



lancaster  
**moble**

# Lupine Meadow

## Transportation Impact Analysis

### Columbia County, OR

Date:

October 27, 2023

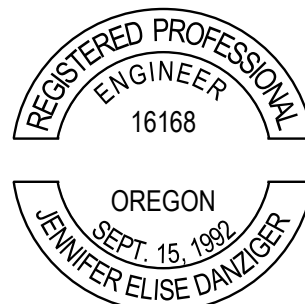
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RENEWS: 12/31/2023

## Table of Contents

|                                     |    |
|-------------------------------------|----|
| Executive Summary                   | 3  |
| Project Description                 | 4  |
| Introduction                        | 4  |
| Location Description                | 4  |
| Vicinity Streets                    | 5  |
| Study Intersections                 | 6  |
| Site Trips                          | 6  |
| Trip Generation                     | 6  |
| Trip Distribution                   | 7  |
| Trip Assignment                     | 7  |
| Traffic Volumes                     | 8  |
| Existing Conditions                 | 8  |
| Background Conditions               | 8  |
| Buildout Conditions                 | 8  |
| Safety                              | 10 |
| Crash History Review                | 10 |
| Sight Distance                      | 12 |
| Access Spacing                      | 13 |
| Left-Turn Lane Warrants             | 13 |
| Preliminary Traffic Signal Warrants | 14 |
| Potential Access Conflicts          | 14 |
| Operational Analysis                | 15 |
| Performance Targets                 | 15 |
| Delay & Capacity Analysis           | 15 |
| Conclusions                         | 17 |

## List of Appendices

- Appendix A – Site Information
- Appendix B – Volumes
- Appendix C - Safety
- Appendix D - Operations



## List of Figures

|  |   |
|--|---|
| Figure 1: Aerial Photo of Site Vicinity (Image from Google Maps) | 5 |
| Figure 2: Peak Hour Traffic Volumes – All Scenarios              | 9 |

## List of Tables

|   |    |
|---|----|
| Table 1: Vicinity Roadway Descriptions      | 5  |
| Table 2: Vicinity Intersection Descriptions | 6  |
| Table 3: Trip Generation Summary            | 6  |
| Table 4: Crash Type Summary                 | 10 |
| Table 5: Crash Severity and Rate Summary    | 11 |
| Table 6: Sight Distance Comparison          | 13 |
| Table 7: Capacity Analysis Summary          | 16 |



## Executive Summary

1. This Transportation Impact Study (TIA) evaluates the transportation impacts of the development of 8 single-family homes, to be constructed on Map No. 6225 Tax Lot 400, opposite of 33300 Tide Creek Road in Columbia County, Oregon.
2. The project site encompasses approximately 44.96 acres located north of Tide Creek Road. It is currently undeveloped and surrounded by residential land uses.
3. Three accesses along Tide Creek Road will be constructed. Two will serve individual residences and one will be shared access serving 6 residences.
4. The trip generation calculations show that the proposed project is projected to generate 6 morning peak hour trips, 8 evening peak hour trips, and 76 average weekday trips.
5. No significant trends or crash patterns were identified at any of the study intersections. Accordingly, no specific safety mitigation is recommended.
6. Sight distance requirements per Columbia County standards can be met at all of the site accesses.
7. The projected traffic demand at the shared site access does not meet the left-turn lane warrant thresholds under buildout conditions.
8. Traffic signal warrants are not met at the intersection of Tide Creek Road and US 30.
9. The new accesses and added traffic from the proposed development will not create significant conflicts with existing driveways.
10. All study intersections are projected to meet ODOT and the Columbia County standards under all analysis scenarios.
11. With a peak hour increase of only 1 vehicle every 7 to 10 minutes, residents along Tide Creek Road will perceive no change in average delay; driveways will continue to operate at LOS A.



# Project Description

## Introduction

This Transportation Impact Study (TIA) evaluates the transportation impacts of the development of 8 single-family homes, to be constructed on Map No. 6225 Tax Lot 400, opposite of 33300 Tide Creek Road in Columbia County, Oregon.

This report follows the Columbia County *Guidelines for Transportation Impact Analysis*.<sup>1</sup> Its purpose is to determine whether the transportation system within the vicinity of the site is capable of safely and efficiently supporting the existing and proposed uses, as well as to determine any mitigation that may be necessary. The study area was determined through discussion with the Director of Public Works.

All supporting data and calculations are included in the appendix to this report.

## Location Description

The project site (Map No. 6225 Tax Lot 400) encompasses approximately 44.96 acres and is located north of Tide Creek Road. The project site is currently undeveloped with Forest Agriculture (*FA-80*) zoning. It is being developed through a Measure 49 property claim.

Figure 1 displays a vicinity map of the project area, with the project site outlined in yellow.

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<sup>1</sup> 2017 Columbia County Transportation System Plan: Volume 2, Section P.

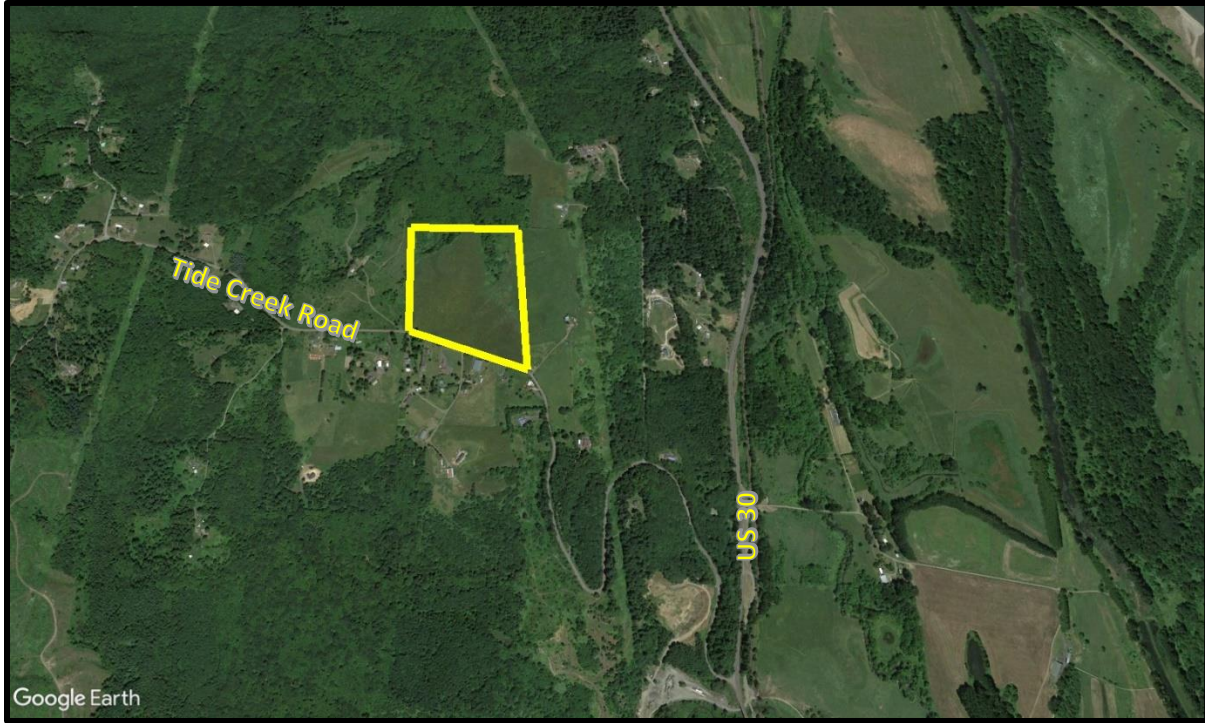


Figure 1: Aerial Photo of Site Vicinity (Image from Google Maps)

Three accesses along Tide Creek Road will be constructed:

1. A western driveway serving a single home located approximately 145 feet east of the property line.
2. A shared site access serving 6 homes located with a centerline 240 feet east of the property line
3. An eastern driveway serving a single home located a minimum of 380 feet east of the property line

## Vicinity Streets

The proposed development is expected to primarily utilize Tide Creek Road and US 30. Table 1 provides a description of these roadways.

Table 1: Vicinity Roadway Descriptions

| Street Name     | Jurisdiction    | Functional Classification            | Cross-Section        | Speed (MPH)     | Curbs & Sidewalks | On-Street Parking | Bicycle Facilities |
|-----------------|-----------------|--------------------------------------|----------------------|-----------------|-------------------|-------------------|--------------------|
| US 30           | ODOT            | Principal Arterial/<br>Statewide Hwy | 2 lanes <sup>1</sup> | 55              | None              | Not Permitted     | None               |
| Tide Creek Road | Columbia County | Minor Collector                      | 2 lanes <sup>2</sup> | 25<br>Statutory | None              | Not Permitted     | None               |

Notes:

1. US 30 is approximately 24 feet wide with 6-foot shoulders with a poor pavement condition rating.
2. Tide Creek Road is approximately 20 to 22 feet wide with narrow to non-existent paved shoulders and steep grades. A pavement condition rating was not available.

Tide Creek Road is classified as a minor collector roadway in the Columbia County Transportation System Plan (TSP). According to the TSP, minor collectors “often connect the neighborhoods to the major collector roadways. These roadways serve as major neighborhood routes and generally provide more direct access to properties or driveways than arterial or major collector roadways.”

## Study Intersections

Through coordination with Columbia County Public Work’s staff, the intersection of US 30 & Tide Creek Road was identified for evaluation, along with the three proposed site accesses. The existing characteristics of the US 30 & Tide Creek Road intersection are summarized in Table 2.

**Table 2: Vicinity Intersection Descriptions**

|   | Intersection            | Geometry | Traffic Control | Phasing/Stopped Approaches |
|---|-------------------------|----------|-----------------|----------------------------|
| 1 | US 30 & Tide Creek Road | 3-Leg    | Stop-Controlled | EB Stop-Controlled         |

## Site Trips

### Trip Generation

To estimate the number of trips that will be generated by the proposed use, trip rates from the *Trip Generation Manual*<sup>2</sup> were used. Specifically, trip rates from the land use code 210, *Single Family Detached Housing* are used to estimate the proposed development’s trip generation based on the number of dwelling units (8 units).

The trip generation estimates are summarized in Table 3. Detailed trip generation calculations are included as an attachment to this memorandum.

**Table 3: Trip Generation Summary**

| Land Use                       | ITE Code | Size | Morning Peak Hour |     |       | Evening Peak Hour |     |       | Weekday Total |
|--------------------------------|----------|------|-------------------|-----|-------|-------------------|-----|-------|---------------|
|                                |          |      | In                | Out | Total | In                | Out | Total |               |
| Single-Family Detached Housing | 210      | 8 DU | 2                 | 4   | 6     | 5                 | 3   | 8     | 76            |

The trip generation calculations show that the proposed project is projected to generate 6 morning peak hour trips, 8 evening peak hour trips, and 76 average weekday trips. The site will not generate vehicles exceeding 26,000-pound gross vehicle weight (13 tons).

*Note, the site trip generation is well below the threshold of more than 25 peak hour trips or more than 400 daily trips which Columbia County typically uses as the basis for requiring a TIA. Construction trip generation is not considered as criteria for requiring a TIA.*

<sup>2</sup> Institute of Transportation Engineers (ITE), *Trip Generation Manual*, 11<sup>th</sup> Edition, 2021.



## Trip Distribution

A directional distribution of site trips to and from the proposed development was estimated based on locations of likely destinations, locations of major transportation facilities in the site vicinity, and turning movement counts at the highway intersection. The following trip distribution was used for analysis:

- Approximately 90 percent of site trips will travel to/from the south/east along US 30 via Tide Creek Road
- Approximately 10 percent of site trips will travel to/from the north/west along US 30 via Tide Creek Road

## Trip Assignment

The project trip assignment is shown in the third column of Figure 2.

## Traffic Volumes

### Existing Conditions

Turning movement counts were conducted on Wednesday, October 4, 2023, between 7:00 AM and 9:00 AM and between 4:00 PM and 6:00 PM at the existing intersection of US 30 and Tide Creek Road (see Appendix B). The intersection's respective morning and evening peak hours were used for analysis.

Traffic volumes through ODOT intersections were seasonally adjusted to reflect the 30<sup>th</sup> highest hour of traffic. ODOT Summer Trends were used to develop a seasonal adjustment factor (SAF) of 1.185 that was applied to the existing traffic counts. Turning movement volumes are shown in the first column of Figure 2.

In addition to turning movement counts, 24-hour traffic counts were collected on Tide Creek Road east of the site on October 5, 2023, and on Tide Creek Road west of the site on October 18, 2023. These counts included a measure of daily volume by hour, vehicle classification and speed. Detailed counts are included in Appendix B; key findings are summarized below.

- The average daily volume (ADT) was measured at 500 vehicles east of the site and 465 vehicles west of the site. The difference in volumes is likely due to the variation in daily traffic demand and not just the traffic from the homes and businesses between the two count locations.
- Based on an average of the two days of vehicle classification data, the average percentage of heavy vehicles (i.e., more than 3 axles) was 1.7 percent.
- The 85<sup>th</sup> percentile speed of traffic traveling eastbound toward the site from the west was 47 mph.
- The 85<sup>th</sup> percentile speed of traffic traveling westbound toward the site from the east was 42 mph.

### Background Conditions

For the general background growth, an annual growth rate of 2.0 percent per year for 2 years was applied to the year 2023 existing traffic volumes to estimate year 2025 background traffic volumes. This rate is substantially higher than the 20-year forecast growth rate of 0.5 percent per year that was derived from ODOT's Future Highway Volume Table and thus provides a conservative estimate. Turning movement volumes are shown in the second column of Figure 2.

With this growth rate the ADT under background conditions would be 520 vehicles or less east of the site.

### Buildout Conditions

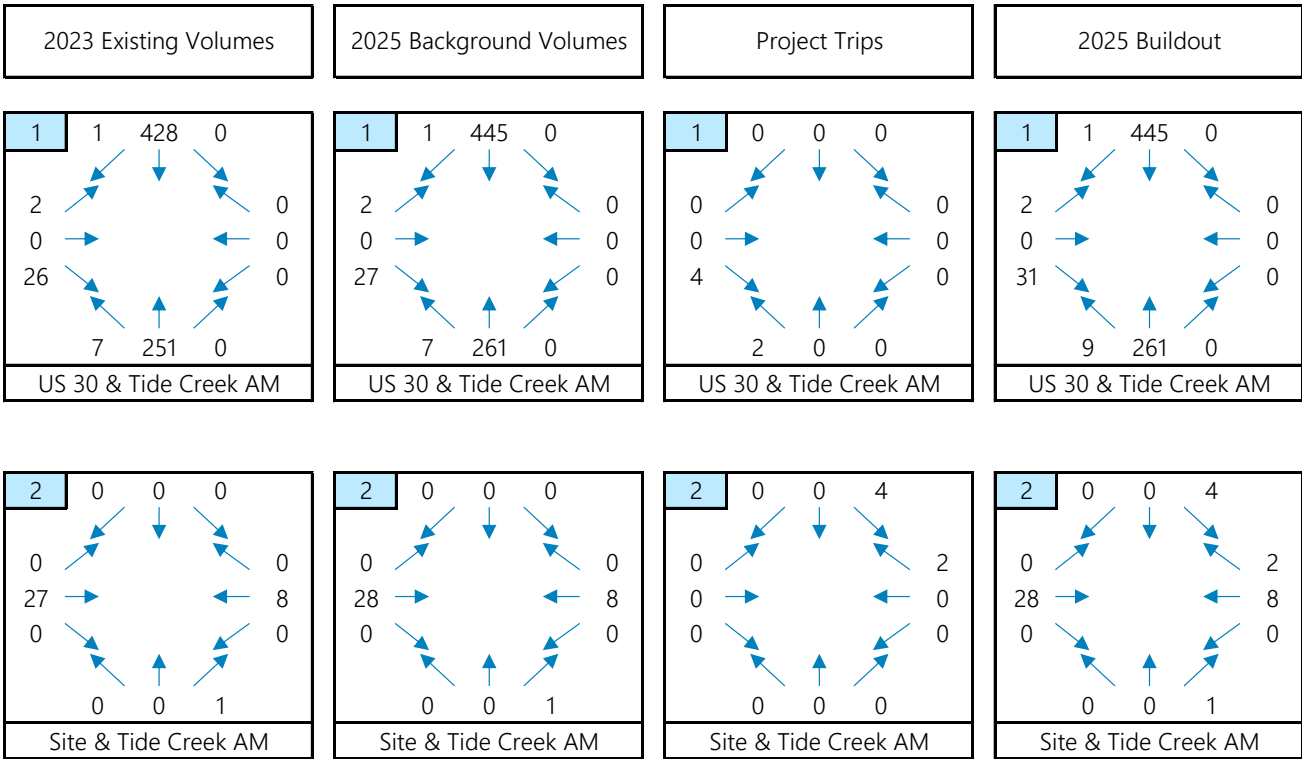
The trips to be generated by the proposed development, quantified earlier within the *Site Trips* section, were added to the year 2025 background traffic volumes in order to obtain the year 2025 traffic volumes with the full buildout and occupancy of the proposed development. As a worst-case evaluation of operations, all trips from the development were assigned to the shared access. In reality, the trips will be distributed across the three accesses with most still using the shared access. Turning movement volumes are shown in the fourth column of Figure 2.

With project traffic, the ADT under buildout conditions would be 596 vehicles or less east of the site.

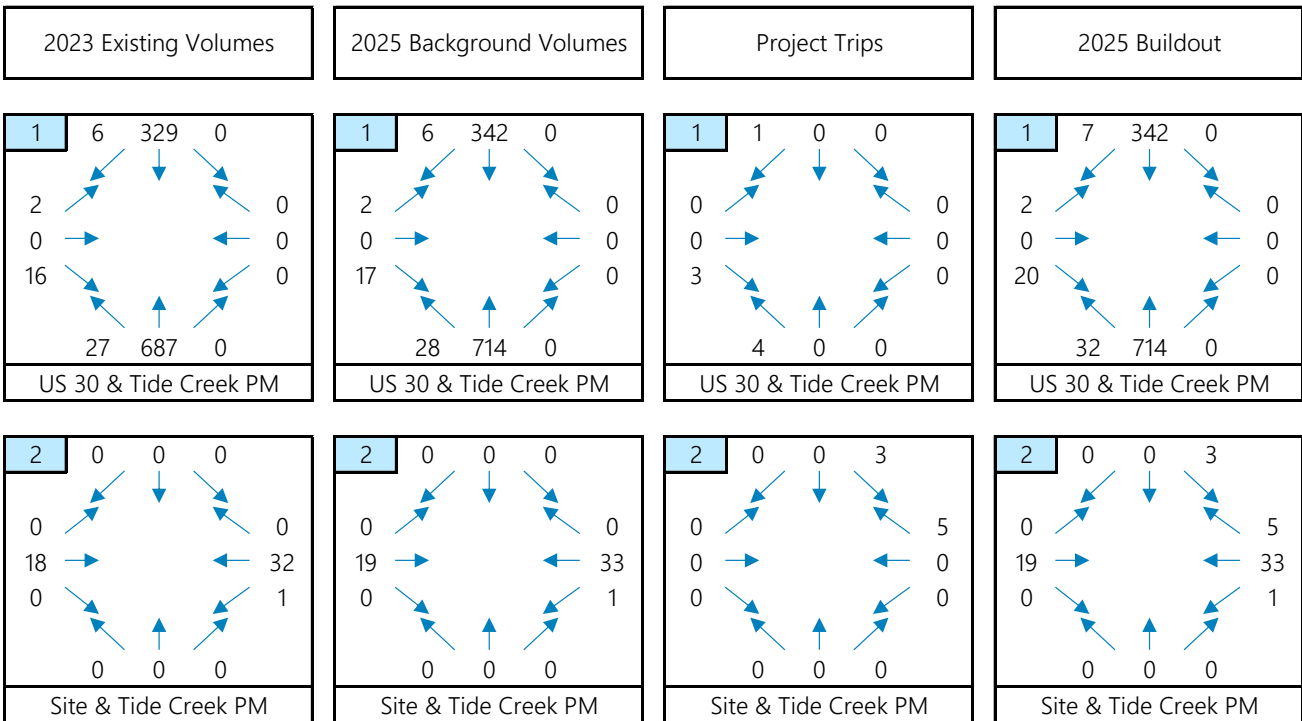


no scale

### AM PEAK HOUR



### PM PEAK HOUR



# Safety

## Crash History Review

Using data obtained from ODOT’s Crash Data System, a review of approximately five years of the most recent available crash history (January 2017 through December 2021) was performed at the study intersections. The crash data was evaluated based on the number of crashes, the type of collisions, and the severity of the collisions. Crash severity is based on injuries sustained by people involved in the crash, and includes five categories:

- *PDO* – Property Damage Only
- *Injury C* – Possible Injury
- *Injury B* – Suspected Minor Injury
- *Injury A* – Suspected Serious Injury
- *Fatality*

Crash rates provide the ability to compare safety risks at different intersections by accounting for both the number of crashes that have occurred during the study period and the number of vehicles that typically travel through the intersection. Crash rates were calculated using the common assumption that traffic counted during the evening peak hour represents approximately 10 percent of the average daily traffic (ADT) at the intersection.

The study intersections adhere to the crash analysis methodologies within ODOT’s Analysis Procedures Manual (APM). According to *Exhibit 4-1: Intersection Crash Rates per MEV by Land Type and Traffic Control* of the APM, intersections which experience crash rates in excess of their respective 90<sup>th</sup> percentile crash rates should be “flagged for further analysis”. Crash rates in excess of the 90<sup>th</sup> percentile crashes per million entering vehicles (CMEV) may be indicative of design deficiencies and therefore require a need for further investigation and possible mitigation.

Columbia County Public Works’ staff requested a crash history review at the study intersection of Tide Creek Road & US 30 as well as along Tide Creek Road from the site frontage to US 30. Table 4 below provides a summary of crash types while Table 5 summarizes crash severities and rates for each of the study areas. Detailed crash data is provided in Appendix C.

