

| TWO-WAY STOP CONTROL SUMMARY                     |                         |            |           |                                      |                             |           |       |
|--|-------------------------|------------|-----------|--------------------------------------|-----------------------------|-----------|-------|
| <b>General Information</b>                       |                         |            |           | <b>Site Information</b>              |                             |           |       |
| Analyst  | JAG                     |            |           | Intersection                         | St . Joseph and Cold Spring |           |       |
| Agency/Co.                                       | TMA                     |            |           | Jurisdiction                         | Town of Forestburgh         |           |       |
| Date Performed                                   | 8/3/2009                |            |           | Analysis Year                        | Existing Condition          |           |       |
| Analysis Time Period                             | Friday Peak Hour Summer |            |           |                                      |                             |           |       |
| Project Description                              |                         |            |           |                                      |                             |           |       |
| East/West Street: St. Joseph Road                |                         |            |           | North/South Street: Cold Spring Road |                             |           |       |
| Intersection Orientation: North-South            |                         |            |           | Study Period (hrs): 0.25             |                             |           |       |
| <b>Vehicle Volumes and Adjustments</b>           |                         |            |           |                                      |                             |           |       |
| <b>Major Street</b>                              | Northbound              |            |           | Southbound                           |                             |           |       |
| Movement   | 1                       | 2          | 3         | 4                                    | 5                           | 6         |       |
|  | L                       | T          | R         | L                                    | T                           | R         |       |
| Volume (veh/h)                                   | 2                       | 20         |           |                                      | 14                          | 6         |       |
| Peak-Hour Factor, PHF                            | 0.64                    | 0.64       | 1.00      | 1.00                                 | 0.71                        | 0.71      |       |
| Hourly Flow Rate, HFR (veh/h)                    | 3                       | 31         | 0         | 0                                    | 19                          | 8         |       |
| Percent Heavy Vehicles                           | 0                       | --         | --        | 0                                    | --                          | --        |       |
| Median Type                                      | Undivided               |            |           |                                      |                             |           |       |
| RT Channelized                                   |                         |            | 0         |                                      |                             |           | 0     |
| Lanes  | 0                       | 1          | 0         | 0                                    | 1                           | 0         |       |
| Configuration                                    | LT                      |            |           |                                      |                             |           | TR    |
| Upstream Signal                                  |                         | 0          |           |                                      | 0                           |           |       |
| <b>Minor Street</b>                              | Eastbound               |            |           | Westbound                            |                             |           |       |
| Movement   | 7                       | 8          | 9         | 10                                   | 11                          | 12        |       |
|  | L                       | T          | R         | L                                    | T                           | R         |       |
| Volume (veh/h)                                   | 5                       |            | 1         |                                      |                             |           |       |
| Peak-Hour Factor, PHF                            | 0.50                    | 1.00       | 0.50      | 1.00                                 | 1.00                        | 1.00      |       |
| Hourly Flow Rate, HFR (veh/h)                    | 10                      | 0          | 2         | 0                                    | 0                           | 0         |       |
| Percent Heavy Vehicles                           | 0                       | 0          | 0         | 0                                    | 0                           | 0         |       |
| Percent Grade (%)                                | 0                       |            |           | 0                                    |                             |           |       |
| Flared Approach                                  |                         | N          |           |                                      | N                           |           |       |
| Storage  |                         | 0          |           |                                      | 0                           |           |       |
| RT Channelized                                   |                         |            | 0         |                                      |                             |           | 0     |
| Lanes  | 0                       | 0          | 0         | 0                                    | 0                           | 0         |       |
| Configuration                                    |                         | LR         |           |                                      |                             |           |       |
| <b>Delay, Queue Length, and Level of Service</b> |                         |            |           |                                      |                             |           |       |
| Approach   | Northbound              | Southbound | Westbound |                                      |                             | Eastbound |       |
| Movement   | 1                       | 4          | 7         | 8                                    | 9                           | 10        | 11 12 |
| Lane Configuration                               | LT                      |            |           |                                      |                             |           | LR    |
| v (veh/h)  | 3                       |            |           |                                      |                             |           | 12    |
| C (m) (veh/h)                                    | 1600                    |            |           |                                      |                             |           | 967   |
| v/c  | 0.00                    |            |           |                                      |                             |           | 0.01  |
| 95% queue length                                 | 0.01                    |            |           |                                      |                             |           | 0.04  |
| Control Delay (s/veh)                            | 7.3                     |            |           |                                      |                             |           | 8.8   |
| LOS  | A                       |            |           |                                      |                             |           | A     |
| Approach Delay (s/veh)                           | --                      | --         |           |                                      |                             |           | 8.8   |
| Approach LOS                                     | --                      | --         |           |                                      |                             |           | A     |

| TWO-WAY STOP CONTROL SUMMARY                 |                         |            |           |   |                             |           |    |
|--|-------------------------|------------|-----------|---|-----------------------------|-----------|----|
| General Information                          |                         |            |           | Site Information                            |                             |           |    |
| Analyst                                      | JAG                     |            |           | Intersection                                | Rose Valley and Cold Spring |           |    |
| Agency/Co.                                   | TMA                     |            |           | Jurisdiction                                | Town of Forestburgh         |           |    |
| Date Performed                               | 8/4/2009                |            |           | Analysis Year                               | Existing Condition          |           |    |
| Analysis Time Period                         | Summer Friday Peak Hour |            |           |   |                             |           |    |
| Project Description                          |                         |            |           |   |                             |           |    |
| East/West Street: <i>Rose Valley Road</i>    |                         |            |           | North/South Street: <i>Cold Spring Road</i> |                             |           |    |
| Intersection Orientation: <i>North-South</i> |                         |            |           | Study Period (hrs): <i>0.25</i>             |                             |           |    |
| Vehicle Volumes and Adjustments              |                         |            |           |   |                             |           |    |
| Major Street                                 | Northbound              |            |           | Southbound                                  |                             |           |    |
| Movement                                     | 1                       | 2          | 3         | 4   | 5                           | 6         |    |
|  | L                       | T          | R         | L   | T                           | R         |    |
| Volume (veh/h)                               |                         | 32         | 33        | 17  | 26                          |           |    |
| Peak-Hour Factor, PHF                        | 1.00                    | 0.90       | 0.90      | 0.83  | 0.83                        | 1.00      |    |
| Hourly Flow Rate, HFR (veh/h)                | 0                       | 35         | 36        | 20  | 31                          | 0         |    |
| Percent Heavy Vehicles                       | 0                       | --         | --        | 0   | --                          | --        |    |
| Median Type                                  | Undivided               |            |           |   |                             |           |    |
| RT Channelized                               |                         |            | 0         |   |                             | 0         |    |
| Lanes  | 0                       | 1          | 0         | 0   | 1                           | 0         |    |
| Configuration                                |                         |            | TR        | LT  |                             |           |    |
| Upstream Signal                              |                         | 0          |           |   | 0                           |           |    |
| Minor Street                                 | Eastbound               |            |           | Westbound                                   |                             |           |    |
| Movement                                     | 7                       | 8          | 9         | 10  | 11                          | 12        |    |
|  | L                       | T          | R         | L   | T                           | R         |    |
| Volume (veh/h)                               |                         |            |           | 26  |                             | 16        |    |
| Peak-Hour Factor, PHF                        | 1.00                    | 1.00       | 1.00      | 0.81  | 1.00                        | 0.81      |    |
| Hourly Flow Rate, HFR (veh/h)                | 0                       | 0          | 0         | 32  | 0                           | 19        |    |
| Percent Heavy Vehicles                       | 0                       | 0          | 0         | 7   | 0                           | 7         |    |
| Percent Grade (%)                            |                         | 0          |           |   | 6                           |           |    |
| Flared Approach                              |                         | N          |           |   | N                           |           |    |
| Storage                                      |                         | 0          |           |   | 0                           |           |    |
| RT Channelized                               |                         |            | 0         |   |                             | 0         |    |
| Lanes  | 0                       | 0          | 0         | 0   | 0                           | 0         |    |
| Configuration                                |                         |            |           |   | LR                          |           |    |
| Delay, Queue Length, and Level of Service    |                         |            |           |   |                             |           |    |
| Approach                                     | Northbound              | Southbound | Westbound |   |                             | Eastbound |    |
| Movement                                     | 1                       | 4          | 7         | 8   | 9                           | 10        | 11 |
| Lane Configuration                           |                         | LT         |           | LR  |                             |           |    |
| v (veh/h)                                    |                         | 20         |           | 51  |                             |           |    |
| C (m) (veh/h)                                |                         | 1542       |           | 872   |                             |           |    |
| v/c  |                         | 0.01       |           | 0.06  |                             |           |    |
| 95% queue length                             |                         | 0.04       |           | 0.19  |                             |           |    |
| Control Delay (s/veh)                        |                         | 7.4        |           | 9.4   |                             |           |    |
| LOS  |                         | A          |           | A   |                             |           |    |
| Approach Delay (s/veh)                       | --                      | --         |           | 9.4   |                             |           |    |
| Approach LOS                                 | --                      | --         |           | A   |                             |           |    |

| TWO-WAY STOP CONTROL SUMMARY                     |                         |           |            |                                    |                         |            |      |    |
|--|-------------------------|-----------|------------|------------------------------------|-------------------------|------------|------|----|
| <b>General Information</b>                       |                         |           |            | <b>Site Information</b>            |                         |            |      |    |
| Analyst  | JAG                     |           |            | Intersection                       | Cold Spring and Waverly |            |      |    |
| Agency/Co.                                       | TMA                     |           |            | Jurisdiction                       | Town of Forestburgh     |            |      |    |
| Date Performed                                   | 8/4/2009                |           |            | Analysis Year                      | Existing Condition      |            |      |    |
| Analysis Time Period                             | Summer Friday Peak Hour |           |            |                                    |                         |            |      |    |
| Project Description                              |                         |           |            |                                    |                         |            |      |    |
| East/West Street: Cold Spring Road               |                         |           |            | North/South Street: Waverly Avenue |                         |            |      |    |
| Intersection Orientation: East-West              |                         |           |            | Study Period (hrs): 0.25           |                         |            |      |    |
| <b>Vehicle Volumes and Adjustments</b>           |                         |           |            |                                    |                         |            |      |    |
| <b>Major Street</b>                              | Eastbound               |           |            | Westbound                          |                         |            |      |    |
| Movement   | 1                       | 2         | 3          | 4                                  | 5                       | 6          |      |    |
|  | L                       | T         | R          | L                                  | T                       | R          |      |    |
| Volume (veh/h)                                   | 21                      | 89        |            |                                    | 93                      | 45         |      |    |
| Peak-Hour Factor, PHF                            | 0.79                    | 0.79      | 1.00       | 1.00                               | 0.88                    | 0.88       |      |    |
| Hourly Flow Rate, HFR (veh/h)                    | 26                      | 112       | 0          | 0                                  | 105                     | 51         |      |    |
| Percent Heavy Vehicles                           | 5                       | --        | --         | 0                                  | --                      | --         |      |    |
| Median Type                                      | Undivided               |           |            |                                    |                         |            |      |    |
| RT Channelized                                   |                         |           | 0          |                                    |                         | 0          |      |    |
| Lanes  | 0                       | 1         | 0          | 0                                  | 1                       | 0          |      |    |
| Configuration                                    | LT                      |           |            | TR                                 |                         |            |      |    |
| Upstream Signal                                  |                         | 0         |            |                                    | 0                       |            |      |    |
| <b>Minor Street</b>                              | Northbound              |           |            | Southbound                         |                         |            |      |    |
| Movement   | 7                       | 8         | 9          | 10                                 | 11                      | 12         |      |    |
|  | L                       | T         | R          | L                                  | T                       | R          |      |    |
| Volume (veh/h)                                   |                         |           |            | 72                                 |                         | 32         |      |    |
| Peak-Hour Factor, PHF                            | 1.00                    | 1.00      | 1.00       | 0.68                               | 1.00                    | 0.68       |      |    |
| Hourly Flow Rate, HFR (veh/h)                    | 0                       | 0         | 0          | 105                                | 0                       | 47         |      |    |
| Percent Heavy Vehicles                           | 0                       | 0         | 0          | 3                                  | 0                       | 3          |      |    |
| Percent Grade (%)                                | 0                       |           |            | 8                                  |                         |            |      |    |
| Flared Approach                                  |                         | N         |            |                                    | N                       |            |      |    |
| Storage  |                         | 0         |            |                                    | 0                       |            |      |    |
| RT Channelized                                   |                         |           | 0          |                                    |                         | 0          |      |    |
| Lanes  | 0                       | 0         | 0          | 0                                  | 0                       | 0          |      |    |
| Configuration                                    |                         |           |            | LR                                 |                         |            |      |    |
| <b>Delay, Queue Length, and Level of Service</b> |                         |           |            |                                    |                         |            |      |    |
| Approach   | Eastbound               | Westbound | Northbound |                                    |                         | Southbound |      |    |
| Movement   | 1                       | 4         | 7          | 8                                  | 9                       | 10         | 11   | 12 |
| Lane Configuration                               | LT                      |           |            |                                    |                         | LR         |      |    |
| v (veh/h)  | 26                      |           |            |                                    |                         |            | 152  |    |
| C (m) (veh/h)                                    | 1406                    |           |            |                                    |                         |            | 667  |    |
| v/c  | 0.02                    |           |            |                                    |                         |            | 0.23 |    |
| 95% queue length                                 | 0.06                    |           |            |                                    |                         |            | 0.87 |    |
| Control Delay (s/veh)                            | 7.6                     |           |            |                                    |                         |            | 12.0 |    |
| LOS  | A                       |           |            |                                    |                         | B          |      |    |
| Approach Delay (s/veh)                           | --                      | --        |            |                                    |                         | 12.0       |      |    |
| Approach LOS                                     | --                      | --        |            |                                    |                         | B          |      |    |

| TWO-WAY STOP CONTROL SUMMARY                     |                         |           |                                      |                         |      |            |    |    |
|--|-------------------------|-----------|--------------------------------------|-------------------------|------|------------|----|----|
| <b>General Information</b>                       |                         |           | <b>Site Information</b>              |                         |      |            |    |    |
| Analyst  | JAG                     |           | Intersection                         | E. Broadway/Rose Valley |      |            |    |    |
| Agency/Co.                                       | TMA                     |           | Jurisdiction                         | Town of Thompson        |      |            |    |    |
| Date Performed                                   | 8/4/2009                |           | Analysis Year                        | Existing Condition      |      |            |    |    |
| Analysis Time Period                             | Summer Friday Peak Hour |           |                                      |                         |      |            |    |    |
| Project Description                              |                         |           |                                      |                         |      |            |    |    |
| East/West Street: East Broadway                  |                         |           | North/South Street: Rose Valley Road |                         |      |            |    |    |
| Intersection Orientation: East-West              |                         |           | Study Period (hrs): 0.25             |                         |      |            |    |    |
| <b>Vehicle Volumes and Adjustments</b>           |                         |           |                                      |                         |      |            |    |    |
| <b>Major Street</b>                              | Eastbound               |           |                                      | Westbound               |      |            |    |    |
| Movement   | 1                       | 2         | 3                                    | 4                       | 5    | 6          |    |    |
|  | L                       | T         | R                                    | L                       | T    | R          |    |    |
| Volume (veh/h)                                   | 8                       | 218       | 74                                   | 24                      | 190  | 1          |    |    |
| Peak-Hour Factor, PHF                            | 0.81                    | 0.81      | 0.81                                 | 0.87                    | 0.87 | 0.87       |    |    |
| Hourly Flow Rate, HFR (veh/h)                    | 9                       | 269       | 91                                   | 27                      | 218  | 1          |    |    |
| Percent Heavy Vehicles                           | 7                       | --        | --                                   | 4                       | --   | --         |    |    |
| Median Type                                      | Undivided               |           |                                      |                         |      |            |    |    |
| RT Channelized                                   |                         |           | 0                                    |                         |      | 0          |    |    |
| Lanes  | 0                       | 1         | 0                                    | 0                       | 1    | 0          |    |    |
| Configuration                                    | LTR                     |           |                                      | LTR                     |      |            |    |    |
| Upstream Signal                                  |                         | 0         |                                      |                         | 0    |            |    |    |
| <b>Minor Street</b>                              | Northbound              |           |                                      | Southbound              |      |            |    |    |
| Movement   | 7                       | 8         | 9                                    | 10                      | 11   | 12         |    |    |
|  | L                       | T         | R                                    | L                       | T    | R          |    |    |
| Volume (veh/h)                                   | 10                      | 4         | 47                                   | 0                       | 2    | 5          |    |    |
| Peak-Hour Factor, PHF                            | 0.80                    | 0.80      | 0.80                                 | 0.58                    | 0.58 | 0.58       |    |    |
| Hourly Flow Rate, HFR (veh/h)                    | 12                      | 4         | 58                                   | 0                       | 3    | 8          |    |    |
| Percent Heavy Vehicles                           | 7                       | 7         | 7                                    | 0                       | 0    | 0          |    |    |
| Percent Grade (%)                                | 0                       |           |                                      | 0                       |      |            |    |    |
| Flared Approach                                  |                         | Y         |                                      |                         | N    |            |    |    |
| Storage  |                         | 2         |                                      |                         | 0    |            |    |    |
| RT Channelized                                   |                         |           | 0                                    |                         |      | 0          |    |    |
| Lanes  | 0                       | 1         | 0                                    | 0                       | 1    | 0          |    |    |
| Configuration                                    |                         | LTR       |                                      |                         | LTR  |            |    |    |
| <b>Delay, Queue Length, and Level of Service</b> |                         |           |                                      |                         |      |            |    |    |
| Approach   | Eastbound               | Westbound | Northbound                           |                         |      | Southbound |    |    |
| Movement   | 1                       | 4         | 7                                    | 8                       | 9    | 10         | 11 | 12 |
| Lane Configuration                               | LTR                     | LTR       | LTR                                  |                         |      | LTR        |    |    |
| v (veh/h)  | 9                       | 27        | 74                                   |                         |      | 11         |    |    |
| C (m) (veh/h)                                    | 1321                    | 1188      | 912                                  |                         |      | 625        |    |    |
| v/c  | 0.01                    | 0.02      | 0.08                                 |                         |      | 0.02       |    |    |
| 95% queue length                                 | 0.02                    | 0.07      | 0.26                                 |                         |      | 0.05       |    |    |
| Control Delay (s/veh)                            | 7.7                     | 8.1       | 11.4                                 |                         |      | 10.9       |    |    |
| LOS  | A                       | A         | B                                    |                         |      | B          |    |    |
| Approach Delay (s/veh)                           | --                      | --        | 11.4                                 |                         |      | 10.9       |    |    |
| Approach LOS                                     | --                      | --        | B                                    |                         |      | B          |    |    |

### HCS+™ DETAILED REPORT

| General Information                        | Site Information                          |
|--|---|
| Analyst           JAG                      | Intersection <i>Rt 42, Bank, St. John</i> |
| Agency or Co.   TMA                        | Area Type <i>All other areas</i>          |
| Date Performed  8/4/2009                   | Jurisdiction <i>Village of Monticello</i> |
| Time Period <i>Summer Friday Peak Hour</i> | Analysis Year <i>Existing Condition</i>   |
|  | Project ID                                |

| Volume and Timing Input                   |          |         |      |      |       |      |                        |          |      |      |       |      |  |
|---|----------|---------|------|------|-------|------|------------------------|----------|------|------|-------|------|--|
|   | EB       |         |      | WB   |       |      | NB                     |          |      | SB   |       |      |  |
|   | LT       | TH      | RT   | LT   | TH    | RT   | LT                     | TH       | RT   | LT   | TH    | RT   |  |
| Number of Lanes, N <sub>l</sub>           | 0        | 2       | 0    | 0    | 2     | 0    | 0                      | 1        | 0    | 0    | 1     | 0    |  |
| Lane Group                                |          | LTR     |      |      | LTR   |      |                        | LTR      |      |      | LTR   |      |  |
| Volume, V (vph)                           | 8        | 634     | 49   | 77   | 695   | 24   | 62                     | 10       | 84   | 33   | 27    | 32   |  |
| % Heavy Vehicles, %HV                     | 7        | 7       | 7    | 4    | 4     | 4    | 1                      | 1        | 1    | 2    | 2     | 2    |  |
| Peak-Hour Factor, PHF                     | 0.95     | 0.95    | 0.95 | 0.95 | 0.95  | 0.95 | 0.81                   | 0.81     | 0.81 | 0.88 | 0.88  | 0.88 |  |
| Pretimed (P) or Actuated (A)              | A        | A       | A    | A    | A     | A    | A                      | A        | A    | A    | A     | A    |  |
| Start-up Lost Time, l <sub>1</sub>        |          | 2.0     |      |      | 2.0   |      |                        | 2.0      |      |      | 2.0   |      |  |
| Extension of Effective Green, e           |          | 2.0     |      |      | 2.0   |      |                        | 2.0      |      |      | 2.0   |      |  |
| Arrival Type, AT                          |          | 3       |      |      | 3     |      |                        | 3        |      |      | 3     |      |  |
| Unit Extension, UE                        |          | 3.0     |      |      | 3.0   |      |                        | 3.0      |      |      | 3.0   |      |  |
| Filtering/Metering, I                     |          | 1.000   |      |      | 1.000 |      |                        | 1.000    |      |      | 1.000 |      |  |
| Initial Unmet Demand, Q <sub>b</sub>      |          | 0.0     |      |      | 0.0   |      |                        | 0.0      |      |      | 0.0   |      |  |
| Ped / Bike / RTOR Volumes                 | 0        | 0       | 0    | 0    | 0     | 0    | 0                      | 0        | 0    | 0    | 0     | 0    |  |
| Lane Width                                |          | 11.0    |      |      | 11.0  |      |                        | 11.0     |      |      | 12.0  |      |  |
| Parking / Grade / Parking                 | N        | 0       | N    | N    | 0     | N    | N                      | 0        | N    | N    | 0     | N    |  |
| Parking Maneuvers, N <sub>m</sub>         |          |         |      |      |       |      |                        |          |      |      |       |      |  |
| Buses Stopping, N <sub>b</sub>            |          | 0       |      |      | 0     |      |                        | 0        |      |      | 0     |      |  |
| Min. Time for Pedestrians, G <sub>p</sub> |          | 3.2     |      |      | 3.2   |      |                        | 3.2      |      |      | 3.2   |      |  |
| Phasing                                   | EW Perm  | WB Only | 03   |      | 04    |      | NB Only                | SB Only  | 07   |      | 08    |      |  |
| Timing                                    | G = 43.0 | G = 7.0 | G =  |      | G =   |      | G = 15.0               | G = 10.0 | G =  |      | G =   |      |  |
|   | Y = 5    | Y = 5   | Y =  |      | Y =   |      | Y = 5                  | Y = 5    | Y =  |      | Y =   |      |  |
| Duration of Analysis, T = 0.25            |          |         |      |      |       |      | Cycle Length, C = 95.0 |          |      |      |       |      |  |

| Lane Group Capacity, Control Delay, and LOS Determination |      |       |    |                       |       |    |                  |       |    |      |       |    |
|---|------|-------|----|-----------------------|-------|----|------------------|-------|----|------|-------|----|
|   | EB   |       |    | WB                    |       |    | NB               |       |    | SB   |       |    |
|   | LT   | TH    | RT | LT                    | TH    | RT | LT               | TH    | RT | LT   | TH    | RT |
| Adjusted Flow Rate, v                                     |      | 727   |    |                       | 838   |    |                  | 193   |    |      | 105   |    |
| Lane Group Capacity, c                                    |      | 1383  |    |                       | 1563  |    |                  | 261   |    |      | 184   |    |
| v/c Ratio, X  |      | 0.53  |    |                       | 0.54  |    |                  | 0.74  |    |      | 0.57  |    |
| Total Green Ratio, g/C                                    |      | 0.45  |    |                       | 0.58  |    |                  | 0.16  |    |      | 0.11  |    |
| Uniform Delay, d <sub>1</sub>                             |      | 18.7  |    |                       | 12.2  |    |                  | 38.1  |    |      | 40.5  |    |
| Progression Factor, PF                                    |      | 1.000 |    |                       | 1.000 |    |                  | 1.000 |    |      | 1.000 |    |
| Delay Calibration, k                                      |      | 0.13  |    |                       | 0.14  |    |                  | 0.30  |    |      | 0.17  |    |
| Incremental Delay, d <sub>2</sub>                         |      | 0.4   |    |                       | 0.4   |    |                  | 10.7  |    |      | 4.2   |    |
| Initial Queue Delay, d <sub>3</sub>                       |      | 0.0   |    |                       | 0.0   |    |                  | 0.0   |    |      | 0.0   |    |
| Control Delay   |      | 19.0  |    |                       | 12.6  |    |                  | 48.8  |    |      | 44.7  |    |
| Lane Group LOS  |      | B     |    |                       | B     |    |                  | D     |    |      | D     |    |
| Approach Delay  | 19.0 |       |    | 12.6                  |       |    | 48.8             |       |    | 44.7 |       |    |
| Approach LOS  | B    |       |    | B                     |       |    | D                |       |    | D    |       |    |
| Intersection Delay  | 20.7 |       |    | X <sub>C</sub> = 0.75 |       |    | Intersection LOS |       |    | C    |       |    |

## TWO-WAY STOP CONTROL SUMMARY

| General Information  |                         | Site Information |                            |
|----------------------|-------------------------|------------------|----------------------------|
| Analyst              | JAG                     | Intersection     | W. Broadway/Forestburgh Rd |
| Agency/Co.           | TMA                     | Jurisdiction     | Village of Monticello      |
| Date Performed       | 8/4/2009                | Analysis Year    | Existing Condition         |
| Analysis Time Period | Summer Friday Peak Hour |                  |                            |

|                                       |   |
|---------------------------------------|---|
| Project Description                   |   |
| East/West Street: West Broadway       | North/South Street: Rt 42 (Forestburgh, Broadway) |
| Intersection Orientation: North-South | Study Period (hrs): 0.25                          |

### Vehicle Volumes and Adjustments

| Major Street                  | Northbound |      |      | Southbound |      |      |
|-------------------------------|------------|------|------|------------|------|------|
| Movement                      | 1          | 2    | 3    | 4          | 5    | 6    |
|                               | L          | T    | R    | L          | T    | R    |
| Volume (veh/h)                | 93         | 495  |      |            | 732  | 150  |
| Peak-Hour Factor, PHF         | 0.92       | 0.92 | 1.00 | 1.00       | 0.93 | 0.93 |
| Hourly Flow Rate, HFR (veh/h) | 101        | 538  | 0    | 0          | 787  | 161  |
| Percent Heavy Vehicles        | 7          | --   | --   | 0          | --   | --   |
| Median Type                   | Undivided  |      |      |            |      |      |
| RT Channelized                |            |      | 0    |            |      | 0    |
| Lanes                         | 1          | 1    | 0    | 0          | 1    | 0    |
| Configuration                 | L          | T    |      |            |      | TR   |
| Upstream Signal               |            | 0    |      |            | 0    |      |

| Minor Street                  | Eastbound |      |      | Westbound |      |      |
|-------------------------------|-----------|------|------|-----------|------|------|
| Movement                      | 7         | 8    | 9    | 10        | 11   | 12   |
|                               | L         | T    | R    | L         | T    | R    |
| Volume (veh/h)                | 92        |      | 134  |           |      |      |
| Peak-Hour Factor, PHF         | 0.87      | 1.00 | 0.87 | 1.00      | 1.00 | 1.00 |
| Hourly Flow Rate, HFR (veh/h) | 105       | 0    | 154  | 0         | 0    | 0    |
| Percent Heavy Vehicles        | 5         | 0    | 5    | 0         | 0    | 0    |
| Percent Grade (%)             |           | 0    |      |           | 0    |      |
| Flared Approach               |           | Y    |      |           | N    |      |
| Storage                       |           | 1    |      |           | 0    |      |
| RT Channelized                |           |      | 0    |           |      | 0    |
| Lanes                         | 0         | 0    | 0    | 0         | 0    | 0    |
| Configuration                 |           | LR   |      |           |      |      |

### Delay, Queue Length, and Level of Service

| Approach               | Northbound | Southbound | Westbound |   |   | Eastbound |       |    |
|------------------------|------------|------------|-----------|---|---|-----------|-------|----|
| Movement               | 1          | 4          | 7         | 8 | 9 | 10        | 11    | 12 |
| Lane Configuration     | L          |            |           |   |   |           | LR    |    |
| v (veh/h)              | 101        |            |           |   |   |           | 259   |    |
| C (m) (veh/h)          | 704        |            |           |   |   |           | 180   |    |
| v/c                    | 0.14       |            |           |   |   |           | 1.44  |    |
| 95% queue length       | 0.50       |            |           |   |   |           | 15.96 |    |
| Control Delay (s/veh)  | 11.0       |            |           |   |   |           | 274.4 |    |
| LOS                    | B          |            |           |   |   |           | F     |    |
| Approach Delay (s/veh) | --         | --         |           |   |   |           | 274.4 |    |
| Approach LOS           | --         | --         |           |   |   |           | F     |    |

| TWO-WAY STOP CONTROL SUMMARY              |                         |            |           |                                  |                          |           |    |    |
|---|-------------------------|------------|-----------|----------------------------------|--------------------------|-----------|----|----|
| General Information                       |                         |            |           | Site Information                 |                          |           |    |    |
| Analyst                                   | JAG                     |            |           | Intersection                     | St. Joseph and NYS Rt 42 |           |    |    |
| Agency/Co.                                | TMA                     |            |           | Jurisdiction                     | Town of Forestburgh      |           |    |    |
| Date Performed                            | 8/10/2009               |            |           | Analysis Year                    | Existing Condition       |           |    |    |
| Analysis Time Period                      | Summer Friday Peak Hour |            |           |                                  |                          |           |    |    |
| Project Description                       |                         |            |           |                                  |                          |           |    |    |
| East/West Street: St. Joseph Road         |                         |            |           | North/South Street: NYS Route 42 |                          |           |    |    |
| Intersection Orientation: North-South     |                         |            |           | Study Period (hrs): 0.25         |                          |           |    |    |
| Vehicle Volumes and Adjustments           |                         |            |           |                                  |                          |           |    |    |
| Major Street                              | Northbound              |            |           | Southbound                       |                          |           |    |    |
| Movement                                  | 1                       | 2          | 3         | 4                                | 5                        | 6         |    |    |
|   | L                       | T          | R         | L                                | T                        | R         |    |    |
| Volume (veh/h)                            |                         | 125        | 3         | 0                                | 157                      |           |    |    |
| Peak-Hour Factor, PHF                     | 1.00                    | 0.89       | 0.89      | 0.91                             | 0.91                     | 1.00      |    |    |
| Hourly Flow Rate, HFR (veh/h)             | 0                       | 140        | 3         | 0                                | 172                      | 0         |    |    |
| Percent Heavy Vehicles                    | 0                       | --         | --        | 0                                | --                       | --        |    |    |
| Median Type                               | Undivided               |            |           |                                  |                          |           |    |    |
| RT Channelized                            |                         |            | 0         |                                  |                          | 0         |    |    |
| Lanes                                     | 0                       | 1          | 0         | 0                                | 1                        | 0         |    |    |
| Configuration                             |                         |            | TR        | LT                               |                          |           |    |    |
| Upstream Signal                           |                         | 0          |           |                                  | 0                        |           |    |    |
| Minor Street                              | Eastbound               |            |           | Westbound                        |                          |           |    |    |
| Movement                                  | 7                       | 8          | 9         | 10                               | 11                       | 12        |    |    |
|   | L                       | T          | R         | L                                | T                        | R         |    |    |
| Volume (veh/h)                            |                         |            |           | 5                                |                          | 1         |    |    |
| Peak-Hour Factor, PHF                     | 1.00                    | 1.00       | 1.00      | 0.75                             | 1.00                     | 0.75      |    |    |
| Hourly Flow Rate, HFR (veh/h)             | 0                       | 0          | 0         | 6                                | 0                        | 1         |    |    |
| Percent Heavy Vehicles                    | 0                       | 0          | 0         | 0                                | 0                        | 0         |    |    |
| Percent Grade (%)                         | 0                       |            |           | 0                                |                          |           |    |    |
| Flared Approach                           |                         | N          |           |                                  | N                        |           |    |    |
| Storage                                   |                         | 0          |           |                                  | 0                        |           |    |    |
| RT Channelized                            |                         |            | 0         |                                  |                          | 0         |    |    |
| Lanes                                     | 0                       | 0          | 0         | 0                                | 0                        | 0         |    |    |
| Configuration                             |                         |            |           |                                  | LR                       |           |    |    |
| Delay, Queue Length, and Level of Service |                         |            |           |                                  |                          |           |    |    |
| Approach                                  | Northbound              | Southbound | Westbound |                                  |                          | Eastbound |    |    |
| Movement                                  | 1                       | 4          | 7         | 8                                | 9                        | 10        | 11 | 12 |
| Lane Configuration                        |                         | LT         |           | LR                               |                          |           |    |    |
| v (veh/h)                                 |                         | 0          |           | 7                                |                          |           |    |    |
| C (m) (veh/h)                             |                         | 1452       |           | 708                              |                          |           |    |    |
| v/c                                       |                         | 0.00       |           | 0.01                             |                          |           |    |    |
| 95% queue length                          |                         | 0.00       |           | 0.03                             |                          |           |    |    |
| Control Delay (s/veh)                     |                         | 7.5        |           | 10.1                             |                          |           |    |    |
| LOS                                       |                         | A          |           | B                                |                          |           |    |    |
| Approach Delay (s/veh)                    | --                      | --         | 10.1      |                                  |                          |           |    |    |
| Approach LOS                              | --                      | --         | B         |                                  |                          |           |    |    |

| TWO-WAY STOP CONTROL SUMMARY              |                         |            |           |                                      |                             |           |    |
|---|-------------------------|------------|-----------|--------------------------------------|-----------------------------|-----------|----|
| General Information                       |                         |            |           | Site Information                     |                             |           |    |
| Analyst                                   | JAG                     |            |           | Intersection                         | St . Joseph and Cold Spring |           |    |
| Agency/Co.                                | TMA                     |            |           | Jurisdiction                         | Town of Forestburgh         |           |    |
| Date Performed                            | 8/3/2009                |            |           | Analysis Year                        | Existing Condition          |           |    |
| Analysis Time Period                      | Sunday Peak Hour Summer |            |           |                                      |                             |           |    |
| Project Description                       |                         |            |           |                                      |                             |           |    |
| East/West Street: St. Joseph Road         |                         |            |           | North/South Street: Cold Spring Road |                             |           |    |
| Intersection Orientation: North-South     |                         |            |           | Study Period (hrs): 0.25             |                             |           |    |
| Vehicle Volumes and Adjustments           |                         |            |           |                                      |                             |           |    |
| Major Street                              | Northbound              |            |           | Southbound                           |                             |           |    |
| Movement                                  | 1                       | 2          | 3         | 4                                    | 5                           | 6         |    |
|   | L                       | T          | R         | L                                    | T                           | R         |    |
| Volume (veh/h)                            | 0                       | 7          |           |                                      | 15                          | 2         |    |
| Peak-Hour Factor, PHF                     | 0.58                    | 0.58       | 1.00      | 1.00                                 | 0.61                        | 0.61      |    |
| Hourly Flow Rate, HFR (veh/h)             | 0                       | 12         | 0         | 0                                    | 24                          | 3         |    |
| Percent Heavy Vehicles                    | 0                       | --         | --        | 0                                    | --                          | --        |    |
| Median Type                               | Undivided               |            |           |                                      |                             |           |    |
| RT Channelized                            |                         |            | 0         |                                      |                             | 0         |    |
| Lanes                                     | 0                       | 1          | 0         | 0                                    | 1                           | 0         |    |
| Configuration                             | LT                      |            |           | TR                                   |                             |           |    |
| Upstream Signal                           |                         | 0          |           |                                      | 0                           |           |    |
| Minor Street                              | Eastbound               |            |           | Westbound                            |                             |           |    |
| Movement                                  | 7                       | 8          | 9         | 10                                   | 11                          | 12        |    |
|   | L                       | T          | R         | L                                    | T                           | R         |    |
| Volume (veh/h)                            | 1                       |            | 0         |                                      |                             |           |    |
| Peak-Hour Factor, PHF                     | 0.25                    | 1.00       | 0.25      | 1.00                                 | 1.00                        | 1.00      |    |
| Hourly Flow Rate, HFR (veh/h)             | 4                       | 0          | 0         | 0                                    | 0                           | 0         |    |
| Percent Heavy Vehicles                    | 0                       | 0          | 0         | 0                                    | 0                           | 0         |    |
| Percent Grade (%)                         | 0                       |            |           | 0                                    |                             |           |    |
| Flared Approach                           |                         | N          |           |                                      | N                           |           |    |
| Storage                                   |                         | 0          |           |                                      | 0                           |           |    |
| RT Channelized                            |                         |            | 0         |                                      |                             | 0         |    |
| Lanes                                     | 0                       | 0          | 0         | 0                                    | 0                           | 0         |    |
| Configuration                             |                         | LR         |           |                                      |                             |           |    |
| Delay, Queue Length, and Level of Service |                         |            |           |                                      |                             |           |    |
| Approach                                  | Northbound              | Southbound | Westbound |                                      |                             | Eastbound |    |
| Movement                                  | 1                       | 4          | 7         | 8                                    | 9                           | 10        | 11 |
| Lane Configuration                        | LT                      |            |           |                                      |                             | LR        |    |
| v (veh/h)                                 | 0                       |            |           |                                      |                             | 4         |    |
| C (m) (veh/h)                             | 1600                    |            |           |                                      |                             | 979       |    |
| v/c                                       | 0.00                    |            |           |                                      |                             | 0.00      |    |
| 95% queue length                          | 0.00                    |            |           |                                      |                             | 0.01      |    |
| Control Delay (s/veh)                     | 7.3                     |            |           |                                      |                             | 8.7       |    |
| LOS                                       | A                       |            |           |                                      |                             | A         |    |
| Approach Delay (s/veh)                    | --                      | --         |           |                                      |                             | 8.7       |    |
| Approach LOS                              | --                      | --         |           |                                      |                             | A         |    |



| TWO-WAY STOP CONTROL SUMMARY              |                         |            |           |                                      |                             |           |    |
|---|-------------------------|------------|-----------|--------------------------------------|-----------------------------|-----------|----|
| General Information                       |                         |            |           | Site Information                     |                             |           |    |
| Analyst                                   | JAG                     |            |           | Intersection                         | Rose Valley and Cold Spring |           |    |
| Agency/Co.                                | TMA                     |            |           | Jurisdiction                         | Town of Forestburgh         |           |    |
| Date Performed                            | 8/4/2009                |            |           | Analysis Year                        | Existing Condition          |           |    |
| Analysis Time Period                      | Summer Sunday Peak Hour |            |           |                                      |                             |           |    |
| Project Description                       |                         |            |           |                                      |                             |           |    |
| East/West Street: Rose Valley Road        |                         |            |           | North/South Street: Cold Spring Road |                             |           |    |
| Intersection Orientation: North-South     |                         |            |           | Study Period (hrs): 0.25             |                             |           |    |
| Vehicle Volumes and Adjustments           |                         |            |           |                                      |                             |           |    |
| Major Street                              | Northbound              |            |           | Southbound                           |                             |           |    |
| Movement                                  | 1                       | 2          | 3         | 4                                    | 5                           | 6         |    |
|   | L                       | T          | R         | L                                    | T                           | R         |    |
| Volume (veh/h)                            |                         | 7          | 5         | 13                                   | 1                           |           |    |
| Peak-Hour Factor, PHF                     | 1.00                    | 0.60       | 0.60      | 0.70                                 | 0.70                        | 1.00      |    |
| Hourly Flow Rate, HFR (veh/h)             | 0                       | 11         | 8         | 18                                   | 1                           | 0         |    |
| Percent Heavy Vehicles                    | 0                       | --         | --        | 0                                    | --                          | --        |    |
| Median Type                               | Undivided               |            |           |                                      |                             |           |    |
| RT Channelized                            |                         |            | 0         |                                      |                             | 0         |    |
| Lanes                                     | 0                       | 1          | 0         | 0                                    | 1                           | 0         |    |
| Configuration                             |                         |            | TR        | LT                                   |                             |           |    |
| Upstream Signal                           |                         | 0          |           |                                      | 0                           |           |    |
| Minor Street                              | Eastbound               |            |           | Westbound                            |                             |           |    |
| Movement                                  | 7                       | 8          | 9         | 10                                   | 11                          | 12        |    |
|   | L                       | T          | R         | L                                    | T                           | R         |    |
| Volume (veh/h)                            |                         |            |           | 8                                    |                             | 2         |    |
| Peak-Hour Factor, PHF                     | 1.00                    | 1.00       | 1.00      | 0.50                                 | 1.00                        | 0.50      |    |
| Hourly Flow Rate, HFR (veh/h)             | 0                       | 0          | 0         | 16                                   | 0                           | 4         |    |
| Percent Heavy Vehicles                    | 0                       | 0          | 0         | 10                                   | 0                           | 10        |    |
| Percent Grade (%)                         | 0                       |            |           | 6                                    |                             |           |    |
| Flared Approach                           |                         | N          |           |                                      | N                           |           |    |
| Storage                                   |                         | 0          |           |                                      | 0                           |           |    |
| RT Channelized                            |                         |            | 0         |                                      |                             | 0         |    |
| Lanes                                     | 0                       | 0          | 0         | 0                                    | 0                           | 0         |    |
| Configuration                             |                         |            |           |                                      | LR                          |           |    |
| Delay, Queue Length, and Level of Service |                         |            |           |                                      |                             |           |    |
| Approach                                  | Northbound              | Southbound | Westbound |                                      |                             | Eastbound |    |
| Movement                                  | 1                       | 4          | 7         | 8                                    | 9                           | 10        | 11 |
| Lane Configuration                        |                         | LT         |           | LR                                   |                             |           |    |
| v (veh/h)                                 |                         | 18         |           | 20                                   |                             |           |    |
| C (m) (veh/h)                             |                         | 1611       |           | 934                                  |                             |           |    |
| v/c                                       |                         | 0.01       |           | 0.02                                 |                             |           |    |
| 95% queue length                          |                         | 0.03       |           | 0.07                                 |                             |           |    |
| Control Delay (s/veh)                     |                         | 7.3        |           | 8.9                                  |                             |           |    |
| LOS                                       |                         | A          |           | A                                    |                             |           |    |
| Approach Delay (s/veh)                    | --                      | --         | 8.9       |                                      |                             |           |    |
| Approach LOS                              | --                      | --         | A         |                                      |                             |           |    |

| TWO-WAY STOP CONTROL SUMMARY                     |                         |           |            |                                    |                         |            |      |    |
|--|-------------------------|-----------|------------|------------------------------------|-------------------------|------------|------|----|
| <b>General Information</b>                       |                         |           |            | <b>Site Information</b>            |                         |            |      |    |
| Analyst  | JAG                     |           |            | Intersection                       | Cold Spring and Waverly |            |      |    |
| Agency/Co.                                       | TMA                     |           |            | Jurisdiction                       | Town of Forestburgh     |            |      |    |
| Date Performed                                   | 8/4/2009                |           |            | Analysis Year                      | Existing Condition      |            |      |    |
| Analysis Time Period                             | Summer Sunday Peak Hour |           |            |                                    |                         |            |      |    |
| Project Description                              |                         |           |            |                                    |                         |            |      |    |
| East/West Street: Cold Spring Road               |                         |           |            | North/South Street: Waverly Avenue |                         |            |      |    |
| Intersection Orientation: East-West              |                         |           |            | Study Period (hrs): 0.25           |                         |            |      |    |
| <b>Vehicle Volumes and Adjustments</b>           |                         |           |            |                                    |                         |            |      |    |
| <b>Major Street</b>                              | Eastbound               |           |            | Westbound                          |                         |            |      |    |
| Movement   | 1                       | 2         | 3          | 4                                  | 5                       | 6          |      |    |
|  | L                       | T         | R          | L                                  | T                       | R          |      |    |
| Volume (veh/h)                                   | 14                      | 62        |            |                                    | 53                      | 40         |      |    |
| Peak-Hour Factor, PHF                            | 0.73                    | 0.73      | 1.00       | 1.00                               | 0.89                    | 0.89       |      |    |
| Hourly Flow Rate, HFR (veh/h)                    | 19                      | 84        | 0          | 0                                  | 59                      | 44         |      |    |
| Percent Heavy Vehicles                           | 0                       | --        | --         | 0                                  | --                      | --         |      |    |
| Median Type                                      | Undivided               |           |            |                                    |                         |            |      |    |
| RT Channelized                                   |                         |           | 0          |                                    |                         | 0          |      |    |
| Lanes  | 0                       | 1         | 0          | 0                                  | 1                       | 0          |      |    |
| Configuration                                    | LT                      |           |            |                                    |                         |            | TR   |    |
| Upstream Signal                                  |                         | 0         |            |                                    | 0                       |            |      |    |
| <b>Minor Street</b>                              | Northbound              |           |            | Southbound                         |                         |            |      |    |
| Movement   | 7                       | 8         | 9          | 10                                 | 11                      | 12         |      |    |
|  | L                       | T         | R          | L                                  | T                       | R          |      |    |
| Volume (veh/h)                                   |                         |           |            | 41                                 |                         | 19         |      |    |
| Peak-Hour Factor, PHF                            | 1.00                    | 1.00      | 1.00       | 0.71                               | 1.00                    | 0.71       |      |    |
| Hourly Flow Rate, HFR (veh/h)                    | 0                       | 0         | 0          | 57                                 | 0                       | 26         |      |    |
| Percent Heavy Vehicles                           | 0                       | 0         | 0          | 0                                  | 0                       | 0          |      |    |
| Percent Grade (%)                                | 0                       |           |            | 8                                  |                         |            |      |    |
| Flared Approach                                  |                         | N         |            |                                    | N                       |            |      |    |
| Storage  |                         | 0         |            |                                    | 0                       |            |      |    |
| RT Channelized                                   |                         |           | 0          |                                    |                         | 0          |      |    |
| Lanes  | 0                       | 0         | 0          | 0                                  | 0                       | 0          |      |    |
| Configuration                                    |                         |           |            | LR                                 |                         |            |      |    |
| <b>Delay, Queue Length, and Level of Service</b> |                         |           |            |                                    |                         |            |      |    |
| Approach   | Eastbound               | Westbound | Northbound |                                    |                         | Southbound |      |    |
| Movement   | 1                       | 4         | 7          | 8                                  | 9                       | 10         | 11   | 12 |
| Lane Configuration                               | LT                      |           |            |                                    |                         | LR         |      |    |
| v (veh/h)  | 19                      |           |            |                                    |                         |            | 83   |    |
| C (m) (veh/h)                                    | 1502                    |           |            |                                    |                         |            | 777  |    |
| v/c  | 0.01                    |           |            |                                    |                         |            | 0.11 |    |
| 95% queue length                                 | 0.04                    |           |            |                                    |                         |            | 0.36 |    |
| Control Delay (s/veh)                            | 7.4                     |           |            |                                    |                         |            | 10.2 |    |
| LOS  | A                       |           |            |                                    |                         | B          |      |    |
| Approach Delay (s/veh)                           | --                      | --        |            |                                    |                         | 10.2       |      |    |
| Approach LOS                                     | --                      | --        |            |                                    |                         | B          |      |    |

| TWO-WAY STOP CONTROL SUMMARY                     |                         |           |            |                                      |                         |            |    |    |
|--|-------------------------|-----------|------------|--------------------------------------|-------------------------|------------|----|----|
| <b>General Information</b>                       |                         |           |            | <b>Site Information</b>              |                         |            |    |    |
| Analyst  | JAG                     |           |            | Intersection                         | E. Broadway/Rose Valley |            |    |    |
| Agency/Co.                                       | TMA                     |           |            | Jurisdiction                         | Town of Thompson        |            |    |    |
| Date Performed                                   | 8/4/2009                |           |            | Analysis Year                        | Existing Condition      |            |    |    |
| Analysis Time Period                             | Summer Sunday Peak Hour |           |            |                                      |                         |            |    |    |
| Project Description                              |                         |           |            |                                      |                         |            |    |    |
| East/West Street: East Broadway                  |                         |           |            | North/South Street: Rose Valley Road |                         |            |    |    |
| Intersection Orientation: East-West              |                         |           |            | Study Period (hrs): 0.25             |                         |            |    |    |
| <b>Vehicle Volumes and Adjustments</b>           |                         |           |            |                                      |                         |            |    |    |
| <b>Major Street</b>                              | Eastbound               |           |            | Westbound                            |                         |            |    |    |
| Movement   | 1                       | 2         | 3          | 4                                    | 5                       | 6          |    |    |
|  | L                       | T         | R          | L                                    | T                       | R          |    |    |
| Volume (veh/h)                                   | 4                       | 205       | 40         | 20                                   | 134                     | 0          |    |    |
| Peak-Hour Factor, PHF                            | 0.79                    | 0.79      | 0.79       | 0.84                                 | 0.84                    | 0.84       |    |    |
| Hourly Flow Rate, HFR (veh/h)                    | 5                       | 259       | 50         | 23                                   | 159                     | 0          |    |    |
| Percent Heavy Vehicles                           | 10                      | --        | --         | 4                                    | --                      | --         |    |    |
| Median Type                                      | Undivided               |           |            |                                      |                         |            |    |    |
| RT Channelized                                   |                         |           | 0          |                                      |                         | 0          |    |    |
| Lanes  | 0                       | 1         | 0          | 0                                    | 1                       | 0          |    |    |
| Configuration                                    | LTR                     |           |            | LTR                                  |                         |            |    |    |
| Upstream Signal                                  |                         | 0         |            |                                      | 0                       |            |    |    |
| <b>Minor Street</b>                              | Northbound              |           |            | Southbound                           |                         |            |    |    |
| Movement   | 7                       | 8         | 9          | 10                                   | 11                      | 12         |    |    |
|  | L                       | T         | R          | L                                    | T                       | R          |    |    |
| Volume (veh/h)                                   | 8                       | 0         | 48         | 0                                    | 1                       | 0          |    |    |
| Peak-Hour Factor, PHF                            | 0.70                    | 0.70      | 0.70       | 0.25                                 | 0.25                    | 0.25       |    |    |
| Hourly Flow Rate, HFR (veh/h)                    | 11                      | 0         | 68         | 0                                    | 4                       | 0          |    |    |
| Percent Heavy Vehicles                           | 10                      | 10        | 10         | 0                                    | 0                       | 0          |    |    |
| Percent Grade (%)                                | 0                       |           |            | 0                                    |                         |            |    |    |
| Flared Approach                                  |                         | Y         |            |                                      | N                       |            |    |    |
| Storage  |                         | 2         |            |                                      | 0                       |            |    |    |
| RT Channelized                                   |                         |           | 0          |                                      |                         | 0          |    |    |
| Lanes  | 0                       | 1         | 0          | 0                                    | 1                       | 0          |    |    |
| Configuration                                    |                         | LTR       |            |                                      | LTR                     |            |    |    |
| <b>Delay, Queue Length, and Level of Service</b> |                         |           |            |                                      |                         |            |    |    |
| Approach   | Eastbound               | Westbound | Northbound |                                      |                         | Southbound |    |    |
| Movement   | 1                       | 4         | 7          | 8                                    | 9                       | 10         | 11 | 12 |
| Lane Configuration                               | LTR                     | LTR       | LTR        |                                      |                         | LTR        |    |    |
| v (veh/h)  | 5                       | 23        | 79         |                                      |                         | 4          |    |    |
| C (m) (veh/h)                                    | 1373                    | 1240      | 855        |                                      |                         | 450        |    |    |
| v/c  | 0.00                    | 0.02      | 0.09       |                                      |                         | 0.01       |    |    |
| 95% queue length                                 | 0.01                    | 0.06      | 0.30       |                                      |                         | 0.03       |    |    |
| Control Delay (s/veh)                            | 7.6                     | 8.0       | 10.8       |                                      |                         | 13.1       |    |    |
| LOS  | A                       | A         | B          |                                      |                         | B          |    |    |
| Approach Delay (s/veh)                           | --                      | --        | 10.8       |                                      |                         | 13.1       |    |    |
| Approach LOS                                     | --                      | --        | B          |                                      |                         | B          |    |    |

