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**Traffic Impact Study** 

Generic Draft Environmental Impact Statement
Hampton Ridge Center Rezoning



# STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION REGION FOUR 1530 JEFFERSON ROAD ROCHESTER, NEW YORK 14623 www.nysdot.gov

KEVIN B. O'BUCKLEY, P.E. REGIONAL DIRECTOR

September 19, 2007

Mr. James Elmer, P.E. Bergmann Associates 200 First Federal Plaza 28 East Main Street Rochester, NY 14614

Re: Hampton Ridge Center Route 104, Town of Greece Monroe County

Dear Mr. Elmer:

We have received your request for information on whether five locations adjacent to the subject project are on the New York State Priority Investigation Location (PIL) list.

The following intersections are on our PIL list.

Route 104 and Manitou Road

Route 104 and Elmgrove Road/North Greece Road

Route 104 and Elmridge Plaza

These locations are not on our PIL list.

Route 104 and Kohl's driveway

Route 104 between Manitou Road and the Kohl's driveway

If there are any questions please contact Mr. Robert Duennebacke at 272-3475.

Sincerely,

David C. Goehring, P.E.,

Regional Transportation Operations Engineer

DCG/RLD/



BY:----

ASTRID C. GLYNN COMMISSIONER

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# STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION REGION FOUR 1530 JEFFERSON ROAD ROCHESTER, NEW YORK 14623 www.nysdot.gov

KEVIN B. O'BUCKLEY, P.E. REGIONAL DIRECTOR

ASTRID C. GLYNN COMMISSIONER

Proj. No.

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Enc.

**Full Copy** 

Copies to

Mark Petroski

BY:----

September 11, 2007

Mr. Frank Dolan
Bergmann Associates
28 East Main Street
200 First Federal Plaza
Rochester, NY 14614-1909

Re: Hampton Ridge Center

Route 104, between Route 261 & Route 286

Town of Greece, Monroe County

Dear Mr. Bolan Frank

We have completed our review of your July 18, 2007 letter responding to our previous comments and have the following comments.

In regards to the Route 104 and Manitou Road intersection, it is our policy that when a lowering in the level of service (LOS) during a peak hour occurs, traffic mitigation is required to offset this impact. The LOS is expected to be lowered significantly during peak hours. Contrary to your statement, there is no indication that this would be limited to one peak hour. It is more reasonable to assume that there will be significant impacts during afternoon and weekend periods when commercial activity is high. In this case improvements at the intersection appear impractical due to right-of-way and physical constraints. It was suggested that these improvements could be done when the New York State Department of Transportation reconstructs Route 104 in this area and can obtain right-of-way. Presently we do not have a project planned in this area and thus do not foresee the necessary traffic improvements occurring for at least ten years. If traffic mitigation is not feasible with full development of Hampton Ridge Center, consideration needs to be given to the scope of this project in relation to the transportation infrastructure available.

We have reviewed the proposed modifications at the Route 104 and Elmgrove Road/North Greece Road intersection. The installation of dual left turn lanes on Elmgrove Road and North Greece Road has inherent drawbacks but appears feasible. As stated in our previous comments, the proposed layout may require a higher cycle length and may negatively impact the progression of traffic on Route 104. We also have concerns with the inefficiency of split phasing the northbound and southbound directions during off peak hours. Before split-phasing Elmgrove Road and North Greece Road an updated intersection analysis with actual traffic volumes as Hampton Ridge approaches full development will be necessary. A comparison of existing and proposed geometry is necessary to determine which alternative is better. This analysis should compare impacts to capacity, safety and the progression of Route 104 traffic.

Another drawback is the unconventional way that large vehicles (buses and trucks) needing to turn onto North Greece Road must be accommodated. Permanently detouring large vehicles to use the Old North Greece Road truck U-turn does not fully mitigate for the impact the dual left counter-measure will have on large vehicles. The impact that remains is an unquantifiable operational deficiency. Detailed design will reveal additional modifications to striping and lane tapers that may be necessary to eliminate trap lanes and provide for better lane alignment.

As stated in your letter, we are in agreement with traffic mitigation at the site driveway on Route 104. The location of this driveway and all traffic mitigation must be coordinated with the future development of property on the south side of Route 104. Efforts to minimize signalized intersections are critical to maintain good traffic flow.

A Highway Work Permit is required for all work within State right-of-way. However significant issues still exist that require further conceptual work. We look forward to the results of your continued planning efforts for this commercial development.

If there are any questions regarding our review please contact Mr. Robert Duennebacke at 272-3475.

Sincerely,

David C. Goehring, P.E.,

Regional Transportation Operations Engineer

DCG/RLD/

c: G. Tajkowski, Town of Greece

D. Jindra, Assistant Resident Engineer, Monroe West

J. Frank, Permit Review



# Department of Transportation Monroe County, New York

Maggie Brooks
County Executive

Terrence J. Rice, P.E. Director

July 31, 2007

Mr. Frank L. Dolan, P.E., PTOE Bergmann Associates 200 First Federal Plaza 28 E. Main St. Rochester, NY 14614

RE: HAMPTON RIDGE CENTER - TRAFFIC IMPACT STUDY

Dear Mr. Dolan, FRANK

We have completed our review of the traffic impact study for the above referenced project and offer the following comments:

- 1. Figures 9 & 10 identify that additional intersections should be studied beyond that performed. Any intersections that have 100 or more trips added as a result of this development should at least be reviewed to determine if the additional traffic will have an impact. This means the Mill Rd. & N. Greece Rd intersection, as well as east of Elmridge Plaza on Route 104 and west of Manitou on Route 104 as well should be studied.
- 2. Table 6 shows that the mitigation proposed appears to be inadequate @ Route 104 & Manitou Road, as well as at Route 104/N. Greece Rd./Elmgrove Rd. We concur with NYSDOT's comments dated 3.28.2005 regarding these intersections, which are under their jurisdiction.
- 3. Pg 22; ¶ 3 indicates that pedestrian phases were removed from the Synchro model at the Route 104/Elmgrove/N. Greece Rd. intersection, however, the infrequent pushes of the button is an input that can be accounted for, and modeled. Please modify and re-run the analysis.
- 4. Please identify any impacts to N. Greece Road and to nearby accesses, as a result of any mitigation (widening for left turn lane) etc. that may be required.
- 5. Pg 24 The statement that the changes at Route 104/Elmgrove/N. Greece Rd. can be made w/pavement markings & signal modifications is incorrect this intersection has already been reconstructed differently.
- 6. Traffic signal conduit should be installed from the site driveway to both Manitou Rd. and Elmgrove Road.
- 7. Recommendations: #2 The new signal at the site driveway must be coordinated with the adjacent signals to the east at Elmgrove and beyond.

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- 8. Recommendations: #6 The signal at Route 104/Elmgrove/N. Greece Rd. must be coordinated with the adjacent signals. It is coordinated now, and runs well @ 120 second cycle length.
- 9. Recommendations: #7 Continue to operate the signal @ Route 104 & Elmridge Plaza in coordination with those to the east and west.

We would like to review a revised traffic impact study. If you have any questions, or wish to meet to discuss, please call me at (585) 753-7733.

Sincerely,

Brent H. Penwarden III, P.E.

Associate Engineer

CC:

T. Rice

G. Tajkowski, Town of Greece L. Sherman, NYSDOT, Region 4

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July 18, 2007

Mr. David Goehring, P.E. New York State Department of Transportation Traffic Operations Section 1530 Jefferson Road Rochester, New York 14623-3161

Re: Hampton Ridge Center
Route 104, Between Route 261 and
N. Greece Road, Town of Greece
Monroe County

Dear Mr. Goehring:

We are following up on your March 28,2005 letter and our subsequent meetings and e-mails concerning the referenced project.

Regarding the intersection of Rt.104 and Manitou Road, we offer the following: As we have the discussed the existing No-Build Levels of service for the Northbound and Southbound left turn and through lanes show E and F respectively for the PM peak period. In our report pages 22 and 23 we indicated that in order to mitigate this existing condition construction of dedicated left turn lanes would be necessary. However, as you have indicated in your March 28, 2005 letter, given the ROW and grade issues these improvements appear impractical without the purchase of ROW. Given that this is only a short existing Friday PM peak period problem, we suggest that these improvements be held until NYSDOT does reconstruction of Rt.104 in this area and can obtain the necessary ROW.

Regarding the intersection of Rt.104 and Elmgrove Road/ N. Greece Road, attached is a drawing showing our proposed modifications to this intersection. We have extended the lane tapers on Elmgrove Road to avoid creating a "trap lane". Attached are the Sim Traffic queue results for this intersection. These results show that the proposed improvements can improve the levels of service on Elmgrove Road and North Greece Road. We believe our proposed improvements can accommodate the increase in traffic with out significantly disrupting traffic on Rt.104.

Relative to your comments regarding the westbound Rt.104 design vehicle being able to negotiate the right turn into North Greece Road, the newly constructed truck turn around just west of this intersection can be signed and used for large vehicles wanting to travel north on North Greece Road.

We will comply with your requirements regarding the proposed site driveway

We trust that this addresses your concerns and look forward to your approval.

Very truly yours,

Bergmann Associates

Frank L. Dolan, P.E., PTOE

Frank

**Principal Transportation Systems** 

Xc M. Petroski J. Di Marco II

# 499: NYS Route 104 & N Greece Performance by movement

|                     | EBL  | EBT           | EBR  | WBL  | WBT   | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBF  |
|---------------------|------|---------------|------|------|-------|------|------|------|------|------|------|------|
| Total Delay (hr)    | 6.0  | 12.0          | 1.8  | 5.6  | 17.4  | 0.6  | 6.9  | 9.8  | 1.8  | 3.8  | 4.7  | 2.5  |
| Delay / Veh (s)     | 64.9 | 42.2          | 27.8 | 92.4 | 55.8  | 10.4 | 58.0 | 70.8 | 31.5 | 56.3 | 49.2 | 26.7 |
| Stop Delay (hr)     | 5.1  | 9.1           | 1.5  | 4.7  | 12.9  | 0.1  | 6.1  | 8.2  | 1.4  | 3.5  | 4.0  | 1.9  |
| St Del/Veh (s)      | 55.3 | 32.0          | 22.4 | 78.7 | 41.5  | 1.8  | 50.7 | 59.1 | 24.5 | 51.9 | 42.1 | 20.4 |
| Total Stops         | 338  | 815           | 210  | 268  | 993   | 123  | 461  | 564  | 159  | 231  | 300  | 234  |
| Stop/Veh            | 1.02 | 0.79          | 0.88 | 1.24 | 0.89  | 0.62 | 1.07 | 1.13 | 0.76 | 0.96 | 0.88 | 0.69 |
| Travel Dist (mi)    | 75.5 | 227.9         | 54.0 | 55.0 | 284.6 | 50.8 | 50.1 | 57.6 | 24.1 | 18.7 | 26.5 | 25.9 |
| Travel Time (hr)    | 8.2  | <b>17.9</b> , | 3.7  | 7.2  | 24.7  | 2.2  | 8.7  | 11.5 | 2.7  | 4.5  | 5.5  | 3.6  |
| Avg Speed (mph)     | 9    | 13            | 15   | . 8  | 12    | 23   | 6    | 5    | 9    | 4    | 5    | 7.0  |
| Vehicles Entered    | 336  | 1019          | 239  | 219  | 1125  | 198  | 433  | 500  | 211  | 238  | 343  | 337  |
| Vehicles Exited     | 330  | 1032          | 239  | 215  | 1113  | 198  | 430  | 497  | 206  | 241  | 341  | 340  |
| Hourly Exit Rate    | 330  | 1032          | 239  | 215  | 1113  | 198  | 430  | 497  | 206  | 241  | 341  | 340  |
| Denied Entry Before | 0    | 0             | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Denied Entry After  | 0    | 0             | 0    | 0    | Ō     | Ö    | Ŏ    | ŏ    | Ö    | ő    | Õ    | Ö    |

# 499: NYS Route 104 & N Greece Intersection Performance

| The second secon | EB    | WB    | NB    | SB   | Total |  |
|--|-------|-------|-------|------|-------|--|
| Total Delay (hr)   | 19.9  | 23.5  | 18.6  | 10.9 | 72.9  |  |
| Delay / Veh (s)  | 44.8  | 55.1  | 58.7  | 42.8 | 50.5  |  |
| Stop Delay (hr)  | 15.7  | 17.7  | 15.7  | 9.4  | 58.5  |  |
| St Del/Veh (s)   | 35.4  | 41.6  | 49.6  | 36.7 | 40.6  |  |
| Total Stops  | 1363  | 1384  | 1184  | 765  | 4696  |  |
| Stop/Veh   | 0.85  | 0.90  | 1.04  | 0.83 | 0.90  |  |
| Travel Dist (mi)   | 357.4 | 390.5 | 131.9 | 71.1 | 950.8 |  |
| Travel Time (hr)   | 29.8  | 34.2  | 22.9  | 13.6 | 100.4 |  |
| Avg Speed (mph)  | 12    | 11    | 6     | 5    | 9     |  |
| Vehicles Entered   | 1594  | 1542  | 1144  | 918  | 5198  |  |
| Vehicles Exited  | 1601  | 1526  | 1133  | 922  | 5182  |  |
| Hourly Exit Rate   | 1601  | 1526  | 1133  | 922  | 5182  |  |
| Denied Entry Before  | 0     | Ò     | 0     | 0    | 0     |  |
| Denied Entry After   | 0     | 0     | 0     | Ō    | Ď     |  |

# Intersection: 499: NYS Route 104 & N Greece

| Movement              | EB:  | EB   | EB    | EB     | WB:  | WB   | · WB | WB   | WB. | NB   | NB  | N           |
|-----------------------|------|------|-------|--------|------|------|------|------|-----|------|-----|-------------|
| Directions Served     | L    | Т    | Т     | TR     | 1    | T    | T    | T    | R   | 1,10 | 110 | <u>'\</u> = |
| Maximum Queue (ft)    | 320  | 407  | 290   | 303    | 320  | 475  | 458  | 475  | 48  | 232  | 476 | 620         |
| Average Queue (ft)    | 217  | 209  | 194   | 200    | 197  | 232  | 235  | 212  | 15  | 144  | 209 | 620         |
| 95th Queue (ft)       | 311  | 318  | 269   | 281    | 325  | 387  | 362  | 338  | 35  | 206  | 433 | 424         |
| Link Distance (ft)    |      | 1192 | 1192  | 1192   | 020  | 1263 | 1263 | 1263 | 33  | 200  | 433 | 703         |
| Upstream Blk Time (%) |      |      |       |        |      | 1200 | 1200 | 1203 |     |      |     | 548         |
| Queuing Penalty (veh) |      |      |       |        |      |      |      |      |     |      |     | 0.09        |
| Storage Bay Dist (ft) | 295  |      |       |        | 295  |      |      |      | 295 | 440  | 440 | 0           |
| Storage Blk Time (%)  | 0.03 | 0.00 |       |        | 0.06 | 0.01 |      | 0.01 | 293 | 440  | 440 | 0.45        |
| Queuing Penalty (veh) | 10   | 0    |       |        | 23   | 2    |      | 0.01 |     |      |     | 0.15        |
| Intersection: 499: N  |      | -    | 4 & N | Greece |      | ~    |      |      |     |      |     | 91          |

| Movement              | NB   | B4   | SB  | SB   | SB   | SB   | ⊕ <b>B2</b> ** | The second of th |
|-----------------------|------|------|-----|------|------|------|----------------|--|
| Directions Served     | R    | Т    | L   | L    | T    | R    | T              | 5. 3   |
| Maximum Queue (ft)    | 426  | 865  | 135 | 338  | 418  | 245  | 386            |  |
| Average Queue (ft)    | 149  | 159  | 66  | 97   | 247  | 174  | 48             |  |
| 95th Queue (ft)       | 360  | 616  | 119 | 212  | 419  | 268  | 227            |  |
| Link Distance (ft)    |      | 851  |     |      | 346  |      | 371            |  |
| Upstream Blk Time (%) |      | 0.01 |     | 0.00 | 0.07 |      | 0.00           |  |
| Queuing Penalty (veh) |      | 0    |     | 0    | 0    |      | 0              |  |
| Storage Bay Dist (ft) | 400  |      | 340 | 340  |      | 200  | •              |  |
| Storage Blk Time (%)  | 0.00 |      |     | 0.00 | 0.15 | 0.01 |                |  |
| Queuing Penalty (veh) | 0    |      |     | 1    | 89   | 4    |                |  |

Intersection: 1056: NYS Route 104 & NYS Route 261

| Movement              | EB  | EB   | EB   | WB   | WB   | WE   | NB   | î NB | SB   | S <b>B</b> (1981) 1983 | *** |
|-----------------------|-----|------|------|------|------|------|------|------|------|------------------------|-----|
| Directions Served     | L.  | T    | TR   | L    | T    | TR   | LT   | R    | IT   | R                      | _2  |
| Maximum Queue (ft)    | 182 | 236  | 246  | 195  | 674  | 742  | 1325 | 176  | 1354 | 145                    |     |
| Average Queue (ft)    | 92  | 171  | 165  | 140  | 273  | 365  | 925  | 126  | 1129 | 107                    |     |
| 95th Queue (ft)       | 154 | 240  | 240  | 227  | 461  | 593  | 1498 | 225  | 1726 | 179                    |     |
| Link Distance (ft)    |     | 1166 | 1166 |      | 2193 | 2193 | 1310 |      | 1320 | 173                    |     |
| Upstream Blk Time (%) |     |      |      |      |      |      | 0.16 |      | 0.57 |                        |     |
| Queuing Penalty (veh) |     |      |      |      |      |      | 0    |      | 0.01 |                        |     |
| Storage Bay Dist (ft) | 245 |      |      | 170  |      |      | _    | 150  | ·    | 100                    |     |
| Storage Blk Time (%)  |     | 0.00 |      | 0.10 | 0.15 |      | 0.57 | 0.00 | 0.86 | 0.00                   |     |
| Queuing Penalty (veh) |     | 0    |      | 50   | 34   |      | 147  | 2    | 108  | 0                      |     |