**Table 4: Crash Type Summary**

| Segment or Intersection                | Crash Type |          |       |     |      |       | Total Crashes |
|--|------------|----------|-------|-----|------|-------|---------------|
|  | Turn       | Rear End | Fixed | Ped | Bike | Other |               |
| Tide Creek Road (Site Access to US 30) | 0          | 0        | 1     | 0   | 0    | 1     | 2             |
| US 30 & Tide Creek Road                | 1          | 5        | 0     | 0   | 0    | 0     | 6             |



**Table 5: Crash Severity and Rate Summary**

| Segment or Intersection                | Severity |   |   |   |       | Total Crashes | PHEV  | Crash Rate | 90 <sup>th</sup> % Rate |
|--|----------|---|---|---|-------|---------------|-------|------------|-------------------------|
|  | PDO      | C | B | A | Fatal |               |       |            |                         |
| Tide Creek Road (Site Access to US 30) | 0        | 0 | 2 | 0 | 0     | 2             | -     | -          | -                       |
| US 30 & Tide Creek Road                | 1        | 3 | 1 | 1 | 0     | 6             | 1,067 | 0.308      | 0.475                   |

**Tide Creek Road**

Two crashes were reported on Tide Creek Road during the five-year crash analysis period. Both collisions involved a single vehicle traveling in the eastbound direction:

- One crash was reported approximately 200 feet west of US 30. It involved a motorcycle that overturned at a curve in the roadway. The event code indicates the driver may have been avoiding another vehicle but the direction of the non-contact vehicle is not reported. Thus, it cannot be determined if the driver lost control while slowing due to another vehicle traveling in the same direction or was swerving to avoid a vehicle traveling in the opposite direction.
- One crash was reported approximately 0.25 miles west of US 30. It involved a westbound passenger vehicle that collided with a fixed object. The event code for this crash also indicates that the driver may have been avoiding another vehicle but the direction of the non-contact vehicle is not reported. Given the position of the crash on a curve and distance from the highway intersection, it is more likely that the driver swerved to avoid a vehicle traveling in the opposite direction.

**US 30 & Tide Creek Road**

Six reported crashes were associated with the intersection during the five-year analysis period. All crashes appear to have occurred traveling westbound on US 30, which is northbound specifically at the intersection. One was reported as a turning collision and 5 were reported as rear-end collisions. Closer examination of the turning collision descriptors indicates that it was likely to have been a rear-end collision where a vehicle traveling straight on US 30 struck a vehicle slowing to make a left turn onto Tide Creek Road.

**Crash Severity**

One of the crashes reported in the five-year analysis period resulting in an incapacitating injury (Injury A) at the intersection of Tide Creek Road & US 30. This rear-end collision was reported in the westbound direction on US 30, which is northbound in the study area. The driver of the striking vehicle was reported to have been following too closely and had a suspended license. The driver of the striking vehicle is reported to not have sustained any injuries, the driver of the struck vehicle is reported to have sustained injuries consistent with an Injury A classification. The crash occurred under clear, dry, daytime conditions.

**Pedestrian and Bicycle Collisions**

None of the crashes reported in the five-year analysis period had a pedestrian or bicyclist involved.



### **ODOT 90<sup>th</sup> Percentile Crash Rates**

The study intersection of Tide Creek Road & US 30 was found to not have a rate above the respective ODOT 90<sup>th</sup> percentile crash rates.

### **Conclusion**

Based on a review of the most recent five years of available crash data, no significant trends or crash patterns were identified at any of the study intersections. No safety mitigation is recommended per the crash data analysis.

## Sight Distance

A sight distance analysis was performed for the planned new local accesses. Sight distance was measured and evaluated in accordance with standards established in *A Policy on Geometric Design of Highways and Streets*<sup>3</sup> as well as per *Columbia County Roadway Standards*. According to Columbia County standards, the driver's eye is assumed to be 10 feet from the near edge of the nearest travel lane of the intersecting street and at a height of 3.5 feet above the minor-street approach pavement. The vehicle driver's eye-height along the major-street approach is assumed to be 3.5 feet above the cross-street pavement.

### **Columbia County Standards**

Per *Columbia County Roadway Standards*, the minimum sight distance requirement will be 10 times the 85<sup>th</sup> percentile speed to be measured 10 feet from the edge of the travel lane. The speed data on Tide Creek Road showed that the 85<sup>th</sup> percentile eastbound speed is 47 mph approaching the site accesses from the west and the westbound speed is 42 mph approaching the site accesses from the east. Therefore, the minimum sight distance requirements are 470 feet looking to the west of the site accesses and 420 feet looking to the east of the site accesses.

### **Stopping Sight Distance**

Stopping sight distance (SSD) is considered the minimum requirement to ensure safe operation of the driveway access. This distance allows the driver of a vehicle traveling on the major street to react to a turning vehicle or other object in the roadway and come to a complete stop to avoid a collision. To ensure safe operation of a driveway, the available sight distance must at least equal the minimum required stopping sight distance. SSD is the same for both passenger vehicles and trucks.

For vehicles traveling in the eastbound direction toward the site, Tide Creek Road was measured to have an approximately 9 percent downgrade. At an 85<sup>th</sup> percentile speed of 47 mph, the SSD is 460 feet.

For vehicles traveling in the westbound direction toward the site, Tide Creek Road was measured to have an approximately 7 percent upgrade. At an 85<sup>th</sup> percentile speed of 42 mph, the SSD is 300 feet.

### **Available Sight Distance**

Due to existing grade differences and foliage on the property, field measurements were taken at the edge of pavement. Available sight lines were calibrated on aerial photos using these measurements and then calculated

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<sup>3</sup> American Association of State Highway and Transportation Officials (AASHTO), *A Policy on Geometric Design of Highways and Streets*, 7<sup>th</sup> Edition, 2018.

from a distance of ten feet back to provide sight distance measurements that comply with Columbia County standards. Table 6 compares the available sight distance measured in the field with the recommendations and requirements for the traffic movements at the site accesses. Illustrations of sight lines are included in Appendix C.

**Table 6: Sight Distance Comparison**

| Access                               | Columbia County Requirements |          | Required SSD |          | Available Sight Distance |          |
|--------------------------------------|------------------------------|----------|--------------|----------|--------------------------|----------|
|                                      | To Left                      | To Right | To Left      | To Right | To Left                  | To Right |
| Eastern Driveway & Tide Creek Road   | 420 ft                       | 470 ft   | 300 ft       | 460 ft   | > 700 ft                 | > 470 ft |
| Shared Site Access & Tide Creek Road | 420 ft                       | 470 ft   | 300 ft       | 460 ft   | > 700 ft                 | 470 ft   |
| Western Driveway & Tide Creek Road   | 420 ft                       | 470 ft   | 300 ft       | 460 ft   | > 700 ft                 | 470 ft   |

**Conclusion**

Based on the sight distance analysis, all site accesses are expected to have adequate sight lines. No mitigation pertaining to sight distance is required.

**Access Spacing**

According to the Columbia County TSP the minimum access spacing between driveways is 65 feet on a minor collector as measured from center to center of all adjacent approaches. The proposed driveway locations will meet this standard.

**Left-Turn Lane Warrants**

Tide Creek Road is a low-volume, two-lane minor collector road. As such, left-turn lanes are not typically provided at intersections or driveways. However, left-turn warrants were assessed at the shared site access to determine if threshold to install a turn lane would be met.

A left-turn refuge lane is primarily a safety consideration for the major street, removing left-turning vehicles from the through traffic stream. The left-turn lane warrants used were developed from the *National Cooperative Highway Research Project's (NCHRP) Report 457*. Turn lane warrants were evaluated based on the number of advancing and opposing vehicles as well as the number of turning vehicles, the travel speed, and the number of through travel lanes.

Left-turn lane warrants are not projected to be met for the shared site access under buildout conditions. Accordingly, no new turn lanes are recommended.



## Preliminary Traffic Signal Warrants

Future traffic demand on Tide Creek Road at the site accesses and at the highway is well below the thresholds for a traffic signal; therefore, no detailed warrant analysis was performed.

## Potential Access Conflicts

The proposed development will add three accesses to the north side of Tide Creek Road along a section that has three existing accesses on the south side of the road. The shared access will be located opposite an existing driveway but the other two driveways will be offset from accesses across the street.

Tide Creek Road has a two-lane cross section that can adequately serve the forecast demand and left-turn lane warrants are not met. Without a center refuge lane, there is no potential for head-on collisions between vehicles trying to make a left turn. Furthermore, the volume on the roadway is so low that the likelihood of encountering another turning vehicle is relatively low, even during peak hours. Therefore, the short driveway offsets are not anticipated to be a safety concern.

Thus, the new accesses and added traffic from the proposed development will not create significant conflicts with existing driveways.

## Operational Analysis

An operational analysis was conducted for each of the study intersections per the unsignalized intersection analysis methodologies in the *Highway Capacity Manual* (HCM)<sup>4</sup>. The Synchro/SimTraffic software was used for the analysis.

Two performance measures are assessed for intersection operations:

- The Level of service (LOS) is a measure based on average delay per vehicle that ranges from LOS A, which indicates little or no delay, to LOS F, which indicates a significant amount of congestion and delay.
- The volume to capacity (v/c) ratio is a measure that compares the traffic volume (demand) against the available capacity of an intersection, with v/c ratios above 1.0 indicating that an intersection is operating above capacity.

## Performance Targets

The intersection of US 30 & Tide Creek Road is under the jurisdiction of the Oregon Department of Transportation. The applicable minimum operational standards for these facilities are established under the Oregon Highway Plan and are based on the v/c ratio of the intersection. According to the Oregon Highway Plan, US 30 is a Statewide Freight Route, and has a maximum allowable v/c ratio of 0.70.<sup>5</sup>

According to the Columbia County TSP, for two-way, stop-controlled intersections, all approaches serving more than 20 vehicles during the highest one-hour period of an average weekday shall operate with a LOS E or better and a v/c ratio not higher than 0.90. Mobility targets do not apply to approaches at intersections serving 20 vehicles or fewer during the peak hour.

## Delay & Capacity Analysis

The LOS, delay, and v/c results of the capacity analysis are shown in Table 7. Detailed calculations as well as tables showing the relationship between delay and LOS are included Appendix D. For a conservative analysis, the site accesses along Tide Creek Road were condensed to the single shared access and driveway volumes were included for the existing residence south of the highway.

As shown in Table 7, all study intersections are projected to operate within ODOT and the Columbia County standards under all analysis scenarios.

The increased traffic from the proposed development will not measurably impact the operations at other driveways along Tide Creek Road. With a peak hour increase of only 1 vehicle every 7 to 10 minutes, residents along Tide Creek Road will perceive no change in average delay; driveways will continue to operate at LOS A.

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<sup>4</sup> Transportation Research Board, *Highway Capacity Manual 7<sup>th</sup> Edition*, 2022.

<sup>5</sup> Oregon Department of Transportation, *1999 Oregon Highway Plan, Including amendments November 1999 through May 2015*, 1999.

Table 7: Capacity Analysis Summary

| Intersection & Scenario                     | Morning Peak Hour |           |       | Evening Peak Hour |           |       |
|---|-------------------|-----------|-------|-------------------|-----------|-------|
|   | LOS               | Delay (s) | V/C   | LOS               | Delay (s) | V/C   |
| <b>1. US 30 &amp; Tide Creek Road</b>       |                   |           |       |                   |           |       |
| 2023 Existing Condition                     | B                 | 12        | 0.05  | B                 | 12        | 0.03  |
| 2025 Background Condition                   | B                 | 12        | 0.05  | B                 | 12        | 0.04  |
| 2025 Buildout Condition                     | B                 | 12        | 0.06  | B                 | 12        | 0.04  |
| <b>2. Site Access &amp; Tide Creek Road</b> |                   |           |       |                   |           |       |
| 2023 Existing Condition                     | A                 | 9         | <0.01 | A                 | 7         | <0.01 |
| 2025 Background Condition                   | A                 | 9         | <0.01 | A                 | 7         | <0.01 |
| 2025 Buildout Condition                     | A                 | 9         | 0.01  | A                 | 9         | <0.01 |



## Conclusions

Findings from this TIS include:

- The trip generation calculations show that the proposed project is projected to generate 6 morning peak hour trips, 8 evening peak hour trips, and 76 average weekday trips.
- No significant trends or crash patterns were identified at any of the study intersections. Accordingly, no specific safety mitigation is recommended.
- Sight distance requirements per Columbia County standards can be met at all of the site accesses.
- The projected traffic demand at the shared site access does not meet the left-turn lane warrant thresholds under buildout conditions.
- Traffic signal warrants are not met at the intersection of Tide Creek Road and US 30.
- The new accesses and added traffic from the proposed development will not create significant conflicts with existing driveways.
- All study intersections are projected to meet ODOT and the Columbia County standards under all analysis scenarios.
- With a peak hour increase of only 1 vehicle every 7 to 10 minutes, residents along Tide Creek Road will perceive no change in average delay; driveways will continue to operate at LOS A.

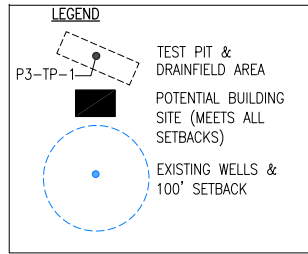


## Appendix A – Site Information

Site Plan

Trip Generation Calculations





**GENERAL NOTES**

ALL PROPOSED LOT DIMENSIONS ARE APPROXIMATE SUBJECT TO FINAL PLAT PREPARED BY PROFESSIONAL LAND SURVEYOR.

TOPOGRAPHY IS BASED ON COUNTY G.I.S. AND USGS TOPOGRAPHIC MAPS, FINAL TOPOGRAPHY WILL DOCUMENTED BY PROFESSIONAL LAND SURVEYOR AT FINAL PLAT.

FINAL ROAD DESIGN, GRADES, CROWN, CURVE RADII, STORMWATER AND EROSION CONTROL WILL BE DESIGNED BY A LICENSED DESIGN PROFESSIONAL.

**LOT NOTES:**

PARCEL #400 APPROXIMATE AREA BEFORE AND AFTER DEVELOPMENT ORIGINAL PARCEL = ± 48 AC.  
 REMNANT PARCEL AFTER M49 DEVELOPMENT = ± 31 AC.  
 REMNANT PARCEL HAS ± 709' ROAD FRONTAGE ON TIDE CREEK ROAD

PRIVATE R.O.W. = ± 35,600 sq. ft. OR +/- 0.8 AC.

**DEVELOPMENT FRONTAGE: 1250' FL.**

**SEPTIC INFORMATION:**

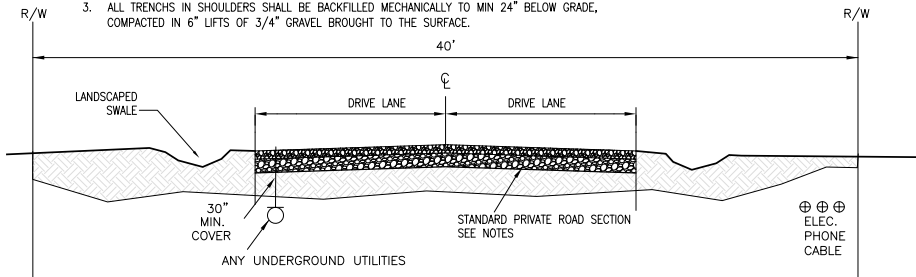
SEPTIC TEST PITS ARE LABELED BASED ON THE TEST PIT EVALUATION REPORTS FROM APRIL 30, 2019. SEE NARRATIVE, ATTACHMENT #7.

EACH PROPOSED SEPTIC DRAINFIELD AREA MEASURES ± 30'x100' AND IS SITED A MINIMUM OF:

- 100' FROM ANY WETLAND (OR WETLAND STUDY AREA BORDER)
- 100' FROM ANY WELL
- 10' FROM ANY PROPERTY LINE
- 50' FROM ANY DOWN-SLOPE STRUCTURE

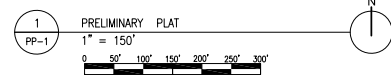
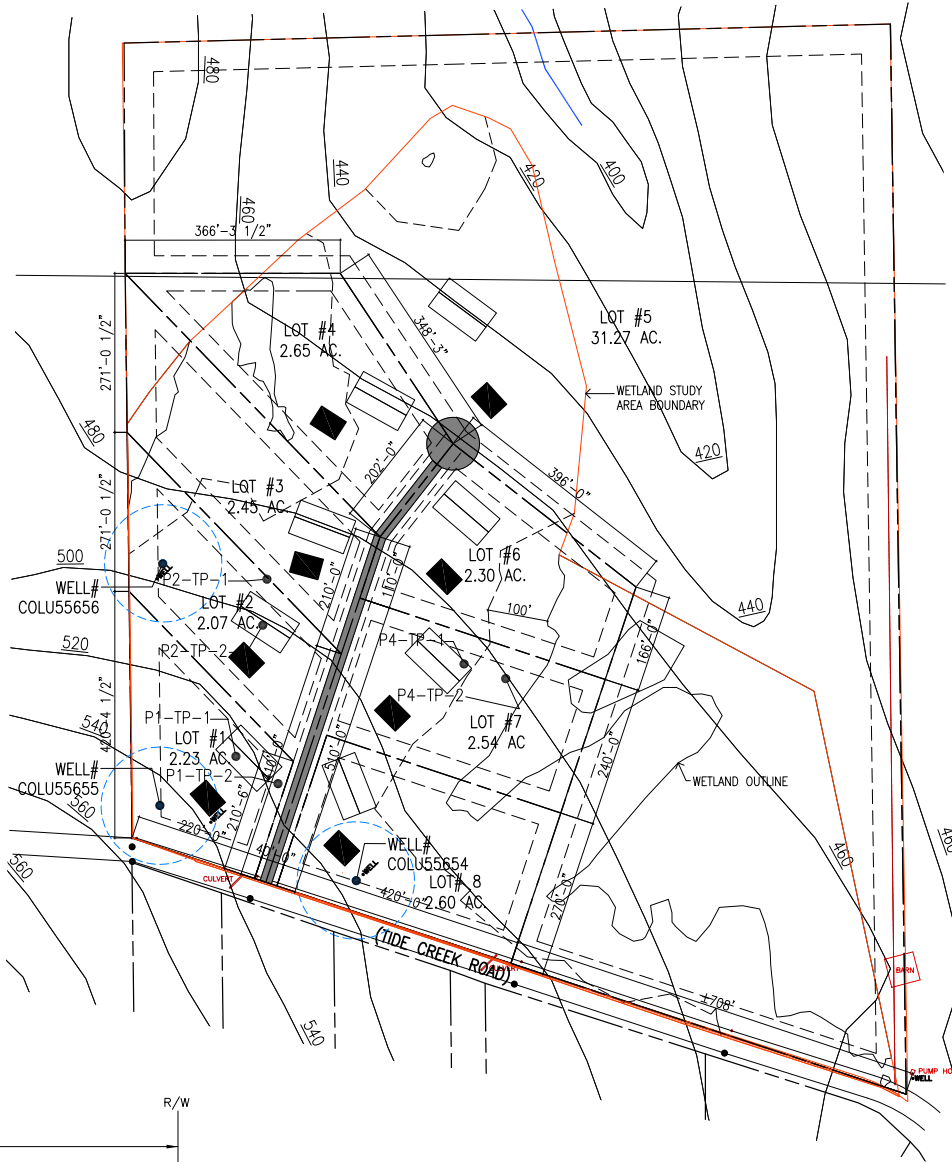
**STREET SECTION NOTES:**

1. PER COLUMBIA COUNTY ROAD STANDARDS PRIVATE ROAD SHALL BE AS FOLLOWS:
  - BASE: 8" OF 1-1/2"-0 COMPACTED GRAVEL
  - LEVELING COURSE: 2" MIN OF 3/4"-0 COMPACTED GRAVEL
2. ALL TRENCH CROSSINGS OR UNDERGROUND UTILITIES SHALL BE BACKFILLED MECHANICALLY TO MIN 30" BELOW GRADE, COMPACTED IN 6" LIFTS OF 3/4" GRAVEL BROUGHT TO THE SURFACE OF THE STREET AGG. ALL PATCHES SHALL BE OF LIKE MATERIAL AS ORIGINAL SURFACE.
3. ALL TRENCHES IN SHOULDERS SHALL BE BACKFILLED MECHANICALLY TO MIN 24" BELOW GRADE, COMPACTED IN 6" LIFTS OF 3/4" GRAVEL BROUGHT TO THE SURFACE.



PER COLUMBIA COUNTY ROAD STANDARDS, PART 2, PP. 23-26, A 40' WIDE PRIVATE R.O.W. MAY BE USED TO SERVE UP TO SIX HOMES. THIS CONFIGURATION OF THE PRIVATE R.O.W. / ROAD MEETS ALL APPLICABLE COUNTY STANDARDS.

2 TYPICAL ROAD SECTION  
PP-1



Page reduced to letter size for report.