### HCS+™ DETAILED REPORT

| General Information                        | Site Information                          |
|--|---|
| Analyst <i>JAG</i>                         | Intersection <i>Rt 42, Bank, St. John</i> |
| Agency or Co. <i>TMA</i>                   | Area Type <i>All other areas</i>          |
| Date Performed <i>8/4/2009</i>             | Jurisdiction <i>Village of Monticello</i> |
| Time Period <i>Summer Sunday Peak Hour</i> | Analysis Year <i>Existing Condition</i>   |
|  | Project ID                                |

| Volume and Timing Input                   |          |         |      |      |          |          |                        |       |      |      |       |      |
|---|----------|---------|------|------|----------|----------|------------------------|-------|------|------|-------|------|
|   | EB       |         |      | WB   |          |          | NB                     |       |      | SB   |       |      |
|   | LT       | TH      | RT   | LT   | TH       | RT       | LT                     | TH    | RT   | LT   | TH    | RT   |
| Number of Lanes, N <sub>l</sub>           | 0        | 2       | 0    | 0    | 2        | 0        | 0                      | 1     | 0    | 0    | 1     | 0    |
| Lane Group                                |          | LTR     |      |      | LTR      |          |                        | LTR   |      |      | LTR   |      |
| Volume, V (vph)                           | 7        | 545     | 29   | 41   | 473      | 11       | 51                     | 4     | 59   | 17   | 5     | 10   |
| % Heavy Vehicles, %HV                     | 7        | 7       | 7    | 4    | 4        | 4        | 1                      | 1     | 1    | 2    | 2     | 2    |
| Peak-Hour Factor, PHF                     | 0.88     | 0.88    | 0.88 | 0.92 | 0.92     | 0.92     | 0.79                   | 0.79  | 0.79 | 0.50 | 0.50  | 0.50 |
| Pretimed (P) or Actuated (A)              | A        | A       | A    | A    | A        | A        | A                      | A     | A    | A    | A     | A    |
| Start-up Lost Time, l <sub>1</sub>        |          | 2.0     |      |      | 2.0      |          |                        | 2.0   |      |      | 2.0   |      |
| Extension of Effective Green, e           |          | 2.0     |      |      | 2.0      |          |                        | 2.0   |      |      | 2.0   |      |
| Arrival Type, AT                          |          | 3       |      |      | 3        |          |                        | 3     |      |      | 3     |      |
| Unit Extension, UE                        |          | 3.0     |      |      | 3.0      |          |                        | 3.0   |      |      | 3.0   |      |
| Filtering/Metering, I                     |          | 1.000   |      |      | 1.000    |          |                        | 1.000 |      |      | 1.000 |      |
| Initial Unmet Demand, Q <sub>b</sub>      |          | 0.0     |      |      | 0.0      |          |                        | 0.0   |      |      | 0.0   |      |
| Ped / Bike / RTOR Volumes                 | 0        | 0       | 0    | 0    | 0        | 0        | 0                      | 0     | 0    | 0    | 0     | 0    |
| Lane Width                                |          | 11.0    |      |      | 11.0     |          |                        | 11.0  |      |      | 12.0  |      |
| Parking / Grade / Parking                 | N        | 0       | N    | N    | 0        | N        | N                      | 0     | N    | N    | 0     | N    |
| Parking Maneuvers, N <sub>m</sub>         |          |         |      |      |          |          |                        |       |      |      |       |      |
| Buses Stopping, N <sub>b</sub>            |          | 0       |      |      | 0        |          |                        | 0     |      |      | 0     |      |
| Min. Time for Pedestrians, G <sub>p</sub> |          | 3.2     |      |      | 3.2      |          |                        | 3.2   |      |      | 3.2   |      |
| Phasing                                   | EW Perm  | WB Only | 03   | 04   | NB Only  | SB Only  | 07                     | 08    |      |      |       |      |
| Timing                                    | G = 43.0 | G = 7.0 | G =  | G =  | G = 15.0 | G = 10.0 | G =                    | G =   |      |      |       |      |
|   | Y = 5    | Y = 5   | Y =  | Y =  | Y = 5    | Y = 5    | Y =                    | Y =   |      |      |       |      |
| Duration of Analysis, T = 0.25            |          |         |      |      |          |          | Cycle Length, C = 95.0 |       |      |      |       |      |

| Lane Group Capacity, Control Delay, and LOS Determination |    |       |    |    |                       |    |    |                  |    |    |       |    |
|---|----|-------|----|----|-----------------------|----|----|------------------|----|----|-------|----|
|   | EB |       |    | WB |                       |    | NB |                  |    | SB |       |    |
|   | LT | TH    | RT | LT | TH                    | RT | LT | TH               | RT | LT | TH    | RT |
| Adjusted Flow Rate, v                                     |    | 660   |    |    | 571                   |    |    | 145              |    |    | 64    |    |
| Lane Group Capacity, c                                    |    | 1392  |    |    | 1719                  |    |    | 261              |    |    | 183   |    |
| v/c Ratio, X  |    | 0.47  |    |    | 0.33                  |    |    | 0.56             |    |    | 0.35  |    |
| Total Green Ratio, g/C                                    |    | 0.45  |    |    | 0.58                  |    |    | 0.16             |    |    | 0.11  |    |
| Uniform Delay, d <sub>1</sub>                             |    | 18.1  |    |    | 10.4                  |    |    | 36.9             |    |    | 39.5  |    |
| Progression Factor, PF                                    |    | 1.000 |    |    | 1.000                 |    |    | 1.000            |    |    | 1.000 |    |
| Delay Calibration, k                                      |    | 0.11  |    |    | 0.11                  |    |    | 0.15             |    |    | 0.11  |    |
| Incremental Delay, d <sub>2</sub>                         |    | 0.3   |    |    | 0.1                   |    |    | 2.6              |    |    | 1.2   |    |
| Initial Queue Delay, d <sub>3</sub>                       |    | 0.0   |    |    | 0.0                   |    |    | 0.0              |    |    | 0.0   |    |
| Control Delay   |    | 18.4  |    |    | 10.5                  |    |    | 39.5             |    |    | 40.6  |    |
| Lane Group LOS  |    | B     |    |    | B                     |    |    | D                |    |    | D     |    |
| Approach Delay  |    | 18.4  |    |    | 10.5                  |    |    | 39.5             |    |    | 40.6  |    |
| Approach LOS  |    | B     |    |    | B                     |    |    | D                |    |    | D     |    |
| Intersection Delay  |    | 18.4  |    |    | X <sub>C</sub> = 0.59 |    |    | Intersection LOS |    |    | B     |    |

| TWO-WAY STOP CONTROL SUMMARY                     |                         |            |           |   |                            |           |       |
|--|-------------------------|------------|-----------|---|----------------------------|-----------|-------|
| <b>General Information</b>                       |                         |            |           | <b>Site Information</b>                           |                            |           |       |
| Analyst  | JAG                     |            |           | Intersection                                      | W. Broadway/Forestburgh Rd |           |       |
| Agency/Co.                                       | TMA                     |            |           | Jurisdiction                                      | Village of Monticello      |           |       |
| Date Performed                                   | 8/4/2009                |            |           | Analysis Year                                     | Existing Condition         |           |       |
| Analysis Time Period                             | Summer Sunday Peak Hour |            |           |   |                            |           |       |
| Project Description                              |                         |            |           |   |                            |           |       |
| East/West Street: West Broadway                  |                         |            |           | North/South Street: Rt 42 (Forestburgh, Broadway) |                            |           |       |
| Intersection Orientation: North-South            |                         |            |           | Study Period (hrs): 0.25                          |                            |           |       |
| <b>Vehicle Volumes and Adjustments</b>           |                         |            |           |   |                            |           |       |
| <b>Major Street</b>                              | Northbound              |            |           | Southbound  |                            |           |       |
| Movement   | 1                       | 2          | 3         | 4   | 5                          | 6         |       |
|  | L                       | T          | R         | L   | T                          | R         |       |
| Volume (veh/h)                                   | 74                      | 448        |           |   | 497                        | 116       |       |
| Peak-Hour Factor, PHF                            | 0.95                    | 0.95       | 1.00      | 1.00  | 0.95                       | 0.95      |       |
| Hourly Flow Rate, HFR (veh/h)                    | 77                      | 471        | 0         | 0   | 523                        | 122       |       |
| Percent Heavy Vehicles                           | 7                       | --         | --        | 0   | --                         | --        |       |
| Median Type                                      | Undivided               |            |           |   |                            |           |       |
| RT Channelized                                   |                         |            | 0         |   |                            |           | 0     |
| Lanes  | 1                       | 1          | 0         | 0   | 1                          |           | 0     |
| Configuration                                    | L                       | T          |           |   |                            |           | TR    |
| Upstream Signal                                  |                         | 0          |           |   | 0                          |           |       |
| <b>Minor Street</b>                              | Eastbound               |            |           | Westbound   |                            |           |       |
| Movement   | 7                       | 8          | 9         | 10  | 11                         | 12        |       |
|  | L                       | T          | R         | L   | T                          | R         |       |
| Volume (veh/h)                                   | 100                     |            | 128       |   |                            |           |       |
| Peak-Hour Factor, PHF                            | 0.88                    | 1.00       | 0.88      | 1.00  | 1.00                       | 1.00      |       |
| Hourly Flow Rate, HFR (veh/h)                    | 113                     | 0          | 145       | 0   | 0                          | 0         |       |
| Percent Heavy Vehicles                           | 5                       | 0          | 5         | 0   | 0                          | 0         |       |
| Percent Grade (%)                                |                         | 0          |           |   | 0                          |           |       |
| Flared Approach                                  |                         | Y          |           |   | N                          |           |       |
| Storage  |                         | 1          |           |   | 0                          |           |       |
| RT Channelized                                   |                         |            | 0         |   |                            |           | 0     |
| Lanes  | 0                       | 0          | 0         | 0   | 0                          | 0         | 0     |
| Configuration                                    |                         | LR         |           |   |                            |           |       |
| <b>Delay, Queue Length, and Level of Service</b> |                         |            |           |   |                            |           |       |
| Approach   | Northbound              | Southbound | Westbound |   |                            | Eastbound |       |
| Movement   | 1                       | 4          | 7         | 8   | 9                          | 10        | 11 12 |
| Lane Configuration                               | L                       |            |           |   |                            |           | LR    |
| v (veh/h)  | 77                      |            |           |   |                            |           | 258   |
| C (m) (veh/h)                                    | 917                     |            |           |   |                            |           | 328   |
| v/c  | 0.08                    |            |           |   |                            |           | 0.79  |
| 95% queue length                                 | 0.27                    |            |           |   |                            |           | 6.39  |
| Control Delay (s/veh)                            | 9.3                     |            |           |   |                            |           | 46.6  |
| LOS  | A                       |            |           |   |                            |           | E     |
| Approach Delay (s/veh)                           | --                      | --         |           |   |                            |           | 46.6  |
| Approach LOS                                     | --                      | --         |           |   |                            |           | E     |

| TWO-WAY STOP CONTROL SUMMARY              |                         |            |           |                                  |                          |           |    |
|---|-------------------------|------------|-----------|----------------------------------|--------------------------|-----------|----|
| General Information                       |                         |            |           | Site Information                 |                          |           |    |
| Analyst                                   | JAG                     |            |           | Intersection                     | St. Joseph and NYS Rt 42 |           |    |
| Agency/Co.                                | TMA                     |            |           | Jurisdiction                     | Town of Forestburgh      |           |    |
| Date Performed                            | 8/10/2009               |            |           | Analysis Year                    | Existing Condition       |           |    |
| Analysis Time Period                      | Summer Sunday Peak Hour |            |           |                                  |                          |           |    |
| Project Description                       |                         |            |           |                                  |                          |           |    |
| East/West Street: St. Joseph Road         |                         |            |           | North/South Street: NYS Route 42 |                          |           |    |
| Intersection Orientation: North-South     |                         |            |           | Study Period (hrs): 0.25         |                          |           |    |
| Vehicle Volumes and Adjustments           |                         |            |           |                                  |                          |           |    |
| Major Street                              | Northbound              |            |           | Southbound                       |                          |           |    |
| Movement                                  | 1                       | 2          | 3         | 4                                | 5                        | 6         |    |
|   | L                       | T          | R         | L                                | T                        | R         |    |
| Volume (veh/h)                            |                         | 76         | 4         | 1                                | 230                      |           |    |
| Peak-Hour Factor, PHF                     | 1.00                    | 0.67       | 0.67      | 0.92                             | 0.92                     | 1.00      |    |
| Hourly Flow Rate, HFR (veh/h)             | 0                       | 113        | 5         | 1                                | 249                      | 0         |    |
| Percent Heavy Vehicles                    | 0                       | --         | --        | 0                                | --                       | --        |    |
| Median Type                               | Undivided               |            |           |                                  |                          |           |    |
| RT Channelized                            |                         |            | 0         |                                  |                          | 0         |    |
| Lanes                                     | 0                       | 1          | 0         | 0                                | 1                        | 0         |    |
| Configuration                             |                         |            | TR        | LT                               |                          |           |    |
| Upstream Signal                           |                         | 0          |           |                                  | 0                        |           |    |
| Minor Street                              | Eastbound               |            |           | Westbound                        |                          |           |    |
| Movement                                  | 7                       | 8          | 9         | 10                               | 11                       | 12        |    |
|   | L                       | T          | R         | L                                | T                        | R         |    |
| Volume (veh/h)                            |                         |            |           | 4                                |                          | 1         |    |
| Peak-Hour Factor, PHF                     | 1.00                    | 1.00       | 1.00      | 0.42                             | 1.00                     | 0.42      |    |
| Hourly Flow Rate, HFR (veh/h)             | 0                       | 0          | 0         | 9                                | 0                        | 2         |    |
| Percent Heavy Vehicles                    | 0                       | 0          | 0         | 0                                | 0                        | 0         |    |
| Percent Grade (%)                         | 0                       |            |           | 0                                |                          |           |    |
| Flared Approach                           |                         | N          |           |                                  | N                        |           |    |
| Storage                                   |                         | 0          |           |                                  | 0                        |           |    |
| RT Channelized                            |                         |            | 0         |                                  |                          | 0         |    |
| Lanes                                     | 0                       | 0          | 0         | 0                                | 0                        | 0         |    |
| Configuration                             |                         |            |           |                                  | LR                       |           |    |
| Delay, Queue Length, and Level of Service |                         |            |           |                                  |                          |           |    |
| Approach                                  | Northbound              | Southbound | Westbound |                                  |                          | Eastbound |    |
| Movement                                  | 1                       | 4          | 7         | 8                                | 9                        | 10        | 11 |
| Lane Configuration                        |                         | LT         |           | LR                               |                          |           |    |
| v (veh/h)                                 |                         | 1          |           | 11                               |                          |           |    |
| C (m) (veh/h)                             |                         | 1483       |           | 677                              |                          |           |    |
| v/c                                       |                         | 0.00       |           | 0.02                             |                          |           |    |
| 95% queue length                          |                         | 0.00       |           | 0.05                             |                          |           |    |
| Control Delay (s/veh)                     |                         | 7.4        |           | 10.4                             |                          |           |    |
| LOS                                       |                         | A          |           | B                                |                          |           |    |
| Approach Delay (s/veh)                    | --                      | --         | 10.4      |                                  |                          |           |    |
| Approach LOS                              | --                      | --         | B         |                                  |                          |           |    |

| TWO-WAY STOP CONTROL SUMMARY              |                         |            |           |                                      |                             |           |    |
|---|-------------------------|------------|-----------|--------------------------------------|-----------------------------|-----------|----|
| General Information                       |                         |            |           | Site Information                     |                             |           |    |
| Analyst                                   | JAG                     |            |           | Intersection                         | St . Joseph and Cold Spring |           |    |
| Agency/Co.                                | TMA                     |            |           | Jurisdiction                         | Forestburgh                 |           |    |
| Date Performed                            | 9/16/2009               |            |           | Analysis Year                        | Interim No Build Condition  |           |    |
| Analysis Time Period                      | Friday Peak Hour Summer |            |           |                                      |                             |           |    |
| Project Description                       |                         |            |           |                                      |                             |           |    |
| East/West Street: St. Joseph Road         |                         |            |           | North/South Street: Cold Spring Road |                             |           |    |
| Intersection Orientation: North-South     |                         |            |           | Study Period (hrs): 0.25             |                             |           |    |
| Vehicle Volumes and Adjustments           |                         |            |           |                                      |                             |           |    |
| Major Street                              | Northbound              |            |           | Southbound                           |                             |           |    |
| Movement                                  | 1                       | 2          | 3         | 4                                    | 5                           | 6         |    |
|   | L                       | T          | R         | L                                    | T                           | R         |    |
| Volume (veh/h)                            | 3                       | 22         |           |                                      | 15                          | 6         |    |
| Peak-Hour Factor, PHF                     | 0.64                    | 0.64       | 1.00      | 1.00                                 | 0.71                        | 0.71      |    |
| Hourly Flow Rate, HFR (veh/h)             | 4                       | 34         | 0         | 0                                    | 21                          | 8         |    |
| Percent Heavy Vehicles                    | 0                       | --         | --        | 0                                    | --                          | --        |    |
| Median Type                               | Undivided               |            |           |                                      |                             |           |    |
| RT Channelized                            |                         |            | 0         |                                      |                             | 0         |    |
| Lanes                                     | 0                       | 1          | 0         | 0                                    | 1                           | 0         |    |
| Configuration                             | LT                      |            |           |                                      |                             | TR        |    |
| Upstream Signal                           |                         | 0          |           |                                      | 0                           |           |    |
| Minor Street                              | Eastbound               |            |           | Westbound                            |                             |           |    |
| Movement                                  | 7                       | 8          | 9         | 10                                   | 11                          | 12        |    |
|   | L                       | T          | R         | L                                    | T                           | R         |    |
| Volume (veh/h)                            | 5                       |            | 2         |                                      |                             |           |    |
| Peak-Hour Factor, PHF                     | 0.50                    | 1.00       | 0.50      | 1.00                                 | 1.00                        | 1.00      |    |
| Hourly Flow Rate, HFR (veh/h)             | 10                      | 0          | 4         | 0                                    | 0                           | 0         |    |
| Percent Heavy Vehicles                    | 0                       | 0          | 0         | 0                                    | 0                           | 0         |    |
| Percent Grade (%)                         | 0                       |            |           | 0                                    |                             |           |    |
| Flared Approach                           |                         | N          |           |                                      | N                           |           |    |
| Storage                                   |                         | 0          |           |                                      | 0                           |           |    |
| RT Channelized                            |                         |            | 0         |                                      |                             | 0         |    |
| Lanes                                     | 0                       | 0          | 0         | 0                                    | 0                           | 0         |    |
| Configuration                             |                         | LR         |           |                                      |                             |           |    |
| Delay, Queue Length, and Level of Service |                         |            |           |                                      |                             |           |    |
| Approach                                  | Northbound              | Southbound | Westbound |                                      |                             | Eastbound |    |
| Movement                                  | 1                       | 4          | 7         | 8                                    | 9                           | 10        | 11 |
| Lane Configuration                        | LT                      |            |           |                                      |                             | LR        |    |
| v (veh/h)                                 | 4                       |            |           |                                      |                             | 14        |    |
| C (m) (veh/h)                             | 1597                    |            |           |                                      |                             | 971       |    |
| v/c                                       | 0.00                    |            |           |                                      |                             | 0.01      |    |
| 95% queue length                          | 0.01                    |            |           |                                      |                             | 0.04      |    |
| Control Delay (s/veh)                     | 7.3                     |            |           |                                      |                             | 8.8       |    |
| LOS                                       | A                       |            |           |                                      |                             | A         |    |
| Approach Delay (s/veh)                    | --                      | --         |           |                                      |                             | 8.8       |    |
| Approach LOS                              | --                      | --         |           |                                      |                             | A         |    |

| TWO-WAY STOP CONTROL SUMMARY                     |                         |            |           |   |                             |           |    |
|--|-------------------------|------------|-----------|---|-----------------------------|-----------|----|
| <b>General Information</b>                       |                         |            |           | <b>Site Information</b>                     |                             |           |    |
| Analyst  | JAG                     |            |           | Intersection                                | Rose Valley and Cold Spring |           |    |
| Agency/Co.                                       | TMA                     |            |           | Jurisdiction                                | Town of Forestburgh         |           |    |
| Date Performed                                   | 9/16/2009               |            |           | Analysis Year                               | Interim No Build Condition  |           |    |
| Analysis Time Period                             | Summer Friday Peak Hour |            |           |   |                             |           |    |
| Project Description                              |                         |            |           |   |                             |           |    |
| East/West Street: <i>Rose Valley Road</i>        |                         |            |           | North/South Street: <i>Cold Spring Road</i> |                             |           |    |
| Intersection Orientation: <i>North-South</i>     |                         |            |           | Study Period (hrs): <i>0.25</i>             |                             |           |    |
| <b>Vehicle Volumes and Adjustments</b>           |                         |            |           |   |                             |           |    |
| <b>Major Street</b>                              | Northbound              |            |           | Southbound                                  |                             |           |    |
| Movement   | 1                       | 2          | 3         | 4   | 5                           | 6         |    |
|  | L                       | T          | R         | L   | T                           | R         |    |
| Volume (veh/h)                                   |                         | 34         | 35        | 18  | 29                          |           |    |
| Peak-Hour Factor, PHF                            | 1.00                    | 0.90       | 0.90      | 0.83  | 0.83                        | 1.00      |    |
| Hourly Flow Rate, HFR (veh/h)                    | 0                       | 37         | 38        | 21  | 34                          | 0         |    |
| Percent Heavy Vehicles                           | 0                       | --         | --        | 0   | --                          | --        |    |
| Median Type                                      | Undivided               |            |           |   |                             |           |    |
| RT Channelized                                   |                         |            | 0         |   |                             | 0         |    |
| Lanes  | 0                       | 1          | 0         | 0   | 1                           | 0         |    |
| Configuration                                    |                         |            | TR        | LT  |                             |           |    |
| Upstream Signal                                  |                         | 0          |           |   | 0                           |           |    |
| <b>Minor Street</b>                              | Eastbound               |            |           | Westbound                                   |                             |           |    |
| Movement   | 7                       | 8          | 9         | 10  | 11                          | 12        |    |
|  | L                       | T          | R         | L   | T                           | R         |    |
| Volume (veh/h)                                   |                         |            |           | 28  |                             | 17        |    |
| Peak-Hour Factor, PHF                            | 1.00                    | 1.00       | 1.00      | 0.81  | 1.00                        | 0.81      |    |
| Hourly Flow Rate, HFR (veh/h)                    | 0                       | 0          | 0         | 34  | 0                           | 20        |    |
| Percent Heavy Vehicles                           | 0                       | 0          | 0         | 7   | 0                           | 7         |    |
| Percent Grade (%)                                | 0                       |            |           | 6   |                             |           |    |
| Flared Approach                                  |                         | N          |           |   | N                           |           |    |
| Storage  |                         | 0          |           |   | 0                           |           |    |
| RT Channelized                                   |                         |            | 0         |   |                             | 0         |    |
| Lanes  | 0                       | 0          | 0         | 0   | 0                           | 0         |    |
| Configuration                                    |                         |            |           |   | LR                          |           |    |
| <b>Delay, Queue Length, and Level of Service</b> |                         |            |           |   |                             |           |    |
| Approach   | Northbound              | Southbound | Westbound |   |                             | Eastbound |    |
| Movement   | 1                       | 4          | 7         | 8   | 9                           | 10        | 11 |
| Lane Configuration                               |                         | LT         |           | LR  |                             |           |    |
| v (veh/h)  |                         | 21         |           | 54  |                             |           |    |
| C (m) (veh/h)                                    |                         | 1537       |           | 863   |                             |           |    |
| v/c  |                         | 0.01       |           | 0.06  |                             |           |    |
| 95% queue length                                 |                         | 0.04       |           | 0.20  |                             |           |    |
| Control Delay (s/veh)                            |                         | 7.4        |           | 9.4   |                             |           |    |
| LOS  |                         | A          |           | A   |                             |           |    |
| Approach Delay (s/veh)                           | --                      | --         | 9.4       |   |                             |           |    |
| Approach LOS                                     | --                      | --         | A         |   |                             |           |    |



| TWO-WAY STOP CONTROL SUMMARY                     |                         |            |            |                                    |                            |            |      |    |
|--|-------------------------|------------|------------|------------------------------------|----------------------------|------------|------|----|
| <b>General Information</b>                       |                         |            |            | <b>Site Information</b>            |                            |            |      |    |
| Analyst  | JAG                     |            |            | Intersection                       | Cold Spring and Waverly    |            |      |    |
| Agency/Co.                                       | TMA                     |            |            | Jurisdiction                       | Town of Forestburgh        |            |      |    |
| Date Performed                                   | 9/16/2009               |            |            | Analysis Year                      | Interim No Build Condition |            |      |    |
| Analysis Time Period                             | Summer Friday Peak Hour |            |            |                                    |                            |            |      |    |
| Project Description                              |                         |            |            |                                    |                            |            |      |    |
| East/West Street: Cold Spring Road               |                         |            |            | North/South Street: Waverly Avenue |                            |            |      |    |
| Intersection Orientation: East-West              |                         |            |            | Study Period (hrs): 0.25           |                            |            |      |    |
| <b>Vehicle Volumes and Adjustments</b>           |                         |            |            |                                    |                            |            |      |    |
| <b>Major Street</b>                              |                         | Eastbound  |            |                                    | Westbound                  |            |      |    |
| Movement   | 1                       | 2          | 3          | 4                                  | 5                          | 6          |      |    |
|  | L                       | T          | R          | L                                  | T                          | R          |      |    |
| Volume (veh/h)                                   | 28                      | 95         |            |                                    | 101                        | 48         |      |    |
| Peak-Hour Factor, PHF                            | 0.79                    | 0.79       | 1.00       | 1.00                               | 0.88                       | 0.88       |      |    |
| Hourly Flow Rate, HFR (veh/h)                    | 35                      | 120        | 0          | 0                                  | 114                        | 54         |      |    |
| Percent Heavy Vehicles                           | 5                       | --         | --         | 0                                  | --                         | --         |      |    |
| Median Type                                      | Undivided               |            |            |                                    |                            |            |      |    |
| RT Channelized                                   |                         |            | 0          |                                    |                            |            |      | 0  |
| Lanes  | 0                       | 1          | 0          | 0                                  | 1                          | 0          |      |    |
| Configuration                                    | LT                      |            |            |                                    |                            |            |      | TR |
| Upstream Signal                                  |                         | 0          |            |                                    | 0                          |            |      |    |
| <b>Minor Street</b>                              |                         | Northbound |            |                                    | Southbound                 |            |      |    |
| Movement   | 7                       | 8          | 9          | 10                                 | 11                         | 12         |      |    |
|  | L                       | T          | R          | L                                  | T                          | R          |      |    |
| Volume (veh/h)                                   |                         |            |            | 77                                 |                            | 42         |      |    |
| Peak-Hour Factor, PHF                            | 1.00                    | 1.00       | 1.00       | 0.68                               | 1.00                       | 0.68       |      |    |
| Hourly Flow Rate, HFR (veh/h)                    | 0                       | 0          | 0          | 113                                | 0                          | 61         |      |    |
| Percent Heavy Vehicles                           | 0                       | 0          | 0          | 3                                  | 0                          | 3          |      |    |
| Percent Grade (%)                                |                         | 0          |            |                                    | 8                          |            |      |    |
| Flared Approach                                  |                         | N          |            |                                    | N                          |            |      |    |
| Storage  |                         | 0          |            |                                    | 0                          |            |      |    |
| RT Channelized                                   |                         |            | 0          |                                    |                            | 0          |      |    |
| Lanes  | 0                       | 0          | 0          | 0                                  | 0                          | 0          |      |    |
| Configuration                                    |                         |            |            |                                    | LR                         |            |      |    |
| <b>Delay, Queue Length, and Level of Service</b> |                         |            |            |                                    |                            |            |      |    |
| Approach   | Eastbound               | Westbound  | Northbound |                                    |                            | Southbound |      |    |
| Movement   | 1                       | 4          | 7          | 8                                  | 9                          | 10         | 11   | 12 |
| Lane Configuration                               | LT                      |            |            |                                    |                            |            | LR   |    |
| v (veh/h)  | 35                      |            |            |                                    |                            |            | 174  |    |
| C (m) (veh/h)                                    | 1392                    |            |            |                                    |                            |            | 639  |    |
| v/c  | 0.03                    |            |            |                                    |                            |            | 0.27 |    |
| 95% queue length                                 | 0.08                    |            |            |                                    |                            |            | 1.10 |    |
| Control Delay (s/veh)                            | 7.7                     |            |            |                                    |                            |            | 12.7 |    |
| LOS  | A                       |            |            |                                    |                            |            | B    |    |
| Approach Delay (s/veh)                           | --                      | --         |            |                                    |                            |            | 12.7 |    |
| Approach LOS                                     | --                      | --         |            |                                    |                            |            | B    |    |

| TWO-WAY STOP CONTROL SUMMARY                     |                         |           |            |                                      |                           |            |    |    |
|--|-------------------------|-----------|------------|--------------------------------------|---------------------------|------------|----|----|
| <b>General Information</b>                       |                         |           |            | <b>Site Information</b>              |                           |            |    |    |
| Analyst  | JAG                     |           |            | Intersection                         | E. Broadway/Rose Valley   |            |    |    |
| Agency/Co.                                       | TMA                     |           |            | Jurisdiction                         | Town of Thompson          |            |    |    |
| Date Performed                                   | 9/16/2009               |           |            | Analysis Year                        | Interim No Build Condtion |            |    |    |
| Analysis Time Period                             | Summer Friday Peak Hour |           |            |                                      |                           |            |    |    |
| Project Description                              |                         |           |            |                                      |                           |            |    |    |
| East/West Street: East Broadway                  |                         |           |            | North/South Street: Rose Valley Road |                           |            |    |    |
| Intersection Orientation: East-West              |                         |           |            | Study Period (hrs): 0.25             |                           |            |    |    |
| <b>Vehicle Volumes and Adjustments</b>           |                         |           |            |                                      |                           |            |    |    |
| <b>Major Street</b>                              | Eastbound               |           |            | Westbound                            |                           |            |    |    |
| Movement   | 1                       | 2         | 3          | 4                                    | 5                         | 6          |    |    |
|  | L                       | T         | R          | L                                    | T                         | R          |    |    |
| Volume (veh/h)                                   | 9                       | 234       | 79         | 26                                   | 204                       | 1          |    |    |
| Peak-Hour Factor, PHF                            | 0.81                    | 0.81      | 0.81       | 0.87                                 | 0.87                      | 0.87       |    |    |
| Hourly Flow Rate, HFR (veh/h)                    | 11                      | 288       | 97         | 29                                   | 234                       | 1          |    |    |
| Percent Heavy Vehicles                           | 7                       | --        | --         | 4                                    | --                        | --         |    |    |
| Median Type                                      | Undivided               |           |            |                                      |                           |            |    |    |
| RT Channelized                                   |                         |           | 0          |                                      |                           | 0          |    |    |
| Lanes  | 0                       | 1         | 0          | 0                                    | 1                         | 0          |    |    |
| Configuration                                    | LTR                     |           |            | LTR                                  |                           |            |    |    |
| Upstream Signal                                  |                         | 0         |            |                                      | 0                         |            |    |    |
| <b>Minor Street</b>                              | Northbound              |           |            | Southbound                           |                           |            |    |    |
| Movement   | 7                       | 8         | 9          | 10                                   | 11                        | 12         |    |    |
|  | L                       | T         | R          | L                                    | T                         | R          |    |    |
| Volume (veh/h)                                   | 11                      | 4         | 50         | 0                                    | 2                         | 5          |    |    |
| Peak-Hour Factor, PHF                            | 0.80                    | 0.80      | 0.80       | 0.58                                 | 0.58                      | 0.58       |    |    |
| Hourly Flow Rate, HFR (veh/h)                    | 13                      | 4         | 62         | 0                                    | 3                         | 8          |    |    |
| Percent Heavy Vehicles                           | 7                       | 7         | 7          | 0                                    | 0                         | 0          |    |    |
| Percent Grade (%)                                | 0                       |           |            | 0                                    |                           |            |    |    |
| Flared Approach                                  |                         | Y         |            |                                      | N                         |            |    |    |
| Storage  |                         | 2         |            |                                      | 0                         |            |    |    |
| RT Channelized                                   |                         |           | 0          |                                      |                           | 0          |    |    |
| Lanes  | 0                       | 1         | 0          | 0                                    | 1                         | 0          |    |    |
| Configuration                                    |                         | LTR       |            |                                      | LTR                       |            |    |    |
| <b>Delay, Queue Length, and Level of Service</b> |                         |           |            |                                      |                           |            |    |    |
| Approach   | Eastbound               | Westbound | Northbound |                                      |                           | Southbound |    |    |
| Movement   | 1                       | 4         | 7          | 8                                    | 9                         | 10         | 11 | 12 |
| Lane Configuration                               | LTR                     | LTR       | LTR        |                                      |                           | LTR        |    |    |
| v (veh/h)  | 11                      | 29        | 79         |                                      |                           | 11         |    |    |
| C (m) (veh/h)                                    | 1303                    | 1163      | 886        |                                      |                           | 598        |    |    |
| v/c  | 0.01                    | 0.02      | 0.09       |                                      |                           | 0.02       |    |    |
| 95% queue length                                 | 0.03                    | 0.08      | 0.29       |                                      |                           | 0.06       |    |    |
| Control Delay (s/veh)                            | 7.8                     | 8.2       | 11.7       |                                      |                           | 11.1       |    |    |
| LOS  | A                       | A         | B          |                                      |                           | B          |    |    |
| Approach Delay (s/veh)                           | --                      | --        | 11.7       |                                      |                           | 11.1       |    |    |
| Approach LOS                                     | --                      | --        | B          |                                      |                           | B          |    |    |

