



May 5, 2021

Jeff Morrell  
CEO  
Morrell Builders, Inc.  
1501 Pittsford-Victor Rd. Suite 100  
Victor, NY 14564

RE: Pierce Brook Subdivision – Canandaigua, NY  
Traffic Impact Letter of Findings

Dear Mr. Morrell,

McFarland Johnson, Inc. (MJ) has reviewed existing and future traffic conditions associated with the Pierce Brook Residential Subdivision and respectfully submits this Letter of Findings. The intent of this letter is to analyze the impacts, if any, that the proposed subdivision may have on the existing study area intersections and surrounding roadway network. Based on input provided by the New York State Department of Transportation (NYSDOT), the following intersections were analyzed for this traffic study and are shown in Figure 1 – Site Location and Figure 2 – Concept Site Plan:

- Route 5 & 20 @ Bristol Road (NYS Route 21) – 4-Legged Signalized Intersection
- Route 5 & 20 @ Parrish Street Ext. – 4-Legged Side Street Stop-Sign Controlled Intersection
- Bristol Road (NYS Route 21) @ Proposed Road A – Unsignalized T-Intersection
- Parrish Street Ext. @ Proposed Road A – Unsignalized T-Intersection

The proposed subdivision is located on a 95-acre parcel and will consist of 92 total new residential units within a combination of 2-unit and 3-unit buildings, as shown in Figure 2 – Concept Site Plan, developed by Marathon Engineering dated January 15, 2021. The site plan shows two access points: one off Bristol Road (NYS Route 21) on the northern border of the property and another off Parrish Street Ext., on the southern edge of the property. Existing intersection geometry is shown in Figure 3.

### **2021 Existing Traffic Volumes**

Existing traffic volumes for the study area intersections were established based on Turning Movement Counts (TMC), which were recorded Tuesday, April 6, 2021 from 7:00 to 9:00 AM and 4:00 to 6:00 PM, by McFarland Johnson. The TMC data shows that the weekday traffic in the study area peaks between 7:30 and 8:30 AM in the morning, while the evening traffic peaks between 4:00 and 5:00 PM.

Due to the COVID-19 pandemic, the data collected was compared to historical New York State Department of Transportation (NYSDOT) data from 2019 and found to be approximately 10% lower during the morning peak hour, and 19% lower during the evening peak hour. Following the NYSDOT Memo “Traffic Data Collection Guidance During COVID-19 Pandemic” dated August 11, 2020, to model existing and proposed traffic as accurately as possible, the 2021 counted traffic volumes were increased by 10% and 19% for the morning and evening peak hours, respectively, to estimate non-pandemic 2021 volumes. These adjusted volumes were used as the base scenario to develop a comparison to future conditions and enable the

analysis to calibrate the traffic model to mimic the present real-life operations anticipated following the COVID-19 pandemic.

The traffic volume data is attached to this letter and the resultant peak hour volume diagram is shown in Figure 4 – 2021 Base Volumes.

### 2028 No Build Traffic Volumes

As the proposed subdivision is anticipated to be completed in 2028, the 2021 adjusted traffic volumes were further grown by an annual background growth rate of 1% per year for a total increase of 7% to create the 2028 No Build traffic volumes. This enables the analysis to establish projected background volumes to the year 2028. This growth rate was established by reviewing historical count data collected by NYSDOT within the study area. No additional background traffic from any other developments and/or roadway projects currently under review or approved were recommended by the Town or NYSDOT during the scoping process for this traffic analysis. The 2028 traffic volumes are shown in Figure 5 – 2028 No - Build Volumes.

### Trip Distribution

Development of a projected trip distribution model for the proposed subdivision is based on existing traffic patterns through Routes 5 & 20 as well as overall knowledge of traffic patterns in the area and nature of the proposed development. The study assumed that there will be a 50/50 split between traffic entering and exiting the site from the two proposed access drives. It is anticipated that 45% of traffic will enter from the east via Bristol Road (NYS Route 21) and Parrish Street Ext., 25% from the north and 25% from the south via Routes 5 & 20, with the remaining 10% entering from the west.

### Trip Generation

The Pierce Brook subdivision project consists of 92 units, made up of 2 and 3-unit buildings. For analysis purposes, site generated traffic was estimated using trip generation rates provided in the Institute of Transportation Engineers' (ITE) Trip Generation manual, 10th edition as shown in the table below and the attached Figure 7 – Trip Generation Volumes. Based on the ITE rates it is projected that the site will generate a total of 43 additional trips during the morning peak hour and 52 additional trips during the evening peak hour. Based on the residential nature of the development no multi-use or pass-by trip credits were assumed in this study.

### TRIP GENERATION CALCULATION TABLE

ITE Trip Generation 10th Edition Manual Research Data:

| Type of Land Use               | ITE Code | Unit     | Weekday Morning Peak   |           |           | Weekday Evening Peak   |           |           |
|--------------------------------|----------|----------|------------------------|-----------|-----------|------------------------|-----------|-----------|
|                                |          |          | Enter                  | Exit      | Total     | Enter                  | Exit      | Total     |
| Multifamily Housing (Low-Rise) | 220      | 92 Units | Generation Rate = 0.46 |           |           | Generation Rate = 0.56 |           |           |
|                                |          |          | 23%                    | 77%       | 100%      | 63%                    | 37%       | 100%      |
|                                |          |          | <b>9</b>               | <b>34</b> | <b>43</b> | <b>32</b>              | <b>20</b> | <b>52</b> |

### 2028 Build Traffic Volumes

The build volumes shown in Figure 8 – 2028 Build Volumes represent the 2028 No Build volumes for each scenario combined with the additional estimated trips generated by the proposed Pierce Brook subdivision.

### Capacity Analysis

A capacity analysis was performed using Synchro 10.0 traffic modeling software and the procedures defined in the Highway Capacity Manual (6<sup>th</sup> Edition) were used to determine operating conditions for the 2021 Base, 2028 No Build, and 2028 Build scenarios. The Level of Service Summary Table below shows the results of the capacity analysis; synchro analysis printouts are attached to this letter.

**Intersection Level of Service Table**

| Study Intersection                                                           | Approach and Movement |       | MORNING PEAK HOUR |          |               |          |             |          |
|------------------------------------------------------------------------------|-----------------------|-------|-------------------|----------|---------------|----------|-------------|----------|
|                                                                              |                       |       | 2021 BASE         |          | 2028 NO BUILD |          | 2028 BUILD  |          |
|                                                                              |                       |       | Delay             | LOS      | Delay         | LOS      | Delay       | LOS      |
| Route 5 & 20 at Bristol Road<br>(NYS Route 21)<br>(Signalized)               | Eastbound             | L     | 12.5              | B        | 12.5          | B        | 12.5        | B        |
|                                                                              |                       | T-R   | 18.2              | B        | 18.5          | B        | 18.5        | B        |
|                                                                              | Westbound             | L     | 12.0              | B        | 12.1          | B        | 12.1        | B        |
|                                                                              |                       | T-R   | 11.1              | B        | 11.0          | B        | 11.0        | B        |
|                                                                              | Northbound            | L-T-R | 6.9               | A        | 7.6           | A        | 8.1         | A        |
|                                                                              | Southbound            | L-T-R | 6.6               | A        | 7.0           | A        | 7.1         | A        |
|                                                                              | <b>OVERALL</b>        |       | <b>11.6</b>       | <b>B</b> | <b>12.0</b>   | <b>B</b> | <b>12.1</b> | <b>B</b> |
| Route 5 & 20 at Parrish<br>Street Ext.<br>(Un-Signalized)                    | Northeastbound        | L     | 7.8               | A        | 7.8           | A        | 7.8         | A        |
|                                                                              | Northbound            | L-T-R | 23.6              | C        | 27.8          | D        | 30.2        | D        |
|                                                                              | Southbound            | L-T-R | 14.6              | B        | 16.0          | C        | 16.8        | C        |
|                                                                              | Southwestbound        | L     | 8.2               | A        | 8.3           | A        | 8.3         | A        |
|                                                                              | <b>OVERALL</b>        |       | <b>5.5</b>        | <b>A</b> | <b>6.3</b>    | <b>A</b> | <b>7.1</b>  | <b>A</b> |
| Bristol Road (NYS Route 21)<br>at Proposed Northern Drive<br>(Un-Signalized) | Westbound             | L     |                   |          |               |          | 10.3        | B        |
|                                                                              | Southbound            | L     |                   |          |               |          | 7.9         | A        |
|                                                                              | <b>OVERALL</b>        |       |                   |          |               |          | <b>0.5</b>  | <b>A</b> |
| Parrish Street Ext. at<br>Proposed Southern Drive<br>(Un-Signalized)         | Northbound            | L     |                   |          |               |          | 0.0         | A        |
|                                                                              | Eastbound             | L     |                   |          |               |          | 9.7         | A        |
|                                                                              | <b>OVERALL</b>        |       |                   |          |               |          | <b>0.7</b>  | <b>A</b> |

| Study Intersection                                                           | Approach and Movement |       | EVENING PEAK HOUR |          |               |          |             |          |
|------------------------------------------------------------------------------|-----------------------|-------|-------------------|----------|---------------|----------|-------------|----------|
|                                                                              |                       |       | 2021 BASE         |          | 2028 NO BUILD |          | 2028 BUILD  |          |
|                                                                              |                       |       | Delay             | LOS      | Delay         | LOS      | Delay       | LOS      |
| Route 5 & 20 at Bristol Road<br>(NYS Route 21)<br>(Signalized)               | Eastbound             | L     | 11.6              | B        | 11.6          | B        | 11.5        | B        |
|                                                                              |                       | T-R   | 17.7              | B        | 17.7          | B        | 17.8        | B        |
|                                                                              | Westbound             | L     | 30.2              | C        | 36.9          | D        | 39.0        | D        |
|                                                                              |                       | T-R   | 11.8              | B        | 11.6          | B        | 11.5        | B        |
|                                                                              | Northbound            | L-T-R | 6.2               | A        | 6.9           | A        | 7.3         | A        |
|                                                                              | Southbound            | L-T-R | 7.7               | A        | 8.5           | A        | 8.8         | A        |
|                                                                              | <b>OVERALL</b>        |       | <b>13.6</b>       | <b>B</b> | <b>14.5</b>   | <b>B</b> | <b>14.8</b> | <b>B</b> |
| Route 5 & 20 at Parrish<br>Street Ext.<br>(Un-Signalized)                    | Northeastbound        | L     | 8.4               | A        | 8.5           | A        | 8.5         | A        |
|                                                                              | Northbound            | L-T-R | 22.1              | C        | 26.4          | D        | 29.8        | D        |
|                                                                              | Southbound            | L-T-R | 23.1              | C        | 27.7          | D        | 33.0        | D        |
|                                                                              | Southwestbound        | L     | 8.5               | A        | 8.6           | A        | 8.6         | A        |
|                                                                              | <b>OVERALL</b>        |       | <b>5.2</b>        | <b>A</b> | <b>6.1</b>    | <b>A</b> | <b>7.3</b>  | <b>A</b> |
| Bristol Road (NYS Route 21)<br>at Proposed Northern Drive<br>(Un-Signalized) | Westbound             | L     |                   |          |               |          | 10.0        | B        |
|                                                                              | Southbound            | L     |                   |          |               |          | 7.8         | A        |
|                                                                              | <b>OVERALL</b>        |       |                   |          |               |          | <b>0.3</b>  | <b>A</b> |
| Parrish Street Ext. at<br>Proposed Southern Drive<br>(Un-Signalized)         | Northbound            | L     |                   |          |               |          | 7.5         | A        |
|                                                                              | Eastbound             | L     |                   |          |               |          | 9.8         | A        |
|                                                                              | <b>OVERALL</b>        |       |                   |          |               |          | <b>0.5</b>  | <b>A</b> |

As shown in the table, both existing intersections are currently operating at acceptable levels of service and will continue to do so with the additional traffic generated by the proposed subdivision. Both of the proposed site's driveways will operate with LOS 'A' during both the morning and evening peak hours due to the low volume of traffic the subdivision will generate.

All existing approach lanes will experience minimal to no increase in delay with the maximum impact being an increase of 5.3 seconds of average additional delay. The minor increase in traffic as a result of the proposed subdivision will have a negligible impact on the operations of the surrounding roadway network. Overall, the proposed Pierce Brook subdivision will not have any noticeable effect on the traffic operations for traveling public within the study area.

### Sight Distance Analysis

The sight distance at the proposed site entrance was measured to determine if the available intersection sight distances meet the AASHTO recommended values. As shown in the table below, adequate site distance is available at the proposed driveways on Bristol Road and Parrish Street Ext.

| SIGHT DISTANCE CALCULATIONS                            |             |               |                                                                 |                                             |                                                             |                                         |                                |
|--------------------------------------------------------|-------------|---------------|-----------------------------------------------------------------|---------------------------------------------|-------------------------------------------------------------|-----------------------------------------|--------------------------------|
| Location                                               | Speed Limit | Direction     | AASHTO/NYS DOT<br>Recommended<br>Intersection Sight<br>Distance | Available<br>Intersection<br>Sight Distance | AASHTO/NYS DOT<br>Recommended<br>Stopping Sight<br>Distance | Available<br>Stopping Sight<br>Distance | Visual<br>Restriction          |
| Bristol Road (NYS Route 21) at Proposed North Driveway | 55 mph      | Looking Left  | 530 feet                                                        | 806 feet                                    | 495 feet                                                    | 806 feet                                | Vertical Curve                 |
|                                                        | 55 mph      | Looking Right | 610 feet                                                        | 784 feet                                    |                                                             | 847 feet                                | Horizontal /<br>Vertical Curve |
| Parrish Street Ext at Proposed South Driveway          | 55 mph      | Looking Left  | 530 feet                                                        | 550 feet                                    | 495 feet                                                    | 550 feet                                | Horizontal /<br>Vertical Curve |
|                                                        | 55 mph      | Looking Right | 610 feet                                                        | 1,110 feet                                  |                                                             | 1,110 feet                              | Vertical Curve                 |

### Conclusion

The capacity analysis revealed that the additional traffic generated by the proposed Pierce Brook subdivision will have a negligible impact to the operations on the Route 5 & 20 corridor, as well as Bristol Road (NYS Route 21) and Parrish Street Ext., due to the low volume of projected trips resulting from the 92 residential units. Supplementary turn lanes and signal warrants were reviewed at both of the subdivision's access points but were not warranted based on AASHTO and MUTCD volume recommendations, due to the acceptable levels of operation. No improvements to the surrounding roadway network are recommended as a result of the proposed Pierce Brook subdivision.

Please do not hesitate to call should you require additional information or have any questions.

Sincerely yours,

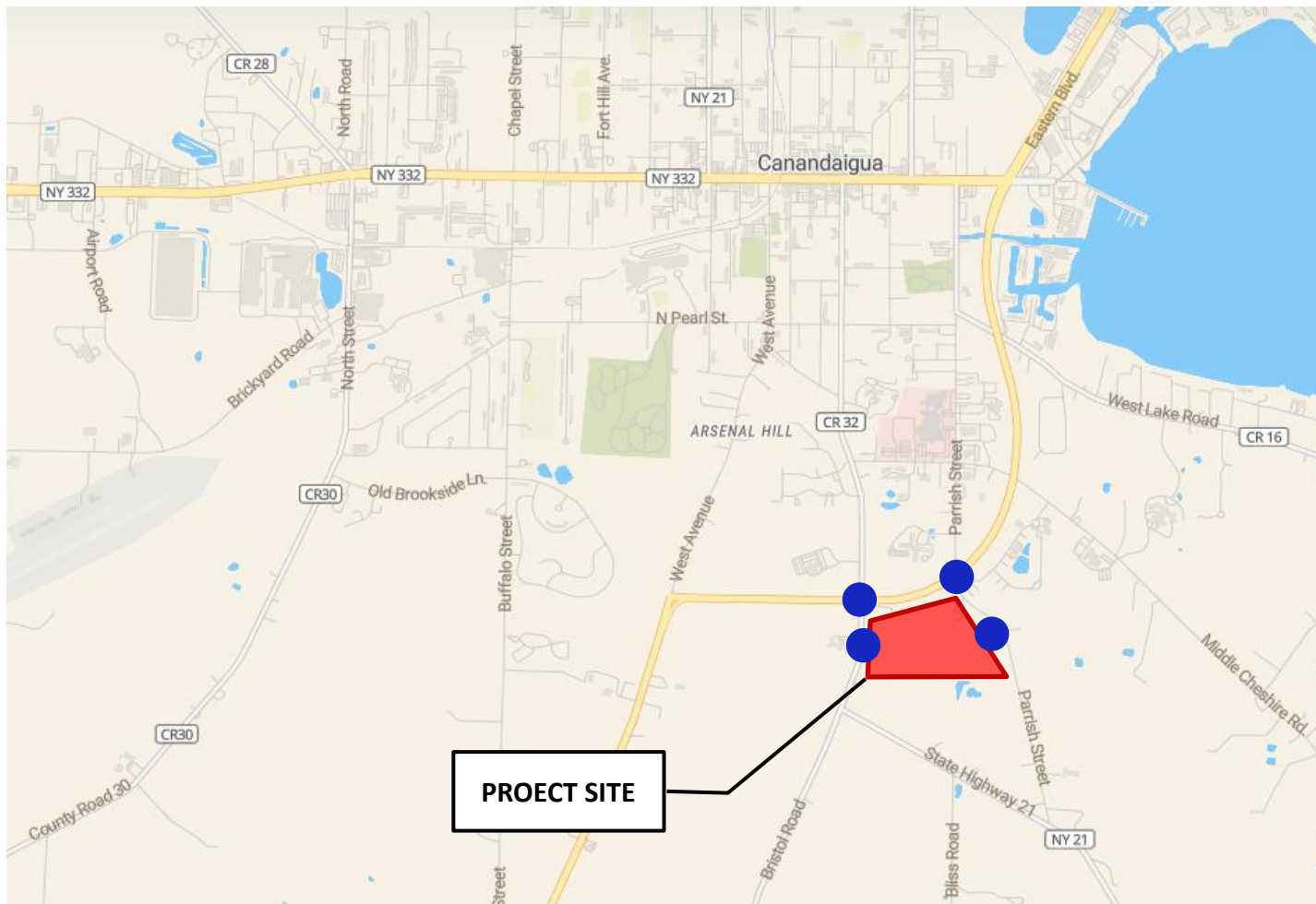
McFARLAND-JOHNSON, INC.



Adam J. Frosino, PE, PTOE  
Project Manager



Not to Scale



#### LEGEND



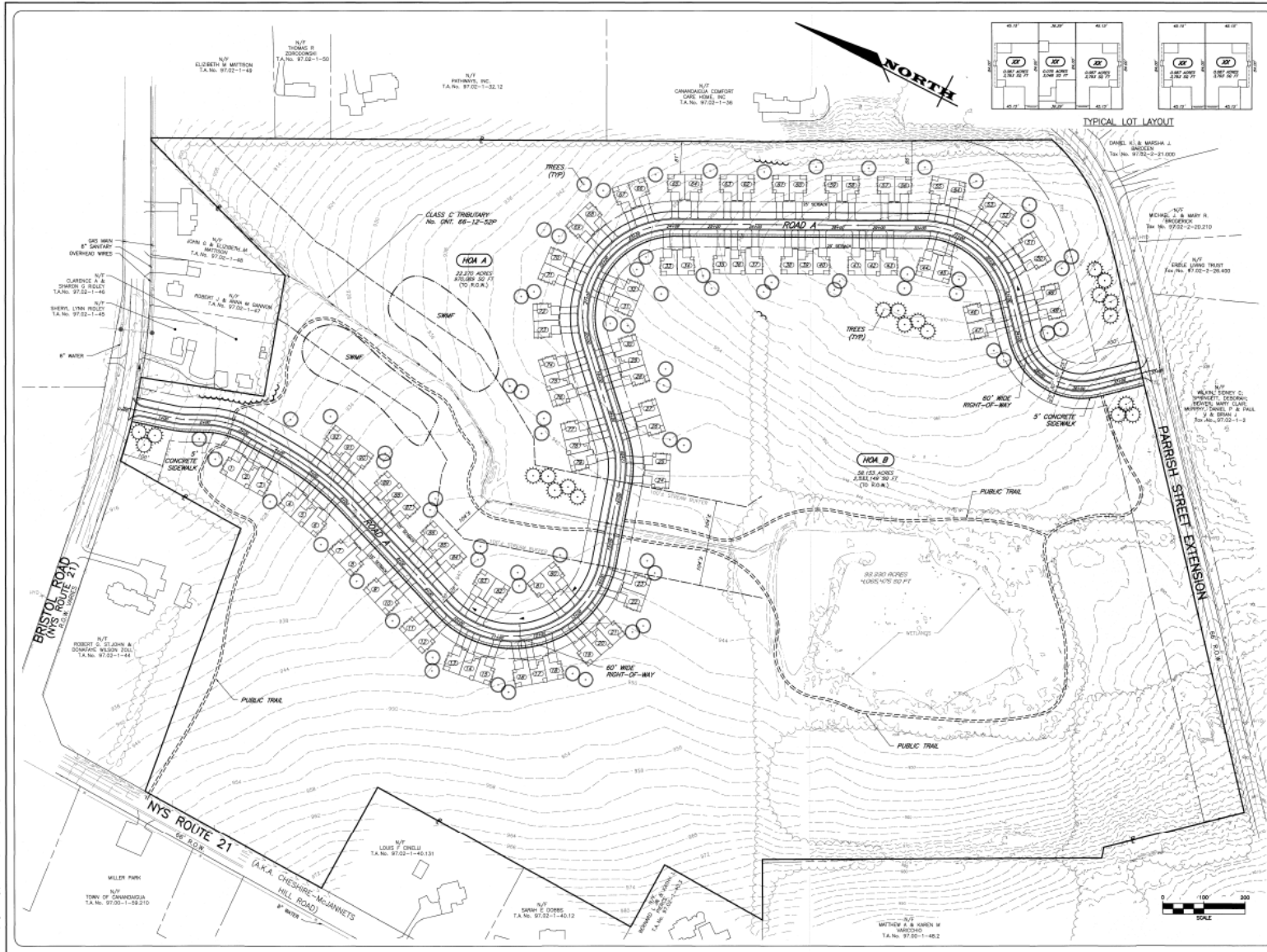
Project Site



Study Area Intersection

### Site Location

File: 2 [Engineering] Job: Plan 1022-19 [Drawing] 1022 Miller Sketch Plan Map, Local road: 1/12/2024, Plot Date: 1/13/2024, By: COLE PARKER, Plot Style: MARATHON STANDARD.CTP



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www.marathoneng.com

# **SKETCH PLAN** for **MILLER / WILKIN SUBDIVISION**

STATE ROUTE 21 SOUTH, T.A. NO. 97.02-1-52.1  
PARISH STREET EXTENSION, T.A. NO. 97.02-2-2  
TOWN OF CANNADAGUA, ONTARIO COUNTY, STATE OF NEW YORK