# 499: NYS Route 104 & N Greece Performance by movement

| EBL  | EBT  | EBR   | WRI  | WAT   | WAD  | MDI   | NOT   | NIDE  | oni :   | COT   | 004   |
|------|--|---|--|---|--|---|---|---|---|---|---|
|      |  |   |  |   |  |   |   |   |   |   | SBA   |
|      |  |   |  |   |  |   | 6.0   | 2.8   | 4.6   | 4.8   | 2.9   |
|      |  | 29.4  | 58.3   | 68.4  | 33.5   | 61.8  | 61.6  | 33.2  | 71.7  | 57.0  | 26.2  |
| 5.4  | 9.2  | 2.1   | 2.5  | 19.2  | 1.3  | 4.4   | 5.3   | 2.3   |   |   | 2.1   |
| 49.8 | 25.5   | 21.2  | 44.0   | 51.6  | 22.9   | 57.5  |   |   |   |   | 18.5  |
| 394  | 935  | 295   | 223  | 1374  | 165  | 276   |   |   |   |   | 278   |
| 1.01 | 0.72   | 0.84  | 1.08   | 1.02  | 0.79   | 1.01  |   |   |   |   | 0.69  |
| 88.9 | 301.0  | 84.0  | 53.3   | 345.6   |  |   |   |   |   |   | 40.7  |
| 9.2  | 20.9   | 5.7   | 4.9  |   |  |   |   |   |   |   |   |
| 10   | 14   | 15  |  |   |  | _   |   |   |   |   | 4.5   |
| 386  | 1295   | 355   |  |   |  |   |   | _   | •   | -   | 9   |
| 391  | 1296   |   |  |   |  |   |   |   |   |   | 401   |
|      |  |   |  |   |  |   |   | 307   | 228   | 301   | 401   |
| 391  | 1296   | 351   | 207  | 1324  | 208  | 272   | 347   | 307   | 228   | 301   | 401   |
| 0    | 0  | 0   | 0  | 0   | 0  | n   | Λ   |   |   |   |   |
| 0    | 0  | 0   | 0  | Ŏ   | Ŏ  | Ŏ   | Ö   | Ö   | 0   | _   | 0   |
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# 499: NYS Route 104 & N Greece Intersection Performance

|                     | TOTAL PROPERTY EB | WB     | NB*   | SB   | Total  |    |
|---------------------|-------------------|--------|-------|------|--------|----|
| Total Delay (hr)    | 22.5              | 30.8   | 13.6  | 12.3 | 79.2   | 78 |
| Delay / Veh (s)     | 39.8              | 63.0   | 52.3  | 47.4 | 50.3   |    |
| Stop Delay (hr)     | 16.6              | 23.1   | 12.0  | 10.4 | 62.1   |    |
| St Del/Veh (s)      | 29.4              | 47.2   | 46.2  | 40.1 | 39.5   |    |
| Total Stops         | 1624              | 1762   | 886   | 834  | 5106   |    |
| Stop/Veh            | 0.80              | 1.00   | 0.95  | 0.89 | 0.90   |    |
| Travel Dist (mi)    | 474.0             | 452.7  | 108.3 | 96.2 | 1131.1 |    |
| Travel Time (hr)    | 35.7              | 43.0   | 17.6  | 15.8 | 112.1  |    |
| Avg Speed (mph)     | 13                | 11     | 6     | 6    | 10     |    |
| Vehicles Entered    | 2036              | 1776   | 942   | 942  | 5696   |    |
| Vehicles Exited     | 2038              | 1739   | 926   | 930  | 5633   |    |
| Hourly Exit Rate    | 2038              | - 1739 | 926   | 930  | 5633   |    |
| Denied Entry Before | 9 0               | 0      | 0     | 0    | 0      |    |
| Denied Entry After  | 0                 | 0      | Ō     | ő    | Ŏ      |    |



| Movement              | EB   | EB   | EB    | EB     | WB   | WB   | WB   | WB   | WB   | NB  | NB  | NB   |
|-----------------------|------|------|-------|--------|------|------|------|------|------|-----|-----|------|
| Directions Served     | L    | Т    | Т     | TR     | ı    | T    | T    |      | R    | 110 | 110 | 1/0  |
| Maximum Queue (ft)    | 321  | 632  | 370   | 385    | 321  | 483  | 503  | 467  | 340  | 216 | 239 | 454  |
| Average Queue (ft)    | 232  | 242  | 223   | 263    | 176  | 335  | 351  | 303  | 129  | 96  |     | 454  |
| 95th Queue (ft)       | 349  | 406  | 331   | 383    | 338  | 493  | 504  | 453  | 323  | 169 | 101 | 249  |
| Link Distance (ft)    |      | 1192 | 1192  | 1192   | 000  | 1263 | 1263 | 1263 | 323  | 109 | 169 | 421  |
| Upstream Blk Time (%) |      |      |       |        |      | 1200 | 1203 | 1203 |      |     |     | 548  |
| Queuing Penalty (veh) |      |      |       |        |      |      |      |      |      |     |     |      |
| Storage Bay Dist (ft) | 295  |      |       |        | 295  |      |      |      | 295  | 440 | 440 |      |
| Storage Blk Time (%)  | 0.04 | 0.01 |       |        | 0.00 | 0.12 |      | 0.09 |      | 440 | 440 |      |
| Queuing Penalty (veh) | 17   | 3    |       |        | 0.00 | 25   |      | 17   | 0.00 |     |     | 0.01 |
| Intersection: 499: N  |      | -    | 4 & N | Greece |      | 25   |      | 17   | 0    |     |     | 5    |

| Movement:             | NB T | SB  | SB  | SE   | SB   | B2 1 | e granda | . Est |          | 1 4 |
|-----------------------|------|-----|-----|------|------|------|----------|-------|----------|-----|
| Directions Served     | R    | L   | L   | Т    | R    | T    |          |       | - E 1 77 |     |
| Maximum Queue (ft)    | 426  | 152 | 373 | 552  | 226  | 187  |          |       |          |     |
| Average Queue (ft)    | 174  | 82  | 117 | 248  | 174  | 6    |          |       |          |     |
| 95th Queue (ft)       | 310  | 143 | 242 | 441  | 264  | 62   |          |       |          |     |
| Link Distance (ft)    |      |     |     | 480  |      | 236  |          |       |          |     |
| Upstream Blk Time (%) |      |     |     | 0.02 |      |      |          |       |          |     |
| Queuing Penalty (veh) |      |     |     | 0    |      |      |          |       |          |     |
| Storage Bay Dist (ft) | 400  | 340 | 340 |      | 200  |      |          |       |          |     |
| Storage Blk Time (%)  | 0.00 |     | +   | 0.11 | 0.02 |      |          |       |          |     |
| Queuing Penalty (veh) | 0    |     |     | 75   | 11   |      |          |       |          |     |

Intersection: 1056: NYS Route 104 & NYS Route 261

| Movement              | EB   | EB   | EB   | WB   | · WB | WB   | NB   | NB   | SB   | SB   |   |
|-----------------------|------|------|------|------|------|------|------|------|------|------|---|
| Directions Served     | L    | T    | TR   | L    | T    | TR   | LT   | R    | LT   | R    |   |
| Maximum Queue (ft)    | 271  | 470  | 454  | 195  | 464  | 428  | 184  | 176  | 619  | 145  | • |
| Average Queue (ft)    | 75   | 264  | 255  | 120  | 214  | 252  | 86   | 77   | 395  | 101  |   |
| 95th Queue (ft)       | 199  | 401  | 395  | 199  | 373  | 408  | 152  | 161  | 570  | 175  |   |
| Link Distance (ft)    |      | 1166 | 1166 |      | 2192 | 2192 | 1310 | 101  | 1320 | 175  |   |
| Upstream Blk Time (%) |      |      |      |      |      |      |      |      | 1320 |      |   |
| Queuing Penalty (veh) |      |      |      |      |      |      |      |      |      |      |   |
| Storage Bay Dist (ft) | 245  |      |      | 170  |      |      |      | 150  |      | 100  |   |
| Storage Blk Time (%)  | 0.00 | 0.11 |      | 0.01 | 0.19 |      | 0.02 | 0.00 | 0.64 | 0.00 |   |
| Queuing Penalty (veh) | 0    | 9    |      | 6    | 42   |      | 5    | 0.00 | 78   | 0.00 |   |
|                       |      |      |      |      |      |      | _    |      |      | J    |   |



May 30, 2007

Mr. Henry Herdzik
Monroe County Department of Transportation
6100 City Place
50 West Main Street
Rochester, NY 14614

RE:

Proposed Hampton Ridge Center, Town of Greece

Dear Henry,

Please find attached for your records one (1) copy of the December 2004 Traffic Impact Study for the proposed Hampton Ridge Center on NYS Route 104 (West Ridge Road) in the Town of Greece. This report was submitted to the New York State Department of Transportation (NYSDOT) for review at the close of 2004 prior to the genesis of the Southwestern Commons project. We received comments from the NYSDOT dated March 28, 2005 (copy also attached for your records). The project team next met with the NYSDOT and presented a concept plan in response. We are in the process of obtaining a NYSDOT response to that concept plan.

As the traffic impact study for the Hampton Ridge Center was formally submitted prior to that of Southwestern Commons, we cordially ask that the MCDOT provide us with any comments specifically related the proposed Hampton Ridge Center separate from its neighboring development.

Please feel free to contact me at (585) 232-5137 extension 490 should you have any questions on the traffic impact study or our request. I look forward to hearing from you in the near future.

Sincerely,

**BERGMANN ASSOCIATES** 

Frank L. Dolan, P.E., PTOE

Principal, Transportation Systems

Cc. Mark Petroski, Bergmann Associates

# MONROE COUNTY DEPARTMENT OF TRANSPORTATION

# **DEVELOPMENT REVIEW COMMITTEE REPORT**

| PROJECT: Hampton Ridge Center  | ATTENTION: Renee Casler                |
|--------------------------------|--|
| LOCATION: 4320 West Ridge Road | DATE TO PLANNING: May 16, 2007         |
| TOWN: Greece                   | DRC #: GR07-27Z                        |
| ENGINEER: Bergmann Asociates   | LOG IN DATE: 5/8/07                    |
| OWNER: John L DiMarco, II      | ENGINEER FAX #: 232-4652-Mark Petroski |
| MCDOT CONTACT: Henry Herdzik   | # OF PAGES IN THIS FAX: 1              |

### **GENERAL COMMENTS:**

1. The Traffic Impact Report will need to be scoped and developed for this project for our review. Since the Southwestern Commons proposed development (south side of West Ridge Road) will need to analyze many of the same intersections, and since each of these two proposed projects will need to consider impacts from the other, we recommend that both parties work together to create one traffic impact report for both projects. (B)



| D | E | P | A | R | T | M | E | N | T      | 0     | F |
|---|---|---|---|---|---|---|---|---|--------|-------|---|
|   |   |   |   |   |   |   |   |   | ****** | <br>_ |   |

**FAX** 

# TRANSPORTATION

Telephone: (585) 753-7720 Fax: (585) 753-7730

| TO:      | Frank Dolan @ Bergmani | n Associates          |                           |
|----------|------------------------|-----------------------|---------------------------|
| FAX #:   | 232-4652               |                       |                           |
| SUBJECT: | Hampton Ridge Center - | Traffic Impact Report |                           |
| DATE:    | 5/4/07                 | Pages:                | (Including cover sheet) 1 |
| FROM:    | Henry Herdzik          |                       |                           |
| OF:      | MCDOT Permits          | PHONE #:              | 753-7711                  |

#### COMMENTS:

Hello Frank,

We have received the Traffic Impact Report for the above mentioned project and are currently reviewing it. Before the County can comment on this report, we must receive a \$800 traffic report review fee.

Please note that checks must be made payable to: Director of Finance, County of Monroe.

## RECEIVED

2007 MAY 15 AM 11: 47

TOWN OF GREECE
DEVELOPMENT SERVICES

# STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION REGION FOUR 1530 JEFFERSON ROAD ROCHESTER, NEW YORK 14623 www.nysdot.gov

KEVIN B. O'BUCKLEY, P.E. REGIONAL DIRECTOR

ASTRID C. GLYNN ACTING COMMISSIONER

May 11, 2007

Ms. Meaghan Partelow FRA Engineering 530 Summit Point Drive Henrietta, NY 14467

Re: Southwestern Commons and Wal-Mart Plaza Route 104 and Manitou Road Town of Greece, Monroe County

Dear Ms. Partelow: Mag han -

We have completed our review of the Traffic Impact Study for the proposed Southwestern Commons and Wal-Mart Plaza on the southeast quadrant of Route 104 and Manitou Road. Before we can comment on the traffic impacts of this development and mitigation necessary, the scope of this study needs to be expanded.

Due to the significant number of trips generated by Southwestern Commons and Wal-Mart Plaza the following signalized intersections should also included in this study.

Route 104 and Route 259 Route 261 and Route 18 Route 261 and Route 31

To capture the full development traffic impacts of this development and on the adjacent roadway system, this study should take into account all planned development in the area which is approved and unapproved. Specifically the full development of Hampton Ridge Center and the adjacent Shops at Hampton Ridge(Kohls) which are on the north side of Route 104 across from this project. The proposed Hampton Ridge Center proposes a signalized driveway on Route 104 east of the proposed Southwestern Boulevard traffic signal. Each of these driveway locations and projects should be coordinated so that impacts to Route 104 are minimized.

We also have concerns regarding the existing traffic volumes used. These were taken in March, 2002. New traffic counts should be taken at the Route 104 and Route 261 intersection and compared with the 2002 counts. We realize that newer traffic counts on Route 104 may be impacted by the current Route 104 construction project, however if traffic counts are taken before the construction significantly ramps up this S pring, these traffic counts could a ssist in simulating existing conditions.

As with the proposed Hampton Ridge Center we have concerns with the significant number of trips generated by Southwestern Commons and the Wal-Mart Plaza, and the resulting traffic impacts on Route 104 and Route 261. Much of the traffic mitigation proposed will require the acquisition and transfer of right-of-way on Route 104 and Route 261. Without this right-of-way in our possession, traffic mitigation such as the addition of lanes is not possible. We also question whether some of the traffic mitigation is feasible, due to physical constraints, particularly the areas in the vicinity of Larkin Creek and the cemetery on the southwest corner of Route 104 and Route 261 raised concerns. Subsequent to determining traffic mitigation, a concept plan is required to determine what right-of-way is necessary, impacts on utilities, and what physical constraints need to be addressed.

With full development of this project and all proposed traffic mitigation in place we have concerns that Route 104 and its approaches will be near or exceed its capacity. This will create operational and safety problems on Route 104 and its approaches. Since additional traffic mitigation may not be feasible, a reduction in the intensity of development and the number of trips generated in the peak hours may be the only alternative to mitigate the impacts on the highway system.

If there are any questions regarding our review please contact Mr. Robert Duennebacke at 272-3475.

Very truly yours,

David C. Goehring, P.E.

Regional Transportation Operations Engineer

DCG/RLD/

c: G. Taikowski, Director of Development Services, Town of Greece

T. Rice, Director, Monroe County Department of Transportation

D. Jindra, Assistant Resident Engineer, Monroe West

J. Frank, Permit Review



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STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
1530 JEFFERSON ROAD
ROCHESTER, N.Y. 14623-3161

JOSEPH H. BOARDMAN COMMISSIONER

CHARLES E. MOYNIHAN, P.E. REGIONAL DIRECTOR

May 25, 2005

Mr. Frank Dolan
Bergmann Associates
200 First Federal Plaza
28 East Main Street
Rochester, NY 14614-1909

MAY 2 7 2005

RE: TRAFFIC SIGNAL WARRANT STUDY ROUTE 104 AT KOHL'S PLAZA

TOWN OF GREECE, MONROE COUNTY

Dear Mr. Dolan: Frank

We have completed our review of the Traffic Signal Analysis for the above referenced location.

Our review included an assessment of the methodology followed, a spot-check of traffic volume data collected and an assessment of conclusions made. We also took into account anticipated traffic volumes from additional retail and office space which is now before the Greece Planning Board for approval.

The analysis reviewed the capacity of the intersection with and without a traffic signal, a comparison of traffic volumes with warrant thresholds identified in the New York State Manual of Uniform Traffic Control Devices and a delay study. These are comments on methodology used.

1. Warrant 8 is to be used only in exceptional cases as it calls for a lower threshold than Warrants 1 and 2. As this intersection exhibits no characteristics that would classify it as exceptional in the context that is intended here, this warrant is not applicable here. Warrants 9 and 10 are used in conjunction with excessive delays. Meeting the volume thresholds for these warrants is only meaningful in combination with observed and measurable delays that are well beyond what is considered acceptable. Warrant 2 is also intended to be used in combination with some measurable delays though not as excessive as that of Warrants 9 or 10.

2. The delay study data was collected properly however the results were not provided in such a way that gives us a meaningful sense of the delays experienced. The percentage of vehicles delayed less than 60 seconds, 90 seconds and 120 seconds are relevant thresholds in a location such as this. We then can draw comparisons to how vehicles would be delayed if signalized.

The traffic volume data was spot-checked with a comparable timeframe in May. Traffic volumes appear reasonable for a weekday on a day with no special sales going on. We believe the non-sale days would represent a more typical day at the store.

We have concluded that though the volumes thresholds are met for Warrants 2, 9 and 11, the delays are not of the magnitude that would indicate that a signal is warranted. Traffic signals that are installed without careful consideration of all these factors can often work to the disadvantage of the traveling public. Besides increasing delays for motorists a traffic signal can increase the frequency of accidents especially rear-end type accidents.

We also looked at the need for a signal once the additional retail is opened. We first compared the volume data collected in this analysis to the anticipated trips identified in the original Traffic Impact Analysis. Since the existing volumes are lower than the original projections, we reduced the projected volumes for the additional retail by the same factor and added it to the existing Kohl's traffic volumes. These volumes meet the threshold for Warrant 1 four out of seven days a week.

Based on this analysis we have concluded that a traffic signal will be warranted upon completion of the additional retail currently proposed. A traffic signal should be installed no sooner than two weeks prior to opening day of the first retail but no later than the opening day of the last retail space. The proposed office space should have minimal impact on the need for the traffic signal and is therefore not considered a trigger for the timeframe for installing the traffic signal.

A Highway Work Permit will be required for this work. Detailed plans, prepared in accordance with the Region 4 Checklist for Major Highway Work Permits (found at <a href="https://www.dot.state.ny.us/reg/r4/ref">www.dot.state.ny.us/reg/r4/ref</a> links.html) should be submitted for review to Mr. Ken Bittner, Assistant Resident Engineer at the following address:

New York State Department of Transportation 2441 S. Union Street Spencerport, NY 14559 If you have any questions regarding this review, please contact Dave Goehring at (585) 272-3460, ext. 3481.