### HCS+™ DETAILED REPORT

| General Information                      | Site Information                            |
|--|---|
| Analyst            JAG                   | Intersection     Rt 42, Bank, St. John      |
| Agency or Co.   TMA                      | Area Type        All other areas            |
| Date Performed  9/16/2009                | Jurisdiction     Village of Monticello      |
| Time Period      Summer Friday Peak Hour | Analysis Year    Interim No Build Condition |
|  | Project ID                                  |

| Volume and Timing Input                   |          |         |      |      |          |          |                        |       |      |      |       |      |
|---|----------|---------|------|------|----------|----------|------------------------|-------|------|------|-------|------|
|   | EB       |         |      | WB   |          |          | NB                     |       |      | SB   |       |      |
|   | LT       | TH      | RT   | LT   | TH       | RT       | LT                     | TH    | RT   | LT   | TH    | RT   |
| Number of Lanes, N <sub>i</sub>           | 0        | 2       | 0    | 0    | 2        | 0        | 0                      | 1     | 0    | 0    | 1     | 0    |
| Lane Group                                |          | LTR     |      |      | LTR      |          |                        | LTR   |      |      | LTR   |      |
| Volume, V (vph)                           | 9        | 741     | 82   | 119  | 831      | 26       | 85                     | 11    | 115  | 35   | 29    | 34   |
| % Heavy Vehicles, %HV                     | 7        | 7       | 7    | 4    | 4        | 4        | 1                      | 1     | 1    | 2    | 2     | 2    |
| Peak-Hour Factor, PHF                     | 0.95     | 0.95    | 0.95 | 0.95 | 0.95     | 0.95     | 0.81                   | 0.81  | 0.81 | 0.88 | 0.88  | 0.88 |
| Pretimed (P) or Actuated (A)              | A        | A       | A    | A    | A        | A        | A                      | A     | A    | A    | A     | A    |
| Start-up Lost Time, l <sub>i</sub>        |          | 2.0     |      |      | 2.0      |          |                        | 2.0   |      |      | 2.0   |      |
| Extension of Effective Green, e           |          | 2.0     |      |      | 2.0      |          |                        | 2.0   |      |      | 2.0   |      |
| Arrival Type, AT                          |          | 3       |      |      | 3        |          |                        | 3     |      |      | 3     |      |
| Unit Extension, UE                        |          | 3.0     |      |      | 3.0      |          |                        | 3.0   |      |      | 3.0   |      |
| Filtering/Metering, I                     |          | 1.000   |      |      | 1.000    |          |                        | 1.000 |      |      | 1.000 |      |
| Initial Unmet Demand, Q <sub>b</sub>      |          | 0.0     |      |      | 0.0      |          |                        | 0.0   |      |      | 0.0   |      |
| Ped / Bike / RTOR Volumes                 | 0        | 0       | 0    | 0    | 0        | 0        | 0                      | 0     | 0    | 0    | 0     | 0    |
| Lane Width                                |          | 12.0    |      |      | 12.0     |          |                        | 11.0  |      |      | 12.0  |      |
| Parking / Grade / Parking                 | N        | 0       | N    | N    | 0        | N        | N                      | 0     | N    | N    | 0     | N    |
| Parking Maneuvers, N <sub>m</sub>         |          |         |      |      |          |          |                        |       |      |      |       |      |
| Buses Stopping, N <sub>b</sub>            |          | 0       |      |      | 0        |          |                        | 0     |      |      | 0     |      |
| Min. Time for Pedestrians, G <sub>p</sub> |          | 3.2     |      |      | 3.2      |          |                        | 3.2   |      |      | 3.2   |      |
| Phasing                                   | EW Perm  | WB Only | 03   | 04   | NB Only  | SB Only  | 07                     | 08    |      |      |       |      |
| Timing                                    | G = 38.0 | G = 7.0 | G =  | G =  | G = 20.0 | G = 10.0 | G =                    | G =   |      |      |       |      |
|   | Y = 5    | Y = 5   | Y =  | Y =  | Y = 5    | Y = 5    | Y =                    | Y =   |      |      |       |      |
| Duration of Analysis, T = 0.25            |          |         |      |      |          |          | Cycle Length, C = 95.0 |       |      |      |       |      |

| Lane Group Capacity, Control Delay, and LOS Determination |      |       |    |                       |       |    |                  |       |    |      |       |    |
|---|------|-------|----|-----------------------|-------|----|------------------|-------|----|------|-------|----|
|   | EB   |       |    | WB                    |       |    | NB               |       |    | SB   |       |    |
|   | LT   | TH    | RT | LT                    | TH    | RT | LT               | TH    | RT | LT   | TH    | RT |
| Adjusted Flow Rate, v                                     |      | 875   |    |                       | 1027  |    |                  | 261   |    |      | 112   |    |
| Lane Group Capacity, c                                    |      | 1255  |    |                       | 1249  |    |                  | 348   |    |      | 184   |    |
| v/c Ratio, X  |      | 0.70  |    |                       | 0.82  |    |                  | 0.75  |    |      | 0.61  |    |
| Total Green Ratio, g/C                                    |      | 0.40  |    |                       | 0.53  |    |                  | 0.21  |    |      | 0.11  |    |
| Uniform Delay, d <sub>1</sub>                             |      | 23.7  |    |                       | 18.8  |    |                  | 35.2  |    |      | 40.6  |    |
| Progression Factor, PF                                    |      | 1.000 |    |                       | 1.000 |    |                  | 1.000 |    |      | 1.000 |    |
| Delay Calibration, k                                      |      | 0.26  |    |                       | 0.36  |    |                  | 0.31  |    |      | 0.19  |    |
| Incremental Delay, d <sub>2</sub>                         |      | 1.7   |    |                       | 4.6   |    |                  | 8.8   |    |      | 5.7   |    |
| Initial Queue Delay, d <sub>3</sub>                       |      | 0.0   |    |                       | 0.0   |    |                  | 0.0   |    |      | 0.0   |    |
| Control Delay   |      | 25.4  |    |                       | 23.3  |    |                  | 43.9  |    |      | 46.4  |    |
| Lane Group LOS  |      | C     |    |                       | C     |    |                  | D     |    |      | D     |    |
| Approach Delay  | 25.4 |       |    | 23.3                  |       |    | 43.9             |       |    | 46.4 |       |    |
| Approach LOS  | C    |       |    | C                     |       |    | D                |       |    | D    |       |    |
| Intersection Delay  | 27.6 |       |    | X <sub>C</sub> = 0.89 |       |    | Intersection LOS |       |    | C    |       |    |

| TWO-WAY STOP CONTROL SUMMARY              |                         |            |           |   |                            |           |       |
|---|-------------------------|------------|-----------|---|----------------------------|-----------|-------|
| General Information                       |                         |            |           | Site Information                                  |                            |           |       |
| Analyst                                   | JAG                     |            |           | Intersection                                      | W. Broadway/Forestburg rd  |           |       |
| Agency/Co.                                | TMA                     |            |           | Jurisdiction                                      | Village of Monticello      |           |       |
| Date Performed                            | 9/16/2009               |            |           | Analysis Year                                     | Interim No Build Condition |           |       |
| Analysis Time Period                      | Summer Friday Peak Hour |            |           |   |                            |           |       |
| Project Description                       |                         |            |           |   |                            |           |       |
| East/West Street: West Broadway           |                         |            |           | North/South Street: Rt 42 (Forestburgh, Broadway) |                            |           |       |
| Intersection Orientation: North-South     |                         |            |           | Study Period (hrs): 0.25                          |                            |           |       |
| Vehicle Volumes and Adjustments           |                         |            |           |   |                            |           |       |
| Major Street                              | Northbound              |            |           | Southbound  |                            |           |       |
| Movement                                  | 1                       | 2          | 3         | 4   | 5                          | 6         |       |
|   | L                       | T          | R         | L   | T                          | R         |       |
| Volume (veh/h)                            | 112                     | 599        |           |   | 880                        | 162       |       |
| Peak-Hour Factor, PHF                     | 0.92                    | 0.92       | 1.00      | 1.00  | 0.93                       | 0.93      |       |
| Hourly Flow Rate, HFR (veh/h)             | 121                     | 651        | 0         | 0   | 946                        | 174       |       |
| Percent Heavy Vehicles                    | 7                       | --         | --        | 0   | --                         | --        |       |
| Median Type                               | Undivided               |            |           |   |                            |           |       |
| RT Channelized                            |                         |            | 0         |   |                            | 0         |       |
| Lanes                                     | 1                       | 1          | 0         | 0   | 1                          | 0         |       |
| Configuration                             | L                       | T          |           |   |                            | TR        |       |
| Upstream Signal                           |                         | 0          |           |   | 0                          |           |       |
| Minor Street                              | Eastbound               |            |           | Westbound   |                            |           |       |
| Movement                                  | 7                       | 8          | 9         | 10  | 11                         | 12        |       |
|   | L                       | T          | R         | L   | T                          | R         |       |
| Volume (veh/h)                            | 101                     |            | 153       |   |                            |           |       |
| Peak-Hour Factor, PHF                     | 0.87                    | 1.00       | 0.87      | 1.00  | 1.00                       | 1.00      |       |
| Hourly Flow Rate, HFR (veh/h)             | 116                     | 0          | 175       | 0   | 0                          | 0         |       |
| Percent Heavy Vehicles                    | 5                       | 0          | 5         | 0   | 0                          | 0         |       |
| Percent Grade (%)                         | 0                       |            |           | 0   |                            |           |       |
| Flared Approach                           |                         | Y          |           |   | N                          |           |       |
| Storage                                   |                         | 1          |           |   | 0                          |           |       |
| RT Channelized                            |                         |            | 0         |   |                            | 0         |       |
| Lanes                                     | 0                       | 0          | 0         | 0   | 0                          | 0         |       |
| Configuration                             |                         | LR         |           |   |                            |           |       |
| Delay, Queue Length, and Level of Service |                         |            |           |   |                            |           |       |
| Approach                                  | Northbound              | Southbound | Westbound |   |                            | Eastbound |       |
| Movement                                  | 1                       | 4          | 7         | 8   | 9                          | 10        | 11    |
| Lane Configuration                        | L                       |            |           |   |                            |           | LR    |
| v (veh/h)                                 | 121                     |            |           |   |                            |           | 291   |
| C (m) (veh/h)                             | 606                     |            |           |   |                            |           | 113   |
| v/c                                       | 0.20                    |            |           |   |                            |           | 2.58  |
| 95% queue length                          | 0.74                    |            |           |   |                            |           | 26.39 |
| Control Delay (s/veh)                     | 12.4                    |            |           |   |                            |           | 794.4 |
| LOS                                       | B                       |            |           |   |                            |           | F     |
| Approach Delay (s/veh)                    | --                      | --         |           |   |                            |           | 794.4 |
| Approach LOS                              | --                      | --         |           |   |                            |           | F     |

| TWO-WAY STOP CONTROL SUMMARY                     |                         |            |           |                                  |                            |           |    |
|--|-------------------------|------------|-----------|----------------------------------|----------------------------|-----------|----|
| <b>General Information</b>                       |                         |            |           | <b>Site Information</b>          |                            |           |    |
| Analyst  | JAG                     |            |           | Intersection                     | St. Joseph and NYS Rt 42   |           |    |
| Agency/Co.                                       | TMA                     |            |           | Jurisdiction                     | Town of Forestburgh        |           |    |
| Date Performed                                   | 9/16/2009               |            |           | Analysis Year                    | Interim No Build Condition |           |    |
| Analysis Time Period                             | Summer Friday Peak Hour |            |           |                                  |                            |           |    |
| Project Description                              |                         |            |           |                                  |                            |           |    |
| East/West Street: St. Joseph Road                |                         |            |           | North/South Street: NYS Route 42 |                            |           |    |
| Intersection Orientation: North-South            |                         |            |           | Study Period (hrs): 0.25         |                            |           |    |
| <b>Vehicle Volumes and Adjustments</b>           |                         |            |           |                                  |                            |           |    |
| <b>Major Street</b>                              | Northbound              |            |           | Southbound                       |                            |           |    |
| Movement   | 1                       | 2          | 3         | 4                                | 5                          | 6         |    |
|  | L                       | T          | R         | L                                | T                          | R         |    |
| Volume (veh/h)                                   |                         | 213        | 4         | 0                                | 280                        |           |    |
| Peak-Hour Factor, PHF                            | 1.00                    | 0.89       | 0.89      | 0.91                             | 0.91                       | 1.00      |    |
| Hourly Flow Rate, HFR (veh/h)                    | 0                       | 239        | 4         | 0                                | 307                        | 0         |    |
| Percent Heavy Vehicles                           | 0                       | --         | --        | 0                                | --                         | --        |    |
| Median Type                                      | Undivided               |            |           |                                  |                            |           |    |
| RT Channelized                                   |                         |            | 0         |                                  |                            |           | 0  |
| Lanes  | 0                       | 1          | 0         | 0                                | 1                          | 0         |    |
| Configuration                                    |                         |            | TR        | LT                               |                            |           |    |
| Upstream Signal                                  |                         | 0          |           |                                  | 0                          |           |    |
| <b>Minor Street</b>                              | Eastbound               |            |           | Westbound                        |                            |           |    |
| Movement   | 7                       | 8          | 9         | 10                               | 11                         | 12        |    |
|  | L                       | T          | R         | L                                | T                          | R         |    |
| Volume (veh/h)                                   |                         |            |           | 6                                |                            | 1         |    |
| Peak-Hour Factor, PHF                            | 1.00                    | 1.00       | 1.00      | 0.75                             | 1.00                       | 0.75      |    |
| Hourly Flow Rate, HFR (veh/h)                    | 0                       | 0          | 0         | 8                                | 0                          | 1         |    |
| Percent Heavy Vehicles                           | 0                       | 0          | 0         | 0                                | 0                          | 0         |    |
| Percent Grade (%)                                |                         | 0          |           |                                  | 0                          |           |    |
| Flared Approach                                  |                         | N          |           |                                  | N                          |           |    |
| Storage  |                         | 0          |           |                                  | 0                          |           |    |
| RT Channelized                                   |                         |            | 0         |                                  |                            | 0         |    |
| Lanes  | 0                       | 0          | 0         | 0                                | 0                          | 0         |    |
| Configuration                                    |                         |            |           |                                  | LR                         |           |    |
| <b>Delay, Queue Length, and Level of Service</b> |                         |            |           |                                  |                            |           |    |
| Approach   | Northbound              | Southbound | Westbound |                                  |                            | Eastbound |    |
| Movement   | 1                       | 4          | 7         | 8                                | 9                          | 10        | 11 |
| Lane Configuration                               |                         | LT         |           | LR                               |                            |           |    |
| v (veh/h)  |                         | 0          |           | 9                                |                            |           |    |
| C (m) (veh/h)                                    |                         | 1335       |           | 523                              |                            |           |    |
| v/c  |                         | 0.00       |           | 0.02                             |                            |           |    |
| 95% queue length                                 |                         | 0.00       |           | 0.05                             |                            |           |    |
| Control Delay (s/veh)                            |                         | 7.7        |           | 12.0                             |                            |           |    |
| LOS  |                         | A          |           | B                                |                            |           |    |
| Approach Delay (s/veh)                           | --                      | --         | 12.0      |                                  |                            |           |    |
| Approach LOS                                     | --                      | --         | B         |                                  |                            |           |    |

| TWO-WAY STOP CONTROL SUMMARY              |                         |            |           |                                      |                             |           |      |    |
|---|-------------------------|------------|-----------|--------------------------------------|-----------------------------|-----------|------|----|
| General Information                       |                         |            |           | Site Information                     |                             |           |      |    |
| Analyst                                   | JAG                     |            |           | Intersection                         | St . Joseph and Cold Spring |           |      |    |
| Agency/Co.                                | TMA                     |            |           | Jurisdiction                         | Town of Forestburgh         |           |      |    |
| Date Performed                            | 9/16/2009               |            |           | Analysis Year                        | Interim No Build Condition  |           |      |    |
| Analysis Time Period                      | Sunday Peak Hour Summer |            |           |                                      |                             |           |      |    |
| Project Description                       |                         |            |           |                                      |                             |           |      |    |
| East/West Street: St. Joseph Road         |                         |            |           | North/South Street: Cold Spring Road |                             |           |      |    |
| Intersection Orientation: North-South     |                         |            |           | Study Period (hrs): 0.25             |                             |           |      |    |
| Vehicle Volumes and Adjustments           |                         |            |           |                                      |                             |           |      |    |
| Major Street                              | Northbound              |            |           | Southbound                           |                             |           |      |    |
| Movement                                  | 1                       | 2          | 3         | 4                                    | 5                           | 6         |      |    |
|   | L                       | T          | R         | L                                    | T                           | R         |      |    |
| Volume (veh/h)                            | 1                       | 8          |           |                                      | 16                          | 2         |      |    |
| Peak-Hour Factor, PHF                     | 0.58                    | 0.58       | 1.00      | 1.00                                 | 0.61                        | 0.61      |      |    |
| Hourly Flow Rate, HFR (veh/h)             | 1                       | 13         | 0         | 0                                    | 26                          | 3         |      |    |
| Percent Heavy Vehicles                    | 0                       | --         | --        | 0                                    | --                          | --        |      |    |
| Median Type                               | Undivided               |            |           |                                      |                             |           |      |    |
| RT Channelized                            |                         |            | 0         |                                      |                             | 0         |      |    |
| Lanes                                     | 0                       | 1          | 0         | 0                                    | 1                           | 0         |      |    |
| Configuration                             | LT                      |            |           |                                      |                             |           | TR   |    |
| Upstream Signal                           |                         | 0          |           |                                      | 0                           |           |      |    |
| Minor Street                              | Eastbound               |            |           | Westbound                            |                             |           |      |    |
| Movement                                  | 7                       | 8          | 9         | 10                                   | 11                          | 12        |      |    |
|   | L                       | T          | R         | L                                    | T                           | R         |      |    |
| Volume (veh/h)                            | 1                       |            | 1         |                                      |                             |           |      |    |
| Peak-Hour Factor, PHF                     | 0.25                    | 1.00       | 0.25      | 1.00                                 | 1.00                        | 1.00      |      |    |
| Hourly Flow Rate, HFR (veh/h)             | 4                       | 0          | 4         | 0                                    | 0                           | 0         |      |    |
| Percent Heavy Vehicles                    | 0                       | 0          | 0         | 0                                    | 0                           | 0         |      |    |
| Percent Grade (%)                         | 0                       |            |           | 0                                    |                             |           |      |    |
| Flared Approach                           |                         | N          |           |                                      | N                           |           |      |    |
| Storage                                   |                         | 0          |           |                                      | 0                           |           |      |    |
| RT Channelized                            |                         |            | 0         |                                      |                             | 0         |      |    |
| Lanes                                     | 0                       | 0          | 0         | 0                                    | 0                           | 0         |      |    |
| Configuration                             |                         | LR         |           |                                      |                             |           |      |    |
| Delay, Queue Length, and Level of Service |                         |            |           |                                      |                             |           |      |    |
| Approach                                  | Northbound              | Southbound | Westbound |                                      |                             | Eastbound |      |    |
| Movement                                  | 1                       | 4          | 7         | 8                                    | 9                           | 10        | 11   | 12 |
| Lane Configuration                        | LT                      |            |           |                                      |                             | LR        |      |    |
| v (veh/h)                                 | 1                       |            |           |                                      |                             |           | 8    |    |
| C (m) (veh/h)                             | 1597                    |            |           |                                      |                             |           | 1011 |    |
| v/c                                       | 0.00                    |            |           |                                      |                             |           | 0.01 |    |
| 95% queue length                          | 0.00                    |            |           |                                      |                             |           | 0.02 |    |
| Control Delay (s/veh)                     | 7.3                     |            |           |                                      |                             |           | 8.6  |    |
| LOS                                       | A                       |            |           |                                      |                             |           | A    |    |
| Approach Delay (s/veh)                    | --                      | --         |           |                                      |                             | 8.6       |      |    |
| Approach LOS                              | --                      | --         |           |                                      |                             | A         |      |    |

| TWO-WAY STOP CONTROL SUMMARY              |                         |            |           |                                      |                             |           |    |
|---|-------------------------|------------|-----------|--------------------------------------|-----------------------------|-----------|----|
| General Information                       |                         |            |           | Site Information                     |                             |           |    |
| Analyst                                   | JAG                     |            |           | Intersection                         | Rose Valley and Cold Spring |           |    |
| Agency/Co.                                | TMA                     |            |           | Jurisdiction                         | Town of Forestburgh         |           |    |
| Date Performed                            | 9/16/2009               |            |           | Analysis Year                        | Interim No Build Condition  |           |    |
| Analysis Time Period                      | Summer Sunday Peak Hour |            |           |                                      |                             |           |    |
| Project Description                       |                         |            |           |                                      |                             |           |    |
| East/West Street: Rose Valley Road        |                         |            |           | North/South Street: Cold Spring Road |                             |           |    |
| Intersection Orientation: North-South     |                         |            |           | Study Period (hrs): 0.25             |                             |           |    |
| Vehicle Volumes and Adjustments           |                         |            |           |                                      |                             |           |    |
| Major Street                              | Northbound              |            |           | Southbound                           |                             |           |    |
| Movement                                  | 1                       | 2          | 3         | 4                                    | 5                           | 6         |    |
|   | L                       | T          | R         | L                                    | T                           | R         |    |
| Volume (veh/h)                            |                         | 8          | 5         | 14                                   | 1                           |           |    |
| Peak-Hour Factor, PHF                     | 1.00                    | 0.60       | 0.60      | 0.70                                 | 0.70                        | 1.00      |    |
| Hourly Flow Rate, HFR (veh/h)             | 0                       | 13         | 8         | 20                                   | 1                           | 0         |    |
| Percent Heavy Vehicles                    | 0                       | --         | --        | 0                                    | --                          | --        |    |
| Median Type                               | Undivided               |            |           |                                      |                             |           |    |
| RT Channelized                            |                         |            | 0         |                                      |                             | 0         |    |
| Lanes                                     | 0                       | 1          | 0         | 0                                    | 1                           | 0         |    |
| Configuration                             |                         |            | TR        | LT                                   |                             |           |    |
| Upstream Signal                           |                         | 0          |           |                                      | 0                           |           |    |
| Minor Street                              | Eastbound               |            |           | Westbound                            |                             |           |    |
| Movement                                  | 7                       | 8          | 9         | 10                                   | 11                          | 12        |    |
|   | L                       | T          | R         | L                                    | T                           | R         |    |
| Volume (veh/h)                            |                         |            |           | 9                                    |                             | 2         |    |
| Peak-Hour Factor, PHF                     | 1.00                    | 1.00       | 1.00      | 0.50                                 | 1.00                        | 0.50      |    |
| Hourly Flow Rate, HFR (veh/h)             | 0                       | 0          | 0         | 18                                   | 0                           | 4         |    |
| Percent Heavy Vehicles                    | 0                       | 0          | 0         | 10                                   | 0                           | 10        |    |
| Percent Grade (%)                         | 0                       |            |           | 6                                    |                             |           |    |
| Flared Approach                           |                         | N          |           |                                      | N                           |           |    |
| Storage                                   |                         | 0          |           |                                      | 0                           |           |    |
| RT Channelized                            |                         |            | 0         |                                      |                             | 0         |    |
| Lanes                                     | 0                       | 0          | 0         | 0                                    | 0                           | 0         |    |
| Configuration                             |                         |            |           |                                      | LR                          |           |    |
| Delay, Queue Length, and Level of Service |                         |            |           |                                      |                             |           |    |
| Approach                                  | Northbound              | Southbound | Westbound |                                      |                             | Eastbound |    |
| Movement                                  | 1                       | 4          | 7         | 8                                    | 9                           | 10        | 11 |
| Lane Configuration                        |                         | LT         |           | LR                                   |                             |           |    |
| v (veh/h)                                 |                         | 20         |           | 22                                   |                             |           |    |
| C (m) (veh/h)                             |                         | 1608       |           | 923                                  |                             |           |    |
| v/c                                       |                         | 0.01       |           | 0.02                                 |                             |           |    |
| 95% queue length                          |                         | 0.04       |           | 0.07                                 |                             |           |    |
| Control Delay (s/veh)                     |                         | 7.3        |           | 9.0                                  |                             |           |    |
| LOS                                       |                         | A          |           | A                                    |                             |           |    |
| Approach Delay (s/veh)                    | --                      | --         | 9.0       |                                      |                             |           |    |
| Approach LOS                              | --                      | --         | A         |                                      |                             |           |    |

| TWO-WAY STOP CONTROL SUMMARY                     |                         |           |            |                                    |                            |            |      |    |
|--|-------------------------|-----------|------------|------------------------------------|----------------------------|------------|------|----|
| <b>General Information</b>                       |                         |           |            | <b>Site Information</b>            |                            |            |      |    |
| Analyst  | JAG                     |           |            | Intersection                       | Cold Spring and Waverly    |            |      |    |
| Agency/Co.                                       | TMA                     |           |            | Jurisdiction                       | Town of Forestburgh        |            |      |    |
| Date Performed                                   | 8/4/2009                |           |            | Analysis Year                      | Interim No Build Condition |            |      |    |
| Analysis Time Period                             | Summer Sunday Peak Hour |           |            |                                    |                            |            |      |    |
| Project Description                              |                         |           |            |                                    |                            |            |      |    |
| East/West Street: Cold Spring Road               |                         |           |            | North/South Street: Waverly Avenue |                            |            |      |    |
| Intersection Orientation: East-West              |                         |           |            | Study Period (hrs): 0.25           |                            |            |      |    |
| <b>Vehicle Volumes and Adjustments</b>           |                         |           |            |                                    |                            |            |      |    |
| <b>Major Street</b>                              | Eastbound               |           |            | Westbound                          |                            |            |      |    |
| Movement   | 1                       | 2         | 3          | 4                                  | 5                          | 6          |      |    |
|  | L                       | T         | R          | L                                  | T                          | R          |      |    |
| Volume (veh/h)                                   | 20                      | 66        |            |                                    | 57                         | 43         |      |    |
| Peak-Hour Factor, PHF                            | 0.73                    | 0.73      | 1.00       | 1.00                               | 0.89                       | 0.89       |      |    |
| Hourly Flow Rate, HFR (veh/h)                    | 27                      | 90        | 0          | 0                                  | 64                         | 48         |      |    |
| Percent Heavy Vehicles                           | 0                       | --        | --         | 0                                  | --                         | --         |      |    |
| Median Type                                      | Undivided               |           |            |                                    |                            |            |      |    |
| RT Channelized                                   |                         |           | 0          |                                    |                            |            | 0    |    |
| Lanes  | 0                       | 1         | 0          | 0                                  | 1                          |            | 0    |    |
| Configuration                                    | LT                      |           |            |                                    |                            |            | TR   |    |
| Upstream Signal                                  |                         | 0         |            |                                    | 0                          |            |      |    |
| <b>Minor Street</b>                              | Northbound              |           |            | Southbound                         |                            |            |      |    |
| Movement   | 7                       | 8         | 9          | 10                                 | 11                         | 12         |      |    |
|  | L                       | T         | R          | L                                  | T                          | R          |      |    |
| Volume (veh/h)                                   |                         |           |            | 44                                 |                            | 25         |      |    |
| Peak-Hour Factor, PHF                            | 1.00                    | 1.00      | 1.00       | 0.71                               | 1.00                       | 0.71       |      |    |
| Hourly Flow Rate, HFR (veh/h)                    | 0                       | 0         | 0          | 61                                 | 0                          | 35         |      |    |
| Percent Heavy Vehicles                           | 0                       | 0         | 0          | 0                                  | 0                          | 0          |      |    |
| Percent Grade (%)                                | 0                       |           |            | 8                                  |                            |            |      |    |
| Flared Approach                                  |                         | N         |            |                                    | N                          |            |      |    |
| Storage  |                         | 0         |            |                                    | 0                          |            |      |    |
| RT Channelized                                   |                         |           | 0          |                                    |                            |            | 0    |    |
| Lanes  | 0                       | 0         | 0          | 0                                  | 0                          |            | 0    |    |
| Configuration                                    |                         |           |            |                                    | LR                         |            |      |    |
| <b>Delay, Queue Length, and Level of Service</b> |                         |           |            |                                    |                            |            |      |    |
| Approach   | Eastbound               | Westbound | Northbound |                                    |                            | Southbound |      |    |
| Movement   | 1                       | 4         | 7          | 8                                  | 9                          | 10         | 11   | 12 |
| Lane Configuration                               | LT                      |           |            |                                    |                            |            | LR   |    |
| v (veh/h)  | 27                      |           |            |                                    |                            |            | 96   |    |
| C (m) (veh/h)                                    | 1490                    |           |            |                                    |                            |            | 755  |    |
| v/c  | 0.02                    |           |            |                                    |                            |            | 0.13 |    |
| 95% queue length                                 | 0.06                    |           |            |                                    |                            |            | 0.43 |    |
| Control Delay (s/veh)                            | 7.5                     |           |            |                                    |                            |            | 10.5 |    |
| LOS  | A                       |           |            |                                    |                            |            | B    |    |
| Approach Delay (s/veh)                           | --                      | --        |            |                                    |                            |            | 10.5 |    |
| Approach LOS                                     | --                      | --        |            |                                    |                            |            | B    |    |



| TWO-WAY STOP CONTROL SUMMARY                     |                         |           |            |                                      |                            |            |    |    |
|--|-------------------------|-----------|------------|--------------------------------------|----------------------------|------------|----|----|
| <b>General Information</b>                       |                         |           |            | <b>Site Information</b>              |                            |            |    |    |
| Analyst  | JAG                     |           |            | Intersection                         | E. Broadway/Rose Valley    |            |    |    |
| Agency/Co.                                       | TMA                     |           |            | Jurisdiction                         | Town of Thompson           |            |    |    |
| Date Performed                                   | 9/16/2009               |           |            | Analysis Year                        | Interim No Build Condition |            |    |    |
| Analysis Time Period                             | Summer Sunday Peak Hour |           |            |                                      |                            |            |    |    |
| Project Description                              |                         |           |            |                                      |                            |            |    |    |
| East/West Street: East Broadway                  |                         |           |            | North/South Street: Rose Valley Road |                            |            |    |    |
| Intersection Orientation: East-West              |                         |           |            | Study Period (hrs): 0.25             |                            |            |    |    |
| <b>Vehicle Volumes and Adjustments</b>           |                         |           |            |                                      |                            |            |    |    |
| <b>Major Street</b>                              | Eastbound               |           |            | Westbound                            |                            |            |    |    |
| Movement   | 1                       | 2         | 3          | 4                                    | 5                          | 6          |    |    |
|  | L                       | T         | R          | L                                    | T                          | R          |    |    |
| Volume (veh/h)                                   | 4                       | 220       | 43         | 21                                   | 144                        | 0          |    |    |
| Peak-Hour Factor, PHF                            | 0.79                    | 0.79      | 0.79       | 0.84                                 | 0.84                       | 0.84       |    |    |
| Hourly Flow Rate, HFR (veh/h)                    | 5                       | 278       | 54         | 25                                   | 171                        | 0          |    |    |
| Percent Heavy Vehicles                           | 10                      | --        | --         | 4                                    | --                         | --         |    |    |
| Median Type                                      | Undivided               |           |            |                                      |                            |            |    |    |
| RT Channelized                                   |                         |           | 0          |                                      |                            | 0          |    |    |
| Lanes  | 0                       | 1         | 0          | 0                                    | 1                          | 0          |    |    |
| Configuration                                    | LTR                     |           |            | LTR                                  |                            |            |    |    |
| Upstream Signal                                  |                         | 0         |            |                                      | 0                          |            |    |    |
| <b>Minor Street</b>                              | Northbound              |           |            | Southbound                           |                            |            |    |    |
| Movement   | 7                       | 8         | 9          | 10                                   | 11                         | 12         |    |    |
|  | L                       | T         | R          | L                                    | T                          | R          |    |    |
| Volume (veh/h)                                   | 9                       | 0         | 51         | 0                                    | 1                          | 0          |    |    |
| Peak-Hour Factor, PHF                            | 0.70                    | 0.70      | 0.70       | 0.25                                 | 0.25                       | 0.25       |    |    |
| Hourly Flow Rate, HFR (veh/h)                    | 12                      | 0         | 72         | 0                                    | 4                          | 0          |    |    |
| Percent Heavy Vehicles                           | 10                      | 10        | 10         | 0                                    | 0                          | 0          |    |    |
| Percent Grade (%)                                | 0                       |           |            | 0                                    |                            |            |    |    |
| Flared Approach                                  |                         | Y         |            |                                      | N                          |            |    |    |
| Storage  |                         | 2         |            |                                      | 0                          |            |    |    |
| RT Channelized                                   |                         |           | 0          |                                      |                            | 0          |    |    |
| Lanes  | 0                       | 1         | 0          | 0                                    | 1                          | 0          |    |    |
| Configuration                                    |                         | LTR       |            |                                      | LTR                        |            |    |    |
| <b>Delay, Queue Length, and Level of Service</b> |                         |           |            |                                      |                            |            |    |    |
| Approach   | Eastbound               | Westbound | Northbound |                                      |                            | Southbound |    |    |
| Movement   | 1                       | 4         | 7          | 8                                    | 9                          | 10         | 11 | 12 |
| Lane Configuration                               | LTR                     | LTR       | LTR        |                                      |                            | LTR        |    |    |
| v (veh/h)  | 5                       | 25        | 84         |                                      |                            | 4          |    |    |
| C (m) (veh/h)                                    | 1359                    | 1216      | 835        |                                      |                            | 426        |    |    |
| v/c  | 0.00                    | 0.02      | 0.10       |                                      |                            | 0.01       |    |    |
| 95% queue length                                 | 0.01                    | 0.06      | 0.33       |                                      |                            | 0.03       |    |    |
| Control Delay (s/veh)                            | 7.7                     | 8.0       | 11.0       |                                      |                            | 13.5       |    |    |
| LOS  | A                       | A         | B          |                                      |                            | B          |    |    |
| Approach Delay (s/veh)                           | --                      | --        | 11.0       |                                      |                            | 13.5       |    |    |
| Approach LOS                                     | --                      | --        | B          |                                      |                            | B          |    |    |

### HCS+™ DETAILED REPORT

| General Information                        | Site Information                                |
|--|---|
| Analyst <i>JAG</i>                         | Intersection <i>Rt 42, Bank, St. John</i>       |
| Agency or Co. <i>TMA</i>                   | Area Type <i>All other areas</i>                |
| Date Performed <i>9/16/2009</i>            | Jurisdiction <i>Village of Monticello</i>       |
| Time Period <i>Summer Sunday Peak Hour</i> | Analysis Year <i>Interim No Build Condition</i> |
|  | Project ID                                      |

| Volume and Timing Input                   |          |         |      |      |          |          |                        |       |      |      |       |      |
|---|----------|---------|------|------|----------|----------|------------------------|-------|------|------|-------|------|
|   | EB       |         |      | WB   |          |          | NB                     |       |      | SB   |       |      |
|   | LT       | TH      | RT   | LT   | TH       | RT       | LT                     | TH    | RT   | LT   | TH    | RT   |
| Number of Lanes, N <sub>1</sub>           | 0        | 2       | 0    | 0    | 2        | 0        | 0                      | 1     | 0    | 0    | 1     | 0    |
| Lane Group                                |          | LTR     |      |      | LTR      |          |                        | LTR   |      |      | LTR   |      |
| Volume, V (vph)                           | 8        | 658     | 48   | 55   | 574      | 12       | 73                     | 4     | 80   | 18   | 5     | 11   |
| % Heavy Vehicles, %HV                     | 7        | 7       | 7    | 4    | 4        | 4        | 1                      | 1     | 1    | 2    | 2     | 2    |
| Peak-Hour Factor, PHF                     | 0.88     | 0.88    | 0.88 | 0.92 | 0.92     | 0.92     | 0.79                   | 0.79  | 0.79 | 0.50 | 0.50  | 0.50 |
| Pretimed (P) or Actuated (A)              | A        | A       | A    | A    | A        | A        | A                      | A     | A    | A    | A     | A    |
| Start-up Lost Time, I <sub>1</sub>        |          | 2.0     |      |      | 2.0      |          |                        | 2.0   |      |      | 2.0   |      |
| Extension of Effective Green, e           |          | 2.0     |      |      | 2.0      |          |                        | 2.0   |      |      | 2.0   |      |
| Arrival Type, AT                          |          | 3       |      |      | 3        |          |                        | 3     |      |      | 3     |      |
| Unit Extension, UE                        |          | 3.0     |      |      | 3.0      |          |                        | 3.0   |      |      | 3.0   |      |
| Filtering/Metering, I                     |          | 1.000   |      |      | 1.000    |          |                        | 1.000 |      |      | 1.000 |      |
| Initial Unmet Demand, Q <sub>b</sub>      |          | 0.0     |      |      | 0.0      |          |                        | 0.0   |      |      | 0.0   |      |
| Ped / Bike / RTOR Volumes                 | 0        | 0       | 0    | 0    | 0        | 0        | 0                      | 0     | 0    | 0    | 0     | 0    |
| Lane Width                                |          | 12.0    |      |      | 12.0     |          |                        | 11.0  |      |      | 12.0  |      |
| Parking / Grade / Parking                 | N        | 0       | N    | N    | 0        | N        | N                      | 0     | N    | N    | 0     | N    |
| Parking Maneuvers, N <sub>m</sub>         |          |         |      |      |          |          |                        |       |      |      |       |      |
| Buses Stopping, N <sub>b</sub>            |          | 0       |      |      | 0        |          |                        | 0     |      |      | 0     |      |
| Min. Time for Pedestrians, G <sub>p</sub> |          | 3.2     |      |      | 3.2      |          |                        | 3.2   |      |      | 3.2   |      |
| Phasing                                   | EW Perm  | WB Only | 03   | 04   | NB Only  | SB Only  | 07                     | 08    |      |      |       |      |
| Timing                                    | G = 38.0 | G = 7.0 | G =  | G =  | G = 20.0 | G = 10.0 | G =                    | G =   |      |      |       |      |
|   | Y = 5    | Y = 5   | Y =  | Y =  | Y = 5    | Y = 5    | Y =                    | Y =   |      |      |       |      |
| Duration of Analysis, T = 0.25            |          |         |      |      |          |          | Cycle Length, C = 95.0 |       |      |      |       |      |

| Lane Group Capacity, Control Delay, and LOS Determination |      |       |    |                       |       |    |                  |       |    |      |       |    |
|---|------|-------|----|-----------------------|-------|----|------------------|-------|----|------|-------|----|
|   | EB   |       |    | WB                    |       |    | NB               |       |    | SB   |       |    |
|   | LT   | TH    | RT | LT                    | TH    | RT | LT               | TH    | RT | LT   | TH    | RT |
| Adjusted Flow Rate, v                                     |      | 812   |    |                       | 697   |    |                  | 198   |    |      | 68    |    |
| Lane Group Capacity, c                                    |      | 1267  |    |                       | 1469  |    |                  | 348   |    |      | 183   |    |
| v/c Ratio, X  |      | 0.64  |    |                       | 0.47  |    |                  | 0.57  |    |      | 0.37  |    |
| Total Green Ratio, g/C                                    |      | 0.40  |    |                       | 0.53  |    |                  | 0.21  |    |      | 0.11  |    |
| Uniform Delay, d <sub>1</sub>                             |      | 23.0  |    |                       | 14.2  |    |                  | 33.6  |    |      | 39.6  |    |
| Progression Factor, PF                                    |      | 1.000 |    |                       | 1.000 |    |                  | 1.000 |    |      | 1.000 |    |
| Delay Calibration, k                                      |      | 0.22  |    |                       | 0.11  |    |                  | 0.16  |    |      | 0.11  |    |
| Incremental Delay, d <sub>2</sub>                         |      | 1.1   |    |                       | 0.2   |    |                  | 2.2   |    |      | 1.3   |    |
| Initial Queue Delay, d <sub>3</sub>                       |      | 0.0   |    |                       | 0.0   |    |                  | 0.0   |    |      | 0.0   |    |
| Control Delay   |      | 24.1  |    |                       | 14.4  |    |                  | 35.8  |    |      | 40.8  |    |
| Lane Group LOS  |      | C     |    |                       | B     |    |                  | D     |    |      | D     |    |
| Approach Delay  | 24.1 |       |    | 14.4                  |       |    | 35.8             |       |    | 40.8 |       |    |
| Approach LOS  | C    |       |    | B                     |       |    | D                |       |    | D    |       |    |
| Intersection Delay  | 22.3 |       |    | X <sub>c</sub> = 0.66 |       |    | Intersection LOS |       |    | C    |       |    |

| TWO-WAY STOP CONTROL SUMMARY              |                         |            |           |   |                            |           |       |
|---|-------------------------|------------|-----------|---|----------------------------|-----------|-------|
| General Information                       |                         |            |           | Site Information                                  |                            |           |       |
| Analyst                                   | JAG                     |            |           | Intersection                                      | W. Broadway/Forestburgh Rd |           |       |
| Agency/Co.                                | TMA                     |            |           | Jurisdiction                                      | Village of Monticello      |           |       |
| Date Performed                            | 8/4/2009                |            |           | Analysis Year                                     | Interim No Build Condition |           |       |
| Analysis Time Period                      | Summer Sunday Peak Hour |            |           |   |                            |           |       |
| Project Description                       |                         |            |           |   |                            |           |       |
| East/West Street: West Broadway           |                         |            |           | North/South Street: Rt 42 (Forestburgh, Broadway) |                            |           |       |
| Intersection Orientation: North-South     |                         |            |           | Study Period (hrs): 0.25                          |                            |           |       |
| Vehicle Volumes and Adjustments           |                         |            |           |   |                            |           |       |
| Major Street                              | Northbound              |            |           | Southbound  |                            |           |       |
| Movement                                  | 1                       | 2          | 3         | 4   | 5                          | 6         |       |
|   | L                       | T          | R         | L   | T                          | R         |       |
| Volume (veh/h)                            | 97                      | 563        |           |   | 608                        | 125       |       |
| Peak-Hour Factor, PHF                     | 0.95                    | 0.95       | 1.00      | 1.00  | 0.95                       | 0.95      |       |
| Hourly Flow Rate, HFR (veh/h)             | 102                     | 592        | 0         | 0   | 640                        | 131       |       |
| Percent Heavy Vehicles                    | 7                       | --         | --        | 0   | --                         | --        |       |
| Median Type                               | Undivided               |            |           |   |                            |           |       |
| RT Channelized                            |                         |            | 0         |   |                            |           | 0     |
| Lanes                                     | 1                       | 1          | 0         | 0   | 1                          |           | 0     |
| Configuration                             | L                       | T          |           |   |                            |           | TR    |
| Upstream Signal                           |                         | 0          |           |   | 0                          |           |       |
| Minor Street                              | Eastbound               |            |           | Westbound   |                            |           |       |
| Movement                                  | 7                       | 8          | 9         | 10  | 11                         | 12        |       |
|   | L                       | T          | R         | L   | T                          | R         |       |
| Volume (veh/h)                            | 108                     |            | 155       |   |                            |           |       |
| Peak-Hour Factor, PHF                     | 0.88                    | 1.00       | 0.88      | 1.00  | 1.00                       | 1.00      |       |
| Hourly Flow Rate, HFR (veh/h)             | 122                     | 0          | 176       | 0   | 0                          | 0         |       |
| Percent Heavy Vehicles                    | 5                       | 0          | 5         | 0   | 0                          | 0         |       |
| Percent Grade (%)                         |                         | 0          |           |   | 0                          |           |       |
| Flared Approach                           |                         | Y          |           |   | N                          |           |       |
| Storage                                   |                         | 1          |           |   | 0                          |           |       |
| RT Channelized                            |                         |            | 0         |   |                            |           | 0     |
| Lanes                                     | 0                       | 0          | 0         | 0   | 0                          | 0         | 0     |
| Configuration                             |                         | LR         |           |   |                            |           |       |
| Delay, Queue Length, and Level of Service |                         |            |           |   |                            |           |       |
| Approach                                  | Northbound              | Southbound | Westbound |   |                            | Eastbound |       |
| Movement                                  | 1                       | 4          | 7         | 8   | 9                          | 10        | 11    |
| Lane Configuration                        | L                       |            |           |   |                            |           | LR    |
| v (veh/h)                                 | 102                     |            |           |   |                            |           | 298   |
| C (m) (veh/h)                             | 822                     |            |           |   |                            |           | 215   |
| v/c                                       | 0.12                    |            |           |   |                            |           | 1.39  |
| 95% queue length                          | 0.42                    |            |           |   |                            |           | 16.96 |
| Control Delay (s/veh)                     | 10.0                    |            |           |   |                            |           | 242.7 |
| LOS                                       | A                       |            |           |   |                            |           | F     |
| Approach Delay (s/veh)                    | --                      | --         |           |   |                            |           | 242.7 |
| Approach LOS                              | --                      | --         |           |   |                            |           | F     |

| TWO-WAY STOP CONTROL SUMMARY              |                         |            |           |                                  |                            |           |    |    |
|---|-------------------------|------------|-----------|----------------------------------|----------------------------|-----------|----|----|
| General Information                       |                         |            |           | Site Information                 |                            |           |    |    |
| Analyst                                   | JAG                     |            |           | Intersection                     | St. Joseph and NYS Rt 42   |           |    |    |
| Agency/Co.                                | TMA                     |            |           | Jurisdiction                     | Town of Forestburgh        |           |    |    |
| Date Performed                            | 9/16/2009               |            |           | Analysis Year                    | Interim No Build Condition |           |    |    |
| Analysis Time Period                      | Summer Sunday Peak Hour |            |           |                                  |                            |           |    |    |
| Project Description                       |                         |            |           |                                  |                            |           |    |    |
| East/West Street: St. Joseph Road         |                         |            |           | North/South Street: NYS Route 42 |                            |           |    |    |
| Intersection Orientation: North-South     |                         |            |           | Study Period (hrs): 0.25         |                            |           |    |    |
| Vehicle Volumes and Adjustments           |                         |            |           |                                  |                            |           |    |    |
| Major Street                              | Northbound              |            |           | Southbound                       |                            |           |    |    |
| Movement                                  | 1                       | 2          | 3         | 4                                | 5                          | 6         |    |    |
|   | L                       | T          | R         | L                                | T                          | R         |    |    |
| Volume (veh/h)                            |                         | 179        | 5         | 1                                | 337                        |           |    |    |
| Peak-Hour Factor, PHF                     | 1.00                    | 0.67       | 0.67      | 0.92                             | 0.92                       | 1.00      |    |    |
| Hourly Flow Rate, HFR (veh/h)             | 0                       | 267        | 7         | 1                                | 366                        | 0         |    |    |
| Percent Heavy Vehicles                    | 0                       | --         | --        | 0                                | --                         | --        |    |    |
| Median Type                               | Undivided               |            |           |                                  |                            |           |    |    |
| RT Channelized                            |                         |            | 0         |                                  |                            | 0         |    |    |
| Lanes                                     | 0                       | 1          | 0         | 0                                | 1                          | 0         |    |    |
| Configuration                             |                         |            | TR        | LT                               |                            |           |    |    |
| Upstream Signal                           |                         | 0          |           |                                  | 0                          |           |    |    |
| Minor Street                              | Eastbound               |            |           | Westbound                        |                            |           |    |    |
| Movement                                  | 7                       | 8          | 9         | 10                               | 11                         | 12        |    |    |
|   | L                       | T          | R         | L                                | T                          | R         |    |    |
| Volume (veh/h)                            |                         |            |           | 5                                |                            | 1         |    |    |
| Peak-Hour Factor, PHF                     | 1.00                    | 1.00       | 1.00      | 0.42                             | 1.00                       | 0.42      |    |    |
| Hourly Flow Rate, HFR (veh/h)             | 0                       | 0          | 0         | 11                               | 0                          | 2         |    |    |
| Percent Heavy Vehicles                    | 0                       | 0          | 0         | 0                                | 0                          | 0         |    |    |
| Percent Grade (%)                         | 0                       |            |           | 0                                |                            |           |    |    |
| Flared Approach                           |                         | N          |           |                                  | N                          |           |    |    |
| Storage                                   |                         | 0          |           |                                  | 0                          |           |    |    |
| RT Channelized                            |                         |            | 0         |                                  |                            | 0         |    |    |
| Lanes                                     | 0                       | 0          | 0         | 0                                | 0                          | 0         |    |    |
| Configuration                             |                         |            |           |                                  | LR                         |           |    |    |
| Delay, Queue Length, and Level of Service |                         |            |           |                                  |                            |           |    |    |
| Approach                                  | Northbound              | Southbound | Westbound |                                  |                            | Eastbound |    |    |
| Movement                                  | 1                       | 4          | 7         | 8                                | 9                          | 10        | 11 | 12 |
| Lane Configuration                        |                         | LT         |           | LR                               |                            |           |    |    |
| v (veh/h)                                 |                         | 1          |           | 13                               |                            |           |    |    |
| C (m) (veh/h)                             |                         | 1301       |           | 475                              |                            |           |    |    |
| v/c                                       |                         | 0.00       |           | 0.03                             |                            |           |    |    |
| 95% queue length                          |                         | 0.00       |           | 0.08                             |                            |           |    |    |
| Control Delay (s/veh)                     |                         | 7.8        |           | 12.8                             |                            |           |    |    |
| LOS                                       |                         | A          |           | B                                |                            |           |    |    |
| Approach Delay (s/veh)                    | --                      | --         | 12.8      |                                  |                            |           |    |    |
| Approach LOS                              | --                      | --         | B         |                                  |                            |           |    |    |

| TWO-WAY STOP CONTROL SUMMARY                     |                         |            |           |                                      |                             |           |      |    |
|--|-------------------------|------------|-----------|--------------------------------------|-----------------------------|-----------|------|----|
| <b>General Information</b>                       |                         |            |           | <b>Site Information</b>              |                             |           |      |    |
| Analyst  | JAG                     |            |           | Intersection                         | St . Joseph and Cold Spring |           |      |    |
| Agency/Co.                                       | TMA                     |            |           | Jurisdiction                         | Town of Forestburgh         |           |      |    |
| Date Performed                                   | 9/16/2009               |            |           | Analysis Year                        | Interim Build Condition     |           |      |    |
| Analysis Time Period                             | Friday Peak Hour Summer |            |           |                                      |                             |           |      |    |
| Project Description                              |                         |            |           |                                      |                             |           |      |    |
| East/West Street: St. Joseph Road                |                         |            |           | North/South Street: Cold Spring Road |                             |           |      |    |
| Intersection Orientation: North-South            |                         |            |           | Study Period (hrs): 0.25             |                             |           |      |    |
| <b>Vehicle Volumes and Adjustments</b>           |                         |            |           |                                      |                             |           |      |    |
| <b>Major Street</b>                              | Northbound              |            |           | Southbound                           |                             |           |      |    |
| Movement   | 1                       | 2          | 3         | 4                                    | 5                           | 6         |      |    |
|  | L                       | T          | R         | L                                    | T                           | R         |      |    |
| Volume (veh/h)                                   | 3                       | 56         |           |                                      | 22                          | 8         |      |    |
| Peak-Hour Factor, PHF                            | 0.64                    | 0.64       | 1.00      | 1.00                                 | 0.71                        | 0.71      |      |    |
| Hourly Flow Rate, HFR (veh/h)                    | 4                       | 87         | 0         | 0                                    | 30                          | 11        |      |    |
| Percent Heavy Vehicles                           | 0                       | --         | --        | 0                                    | --                          | --        |      |    |
| Median Type                                      | Undivided               |            |           |                                      |                             |           |      |    |
| RT Channelized                                   |                         |            | 0         |                                      |                             | 0         |      |    |
| Lanes  | 0                       | 1          | 0         | 0                                    | 1                           | 0         |      |    |
| Configuration                                    | LT                      |            |           |                                      |                             | TR        |      |    |
| Upstream Signal                                  |                         | 0          |           |                                      | 0                           |           |      |    |
| <b>Minor Street</b>                              | Eastbound               |            |           | Westbound                            |                             |           |      |    |
| Movement   | 7                       | 8          | 9         | 10                                   | 11                          | 12        |      |    |
|  | L                       | T          | R         | L                                    | T                           | R         |      |    |
| Volume (veh/h)                                   | 6                       |            | 2         |                                      |                             |           |      |    |
| Peak-Hour Factor, PHF                            | 0.50                    | 1.00       | 0.50      | 1.00                                 | 1.00                        | 1.00      |      |    |
| Hourly Flow Rate, HFR (veh/h)                    | 12                      | 0          | 4         | 0                                    | 0                           | 0         |      |    |
| Percent Heavy Vehicles                           | 0                       | 0          | 0         | 0                                    | 0                           | 0         |      |    |
| Percent Grade (%)                                | 0                       |            |           | 0                                    |                             |           |      |    |
| Flared Approach                                  |                         | N          |           |                                      | N                           |           |      |    |
| Storage  |                         | 0          |           |                                      | 0                           |           |      |    |
| RT Channelized                                   |                         |            | 0         |                                      |                             | 0         |      |    |
| Lanes  | 0                       | 0          | 0         | 0                                    | 0                           | 0         |      |    |
| Configuration                                    |                         | LR         |           |                                      |                             |           |      |    |
| <b>Delay, Queue Length, and Level of Service</b> |                         |            |           |                                      |                             |           |      |    |
| Approach   | Northbound              | Southbound | Westbound |                                      |                             | Eastbound |      |    |
| Movement   | 1                       | 4          | 7         | 8                                    | 9                           | 10        | 11   | 12 |
| Lane Configuration                               | LT                      |            |           |                                      |                             |           | LR   |    |
| v (veh/h)  | 4                       |            |           |                                      |                             |           | 16   |    |
| C (m) (veh/h)                                    | 1581                    |            |           |                                      |                             |           | 904  |    |
| v/c  | 0.00                    |            |           |                                      |                             |           | 0.02 |    |
| 95% queue length                                 | 0.01                    |            |           |                                      |                             |           | 0.05 |    |
| Control Delay (s/veh)                            | 7.3                     |            |           |                                      |                             |           | 9.1  |    |
| LOS  | A                       |            |           |                                      |                             |           | A    |    |
| Approach Delay (s/veh)                           | --                      | --         |           |                                      |                             |           | 9.1  |    |
| Approach LOS                                     | --                      | --         |           |                                      |                             |           | A    |    |