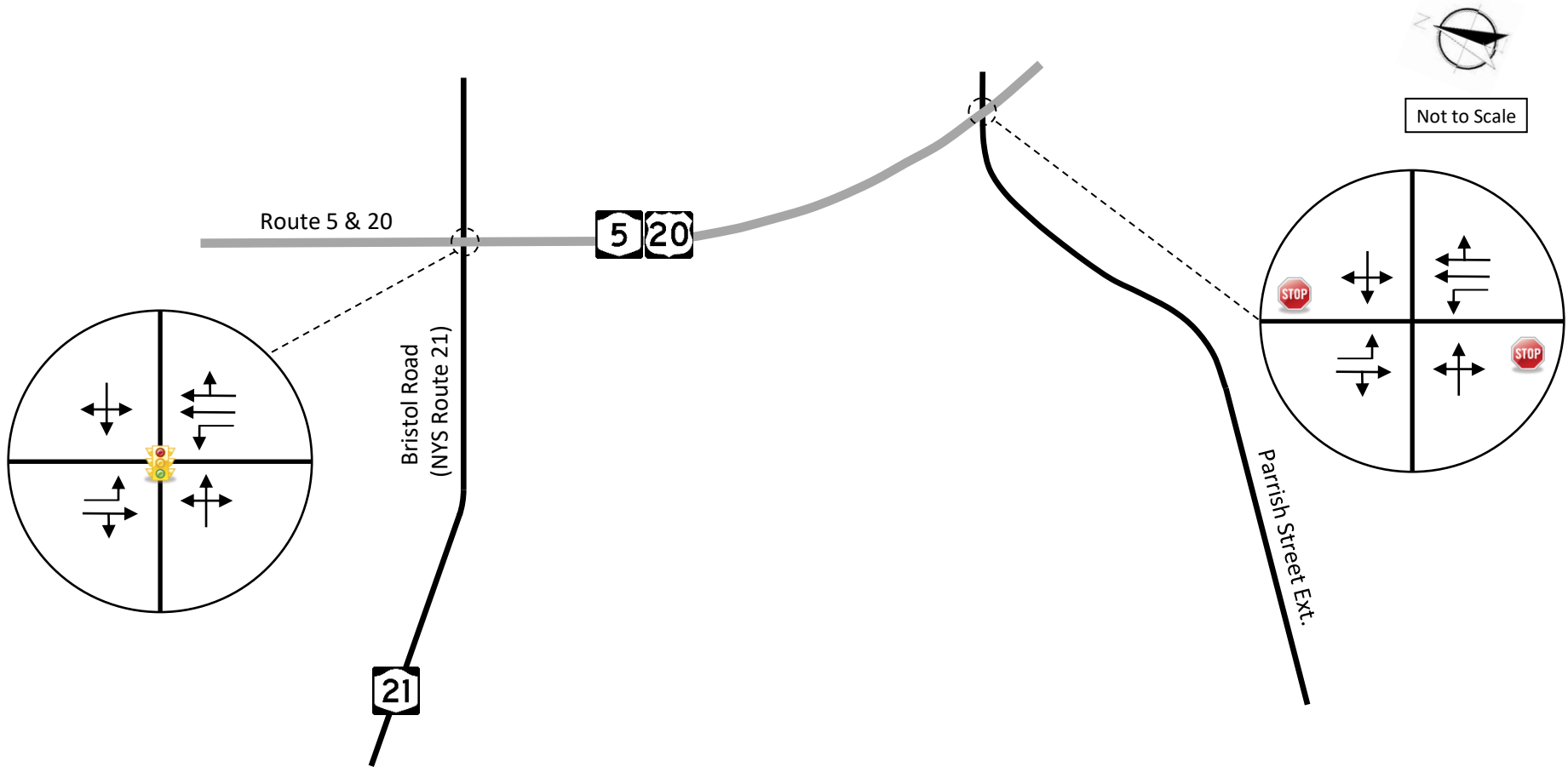
JOB NO: 1022-19  
SCALE: 1"=100'  
DRAWN: CJP  
DESIGNED: RPB  
DATE: 01/15/2021

REVISIONS

DATE BY REVISION

Concept Site Plan

FIGURE 2



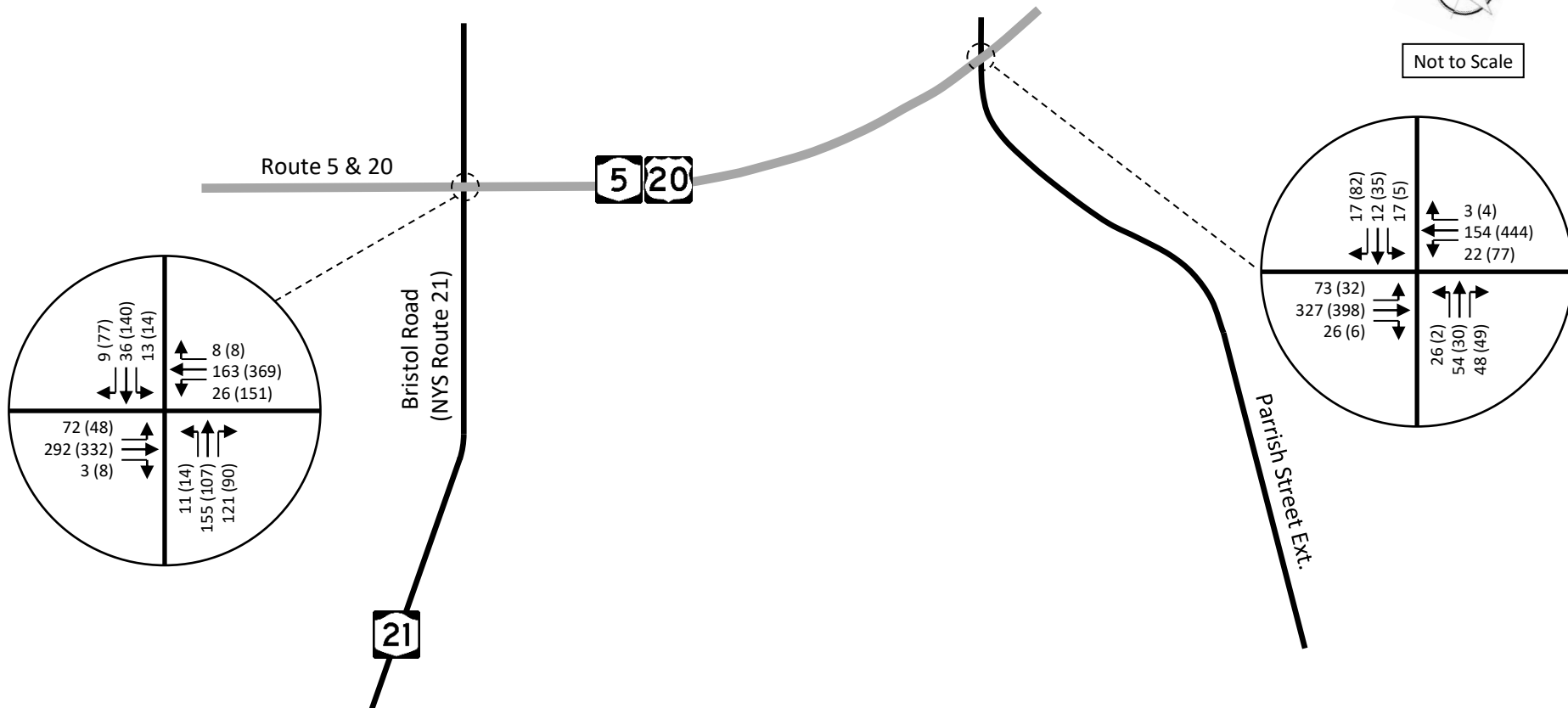
### LEGEND

|                                                                                     |                                   |
|-------------------------------------------------------------------------------------|-----------------------------------|
|  | Turn Movement                     |
|  | Signalized Intersection           |
|  | Stop Sign Controlled Intersection |

## Existing Intersection Geometry



Not to Scale



### LEGEND



Turn Movement

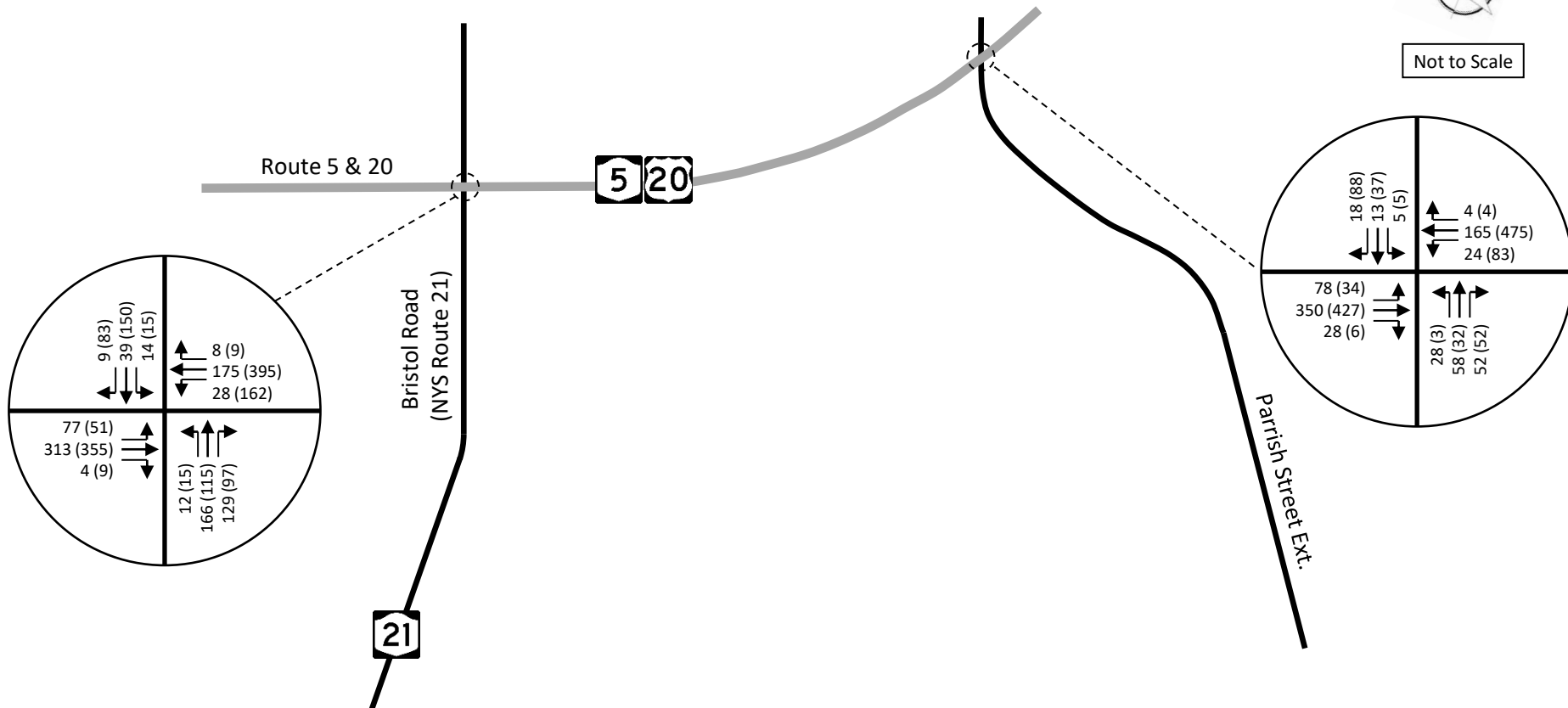
###(###)

Peak Hour Traffic  
Volume - AM(PM)

## 2021 Base Volumes



Not to Scale



### LEGEND

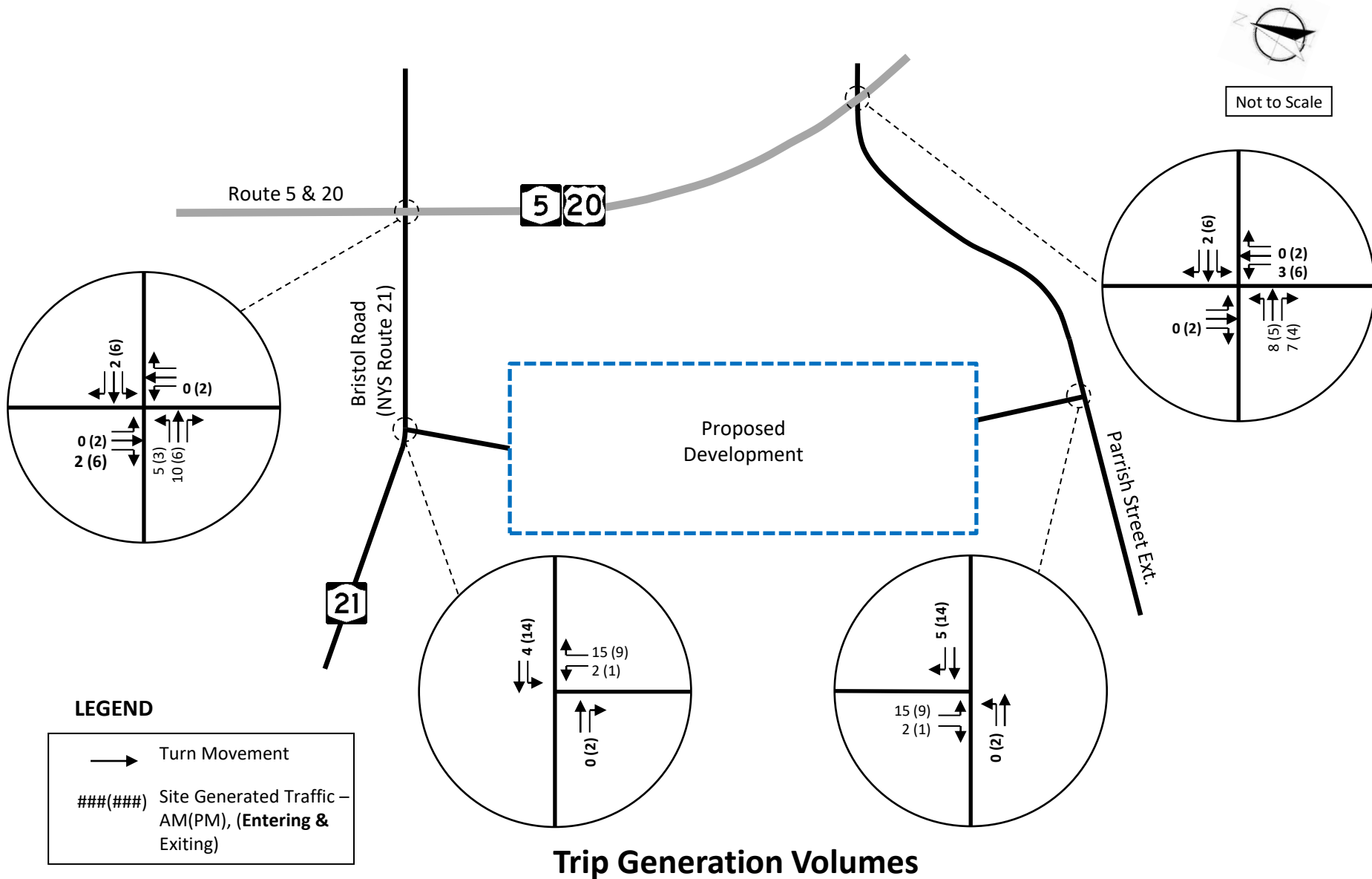


Turn Movement

###(###)

Peak Hour Traffic  
Volume - AM(PM)

## 2028 No-Build Volumes





# Tri-State Traffic Data Inc

184 Baker Rd  
Coatesville, PA 19320

Road: Parrish Street Ext  
Location: 100 ft W of Rts. 5/20  
Counter: 22574

GPS: 42.871655, -77.298371

| Start Time | 4/5/2021 |       | 4/6/2021 |       | 4/7/2021 |       | 4/8/2021 |       | 4/9/2021 |    | Weekday Average |       | 4/10/2021 |    | 4/11/2021 |    |
|------------|----------|-------|----------|-------|----------|-------|----------|-------|----------|----|-----------------|-------|-----------|----|-----------|----|
|            | EB       | WB    | EB       | WB    | EB       | WB    | EB       | WB    | EB       | WB | EB              | WB    | EB        | WB | EB        | WB |
| 12:00 AM   | *        | *     | 1        | 0     | 1        | 0     | 4        | 3     | *        | *  | 2               | 1     | *         | *  | *         | *  |
| 01:00      | *        | *     | 0        | 0     | 0        | 0     | 0        | 0     | *        | *  | 0               | 0     | *         | *  | *         | *  |
| 02:00      | *        | *     | 0        | 0     | 1        | 0     | 0        | 1     | *        | *  | 0               | 0     | *         | *  | *         | *  |
| 03:00      | *        | *     | 1        | 0     | 3        | 0     | 1        | 0     | *        | *  | 2               | 0     | *         | *  | *         | *  |
| 04:00      | *        | *     | 8        | 1     | 7        | 3     | 4        | 2     | *        | *  | 6               | 2     | *         | *  | *         | *  |
| 05:00      | *        | *     | 13       | 5     | 15       | 2     | 16       | 4     | *        | *  | 15              | 4     | *         | *  | *         | *  |
| 06:00      | *        | *     | 59       | 29    | 53       | 19    | 48       | 28    | *        | *  | 53              | 25    | *         | *  | *         | *  |
| 07:00      | *        | *     | 121      | 50    | 93       | 49    | 126      | 39    | *        | *  | 113             | 46    | *         | *  | *         | *  |
| 08:00      | *        | *     | 124      | 67    | 117      | 64    | 107      | 60    | *        | *  | 116             | 64    | *         | *  | *         | *  |
| 09:00      | *        | *     | 101      | 65    | 96       | 44    | *        | *     | *        | *  | 98              | 54    | *         | *  | *         | *  |
| 10:00      | *        | *     | 87       | 63    | 116      | 65    | *        | *     | *        | *  | 102             | 64    | *         | *  | *         | *  |
| 11:00      | *        | *     | 111      | 94    | 91       | 80    | *        | *     | *        | *  | 101             | 87    | *         | *  | *         | *  |
| 12:00 PM   | *        | *     | 82       | 75    | 82       | 90    | *        | *     | *        | *  | 82              | 82    | *         | *  | *         | *  |
| 01:00      | *        | *     | 91       | 98    | 116      | 104   | *        | *     | *        | *  | 104             | 101   | *         | *  | *         | *  |
| 02:00      | *        | *     | 94       | 86    | 83       | 94    | *        | *     | *        | *  | 88              | 90    | *         | *  | *         | *  |
| 03:00      | *        | *     | 95       | 114   | 105      | 117   | *        | *     | *        | *  | 100             | 116   | *         | *  | *         | *  |
| 04:00      | *        | *     | 71       | 100   | 78       | 102   | *        | *     | *        | *  | 74              | 101   | *         | *  | *         | *  |
| 05:00      | *        | *     | 69       | 95    | 54       | 114   | *        | *     | *        | *  | 62              | 104   | *         | *  | *         | *  |
| 06:00      | 51       | 60    | 44       | 59    | 45       | 64    | *        | *     | *        | *  | 47              | 61    | *         | *  | *         | *  |
| 07:00      | 18       | 40    | 28       | 46    | 28       | 62    | *        | *     | *        | *  | 25              | 49    | *         | *  | *         | *  |
| 08:00      | 15       | 16    | 8        | 32    | 22       | 34    | *        | *     | *        | *  | 15              | 27    | *         | *  | *         | *  |
| 09:00      | 5        | 12    | 6        | 18    | 4        | 22    | *        | *     | *        | *  | 5               | 17    | *         | *  | *         | *  |
| 10:00      | 3        | 4     | 8        | 7     | 1        | 11    | *        | *     | *        | *  | 4               | 7     | *         | *  | *         | *  |
| 11:00      | 3        | 4     | 1        | 5     | 2        | 10    | *        | *     | *        | *  | 2               | 6     | *         | *  | *         | *  |
| Total      | 95       | 136   | 1223     | 1109  | 1213     | 1150  | 306      | 137   | 0        | 0  | 1216            | 1108  | 0         | 0  | 0         | 0  |
| Day        | 231      |       | 2332     |       | 2363     |       | 443      |       | 0        |    | 2324            |       | 0         |    | 0         |    |
| AM Peak    | -        | -     | 08:00    | 11:00 | 08:00    | 11:00 | 07:00    | 08:00 | -        | -  | 08:00           | 11:00 | -         | -  | -         | -  |
| Vol.       | -        | -     | 124      | 94    | 117      | 80    | 126      | 60    | -        | -  | 116             | 87    | -         | -  | -         | -  |
| PM Peak    | 18:00    | 18:00 | 15:00    | 15:00 | 13:00    | 15:00 | -        | -     | -        | -  | 13:00           | 15:00 | -         | -  | -         | -  |
| Vol.       | 51       | 60    | 95       | 114   | 116      | 117   | -        | -     | -        | -  | 104             | 116   | -         | -  | -         | -  |

|             |           |            |      |     |   |      |   |   |
|-------------|-----------|------------|------|-----|---|------|---|---|
| Comb. Total | 231       | 2332       | 2363 | 443 | 0 | 2324 | 0 | 0 |
| ADT         | ADT 2,328 | AADT 2,328 |      |     |   |      |   |   |



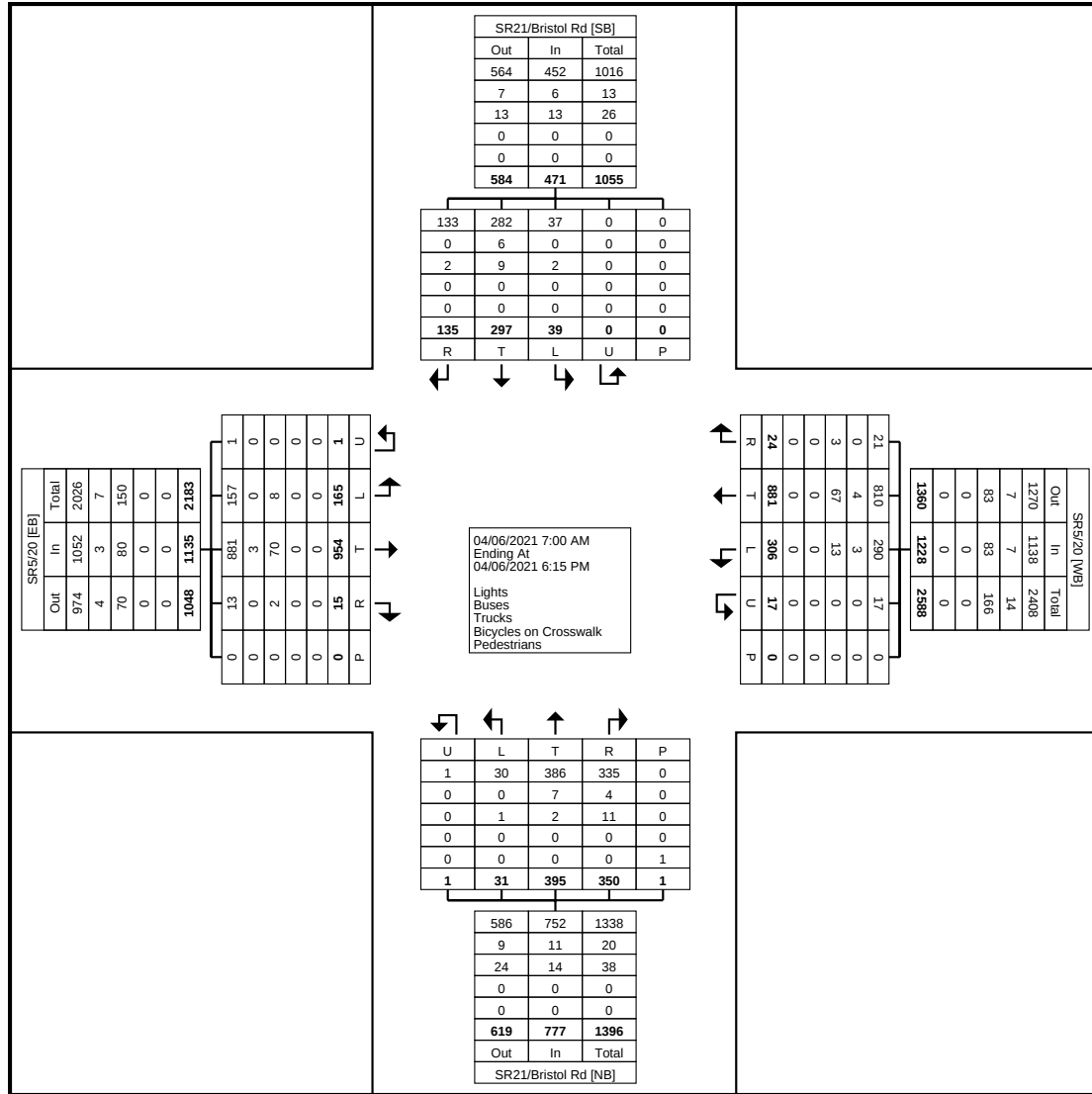
Tuesday, April 6, 2021  
Location: 42.874996, -  
77.301999

Coatesville, Pennsylvania, United States 19320  
610-466-1469  
Serving Transportation Professionals Since 1995