Owner / Developer:  
AGNES PETERSEN  
PO BOX 748  
ST HELENS, OR 97051

**PRELIMINARY PLAT  
Lupine Meadow  
MEASURE 49 AUTHORIZATIONS  
TAX LOT 6N2W-2500-400**

SCALE: AS NOTED  
 DRAWN BY:  
 CHECKED BY:  
 CAD FILE: M49-Transfer-PlotPlan.1.2  
 DATE: JUNE 21, 2023

| REVISIONS |             |
|-----------|-------------|
| Δ         | DESCRIPTION |
|           |             |
|           |             |
|           |             |
|           |             |

CONTENTS:  
 PRELIMINARY PLAT

SHEET NO:

**PP-2.1**

TIDE CREEK ROAD,  
DEER ISLAND, OR 97054



TRIP GENERATION CALCULATIONS  
Source: Trip Generation Manual, 11th Edition

*Land Use:* Single-Family Detached Housing  
*Land Use Code:* 210  
*Land Use Subcategory:* All Sites  
*Setting/Location:* General Urban/Suburban  
*Variable:* Dwelling Units  
*Trip Type:* Vehicle  
*Formula Type:* Rate  
*Variable Quantity:* **8**

WARNING: Variable Quantity is less than Minimum Survey Size for Peak Hours

**AM PEAK HOUR**

*Trip Rate:* 0.7

|                   | Enter    | Exit     | Total    |
|-------------------|----------|----------|----------|
| Directional Split | 25%      | 75%      |          |
| Trip Ends         | <b>2</b> | <b>4</b> | <b>6</b> |

**PM PEAK HOUR**

*Trip Rate:* 0.94

|                   | Enter    | Exit     | Total    |
|-------------------|----------|----------|----------|
| Directional Split | 63%      | 37%      |          |
| Trip Ends         | <b>5</b> | <b>3</b> | <b>8</b> |

**WEEKDAY**

*Trip Rate:* 9.43

|                   | Enter     | Exit      | Total     |
|-------------------|-----------|-----------|-----------|
| Directional Split | 50%       | 50%       |           |
| Trip Ends         | <b>38</b> | <b>38</b> | <b>76</b> |

**SATURDAY**

*Trip Rate:* 9.48

|                   | Enter     | Exit      | Total     |
|-------------------|-----------|-----------|-----------|
| Directional Split | 50%       | 50%       |           |
| Trip Ends         | <b>38</b> | <b>38</b> | <b>76</b> |

Source: Trip Generation Manual, 11th Edition

## Appendix B – Volumes

Turning Movement Counts

24-Hour Volumes

24-Hour Vehicle Classification

Speed Data





ALL TRAFFIC DATA SERVICES

(303) 216-2439

www.alltrafficdata.net

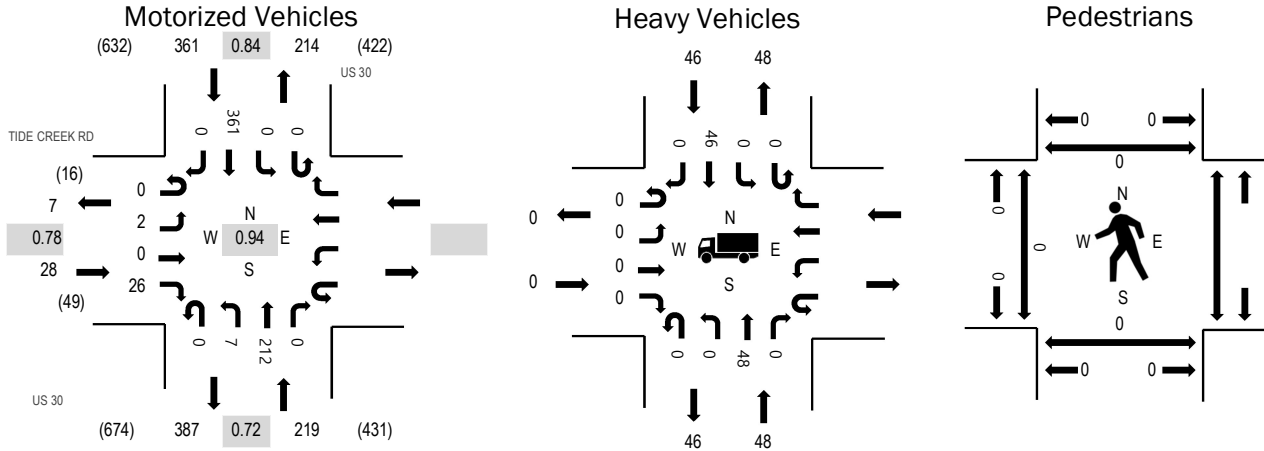
Location: 1 US 30 & TIDE CREEK RD AM

Date: Wednesday, October 4, 2023

Peak Hour: 07:15 AM - 08:15 AM

Peak 15-Minutes: 07:15 AM - 07:30 AM

Peak Hour



Note: Total study counts contained in parentheses.

|     | HV%   | PHF  |
|-----|-------|------|
| EB  | 0.0%  | 0.78 |
| WB  |       |      |
| NB  | 21.9% | 0.72 |
| SB  | 12.7% | 0.84 |
| All | 15.5% | 0.94 |

Traffic Counts - Motorized Vehicles

| Interval Start Time | TIDE CREEK RD Eastbound |      |      |       | Westbound |      |      |       | US 30 Northbound |      |      |       | US 30 Southbound |      |      |       | Total | Rolling Hour |
|---------------------|-------------------------|------|------|-------|-----------|------|------|-------|------------------|------|------|-------|------------------|------|------|-------|-------|--------------|
|                     | U-Turn                  | Left | Thru | Right | U-Turn    | Left | Thru | Right | U-Turn           | Left | Thru | Right | U-Turn           | Left | Thru | Right |       |              |
| 7:00 AM             | 0                       | 0    | 0    | 0     |           |      |      |       | 0                | 0    | 16   | 0     | 0                | 0    | 29   | 0     | 45    | 595          |
| 7:05 AM             | 0                       | 0    | 0    | 2     |           |      |      |       | 0                | 0    | 17   | 0     | 0                | 0    | 17   | 0     | 36    | 593          |
| 7:10 AM             | 0                       | 0    | 0    | 3     |           |      |      |       | 0                | 0    | 21   | 0     | 0                | 0    | 23   | 1     | 48    | 600          |
| 7:15 AM             | 0                       | 1    | 0    | 2     |           |      |      |       | 0                | 0    | 34   | 0     | 0                | 0    | 31   | 0     | 68    | 608          |
| 7:20 AM             | 0                       | 0    | 0    | 3     |           |      |      |       | 0                | 0    | 21   | 0     | 0                | 0    | 23   | 0     | 47    | 586          |
| 7:25 AM             | 0                       | 0    | 0    | 2     |           |      |      |       | 0                | 0    | 19   | 0     | 0                | 0    | 26   | 0     | 47    | 588          |
| 7:30 AM             | 0                       | 0    | 0    | 1     |           |      |      |       | 0                | 0    | 15   | 0     | 0                | 0    | 38   | 0     | 54    | 585          |
| 7:35 AM             | 0                       | 1    | 0    | 2     |           |      |      |       | 0                | 0    | 9    | 0     | 0                | 0    | 32   | 0     | 44    | 568          |
| 7:40 AM             | 0                       | 0    | 0    | 4     |           |      |      |       | 0                | 1    | 19   | 0     | 0                | 0    | 37   | 0     | 61    | 563          |
| 7:45 AM             | 0                       | 0    | 0    | 1     |           |      |      |       | 0                | 1    | 12   | 0     | 0                | 0    | 36   | 0     | 50    | 534          |
| 7:50 AM             | 0                       | 0    | 0    | 2     |           |      |      |       | 0                | 0    | 16   | 0     | 0                | 0    | 30   | 0     | 48    | 529          |
| 7:55 AM             | 0                       | 0    | 0    | 0     |           |      |      |       | 0                | 0    | 19   | 0     | 0                | 0    | 28   | 0     | 47    | 525          |
| 8:00 AM             | 0                       | 0    | 0    | 3     |           |      |      |       | 0                | 0    | 14   | 0     | 0                | 0    | 26   | 0     | 43    | 517          |
| 8:05 AM             | 0                       | 0    | 0    | 1     |           |      |      |       | 0                | 2    | 15   | 0     | 0                | 0    | 25   | 0     | 43    |              |
| 8:10 AM             | 0                       | 0    | 0    | 5     |           |      |      |       | 0                | 3    | 19   | 0     | 0                | 0    | 29   | 0     | 56    |              |
| 8:15 AM             | 0                       | 0    | 0    | 0     |           |      |      |       | 0                | 0    | 16   | 0     | 0                | 0    | 29   | 1     | 46    |              |
| 8:20 AM             | 0                       | 0    | 0    | 3     |           |      |      |       | 0                | 0    | 26   | 0     | 0                | 0    | 20   | 0     | 49    |              |
| 8:25 AM             | 0                       | 0    | 0    | 2     |           |      |      |       | 0                | 2    | 21   | 0     | 0                | 0    | 19   | 0     | 44    |              |
| 8:30 AM             | 0                       | 0    | 0    | 1     |           |      |      |       | 0                | 1    | 15   | 0     | 0                | 0    | 20   | 0     | 37    |              |
| 8:35 AM             | 0                       | 0    | 0    | 1     |           |      |      |       | 0                | 0    | 17   | 0     | 0                | 0    | 21   | 0     | 39    |              |
| 8:40 AM             | 0                       | 1    | 0    | 1     |           |      |      |       | 0                | 1    | 9    | 0     | 0                | 0    | 20   | 0     | 32    |              |
| 8:45 AM             | 0                       | 0    | 0    | 2     |           |      |      |       | 0                | 0    | 15   | 0     | 0                | 0    | 28   | 0     | 45    |              |
| 8:50 AM             | 1                       | 1    | 0    | 2     |           |      |      |       | 0                | 1    | 16   | 0     | 0                | 0    | 23   | 0     | 44    |              |
| 8:55 AM             | 0                       | 0    | 0    | 1     |           |      |      |       | 0                | 1    | 17   | 0     | 0                | 0    | 20   | 0     | 39    |              |
| Count Total         | 1                       | 4    | 0    | 44    |           |      |      |       | 0                | 13   | 418  | 0     | 0                | 0    | 630  | 2     | 1,112 |              |
| Peak Hour           | 0                       | 2    | 0    | 26    |           |      |      |       | 0                | 7    | 212  | 0     | 0                | 0    | 361  | 0     | 608   |              |

### Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

| Interval<br>Start Time | Heavy Vehicles |    |    |    |       | Interval<br>Start Time | Bicycles on Roadway |    |    |    |       | Interval<br>Start Time | Pedestrians/Bicycles on Crosswalk |    |    |    |       |
|------------------------|----------------|----|----|----|-------|------------------------|---------------------|----|----|----|-------|------------------------|-----------------------------------|----|----|----|-------|
|                        | EB             | NB | WB | SB | Total |                        | EB                  | NB | WB | SB | Total |                        | EB                                | NB | WB | SB | Total |
| 7:00 AM                | 0              | 4  |    | 3  | 7     | 7:00 AM                | 0                   | 0  |    | 0  | 0     | 7:00 AM                | 0                                 | 0  |    | 0  | 0     |
| 7:05 AM                | 1              | 3  |    | 2  | 6     | 7:05 AM                | 0                   | 0  |    | 0  | 0     | 7:05 AM                | 0                                 | 0  |    | 0  | 0     |
| 7:10 AM                | 0              | 4  |    | 4  | 8     | 7:10 AM                | 0                   | 0  |    | 0  | 0     | 7:10 AM                | 0                                 | 0  |    | 0  | 0     |
| 7:15 AM                | 0              | 9  |    | 3  | 12    | 7:15 AM                | 0                   | 0  |    | 0  | 0     | 7:15 AM                | 0                                 | 0  |    | 0  | 0     |
| 7:20 AM                | 0              | 4  |    | 1  | 5     | 7:20 AM                | 0                   | 0  |    | 0  | 0     | 7:20 AM                | 0                                 | 0  |    | 0  | 0     |
| 7:25 AM                | 0              | 3  |    | 4  | 7     | 7:25 AM                | 0                   | 0  |    | 0  | 0     | 7:25 AM                | 0                                 | 0  |    | 0  | 0     |
| 7:30 AM                | 0              | 6  |    | 6  | 12    | 7:30 AM                | 0                   | 0  |    | 0  | 0     | 7:30 AM                | 0                                 | 0  |    | 0  | 0     |
| 7:35 AM                | 0              | 1  |    | 2  | 3     | 7:35 AM                | 0                   | 0  |    | 0  | 0     | 7:35 AM                | 0                                 | 0  |    | 0  | 0     |
| 7:40 AM                | 0              | 4  |    | 7  | 11    | 7:40 AM                | 0                   | 0  |    | 0  | 0     | 7:40 AM                | 0                                 | 0  |    | 0  | 0     |
| 7:45 AM                | 0              | 2  |    | 4  | 6     | 7:45 AM                | 0                   | 0  |    | 0  | 0     | 7:45 AM                | 0                                 | 0  |    | 0  | 0     |
| 7:50 AM                | 0              | 3  |    | 6  | 9     | 7:50 AM                | 0                   | 0  |    | 0  | 0     | 7:50 AM                | 0                                 | 0  |    | 0  | 0     |
| 7:55 AM                | 0              | 5  |    | 0  | 5     | 7:55 AM                | 0                   | 0  |    | 0  | 0     | 7:55 AM                | 0                                 | 0  |    | 0  | 0     |
| 8:00 AM                | 0              | 2  |    | 6  | 8     | 8:00 AM                | 0                   | 0  |    | 0  | 0     | 8:00 AM                | 0                                 | 0  |    | 0  | 0     |
| 8:05 AM                | 0              | 4  |    | 2  | 6     | 8:05 AM                | 0                   | 0  |    | 0  | 0     | 8:05 AM                | 0                                 | 0  |    | 0  | 0     |
| 8:10 AM                | 0              | 5  |    | 5  | 10    | 8:10 AM                | 0                   | 0  |    | 0  | 0     | 8:10 AM                | 0                                 | 0  |    | 0  | 0     |
| 8:15 AM                | 0              | 1  |    | 7  | 8     | 8:15 AM                | 0                   | 0  |    | 0  | 0     | 8:15 AM                | 0                                 | 0  |    | 0  | 0     |
| 8:20 AM                | 0              | 7  |    | 2  | 9     | 8:20 AM                | 0                   | 0  |    | 0  | 0     | 8:20 AM                | 0                                 | 0  |    | 0  | 0     |
| 8:25 AM                | 0              | 5  |    | 4  | 9     | 8:25 AM                | 0                   | 0  |    | 0  | 0     | 8:25 AM                | 0                                 | 0  |    | 0  | 0     |
| 8:30 AM                | 0              | 5  |    | 3  | 8     | 8:30 AM                | 0                   | 0  |    | 0  | 0     | 8:30 AM                | 0                                 | 0  |    | 0  | 0     |
| 8:35 AM                | 0              | 5  |    | 4  | 9     | 8:35 AM                | 0                   | 0  |    | 0  | 0     | 8:35 AM                | 0                                 | 0  |    | 0  | 0     |
| 8:40 AM                | 0              | 2  |    | 4  | 6     | 8:40 AM                | 0                   | 0  |    | 0  | 0     | 8:40 AM                | 0                                 | 0  |    | 0  | 0     |
| 8:45 AM                | 0              | 3  |    | 3  | 6     | 8:45 AM                | 0                   | 0  |    | 0  | 0     | 8:45 AM                | 0                                 | 0  |    | 0  | 0     |
| 8:50 AM                | 0              | 6  |    | 3  | 9     | 8:50 AM                | 0                   | 0  |    | 0  | 0     | 8:50 AM                | 0                                 | 0  |    | 0  | 0     |
| 8:55 AM                | 0              | 4  |    | 3  | 7     | 8:55 AM                | 0                   | 0  |    | 0  | 0     | 8:55 AM                | 0                                 | 0  |    | 0  | 0     |
| Count Total            | 1              | 97 |    | 88 | 186   | Count Total            | 0                   | 0  |    | 0  | 0     | Count Total            | 0                                 | 0  |    | 0  | 0     |
| Peak Hour              | 0              | 48 |    | 46 | 94    | Peak Hour              | 0                   | 0  |    | 0  | 0     | Peak Hour              | 0                                 | 0  |    | 0  | 0     |



ALL TRAFFIC DATA SERVICES

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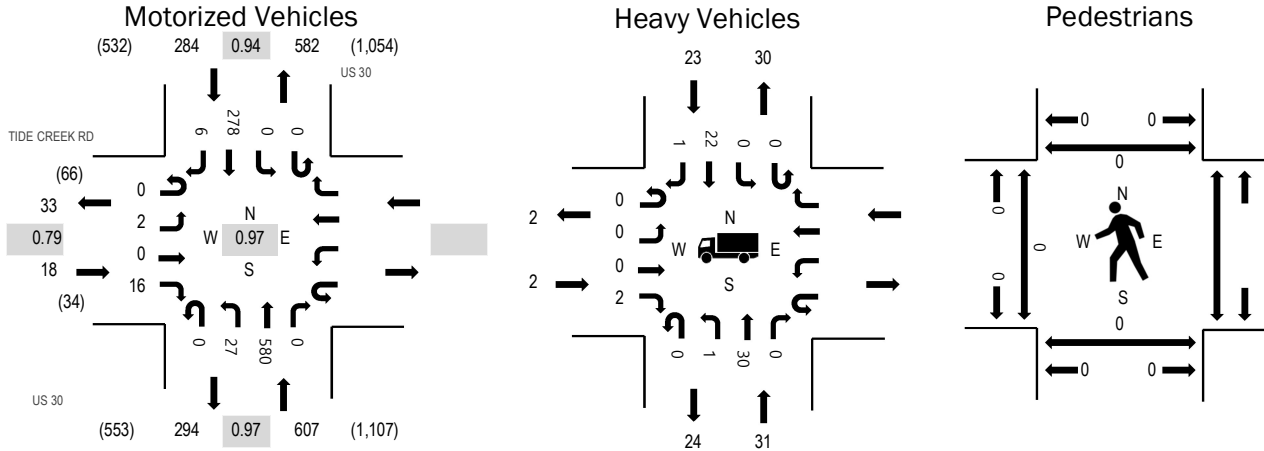
Location: 1 US 30 & TIDE CREEK RD PM

Date: Wednesday, October 4, 2023

Peak Hour: 04:25 PM - 05:25 PM

Peak 15-Minutes: 04:25 PM - 04:40 PM

Peak Hour



Note: Total study counts contained in parentheses.

|     | HV%   | PHF  |
|-----|-------|------|
| EB  | 11.1% | 0.79 |
| WB  |       |      |
| NB  | 5.1%  | 0.97 |
| SB  | 8.1%  | 0.94 |
| All | 6.2%  | 0.97 |

Traffic Counts - Motorized Vehicles

| Interval<br>Start Time | TIDE CREEK RD<br>Eastbound |      |      |       | Westbound |      |      |       | US 30<br>Northbound |      |       |       | US 30<br>Southbound |      |      |       | Total | Rolling<br>Hour |
|------------------------|----------------------------|------|------|-------|-----------|------|------|-------|---------------------|------|-------|-------|---------------------|------|------|-------|-------|-----------------|
|                        | U-Turn                     | Left | Thru | Right | U-Turn    | Left | Thru | Right | U-Turn              | Left | Thru  | Right | U-Turn              | Left | Thru | Right |       |                 |
| 4:00 PM                | 0                          | 0    | 0    | 2     |           |      |      |       | 0                   | 7    | 26    | 0     | 0                   | 0    | 25   | 0     | 60    | 857             |
| 4:05 PM                | 0                          | 1    | 0    | 2     |           |      |      |       | 0                   | 1    | 27    | 0     | 0                   | 0    | 25   | 0     | 56    | 868             |
| 4:10 PM                | 0                          | 0    | 0    | 0     |           |      |      |       | 0                   | 1    | 39    | 0     | 0                   | 0    | 27   | 1     | 68    | 887             |
| 4:15 PM                | 0                          | 0    | 0    | 2     |           |      |      |       | 0                   | 2    | 42    | 0     | 0                   | 0    | 26   | 0     | 72    | 893             |
| 4:20 PM                | 0                          | 0    | 0    | 1     |           |      |      |       | 0                   | 2    | 46    | 0     | 0                   | 0    | 24   | 0     | 73    | 889             |
| 4:25 PM                | 0                          | 0    | 0    | 2     |           |      |      |       | 0                   | 1    | 47    | 0     | 0                   | 0    | 23   | 1     | 74    | 909             |
| 4:30 PM                | 0                          | 0    | 0    | 1     |           |      |      |       | 0                   | 6    | 45    | 0     | 0                   | 0    | 27   | 0     | 79    | 909             |
| 4:35 PM                | 0                          | 0    | 0    | 2     |           |      |      |       | 0                   | 0    | 54    | 0     | 0                   | 0    | 26   | 0     | 82    | 887             |
| 4:40 PM                | 0                          | 1    | 0    | 1     |           |      |      |       | 0                   | 1    | 47    | 0     | 0                   | 0    | 14   | 1     | 65    | 868             |
| 4:45 PM                | 0                          | 0    | 0    | 0     |           |      |      |       | 0                   | 2    | 45    | 0     | 0                   | 0    | 22   | 0     | 69    | 864             |
| 4:50 PM                | 0                          | 0    | 0    | 1     |           |      |      |       | 0                   | 2    | 50    | 0     | 0                   | 0    | 31   | 2     | 86    | 853             |
| 4:55 PM                | 0                          | 0    | 0    | 2     |           |      |      |       | 0                   | 2    | 48    | 0     | 0                   | 0    | 20   | 1     | 73    | 836             |
| 5:00 PM                | 0                          | 0    | 0    | 3     |           |      |      |       | 0                   | 5    | 44    | 0     | 0                   | 0    | 19   | 0     | 71    | 816             |
| 5:05 PM                | 0                          | 0    | 0    | 1     |           |      |      |       | 0                   | 5    | 46    | 0     | 0                   | 0    | 23   | 0     | 75    |                 |
| 5:10 PM                | 0                          | 1    | 0    | 0     |           |      |      |       | 0                   | 0    | 49    | 0     | 0                   | 0    | 24   | 0     | 74    |                 |
| 5:15 PM                | 0                          | 0    | 0    | 1     |           |      |      |       | 0                   | 1    | 48    | 0     | 0                   | 0    | 18   | 0     | 68    |                 |
| 5:20 PM                | 0                          | 0    | 0    | 2     |           |      |      |       | 0                   | 2    | 57    | 0     | 0                   | 0    | 31   | 1     | 93    |                 |
| 5:25 PM                | 0                          | 0    | 0    | 3     |           |      |      |       | 0                   | 2    | 41    | 0     | 0                   | 0    | 28   | 0     | 74    |                 |
| 5:30 PM                | 0                          | 0    | 0    | 1     |           |      |      |       | 0                   | 3    | 39    | 0     | 0                   | 0    | 12   | 2     | 57    |                 |
| 5:35 PM                | 0                          | 0    | 0    | 1     |           |      |      |       | 0                   | 2    | 42    | 0     | 0                   | 0    | 18   | 0     | 63    |                 |
| 5:40 PM                | 0                          | 0    | 0    | 0     |           |      |      |       | 0                   | 0    | 46    | 0     | 0                   | 0    | 15   | 0     | 61    |                 |
| 5:45 PM                | 0                          | 0    | 0    | 0     |           |      |      |       | 0                   | 6    | 36    | 0     | 0                   | 0    | 16   | 0     | 58    |                 |
| 5:50 PM                | 0                          | 1    | 0    | 1     |           |      |      |       | 0                   | 4    | 46    | 0     | 0                   | 0    | 17   | 0     | 69    |                 |
| 5:55 PM                | 0                          | 0    | 0    | 1     |           |      |      |       | 0                   | 0    | 40    | 0     | 0                   | 0    | 12   | 0     | 53    |                 |
| Count Total            | 0                          | 4    | 0    | 30    |           |      |      |       | 0                   | 57   | 1,050 | 0     | 0                   | 0    | 523  | 9     | 1,673 |                 |
| Peak Hour              | 0                          | 2    | 0    | 16    |           |      |      |       | 0                   | 27   | 580   | 0     | 0                   | 0    | 278  | 6     | 909   |                 |

### Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

| Interval<br>Start Time | Heavy Vehicles |    |    |    |       | Interval<br>Start Time | Bicycles on Roadway |    |    |    |       | Interval<br>Start Time | Pedestrians/Bicycles on Crosswalk |    |    |    |       |
|------------------------|----------------|----|----|----|-------|------------------------|---------------------|----|----|----|-------|------------------------|-----------------------------------|----|----|----|-------|
|                        | EB             | NB | WB | SB | Total |                        | EB                  | NB | WB | SB | Total |                        | EB                                | NB | WB | SB | Total |
| 4:00 PM                | 0              | 4  |    | 3  | 7     | 4:00 PM                | 0                   | 0  |    | 0  | 0     | 4:00 PM                | 0                                 | 0  |    | 0  | 0     |
| 4:05 PM                | 1              | 0  |    | 3  | 4     | 4:05 PM                | 0                   | 0  |    | 0  | 0     | 4:05 PM                | 0                                 | 0  |    | 0  | 0     |
| 4:10 PM                | 0              | 4  |    | 2  | 6     | 4:10 PM                | 0                   | 0  |    | 0  | 0     | 4:10 PM                | 0                                 | 0  |    | 0  | 0     |
| 4:15 PM                | 0              | 4  |    | 0  | 4     | 4:15 PM                | 0                   | 0  |    | 0  | 0     | 4:15 PM                | 0                                 | 0  |    | 0  | 0     |
| 4:20 PM                | 0              | 2  |    | 4  | 6     | 4:20 PM                | 0                   | 0  |    | 0  | 0     | 4:20 PM                | 0                                 | 0  |    | 0  | 0     |
| 4:25 PM                | 0              | 2  |    | 2  | 4     | 4:25 PM                | 0                   | 0  |    | 0  | 0     | 4:25 PM                | 0                                 | 0  |    | 0  | 0     |
| 4:30 PM                | 1              | 4  |    | 4  | 9     | 4:30 PM                | 0                   | 0  |    | 0  | 0     | 4:30 PM                | 0                                 | 0  |    | 0  | 0     |
| 4:35 PM                | 0              | 4  |    | 4  | 8     | 4:35 PM                | 0                   | 0  |    | 0  | 0     | 4:35 PM                | 0                                 | 0  |    | 0  | 0     |
| 4:40 PM                | 0              | 2  |    | 1  | 3     | 4:40 PM                | 0                   | 0  |    | 0  | 0     | 4:40 PM                | 0                                 | 0  |    | 0  | 0     |
| 4:45 PM                | 0              | 2  |    | 2  | 4     | 4:45 PM                | 0                   | 0  |    | 0  | 0     | 4:45 PM                | 0                                 | 0  |    | 0  | 0     |
| 4:50 PM                | 0              | 2  |    | 2  | 4     | 4:50 PM                | 0                   | 0  |    | 0  | 0     | 4:50 PM                | 0                                 | 0  |    | 0  | 0     |
| 4:55 PM                | 0              | 1  |    | 2  | 3     | 4:55 PM                | 0                   | 0  |    | 0  | 0     | 4:55 PM                | 0                                 | 0  |    | 0  | 0     |
| 5:00 PM                | 1              | 4  |    | 0  | 5     | 5:00 PM                | 0                   | 0  |    | 0  | 0     | 5:00 PM                | 0                                 | 0  |    | 0  | 0     |
| 5:05 PM                | 0              | 1  |    | 1  | 2     | 5:05 PM                | 0                   | 0  |    | 0  | 0     | 5:05 PM                | 0                                 | 0  |    | 0  | 0     |
| 5:10 PM                | 0              | 3  |    | 2  | 5     | 5:10 PM                | 0                   | 0  |    | 0  | 0     | 5:10 PM                | 0                                 | 0  |    | 0  | 0     |
| 5:15 PM                | 0              | 2  |    | 0  | 2     | 5:15 PM                | 0                   | 0  |    | 0  | 0     | 5:15 PM                | 0                                 | 0  |    | 0  | 0     |
| 5:20 PM                | 0              | 4  |    | 3  | 7     | 5:20 PM                | 0                   | 0  |    | 0  | 0     | 5:20 PM                | 0                                 | 0  |    | 0  | 0     |
| 5:25 PM                | 0              | 2  |    | 1  | 3     | 5:25 PM                | 0                   | 0  |    | 0  | 0     | 5:25 PM                | 0                                 | 0  |    | 0  | 0     |
| 5:30 PM                | 0              | 3  |    | 1  | 4     | 5:30 PM                | 0                   | 0  |    | 0  | 0     | 5:30 PM                | 0                                 | 0  |    | 0  | 0     |
| 5:35 PM                | 0              | 2  |    | 1  | 3     | 5:35 PM                | 0                   | 0  |    | 0  | 0     | 5:35 PM                | 0                                 | 0  |    | 0  | 0     |
| 5:40 PM                | 0              | 3  |    | 0  | 3     | 5:40 PM                | 0                   | 0  |    | 0  | 0     | 5:40 PM                | 0                                 | 0  |    | 0  | 0     |
| 5:45 PM                | 0              | 1  |    | 0  | 1     | 5:45 PM                | 0                   | 0  |    | 0  | 0     | 5:45 PM                | 0                                 | 0  |    | 0  | 0     |
| 5:50 PM                | 1              | 3  |    | 0  | 4     | 5:50 PM                | 0                   | 0  |    | 0  | 0     | 5:50 PM                | 0                                 | 0  |    | 0  | 0     |
| 5:55 PM                | 0              | 0  |    | 1  | 1     | 5:55 PM                | 0                   | 0  |    | 0  | 0     | 5:55 PM                | 0                                 | 0  |    | 0  | 0     |
| Count Total            | 4              | 59 |    | 39 | 102   | Count Total            | 0                   | 0  |    | 0  | 0     | Count Total            | 0                                 | 0  |    | 0  | 0     |
| Peak Hour              | 2              | 31 |    | 23 | 56    | Peak Hour              | 0                   | 0  |    | 0  | 0     | Peak Hour              | 0                                 | 0  |    | 0  | 0     |

Measured ~600 feet east of  
Proposed Shared Access

**All Traffic Data Services, Inc.**  
*alltrafficdata.net*

Site Code: 1  
Tide Creek Road E.O MAPLECREST RD

| Start Time  | 05-Oct-23 Thu | EB    | WB    |   |   |   |   |   |   | Total |
|-------------|---------------|-------|-------|---|---|---|---|---|---|-------|
| 12:00 AM    |               | 0     | 0     |   |   |   |   |   |   | 0     |
| 01:00       |               | 0     | 0     |   |   |   |   |   |   | 0     |
| 02:00       |               | 0     | 0     |   |   |   |   |   |   | 0     |
| 03:00       |               | 2     | 0     |   |   |   |   |   |   | 2     |
| 04:00       |               | 7     | 1     |   |   |   |   |   |   | 8     |
| 05:00       |               | 13    | 3     |   |   |   |   |   |   | 16    |
| 06:00       |               | 25    | 1     |   |   |   |   |   |   | 26    |
| 07:00       |               | 25    | 8     |   |   |   |   |   |   | 33    |
| 08:00       |               | 17    | 8     |   |   |   |   |   |   | 25    |
| 09:00       |               | 22    | 9     |   |   |   |   |   |   | 31    |
| 10:00       |               | 11    | 9     |   |   |   |   |   |   | 20    |
| 11:00       |               | 18    | 10    |   |   |   |   |   |   | 28    |
| 12:00 PM    |               | 19    | 12    |   |   |   |   |   |   | 31    |
| 01:00       |               | 15    | 23    |   |   |   |   |   |   | 38    |
| 02:00       |               | 19    | 11    |   |   |   |   |   |   | 30    |
| 03:00       |               | 11    | 22    |   |   |   |   |   |   | 33    |
| 04:00       |               | 17    | 22    |   |   |   |   |   |   | 39    |
| 05:00       |               | 13    | 31    |   |   |   |   |   |   | 44    |
| 06:00       |               | 16    | 24    |   |   |   |   |   |   | 40    |
| 07:00       |               | 7     | 15    |   |   |   |   |   |   | 22    |
| 08:00       |               | 5     | 11    |   |   |   |   |   |   | 16    |
| 09:00       |               | 4     | 5     |   |   |   |   |   |   | 9     |
| 10:00       |               | 1     | 4     |   |   |   |   |   |   | 5     |
| 11:00       |               | 1     | 3     |   |   |   |   |   |   | 4     |
| Total       |               | 268   | 232   |   |   |   |   |   |   | 500   |
| Percent     |               | 53.6% | 46.4% |   |   |   |   |   |   |       |
| AM Peak     | -             | 06:00 | 11:00 | - | - | - | - | - | - | 07:00 |
| Vol.        | -             | 25    | 10    | - | - | - | - | - | - | 33    |
| PM Peak     | -             | 12:00 | 17:00 | - | - | - | - | - | - | 17:00 |
| Vol.        | -             | 19    | 31    | - | - | - | - | - | - | 44    |
| Grand Total |               | 268   | 232   |   |   |   |   |   |   | 500   |
| Percent     |               | 53.6% | 46.4% |   |   |   |   |   |   |       |

ADT

ADT 500

AADT 500

EB

| Start Time  | Bikes | Cars & Trailers | 2 Axle Long | Buses | 2 Axle 6 Tire | 3 Axle Single | 4 Axle Single | <5 Axl Double | 5 Axle Double | >6 Axl Double | <6 Axl Multi | 6 Axle Multi | >6 Axl Multi | Total |
|-------------|-------|-----------------|-------------|-------|---------------|---------------|---------------|---------------|---------------|---------------|--------------|--------------|--------------|-------|
| 10/05/23    | 0     | 0               | 0           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 0     |
| 01:00       | 0     | 0               | 0           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 0     |
| 02:00       | 0     | 0               | 0           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 0     |
| 03:00       | 0     | 1               | 0           | 0     | 1             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 2     |
| 04:00       | 0     | 4               | 3           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 7     |
| 05:00       | 0     | 6               | 0           | 0     | 6             | 0             | 0             | 0             | 0             | 0             | 1            | 0            | 0            | 13    |
| 06:00       | 0     | 14              | 3           | 1     | 6             | 0             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 25    |
| 07:00       | 0     | 11              | 10          | 0     | 4             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 25    |
| 08:00       | 0     | 11              | 3           | 0     | 2             | 0             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 17    |
| 09:00       | 0     | 12              | 4           | 0     | 6             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 22    |
| 10:00       | 0     | 7               | 3           | 0     | 1             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 11    |
| 11:00       | 0     | 9               | 4           | 0     | 4             | 0             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 18    |
| 12 PM       | 0     | 11              | 3           | 0     | 5             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 19    |
| 13:00       | 0     | 9               | 3           | 0     | 3             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 15    |
| 14:00       | 0     | 13              | 3           | 1     | 2             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 19    |
| 15:00       | 0     | 5               | 3           | 1     | 2             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 11    |
| 16:00       | 0     | 7               | 5           | 0     | 5             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 17    |
| 17:00       | 0     | 5               | 6           | 0     | 2             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 13    |
| 18:00       | 0     | 8               | 4           | 0     | 4             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 16    |
| 19:00       | 0     | 3               | 2           | 0     | 2             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 7     |
| 20:00       | 0     | 1               | 3           | 0     | 1             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 5     |
| 21:00       | 0     | 0               | 3           | 0     | 1             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 4     |
| 22:00       | 0     | 0               | 0           | 0     | 1             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 1     |
| 23:00       | 0     | 1               | 0           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 1     |
| Day Total   | 0     | 138             | 65          | 3     | 58            | 0             | 0             | 3             | 0             | 0             | 1            | 0            | 0            | 268   |
| Percent     | 0.0%  | 51.5%           | 24.3%       | 1.1%  | 21.6%         | 0.0%          | 0.0%          | 1.1%          | 0.0%          | 0.0%          | 0.4%         | 0.0%         | 0.0%         |       |
| AM Peak     |       | 06:00           | 07:00       | 06:00 | 05:00         |               |               | 06:00         |               |               | 05:00        |              |              | 06:00 |
| Vol.        |       | 14              | 10          | 1     | 6             |               |               | 1             |               |               | 1            |              |              | 25    |
| PM Peak     |       | 14:00           | 17:00       | 14:00 | 12:00         |               |               |               |               |               |              |              |              | 12:00 |
| Vol.        |       | 13              | 6           | 1     | 5             |               |               |               |               |               |              |              |              | 19    |
| Grand Total | 0     | 138             | 65          | 3     | 58            | 0             | 0             | 3             | 0             | 0             | 1            | 0            | 0            | 268   |
| Percent     | 0.0%  | 51.5%           | 24.3%       | 1.1%  | 21.6%         | 0.0%          | 0.0%          | 1.1%          | 0.0%          | 0.0%          | 0.4%         | 0.0%         | 0.0%         |       |

| WB | Start Time  | Bikes | Cars & Trailers | 2 Axle Long | Buses | 2 Axle 6 Tire | 3 Axle Single | 4 Axle Single | <5 Axl Double | 5 Axle Double | >6 Axl Double | <6 Axl Multi | 6 Axle Multi | >6 Axl Multi | Total |
|----|-------------|-------|-----------------|-------------|-------|---------------|---------------|---------------|---------------|---------------|---------------|--------------|--------------|--------------|-------|
|    | 10/05/23    | 0     | 0               | 0           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 0     |
|    | 01:00       | 0     | 0               | 0           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 0     |
|    | 02:00       | 0     | 0               | 0           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 0     |
|    | 03:00       | 0     | 0               | 0           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 0     |
|    | 04:00       | 0     | 1               | 0           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 1     |
|    | 05:00       | 0     | 3               | 0           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 3     |
|    | 06:00       | 0     | 0               | 0           | 1     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 1     |
|    | 07:00       | 0     | 6               | 0           | 0     | 2             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 8     |
|    | 08:00       | 0     | 5               | 2           | 0     | 1             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 8     |
|    | 09:00       | 0     | 7               | 1           | 0     | 1             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 9     |
|    | 10:00       | 0     | 5               | 3           | 0     | 1             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 9     |
|    | 11:00       | 0     | 4               | 3           | 0     | 3             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 10    |
|    | 12 PM       | 0     | 9               | 2           | 0     | 1             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 12    |
|    | 13:00       | 0     | 13              | 8           | 0     | 1             | 0             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 23    |
|    | 14:00       | 0     | 8               | 3           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 11    |
|    | 15:00       | 0     | 13              | 5           | 0     | 3             | 0             | 1             | 0             | 0             | 0             | 0            | 0            | 0            | 22    |
|    | 16:00       | 0     | 17              | 5           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 22    |
|    | 17:00       | 0     | 17              | 8           | 0     | 6             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 31    |
|    | 18:00       | 0     | 18              | 4           | 0     | 2             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 24    |
|    | 19:00       | 0     | 7               | 5           | 0     | 3             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 15    |
|    | 20:00       | 0     | 8               | 3           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 11    |
|    | 21:00       | 0     | 3               | 2           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 5     |
|    | 22:00       | 0     | 4               | 0           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 4     |
|    | 23:00       | 0     | 0               | 2           | 0     | 1             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 3     |
|    | Day Total   | 0     | 148             | 56          | 1     | 25            | 0             | 1             | 1             | 0             | 0             | 0            | 0            | 0            | 232   |
|    | Percent     | 0.0%  | 63.8%           | 24.1%       | 0.4%  | 10.8%         | 0.0%          | 0.4%          | 0.4%          | 0.0%          | 0.0%          | 0.0%         | 0.0%         | 0.0%         |       |
|    | AM Peak     |       | 09:00           | 10:00       | 06:00 | 11:00         |               |               |               |               |               |              |              |              | 11:00 |
|    | Vol.        |       | 7               | 3           | 1     | 3             |               |               |               |               |               |              |              |              | 10    |
|    | PM Peak     |       | 18:00           | 13:00       |       | 17:00         |               | 15:00         | 13:00         |               |               |              |              |              | 17:00 |
|    | Vol.        |       | 18              | 8           |       | 6             |               | 1             | 1             |               |               |              |              |              | 31    |
|    | Grand Total | 0     | 148             | 56          | 1     | 25            | 0             | 1             | 1             | 0             | 0             | 0            | 0            | 0            | 232   |
|    | Percent     | 0.0%  | 63.8%           | 24.1%       | 0.4%  | 10.8%         | 0.0%          | 0.4%          | 0.4%          | 0.0%          | 0.0%          | 0.0%         | 0.0%         | 0.0%         |       |

EB

| Start Time     | 15    | 20   | 25    | 30    | 35    | 40    | 45    | 50    | 55    | 60    | 65    | 70    | 75   | 999  | Total | Pace Speed | Number in Pace |
|----------------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|------------|----------------|
| 10/05/23       | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0    | 0    | 0     | *          | *              |
| 01:00          | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0    | 0    | 0     | *          | *              |
| 02:00          | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0    | 0    | 0     | *          | *              |
| 03:00          | 0     | 0    | 0     | 0     | 0     | 0     | 1     | 0     | 0     | 1     | 0     | 0     | 0    | 0    | 2     | 34-43      | 1              |
| 04:00          | 0     | 0    | 0     | 0     | 0     | 0     | 3     | 1     | 2     | 0     | 1     | 0     | 0    | 0    | 7     | 41-50      | 4              |
| 05:00          | 0     | 0    | 0     | 0     | 2     | 2     | 2     | 2     | 2     | 2     | 1     | 0     | 0    | 0    | 13    | 51-60      | 4              |
| 06:00          | 1     | 0    | 0     | 3     | 3     | 1     | 6     | 5     | 3     | 3     | 0     | 0     | 0    | 0    | 25    | 41-50      | 11             |
| 07:00          | 0     | 0    | 0     | 0     | 0     | 0     | 9     | 7     | 6     | 2     | 1     | 0     | 0    | 0    | 25    | 41-50      | 16             |
| 08:00          | 1     | 0    | 0     | 2     | 1     | 2     | 7     | 2     | 2     | 0     | 0     | 0     | 0    | 0    | 17    | 41-50      | 9              |
| 09:00          | 1     | 0    | 0     | 0     | 1     | 2     | 7     | 7     | 4     | 0     | 0     | 0     | 0    | 0    | 22    | 41-50      | 14             |
| 10:00          | 0     | 0    | 0     | 0     | 0     | 2     | 3     | 2     | 0     | 4     | 0     | 0     | 0    | 0    | 11    | 36-45      | 5              |
| 11:00          | 0     | 0    | 2     | 0     | 3     | 1     | 5     | 7     | 0     | 0     | 0     | 0     | 0    | 0    | 18    | 41-50      | 12             |
| 12 PM          | 2     | 0    | 0     | 0     | 1     | 2     | 5     | 4     | 2     | 3     | 0     | 0     | 0    | 0    | 19    | 41-50      | 9              |
| 13:00          | 1     | 0    | 1     | 0     | 0     | 3     | 4     | 4     | 1     | 0     | 0     | 1     | 0    | 0    | 15    | 41-50      | 8              |
| 14:00          | 7     | 0    | 1     | 0     | 3     | 1     | 2     | 2     | 3     | 0     | 0     | 0     | 0    | 0    | 19    | 46-55      | 5              |
| 15:00          | 1     | 0    | 0     | 1     | 0     | 3     | 0     | 2     | 3     | 1     | 0     | 0     | 0    | 0    | 11    | 46-55      | 5              |
| 16:00          | 1     | 0    | 0     | 0     | 0     | 3     | 3     | 7     | 3     | 0     | 0     | 0     | 0    | 0    | 17    | 46-55      | 10             |
| 17:00          | 0     | 0    | 0     | 1     | 1     | 3     | 2     | 1     | 3     | 2     | 0     | 0     | 0    | 0    | 13    | 51-60      | 5              |
| 18:00          | 1     | 0    | 0     | 1     | 2     | 0     | 4     | 4     | 3     | 1     | 0     | 0     | 0    | 0    | 16    | 41-50      | 8              |
| 19:00          | 0     | 0    | 0     | 0     | 0     | 1     | 3     | 0     | 2     | 0     | 1     | 0     | 0    | 0    | 7     | 36-45      | 4              |
| 20:00          | 0     | 0    | 0     | 0     | 0     | 1     | 2     | 1     | 1     | 0     | 0     | 0     | 0    | 0    | 5     | 41-50      | 3              |
| 21:00          | 0     | 0    | 0     | 0     | 0     | 1     | 0     | 2     | 1     | 0     | 0     | 0     | 0    | 0    | 4     | 44-53      | 3              |
| 22:00          | 0     | 0    | 0     | 0     | 0     | 1     | 0     | 0     | 0     | 0     | 0     | 0     | 0    | 0    | 1     | 29-38      | 1              |
| 23:00          | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 1     | 0     | 0     | 0    | 0    | 1     | 49-58      | 1              |
| <b>Total</b>   | 16    | 0    | 4     | 8     | 17    | 29    | 68    | 60    | 41    | 20    | 4     | 1     | 0    | 0    | 268   |            |                |
| <b>Percent</b> | 6.0%  | 0.0% | 1.5%  | 3.0%  | 6.3%  | 10.8% | 25.4% | 22.4% | 15.3% | 7.5%  | 1.5%  | 0.4%  | 0.0% | 0.0% |       |            |                |
| <b>AM Peak</b> | 06:00 |      | 11:00 | 06:00 | 06:00 | 05:00 | 07:00 | 07:00 | 07:00 | 10:00 | 04:00 |       |      |      | 06:00 |            |                |
| <b>Vol.</b>    | 1     |      | 2     | 3     | 3     | 2     | 9     | 7     | 6     | 4     | 1     |       |      |      | 25    |            |                |
| <b>PM Peak</b> | 14:00 |      | 13:00 | 15:00 | 14:00 | 13:00 | 12:00 | 16:00 | 14:00 | 12:00 | 19:00 | 13:00 |      |      | 12:00 |            |                |
| <b>Vol.</b>    | 7     |      | 1     | 1     | 3     | 3     | 5     | 7     | 3     | 3     | 1     | 1     |      |      | 19    |            |                |
| <b>Total</b>   | 16    | 0    | 4     | 8     | 17    | 29    | 68    | 60    | 41    | 20    | 4     | 1     | 0    | 0    | 268   |            |                |
| <b>Percent</b> | 6.0%  | 0.0% | 1.5%  | 3.0%  | 6.3%  | 10.8% | 25.4% | 22.4% | 15.3% | 7.5%  | 1.5%  | 0.4%  | 0.0% | 0.0% |       |            |                |