| TWO-WAY STOP CONTROL SUMMARY                 |                         |            |           |   |                             |           |    |
|--|-------------------------|------------|-----------|---|-----------------------------|-----------|----|
| General Information                          |                         |            |           | Site Information                            |                             |           |    |
| Analyst                                      | JAG                     |            |           | Intersection                                | Rose Valley and Cold Spring |           |    |
| Agency/Co.                                   | TMA                     |            |           | Jurisdiction                                | Town of Forestburgh         |           |    |
| Date Performed                               | 9/16/2009               |            |           | Analysis Year                               | Interim Build Condition     |           |    |
| Analysis Time Period                         | Summer Friday Peak Hour |            |           |   |                             |           |    |
| Project Description                          |                         |            |           |   |                             |           |    |
| East/West Street: <i>Rose Valley Road</i>    |                         |            |           | North/South Street: <i>Cold Spring Road</i> |                             |           |    |
| Intersection Orientation: <i>North-South</i> |                         |            |           | Study Period (hrs): <i>0.25</i>             |                             |           |    |
| Vehicle Volumes and Adjustments              |                         |            |           |   |                             |           |    |
| Major Street                                 | Northbound              |            |           | Southbound                                  |                             |           |    |
| Movement                                     | 1                       | 2          | 3         | 4   | 5                           | 6         |    |
|  | L                       | T          | R         | L   | T                           | R         |    |
| Volume (veh/h)                               |                         | 71         | 35        | 64  | 37                          |           |    |
| Peak-Hour Factor, PHF                        | 1.00                    | 0.90       | 0.90      | 0.83  | 0.83                        | 1.00      |    |
| Hourly Flow Rate, HFR (veh/h)                | 0                       | 78         | 38        | 77  | 44                          | 0         |    |
| Percent Heavy Vehicles                       | 0                       | --         | --        | 0   | --                          | --        |    |
| Median Type                                  | <i>Undivided</i>        |            |           |   |                             |           |    |
| RT Channelized                               |                         |            | 0         |   |                             | 0         |    |
| Lanes  | 0                       | 1          | 0         | 0   | 1                           | 0         |    |
| Configuration                                |                         |            | TR        | LT  |                             |           |    |
| Upstream Signal                              |                         | 0          |           |   | 0                           |           |    |
| Minor Street                                 | Eastbound               |            |           | Westbound                                   |                             |           |    |
| Movement                                     | 7                       | 8          | 9         | 10  | 11                          | 12        |    |
|  | L                       | T          | R         | L   | T                           | R         |    |
| Volume (veh/h)                               |                         |            |           | 28  |                             | 74        |    |
| Peak-Hour Factor, PHF                        | 1.00                    | 1.00       | 1.00      | 0.81  | 1.00                        | 0.81      |    |
| Hourly Flow Rate, HFR (veh/h)                | 0                       | 0          | 0         | 34  | 0                           | 91        |    |
| Percent Heavy Vehicles                       | 0                       | 0          | 0         | 7   | 0                           | 7         |    |
| Percent Grade (%)                            | 0                       |            |           | 6   |                             |           |    |
| Flared Approach                              |                         | N          |           |   | N                           |           |    |
| Storage                                      |                         | 0          |           |   | 0                           |           |    |
| RT Channelized                               |                         |            | 0         |   |                             | 0         |    |
| Lanes  | 0                       | 0          | 0         | 0   | 0                           | 0         |    |
| Configuration                                |                         |            |           |   | LR                          |           |    |
| Delay, Queue Length, and Level of Service    |                         |            |           |   |                             |           |    |
| Approach                                     | Northbound              | Southbound | Westbound |   |                             | Eastbound |    |
| Movement                                     | 1                       | 4          | 7         | 8   | 9                           | 10        | 11 |
| Lane Configuration                           |                         | LT         |           | LR  |                             |           |    |
| v (veh/h)                                    |                         | 77         |           | 125   |                             |           |    |
| C (m) (veh/h)                                |                         | 1485       |           | 803   |                             |           |    |
| v/c  |                         | 0.05       |           | 0.16  |                             |           |    |
| 95% queue length                             |                         | 0.16       |           | 0.55  |                             |           |    |
| Control Delay (s/veh)                        |                         | 7.6        |           | 10.3  |                             |           |    |
| LOS  |                         | A          |           | B   |                             |           |    |
| Approach Delay (s/veh)                       | --                      | --         | 10.3      |   |                             |           |    |
| Approach LOS                                 | --                      | --         | B         |   |                             |           |    |

| TWO-WAY STOP CONTROL SUMMARY                     |                         |           |            |                                    |                         |            |      |    |
|--|-------------------------|-----------|------------|------------------------------------|-------------------------|------------|------|----|
| <b>General Information</b>                       |                         |           |            | <b>Site Information</b>            |                         |            |      |    |
| Analyst  | JAG                     |           |            | Intersection                       | Cold Spring and Waverly |            |      |    |
| Agency/Co.                                       | TMA                     |           |            | Jurisdiction                       | Town of Forestburgh     |            |      |    |
| Date Performed                                   | 9/16/2009               |           |            | Analysis Year                      | Interim Build Condition |            |      |    |
| Analysis Time Period                             | Summer Friday Peak Hour |           |            |                                    |                         |            |      |    |
| Project Description                              |                         |           |            |                                    |                         |            |      |    |
| East/West Street: Cold Spring Road               |                         |           |            | North/South Street: Waverly Avenue |                         |            |      |    |
| Intersection Orientation: East-West              |                         |           |            | Study Period (hrs): 0.25           |                         |            |      |    |
| <b>Vehicle Volumes and Adjustments</b>           |                         |           |            |                                    |                         |            |      |    |
| <b>Major Street</b>                              | Eastbound               |           |            | Westbound                          |                         |            |      |    |
| Movement   | 1                       | 2         | 3          | 4                                  | 5                       | 6          |      |    |
|  | L                       | T         | R          | L                                  | T                       | R          |      |    |
| Volume (veh/h)                                   | 28                      | 124       |            |                                    | 156                     | 121        |      |    |
| Peak-Hour Factor, PHF                            | 0.79                    | 0.79      | 1.00       | 1.00                               | 0.88                    | 0.88       |      |    |
| Hourly Flow Rate, HFR (veh/h)                    | 35                      | 156       | 0          | 0                                  | 177                     | 137        |      |    |
| Percent Heavy Vehicles                           | 5                       | --        | --         | 0                                  | --                      | --         |      |    |
| Median Type                                      | Undivided               |           |            |                                    |                         |            |      |    |
| RT Channelized                                   |                         |           | 0          |                                    |                         |            |      | 0  |
| Lanes  | 0                       | 1         | 0          | 0                                  | 1                       | 0          |      |    |
| Configuration                                    | LT                      |           |            |                                    |                         |            |      | TR |
| Upstream Signal                                  |                         | 0         |            |                                    | 0                       |            |      |    |
| <b>Minor Street</b>                              | Northbound              |           |            | Southbound                         |                         |            |      |    |
| Movement   | 7                       | 8         | 9          | 10                                 | 11                      | 12         |      |    |
|  | L                       | T         | R          | L                                  | T                       | R          |      |    |
| Volume (veh/h)                                   |                         |           |            | 98                                 |                         | 42         |      |    |
| Peak-Hour Factor, PHF                            | 1.00                    | 1.00      | 1.00       | 0.68                               | 1.00                    | 0.68       |      |    |
| Hourly Flow Rate, HFR (veh/h)                    | 0                       | 0         | 0          | 144                                | 0                       | 61         |      |    |
| Percent Heavy Vehicles                           | 0                       | 0         | 0          | 3                                  | 0                       | 3          |      |    |
| Percent Grade (%)                                |                         | 0         |            |                                    | 8                       |            |      |    |
| Flared Approach                                  |                         | N         |            |                                    | N                       |            |      |    |
| Storage  |                         | 0         |            |                                    | 0                       |            |      |    |
| RT Channelized                                   |                         |           | 0          |                                    |                         | 0          |      |    |
| Lanes  | 0                       | 0         | 0          | 0                                  | 0                       | 0          |      |    |
| Configuration                                    |                         |           |            |                                    | LR                      |            |      |    |
| <b>Delay, Queue Length, and Level of Service</b> |                         |           |            |                                    |                         |            |      |    |
| Approach   | Eastbound               | Westbound | Northbound |                                    |                         | Southbound |      |    |
| Movement   | 1                       | 4         | 7          | 8                                  | 9                       | 10         | 11   | 12 |
| Lane Configuration                               | LT                      |           |            |                                    |                         |            | LR   |    |
| v (veh/h)  | 35                      |           |            |                                    |                         |            | 205  |    |
| C (m) (veh/h)                                    | 1229                    |           |            |                                    |                         |            | 494  |    |
| v/c  | 0.03                    |           |            |                                    |                         |            | 0.41 |    |
| 95% queue length                                 | 0.09                    |           |            |                                    |                         |            | 2.02 |    |
| Control Delay (s/veh)                            | 8.0                     |           |            |                                    |                         |            | 17.4 |    |
| LOS  | A                       |           |            |                                    |                         |            | C    |    |
| Approach Delay (s/veh)                           | --                      | --        |            |                                    |                         |            | 17.4 |    |
| Approach LOS                                     | --                      | --        |            |                                    |                         |            | C    |    |

| TWO-WAY STOP CONTROL SUMMARY                     |                         |           |                                      |                         |      |            |    |    |
|--|-------------------------|-----------|--------------------------------------|-------------------------|------|------------|----|----|
| <b>General Information</b>                       |                         |           | <b>Site Information</b>              |                         |      |            |    |    |
| Analyst  | JAG                     |           | Intersection                         | E. Broadway/Rose Valley |      |            |    |    |
| Agency/Co.                                       | TMA                     |           | Jurisdiction                         | Town of Thompson        |      |            |    |    |
| Date Performed                                   | 9/16/2009               |           | Analysis Year                        | Interim Build Condition |      |            |    |    |
| Analysis Time Period                             | Summer Friday Peak Hour |           |                                      |                         |      |            |    |    |
| Project Description                              |                         |           |                                      |                         |      |            |    |    |
| East/West Street: East Broadway                  |                         |           | North/South Street: Rose Valley Road |                         |      |            |    |    |
| Intersection Orientation: East-West              |                         |           | Study Period (hrs): 0.25             |                         |      |            |    |    |
| <b>Vehicle Volumes and Adjustments</b>           |                         |           |                                      |                         |      |            |    |    |
| <b>Major Street</b>                              | Eastbound               |           |                                      | Westbound               |      |            |    |    |
| Movement   | 1                       | 2         | 3                                    | 4                       | 5    | 6          |    |    |
|  | L                       | T         | R                                    | L                       | T    | R          |    |    |
| Volume (veh/h)                                   | 9                       | 234       | 100                                  | 62                      | 204  | 1          |    |    |
| Peak-Hour Factor, PHF                            | 0.81                    | 0.81      | 0.81                                 | 0.87                    | 0.87 | 0.87       |    |    |
| Hourly Flow Rate, HFR (veh/h)                    | 11                      | 288       | 123                                  | 71                      | 234  | 1          |    |    |
| Percent Heavy Vehicles                           | 7                       | --        | --                                   | 4                       | --   | --         |    |    |
| Median Type                                      | Undivided               |           |                                      |                         |      |            |    |    |
| RT Channelized                                   |                         |           | 0                                    |                         |      | 0          |    |    |
| Lanes  | 0                       | 1         | 0                                    | 0                       | 1    | 0          |    |    |
| Configuration                                    | LTR                     |           |                                      | LTR                     |      |            |    |    |
| Upstream Signal                                  |                         | 0         |                                      |                         | 0    |            |    |    |
| <b>Minor Street</b>                              | Northbound              |           |                                      | Southbound              |      |            |    |    |
| Movement   | 7                       | 8         | 9                                    | 10                      | 11   | 12         |    |    |
|  | L                       | T         | R                                    | L                       | T    | R          |    |    |
| Volume (veh/h)                                   | 20                      | 4         | 86                                   | 0                       | 2    | 5          |    |    |
| Peak-Hour Factor, PHF                            | 0.80                    | 0.80      | 0.80                                 | 0.58                    | 0.58 | 0.58       |    |    |
| Hourly Flow Rate, HFR (veh/h)                    | 24                      | 4         | 107                                  | 0                       | 3    | 8          |    |    |
| Percent Heavy Vehicles                           | 7                       | 7         | 7                                    | 0                       | 0    | 0          |    |    |
| Percent Grade (%)                                | 0                       |           |                                      | 0                       |      |            |    |    |
| Flared Approach                                  |                         | Y         |                                      |                         | N    |            |    |    |
| Storage  |                         | 2         |                                      |                         | 0    |            |    |    |
| RT Channelized                                   |                         |           | 0                                    |                         |      | 0          |    |    |
| Lanes  | 0                       | 1         | 0                                    | 0                       | 1    | 0          |    |    |
| Configuration                                    |                         | LTR       |                                      |                         | LTR  |            |    |    |
| <b>Delay, Queue Length, and Level of Service</b> |                         |           |                                      |                         |      |            |    |    |
| Approach   | Eastbound               | Westbound | Northbound                           |                         |      | Southbound |    |    |
| Movement   | 1                       | 4         | 7                                    | 8                       | 9    | 10         | 11 | 12 |
| Lane Configuration                               | LTR                     | LTR       | LTR                                  |                         |      | LTR        |    |    |
| v (veh/h)  | 11                      | 71        | 135                                  |                         |      | 11         |    |    |
| C (m) (veh/h)                                    | 1303                    | 1137      | 860                                  |                         |      | 545        |    |    |
| v/c  | 0.01                    | 0.06      | 0.16                                 |                         |      | 0.02       |    |    |
| 95% queue length                                 | 0.03                    | 0.20      | 0.56                                 |                         |      | 0.06       |    |    |
| Control Delay (s/veh)                            | 7.8                     | 8.4       | 12.7                                 |                         |      | 11.7       |    |    |
| LOS  | A                       | A         | B                                    |                         |      | B          |    |    |
| Approach Delay (s/veh)                           | --                      | --        | 12.7                                 |                         |      | 11.7       |    |    |
| Approach LOS                                     | --                      | --        | B                                    |                         |      | B          |    |    |



### HCS+™ DETAILED REPORT

| General Information                        | Site Information                             |
|--|--|
| Analyst <i>JAG</i>                         | Intersection <i>Rt 42, Bank, St. Johns</i>   |
| Agency or Co. <i>TMA</i>                   | Area Type <i>All other areas</i>             |
| Date Performed <i>9/16/2009</i>            | Jurisdiction <i>Village of Monticello</i>    |
| Time Period <i>Summer Friday Peak Hour</i> | Analysis Year <i>Interim Build Condition</i> |
|  | Project ID                                   |

| Volume and Timing Input                   |          |         |      |      |          |         |                        |         |      |      |       |      |
|---|----------|---------|------|------|----------|---------|------------------------|---------|------|------|-------|------|
|   | EB       |         |      | WB   |          |         | NB                     |         |      | SB   |       |      |
|   | LT       | TH      | RT   | LT   | TH       | RT      | LT                     | TH      | RT   | LT   | TH    | RT   |
| Number of Lanes, N <sub>1</sub>           | 0        | 2       | 0    | 0    | 2        | 0       | 0                      | 1       | 0    | 0    | 1     | 0    |
| Lane Group                                |          | LTR     |      |      | LTR      |         |                        | LTR     |      |      | LTR   |      |
| Volume, V (vph)                           | 9        | 741     | 89   | 140  | 831      | 26      | 94                     | 11      | 151  | 35   | 29    | 34   |
| % Heavy Vehicles, %HV                     | 7        | 7       | 7    | 4    | 4        | 4       | 1                      | 1       | 1    | 2    | 2     | 2    |
| Peak-Hour Factor, PHF                     | 0.95     | 0.95    | 0.95 | 0.95 | 0.95     | 0.95    | 0.81                   | 0.81    | 0.81 | 0.88 | 0.88  | 0.88 |
| Pretimed (P) or Actuated (A)              | A        | A       | A    | A    | A        | A       | A                      | A       | A    | A    | A     | A    |
| Start-up Lost Time, I <sub>1</sub>        |          | 2.0     |      |      | 2.0      |         |                        | 2.0     |      |      | 2.0   |      |
| Extension of Effective Green, e           |          | 2.0     |      |      | 2.0      |         |                        | 2.0     |      |      | 2.0   |      |
| Arrival Type, AT                          |          | 3       |      |      | 3        |         |                        | 3       |      |      | 3     |      |
| Unit Extension, UE                        |          | 3.0     |      |      | 3.0      |         |                        | 3.0     |      |      | 3.0   |      |
| Filtering/Metering, I                     |          | 1.000   |      |      | 1.000    |         |                        | 1.000   |      |      | 1.000 |      |
| Initial Unmet Demand, Q <sub>b</sub>      |          | 0.0     |      |      | 0.0      |         |                        | 0.0     |      |      | 0.0   |      |
| Ped / Bike / RTOR Volumes                 | 0        | 0       | 0    | 0    | 0        | 0       | 0                      | 0       | 0    | 0    | 0     | 0    |
| Lane Width                                |          | 12.0    |      |      | 12.0     |         |                        | 11.0    |      |      | 12.0  |      |
| Parking / Grade / Parking                 | N        | 0       | N    | N    | 0        | N       | N                      | 0       | N    | N    | 0     | N    |
| Parking Maneuvers, N <sub>m</sub>         |          |         |      |      |          |         |                        |         |      |      |       |      |
| Buses Stopping, N <sub>b</sub>            |          | 0       |      |      | 0        |         |                        | 0       |      |      | 0     |      |
| Min. Time for Pedestrians, G <sub>p</sub> |          | 3.2     |      |      | 3.2      |         |                        | 3.2     |      |      | 3.2   |      |
| Phasing                                   | EW Perm  | WB Only | 03   |      | 04       |         | NB Only                | SB Only | 07   |      | 08    |      |
| Timing                                    | G = 37.0 | G = 7.0 | G =  | G =  | G = 22.0 | G = 9.0 | G =                    | G =     |      |      |       |      |
|   | Y = 5    | Y = 5   | Y =  | Y =  | Y = 5    | Y = 5   | Y =                    | Y =     |      |      |       |      |
| Duration of Analysis, T = 0.25            |          |         |      |      |          |         | Cycle Length, C = 95.0 |         |      |      |       |      |

| Lane Group Capacity, Control Delay, and LOS Determination |      |       |    |                       |       |    |                  |       |    |      |       |    |
|---|------|-------|----|-----------------------|-------|----|------------------|-------|----|------|-------|----|
|   | EB   |       |    | WB                    |       |    | NB               |       |    | SB   |       |    |
|   | LT   | TH    | RT | LT                    | TH    | RT | LT               | TH    | RT | LT   | TH    | RT |
| Adjusted Flow Rate, v                                     |      | 883   |    |                       | 1049  |    |                  | 316   |    |      | 112   |    |
| Lane Group Capacity, c                                    |      | 1220  |    |                       | 1204  |    |                  | 381   |    |      | 165   |    |
| v/c Ratio, X  |      | 0.72  |    |                       | 0.87  |    |                  | 0.83  |    |      | 0.68  |    |
| Total Green Ratio, g/C                                    |      | 0.39  |    |                       | 0.52  |    |                  | 0.23  |    |      | 0.09  |    |
| Uniform Delay, d <sub>1</sub>                             |      | 24.7  |    |                       | 20.2  |    |                  | 34.7  |    |      | 41.6  |    |
| Progression Factor, PF                                    |      | 1.000 |    |                       | 1.000 |    |                  | 1.000 |    |      | 1.000 |    |
| Delay Calibration, k                                      |      | 0.28  |    |                       | 0.40  |    |                  | 0.37  |    |      | 0.25  |    |
| Incremental Delay, d <sub>2</sub>                         |      | 2.2   |    |                       | 7.2   |    |                  | 14.2  |    |      | 10.7  |    |
| Initial Queue Delay, d <sub>3</sub>                       |      | 0.0   |    |                       | 0.0   |    |                  | 0.0   |    |      | 0.0   |    |
| Control Delay   |      | 26.8  |    |                       | 27.4  |    |                  | 48.9  |    |      | 52.3  |    |
| Lane Group LOS  |      | C     |    |                       | C     |    |                  | D     |    |      | D     |    |
| Approach Delay  | 26.8 |       |    | 27.4                  |       |    | 48.9             |       |    | 52.3 |       |    |
| Approach LOS  | C    |       |    | C                     |       |    | D                |       |    | D    |       |    |
| Intersection Delay  | 31.3 |       |    | X <sub>c</sub> = 0.92 |       |    | Intersection LOS |       |    | C    |       |    |

| TWO-WAY STOP CONTROL SUMMARY                     |                         |            |           |   |                            |           |       |
|--|-------------------------|------------|-----------|---|----------------------------|-----------|-------|
| <b>General Information</b>                       |                         |            |           | <b>Site Information</b>                           |                            |           |       |
| Analyst  | JAG                     |            |           | Intersection                                      | W. Broadway/Forestburgh Rd |           |       |
| Agency/Co.                                       | TMA                     |            |           | Jurisdiction                                      | Village of Monticello      |           |       |
| Date Performed                                   | 9/16/2009               |            |           | Analysis Year                                     | Interim Build Condition    |           |       |
| Analysis Time Period                             | Summer Friday Peak Hour |            |           |   |                            |           |       |
| Project Description                              |                         |            |           |   |                            |           |       |
| East/West Street: West Broadway                  |                         |            |           | North/South Street: Rt 42 (Forestburgh, Broadway) |                            |           |       |
| Intersection Orientation: North-South            |                         |            |           | Study Period (hrs): 0.25                          |                            |           |       |
| <b>Vehicle Volumes and Adjustments</b>           |                         |            |           |   |                            |           |       |
| <b>Major Street</b>                              | Northbound              |            |           | Southbound  |                            |           |       |
| Movement   | 1                       | 2          | 3         | 4   | 5                          | 6         |       |
|  | L                       | T          | R         | L   | T                          | R         |       |
| Volume (veh/h)                                   | 112                     | 599        |           |   | 880                        | 164       |       |
| Peak-Hour Factor, PHF                            | 0.92                    | 0.92       | 1.00      | 1.00  | 0.93                       | 0.93      |       |
| Hourly Flow Rate, HFR (veh/h)                    | 121                     | 651        | 0         | 0   | 946                        | 176       |       |
| Percent Heavy Vehicles                           | 7                       | --         | --        | 0   | --                         | --        |       |
| Median Type                                      | Undivided               |            |           |   |                            |           |       |
| RT Channelized                                   |                         |            | 0         |   |                            |           | 0     |
| Lanes  | 1                       | 1          | 0         | 0   | 1                          |           | 0     |
| Configuration                                    | L                       | T          |           |   |                            |           | TR    |
| Upstream Signal                                  |                         | 0          |           |   | 0                          |           |       |
| <b>Minor Street</b>                              | Eastbound               |            |           | Westbound   |                            |           |       |
| Movement   | 7                       | 8          | 9         | 10  | 11                         | 12        |       |
|  | L                       | T          | R         | L   | T                          | R         |       |
| Volume (veh/h)                                   | 102                     |            | 163       |   |                            |           |       |
| Peak-Hour Factor, PHF                            | 0.87                    | 1.00       | 0.87      | 1.00  | 1.00                       | 1.00      |       |
| Hourly Flow Rate, HFR (veh/h)                    | 117                     | 0          | 187       | 0   | 0                          | 0         |       |
| Percent Heavy Vehicles                           | 5                       | 0          | 5         | 0   | 0                          | 0         |       |
| Percent Grade (%)                                |                         | 0          |           |   | 0                          |           |       |
| Flared Approach                                  |                         | Y          |           |   | N                          |           |       |
| Storage  |                         | 1          |           |   | 0                          |           |       |
| RT Channelized                                   |                         |            | 0         |   |                            |           | 0     |
| Lanes  | 0                       | 0          | 0         | 0   | 0                          | 0         | 0     |
| Configuration                                    |                         | LR         |           |   |                            |           |       |
| <b>Delay, Queue Length, and Level of Service</b> |                         |            |           |   |                            |           |       |
| Approach   | Northbound              | Southbound | Westbound |   |                            | Eastbound |       |
| Movement   | 1                       | 4          | 7         | 8   | 9                          | 10        | 11 12 |
| Lane Configuration                               | L                       |            |           |   |                            |           | LR    |
| v (veh/h)  | 121                     |            |           |   |                            |           | 304   |
| C (m) (veh/h)                                    | 604                     |            |           |   |                            |           | 115   |
| v/c  | 0.20                    |            |           |   |                            |           | 2.64  |
| 95% queue length                                 | 0.74                    |            |           |   |                            |           | 27.74 |
| Control Delay (s/veh)                            | 12.4                    |            |           |   |                            |           | 823.2 |
| LOS  | B                       |            |           |   |                            |           | F     |
| Approach Delay (s/veh)                           | --                      | --         |           |   |                            |           | 823.2 |
| Approach LOS                                     | --                      | --         |           |   |                            |           | F     |

| TWO-WAY STOP CONTROL SUMMARY              |                         |            |           |                                  |                          |           |    |    |
|---|-------------------------|------------|-----------|----------------------------------|--------------------------|-----------|----|----|
| General Information                       |                         |            |           | Site Information                 |                          |           |    |    |
| Analyst                                   | JAG                     |            |           | Intersection                     | St. Joseph and NYS Rt 42 |           |    |    |
| Agency/Co.                                | TMA                     |            |           | Jurisdiction                     | Town of Forestburgh      |           |    |    |
| Date Performed                            | 9/16/2009               |            |           | Analysis Year                    | Interim Build Condition  |           |    |    |
| Analysis Time Period                      | Summer Friday Peak Hour |            |           |                                  |                          |           |    |    |
| Project Description                       |                         |            |           |                                  |                          |           |    |    |
| East/West Street: St. Joseph Road         |                         |            |           | North/South Street: NYS Route 42 |                          |           |    |    |
| Intersection Orientation: North-South     |                         |            |           | Study Period (hrs): 0.25         |                          |           |    |    |
| Vehicle Volumes and Adjustments           |                         |            |           |                                  |                          |           |    |    |
| Major Street                              | Northbound              |            |           | Southbound                       |                          |           |    |    |
| Movement                                  | 1                       | 2          | 3         | 4                                | 5                        | 6         |    |    |
|   | L                       | T          | R         | L                                | T                        | R         |    |    |
| Volume (veh/h)                            |                         | 213        | 5         | 0                                | 280                      |           |    |    |
| Peak-Hour Factor, PHF                     | 1.00                    | 0.89       | 0.89      | 0.91                             | 0.91                     | 1.00      |    |    |
| Hourly Flow Rate, HFR (veh/h)             | 0                       | 239        | 5         | 0                                | 307                      | 0         |    |    |
| Percent Heavy Vehicles                    | 0                       | --         | --        | 0                                | --                       | --        |    |    |
| Median Type                               | Undivided               |            |           |                                  |                          |           |    |    |
| RT Channelized                            |                         |            | 0         |                                  |                          | 0         |    |    |
| Lanes                                     | 0                       | 1          | 0         | 0                                | 1                        | 0         |    |    |
| Configuration                             |                         |            | TR        | LT                               |                          |           |    |    |
| Upstream Signal                           |                         | 0          |           |                                  | 0                        |           |    |    |
| Minor Street                              | Eastbound               |            |           | Westbound                        |                          |           |    |    |
| Movement                                  | 7                       | 8          | 9         | 10                               | 11                       | 12        |    |    |
|   | L                       | T          | R         | L                                | T                        | R         |    |    |
| Volume (veh/h)                            |                         |            |           | 8                                |                          | 1         |    |    |
| Peak-Hour Factor, PHF                     | 1.00                    | 1.00       | 1.00      | 0.75                             | 1.00                     | 0.75      |    |    |
| Hourly Flow Rate, HFR (veh/h)             | 0                       | 0          | 0         | 10                               | 0                        | 1         |    |    |
| Percent Heavy Vehicles                    | 0                       | 0          | 0         | 0                                | 0                        | 0         |    |    |
| Percent Grade (%)                         |                         | 0          |           |                                  | 0                        |           |    |    |
| Flared Approach                           |                         | N          |           |                                  | N                        |           |    |    |
| Storage                                   |                         | 0          |           |                                  | 0                        |           |    |    |
| RT Channelized                            |                         |            | 0         |                                  |                          | 0         |    |    |
| Lanes                                     | 0                       | 0          | 0         | 0                                | 0                        | 0         |    |    |
| Configuration                             |                         |            |           |                                  | LR                       |           |    |    |
| Delay, Queue Length, and Level of Service |                         |            |           |                                  |                          |           |    |    |
| Approach                                  | Northbound              | Southbound | Westbound |                                  |                          | Eastbound |    |    |
| Movement                                  | 1                       | 4          | 7         | 8                                | 9                        | 10        | 11 | 12 |
| Lane Configuration                        |                         | LT         |           | LR                               |                          |           |    |    |
| v (veh/h)                                 |                         | 0          |           | 11                               |                          |           |    |    |
| C (m) (veh/h)                             |                         | 1334       |           | 518                              |                          |           |    |    |
| v/c                                       |                         | 0.00       |           | 0.02                             |                          |           |    |    |
| 95% queue length                          |                         | 0.00       |           | 0.07                             |                          |           |    |    |
| Control Delay (s/veh)                     |                         | 7.7        |           | 12.1                             |                          |           |    |    |
| LOS                                       |                         | A          |           | B                                |                          |           |    |    |
| Approach Delay (s/veh)                    | --                      | --         | 12.1      |                                  |                          |           |    |    |
| Approach LOS                              | --                      | --         | B         |                                  |                          |           |    |    |

| TWO-WAY STOP CONTROL SUMMARY                     |                         |            |           |                                      |                         |           |       |
|--|-------------------------|------------|-----------|--------------------------------------|-------------------------|-----------|-------|
| <b>General Information</b>                       |                         |            |           | <b>Site Information</b>              |                         |           |       |
| Analyst  | JAG                     |            |           | Intersection                         | Access and Cold Spring  |           |       |
| Agency/Co.                                       | TMA                     |            |           | Jurisdiction                         | Town of Forestburgh     |           |       |
| Date Performed                                   | 9/10/2009               |            |           | Analysis Year                        | Build Condition Interim |           |       |
| Analysis Time Period                             | Friday Summer Peak Hour |            |           |                                      |                         |           |       |
| Project Description                              |                         |            |           |                                      |                         |           |       |
| East/West Street: Site Access                    |                         |            |           | North/South Street: Cold Spring Road |                         |           |       |
| Intersection Orientation: North-South            |                         |            |           | Study Period (hrs): 0.25             |                         |           |       |
| <b>Vehicle Volumes and Adjustments</b>           |                         |            |           |                                      |                         |           |       |
| <b>Major Street</b>                              | Northbound              |            |           | Southbound                           |                         |           |       |
| Movement   | 1                       | 2          | 3         | 4                                    | 5                       | 6         |       |
|  | L                       | T          | R         | L                                    | T                       | R         |       |
| Volume (veh/h)                                   | 93                      | 52         |           |                                      | 46                      | 50        |       |
| Peak-Hour Factor, PHF                            | 0.90                    | 0.90       | 1.00      | 1.00                                 | 0.90                    | 0.90      |       |
| Hourly Flow Rate, HFR (veh/h)                    | 103                     | 57         | 0         | 0                                    | 51                      | 55        |       |
| Percent Heavy Vehicles                           | 0                       | --         | --        | 0                                    | --                      | --        |       |
| Median Type                                      | Undivided               |            |           |                                      |                         |           |       |
| RT Channelized                                   |                         |            | 0         |                                      |                         |           | 0     |
| Lanes  | 0                       | 1          | 0         | 0                                    | 1                       | 0         |       |
| Configuration                                    | LT                      |            |           |                                      |                         |           | TR    |
| Upstream Signal                                  |                         | 0          |           |                                      | 0                       |           |       |
| <b>Minor Street</b>                              | Eastbound               |            |           | Westbound                            |                         |           |       |
| Movement   | 7                       | 8          | 9         | 10                                   | 11                      | 12        |       |
|  | L                       | T          | R         | L                                    | T                       | R         |       |
| Volume (veh/h)                                   | 127                     |            | 55        |                                      |                         |           |       |
| Peak-Hour Factor, PHF                            | 0.90                    | 1.00       | 0.90      | 1.00                                 | 1.00                    | 1.00      |       |
| Hourly Flow Rate, HFR (veh/h)                    | 141                     | 0          | 61        | 0                                    | 0                       | 0         |       |
| Percent Heavy Vehicles                           | 0                       | 0          | 0         | 0                                    | 0                       | 0         |       |
| Percent Grade (%)                                |                         | 0          |           |                                      | 0                       |           |       |
| Flared Approach                                  |                         | N          |           |                                      | N                       |           |       |
| Storage  |                         | 0          |           |                                      | 0                       |           |       |
| RT Channelized                                   |                         |            | 0         |                                      |                         |           | 0     |
| Lanes  | 0                       | 0          | 0         | 0                                    | 0                       | 0         |       |
| Configuration                                    |                         | LR         |           |                                      |                         |           |       |
| <b>Delay, Queue Length, and Level of Service</b> |                         |            |           |                                      |                         |           |       |
| Approach   | Northbound              | Southbound | Westbound |                                      |                         | Eastbound |       |
| Movement   | 1                       | 4          | 7         | 8                                    | 9                       | 10        | 11 12 |
| Lane Configuration                               | LT                      |            |           |                                      |                         |           | LR    |
| v (veh/h)  | 103                     |            |           |                                      |                         |           | 202   |
| C (m) (veh/h)                                    | 1498                    |            |           |                                      |                         |           | 693   |
| v/c  | 0.07                    |            |           |                                      |                         |           | 0.29  |
| 95% queue length                                 | 0.22                    |            |           |                                      |                         |           | 1.21  |
| Control Delay (s/veh)                            | 7.6                     |            |           |                                      |                         |           | 12.3  |
| LOS  | A                       |            |           |                                      |                         |           | B     |
| Approach Delay (s/veh)                           | --                      | --         |           |                                      |                         |           | 12.3  |
| Approach LOS                                     | --                      | --         |           |                                      |                         |           | B     |

| TWO-WAY STOP CONTROL SUMMARY                     |                         |            |           |                                      |                             |           |       |
|--|-------------------------|------------|-----------|--------------------------------------|-----------------------------|-----------|-------|
| <b>General Information</b>                       |                         |            |           | <b>Site Information</b>              |                             |           |       |
| Analyst  | JAG                     |            |           | Intersection                         | St . Joseph and Cold Spring |           |       |
| Agency/Co.                                       | TMA                     |            |           | Jurisdiction                         | Town of Forestburgh         |           |       |
| Date Performed                                   | 9/16/2009               |            |           | Analysis Year                        | Interim Build Condition     |           |       |
| Analysis Time Period                             | Sunday Peak Hour Summer |            |           |                                      |                             |           |       |
| Project Description                              |                         |            |           |                                      |                             |           |       |
| East/West Street: St. Joseph Road                |                         |            |           | North/South Street: Cold Spring Road |                             |           |       |
| Intersection Orientation: North-South            |                         |            |           | Study Period (hrs): 0.25             |                             |           |       |
| <b>Vehicle Volumes and Adjustments</b>           |                         |            |           |                                      |                             |           |       |
| <b>Major Street</b>                              | Northbound              |            |           | Southbound                           |                             |           |       |
| Movement   | 1                       | 2          | 3         | 4                                    | 5                           | 6         |       |
|  | L                       | T          | R         | L                                    | T                           | R         |       |
| Volume (veh/h)                                   | 1                       | 16         |           |                                      | 74                          | 4         |       |
| Peak-Hour Factor, PHF                            | 0.58                    | 0.58       | 1.00      | 1.00                                 | 0.61                        | 0.61      |       |
| Hourly Flow Rate, HFR (veh/h)                    | 1                       | 27         | 0         | 0                                    | 121                         | 6         |       |
| Percent Heavy Vehicles                           | 0                       | --         | --        | 0                                    | --                          | --        |       |
| Median Type                                      | Undivided               |            |           |                                      |                             |           |       |
| RT Channelized                                   |                         |            | 0         |                                      |                             |           | 0     |
| Lanes  | 0                       | 1          | 0         | 0                                    | 1                           | 0         |       |
| Configuration                                    | LT                      |            |           |                                      |                             |           | TR    |
| Upstream Signal                                  |                         | 0          |           |                                      | 0                           |           |       |
| <b>Minor Street</b>                              | Eastbound               |            |           | Westbound                            |                             |           |       |
| Movement   | 7                       | 8          | 9         | 10                                   | 11                          | 12        |       |
|  | L                       | T          | R         | L                                    | T                           | R         |       |
| Volume (veh/h)                                   | 2                       |            | 1         |                                      |                             |           |       |
| Peak-Hour Factor, PHF                            | 0.25                    | 1.00       | 0.25      | 1.00                                 | 1.00                        | 1.00      |       |
| Hourly Flow Rate, HFR (veh/h)                    | 8                       | 0          | 4         | 0                                    | 0                           | 0         |       |
| Percent Heavy Vehicles                           | 0                       | 0          | 0         | 0                                    | 0                           | 0         |       |
| Percent Grade (%)                                | 0                       |            |           | 0                                    |                             |           |       |
| Flared Approach                                  |                         | N          |           |                                      | N                           |           |       |
| Storage  |                         | 0          |           |                                      | 0                           |           |       |
| RT Channelized                                   |                         |            | 0         |                                      |                             |           | 0     |
| Lanes  | 0                       | 0          | 0         | 0                                    | 0                           | 0         |       |
| Configuration                                    |                         | LR         |           |                                      |                             |           |       |
| <b>Delay, Queue Length, and Level of Service</b> |                         |            |           |                                      |                             |           |       |
| Approach   | Northbound              | Southbound | Westbound |                                      |                             | Eastbound |       |
| Movement   | 1                       | 4          | 7         | 8                                    | 9                           | 10        | 11 12 |
| Lane Configuration                               | LT                      |            |           |                                      |                             |           | LR    |
| v (veh/h)  | 1                       |            |           |                                      |                             |           | 12    |
| C (m) (veh/h)                                    | 1472                    |            |           |                                      |                             |           | 870   |
| v/c  | 0.00                    |            |           |                                      |                             |           | 0.01  |
| 95% queue length                                 | 0.00                    |            |           |                                      |                             |           | 0.04  |
| Control Delay (s/veh)                            | 7.4                     |            |           |                                      |                             |           | 9.2   |
| LOS  | A                       |            |           |                                      |                             |           | A     |
| Approach Delay (s/veh)                           | --                      | --         |           |                                      |                             |           | 9.2   |
| Approach LOS                                     | --                      | --         |           |                                      |                             |           | A     |

| TWO-WAY STOP CONTROL SUMMARY                     |                         |            |           |                                      |                             |           |    |
|--|-------------------------|------------|-----------|--------------------------------------|-----------------------------|-----------|----|
| <b>General Information</b>                       |                         |            |           | <b>Site Information</b>              |                             |           |    |
| Analyst  | JAG                     |            |           | Intersection                         | Rose Valley and Cold Spring |           |    |
| Agency/Co.                                       | TMA                     |            |           | Jurisdiction                         | Town of Forestburgh         |           |    |
| Date Performed                                   | 9/16/2009               |            |           | Analysis Year                        | Interim Build Condition     |           |    |
| Analysis Time Period                             | Summer Sunday Peak Hour |            |           |                                      |                             |           |    |
| Project Description                              |                         |            |           |                                      |                             |           |    |
| East/West Street: Rose Valley Road               |                         |            |           | North/South Street: Cold Spring Road |                             |           |    |
| Intersection Orientation: North-South            |                         |            |           | Study Period (hrs): 0.25             |                             |           |    |
| <b>Vehicle Volumes and Adjustments</b>           |                         |            |           |                                      |                             |           |    |
| <b>Major Street</b>                              | Northbound              |            |           | Southbound                           |                             |           |    |
| Movement   | 1                       | 2          | 3         | 4                                    | 5                           | 6         |    |
|  | L                       | T          | R         | L                                    | T                           | R         |    |
| Volume (veh/h)                                   |                         | 19         | 5         | 98                                   | 75                          |           |    |
| Peak-Hour Factor, PHF                            | 1.00                    | 0.60       | 0.60      | 0.70                                 | 0.70                        | 1.00      |    |
| Hourly Flow Rate, HFR (veh/h)                    | 0                       | 31         | 8         | 140                                  | 107                         | 0         |    |
| Percent Heavy Vehicles                           | 0                       | --         | --        | 0                                    | --                          | --        |    |
| Median Type                                      | Undivided               |            |           |                                      |                             |           |    |
| RT Channelized                                   |                         |            | 0         |                                      |                             | 0         |    |
| Lanes  | 0                       | 1          | 0         | 0                                    | 1                           | 0         |    |
| Configuration                                    |                         |            | TR        | LT                                   |                             |           |    |
| Upstream Signal                                  |                         | 0          |           |                                      | 0                           |           |    |
| <b>Minor Street</b>                              | Eastbound               |            |           | Westbound                            |                             |           |    |
| Movement   | 7                       | 8          | 9         | 10                                   | 11                          | 12        |    |
|  | L                       | T          | R         | L                                    | T                           | R         |    |
| Volume (veh/h)                                   |                         |            |           | 9                                    |                             | 76        |    |
| Peak-Hour Factor, PHF                            | 1.00                    | 1.00       | 1.00      | 0.50                                 | 1.00                        | 0.50      |    |
| Hourly Flow Rate, HFR (veh/h)                    | 0                       | 0          | 0         | 18                                   | 0                           | 152       |    |
| Percent Heavy Vehicles                           | 0                       | 0          | 0         | 10                                   | 0                           | 10        |    |
| Percent Grade (%)                                |                         | 0          |           |                                      | 6                           |           |    |
| Flared Approach                                  |                         | N          |           |                                      | N                           |           |    |
| Storage  |                         | 0          |           |                                      | 0                           |           |    |
| RT Channelized                                   |                         |            | 0         |                                      |                             | 0         |    |
| Lanes  | 0                       | 0          | 0         | 0                                    | 0                           | 0         |    |
| Configuration                                    |                         |            |           |                                      | LR                          |           |    |
| <b>Delay, Queue Length, and Level of Service</b> |                         |            |           |                                      |                             |           |    |
| Approach   | Northbound              | Southbound | Westbound |                                      |                             | Eastbound |    |
| Movement   | 1                       | 4          | 7         | 8                                    | 9                           | 10        | 11 |
| Lane Configuration                               |                         | LT         |           | LR                                   |                             |           |    |
| v (veh/h)  |                         | 140        |           | 170                                  |                             |           |    |
| C (m) (veh/h)                                    |                         | 1584       |           | 893                                  |                             |           |    |
| v/c  |                         | 0.09       |           | 0.19                                 |                             |           |    |
| 95% queue length                                 |                         | 0.29       |           | 0.70                                 |                             |           |    |
| Control Delay (s/veh)                            |                         | 7.5        |           | 10.0                                 |                             |           |    |
| LOS  |                         | A          |           | A                                    |                             |           |    |
| Approach Delay (s/veh)                           | --                      | --         | 10.0      |                                      |                             |           |    |
| Approach LOS                                     | --                      | --         | A         |                                      |                             |           |    |