Site Code: SCU52N  
Start Date: 04/06/2021  
Page No: 1

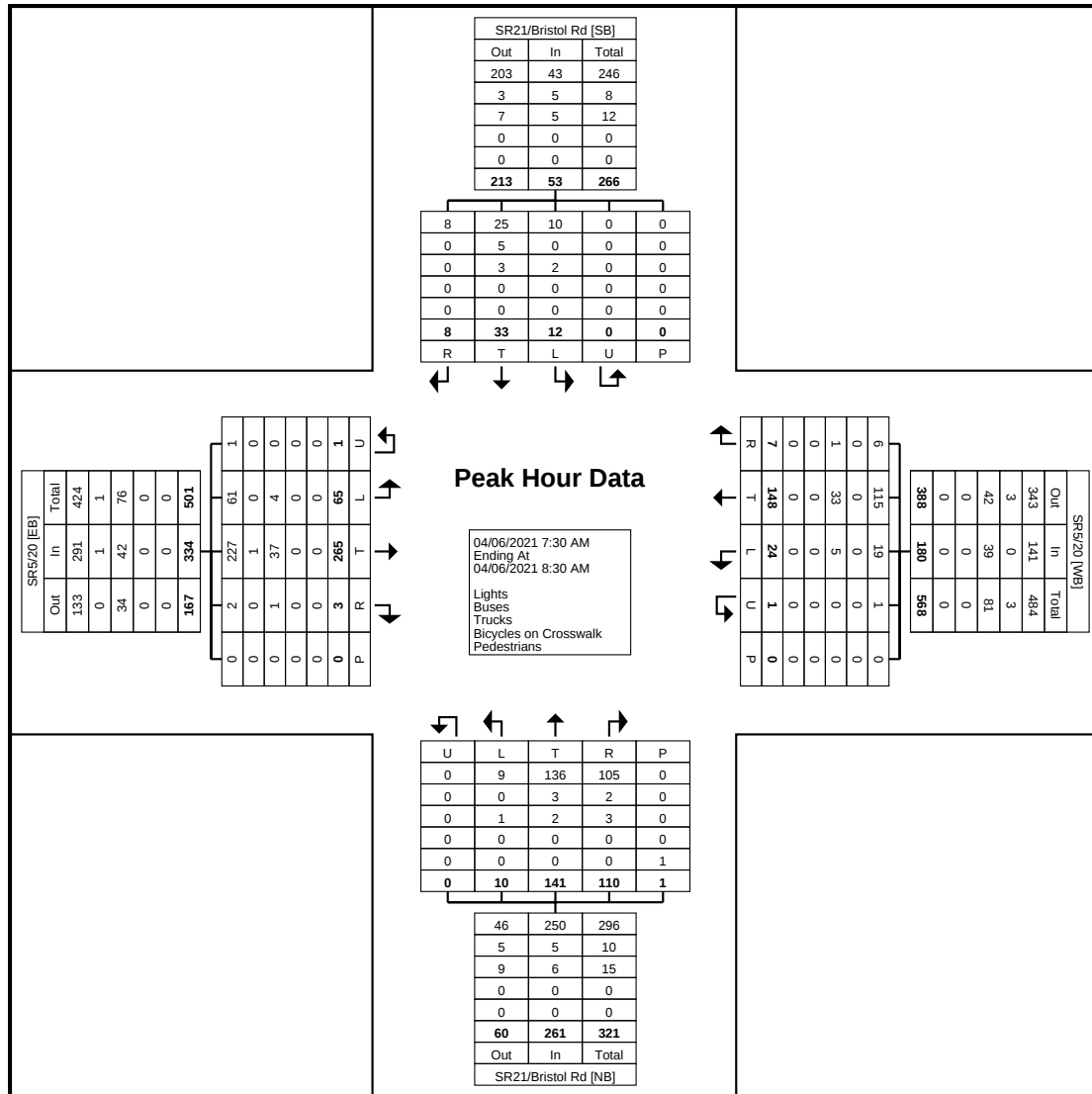
## Turning Movement Data

| Start Time              | SR5/20<br>Eastbound |      |       |              |        |       |            | SR5/20<br>Westbound |      |       |              |        |       |            | SR21/Bristol Rd<br>Northbound |      |       |              |        |       |            | SR21/Bristol Rd<br>Southbound |      |       |              |        |       |            | Int. Total |
|-------------------------|---------------------|------|-------|--------------|--------|-------|------------|---------------------|------|-------|--------------|--------|-------|------------|-------------------------------|------|-------|--------------|--------|-------|------------|-------------------------------|------|-------|--------------|--------|-------|------------|------------|
|                         | Left                | Thru | Right | Right on Red | U-Turn | Ped s | App. Total | Left                | Thru | Right | Right on Red | U-Turn | Ped s | App. Total | Left                          | Thru | Right | Right on Red | U-Turn | Ped s | App. Total | Left                          | Thru | Right | Right on Red | U-Turn | Ped s | App. Total |            |
|                         |                     |      |       |              |        |       |            |                     |      |       |              |        |       |            |                               |      |       |              |        |       |            |                               |      |       |              |        |       |            |            |
| 7:00 AM                 | 5                   | 39   | 0     | 0            | 0      | 0     | 44         | 11                  | 38   | 0     | 0            | 1      | 0     | 50         | 0                             | 20   | 8     | 3            | 0      | 0     | 31         | 1                             | 13   | 1     | 5            | 0      | 0     | 20         | 145        |
| 7:15 AM                 | 14                  | 54   | 0     | 1            | 0      | 0     | 69         | 9                   | 45   | 0     | 0            | 0      | 0     | 54         | 1                             | 33   | 24    | 2            | 0      | 0     | 60         | 2                             | 13   | 5     | 3            | 0      | 0     | 23         | 206        |
| 7:30 AM                 | 16                  | 66   | 0     | 1            | 0      | 0     | 83         | 6                   | 51   | 0     | 1            | 0      | 0     | 58         | 2                             | 36   | 12    | 8            | 0      | 0     | 58         | 3                             | 13   | 2     | 0            | 0      | 0     | 18         | 217        |
| 7:45 AM                 | 26                  | 59   | 1     | 0            | 0      | 0     | 86         | 9                   | 31   | 0     | 0            | 0      | 0     | 40         | 1                             | 36   | 20    | 13           | 0      | 1     | 70         | 3                             | 7    | 1     | 1            | 0      | 0     | 12         | 208        |
| Hourly Total            | 61                  | 218  | 1     | 2            | 0      | 0     | 282        | 35                  | 165  | 0     | 1            | 1      | 0     | 202        | 4                             | 125  | 64    | 26           | 0      | 1     | 219        | 9                             | 46   | 9     | 9            | 0      | 0     | 73         | 776        |
| 8:00 AM                 | 8                   | 70   | 0     | 0            | 1      | 0     | 79         | 4                   | 32   | 2     | 1            | 0      | 0     | 39         | 2                             | 34   | 15    | 7            | 0      | 0     | 58         | 1                             | 6    | 2     | 1            | 0      | 0     | 10         | 186        |
| 8:15 AM                 | 15                  | 70   | 1     | 0            | 0      | 0     | 86         | 5                   | 34   | 0     | 3            | 1      | 0     | 43         | 5                             | 35   | 32    | 3            | 0      | 0     | 75         | 5                             | 7    | 0     | 1            | 0      | 0     | 13         | 217        |
| 8:30 AM                 | 12                  | 44   | 0     | 0            | 0      | 0     | 56         | 12                  | 40   | 2     | 1            | 1      | 0     | 56         | 2                             | 22   | 19    | 5            | 0      | 0     | 48         | 0                             | 12   | 2     | 4            | 0      | 0     | 18         | 178        |
| 8:45 AM                 | 9                   | 77   | 1     | 0            | 0      | 0     | 87         | 11                  | 33   | 1     | 0            | 0      | 0     | 45         | 2                             | 21   | 24    | 5            | 0      | 0     | 52         | 4                             | 17   | 2     | 3            | 0      | 0     | 26         | 210        |
| Hourly Total            | 44                  | 261  | 2     | 0            | 1      | 0     | 308        | 32                  | 139  | 5     | 5            | 2      | 0     | 183        | 11                            | 112  | 90    | 20           | 0      | 0     | 233        | 10                            | 42   | 6     | 9            | 0      | 0     | 67         | 791        |
| 9:00 AM                 | 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          |
| *** BREAK ***           | -                   | -    | -     | -            | -      | -     | -          | -                   | -    | -     | -            | -      | -     | -          | -                             | -    | -     | -            | -      | -     | -          | -                             | -    | -     | -            | -      | -     | -          |            |
| Hourly Total            | 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          |
| 4:00 PM                 | 8                   | 82   | 2     | 0            | 0      | 0     | 92         | 33                  | 83   | 1     | 1            | 2      | 0     | 120        | 2                             | 26   | 14    | 7            | 1      | 0     | 50         | 6                             | 30   | 13    | 0            | 0      | 0     | 49         | 311        |
| 4:15 PM                 | 11                  | 60   | 1     | 1            | 0      | 0     | 73         | 21                  | 84   | 2     | 1            | 0      | 0     | 108        | 3                             | 29   | 12    | 6            | 0      | 0     | 50         | 2                             | 26   | 9     | 2            | 0      | 0     | 39         | 270        |
| 4:30 PM                 | 11                  | 63   | 1     | 1            | 0      | 0     | 76         | 39                  | 77   | 0     | 0            | 4      | 0     | 120        | 3                             | 16   | 7     | 8            | 0      | 0     | 34         | 3                             | 28   | 27    | 2            | 0      | 0     | 60         | 290        |
| 4:45 PM                 | 10                  | 74   | 0     | 1            | 0      | 0     | 85         | 34                  | 66   | 2     | 0            | 1      | 0     | 103        | 4                             | 19   | 18    | 4            | 0      | 0     | 45         | 1                             | 34   | 9     | 3            | 0      | 0     | 47         | 280        |
| Hourly Total            | 40                  | 279  | 4     | 3            | 0      | 0     | 326        | 127                 | 310  | 5     | 2            | 7      | 0     | 451        | 12                            | 90   | 51    | 25           | 1      | 0     | 179        | 12                            | 118  | 58    | 7            | 0      | 0     | 195        | 1151       |
| 5:00 PM                 | 5                   | 42   | 1     | 1            | 0      | 0     | 49         | 32                  | 75   | 2     | 0            | 1      | 0     | 110        | 0                             | 23   | 9     | 6            | 0      | 0     | 38         | 4                             | 35   | 7     | 5            | 0      | 0     | 51         | 248        |
| 5:15 PM                 | 6                   | 64   | 0     | 0            | 0      | 0     | 70         | 25                  | 79   | 2     | 0            | 3      | 0     | 109        | 2                             | 17   | 14    | 8            | 0      | 0     | 41         | 2                             | 19   | 9     | 4            | 0      | 0     | 34         | 254        |
| 5:30 PM                 | 4                   | 44   | 1     | 0            | 0      | 0     | 49         | 23                  | 50   | 1     | 0            | 1      | 0     | 75         | 2                             | 11   | 11    | 10           | 0      | 0     | 34         | 2                             | 14   | 4     | 3            | 0      | 0     | 23         | 181        |
| 5:45 PM                 | 5                   | 46   | 0     | 0            | 0      | 0     | 51         | 32                  | 63   | 1     | 0            | 2      | 0     | 98         | 0                             | 17   | 13    | 3            | 0      | 0     | 33         | 0                             | 23   | 5     | 0            | 0      | 0     | 28         | 210        |
| Hourly Total            | 20                  | 196  | 2     | 1            | 0      | 0     | 219        | 112                 | 267  | 6     | 0            | 7      | 0     | 392        | 4                             | 68   | 47    | 27           | 0      | 0     | 146        | 8                             | 91   | 25    | 12           | 0      | 0     | 136        | 893        |
| 6:00 PM                 | 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          |
| Grand Total             | 165                 | 954  | 9     | 6            | 1      | 0     | 1135       | 306                 | 881  | 16    | 8            | 17     | 0     | 1228       | 31                            | 395  | 252   | 98           | 1      | 1     | 777        | 39                            | 297  | 98    | 37           | 0      | 0     | 471        | 3611       |
| Approach %              | 14.5                | 84.1 | 0.8   | 0.5          | 0.1    | -     | -          | 24.9                | 71.7 | 1.3   | 0.7          | 1.4    | -     | -          | 4.0                           | 50.8 | 32.4  | 12.6         | 0.1    | -     | -          | 8.3                           | 63.1 | 20.8  | 7.9          | 0.0    | -     | -          | -          |
| Total %                 | 4.6                 | 26.4 | 0.2   | 0.2          | 0.0    | -     | 31.4       | 8.5                 | 24.4 | 0.4   | 0.2          | 0.5    | -     | 34.0       | 0.9                           | 10.9 | 7.0   | 2.7          | 0.0    | -     | 21.5       | 1.1                           | 8.2  | 2.7   | 1.0          | 0.0    | -     | 13.0       | -          |
| Lights                  | 157                 | 881  | 9     | 4            | 1      | -     | 1052       | 290                 | 810  | 14    | 7            | 17     | -     | 1138       | 30                            | 386  | 240   | 95           | 1      | -     | 752        | 37                            | 282  | 98    | 35           | 0      | -     | 452        | 3394       |
| % Lights                | 95.2                | 92.3 | 100.0 | 66.7         | 100.0  | -     | 92.7       | 94.8                | 91.9 | 87.5  | 87.5         | 100.0  | -     | 92.7       | 96.8                          | 97.7 | 95.2  | 96.9         | 100.0  | -     | 96.8       | 94.9                          | 94.9 | 100.0 | 94.6         | -      | -     | 96.0       | 94.0       |
| Buses                   | 0                   | 3    | 0     | 0            | 0      | 0     | 3          | 3                   | 4    | 0     | 0            | 0      | -     | 7          | 0                             | 7    | 4     | 0            | 0      | -     | 11         | 0                             | 6    | 0     | 0            | 0      | -     | 6          | 27         |
| % Buses                 | 0.0                 | 0.3  | 0.0   | 0.0          | 0.0    | -     | 0.3        | 1.0                 | 0.5  | 0.0   | 0.0          | 0.0    | -     | 0.6        | 0.0                           | 1.8  | 1.6   | 0.0          | 0.0    | -     | 1.4        | 0.0                           | 2.0  | 0.0   | 0.0          | -      | -     | 1.3        | 0.7        |
| Trucks                  | 8                   | 70   | 0     | 2            | 0      | -     | 80         | 13                  | 67   | 2     | 1            | 0      | -     | 83         | 1                             | 2    | 8     | 3            | 0      | -     | 14         | 2                             | 9    | 0     | 2            | 0      | -     | 13         | 190        |
| % Trucks                | 4.8                 | 7.3  | 0.0   | 33.3         | 0.0    | -     | 7.0        | 4.2                 | 7.6  | 12.5  | 12.5         | 0.0    | -     | 6.8        | 3.2                           | 0.5  | 3.2   | 3.1          | 0.0    | -     | 1.8        | 5.1                           | 3.0  | 0.0   | 5.4          | -      | -     | 2.8        | 5.3        |
| Bicycles on Crosswalk   | -                   | -    | -     | -            | -      | 0     | -          | -                   | -    | -     | -            | -      | 0     | -          | -                             | -    | -     | -            | -      | 0     | -          | -                             | -    | -     | -            | -      | 0     | -          | -          |
| % Bicycles on Crosswalk | -                   | -    | -     | -            | -      | -     | -          | -                   | -    | -     | -            | -      | -     | -          | -                             | -    | -     | -            | -      | 0.0   | -          | -                             | -    | -     | -            | -      | -     | -          | -          |
| Pedestrians             | -                   | -    | -     | -            | -      | 0     | -          | -                   | -    | -     | -            | -      | 0     | -          | -                             | -    | -     | -            | -      | 1     | -          | -                             | -    | -     | -            | -      | 0     | -          | -          |
| % Pedestrians           | -                   | -    | -     | -            | -      | -     | -          | -                   | -    | -     | -            | -      | -     | -          | -                             | -    | -     | -            | -      | 100.0 | -          | -                             | -    | -     | -            | -      | -     | -          | -          |



Turning Movement Data Plot





Turning Movement Peak Hour Data Plot (7:30 AM)

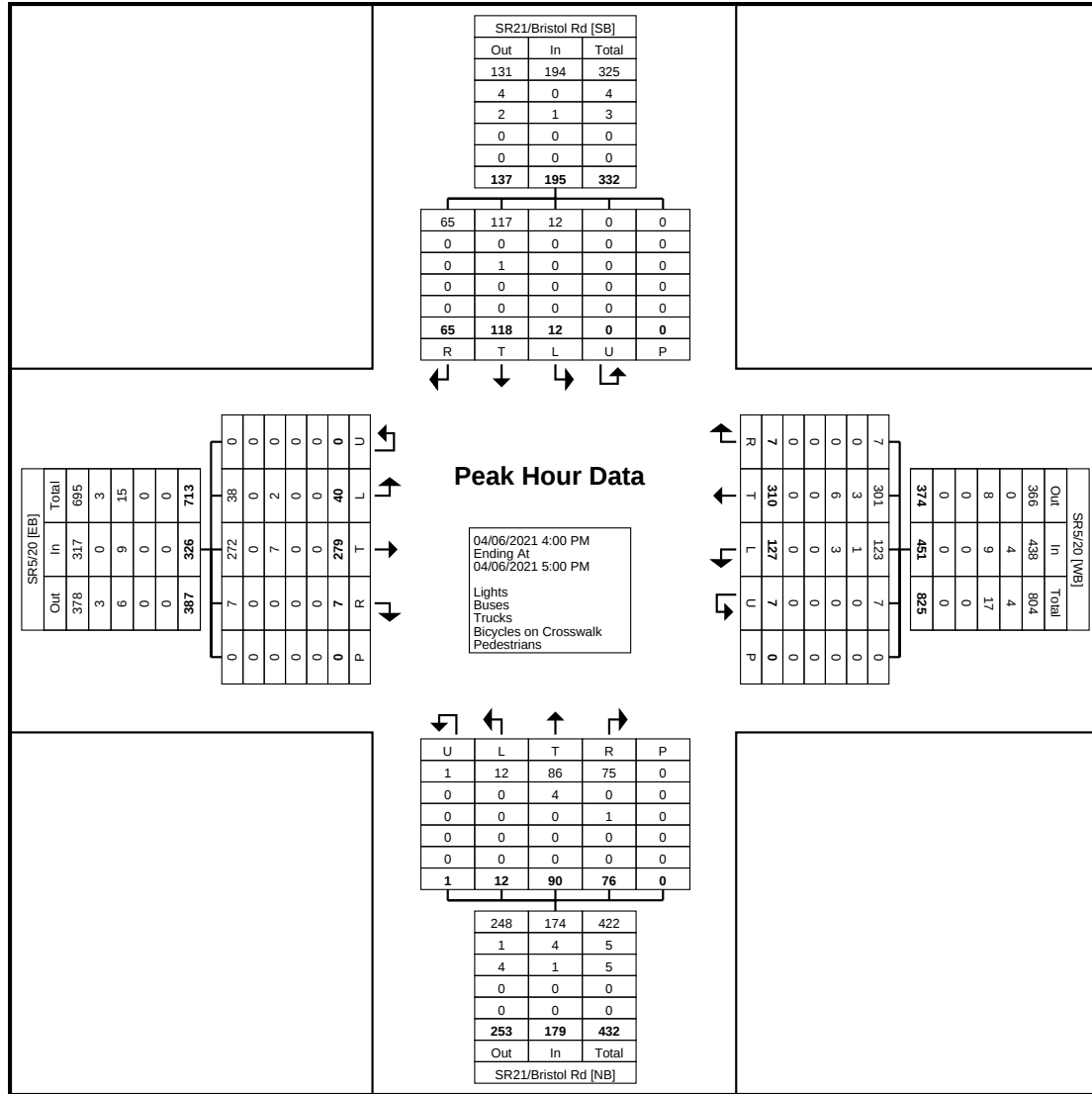


Tuesday, April 6, 2021  
Location: 42.874996, -  
77.301999

Coatesville, Pennsylvania, United States 19320  
610-466-1469  
Serving Transportation Professionals Since 1995

### Turning Movement Peak Hour Data (4:00 PM)

[illegible]



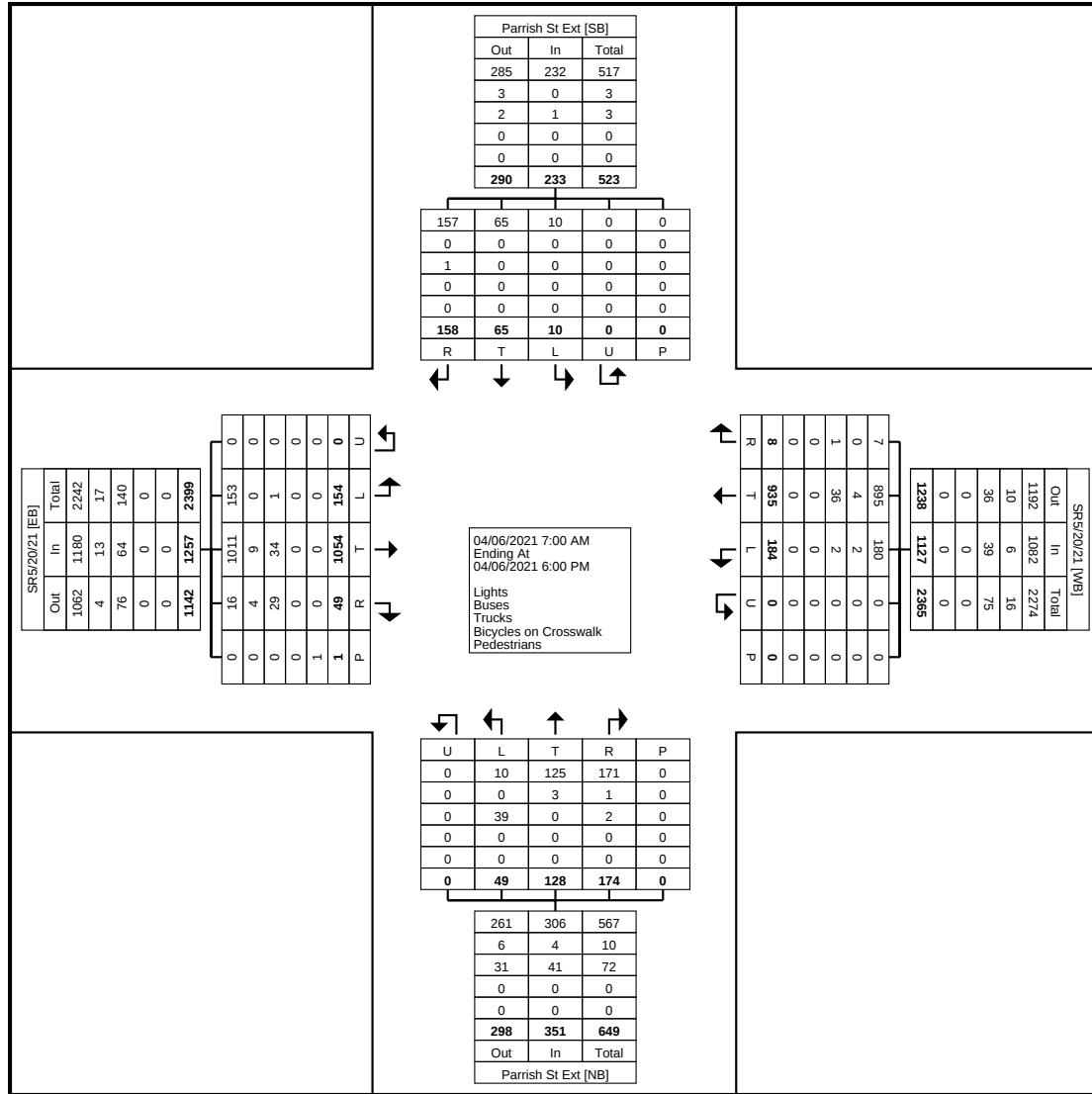
Turning Movement Peak Hour Data Plot (4:00 PM)