15th Percentile : 33 MPH  
50th Percentile : 44 MPH  
85th Percentile : 53 MPH  
95th Percentile : 57 MPH

Stats  
10 MPH Pace Speed : 41-50 MPH  
Number in Pace : 128  
Percent in Pace : 47.8%  
Number of Vehicles > 50 MPH : 66  
Percent of Vehicles > 50 MPH : 24.6%  
Mean Speed(Average) : 43 MPH

| WB       | Start Time | 15    | 16   | 21   | 25   | 26    | 30    | 31    | 35    | 36    | 40    | 41   | 45   | 46   | 50   | 51   | 55   | 56   | 60   | 61   | 65   | 66   | 70   | 71   | 75   | 76   | 999 | Total | Pace Speed | Number in Pace |
|----------|------------|-------|------|------|------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|-------|------------|----------------|
| 10/05/23 |            | 0     | 0    | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0     | *          | *              |
|          | 01:00      | 0     | 0    | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0     | *          | *              |
|          | 02:00      | 0     | 0    | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0     | *          | *              |
|          | 03:00      | 0     | 0    | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0     | *          | *              |
|          | 04:00      | 0     | 0    | 0    | 0    | 0     | 0     | 0     | 0     | 1     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1   | 29-38 | 1          |                |
|          | 05:00      | 0     | 0    | 0    | 0    | 0     | 0     | 0     | 0     | 2     | 0     | 0    | 1    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 3   | 30-39 | 2          |                |
|          | 06:00      | 0     | 0    | 0    | 0    | 0     | 1     | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1   | 24-33 | 1          |                |
|          | 07:00      | 0     | 0    | 0    | 0    | 1     | 2     | 4     | 1     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 8   | 31-40 | 6          |                |
|          | 08:00      | 0     | 0    | 0    | 0    | 0     | 2     | 3     | 2     | 1     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 8   | 36-45 | 5          |                |
|          | 09:00      | 0     | 0    | 0    | 0    | 0     | 5     | 2     | 1     | 1     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 9   | 31-40 | 7          |                |
|          | 10:00      | 0     | 0    | 0    | 0    | 2     | 2     | 2     | 2     | 1     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 9   | 36-45 | 4          |                |
|          | 11:00      | 0     | 0    | 0    | 0    | 5     | 2     | 1     | 2     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 10  | 26-35 | 7          |                |
|          | 12 PM      | 0     | 0    | 0    | 0    | 2     | 1     | 6     | 3     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 12  | 35-44 | 9          |                |
|          | 13:00      | 0     | 0    | 0    | 0    | 3     | 10    | 6     | 4     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 23  | 31-40 | 16         |                |
|          | 14:00      | 3     | 0    | 0    | 0    | 2     | 2     | 1     | 3     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 11  | 25-34 | 4          |                |
|          | 15:00      | 0     | 0    | 0    | 0    | 1     | 6     | 10    | 4     | 1     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 22  | 31-40 | 16         |                |
|          | 16:00      | 2     | 0    | 0    | 0    | 0     | 4     | 9     | 5     | 1     | 1     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 22  | 34-43 | 14         |                |
|          | 17:00      | 1     | 0    | 0    | 0    | 2     | 2     | 16    | 6     | 4     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 31  | 36-45 | 22         |                |
|          | 18:00      | 1     | 0    | 0    | 0    | 1     | 7     | 6     | 7     | 1     | 1     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 24  | 31-40 | 13         |                |
|          | 19:00      | 0     | 0    | 0    | 0    | 0     | 5     | 6     | 3     | 1     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 15  | 31-40 | 11         |                |
|          | 20:00      | 0     | 0    | 0    | 0    | 2     | 1     | 5     | 2     | 1     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 11  | 36-45 | 7          |                |
|          | 21:00      | 0     | 0    | 0    | 0    | 0     | 1     | 3     | 1     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 5   | 36-45 | 4          |                |
|          | 22:00      | 0     | 0    | 0    | 0    | 0     | 2     | 2     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 4   | 30-39 | 4          |                |
|          | 23:00      | 0     | 0    | 0    | 0    | 0     | 1     | 2     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 3   | 30-39 | 3          |                |
|          | Total      | 7     | 0    | 0    | 0    | 21    | 56    | 87    | 46    | 13    | 2     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 232 |       |            |                |
|          | Percent    | 3.0%  | 0.0% | 0.0% | 0.0% | 9.1%  | 24.1% | 37.5% | 19.8% | 5.6%  | 0.9%  | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |     |       |            |                |
|          | AM Peak    |       |      |      |      | 11:00 | 09:00 | 07:00 | 08:00 | 05:00 |       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |     | 11:00 |            |                |
|          | Vol.       |       |      |      |      | 5     | 5     | 4     | 2     | 1     |       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |     | 10    |            |                |
|          | PM Peak    | 14:00 |      |      |      | 13:00 | 13:00 | 17:00 | 18:00 | 17:00 | 16:00 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |     | 17:00 |            |                |
|          | Vol.       | 3     |      |      |      | 3     | 10    | 16    | 7     | 4     | 1     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |     | 31    |            |                |
|          | Total      | 7     | 0    | 0    | 0    | 21    | 56    | 87    | 46    | 13    | 2     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 232 |       |            |                |
|          | Percent    | 3.0%  | 0.0% | 0.0% | 0.0% | 9.1%  | 24.1% | 37.5% | 19.8% | 5.6%  | 0.9%  | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |     |       |            |                |

15th Percentile : 30 MPH  
 50th Percentile : 36 MPH  
 85th Percentile : 42 MPH  
 95th Percentile : 46 MPH

Stats  
 10 MPH Pace Speed : 31-40 MPH  
 Number in Pace : 143  
 Percent in Pace : 61.6%  
 Number of Vehicles > 50 MPH : 2  
 Percent of Vehicles > 50 MPH : 0.9%  
 Mean Speed(Average) : 37 MPH



EB

| Start Time   | Bikes | Cars & Trailers | 2 Axle Long | Buses      | 2 Axle 6 Tire | 3 Axle Single | 4 Axle Single | <5 Axl Double | 5 Axle Double | >6 Axl Double | <6 Axl Multi | 6 Axle Multi | >6 Axl Multi | Total       |
|--------------|-------|-----------------|-------------|------------|---------------|---------------|---------------|---------------|---------------|---------------|--------------|--------------|--------------|-------------|
| 10/18/23     | 0     | 0               | 0           | 0          | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 0           |
| 01:00        | 0     | 1               | 1           | 0          | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 2           |
| 02:00        | 0     | 0               | 0           | 0          | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 0           |
| 03:00        | 0     | 1               | 0           | 0          | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 1           |
| 04:00        | 0     | 6               | 1           | 0          | 1             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 8           |
| 05:00        | 0     | 6               | 4           | 1          | 4             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 15          |
| 06:00        | 0     | 10              | 2           | <b>2</b>   | <b>8</b>      | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | <b>22</b>   |
| 07:00        | 0     | <b>13</b>       | 4           | 0          | 4             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 21          |
| 08:00        | 0     | 8               | 4           | 0          | 5             | 0             | 0             | <b>1</b>      | 0             | 0             | 0            | 0            | 0            | 18          |
| 09:00        | 0     | 10              | 3           | 0          | 3             | 0             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 17          |
| 10:00        | 0     | 6               | 4           | 0          | 2             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 12          |
| 11:00        | 0     | 9               | <b>5</b>    | 0          | 1             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 15          |
| 12 PM        | 0     | 7               | 2           | 0          | 2             | 0             | 0             | <b>1</b>      | 0             | 0             | 0            | 0            | 0            | 12          |
| 13:00        | 0     | 6               | <b>7</b>    | <b>1</b>   | <b>5</b>      | 0             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | <b>20</b>   |
| 14:00        | 0     | 11              | 4           | 0          | 3             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 18          |
| 15:00        | 0     | 4               | 2           | 1          | 1             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 8           |
| 16:00        | 0     | 6               | 4           | 0          | 1             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 11          |
| 17:00        | 0     | 8               | 2           | 0          | 3             | 0             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 14          |
| 18:00        | 0     | <b>12</b>       | 2           | 0          | 3             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 17          |
| 19:00        | 0     | 1               | 2           | 0          | 1             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 4           |
| 20:00        | 0     | 1               | 1           | 0          | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 2           |
| 21:00        | 0     | 1               | 1           | 0          | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 2           |
| 22:00        | 0     | 0               | 1           | 0          | 3             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 4           |
| 23:00        | 0     | 0               | 0           | 0          | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 0           |
| Day Total    | 0     | 127             | 56          | 5          | 50            | 0             | 0             | 5             | 0             | 0             | 0            | 0            | 0            | 243         |
| Percent      | 0.0%  | 52.3%           | 23.0%       | 2.1%       | 20.6%         | 0.0%          | 0.0%          | 2.1%          | 0.0%          | 0.0%          | 0.0%         | 0.0%         | 0.0%         |             |
| AM Peak Vol. |       | 07:00<br>13     | 11:00<br>5  | 06:00<br>2 | 06:00<br>8    |               |               | 08:00<br>1    |               |               |              |              |              | 06:00<br>22 |
| PM Peak Vol. |       | 18:00<br>12     | 13:00<br>7  | 13:00<br>1 | 13:00<br>5    |               |               | 12:00<br>1    |               |               |              |              |              | 13:00<br>20 |
| Grand Total  | 0     | 127             | 56          | 5          | 50            | 0             | 0             | 5             | 0             | 0             | 0            | 0            | 0            | 243         |
| Percent      | 0.0%  | 52.3%           | 23.0%       | 2.1%       | 20.6%         | 0.0%          | 0.0%          | 2.1%          | 0.0%          | 0.0%          | 0.0%         | 0.0%         | 0.0%         |             |

| WB           |       |                 |             |            |               |               |               |               |               |               |              |              |              |             |
|--------------|-------|-----------------|-------------|------------|---------------|---------------|---------------|---------------|---------------|---------------|--------------|--------------|--------------|-------------|
| Start Time   | Bikes | Cars & Trailers | 2 Axle Long | Buses      | 2 Axle 6 Tire | 3 Axle Single | 4 Axle Single | <5 Axl Double | 5 Axle Double | >6 Axl Double | <6 Axl Multi | 6 Axle Multi | >6 Axl Multi | Total       |
| 10/18/23     | 0     | 0               | 0           | 0          | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 0           |
| 01:00        | 0     | 0               | 0           | 0          | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 0           |
| 02:00        | 0     | 0               | 0           | 0          | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 0           |
| 03:00        | 0     | 0               | 0           | 0          | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 0           |
| 04:00        | 0     | 0               | 0           | 0          | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 0           |
| 05:00        | 0     | 0               | 0           | 0          | 2             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 2           |
| 06:00        | 0     | 1               | 0           | 1          | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 2           |
| 07:00        | 0     | 2               | 0           | 0          | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 2           |
| 08:00        | 0     | 4               | 2           | 0          | 1             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 7           |
| 09:00        | 0     | 1               | 2           | 0          | 2             | 0             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 6           |
| 10:00        | 0     | 3               | 6           | 0          | 2             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 11          |
| 11:00        | 0     | 2               | 4           | 0          | 3             | 0             | 0             | 2             | 0             | 0             | 0            | 0            | 0            | 11          |
| 12 PM        | 0     | 11              | 3           | 0          | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 14          |
| 13:00        | 0     | 10              | 2           | 1          | 2             | 0             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 16          |
| 14:00        | 0     | 6               | 5           | 0          | 3             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 14          |
| 15:00        | 0     | 13              | 6           | 0          | 7             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 26          |
| 16:00        | 0     | 11              | 5           | 0          | 7             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 23          |
| 17:00        | 0     | 13              | 5           | 0          | 5             | 0             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 24          |
| 18:00        | 0     | 14              | 4           | 0          | 5             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 23          |
| 19:00        | 0     | 10              | 4           | 0          | 2             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 16          |
| 20:00        | 0     | 9               | 2           | 0          | 4             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 15          |
| 21:00        | 0     | 2               | 3           | 0          | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 5           |
| 22:00        | 0     | 2               | 0           | 0          | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 2           |
| 23:00        | 0     | 3               | 0           | 0          | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 3           |
| Day Total    | 0     | 117             | 53          | 2          | 45            | 0             | 0             | 5             | 0             | 0             | 0            | 0            | 0            | 222         |
| Percent      | 0.0%  | 52.7%           | 23.9%       | 0.9%       | 20.3%         | 0.0%          | 0.0%          | 2.3%          | 0.0%          | 0.0%          | 0.0%         | 0.0%         | 0.0%         |             |
| AM Peak Vol. |       | 08:00<br>4      | 10:00<br>6  | 06:00<br>1 | 11:00<br>3    |               |               | 11:00<br>2    |               |               |              |              |              | 10:00<br>11 |
| PM Peak Vol. |       | 18:00<br>14     | 15:00<br>6  | 13:00<br>1 | 15:00<br>7    |               |               | 13:00<br>1    |               |               |              |              |              | 15:00<br>26 |
| Grand Total  | 0     | 117             | 53          | 2          | 45            | 0             | 0             | 5             | 0             | 0             | 0            | 0            | 0            | 222         |
| Percent      | 0.0%  | 52.7%           | 23.9%       | 0.9%       | 20.3%         | 0.0%          | 0.0%          | 2.3%          | 0.0%          | 0.0%          | 0.0%         | 0.0%         | 0.0%         |             |

EB

| Start Time     | 15           | 20           | 25           | 30           | 35           | 40           | 45           | 50           | 55           | 60           | 65          | 70          | 75          | 999         | Total        | Pace Speed | Number in Pace |
|----------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|-------------|-------------|-------------|--------------|------------|----------------|
| 10/18/23       | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0           | 0           | 0           | 0           | 0            | *          | *              |
| 01:00          | 0            | 0            | 0            | 0            | 1            | 1            | 0            | 0            | 0            | 0            | 0           | 0           | 0           | 0           | 2            | 29-38      | 2              |
| 02:00          | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0           | 0           | 0           | 0           | 0            | *          | *              |
| 03:00          | 0            | 0            | 0            | 0            | 0            | 1            | 0            | 0            | 0            | 0            | 0           | 0           | 0           | 0           | 1            | 29-38      | 1              |
| 04:00          | 0            | 0            | 0            | 0            | 0            | 0            | 3            | 5            | 0            | 0            | 0           | 0           | 0           | 0           | 8            | 41-50      | 8              |
| 05:00          | 0            | 0            | 0            | 1            | 0            | 3            | 5            | 3            | 3            | 0            | 0           | 0           | 0           | 0           | 15           | 36-45      | 8              |
| 06:00          | 0            | 0            | 1            | 1            | 4            | 5            | 5            | 4            | 0            | 2            | 0           | 0           | 0           | 0           | 22           | 36-45      | 10             |
| 07:00          | 0            | 0            | 0            | 0            | 1            | 6            | 7            | 5            | 2            | 0            | 0           | 0           | 0           | 0           | 21           | 36-45      | 13             |
| 08:00          | 0            | 2            | 1            | 2            | 3            | 7            | 2            | 1            | 0            | 0            | 0           | 0           | 0           | 0           | 18           | 31-40      | 10             |
| 09:00          | 0            | 0            | 0            | 7            | 4            | 4            | 2            | 0            | 0            | 0            | 0           | 0           | 0           | 0           | 17           | 26-35      | 11             |
| 10:00          | 0            | 0            | 1            | 2            | 4            | 4            | 1            | 0            | 0            | 0            | 0           | 0           | 0           | 0           | 12           | 30-39      | 8              |
| 11:00          | 1            | 0            | 0            | 5            | 3            | 4            | 1            | 0            | 1            | 0            | 0           | 0           | 0           | 0           | 15           | 26-35      | 8              |
| 12 PM          | 0            | 0            | 0            | 1            | 3            | 2            | 3            | 1            | 2            | 0            | 0           | 0           | 0           | 0           | 12           | 36-45      | 5              |
| 13:00          | 0            | 0            | 0            | 0            | 2            | 6            | 9            | 2            | 0            | 1            | 0           | 0           | 0           | 0           | 20           | 36-45      | 15             |
| 14:00          | 1            | 0            | 0            | 0            | 2            | 5            | 6            | 3            | 1            | 0            | 0           | 0           | 0           | 0           | 18           | 36-45      | 11             |
| 15:00          | 0            | 0            | 0            | 0            | 0            | 2            | 5            | 0            | 1            | 0            | 0           | 0           | 0           | 0           | 8            | 36-45      | 7              |
| 16:00          | 2            | 0            | 0            | 0            | 1            | 3            | 3            | 2            | 0            | 0            | 0           | 0           | 0           | 0           | 11           | 36-45      | 6              |
| 17:00          | 0            | 0            | 0            | 2            | 2            | 3            | 3            | 2            | 2            | 0            | 0           | 0           | 0           | 0           | 14           | 36-45      | 6              |
| 18:00          | 1            | 0            | 0            | 0            | 1            | 5            | 6            | 2            | 1            | 1            | 0           | 0           | 0           | 0           | 17           | 36-45      | 11             |
| 19:00          | 0            | 0            | 0            | 0            | 1            | 1            | 2            | 0            | 0            | 0            | 0           | 0           | 0           | 0           | 4            | 34-43      | 3              |
| 20:00          | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 2            | 0            | 0            | 0           | 0           | 0           | 0           | 2            | 40-49      | 2              |
| 21:00          | 0            | 0            | 0            | 0            | 0            | 2            | 0            | 0            | 0            | 0            | 0           | 0           | 0           | 0           | 2            | 30-39      | 2              |
| 22:00          | 0            | 0            | 0            | 0            | 0            | 1            | 1            | 1            | 1            | 0            | 0           | 0           | 0           | 0           | 4            | 34-43      | 2              |
| 23:00          | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0           | 0           | 0           | 0           | 0            | *          | *              |
| <b>Total</b>   | <b>5</b>     | <b>2</b>     | <b>3</b>     | <b>21</b>    | <b>32</b>    | <b>65</b>    | <b>64</b>    | <b>33</b>    | <b>14</b>    | <b>4</b>     | <b>0</b>    | <b>0</b>    | <b>0</b>    | <b>0</b>    | <b>243</b>   |            |                |
| <b>Percent</b> | <b>2.1%</b>  | <b>0.8%</b>  | <b>1.2%</b>  | <b>8.6%</b>  | <b>13.2%</b> | <b>26.7%</b> | <b>26.3%</b> | <b>13.6%</b> | <b>5.8%</b>  | <b>1.6%</b>  | <b>0.0%</b> | <b>0.0%</b> | <b>0.0%</b> | <b>0.0%</b> |              |            |                |
| <b>AM Peak</b> | <b>11:00</b> | <b>08:00</b> | <b>06:00</b> | <b>09:00</b> | <b>06:00</b> | <b>08:00</b> | <b>07:00</b> | <b>04:00</b> | <b>05:00</b> | <b>06:00</b> |             |             |             |             | <b>06:00</b> |            |                |
| <b>Vol.</b>    | <b>1</b>     | <b>2</b>     | <b>1</b>     | <b>7</b>     | <b>4</b>     | <b>7</b>     | <b>7</b>     | <b>5</b>     | <b>3</b>     | <b>2</b>     |             |             |             |             | <b>22</b>    |            |                |
| <b>PM Peak</b> | <b>16:00</b> |              |              | <b>17:00</b> | <b>12:00</b> | <b>13:00</b> | <b>13:00</b> | <b>14:00</b> | <b>12:00</b> | <b>13:00</b> |             |             |             |             | <b>13:00</b> |            |                |
| <b>Vol.</b>    | <b>2</b>     |              |              | <b>2</b>     | <b>3</b>     | <b>6</b>     | <b>9</b>     | <b>3</b>     | <b>2</b>     | <b>1</b>     |             |             |             |             | <b>20</b>    |            |                |
| <b>Total</b>   | <b>5</b>     | <b>2</b>     | <b>3</b>     | <b>21</b>    | <b>32</b>    | <b>65</b>    | <b>64</b>    | <b>33</b>    | <b>14</b>    | <b>4</b>     | <b>0</b>    | <b>0</b>    | <b>0</b>    | <b>0</b>    | <b>243</b>   |            |                |
| <b>Percent</b> | <b>2.1%</b>  | <b>0.8%</b>  | <b>1.2%</b>  | <b>8.6%</b>  | <b>13.2%</b> | <b>26.7%</b> | <b>26.3%</b> | <b>13.6%</b> | <b>5.8%</b>  | <b>1.6%</b>  | <b>0.0%</b> | <b>0.0%</b> | <b>0.0%</b> | <b>0.0%</b> |              |            |                |

15th Percentile : 30 MPH  
 50th Percentile : 39 MPH  
 85th Percentile : 47 MPH  
 95th Percentile : 52 MPH