| TWO-WAY STOP CONTROL SUMMARY                     |                         |           |            |                                    |                         |            |      |    |
|--|-------------------------|-----------|------------|------------------------------------|-------------------------|------------|------|----|
| <b>General Information</b>                       |                         |           |            | <b>Site Information</b>            |                         |            |      |    |
| Analyst  | JAG                     |           |            | Intersection                       | Cold Spring and Waverly |            |      |    |
| Agency/Co.                                       | TMA                     |           |            | Jurisdiction                       | Town of Forestburgh     |            |      |    |
| Date Performed                                   | 8/4/2009                |           |            | Analysis Year                      | Interim Build Condition |            |      |    |
| Analysis Time Period                             | Summer Sunday Peak Hour |           |            |                                    |                         |            |      |    |
| Project Description                              |                         |           |            |                                    |                         |            |      |    |
| East/West Street: Cold Spring Road               |                         |           |            | North/South Street: Waverly Avenue |                         |            |      |    |
| Intersection Orientation: East-West              |                         |           |            | Study Period (hrs): 0.25           |                         |            |      |    |
| <b>Vehicle Volumes and Adjustments</b>           |                         |           |            |                                    |                         |            |      |    |
| <b>Major Street</b>                              | Eastbound               |           |            | Westbound                          |                         |            |      |    |
| Movement   | 1                       | 2         | 3          | 4                                  | 5                       | 6          |      |    |
|  | L                       | T         | R          | L                                  | T                       | R          |      |    |
| Volume (veh/h)                                   | 20                      | 140       |            |                                    | 106                     | 79         |      |    |
| Peak-Hour Factor, PHF                            | 0.73                    | 0.73      | 1.00       | 1.00                               | 0.89                    | 0.89       |      |    |
| Hourly Flow Rate, HFR (veh/h)                    | 27                      | 191       | 0          | 0                                  | 119                     | 88         |      |    |
| Percent Heavy Vehicles                           | 0                       | --        | --         | 0                                  | --                      | --         |      |    |
| Median Type                                      | Undivided               |           |            |                                    |                         |            |      |    |
| RT Channelized                                   |                         |           | 0          |                                    |                         | 0          |      |    |
| Lanes  | 0                       | 1         | 0          | 0                                  | 1                       | 0          |      |    |
| Configuration                                    | LT                      |           |            |                                    |                         | TR         |      |    |
| Upstream Signal                                  |                         | 0         |            |                                    | 0                       |            |      |    |
| <b>Minor Street</b>                              | Northbound              |           |            | Southbound                         |                         |            |      |    |
| Movement   | 7                       | 8         | 9          | 10                                 | 11                      | 12         |      |    |
|  | L                       | T         | R          | L                                  | T                       | R          |      |    |
| Volume (veh/h)                                   |                         |           |            | 97                                 |                         | 25         |      |    |
| Peak-Hour Factor, PHF                            | 1.00                    | 1.00      | 1.00       | 0.71                               | 1.00                    | 0.71       |      |    |
| Hourly Flow Rate, HFR (veh/h)                    | 0                       | 0         | 0          | 136                                | 0                       | 35         |      |    |
| Percent Heavy Vehicles                           | 0                       | 0         | 0          | 0                                  | 0                       | 0          |      |    |
| Percent Grade (%)                                | 0                       |           |            | 8                                  |                         |            |      |    |
| Flared Approach                                  |                         | N         |            |                                    | N                       |            |      |    |
| Storage  |                         | 0         |            |                                    | 0                       |            |      |    |
| RT Channelized                                   |                         |           | 0          |                                    |                         | 0          |      |    |
| Lanes  | 0                       | 0         | 0          | 0                                  | 0                       | 0          |      |    |
| Configuration                                    |                         |           |            |                                    | LR                      |            |      |    |
| <b>Delay, Queue Length, and Level of Service</b> |                         |           |            |                                    |                         |            |      |    |
| Approach   | Eastbound               | Westbound | Northbound |                                    |                         | Southbound |      |    |
| Movement   | 1                       | 4         | 7          | 8                                  | 9                       | 10         | 11   | 12 |
| Lane Configuration                               | LT                      |           |            |                                    |                         |            | LR   |    |
| v (veh/h)  | 27                      |           |            |                                    |                         |            | 171  |    |
| C (m) (veh/h)                                    | 1376                    |           |            |                                    |                         |            | 540  |    |
| v/c  | 0.02                    |           |            |                                    |                         |            | 0.32 |    |
| 95% queue length                                 | 0.06                    |           |            |                                    |                         |            | 1.35 |    |
| Control Delay (s/veh)                            | 7.7                     |           |            |                                    |                         |            | 14.7 |    |
| LOS  | A                       |           |            |                                    |                         |            | B    |    |
| Approach Delay (s/veh)                           | --                      | --        |            |                                    |                         |            | 14.7 |    |
| Approach LOS                                     | --                      | --        |            |                                    |                         |            | B    |    |

| TWO-WAY STOP CONTROL SUMMARY                     |                         |           |            |                                      |                         |            |    |    |
|--|-------------------------|-----------|------------|--------------------------------------|-------------------------|------------|----|----|
| <b>General Information</b>                       |                         |           |            | <b>Site Information</b>              |                         |            |    |    |
| Analyst  | JAG                     |           |            | Intersection                         | E. Broadway/Rose Valley |            |    |    |
| Agency/Co.                                       | TMA                     |           |            | Jurisdiction                         | Town of Thompson        |            |    |    |
| Date Performed                                   | 9/16/2009               |           |            | Analysis Year                        | Interim Build Condition |            |    |    |
| Analysis Time Period                             | Summer Sunday Peak Hour |           |            |                                      |                         |            |    |    |
| Project Description                              |                         |           |            |                                      |                         |            |    |    |
| East/West Street: East Broadway                  |                         |           |            | North/South Street: Rose Valley Road |                         |            |    |    |
| Intersection Orientation: East-West              |                         |           |            | Study Period (hrs): 0.25             |                         |            |    |    |
| <b>Vehicle Volumes and Adjustments</b>           |                         |           |            |                                      |                         |            |    |    |
| <b>Major Street</b>                              | Eastbound               |           |            | Westbound                            |                         |            |    |    |
| Movement   | 1                       | 2         | 3          | 4                                    | 5                       | 6          |    |    |
|  | L                       | T         | R          | L                                    | T                       | R          |    |    |
| Volume (veh/h)                                   | 4                       | 220       | 75         | 63                                   | 144                     | 0          |    |    |
| Peak-Hour Factor, PHF                            | 0.79                    | 0.79      | 0.79       | 0.84                                 | 0.84                    | 0.84       |    |    |
| Hourly Flow Rate, HFR (veh/h)                    | 5                       | 278       | 94         | 75                                   | 171                     | 0          |    |    |
| Percent Heavy Vehicles                           | 10                      | --        | --         | 4                                    | --                      | --         |    |    |
| Median Type                                      | Undivided               |           |            |                                      |                         |            |    |    |
| RT Channelized                                   |                         |           | 0          |                                      |                         | 0          |    |    |
| Lanes  | 0                       | 1         | 0          | 0                                    | 1                       | 0          |    |    |
| Configuration                                    | LTR                     |           |            | LTR                                  |                         |            |    |    |
| Upstream Signal                                  |                         | 0         |            |                                      | 0                       |            |    |    |
| <b>Minor Street</b>                              | Northbound              |           |            | Southbound                           |                         |            |    |    |
| Movement   | 7                       | 8         | 9          | 10                                   | 11                      | 12         |    |    |
|  | L                       | T         | R          | L                                    | T                       | R          |    |    |
| Volume (veh/h)                                   | 21                      | 0         | 136        | 0                                    | 1                       | 0          |    |    |
| Peak-Hour Factor, PHF                            | 0.70                    | 0.70      | 0.70       | 0.25                                 | 0.25                    | 0.25       |    |    |
| Hourly Flow Rate, HFR (veh/h)                    | 30                      | 0         | 194        | 0                                    | 4                       | 0          |    |    |
| Percent Heavy Vehicles                           | 10                      | 10        | 10         | 0                                    | 0                       | 0          |    |    |
| Percent Grade (%)                                | 0                       |           |            | 0                                    |                         |            |    |    |
| Flared Approach                                  |                         | Y         |            |                                      | N                       |            |    |    |
| Storage  |                         | 2         |            |                                      | 0                       |            |    |    |
| RT Channelized                                   |                         |           | 0          |                                      |                         | 0          |    |    |
| Lanes  | 0                       | 1         | 0          | 0                                    | 1                       | 0          |    |    |
| Configuration                                    |                         | LTR       |            |                                      | LTR                     |            |    |    |
| <b>Delay, Queue Length, and Level of Service</b> |                         |           |            |                                      |                         |            |    |    |
| Approach   | Eastbound               | Westbound | Northbound |                                      |                         | Southbound |    |    |
| Movement   | 1                       | 4         | 7          | 8                                    | 9                       | 10         | 11 | 12 |
| Lane Configuration                               | LTR                     | LTR       | LTR        |                                      |                         | LTR        |    |    |
| v (veh/h)  | 5                       | 75        | 224        |                                      |                         | 4          |    |    |
| C (m) (veh/h)                                    | 1359                    | 1176      | 806        |                                      |                         | 337        |    |    |
| v/c  | 0.00                    | 0.06      | 0.28       |                                      |                         | 0.01       |    |    |
| 95% queue length                                 | 0.01                    | 0.20      | 1.14       |                                      |                         | 0.04       |    |    |
| Control Delay (s/veh)                            | 7.7                     | 8.3       | 12.7       |                                      |                         | 15.8       |    |    |
| LOS  | A                       | A         | B          |                                      |                         | C          |    |    |
| Approach Delay (s/veh)                           | --                      | --        | 12.7       |                                      |                         | 15.8       |    |    |
| Approach LOS                                     | --                      | --        | B          |                                      |                         | C          |    |    |



## HCS+™ DETAILED REPORT

| General Information |                         |  |  | Site Information |                         |  |  |
|---------------------|-------------------------|--|--|------------------|-------------------------|--|--|
| Analyst             | JAG                     |  |  | Intersection     | Rt 42, Bank, St. Johns  |  |  |
| Agency or Co.       | TMA                     |  |  | Area Type        | All other areas         |  |  |
| Date Performed      | 9/16/2009               |  |  | Jurisdiction     | Village of Monticello   |  |  |
| Time Period         | Summer Sunday Peak Hour |  |  | Analysis Year    | Interim Build Condition |  |  |
|                     |                         |  |  | Project ID       |                         |  |  |

| Volume and Timing Input                   |          |         |      |      |       |      |                        |       |          |          |       |      |     |
|---|----------|---------|------|------|-------|------|------------------------|-------|----------|----------|-------|------|-----|
|   | EB       |         |      | WB   |       |      | NB                     |       |          | SB       |       |      |     |
|   | LT       | TH      | RT   | LT   | TH    | RT   | LT                     | TH    | RT       | LT       | TH    | RT   |     |
| Number of Lanes, N <sub>i</sub>           | 0        | 2       | 0    | 0    | 2     | 0    | 0                      | 1     | 0        | 0        | 1     | 0    |     |
| Lane Group                                |          | LTR     |      |      | LTR   |      |                        | LTR   |          |          | LTR   |      |     |
| Volume, V (vph)                           | 8        | 658     | 59   | 108  | 574   | 12   | 85                     | 4     | 116      | 18       | 5     | 11   |     |
| % Heavy Vehicles, %HV                     | 7        | 7       | 7    | 4    | 4     | 4    | 1                      | 1     | 1        | 2        | 2     | 2    |     |
| Peak-Hour Factor, PHF                     | 0.88     | 0.88    | 0.88 | 0.92 | 0.92  | 0.92 | 0.79                   | 0.79  | 0.79     | 0.50     | 0.50  | 0.50 |     |
| Pretimed (P) or Actuated (A)              | A        | A       | A    | A    | A     | A    | A                      | A     | A        | A        | A     | A    |     |
| Start-up Lost Time, l <sub>i</sub>        |          | 2.0     |      |      | 2.0   |      |                        | 2.0   |          |          | 2.0   |      |     |
| Extension of Effective Green, e           |          | 2.0     |      |      | 2.0   |      |                        | 2.0   |          |          | 2.0   |      |     |
| Arrival Type, AT                          |          | 3       |      |      | 3     |      |                        | 3     |          |          | 3     |      |     |
| Unit Extension, UE                        |          | 3.0     |      |      | 3.0   |      |                        | 3.0   |          |          | 3.0   |      |     |
| Filtering/Metering, I                     |          | 1.000   |      |      | 1.000 |      |                        | 1.000 |          |          | 1.000 |      |     |
| Initial Unmet Demand, Q <sub>b</sub>      |          | 0.0     |      |      | 0.0   |      |                        | 0.0   |          |          | 0.0   |      |     |
| Ped / Bike / RTOR Volumes                 | 0        | 0       | 0    | 0    | 0     | 0    | 0                      | 0     | 0        | 0        | 0     | 0    |     |
| Lane Width                                |          | 12.0    |      |      | 12.0  |      |                        | 11.0  |          |          | 12.0  |      |     |
| Parking / Grade / Parking                 | N        | 0       | N    | N    | 0     | N    | N                      | 0     | N        | N        | 0     | N    |     |
| Parking Maneuvers, N <sub>m</sub>         |          |         |      |      |       |      |                        |       |          |          |       |      |     |
| Buses Stopping, N <sub>b</sub>            |          | 0       |      |      | 0     |      |                        | 0     |          |          | 0     |      |     |
| Min. Time for Pedestrians, G <sub>p</sub> |          | 3.2     |      |      | 3.2   |      |                        | 3.2   |          |          | 3.2   |      |     |
| Phasing                                   | EW Perm  | WB Only | 03   |      |       | 04   |                        |       | NB Only  | SB Only  | 07    |      | 08  |
| Timing                                    | G = 38.0 | G = 7.0 | G =  |      |       | G =  |                        |       | G = 20.0 | G = 10.0 | G =   |      | G = |
|   | Y = 5    | Y = 5   | Y =  |      |       | Y =  |                        |       | Y = 5    | Y = 5    | Y =   |      | Y = |
| Duration of Analysis, T = 0.25            |          |         |      |      |       |      | Cycle Length, C = 95.0 |       |          |          |       |      |     |

| Lane Group Capacity, Control Delay, and LOS Determination |      |       |    |                       |       |    |                  |       |    |      |       |    |
|---|------|-------|----|-----------------------|-------|----|------------------|-------|----|------|-------|----|
|   | EB   |       |    | WB                    |       |    | NB               |       |    | SB   |       |    |
|   | LT   | TH    | RT | LT                    | TH    | RT | LT               | TH    | RT | LT   | TH    | RT |
| Adjusted Flow Rate, v                                     |      | 824   |    |                       | 754   |    |                  | 260   |    |      | 68    |    |
| Lane Group Capacity, c                                    |      | 1263  |    |                       | 1256  |    |                  | 347   |    |      | 183   |    |
| v/c Ratio, X  |      | 0.65  |    |                       | 0.60  |    |                  | 0.75  |    |      | 0.37  |    |
| Total Green Ratio, g/C                                    |      | 0.40  |    |                       | 0.53  |    |                  | 0.21  |    |      | 0.11  |    |
| Uniform Delay, d <sub>1</sub>                             |      | 23.1  |    |                       | 15.6  |    |                  | 35.1  |    |      | 39.6  |    |
| Progression Factor, PF                                    |      | 1.000 |    |                       | 1.000 |    |                  | 1.000 |    |      | 1.000 |    |
| Delay Calibration, k                                      |      | 0.23  |    |                       | 0.19  |    |                  | 0.30  |    |      | 0.11  |    |
| Incremental Delay, d <sub>2</sub>                         |      | 1.2   |    |                       | 0.8   |    |                  | 8.8   |    |      | 1.3   |    |
| Initial Queue Delay, d <sub>3</sub>                       |      | 0.0   |    |                       | 0.0   |    |                  | 0.0   |    |      | 0.0   |    |
| Control Delay   |      | 24.4  |    |                       | 16.4  |    |                  | 43.9  |    |      | 40.8  |    |
| Lane Group LOS  |      | C     |    |                       | B     |    |                  | D     |    |      | D     |    |
| Approach Delay  | 24.4 |       |    | 16.4                  |       |    | 43.9             |       |    | 40.8 |       |    |
| Approach LOS  | C    |       |    | B                     |       |    | D                |       |    | D    |       |    |
| Intersection Delay  | 24.5 |       |    | X <sub>C</sub> = 0.82 |       |    | Intersection LOS |       |    | C    |       |    |

| TWO-WAY STOP CONTROL SUMMARY              |                         |            |           |   |                            |           |       |
|---|-------------------------|------------|-----------|---|----------------------------|-----------|-------|
| General Information                       |                         |            |           | Site Information                                  |                            |           |       |
| Analyst                                   | JAG                     |            |           | Intersection                                      | W. Broadway/Forestburgh Rd |           |       |
| Agency/Co.                                | TMA                     |            |           | Jurisdiction                                      | Village of Monticello      |           |       |
| Date Performed                            | 8/4/2009                |            |           | Analysis Year                                     | Interim Build Condition    |           |       |
| Analysis Time Period                      | Summer Sunday Peak Hour |            |           |   |                            |           |       |
| Project Description                       |                         |            |           |   |                            |           |       |
| East/West Street: West Broadway           |                         |            |           | North/South Street: Rt 42 (Forestburgh, Broadway) |                            |           |       |
| Intersection Orientation: North-South     |                         |            |           | Study Period (hrs): 0.25                          |                            |           |       |
| Vehicle Volumes and Adjustments           |                         |            |           |   |                            |           |       |
| Major Street                              | Northbound              |            |           | Southbound  |                            |           |       |
| Movement                                  | 1                       | 2          | 3         | 4   | 5                          | 6         |       |
|   | L                       | T          | R         | L   | T                          | R         |       |
| Volume (veh/h)                            | 97                      | 563        |           |   | 608                        | 127       |       |
| Peak-Hour Factor, PHF                     | 0.95                    | 0.95       | 1.00      | 1.00  | 0.95                       | 0.95      |       |
| Hourly Flow Rate, HFR (veh/h)             | 102                     | 592        | 0         | 0   | 640                        | 133       |       |
| Percent Heavy Vehicles                    | 7                       | --         | --        | 0   | --                         | --        |       |
| Median Type                               | Undivided               |            |           |   |                            |           |       |
| RT Channelized                            |                         |            | 0         |   |                            |           | 0     |
| Lanes                                     | 1                       | 1          | 0         | 0   | 1                          |           | 0     |
| Configuration                             | L                       | T          |           |   |                            |           | TR    |
| Upstream Signal                           |                         | 0          |           |   | 0                          |           |       |
| Minor Street                              | Eastbound               |            |           | Westbound   |                            |           |       |
| Movement                                  | 7                       | 8          | 9         | 10  | 11                         | 12        |       |
|   | L                       | T          | R         | L   | T                          | R         |       |
| Volume (veh/h)                            | 110                     |            | 155       |   |                            |           |       |
| Peak-Hour Factor, PHF                     | 0.88                    | 1.00       | 0.88      | 1.00  | 1.00                       | 1.00      |       |
| Hourly Flow Rate, HFR (veh/h)             | 125                     | 0          | 176       | 0   | 0                          | 0         |       |
| Percent Heavy Vehicles                    | 5                       | 0          | 5         | 0   | 0                          | 0         |       |
| Percent Grade (%)                         |                         | 0          |           |   | 0                          |           |       |
| Flared Approach                           |                         | Y          |           |   | N                          |           |       |
| Storage                                   |                         | 1          |           |   | 0                          |           |       |
| RT Channelized                            |                         |            | 0         |   |                            |           | 0     |
| Lanes                                     | 0                       | 0          | 0         | 0   | 0                          | 0         |       |
| Configuration                             |                         | LR         |           |   |                            |           |       |
| Delay, Queue Length, and Level of Service |                         |            |           |   |                            |           |       |
| Approach                                  | Northbound              | Southbound | Westbound |   |                            | Eastbound |       |
| Movement                                  | 1                       | 4          | 7         | 8   | 9                          | 10        | 11    |
| Lane Configuration                        | L                       |            |           |   |                            |           | LR    |
| v (veh/h)                                 | 102                     |            |           |   |                            |           | 301   |
| C (m) (veh/h)                             | 820                     |            |           |   |                            |           | 214   |
| v/c                                       | 0.12                    |            |           |   |                            |           | 1.41  |
| 95% queue length                          | 0.42                    |            |           |   |                            |           | 17.37 |
| Control Delay (s/veh)                     | 10.0                    |            |           |   |                            |           | 251.2 |
| LOS                                       | B                       |            |           |   |                            |           | F     |
| Approach Delay (s/veh)                    | --                      | --         |           |   |                            |           | 251.2 |
| Approach LOS                              | --                      | --         |           |   |                            |           | F     |

| TWO-WAY STOP CONTROL SUMMARY              |                         |            |           |                                  |                          |           |    |
|---|-------------------------|------------|-----------|----------------------------------|--------------------------|-----------|----|
| General Information                       |                         |            |           | Site Information                 |                          |           |    |
| Analyst                                   | JAG                     |            |           | Intersection                     | St. Joseph and NYS Rt 42 |           |    |
| Agency/Co.                                | TMA                     |            |           | Jurisdiction                     | Town of Forestburgh      |           |    |
| Date Performed                            | 9/16/2009               |            |           | Analysis Year                    | Interim Build Condition  |           |    |
| Analysis Time Period                      | Summer Sunday Peak Hour |            |           |                                  |                          |           |    |
| Project Description                       |                         |            |           |                                  |                          |           |    |
| East/West Street: St. Joseph Road         |                         |            |           | North/South Street: NYS Route 42 |                          |           |    |
| Intersection Orientation: North-South     |                         |            |           | Study Period (hrs): 0.25         |                          |           |    |
| Vehicle Volumes and Adjustments           |                         |            |           |                                  |                          |           |    |
| Major Street                              | Northbound              |            |           | Southbound                       |                          |           |    |
| Movement                                  | 1                       | 2          | 3         | 4                                | 5                        | 6         |    |
|   | L                       | T          | R         | L                                | T                        | R         |    |
| Volume (veh/h)                            |                         | 179        | 7         | 1                                | 337                      |           |    |
| Peak-Hour Factor, PHF                     | 1.00                    | 0.67       | 0.67      | 0.92                             | 0.92                     | 1.00      |    |
| Hourly Flow Rate, HFR (veh/h)             | 0                       | 267        | 10        | 1                                | 366                      | 0         |    |
| Percent Heavy Vehicles                    | 0                       | --         | --        | 0                                | --                       | --        |    |
| Median Type                               | Undivided               |            |           |                                  |                          |           |    |
| RT Channelized                            |                         |            | 0         |                                  |                          | 0         |    |
| Lanes                                     | 0                       | 1          | 0         | 0                                | 1                        | 0         |    |
| Configuration                             |                         |            | TR        | LT                               |                          |           |    |
| Upstream Signal                           |                         | 0          |           |                                  | 0                        |           |    |
| Minor Street                              | Eastbound               |            |           | Westbound                        |                          |           |    |
| Movement                                  | 7                       | 8          | 9         | 10                               | 11                       | 12        |    |
|   | L                       | T          | R         | L                                | T                        | R         |    |
| Volume (veh/h)                            |                         |            |           | 7                                |                          | 1         |    |
| Peak-Hour Factor, PHF                     | 1.00                    | 1.00       | 1.00      | 0.42                             | 1.00                     | 0.42      |    |
| Hourly Flow Rate, HFR (veh/h)             | 0                       | 0          | 0         | 16                               | 0                        | 2         |    |
| Percent Heavy Vehicles                    | 0                       | 0          | 0         | 0                                | 0                        | 0         |    |
| Percent Grade (%)                         | 0                       |            |           | 0                                |                          |           |    |
| Flared Approach                           |                         | N          |           |                                  | N                        |           |    |
| Storage                                   |                         | 0          |           |                                  | 0                        |           |    |
| RT Channelized                            |                         |            | 0         |                                  |                          | 0         |    |
| Lanes                                     | 0                       | 0          | 0         | 0                                | 0                        | 0         |    |
| Configuration                             |                         |            |           |                                  | LR                       |           |    |
| Delay, Queue Length, and Level of Service |                         |            |           |                                  |                          |           |    |
| Approach                                  | Northbound              | Southbound | Westbound |                                  |                          | Eastbound |    |
| Movement                                  | 1                       | 4          | 7         | 8                                | 9                        | 10        | 11 |
| Lane Configuration                        |                         | LT         |           | LR                               |                          |           |    |
| v (veh/h)                                 |                         | 1          |           | 18                               |                          |           |    |
| C (m) (veh/h)                             |                         | 1298       |           | 465                              |                          |           |    |
| v/c                                       |                         | 0.00       |           | 0.04                             |                          |           |    |
| 95% queue length                          |                         | 0.00       |           | 0.12                             |                          |           |    |
| Control Delay (s/veh)                     |                         | 7.8        |           | 13.1                             |                          |           |    |
| LOS                                       |                         | A          |           | B                                |                          |           |    |
| Approach Delay (s/veh)                    | --                      | --         | 13.1      |                                  |                          |           |    |
| Approach LOS                              | --                      | --         | B         |                                  |                          |           |    |

| TWO-WAY STOP CONTROL SUMMARY                     |                         |            |           |                                      |                         |           |       |
|--|-------------------------|------------|-----------|--------------------------------------|-------------------------|-----------|-------|
| <b>General Information</b>                       |                         |            |           | <b>Site Information</b>              |                         |           |       |
| Analyst  | JAG                     |            |           | Intersection                         | Access and Cold Spring  |           |       |
| Agency/Co.                                       | TMA                     |            |           | Jurisdiction                         | Town of Forestburgh     |           |       |
| Date Performed                                   | 9/10/2009               |            |           | Analysis Year                        | Interim Build Condition |           |       |
| Analysis Time Period                             | Sunday Summer Peak Hour |            |           |                                      |                         |           |       |
| Project Description                              |                         |            |           |                                      |                         |           |       |
| East/West Street: Site Access                    |                         |            |           | North/South Street: Cold Spring Road |                         |           |       |
| Intersection Orientation: North-South            |                         |            |           | Study Period (hrs): 0.25             |                         |           |       |
| <b>Vehicle Volumes and Adjustments</b>           |                         |            |           |                                      |                         |           |       |
| <b>Major Street</b>                              | Northbound              |            |           | Southbound                           |                         |           |       |
| Movement   | 1                       | 2          | 3         | 4                                    | 5                       | 6         |       |
|  | L                       | T          | R         | L                                    | T                       | R         |       |
| Volume (veh/h)                                   | 84                      | 10         |           |                                      | 15                      | 127       |       |
| Peak-Hour Factor, PHF                            | 0.90                    | 0.90       | 1.00      | 1.00                                 | 0.90                    | 0.90      |       |
| Hourly Flow Rate, HFR (veh/h)                    | 93                      | 11         | 0         | 0                                    | 16                      | 141       |       |
| Percent Heavy Vehicles                           | 0                       | --         | --        | 0                                    | --                      | --        |       |
| Median Type                                      | Undivided               |            |           |                                      |                         |           |       |
| RT Channelized                                   |                         |            | 0         |                                      |                         | 0         |       |
| Lanes  | 0                       | 1          | 0         | 0                                    | 1                       | 0         |       |
| Configuration                                    | LT                      |            |           |                                      |                         | TR        |       |
| Upstream Signal                                  |                         | 0          |           |                                      | 0                       |           |       |
| <b>Minor Street</b>                              | Eastbound               |            |           | Westbound                            |                         |           |       |
| Movement   | 7                       | 8          | 9         | 10                                   | 11                      | 12        |       |
|  | L                       | T          | R         | L                                    | T                       | R         |       |
| Volume (veh/h)                                   | 85                      |            | 158       |                                      |                         |           |       |
| Peak-Hour Factor, PHF                            | 0.90                    | 1.00       | 0.90      | 1.00                                 | 1.00                    | 1.00      |       |
| Hourly Flow Rate, HFR (veh/h)                    | 94                      | 0          | 175       | 0                                    | 0                       | 0         |       |
| Percent Heavy Vehicles                           | 0                       | 0          | 0         | 0                                    | 0                       | 0         |       |
| Percent Grade (%)                                |                         | 0          |           |                                      | 0                       |           |       |
| Flared Approach                                  |                         | N          |           |                                      | N                       |           |       |
| Storage  |                         | 0          |           |                                      | 0                       |           |       |
| RT Channelized                                   |                         |            | 0         |                                      |                         | 0         |       |
| Lanes  | 0                       | 0          | 0         | 0                                    | 0                       | 0         |       |
| Configuration                                    |                         | LR         |           |                                      |                         |           |       |
| <b>Delay, Queue Length, and Level of Service</b> |                         |            |           |                                      |                         |           |       |
| Approach   | Northbound              | Southbound | Westbound |                                      |                         | Eastbound |       |
| Movement   | 1                       | 4          | 7         | 8                                    | 9                       | 10        | 11 12 |
| Lane Configuration                               | LT                      |            |           |                                      |                         |           | LR    |
| v (veh/h)  | 93                      |            |           |                                      |                         |           | 269   |
| C (m) (veh/h)                                    | 1435                    |            |           |                                      |                         |           | 840   |
| v/c  | 0.06                    |            |           |                                      |                         |           | 0.32  |
| 95% queue length                                 | 0.21                    |            |           |                                      |                         |           | 1.39  |
| Control Delay (s/veh)                            | 7.7                     |            |           |                                      |                         |           | 11.3  |
| LOS  | A                       |            |           |                                      |                         |           | B     |
| Approach Delay (s/veh)                           | --                      | --         |           |                                      |                         |           | 11.3  |
| Approach LOS                                     | --                      | --         |           |                                      |                         |           | B     |

| TWO-WAY STOP CONTROL SUMMARY                     |                         |            |           |                                      |                             |           |      |    |
|--|-------------------------|------------|-----------|--------------------------------------|-----------------------------|-----------|------|----|
| <b>General Information</b>                       |                         |            |           | <b>Site Information</b>              |                             |           |      |    |
| Analyst  | JAG                     |            |           | Intersection                         | St . Joseph and Cold Spring |           |      |    |
| Agency/Co.                                       | TMA                     |            |           | Jurisdiction                         | Forestburgh                 |           |      |    |
| Date Performed                                   | 9/16/2009               |            |           | Analysis Year                        | No Build Condition          |           |      |    |
| Analysis Time Period                             | Friday Peak Hour Summer |            |           |                                      |                             |           |      |    |
| Project Description                              |                         |            |           |                                      |                             |           |      |    |
| East/West Street: St. Joseph Road                |                         |            |           | North/South Street: Cold Spring Road |                             |           |      |    |
| Intersection Orientation: North-South            |                         |            |           | Study Period (hrs): 0.25             |                             |           |      |    |
| <b>Vehicle Volumes and Adjustments</b>           |                         |            |           |                                      |                             |           |      |    |
| <b>Major Street</b>                              | Northbound              |            |           | Southbound                           |                             |           |      |    |
| Movement   | 1                       | 2          | 3         | 4                                    | 5                           | 6         |      |    |
|  | L                       | T          | R         | L                                    | T                           | R         |      |    |
| Volume (veh/h)                                   | 3                       | 24         |           |                                      | 16                          | 7         |      |    |
| Peak-Hour Factor, PHF                            | 0.64                    | 0.64       | 1.00      | 1.00                                 | 0.71                        | 0.71      |      |    |
| Hourly Flow Rate, HFR (veh/h)                    | 4                       | 37         | 0         | 0                                    | 22                          | 9         |      |    |
| Percent Heavy Vehicles                           | 0                       | --         | --        | 0                                    | --                          | --        |      |    |
| Median Type                                      | Undivided               |            |           |                                      |                             |           |      |    |
| RT Channelized                                   |                         |            | 0         |                                      |                             | 0         |      |    |
| Lanes  | 0                       | 1          | 0         | 0                                    | 1                           | 0         |      |    |
| Configuration                                    | LT                      |            |           |                                      |                             |           | TR   |    |
| Upstream Signal                                  |                         | 0          |           |                                      | 0                           |           |      |    |
| <b>Minor Street</b>                              | Eastbound               |            |           | Westbound                            |                             |           |      |    |
| Movement   | 7                       | 8          | 9         | 10                                   | 11                          | 12        |      |    |
|  | L                       | T          | R         | L                                    | T                           | R         |      |    |
| Volume (veh/h)                                   | 6                       |            | 2         |                                      |                             |           |      |    |
| Peak-Hour Factor, PHF                            | 0.50                    | 1.00       | 0.50      | 1.00                                 | 1.00                        | 1.00      |      |    |
| Hourly Flow Rate, HFR (veh/h)                    | 12                      | 0          | 4         | 0                                    | 0                           | 0         |      |    |
| Percent Heavy Vehicles                           | 0                       | 0          | 0         | 0                                    | 0                           | 0         |      |    |
| Percent Grade (%)                                | 0                       |            |           | 0                                    |                             |           |      |    |
| Flared Approach                                  |                         | N          |           |                                      | N                           |           |      |    |
| Storage  |                         | 0          |           |                                      | 0                           |           |      |    |
| RT Channelized                                   |                         |            | 0         |                                      |                             | 0         |      |    |
| Lanes  | 0                       | 0          | 0         | 0                                    | 0                           | 0         |      |    |
| Configuration                                    |                         | LR         |           |                                      |                             |           |      |    |
| <b>Delay, Queue Length, and Level of Service</b> |                         |            |           |                                      |                             |           |      |    |
| Approach   | Northbound              | Southbound | Westbound |                                      |                             | Eastbound |      |    |
| Movement   | 1                       | 4          | 7         | 8                                    | 9                           | 10        | 11   | 12 |
| Lane Configuration                               | LT                      |            |           |                                      |                             | LR        |      |    |
| v (veh/h)  | 4                       |            |           |                                      |                             |           | 16   |    |
| C (m) (veh/h)                                    | 1595                    |            |           |                                      |                             |           | 963  |    |
| v/c  | 0.00                    |            |           |                                      |                             |           | 0.02 |    |
| 95% queue length                                 | 0.01                    |            |           |                                      |                             |           | 0.05 |    |
| Control Delay (s/veh)                            | 7.3                     |            |           |                                      |                             |           | 8.8  |    |
| LOS  | A                       |            |           |                                      |                             |           | A    |    |
| Approach Delay (s/veh)                           | --                      | --         |           |                                      |                             | 8.8       |      |    |
| Approach LOS                                     | --                      | --         |           |                                      |                             | A         |      |    |

| TWO-WAY STOP CONTROL SUMMARY                     |                         |            |           |   |                             |           |    |
|--|-------------------------|------------|-----------|---|-----------------------------|-----------|----|
| <b>General Information</b>                       |                         |            |           | <b>Site Information</b>                     |                             |           |    |
| Analyst  | JAG                     |            |           | Intersection                                | Rose Valley and Cold Spring |           |    |
| Agency/Co.                                       | TMA                     |            |           | Jurisdiction                                | Town of Forestburgh         |           |    |
| Date Performed                                   | 9/16/2009               |            |           | Analysis Year                               | No Build Condition          |           |    |
| Analysis Time Period                             | Summer Friday Peak Hour |            |           |   |                             |           |    |
| Project Description                              |                         |            |           |   |                             |           |    |
| East/West Street: <i>Rose Valley Road</i>        |                         |            |           | North/South Street: <i>Cold Spring Road</i> |                             |           |    |
| Intersection Orientation: <i>North-South</i>     |                         |            |           | Study Period (hrs): <i>0.25</i>             |                             |           |    |
| <b>Vehicle Volumes and Adjustments</b>           |                         |            |           |   |                             |           |    |
| <b>Major Street</b>                              | Northbound              |            |           | Southbound                                  |                             |           |    |
| Movement   | 1                       | 2          | 3         | 4   | 5                           | 6         |    |
|  | L                       | T          | R         | L   | T                           | R         |    |
| Volume (veh/h)                                   |                         | 36         | 37        | 19  | 30                          |           |    |
| Peak-Hour Factor, PHF                            | 1.00                    | 0.90       | 0.90      | 0.83  | 0.83                        | 1.00      |    |
| Hourly Flow Rate, HFR (veh/h)                    | 0                       | 40         | 41        | 22  | 36                          | 0         |    |
| Percent Heavy Vehicles                           | 0                       | --         | --        | 0   | --                          | --        |    |
| Median Type                                      | Undivided               |            |           |   |                             |           |    |
| RT Channelized                                   |                         |            | 0         |   |                             | 0         |    |
| Lanes  | 0                       | 1          | 0         | 0   | 1                           | 0         |    |
| Configuration                                    |                         |            | TR        | LT  |                             |           |    |
| Upstream Signal                                  |                         | 0          |           |   | 0                           |           |    |
| <b>Minor Street</b>                              | Eastbound               |            |           | Westbound                                   |                             |           |    |
| Movement   | 7                       | 8          | 9         | 10  | 11                          | 12        |    |
|  | L                       | T          | R         | L   | T                           | R         |    |
| Volume (veh/h)                                   |                         |            |           | 29  |                             | 18        |    |
| Peak-Hour Factor, PHF                            | 1.00                    | 1.00       | 1.00      | 0.81  | 1.00                        | 0.81      |    |
| Hourly Flow Rate, HFR (veh/h)                    | 0                       | 0          | 0         | 35  | 0                           | 22        |    |
| Percent Heavy Vehicles                           | 0                       | 0          | 0         | 7   | 0                           | 7         |    |
| Percent Grade (%)                                | 0                       |            |           | 6   |                             |           |    |
| Flared Approach                                  |                         | N          |           |   | N                           |           |    |
| Storage  |                         | 0          |           |   | 0                           |           |    |
| RT Channelized                                   |                         |            | 0         |   |                             | 0         |    |
| Lanes  | 0                       | 0          | 0         | 0   | 0                           | 0         |    |
| Configuration                                    |                         |            |           |   | LR                          |           |    |
| <b>Delay, Queue Length, and Level of Service</b> |                         |            |           |   |                             |           |    |
| Approach   | Northbound              | Southbound | Westbound |   |                             | Eastbound |    |
| Movement   | 1                       | 4          | 7         | 8   | 9                           | 10        | 11 |
| Lane Configuration                               |                         | LT         |           | LR  |                             |           |    |
| v (veh/h)  |                         | 22         |           | 57  |                             |           |    |
| C (m) (veh/h)                                    |                         | 1529       |           | 855   |                             |           |    |
| v/c  |                         | 0.01       |           | 0.07  |                             |           |    |
| 95% queue length                                 |                         | 0.04       |           | 0.21  |                             |           |    |
| Control Delay (s/veh)                            |                         | 7.4        |           | 9.5   |                             |           |    |
| LOS  |                         | A          |           | A   |                             |           |    |
| Approach Delay (s/veh)                           | --                      | --         | 9.5       |   |                             |           |    |
| Approach LOS                                     | --                      | --         | A         |   |                             |           |    |

| TWO-WAY STOP CONTROL SUMMARY              |                         |           |            |                                    |                         |            |      |    |
|---|-------------------------|-----------|------------|------------------------------------|-------------------------|------------|------|----|
| General Information                       |                         |           |            | Site Information                   |                         |            |      |    |
| Analyst                                   | JAG                     |           |            | Intersection                       | Cold Spring and Waverly |            |      |    |
| Agency/Co.                                | TMA                     |           |            | Jurisdiction                       | Town of Forestburgh     |            |      |    |
| Date Performed                            | 9/16/2009               |           |            | Analysis Year                      | No Build Condition      |            |      |    |
| Analysis Time Period                      | Summer Friday Peak Hour |           |            |                                    |                         |            |      |    |
| Project Description                       |                         |           |            |                                    |                         |            |      |    |
| East/West Street: Cold Spring Road        |                         |           |            | North/South Street: Waverly Avenue |                         |            |      |    |
| Intersection Orientation: East-West       |                         |           |            | Study Period (hrs): 0.25           |                         |            |      |    |
| Vehicle Volumes and Adjustments           |                         |           |            |                                    |                         |            |      |    |
| Major Street                              | Eastbound               |           |            | Westbound                          |                         |            |      |    |
| Movement                                  | 1                       | 2         | 3          | 4                                  | 5                       | 6          |      |    |
|   | L                       | T         | R          | L                                  | T                       | R          |      |    |
| Volume (veh/h)                            | 29                      | 100       |            |                                    | 106                     | 51         |      |    |
| Peak-Hour Factor, PHF                     | 0.79                    | 0.79      | 1.00       | 1.00                               | 0.88                    | 0.88       |      |    |
| Hourly Flow Rate, HFR (veh/h)             | 36                      | 126       | 0          | 0                                  | 120                     | 57         |      |    |
| Percent Heavy Vehicles                    | 5                       | --        | --         | 0                                  | --                      | --         |      |    |
| Median Type                               | Undivided               |           |            |                                    |                         |            |      |    |
| RT Channelized                            |                         |           | 0          |                                    |                         |            |      | 0  |
| Lanes                                     | 0                       | 1         | 0          | 0                                  | 1                       | 0          |      |    |
| Configuration                             | LT                      |           |            |                                    |                         |            |      | TR |
| Upstream Signal                           |                         | 0         |            |                                    | 0                       |            |      |    |
| Minor Street                              | Northbound              |           |            | Southbound                         |                         |            |      |    |
| Movement                                  | 7                       | 8         | 9          | 10                                 | 11                      | 12         |      |    |
|   | L                       | T         | R          | L                                  | T                       | R          |      |    |
| Volume (veh/h)                            |                         |           |            | 81                                 |                         | 44         |      |    |
| Peak-Hour Factor, PHF                     | 1.00                    | 1.00      | 1.00       | 0.68                               | 1.00                    | 0.68       |      |    |
| Hourly Flow Rate, HFR (veh/h)             | 0                       | 0         | 0          | 119                                | 0                       | 64         |      |    |
| Percent Heavy Vehicles                    | 0                       | 0         | 0          | 3                                  | 0                       | 3          |      |    |
| Percent Grade (%)                         |                         | 0         |            |                                    | 8                       |            |      |    |
| Flared Approach                           |                         | N         |            |                                    | N                       |            |      |    |
| Storage                                   |                         | 0         |            |                                    | 0                       |            |      |    |
| RT Channelized                            |                         |           | 0          |                                    |                         | 0          |      |    |
| Lanes                                     | 0                       | 0         | 0          | 0                                  | 0                       | 0          |      |    |
| Configuration                             |                         |           |            |                                    | LR                      |            |      |    |
| Delay, Queue Length, and Level of Service |                         |           |            |                                    |                         |            |      |    |
| Approach                                  | Eastbound               | Westbound | Northbound |                                    |                         | Southbound |      |    |
| Movement                                  | 1                       | 4         | 7          | 8                                  | 9                       | 10         | 11   | 12 |
| Lane Configuration                        | LT                      |           |            |                                    |                         |            | LR   |    |
| v (veh/h)                                 | 36                      |           |            |                                    |                         |            | 183  |    |
| C (m) (veh/h)                             | 1381                    |           |            |                                    |                         |            | 624  |    |
| v/c                                       | 0.03                    |           |            |                                    |                         |            | 0.29 |    |
| 95% queue length                          | 0.08                    |           |            |                                    |                         |            | 1.22 |    |
| Control Delay (s/veh)                     | 7.7                     |           |            |                                    |                         |            | 13.1 |    |
| LOS                                       | A                       |           |            |                                    |                         |            | B    |    |
| Approach Delay (s/veh)                    | --                      | --        |            |                                    |                         |            | 13.1 |    |
| Approach LOS                              | --                      | --        |            |                                    |                         |            | B    |    |

| TWO-WAY STOP CONTROL SUMMARY                     |                         |           |            |                                      |                         |            |    |    |
|--|-------------------------|-----------|------------|--------------------------------------|-------------------------|------------|----|----|
| <b>General Information</b>                       |                         |           |            | <b>Site Information</b>              |                         |            |    |    |
| Analyst  | JAG                     |           |            | Intersection                         | E. Broadway/Rose Valley |            |    |    |
| Agency/Co.                                       | TMA                     |           |            | Jurisdiction                         | Town of Thompson        |            |    |    |
| Date Performed                                   | 9/16/2009               |           |            | Analysis Year                        | No Build Condition      |            |    |    |
| Analysis Time Period                             | Summer Friday Peak Hour |           |            |                                      |                         |            |    |    |
| Project Description                              |                         |           |            |                                      |                         |            |    |    |
| East/West Street: East Broadway                  |                         |           |            | North/South Street: Rose Valley Road |                         |            |    |    |
| Intersection Orientation: East-West              |                         |           |            | Study Period (hrs): 0.25             |                         |            |    |    |
| <b>Vehicle Volumes and Adjustments</b>           |                         |           |            |                                      |                         |            |    |    |
| <b>Major Street</b>                              | Eastbound               |           |            | Westbound                            |                         |            |    |    |
| Movement   | 1                       | 2         | 3          | 4                                    | 5                       | 6          |    |    |
|  | L                       | T         | R          | L                                    | T                       | R          |    |    |
| Volume (veh/h)                                   | 9                       | 246       | 83         | 27                                   | 214                     | 1          |    |    |
| Peak-Hour Factor, PHF                            | 0.81                    | 0.81      | 0.81       | 0.87                                 | 0.87                    | 0.87       |    |    |
| Hourly Flow Rate, HFR (veh/h)                    | 11                      | 303       | 102        | 31                                   | 245                     | 1          |    |    |
| Percent Heavy Vehicles                           | 7                       | --        | --         | 4                                    | --                      | --         |    |    |
| Median Type                                      | Undivided               |           |            |                                      |                         |            |    |    |
| RT Channelized                                   |                         |           | 0          |                                      |                         | 0          |    |    |
| Lanes  | 0                       | 1         | 0          | 0                                    | 1                       | 0          |    |    |
| Configuration                                    | LTR                     |           |            | LTR                                  |                         |            |    |    |
| Upstream Signal                                  |                         | 0         |            |                                      | 0                       |            |    |    |
| <b>Minor Street</b>                              | Northbound              |           |            | Southbound                           |                         |            |    |    |
| Movement   | 7                       | 8         | 9          | 10                                   | 11                      | 12         |    |    |
|  | L                       | T         | R          | L                                    | T                       | R          |    |    |
| Volume (veh/h)                                   | 11                      | 5         | 53         | 0                                    | 2                       | 6          |    |    |
| Peak-Hour Factor, PHF                            | 0.80                    | 0.80      | 0.80       | 0.58                                 | 0.58                    | 0.58       |    |    |
| Hourly Flow Rate, HFR (veh/h)                    | 13                      | 6         | 66         | 0                                    | 3                       | 10         |    |    |
| Percent Heavy Vehicles                           | 7                       | 7         | 7          | 0                                    | 0                       | 0          |    |    |
| Percent Grade (%)                                | 0                       |           |            | 0                                    |                         |            |    |    |
| Flared Approach                                  |                         | Y         |            |                                      | N                       |            |    |    |
| Storage  |                         | 2         |            |                                      | 0                       |            |    |    |
| RT Channelized                                   |                         |           | 0          |                                      |                         | 0          |    |    |
| Lanes  | 0                       | 1         | 0          | 0                                    | 1                       | 0          |    |    |
| Configuration                                    |                         | LTR       |            |                                      | LTR                     |            |    |    |
| <b>Delay, Queue Length, and Level of Service</b> |                         |           |            |                                      |                         |            |    |    |
| Approach   | Eastbound               | Westbound | Northbound |                                      |                         | Southbound |    |    |
| Movement   | 1                       | 4         | 7          | 8                                    | 9                       | 10         | 11 | 12 |
| Lane Configuration                               | LTR                     | LTR       | LTR        |                                      |                         | LTR        |    |    |
| v (veh/h)  | 11                      | 31        | 85         |                                      |                         | 13         |    |    |
| C (m) (veh/h)                                    | 1291                    | 1143      | 874        |                                      |                         | 604        |    |    |
| v/c  | 0.01                    | 0.03      | 0.10       |                                      |                         | 0.02       |    |    |
| 95% queue length                                 | 0.03                    | 0.08      | 0.32       |                                      |                         | 0.07       |    |    |
| Control Delay (s/veh)                            | 7.8                     | 8.2       | 12.1       |                                      |                         | 11.1       |    |    |
| LOS  | A                       | A         | B          |                                      |                         | B          |    |    |
| Approach Delay (s/veh)                           | --                      | --        | 12.1       |                                      |                         | 11.1       |    |    |
| Approach LOS                                     | --                      | --        | B          |                                      |                         | B          |    |    |