Tuesday, April 6, 2021  
Location: 42.871838, -  
77.297845

Count Name: Rte 20 & Parish St  
Site Code: SCU71Y  
Start Date: 04/06/2021  
Page No: 1

| Start Time    | SR5/20/21<br>Eastbound |      |       |        |      |            | SR5/20/21<br>Westbound |      |       |        |      |            | Parrish St Ext<br>Northbound |      |       |        |      |            | Parrish St Ext<br>Southbound |      |       |        |      |            | Int. Total |
|---------------|------------------------|------|-------|--------|------|------------|------------------------|------|-------|--------|------|------------|------------------------------|------|-------|--------|------|------------|------------------------------|------|-------|--------|------|------------|------------|
|               | Left                   | Thru | Right | U-Turn | Peds | App. Total | Left                   | Thru | Right | U-Turn | Peds | App. Total | Left                         | Thru | Right | U-Turn | Peds | App. Total | Left                         | Thru | Right | U-Turn | Peds | App. Total |            |
|               |                        |      |       |        |      |            |                        |      |       |        |      |            |                              |      |       |        |      |            |                              |      |       |        |      |            |            |
| 7:00 AM       | 5                      | 43   | 0     | 0      | 0    | 48         | 2                      | 23   | 1     | 0      | 0    | 26         | 5                            | 7    | 9     | 0      | 0    | 21         | 0                            | 1    | 10    | 0      | 0    | 11         | 106        |
| 7:15 AM       | 16                     | 58   | 6     | 0      | 0    | 80         | 4                      | 36   | 0     | 0      | 0    | 40         | 5                            | 9    | 8     | 0      | 0    | 22         | 0                            | 1    | 7     | 0      | 0    | 8          | 150        |
| 7:30 AM       | 16                     | 69   | 5     | 0      | 0    | 90         | 4                      | 45   | 0     | 0      | 0    | 49         | 5                            | 15   | 12    | 0      | 0    | 32         | 0                            | 5    | 4     | 0      | 0    | 9          | 180        |
| 7:45 AM       | 17                     | 69   | 7     | 0      | 0    | 93         | 4                      | 29   | 2     | 0      | 0    | 35         | 6                            | 9    | 10    | 0      | 0    | 25         | 1                            | 3    | 3     | 0      | 0    | 7          | 160        |
| Hourly Total  | 54                     | 239  | 18    | 0      | 0    | 311        | 14                     | 133  | 3     | 0      | 0    | 150        | 21                           | 40   | 39    | 0      | 0    | 100        | 1                            | 10   | 24    | 0      | 0    | 35         | 596        |
| 8:00 AM       | 14                     | 69   | 6     | 0      | 0    | 89         | 8                      | 34   | 1     | 0      | 0    | 43         | 6                            | 12   | 14    | 0      | 0    | 32         | 2                            | 1    | 1     | 0      | 0    | 4          | 168        |
| 8:15 AM       | 19                     | 80   | 6     | 0      | 1    | 105        | 4                      | 31   | 0     | 0      | 0    | 35         | 7                            | 13   | 8     | 0      | 0    | 28         | 1                            | 2    | 7     | 0      | 0    | 10         | 178        |
| 8:30 AM       | 7                      | 51   | 6     | 0      | 0    | 64         | 9                      | 41   | 0     | 0      | 0    | 50         | 5                            | 10   | 14    | 0      | 0    | 29         | 0                            | 4    | 8     | 0      | 0    | 12         | 155        |
| 8:45 AM       | 19                     | 74   | 7     | 0      | 0    | 100        | 3                      | 30   | 0     | 0      | 0    | 33         | 6                            | 7    | 12    | 0      | 0    | 25         | 1                            | 3    | 10    | 0      | 0    | 14         | 172        |
| Hourly Total  | 59                     | 274  | 25    | 0      | 1    | 358        | 24                     | 136  | 1     | 0      | 0    | 161        | 24                           | 42   | 48    | 0      | 0    | 114        | 4                            | 10   | 26    | 0      | 0    | 40         | 673        |
| 9:00 AM       | 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          |
| *** BREAK *** | -                      | -    | -     | -      | -    | -          | -                      | -    | -     | -      | -    | -          | -                            | -    | -     | -      | -    | -          | -                            | -    | -     | -      | -    | -          | -          |
| Hourly Total  | 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          |
| 4:00 PM       | 12                     | 76   | 2     | 0      | 0    | 90         | 18                     | 94   | 1     | 0      | 0    | 113        | 1                            | 9    | 16    | 0      | 0    | 26         | 0                            | 7    | 20    | 0      | 0    | 27         | 256        |
| 4:15 PM       | 6                      | 58   | 1     | 0      | 0    | 65         | 18                     | 96   | 1     | 0      | 0    | 115        | 0                            | 6    | 5     | 0      | 0    | 11         | 1                            | 9    | 11    | 0      | 0    | 21         | 212        |
| 4:30 PM       | 5                      | 68   | 2     | 0      | 0    | 75         | 18                     | 88   | 0     | 0      | 0    | 106        | 0                            | 5    | 11    | 0      | 0    | 16         | 2                            | 10   | 24    | 0      | 0    | 36         | 233        |
| 4:45 PM       | 4                      | 83   | 0     | 0      | 0    | 87         | 11                     | 95   | 1     | 0      | 0    | 107        | 1                            | 5    | 9     | 0      | 0    | 15         | 1                            | 3    | 14    | 0      | 0    | 18         | 227        |
| Hourly Total  | 27                     | 285  | 5     | 0      | 0    | 317        | 65                     | 373  | 3     | 0      | 0    | 441        | 2                            | 25   | 41    | 0      | 0    | 68         | 4                            | 29   | 69    | 0      | 0    | 102        | 928        |
| 5:00 PM       | 4                      | 52   | 0     | 0      | 0    | 56         | 28                     | 80   | 1     | 0      | 0    | 109        | 0                            | 2    | 18    | 0      | 0    | 20         | 1                            | 6    | 8     | 0      | 0    | 15         | 200        |
| 5:15 PM       | 5                      | 82   | 1     | 0      | 0    | 88         | 15                     | 75   | 0     | 0      | 0    | 90         | 1                            | 10   | 12    | 0      | 0    | 23         | 0                            | 4    | 10    | 0      | 0    | 14         | 215        |
| 5:30 PM       | 2                      | 65   | 0     | 0      | 0    | 67         | 21                     | 59   | 0     | 0      | 0    | 80         | 1                            | 4    | 10    | 0      | 0    | 15         | 0                            | 2    | 10    | 0      | 0    | 12         | 174        |
| 5:45 PM       | 3                      | 57   | 0     | 0      | 0    | 60         | 17                     | 79   | 0     | 0      | 0    | 96         | 0                            | 5    | 6     | 0      | 0    |            |                              |      |       |        |      |            |            |



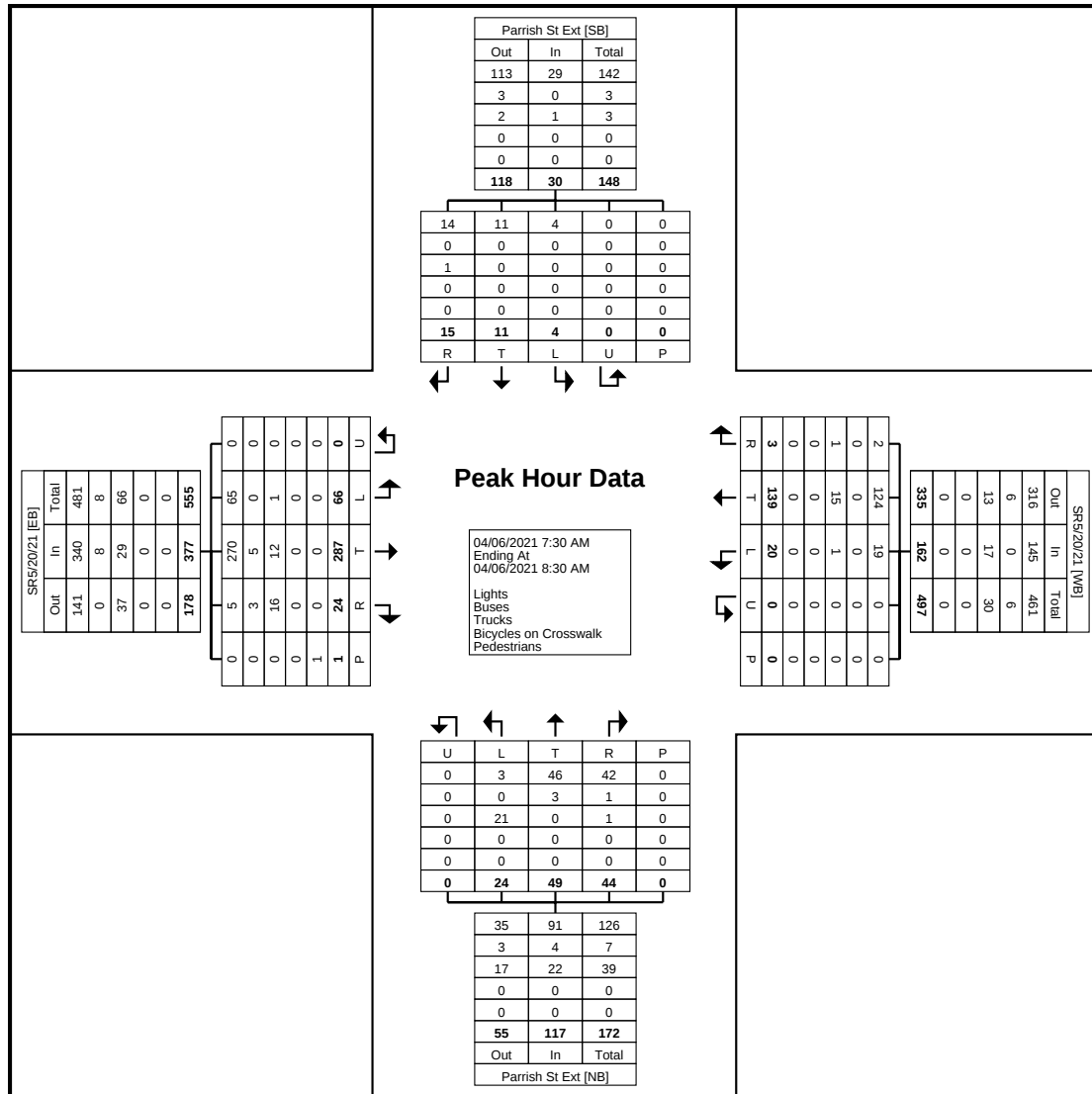
Turning Movement Data Plot



Tuesday, April 6, 2021  
Location: 42.871838, -  
77.297845

Count Name: Rte 20 & Parish St  
Site Code: SCU71Y  
Start Date: 04/06/2021  
Page No: 3

[illegible]



Turning Movement Peak Hour Data Plot (7:30 AM)

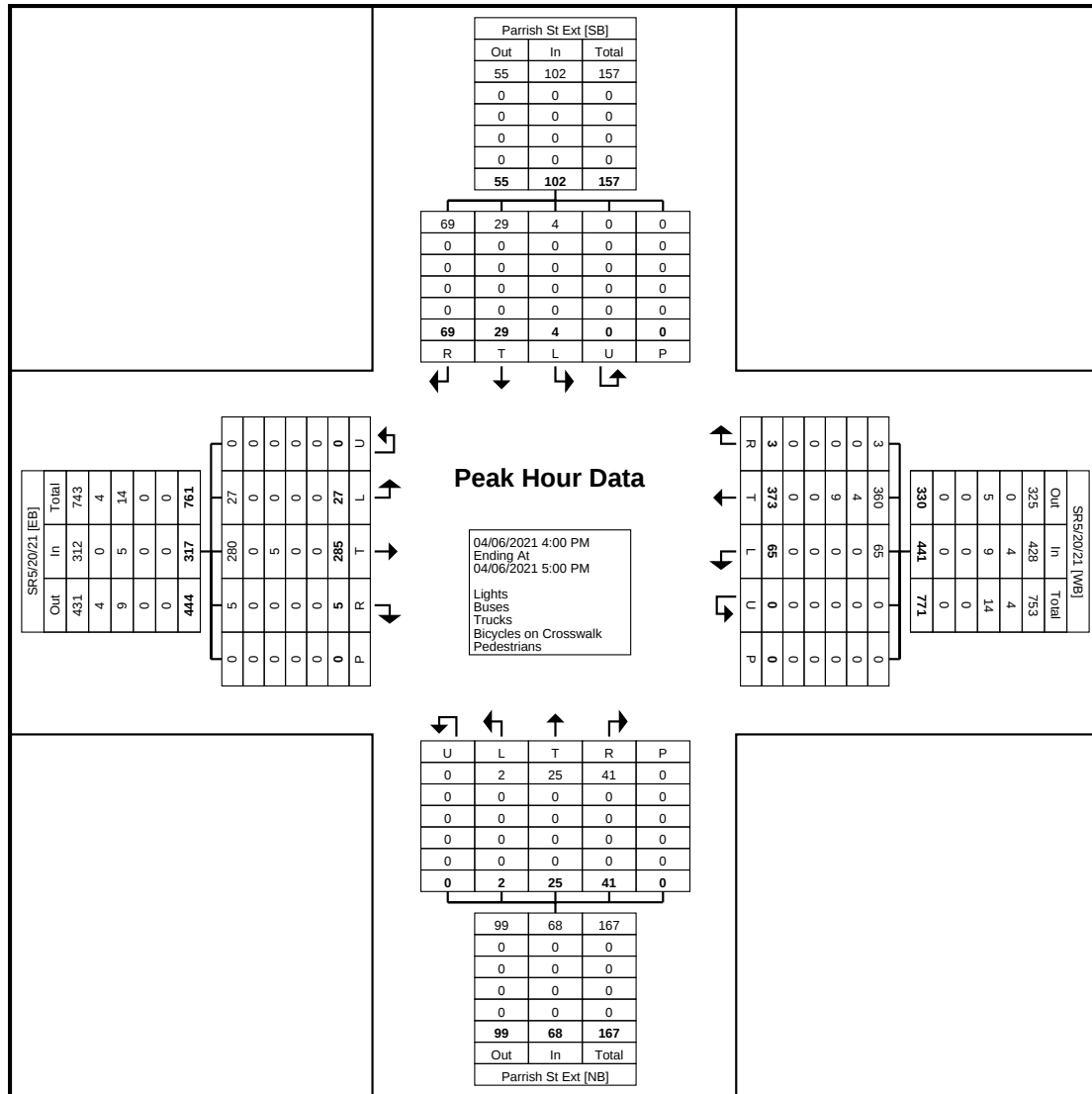


Tuesday, April 6, 2021  
Location: 42.871838, -  
77.297845

Coatesville, Pennsylvania, United States 19320  
610-466-1469  
Serving Transportation Professionals Since 1995

Count Name: Rte 20 & Parish St  
Site Code: SCU71Y  
Start Date: 04/06/2021  
Page No: 5

[illegible]



Turning Movement Peak Hour Data Plot (4:00 PM)

Lanes, Volumes, Timings  
3: Bristol Road (NYS Route 21) & Route 5 & 20

2021 Base - AM

04/28/2021

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |                                                                                     |  |                                                                                     |                                                                                     |  |                                                                                     |
| Traffic Volume (vph)       | 72                                                                                | 292                                                                               | 3                                                                                 | 26                                                                                | 163                                                                               | 8                                                                                 | 11                                                                                  | 155                                                                                 | 121                                                                                 | 13                                                                                  | 36                                                                                  | 9                                                                                   |
| Future Volume (vph)        | 72                                                                                | 292                                                                               | 3                                                                                 | 26                                                                                | 163                                                                               | 8                                                                                 | 11                                                                                  | 155                                                                                 | 121                                                                                 | 13                                                                                  | 36                                                                                  | 9                                                                                   |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Storage Length (ft)        | 100                                                                               |                                                                                   | 0                                                                                 | 100                                                                               |                                                                                   | 0                                                                                 | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (ft)          | 75                                                                                |                                                                                   |                                                                                   | 75                                                                                |                                                                                   |                                                                                   | 25                                                                                  |                                                                                     |                                                                                     | 25                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   | 0.999                                                                             |                                                                                   |                                                                                   | 0.993                                                                             |                                                                                   |                                                                                     | 0.943                                                                               |                                                                                     |                                                                                     | 0.979                                                                               |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                     | 0.998                                                                               |                                                                                     |                                                                                     | 0.989                                                                               |                                                                                     |
| Satd. Flow (prot)          | 1703                                                                              | 1667                                                                              | 0                                                                                 | 1492                                                                              | 2962                                                                              | 0                                                                                 | 0                                                                                   | 1702                                                                                | 0                                                                                   | 0                                                                                   | 1549                                                                                | 0                                                                                   |
| Flt Permitted              | 0.615                                                                             |                                                                                   |                                                                                   | 0.480                                                                             |                                                                                   |                                                                                   |                                                                                     | 0.992                                                                               |                                                                                     |                                                                                     | 0.919                                                                               |                                                                                     |
| Satd. Flow (perm)          | 1102                                                                              | 1667                                                                              | 0                                                                                 | 754                                                                               | 2962                                                                              | 0                                                                                 | 0                                                                                   | 1691                                                                                | 0                                                                                   | 0                                                                                   | 1439                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 1                                                                                 |                                                                                   |                                                                                   | 10                                                                                |                                                                                   |                                                                                     | 87                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Speed (mph)           |                                                                                   | 55                                                                                |                                                                                   |                                                                                   | 55                                                                                |                                                                                   |                                                                                     | 55                                                                                  |                                                                                     |                                                                                     | 40                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 1485                                                                              |                                                                                   |                                                                                   | 1620                                                                              |                                                                                   |                                                                                     | 705                                                                                 |                                                                                     |                                                                                     | 579                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 18.4                                                                              |                                                                                   |                                                                                   | 20.1                                                                              |                                                                                   |                                                                                     | 8.7                                                                                 |                                                                                     |                                                                                     | 9.9                                                                                 |                                                                                     |
| Peak Hour Factor           | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 0.78                                                                              | 0.78                                                                              | 0.78                                                                              | 0.87                                                                                | 0.87                                                                                | 0.87                                                                                | 0.74                                                                                | 0.74                                                                                | 0.74                                                                                |
| Heavy Vehicles (%)         | 6%                                                                                | 14%                                                                               | 1%                                                                                | 21%                                                                               | 22%                                                                               | 1%                                                                                | 10%                                                                                 | 4%                                                                                  | 6%                                                                                  | 17%                                                                                 | 24%                                                                                 | 0%                                                                                  |
| Adj. Flow (vph)            | 74                                                                                | 301                                                                               | 3                                                                                 | 33                                                                                | 209                                                                               | 10                                                                                | 13                                                                                  | 178                                                                                 | 139                                                                                 | 18                                                                                  | 49                                                                                  | 12                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 74                                                                                | 304                                                                               | 0                                                                                 | 33                                                                                | 219                                                                               | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 79                                                                                  | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                                | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                     | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 2                                                                                   | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 5.0                                                                                 |                                                                                     | 5.0                                                                                 | 5.0                                                                                 |                                                                                     |
| Minimum Split (s)          | 22.5                                                                              | 22.5                                                                              |                                                                                   | 22.5                                                                              | 22.5                                                                              |                                                                                   | 22.5                                                                                | 22.5                                                                                |                                                                                     | 22.5                                                                                | 22.5                                                                                |                                                                                     |
| Total Split (s)            | 26.0                                                                              | 26.0                                                                              |                                                                                   | 26.0                                                                              | 26.0                                                                              |                                                                                   | 26.0                                                                                | 26.0                                                                                |                                                                                     | 26.0                                                                                | 26.0                                                                                |                                                                                     |
| Total Split (%)            | 50.0%                                                                             | 50.0%                                                                             |                                                                                   | 50.0%                                                                             | 50.0%                                                                             |                                                                                   | 50.0%                                                                               | 50.0%                                                                               |                                                                                     | 50.0%                                                                               | 50.0%                                                                               |                                                                                     |
| Maximum Green (s)          | 22.0                                                                              | 22.0                                                                              |                                                                                   | 22.0                                                                              | 22.0                                                                              |                                                                                   | 22.0                                                                                | 22.0                                                                                |                                                                                     | 22.0                                                                                | 22.0                                                                                |                                                                                     |
| Yellow Time (s)            | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                 | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| All-Red Time (s)           | 1.0                                                                               | 1.0                                                                               |                                                                                   | 1.0                                                                               | 1.0                                                                               |                                                                                   | 1.0                                                                                 | 1.0                                                                                 |                                                                                     | 1.0                                                                                 | 1.0                                                                                 |                                                                                     |
| Lost Time Adjust (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)        | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               |                                                                                   |                                                                                     | 4.0                                                                                 |                                                                                     |                                                                                     | 4.0                                                                                 |                                                                                     |
| Lead/Lag                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)      | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                 | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode                | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | Max                                                                                 | Max                                                                                 |                                                                                     | Max                                                                                 | Max                                                                                 |                                                                                     |

Lanes, Volumes, Timings  
3: Bristol Road (NYS Route 21) & Route 5 & 20

2021 Base - AM  
04/28/2021

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Act Effect Green (s)    | 13.0                                                                              | 13.0                                                                              |                                                                                   | 13.0                                                                              | 13.0                                                                              |                                                                                   |                                                                                    | 22.2                                                                                |                                                                                     |                                                                                     | 22.2                                                                                |                                                                                     |
| Actuated g/C Ratio      | 0.30                                                                              | 0.30                                                                              |                                                                                   | 0.30                                                                              | 0.30                                                                              |                                                                                   |                                                                                    | 0.51                                                                                |                                                                                     |                                                                                     | 0.51                                                                                |                                                                                     |
| v/c Ratio               | 0.22                                                                              | 0.61                                                                              |                                                                                   | 0.15                                                                              | 0.24                                                                              |                                                                                   |                                                                                    | 0.36                                                                                |                                                                                     |                                                                                     | 0.11                                                                                |                                                                                     |
| Control Delay           | 12.5                                                                              | 18.2                                                                              |                                                                                   | 12.0                                                                              | 11.1                                                                              |                                                                                   |                                                                                    | 6.9                                                                                 |                                                                                     |                                                                                     | 6.6                                                                                 |                                                                                     |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Total Delay             | 12.5                                                                              | 18.2                                                                              |                                                                                   | 12.0                                                                              | 11.1                                                                              |                                                                                   |                                                                                    | 6.9                                                                                 |                                                                                     |                                                                                     | 6.6                                                                                 |                                                                                     |
| LOS                     | B                                                                                 | B                                                                                 |                                                                                   | B                                                                                 | B                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   | 17.1                                                                              |                                                                                   |                                                                                   | 11.2                                                                              |                                                                                   |                                                                                    | 6.9                                                                                 |                                                                                     |                                                                                     | 6.6                                                                                 |                                                                                     |
| Approach LOS            |                                                                                   | B                                                                                 |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |
| Queue Length 50th (ft)  | 13                                                                                | 62                                                                                |                                                                                   | 6                                                                                 | 20                                                                                |                                                                                   |                                                                                    | 29                                                                                  |                                                                                     |                                                                                     | 7                                                                                   |                                                                                     |
| Queue Length 95th (ft)  | 35                                                                                | 116                                                                               |                                                                                   | 17                                                                                | 31                                                                                |                                                                                   |                                                                                    | 87                                                                                  |                                                                                     |                                                                                     | 23                                                                                  |                                                                                     |
| Internal Link Dist (ft) |                                                                                   | 1405                                                                              |                                                                                   |                                                                                   | 1540                                                                              |                                                                                   |                                                                                    | 625                                                                                 |                                                                                     |                                                                                     | 499                                                                                 |                                                                                     |
| Turn Bay Length (ft)    | 100                                                                               |                                                                                   |                                                                                   | 100                                                                               |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)     | 565                                                                               | 856                                                                               |                                                                                   | 386                                                                               | 1525                                                                              |                                                                                   |                                                                                    | 910                                                                                 |                                                                                     |                                                                                     | 744                                                                                 |                                                                                     |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Reduced v/c Ratio       | 0.13                                                                              | 0.36                                                                              |                                                                                   | 0.09                                                                              | 0.14                                                                              |                                                                                   |                                                                                    | 0.36                                                                                |                                                                                     |                                                                                     | 0.11                                                                                |                                                                                     |