Very truly yours,

Hany

Larry R. Sherman

Regional Traffic Engineer

## LRS/DCG/cg

c: G. Tajkowski, Town of Greece

D. Hofmeister, Di Marco Group

K. Bittner, Asst. Resident Engineer, Monroe West

J. Frank, Traffic & Safety Permit Review



MAR 3 0 2005

WWA TO

# STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION 1530 JEFFERSON ROAD ROCHESTER, N.Y. 14623-3161

CHARLES E. MOYNIHAN, P.E. REGIONAL DIRECTOR

March 28, 2005

JOSEPH H. BOARDMAN
COMMISSIONER

Mr. Frank Dolan Bergmann Associates 200 First Federal Plaza Rochester, New York 14614

Re: Hampton Ridge Center

Route 104, Between Route 261 & N. Greece Road, Town of Greece

Monroe County

Dear Mr. Dolan. Frank

We have completed our review of a Traffic Impact Study for the proposed 390,000 square feet of building space to include a multiplex movie theater, various retail stores, 4 sit-down restaurants, a pharmacy, and a drive-thru bank. Through our review we noted that Hampton Ridge Center and the adjacent Shops at Hampton Ridge will generate 2167 and 3836 trips in the weekday PM and Saturday mid-day peak hours respectively. Of the total trips generated, 1430 and 2839 will be new trips on Route 104 in the weekday PM and Saturday mid-day peak hour respectively.

These new trips will significantly impact the adjacent signalized intersection at Manitou Road and at Elmgrove Road/North Greece Road. Traffic impacts will significantly reduce the capacity of each of these intersections and at some approaches exceed their capacity during peak hours. With the proposed traffic mitigation we have serious concerns about the safety and operation of the signalized intersections as they approach capacity. Therefore, we recommend a reduction in the intensity of development and the number of trips generated in the peak hours. In regards to our specific concerns we have the following comments:

At the Route 104 and Manitou Road intersection, Table 7 shows the overall Level of Service (LOS) in the PM peak to be 'D' (37 sec/veh) with full development and with geometric improvements. However, the geometric improvements assumed in the analysis (a 100 foot southbound right turn lane and a 150 foot northbound right turn lane) are not identified as recommended mitigation measures. Reasons cited include the real possibility that additional lanes would not fit within the existing right-of-way. We believe that right turn lanes would need to be significantly longer than proposed and improvements to the through lanes on both approaches would be necessary to accommodate the anticipated queue.

March 28, 2005 Page 2

We estimate that with 2 or 3 through vehicles in the northbound lane a right turn vehicle would not be able to reach the short right turn lane, greatly reducing their effectiveness. If these mitigation measures are found to be impractical, as expected, the appropriate level of service for the intersection is summarized in Table 6 instead. This shows an overall LOS 'E' (73 sec/veh) with LOS 'F' for the northbound and southbound lefts. The intersection can expect to operate at 11.8% beyond full capacity with full development in the weekday PM peak hour.

At the Route 104 and Elmgrove Road/North Greece Road intersection we have concerns with the proposal to revise our upcoming capital improvements at this intersection with striping changes to allow dual left turns northbound and southbound. This proposal will create a trap lane for northbound through vehicles approaching Route 104. The proposed geometry would lead a vehicle intending to continue north on North Greece Road into a lane designated for left turns. Also, will the design vehicle be able to make a westbound right turn on Route 104 without traversing into a southbound left turn lane? A conceptual design plan needs to be included to determine if this proposal is physically feasible.

In the SYNCHRO analysis queue lengths were not included. We have concerns that queue lengths for through vehicles may block turning lanes or vice-versa. Also of concern is the inefficiency of split phasing the northbound and southbound approaches (which becomes necessary when introducing dual left turn lanes) during off-peak hours which is a great majority of the normal week. Also, the relatively high cycle length (125 seconds) which requires this intersection to run out of coordination during peak hours will negatively impact corridor progression. Even with the proposed mitigation it is expected that this intersection will be at approximately 92% of its capacity with full development in the weekday PM and Saturday mid-day peak hours. Full development of the subject project will consume a majority of excess capacity built into our capital project. Instead of this intersection approaching its capacity for 20 more years which is the intent of our project, this intersection will exceed its capacity within 5 years of its completion.

At the proposed site driveway on Route 104, three lanes exiting (two 12 foot wide left turn lanes and a 12 foot wide right turn lane) and two 12 foot lanes entering are warranted. The storage lengths for exiting lanes should be a minimum of 200 feet and provide sufficient storage based on queue lengths. Until a traffic signal is warranted, the third exiting lane should be cross-hatched to provide two lanes exiting. Driveway radii should be based on the design vehicle, which should be identified prior to starting design. We agree that an eastbound left turn lane and a westbound right turn lane on Route 104 is warranted. We also agree that the eastbound left turn lane should provide a storage length of 500 feet and be 12 feet side. Taper lengths should conform to Table 262-2 of the New York State Manual of Uniform Traffic Control Devices. Due to the taper lengths for the eastbound left turn lane at the site driveway and the existing eastbound left turn lane at the adjacent Shops at Hampton Ridge, a 12 foot left turn lane is required on Route 104 between the site driveway and the Shops at Hampton Ridge driveway. This will eliminate safety and operational concerns of tapering through traffic on Route 104 around each left turn within a very short distance. The free flow westbound right turn lane should provide a storage length of 325 feet and be 12 feet in width. Existing shoulder widths should be maintained. Clear zones should be identified and should be attainable with gentle slopes that do not require guiderail.

March 28, 2005 Page 3

We agree that a three color traffic signal is warranted on Route 104 at the site driveway with full development of the project. Include the installation of traffic signal conduit and pull boxes at the site driveway to facilitate a traffic signal when traffic signal warrants are met. Also include traffic signal conduit and pull boxes from the site driveway to Manitou Road and the adjacent Shops at Hampton Ridge driveway to facilitate the future coordination of theses traffic signals. As the development progresses a traffic signal warrant analysis will be required. The analysis should be performed with approximately 100,000 square feet of building space open. The traffic signal warrant analysis should include twenty-four hour machine counts of an average day, an accident analysis, and a delay study.

In regard to the proposed cross access roadway between Hampton Ridge Center and the adjacent Shops at Hampton Ridge, we strongly support this and any other proposal to provide cross access to adjacent development.

We look forward to your response to the issues that we have identified. If you have any questions regarding our review, please contact Mr. Robert Duennebacke at 272-3475 ext. 3475.

Very truly yours,

Larry R. Sherman

Regional Traffic Engineer

LRS/RLD/

D. Hofmeister, The DiMarco Group

G. Tajkowski, Town of Greece

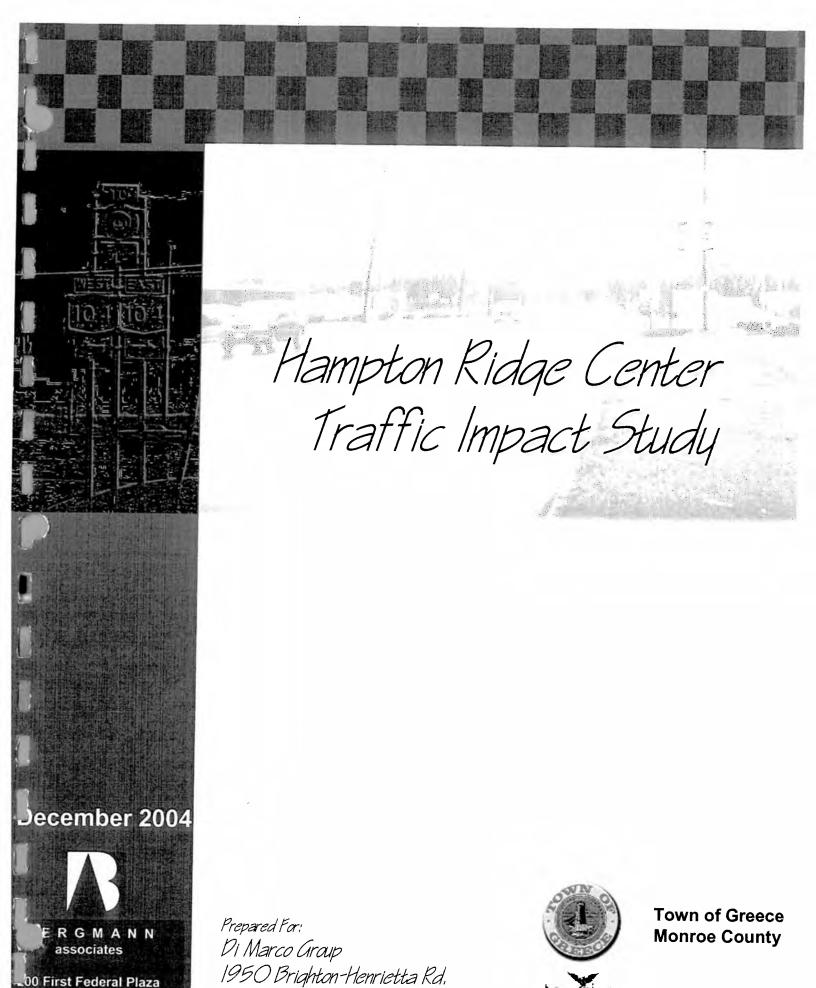
K. Bittner, Asst. Resident Engineer, Monroe West

# N.Y.S.D.O.T. REGION 4 TRAFFIC IMPACT STUDY CHECKLIST

| Project     | Name:_                | Hai                               | npto             | on 1                   | Ridge             | Center         |
|-------------|-----------------------|-----------------------------------|------------------|------------------------|-------------------|----------------|
|             |                       |                                   |                  |                        | 1/2               | Rd. T/o Greece |
| Owner/      | Contact: <sub>-</sub> | DIM                               | larca            | o Gro                  | p - D             | we Hofmeister  |
| Address     | s:/9<br>天             | 950 B                             | right            | tion-                  | Hanrich<br>VY 146 | 123            |
| Engine      | er/Contac             | ot:_ <i>_28_</i> _                | gm               | <u>ann</u>             | Assoc.            | Mike Crose     |
| Address     | <u>s:z</u>            | 8 E./                             | yas.             | 0 57                   | Roc               | hester Nys4614 |
| Phone N     | ان                    | 585-                              | 232              | 2-5.                   | 135               |                |
| Fax No.:    | _ح                    | 85 ·                              | 325              | - 8.                   | 446               |                |
| SEQRA       | Determir              | nation:                           |                  |                        |                   |                |
| Sub.<br>No. | Date<br>Sub.          | Date<br>returned to<br>Consultant | Resub.<br>Reqd.? | Accept<br>or<br>Reject |                   | Comments       |
|             |                       |                                   |                  |                        |                   |                |
|             |                       |                                   |                  |                        |                   |                |
|             |                       |                                   | :                |                        |                   |                |

# N.Y.S.D.O.T. REGION 4 TRAFFIC IMPACT STUDY CHECKLIST

| Inc.         | Not App. | Traffic Impact Study Submission Description (2 copies)  | Comments  |
|--------------|----------|---|---|
|              | 1-PP     | 1. Perm 51 Payment Agreement for Highway Work Permit and fee  |   |
| V            | <u> </u> | for > 100,000 SF  |   |
| V            |          | Site Plan (showing lot lines, proposed entrances, adj./opposite properties & driveways)   |   |
| <b>/</b>     |          | 3. Location Map (study area)  |   |
| V            |          | 4. Project description (land use, sq. footage/no. units)  |   |
| /            |          | 5. ITE Land Use Code, Trip Generation Edition, calculations   |   |
|              | <b>V</b> | 6. Other sources for determining projected trips (comparable uses)  |   |
| <b>/</b>     |          | 7. Identify roadways & intersections affected, describe roadways (include diagrams), jurisdiction, AADT's, posted speeds.       |   |
| $\checkmark$ |          | 8. Phasing schedule & year of full buildout   | Full Buildout 2006                                    |
| /            |          | Traffic counts (incl. dates, sources and diagrams), rationale for analysis peak hours   | Full Buildout 2006  See text. GRC trafficused         |
| V            | 7        | 10. Rationale for analysis of peak hours  |   |
| ✓            |          | Identify other proposed development in area, planned improvements by others   |   |
| <b>V</b>     |          | 12. Background growth rate & source   |   |
| V            |          | 13. Transit availability, pedestrian facilities   |   |
| V            |          | <ol> <li>Trip distribution pattern (incl. rationale for &amp; source each turning<br/>movement, diagram)</li> </ol>             |   |
| V            |          | <ol> <li>Pass-by trips/shopper credit (incl. rationale), multi-use, seasonal<br/>adjustments</li> </ol>                         |   |
| <u> </u>     |          | 16. Sight distance at proposed access   |   |
| /            |          | 17. Signal warrant check, delay or gap studies  | ·   |
|              | /        | 18. Left or right turn lane warrant check   | Signal Wagnet Mat                                     |
| V            |          | 19. L.O.S. table for key roadways & intersections for: (specify analysis method & version)                                      | Signal Warrant met  Synchro 5                         |
| /            |          | a) Present year   |   |
| 1            |          | b) Year of full buildout w/o development  |   |
|              | 7        | c) Year of full buildout w/development w/o mitigation   | Described in text                                     |
| 1            |          | d) Year of full buildout w/development w/mitigation   |   |
| ille         | /        | <ul> <li>e) Phased construction w/development w/corresponding phased<br/>mitigation</li> </ul>                                  | Construction<br>Not phased                            |
| /            |          | <ol> <li>Detailed description of proposed mitigation (include phased<br/>mitigation as applicable.</li> </ol>                   |   |
|              | V        | 21. Schematic plan of mitigation with dimensions  | to be completed during design pha                     |
|              | V        | 22. Indicate if "break in access" is required & explain   | 1 119 5109.1  |
|              | <b>V</b> | 23. Include count data sheets, projected traffic sheets   | Court Data obtained from GRC                          |
| /            |          | 24. Include L.O.S. computer analysis sheets   |   |
| $\checkmark$ |          | <ol> <li>Include warrant analysis, sight distance, left turn lane warrants<br/>and delay or gap studies/calculations</li> </ol> | warrant analysis in appendix C                        |
| V            |          | 26. Reference of other studies in area & sources  | warrant analysis in appendix C<br>referenced in text. |



Rochester, NY 14623

**New York State** 

.00 First Federal Plaza Rochester, New York

14614



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#### I. INTRODUCTION

The subject of this study is the proposed multi-use development to be named Hampton Ridge Center. The DiMarco Group is proposing to construct this new development in the Town of Greece, Monroe County, New York. The proposed site is located north of NYS Route 104 (West Ridge Road) between North Greece Road and Manitou Road (NYS Route 261). A project location map is shown in Figure 1.

The proposed multi-use development would include 390,000 square feet of total building space comprised of several land uses including a multiplex movie theater, various retail establishments, 4 sit down restaurants, a pharmacy and a drive-in bank. Access to the site would be provided by a driveway intersecting NYS Route 104. This study will focus on traffic impacts along NYS Route 104 (West Ridge Road). The intent of this traffic impact study is to document the existing traffic conditions and evaluate any potential transportation impacts of the proposed development on the surrounding transportation system.

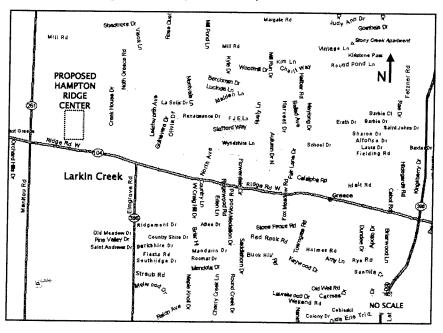


Figure 1: Proposed Project Location

The following methodology was used to conduct this study:

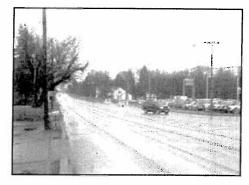
- 1. Conduct site visits to verify roadway geometry and observe traffic operations.
- 2. Using previously obtained manual turning movement counts for 3 study area intersections, summarize the existing (2004) weekday evening and Saturday mid-day peak hour traffic volumes.
- 3. Investigate and calculate additional traffic on NYS Route 104 due to proposed and approved surrounding development(s). Include this traffic in the 2006 background traffic estimate for the proposed development.
- 4. Estimate the number of new trips generated by the proposed development, distribute the trips on the surrounding roadways, and add the projected trips to the background traffic volumes at the estimated time of completion of the project, 2006.
- 5. Evaluate the capacity of study area intersections under existing traffic conditions as well as future conditions with and without the proposed Hampton Ridge Center development.
- 6. Summarize potential impacts of the proposed Hampton Ridge Center development on the roadway system and identify mitigation measures, if any.

#### II. EXISTING CONDITIONS

#### A. STUDY AREA ROADWAYS

#### 1. NYS Route 104 (West Ridge Road)

NYS Route 104 is classified as an Urban Principal Arterial. The roadway has two 11 foot (ft) wide travel lanes in each direction and a 12 ft center two-way left-turn lane (TWLTL) from the eastern study limits to approximately 1/2 mile (mi) east of Manitou Road. At this point, NYS Route 104 transitions to a four-lane roadway (11 ft lanes) with a 4 ft striped median. Paved shoulder widths range from 0 ft to 3 ft throughout this section.



NYS Route 104 Eastbound at Western Study Limits

The roadway's asphalt pavement is listed in fair condition in the 2003 New York State Department of Transportation (NYSDOT) <u>Highway Sufficiency</u>

<u>Ratings</u>. NYS Route 104 has a posted speed limit of 40 mph between Elmgrove Road and Manitou Road. Land use in the area is primarily commercial and residential.

Traffic counts by NYSDOT indicate that NYS Route 104 carries an estimated Average Annual Daily Traffic (AADT) of 22,400 vehicles per day (vpd). Much of this volume consists of commuter travel between the City of Rochester and its western suburbs.

According to NYSDOT Region 4, the proposed West Ridge Road Improvement Project (PIN 4045,51) would reconstruct NYS Route 104 from east of the study area to Larkin Creek. The reconstruction would widen NYS Route 104 to a 7-lane section with three 12 ft through lanes in each direction, a 4 ft curb offset, and a 16 ft median. No median barrier would be installed in the study area. Additional improvements (lane additions) would be made at the



NYS Route 104 Westbound at Eastern Study Limits

North Greece Road and Elmgrove Road intersection. Roadway construction is set to begin in 2005. No improvements other than routine maintenance are planned for the section of NYS Route 104 west of Larkin Creek.