### HCS+™ DETAILED REPORT

| General Information |                         |  |  | Site Information |                        |  |  |
|---------------------|-------------------------|--|--|------------------|------------------------|--|--|
| Analyst             | JAG                     |  |  | Intersection     | Rt 42, Bank, St. Johns |  |  |
| Agency or Co.       | TMA                     |  |  | Area Type        | All other areas        |  |  |
| Date Performed      | 9/16/2009               |  |  | Jurisdiction     | Village of Monticello  |  |  |
| Time Period         | Summer Friday Peak Hour |  |  | Analysis Year    | No Build Condition     |  |  |
|                     |                         |  |  | Project ID       |                        |  |  |

| Volume and Timing Input                   |          |         |      |      |       |      |                        |       |         |          |       |      |    |
|---|----------|---------|------|------|-------|------|------------------------|-------|---------|----------|-------|------|----|
|   | EB       |         |      | WB   |       |      | NB                     |       |         | SB       |       |      |    |
|   | LT       | TH      | RT   | LT   | TH    | RT   | LT                     | TH    | RT      | LT       | TH    | RT   |    |
| Number of Lanes, N <sub>1</sub>           | 0        | 2       | 0    | 0    | 2     | 0    | 0                      | 1     | 0       | 0        | 1     | 0    |    |
| Lane Group                                |          | LTR     |      |      | LTR   |      |                        | LTR   |         |          | LTR   |      |    |
| Volume, V (vph)                           | 9        | 775     | 84   | 123  | 869   | 27   | 89                     | 11    | 120     | 37       | 30    | 36   |    |
| % Heavy Vehicles, %HV                     | 7        | 7       | 7    | 4    | 4     | 4    | 1                      | 1     | 1       | 2        | 2     | 2    |    |
| Peak-Hour Factor, PHF                     | 0.95     | 0.95    | 0.95 | 0.95 | 0.95  | 0.95 | 0.81                   | 0.81  | 0.81    | 0.88     | 0.88  | 0.88 |    |
| Pretimed (P) or Actuated (A)              | A        | A       | A    | A    | A     | A    | A                      | A     | A       | A        | A     | A    |    |
| Start-up Lost Time, I <sub>1</sub>        |          | 2.0     |      |      | 2.0   |      |                        | 2.0   |         |          | 2.0   |      |    |
| Extension of Effective Green, e           |          | 2.0     |      |      | 2.0   |      |                        | 2.0   |         |          | 2.0   |      |    |
| Arrival Type, AT                          |          | 3       |      |      | 3     |      |                        | 3     |         |          | 3     |      |    |
| Unit Extension, UE                        |          | 3.0     |      |      | 3.0   |      |                        | 3.0   |         |          | 3.0   |      |    |
| Filtering/Metering, I                     |          | 1.000   |      |      | 1.000 |      |                        | 1.000 |         |          | 1.000 |      |    |
| Initial Unmet Demand, Q <sub>b</sub>      |          | 0.0     |      |      | 0.0   |      |                        | 0.0   |         |          | 0.0   |      |    |
| Ped / Bike / RTOR Volumes                 | 0        | 0       | 0    | 0    | 0     | 0    | 0                      | 0     | 0       | 0        | 0     | 0    |    |
| Lane Width                                |          | 12.0    |      |      | 12.0  |      |                        | 11.0  |         |          | 12.0  |      |    |
| Parking / Grade / Parking                 | N        | 0       | N    | N    | 0     | N    | N                      | 0     | N       | N        | 0     | N    |    |
| Parking Maneuvers, N <sub>m</sub>         |          |         |      |      |       |      |                        |       |         |          |       |      |    |
| Buses Stopping, N <sub>b</sub>            |          | 0       |      |      | 0     |      |                        | 0     |         |          | 0     |      |    |
| Min. Time for Pedestrians, G <sub>p</sub> |          | 3.2     |      |      | 3.2   |      |                        | 3.2   |         |          | 3.2   |      |    |
| Phasing                                   | EW Perm  | WB Only | 03   |      |       | 04   |                        |       | NB Only | SB Only  | 07    |      | 08 |
| Timing                                    | G = 38.0 | G = 7.0 | G =  | G =  |       |      | G = 20.0               |       |         | G = 10.0 | G =   |      |    |
|   | Y = 5    | Y = 5   | Y =  | Y =  |       |      | Y = 5                  |       |         | Y = 5    | Y =   |      |    |
| Duration of Analysis, T = 0.25            |          |         |      |      |       |      | Cycle Length, C = 95.0 |       |         |          |       |      |    |

| Lane Group Capacity, Control Delay, and LOS Determination |      |       |    |                       |       |    |                  |       |    |      |       |    |
|---|------|-------|----|-----------------------|-------|----|------------------|-------|----|------|-------|----|
|   | EB   |       |    | WB                    |       |    | NB               |       |    | SB   |       |    |
|   | LT   | TH    | RT | LT                    | TH    | RT | LT               | TH    | RT | LT   | TH    | RT |
| Adjusted Flow Rate, v                                     |      | 913   |    |                       | 1072  |    |                  | 272   |    |      | 117   |    |
| Lane Group Capacity, c                                    |      | 1255  |    |                       | 1232  |    |                  | 348   |    |      | 183   |    |
| v/c Ratio, X  |      | 0.73  |    |                       | 0.87  |    |                  | 0.78  |    |      | 0.64  |    |
| Total Green Ratio, g/C                                    |      | 0.40  |    |                       | 0.53  |    |                  | 0.21  |    |      | 0.11  |    |
| Uniform Delay, d <sub>1</sub>                             |      | 24.1  |    |                       | 19.7  |    |                  | 35.4  |    |      | 40.8  |    |
| Progression Factor, PF                                    |      | 1.000 |    |                       | 1.000 |    |                  | 1.000 |    |      | 1.000 |    |
| Delay Calibration, k                                      |      | 0.29  |    |                       | 0.40  |    |                  | 0.33  |    |      | 0.22  |    |
| Incremental Delay, d <sub>2</sub>                         |      | 2.2   |    |                       | 7.0   |    |                  | 11.0  |    |      | 7.3   |    |
| Initial Queue Delay, d <sub>3</sub>                       |      | 0.0   |    |                       | 0.0   |    |                  | 0.0   |    |      | 0.0   |    |
| Control Delay   |      | 26.3  |    |                       | 26.6  |    |                  | 46.4  |    |      | 48.1  |    |
| Lane Group LOS  |      | C     |    |                       | C     |    |                  | D     |    |      | D     |    |
| Approach Delay  | 26.3 |       |    | 26.6                  |       |    | 46.4             |       |    | 48.1 |       |    |
| Approach LOS  | C    |       |    | C                     |       |    | D                |       |    | D    |       |    |
| Intersection Delay  | 29.8 |       |    | X <sub>c</sub> = 0.90 |       |    | Intersection LOS |       |    | C    |       |    |

| TWO-WAY STOP CONTROL SUMMARY                     |                         |            |           |   |                            |           |       |
|--|-------------------------|------------|-----------|---|----------------------------|-----------|-------|
| <b>General Information</b>                       |                         |            |           | <b>Site Information</b>                           |                            |           |       |
| Analyst  | JAG                     |            |           | Intersection                                      | W. Broadway/Forestburgh Rd |           |       |
| Agency/Co.                                       | TMA                     |            |           | Jurisdiction                                      | Village of Monticello      |           |       |
| Date Performed                                   | 9/16/2009               |            |           | Analysis Year                                     | No Build Condition         |           |       |
| Analysis Time Period                             | Summer Friday Peak Hour |            |           |   |                            |           |       |
| Project Description                              |                         |            |           |   |                            |           |       |
| East/West Street: West Broadway                  |                         |            |           | North/South Street: Rt 42 (Forestburgh, Broadway) |                            |           |       |
| Intersection Orientation: North-South            |                         |            |           | Study Period (hrs): 0.25                          |                            |           |       |
| <b>Vehicle Volumes and Adjustments</b>           |                         |            |           |   |                            |           |       |
| <b>Major Street</b>                              | Northbound              |            |           | Southbound  |                            |           |       |
| Movement   | 1                       | 2          | 3         | 4   | 5                          | 6         |       |
|  | L                       | T          | R         | L   | T                          | R         |       |
| Volume (veh/h)                                   | 117                     | 626        |           |   | 920                        | 170       |       |
| Peak-Hour Factor, PHF                            | 0.92                    | 0.92       | 1.00      | 1.00  | 0.93                       | 0.93      |       |
| Hourly Flow Rate, HFR (veh/h)                    | 127                     | 680        | 0         | 0   | 989                        | 182       |       |
| Percent Heavy Vehicles                           | 7                       | --         | --        | 0   | --                         | --        |       |
| Median Type                                      | Undivided               |            |           |   |                            |           |       |
| RT Channelized                                   |                         |            | 0         |   |                            |           | 0     |
| Lanes  | 1                       | 1          | 0         | 0   | 1                          |           | 0     |
| Configuration                                    | L                       | T          |           |   |                            |           | TR    |
| Upstream Signal                                  |                         | 0          |           |   | 0                          |           |       |
| <b>Minor Street</b>                              | Eastbound               |            |           | Westbound   |                            |           |       |
| Movement   | 7                       | 8          | 9         | 10  | 11                         | 12        |       |
|  | L                       | T          | R         | L   | T                          | R         |       |
| Volume (veh/h)                                   | 106                     |            | 170       |   |                            |           |       |
| Peak-Hour Factor, PHF                            | 0.87                    | 1.00       | 0.87      | 1.00  | 1.00                       | 1.00      |       |
| Hourly Flow Rate, HFR (veh/h)                    | 121                     | 0          | 195       | 0   | 0                          | 0         |       |
| Percent Heavy Vehicles                           | 5                       | 0          | 5         | 0   | 0                          | 0         |       |
| Percent Grade (%)                                |                         | 0          |           |   | 0                          |           |       |
| Flared Approach                                  |                         | Y          |           |   | N                          |           |       |
| Storage  |                         | 1          |           |   | 0                          |           |       |
| RT Channelized                                   |                         |            | 0         |   |                            |           | 0     |
| Lanes  | 0                       | 0          | 0         | 0   | 0                          | 0         |       |
| Configuration                                    |                         | LR         |           |   |                            |           |       |
| <b>Delay, Queue Length, and Level of Service</b> |                         |            |           |   |                            |           |       |
| Approach   | Northbound              | Southbound | Westbound |   |                            | Eastbound |       |
| Movement   | 1                       | 4          | 7         | 8   | 9                          | 10        | 11 12 |
| Lane Configuration                               | L                       |            |           |   |                            |           | LR    |
| v (veh/h)  | 127                     |            |           |   |                            |           | 316   |
| C (m) (veh/h)                                    | 579                     |            |           |   |                            |           | 99    |
| v/c  | 0.22                    |            |           |   |                            |           | 3.19  |
| 95% queue length                                 | 0.83                    |            |           |   |                            |           | 30.95 |
| Control Delay (s/veh)                            | 13.0                    |            |           |   |                            |           | 1078  |
| LOS  | B                       |            |           |   |                            |           | F     |
| Approach Delay (s/veh)                           | --                      | --         |           |   |                            |           | 1078  |
| Approach LOS                                     | --                      | --         |           |   |                            |           | F     |

| TWO-WAY STOP CONTROL SUMMARY                     |                         |            |           |                                  |                          |           |    |    |
|--|-------------------------|------------|-----------|----------------------------------|--------------------------|-----------|----|----|
| <b>General Information</b>                       |                         |            |           | <b>Site Information</b>          |                          |           |    |    |
| Analyst  | JAG                     |            |           | Intersection                     | St. Joseph and NYS Rt 42 |           |    |    |
| Agency/Co.                                       | TMA                     |            |           | Jurisdiction                     | Town of Forestburgh      |           |    |    |
| Date Performed                                   | 9/16/2009               |            |           | Analysis Year                    | No Build Condition       |           |    |    |
| Analysis Time Period                             | Summer Friday Peak Hour |            |           |                                  |                          |           |    |    |
| Project Description                              |                         |            |           |                                  |                          |           |    |    |
| East/West Street: St. Joseph Road                |                         |            |           | North/South Street: NYS Route 42 |                          |           |    |    |
| Intersection Orientation: North-South            |                         |            |           | Study Period (hrs): 0.25         |                          |           |    |    |
| <b>Vehicle Volumes and Adjustments</b>           |                         |            |           |                                  |                          |           |    |    |
| <b>Major Street</b>                              |                         | Northbound |           |                                  | Southbound               |           |    |    |
| Movement   | 1                       | 2          | 3         | 4                                | 5                        | 6         |    |    |
|  | L                       | T          | R         | L                                | T                        | R         |    |    |
| Volume (veh/h)                                   |                         | 220        | 4         | 0                                | 289                      |           |    |    |
| Peak-Hour Factor, PHF                            | 1.00                    | 0.89       | 0.89      | 0.91                             | 0.91                     | 1.00      |    |    |
| Hourly Flow Rate, HFR (veh/h)                    | 0                       | 247        | 4         | 0                                | 317                      | 0         |    |    |
| Percent Heavy Vehicles                           | 0                       | --         | --        | 0                                | --                       | --        |    |    |
| Median Type                                      | Undivided               |            |           |                                  |                          |           |    |    |
| RT Channelized                                   |                         |            | 0         |                                  |                          | 0         |    |    |
| Lanes  | 0                       | 1          | 0         | 0                                | 1                        | 0         |    |    |
| Configuration                                    |                         |            | TR        | LT                               |                          |           |    |    |
| Upstream Signal                                  |                         | 0          |           |                                  | 0                        |           |    |    |
| <b>Minor Street</b>                              |                         | Eastbound  |           |                                  | Westbound                |           |    |    |
| Movement   | 7                       | 8          | 9         | 10                               | 11                       | 12        |    |    |
|  | L                       | T          | R         | L                                | T                        | R         |    |    |
| Volume (veh/h)                                   |                         |            |           | 7                                |                          | 1         |    |    |
| Peak-Hour Factor, PHF                            | 1.00                    | 1.00       | 1.00      | 0.75                             | 1.00                     | 0.75      |    |    |
| Hourly Flow Rate, HFR (veh/h)                    | 0                       | 0          | 0         | 9                                | 0                        | 1         |    |    |
| Percent Heavy Vehicles                           | 0                       | 0          | 0         | 0                                | 0                        | 0         |    |    |
| Percent Grade (%)                                |                         | 0          |           |                                  | 0                        |           |    |    |
| Flared Approach                                  |                         | N          |           |                                  | N                        |           |    |    |
| Storage  |                         | 0          |           |                                  | 0                        |           |    |    |
| RT Channelized                                   |                         |            | 0         |                                  |                          | 0         |    |    |
| Lanes  | 0                       | 0          | 0         | 0                                | 0                        | 0         |    |    |
| Configuration                                    |                         |            |           |                                  | LR                       |           |    |    |
| <b>Delay, Queue Length, and Level of Service</b> |                         |            |           |                                  |                          |           |    |    |
| Approach   | Northbound              | Southbound | Westbound |                                  |                          | Eastbound |    |    |
| Movement   | 1                       | 4          | 7         | 8                                | 9                        | 10        | 11 | 12 |
| Lane Configuration                               |                         | LT         |           | LR                               |                          |           |    |    |
| v (veh/h)  |                         | 0          |           | 10                               |                          |           |    |    |
| C (m) (veh/h)                                    |                         | 1326       |           | 509                              |                          |           |    |    |
| v/c  |                         | 0.00       |           | 0.02                             |                          |           |    |    |
| 95% queue length                                 |                         | 0.00       |           | 0.06                             |                          |           |    |    |
| Control Delay (s/veh)                            |                         | 7.7        |           | 12.2                             |                          |           |    |    |
| LOS  |                         | A          |           | B                                |                          |           |    |    |
| Approach Delay (s/veh)                           | --                      | --         | 12.2      |                                  |                          |           |    |    |
| Approach LOS                                     | --                      | --         | B         |                                  |                          |           |    |    |

## TWO-WAY STOP CONTROL SUMMARY

| General Information                       |                         |            | Site Information                     |                             |      |           |      |    |
|---|-------------------------|------------|--------------------------------------|-----------------------------|------|-----------|------|----|
| Analyst                                   | JAG                     |            | Intersection                         | St . Joseph and Cold Spring |      |           |      |    |
| Agency/Co.                                | TMA                     |            | Jurisdiction                         | Town of Forestburgh         |      |           |      |    |
| Date Performed                            | 9/16/2009               |            | Analysis Year                        | No Build Condition          |      |           |      |    |
| Analysis Time Period                      | Sunday Peak Hour Summer |            |                                      |                             |      |           |      |    |
| Project Description                       |                         |            |                                      |                             |      |           |      |    |
| East/West Street: St. Joseph Road         |                         |            | North/South Street: Cold Spring Road |                             |      |           |      |    |
| Intersection Orientation: North-South     |                         |            | Study Period (hrs): 0.25             |                             |      |           |      |    |
| Vehicle Volumes and Adjustments           |                         |            |                                      |                             |      |           |      |    |
| Major Street                              | Northbound              |            |                                      | Southbound                  |      |           |      |    |
| Movement                                  | 1                       | 2          | 3                                    | 4                           | 5    | 6         |      |    |
|   | L                       | T          | R                                    | L                           | T    | R         |      |    |
| Volume (veh/h)                            | 1                       | 8          |                                      |                             | 17   | 2         |      |    |
| Peak-Hour Factor, PHF                     | 0.58                    | 0.58       | 1.00                                 | 1.00                        | 0.61 | 0.61      |      |    |
| Hourly Flow Rate, HFR (veh/h)             | 1                       | 13         | 0                                    | 0                           | 27   | 3         |      |    |
| Percent Heavy Vehicles                    | 0                       | --         | --                                   | 0                           | --   | --        |      |    |
| Median Type                               | Undivided               |            |                                      |                             |      |           |      |    |
| RT Channelized                            |                         |            | 0                                    |                             |      | 0         |      |    |
| Lanes                                     | 0                       | 1          | 0                                    | 0                           | 1    | 0         |      |    |
| Configuration                             | LT                      |            |                                      |                             |      | TR        |      |    |
| Upstream Signal                           |                         | 0          |                                      |                             | 0    |           |      |    |
| Minor Street                              | Eastbound               |            |                                      | Westbound                   |      |           |      |    |
| Movement                                  | 7                       | 8          | 9                                    | 10                          | 11   | 12        |      |    |
|   | L                       | T          | R                                    | L                           | T    | R         |      |    |
| Volume (veh/h)                            | 1                       |            | 1                                    |                             |      |           |      |    |
| Peak-Hour Factor, PHF                     | 0.25                    | 1.00       | 0.25                                 | 1.00                        | 1.00 | 1.00      |      |    |
| Hourly Flow Rate, HFR (veh/h)             | 4                       | 0          | 4                                    | 0                           | 0    | 0         |      |    |
| Percent Heavy Vehicles                    | 0                       | 0          | 0                                    | 0                           | 0    | 0         |      |    |
| Percent Grade (%)                         | 0                       |            |                                      | 0                           |      |           |      |    |
| Flared Approach                           |                         | N          |                                      |                             | N    |           |      |    |
| Storage                                   |                         | 0          |                                      |                             | 0    |           |      |    |
| RT Channelized                            |                         |            | 0                                    |                             |      | 0         |      |    |
| Lanes                                     | 0                       | 0          | 0                                    | 0                           | 0    | 0         |      |    |
| Configuration                             |                         | LR         |                                      |                             |      |           |      |    |
| Delay, Queue Length, and Level of Service |                         |            |                                      |                             |      |           |      |    |
| Approach                                  | Northbound              | Southbound | Westbound                            |                             |      | Eastbound |      |    |
| Movement                                  | 1                       | 4          | 7                                    | 8                           | 9    | 10        | 11   | 12 |
| Lane Configuration                        | LT                      |            |                                      |                             |      |           | LR   |    |
| v (veh/h)                                 | 1                       |            |                                      |                             |      |           | 8    |    |
| C (m) (veh/h)                             | 1596                    |            |                                      |                             |      |           | 1011 |    |
| v/c                                       | 0.00                    |            |                                      |                             |      |           | 0.01 |    |
| 95% queue length                          | 0.00                    |            |                                      |                             |      |           | 0.02 |    |
| Control Delay (s/veh)                     | 7.3                     |            |                                      |                             |      |           | 8.6  |    |
| LOS                                       | A                       |            |                                      |                             |      |           | A    |    |
| Approach Delay (s/veh)                    | --                      | --         |                                      |                             |      |           | 8.6  |    |
| Approach LOS                              | --                      | --         |                                      |                             |      |           | A    |    |

| TWO-WAY STOP CONTROL SUMMARY                     |                         |            |           |                                      |                             |           |    |
|--|-------------------------|------------|-----------|--------------------------------------|-----------------------------|-----------|----|
| <b>General Information</b>                       |                         |            |           | <b>Site Information</b>              |                             |           |    |
| Analyst  | JAG                     |            |           | Intersection                         | Rose Valley and Cold Spring |           |    |
| Agency/Co.                                       | TMA                     |            |           | Jurisdiction                         | Town of Forestburg          |           |    |
| Date Performed                                   | 9/16/2009               |            |           | Analysis Year                        | No Build Condition          |           |    |
| Analysis Time Period                             | Summer Sunday Peak Hour |            |           |                                      |                             |           |    |
| Project Description                              |                         |            |           |                                      |                             |           |    |
| East/West Street: Rose Valley Road               |                         |            |           | North/South Street: Cold Spring Road |                             |           |    |
| Intersection Orientation: North-South            |                         |            |           | Study Period (hrs): 0.25             |                             |           |    |
| <b>Vehicle Volumes and Adjustments</b>           |                         |            |           |                                      |                             |           |    |
| <b>Major Street</b>                              | Northbound              |            |           | Southbound                           |                             |           |    |
| Movement   | 1                       | 2          | 3         | 4                                    | 5                           | 6         |    |
|  | L                       | T          | R         | L                                    | T                           | R         |    |
| Volume (veh/h)                                   |                         | 8          | 6         | 15                                   | 1                           |           |    |
| Peak-Hour Factor, PHF                            | 1.00                    | 0.60       | 0.60      | 0.70                                 | 0.70                        | 1.00      |    |
| Hourly Flow Rate, HFR (veh/h)                    | 0                       | 13         | 9         | 21                                   | 1                           | 0         |    |
| Percent Heavy Vehicles                           | 0                       | --         | --        | 0                                    | --                          | --        |    |
| Median Type                                      | Undivided               |            |           |                                      |                             |           |    |
| RT Channelized                                   |                         |            | 0         |                                      |                             | 0         |    |
| Lanes  | 0                       | 1          | 0         | 0                                    | 1                           | 0         |    |
| Configuration                                    |                         |            | TR        | LT                                   |                             |           |    |
| Upstream Signal                                  |                         | 0          |           |                                      | 0                           |           |    |
| <b>Minor Street</b>                              | Eastbound               |            |           | Westbound                            |                             |           |    |
| Movement   | 7                       | 8          | 9         | 10                                   | 11                          | 12        |    |
|  | L                       | T          | R         | L                                    | T                           | R         |    |
| Volume (veh/h)                                   |                         |            |           | 9                                    |                             | 2         |    |
| Peak-Hour Factor, PHF                            | 1.00                    | 1.00       | 1.00      | 0.50                                 | 1.00                        | 0.50      |    |
| Hourly Flow Rate, HFR (veh/h)                    | 0                       | 0          | 0         | 18                                   | 0                           | 4         |    |
| Percent Heavy Vehicles                           | 0                       | 0          | 0         | 10                                   | 0                           | 10        |    |
| Percent Grade (%)                                | 0                       |            |           | 6                                    |                             |           |    |
| Flared Approach                                  |                         | N          |           |                                      | N                           |           |    |
| Storage  |                         | 0          |           |                                      | 0                           |           |    |
| RT Channelized                                   |                         |            | 0         |                                      |                             | 0         |    |
| Lanes  | 0                       | 0          | 0         | 0                                    | 0                           | 0         |    |
| Configuration                                    |                         |            |           |                                      | LR                          |           |    |
| <b>Delay, Queue Length, and Level of Service</b> |                         |            |           |                                      |                             |           |    |
| Approach   | Northbound              | Southbound | Westbound |                                      |                             | Eastbound |    |
| Movement   | 1                       | 4          | 7         | 8                                    | 9                           | 10        | 11 |
| Lane Configuration                               |                         | LT         |           | LR                                   |                             |           |    |
| v (veh/h)  |                         | 21         |           | 22                                   |                             |           |    |
| C (m) (veh/h)                                    |                         | 1607       |           | 918                                  |                             |           |    |
| v/c  |                         | 0.01       |           | 0.02                                 |                             |           |    |
| 95% queue length                                 |                         | 0.04       |           | 0.07                                 |                             |           |    |
| Control Delay (s/veh)                            |                         | 7.3        |           | 9.0                                  |                             |           |    |
| LOS  |                         | A          |           | A                                    |                             |           |    |
| Approach Delay (s/veh)                           | --                      | --         | 9.0       |                                      |                             |           |    |
| Approach LOS                                     | --                      | --         | A         |                                      |                             |           |    |

| TWO-WAY STOP CONTROL SUMMARY                     |                         |           |            |                                    |                         |            |      |    |
|--|-------------------------|-----------|------------|------------------------------------|-------------------------|------------|------|----|
| <b>General Information</b>                       |                         |           |            | <b>Site Information</b>            |                         |            |      |    |
| Analyst  | JAG                     |           |            | Intersection                       | Cold Spring and Waverly |            |      |    |
| Agency/Co.                                       | TMA                     |           |            | Jurisdiction                       | Town of Forestburgh     |            |      |    |
| Date Performed                                   | 9/16/2009               |           |            | Analysis Year                      | No Build Condition      |            |      |    |
| Analysis Time Period                             | Summer Sunday Peak Hour |           |            |                                    |                         |            |      |    |
| Project Description                              |                         |           |            |                                    |                         |            |      |    |
| East/West Street: Cold Spring Road               |                         |           |            | North/South Street: Waverly Avenue |                         |            |      |    |
| Intersection Orientation: East-West              |                         |           |            | Study Period (hrs): 0.25           |                         |            |      |    |
| <b>Vehicle Volumes and Adjustments</b>           |                         |           |            |                                    |                         |            |      |    |
| <b>Major Street</b>                              | Eastbound               |           |            | Westbound                          |                         |            |      |    |
| Movement   | 1                       | 2         | 3          | 4                                  | 5                       | 6          |      |    |
|  | L                       | T         | R          | L                                  | T                       | R          |      |    |
| Volume (veh/h)                                   | 21                      | 70        |            |                                    | 60                      | 45         |      |    |
| Peak-Hour Factor, PHF                            | 0.73                    | 0.73      | 1.00       | 1.00                               | 0.89                    | 0.89       |      |    |
| Hourly Flow Rate, HFR (veh/h)                    | 28                      | 95        | 0          | 0                                  | 67                      | 50         |      |    |
| Percent Heavy Vehicles                           | 0                       | --        | --         | 0                                  | --                      | --         |      |    |
| Median Type                                      | Undivided               |           |            |                                    |                         |            |      |    |
| RT Channelized                                   |                         |           | 0          |                                    |                         |            | 0    |    |
| Lanes  | 0                       | 1         | 0          | 0                                  | 1                       | 0          |      |    |
| Configuration                                    | LT                      |           |            |                                    |                         |            | TR   |    |
| Upstream Signal                                  |                         | 0         |            |                                    | 0                       |            |      |    |
| <b>Minor Street</b>                              | Northbound              |           |            | Southbound                         |                         |            |      |    |
| Movement   | 7                       | 8         | 9          | 10                                 | 11                      | 12         |      |    |
|  | L                       | T         | R          | L                                  | T                       | R          |      |    |
| Volume (veh/h)                                   |                         |           |            | 46                                 |                         | 26         |      |    |
| Peak-Hour Factor, PHF                            | 1.00                    | 1.00      | 1.00       | 0.71                               | 1.00                    | 0.71       |      |    |
| Hourly Flow Rate, HFR (veh/h)                    | 0                       | 0         | 0          | 64                                 | 0                       | 36         |      |    |
| Percent Heavy Vehicles                           | 0                       | 0         | 0          | 0                                  | 0                       | 0          |      |    |
| Percent Grade (%)                                | 0                       |           |            | 8                                  |                         |            |      |    |
| Flared Approach                                  |                         | N         |            |                                    | N                       |            |      |    |
| Storage  |                         | 0         |            |                                    | 0                       |            |      |    |
| RT Channelized                                   |                         |           | 0          |                                    |                         | 0          |      |    |
| Lanes  | 0                       | 0         | 0          | 0                                  | 0                       | 0          |      |    |
| Configuration                                    |                         |           |            |                                    | LR                      |            |      |    |
| <b>Delay, Queue Length, and Level of Service</b> |                         |           |            |                                    |                         |            |      |    |
| Approach   | Eastbound               | Westbound | Northbound |                                    |                         | Southbound |      |    |
| Movement   | 1                       | 4         | 7          | 8                                  | 9                       | 10         | 11   | 12 |
| Lane Configuration                               | LT                      |           |            |                                    |                         |            | LR   |    |
| v (veh/h)  | 28                      |           |            |                                    |                         |            | 100  |    |
| C (m) (veh/h)                                    | 1484                    |           |            |                                    |                         |            | 742  |    |
| v/c  | 0.02                    |           |            |                                    |                         |            | 0.13 |    |
| 95% queue length                                 | 0.06                    |           |            |                                    |                         |            | 0.46 |    |
| Control Delay (s/veh)                            | 7.5                     |           |            |                                    |                         |            | 10.6 |    |
| LOS  | A                       |           |            |                                    |                         |            | B    |    |
| Approach Delay (s/veh)                           | --                      | --        |            |                                    |                         |            | 10.6 |    |
| Approach LOS                                     | --                      | --        |            |                                    |                         |            | B    |    |

| TWO-WAY STOP CONTROL SUMMARY                     |                         |           |            |                                      |                         |            |    |    |
|--|-------------------------|-----------|------------|--------------------------------------|-------------------------|------------|----|----|
| <b>General Information</b>                       |                         |           |            | <b>Site Information</b>              |                         |            |    |    |
| Analyst  | JAG                     |           |            | Intersection                         | E. Broadway/Rose Valley |            |    |    |
| Agency/Co.                                       | TMA                     |           |            | Jurisdiction                         | Town of Thompson        |            |    |    |
| Date Performed                                   | 9/16/2009               |           |            | Analysis Year                        | No Build Condition      |            |    |    |
| Analysis Time Period                             | Summer Sunday Peak Hour |           |            |                                      |                         |            |    |    |
| Project Description                              |                         |           |            |                                      |                         |            |    |    |
| East/West Street: East Broadway                  |                         |           |            | North/South Street: Rose Valley Road |                         |            |    |    |
| Intersection Orientation: East-West              |                         |           |            | Study Period (hrs): 0.25             |                         |            |    |    |
| <b>Vehicle Volumes and Adjustments</b>           |                         |           |            |                                      |                         |            |    |    |
| <b>Major Street</b>                              | Eastbound               |           |            | Westbound                            |                         |            |    |    |
| Movement   | 1                       | 2         | 3          | 4                                    | 5                       | 6          |    |    |
|  | L                       | T         | R          | L                                    | T                       | R          |    |    |
| Volume (veh/h)                                   | 5                       | 231       | 45         | 23                                   | 151                     | 0          |    |    |
| Peak-Hour Factor, PHF                            | 0.79                    | 0.79      | 0.79       | 0.84                                 | 0.84                    | 0.84       |    |    |
| Hourly Flow Rate, HFR (veh/h)                    | 6                       | 292       | 56         | 27                                   | 179                     | 0          |    |    |
| Percent Heavy Vehicles                           | 10                      | --        | --         | 4                                    | --                      | --         |    |    |
| Median Type                                      | Undivided               |           |            |                                      |                         |            |    |    |
| RT Channelized                                   |                         |           | 0          |                                      |                         | 0          |    |    |
| Lanes  | 0                       | 1         | 0          | 0                                    | 1                       | 0          |    |    |
| Configuration                                    | LTR                     |           |            | LTR                                  |                         |            |    |    |
| Upstream Signal                                  |                         | 0         |            |                                      | 0                       |            |    |    |
| <b>Minor Street</b>                              | Northbound              |           |            | Southbound                           |                         |            |    |    |
| Movement   | 7                       | 8         | 9          | 10                                   | 11                      | 12         |    |    |
|  | L                       | T         | R          | L                                    | T                       | R          |    |    |
| Volume (veh/h)                                   | 9                       | 0         | 54         | 0                                    | 1                       | 0          |    |    |
| Peak-Hour Factor, PHF                            | 0.70                    | 0.70      | 0.70       | 0.25                                 | 0.25                    | 0.25       |    |    |
| Hourly Flow Rate, HFR (veh/h)                    | 12                      | 0         | 77         | 0                                    | 4                       | 0          |    |    |
| Percent Heavy Vehicles                           | 10                      | 10        | 10         | 0                                    | 0                       | 0          |    |    |
| Percent Grade (%)                                | 0                       |           |            | 0                                    |                         |            |    |    |
| Flared Approach                                  |                         | Y         |            |                                      | N                       |            |    |    |
| Storage  |                         | 2         |            |                                      | 0                       |            |    |    |
| RT Channelized                                   |                         |           | 0          |                                      |                         | 0          |    |    |
| Lanes  | 0                       | 1         | 0          | 0                                    | 1                       | 0          |    |    |
| Configuration                                    |                         | LTR       |            |                                      | LTR                     |            |    |    |
| <b>Delay, Queue Length, and Level of Service</b> |                         |           |            |                                      |                         |            |    |    |
| Approach   | Eastbound               | Westbound | Northbound |                                      |                         | Southbound |    |    |
| Movement   | 1                       | 4         | 7          | 8                                    | 9                       | 10         | 11 | 12 |
| Lane Configuration                               | LTR                     | LTR       | LTR        |                                      |                         | LTR        |    |    |
| v (veh/h)  | 6                       | 27        | 89         |                                      |                         | 4          |    |    |
| C (m) (veh/h)                                    | 1350                    | 1200      | 813        |                                      |                         | 408        |    |    |
| v/c  | 0.00                    | 0.02      | 0.11       |                                      |                         | 0.01       |    |    |
| 95% queue length                                 | 0.01                    | 0.07      | 0.37       |                                      |                         | 0.03       |    |    |
| Control Delay (s/veh)                            | 7.7                     | 8.1       | 11.2       |                                      |                         | 13.9       |    |    |
| LOS  | A                       | A         | B          |                                      |                         | B          |    |    |
| Approach Delay (s/veh)                           | --                      | --        | 11.2       |                                      |                         | 13.9       |    |    |
| Approach LOS                                     | --                      | --        | B          |                                      |                         | B          |    |    |

**HCS+™ DETAILED REPORT**

| <b>General Information</b> |                         |  |  | <b>Site Information</b> |                        |  |  |
|----------------------------|-------------------------|--|--|-------------------------|------------------------|--|--|
| Analyst                    | JAG                     |  |  | Intersection            | Rt 42, Bank, St. Johns |  |  |
| Agency or Co.              | TMA                     |  |  | Area Type               | All other areas        |  |  |
| Date Performed             | 9/16/2009               |  |  | Jurisdiction            | Village of Monticello  |  |  |
| Time Period                | Summer Sunday Peak Hour |  |  | Analysis Year           | No Build Condition     |  |  |
|                            |                         |  |  | Project ID              |                        |  |  |

| <b>Volume and Timing Input</b>            |          |         |      |      |          |          |                        |         |      |      |       |      |
|---|----------|---------|------|------|----------|----------|------------------------|---------|------|------|-------|------|
|   | EB       |         |      | WB   |          |          | NB                     |         |      | SB   |       |      |
|   | LT       | TH      | RT   | LT   | TH       | RT       | LT                     | TH      | RT   | LT   | TH    | RT   |
| Number of Lanes, N <sub>1</sub>           | 0        | 2       | 0    | 0    | 2        | 0        | 0                      | 1       | 0    | 0    | 1     | 0    |
| Lane Group                                |          | LTR     |      |      | LTR      |          |                        | LTR     |      |      | LTR   |      |
| Volume, V (vph)                           | 8        | 688     | 50   | 57   | 600      | 12       | 75                     | 5       | 83   | 19   | 6     | 11   |
| % Heavy Vehicles, %HV                     | 7        | 7       | 7    | 4    | 4        | 4        | 1                      | 1       | 1    | 2    | 2     | 2    |
| Peak-Hour Factor, PHF                     | 0.88     | 0.88    | 0.88 | 0.92 | 0.92     | 0.92     | 0.79                   | 0.79    | 0.79 | 0.50 | 0.50  | 0.50 |
| Pretimed (P) or Actuated (A)              | A        | A       | A    | A    | A        | A        | A                      | A       | A    | A    | A     | A    |
| Start-up Lost Time, I <sub>1</sub>        |          | 2.0     |      |      | 2.0      |          |                        | 2.0     |      |      | 2.0   |      |
| Extension of Effective Green, e           |          | 2.0     |      |      | 2.0      |          |                        | 2.0     |      |      | 2.0   |      |
| Arrival Type, AT                          |          | 3       |      |      | 3        |          |                        | 3       |      |      | 3     |      |
| Unit Extension, UE                        |          | 3.0     |      |      | 3.0      |          |                        | 3.0     |      |      | 3.0   |      |
| Filtering/Metering, I                     |          | 1.000   |      |      | 1.000    |          |                        | 1.000   |      |      | 1.000 |      |
| Initial Unmet Demand, Q <sub>b</sub>      |          | 0.0     |      |      | 0.0      |          |                        | 0.0     |      |      | 0.0   |      |
| Ped / Bike / RTOR Volumes                 | 0        | 0       | 0    | 0    | 0        | 0        | 0                      | 0       | 0    | 0    | 0     | 0    |
| Lane Width                                |          | 12.0    |      |      | 12.0     |          |                        | 11.0    |      |      | 12.0  |      |
| Parking / Grade / Parking                 | N        | 0       | N    | N    | 0        | N        | N                      | 0       | N    | N    | 0     | N    |
| Parking Maneuvers, N <sub>m</sub>         |          |         |      |      |          |          |                        |         |      |      |       |      |
| Buses Stopping, N <sub>b</sub>            |          | 0       |      |      | 0        |          |                        | 0       |      |      | 0     |      |
| Min. Time for Pedestrians, G <sub>p</sub> |          | 3.2     |      |      | 3.2      |          |                        | 3.2     |      |      | 3.2   |      |
| Phasing                                   | EW Perm  | WB Only | 03   |      | 04       |          | NB Only                | SB Only | 07   |      | 08    |      |
| Timing                                    | G = 38.0 | G = 7.0 | G =  | G =  | G = 20.0 | G = 10.0 | G =                    | G =     |      |      |       |      |
|   | Y = 5    | Y = 5   | Y =  | Y =  | Y = 5    | Y = 5    | Y =                    | Y =     |      |      |       |      |
| Duration of Analysis, T = 0.25            |          |         |      |      |          |          | Cycle Length, C = 95.0 |         |      |      |       |      |

| <b>Lane Group Capacity, Control Delay, and LOS Determination</b> |      |       |    |                       |       |    |                  |       |    |      |       |    |
|--|------|-------|----|-----------------------|-------|----|------------------|-------|----|------|-------|----|
|  | EB   |       |    | WB                    |       |    | NB               |       |    | SB   |       |    |
|  | LT   | TH    | RT | LT                    | TH    | RT | LT               | TH    | RT | LT   | TH    | RT |
| Adjusted Flow Rate, v  |      | 848   |    |                       | 727   |    |                  | 206   |    |      | 72    |    |
| Lane Group Capacity, c   |      | 1267  |    |                       | 1443  |    |                  | 348   |    |      | 183   |    |
| v/c Ratio, X   |      | 0.67  |    |                       | 0.50  |    |                  | 0.59  |    |      | 0.39  |    |
| Total Green Ratio, g/C   |      | 0.40  |    |                       | 0.53  |    |                  | 0.21  |    |      | 0.11  |    |
| Uniform Delay, d <sub>1</sub>                                    |      | 23.4  |    |                       | 14.5  |    |                  | 33.8  |    |      | 39.7  |    |
| Progression Factor, PF   |      | 1.000 |    |                       | 1.000 |    |                  | 1.000 |    |      | 1.000 |    |
| Delay Calibration, k   |      | 0.24  |    |                       | 0.11  |    |                  | 0.18  |    |      | 0.11  |    |
| Incremental Delay, d <sub>2</sub>                                |      | 1.4   |    |                       | 0.3   |    |                  | 2.7   |    |      | 1.4   |    |
| Initial Queue Delay, d <sub>3</sub>                              |      | 0.0   |    |                       | 0.0   |    |                  | 0.0   |    |      | 0.0   |    |
| Control Delay  |      | 24.7  |    |                       | 14.8  |    |                  | 36.5  |    |      | 41.1  |    |
| Lane Group LOS   |      | C     |    |                       | B     |    |                  | D     |    |      | D     |    |
| Approach Delay   | 24.7 |       |    | 14.8                  |       |    | 36.5             |       |    | 41.1 |       |    |
| Approach LOS   | C    |       |    | B                     |       |    | D                |       |    | D    |       |    |
| Intersection Delay   | 22.8 |       |    | X <sub>c</sub> = 0.69 |       |    | Intersection LOS |       |    | C    |       |    |



| TWO-WAY STOP CONTROL SUMMARY                     |                         |            |           |   |                            |           |       |
|--|-------------------------|------------|-----------|---|----------------------------|-----------|-------|
| <b>General Information</b>                       |                         |            |           | <b>Site Information</b>                           |                            |           |       |
| Analyst  | JAG                     |            |           | Intersection                                      | W. Broadway/Forestburgh Rd |           |       |
| Agency/Co.                                       | TMA                     |            |           | Jurisdiction                                      | Village of Monticello      |           |       |
| Date Performed                                   | 9/16/2009               |            |           | Analysis Year                                     | No Build Condition         |           |       |
| Analysis Time Period                             | Summer Sunday Peak Hour |            |           |   |                            |           |       |
| Project Description                              |                         |            |           |   |                            |           |       |
| East/West Street: West Broadway                  |                         |            |           | North/South Street: Rt 42 (Forestburgh, Broadway) |                            |           |       |
| Intersection Orientation: North-South            |                         |            |           | Study Period (hrs): 0.25                          |                            |           |       |
| <b>Vehicle Volumes and Adjustments</b>           |                         |            |           |   |                            |           |       |
| <b>Major Street</b>                              | Northbound              |            |           | Southbound  |                            |           |       |
| Movement   | 1                       | 2          | 3         | 4   | 5                          | 6         |       |
|  | L                       | T          | R         | L   | T                          | R         |       |
| Volume (veh/h)                                   | 101                     | 588        |           |   | 635                        | 132       |       |
| Peak-Hour Factor, PHF                            | 0.95                    | 0.95       | 1.00      | 1.00  | 0.95                       | 0.95      |       |
| Hourly Flow Rate, HFR (veh/h)                    | 106                     | 618        | 0         | 0   | 668                        | 138       |       |
| Percent Heavy Vehicles                           | 7                       | --         | --        | 0   | --                         | --        |       |
| Median Type                                      | Undivided               |            |           |   |                            |           |       |
| RT Channelized                                   |                         |            | 0         |   |                            | 0         |       |
| Lanes  | 1                       | 1          | 0         | 0   | 1                          | 0         |       |
| Configuration                                    | L                       | T          |           |   |                            | TR        |       |
| Upstream Signal                                  |                         | 0          |           |   | 0                          |           |       |
| <b>Minor Street</b>                              | Eastbound               |            |           | Westbound   |                            |           |       |
| Movement   | 7                       | 8          | 9         | 10  | 11                         | 12        |       |
|  | L                       | T          | R         | L   | T                          | R         |       |
| Volume (veh/h)                                   | 114                     |            | 162       |   |                            |           |       |
| Peak-Hour Factor, PHF                            | 0.88                    | 1.00       | 0.88      | 1.00  | 1.00                       | 1.00      |       |
| Hourly Flow Rate, HFR (veh/h)                    | 129                     | 0          | 184       | 0   | 0                          | 0         |       |
| Percent Heavy Vehicles                           | 5                       | 0          | 5         | 0   | 0                          | 0         |       |
| Percent Grade (%)                                | 0                       |            |           | 0   |                            |           |       |
| Flared Approach                                  |                         | Y          |           |   | N                          |           |       |
| Storage  |                         | 1          |           |   | 0                          |           |       |
| RT Channelized                                   |                         |            | 0         |   |                            | 0         |       |
| Lanes  | 0                       | 0          | 0         | 0   | 0                          | 0         |       |
| Configuration                                    |                         | LR         |           |   |                            |           |       |
| <b>Delay, Queue Length, and Level of Service</b> |                         |            |           |   |                            |           |       |
| Approach   | Northbound              | Southbound | Westbound |   |                            | Eastbound |       |
| Movement   | 1                       | 4          | 7         | 8   | 9                          | 10        | 11 12 |
| Lane Configuration                               | L                       |            |           |   |                            |           | LR    |
| v (veh/h)  | 106                     |            |           |   |                            |           | 313   |
| C (m) (veh/h)                                    | 797                     |            |           |   |                            |           | 193   |
| v/c  | 0.13                    |            |           |   |                            |           | 1.62  |
| 95% queue length                                 | 0.46                    |            |           |   |                            |           | 20.68 |
| Control Delay (s/veh)                            | 10.2                    |            |           |   |                            |           | 345.7 |
| LOS  | B                       |            |           |   |                            |           | F     |
| Approach Delay (s/veh)                           | --                      | --         |           |   |                            |           | 345.7 |
| Approach LOS                                     | --                      | --         |           |   |                            |           | F     |

| TWO-WAY STOP CONTROL SUMMARY              |                         |            |           |                                  |                          |           |    |
|---|-------------------------|------------|-----------|----------------------------------|--------------------------|-----------|----|
| General Information                       |                         |            |           | Site Information                 |                          |           |    |
| Analyst                                   | JAG                     |            |           | Intersection                     | St. Joseph and NYS Rt 42 |           |    |
| Agency/Co.                                | TMA                     |            |           | Jurisdiction                     | Town of Forestburgh      |           |    |
| Date Performed                            | 9/16/2009               |            |           | Analysis Year                    | No Build Condition       |           |    |
| Analysis Time Period                      | Summer Sunday Peak Hour |            |           |                                  |                          |           |    |
| Project Description                       |                         |            |           |                                  |                          |           |    |
| East/West Street: St. Joseph Road         |                         |            |           | North/South Street: NYS Route 42 |                          |           |    |
| Intersection Orientation: North-South     |                         |            |           | Study Period (hrs): 0.25         |                          |           |    |
| Vehicle Volumes and Adjustments           |                         |            |           |                                  |                          |           |    |
| Major Street                              | Northbound              |            |           | Southbound                       |                          |           |    |
| Movement                                  | 1                       | 2          | 3         | 4                                | 5                        | 6         |    |
|   | L                       | T          | R         | L                                | T                        | R         |    |
| Volume (veh/h)                            |                         | 184        | 6         | 1                                | 349                      |           |    |
| Peak-Hour Factor, PHF                     | 1.00                    | 0.67       | 0.67      | 0.92                             | 0.92                     | 1.00      |    |
| Hourly Flow Rate, HFR (veh/h)             | 0                       | 274        | 8         | 1                                | 379                      | 0         |    |
| Percent Heavy Vehicles                    | 0                       | --         | --        | 0                                | --                       | --        |    |
| Median Type                               | Undivided               |            |           |                                  |                          |           |    |
| RT Channelized                            |                         |            | 0         |                                  |                          | 0         |    |
| Lanes                                     | 0                       | 1          | 0         | 0                                | 1                        | 0         |    |
| Configuration                             |                         |            | TR        | LT                               |                          |           |    |
| Upstream Signal                           |                         | 0          |           |                                  | 0                        |           |    |
| Minor Street                              | Eastbound               |            |           | Westbound                        |                          |           |    |
| Movement                                  | 7                       | 8          | 9         | 10                               | 11                       | 12        |    |
|   | L                       | T          | R         | L                                | T                        | R         |    |
| Volume (veh/h)                            |                         |            |           | 6                                |                          | 1         |    |
| Peak-Hour Factor, PHF                     | 1.00                    | 1.00       | 1.00      | 0.42                             | 1.00                     | 0.42      |    |
| Hourly Flow Rate, HFR (veh/h)             | 0                       | 0          | 0         | 14                               | 0                        | 2         |    |
| Percent Heavy Vehicles                    | 0                       | 0          | 0         | 0                                | 0                        | 0         |    |
| Percent Grade (%)                         | 0                       |            |           | 0                                |                          |           |    |
| Flared Approach                           |                         | N          |           |                                  | N                        |           |    |
| Storage                                   |                         | 0          |           |                                  | 0                        |           |    |
| RT Channelized                            |                         |            | 0         |                                  |                          | 0         |    |
| Lanes                                     | 0                       | 0          | 0         | 0                                | 0                        | 0         |    |
| Configuration                             |                         |            |           |                                  | LR                       |           |    |
| Delay, Queue Length, and Level of Service |                         |            |           |                                  |                          |           |    |
| Approach                                  | Northbound              | Southbound | Westbound |                                  |                          | Eastbound |    |
| Movement                                  | 1                       | 4          | 7         | 8                                | 9                        | 10        | 11 |
| Lane Configuration                        |                         | LT         |           | LR                               |                          |           |    |
| v (veh/h)                                 |                         | 1          |           | 16                               |                          |           |    |
| C (m) (veh/h)                             |                         | 1292       |           | 457                              |                          |           |    |
| v/c                                       |                         | 0.00       |           | 0.04                             |                          |           |    |
| 95% queue length                          |                         | 0.00       |           | 0.11                             |                          |           |    |
| Control Delay (s/veh)                     |                         | 7.8        |           | 13.2                             |                          |           |    |
| LOS                                       |                         | A          |           | B                                |                          |           |    |
| Approach Delay (s/veh)                    | --                      | --         | 13.2      |                                  |                          |           |    |
| Approach LOS                              | --                      | --         | B         |                                  |                          |           |    |