Intersection Summary

Area Type: Other

Cycle Length: 52

Actuated Cycle Length: 43.2

Natural Cycle: 45

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.61

Intersection Signal Delay: 11.6

Intersection LOS: B

Intersection Capacity Utilization 46.5%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 3: Bristol Road (NYS Route 21) & Route 5 & 20

|                                                                                        |                                                                                        |
|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
|  Ø2 |  Ø4 |
| 26 s                                                                                   | 26 s                                                                                   |
|  Ø6 |  Ø8 |
| 26 s                                                                                   | 26 s                                                                                   |

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 5.5  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  | NEL  | NET  | NER  | SWL  | SWT  | SWR  |
| Lane Configurations      |      | ↕    |      |      | ↕    |      | ↗    | ↘    |      | ↗    | ↕    |      |
| Traffic Vol, veh/h       | 26   | 54   | 48   | 4    | 12   | 17   | 73   | 327  | 26   | 22   | 154  | 3    |
| Future Vol, veh/h        | 26   | 54   | 48   | 4    | 12   | 17   | 73   | 327  | 26   | 22   | 154  | 3    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | 125  | -    | -    | 125  | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 91   | 91   | 91   | 75   | 75   | 75   | 90   | 90   | 90   | 83   | 83   | 83   |
| Heavy Vehicles, %        | 88   | 6    | 5    | 0    | 0    | 7    | 2    | 6    | 80   | 5    | 11   | 33   |
| Mvmt Flow                | 29   | 59   | 53   | 5    | 16   | 23   | 81   | 363  | 29   | 27   | 186  | 4    |

| Major/Minor          | Minor1 |       | Minor2 |     | Major1 |       |      | Major2 |        |       |   |   |
|----------------------|--------|-------|--------|-----|--------|-------|------|--------|--------|-------|---|---|
| Conflicting Flow All | 695    | 784   | 378    | 838 | 796    | 95    | 190  | 0      | 0      | 392   | 0 | 0 |
| Stage 1              | 540    | 540   | -      | 242 | 242    | -     | -    | -      | -      | -     | - | - |
| Stage 2              | 155    | 244   | -      | 596 | 554    | -     | -    | -      | -      | -     | - | - |
| Critical Hdwy        | 8.62   | 6.59  | 6.275  | 7.3 | 6.5    | 7.005 | 4.13 | -      | -      | 4.175 | - | - |
| Critical Hdwy Stg 1  | 7.42   | 5.59  | -      | 6.5 | 5.5    | -     | -    | -      | -      | -     | - | - |
| Critical Hdwy Stg 2  | 7.82   | 5.59  | -      | 6.1 | 5.5    | -     | -    | -      | -      | -     | - | - |
| Follow-up Hdwy       | 4.336  | 4.057 | 3.3475 | 3.5 | 4.3665 | 2.219 | -    | -      | 2.2475 | -     | - | - |
| Pot Cap-1 Maneuver   | 232    | 318   | 660    | 275 | 322    | 929   | 1382 | -      | -      | 1146  | - | - |
| Stage 1              | 371    | 512   | -      | 746 | 709    | -     | -    | -      | -      | -     | - | - |
| Stage 2              | 650    | 695   | -      | 494 | 517    | -     | -    | -      | -      | -     | - | - |
| Platoon blocked, %   |        |       |        |     |        |       |      | -      | -      | -     | - | - |
| Mov Cap-1 Maneuver   | 204    | 292   | 660    | 201 | 296    | 929   | 1382 | -      | -      | 1146  | - | - |
| Mov Cap-2 Maneuver   | 204    | 292   | -      | 201 | 296    | -     | -    | -      | -      | -     | - | - |
| Stage 1              | 349    | 482   | -      | 702 | 692    | -     | -    | -      | -      | -     | - | - |
| Stage 2              | 605    | 678   | -      | 375 | 486    | -     | -    | -      | -      | -     | - | - |

| Approach             | NB   |  | SB   |  | NE  |  | SW |  |
|----------------------|------|--|------|--|-----|--|----|--|
| HCM Control Delay, s | 23.6 |  | 14.6 |  | 1.3 |  | 1  |  |
| HCM LOS              | C    |  | B    |  |     |  |    |  |

| Minor Lane/Major Mvmt | NEL   | NET | NER | NBLn1 | SBLn1 | SWL   | SWT | SWR |
|-----------------------|-------|-----|-----|-------|-------|-------|-----|-----|
| Capacity (veh/h)      | 1382  | -   | -   | 332   | 419   | 1146  | -   | -   |
| HCM Lane V/C Ratio    | 0.059 | -   | -   | 0.424 | 0.105 | 0.023 | -   | -   |
| HCM Control Delay (s) | 7.8   | -   | -   | 23.6  | 14.6  | 8.2   | -   | -   |
| HCM Lane LOS          | A     | -   | -   | C     | B     | A     | -   | -   |
| HCM 95th %tile Q(veh) | 0.2   | -   | -   | 2     | 0.3   | 0.1   | -   | -   |

Lanes, Volumes, Timings  
3: Bristol Road (NYS Route 21) & Route 5 & 20

2021 Base - PM

04/28/2021

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |                                                                                     |  |                                                                                     |                                                                                     |  |                                                                                     |
| Traffic Volume (vph)       | 48                                                                                | 332                                                                               | 8                                                                                 | 151                                                                               | 369                                                                               | 8                                                                                 | 14                                                                                  | 107                                                                                 | 90                                                                                  | 14                                                                                  | 140                                                                                 | 77                                                                                  |
| Future Volume (vph)        | 48                                                                                | 332                                                                               | 8                                                                                 | 151                                                                               | 369                                                                               | 8                                                                                 | 14                                                                                  | 107                                                                                 | 90                                                                                  | 14                                                                                  | 140                                                                                 | 77                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Storage Length (ft)        | 100                                                                               |                                                                                   | 0                                                                                 | 100                                                                               |                                                                                   | 0                                                                                 | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (ft)          | 75                                                                                |                                                                                   |                                                                                   | 75                                                                                |                                                                                   |                                                                                   | 25                                                                                  |                                                                                     |                                                                                     | 25                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   | 0.996                                                                             |                                                                                   |                                                                                   | 0.997                                                                             |                                                                                   |                                                                                     | 0.943                                                                               |                                                                                     |                                                                                     | 0.955                                                                               |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                     | 0.997                                                                               |                                                                                     |                                                                                     | 0.997                                                                               |                                                                                     |
| Satd. Flow (prot)          | 1719                                                                              | 1839                                                                              | 0                                                                                 | 1752                                                                              | 3497                                                                              | 0                                                                                 | 0                                                                                   | 1736                                                                                | 0                                                                                   | 0                                                                                   | 1798                                                                                | 0                                                                                   |
| Flt Permitted              | 0.515                                                                             |                                                                                   |                                                                                   | 0.384                                                                             |                                                                                   |                                                                                   |                                                                                     | 0.975                                                                               |                                                                                     |                                                                                     | 0.980                                                                               |                                                                                     |
| Satd. Flow (perm)          | 932                                                                               | 1839                                                                              | 0                                                                                 | 708                                                                               | 3497                                                                              | 0                                                                                 | 0                                                                                   | 1698                                                                                | 0                                                                                   | 0                                                                                   | 1767                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 3                                                                                 |                                                                                   |                                                                                   | 5                                                                                 |                                                                                   |                                                                                     | 89                                                                                  |                                                                                     |                                                                                     | 60                                                                                  |                                                                                     |
| Link Speed (mph)           |                                                                                   | 55                                                                                |                                                                                   |                                                                                   | 55                                                                                |                                                                                   |                                                                                     | 55                                                                                  |                                                                                     |                                                                                     | 40                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 1485                                                                              |                                                                                   |                                                                                   | 1620                                                                              |                                                                                   |                                                                                     | 705                                                                                 |                                                                                     |                                                                                     | 579                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 18.4                                                                              |                                                                                   |                                                                                   | 20.1                                                                              |                                                                                   |                                                                                     | 8.7                                                                                 |                                                                                     |                                                                                     | 9.9                                                                                 |                                                                                     |
| Peak Hour Factor           | 0.89                                                                              | 0.89                                                                              | 0.89                                                                              | 0.94                                                                              | 0.94                                                                              | 0.94                                                                              | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                | 0.81                                                                                | 0.81                                                                                | 0.81                                                                                |
| Heavy Vehicles (%)         | 5%                                                                                | 3%                                                                                | 0%                                                                                | 3%                                                                                | 3%                                                                                | 0%                                                                                | 0%                                                                                  | 4%                                                                                  | 2%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 54                                                                                | 373                                                                               | 9                                                                                 | 161                                                                               | 393                                                                               | 9                                                                                 | 16                                                                                  | 119                                                                                 | 100                                                                                 | 17                                                                                  | 173                                                                                 | 95                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 54                                                                                | 382                                                                               | 0                                                                                 | 161                                                                               | 402                                                                               | 0                                                                                 | 0                                                                                   | 235                                                                                 | 0                                                                                   | 0                                                                                   | 285                                                                                 | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                                | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                     | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 2                                                                                   | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 5.0                                                                                 |                                                                                     | 5.0                                                                                 | 5.0                                                                                 |                                                                                     |
| Minimum Split (s)          | 22.5                                                                              | 22.5                                                                              |                                                                                   | 22.5                                                                              | 22.5                                                                              |                                                                                   | 22.5                                                                                | 22.5                                                                                |                                                                                     | 22.5                                                                                | 22.5                                                                                |                                                                                     |
| Total Split (s)            | 26.0                                                                              | 26.0                                                                              |                                                                                   | 26.0                                                                              | 26.0                                                                              |                                                                                   | 26.0                                                                                | 26.0                                                                                |                                                                                     | 26.0                                                                                | 26.0                                                                                |                                                                                     |
| Total Split (%)            | 50.0%                                                                             | 50.0%                                                                             |                                                                                   | 50.0%                                                                             | 50.0%                                                                             |                                                                                   | 50.0%                                                                               | 50.0%                                                                               |                                                                                     | 50.0%                                                                               | 50.0%                                                                               |                                                                                     |
| Maximum Green (s)          | 22.0                                                                              | 22.0                                                                              |                                                                                   | 22.0                                                                              | 22.0                                                                              |                                                                                   | 22.0                                                                                | 22.0                                                                                |                                                                                     | 22.0                                                                                | 22.0                                                                                |                                                                                     |
| Yellow Time (s)            | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                 | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| All-Red Time (s)           | 1.0                                                                               | 1.0                                                                               |                                                                                   | 1.0                                                                               | 1.0                                                                               |                                                                                   | 1.0                                                                                 | 1.0                                                                                 |                                                                                     | 1.0                                                                                 | 1.0                                                                                 |                                                                                     |
| Lost Time Adjust (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)        | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               |                                                                                   |                                                                                     | 4.0                                                                                 |                                                                                     |                                                                                     | 4.0                                                                                 |                                                                                     |
| Lead/Lag                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)      | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                 | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode                | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | Max                                                                                 | Max                                                                                 |                                                                                     | Max                                                                                 | Max                                                                                 |                                                                                     |

Lanes, Volumes, Timings  
3: Bristol Road (NYS Route 21) & Route 5 & 20

2021 Base - PM  
04/28/2021

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Act Effect Green (s)    | 14.6                                                                              | 14.6                                                                              |                                                                                   | 14.6                                                                              | 14.6                                                                              |                                                                                   |                                                                                    | 22.2                                                                                |                                                                                     |                                                                                     | 22.2                                                                                |                                                                                     |
| Actuated g/C Ratio      | 0.33                                                                              | 0.33                                                                              |                                                                                   | 0.33                                                                              | 0.33                                                                              |                                                                                   |                                                                                    | 0.49                                                                                |                                                                                     |                                                                                     | 0.49                                                                                |                                                                                     |
| v/c Ratio               | 0.18                                                                              | 0.64                                                                              |                                                                                   | 0.70                                                                              | 0.35                                                                              |                                                                                   |                                                                                    | 0.27                                                                                |                                                                                     |                                                                                     | 0.32                                                                                |                                                                                     |
| Control Delay           | 11.6                                                                              | 17.7                                                                              |                                                                                   | 30.2                                                                              | 11.8                                                                              |                                                                                   |                                                                                    | 6.2                                                                                 |                                                                                     |                                                                                     | 7.7                                                                                 |                                                                                     |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Total Delay             | 11.6                                                                              | 17.7                                                                              |                                                                                   | 30.2                                                                              | 11.8                                                                              |                                                                                   |                                                                                    | 6.2                                                                                 |                                                                                     |                                                                                     | 7.7                                                                                 |                                                                                     |
| LOS                     | B                                                                                 | B                                                                                 |                                                                                   | C                                                                                 | B                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   | 16.9                                                                              |                                                                                   |                                                                                   | 17.1                                                                              |                                                                                   |                                                                                    | 6.2                                                                                 |                                                                                     |                                                                                     | 7.7                                                                                 |                                                                                     |
| Approach LOS            |                                                                                   | B                                                                                 |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |
| Queue Length 50th (ft)  | 10                                                                                | 80                                                                                |                                                                                   | 35                                                                                | 39                                                                                |                                                                                   |                                                                                    | 18                                                                                  |                                                                                     |                                                                                     | 29                                                                                  |                                                                                     |
| Queue Length 95th (ft)  | 27                                                                                | 140                                                                               |                                                                                   | #89                                                                               | 64                                                                                |                                                                                   |                                                                                    | 64                                                                                  |                                                                                     |                                                                                     | 75                                                                                  |                                                                                     |
| Internal Link Dist (ft) |                                                                                   | 1405                                                                              |                                                                                   |                                                                                   | 1540                                                                              |                                                                                   |                                                                                    | 625                                                                                 |                                                                                     |                                                                                     | 499                                                                                 |                                                                                     |
| Turn Bay Length (ft)    | 100                                                                               |                                                                                   |                                                                                   | 100                                                                               |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)     | 461                                                                               | 911                                                                               |                                                                                   | 350                                                                               | 1733                                                                              |                                                                                   |                                                                                    | 885                                                                                 |                                                                                     |                                                                                     | 904                                                                                 |                                                                                     |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Reduced v/c Ratio       | 0.12                                                                              | 0.42                                                                              |                                                                                   | 0.46                                                                              | 0.23                                                                              |                                                                                   |                                                                                    | 0.27                                                                                |                                                                                     |                                                                                     | 0.32                                                                                |                                                                                     |

Intersection Summary

Area Type: Other

Cycle Length: 52

Actuated Cycle Length: 44.9

Natural Cycle: 45

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.70

Intersection Signal Delay: 13.6

Intersection LOS: B

Intersection Capacity Utilization 52.6%

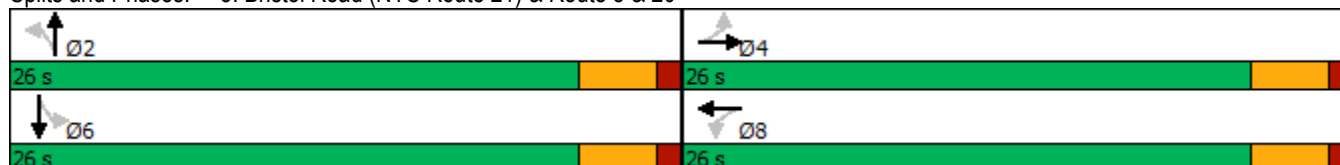
ICU Level of Service A

Analysis Period (min) 15

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

Queue shown is maximum after two cycles.

Splits and Phases: 3: Bristol Road (NYS Route 21) & Route 5 & 20



| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 5.2  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  | NEL  | NET  | NER  | SWL  | SWT  | SWR  |
| Lane Configurations      |      | ↕    |      |      | ↕    |      | ↗    | ↖    |      | ↗    | ↕    |      |
| Traffic Vol, veh/h       | 2    | 30   | 49   | 5    | 35   | 82   | 32   | 398  | 6    | 77   | 444  | 4    |
| Future Vol, veh/h        | 2    | 30   | 49   | 5    | 35   | 82   | 32   | 398  | 6    | 77   | 444  | 4    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | 125  | -    | -    | 125  | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 80   | 80   | 80   | 80   | 80   | 80   | 88   | 88   | 88   | 96   | 96   | 96   |
| Heavy Vehicles, %        | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 2    | 0    | 0    | 3    | 0    |
| Mvmt Flow                | 3    | 38   | 61   | 6    | 44   | 103  | 36   | 452  | 7    | 80   | 463  | 4    |

| Major/Minor          | Minor1 |      | Minor2 |      | Major1 |     | Major2 |   |   |      |   |   |
|----------------------|--------|------|--------|------|--------|-----|--------|---|---|------|---|---|
| Conflicting Flow All | 942    | 1155 | 456    | 1202 | 1156   | 234 | 467    | 0 | 0 | 459  | 0 | 0 |
| Stage 1              | 528    | 528  | -      | 625  | 625    | -   | -      | - | - | -    | - | - |
| Stage 2              | 414    | 627  | -      | 577  | 531    | -   | -      | - | - | -    | - | - |
| Critical Hdwy        | 7.3    | 6.5  | 6.2    | 7.3  | 6.5    | 6.9 | 4.1    | - | - | 4.1  | - | - |
| Critical Hdwy Stg 1  | 6.1    | 5.5  | -      | 6.5  | 5.5    | -   | -      | - | - | -    | - | - |
| Critical Hdwy Stg 2  | 6.5    | 5.5  | -      | 6.1  | 5.5    | -   | -      | - | - | -    | - | - |
| Follow-up Hdwy       | 3.5    | 4    | 3.3    | 3.5  | 4      | 3.3 | 2.2    | - | - | 2.2  | - | - |
| Pot Cap-1 Maneuver   | 233    | 199  | 609    | 152  | 198    | 774 | 1105   | - | - | 1113 | - | - |
| Stage 1              | 538    | 531  | -      | 444  | 480    | -   | -      | - | - | -    | - | - |
| Stage 2              | 592    | 479  | -      | 506  | 529    | -   | -      | - | - | -    | - | - |
| Platoon blocked, %   |        |      |        |      |        |     |        | - | - | -    | - | - |
| Mov Cap-1 Maneuver   | 151    | 179  | 609    | 106  | 178    | 774 | 1105   | - | - | 1113 | - | - |
| Mov Cap-2 Maneuver   | 151    | 179  | -      | 106  | 178    | -   | -      | - | - | -    | - | - |
| Stage 1              | 520    | 513  | -      | 429  | 445    | -   | -      | - | - | -    | - | - |
| Stage 2              | 430    | 445  | -      | 408  | 512    | -   | -      | - | - | -    | - | - |

| Approach             | NB   |  | SB   |  | NE  |  | SW  |  |
|----------------------|------|--|------|--|-----|--|-----|--|
| HCM Control Delay, s | 22.1 |  | 23.1 |  | 0.6 |  | 1.2 |  |
| HCM LOS              | C    |  | C    |  |     |  |     |  |

| Minor Lane/Major Mvmt | NEL   | NET | NER | NBLn1 | SBLn1 | SWL   | SWT | SWR |
|-----------------------|-------|-----|-----|-------|-------|-------|-----|-----|
| Capacity (veh/h)      | 1105  | -   | -   | 310   | 349   | 1113  | -   | -   |
| HCM Lane V/C Ratio    | 0.033 | -   | -   | 0.327 | 0.437 | 0.072 | -   | -   |
| HCM Control Delay (s) | 8.4   | -   | -   | 22.1  | 23.1  | 8.5   | -   | -   |
| HCM Lane LOS          | A     | -   | -   | C     | C     | A     | -   | -   |
| HCM 95th %tile Q(veh) | 0.1   | -   | -   | 1.4   | 2.1   | 0.2   | -   | -   |

Lanes, Volumes, Timings  
3: Bristol Road (NYS Route 21) & Route 5 & 20

2028 No Build - AM

04/28/2021

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |                                                                                     |  |                                                                                     |                                                                                     |  |  |
| Traffic Volume (vph)       | 77                                                                                | 313                                                                               | 4                                                                                 | 28                                                                                | 175                                                                               | 8                                                                                 | 12                                                                                  | 166                                                                                 | 129                                                                                 | 14                                                                                  | 39                                                                                  | 9                                                                                   |
| Future Volume (vph)        | 77                                                                                | 313                                                                               | 4                                                                                 | 28                                                                                | 175                                                                               | 8                                                                                 | 12                                                                                  | 166                                                                                 | 129                                                                                 | 14                                                                                  | 39                                                                                  | 9                                                                                   |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Storage Length (ft)        | 100                                                                               |                                                                                   | 0                                                                                 | 100                                                                               |                                                                                   | 0                                                                                 | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (ft)          | 75                                                                                |                                                                                   |                                                                                   | 75                                                                                |                                                                                   |                                                                                   | 25                                                                                  |                                                                                     |                                                                                     | 25                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   | 0.998                                                                             |                                                                                   |                                                                                   | 0.994                                                                             |                                                                                   |                                                                                     | 0.943                                                                               |                                                                                     |                                                                                     | 0.981                                                                               |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                     | 0.998                                                                               |                                                                                     |                                                                                     | 0.989                                                                               |                                                                                     |
| Satd. Flow (prot)          | 1703                                                                              | 1666                                                                              | 0                                                                                 | 1492                                                                              | 2963                                                                              | 0                                                                                 | 0                                                                                   | 1702                                                                                | 0                                                                                   | 0                                                                                   | 1549                                                                                | 0                                                                                   |
| Flt Permitted              | 0.606                                                                             |                                                                                   |                                                                                   | 0.452                                                                             |                                                                                   |                                                                                   |                                                                                     | 0.992                                                                               |                                                                                     |                                                                                     | 0.914                                                                               |                                                                                     |
| Satd. Flow (perm)          | 1086                                                                              | 1666                                                                              | 0                                                                                 | 710                                                                               | 2963                                                                              | 0                                                                                 | 0                                                                                   | 1691                                                                                | 0                                                                                   | 0                                                                                   | 1432                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 1                                                                                 |                                                                                   |                                                                                   | 10                                                                                |                                                                                   |                                                                                     | 87                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Speed (mph)           |                                                                                   | 55                                                                                |                                                                                   |                                                                                   | 55                                                                                |                                                                                   |                                                                                     | 55                                                                                  |                                                                                     |                                                                                     | 40                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 1485                                                                              |                                                                                   |                                                                                   | 1620                                                                              |                                                                                   |                                                                                     | 705                                                                                 |                                                                                     |                                                                                     | 579                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 18.4                                                                              |                                                                                   |                                                                                   | 20.1                                                                              |                                                                                   |                                                                                     | 8.7                                                                                 |                                                                                     |                                                                                     | 9.9                                                                                 |                                                                                     |
| Peak Hour Factor           | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 0.78                                                                              | 0.78                                                                              | 0.78                                                                              | 0.87                                                                                | 0.87                                                                                | 0.87                                                                                | 0.74                                                                                | 0.74                                                                                | 0.74                                                                                |
| Heavy Vehicles (%)         | 6%                                                                                | 14%                                                                               | 1%                                                                                | 21%                                                                               | 22%                                                                               | 1%                                                                                | 10%                                                                                 | 4%                                                                                  | 6%                                                                                  | 17%                                                                                 | 24%                                                                                 | 0%                                                                                  |
| Adj. Flow (vph)            | 79                                                                                | 323                                                                               | 4                                                                                 | 36                                                                                | 224                                                                               | 10                                                                                | 14                                                                                  | 191                                                                                 | 148                                                                                 | 19                                                                                  | 53                                                                                  | 12                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 79                                                                                | 327                                                                               | 0                                                                                 | 36                                                                                | 234                                                                               | 0                                                                                 | 0                                                                                   | 353                                                                                 | 0                                                                                   | 0                                                                                   | 84                                                                                  | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                                | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                     | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 2                                                                                   | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 5.0                                                                                 |                                                                                     | 5.0                                                                                 | 5.0                                                                                 |                                                                                     |
| Minimum Split (s)          | 22.5                                                                              | 22.5                                                                              |                                                                                   | 22.5                                                                              | 22.5                                                                              |                                                                                   | 22.5                                                                                | 22.5                                                                                |                                                                                     | 22.5                                                                                | 22.5                                                                                |                                                                                     |
| Total Split (s)            | 26.0                                                                              | 26.0                                                                              |                                                                                   | 26.0                                                                              | 26.0                                                                              |                                                                                   | 26.0                                                                                | 26.0                                                                                |                                                                                     | 26.0                                                                                | 26.0                                                                                |                                                                                     |
| Total Split (%)            | 50.0%                                                                             | 50.0%                                                                             |                                                                                   | 50.0%                                                                             | 50.0%                                                                             |                                                                                   | 50.0%                                                                               | 50.0%                                                                               |                                                                                     | 50.0%                                                                               | 50.0%                                                                               |                                                                                     |
| Maximum Green (s)          | 22.0                                                                              | 22.0                                                                              |                                                                                   | 22.0                                                                              | 22.0                                                                              |                                                                                   | 22.0                                                                                | 22.0                                                                                |                                                                                     | 22.0                                                                                | 22.0                                                                                |                                                                                     |
| Yellow Time (s)            | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                 | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| All-Red Time (s)           | 1.0                                                                               | 1.0                                                                               |                                                                                   | 1.0                                                                               | 1.0                                                                               |                                                                                   | 1.0                                                                                 | 1.0                                                                                 |                                                                                     | 1.0                                                                                 | 1.0                                                                                 |                                                                                     |
| Lost Time Adjust (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)        | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               |                                                                                   |                                                                                     | 4.0                                                                                 |                                                                                     |                                                                                     | 4.0                                                                                 |                                                                                     |
| Lead/Lag                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)      | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                 | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode                | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | Max                                                                                 | Max                                                                                 |                                                                                     | Max                                                                                 | Max                                                                                 |                                                                                     |