Stats  
 10 MPH Pace Speed : 36-45 MPH  
 Number in Pace : 129  
 Percent in Pace : 53.1%  
 Number of Vehicles > 45 MPH : 51  
 Percent of Vehicles > 45 MPH : 21.0%  
 Mean Speed(Average) : 39 MPH

| WB           | Start Time | 15    | 20    | 25    | 30    | 35    | 40    | 45    | 50    | 55    | 60   | 65   | 70   | 75   | 999   | Total | Pace Speed | Number in Pace |       |
|--------------|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|-------|-------|------------|----------------|-------|
| 10/18/23     |            | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0     | 0     | *          | *              |       |
| 01:00        |            | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0     | 0     | *          | *              |       |
| 02:00        |            | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0     | 0     | *          | *              |       |
| 03:00        |            | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0     | 0     | *          | *              |       |
| 04:00        |            | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0     | 0     | *          | *              |       |
| 05:00        |            | 0     | 0     | 0     | 0     | 1     | 1     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0     | 2     | 29-38      | 2              |       |
| 06:00        |            | 0     | 0     | 0     | 0     | 1     | 0     | 0     | 1     | 0     | 0    | 0    | 0    | 0    | 0     | 2     | 24-33      | 1              |       |
| 07:00        |            | 0     | 0     | 0     | 0     | 0     | 0     | 1     | 1     | 0     | 0    | 0    | 0    | 0    | 0     | 2     | 39-48      | 2              |       |
| 08:00        |            | 1     | 1     | 0     | 3     | 1     | 0     | 1     | 0     | 0     | 0    | 0    | 0    | 0    | 0     | 7     | 26-35      | 4              |       |
| 09:00        |            | 0     | 0     | 1     | 1     | 3     | 1     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0     | 6     | 31-40      | 4              |       |
| 10:00        |            | 0     | 0     | 1     | 7     | 3     | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0     | 11    | 25-34      | 10             |       |
| 11:00        |            | 0     | 2     | 4     | 2     | 2     | 1     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0     | 11    | 21-30      | 6              |       |
| 12 PM        |            | 0     | 0     | 0     | 2     | 2     | 4     | 3     | 0     | 2     | 0    | 1    | 0    | 0    | 0     | 14    | 34-43      | 7              |       |
| 13:00        |            | 1     | 0     | 0     | 2     | 3     | 5     | 2     | 1     | 2     | 0    | 0    | 0    | 0    | 0     | 16    | 31-40      | 8              |       |
| 14:00        |            | 1     | 0     | 0     | 1     | 1     | 4     | 4     | 1     | 2     | 0    | 0    | 0    | 0    | 0     | 14    | 36-45      | 8              |       |
| 15:00        |            | 0     | 0     | 0     | 2     | 3     | 11    | 10    | 0     | 0     | 0    | 0    | 0    | 0    | 0     | 26    | 36-45      | 21             |       |
| 16:00        |            | 0     | 0     | 0     | 0     | 1     | 13    | 2     | 6     | 1     | 0    | 0    | 0    | 0    | 0     | 23    | 34-43      | 15             |       |
| 17:00        |            | 1     | 0     | 0     | 0     | 1     | 9     | 7     | 3     | 3     | 0    | 0    | 0    | 0    | 0     | 24    | 36-45      | 16             |       |
| 18:00        |            | 1     | 0     | 0     | 1     | 2     | 5     | 11    | 2     | 1     | 0    | 0    | 0    | 0    | 0     | 23    | 36-45      | 16             |       |
| 19:00        |            | 0     | 0     | 0     | 1     | 2     | 4     | 6     | 2     | 1     | 0    | 0    | 0    | 0    | 0     | 16    | 36-45      | 10             |       |
| 20:00        |            | 0     | 0     | 0     | 0     | 3     | 5     | 5     | 1     | 1     | 0    | 0    | 0    | 0    | 0     | 15    | 36-45      | 10             |       |
| 21:00        |            | 0     | 0     | 0     | 0     | 1     | 3     | 1     | 0     | 0     | 0    | 0    | 0    | 0    | 0     | 5     | 36-45      | 4              |       |
| 22:00        |            | 0     | 0     | 0     | 0     | 1     | 0     | 1     | 0     | 0     | 0    | 0    | 0    | 0    | 0     | 2     | 24-33      | 1              |       |
| 23:00        |            | 0     | 0     | 0     | 0     | 1     | 2     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0     | 3     | 30-39      | 3              |       |
| <b>Total</b> |            | 5     | 3     | 6     | 22    | 32    | 68    | 54    | 18    | 13    | 0    | 1    | 0    | 0    | 0     | 222   |            |                |       |
| Percent      |            | 2.3%  | 1.4%  | 2.7%  | 9.9%  | 14.4% | 30.6% | 24.3% | 8.1%  | 5.9%  | 0.0% | 0.5% | 0.0% | 0.0% | 0.0%  |       |            |                |       |
| AM Peak      | 08:00      | 11:00 | 11:00 | 10:00 | 09:00 | 05:00 | 07:00 | 06:00 |       |       |      |      |      |      |       |       |            |                | 10:00 |
| Vol.         | 1          | 2     | 4     | 7     | 3     | 1     | 1     | 1     |       |       |      |      |      |      |       |       |            |                | 11    |
| PM Peak      | 13:00      |       |       |       | 12:00 | 13:00 | 16:00 | 18:00 | 16:00 | 17:00 |      |      |      |      | 12:00 | 15:00 |            |                |       |
| Vol.         | 1          |       |       |       | 2     | 3     | 13    | 11    | 6     | 3     |      |      |      |      | 1     | 26    |            |                |       |
| <b>Total</b> | 5          | 3     | 6     | 22    | 32    | 68    | 54    | 18    | 13    | 0     | 1    | 0    | 0    | 0    | 0     | 222   |            |                |       |
| Percent      | 2.3%       | 1.4%  | 2.7%  | 9.9%  | 14.4% | 30.6% | 24.3% | 8.1%  | 5.9%  | 0.0%  | 0.5% | 0.0% | 0.0% | 0.0% | 0.0%  |       |            |                |       |

15th Percentile : 29 MPH  
 50th Percentile : 38 MPH  
 85th Percentile : 44 MPH  
 95th Percentile : 51 MPH

Stats  
 10 MPH Pace Speed : 36-45 MPH  
 Number in Pace : 122  
 Percent in Pace : 55.0%  
 Number of Vehicles > 45 MPH : 32  
 Percent of Vehicles > 45 MPH : 14.4%  
 Mean Speed(Average) : 38 MPH

## Appendix C - Safety

Crash History Data

Sight Distance Measurements

Left-Turn Lane Warrant Analysis










↔ Sight distance from edge of pavement - measured in field

↔ Sight distance estimated at 10 feet from edge of pavement



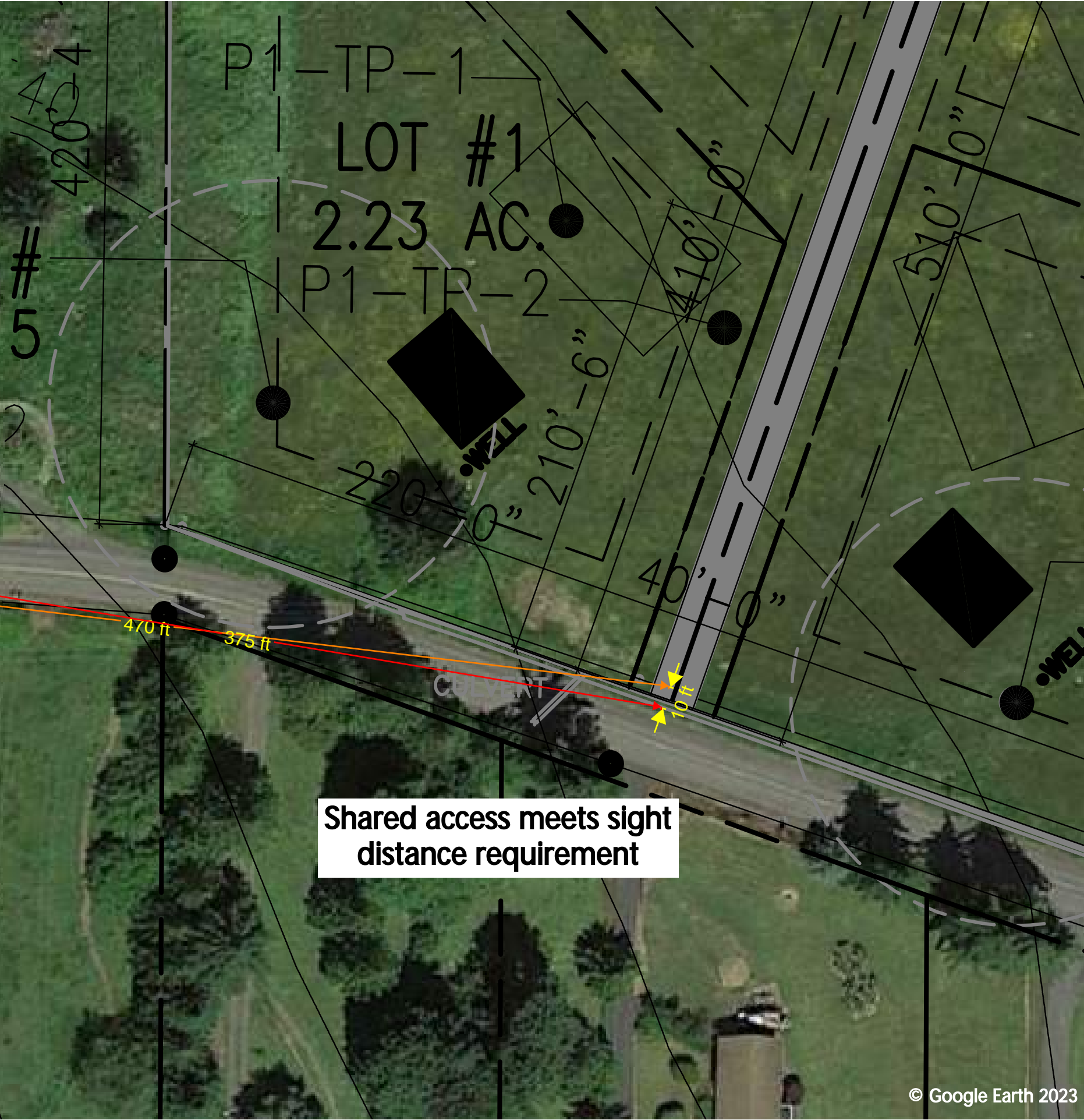
West driveway at 95 feet or more west of shared access meets sight distance requirement

Scale 1" = 50' 


↔ Sight distance from edge of pavement - measured in field

↔ Sight distance estimated at 10 feet from edge of pavement




© Google Earth 2023

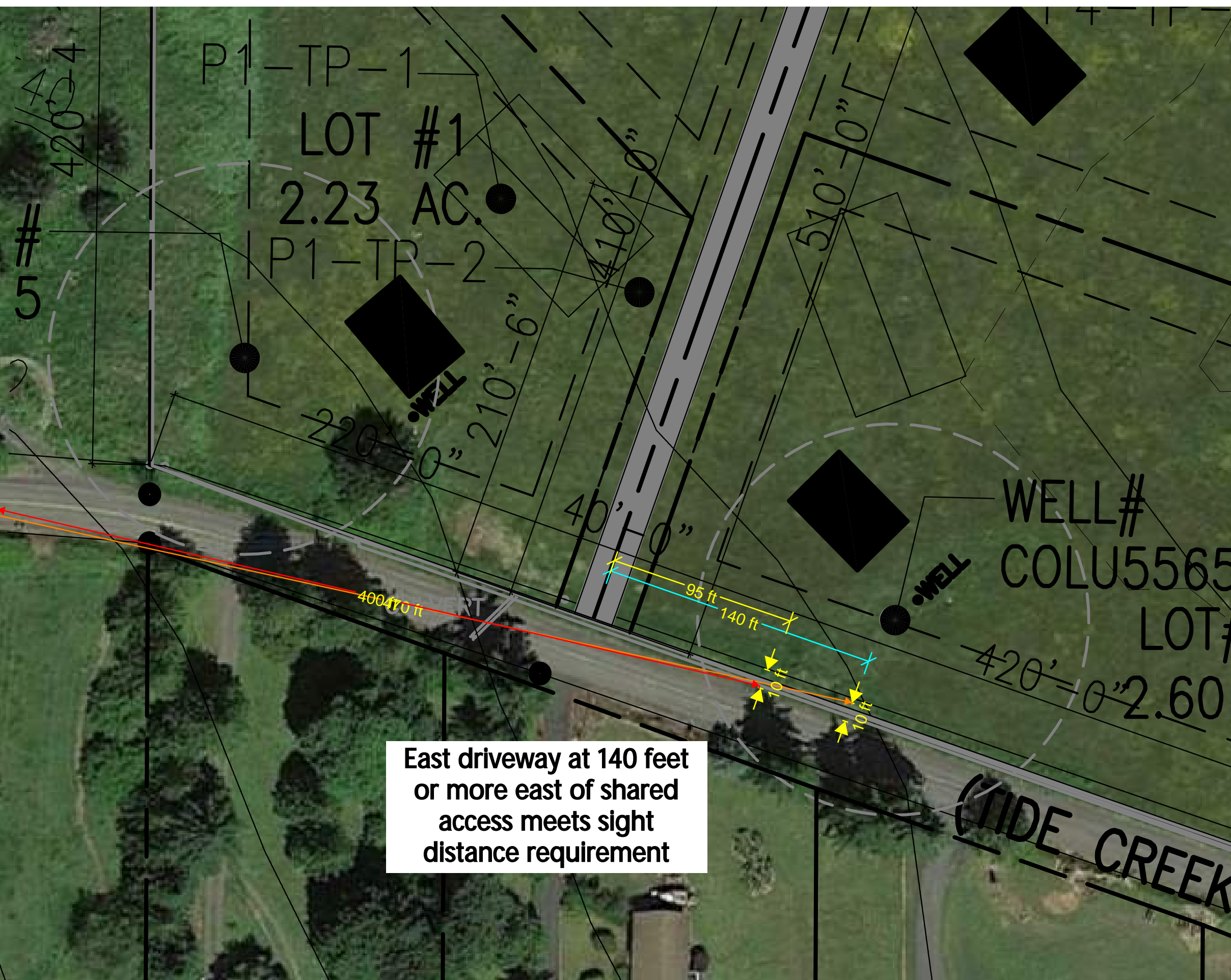


Shared access meets sight distance requirement


Scale 1" = 50' 

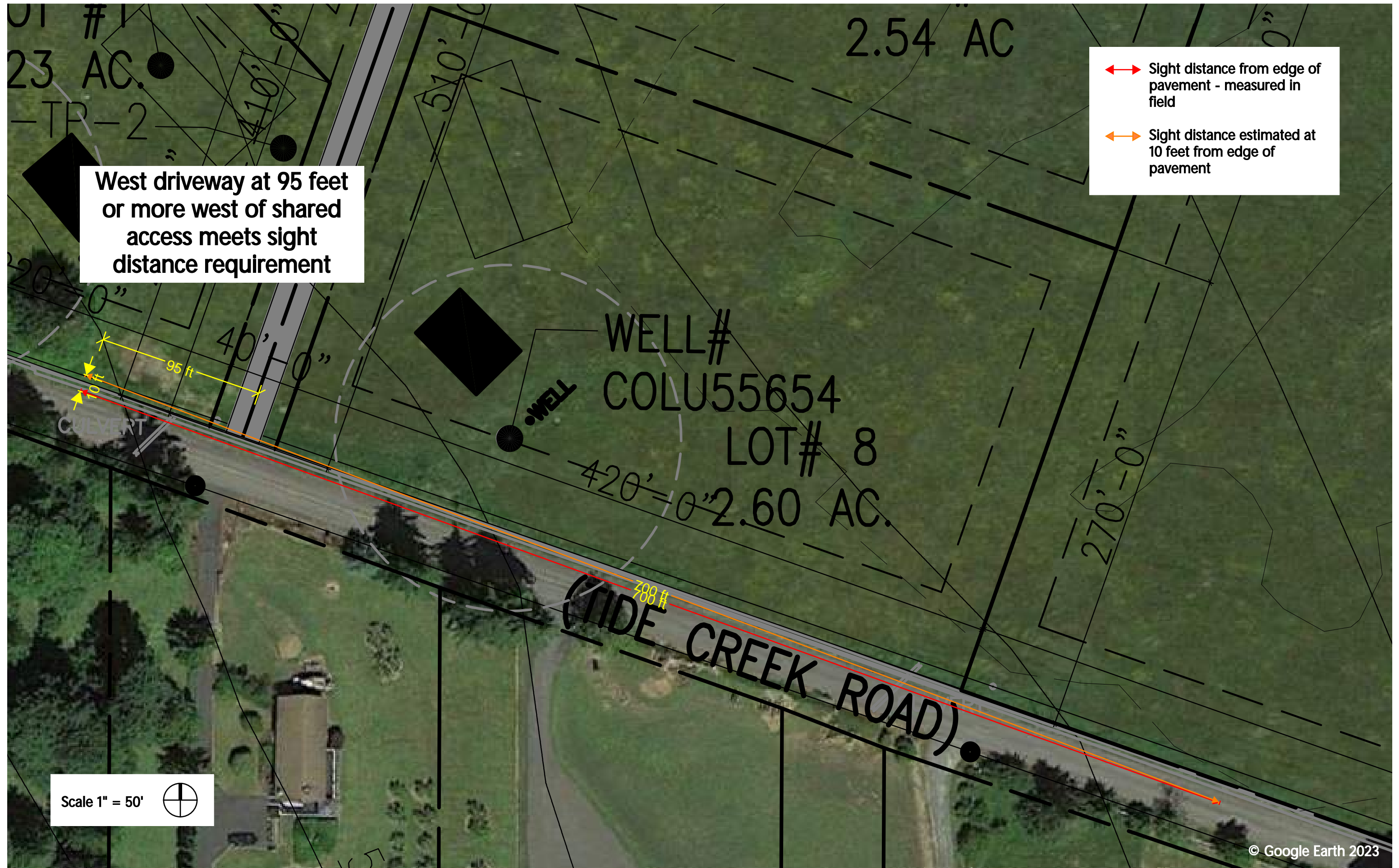
© Google Earth 2023



-  Sight distance from edge of pavement - measured in field
-  Minimum distance needed from shared access
-  Sight distance estimated at 10 feet from edge of pavement




East driveway at 140 feet or more east of shared access meets sight distance requirement

Scale 1" = 50' 



-  Sight distance from edge of pavement - measured in field
-  Sight distance estimated at 10 feet from edge of pavement

West driveway at 95 feet or more west of shared access meets sight distance requirement

Scale 1" = 50' 

↔ Sight distance from edge of pavement - measured in field  
↔ Sight distance estimated at 10 feet from edge of pavement


Shared access meets sight distance requirement

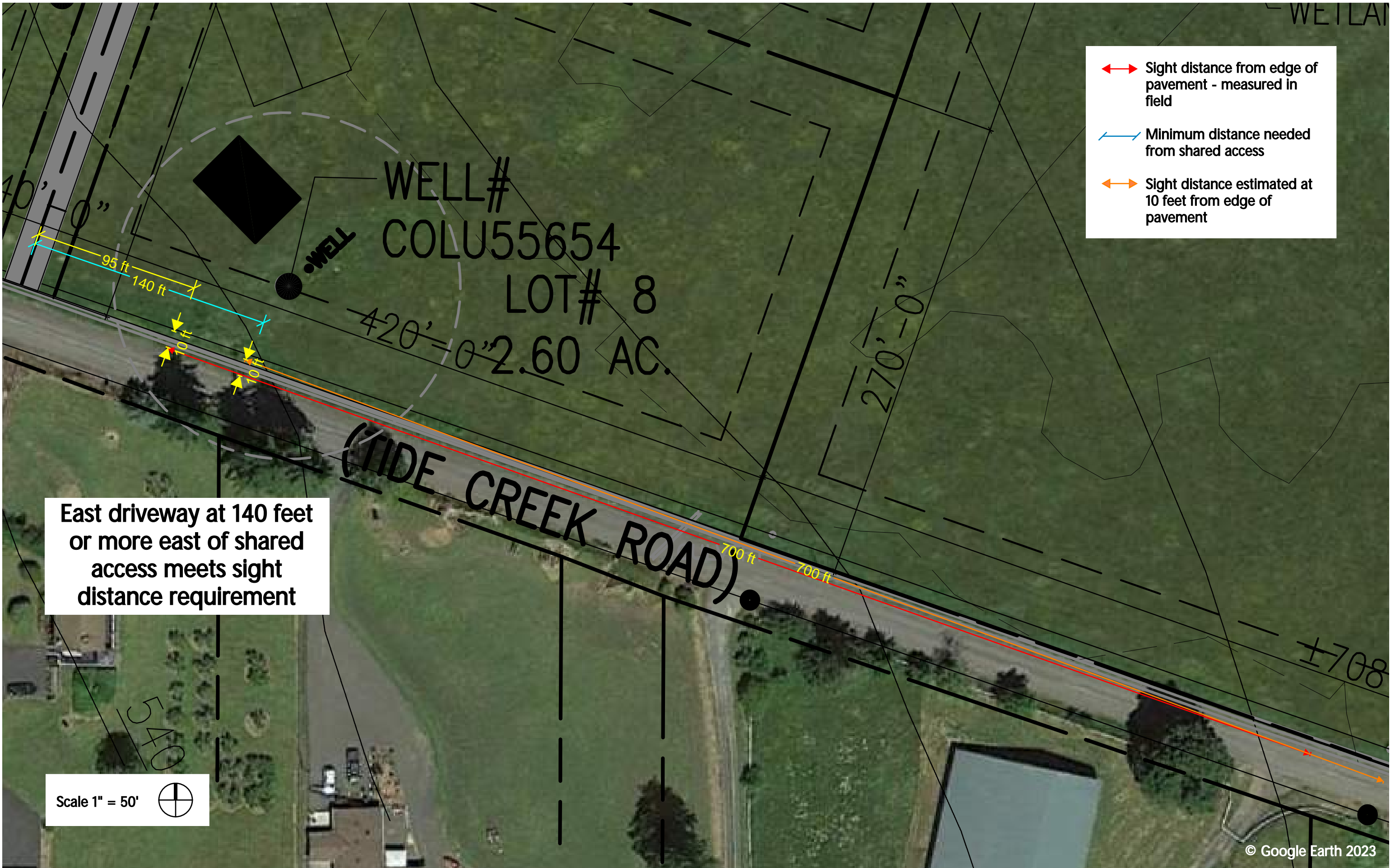
WELL#  
COLU55654  
LOT# 8  
420'-0" 2.60 AC.