### 2. Elmgrove Road (NYS Route 386)

Elmgrove Road connects NYS Route 531 to the south with NYS Route 104, east of the proposed Hampton Ridge Center. In the project area, Elmgrove Road is a classified as an Urban Collector. It has one 12 ft travel lane in each direction and 6 ft shoulders. The posted speed limit is 40 mph. In 2003, the asphalt pavement surface was listed in poor condition according to the NYSDOT Highway Sufficiency Ratings (2003). The current AADT on this section of the highway is approximately 19,000 vpd.

#### 3. North Greece Road

North Greece Road is a north-south arterial that meets Elmgrove Road at its intersection with NYS Route 104. It has one 12 ft travel lane in each direction. The roadway is curbed through the study area. The posted speed limit is 35 mph. The estimated AADT on North Greece Road is 18,500 vpd. This is based upon historic traffic count information presented in the Monroe County Department of Transportation (MCDOT) <u>Traffic Summary Report</u> (2002). Sidewalks are provided along each side of the road from NYS Route 104 to Bramhall Road.

#### 4. Manitou Road (NYS Route 261)

Manitou Road crosses NYS Route 104 at the western project limit. North of NYS Route 104, Manitou Road is an Urban Minor Arterial and is signed as NYS Route 261. The roadway has one 12 ft travel lane in each direction and 8 ft shoulders. The posted speed limit is 40 mph.

The pavement north of NYS Route 104 was listed in good condition according to the NYSDOT <u>Highway Sufficiency Ratings</u> (2003). Based upon the same reference, the AADT on NYS Route 261 is approximately 11,000 vpd.

MCDOT owns and maintains the highway south of NYS Route 104. The posted speed limit is 40 mph. The AADT on this section of Manitou Road was 8,600 vpd in 2001 according to the 2002 MCDOT <u>Traffic Summary</u> Report.



Manitou Road Northbound at NYS Route 104

#### 5. Elmridge Plaza Drive

The main entrance to Elmridge Plaza is located off NYS Route 104 just east of North Greece Road and Elmgrove Road. The asphalt roadway has multiple travel lanes in each direction separated by a narrow planted median. The roadway is curbed. There is no posted speed limit.



Elmridge Plaza



Plaza Drive at NYS Route 104

#### B. STUDY AREA INTERSECTIONS

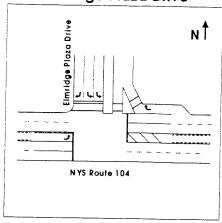
All traffic signals at intersections within the study area are owned and operated by NYSDOT.



### 1. NYS Route 104 and Elmridge Plaza Drive

The Elmridge Plaza drive meets NYS Route 104 at a signalized intersection. The signal operates as part of an actuated-coordinated system along NYS Route 104. The eastbound approach consists of an exclusive left-turn lane and two through lanes. Two through travel lanes along with an exclusive, free-flow right-turn lane comprise the westbound approach. A raised splitter island separates the free-flow right-turn lane from opposing traffic. The southbound approach consists of dual exclusive left-turn lanes and an exclusive right-turn lane. All lane widths are 12 ft. All

Figure 2: NYS Route 104 and Elmridge Plaza Drive



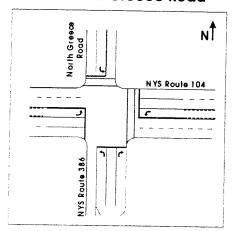
approaches are controlled by the signal with the exception of the exclusive right-turn lane in the westbound direction. There is one marked pedestrian crossing on the north approach.

As part of the West Ridge Road improvement project, NYS Route 104 would be widened to include three 12 ft through lanes in each direction with a 4 ft curb offset. No significant changes would be made to the Elmridge Plaza Drive approach.

# 2. NYS Route 104, Elmgrove Road, and North Greece Road

Elmgrove Road and North Greece Road meet NYS Route 104 at a four-way signalized intersection. This signal is coordinated with those to the east. The Elmgrove Road (northbound) approach presently consists of an exclusive left-turn lane, a through lane, and an exclusive right-turn lane. All lane widths on this approach are 11 ft. The North Greece Road (southbound) approach consists of a 16 ft shared through and right-turn lane with a 12-foot exclusive left-turn lane. Both eastbound and westbound approaches consist of two 12 ft through lanes with an exclusive left-turn lane. Marked pedestrian crossings are located on the north and east approaches.

Figure 3: NYS Route 104, NYS Route 386 (Elmgrove Road), and North Greece Road

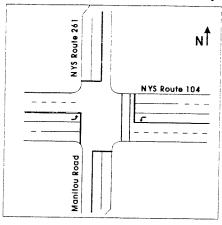


As part of the West Ridge Road Improvement Project, NYS Route 104 would be widened to include three 12 ft through lanes in each direction and a new westbound right-turn lane. An exclusive southbound right-turn lane would be added to the North Greece Road approach. Finally, a second northbound through lane would be added to the Elmgrove Road (NYS Route 386) approach.

## 3. NYS Route 104 and Manitou Road

Manitou Road crosses NYS Route 104 at a four-legged signalized intersection. The signal at this intersection is not presently coordinated with any others on NYS Route 104. Both the northbound southbound (Manitou Road) approaches consist of two lanes. No pavement markings or signage is present to designate lane usage. Field observations showed that generally the inside lanes on both approaches are utilized as shared through and left-turn lanes while the outside lanes are used as exclusive rightturn lanes. The eastbound and westbound approaches each consist of an exclusive

Figure 4: NYS Route 104 and NYS Route 261 (Manitou Rd.)



left-turn lane, a through lane, and a shared through and right-turn lane. The only marked pedestrian crossing is located on the east approach.

#### III. TRAFFIC VOLUMES

#### A. EXISTING TRAFFIC VOLUMES

Manual turning movement counts were performed at 3 study area intersections in March of 2002 for the Shops at Hampton Ridge (SHR) project. This count data will be used as a base for Hampton Ridge Center Traffic Impact Study.

- 1. NYS Route 104 (West Ridge Road) and Manitou Road (NYS Route 261)
- 2. NYS Route 104, Elmgrove Road (NYS Route 386), and North Greece Road
- 3. NYS Route 104 and the Elmridge Plaza Entrance

The counts were recorded in 15-minute intervals to enable the identification of the peak hour and traffic peaking characteristics within that hour. Data regarding the percent of truck traffic and right turns on red were also collected.



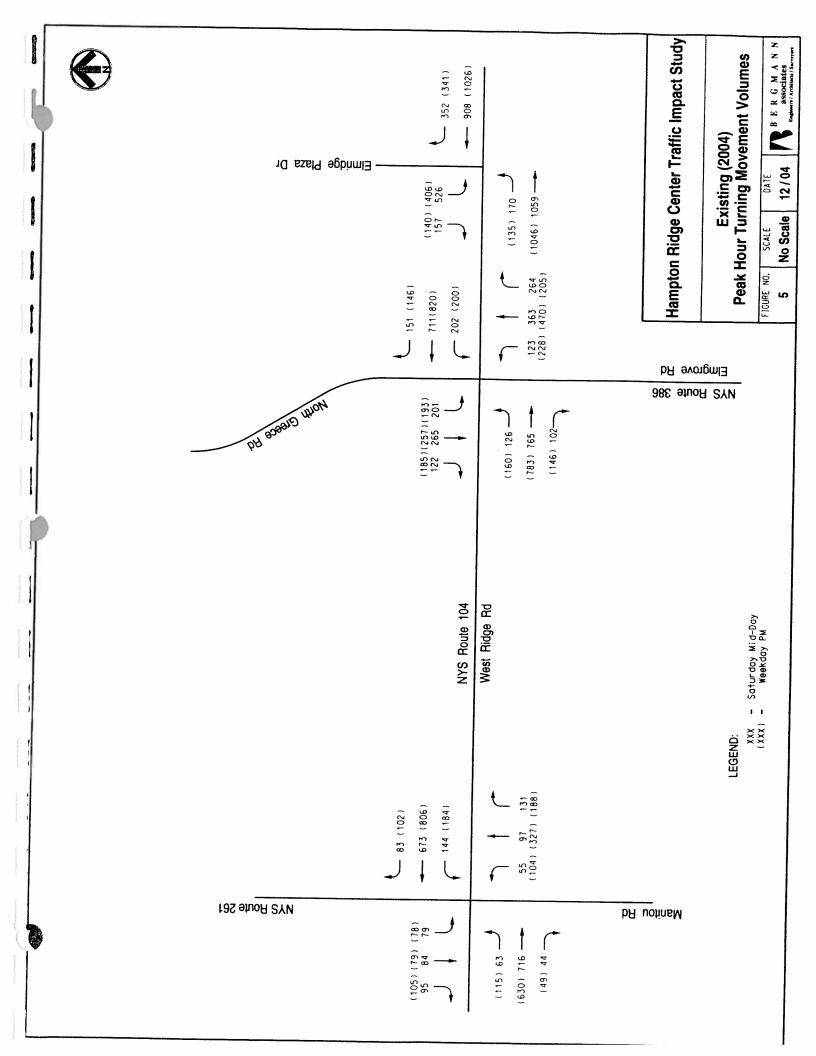
Weekday evening counts were taken on Friday, March 15, 2002 from 3:30 PM to 6:30 PM. The counts were taken on a Friday to evaluate what is typically the highest period of combined commuter and retail traffic. The weekday evening peak hour was determined to occur from 4:30 PM to 5:30 PM.

Saturday mid-day peak period counts were performed on March 16, 2002 between 11:00 AM and 3:00 PM. Counts were taken at this time because retail traffic generally peaks during the Saturday mid-day period. The mid-day peak period occurred from 11:30 AM to 12:30 PM.

An annually compounded growth rate of 1.5% per year was applied to the 2002 turning movements to estimate existing traffic volumes in 2004. This rate is based upon historic growth trends and forecasts for the area. This growth rate is also referenced in the NYSDOT <u>Design Report and Environmental Assessment for Ridge Road, Part 1</u>, (Rochester to West Greece, PIN 4045.51). The existing 2004 weekday evening and Saturday mid-day peak hour traffic volumes are shown in Figure 5.

### B. BACKGROUND TRAFFIC VOLUMES

As with the existing traffic volumes, the annually compounded growth rate of 1.5% per year was applied to estimate background traffic volumes. The projected study area 2006 background traffic volumes are shown in Figure 6. Expected traffic generated by the following approved developments was also included in the 2006 background traffic: Bramhall Office Park, Creek House Commons, Fairfield Place and the Shops at Hampton Ridge (SHR). Estimated traffic to be generated by each development was obtained using their respective traffic impact studies.



Conversations with the Town of Greece indicate that there are two currently approved developments due for completion in the area by 2006. They are the Bramhall Office Park to be located off of Bramhall Road and Creek House Commons to be located on Creek House Drive. In addition, a residential development is slated for construction in the Town of Parma. Fairfield Place is a 550+/- mixed residential development (single family homes, apartments and townhouses) that will be built about 700 ft north of West Ridge Road. It will have two access drives to Manitou Road. The entire development may not be complete by 2006, but in an effort to be conservative, this study assumes the development will be completely finished at this time.

Also included in the 2006 background traffic estimate for the Hampton Ridge Center are peak hour trips generated by the SHR found immediately to the east. The proposed SHR development includes a 108,248 square foot Kohl's (allowing for a 20,000 square foot expansion), 64,700 square feet of retail space, a 10,800 square foot office building, a 2,200 square foot bank and a 2,800 square foot fast food restaurant with drive through window. A list of proposed land uses within the SHR and size of each are shown in Table 1. The SHR will have one driveway accessing NYS Route 104 for all land uses except the office building, which will have one access driveway to Creek House Drive.

Table 1: Assumed Land Uses for the SHR

| Building(s) | Size (gsf) | Description                                       | ITE Land Use Code |
|-------------|------------|---|-------------------|
| Retail      | 64,700     | Specialty Retail Center                           | 814               |
| Kohl's      | 108,248    | Free Standing Discount Store                      | 815               |
| Office      | 10,800     | Single Tenant Office Building                     | 715               |
| Bank        | 2,200      | Drive-In Bank                                     | 912               |
| Fast Food   | 2,800      | Fast Food Restaurant with Drive<br>Through Window | 834               |

Where applicable, trip rates for each land use were taken from the SHR traffic impact study used for project approval. Otherwise, the trip generation rates are based on the 7<sup>th</sup> edition <u>Trip Generation</u> (Institute of Transportation Engineers (ITE), Washington, D.C., 2003). <u>Trip Generation</u> documents traffic counts collected throughout the country for different land uses.

Based upon the ITE <u>Trip Generation</u> the proposed development would generate 948 and 1788 total trip ends during the weekday evening and Saturday mid-day peak hours, respectively. A trip end is equal to one entering trip or one exiting trip.

It was assumed that during each peak period, 15% of the total trips would be shared among the various components of the development. The number of shared trips is based upon past experience and professional judgment. The number of trips assumed to be shared by the SHR and the Hampton Ridge Center via the cross-access roadway shown on the concept site plan are 90 and 179 (10% of the total trips generated by the SHR minus the SHR office building) during the weekday evening and Saturday mid-day peak hours, respectively.

The remaining trips (external trips) are comprised of pass-by and primary trips. Pass-by trips are intermediate stops on the way to another destination. These trips are diverted from the traffic passing on an adjacent street. As is typical of a retail development, a portion of the customers will be already passing by the stores or restaurants, stop in, and then continue on to their original destination.

Based upon data for each proposed land use contained in the Trip Generation Handbook (ITE, Washington, D.C., 2001), a 34% and 26% pass-by credit was assumed for the SHR during the weekday evening and Saturday mid-day peak periods, respectively. Table 2 summarizes the total trips by land use, shared trips, pass-by trips and primary trips during the peak hours.

Table 2: SHR Trip Generation Summary

| Building/Parcel                               | Trips Generated |        |       |       |        |       |  |  |  |
|---|-----------------|--------|-------|-------|--------|-------|--|--|--|
|   | Week            | day Ev | ening | Satur | d-day: |       |  |  |  |
|   | Enter           | Exit   | Total | Enter | Exit   | Total |  |  |  |
| Specialty Retail Center                       | 107             | 136    | 243   | 370   | 342    | 712   |  |  |  |
| Free Standing Discount Store                  | 230             | 229    | 459   | 423   | 406    | 829   |  |  |  |
| Single Tenant Office Building                 | 8               | 43     | 51    | 0     | 0      | 0     |  |  |  |
| Drive-In Bank                                 | 51              | 50     | 101   | 42    | 40     | 82    |  |  |  |
| Fast Food Restaurant w/ Drive-Thru            | 47              | 47     | 94    | 84    | 81     | 165   |  |  |  |
|   |                 |        |       |       |        |       |  |  |  |
| Total Trips                                   | 443             | 505    | 948   | 919   | 869    | 1788  |  |  |  |
| Total Trips at NYS Route 104                  | 435             | 462    | 897   | 919   | 869    | 1788  |  |  |  |
|   |                 |        |       |       |        |       |  |  |  |
| Total Trips Shared Internally (15%)           | 65              | 69     | 134   | 138   | 130    | 268   |  |  |  |
| Total Trips Shared with HRC (10%)             | 44              | 46     | 90    | 92    | 87     | 179   |  |  |  |
| Total Net Site Trips at NYS Route 104         | 326             | 347    | 673   | 689   | 652    | 1341  |  |  |  |
| Total Dass by Tring at NIVC Day to 104        |                 |        |       |       |        |       |  |  |  |
| Total Pass-by Trips at NYS Route 104          | 111             | 118    | 229   | 179   | 170    | 349   |  |  |  |
| Total New (Primary) Trips<br>at NYS Route 104 | 215             | 229    | 444   | 510   | 482    | 992   |  |  |  |

The office building outparcel of the SHR was treated as a separate site development during the trip analysis as it will have an independent access driveway to Creek House Drive.



## C. TRIP GENERATION

The trip generation estimate for the proposed Hampton Ridge Center is based on the 7<sup>th</sup> edition <u>Trip Generation</u> (Institute of Transportation Engineers (ITE), Washington, D.C., 2003).

The site would include 390,000 square feet of multi-use building space. While the exact tenant of each building and outparcel is unknown at this time, likely uses were assumed. The gross floor space and assumed use of each parcel are summarized in Table 3.

Table 3: Assumed Land Uses for the Hampton Ridge Center

| Building(s)                         | Size (gsf) | Description                          | ITE Land Use Code |
|-------------------------------------|------------|--------------------------------------|-------------------|
| Movie<br>Theater                    | 50,000     | Multiplex Movie Theater              | 445               |
| Retail, Bank<br>&<br>Pharmacy       | 316,000    | Shopping Center                      | 820               |
| Four (4) Sit<br>Down<br>Restaurants | 24,000     | High Turnover Sit Down<br>Restaurant | 932               |

The proposed development is projected to generate approximately 1863 and 3146 total trip ends during the weekday evening and Saturday midday peak hours, respectively. The trip generation estimate for each land use is summarized in Table 4.