Lanes, Volumes, Timings  
3: Bristol Road (NYS Route 21) & Route 5 & 20

2028 No Build - AM

04/28/2021

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Act Effect Green (s)    | 13.7                                                                              | 13.7                                                                              |                                                                                   | 13.7                                                                              | 13.7                                                                              |                                                                                   |                                                                                    | 22.2                                                                                |                                                                                     |                                                                                     | 22.2                                                                                |                                                                                     |
| Actuated g/C Ratio      | 0.31                                                                              | 0.31                                                                              |                                                                                   | 0.31                                                                              | 0.31                                                                              |                                                                                   |                                                                                    | 0.50                                                                                |                                                                                     |                                                                                     | 0.50                                                                                |                                                                                     |
| v/c Ratio               | 0.23                                                                              | 0.63                                                                              |                                                                                   | 0.16                                                                              | 0.25                                                                              |                                                                                   |                                                                                    | 0.39                                                                                |                                                                                     |                                                                                     | 0.12                                                                                |                                                                                     |
| Control Delay           | 12.5                                                                              | 18.5                                                                              |                                                                                   | 12.1                                                                              | 11.0                                                                              |                                                                                   |                                                                                    | 7.6                                                                                 |                                                                                     |                                                                                     | 7.0                                                                                 |                                                                                     |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Total Delay             | 12.5                                                                              | 18.5                                                                              |                                                                                   | 12.1                                                                              | 11.0                                                                              |                                                                                   |                                                                                    | 7.6                                                                                 |                                                                                     |                                                                                     | 7.0                                                                                 |                                                                                     |
| LOS                     | B                                                                                 | B                                                                                 |                                                                                   | B                                                                                 | B                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   | 17.3                                                                              |                                                                                   |                                                                                   | 11.1                                                                              |                                                                                   |                                                                                    | 7.6                                                                                 |                                                                                     |                                                                                     | 7.0                                                                                 |                                                                                     |
| Approach LOS            |                                                                                   | B                                                                                 |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |
| Queue Length 50th (ft)  | 14                                                                                | 68                                                                                |                                                                                   | 6                                                                                 | 21                                                                                |                                                                                   |                                                                                    | 34                                                                                  |                                                                                     |                                                                                     | 8                                                                                   |                                                                                     |
| Queue Length 95th (ft)  | 36                                                                                | 125                                                                               |                                                                                   | 18                                                                                | 33                                                                                |                                                                                   |                                                                                    | 100                                                                                 |                                                                                     |                                                                                     | 26                                                                                  |                                                                                     |
| Internal Link Dist (ft) |                                                                                   | 1405                                                                              |                                                                                   |                                                                                   | 1540                                                                              |                                                                                   |                                                                                    | 625                                                                                 |                                                                                     |                                                                                     | 499                                                                                 |                                                                                     |
| Turn Bay Length (ft)    | 100                                                                               |                                                                                   |                                                                                   | 100                                                                               |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)     | 548                                                                               | 842                                                                               |                                                                                   | 358                                                                               | 1501                                                                              |                                                                                   |                                                                                    | 897                                                                                 |                                                                                     |                                                                                     | 729                                                                                 |                                                                                     |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Reduced v/c Ratio       | 0.14                                                                              | 0.39                                                                              |                                                                                   | 0.10                                                                              | 0.16                                                                              |                                                                                   |                                                                                    | 0.39                                                                                |                                                                                     |                                                                                     | 0.12                                                                                |                                                                                     |

Intersection Summary

Area Type: Other

Cycle Length: 52

Actuated Cycle Length: 44

Natural Cycle: 45

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.63

Intersection Signal Delay: 12.0

Intersection LOS: B

Intersection Capacity Utilization 48.9%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 3: Bristol Road (NYS Route 21) & Route 5 & 20

|                                                                                        |                                                                                        |
|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
|  Ø2 |  Ø4 |
| 26 s                                                                                   | 26 s                                                                                   |
|  Ø6 |  Ø8 |
| 26 s                                                                                   | 26 s                                                                                   |

| Intersection             |        |       |        |       |        |       |      |        |        |       |      |      |
|--------------------------|--------|-------|--------|-------|--------|-------|------|--------|--------|-------|------|------|
| Int Delay, s/veh         | 6.3    |       |        |       |        |       |      |        |        |       |      |      |
| Movement                 | NBL    | NBT   | NBR    | SBL   | SBT    | SBR   | NEL  | NET    | NER    | SWL   | SWT  | SWR  |
| Lane Configurations      |        | ↕     |        |       | ↕      |       | ↗    | ↘      |        | ↗     | ↕    |      |
| Traffic Vol, veh/h       | 28     | 58    | 52     | 5     | 13     | 18    | 78   | 350    | 28     | 24    | 165  | 4    |
| Future Vol, veh/h        | 28     | 58    | 52     | 5     | 13     | 18    | 78   | 350    | 28     | 24    | 165  | 4    |
| Conflicting Peds, #/hr   | 0      | 0     | 0      | 0     | 0      | 0     | 0    | 0      | 0      | 0     | 0    | 0    |
| Sign Control             | Stop   | Stop  | Stop   | Stop  | Stop   | Stop  | Free | Free   | Free   | Free  | Free | Free |
| RT Channelized           | -      | -     | None   | -     | -      | None  | -    | -      | None   | -     | -    | None |
| Storage Length           | -      | -     | -      | -     | -      | -     | 125  | -      | -      | 125   | -    | -    |
| Veh in Median Storage, # | -      | 0     | -      | -     | 0      | -     | -    | 0      | -      | -     | 0    | -    |
| Grade, %                 | -      | 0     | -      | -     | 0      | -     | -    | 0      | -      | -     | 0    | -    |
| Peak Hour Factor         | 91     | 91    | 91     | 75    | 75     | 75    | 90   | 90     | 90     | 83    | 83   | 83   |
| Heavy Vehicles, %        | 88     | 6     | 5      | 0     | 0      | 7     | 2    | 6      | 80     | 5     | 11   | 33   |
| Mvmt Flow                | 31     | 64    | 57     | 7     | 17     | 24    | 87   | 389    | 31     | 29    | 199  | 5    |
| Major/Minor              | Minor1 |       | Minor2 |       | Major1 |       |      | Major2 |        |       |      |      |
| Conflicting Flow All     | 745    | 841   | 405    | 899   | 854    | 102   | 204  | 0      | 0      | 420   | 0    | 0    |
| Stage 1                  | 579    | 579   | -      | 260   | 260    | -     | -    | -      | -      | -     | -    | -    |
| Stage 2                  | 166    | 262   | -      | 639   | 594    | -     | -    | -      | -      | -     | -    | -    |
| Critical Hdwy            | 8.62   | 6.59  | 6.275  | 7.3   | 6.5    | 7.005 | 4.13 | -      | -      | 4.175 | -    | -    |
| Critical Hdwy Stg 1      | 7.42   | 5.59  | -      | 6.5   | 5.5    | -     | -    | -      | -      | -     | -    | -    |
| Critical Hdwy Stg 2      | 7.82   | 5.59  | -      | 6.1   | 5.5    | -     | -    | -      | -      | -     | -    | -    |
| Follow-up Hdwy           | 4.336  | 4.057 | 3.3475 | 3.5   | 4.3665 | 2.219 | -    | -      | 2.2475 | -     | -    | -    |
| Pot Cap-1 Maneuver       | 211    | 295   | 637    | 249   | 298    | 919   | 1366 | -      | -      | 1119  | -    | -    |
| Stage 1                  | 350    | 492   | -      | 728   | 697    | -     | -    | -      | -      | -     | -    | -    |
| Stage 2                  | 639    | 682   | -      | 468   | 496    | -     | -    | -      | -      | -     | -    | -    |
| Platoon blocked, %       |        |       |        |       |        |       |      | -      | -      | -     | -    | -    |
| Mov Cap-1 Maneuver       | 183    | 269   | 637    | 173   | 272    | 919   | 1366 | -      | -      | 1119  | -    | -    |
| Mov Cap-2 Maneuver       | 183    | 269   | -      | 173   | 272    | -     | -    | -      | -      | -     | -    | -    |
| Stage 1                  | 328    | 461   | -      | 681   | 679    | -     | -    | -      | -      | -     | -    | -    |
| Stage 2                  | 591    | 664   | -      | 344   | 464    | -     | -    | -      | -      | -     | -    | -    |
| Approach                 | NB     |       | SB     |       | NE     |       |      | SW     |        |       |      |      |
| HCM Control Delay, s     | 27.8   |       | 16     |       | 1.3    |       |      | 1      |        |       |      |      |
| HCM LOS                  | D      |       | C      |       |        |       |      |        |        |       |      |      |
| Minor Lane/Major Mvmt    | NEL    | NET   | NER    | NBLn1 | SBLn1  | SWL   | SWT  | SWR    |        |       |      |      |
| Capacity (veh/h)         | 1366   | -     | -      | 306   | 374    | 1119  | -    | -      |        |       |      |      |
| HCM Lane V/C Ratio       | 0.063  | -     | -      | 0.496 | 0.128  | 0.026 | -    | -      |        |       |      |      |
| HCM Control Delay (s)    | 7.8    | -     | -      | 27.8  | 16     | 8.3   | -    | -      |        |       |      |      |
| HCM Lane LOS             | A      | -     | -      | D     | C      | A     | -    | -      |        |       |      |      |
| HCM 95th %tile Q(veh)    | 0.2    | -     | -      | 2.6   | 0.4    | 0.1   | -    | -      |        |       |      |      |

Lanes, Volumes, Timings  
3: Bristol Road (NYS Route 21) & Route 5 & 20

2028 No Build - PM

04/28/2021

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |                                                                                     |  |                                                                                     |                                                                                     |  |  |
| Traffic Volume (vph)       | 51                                                                                | 355                                                                               | 9                                                                                 | 162                                                                               | 395                                                                               | 9                                                                                 | 15                                                                                  | 115                                                                                 | 97                                                                                  | 15                                                                                  | 150                                                                                 | 83                                                                                  |
| Future Volume (vph)        | 51                                                                                | 355                                                                               | 9                                                                                 | 162                                                                               | 395                                                                               | 9                                                                                 | 15                                                                                  | 115                                                                                 | 97                                                                                  | 15                                                                                  | 150                                                                                 | 83                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Storage Length (ft)        | 100                                                                               |                                                                                   | 0                                                                                 | 100                                                                               |                                                                                   | 0                                                                                 | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (ft)          | 75                                                                                |                                                                                   |                                                                                   | 75                                                                                |                                                                                   |                                                                                   | 25                                                                                  |                                                                                     |                                                                                     | 25                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   | 0.996                                                                             |                                                                                   |                                                                                   | 0.997                                                                             |                                                                                   |                                                                                     | 0.942                                                                               |                                                                                     |                                                                                     | 0.955                                                                               |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                     | 0.997                                                                               |                                                                                     |                                                                                     | 0.997                                                                               |                                                                                     |
| Satd. Flow (prot)          | 1719                                                                              | 1839                                                                              | 0                                                                                 | 1752                                                                              | 3497                                                                              | 0                                                                                 | 0                                                                                   | 1735                                                                                | 0                                                                                   | 0                                                                                   | 1798                                                                                | 0                                                                                   |
| Flt Permitted              | 0.490                                                                             |                                                                                   |                                                                                   | 0.359                                                                             |                                                                                   |                                                                                   |                                                                                     | 0.974                                                                               |                                                                                     |                                                                                     | 0.978                                                                               |                                                                                     |
| Satd. Flow (perm)          | 887                                                                               | 1839                                                                              | 0                                                                                 | 662                                                                               | 3497                                                                              | 0                                                                                 | 0                                                                                   | 1695                                                                                | 0                                                                                   | 0                                                                                   | 1764                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 3                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                     | 89                                                                                  |                                                                                     |                                                                                     | 60                                                                                  |                                                                                     |
| Link Speed (mph)           |                                                                                   | 55                                                                                |                                                                                   |                                                                                   | 55                                                                                |                                                                                   |                                                                                     | 55                                                                                  |                                                                                     |                                                                                     | 40                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 1485                                                                              |                                                                                   |                                                                                   | 1620                                                                              |                                                                                   |                                                                                     | 705                                                                                 |                                                                                     |                                                                                     | 579                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 18.4                                                                              |                                                                                   |                                                                                   | 20.1                                                                              |                                                                                   |                                                                                     | 8.7                                                                                 |                                                                                     |                                                                                     | 9.9                                                                                 |                                                                                     |
| Peak Hour Factor           | 0.89                                                                              | 0.89                                                                              | 0.89                                                                              | 0.94                                                                              | 0.94                                                                              | 0.94                                                                              | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                | 0.81                                                                                | 0.81                                                                                | 0.81                                                                                |
| Heavy Vehicles (%)         | 5%                                                                                | 3%                                                                                | 0%                                                                                | 3%                                                                                | 3%                                                                                | 0%                                                                                | 0%                                                                                  | 4%                                                                                  | 2%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 57                                                                                | 399                                                                               | 10                                                                                | 172                                                                               | 420                                                                               | 10                                                                                | 17                                                                                  | 128                                                                                 | 108                                                                                 | 19                                                                                  | 185                                                                                 | 102                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 57                                                                                | 409                                                                               | 0                                                                                 | 172                                                                               | 430                                                                               | 0                                                                                 | 0                                                                                   | 253                                                                                 | 0                                                                                   | 0                                                                                   | 306                                                                                 | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                                | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                     | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 2                                                                                   | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 5.0                                                                                 |                                                                                     | 5.0                                                                                 | 5.0                                                                                 |                                                                                     |
| Minimum Split (s)          | 22.5                                                                              | 22.5                                                                              |                                                                                   | 22.5                                                                              | 22.5                                                                              |                                                                                   | 22.5                                                                                | 22.5                                                                                |                                                                                     | 22.5                                                                                | 22.5                                                                                |                                                                                     |
| Total Split (s)            | 26.0                                                                              | 26.0                                                                              |                                                                                   | 26.0                                                                              | 26.0                                                                              |                                                                                   | 26.0                                                                                | 26.0                                                                                |                                                                                     | 26.0                                                                                | 26.0                                                                                |                                                                                     |
| Total Split (%)            | 50.0%                                                                             | 50.0%                                                                             |                                                                                   | 50.0%                                                                             | 50.0%                                                                             |                                                                                   | 50.0%                                                                               | 50.0%                                                                               |                                                                                     | 50.0%                                                                               | 50.0%                                                                               |                                                                                     |
| Maximum Green (s)          | 22.0                                                                              | 22.0                                                                              |                                                                                   | 22.0                                                                              | 22.0                                                                              |                                                                                   | 22.0                                                                                | 22.0                                                                                |                                                                                     | 22.0                                                                                | 22.0                                                                                |                                                                                     |
| Yellow Time (s)            | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                 | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| All-Red Time (s)           | 1.0                                                                               | 1.0                                                                               |                                                                                   | 1.0                                                                               | 1.0                                                                               |                                                                                   | 1.0                                                                                 | 1.0                                                                                 |                                                                                     | 1.0                                                                                 | 1.0                                                                                 |                                                                                     |
| Lost Time Adjust (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)        | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               |                                                                                   |                                                                                     | 4.0                                                                                 |                                                                                     |                                                                                     | 4.0                                                                                 |                                                                                     |
| Lead/Lag                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)      | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                 | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode                | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | Max                                                                                 | Max                                                                                 |                                                                                     | Max                                                                                 | Max                                                                                 |                                                                                     |

Lanes, Volumes, Timings  
3: Bristol Road (NYS Route 21) & Route 5 & 20

2028 No Build - PM

04/28/2021

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Act Effect Green (s)    | 15.7                                                                              | 15.7                                                                              |                                                                                   | 15.7                                                                              | 15.7                                                                              |                                                                                   |                                                                                    | 22.3                                                                                |                                                                                     |                                                                                     | 22.3                                                                                |                                                                                     |
| Actuated g/C Ratio      | 0.34                                                                              | 0.34                                                                              |                                                                                   | 0.34                                                                              | 0.34                                                                              |                                                                                   |                                                                                    | 0.48                                                                                |                                                                                     |                                                                                     | 0.48                                                                                |                                                                                     |
| v/c Ratio               | 0.19                                                                              | 0.65                                                                              |                                                                                   | 0.76                                                                              | 0.36                                                                              |                                                                                   |                                                                                    | 0.29                                                                                |                                                                                     |                                                                                     | 0.35                                                                                |                                                                                     |
| Control Delay           | 11.6                                                                              | 17.7                                                                              |                                                                                   | 36.9                                                                              | 11.6                                                                              |                                                                                   |                                                                                    | 6.9                                                                                 |                                                                                     |                                                                                     | 8.5                                                                                 |                                                                                     |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Total Delay             | 11.6                                                                              | 17.7                                                                              |                                                                                   | 36.9                                                                              | 11.6                                                                              |                                                                                   |                                                                                    | 6.9                                                                                 |                                                                                     |                                                                                     | 8.5                                                                                 |                                                                                     |
| LOS                     | B                                                                                 | B                                                                                 |                                                                                   | D                                                                                 | B                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   | 16.9                                                                              |                                                                                   |                                                                                   | 18.9                                                                              |                                                                                   |                                                                                    | 6.9                                                                                 |                                                                                     |                                                                                     | 8.5                                                                                 |                                                                                     |
| Approach LOS            |                                                                                   | B                                                                                 |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |
| Queue Length 50th (ft)  | 10                                                                                | 87                                                                                |                                                                                   | 39                                                                                | 42                                                                                |                                                                                   |                                                                                    | 23                                                                                  |                                                                                     |                                                                                     | 36                                                                                  |                                                                                     |
| Queue Length 95th (ft)  | 28                                                                                | 152                                                                               |                                                                                   | #118                                                                              | 68                                                                                |                                                                                   |                                                                                    | 70                                                                                  |                                                                                     |                                                                                     | 81                                                                                  |                                                                                     |
| Internal Link Dist (ft) |                                                                                   | 1405                                                                              |                                                                                   |                                                                                   | 1540                                                                              |                                                                                   |                                                                                    | 625                                                                                 |                                                                                     |                                                                                     | 499                                                                                 |                                                                                     |
| Turn Bay Length (ft)    | 100                                                                               |                                                                                   |                                                                                   | 100                                                                               |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)     | 428                                                                               | 889                                                                               |                                                                                   | 319                                                                               | 1692                                                                              |                                                                                   |                                                                                    | 864                                                                                 |                                                                                     |                                                                                     | 883                                                                                 |                                                                                     |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Reduced v/c Ratio       | 0.13                                                                              | 0.46                                                                              |                                                                                   | 0.54                                                                              | 0.25                                                                              |                                                                                   |                                                                                    | 0.29                                                                                |                                                                                     |                                                                                     | 0.35                                                                                |                                                                                     |

Intersection Summary

Area Type: Other

Cycle Length: 52

Actuated Cycle Length: 46.1

Natural Cycle: 45

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.76

Intersection Signal Delay: 14.5

Intersection LOS: B

Intersection Capacity Utilization 55.7%

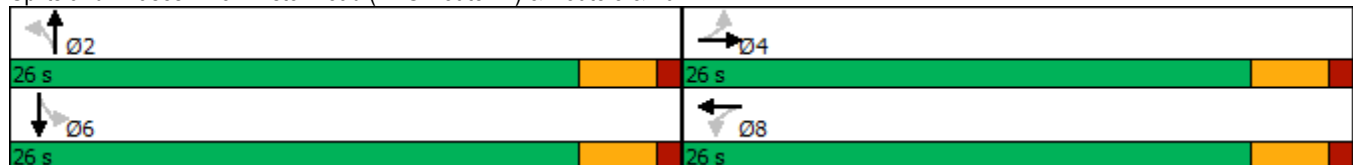
ICU Level of Service B

Analysis Period (min) 15

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

Queue shown is maximum after two cycles.