WELL

(TIDE CREEK ROAD)

788 ft

Scale 1" = 50' 



# Left-Turn Lane Warrant Analysis



Project: 23135 - Lupine Meadow  
 Intersection: Shared Access & Tide Creek Road  
 Date: 10/27/2023  
 Scenario: Buildout AM

*Assumes 1 left-turning vehicle for calculation.*

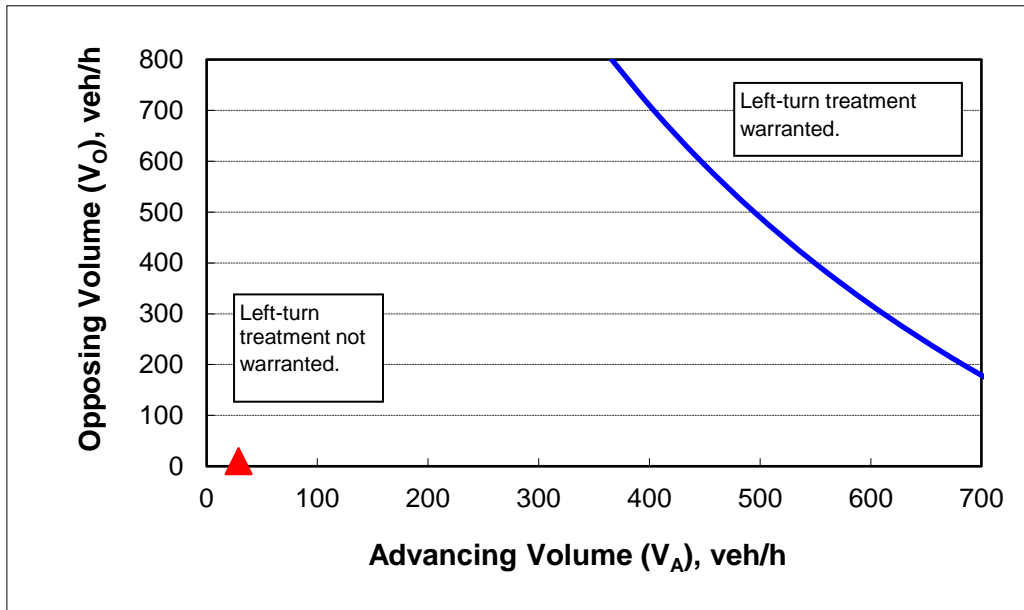
## 2-lane roadway (English)

### INPUT

| Variable  | Value |
|---|-------|
| 85 <sup>th</sup> percentile speed, mph:           | 47    |
| Left-turns in advancing volume ( $V_A$ ), veh/hr: | 1     |
| Advancing volume ( $V_A$ ), veh/h:                | 29    |
| Opposing volume ( $V_O$ ), veh/h:                 | 10    |

### OUTPUT

| Variable  | Value |
|---|-------|
| Limiting advancing volume ( $V_A$ ), veh/h:                       | 856   |
| Guidance for determining the need for a major-road left-turn bay: |       |
| Left-turn treatment NOT warranted.                                |       |



### CALIBRATION CONSTANTS (2-Lane Roadway)

| Variable   | Value |
|--|-------|
| Average time for making left-turn, s:                              | 3.0   |
| Critical headway, s:   | 5.0   |
| Average time for left-turn vehicle to clear the advancing lane, s: | 1.9   |

## Left-Turn Lane Warrant Analysis



Project: 23135 - Lupine Meadow  
 Intersection: Shared Access & Tide Creek Road  
 Date: 10/27/2023  
 Scenario: Buildout PM

*Assumes 1 left-turning vehicle for calculation.*

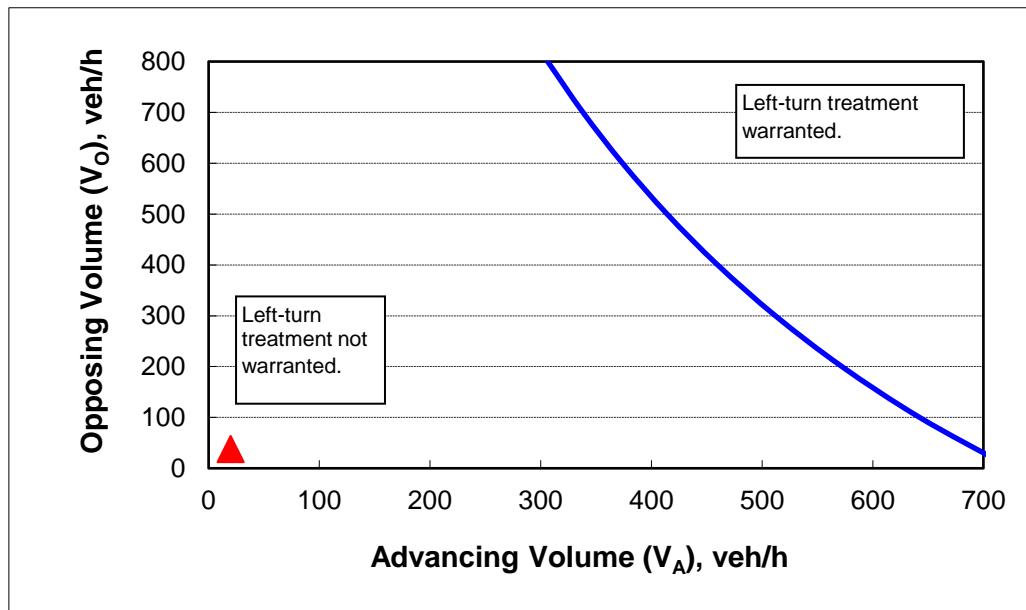
### 2-lane roadway (English)

#### INPUT

| Variable  | Value |
|---|-------|
| 85 <sup>th</sup> percentile speed, mph:           | 47    |
| Left-turns in advancing volume ( $V_A$ ), veh/hr: | 1     |
| Advancing volume ( $V_A$ ), veh/h:                | 20    |
| Opposing volume ( $V_O$ ), veh/h:                 | 38    |

#### OUTPUT

| Variable  | Value |
|---|-------|
| Limiting advancing volume ( $V_A$ ), veh/h:                       | 692   |
| Guidance for determining the need for a major-road left-turn bay: |       |
| Left-turn treatment NOT warranted.                                |       |



#### CALIBRATION CONSTANTS (2-Lane Roadway)

| Variable   | Value |
|--|-------|
| Average time for making left-turn, s:                              | 3.0   |
| Critical headway, s:   | 5.0   |
| Average time for left-turn vehicle to clear the advancing lane, s: | 1.9   |

## Appendix D - Operations

Definitions

Synchro Reports





## Level of Service Definitions

Level of service is used to describe the quality of traffic flow. Levels of service A to C are considered good, and rural roads are usually designed for level of service C. Urban streets and signalized intersections are typically designed for level of service D. Level of service E is considered to be the limit of acceptable delay. For unsignalized intersections, level of service E is generally considered acceptable. Here is a more complete description of levels of service:

- *Level of service A:* Very low delay at intersections, with all traffic signal cycles clearing and no vehicles waiting through more than one signal cycle. On highways, low volume and high speeds, with speeds not restricted by other vehicles.
- *Level of service B:* Operating speeds beginning to be affected by other traffic; short traffic delays at intersections. Higher average intersection delay than for level of service A resulting from more vehicles stopping.
- *Level of service C:* Operating speeds and maneuverability closely controlled by other traffic; higher delays at intersections than for level of service B due to a significant number of vehicles stopping. Not all signal cycles clear the waiting vehicles. This is the recommended design standard for rural highways.
- *Level of service D:* Tolerable operating speeds; long traffic delays occur at intersections. The influence of congestion is noticeable. At traffic signals many vehicles stop, and the proportion of vehicles not stopping declines. The number of signal cycle failures, for which vehicles must wait through more than one signal cycle, are noticeable. This is typically the design level for urban signalized intersections.
- *Level of service E:* Restricted speeds, very long traffic delays at traffic signals, and traffic volumes near capacity. Flow is unstable so that any interruption, no matter how minor, will cause queues to form and service to deteriorate to level of service F. Traffic signal cycle failures are frequent occurrences. For unsignalized intersections, level of service E or better is generally considered acceptable.
- *Level of service F:* Extreme delays, resulting in long queues which may interfere with other traffic movements. There may be stoppages of long duration, and speeds may drop to zero. There may be frequent signal cycle failures. Level of service F will typically result when vehicle arrival rates are greater than capacity. It is considered unacceptable by most drivers.



Level of Service Criteria  
For Signalized Intersections

| Level of Service (LOS) | Control Delay per Vehicle (Seconds) |
|------------------------|-------------------------------------|
| A                      | <10                                 |
| B                      | 10-20                               |
| C                      | 20-35                               |
| D                      | 35-55                               |
| E                      | 55-80                               |
| F                      | >80                                 |

Level of Service Criteria  
For Unsignalized Intersections

| Level of Service (LOS) | Control Delay per Vehicle (Seconds) |
|------------------------|-------------------------------------|
| A                      | <10                                 |
| B                      | 10-15                               |
| C                      | 15-25                               |
| D                      | 25-35                               |
| E                      | 35-50                               |
| F                      | >50                                 |

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 0.5  |      |      |      |      |      |
| Movement                 | EBL  | EBR  | NBL  | NBT  | SBT  | SBR  |
| Lane Configurations      | T    |      |      | T    |      | T    |
| Traffic Vol, veh/h       | 2    | 26   | 7    | 251  | 428  | 1    |
| Future Vol, veh/h        | 2    | 26   | 7    | 251  | 428  | 1    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 94   | 94   | 94   | 94   | 94   | 94   |
| Heavy Vehicles, %        | 0    | 0    | 0    | 23   | 13   | 0    |
| Mvmt Flow                | 2    | 28   | 7    | 267  | 455  | 1    |

| Major/Minor          | Minor2 | Major1 |      | Major2 |   |
|----------------------|--------|--------|------|--------|---|
| Conflicting Flow All | 738    | 456    | 456  | 0      | 0 |
| Stage 1              | 456    | -      | -    | -      | - |
| Stage 2              | 282    | -      | -    | -      | - |
| Critical Hdwy        | 6.4    | 6.2    | 4.1  | -      | - |
| Critical Hdwy Stg 1  | 5.4    | -      | -    | -      | - |
| Critical Hdwy Stg 2  | 5.4    | -      | -    | -      | - |
| Follow-up Hdwy       | 3.5    | 3.3    | 2.2  | -      | - |
| Pot Cap-1 Maneuver   | 388    | 609    | 1115 | -      | - |
| Stage 1              | 643    | -      | -    | -      | - |
| Stage 2              | 770    | -      | -    | -      | - |
| Platoon blocked, %   |        |        |      | -      | - |
| Mov Cap-1 Maneuver   | 385    | 609    | 1115 | -      | - |
| Mov Cap-2 Maneuver   | 385    | -      | -    | -      | - |
| Stage 1              | 638    | -      | -    | -      | - |
| Stage 2              | 770    | -      | -    | -      | - |

| Approach               | EB    | NB   | SB |
|------------------------|-------|------|----|
| HCM Control Delay, s/v | 11.49 | 0.22 | 0  |
| HCM LOS                | B     |      |    |

| Minor Lane/Major Mvmt     | NBL   | NBT | EBLn1 | SBT | SBR |
|---------------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h)          | 49    | -   | 584   | -   | -   |
| HCM Lane V/C Ratio        | 0.007 | -   | 0.051 | -   | -   |
| HCM Control Delay (s/veh) | 8.3   | 0   | 11.5  | -   | -   |
| HCM Lane LOS              | A     | A   | B     | -   | -   |
| HCM 95th %tile Q(veh)     | 0     | -   | 0.2   | -   | -   |

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 0.2  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↕    |      |      | ↕    |      |      | ↕    |      |      | ↕    |      |
| Traffic Vol, veh/h       | 0    | 27   | 0    | 0    | 8    | 0    | 0    | 0    | 1    | 0    | 0    | 0    |
| Future Vol, veh/h        | 0    | 27   | 0    | 0    | 8    | 0    | 0    | 0    | 1    | 0    | 0    | 0    |
| 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           | -    | -    | -    | -    | -    | -    | -    | -    | -    | 0    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 78   | 78   | 92   | 92   | 78   | 78   | 92   | 92   | 92   | 78   | 92   | 78   |
| Heavy Vehicles, %        | 2    | 8    | 2    | 2    | 0    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 35   | 0    | 0    | 10   | 0    | 0    | 0    | 1    | 0    | 0    | 0    |

| Major/Minor          | Major1 |   | Major2 |       | Minor1 |   | Minor2 |       |       |       |       |       |
|----------------------|--------|---|--------|-------|--------|---|--------|-------|-------|-------|-------|-------|
| Conflicting Flow All | 10     | 0 | 0      | 35    | 0      | 0 | 45     | 45    | 35    | 45    | 45    | 10    |
| Stage 1              | -      | - | -      | -     | -      | - | 35     | 35    | -     | 10    | 10    | -     |
| Stage 2              | -      | - | -      | -     | -      | - | 10     | 10    | -     | 35    | 35    | -     |
| 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   | 1609   | - | -      | 1577  | -      | - | 957    | 847   | 1038  | 957   | 847   | 1071  |
| Stage 1              | -      | - | -      | -     | -      | - | 981    | 866   | -     | 1011  | 887   | -     |
| Stage 2              | -      | - | -      | -     | -      | - | 1011   | 887   | -     | 981   | 866   | -     |
| Platoon blocked, %   |        | - | -      |       | -      | - |        |       |       |       |       |       |
| Mov Cap-1 Maneuver   | 1609   | - | -      | 1577  | -      | - | 957    | 847   | 1038  | 956   | 847   | 1071  |
| Mov Cap-2 Maneuver   | -      | - | -      | -     | -      | - | 957    | 847   | -     | 956   | 847   | -     |
| Stage 1              | -      | - | -      | -     | -      | - | 981    | 866   | -     | 1011  | 887   | -     |
| Stage 2              | -      | - | -      | -     | -      | - | 1011   | 887   | -     | 980   | 866   | -     |

| Approach               | EB |  | WB |  | NB   |  | SB |  |
|------------------------|----|--|----|--|------|--|----|--|
| HCM Control Delay, s/v | 0  |  | 0  |  | 8.47 |  | 0  |  |
| HCM LOS                |    |  |    |  | A    |  | A  |  |

| Minor Lane/Major Mvmt     | NBLn1 | EBL  | EBT | EBR | WBL  | WBT | WBR | SBLn1 |
|---------------------------|-------|------|-----|-----|------|-----|-----|-------|
| Capacity (veh/h)          | 1038  | 1609 | -   | -   | 1577 | -   | -   | -     |
| HCM Lane V/C Ratio        | 0.001 | -    | -   | -   | -    | -   | -   | -     |
| HCM Control Delay (s/veh) | 8.5   | 0    | -   | -   | 0    | -   | -   | 0     |
| HCM Lane LOS              | A     | A    | -   | -   | A    | -   | -   | A     |
| HCM 95th %tile Q(veh)     | 0     | 0    | -   | -   | 0    | -   | -   | -     |

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 0.4  |      |      |      |      |      |
| Movement                 | EBL  | EBR  | NBL  | NBT  | SBT  | SBR  |
| Lane Configurations      | T    |      | T    |      | T    |      |
| Traffic Vol, veh/h       | 2    | 16   | 27   | 687  | 329  | 6    |
| Future Vol, veh/h        | 2    | 16   | 27   | 687  | 329  | 6    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 97   | 97   | 97   | 97   | 97   | 97   |
| Heavy Vehicles, %        | 0    | 13   | 4    | 5    | 8    | 17   |
| Mvmt Flow                | 2    | 16   | 28   | 708  | 339  | 6    |

| Major/Minor          | Minor2 | Major1 |       | Major2 |   |
|----------------------|--------|--------|-------|--------|---|
| Conflicting Flow All | 1106   | 342    | 345   | 0      | 0 |
| Stage 1              | 342    | -      | -     | -      | - |
| Stage 2              | 764    | -      | -     | -      | - |
| Critical Hdwy        | 6.4    | 6.33   | 4.14  | -      | - |
| Critical Hdwy Stg 1  | 5.4    | -      | -     | -      | - |
| Critical Hdwy Stg 2  | 5.4    | -      | -     | -      | - |
| Follow-up Hdwy       | 3.5    | 3.417  | 2.236 | -      | - |
| Pot Cap-1 Maneuver   | 235    | 676    | 1203  | -      | - |
| Stage 1              | 724    | -      | -     | -      | - |
| Stage 2              | 463    | -      | -     | -      | - |
| Platoon blocked, %   |        |        |       | -      | - |
| Mov Cap-1 Maneuver   | 226    | 676    | 1203  | -      | - |
| Mov Cap-2 Maneuver   | 226    | -      | -     | -      | - |
| Stage 1              | 696    | -      | -     | -      | - |
| Stage 2              | 463    | -      | -     | -      | - |

| Approach               | EB    | NB  | SB |
|------------------------|-------|-----|----|
| HCM Control Delay, s/v | 11.73 | 0.3 | 0  |
| HCM LOS                | B     |     |    |

| Minor Lane/Major Mvmt     | NBL   | NBT | EBLn1 | SBT | SBR |
|---------------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h)          | 68    | -   | 554   | -   | -   |
| HCM Lane V/C Ratio        | 0.023 | -   | 0.034 | -   | -   |
| HCM Control Delay (s/veh) | 8.1   | 0   | 11.7  | -   | -   |
| HCM Lane LOS              | A     | A   | B     | -   | -   |
| HCM 95th %tile Q(veh)     | 0.1   | -   | 0.1   | -   | -   |

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 0.1  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↕    |      |      | ↕    |      |      | ↕    |      |      | ↕    |      |
| Traffic Vol, veh/h       | 0    | 18   | 0    | 1    | 32   | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Future Vol, veh/h        | 0    | 18   | 0    | 1    | 32   | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 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           | -    | -    | -    | -    | -    | -    | -    | -    | -    | 0    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 79   | 79   | 92   | 92   | 79   | 79   | 92   | 92   | 92   | 79   | 92   | 79   |
| Heavy Vehicles, %        | 2    | 0    | 2    | 2    | 6    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 23   | 0    | 1    | 41   | 0    | 0    | 0    | 0    | 0    | 0    | 0    |

| Major/Minor          | Major1 |   | Major2 |       | Minor1 |   |       | Minor2 |       |       |       |       |
|----------------------|--------|---|--------|-------|--------|---|-------|--------|-------|-------|-------|-------|
| Conflicting Flow All | 41     | 0 | 0      | 23    | 0      | 0 | 65    | 65     | 23    | 65    | 65    | 41    |
| Stage 1              | -      | - | -      | -     | -      | - | 23    | 23     | -     | 43    | 43    | -     |
| Stage 2              | -      | - | -      | -     | -      | - | 43    | 43     | -     | 23    | 23    | -     |
| 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   | 1569   | - | -      | 1592  | -      | - | 928   | 825    | 1054  | 928   | 825   | 1031  |
| Stage 1              | -      | - | -      | -     | -      | - | 995   | 876    | -     | 972   | 859   | -     |
| Stage 2              | -      | - | -      | -     | -      | - | 972   | 859    | -     | 995   | 876   | -     |
| Platoon blocked, %   |        | - | -      |       | -      | - |       |        |       |       |       |       |
| Mov Cap-1 Maneuver   | 1569   | - | -      | 1592  | -      | - | 927   | 825    | 1054  | 927   | 825   | 1031  |
| Mov Cap-2 Maneuver   | -      | - | -      | -     | -      | - | 927   | 825    | -     | 927   | 825   | -     |
| Stage 1              | -      | - | -      | -     | -      | - | 995   | 876    | -     | 971   | 859   | -     |
| Stage 2              | -      | - | -      | -     | -      | - | 971   | 859    | -     | 995   | 876   | -     |

| Approach               | EB | WB   | NB | SB |
|------------------------|----|------|----|----|
| HCM Control Delay, s/v | 0  | 0.19 | 0  | 0  |
| HCM LOS                |    |      | A  | A  |

| Minor Lane/Major Mvmt     | NBLn1 | EBL  | EBT | EBR | WBL   | WBT | WBR | SBLn1 |
|---------------------------|-------|------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h)          | -     | 1569 | -   | -   | 47    | -   | -   | -     |
| HCM Lane V/C Ratio        | -     | -    | -   | -   | 0.001 | -   | -   | -     |
| HCM Control Delay (s/veh) | 0     | 0    | -   | -   | 7.3   | 0   | -   | 0     |
| HCM Lane LOS              | A     | A    | -   | -   | A     | A   | -   | A     |
| HCM 95th %tile Q(veh)     | -     | 0    | -   | -   | 0     | -   | -   | -     |