Table 4: Hampton Ridge Center Trip Generation Summary

| Building/Parcel                     | Trips Generated |         |       |                  |      |       |  |  |  |
|-------------------------------------|-----------------|---------|-------|------------------|------|-------|--|--|--|
|                                     | Weel            | kday Ev | ening | Saturday Mid-day |      |       |  |  |  |
|                                     | Enter           | Exit    | Total | Enter            | Exit | Total |  |  |  |
| Multiplex Movie Theater             | 167             | 94      | 261   | 436              | 402  | 838   |  |  |  |
| Shopping Center                     | 642             | 696     | 1338  | 951              | 877  | 1828  |  |  |  |
| High-Turnover (Sit Down) Restaurant | 40              | 26      | 66    | 76               | 44   | 120   |  |  |  |
| High-Turnover (Sit Down) Restaurant | 40              | 26      | 66    | 76               | 44   | 120   |  |  |  |
| High-Turnover (Sit Down) Restaurant | 40              | 26      | 66    | 76               | 44   | 120   |  |  |  |
| High-Turnover (Sit Down) Restaurant | 40              | 26      | 66    | 76               | 44   | 120   |  |  |  |
| Total Trips                         | 969             | 894     | 1863  | 1691             | 1455 | 3146  |  |  |  |
|                                     |                 |         |       | 10/1             | 1400 | 3140  |  |  |  |
| Total Trips Shared Internally (15%) | 145             | 134     | 279   | 254              | 218  | 472   |  |  |  |
| Total Trips Shared with SHR         | 46              | 44      | 90    | 87               | 92   | 179   |  |  |  |
| Total Net Site Trips                | 778             | 716     | 1494  | 1350             | 1145 | 2495  |  |  |  |
| Total Bass by Tria                  |                 |         |       |                  |      |       |  |  |  |
| Total Pass-by Trips                 | 265             | 243     | 508   | 351              | 298  | 649   |  |  |  |
| Total New (Primary) Trips           | 513             | 473     | 986   | 999              | 847  | 1846  |  |  |  |

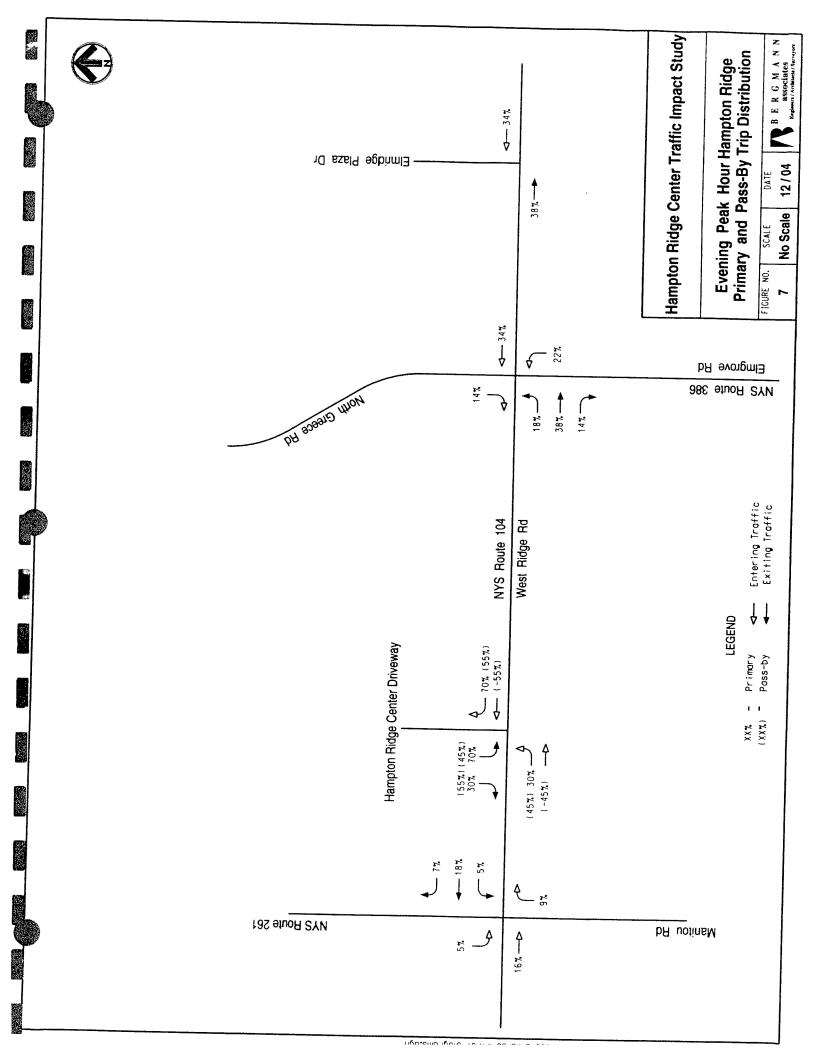
It was assumed that during each peak period, 15% of the total trips would be shared among the various components of the development. The number of shared trips is based upon past experience and professional judgment. The number of trips assumed to be shared by the SHR and the Hampton Ridge Center via the cross-access roadway shown on the concept site plan are 90 and 179 (10% of the total trips generated by the SHR minus the SHR office building) during the weekday evening and Saturday mid-day peak hours, respectively.

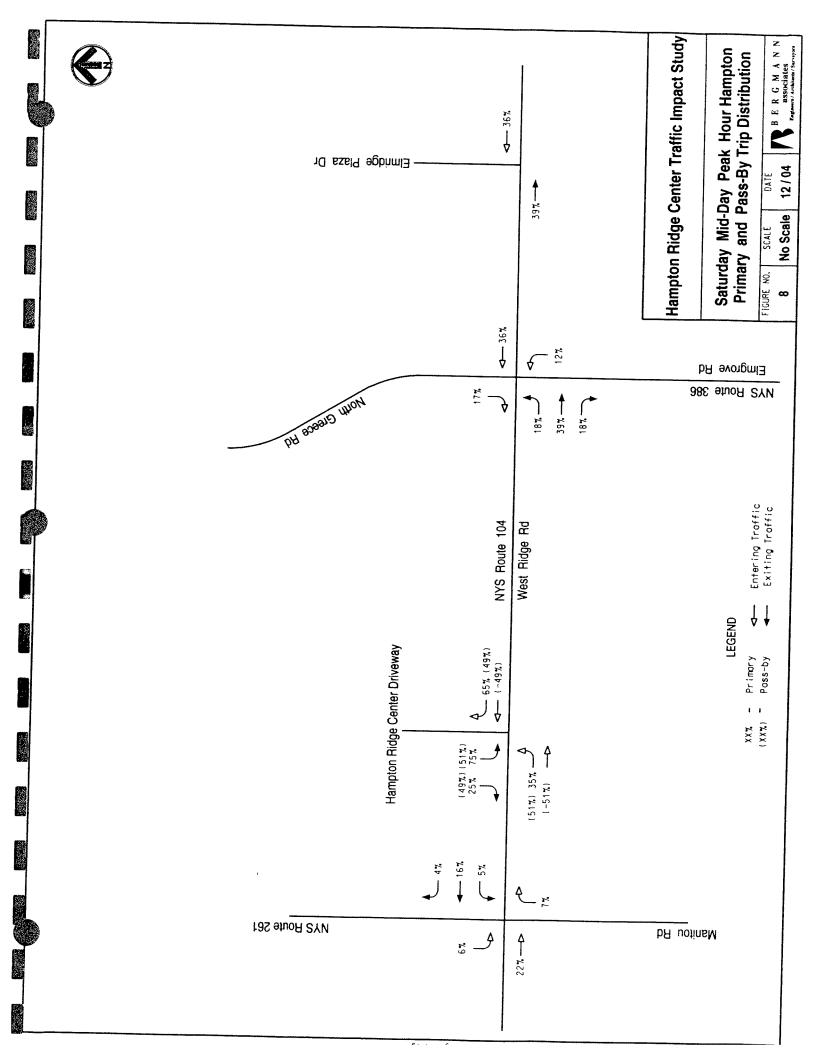
## D. TRIP DISTRIBUTION AND ASSIGNMENT

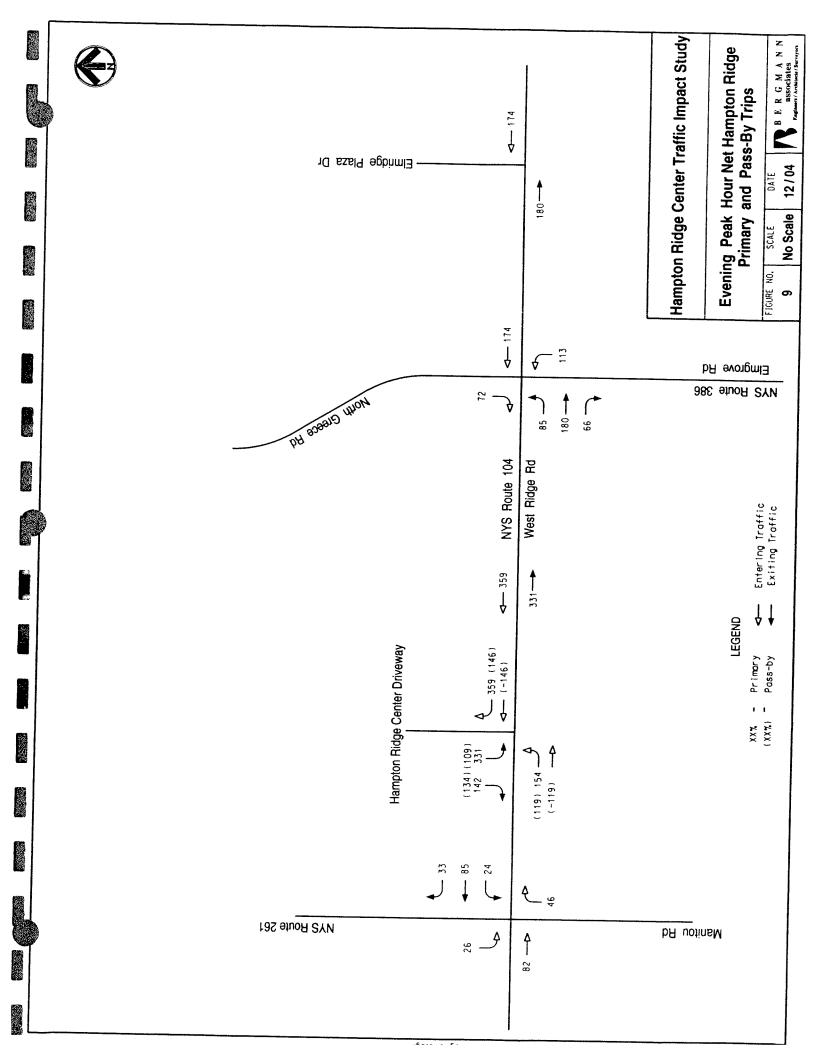
The projected trips generated by the proposed development were assigned to the transportation system based on existing traffic patterns, locations of population centers, the local roadway network, proposed access points, and professional judgment. In addition, the trip distribution is influenced by the existing pattern found at the Elmridge Plaza driveway to NYS Route 104. Figures 7 and 8 contain the trip distribution for the weekday evening and Saturday mid-day peak periods, respectively. This is the trip distribution used for the Hampton Ridge Center and the SHR. The estimated pass-by and primary trips generated by the Hampton Ridge Center are shown in Figures 9 (weekday evening peak hour) and Figure 10 (Saturday mid-day peak hour).

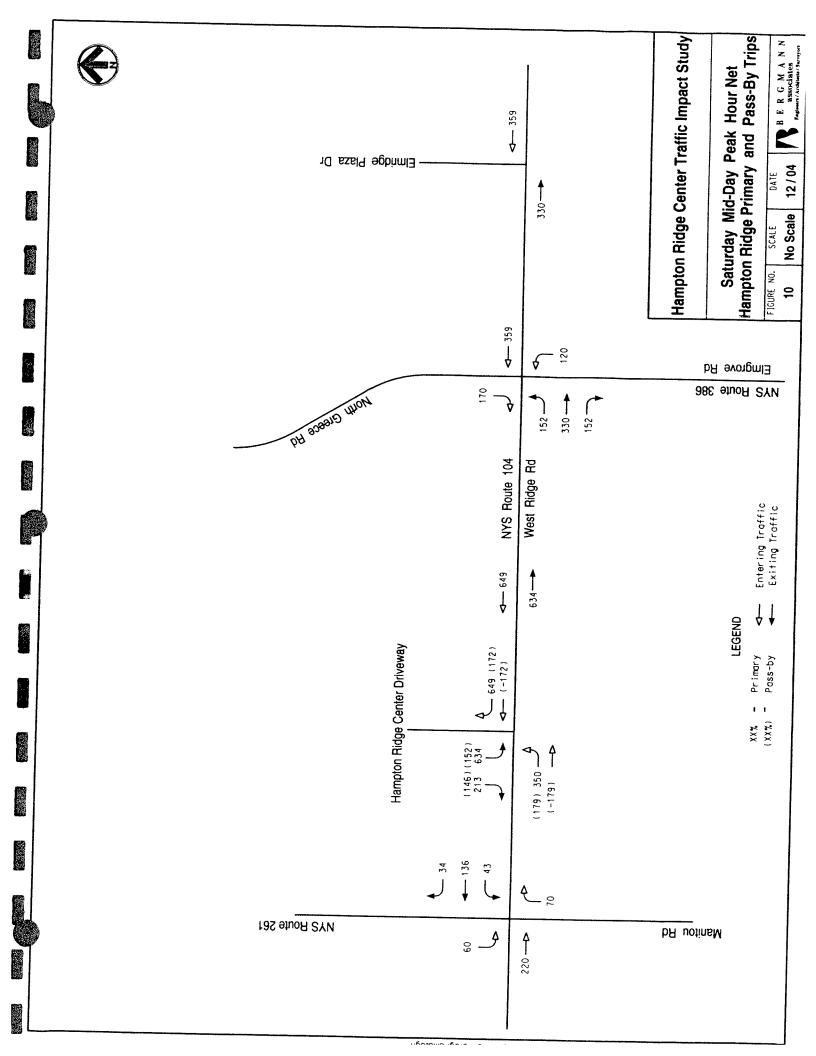
### E. BUILD TRAFFIC VOLUMES

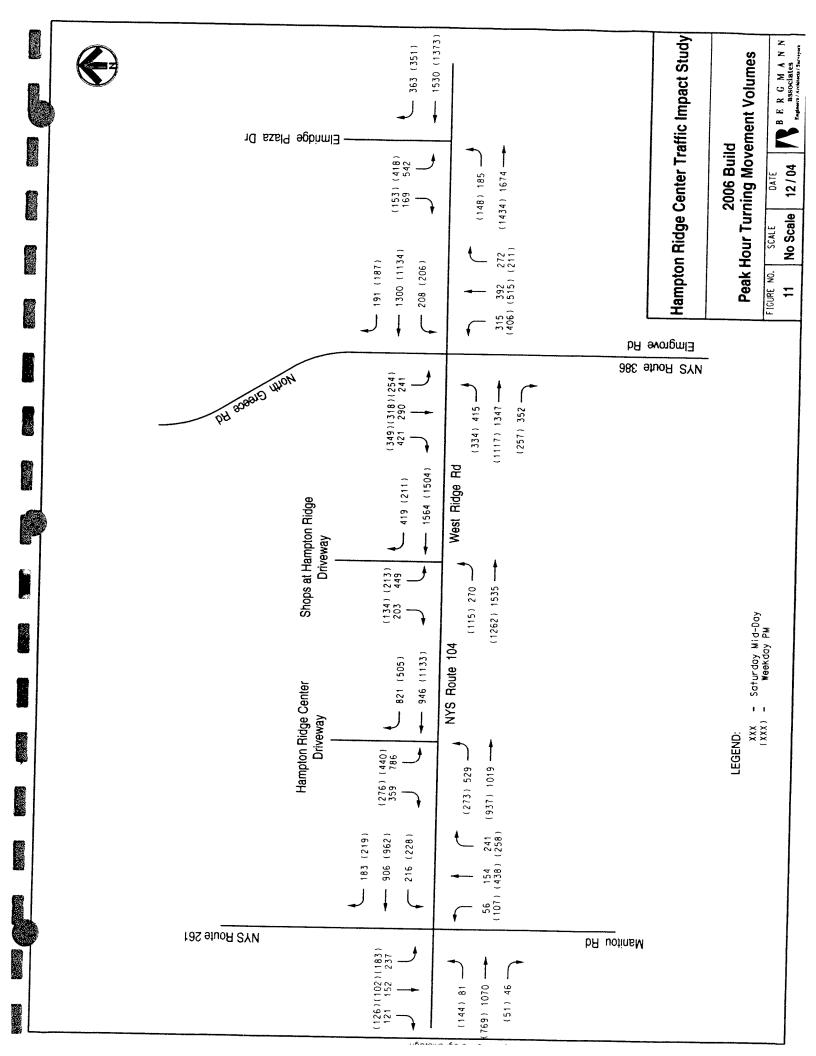
The full build traffic volumes are the sum of the 2006 background traffic volumes and the estimated new site-generated trips shown in Figures 9 and 10. The Hampton Ridge Center is expected to be complete in 2006. Projected turning movement volumes during the weekday evening and Saturday mid-day peak hours upon completion of the project are shown in Figure 11.

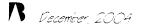












## IV. TRAFFIC OPERATIONS ANALYSIS

#### A. LEVEL OF SERVICE ANALYSIS

A level of service analysis was conducted for the existing, background and build conditions based on traffic volumes, traffic peaking characteristics, and intersection geometry. The analysis is necessary to obtain a measure of how well the roadway network accommodates traffic. Level of service (LOS) is a qualitative measure that describes motorist satisfaction with various factors influencing the degree of traffic congestion. These factors include travel time, speed, maneuverability, and delay.

The level of service analysis methodology for analyzing signalized and unsignalized intersections is documented in the <u>Highway Capacity Manual</u> (HCM) (Transportation Research Board, Washington D.C., 2000). Levels of service range from A to F. LOS A describes operations with little or no delay while LOS F describes highly congested conditions with substantial delays. LOS D or better is generally considered acceptable for peak hours of traffic under urban peak hour conditions. A complete description of levels of service may be found in Appendix A of this report.

Signalized intersections were analyzed using Synchro (Version 5) software. Synchro was also utilized to evaluate coordination along the NYS Route 104 corridor. A base model covering the study area signal network was obtained from the MCDOT. This model was refined with signal timing data provided by the NYSDOT Region 4 Traffic and Safety Group. Field signal timings were also taken at the signalized intersections to verify the signal timing information provided by NYSDOT. Detailed LOS calculations are included in Appendix B.

## 1. Existing Conditions

The results of the existing conditions level of service analysis are shown in Table 5. Data are given for each overall intersection and lane group. Corresponding values of control delay in seconds per vehicle (s/veh) are also summarized in this table.

As shown, most intersection approaches are currently operating with acceptable levels of service. The southbound Manitou Road shared through and left turn lane at West Ridge Road currently operates at LOS F during the weekday evening peak hour. According to the NYSDOT, the Department has considered what it would take to improve operations at this intersection. Limited right-of-way on Manitou Road, the proximity of a neighboring cemetery, and steep grades on the north side of the intersection have been constraints to implementing any proposed changes.

Two lane groups at the intersection of NYS Route 104, Elmgrove Road, and North Greece Road operate at LOS E and F during the evening peak hour based upon the Synchro analysis. The lane groups are the northbound through lane and the southbound shared through and right-turn lane, respectively.