Splits and Phases: 3: Bristol Road (NYS Route 21) & Route 5 & 20





Lanes, Volumes, Timings  
3: Bristol Road (NYS Route 21) & Route 5 & 20

2028 Build - AM

04/28/2021

|                            |  |                                                                                   |       |                                                                                   |                                                                                   |       |       |                                                                                     |       |       |                                                                                     |       |
|----------------------------|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------|-------|-------------------------------------------------------------------------------------|-------|-------|-------------------------------------------------------------------------------------|-------|
| Lane Group                 | EBL                                                                                | EBT                                                                               | EBR   | WBL                                                                               | WBT                                                                               | WBR   | NBL   | NBT                                                                                 | NBR   | SBL   | SBT                                                                                 | SBR   |
| Lane Configurations        |   |  |       |  |  |       |       |  |       |       |  |       |
| Traffic Volume (vph)       | 77                                                                                 | 313                                                                               | 5     | 28                                                                                | 175                                                                               | 8     | 17    | 176                                                                                 | 129   | 14    | 41                                                                                  | 9     |
| Future Volume (vph)        | 77                                                                                 | 313                                                                               | 5     | 28                                                                                | 175                                                                               | 8     | 17    | 176                                                                                 | 129   | 14    | 41                                                                                  | 9     |
| Ideal Flow (vphpl)         | 1900                                                                               | 1900                                                                              | 1900  | 1900                                                                              | 1900                                                                              | 1900  | 1900  | 1900                                                                                | 1900  | 1900  | 1900                                                                                | 1900  |
| Storage Length (ft)        | 100                                                                                |                                                                                   | 0     | 100                                                                               |                                                                                   | 0     | 0     |                                                                                     | 0     | 0     |                                                                                     | 0     |
| Storage Lanes              | 1                                                                                  |                                                                                   | 0     | 1                                                                                 |                                                                                   | 0     | 0     |                                                                                     | 0     | 0     |                                                                                     | 0     |
| Taper Length (ft)          | 75                                                                                 |                                                                                   |       | 75                                                                                |                                                                                   |       | 25    |                                                                                     |       | 25    |                                                                                     |       |
| Lane Util. Factor          | 1.00                                                                               | 1.00                                                                              | 1.00  | 1.00                                                                              | 0.95                                                                              | 0.95  | 1.00  | 1.00                                                                                | 1.00  | 1.00  | 1.00                                                                                | 1.00  |
| Frt                        |                                                                                    | 0.998                                                                             |       |                                                                                   | 0.994                                                                             |       |       | 0.946                                                                               |       |       | 0.981                                                                               |       |
| Flt Protected              | 0.950                                                                              |                                                                                   |       | 0.950                                                                             |                                                                                   |       |       | 0.997                                                                               |       |       | 0.989                                                                               |       |
| Satd. Flow (prot)          | 1703                                                                               | 1666                                                                              | 0     | 1492                                                                              | 2963                                                                              | 0     | 0     | 1705                                                                                | 0     | 0     | 1548                                                                                | 0     |
| Flt Permitted              | 0.606                                                                              |                                                                                   |       | 0.450                                                                             |                                                                                   |       |       | 0.987                                                                               |       |       | 0.914                                                                               |       |
| Satd. Flow (perm)          | 1086                                                                               | 1666                                                                              | 0     | 707                                                                               | 2963                                                                              | 0     | 0     | 1688                                                                                | 0     | 0     | 1430                                                                                | 0     |
| Right Turn on Red          |                                                                                    |                                                                                   | Yes   |                                                                                   |                                                                                   | Yes   |       |                                                                                     | Yes   |       |                                                                                     | Yes   |
| Satd. Flow (RTOR)          |                                                                                    | 2                                                                                 |       |                                                                                   | 10                                                                                |       |       | 80                                                                                  |       |       | 12                                                                                  |       |
| Link Speed (mph)           |                                                                                    | 55                                                                                |       |                                                                                   | 55                                                                                |       |       | 55                                                                                  |       |       | 40                                                                                  |       |
| Link Distance (ft)         |                                                                                    | 1485                                                                              |       |                                                                                   | 1620                                                                              |       |       | 638                                                                                 |       |       | 579                                                                                 |       |
| Travel Time (s)            |                                                                                    | 18.4                                                                              |       |                                                                                   | 20.1                                                                              |       |       | 7.9                                                                                 |       |       | 9.9                                                                                 |       |
| Peak Hour Factor           | 0.97                                                                               | 0.97                                                                              | 0.97  | 0.78                                                                              | 0.78                                                                              | 0.78  | 0.87  | 0.87                                                                                | 0.87  | 0.74  | 0.74                                                                                | 0.74  |
| Heavy Vehicles (%)         | 6%                                                                                 | 14%                                                                               | 1%    | 21%                                                                               | 22%                                                                               | 1%    | 10%   | 4%                                                                                  | 6%    | 17%   | 24%                                                                                 | 0%    |
| Adj. Flow (vph)            | 79                                                                                 | 323                                                                               | 5     | 36                                                                                | 224                                                                               | 10    | 20    | 202                                                                                 | 148   | 19    | 55                                                                                  | 12    |
| Shared Lane Traffic (%)    |                                                                                    |                                                                                   |       |                                                                                   |                                                                                   |       |       |                                                                                     |       |       |                                                                                     |       |
| Lane Group Flow (vph)      | 79                                                                                 | 328                                                                               | 0     | 36                                                                                | 234                                                                               | 0     | 0     | 370                                                                                 | 0     | 0     | 86                                                                                  | 0     |
| Enter Blocked Intersection | No                                                                                 | No                                                                                | No    | No                                                                                | No                                                                                | No    | No    | No                                                                                  | No    | No    | No                                                                                  | No    |
| Lane Alignment             | Left                                                                               | Left                                                                              | Right | Left                                                                              | Left                                                                              | Right | Left  | Left                                                                                | Right | Left  | Left                                                                                | Right |
| Median Width(ft)           |                                                                                    | 12                                                                                |       |                                                                                   | 12                                                                                |       |       | 0                                                                                   |       |       | 0                                                                                   |       |
| Link Offset(ft)            |                                                                                    | 0                                                                                 |       |                                                                                   | 0                                                                                 |       |       | 0                                                                                   |       |       | 0                                                                                   |       |
| Crosswalk Width(ft)        |                                                                                    | 16                                                                                |       |                                                                                   | 16                                                                                |       |       | 16                                                                                  |       |       | 16                                                                                  |       |
| Two way Left Turn Lane     |                                                                                    |                                                                                   |       |                                                                                   |                                                                                   |       |       |                                                                                     |       |       |                                                                                     |       |
| Headway Factor             | 1.00                                                                               | 1.00                                                                              | 1.00  | 1.00                                                                              | 1.00                                                                              | 1.00  | 1.00  | 1.00                                                                                | 1.00  | 1.00  | 1.00                                                                                | 1.00  |
| Turning Speed (mph)        | 15                                                                                 |                                                                                   | 9     | 15                                                                                |                                                                                   | 9     | 15    |                                                                                     | 9     | 15    |                                                                                     | 9     |
| Turn Type                  | Perm                                                                               | NA                                                                                |       | Perm                                                                              | NA                                                                                |       | Perm  | NA                                                                                  |       | Perm  | NA                                                                                  |       |
| Protected Phases           |                                                                                    | 4                                                                                 |       |                                                                                   | 8                                                                                 |       |       | 2                                                                                   |       |       | 6                                                                                   |       |
| Permitted Phases           | 4                                                                                  |                                                                                   |       | 8                                                                                 |                                                                                   |       | 2     |                                                                                     |       | 6     |                                                                                     |       |
| Detector Phase             | 4                                                                                  | 4                                                                                 |       | 8                                                                                 | 8                                                                                 |       | 2     | 2                                                                                   |       | 6     | 6                                                                                   |       |
| Switch Phase               |                                                                                    |                                                                                   |       |                                                                                   |                                                                                   |       |       |                                                                                     |       |       |                                                                                     |       |
| Minimum Initial (s)        | 5.0                                                                                | 5.0                                                                               |       | 5.0                                                                               | 5.0                                                                               |       | 5.0   | 5.0                                                                                 |       | 5.0   | 5.0                                                                                 |       |
| Minimum Split (s)          | 22.5                                                                               | 22.5                                                                              |       | 22.5                                                                              | 22.5                                                                              |       | 22.5  | 22.5                                                                                |       | 22.5  | 22.5                                                                                |       |
| Total Split (s)            | 26.0                                                                               | 26.0                                                                              |       | 26.0                                                                              | 26.0                                                                              |       | 26.0  | 26.0                                                                                |       | 26.0  | 26.0                                                                                |       |
| Total Split (%)            | 50.0%                                                                              | 50.0%                                                                             |       | 50.0%                                                                             | 50.0%                                                                             |       | 50.0% | 50.0%                                                                               |       | 50.0% | 50.0%                                                                               |       |
| Maximum Green (s)          | 22.0                                                                               | 22.0                                                                              |       | 22.0                                                                              | 22.0                                                                              |       | 22.0  | 22.0                                                                                |       | 22.0  | 22.0                                                                                |       |
| Yellow Time (s)            | 3.0                                                                                | 3.0                                                                               |       | 3.0                                                                               | 3.0                                                                               |       | 3.0   | 3.0                                                                                 |       | 3.0   | 3.0                                                                                 |       |
| All-Red Time (s)           | 1.0                                                                                | 1.0                                                                               |       | 1.0                                                                               | 1.0                                                                               |       | 1.0   | 1.0                                                                                 |       | 1.0   | 1.0                                                                                 |       |
| Lost Time Adjust (s)       | 0.0                                                                                | 0.0                                                                               |       | 0.0                                                                               | 0.0                                                                               |       |       | 0.0                                                                                 |       |       | 0.0                                                                                 |       |
| Total Lost Time (s)        | 4.0                                                                                | 4.0                                                                               |       | 4.0                                                                               | 4.0                                                                               |       |       | 4.0                                                                                 |       |       | 4.0                                                                                 |       |
| Lead/Lag                   |                                                                                    |                                                                                   |       |                                                                                   |                                                                                   |       |       |                                                                                     |       |       |                                                                                     |       |
| Lead-Lag Optimize?         |                                                                                    |                                                                                   |       |                                                                                   |                                                                                   |       |       |                                                                                     |       |       |                                                                                     |       |
| Vehicle Extension (s)      | 3.0                                                                                | 3.0                                                                               |       | 3.0                                                                               | 3.0                                                                               |       | 3.0   | 3.0                                                                                 |       | 3.0   | 3.0                                                                                 |       |
| Recall Mode                | None                                                                               | None                                                                              |       | None                                                                              | None                                                                              |       | Max   | Max                                                                                 |       | Max   | Max                                                                                 |       |

Lanes, Volumes, Timings  
3: Bristol Road (NYS Route 21) & Route 5 & 20

2028 Build - AM  
04/28/2021

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Act Effect Green (s)    | 13.7                                                                              | 13.7                                                                              |                                                                                   | 13.7                                                                              | 13.7                                                                              |                                                                                   |                                                                                    | 22.2                                                                                |                                                                                     |                                                                                     | 22.2                                                                                |                                                                                     |
| Actuated g/C Ratio      | 0.31                                                                              | 0.31                                                                              |                                                                                   | 0.31                                                                              | 0.31                                                                              |                                                                                   |                                                                                    | 0.50                                                                                |                                                                                     |                                                                                     | 0.50                                                                                |                                                                                     |
| v/c Ratio               | 0.23                                                                              | 0.63                                                                              |                                                                                   | 0.16                                                                              | 0.25                                                                              |                                                                                   |                                                                                    | 0.41                                                                                |                                                                                     |                                                                                     | 0.12                                                                                |                                                                                     |
| Control Delay           | 12.5                                                                              | 18.5                                                                              |                                                                                   | 12.1                                                                              | 11.0                                                                              |                                                                                   |                                                                                    | 8.1                                                                                 |                                                                                     |                                                                                     | 7.1                                                                                 |                                                                                     |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Total Delay             | 12.5                                                                              | 18.5                                                                              |                                                                                   | 12.1                                                                              | 11.0                                                                              |                                                                                   |                                                                                    | 8.1                                                                                 |                                                                                     |                                                                                     | 7.1                                                                                 |                                                                                     |
| LOS                     | B                                                                                 | B                                                                                 |                                                                                   | B                                                                                 | B                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   | 17.3                                                                              |                                                                                   |                                                                                   | 11.1                                                                              |                                                                                   |                                                                                    | 8.1                                                                                 |                                                                                     |                                                                                     | 7.1                                                                                 |                                                                                     |
| Approach LOS            |                                                                                   | B                                                                                 |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |
| Queue Length 50th (ft)  | 14                                                                                | 68                                                                                |                                                                                   | 6                                                                                 | 21                                                                                |                                                                                   |                                                                                    | 38                                                                                  |                                                                                     |                                                                                     | 8                                                                                   |                                                                                     |
| Queue Length 95th (ft)  | 36                                                                                | 125                                                                               |                                                                                   | 18                                                                                | 33                                                                                |                                                                                   |                                                                                    | 108                                                                                 |                                                                                     |                                                                                     | 26                                                                                  |                                                                                     |
| Internal Link Dist (ft) |                                                                                   | 1405                                                                              |                                                                                   |                                                                                   | 1540                                                                              |                                                                                   |                                                                                    | 558                                                                                 |                                                                                     |                                                                                     | 499                                                                                 |                                                                                     |
| Turn Bay Length (ft)    | 100                                                                               |                                                                                   |                                                                                   | 100                                                                               |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)     | 548                                                                               | 842                                                                               |                                                                                   | 357                                                                               | 1501                                                                              |                                                                                   |                                                                                    | 892                                                                                 |                                                                                     |                                                                                     | 728                                                                                 |                                                                                     |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Reduced v/c Ratio       | 0.14                                                                              | 0.39                                                                              |                                                                                   | 0.10                                                                              | 0.16                                                                              |                                                                                   |                                                                                    | 0.41                                                                                |                                                                                     |                                                                                     | 0.12                                                                                |                                                                                     |

Intersection Summary

Area Type: Other

Cycle Length: 52

Actuated Cycle Length: 44

Natural Cycle: 45

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.63

Intersection Signal Delay: 12.1

Intersection LOS: B

Intersection Capacity Utilization 50.1%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 3: Bristol Road (NYS Route 21) & Route 5 & 20

|                                                                                        |                                                                                        |
|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
|  Ø2 |  Ø4 |
| 26 s                                                                                   | 26 s                                                                                   |
|  Ø6 |  Ø8 |
| 26 s                                                                                   | 26 s                                                                                   |

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 7.1  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  | NEL  | NET  | NER  | SWL  | SWT  | SWR  |
| Lane Configurations      |      | ↕    |      |      | ↕    |      | ↗    | ↘    |      | ↗    | ↕    |      |
| Traffic Vol, veh/h       | 28   | 66   | 59   | 5    | 15   | 18   | 78   | 350  | 28   | 27   | 165  | 4    |
| Future Vol, veh/h        | 28   | 66   | 59   | 5    | 15   | 18   | 78   | 350  | 28   | 27   | 165  | 4    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | 125  | -    | -    | 125  | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 91   | 91   | 91   | 75   | 75   | 75   | 90   | 90   | 90   | 83   | 83   | 83   |
| Heavy Vehicles, %        | 88   | 6    | 5    | 0    | 0    | 7    | 2    | 6    | 80   | 5    | 11   | 33   |
| Mvmt Flow                | 31   | 73   | 65   | 7    | 20   | 24   | 87   | 389  | 31   | 33   | 199  | 5    |

| Major/Minor          | Minor1 |       | Minor2 |     | Major1 |       |      | Major2 |        |       |   |   |
|----------------------|--------|-------|--------|-----|--------|-------|------|--------|--------|-------|---|---|
| Conflicting Flow All | 755    | 849   | 405    | 916 | 862    | 102   | 204  | 0      | 0      | 420   | 0 | 0 |
| Stage 1              | 579    | 579   | -      | 268 | 268    | -     | -    | -      | -      | -     | - | - |
| Stage 2              | 176    | 270   | -      | 648 | 594    | -     | -    | -      | -      | -     | - | - |
| Critical Hdwy        | 8.62   | 6.59  | 6.275  | 7.3 | 6.5    | 7.005 | 4.13 | -      | -      | 4.175 | - | - |
| Critical Hdwy Stg 1  | 7.42   | 5.59  | -      | 6.5 | 5.5    | -     | -    | -      | -      | -     | - | - |
| Critical Hdwy Stg 2  | 7.82   | 5.59  | -      | 6.1 | 5.5    | -     | -    | -      | -      | -     | - | - |
| Follow-up Hdwy       | 4.336  | 4.057 | 3.3475 | 3.5 | 4.3665 | 2.219 | -    | -      | 2.2475 | -     | - | - |
| Pot Cap-1 Maneuver   | 207    | 291   | 637    | 242 | 295    | 919   | 1366 | -      | -      | 1119  | - | - |
| Stage 1              | 350    | 492   | -      | 720 | 691    | -     | -    | -      | -      | -     | - | - |
| Stage 2              | 629    | 677   | -      | 462 | 496    | -     | -    | -      | -      | -     | - | - |
| Platoon blocked, %   |        |       |        |     |        |       |      | -      | -      | -     | - | - |
| Mov Cap-1 Maneuver   | 177    | 265   | 637    | 160 | 268    | 919   | 1366 | -      | -      | 1119  | - | - |
| Mov Cap-2 Maneuver   | 177    | 265   | -      | 160 | 268    | -     | -    | -      | -      | -     | - | - |
| Stage 1              | 328    | 461   | -      | 674 | 671    | -     | -    | -      | -      | -     | - | - |
| Stage 2              | 577    | 657   | -      | 327 | 464    | -     | -    | -      | -      | -     | - | - |

| Approach             | NB   |  | SB   |  | NE  |  | SW  |  |
|----------------------|------|--|------|--|-----|--|-----|--|
| HCM Control Delay, s | 30.2 |  | 16.8 |  | 1.3 |  | 1.1 |  |
| HCM LOS              | D    |  | C    |  |     |  |     |  |

| Minor Lane/Major Mvmt | NEL   | NET | NER | NBLn1 | SBLn1 | SWL   | SWT | SWR |
|-----------------------|-------|-----|-----|-------|-------|-------|-----|-----|
| Capacity (veh/h)      | 1366  | -   | -   | 306   | 356   | 1119  | -   | -   |
| HCM Lane V/C Ratio    | 0.063 | -   | -   | 0.549 | 0.142 | 0.029 | -   | -   |
| HCM Control Delay (s) | 7.8   | -   | -   | 30.2  | 16.8  | 8.3   | -   | -   |
| HCM Lane LOS          | A     | -   | -   | D     | C     | A     | -   | -   |
| HCM 95th %tile Q(veh) | 0.2   | -   | -   | 3.1   | 0.5   | 0.1   | -   | -   |

| Intersection             |                                                                                   |      |                                                                                   |      |      |                                                                                   |
|--------------------------|-----------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------|------|------|-----------------------------------------------------------------------------------|
| Int Delay, s/veh         | 0.5                                                                               |      |                                                                                   |      |      |                                                                                   |
| Movement                 | WBL                                                                               | WBR  | NBT                                                                               | NBR  | SBL  | SBT                                                                               |
| Lane Configurations      |  |      |  |      |      |  |
| Traffic Vol, veh/h       | 2                                                                                 | 15   | 307                                                                               | 0    | 4    | 70                                                                                |
| Future Vol, veh/h        | 2                                                                                 | 15   | 307                                                                               | 0    | 4    | 70                                                                                |
| Conflicting Peds, #/hr   | 0                                                                                 | 0    | 0                                                                                 | 0    | 0    | 0                                                                                 |
| Sign Control             | Stop                                                                              | Stop | Free                                                                              | Free | Free | Free                                                                              |
| RT Channelized           | -                                                                                 | None | -                                                                                 | None | -    | None                                                                              |
| Storage Length           | 0                                                                                 | -    | -                                                                                 | -    | -    | -                                                                                 |
| Veh in Median Storage, # | 0                                                                                 | -    | 0                                                                                 | -    | -    | 0                                                                                 |
| Grade, %                 | 0                                                                                 | -    | 0                                                                                 | -    | -    | 0                                                                                 |
| Peak Hour Factor         | 92                                                                                | 92   | 92                                                                                | 92   | 92   | 92                                                                                |
| Heavy Vehicles, %        | 2                                                                                 | 2    | 2                                                                                 | 2    | 2    | 2                                                                                 |
| Mvmt Flow                | 2                                                                                 | 16   | 334                                                                               | 0    | 4    | 76                                                                                |

| Major/Minor          | Minor1 | Major1 | Major2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 418    | 334    | 0      |
| Stage 1              | 334    | -      | -      |
| Stage 2              | 84     | -      | -      |
| Critical Hdwy        | 6.42   | 6.22   | -      |
| Critical Hdwy Stg 1  | 5.42   | -      | -      |
| Critical Hdwy Stg 2  | 5.42   | -      | -      |
| Follow-up Hdwy       | 3.518  | 3.318  | -      |
| Pot Cap-1 Maneuver   | 591    | 708    | -      |
| Stage 1              | 725    | -      | -      |
| Stage 2              | 939    | -      | -      |
| Platoon blocked, %   |        | -      | -      |
| Mov Cap-1 Maneuver   | 589    | 708    | -      |
| Mov Cap-2 Maneuver   | 589    | -      | -      |
| Stage 1              | 725    | -      | -      |
| Stage 2              | 936    | -      | -      |

| Approach             | WB   | NB | SB  |
|----------------------|------|----|-----|
| HCM Control Delay, s | 10.3 | 0  | 0.4 |
| HCM LOS              | B    |    |     |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL   | SBT   |
|-----------------------|-----|----------|-------|-------|
| Capacity (veh/h)      | -   | -        | 692   | 1225  |
| HCM Lane V/C Ratio    | -   | -        | 0.027 | 0.004 |
| HCM Control Delay (s) | -   | -        | 10.3  | 7.9   |
| HCM Lane LOS          | -   | -        | B     | A     |
| HCM 95th %tile Q(veh) | -   | -        | 0.1   | 0     |

| Intersection             |                                                                                   |        |       |                                                                                   |                                                                                   |      |
|--------------------------|-----------------------------------------------------------------------------------|--------|-------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------|
| Int Delay, s/veh         | 0.7                                                                               |        |       |                                                                                   |                                                                                   |      |
| Movement                 | EBL                                                                               | EBR    | NBL   | NBT                                                                               | SBT                                                                               | SBR  |
| Lane Configurations      |  |        |       |  |  |      |
| Traffic Vol, veh/h       | 15                                                                                | 2      | 0     | 138                                                                               | 65                                                                                | 5    |
| Future Vol, veh/h        | 15                                                                                | 2      | 0     | 138                                                                               | 65                                                                                | 5    |
| Conflicting Peds, #/hr   | 0                                                                                 | 0      | 0     | 0                                                                                 | 0                                                                                 | 0    |
| Sign Control             | Stop                                                                              | Stop   | Free  | Free                                                                              | Free                                                                              | Free |
| RT Channelized           | -                                                                                 | None   | -     | None                                                                              | -                                                                                 | None |
| Storage Length           | 0                                                                                 | -      | -     | -                                                                                 | -                                                                                 | -    |
| Veh in Median Storage, # | 0                                                                                 | -      | -     | 0                                                                                 | 0                                                                                 | -    |
| Grade, %                 | 0                                                                                 | -      | -     | 0                                                                                 | 0                                                                                 | -    |
| Peak Hour Factor         | 92                                                                                | 92     | 92    | 92                                                                                | 92                                                                                | 92   |
| Heavy Vehicles, %        | 2                                                                                 | 2      | 2     | 2                                                                                 | 2                                                                                 | 2    |
| Mvmt Flow                | 16                                                                                | 2      | 0     | 150                                                                               | 71                                                                                | 5    |
| Major/Minor              | Minor2                                                                            | Major1 |       | Major2                                                                            |                                                                                   |      |
| Conflicting Flow All     | 224                                                                               | 74     | 76    | 0                                                                                 | -                                                                                 | 0    |
| Stage 1                  | 74                                                                                | -      | -     | -                                                                                 | -                                                                                 | -    |
| Stage 2                  | 150                                                                               | -      | -     | -                                                                                 | -                                                                                 | -    |
| Critical Hdwy            | 6.42                                                                              | 6.22   | 4.12  | -                                                                                 | -                                                                                 | -    |
| Critical Hdwy Stg 1      | 5.42                                                                              | -      | -     | -                                                                                 | -                                                                                 | -    |
| Critical Hdwy Stg 2      | 5.42                                                                              | -      | -     | -                                                                                 | -                                                                                 | -    |
| Follow-up Hdwy           | 3.518                                                                             | 3.318  | 2.218 | -                                                                                 | -                                                                                 | -    |
| Pot Cap-1 Maneuver       | 764                                                                               | 988    | 1523  | -                                                                                 | -                                                                                 | -    |
| Stage 1                  | 949                                                                               | -      | -     | -                                                                                 | -                                                                                 | -    |
| Stage 2                  | 878                                                                               | -      | -     | -                                                                                 | -                                                                                 | -    |
| Platoon blocked, %       |                                                                                   |        |       | -                                                                                 | -                                                                                 | -    |
| Mov Cap-1 Maneuver       | 764                                                                               | 988    | 1523  | -                                                                                 | -                                                                                 | -    |
| Mov Cap-2 Maneuver       | 764                                                                               | -      | -     | -                                                                                 | -                                                                                 | -    |
| Stage 1                  | 949                                                                               | -      | -     | -                                                                                 | -                                                                                 | -    |
| Stage 2                  | 878                                                                               | -      | -     | -                                                                                 | -                                                                                 | -    |
| Approach                 | EB                                                                                | NB     |       | SB                                                                                |                                                                                   |      |
| HCM Control Delay, s     | 9.7                                                                               | 0      |       | 0                                                                                 |                                                                                   |      |
| HCM LOS                  | A                                                                                 |        |       |                                                                                   |                                                                                   |      |
| Minor Lane/Major Mvmt    | NBL                                                                               | NBT    | EBLn1 | SBT                                                                               | SBR                                                                               |      |
| Capacity (veh/h)         | 1523                                                                              | -      | 785   | -                                                                                 | -                                                                                 |      |
| HCM Lane V/C Ratio       | -                                                                                 | -      | 0.024 | -                                                                                 | -                                                                                 |      |
| HCM Control Delay (s)    | 0                                                                                 | -      | 9.7   | -                                                                                 | -                                                                                 |      |
| HCM Lane LOS             | A                                                                                 | -      | A     | -                                                                                 | -                                                                                 |      |
| HCM 95th %tile Q(veh)    | 0                                                                                 | -      | 0.1   | -                                                                                 | -                                                                                 |      |