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 0.5  |      |      |      |      |      |
| Movement                 | EBL  | EBR  | NBL  | NBT  | SBT  | SBR  |
| Lane Configurations      | T    |      |      | T    |      | T    |
| Traffic Vol, veh/h       | 2    | 27   | 7    | 261  | 445  | 1    |
| Future Vol, veh/h        | 2    | 27   | 7    | 261  | 445  | 1    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 94   | 94   | 94   | 94   | 94   | 94   |
| Heavy Vehicles, %        | 0    | 0    | 0    | 23   | 13   | 0    |
| Mvmt Flow                | 2    | 29   | 7    | 278  | 473  | 1    |

| Major/Minor          | Minor2 | Major1 |      | Major2 |   |
|----------------------|--------|--------|------|--------|---|
| Conflicting Flow All | 766    | 474    | 474  | 0      | 0 |
| Stage 1              | 474    | -      | -    | -      | - |
| Stage 2              | 293    | -      | -    | -      | - |
| Critical Hdwy        | 6.4    | 6.2    | 4.1  | -      | - |
| Critical Hdwy Stg 1  | 5.4    | -      | -    | -      | - |
| Critical Hdwy Stg 2  | 5.4    | -      | -    | -      | - |
| Follow-up Hdwy       | 3.5    | 3.3    | 2.2  | -      | - |
| Pot Cap-1 Maneuver   | 373    | 595    | 1098 | -      | - |
| Stage 1              | 631    | -      | -    | -      | - |
| Stage 2              | 762    | -      | -    | -      | - |
| Platoon blocked, %   |        |        |      | -      | - |
| Mov Cap-1 Maneuver   | 370    | 595    | 1098 | -      | - |
| Mov Cap-2 Maneuver   | 370    | -      | -    | -      | - |
| Stage 1              | 625    | -      | -    | -      | - |
| Stage 2              | 762    | -      | -    | -      | - |

| Approach               | EB    | NB   | SB |
|------------------------|-------|------|----|
| HCM Control Delay, s/v | 11.67 | 0.22 | 0  |
| HCM LOS                | B     |      |    |

| Minor Lane/Major Mvmt     | NBL   | NBT | EBLn1 | SBT | SBR |
|---------------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h)          | 47    | -   | 571   | -   | -   |
| HCM Lane V/C Ratio        | 0.007 | -   | 0.054 | -   | -   |
| HCM Control Delay (s/veh) | 8.3   | 0   | 11.7  | -   | -   |
| HCM Lane LOS              | A     | A   | B     | -   | -   |
| HCM 95th %tile Q(veh)     | 0     | -   | 0.2   | -   | -   |

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 0.2  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↕    |      |      | ↕    |      |      | ↕    |      |      | ↕    |      |
| Traffic Vol, veh/h       | 0    | 28   | 0    | 0    | 8    | 0    | 0    | 0    | 1    | 0    | 0    | 0    |
| Future Vol, veh/h        | 0    | 28   | 0    | 0    | 8    | 0    | 0    | 0    | 1    | 0    | 0    | 0    |
| 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           | -    | -    | -    | -    | -    | -    | -    | -    | -    | 0    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 78   | 78   | 92   | 92   | 78   | 78   | 92   | 92   | 92   | 78   | 92   | 78   |
| Heavy Vehicles, %        | 2    | 8    | 2    | 2    | 0    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 36   | 0    | 0    | 10   | 0    | 0    | 0    | 1    | 0    | 0    | 0    |

| Major/Minor          | Major1 |   | Major2 |       | Minor1 |   | Minor2 |       |       |       |       |       |
|----------------------|--------|---|--------|-------|--------|---|--------|-------|-------|-------|-------|-------|
| Conflicting Flow All | 10     | 0 | 0      | 36    | 0      | 0 | 46     | 46    | 36    | 46    | 46    | 10    |
| Stage 1              | -      | - | -      | -     | -      | - | 36     | 36    | -     | 10    | 10    | -     |
| Stage 2              | -      | - | -      | -     | -      | - | 10     | 10    | -     | 36    | 36    | -     |
| 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   | 1609   | - | -      | 1575  | -      | - | 955    | 846   | 1037  | 955   | 846   | 1071  |
| Stage 1              | -      | - | -      | -     | -      | - | 980    | 865   | -     | 1011  | 887   | -     |
| Stage 2              | -      | - | -      | -     | -      | - | 1011   | 887   | -     | 980   | 865   | -     |
| Platoon blocked, %   |        | - | -      |       | -      | - |        |       |       |       |       |       |
| Mov Cap-1 Maneuver   | 1609   | - | -      | 1575  | -      | - | 955    | 846   | 1037  | 954   | 846   | 1071  |
| Mov Cap-2 Maneuver   | -      | - | -      | -     | -      | - | 955    | 846   | -     | 954   | 846   | -     |
| Stage 1              | -      | - | -      | -     | -      | - | 980    | 865   | -     | 1011  | 887   | -     |
| Stage 2              | -      | - | -      | -     | -      | - | 1011   | 887   | -     | 979   | 865   | -     |

| Approach               | EB | WB | NB   | SB |
|------------------------|----|----|------|----|
| HCM Control Delay, s/v | 0  | 0  | 8.48 | 0  |
| HCM LOS                |    |    | A    | A  |

| Minor Lane/Major Mvmt     | NBLn1 | EBL  | EBT | EBR | WBL  | WBT | WBR | SBLn1 |
|---------------------------|-------|------|-----|-----|------|-----|-----|-------|
| Capacity (veh/h)          | 1037  | 1609 | -   | -   | 1575 | -   | -   | -     |
| HCM Lane V/C Ratio        | 0.001 | -    | -   | -   | -    | -   | -   | -     |
| HCM Control Delay (s/veh) | 8.5   | 0    | -   | -   | 0    | -   | -   | 0     |
| HCM Lane LOS              | A     | A    | -   | -   | A    | -   | -   | A     |
| HCM 95th %tile Q(veh)     | 0     | 0    | -   | -   | 0    | -   | -   | -     |

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 0.4  |      |      |      |      |      |
| Movement                 | EBL  | EBR  | NBL  | NBT  | SBT  | SBR  |
| Lane Configurations      | T    |      | T    |      | T    |      |
| Traffic Vol, veh/h       | 2    | 17   | 28   | 714  | 342  | 6    |
| Future Vol, veh/h        | 2    | 17   | 28   | 714  | 342  | 6    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 97   | 97   | 97   | 97   | 97   | 97   |
| Heavy Vehicles, %        | 0    | 13   | 4    | 5    | 8    | 17   |
| Mvmt Flow                | 2    | 18   | 29   | 736  | 353  | 6    |

| Major/Minor          | Minor2 | Major1 |       | Major2 |   |
|----------------------|--------|--------|-------|--------|---|
| Conflicting Flow All | 1149   | 356    | 359   | 0      | 0 |
| Stage 1              | 356    | -      | -     | -      | - |
| Stage 2              | 794    | -      | -     | -      | - |
| Critical Hdwy        | 6.4    | 6.33   | 4.14  | -      | - |
| Critical Hdwy Stg 1  | 5.4    | -      | -     | -      | - |
| Critical Hdwy Stg 2  | 5.4    | -      | -     | -      | - |
| Follow-up Hdwy       | 3.5    | 3.417  | 2.236 | -      | - |
| Pot Cap-1 Maneuver   | 221    | 664    | 1189  | -      | - |
| Stage 1              | 714    | -      | -     | -      | - |
| Stage 2              | 449    | -      | -     | -      | - |
| Platoon blocked, %   |        |        |       | -      | - |
| Mov Cap-1 Maneuver   | 212    | 664    | 1189  | -      | - |
| Mov Cap-2 Maneuver   | 212    | -      | -     | -      | - |
| Stage 1              | 684    | -      | -     | -      | - |
| Stage 2              | 449    | -      | -     | -      | - |

| Approach               | EB    | NB   | SB |
|------------------------|-------|------|----|
| HCM Control Delay, s/v | 11.88 | 0.31 | 0  |
| HCM LOS                | B     |      |    |

| Minor Lane/Major Mvmt     | NBL   | NBT | EBLn1 | SBT | SBR |
|---------------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h)          | 68    | -   | 543   | -   | -   |
| HCM Lane V/C Ratio        | 0.024 | -   | 0.036 | -   | -   |
| HCM Control Delay (s/veh) | 8.1   | 0   | 11.9  | -   | -   |
| HCM Lane LOS              | A     | A   | B     | -   | -   |
| HCM 95th %tile Q(veh)     | 0.1   | -   | 0.1   | -   | -   |

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 0.1  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↕    |      |      | ↕    |      |      | ↕    |      |      | ↕    |      |
| Traffic Vol, veh/h       | 0    | 19   | 0    | 1    | 33   | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Future Vol, veh/h        | 0    | 19   | 0    | 1    | 33   | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 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           | -    | -    | -    | -    | -    | -    | -    | -    | -    | 0    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 79   | 79   | 92   | 92   | 79   | 79   | 92   | 92   | 92   | 79   | 92   | 79   |
| Heavy Vehicles, %        | 2    | 0    | 2    | 2    | 6    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 24   | 0    | 1    | 42   | 0    | 0    | 0    | 0    | 0    | 0    | 0    |

| Major/Minor          | Major1 |   |   | Major2 |   |   | Minor1 |       |       | Minor2 |       |       |
|----------------------|--------|---|---|--------|---|---|--------|-------|-------|--------|-------|-------|
| Conflicting Flow All | 42     | 0 | 0 | 24     | 0 | 0 | 68     | 68    | 24    | 68     | 68    | 42    |
| Stage 1              | -      | - | - | -      | - | - | 24     | 24    | -     | 44     | 44    | -     |
| Stage 2              | -      | - | - | -      | - | - | 44     | 44    | -     | 24     | 24    | -     |
| 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   | 1567   | - | - | 1591   | - | - | 925    | 823   | 1052  | 925    | 823   | 1029  |
| Stage 1              | -      | - | - | -      | - | - | 994    | 875   | -     | 970    | 858   | -     |
| Stage 2              | -      | - | - | -      | - | - | 970    | 858   | -     | 994    | 875   | -     |
| Platoon blocked, %   |        | - | - |        | - | - |        |       |       |        |       |       |
| Mov Cap-1 Maneuver   | 1567   | - | - | 1591   | - | - | 924    | 822   | 1052  | 924    | 822   | 1029  |
| Mov Cap-2 Maneuver   | -      | - | - | -      | - | - | 924    | 822   | -     | 924    | 822   | -     |
| Stage 1              | -      | - | - | -      | - | - | 994    | 875   | -     | 970    | 858   | -     |
| Stage 2              | -      | - | - | -      | - | - | 970    | 858   | -     | 994    | 875   | -     |

| Approach               | EB |  |  | WB   |  |  | NB |  |  | SB |  |  |
|------------------------|----|--|--|------|--|--|----|--|--|----|--|--|
| HCM Control Delay, s/v | 0  |  |  | 0.18 |  |  | 0  |  |  | 0  |  |  |
| HCM LOS                |    |  |  |      |  |  | A  |  |  | A  |  |  |

| Minor Lane/Major Mvmt     | NBLn1 | EBL  | EBT | EBR | WBL   | WBT | WBR | SBLn1 |
|---------------------------|-------|------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h)          | -     | 1567 | -   | -   | 46    | -   | -   | -     |
| HCM Lane V/C Ratio        | -     | -    | -   | -   | 0.001 | -   | -   | -     |
| HCM Control Delay (s/veh) | 0     | 0    | -   | -   | 7.3   | 0   | -   | 0     |
| HCM Lane LOS              |       | A    | A   | -   | -     | A   | A   | A     |
| HCM 95th %tile Q(veh)     | -     | 0    | -   | -   | 0     | -   | -   | -     |

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 0.6  |      |      |      |      |      |
| Movement                 | EBL  | EBR  | NBL  | NBT  | SBT  | SBR  |
| Lane Configurations      | T    |      |      | T    |      | T    |
| Traffic Vol, veh/h       | 2    | 31   | 9    | 261  | 445  | 1    |
| Future Vol, veh/h        | 2    | 31   | 9    | 261  | 445  | 1    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 94   | 94   | 94   | 94   | 94   | 94   |
| Heavy Vehicles, %        | 0    | 0    | 0    | 23   | 13   | 0    |
| Mvmt Flow                | 2    | 33   | 10   | 278  | 473  | 1    |

| Major/Minor          | Minor2 | Major1 | Major2 |   |   |   |
|----------------------|--------|--------|--------|---|---|---|
| Conflicting Flow All | 771    | 474    | 474    | 0 | - | 0 |
| Stage 1              | 474    | -      | -      | - | - | - |
| Stage 2              | 297    | -      | -      | - | - | - |
| Critical Hdwy        | 6.4    | 6.2    | 4.1    | - | - | - |
| Critical Hdwy Stg 1  | 5.4    | -      | -      | - | - | - |
| Critical Hdwy Stg 2  | 5.4    | -      | -      | - | - | - |
| Follow-up Hdwy       | 3.5    | 3.3    | 2.2    | - | - | - |
| Pot Cap-1 Maneuver   | 371    | 595    | 1098   | - | - | - |
| Stage 1              | 631    | -      | -      | - | - | - |
| Stage 2              | 759    | -      | -      | - | - | - |
| Platoon blocked, %   |        |        |        | - | - | - |
| Mov Cap-1 Maneuver   | 368    | 595    | 1098   | - | - | - |
| Mov Cap-2 Maneuver   | 368    | -      | -      | - | - | - |
| Stage 1              | 624    | -      | -      | - | - | - |
| Stage 2              | 759    | -      | -      | - | - | - |

| Approach               | EB    | NB   | SB |
|------------------------|-------|------|----|
| HCM Control Delay, s/v | 11.69 | 0.28 | 0  |
| HCM LOS                | B     |      |    |

| Minor Lane/Major Mvmt     | NBL   | NBT | EBLn1 | SBT | SBR |
|---------------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h)          | 60    | -   | 573   | -   | -   |
| HCM Lane V/C Ratio        | 0.009 | -   | 0.061 | -   | -   |
| HCM Control Delay (s/veh) | 8.3   | 0   | 11.7  | -   | -   |
| HCM Lane LOS              | A     | A   | B     | -   | -   |
| HCM 95th %tile Q(veh)     | 0     | -   | 0.2   | -   | -   |

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 1    |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↕    |      |      | ↕    |      |      | ↕    |      |      | ↕    |      |
| Traffic Vol, veh/h       | 0    | 28   | 0    | 0    | 8    | 2    | 0    | 0    | 1    | 4    | 0    | 0    |
| Future Vol, veh/h        | 0    | 28   | 0    | 0    | 8    | 2    | 0    | 0    | 1    | 4    | 0    | 0    |
| 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           | -    | -    | -    | -    | -    | -    | -    | -    | -    | 0    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 78   | 78   | 92   | 92   | 78   | 78   | 92   | 92   | 92   | 78   | 92   | 78   |
| Heavy Vehicles, %        | 2    | 8    | 2    | 2    | 0    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 36   | 0    | 0    | 10   | 3    | 0    | 0    | 1    | 5    | 0    | 0    |

| Major/Minor          | Major1 |   | Major2 |       | Minor1 |   | Minor2 |       |       |       |       |       |
|----------------------|--------|---|--------|-------|--------|---|--------|-------|-------|-------|-------|-------|
| Conflicting Flow All | 13     | 0 | 0      | 36    | 0      | 0 | 46     | 49    | 36    | 47    | 47    | 12    |
| Stage 1              | -      | - | -      | -     | -      | - | 36     | 36    | -     | 12    | 12    | -     |
| Stage 2              | -      | - | -      | -     | -      | - | 10     | 13    | -     | 36    | 36    | -     |
| 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   | 1606   | - | -      | 1575  | -      | - | 955    | 843   | 1037  | 953   | 844   | 1069  |
| Stage 1              | -      | - | -      | -     | -      | - | 980    | 865   | -     | 1009  | 886   | -     |
| Stage 2              | -      | - | -      | -     | -      | - | 1011   | 885   | -     | 980   | 865   | -     |
| Platoon blocked, %   |        | - | -      |       | -      | - |        |       |       |       |       |       |
| Mov Cap-1 Maneuver   | 1606   | - | -      | 1575  | -      | - | 955    | 843   | 1037  | 952   | 844   | 1069  |
| Mov Cap-2 Maneuver   | -      | - | -      | -     | -      | - | 955    | 843   | -     | 952   | 844   | -     |
| Stage 1              | -      | - | -      | -     | -      | - | 980    | 865   | -     | 1009  | 886   | -     |
| Stage 2              | -      | - | -      | -     | -      | - | 1011   | 885   | -     | 979   | 865   | -     |

| Approach               | EB | WB | NB   | SB  |
|------------------------|----|----|------|-----|
| HCM Control Delay, s/v | 0  | 0  | 8.48 | 8.8 |
| HCM LOS                |    |    | A    | A   |

| Minor Lane/Major Mvmt     | NBLn1 | EBL  | EBT | EBR | WBL  | WBT | WBR | SBLn1 |
|---------------------------|-------|------|-----|-----|------|-----|-----|-------|
| Capacity (veh/h)          | 1037  | 1606 | -   | -   | 1575 | -   | -   | 952   |
| HCM Lane V/C Ratio        | 0.001 | -    | -   | -   | -    | -   | -   | 0.005 |
| HCM Control Delay (s/veh) | 8.5   | 0    | -   | -   | 0    | -   | -   | 8.8   |
| HCM Lane LOS              | A     | A    | -   | -   | A    | -   | -   | A     |
| HCM 95th %tile Q(veh)     | 0     | 0    | -   | -   | 0    | -   | -   | 0     |

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 0.5  |      |      |      |      |      |
| Movement                 | EBL  | EBR  | NBL  | NBT  | SBT  | SBR  |
| Lane Configurations      | T    |      |      | T    |      | T    |
| Traffic Vol, veh/h       | 2    | 20   | 32   | 714  | 342  | 7    |
| Future Vol, veh/h        | 2    | 20   | 32   | 714  | 342  | 7    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 97   | 97   | 97   | 97   | 97   | 97   |
| Heavy Vehicles, %        | 0    | 13   | 4    | 5    | 8    | 17   |
| Mvmt Flow                | 2    | 21   | 33   | 736  | 353  | 7    |

| Major/Minor          | Minor2 | Major1 |       | Major2 |   |
|----------------------|--------|--------|-------|--------|---|
| Conflicting Flow All | 1158   | 356    | 360   | 0      | 0 |
| Stage 1              | 356    | -      | -     | -      | - |
| Stage 2              | 802    | -      | -     | -      | - |
| Critical Hdwy        | 6.4    | 6.33   | 4.14  | -      | - |
| Critical Hdwy Stg 1  | 5.4    | -      | -     | -      | - |
| Critical Hdwy Stg 2  | 5.4    | -      | -     | -      | - |
| Follow-up Hdwy       | 3.5    | 3.417  | 2.236 | -      | - |
| Pot Cap-1 Maneuver   | 219    | 664    | 1188  | -      | - |
| Stage 1              | 713    | -      | -     | -      | - |
| Stage 2              | 445    | -      | -     | -      | - |
| Platoon blocked, %   |        |        |       | -      | - |
| Mov Cap-1 Maneuver   | 208    | 664    | 1188  | -      | - |
| Mov Cap-2 Maneuver   | 208    | -      | -     | -      | - |
| Stage 1              | 680    | -      | -     | -      | - |
| Stage 2              | 445    | -      | -     | -      | - |

| Approach               | EB    | NB   | SB |
|------------------------|-------|------|----|
| HCM Control Delay, s/v | 11.78 | 0.35 | 0  |
| HCM LOS                | B     |      |    |

| Minor Lane/Major Mvmt     | NBL   | NBT | EBLn1 | SBT | SBR |
|---------------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h)          | 77    | -   | 554   | -   | -   |
| HCM Lane V/C Ratio        | 0.028 | -   | 0.041 | -   | -   |
| HCM Control Delay (s/veh) | 8.1   | 0   | 11.8  | -   | -   |
| HCM Lane LOS              | A     | A   | B     | -   | -   |
| HCM 95th %tile Q(veh)     | 0.1   | -   | 0.1   | -   | -   |

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 0.5  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↕    |      |      | ↕    |      |      | ↕    |      |      | ↕    |      |
| Traffic Vol, veh/h       | 0    | 19   | 0    | 1    | 33   | 5    | 0    | 0    | 0    | 3    | 0    | 0    |
| Future Vol, veh/h        | 0    | 19   | 0    | 1    | 33   | 5    | 0    | 0    | 0    | 3    | 0    | 0    |
| 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           | -    | -    | -    | -    | -    | -    | -    | -    | -    | 0    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 79   | 79   | 92   | 92   | 79   | 79   | 92   | 92   | 92   | 79   | 92   | 79   |
| Heavy Vehicles, %        | 2    | 0    | 2    | 2    | 6    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 24   | 0    | 1    | 42   | 6    | 0    | 0    | 0    | 4    | 0    | 0    |

| Major/Minor          | Major1 |   |   | Major2 |   |   | Minor1 |       |       | Minor2 |       |       |
|----------------------|--------|---|---|--------|---|---|--------|-------|-------|--------|-------|-------|
| Conflicting Flow All | 48     | 0 | 0 | 24     | 0 | 0 | 68     | 74    | 24    | 71     | 71    | 45    |
| Stage 1              | -      | - | - | -      | - | - | 24     | 24    | -     | 47     | 47    | -     |
| Stage 2              | -      | - | - | -      | - | - | 44     | 50    | -     | 24     | 24    | -     |
| 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   | 1559   | - | - | 1591   | - | - | 925    | 816   | 1052  | 920    | 819   | 1025  |
| Stage 1              | -      | - | - | -      | - | - | 994    | 875   | -     | 966    | 856   | -     |
| Stage 2              | -      | - | - | -      | - | - | 970    | 853   | -     | 994    | 875   | -     |
| Platoon blocked, %   |        | - | - |        | - | - |        |       |       |        |       |       |
| Mov Cap-1 Maneuver   | 1559   | - | - | 1591   | - | - | 924    | 815   | 1052  | 920    | 819   | 1025  |
| Mov Cap-2 Maneuver   | -      | - | - | -      | - | - | 924    | 815   | -     | 920    | 819   | -     |
| Stage 1              | -      | - | - | -      | - | - | 994    | 875   | -     | 966    | 855   | -     |
| Stage 2              | -      | - | - | -      | - | - | 970    | 852   | -     | 994    | 875   | -     |

| Approach               | EB | WB   | NB | SB   |
|------------------------|----|------|----|------|
| HCM Control Delay, s/v | 0  | 0.16 | 0  | 8.93 |
| HCM LOS                |    |      | A  | A    |

| Minor Lane/Major Mvmt     | NBLn1 | EBL  | EBT | EBR | WBL   | WBT | WBR | SBLn1 |
|---------------------------|-------|------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h)          | -     | 1559 | -   | -   | 39    | -   | -   | 920   |
| HCM Lane V/C Ratio        | -     | -    | -   | -   | 0.001 | -   | -   | 0.004 |
| HCM Control Delay (s/veh) | 0     | 0    | -   | -   | 7.3   | 0   | -   | 8.9   |
| HCM Lane LOS              |       | A    | A   | -   | A     | A   | -   | A     |
| HCM 95th %tile Q(veh)     | -     | 0    | -   | -   | 0     | -   | -   | 0     |