## TWO-WAY STOP CONTROL SUMMARY

| General Information                       |                         |            | Site Information                     |                             |      |           |      |    |
|---|-------------------------|------------|--------------------------------------|-----------------------------|------|-----------|------|----|
| Analyst                                   | JAG                     |            | Intersection                         | St . Joseph and Cold Spring |      |           |      |    |
| Agency/Co.                                | TMA                     |            | Jurisdiction                         | Forestburgh                 |      |           |      |    |
| Date Performed                            | 9/16/2009               |            | Analysis Year                        | Build Condition             |      |           |      |    |
| Analysis Time Period                      | Friday Peak Hour Summer |            |                                      |                             |      |           |      |    |
| Project Description                       |                         |            |                                      |                             |      |           |      |    |
| East/West Street: St. Joseph Road         |                         |            | North/South Street: Cold Spring Road |                             |      |           |      |    |
| Intersection Orientation: North-South     |                         |            | Study Period (hrs): 0.25             |                             |      |           |      |    |
| Vehicle Volumes and Adjustments           |                         |            |                                      |                             |      |           |      |    |
| Major Street                              | Northbound              |            |                                      | Southbound                  |      |           |      |    |
| Movement                                  | 1                       | 2          | 3                                    | 4                           | 5    | 6         |      |    |
|   | L                       | T          | R                                    | L                           | T    | R         |      |    |
| Volume (veh/h)                            | 3                       | 106        |                                      |                             | 34   | 12        |      |    |
| Peak-Hour Factor, PHF                     | 0.64                    | 0.64       | 1.00                                 | 1.00                        | 0.71 | 0.71      |      |    |
| Hourly Flow Rate, HFR (veh/h)             | 4                       | 165        | 0                                    | 0                           | 47   | 16        |      |    |
| Percent Heavy Vehicles                    | 0                       | --         | --                                   | 0                           | --   | --        |      |    |
| Median Type                               | Undivided               |            |                                      |                             |      |           |      |    |
| RT Channelized                            |                         |            | 0                                    |                             |      | 0         |      |    |
| Lanes                                     | 0                       | 1          | 0                                    | 0                           | 1    | 0         |      |    |
| Configuration                             | LT                      |            |                                      |                             |      | TR        |      |    |
| Upstream Signal                           |                         | 0          |                                      |                             | 0    |           |      |    |
| Minor Street                              | Eastbound               |            |                                      | Westbound                   |      |           |      |    |
| Movement                                  | 7                       | 8          | 9                                    | 10                          | 11   | 12        |      |    |
|   | L                       | T          | R                                    | L                           | T    | R         |      |    |
| Volume (veh/h)                            | 9                       |            | 2                                    |                             |      |           |      |    |
| Peak-Hour Factor, PHF                     | 0.50                    | 1.00       | 0.50                                 | 1.00                        | 1.00 | 1.00      |      |    |
| Hourly Flow Rate, HFR (veh/h)             | 18                      | 0          | 4                                    | 0                           | 0    | 0         |      |    |
| Percent Heavy Vehicles                    | 0                       | 0          | 0                                    | 0                           | 0    | 0         |      |    |
| Percent Grade (%)                         | 0                       |            |                                      | 0                           |      |           |      |    |
| Flared Approach                           |                         | N          |                                      |                             | N    |           |      |    |
| Storage                                   |                         | 0          |                                      |                             | 0    |           |      |    |
| RT Channelized                            |                         |            | 0                                    |                             |      | 0         |      |    |
| Lanes                                     | 0                       | 0          | 0                                    | 0                           | 0    | 0         |      |    |
| Configuration                             |                         | LR         |                                      |                             |      |           |      |    |
| Delay, Queue Length, and Level of Service |                         |            |                                      |                             |      |           |      |    |
| Approach                                  | Northbound              | Southbound | Westbound                            |                             |      | Eastbound |      |    |
| Movement                                  | 1                       | 4          | 7                                    | 8                           | 9    | 10        | 11   | 12 |
| Lane Configuration                        | LT                      |            |                                      |                             |      |           | LR   |    |
| v (veh/h)                                 | 4                       |            |                                      |                             |      |           | 22   |    |
| C (m) (veh/h)                             | 1553                    |            |                                      |                             |      |           | 799  |    |
| v/c                                       | 0.00                    |            |                                      |                             |      |           | 0.03 |    |
| 95% queue length                          | 0.01                    |            |                                      |                             |      |           | 0.08 |    |
| Control Delay (s/veh)                     | 7.3                     |            |                                      |                             |      |           | 9.6  |    |
| LOS                                       | A                       |            |                                      |                             |      |           | A    |    |
| Approach Delay (s/veh)                    | --                      | --         |                                      |                             |      |           | 9.6  |    |
| Approach LOS                              | --                      | --         |                                      |                             |      |           | A    |    |

| TWO-WAY STOP CONTROL SUMMARY                 |                         |            |           |   |                             |           |    |
|--|-------------------------|------------|-----------|---|-----------------------------|-----------|----|
| General Information                          |                         |            |           | Site Information                            |                             |           |    |
| Analyst                                      | JAG                     |            |           | Intersection                                | Rose Valley and Cold Spring |           |    |
| Agency/Co.                                   | TMA                     |            |           | Jurisdiction                                | Town of Forestburgh         |           |    |
| Date Performed                               | 9/16/2009               |            |           | Analysis Year                               | Build Condition             |           |    |
| Analysis Time Period                         | Summer Friday Peak Hour |            |           |   |                             |           |    |
| Project Description                          |                         |            |           |   |                             |           |    |
| East/West Street: <i>Rose Valley Road</i>    |                         |            |           | North/South Street: <i>Cold Spring Road</i> |                             |           |    |
| Intersection Orientation: <i>North-South</i> |                         |            |           | Study Period (hrs): <i>0.25</i>             |                             |           |    |
| Vehicle Volumes and Adjustments              |                         |            |           |   |                             |           |    |
| Major Street                                 | Northbound              |            |           | Southbound                                  |                             |           |    |
| Movement                                     | 1                       | 2          | 3         | 4   | 5                           | 6         |    |
|  | L                       | T          | R         | L   | T                           | R         |    |
| Volume (veh/h)                               |                         | 123        | 37        | 131   | 51                          |           |    |
| Peak-Hour Factor, PHF                        | 1.00                    | 0.90       | 0.90      | 0.83  | 0.83                        | 1.00      |    |
| Hourly Flow Rate, HFR (veh/h)                | 0                       | 136        | 41        | 157   | 61                          | 0         |    |
| Percent Heavy Vehicles                       | 0                       | --         | --        | 0   | --                          | --        |    |
| Median Type                                  | Undivided               |            |           |   |                             |           |    |
| RT Channelized                               |                         |            | 0         |   |                             |           | 0  |
| Lanes  | 0                       | 1          | 0         | 0   | 1                           |           | 0  |
| Configuration                                |                         |            | TR        | LT  |                             |           |    |
| Upstream Signal                              |                         | 0          |           |   | 0                           |           |    |
| Minor Street                                 | Eastbound               |            |           | Westbound                                   |                             |           |    |
| Movement                                     | 7                       | 8          | 9         | 10  | 11                          | 12        |    |
|  | L                       | T          | R         | L   | T                           | R         |    |
| Volume (veh/h)                               |                         |            |           | 29  |                             | 154       |    |
| Peak-Hour Factor, PHF                        | 1.00                    | 1.00       | 1.00      | 0.81  | 1.00                        | 0.81      |    |
| Hourly Flow Rate, HFR (veh/h)                | 0                       | 0          | 0         | 35  | 0                           | 190       |    |
| Percent Heavy Vehicles                       | 0                       | 0          | 0         | 7   | 0                           | 7         |    |
| Percent Grade (%)                            | 0                       |            |           | 6   |                             |           |    |
| Flared Approach                              |                         | N          |           |   | N                           |           |    |
| Storage                                      |                         | 0          |           |   | 0                           |           |    |
| RT Channelized                               |                         |            | 0         |   |                             |           | 0  |
| Lanes  | 0                       | 0          | 0         | 0   | 0                           |           | 0  |
| Configuration                                |                         |            |           |   | LR                          |           |    |
| Delay, Queue Length, and Level of Service    |                         |            |           |   |                             |           |    |
| Approach                                     | Northbound              | Southbound | Westbound |   |                             | Eastbound |    |
| Movement                                     | 1                       | 4          | 7         | 8   | 9                           | 10        | 11 |
| Lane Configuration                           |                         | LT         |           | LR  |                             |           |    |
| v (veh/h)                                    |                         | 157        |           | 225   |                             |           |    |
| C (m) (veh/h)                                |                         | 1411       |           | 711   |                             |           |    |
| v/c  |                         | 0.11       |           | 0.32  |                             |           |    |
| 95% queue length                             |                         | 0.37       |           | 1.36  |                             |           |    |
| Control Delay (s/veh)                        |                         | 7.9        |           | 12.4  |                             |           |    |
| LOS  |                         | A          |           | B   |                             |           |    |
| Approach Delay (s/veh)                       | --                      | --         | 12.4      |   |                             |           |    |
| Approach LOS                                 | --                      | --         | B         |   |                             |           |    |

## TWO-WAY STOP CONTROL SUMMARY

| General Information                       |                         |           | Site Information                   |                         |      |            |      |    |
|---|-------------------------|-----------|------------------------------------|-------------------------|------|------------|------|----|
| Analyst                                   | JAG                     |           | Intersection                       | Cold Spring and Waverly |      |            |      |    |
| Agency/Co.                                | TMA                     |           | Jurisdiction                       | Town of Forestburgh     |      |            |      |    |
| Date Performed                            | 9/16/2009               |           | Analysis Year                      | Build Condition         |      |            |      |    |
| Analysis Time Period                      | Summer Friday Peak Hour |           |                                    |                         |      |            |      |    |
| Project Description                       |                         |           |                                    |                         |      |            |      |    |
| East/West Street: Cold Spring Road        |                         |           | North/South Street: Waverly Avenue |                         |      |            |      |    |
| Intersection Orientation: East-West       |                         |           | Study Period (hrs): 0.25           |                         |      |            |      |    |
| Vehicle Volumes and Adjustments           |                         |           |                                    |                         |      |            |      |    |
| Major Street                              | Eastbound               |           |                                    | Westbound               |      |            |      |    |
| Movement                                  | 1                       | 2         | 3                                  | 4                       | 5    | 6          |      |    |
|   | L                       | T         | R                                  | L                       | T    | R          |      |    |
| Volume (veh/h)                            | 29                      | 169       |                                    |                         | 240  | 230        |      |    |
| Peak-Hour Factor, PHF                     | 0.79                    | 0.79      | 1.00                               | 1.00                    | 0.88 | 0.88       |      |    |
| Hourly Flow Rate, HFR (veh/h)             | 36                      | 213       | 0                                  | 0                       | 272  | 261        |      |    |
| Percent Heavy Vehicles                    | 5                       | --        | --                                 | 0                       | --   | --         |      |    |
| Median Type                               | Undivided               |           |                                    |                         |      |            |      |    |
| RT Channelized                            |                         |           | 0                                  |                         |      | 0          |      |    |
| Lanes                                     | 0                       | 1         | 0                                  | 0                       | 1    | 0          |      |    |
| Configuration                             | LT                      |           |                                    |                         |      | TR         |      |    |
| Upstream Signal                           |                         | 0         |                                    |                         | 0    |            |      |    |
| Minor Street                              | Northbound              |           |                                    | Southbound              |      |            |      |    |
| Movement                                  | 7                       | 8         | 9                                  | 10                      | 11   | 12         |      |    |
|   | L                       | T         | R                                  | L                       | T    | R          |      |    |
| Volume (veh/h)                            |                         |           |                                    | 132                     |      | 44         |      |    |
| Peak-Hour Factor, PHF                     | 1.00                    | 1.00      | 1.00                               | 0.83                    | 1.00 | 0.68       |      |    |
| Hourly Flow Rate, HFR (veh/h)             | 0                       | 0         | 0                                  | 159                     | 0    | 64         |      |    |
| Percent Heavy Vehicles                    | 0                       | 0         | 0                                  | 3                       | 0    | 3          |      |    |
| Percent Grade (%)                         | 0                       |           |                                    | 8                       |      |            |      |    |
| Flared Approach                           |                         | N         |                                    |                         | N    |            |      |    |
| Storage                                   |                         | 0         |                                    |                         | 0    |            |      |    |
| RT Channelized                            |                         |           | 0                                  |                         |      | 0          |      |    |
| Lanes                                     | 0                       | 0         | 0                                  | 0                       | 0    | 0          |      |    |
| Configuration                             |                         |           |                                    |                         | LR   |            |      |    |
| Delay, Queue Length, and Level of Service |                         |           |                                    |                         |      |            |      |    |
| Approach                                  | Eastbound               | Westbound | Northbound                         |                         |      | Southbound |      |    |
| Movement                                  | 1                       | 4         | 7                                  | 8                       | 9    | 10         | 11   | 12 |
| Lane Configuration                        | LT                      |           |                                    |                         |      |            | LR   |    |
| v (veh/h)                                 | 36                      |           |                                    |                         |      |            | 223  |    |
| C (m) (veh/h)                             | 1020                    |           |                                    |                         |      |            | 342  |    |
| v/c                                       | 0.04                    |           |                                    |                         |      |            | 0.65 |    |
| 95% queue length                          | 0.11                    |           |                                    |                         |      |            | 4.35 |    |
| Control Delay (s/veh)                     | 8.7                     |           |                                    |                         |      |            | 33.2 |    |
| LOS                                       | A                       |           |                                    |                         |      |            | D    |    |
| Approach Delay (s/veh)                    | --                      | --        |                                    |                         |      |            | 33.2 |    |
| Approach LOS                              | --                      | --        |                                    |                         |      |            | D    |    |

## TWO-WAY STOP CONTROL SUMMARY

| General Information                       |                         | Site Information |                                      |            |      |            |    |    |
|---|-------------------------|------------------|--------------------------------------|------------|------|------------|----|----|
| Analyst                                   | JAG                     | Intersection     | E. Broadway/Rose Valley              |            |      |            |    |    |
| Agency/Co.                                | TMA                     | Jurisdiction     | Town of Thompson                     |            |      |            |    |    |
| Date Performed                            | 9/16/2009               | Analysis Year    | Build Condition                      |            |      |            |    |    |
| Analysis Time Period                      | Summer Friday Peak Hour |                  |                                      |            |      |            |    |    |
| Project Description                       |                         |                  |                                      |            |      |            |    |    |
| East/West Street: East Broadway           |                         |                  | North/South Street: Rose Valley Road |            |      |            |    |    |
| Intersection Orientation: East-West       |                         |                  | Study Period (hrs): 0.25             |            |      |            |    |    |
| Vehicle Volumes and Adjustments           |                         |                  |                                      |            |      |            |    |    |
| Major Street                              | Eastbound               |                  |                                      | Westbound  |      |            |    |    |
| Movement                                  | 1                       | 2                | 3                                    | 4          | 5    | 6          |    |    |
|   | L                       | T                | R                                    | L          | T    | R          |    |    |
| Volume (veh/h)                            | 9                       | 246              | 134                                  | 113        | 214  | 1          |    |    |
| Peak-Hour Factor, PHF                     | 0.81                    | 0.81             | 0.81                                 | 0.87       | 0.87 | 0.87       |    |    |
| Hourly Flow Rate, HFR (veh/h)             | 11                      | 303              | 165                                  | 129        | 245  | 1          |    |    |
| Percent Heavy Vehicles                    | 7                       | --               | --                                   | 4          | --   | --         |    |    |
| Median Type                               | Undivided               |                  |                                      |            |      |            |    |    |
| RT Channelized                            |                         |                  | 0                                    |            |      | 0          |    |    |
| Lanes                                     | 0                       | 1                | 0                                    | 0          | 1    | 0          |    |    |
| Configuration                             | LTR                     |                  |                                      | LTR        |      |            |    |    |
| Upstream Signal                           |                         | 0                |                                      |            | 0    |            |    |    |
| Minor Street                              | Northbound              |                  |                                      | Southbound |      |            |    |    |
| Movement                                  | 7                       | 8                | 9                                    | 10         | 11   | 12         |    |    |
|   | L                       | T                | R                                    | L          | T    | R          |    |    |
| Volume (veh/h)                            | 33                      | 5                | 142                                  | 0          | 2    | 6          |    |    |
| Peak-Hour Factor, PHF                     | 0.80                    | 0.80             | 0.80                                 | 0.58       | 0.58 | 0.58       |    |    |
| Hourly Flow Rate, HFR (veh/h)             | 41                      | 6                | 177                                  | 0          | 3    | 10         |    |    |
| Percent Heavy Vehicles                    | 7                       | 7                | 7                                    | 0          | 0    | 0          |    |    |
| Percent Grade (%)                         | 0                       |                  |                                      | 0          |      |            |    |    |
| Flared Approach                           |                         | Y                |                                      |            | N    |            |    |    |
| Storage                                   |                         | 2                |                                      |            | 0    |            |    |    |
| RT Channelized                            |                         |                  | 0                                    |            |      | 0          |    |    |
| Lanes                                     | 0                       | 1                | 0                                    | 0          | 1    | 0          |    |    |
| Configuration                             |                         | LTR              |                                      |            | LTR  |            |    |    |
| Delay, Queue Length, and Level of Service |                         |                  |                                      |            |      |            |    |    |
| Approach                                  | Eastbound               | Westbound        | Northbound                           |            |      | Southbound |    |    |
| Movement                                  | 1                       | 4                | 7                                    | 8          | 9    | 10         | 11 | 12 |
| Lane Configuration                        | LTR                     | LTR              | LTR                                  |            |      | LTR        |    |    |
| v (veh/h)                                 | 11                      | 129              | 224                                  |            |      | 13         |    |    |
| C (m) (veh/h)                             | 1291                    | 1083             | 824                                  |            |      | 485        |    |    |
| v/c                                       | 0.01                    | 0.12             | 0.27                                 |            |      | 0.03       |    |    |
| 95% queue length                          | 0.03                    | 0.40             | 1.10                                 |            |      | 0.08       |    |    |
| Control Delay (s/veh)                     | 7.8                     | 8.8              | 15.4                                 |            |      | 12.6       |    |    |
| LOS                                       | A                       | A                | C                                    |            |      | B          |    |    |
| Approach Delay (s/veh)                    | --                      | --               | 15.4                                 |            |      | 12.6       |    |    |
| Approach LOS                              | --                      | --               | C                                    |            |      | B          |    |    |

### HCS+™ DETAILED REPORT

| General Information                        | Site Information                           |
|--|--|
| Analyst <i>JAG</i>                         | Intersection <i>Rt 42, Bank, St. Johns</i> |
| Agency or Co. <i>TMA</i>                   | Area Type <i>All other areas</i>           |
| Date Performed <i>9/16/2009</i>            | Jurisdiction <i>Village of Monticello</i>  |
| Time Period <i>Summer Friday Peak Hour</i> | Analysis Year <i>Build Condition</i>       |
|  | Project ID                                 |

| Volume and Timing Input                   |          |         |      |      |          |         |                        |       |      |      |       |      |
|---|----------|---------|------|------|----------|---------|------------------------|-------|------|------|-------|------|
|   | EB       |         |      | WB   |          |         | NB                     |       |      | SB   |       |      |
|   | LT       | TH      | RT   | LT   | TH       | RT      | LT                     | TH    | RT   | LT   | TH    | RT   |
| Number of Lanes, N <sub>i</sub>           | 0        | 2       | 0    | 0    | 2        | 0       | 0                      | 1     | 0    | 0    | 1     | 0    |
| Lane Group                                |          | LTR     |      |      | LTR      |         |                        | LTR   |      |      | LTR   |      |
| Volume, V (vph)                           | 9        | 775     | 101  | 157  | 869      | 27      | 111                    | 11    | 187  | 37   | 30    | 36   |
| % Heavy Vehicles, %HV                     | 7        | 7       | 7    | 4    | 4        | 4       | 1                      | 1     | 1    | 2    | 2     | 2    |
| Peak-Hour Factor, PHF                     | 0.95     | 0.95    | 0.95 | 0.95 | 0.95     | 0.95    | 0.81                   | 0.81  | 0.81 | 0.88 | 0.88  | 0.88 |
| Pretimed (P) or Actuated (A)              | A        | A       | A    | A    | A        | A       | A                      | A     | A    | A    | A     | A    |
| Start-up Lost Time, l <sub>i</sub>        |          | 2.0     |      |      | 2.0      |         |                        | 2.0   |      |      | 2.0   |      |
| Extension of Effective Green, e           |          | 2.0     |      |      | 2.0      |         |                        | 2.0   |      |      | 2.0   |      |
| Arrival Type, AT                          |          | 3       |      |      | 3        |         |                        | 3     |      |      | 3     |      |
| Unit Extension, UE                        |          | 3.0     |      |      | 3.0      |         |                        | 3.0   |      |      | 3.0   |      |
| Filtering/Metering, I                     |          | 1.000   |      |      | 1.000    |         |                        | 1.000 |      |      | 1.000 |      |
| Initial Unmet Demand, Q <sub>b</sub>      |          | 0.0     |      |      | 0.0      |         |                        | 0.0   |      |      | 0.0   |      |
| Ped / Bike / RTOR Volumes                 | 0        | 0       | 0    | 0    | 0        | 0       | 0                      | 0     | 0    | 0    | 0     | 0    |
| Lane Width                                |          | 12.0    |      |      | 12.0     |         |                        | 11.0  |      |      | 12.0  |      |
| Parking / Grade / Parking                 | N        | 0       | N    | N    | 0        | N       | N                      | 0     | N    | N    | 0     | N    |
| Parking Maneuvers, N <sub>m</sub>         |          |         |      |      |          |         |                        |       |      |      |       |      |
| Buses Stopping, N <sub>b</sub>            |          | 0       |      |      | 0        |         |                        | 0     |      |      | 0     |      |
| Min. Time for Pedestrians, G <sub>p</sub> |          | 3.2     |      |      | 3.2      |         |                        | 3.2   |      |      | 3.2   |      |
| Phasing                                   | EW Perm  | WB Only | 03   | 04   | NB Only  | SB Only | 07                     | 08    |      |      |       |      |
| Timing                                    | G = 34.0 | G = 7.0 | G =  | G =  | G = 25.0 | G = 9.0 | G =                    | G =   |      |      |       |      |
|   | Y = 5    | Y = 5   | Y =  | Y =  | Y = 5    | Y = 5   | Y =                    | Y =   |      |      |       |      |
| Duration of Analysis, T = 0.25            |          |         |      |      |          |         | Cycle Length, C = 95.0 |       |      |      |       |      |

| Lane Group Capacity, Control Delay, and LOS Determination |      |       |    |                       |       |    |                  |       |    |      |       |    |
|---|------|-------|----|-----------------------|-------|----|------------------|-------|----|------|-------|----|
|   | EB   |       |    | WB                    |       |    | NB               |       |    | SB   |       |    |
|   | LT   | TH    | RT | LT                    | TH    | RT | LT               | TH    | RT | LT   | TH    | RT |
| Adjusted Flow Rate, v                                     |      | 931   |    |                       | 1108  |    |                  | 382   |    |      | 117   |    |
| Lane Group Capacity, c                                    |      | 1119  |    |                       | 1100  |    |                  | 432   |    |      | 165   |    |
| v/c Ratio, X  |      | 0.83  |    |                       | 1.01  |    |                  | 0.88  |    |      | 0.71  |    |
| Total Green Ratio, g/C                                    |      | 0.36  |    |                       | 0.48  |    |                  | 0.26  |    |      | 0.09  |    |
| Uniform Delay, d <sub>1</sub>                             |      | 27.9  |    |                       | 24.5  |    |                  | 33.6  |    |      | 41.7  |    |
| Progression Factor, PF                                    |      | 1.000 |    |                       | 1.000 |    |                  | 1.000 |    |      | 1.000 |    |
| Delay Calibration, k                                      |      | 0.37  |    |                       | 0.50  |    |                  | 0.41  |    |      | 0.27  |    |
| Incremental Delay, d <sub>2</sub>                         |      | 5.5   |    |                       | 28.9  |    |                  | 19.1  |    |      | 13.2  |    |
| Initial Queue Delay, d <sub>3</sub>                       |      | 0.0   |    |                       | 0.0   |    |                  | 0.0   |    |      | 0.0   |    |
| Control Delay   |      | 33.4  |    |                       | 53.4  |    |                  | 52.7  |    |      | 54.9  |    |
| Lane Group LOS  |      | C     |    |                       | D     |    |                  | D     |    |      | D     |    |
| Approach Delay  | 33.4 |       |    | 53.4                  |       |    | 52.7             |       |    | 54.9 |       |    |
| Approach LOS  | C    |       |    | D                     |       |    | D                |       |    | D    |       |    |
| Intersection Delay  | 46.0 |       |    | X <sub>C</sub> = 0.93 |       |    | Intersection LOS |       |    | D    |       |    |

## TWO-WAY STOP CONTROL SUMMARY

| General Information                       |                         |            | Site Information                                  |                            |      |           |       |    |
|---|-------------------------|------------|---|----------------------------|------|-----------|-------|----|
| Analyst                                   | JAG                     |            | Intersection                                      | W. Broadway/Forestburgh Rd |      |           |       |    |
| Agency/Co.                                | TMA                     |            | Jurisdiction                                      | Village of Monticello      |      |           |       |    |
| Date Performed                            | 9/16/2009               |            | Analysis Year                                     | No Build Condition         |      |           |       |    |
| Analysis Time Period                      | Summer Friday Peak Hour |            |   |                            |      |           |       |    |
| Project Description                       |                         |            |   |                            |      |           |       |    |
| East/West Street: West Broadway           |                         |            | North/South Street: Rt 42 (Forestburgh, Broadway) |                            |      |           |       |    |
| Intersection Orientation: North-South     |                         |            | Study Period (hrs): 0.25                          |                            |      |           |       |    |
| Vehicle Volumes and Adjustments           |                         |            |   |                            |      |           |       |    |
| Major Street                              | Northbound              |            |   | Southbound                 |      |           |       |    |
| Movement                                  | 1                       | 2          | 3   | 4                          | 5    | 6         |       |    |
|   | L                       | T          | R   | L                          | T    | R         |       |    |
| Volume (veh/h)                            | 117                     | 626        |   |                            | 920  | 175       |       |    |
| Peak-Hour Factor, PHF                     | 0.92                    | 0.92       | 1.00  | 1.00                       | 0.93 | 0.93      |       |    |
| Hourly Flow Rate, HFR (veh/h)             | 127                     | 680        | 0   | 0                          | 989  | 188       |       |    |
| Percent Heavy Vehicles                    | 7                       | --         | --  | 0                          | --   | --        |       |    |
| Median Type                               | <i>Undivided</i>        |            |   |                            |      |           |       |    |
| RT Channelized                            |                         |            | 0   |                            |      | 0         |       |    |
| Lanes                                     | 1                       | 1          | 0   | 0                          | 1    | 0         |       |    |
| Configuration                             | L                       | T          |   |                            |      | TR        |       |    |
| Upstream Signal                           |                         | 0          |   |                            | 0    |           |       |    |
| Minor Street                              | Eastbound               |            |   | Westbound                  |      |           |       |    |
| Movement                                  | 7                       | 8          | 9   | 10                         | 11   | 12        |       |    |
|   | L                       | T          | R   | L                          | T    | R         |       |    |
| Volume (veh/h)                            | 109                     |            | 170   |                            |      |           |       |    |
| Peak-Hour Factor, PHF                     | 0.87                    | 1.00       | 0.87  | 1.00                       | 1.00 | 1.00      |       |    |
| Hourly Flow Rate, HFR (veh/h)             | 125                     | 0          | 195   | 0                          | 0    | 0         |       |    |
| Percent Heavy Vehicles                    | 5                       | 0          | 5   | 0                          | 0    | 0         |       |    |
| Percent Grade (%)                         | 0                       |            |   | 0                          |      |           |       |    |
| Flared Approach                           |                         | Y          |   |                            | N    |           |       |    |
| Storage                                   |                         | 1          |   |                            | 0    |           |       |    |
| RT Channelized                            |                         |            | 0   |                            |      | 0         |       |    |
| Lanes                                     | 0                       | 0          | 0   | 0                          | 0    | 0         |       |    |
| Configuration                             |                         | LR         |   |                            |      |           |       |    |
| Delay, Queue Length, and Level of Service |                         |            |   |                            |      |           |       |    |
| Approach                                  | Northbound              | Southbound | Westbound   |                            |      | Eastbound |       |    |
| Movement                                  | 1                       | 4          | 7   | 8                          | 9    | 10        | 11    | 12 |
| Lane Configuration                        | L                       |            |   |                            |      |           | LR    |    |
| v (veh/h)                                 | 127                     |            |   |                            |      |           | 320   |    |
| C (m) (veh/h)                             | 576                     |            |   |                            |      |           | 98    |    |
| v/c                                       | 0.22                    |            |   |                            |      |           | 3.27  |    |
| 95% queue length                          | 0.84                    |            |   |                            |      |           | 31.55 |    |
| Control Delay (s/veh)                     | 13.0                    |            |   |                            |      |           | 1112  |    |
| LOS                                       | B                       |            |   |                            |      |           | F     |    |
| Approach Delay (s/veh)                    | --                      | --         |   |                            |      |           | 1112  |    |
| Approach LOS                              | --                      | --         |   |                            |      |           | F     |    |



## TWO-WAY STOP CONTROL SUMMARY

| General Information                       |                         | Site Information |                                  |            |      |           |    |    |
|---|-------------------------|------------------|----------------------------------|------------|------|-----------|----|----|
| Analyst                                   | JAG                     | Intersection     | St. Joseph and NYS Rt 42         |            |      |           |    |    |
| Agency/Co.                                | TMA                     | Jurisdiction     | Town of Forestburgh              |            |      |           |    |    |
| Date Performed                            | 9/16/2009               | Analysis Year    | Build Condition                  |            |      |           |    |    |
| Analysis Time Period                      | Summer Friday Peak Hour |                  |                                  |            |      |           |    |    |
| Project Description                       |                         |                  |                                  |            |      |           |    |    |
| East/West Street: St. Joseph Road         |                         |                  | North/South Street: NYS Route 42 |            |      |           |    |    |
| Intersection Orientation: North-South     |                         |                  | Study Period (hrs): 0.25         |            |      |           |    |    |
| Vehicle Volumes and Adjustments           |                         |                  |                                  |            |      |           |    |    |
| Major Street                              | Northbound              |                  |                                  | Southbound |      |           |    |    |
| Movement                                  | 1                       | 2                | 3                                | 4          | 5    | 6         |    |    |
|   | L                       | T                | R                                | L          | T    | R         |    |    |
| Volume (veh/h)                            |                         | 220              | 7                                | 0          | 289  |           |    |    |
| Peak-Hour Factor, PHF                     | 1.00                    | 0.89             | 0.89                             | 0.91       | 0.91 | 1.00      |    |    |
| Hourly Flow Rate, HFR (veh/h)             | 0                       | 247              | 7                                | 0          | 317  | 0         |    |    |
| Percent Heavy Vehicles                    | 0                       | --               | --                               | 0          | --   | --        |    |    |
| Median Type                               | Undivided               |                  |                                  |            |      |           |    |    |
| RT Channelized                            |                         |                  | 0                                |            |      | 0         |    |    |
| Lanes                                     | 0                       | 1                | 0                                | 0          | 1    | 0         |    |    |
| Configuration                             |                         |                  | TR                               | LT         |      |           |    |    |
| Upstream Signal                           |                         | 0                |                                  |            | 0    |           |    |    |
| Minor Street                              | Eastbound               |                  |                                  | Westbound  |      |           |    |    |
| Movement                                  | 7                       | 8                | 9                                | 10         | 11   | 12        |    |    |
|   | L                       | T                | R                                | L          | T    | R         |    |    |
| Volume (veh/h)                            |                         |                  |                                  | 12         |      | 1         |    |    |
| Peak-Hour Factor, PHF                     | 1.00                    | 1.00             | 1.00                             | 0.75       | 1.00 | 0.75      |    |    |
| Hourly Flow Rate, HFR (veh/h)             | 0                       | 0                | 0                                | 16         | 0    | 1         |    |    |
| Percent Heavy Vehicles                    | 0                       | 0                | 0                                | 0          | 0    | 0         |    |    |
| Percent Grade (%)                         | 0                       |                  |                                  | 0          |      |           |    |    |
| Flared Approach                           |                         | N                |                                  |            | N    |           |    |    |
| Storage                                   |                         | 0                |                                  |            | 0    |           |    |    |
| RT Channelized                            |                         |                  | 0                                |            |      | 0         |    |    |
| Lanes                                     | 0                       | 0                | 0                                | 0          | 0    | 0         |    |    |
| Configuration                             |                         |                  |                                  |            | LR   |           |    |    |
| Delay, Queue Length, and Level of Service |                         |                  |                                  |            |      |           |    |    |
| Approach                                  | Northbound              | Southbound       | Westbound                        |            |      | Eastbound |    |    |
| Movement                                  | 1                       | 4                | 7                                | 8          | 9    | 10        | 11 | 12 |
| Lane Configuration                        |                         | LT               |                                  | LR         |      |           |    |    |
| v (veh/h)                                 |                         | 0                |                                  | 17         |      |           |    |    |
| C (m) (veh/h)                             |                         | 1323             |                                  | 499        |      |           |    |    |
| v/c                                       |                         | 0.00             |                                  | 0.03       |      |           |    |    |
| 95% queue length                          |                         | 0.00             |                                  | 0.11       |      |           |    |    |
| Control Delay (s/veh)                     |                         | 7.7              |                                  | 12.5       |      |           |    |    |
| LOS                                       |                         | A                |                                  | B          |      |           |    |    |
| Approach Delay (s/veh)                    | --                      | --               | 12.5                             |            |      |           |    |    |
| Approach LOS                              | --                      | --               | B                                |            |      |           |    |    |

## TWO-WAY STOP CONTROL SUMMARY

| General Information                          |                         | Site Information |   |            |          |           |           |    |
|--|-------------------------|------------------|---|------------|----------|-----------|-----------|----|
| Analyst                                      | JAG                     | Intersection     | Access and Cold Spring                      |            |          |           |           |    |
| Agency/Co.                                   | TMA                     | Jurisdiction     | Town of Forestburgh                         |            |          |           |           |    |
| Date Performed                               | 9/10/2009               | Analysis Year    | Build Condition                             |            |          |           |           |    |
| Analysis Time Period                         | Friday Summer Peak Hour |                  |   |            |          |           |           |    |
| Project Description                          |                         |                  |   |            |          |           |           |    |
| East/West Street: <i>Site Access</i>         |                         |                  | North/South Street: <i>Cold Spring Road</i> |            |          |           |           |    |
| Intersection Orientation: <i>North-South</i> |                         |                  | Study Period (hrs): <i>0.25</i>             |            |          |           |           |    |
| Vehicle Volumes and Adjustments              |                         |                  |   |            |          |           |           |    |
| Major Street                                 | Northbound              |                  |   | Southbound |          |           |           |    |
| Movement                                     | 1                       | 2                | 3   | 4          | 5        | 6         |           |    |
|  | L                       | T                | R   | L          | T        | R         |           |    |
| Volume (veh/h)                               | 222                     | 55               |   |            | 48       | 119       |           |    |
| Peak-Hour Factor, PHF                        | 0.90                    | 0.90             | 1.00  | 1.00       | 0.90     | 0.90      |           |    |
| Hourly Flow Rate, HFR (veh/h)                | 246                     | 61               | 0   | 0          | 53       | 132       |           |    |
| Percent Heavy Vehicles                       | 0                       | --               | --  | 0          | --       | --        |           |    |
| Median Type                                  | <i>Undivided</i>        |                  |   |            |          |           |           |    |
| RT Channelized                               |                         |                  | 0   |            |          | 0         |           |    |
| Lanes  | 0                       | 1                | 0   | 0          | 1        | 0         |           |    |
| Configuration                                | <i>LT</i>               |                  |   | <i>TR</i>  |          |           |           |    |
| Upstream Signal                              |                         | 0                |   |            | 0        |           |           |    |
| Minor Street                                 | Eastbound               |                  |   | Westbound  |          |           |           |    |
| Movement                                     | 7                       | 8                | 9   | 10         | 11       | 12        |           |    |
|  | L                       | T                | R   | L          | T        | R         |           |    |
| Volume (veh/h)                               | 312                     |                  | 134   |            |          |           |           |    |
| Peak-Hour Factor, PHF                        | 0.90                    | 1.00             | 0.90  | 1.00       | 1.00     | 1.00      |           |    |
| Hourly Flow Rate, HFR (veh/h)                | 346                     | 0                | 148   | 0          | 0        | 0         |           |    |
| Percent Heavy Vehicles                       | 0                       | 0                | 0   | 0          | 0        | 0         |           |    |
| Percent Grade (%)                            | 0                       |                  |   | 0          |          |           |           |    |
| Flared Approach                              |                         | <i>N</i>         |   |            | <i>N</i> |           |           |    |
| Storage                                      |                         | 0                |   |            | 0        |           |           |    |
| RT Channelized                               |                         |                  | 0   |            |          | 0         |           |    |
| Lanes  | 0                       | 0                | 0   | 0          | 0        | 0         |           |    |
| Configuration                                |                         | <i>LR</i>        |   |            |          |           |           |    |
| Delay, Queue Length, and Level of Service    |                         |                  |   |            |          |           |           |    |
| Approach                                     | Northbound              | Southbound       | Westbound                                   |            |          | Eastbound |           |    |
| Movement                                     | 1                       | 4                | 7   | 8          | 9        | 10        | 11        | 12 |
| Lane Configuration                           | <i>LT</i>               |                  |   |            |          |           | <i>LR</i> |    |
| v (veh/h)                                    | 246                     |                  |   |            |          |           | 494       |    |
| C (m) (veh/h)                                | 1402                    |                  |   |            |          |           | 431       |    |
| v/c  | 0.18                    |                  |   |            |          |           | 1.15      |    |
| 95% queue length                             | 0.64                    |                  |   |            |          |           | 18.11     |    |
| Control Delay (s/veh)                        | 8.1                     |                  |   |            |          |           | 119.7     |    |
| LOS  | A                       |                  |   |            |          |           | F         |    |
| Approach Delay (s/veh)                       | --                      | --               |   |            |          |           | 119.7     |    |
| Approach LOS                                 | --                      | --               |   |            |          |           | F         |    |