Lanes, Volumes, Timings  
3: Bristol Road (NYS Route 21) & Route 5 & 20

2028 Build - PM

04/28/2021

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |                                                                                     |  |                                                                                     |                                                                                     |  |                                                                                     |
| Traffic Volume (vph)       | 51                                                                                | 357                                                                               | 15                                                                                | 164                                                                               | 395                                                                               | 9                                                                                 | 18                                                                                  | 121                                                                                 | 97                                                                                  | 15                                                                                  | 156                                                                                 | 83                                                                                  |
| Future Volume (vph)        | 51                                                                                | 357                                                                               | 15                                                                                | 164                                                                               | 395                                                                               | 9                                                                                 | 18                                                                                  | 121                                                                                 | 97                                                                                  | 15                                                                                  | 156                                                                                 | 83                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Storage Length (ft)        | 100                                                                               |                                                                                   | 0                                                                                 | 100                                                                               |                                                                                   | 0                                                                                 | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (ft)          | 75                                                                                |                                                                                   |                                                                                   | 75                                                                                |                                                                                   |                                                                                   | 25                                                                                  |                                                                                     |                                                                                     | 25                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   | 0.994                                                                             |                                                                                   |                                                                                   | 0.997                                                                             |                                                                                   |                                                                                     | 0.944                                                                               |                                                                                     |                                                                                     | 0.956                                                                               |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                     | 0.996                                                                               |                                                                                     |                                                                                     | 0.997                                                                               |                                                                                     |
| Satd. Flow (prot)          | 1719                                                                              | 1836                                                                              | 0                                                                                 | 1752                                                                              | 3497                                                                              | 0                                                                                 | 0                                                                                   | 1737                                                                                | 0                                                                                   | 0                                                                                   | 1800                                                                                | 0                                                                                   |
| Flt Permitted              | 0.490                                                                             |                                                                                   |                                                                                   | 0.351                                                                             |                                                                                   |                                                                                   |                                                                                     | 0.968                                                                               |                                                                                     |                                                                                     | 0.978                                                                               |                                                                                     |
| Satd. Flow (perm)          | 887                                                                               | 1836                                                                              | 0                                                                                 | 647                                                                               | 3497                                                                              | 0                                                                                 | 0                                                                                   | 1688                                                                                | 0                                                                                   | 0                                                                                   | 1766                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 5                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                     | 84                                                                                  |                                                                                     |                                                                                     | 58                                                                                  |                                                                                     |
| Link Speed (mph)           |                                                                                   | 55                                                                                |                                                                                   |                                                                                   | 55                                                                                |                                                                                   |                                                                                     | 55                                                                                  |                                                                                     |                                                                                     | 40                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 1485                                                                              |                                                                                   |                                                                                   | 1620                                                                              |                                                                                   |                                                                                     | 628                                                                                 |                                                                                     |                                                                                     | 579                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 18.4                                                                              |                                                                                   |                                                                                   | 20.1                                                                              |                                                                                   |                                                                                     | 7.8                                                                                 |                                                                                     |                                                                                     | 9.9                                                                                 |                                                                                     |
| Peak Hour Factor           | 0.89                                                                              | 0.89                                                                              | 0.89                                                                              | 0.94                                                                              | 0.94                                                                              | 0.94                                                                              | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                | 0.81                                                                                | 0.81                                                                                | 0.81                                                                                |
| Heavy Vehicles (%)         | 5%                                                                                | 3%                                                                                | 0%                                                                                | 3%                                                                                | 3%                                                                                | 0%                                                                                | 0%                                                                                  | 4%                                                                                  | 2%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 57                                                                                | 401                                                                               | 17                                                                                | 174                                                                               | 420                                                                               | 10                                                                                | 20                                                                                  | 134                                                                                 | 108                                                                                 | 19                                                                                  | 193                                                                                 | 102                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 57                                                                                | 418                                                                               | 0                                                                                 | 174                                                                               | 430                                                                               | 0                                                                                 | 0                                                                                   | 262                                                                                 | 0                                                                                   | 0                                                                                   | 314                                                                                 | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                                | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                     | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 2                                                                                   | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 5.0                                                                                 |                                                                                     | 5.0                                                                                 | 5.0                                                                                 |                                                                                     |
| Minimum Split (s)          | 22.5                                                                              | 22.5                                                                              |                                                                                   | 22.5                                                                              | 22.5                                                                              |                                                                                   | 22.5                                                                                | 22.5                                                                                |                                                                                     | 22.5                                                                                | 22.5                                                                                |                                                                                     |
| Total Split (s)            | 26.0                                                                              | 26.0                                                                              |                                                                                   | 26.0                                                                              | 26.0                                                                              |                                                                                   | 26.0                                                                                | 26.0                                                                                |                                                                                     | 26.0                                                                                | 26.0                                                                                |                                                                                     |
| Total Split (%)            | 50.0%                                                                             | 50.0%                                                                             |                                                                                   | 50.0%                                                                             | 50.0%                                                                             |                                                                                   | 50.0%                                                                               | 50.0%                                                                               |                                                                                     | 50.0%                                                                               | 50.0%                                                                               |                                                                                     |
| Maximum Green (s)          | 22.0                                                                              | 22.0                                                                              |                                                                                   | 22.0                                                                              | 22.0                                                                              |                                                                                   | 22.0                                                                                | 22.0                                                                                |                                                                                     | 22.0                                                                                | 22.0                                                                                |                                                                                     |
| Yellow Time (s)            | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                 | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| All-Red Time (s)           | 1.0                                                                               | 1.0                                                                               |                                                                                   | 1.0                                                                               | 1.0                                                                               |                                                                                   | 1.0                                                                                 | 1.0                                                                                 |                                                                                     | 1.0                                                                                 | 1.0                                                                                 |                                                                                     |
| Lost Time Adjust (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)        | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               |                                                                                   |                                                                                     | 4.0                                                                                 |                                                                                     |                                                                                     | 4.0                                                                                 |                                                                                     |
| Lead/Lag                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)      | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                 | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode                | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | Max                                                                                 | Max                                                                                 |                                                                                     | Max                                                                                 | Max                                                                                 |                                                                                     |

Lanes, Volumes, Timings  
3: Bristol Road (NYS Route 21) & Route 5 & 20

2028 Build - PM  
04/28/2021

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Act Effect Green (s)    | 16.0                                                                              | 16.0                                                                              |                                                                                   | 16.0                                                                              | 16.0                                                                              |                                                                                   |                                                                                     | 22.3                                                                                |                                                                                     |                                                                                     | 22.3                                                                                |                                                                                     |
| Actuated g/C Ratio      | 0.34                                                                              | 0.34                                                                              |                                                                                   | 0.34                                                                              | 0.34                                                                              |                                                                                   |                                                                                     | 0.48                                                                                |                                                                                     |                                                                                     | 0.48                                                                                |                                                                                     |
| v/c Ratio               | 0.19                                                                              | 0.66                                                                              |                                                                                   | 0.78                                                                              | 0.35                                                                              |                                                                                   |                                                                                     | 0.31                                                                                |                                                                                     |                                                                                     | 0.36                                                                                |                                                                                     |
| Control Delay           | 11.5                                                                              | 17.7                                                                              |                                                                                   | 39.2                                                                              | 11.5                                                                              |                                                                                   |                                                                                     | 7.4                                                                                 |                                                                                     |                                                                                     | 8.8                                                                                 |                                                                                     |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Total Delay             | 11.5                                                                              | 17.7                                                                              |                                                                                   | 39.2                                                                              | 11.5                                                                              |                                                                                   |                                                                                     | 7.4                                                                                 |                                                                                     |                                                                                     | 8.8                                                                                 |                                                                                     |
| LOS                     | B                                                                                 | B                                                                                 |                                                                                   | D                                                                                 | B                                                                                 |                                                                                   |                                                                                     | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   | 16.9                                                                              |                                                                                   |                                                                                   | 19.5                                                                              |                                                                                   |                                                                                     | 7.4                                                                                 |                                                                                     |                                                                                     | 8.8                                                                                 |                                                                                     |
| Approach LOS            |                                                                                   | B                                                                                 |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                     | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |
| Queue Length 50th (ft)  | 10                                                                                | 89                                                                                |                                                                                   | 40                                                                                | 42                                                                                |                                                                                   |                                                                                     | 26                                                                                  |                                                                                     |                                                                                     | 39                                                                                  |                                                                                     |
| Queue Length 95th (ft)  | 28                                                                                | 155                                                                               |                                                                                   | #122                                                                              | 68                                                                                |                                                                                   |                                                                                     | 74                                                                                  |                                                                                     |                                                                                     | 85                                                                                  |                                                                                     |
| Internal Link Dist (ft) |                                                                                   | 1405                                                                              |                                                                                   |                                                                                   | 1540                                                                              |                                                                                   |                                                                                     | 548                                                                                 |                                                                                     |                                                                                     | 499                                                                                 |                                                                                     |
| Turn Bay Length (ft)    | 100                                                                               |                                                                                   |                                                                                   | 100                                                                               |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)     | 425                                                                               | 883                                                                               |                                                                                   | 310                                                                               | 1681                                                                              |                                                                                   |                                                                                     | 853                                                                                 |                                                                                     |                                                                                     | 877                                                                                 |                                                                                     |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Reduced v/c Ratio       | 0.13                                                                              | 0.47                                                                              |                                                                                   | 0.56                                                                              | 0.26                                                                              |                                                                                   |                                                                                     | 0.31                                                                                |                                                                                     |                                                                                     | 0.36                                                                                |                                                                                     |

Intersection Summary

Area Type: Other

Cycle Length: 52

Actuated Cycle Length: 46.4

Natural Cycle: 45

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.78

Intersection Signal Delay: 14.8

Intersection LOS: B

Intersection Capacity Utilization 57.0%

ICU Level of Service B

Analysis Period (min) 15

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

Queue shown is maximum after two cycles.

Splits and Phases: 3: Bristol Road (NYS Route 21) & Route 5 & 20

|                                                                                        |                                                                                        |
|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
|  Ø2 |  Ø4 |
| 26 s                                                                                   | 26 s                                                                                   |
|  Ø6 |  Ø8 |
| 26 s                                                                                   | 26 s                                                                                   |

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 7.3  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  | NEL  | NET  | NER  | SWL  | SWT  | SWR  |
| Lane Configurations      |      | ↕    |      |      | ↕    |      | ↗    | ↘    |      | ↗    | ↕    |      |
| Traffic Vol, veh/h       | 3    | 37   | 56   | 5    | 43   | 88   | 34   | 427  | 8    | 89   | 477  | 4    |
| Future Vol, veh/h        | 3    | 37   | 56   | 5    | 43   | 88   | 34   | 427  | 8    | 89   | 477  | 4    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | 125  | -    | -    | 125  | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 80   | 80   | 80   | 80   | 80   | 80   | 88   | 88   | 88   | 96   | 96   | 96   |
| Heavy Vehicles, %        | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 2    | 0    | 0    | 3    | 0    |
| Mvmt Flow                | 4    | 46   | 70   | 6    | 54   | 110  | 39   | 485  | 9    | 93   | 497  | 4    |

| Major/Minor          | Minor1 |      | Minor2 |      | Major1 |     | Major2 |   |   |      |   |   |
|----------------------|--------|------|--------|------|--------|-----|--------|---|---|------|---|---|
| Conflicting Flow All | 1030   | 1255 | 490    | 1311 | 1257   | 251 | 501    | 0 | 0 | 494  | 0 | 0 |
| Stage 1              | 568    | 568  | -      | 685  | 685    | -   | -      | - | - | -    | - | - |
| Stage 2              | 462    | 687  | -      | 626  | 572    | -   | -      | - | - | -    | - | - |
| Critical Hdwy        | 7.3    | 6.5  | 6.2    | 7.3  | 6.5    | 6.9 | 4.1    | - | - | 4.1  | - | - |
| Critical Hdwy Stg 1  | 6.1    | 5.5  | -      | 6.5  | 5.5    | -   | -      | - | - | -    | - | - |
| Critical Hdwy Stg 2  | 6.5    | 5.5  | -      | 6.1  | 5.5    | -   | -      | - | - | -    | - | - |
| Follow-up Hdwy       | 3.5    | 4    | 3.3    | 3.5  | 4      | 3.3 | 2.2    | - | - | 2.2  | - | - |
| Pot Cap-1 Maneuver   | 202    | 173  | 582    | 127  | 173    | 755 | 1074   | - | - | 1080 | - | - |
| Stage 1              | 511    | 510  | -      | 409  | 451    | -   | -      | - | - | -    | - | - |
| Stage 2              | 554    | 450  | -      | 475  | 508    | -   | -      | - | - | -    | - | - |
| Platoon blocked, %   |        |      |        |      |        |     |        | - | - | -    | - | - |
| Mov Cap-1 Maneuver   | 115    | 152  | 582    | 78   | 152    | 755 | 1074   | - | - | 1080 | - | - |
| Mov Cap-2 Maneuver   | 115    | 152  | -      | 78   | 152    | -   | -      | - | - | -    | - | - |
| Stage 1              | 493    | 492  | -      | 394  | 412    | -   | -      | - | - | -    | - | - |
| Stage 2              | 376    | 411  | -      | 365  | 490    | -   | -      | - | - | -    | - | - |

| Approach             | NB   |  | SB |  | NE  |  | SW  |  |
|----------------------|------|--|----|--|-----|--|-----|--|
| HCM Control Delay, s | 29.8 |  | 33 |  | 0.6 |  | 1.3 |  |
| HCM LOS              | D    |  | D  |  |     |  |     |  |

| Minor Lane/Major Mvmt | NEL   | NET | NER | NBLn1 | SBLn1 | SWL   | SWT | SWR |
|-----------------------|-------|-----|-----|-------|-------|-------|-----|-----|
| Capacity (veh/h)      | 1074  | -   | -   | 262   | 293   | 1080  | -   | -   |
| HCM Lane V/C Ratio    | 0.036 | -   | -   | 0.458 | 0.58  | 0.086 | -   | -   |
| HCM Control Delay (s) | 8.5   | -   | -   | 29.8  | 33    | 8.6   | -   | -   |
| HCM Lane LOS          | A     | -   | -   | D     | D     | A     | -   | -   |
| HCM 95th %tile Q(veh) | 0.1   | -   | -   | 2.2   | 3.4   | 0.3   | -   | -   |

| Intersection             |                                                                                   |          |                                                                                   |        |       |                                                                                   |
|--------------------------|-----------------------------------------------------------------------------------|----------|-----------------------------------------------------------------------------------|--------|-------|-----------------------------------------------------------------------------------|
| Int Delay, s/veh         | 0.3                                                                               |          |                                                                                   |        |       |                                                                                   |
| Movement                 | WBL                                                                               | WBR      | NBT                                                                               | NBR    | SBL   | SBT                                                                               |
| Lane Configurations      |  |          |  |        |       |  |
| Traffic Vol, veh/h       | 1                                                                                 | 9        | 227                                                                               | 2      | 14    | 321                                                                               |
| Future Vol, veh/h        | 1                                                                                 | 9        | 227                                                                               | 2      | 14    | 321                                                                               |
| Conflicting Peds, #/hr   | 0                                                                                 | 0        | 0                                                                                 | 0      | 0     | 0                                                                                 |
| Sign Control             | Stop                                                                              | Stop     | Free                                                                              | Free   | Free  | Free                                                                              |
| RT Channelized           | -                                                                                 | None     | -                                                                                 | None   | -     | None                                                                              |
| Storage Length           | 0                                                                                 | -        | -                                                                                 | -      | -     | -                                                                                 |
| Veh in Median Storage, # | 0                                                                                 | -        | 0                                                                                 | -      | -     | 0                                                                                 |
| Grade, %                 | 0                                                                                 | -        | 0                                                                                 | -      | -     | 0                                                                                 |
| Peak Hour Factor         | 92                                                                                | 92       | 92                                                                                | 92     | 92    | 92                                                                                |
| Heavy Vehicles, %        | 2                                                                                 | 2        | 2                                                                                 | 2      | 2     | 2                                                                                 |
| Mvmt Flow                | 1                                                                                 | 10       | 247                                                                               | 2      | 15    | 349                                                                               |
| Major/Minor              | Minor1                                                                            | Major1   |                                                                                   | Major2 |       |                                                                                   |
| Conflicting Flow All     | 627                                                                               | 248      | 0                                                                                 | 0      | 249   | 0                                                                                 |
| Stage 1                  | 248                                                                               | -        | -                                                                                 | -      | -     | -                                                                                 |
| Stage 2                  | 379                                                                               | -        | -                                                                                 | -      | -     | -                                                                                 |
| Critical Hdwy            | 6.42                                                                              | 6.22     | -                                                                                 | -      | 4.12  | -                                                                                 |
| Critical Hdwy Stg 1      | 5.42                                                                              | -        | -                                                                                 | -      | -     | -                                                                                 |
| Critical Hdwy Stg 2      | 5.42                                                                              | -        | -                                                                                 | -      | -     | -                                                                                 |
| Follow-up Hdwy           | 3.518                                                                             | 3.318    | -                                                                                 | -      | 2.218 | -                                                                                 |
| Pot Cap-1 Maneuver       | 447                                                                               | 791      | -                                                                                 | -      | 1317  | -                                                                                 |
| Stage 1                  | 793                                                                               | -        | -                                                                                 | -      | -     | -                                                                                 |
| Stage 2                  | 692                                                                               | -        | -                                                                                 | -      | -     | -                                                                                 |
| Platoon blocked, %       |                                                                                   |          | -                                                                                 | -      |       | -                                                                                 |
| Mov Cap-1 Maneuver       | 441                                                                               | 791      | -                                                                                 | -      | 1317  | -                                                                                 |
| Mov Cap-2 Maneuver       | 441                                                                               | -        | -                                                                                 | -      | -     | -                                                                                 |
| Stage 1                  | 793                                                                               | -        | -                                                                                 | -      | -     | -                                                                                 |
| Stage 2                  | 682                                                                               | -        | -                                                                                 | -      | -     | -                                                                                 |
| Approach                 | WB                                                                                | NB       |                                                                                   | SB     |       |                                                                                   |
| HCM Control Delay, s     | 10                                                                                | 0        |                                                                                   | 0.3    |       |                                                                                   |
| HCM LOS                  | B                                                                                 |          |                                                                                   |        |       |                                                                                   |
| Minor Lane/Major Mvmt    | NBT                                                                               | NBRWBLn1 |                                                                                   | SBL    | SBT   |                                                                                   |
| Capacity (veh/h)         | -                                                                                 | - 733    |                                                                                   | 1317   | -     |                                                                                   |
| HCM Lane V/C Ratio       | -                                                                                 | - 0.015  |                                                                                   | 0.012  | -     |                                                                                   |
| HCM Control Delay (s)    | -                                                                                 | - 10     |                                                                                   | 7.8    | 0     |                                                                                   |
| HCM Lane LOS             | -                                                                                 | - B      |                                                                                   | A      | A     |                                                                                   |
| HCM 95th %tile Q(veh)    | -                                                                                 | - 0      |                                                                                   | 0      | -     |                                                                                   |

HCM 6th TWSC  
4: Parrish Street Ext. & Southern Driveway

2028 Build - PM  
04/28/2021

| Intersection             |                                                                                   |        |       |                                                                                   |                                                                                   |      |
|--------------------------|-----------------------------------------------------------------------------------|--------|-------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------|
| Int Delay, s/veh         | 0.5                                                                               |        |       |                                                                                   |                                                                                   |      |
| Movement                 | EBL                                                                               | EBR    | NBL   | NBT                                                                               | SBT                                                                               | SBR  |
| Lane Configurations      |  |        |       |  |  |      |
| Traffic Vol, veh/h       | 9                                                                                 | 1      | 2     | 87                                                                                | 126                                                                               | 14   |
| Future Vol, veh/h        | 9                                                                                 | 1      | 2     | 87                                                                                | 126                                                                               | 14   |
| Conflicting Peds, #/hr   | 0                                                                                 | 0      | 0     | 0                                                                                 | 0                                                                                 | 0    |
| Sign Control             | Stop                                                                              | Stop   | Free  | Free                                                                              | Free                                                                              | Free |
| RT Channelized           | -                                                                                 | None   | -     | None                                                                              | -                                                                                 | None |
| Storage Length           | 0                                                                                 | -      | -     | -                                                                                 | -                                                                                 | -    |
| Veh in Median Storage, # | 0                                                                                 | -      | -     | 0                                                                                 | 0                                                                                 | -    |
| Grade, %                 | 0                                                                                 | -      | -     | 0                                                                                 | 0                                                                                 | -    |
| Peak Hour Factor         | 92                                                                                | 92     | 92    | 92                                                                                | 92                                                                                | 92   |
| Heavy Vehicles, %        | 2                                                                                 | 2      | 2     | 2                                                                                 | 2                                                                                 | 2    |
| Mvmt Flow                | 10                                                                                | 1      | 2     | 95                                                                                | 137                                                                               | 15   |
| Major/Minor              | Minor2                                                                            | Major1 |       | Major2                                                                            |                                                                                   |      |
| Conflicting Flow All     | 244                                                                               | 145    | 152   | 0                                                                                 | -                                                                                 | 0    |
| Stage 1                  | 145                                                                               | -      | -     | -                                                                                 | -                                                                                 | -    |
| Stage 2                  | 99                                                                                | -      | -     | -                                                                                 | -                                                                                 | -    |
| Critical Hdwy            | 6.42                                                                              | 6.22   | 4.12  | -                                                                                 | -                                                                                 | -    |
| Critical Hdwy Stg 1      | 5.42                                                                              | -      | -     | -                                                                                 | -                                                                                 | -    |
| Critical Hdwy Stg 2      | 5.42                                                                              | -      | -     | -                                                                                 | -                                                                                 | -    |
| Follow-up Hdwy           | 3.518                                                                             | 3.318  | 2.218 | -                                                                                 | -                                                                                 | -    |
| Pot Cap-1 Maneuver       | 744                                                                               | 902    | 1429  | -                                                                                 | -                                                                                 | -    |
| Stage 1                  | 882                                                                               | -      | -     | -                                                                                 | -                                                                                 | -    |
| Stage 2                  | 925                                                                               | -      | -     | -                                                                                 | -                                                                                 | -    |
| Platoon blocked, %       |                                                                                   |        |       | -                                                                                 | -                                                                                 | -    |
| Mov Cap-1 Maneuver       | 743                                                                               | 902    | 1429  | -                                                                                 | -                                                                                 | -    |
| Mov Cap-2 Maneuver       | 743                                                                               | -      | -     | -                                                                                 | -                                                                                 | -    |
| Stage 1                  | 881                                                                               | -      | -     | -                                                                                 | -                                                                                 | -    |
| Stage 2                  | 925                                                                               | -      | -     | -                                                                                 | -                                                                                 | -    |
| Approach                 | EB                                                                                | NB     |       | SB                                                                                |                                                                                   |      |
| HCM Control Delay, s     | 9.8                                                                               | 0.2    |       | 0                                                                                 |                                                                                   |      |
| HCM LOS                  | A                                                                                 |        |       |                                                                                   |                                                                                   |      |
| Minor Lane/Major Mvmt    | NBL                                                                               | NBT    | EBLn1 | SBT                                                                               | SBR                                                                               |      |
| Capacity (veh/h)         | 1429                                                                              | -      | 756   | -                                                                                 | -                                                                                 |      |
| HCM Lane V/C Ratio       | 0.002                                                                             | -      | 0.014 | -                                                                                 | -                                                                                 |      |
| HCM Control Delay (s)    | 7.5                                                                               | 0      | 9.8   | -                                                                                 | -                                                                                 |      |
| HCM Lane LOS             | A                                                                                 | A      | A     | -                                                                                 | -                                                                                 |      |
| HCM 95th %tile Q(veh)    | 0                                                                                 | -      | 0     | -                                                                                 | -                                                                                 |      |