Table 5: Existing Conditions Level of Service Analysis

|                                | 14 miles   | Mark.   | Existing Conditions |                 |  |  |  |
|--------------------------------|------------|---------|---------------------|-----------------|--|--|--|
| Intersection                   | Appr       | oach    | LOS/Contr           | rol Delay (sec) |  |  |  |
|                                |            |         | PM Peak             | Mid Day         |  |  |  |
| NYS Route 104 & Manitou Rd     | Eastbound  | Left    | B/10                | A/5             |  |  |  |
| (NYS Route 261)                | Eastbound  | TR      | C/22                | B/12            |  |  |  |
|                                | Westbound  | Left    | B/10                | A/5             |  |  |  |
|                                | Westbound  | TR      | C/23                | B/11            |  |  |  |
|                                | Northbound | LT      | D/47                | B/16            |  |  |  |
|                                | Northbound | Right   | A/4                 | A/3             |  |  |  |
|                                | Southbound | LT      | F/118               | B/17            |  |  |  |
|                                | Southbound | Right   | A/5                 | A/2             |  |  |  |
|                                | Overall    |         | C/28                | B/11            |  |  |  |
| NYS Route 104,                 | Eastbound  | Left    | C/21                | B/15            |  |  |  |
| Elmgrove Rd (NYS Route 386), & | Eastbound  | TR      | D/36                | C/26            |  |  |  |
| North Greece Rd.               | Westbound  | Left    | C/35                | D/43            |  |  |  |
|                                | Westbound  | TR      | C/23                | B/16            |  |  |  |
|                                | Northbound | Left    | C/27                | B/18            |  |  |  |
|                                | Northbound | Through | E/64                | D/39            |  |  |  |
|                                | Northbound | Right   | C/20                | C/23            |  |  |  |
|                                | Southbound | Left    | C/23                | B/20            |  |  |  |
|                                | Southbound | TR      | F/89                | D/41            |  |  |  |
|                                | Overall    |         | D/40                | C/26            |  |  |  |
| NYS Route 104 & Elmridge       | Eastbound  | Left    | B/14                | B/13            |  |  |  |
| Plaza Drive                    | Eastbound  | Through | <b>A</b> /8         | A/7             |  |  |  |
|                                | Westbound  | Through | B/13                | B/15            |  |  |  |
|                                | Southbound | Left    | D/38                | D/36            |  |  |  |
|                                | Southbound | Right   | C/23                | C/21            |  |  |  |
|                                | Overall    |         | B/13                | B/14            |  |  |  |

## 2. Future Background Conditions

Table 6 summarizes the level of service analysis for the study area intersections at the estimated time of completion (2006) assuming the Hampton Ridge Center is not built. Modifications to be made as part of NYSDOT's West Ridge Road Improvement Project (construction planned for 2005) are included in the analysis. Results are shown for each lane group. Overall levels of service are given for each of the signalized intersections. Corresponding values of control delay in seconds per vehicle (s/veh) are also summarized in this table.

Table 6: Future No-Build and Full Build Level of Service Analysis Summary

|                   |                    | Future       | No-Build                                | Future Build<br>with Mitigation<br>LOS/Control Delay (sec) |          |  |  |
|-------------------|--------------------|--------------|---|--|----------|--|--|
| Intersection      | Approach           | LOS/Cont     | rol Delay (sec)                         |  |          |  |  |
|                   |                    | PM Peak      | Date of the                             | PM Peak  | 1 18:40- |  |  |
| NYS Route 104 &   | Eastbound Left     | B/20         | A/10                                    | C/25   | B/15     |  |  |
| Manitou Road      | Eastbound TR       | C/29         | C/23                                    | C/28   | D/42     |  |  |
| (NYS Route 261)*  | Westbound Left     | C/20         | B/10                                    | D/51   | D/49     |  |  |
|                   | Westbound TR       | D/54         | C/20                                    | D/47   | A/10     |  |  |
|                   | Northbound LT      | E/67         | C/21                                    | F/111  | C/22     |  |  |
|                   | Northbound Right   | A/8          | A/6                                     | B/11   | B/12     |  |  |
|                   | Southbound LT      | F/244        | D/50                                    | F/350  | D/48     |  |  |
|                   | Southbound Right   | A/8          | A/5                                     | B/10   | B/10     |  |  |
|                   | Overall            | E/58         | C/23                                    | E/73   | C/28     |  |  |
| NYS Route 104 &   | Eastbound Left     |              |   | B/16   | C/21     |  |  |
| Hampton Ridge     | Eastbound Through  |              | 1                                       | A/2  | A/3      |  |  |
| Center Driveway   | Westbound Through  |              |   | A/8  | B/11     |  |  |
|                   | Westbound Right    |              |   | A/0  | A/5      |  |  |
|                   | Southbound Left    |              |   | D/42   | D/49     |  |  |
|                   | Southbound Right   |              |   | A/5  | A/3      |  |  |
|                   | Overall            |              |   | A/10   | B/15     |  |  |
| NYS Route 104 &   | Eastbound Left     | B/11         | C/21                                    | C/25   | D/51     |  |  |
| Shops at Hampton  | Eastbound Through  | A/5          | B/12                                    | A/3  | A/7      |  |  |
| Ridge Driveway    | Westbound Through  | A/6          | C/21                                    | B/14   | D/50     |  |  |
|                   | Westbound Right    | A/1          | A/1                                     | A/2  | A/7      |  |  |
|                   | Southbound Left    | D/42         | C/34                                    | D/42   | D/50     |  |  |
|                   | Southbound Right   | A/6          | A/3                                     | A/6  | A/4      |  |  |
|                   | Overall            | A/8          | B/17                                    | B/11   | C/29     |  |  |
| NYS Route 104,    | Eastbound Left     | D/42         | D/40                                    | D/54   | D/55     |  |  |
| Elmgrove Rd       | Eastbound TR       | C/33         | D/43                                    | D/43   | D/42     |  |  |
| NYS Route 386) &  | Westbound Left     | C/32         | C/24                                    | D/52   | D/49     |  |  |
| North Greece Rd.  | Westbound Through  | C/27         | C/21                                    | D/51   | D/51     |  |  |
|                   | Westbound Right    | B/15         | A/9                                     | B/10   | A/9      |  |  |
|                   | Northbound Left    | +            | C/28                                    | D/49   | D/50     |  |  |
|                   | Northbound Through |              | D/39                                    | D/52   | D/55     |  |  |
|                   | Northbound Right   | <del> </del> | B/20                                    | B/18   | C/24     |  |  |
|                   | Southbound Left    | <del> </del> | C/32                                    |  | D/53     |  |  |
|                   | Southbound Through | <del> </del> | D/41                                    |  | D/49     |  |  |
|                   | Southbound Right   |              | B/20                                    |  | C/21     |  |  |
|                   | Overall            |              | *************************************** |  |          |  |  |
| IYS Route 104 &   | Eastbound Left     | ·            | C/31                                    |  | D/44     |  |  |
| Imridge           | Eastbound Through  |              |   |  | C/31     |  |  |
| laza Drive        | Westbound Through  |              |   |  | A/7      |  |  |
|                   | Southbound Left    |              |   |  | B/19     |  |  |
|                   | Southbound Right   |              |   |  | C/26     |  |  |
|                   | Overall            |              |   |  | B/12     |  |  |
| ides improvements | Overall            | B/13         | B/16                                    | B/11   | B/14     |  |  |

Includes improvements of the NYSDOT West Ridge Road Improvement Project to be constructed in 2005

<sup>\* =</sup> The results shown for this intersection reflect conditions without improvement. Refer to Table 7 for build condition results assuming the poor levels of service projected during the existing and no-build evening peak hour have been addressed.

LT = Shared left and through

TR = Shared through and right

As part of the NYSDOT West Ridge Road improvement project, NYS Route 104 will receive 3 through lanes in each direction at the Elmgrove Road (NYS Route 386) and North Greece Road intersection. Exclusive left-turn lanes would be provided in each direction as well as a westbound right turn lane. It is assumed for the purposes of this analysis that due to the number of opposing lanes and to promote safety, eastbound and westbound left turns would be restricted to protected only operation both at Elmgrove Road and Elmridge Plaza. Northbound and southbound left turns are assumed to run protected first and then permitted during each cycle of the traffic signal at the intersection of NYS Route 104, North Greece Road and Elmgrove Road. The future no-build analysis also assumes traffic signal coordination on a common 110 second cycle along NYS Route 104 from Elmridge Plaza to the Shops at Hampton Ridge (SHR) driveway.

Inclusion of pedestrian phases (and their associated minimum green times) produces significant vehicle delay and poor levels of service within the Synchro model under background conditions. This is due to the length of the pedestrian "walk" and "don't walk" phases that would be required for individuals to cross the wide approaches proposed under the West Ridge Road Improvement project. Little to no pedestrian activity was observed at the Route 104, North Greece Road, and Elmgrove Road intersection during field visits. Therefore, it is assumed that pedestrian phases would be activated infrequently, with the needs of motorized vehicles controlling the traffic signal operation over the majority of each peak hour.

To model this "typical" condition, pedestrian phases were removed from the Synchro model at this intersection. This does not imply that pedestrian accommodations such as crosswalks, push buttons, and dedicated signal heads are unnecessary. They are indeed required to accommodate occasional pedestrians. Any delays caused by a pedestrian actuation would likely dissipate after several successive vehicle controlled cycles.

Based upon the analysis, the intersection of NYS Route 104, North Greece Road and Elmgrove Road is projected to operate at LOS C overall during both peak hours as planned under the West Ridge Road Improvement Project. Northbound, southbound and eastbound left turns are projected to operate at LOS D during the weekday evening peak hour.

As shown in Table 6, the remaining study area intersections are projected to operate with acceptable levels of service (LOS D or better) during each peak period in 2006 except the intersection of NYS Route 104 with Manitou Road. Both the northbound and southbound shared through/left lanes are projected to operate with a poor level of service (LOS E or F) during the weekday evening peak hour prior to construction of the Hampton Ridge Center. One additional lane would be necessary on both

the north and south approaches to achieve acceptable levels of service during the weekday evening peak at that location (see Table 7). This improvement strategy would require three approach lanes, one exclusive to each movement (left, through and right turns) on the northbound and southbound approaches. Construction of any additional lanes on Manitou Road would be subject to the right-of-way, cemetery, and grade constraints discussed in Section IV.A.1.

Table 7: 2006 Future No-Build and Build Levels of Service with Improvements on Manitou Road NYS Route 104 and Manitou Road

|                    | 1 7 1 1 1  |             | 11 (1979) (1984) | ture No-Build<br>Improvements | Future Build<br>with Improvements |  |  |  |
|--------------------|------------|-------------|------------------|-------------------------------|-----------------------------------|--|--|--|
| Intersection       | Appro      | oach        | 1000             | LOS/Delay                     |                                   | LOS/Delay                              |  |  |
| ray ()<br>Analysis | A 15 A 15  |             |                  | (seconds)                     | JAN SEA                           |  |  |  |
| kalib a            |            | HE STATE OF | 34               | PM Peak                       |                                   | PM Peak                                |  |  |
| NYS Route 104 &    | Eastbound  | Left        | B/19             |                               | C/34                              |  |  |  |
| Manitou Road       | Eastbound  | TR          | C/26             |                               | C/33                              |  |  |  |
| (NYS Route 261)    | Westbound  | Left        | B/19             |                               | D/47                              |  |  |  |
|                    | Westbound  | TR          | D/45             |                               | D/53                              |  |  |  |
|                    | Northbound | Left        | B/19             |                               | B/19                              |  |  |  |
|                    | Northbound | Through     | C/24             |                               | C/25                              |  |  |  |
|                    | Northbound | Right       | A/8              |                               | B/11                              |  |  |  |
|                    | Southbound | Left        | D/42             |                               | D/47                              | ······································ |  |  |
|                    | Southbound | Through     | B/18             |                               | B/18                              |  |  |  |
|                    | Southbound | Right       | A/9              |                               | B/10                              |  |  |  |
|                    | Overall    | <u> </u>    | C/29             |                               | D/37                              |  |  |  |

L T = shared left and through TR = Shared through and right

# 3. Projected Conditions With Development

Table 6 also summarizes level of service for study area intersections at the estimated time of completion (2006) assuming full build out of the proposed development. Once again, modifications to be made as part of NYSDOT's West Ridge Road Improvement (WRRI) Project are included in the analysis.

Additional traffic generated by the proposed development is **not** projected to result in a need for highway improvements at the following intersections.

- NYS Route 104 and Manitou Road (See Section 2)
- NYS Route 104 and the SHR driveway
- NYS Route 104 and the Elmridge Plaza Driveway

In each case, all lane groups are projected to operate with acceptable levels of service during both the weekday evening and Saturday mid-day peak periods. The future build analysis assumes coordinated traffic signals

operating on a 110 second cycle length along NYS Route 104 at Manitou Road, the Hampton Ridge Center driveway, and the SHR driveway. To achieve acceptable operations, the signal at NYS Route 104, North Greece Road and Elmgrove Road is dropped from the coordination plan and allowed to operate under actuated-uncoordinated control during the weekday evening and Saturday mid-day peak hours. It is assumed the Elmridge Plaza signal would remain coordinated with those to the east on NYS Route 104.

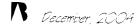
According to the results, the intersection of NYS Route 104 and the Elmridge Plaza Driveway is projected to operate with slightly less delay under the build condition when compared to the no-build condition. The overall level of service does not change. An apparent delay reduction occurs because the intersection is no longer coordinated with traffic signals to the west within the Synchro model. In reality, the Elmridge Plaza traffic signal would remain coordinated with signals to the east along NYS Route 104 and no measurable change in the level of service should occur.

# NYS Route 104, Elmgrove Road and North Greece Road.

Due to the high retail peak hour turning volumes, a 125 second cycle length is recommended in conjunction with the uncoordinated signal operation. The intersection of NYS Route 104, North Greece Road and Elmgrove Road is projected to operate overall at LOS D during both peak hours given the build condition with mitigation. As under no-build conditions, this intersection was analyzed in the absence of an activated pedestrian phase. It is assumed that pedestrian "walk" and "don't walk" indications would be called infrequently. Throughout the majority of the peak hour, the signal would be allowed to respond principally to the needs of vehicular traffic.

Dual left turn lanes would be required on the northbound and southbound approaches to provide acceptable levels of service in all lane groups. The projected volume of northbound left turning vehicles drives the need for this improvement. In addition, the analysis indicates that one northbound through lane would provide adequate capacity as opposed to the two proposed under the WRRI Project.

To accommodate the need for dual northbound and southbound left turn lanes, it is proposed to re-stripe (replace) the inside northbound through lane with a second northbound left turn lane. Likewise, a second southbound left turn lane would be created by re-striping the second (inside) northbound receiving lane. Crosswalks, push buttons, and pedestrian signal heads would remain in place. Based on conceptual review of the WRRI plans, these changes can be made with pavement marking and traffic signal modifications only.



# NYS Route 104 and the Hampton Ridge Center Driveway.

The proposed location of Hampton Ridge Center Driveway is approximately 3,390 ft west of the NYS Route 104, Elmgrove Road, and North Greece Road intersection, approximately 1,050 ft west of the SHR Driveway and approximately 2,290 ft east of Manitou Road. This places it outside the section to be improved as part of the West Ridge Road Improvement Project, and outside the limits of the existing two way left turn lane. Widening of NYS Route 104 to include a 500 ft eastbound left turn lane at the proposed site driveway is recommended based upon the capacity analysis.

In addition, a 300 foot long free-flowing westbound right turn lane along NYS Route 104 at the proposed Hampton Ridge Center Driveway is recommended. This configuration will provide an area for deceleration and an unblocked path for the estimated 821 vehicles entering the site from the east during the Saturday mid-day peak hour. Without this feature, average queues would extend beyond the SHR driveway during the Saturday mid-day peak according to the Synchro/SimTraffic analysis. Based upon Figure 5-19 of the NYSDOT Highway Design Manual "Deceleration Distances for Passenger Cars Approaching Intersections (Braking at a Comfortable Rate)", 260 feet is required for a vehicle traveling at 43.5 mph to decelerate comfortably to 15 mph and 300 feet is required to decelerate to a stop. Therefore, the 300 foot long right turn lane will provide adequate area for deceleration of vehicles entering the Hampton Ridge Center from the east.

Three exiting lanes including two left turn lanes and one right turn lane would be required for southbound traffic leaving the Hampton Ridge Center. Two entrance lanes would be required, one for vehicles entering from the east via the signal and one for vehicles entering from the west in the free-flow right turn lane.

An unsignalized analysis of the proposed intersection indicates that traffic exiting via a left turn would experience extensive delay, queuing, and LOS F. Therefore, the following warrants as described in the New York State Manual of Uniform Traffic Control Devices (MUTCD) were reviewed to study the need for traffic signal control at the site driveway under 2006 full build out conditions:

- Warrant 1, minimum vehicular volume
- Warrant 2, interruption of continuous traffic
- Warrant 8, combination of warrants (Warrants 1 and 2)

Detailed results, broken down by hour, are located in Appendix C.

Warrant 1 is the minimum vehicular volume warrant. For any one hour to satisfy this warrant the volume of traffic on the artery must exceed 600 vehicles and the volume of traffic on the higher volume side road approach must exceed 200 vehicles. NYS Route 104 has two lanes of traffic on each approach (excluding auxiliary lanes) at the intersection with the Hampton Ridge Center Driveway. The minimum volume of 600 vehicles is projected to be met for more than 8 hours on the artery in 2006. The minimum volume of 200 vehicles leaving the site in 2006 is also projected to be met for 8 hours. Therefore, warrant 1 is projected to be met at the site driveway and NYS Route 104 under 2006 full build-out conditions.

Warrant 2 is the interruption of continuous traffic warrant. For any one hour to satisfy this warrant the volume of traffic on the artery must exceed 900 vehicles and the volume of traffic on the higher volume side road approach must exceed 100 vehicles. The minimum volume of 900 vehicles is projected to be met for more than 8 hours on the artery in 2006. The minimum volume of 100 vehicles leaving the site in 2006 is projected to be met for 8 hours. Therefore, warrant 2 is also projected to be met at the site driveway and NYS Route 104 under 2006 full build-out conditions.

Warrant 8 is at least eighty percent traffic volume satisfaction of a combination of Warrants 1 & 2. Eighty percent of the normal required volumes for Warrants 1 and 2 are used here for Warrant 8. For Warrant 1 the minimum volume on the artery is 480 vehicles, and on the side road it is 160 vehicles. For Warrant 2 the minimum volume on the artery is 720 vehicles, and on the side road it is 80 vehicles. Warrant 8 is also projected to be met at the site driveway and NYS Route 104 under 2006 full build-out conditions.

Table 8 contains the results for each of the three warrants for the intersection of NYS Route 104 and the Hampton Ridge Center driveway under 2006 full build-out conditions.