## TWO-WAY STOP CONTROL SUMMARY

| General Information                       |                         |            | Site Information                     |                            |      |           |      |    |
|---|-------------------------|------------|--------------------------------------|----------------------------|------|-----------|------|----|
| Analyst                                   | JAG                     |            | Intersection                         | St. Joseph and Cold Spring |      |           |      |    |
| Agency/Co.                                | TMA                     |            | Jurisdiction                         | Town of Forestburgh        |      |           |      |    |
| Date Performed                            | 9/16/2009               |            | Analysis Year                        | Build Condition            |      |           |      |    |
| Analysis Time Period                      | Sunday Peak Hour Summer |            |                                      |                            |      |           |      |    |
| Project Description                       |                         |            |                                      |                            |      |           |      |    |
| East/West Street: St. Joseph Road         |                         |            | North/South Street: Cold Spring Road |                            |      |           |      |    |
| Intersection Orientation: North-South     |                         |            | Study Period (hrs): 0.25             |                            |      |           |      |    |
| Vehicle Volumes and Adjustments           |                         |            |                                      |                            |      |           |      |    |
| Major Street                              | Northbound              |            |                                      | Southbound                 |      |           |      |    |
| Movement                                  | 1                       | 2          | 3                                    | 4                          | 5    | 6         |      |    |
|   | L                       | T          | R                                    | L                          | T    | R         |      |    |
| Volume (veh/h)                            | 1                       | 27         |                                      |                            | 155  | 7         |      |    |
| Peak-Hour Factor, PHF                     | 0.58                    | 0.58       | 1.00                                 | 1.00                       | 0.61 | 0.61      |      |    |
| Hourly Flow Rate, HFR (veh/h)             | 1                       | 46         | 0                                    | 0                          | 254  | 11        |      |    |
| Percent Heavy Vehicles                    | 0                       | --         | --                                   | 0                          | --   | --        |      |    |
| Median Type                               | Undivided               |            |                                      |                            |      |           |      |    |
| RT Channelized                            |                         |            | 0                                    |                            |      | 0         |      |    |
| Lanes                                     | 0                       | 1          | 0                                    | 0                          | 1    | 0         |      |    |
| Configuration                             | LT                      |            |                                      |                            |      | TR        |      |    |
| Upstream Signal                           |                         | 0          |                                      |                            | 0    |           |      |    |
| Minor Street                              | Eastbound               |            |                                      | Westbound                  |      |           |      |    |
| Movement                                  | 7                       | 8          | 9                                    | 10                         | 11   | 12        |      |    |
|   | L                       | T          | R                                    | L                          | T    | R         |      |    |
| Volume (veh/h)                            | 5                       |            | 1                                    |                            |      |           |      |    |
| Peak-Hour Factor, PHF                     | 0.25                    | 1.00       | 0.25                                 | 1.00                       | 1.00 | 1.00      |      |    |
| Hourly Flow Rate, HFR (veh/h)             | 20                      | 0          | 4                                    | 0                          | 0    | 0         |      |    |
| Percent Heavy Vehicles                    | 0                       | 0          | 0                                    | 0                          | 0    | 0         |      |    |
| Percent Grade (%)                         | 0                       |            |                                      | 0                          |      |           |      |    |
| Flared Approach                           |                         | N          |                                      |                            | N    |           |      |    |
| Storage                                   |                         | 0          |                                      |                            | 0    |           |      |    |
| RT Channelized                            |                         |            | 0                                    |                            |      | 0         |      |    |
| Lanes                                     | 0                       | 0          | 0                                    | 0                          | 0    | 0         |      |    |
| Configuration                             |                         | LR         |                                      |                            |      |           |      |    |
| Delay, Queue Length, and Level of Service |                         |            |                                      |                            |      |           |      |    |
| Approach                                  | Northbound              | Southbound | Westbound                            |                            |      | Eastbound |      |    |
| Movement                                  | 1                       | 4          | 7                                    | 8                          | 9    | 10        | 11   | 12 |
| Lane Configuration                        | LT                      |            |                                      |                            |      |           | LR   |    |
| v (veh/h)                                 | 1                       |            |                                      |                            |      |           | 24   |    |
| C (m) (veh/h)                             | 1311                    |            |                                      |                            |      |           | 701  |    |
| v/c                                       | 0.00                    |            |                                      |                            |      |           | 0.03 |    |
| 95% queue length                          | 0.00                    |            |                                      |                            |      |           | 0.11 |    |
| Control Delay (s/veh)                     | 7.7                     |            |                                      |                            |      |           | 10.3 |    |
| LOS                                       | A                       |            |                                      |                            |      |           | B    |    |
| Approach Delay (s/veh)                    | --                      | --         |                                      |                            |      |           | 10.3 |    |
| Approach LOS                              | --                      | --         |                                      |                            |      |           | B    |    |

## TWO-WAY STOP CONTROL SUMMARY

| General Information                          |                         |            | Site Information                            |                             |      |           |    |    |
|--|-------------------------|------------|---|-----------------------------|------|-----------|----|----|
| Analyst                                      | JAG                     |            | Intersection                                | Rose Valley and Cold Spring |      |           |    |    |
| Agency/Co.                                   | TMA                     |            | Jurisdiction                                | Town of Forestburgh         |      |           |    |    |
| Date Performed                               | 9/16/2009               |            | Analysis Year                               | Build Condition             |      |           |    |    |
| Analysis Time Period                         | Summer Sunday Peak Hour |            |   |                             |      |           |    |    |
| Project Description                          |                         |            |   |                             |      |           |    |    |
| East/West Street: <i>Rose Valley Road</i>    |                         |            | North/South Street: <i>Cold Spring Road</i> |                             |      |           |    |    |
| Intersection Orientation: <i>North-South</i> |                         |            | Study Period (hrs): <i>0.25</i>             |                             |      |           |    |    |
| Vehicle Volumes and Adjustments              |                         |            |   |                             |      |           |    |    |
| Major Street                                 | Northbound              |            |   | Southbound                  |      |           |    |    |
| Movement                                     | 1                       | 2          | 3   | 4                           | 5    | 6         |    |    |
|  | L                       | T          | R   | L                           | T    | R         |    |    |
| Volume (veh/h)                               |                         | 33         | 6   | 232                         | 160  |           |    |    |
| Peak-Hour Factor, PHF                        | 1.00                    | 0.60       | 0.60  | 0.70                        | 0.70 | 1.00      |    |    |
| Hourly Flow Rate, HFR (veh/h)                | 0                       | 54         | 9   | 331                         | 228  | 0         |    |    |
| Percent Heavy Vehicles                       | 0                       | --         | --  | 0                           | --   | --        |    |    |
| Median Type                                  | <i>Undivided</i>        |            |   |                             |      |           |    |    |
| RT Channelized                               |                         |            | 0   |                             |      | 0         |    |    |
| Lanes  | 0                       | 1          | 0   | 0                           | 1    | 0         |    |    |
| Configuration                                |                         |            | TR  | LT                          |      |           |    |    |
| Upstream Signal                              |                         | 0          |   |                             | 0    |           |    |    |
| Minor Street                                 | Eastbound               |            |   | Westbound                   |      |           |    |    |
| Movement                                     | 7                       | 8          | 9   | 10                          | 11   | 12        |    |    |
|  | L                       | T          | R   | L                           | T    | R         |    |    |
| Volume (veh/h)                               |                         |            |   | 9                           |      | 176       |    |    |
| Peak-Hour Factor, PHF                        | 1.00                    | 1.00       | 1.00  | 0.50                        | 1.00 | 0.50      |    |    |
| Hourly Flow Rate, HFR (veh/h)                | 0                       | 0          | 0   | 18                          | 0    | 352       |    |    |
| Percent Heavy Vehicles                       | 0                       | 0          | 0   | 10                          | 0    | 10        |    |    |
| Percent Grade (%)                            | 0                       |            |   | 6                           |      |           |    |    |
| Flared Approach                              |                         | N          |   |                             | N    |           |    |    |
| Storage                                      |                         | 0          |   |                             | 0    |           |    |    |
| RT Channelized                               |                         |            | 0   |                             |      | 0         |    |    |
| Lanes  | 0                       | 0          | 0   | 0                           | 0    | 0         |    |    |
| Configuration                                |                         |            |   |                             | LR   |           |    |    |
| Delay, Queue Length, and Level of Service    |                         |            |   |                             |      |           |    |    |
| Approach                                     | Northbound              | Southbound | Westbound                                   |                             |      | Eastbound |    |    |
| Movement                                     | 1                       | 4          | 7   | 8                           | 9    | 10        | 11 | 12 |
| Lane Configuration                           |                         | LT         |   | LR                          |      |           |    |    |
| v (veh/h)                                    |                         | 331        |   | 370                         |      |           |    |    |
| C (m) (veh/h)                                |                         | 1553       |   | 783                         |      |           |    |    |
| v/c  |                         | 0.21       |   | 0.47                        |      |           |    |    |
| 95% queue length                             |                         | 0.81       |   | 2.56                        |      |           |    |    |
| Control Delay (s/veh)                        |                         | 7.9        |   | 13.6                        |      |           |    |    |
| LOS  |                         | A          |   | B                           |      |           |    |    |
| Approach Delay (s/veh)                       | --                      | --         | 13.6  |                             |      |           |    |    |
| Approach LOS                                 | --                      | --         | B   |                             |      |           |    |    |

## TWO-WAY STOP CONTROL SUMMARY

| General Information                       |                         |           | Site Information                   |                         |      |            |      |    |
|---|-------------------------|-----------|------------------------------------|-------------------------|------|------------|------|----|
| Analyst                                   | JAG                     |           | Intersection                       | Cold Spring and Waverly |      |            |      |    |
| Agency/Co.                                | TMA                     |           | Jurisdiction                       | Town of Forestburgh     |      |            |      |    |
| Date Performed                            | 9/16/2009               |           | Analysis Year                      | Build Condition         |      |            |      |    |
| Analysis Time Period                      | Summer Sunday Peak Hour |           |                                    |                         |      |            |      |    |
| Project Description                       |                         |           |                                    |                         |      |            |      |    |
| East/West Street: Cold Spring Road        |                         |           | North/South Street: Waverly Avenue |                         |      |            |      |    |
| Intersection Orientation: East-West       |                         |           | Study Period (hrs): 0.25           |                         |      |            |      |    |
| Vehicle Volumes and Adjustments           |                         |           |                                    |                         |      |            |      |    |
| Major Street                              | Eastbound               |           |                                    | Westbound               |      |            |      |    |
| Movement                                  | 1                       | 2         | 3                                  | 4                       | 5    | 6          |      |    |
|   | L                       | T         | R                                  | L                       | T    | R          |      |    |
| Volume (veh/h)                            | 21                      | 244       |                                    |                         | 176  | 131        |      |    |
| Peak-Hour Factor, PHF                     | 0.73                    | 0.87      | 1.00                               | 1.00                    | 0.89 | 0.89       |      |    |
| Hourly Flow Rate, HFR (veh/h)             | 28                      | 280       | 0                                  | 0                       | 197  | 147        |      |    |
| Percent Heavy Vehicles                    | 0                       | --        | --                                 | 0                       | --   | --         |      |    |
| Median Type                               | Undivided               |           |                                    |                         |      |            |      |    |
| RT Channelized                            |                         |           | 0                                  |                         |      | 0          |      |    |
| Lanes                                     | 0                       | 1         | 0                                  | 0                       | 1    | 0          |      |    |
| Configuration                             | LT                      |           |                                    |                         |      | TR         |      |    |
| Upstream Signal                           |                         | 0         |                                    |                         | 0    |            |      |    |
| Minor Street                              | Northbound              |           |                                    | Southbound              |      |            |      |    |
| Movement                                  | 7                       | 8         | 9                                  | 10                      | 11   | 12         |      |    |
|   | L                       | T         | R                                  | L                       | T    | R          |      |    |
| Volume (veh/h)                            |                         |           |                                    | 171                     |      | 26         |      |    |
| Peak-Hour Factor, PHF                     | 1.00                    | 1.00      | 1.00                               | 0.83                    | 1.00 | 0.71       |      |    |
| Hourly Flow Rate, HFR (veh/h)             | 0                       | 0         | 0                                  | 206                     | 0    | 36         |      |    |
| Percent Heavy Vehicles                    | 0                       | 0         | 0                                  | 0                       | 0    | 0          |      |    |
| Percent Grade (%)                         | 0                       |           |                                    | 8                       |      |            |      |    |
| Flared Approach                           |                         | N         |                                    |                         | N    |            |      |    |
| Storage                                   |                         | 0         |                                    |                         | 0    |            |      |    |
| RT Channelized                            |                         |           | 0                                  |                         |      | 0          |      |    |
| Lanes                                     | 0                       | 0         | 0                                  | 0                       | 0    | 0          |      |    |
| Configuration                             |                         |           |                                    |                         | LR   |            |      |    |
| Delay, Queue Length, and Level of Service |                         |           |                                    |                         |      |            |      |    |
| Approach                                  | Eastbound               | Westbound | Northbound                         |                         |      | Southbound |      |    |
| Movement                                  | 1                       | 4         | 7                                  | 8                       | 9    | 10         | 11   | 12 |
| Lane Configuration                        | LT                      |           |                                    |                         |      |            | LR   |    |
| v (veh/h)                                 | 28                      |           |                                    |                         |      |            | 242  |    |
| C (m) (veh/h)                             | 1226                    |           |                                    |                         |      |            | 375  |    |
| v/c                                       | 0.02                    |           |                                    |                         |      |            | 0.65 |    |
| 95% queue length                          | 0.07                    |           |                                    |                         |      |            | 4.33 |    |
| Control Delay (s/veh)                     | 8.0                     |           |                                    |                         |      |            | 30.5 |    |
| LOS                                       | A                       |           |                                    |                         |      |            | D    |    |
| Approach Delay (s/veh)                    | --                      | --        |                                    |                         |      |            | 30.5 |    |
| Approach LOS                              | --                      | --        |                                    |                         |      |            | D    |    |

## TWO-WAY STOP CONTROL SUMMARY

| General Information                       |                         |           | Site Information                     |                         |      |            |    |    |
|---|-------------------------|-----------|--------------------------------------|-------------------------|------|------------|----|----|
| Analyst                                   | JAG                     |           | Intersection                         | E. Broadway/Rose Valley |      |            |    |    |
| Agency/Co.                                | TMA                     |           | Jurisdiction                         | Town of Thompson        |      |            |    |    |
| Date Performed                            | 9/16/2009               |           | Analysis Year                        | Build Condition         |      |            |    |    |
| Analysis Time Period                      | Summer Sunday Peak Hour |           |                                      |                         |      |            |    |    |
| Project Description                       |                         |           |                                      |                         |      |            |    |    |
| East/West Street: East Broadway           |                         |           | North/South Street: Rose Valley Road |                         |      |            |    |    |
| Intersection Orientation: East-West       |                         |           | Study Period (hrs): 0.25             |                         |      |            |    |    |
| Vehicle Volumes and Adjustments           |                         |           |                                      |                         |      |            |    |    |
| Major Street                              | Eastbound               |           |                                      | Westbound               |      |            |    |    |
| Movement                                  | 1                       | 2         | 3                                    | 4                       | 5    | 6          |    |    |
|   | L                       | T         | R                                    | L                       | T    | R          |    |    |
| Volume (veh/h)                            | 5                       | 231       | 120                                  | 122                     | 151  | 0          |    |    |
| Peak-Hour Factor, PHF                     | 0.79                    | 0.79      | 0.79                                 | 0.84                    | 0.84 | 0.84       |    |    |
| Hourly Flow Rate, HFR (veh/h)             | 6                       | 292       | 151                                  | 145                     | 179  | 0          |    |    |
| Percent Heavy Vehicles                    | 10                      | --        | --                                   | 4                       | --   | --         |    |    |
| Median Type                               | Undivided               |           |                                      |                         |      |            |    |    |
| RT Channelized                            |                         |           | 0                                    |                         |      | 0          |    |    |
| Lanes                                     | 0                       | 1         | 0                                    | 0                       | 1    | 0          |    |    |
| Configuration                             | LTR                     |           |                                      | LTR                     |      |            |    |    |
| Upstream Signal                           |                         | 0         |                                      |                         | 0    |            |    |    |
| Minor Street                              | Northbound              |           |                                      | Southbound              |      |            |    |    |
| Movement                                  | 7                       | 8         | 9                                    | 10                      | 11   | 12         |    |    |
|   | L                       | T         | R                                    | L                       | T    | R          |    |    |
| Volume (veh/h)                            | 38                      | 0         | 256                                  | 0                       | 1    | 0          |    |    |
| Peak-Hour Factor, PHF                     | 0.70                    | 0.70      | 0.70                                 | 0.25                    | 0.25 | 0.25       |    |    |
| Hourly Flow Rate, HFR (veh/h)             | 54                      | 0         | 365                                  | 0                       | 4    | 0          |    |    |
| Percent Heavy Vehicles                    | 10                      | 10        | 10                                   | 0                       | 0    | 0          |    |    |
| Percent Grade (%)                         | 0                       |           |                                      | 0                       |      |            |    |    |
| Flared Approach                           |                         | Y         |                                      |                         | N    |            |    |    |
| Storage                                   |                         | 2         |                                      |                         | 0    |            |    |    |
| RT Channelized                            |                         |           | 0                                    |                         |      | 0          |    |    |
| Lanes                                     | 0                       | 1         | 0                                    | 0                       | 1    | 0          |    |    |
| Configuration                             |                         | LTR       |                                      |                         | LTR  |            |    |    |
| Delay, Queue Length, and Level of Service |                         |           |                                      |                         |      |            |    |    |
| Approach                                  | Eastbound               | Westbound | Northbound                           |                         |      | Southbound |    |    |
| Movement                                  | 1                       | 4         | 7                                    | 8                       | 9    | 10         | 11 | 12 |
| Lane Configuration                        | LTR                     | LTR       | LTR                                  |                         |      | LTR        |    |    |
| v (veh/h)                                 | 6                       | 145       | 419                                  |                         |      | 4          |    |    |
| C (m) (veh/h)                             | 1350                    | 1107      | 684                                  |                         |      | 230        |    |    |
| v/c                                       | 0.00                    | 0.13      | 0.61                                 |                         |      | 0.02       |    |    |
| 95% queue length                          | 0.01                    | 0.45      | 4.21                                 |                         |      | 0.05       |    |    |
| Control Delay (s/veh)                     | 7.7                     | 8.7       | 18.2                                 |                         |      | 20.9       |    |    |
| LOS                                       | A                       | A         | C                                    |                         |      | C          |    |    |
| Approach Delay (s/veh)                    | --                      | --        | 18.2                                 |                         |      | 20.9       |    |    |
| Approach LOS                              | --                      | --        | C                                    |                         |      | C          |    |    |

### HCS+™ DETAILED REPORT

| General Information |                         |               |                        | Site Information |  |  |  |
|---------------------|-------------------------|---------------|------------------------|------------------|--|--|--|
| Analyst             | JAG                     | Intersection  | Rt 42, Bank, St. Johns |                  |  |  |  |
| Agency or Co.       | TMA                     | Area Type     | All other areas        |                  |  |  |  |
| Date Performed      | 9/16/2009               | Jurisdiction  | Village of Monticello  |                  |  |  |  |
| Time Period         | Summer Sunday Peak Hour | Analysis Year | Build Condition        |                  |  |  |  |
|                     |                         | Project ID    |                        |                  |  |  |  |

| Volume and Timing Input                   |          |         |      |       |          |         |                        |       |         |         |       |      |    |
|---|----------|---------|------|-------|----------|---------|------------------------|-------|---------|---------|-------|------|----|
|   | EB       |         |      | WB    |          |         | NB                     |       |         | SB      |       |      |    |
|   | LT       | TH      | RT   | LT    | TH       | RT      | LT                     | TH    | RT      | LT      | TH    | RT   |    |
| Number of Lanes, N <sub>1</sub>           | 0        | 2       | 0    | 0     | 2        | 0       | 0                      | 1     | 0       | 0       | 1     | 0    |    |
| Lane Group                                |          | LTR     |      | DefL  | TR       |         |                        | LTR   |         |         | LTR   |      |    |
| Volume, V (vph)                           | 8        | 688     | 75   | 182   | 600      | 12      | 104                    | 5     | 169     | 19      | 6     | 11   |    |
| % Heavy Vehicles, %HV                     | 7        | 7       | 7    | 4     | 4        | 4       | 1                      | 1     | 1       | 2       | 2     | 2    |    |
| Peak-Hour Factor, PHF                     | 0.88     | 0.88    | 0.88 | 0.92  | 0.92     | 0.92    | 0.79                   | 0.79  | 0.79    | 0.50    | 0.50  | 0.50 |    |
| Pretimed (P) or Actuated (A)              | A        | A       | A    | A     | A        | A       | A                      | A     | A       | A       | A     | A    |    |
| Start-up Lost Time, I <sub>1</sub>        |          | 2.0     |      | 2.0   | 2.0      |         |                        | 2.0   |         |         | 2.0   |      |    |
| Extension of Effective Green, e           |          | 2.0     |      | 2.0   | 2.0      |         |                        | 2.0   |         |         | 2.0   |      |    |
| Arrival Type, AT                          |          | 3       |      | 3     | 3        |         |                        | 3     |         |         | 3     |      |    |
| Unit Extension, UE                        |          | 3.0     |      | 3.0   | 3.0      |         |                        | 3.0   |         |         | 3.0   |      |    |
| Filtering/Metering, I                     |          | 1.000   |      | 1.000 | 1.000    |         |                        | 1.000 |         |         | 1.000 |      |    |
| Initial Unmet Demand, Q <sub>b</sub>      |          | 0.0     |      | 0.0   | 0.0      |         |                        | 0.0   |         |         | 0.0   |      |    |
| Ped / Bike / RTOR Volumes                 | 0        | 0       | 0    | 0     | 0        | 0       | 0                      | 0     | 0       | 0       | 0     | 0    |    |
| Lane Width                                |          | 12.0    |      | 12.0  | 12.0     |         |                        | 11.0  |         |         | 12.0  |      |    |
| Parking / Grade / Parking                 | N        | 0       | N    | N     | 0        | N       | N                      | 0     | N       | N       | 0     | N    |    |
| Parking Maneuvers, N <sub>m</sub>         |          |         |      |       |          |         |                        |       |         |         |       |      |    |
| Buses Stopping, N <sub>b</sub>            |          | 0       |      | 0     | 0        |         |                        | 0     |         |         | 0     |      |    |
| Min. Time for Pedestrians, G <sub>p</sub> |          | 3.2     |      |       | 3.2      |         |                        | 3.2   |         |         | 3.2   |      |    |
| Phasing                                   | EW Perm  | WB Only | 03   |       |          | 04      |                        |       | NB Only | SB Only | 07    |      | 08 |
| Timing                                    | G = 35.0 | G = 7.0 | G =  | G =   | G = 24.0 | G = 9.0 | G =                    | G =   |         |         |       |      |    |
|   | Y = 5    | Y = 5   | Y =  | Y =   | Y = 5    | Y = 5   | Y =                    | Y =   |         |         |       |      |    |
| Duration of Analysis, T = 0.25            |          |         |      |       |          |         | Cycle Length, C = 95.0 |       |         |         |       |      |    |

| Lane Group Capacity, Control Delay, and LOS Determination |      |       |    |                       |       |    |                  |       |    |      |       |    |
|---|------|-------|----|-----------------------|-------|----|------------------|-------|----|------|-------|----|
|   | EB   |       |    | WB                    |       |    | NB               |       |    | SB   |       |    |
|   | LT   | TH    | RT | LT                    | TH    | RT | LT               | TH    | RT | LT   | TH    | RT |
| Adjusted Flow Rate, v                                     |      | 876   |    | 198                   | 665   |    |                  | 352   |    |      | 72    |    |
| Lane Group Capacity, c                                    |      | 1163  |    | 340                   | 901   |    |                  | 414   |    |      | 165   |    |
| v/c Ratio, X  |      | 0.75  |    | 0.58                  | 0.74  |    |                  | 0.85  |    |      | 0.44  |    |
| Total Green Ratio, g/C                                    |      | 0.37  |    | 0.49                  | 0.49  |    |                  | 0.25  |    |      | 0.09  |    |
| Uniform Delay, d <sub>1</sub>                             |      | 26.2  |    | 30.7                  | 19.1  |    |                  | 33.8  |    |      | 40.6  |    |
| Progression Factor, PF                                    |      | 1.000 |    | 1.000                 | 1.000 |    |                  | 1.000 |    |      | 1.000 |    |
| Delay Calibration, k                                      |      | 0.31  |    | 0.17                  | 0.30  |    |                  | 0.38  |    |      | 0.11  |    |
| Incremental Delay, d <sub>2</sub>                         |      | 2.8   |    | 2.5                   | 3.2   |    |                  | 15.4  |    |      | 1.8   |    |
| Initial Queue Delay, d <sub>3</sub>                       |      | 0.0   |    | 0.0                   | 0.0   |    |                  | 0.0   |    |      | 0.0   |    |
| Control Delay   |      | 29.1  |    | 33.3                  | 22.3  |    |                  | 49.2  |    |      | 42.4  |    |
| Lane Group LOS  |      | C     |    | C                     | C     |    |                  | D     |    |      | D     |    |
| Approach Delay  | 29.1 |       |    | 24.9                  |       |    | 49.2             |       |    | 42.4 |       |    |
| Approach LOS  | C    |       |    | C                     |       |    | D                |       |    | D    |       |    |
| Intersection Delay  | 31.1 |       |    | X <sub>C</sub> = 1.25 |       |    | Intersection LOS |       |    | C    |       |    |

## TWO-WAY STOP CONTROL SUMMARY

| General Information                       |                         | Site Information |   |            |      |           |       |    |
|---|-------------------------|------------------|---|------------|------|-----------|-------|----|
| Analyst                                   | JAG                     | Intersection     | W. Broadway/Forestburgh Rd                        |            |      |           |       |    |
| Agency/Co.                                | TMA                     | Jurisdiction     | Village of Monticello                             |            |      |           |       |    |
| Date Performed                            | 9/16/2009               | Analysis Year    | Build Condition                                   |            |      |           |       |    |
| Analysis Time Period                      | Summer Sunday Peak Hour |                  |   |            |      |           |       |    |
| Project Description                       |                         |                  |   |            |      |           |       |    |
| East/West Street: West Broadway           |                         |                  | North/South Street: Rt 42 (Forestburgh, Broadway) |            |      |           |       |    |
| Intersection Orientation: North-South     |                         |                  | Study Period (hrs): 0.25                          |            |      |           |       |    |
| Vehicle Volumes and Adjustments           |                         |                  |   |            |      |           |       |    |
| Major Street                              | Northbound              |                  |   | Southbound |      |           |       |    |
| Movement                                  | 1                       | 2                | 3   | 4          | 5    | 6         |       |    |
|   | L                       | T                | R   | L          | T    | R         |       |    |
| Volume (veh/h)                            | 101                     | 588              |   |            | 635  | 137       |       |    |
| Peak-Hour Factor, PHF                     | 0.95                    | 0.95             | 1.00  | 1.00       | 0.95 | 0.95      |       |    |
| Hourly Flow Rate, HFR (veh/h)             | 106                     | 618              | 0   | 0          | 668  | 144       |       |    |
| Percent Heavy Vehicles                    | 7                       | --               | --  | 0          | --   | --        |       |    |
| Median Type                               | Undivided               |                  |   |            |      |           |       |    |
| RT Channelized                            |                         |                  | 0   |            |      | 0         |       |    |
| Lanes                                     | 1                       | 1                | 0   | 0          | 1    | 0         |       |    |
| Configuration                             | L                       | T                |   |            |      | TR        |       |    |
| Upstream Signal                           |                         | 0                |   |            | 0    |           |       |    |
| Minor Street                              | Eastbound               |                  |   | Westbound  |      |           |       |    |
| Movement                                  | 7                       | 8                | 9   | 10         | 11   | 12        |       |    |
|   | L                       | T                | R   | L          | T    | R         |       |    |
| Volume (veh/h)                            | 119                     |                  | 162   |            |      |           |       |    |
| Peak-Hour Factor, PHF                     | 0.88                    | 1.00             | 0.88  | 1.00       | 1.00 | 1.00      |       |    |
| Hourly Flow Rate, HFR (veh/h)             | 135                     | 0                | 184   | 0          | 0    | 0         |       |    |
| Percent Heavy Vehicles                    | 5                       | 0                | 5   | 0          | 0    | 0         |       |    |
| Percent Grade (%)                         | 0                       |                  |   | 0          |      |           |       |    |
| Flared Approach                           |                         | Y                |   |            | N    |           |       |    |
| Storage                                   |                         | 1                |   |            | 0    |           |       |    |
| RT Channelized                            |                         |                  | 0   |            |      | 0         |       |    |
| Lanes                                     | 0                       | 0                | 0   | 0          | 0    | 0         |       |    |
| Configuration                             |                         | LR               |   |            |      |           |       |    |
| Delay, Queue Length, and Level of Service |                         |                  |   |            |      |           |       |    |
| Approach                                  | Northbound              | Southbound       | Westbound   |            |      | Eastbound |       |    |
| Movement                                  | 1                       | 4                | 7   | 8          | 9    | 10        | 11    | 12 |
| Lane Configuration                        | L                       |                  |   |            |      |           | LR    |    |
| v (veh/h)                                 | 106                     |                  |   |            |      |           | 319   |    |
| C (m) (veh/h)                             | 793                     |                  |   |            |      |           | 189   |    |
| v/c                                       | 0.13                    |                  |   |            |      |           | 1.69  |    |
| 95% queue length                          | 0.46                    |                  |   |            |      |           | 21.75 |    |
| Control Delay (s/veh)                     | 10.2                    |                  |   |            |      |           | 374.8 |    |
| LOS                                       | B                       |                  |   |            |      |           | F     |    |
| Approach Delay (s/veh)                    | --                      | --               |   |            |      |           | 374.8 |    |
| Approach LOS                              | --                      | --               |   |            |      |           | F     |    |



## TWO-WAY STOP CONTROL SUMMARY

| General Information                       |                         |            | Site Information                 |                          |      |           |    |    |
|---|-------------------------|------------|----------------------------------|--------------------------|------|-----------|----|----|
| Analyst                                   | JAG                     |            | Intersection                     | St. Joseph and NYS Rt 42 |      |           |    |    |
| Agency/Co.                                | TMA                     |            | Jurisdiction                     | Town of Forestburgh      |      |           |    |    |
| Date Performed                            | 9/16/2009               |            | Analysis Year                    | Build Condition          |      |           |    |    |
| Analysis Time Period                      | Summer Sunday Peak Hour |            |                                  |                          |      |           |    |    |
| Project Description                       |                         |            |                                  |                          |      |           |    |    |
| East/West Street: St. Joseph Road         |                         |            | North/South Street: NYS Route 42 |                          |      |           |    |    |
| Intersection Orientation: North-South     |                         |            | Study Period (hrs): 0.25         |                          |      |           |    |    |
| Vehicle Volumes and Adjustments           |                         |            |                                  |                          |      |           |    |    |
| Major Street                              | Northbound              |            |                                  | Southbound               |      |           |    |    |
| Movement                                  | 1                       | 2          | 3                                | 4                        | 5    | 6         |    |    |
|   | L                       | T          | R                                | L                        | T    | R         |    |    |
| Volume (veh/h)                            |                         | 184        | 11                               | 1                        | 349  |           |    |    |
| Peak-Hour Factor, PHF                     | 1.00                    | 0.67       | 0.67                             | 0.92                     | 0.92 | 1.00      |    |    |
| Hourly Flow Rate, HFR (veh/h)             | 0                       | 274        | 16                               | 1                        | 379  | 0         |    |    |
| Percent Heavy Vehicles                    | 0                       | --         | --                               | 0                        | --   | --        |    |    |
| Median Type                               | Undivided               |            |                                  |                          |      |           |    |    |
| RT Channelized                            |                         |            | 0                                |                          |      | 0         |    |    |
| Lanes                                     | 0                       | 1          | 0                                | 0                        | 1    | 0         |    |    |
| Configuration                             |                         |            | TR                               | LT                       |      |           |    |    |
| Upstream Signal                           |                         | 0          |                                  |                          | 0    |           |    |    |
| Minor Street                              | Eastbound               |            |                                  | Westbound                |      |           |    |    |
| Movement                                  | 7                       | 8          | 9                                | 10                       | 11   | 12        |    |    |
|   | L                       | T          | R                                | L                        | T    | R         |    |    |
| Volume (veh/h)                            |                         |            |                                  | 11                       |      | 1         |    |    |
| Peak-Hour Factor, PHF                     | 1.00                    | 1.00       | 1.00                             | 0.42                     | 1.00 | 0.42      |    |    |
| Hourly Flow Rate, HFR (veh/h)             | 0                       | 0          | 0                                | 26                       | 0    | 2         |    |    |
| Percent Heavy Vehicles                    | 0                       | 0          | 0                                | 0                        | 0    | 0         |    |    |
| Percent Grade (%)                         | 0                       |            |                                  | 0                        |      |           |    |    |
| Flared Approach                           |                         | N          |                                  |                          | N    |           |    |    |
| Storage                                   |                         | 0          |                                  |                          | 0    |           |    |    |
| RT Channelized                            |                         |            | 0                                |                          |      | 0         |    |    |
| Lanes                                     | 0                       | 0          | 0                                | 0                        | 0    | 0         |    |    |
| Configuration                             |                         |            |                                  |                          | LR   |           |    |    |
| Delay, Queue Length, and Level of Service |                         |            |                                  |                          |      |           |    |    |
| Approach                                  | Northbound              | Southbound | Westbound                        |                          |      | Eastbound |    |    |
| Movement                                  | 1                       | 4          | 7                                | 8                        | 9    | 10        | 11 | 12 |
| Lane Configuration                        |                         | LT         |                                  | LR                       |      |           |    |    |
| v (veh/h)                                 |                         | 1          |                                  | 28                       |      |           |    |    |
| C (m) (veh/h)                             |                         | 1283       |                                  | 443                      |      |           |    |    |
| v/c                                       |                         | 0.00       |                                  | 0.06                     |      |           |    |    |
| 95% queue length                          |                         | 0.00       |                                  | 0.20                     |      |           |    |    |
| Control Delay (s/veh)                     |                         | 7.8        |                                  | 13.7                     |      |           |    |    |
| LOS                                       |                         | A          |                                  | B                        |      |           |    |    |
| Approach Delay (s/veh)                    | --                      | --         | 13.7                             |                          |      |           |    |    |
| Approach LOS                              | --                      | --         | B                                |                          |      |           |    |    |

| TWO-WAY STOP CONTROL SUMMARY                     |                         |            |           |                                      |                        |           |       |
|--|-------------------------|------------|-----------|--------------------------------------|------------------------|-----------|-------|
| <b>General Information</b>                       |                         |            |           | <b>Site Information</b>              |                        |           |       |
| Analyst  | JAG                     |            |           | Intersection                         | Access and Cold Spring |           |       |
| Agency/Co.                                       | TMA                     |            |           | Jurisdiction                         | Town of Forestburgh    |           |       |
| Date Performed                                   | 9/10/2009               |            |           | Analysis Year                        | Build Condition        |           |       |
| Analysis Time Period                             | Sunday Summer Peak Hour |            |           |                                      |                        |           |       |
| Project Description                              |                         |            |           |                                      |                        |           |       |
| East/West Street: Site Access                    |                         |            |           | North/South Street: Cold Spring Road |                        |           |       |
| Intersection Orientation: North-South            |                         |            |           | Study Period (hrs): 0.25             |                        |           |       |
| <b>Vehicle Volumes and Adjustments</b>           |                         |            |           |                                      |                        |           |       |
| <b>Major Street</b>                              | Northbound              |            |           | Southbound                           |                        |           |       |
| Movement   | 1                       | 2          | 3         | 4                                    | 5                      | 6         |       |
|  | L                       | T          | R         | L                                    | T                      | R         |       |
| Volume (veh/h)                                   | 199                     | 10         |           |                                      | 16                     | 299       |       |
| Peak-Hour Factor, PHF                            | 0.90                    | 0.90       | 1.00      | 1.00                                 | 0.90                   | 0.90      |       |
| Hourly Flow Rate, HFR (veh/h)                    | 221                     | 11         | 0         | 0                                    | 17                     | 332       |       |
| Percent Heavy Vehicles                           | 0                       | --         | --        | 0                                    | --                     | --        |       |
| Median Type                                      | Undivided               |            |           |                                      |                        |           |       |
| RT Channelized                                   |                         |            | 0         |                                      |                        | 0         |       |
| Lanes  | 0                       | 1          | 0         | 0                                    | 1                      | 0         |       |
| Configuration                                    | LT                      |            |           |                                      |                        | TR        |       |
| Upstream Signal                                  |                         | 0          |           |                                      | 0                      |           |       |
| <b>Minor Street</b>                              | Eastbound               |            |           | Westbound                            |                        |           |       |
| Movement   | 7                       | 8          | 9         | 10                                   | 11                     | 12        |       |
|  | L                       | T          | R         | L                                    | T                      | R         |       |
| Volume (veh/h)                                   | 202                     |            | 376       |                                      |                        |           |       |
| Peak-Hour Factor, PHF                            | 0.90                    | 1.00       | 0.90      | 1.00                                 | 1.00                   | 1.00      |       |
| Hourly Flow Rate, HFR (veh/h)                    | 224                     | 0          | 417       | 0                                    | 0                      | 0         |       |
| Percent Heavy Vehicles                           | 0                       | 0          | 0         | 0                                    | 0                      | 0         |       |
| Percent Grade (%)                                |                         | 0          |           |                                      | 0                      |           |       |
| Flared Approach                                  |                         | N          |           |                                      | N                      |           |       |
| Storage  |                         | 0          |           |                                      | 0                      |           |       |
| RT Channelized                                   |                         |            | 0         |                                      |                        | 0         |       |
| Lanes  | 0                       | 0          | 0         | 0                                    | 0                      | 0         |       |
| Configuration                                    |                         | LR         |           |                                      |                        |           |       |
| <b>Delay, Queue Length, and Level of Service</b> |                         |            |           |                                      |                        |           |       |
| Approach   | Northbound              | Southbound | Westbound |                                      |                        | Eastbound |       |
| Movement   | 1                       | 4          | 7         | 8                                    | 9                      | 10        | 11 12 |
| Lane Configuration                               | LT                      |            |           |                                      |                        |           | LR    |
| v (veh/h)  | 221                     |            |           |                                      |                        |           | 641   |
| C (m) (veh/h)                                    | 1221                    |            |           |                                      |                        |           | 584   |
| v/c  | 0.18                    |            |           |                                      |                        |           | 1.10  |
| 95% queue length                                 | 0.66                    |            |           |                                      |                        |           | 19.47 |
| Control Delay (s/veh)                            | 8.6                     |            |           |                                      |                        |           | 92.5  |
| LOS  | A                       |            |           |                                      |                        |           | F     |
| Approach Delay (s/veh)                           | --                      | --         |           |                                      |                        |           | 92.5  |
| Approach LOS                                     | --                      | --         |           |                                      |                        |           | F     |

## TWO-WAY STOP CONTROL SUMMARY

| General Information                          |                         |            | Site Information                            |                               |      |           |    |      |
|--|-------------------------|------------|---|-------------------------------|------|-----------|----|------|
| Analyst                                      | JAG                     |            | Intersection                                | Access and Cold Spring        |      |           |    |      |
| Agency/Co.                                   | TMA                     |            | Jurisdiction                                | Town of Forestburgh           |      |           |    |      |
| Date Performed                               | 9/10/2009               |            | Analysis Year                               | Build Condition w/ Mitigation |      |           |    |      |
| Analysis Time Period                         | Friday Summer Peak Hour |            |   |                               |      |           |    |      |
| Project Description                          |                         |            |   |                               |      |           |    |      |
| East/West Street: <i>Site Access</i>         |                         |            | North/South Street: <i>Cold Spring Road</i> |                               |      |           |    |      |
| Intersection Orientation: <i>North-South</i> |                         |            | Study Period (hrs): <i>0.25</i>             |                               |      |           |    |      |
| Vehicle Volumes and Adjustments              |                         |            |   |                               |      |           |    |      |
| Major Street                                 | Northbound              |            |   | Southbound                    |      |           |    |      |
| Movement                                     | 1                       | 2          | 3   | 4                             | 5    | 6         |    |      |
|  | L                       | T          | R   | L                             | T    | R         |    |      |
| Volume (veh/h)                               | 222                     | 55         |   |                               | 48   | 119       |    |      |
| Peak-Hour Factor, PHF                        | 0.90                    | 0.90       | 1.00  | 1.00                          | 0.90 | 0.90      |    |      |
| Hourly Flow Rate, HFR (veh/h)                | 246                     | 61         | 0   | 0                             | 53   | 132       |    |      |
| Percent Heavy Vehicles                       | 0                       | --         | --  | 0                             | --   | --        |    |      |
| Median Type                                  | <i>Undivided</i>        |            |   |                               |      |           |    |      |
| RT Channelized                               |                         |            | 0   |                               |      | 0         |    |      |
| Lanes  | 1                       | 1          | 0   | 0                             | 1    | 1         |    |      |
| Configuration                                | L                       | T          |   |                               | T    | R         |    |      |
| Upstream Signal                              |                         | 0          |   |                               | 0    |           |    |      |
| Minor Street                                 | Eastbound               |            |   | Westbound                     |      |           |    |      |
| Movement                                     | 7                       | 8          | 9   | 10                            | 11   | 12        |    |      |
|  | L                       | T          | R   | L                             | T    | R         |    |      |
| Volume (veh/h)                               | 312                     |            | 134   |                               |      |           |    |      |
| Peak-Hour Factor, PHF                        | 0.90                    | 1.00       | 0.90  | 1.00                          | 1.00 | 1.00      |    |      |
| Hourly Flow Rate, HFR (veh/h)                | 346                     | 0          | 148   | 0                             | 0    | 0         |    |      |
| Percent Heavy Vehicles                       | 0                       | 0          | 0   | 0                             | 0    | 0         |    |      |
| Percent Grade (%)                            | 0                       |            |   | 0                             |      |           |    |      |
| Flared Approach                              |                         | N          |   |                               | N    |           |    |      |
| Storage                                      |                         | 0          |   |                               | 0    |           |    |      |
| RT Channelized                               |                         |            | 0   |                               |      | 0         |    |      |
| Lanes  | 1                       | 0          | 1   | 0                             | 0    | 0         |    |      |
| Configuration                                | L                       |            | R   |                               |      |           |    |      |
| Delay, Queue Length, and Level of Service    |                         |            |   |                               |      |           |    |      |
| Approach                                     | Northbound              | Southbound | Westbound                                   |                               |      | Eastbound |    |      |
| Movement                                     | 1                       | 4          | 7   | 8                             | 9    | 10        | 11 | 12   |
| Lane Configuration                           | L                       |            |   |                               |      | L         |    | R    |
| v (veh/h)                                    | 246                     |            |   |                               |      | 346       |    | 148  |
| C (m) (veh/h)                                | 1402                    |            |   |                               |      | 382       |    | 1020 |
| v/c  | 0.18                    |            |   |                               |      | 0.91      |    | 0.15 |
| 95% queue length                             | 0.64                    |            |   |                               |      | 9.36      |    | 0.51 |
| Control Delay (s/veh)                        | 8.1                     |            |   |                               |      | 58.7      |    | 9.1  |
| LOS  | A                       |            |   |                               |      | F         |    | A    |
| Approach Delay (s/veh)                       | --                      | --         |   |                               |      | 43.9      |    |      |
| Approach LOS                                 | --                      | --         |   |                               |      | E         |    |      |

## TWO-WAY STOP CONTROL SUMMARY

| General Information                          |                         |            | Site Information                            |                               |      |           |    |      |
|--|-------------------------|------------|---|-------------------------------|------|-----------|----|------|
| Analyst                                      | JAG                     |            | Intersection                                | Access and Cold Spring        |      |           |    |      |
| Agency/Co.                                   | TMA                     |            | Jurisdiction                                | Town of Forestburg            |      |           |    |      |
| Date Performed                               | 9/10/2009               |            | Analysis Year                               | Build Condition w/ Mitigation |      |           |    |      |
| Analysis Time Period                         | Sunday Summer Peak Hour |            |   |                               |      |           |    |      |
| Project Description                          |                         |            |   |                               |      |           |    |      |
| East/West Street: <i>Site Access</i>         |                         |            | North/South Street: <i>Cold Spring Road</i> |                               |      |           |    |      |
| Intersection Orientation: <i>North-South</i> |                         |            | Study Period (hrs): <i>0.25</i>             |                               |      |           |    |      |
| Vehicle Volumes and Adjustments              |                         |            |   |                               |      |           |    |      |
| Major Street                                 | Northbound              |            |   | Southbound                    |      |           |    |      |
| Movement                                     | 1                       | 2          | 3   | 4                             | 5    | 6         |    |      |
|  | L                       | T          | R   | L                             | T    | R         |    |      |
| Volume (veh/h)                               | 199                     | 10         |   |                               | 16   | 299       |    |      |
| Peak-Hour Factor, PHF                        | 0.90                    | 0.90       | 1.00  | 1.00                          | 0.90 | 0.90      |    |      |
| Hourly Flow Rate, HFR (veh/h)                | 221                     | 11         | 0   | 0                             | 17   | 332       |    |      |
| Percent Heavy Vehicles                       | 0                       | --         | --  | 0                             | --   | --        |    |      |
| Median Type                                  | <i>Undivided</i>        |            |   |                               |      |           |    |      |
| RT Channelized                               |                         |            | 0   |                               |      | 0         |    |      |
| Lanes  | 1                       | 1          | 0   | 0                             | 1    | 1         |    |      |
| Configuration                                | L                       | T          |   |                               | T    | R         |    |      |
| Upstream Signal                              |                         | 0          |   |                               | 0    |           |    |      |
| Minor Street                                 | Eastbound               |            |   | Westbound                     |      |           |    |      |
| Movement                                     | 7                       | 8          | 9   | 10                            | 11   | 12        |    |      |
|  | L                       | T          | R   | L                             | T    | R         |    |      |
| Volume (veh/h)                               | 202                     |            | 376   |                               |      |           |    |      |
| Peak-Hour Factor, PHF                        | 0.90                    | 1.00       | 0.90  | 1.00                          | 1.00 | 1.00      |    |      |
| Hourly Flow Rate, HFR (veh/h)                | 224                     | 0          | 417   | 0                             | 0    | 0         |    |      |
| Percent Heavy Vehicles                       | 0                       | 0          | 0   | 0                             | 0    | 0         |    |      |
| Percent Grade (%)                            | 0                       |            |   | 0                             |      |           |    |      |
| Flared Approach                              |                         | N          |   |                               | N    |           |    |      |
| Storage                                      |                         | 0          |   |                               | 0    |           |    |      |
| RT Channelized                               |                         |            | 0   |                               |      | 0         |    |      |
| Lanes  | 1                       | 0          | 1   | 0                             | 0    | 0         |    |      |
| Configuration                                | L                       |            | R   |                               |      |           |    |      |
| Delay, Queue Length, and Level of Service    |                         |            |   |                               |      |           |    |      |
| Approach                                     | Northbound              | Southbound | Westbound                                   |                               |      | Eastbound |    |      |
| Movement                                     | 1                       | 4          | 7   | 8                             | 9    | 10        | 11 | 12   |
| Lane Configuration                           | L                       |            |   |                               |      | L         |    | R    |
| v (veh/h)                                    | 221                     |            |   |                               |      | 224       |    | 417  |
| C (m) (veh/h)                                | 1221                    |            |   |                               |      | 455       |    | 1068 |
| v/c  | 0.18                    |            |   |                               |      | 0.49      |    | 0.39 |
| 95% queue length                             | 0.66                    |            |   |                               |      | 2.66      |    | 1.88 |
| Control Delay (s/veh)                        | 8.6                     |            |   |                               |      | 20.3      |    | 10.5 |
| LOS  | A                       |            |   |                               |      | C         |    | B    |
| Approach Delay (s/veh)                       | --                      | --         |   |                               |      | 13.9      |    |      |
| Approach LOS                                 | --                      | --         |   |                               |      | B         |    |      |