Table 8: Full Build-Out Traffic Signal Warrant Analysis Results

| Warrant  | Hours Met |
|--|-----------|
| Warrant 1 - Minimum Vehicular Volume           | 8         |
| Warrant 2 - Interruption of Continuous Traffic | 8         |
| Warrant 8 - Combination of Warrants 1 & 2      | 8         |

Due to its proximity to the existing signal at Manitou Road and the proposed signal to the east at the SHR Driveway, it is recommended that the new signal be coordinated with each. With these improvements in place, it is projected that acceptable levels of service can be provided at the new intersection during the weekday evening and Saturday midday peak periods.

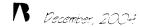
As part of this study, an analysis of location of the site driveway along NYS Route 104 was performed. The basis of the analysis is the width of the green band along NYS Route 104 between Manitou Road and the SHR driveway. The green band along a roadway is dependent upon several factors including: vehicular speeds, spacing of signalized intersections and signal timing. No significant improvement in the width of the green band on NYS Route 104 was realized when moving the proposed site driveway location to the west or east. See Appendix E for Synchro output containing green band results for various driveway locations.

## V. SIGHT DISTANCE EVALUATION

Sight distance is an important consideration at intersections. According to A Policy on Geometric Design of Highways and Streets 2001 (Green Book) (American Association of State Highway and Transportation Officials (AASHTO), Washington D.C.), "Sight distance is provided at intersections to allow drivers to perceive the presence of potentially conflicting vehicles. This should occur in sufficient space for a motorist to stop or adjust their speed, as appropriate, to avoid colliding in the intersection." It also allows drivers of stopped vehicles an opportunity to decide when it is safe to enter or cross the intersecting highway. Sufficient sight distance is provided when it is at least equal to the AASHTO requirement. Intersection sight distances that exceed the required stopping sight distances are desirable. The AASHTO Green Book was used as a reference to establish required stopping sight distances and desirable intersection sight distances for the Hampton Ridge Center's driveways to NYS Route 104.

As noted in Section IV.A.3, traffic signal warrants 1, 2 and 8 are met at the proposed intersection of NYS Route 104 and Hampton Ridge Center Driveway. The AASHTO Green Book states that "At signalized intersections, the first vehicle stopped on one approach should be visible to the driver of the first vehicle stopped on each of the other approaches. Left turning vehicles should have sufficient sight distance to select gaps in oncoming traffic and complete left turns. Apart from these sight conditions, there are generally no other approach or departure sight triangles needed for signalized intersections.

Field observations of sight distance were made on NYS Route 104. The posted speed limit on NYS Route 104 is 40 miles per hour. According to the AASHTO Green Book, the required stopping sight distance is 305 ft and the desirable intersection sight distance is 500 feet for a vehicle making a left turn from the minor approach crossing 3 lanes onto the 5-lane major roadway. The alignment of NYS Route 104 at the location of proposed Hampton Ridge Center Driveway is generally straight. There is one vertical crest curve adjacent to a sag curve located in the vicinity of the Hampton Ridge Center site. Based upon the field observations, the



available sight distances at the proposed location of the site driveway (approximately 700 feet from the western boundary of the site) exceed the AASHTO requirements.

## VI. PEDESTRIAN ACCOMMODATION

Mitigation proposed for the proposed development is subject to NYSDOT Engineering Instruction (EI) 04-11 "Procedural Requirements for Pedestrian Accommodation". The NYSDOT Pedestrian Generator Checklist required by this EI is contained in Appendix F. The Pedestrian Generator Checklist aids in the determination of need for pedestrian accommodation. There is a need for pedestrian accommodations based upon the checklist in Appendix F. Extension of the existing sidewalk along the frontage of the Hampton Ridge Center site and pedestrian crossing provisions at the proposed intersection of the site driveway and NYS Route 104 are recommended.

#### VII. SUMMARY

The subject of this study is the proposed multi-use development to be named Hampton Ridge Center. The DiMarco Group is proposing to construct this new development in the Town of Greece, Monroe County, New York. The proposed site is located north of NYS Route 104 (West Ridge Road) between North Greece Road and Manitou Road (NYS Route 261). The proposed multi-use development would include 390,000 square feet of total building space comprised of several land uses including a multiplex movie theater, various retail establishments, 4 sit down restaurants, a pharmacy and a drive-in bank. Access to the site would be provided by one driveway intersecting NYS Route 104. Cross-access would be provided to the neighboring SHR.

The New York State Department of Transportation currently has plans to reconstruct NYS Route 104 to a point just east of the proposed site drive beginning in 2005. That project will involve the construction of additional through and turn lanes on NYS Route 104.

The proposed development would generate 1863 and 3146 total trips during the weekday evening and Saturday mid-day peak hours, respectively according to the Institute of Transportation Engineer's <u>Trip Generation</u>.

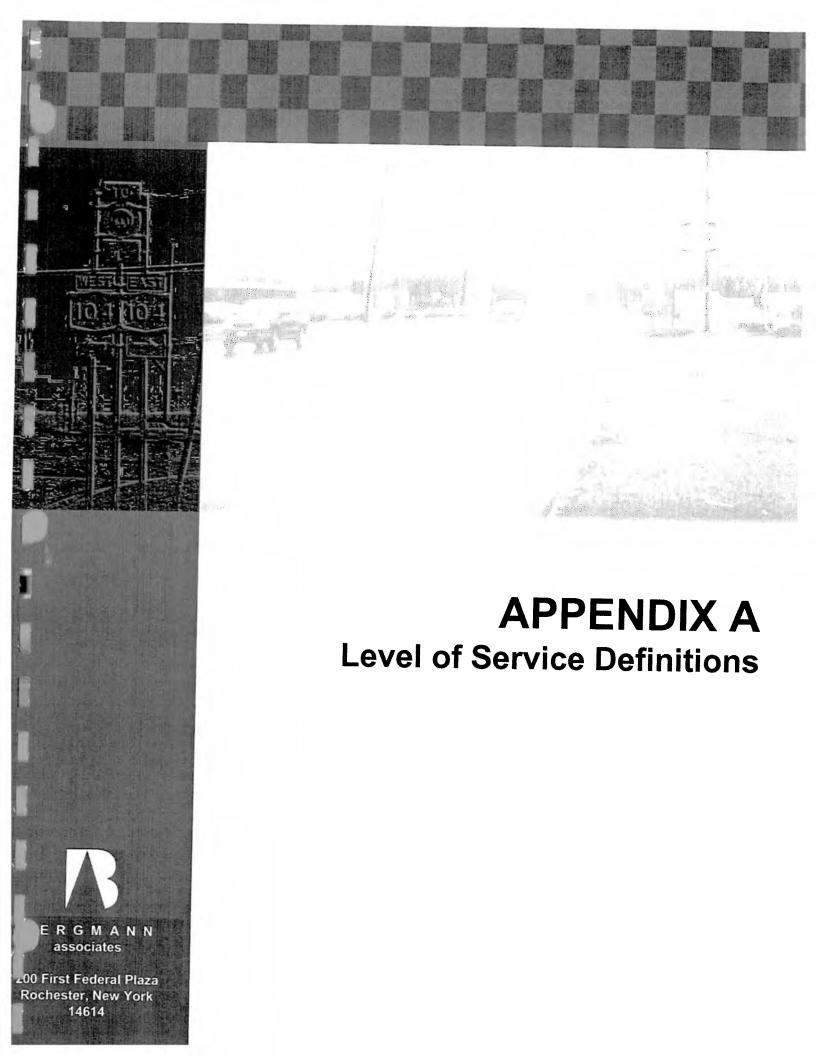
It is projected that the proposed development can be accommodated by the surrounding transportation system given the proposed NYS Route 104 improvements by NYSDOT and some additional roadway improvements.



### VIII. RECOMMENDATIONS

The following highway improvements are recommended to accommodate the proposed development as a result of this study.

- 1. Construct a new full access Hampton Ridge Center Driveway to NYS Route 104 with two exiting lanes for left turns, one exiting lane for right turns, and two entering lanes.
- 2. Install a new traffic signal for the proposed intersection of Hampton Ridge Center Driveway and NYS Route 104. This signal should be coordinated with the signal at the intersection of NYS Route 104 with Manitou Road and the signal expected to be installed at the intersection of NYS Route 104 and the Shops at Hampton Ridge Driveway.
- 3. Widen NYS Route 104 to include a 500 ft eastbound left turn lane at the proposed site driveway.
- 4. Construct a 300 foot long westbound right turn lane along NYS Route 104 at the proposed Hampton Ridge Center Driveway. The turn lane would operate as a free-flow slip lane and not be controlled by the traffic signal.
- 5. Install pedestrian crossing provisions at the signalized intersection of the Hampton Ridge Center site driveway and NYS Route 104 based upon the Pedestrian Generator Checklist shown in Appendix F. Extend the sidewalk located on the north side of NYS Route 104 (constructed for the Shops at Hampton Ridge) to the western frontage limit of the Hampton Ridge Center.
- 6. Re-stripe the North Greece Road and Elmgrove Road approaches to NYS Route 104. The new lane configuration on the North Greece Road would consist of two left turn lanes, one through lane and one right turn lane. The same lane configuration is recommended for the Elmgrove Road approach. Operate this intersection as an independent fully actuated traffic signal with a cycle length of 125 seconds during the weekday evening and Saturday mid-day peak hour (retail peak) periods.
- 7. Continue to operate the traffic signal at the intersection of NYS Route 104 and Elmridge Plaza in coordination with those to the east.
- 8. All curb radii should be designed to accommodate the appropriate design vehicle.
- Ensure adequate site distance will be provided at NYS Route 104 during design of the Hampton Ridge Center driveway.



# DEFINITION OF LEVEL OF SERVICE FOR SIGNALIZED INTERSECTIONS

Level of service for signalized intersections is defined in terms of delay, which is a measure of driver discomfort, frustration, fuel consumption, and lost travel time. The delay experienced by a motorist is made up of a number of factors that relate to control, geometrics, traffic, and incidents. Total delay is the difference between the travel time actually experienced and the reference travel time that would result during ideal conditions: in the absence of traffic control, in the absence of geometric delay, in the absence of any incidents and when there are no other vehicles on the road. Only the portion of total delay attributed to the control facility is quantified. This delay is called *control delay*. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay.

Specifically, LOS criteria for traffic signals are stated in terms of the average control delay per vehicle, typically for a 15-minute analysis period. The criteria are given in the following table. Delay is a complex measure and is dependent on a number of variables, including the quality of progression, the cycle length, the green ratio, and the v/c ratio for the lane group in question.

| LEVEL OF SERVICE | CONTROL DELAY PER VEHICLE (sec) |
|------------------|---------------------------------|
| А                | Less than or equal to 10.0      |
| В                | 10.1 to no more than 20.0       |
| С                | 20.1 to no more than 35.0       |
| D                | 35.1 to no more than 55.0       |
| Е                | 55.1 to no more than 80.0       |
| F                | 80.1 and greater                |

**Level Of Service A** describes operations with very low control delay, up to 10 seconds per vehicle. This level of service occurs when progression is extremely favorable and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.

Level Of Service B describes operations with control delay greater than 10 and up to 20 seconds per vehicle. This level generally occurs with good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of average delay.

Level Of Service C describes operations with control delay greater than 20 and up to 35 seconds per vehicle. These higher delays may result form fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant at this level, though many still pass through the intersection without stopping.

<u>Level Of Service D</u> describes operations with control delay greater than 35 and up to 55 seconds per vehicle. At level D, the influence of congestion becomes more noticeable. Longer delays may result form some combination of unfavorable progression, long cycle lengths, or high v/c ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.

Level Of Service E describes operations with control delay greater

than 55 and up to 80 seconds per vehicle. This level is considered by many agencies to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high v/c ratios. Individual cycle failures are frequent occurrences.

Level Of Service F describes operations with control delay in excess of 80 seconds per vehicle. This level, considered to be unacceptable to most drivers, often occurs with oversaturation, that is, when arrival flow rates exceed the capacity of the intersection. It may also occur at high v/c ratios below 1.0 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing factors to such delay levels.

# DEFINITION OF LEVEL OF SERVICE FOR UNSIGNALIZED INTERSECTIONS

The level of service for a Two-Way-Stop-Control (TWSC) intersection is determined by the computed or measured control delay and is defined for each minor movement. Level of service is not defined for the intersection as a whole. LOS criteria are given in the accompanying table.

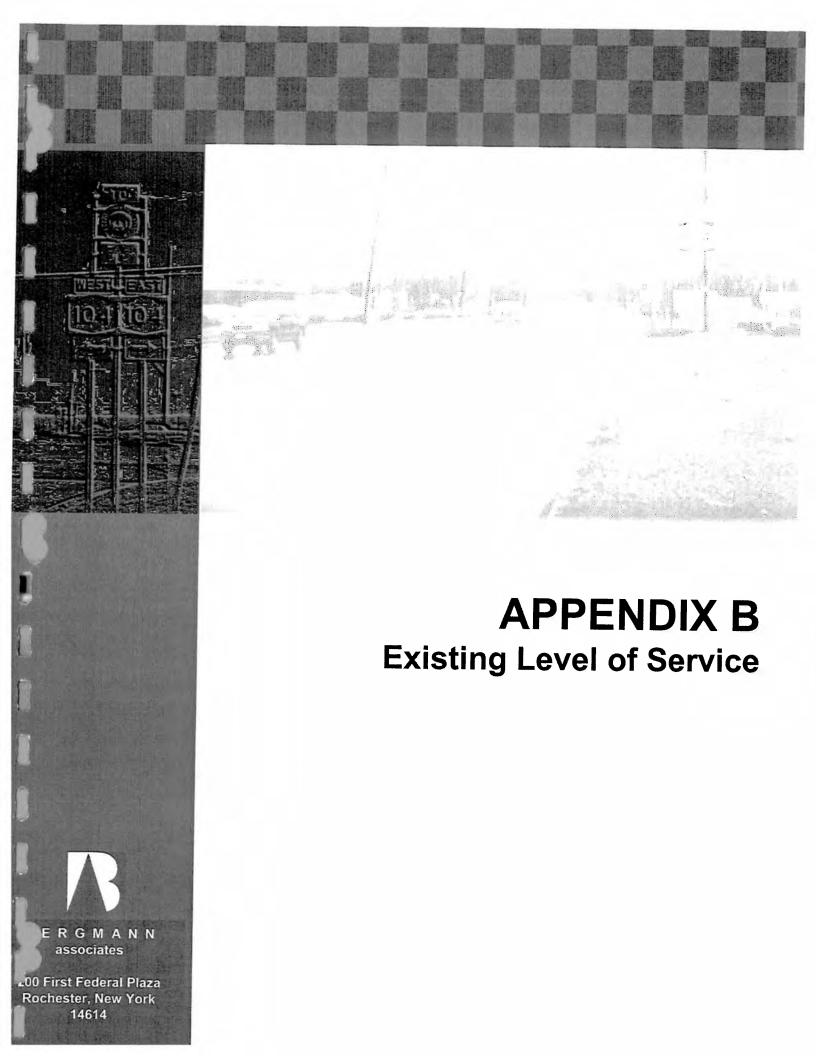
| LEVEL OF SERVICE | CONTROL DELAY PER VEHICLE (sec) |
|------------------|---------------------------------|
| А                | Less than or equal to 10.0      |
| В                | 10.1 to no more than 15.0       |
| С                | 15.1 to no more than 25.0       |
| D                | 25.1 to no more than 35.0       |
| E                | 35.1 to no more than 50.0       |
| F                | 50.1 and greater                |

The LOS criteria for TWSC intersections are somewhat different than the criteria used for signalized intersections. The primary reason for this difference is that drivers expect different levels of performance from different kinds of transportation facilities. The expectation is that a signalized intersection would be designed to carry higher traffic volumes than an unsignalized intersection. In addition, a number of driver behavior considerations combine to make delays at signalized intersections less onerous than delays at unsignalized intersections. Also, there is often much more variability in the amount of delay experienced by individual drivers at an unsignalized intersection versus that at signalized intersections. For these reasons, it is considered that the control delay threshold for any giver level of service would be less for an unsignalized intersection than it would be for a signalized intersection.

The delay experienced by a motorist is made up of a number of factors that relate to control, geometrics, traffic, and incidents. Total delay is the difference between the travel time actually experienced and the reference travel time that would result during conditions with ideal geometrics and in the absence of incidents, control and traffic. This delay is called

control delay. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay.

In the performance evaluation of TWSC intersections, it is important to consider other measures of effectiveness (MOE's) in addition to delay, such as v/c ratios for individual movements, average queue lengths, and 95<sup>th</sup> percentile queue lengths. By focusing on a single MOE for the worst movement only, such as delay for the minor-street left turn, inappropriate traffic control decisions may be made.



|                         | عر          | -           | •            | •        | -               | *                                       | •  | †        | 1                 | . \                      | + ↓          | 4   |
|-------------------------|-------------|-------------|--------------|----------|-----------------|---|--|----------|-------------------|--------------------------|--------------|---|
| Lane Group              | EBL         | EBT         | EBR          | WBL      | WBT             | WBR                                     | NBL  | . NB1    | NBF               | R SBI                    | SB           | SBR   |
| Lane Configurations     | Y           | <b>↑</b> ↑  |              | k        | <b>†</b> \$     |   |  | -        | COMPANY OF STREET | THE PARTY OF THE         |              | S. R. L. S. |
| Ideal Flow (vphpl)      | 1900        | 1900        | 1900         |          |                 | 1900                                    | 1900   |          |                   |                          | 1900         |   |
| Storage Length (ft)     | 245         |             | 0            | 170      |                 | 0                                       |  |          | 150               |                          |              | 100   |
| Storage Lanes           | 1           |             | 0            | 1        |                 | 0                                       | _  |          | Wister at 1       |                          |              | 100   |
| Total Lost Time (s)     | 3.0         | 3.0         | 3.0          | 3.0      | 3.0             | 3.0                                     |  | ,        |                   |                          |              |   |
| Leading Detector (ft)   | 60          | 60          |              | 60       | 60              |   | 5  |          |                   |                          |              |   |
| Trailing Detector (ft)  | 0           | 0           |              | 0        |                 |   | 0  | /        |                   |                          |              |   |
| Turning Speed (mph)     | 15          | 444         | 9            | 15       | -               | 9                                       | 15   | 1790161  | 9                 | _                        |              | 9   |
| Satd. Flow (prot)       | 1719        | 3433        | 0            | 1787     | 3365            | 0                                       | 0  | 1797     |                   |                          |              |   |
| Flt Permitted           | 0.156       |             | 1            | 0.253    |                 |   |  | 0.763    |                   |                          | 0.219        |   |
| Satd. Flow (perm)       | 282         | 3433        | 0            | 476      | 3365            | 0                                       | 0  | 1388     |                   | 0                        |              |   |
| Right Turn on Red       |             |             | Yes          |          |                 | No                                      |  |          | Yes               |                          | 410          |   |
| Satd. Flow (RTOR)       |             | 10          |              |          | SALT MANAGEMENT |   |  |          | 133               | Refer Services           | 125          | Yes   |
| Link Speed (mph)        |             | 40          |              |          | 40              |   | 10-1-11 W  | 40       | 100               |                          | 40           | 76  |
| Link Distance (ft)      |             | 1211        |              |          | 2287            |   | at val.  | 1361     |                   | A STATE OF               |              |   |
| Travel Time (s)         |             | 20.6        |              |          | 39.0            | tagy at some                            |  | 23.2     | 200               | the state of             | 1370<br>23.4 |   |
| Volume (vph)            | 115         | 630         | 49           | 184      | 806             | 102                                     | 104  | 327      | 188               | 78                       |              | 105   |
| Lane Group Flow (vph)   | 131         | 772         | 0            |          | 1009            | 0                                       | 0  | 507      | 221               | 0                        | 79           | 105   |
| Turn Type               | pm+pt       | <del></del> |              | pm+pt    | 1000            |   | Perm   | 507      | pm+ov             | Perm                     | 183          | 122   |
| Protected Phases        | 5           | 2           | · Kuas       |          | 6               |   | 9,55 %   | <b>8</b> | 1.                | reiiii                   |              | pm+ov   |
| Permitted Phases        | 2           |             |              | 6        |                 |   | 8  |          | 8                 | 1                        | 4            | 5   |
| Detector Phases         | 5           | 2.          |              |          | 6               |   | 8  | · 8      |                   | 4                        | 4            | 44<br>خونونونون                                 |
| Minimum Initial (s)     | 2.0         | 15.0        |              | 2.0      | 15.0            | Charles Joyce                           | 5.0  | 5.0      | 2.0               | 5.0                      | 5.0          | 5   |
| Minimum Split (s)       | 7.0         | 20.5        |              | 7.0      | 20.5            |   | 27.5   | 27.5     | 7.0               | 27.5                     | 27.5         | 2.0<br><b>7.0</b>                               |
| Total Split (s)         | 20.0        | 50.5        | 0.0          | 20.0     | 50.5            | 0.0                                     | 35.5   | 35.5     | 20.0              | 35.5                     | 35.5         |   |
| Total Split (%)         | 19%         | 48%         | 0%           | 19%      | 48%             | 0%                                      | 33%  | 33%      | 19%               | 33%                      | 33%          | 20.0  |
| Maximum Green (s)       | 15.0        | 45.0        | 5            | 15.0     | 45.0            |   | 30.0   | 30.0     | 15.0              | 30.0                     | 30.0         | 19%   |
| Yellow Time (s)         | 3.5         | 3.5         |              | 3.5      | 3.5             |   | 3.5  | 3.5      | 3.5               | 3.5                      | 3.5          | 15.0  |
| All-Red Time (s)        | 1.5         | 2.0         | L-Market Co. | 1.5      | 2.0             |   | 2.0  | 2.0      | 1.5               | 2.0                      | 2.0          | 3.5   |
| Lead/Lag                | Lead        | Lag         | w in the     | Lead     | Lag             | A. 5 . 5 .                              |  | U        | Lead              | 2.0                      | 2.0          | 1.5   |
| Lead-Lag Optimize?      |             | 3           |              |          | <b>9</b>        | 4.                                      | , k  |          | Leau              | The state of             | 进行经济等        | Lead  |
| Vehicle Extension (s)   | 1.0         | 1.0         | 1 844        | 1.0      | 1.0             |   | 2.0  | 2.0      | 1.0               | 2.0                      | 2.0          | 12.40   |
| Recall Mode             | None        | None        |              | None     | None            | * | None   | None     | None              | None                     | None         | 1.0   |
| Walk Time (s)           |             |             |              | w. 1     |                 | J. Velik                                | 7.0  | 7.0      | NONE              |                          |              | None  |
| Flash Dont Walk (s)     | .,          | -524105-50  |              |          |                 | 100                                     | 15.0   | 15.0     |                   | 7.0                      | 7.0          |   |
| Pedestrian Calls (#/hr) |             |             | 3415A        | STAN STA | in This is      |   | 0  | 0        | in sties like     | 15.0                     | 15.0         |   |
| Act Effct Green (s)     | 36.4        | 27.9        | men er tiet  | 39.9     | 29.7            |   | A STATE OF THE STA | 32.9     | 46.0              | ·. · · · · · · · · · · · | 0            |   |
| Actuated g/C Ratio      | 0.45        | 0.35        |              | 0.50     | 0.37            |   |  | 0.41     | 46.2              | Sacre                    | 32.9         | 44.5  |
| //c Ratio               | 0.47        | 0.64        | 3.5          | 0.50     | 0.81            |   |  | 0.89     | 0.58              |                          | 0.41         | 0.55  |
| Jniform Delay, d1       | 10.5        | 21.5        | 55 (15%)     | 10.7     | 22.6            |   |  |          | 0.22              |                          | 1.09         | 0.14  |
| Delay                   | 10.2        | 21.6        |              | 10.7     | 22.6            |   |  | 21.8     | 3.0               | 1 12                     | 23.6         | 3.1   |
| .OS                     | 10.2<br>B   | 21.0<br>C   |              | B        | 22.0<br>C       |   | 41.5   | 46.5     | 4.4               |                          | 117.6        | 5.1   |
| Approach Delay          | MATERIAL AT | 19.9        |              | Ь        | 20.5            |   |  | D -      | Α                 | -                        | F            | Α   |
| Approach LOS            |             | В           | 140          |          |                 |   |  | 33.7     |                   |                          | 72.6         |   |
|                         |             | В           |              |          | С               |   |  | С        |                   |                          | Ε            |   |
| ntersection Summary     | <b>建</b>    | a syram     |              |          |                 |   |  | 4224     |                   |                          | A STATE OF   | 147 6 FRES                                      |

Area Type:

Other

Cycle Length: 106

Actuated Cycle Length: 80.2

Natural Cycle: 60

Control Type: Actuated-Uncoordinated

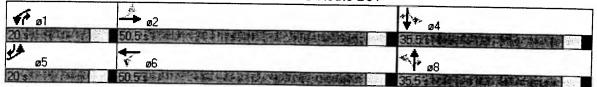
Maximum v/c Ratio: 1.09

Intersection Signal Delay: 28.4

Intersection Capacity Utilization 85.8%

Intersection LOS: C
ICU Level of Service D

Splits and Phases: 1056: NYS Route 104 & NYS Route 261



|                         | ۶      | -                                       | •                                       | 1                 | -           | *                    | 4          | †                 | ^   | . /               | . ↓                           | 4                    |
|-------------------------|--------|---|---|-------------------|-------------|----------------------|------------|-------------------|---|-------------------|-------------------------------|----------------------|
| Lane Group              | EBI    | EBT                                     | EBR                                     | WBL               | WBT         | WBR                  | NBL        | . NBT             | NBF   | SBL               | SBT                           | con                  |
| Lane Configurations     | 1      | ነ ተራ                                    |   |                   | <b>†</b> \$ |                      | *          | The second second | Marin St. C. Calledon   | Challanes Coldato | Section 1                     | SBR                  |
| Ideal Flow (vphpl)      | 1900   |   | 1900                                    | 1900              |             | 1900                 | 1900       |                   |   |                   |                               |                      |
| Storage Length (ft)     | 295    | 5                                       | 0                                       | 295               |             | 0                    | 210        |                   | 205   |                   |                               | 1900                 |
| Storage Lanes           |        |   | 0                                       |                   |             | 0                    |            |                   | 200   |                   |                               | U<br><b>ሰ</b> ፋን የመ  |
| Total Lost Time (s)     | 3.0    | 3.0                                     | 3.0                                     | 3.0               | 3.0         | 3.0                  | 3.0        | 3.0               | and the same  | 4, 1, 1, 1        |                               | 0                    |
| Leading Detector (ft)   | 60     | 5                                       |   | 60                |             |                      | 60         |                   |   |                   |                               | 3.0                  |
| Trailing Detector (ft)  | O      | 5                                       | 45                                      | 0                 | 4           | Sarati e Alike e     | 0          | 244 4 ?           | **************************************  |                   | W 400                         |                      |
| Turning Speed (mph)     | 15     |   | 9                                       | 15                |             | 9                    | 15         | •                 | 9   |                   |                               | All Comments         |
| Satd. Flow (prot)       | 1805   | 3488                                    | 0                                       | 1805              | 3412        | 0                    | 1770       | 1881              | 1583  |                   |                               | 9                    |
| Flt Permitted           | 0.114  |   |   | 0.114             |             |                      | 0.148      |                   | 1303  | 0.148             | 1763                          | 0                    |
| Satd. Flow (perm)       | 217    | 3488                                    | 0                                       | 217               | 3412        | 0                    | 276        | 1881              | 1583  | 278               | ,                             |                      |
| Right Turn on Red       |        |   | Yes                                     | Trage are         |             | Yes                  | 1 ( ) ( )  | 1001              | No  | 2/0               | 1763                          | .0                   |
| Satd. Flow (RTOR)       |        | 24                                      | .,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |                   | 22          | , , <b></b>          |            |                   | . 140   |                   |                               | No                   |
| Link Speed (mph)        |        | 40                                      |   |                   | 40          |                      |            | 30                |   |                   |                               | V 87                 |
| Link Distance (ft)      |        | 3397                                    |   | 1. 1. 1. 1. 1. 1. | 1383        |                      |            | 1526              |   |                   | 35                            |                      |
| Travel Time (s)         |        | 57.9                                    | 33.43                                   |                   | 23.6        | 811850               |            | 34.7              |   | in the second     | 857                           |                      |
| Volume (vph)            | 160    | and the second                          | 146                                     | 200               | 820         | 146                  | 228        | 470               | Total Control of the | 400               | 16.7                          |                      |
| Lane Group Flow (vph)   |        | 1147                                    | 0                                       | 215               | 1039        | 0                    | 243        | 500               | 205   | 193               | 257                           | 185                  |
| Turn Type               | pm+pt  |   |   | pm+pt             | 1000        |                      |            |                   | 218   | 227               | 520                           | 0.1                  |
| Protected Phases        | 5      |   | is ender                                |                   | 6           | en yezhoù e          | pm+pt      |                   | pm+ov   | The second second | A 50 TO 100 A 100             |                      |
| Permitted Phases        | 2      | - · · · · · · · · · · · · · · · · · · · |   | 6                 | *           |                      | 3          | 8                 | *1  | <b>₹7</b>         | 4                             |                      |
| Detector Phases         | _<br>5 | 2                                       | 8 / [ W Y 2 ]                           | 1                 | 6           | (3 - <b>(X</b> ) - 5 | 8<br>- 3   | · · · · · · ·     | 8   | 4                 | 31 - 31 - 1 a sax             |                      |
| Minimum Initial (s)     | 2.0    | 33.0                                    |   | 2.0               | 33.0        |                      | 2.0        | <b>8</b><br>5.0   | 1   | 7.                | 4                             |                      |
| Minimum Split (s)       | 9.0    | 38.0                                    | E.S. 18 3 - 3 - 3                       | 9.0               | 38.0        |                      | 7.0        | 27.0              | 2.0   | 2.0               | 5.0                           |                      |
| Total Split (s)         | 15.0   | 38.0                                    | 0.0                                     | 15.0              | 38.0        | 0.0                  | 17.0       |                   | 9.0   | 7.0               | 27.0                          |                      |
| Total Split (%)         | 15%    | 38%                                     | 0%                                      | 15%               | 38%         | 0.0                  | 17%        | 30.0              | 15.0  | 17.0              | 30.0                          | 0.0                  |
| Maximum Green (s)       | 10.0   | 33.0                                    | 0.0                                     | 10.0              | 33.0        | 0 /6                 | 12.0       | 30%               | 15%   | 17%               | 30%                           | 0%                   |
| Yellow Time (s)         | 3.0    | 3.0                                     |   | 3.0               | 3.0         |                      | 3.0        | 25.0              | 10.0  | 12.0              | 25.0                          | et Sympoles y letter |
| All-Red Time (s)        | 2.0    | 2.0                                     |   | 2.0               | 2.0         | 744,20               | . 1        | 3.0               | 3.0   | 3.0               |                               |                      |
| Lead/Lag                | Lead   | Lag                                     |   | Lead              | ے.ں<br>Lag  |                      | 2.0        | 2.0               | 2.0   | 2.0               | 2.0                           |                      |
| Lead-Lag Optimize?      | 7,744  | Lug                                     | 1.34.1.24.1.                            | Leau              | Lay         |                      | Lead       | Lag               | Lead  | Lead              | Lag                           |                      |
| Vehicle Extension (s)   | 1.0    | 1.0                                     | . 7                                     | 1.0               | 2.0         |                      | 0.0        | 00                |   | 1000 va 1400      |                               | 2 - 79/ In table .   |
| Recall Mode             |        | Coord                                   | s with 1 by 1 s                         | 1.one             |             |                      | 2.0        | 2.0               | 1.0   | 3.0               | 2.0                           |                      |
| Walk Time (s)           |        | 7.0                                     |   | 1.UHE             |             | 372                  | None       | None              | None  | None              | None                          | Ve to a              |
| Flash Dont Walk (s)     |        | 15.0                                    | 1100                                    |                   | 7.0         |                      |            | 7.0               |   |                   | 7.0                           |                      |
| Pedestrian Calls (#/hr) |        | 0                                       | fw is                                   |                   | 15.0        |                      |            | 15.0              |   | mar daliku uk     | 15.0                          |                      |
| Act Effct Green (s)     | 47.7   | 36.8                                    |   | 47.0              | 0           |                      |            | 0                 |   | W15-13-1          | 0                             |                      |
| Actuated g/C Ratio      | 0.48   | 0.37                                    |   | 47.3              | 36.6        |                      | 40.5       | 27.0              | 40.7  | 40.6              | 27.0                          |                      |
| //c Ratio               | 0.71   |   |   | 0.47              | 0.37        |                      | 0.41       | 0.27              | 0.41  | 0.41              | 0.27                          |                      |
| Jniform Delay, d1       | 14.2   | 0.88                                    | NEW AND ADDRESS OF                      | 0.79              | 0.82        |                      | 0.78       | 0.98              | 0.34  | 0.72              | 1.09                          |                      |
| Delay                   |        | 28.9                                    |   | 16.7              | 28.1        |                      | 18.9       | 36.3              | 20.4  | 18.5              | 36.5                          |                      |
| .OS                     | 20.8   | 36.4                                    | • •                                     | 34.9              | 22.8        |                      | 27.1       | 63.9              | 20.4  | 23.4              | 89.2                          |                      |
| Approach Delay          | C      | D                                       |   | С                 | C           |                      | . · C      | E                 | C   | C                 | F                             | 3.                   |
|                         |        | 34.1                                    |   | 1 2 1445          | 24.9        |                      |            | 44.7              |   |                   | 69.2                          |                      |
| Approach LOS            | 1      | C                                       |   |                   | С           |                      |            | D                 |   |                   | E                             |                      |
| ntersection Summary     |        |   | 1857                                    | ্লা ক্ষর          | A SHOULD BE |                      | SERVE-DOI: | TOTAL MALE        | 54 S414 S10   | Selection of      | of the Control of the Control | and the same         |

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 10 (10%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow

Natural Cycle: 85

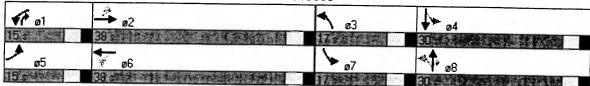
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.09

Intersection Signal Delay: 39.9
Intersection Capacity Utilization 100.4%

Intersection LOS: D
ICU Level of Service F

Splits and Phases: 499: NYS Route 104 & N Greece



|                        | •          | -                 | . 🕶               | • •          | . \                       | - 4                       |  |
|------------------------|------------|-------------------|-------------------|--------------|---------------------------|---------------------------|--|
| Lane Group             | EBL        | EB1               | WBT               | WBF          | SBI                       | SBR                       |  |
| Lane Configurations    | 7          | 5 14              | The second second |              | The state of the state of | LEGISLAND, Prop. L. Well, | CONTROL OF THE STATE OF THE PROPERTY OF THE STATE OF THE  |
| Ideal Flow (vphpl)     | 1900       |                   |                   |              |                           |                           | The state of the s |
| Storage Length (ft)    | 300        |                   | - St. 245 45      | 215          |                           |                           |  |
| Storage Lanes          | E0085      |                   |                   |              |                           |                           |  |
| Total Lost Time (s)    | 3.0        | 3.0               | 3.0               |              |                           |                           |  |
| Leading Detector (ft)  | 60         |                   |                   |              |                           |                           |  |
| Trailing Detector (ft) | 0          | ACTION ASSESSMENT |                   | 21 1         |                           |                           |  |
| Turning Speed (mph)    | 15         |                   |                   | 9            |                           | _                         | TRANSPORTED TO THE TELEVISION OF THE TELEVISION  |
| Satd. Flow (prot)      | 1805       |                   | 3574              |              |                           |                           |  |
| Flt Permitted          | 0.146      |                   |                   |              | 0.950                     |                           |  |
| Satd. Flow (perm)      | 277        |                   | 3574              | 1615         | 3502                      |                           |  |
| Right Turn on Red      | Stewar     |                   | 22 (27)           | Yes          | 0002                      | No                        | salagi Madalati (m. 1844), seri in .   |
| Satd. Flow (RTOR)      |            |                   |                   | 218          |                           | 140                       |  |
| Link Speed (mph)       |            | 40                | 40                | All half e   | 30                        |                           | WANTED BEING BETTER THE PARTY OF THE PARTY O |
| Link Distance (ft)     |            | 1383              | 1664              |              | 478                       |                           |  |
| Travel Time (s)        | 72.5       | 23.6              | 28.4              | \$ 55%,      | 10.9                      |                           |  |
| Volume (vph)           | 135        | 1046              | 1026              | 341          | 406                       | 140                       |  |
| Lane Group Flow (vph)  | 148        | 1149              | 1153              | 383          | 437                       | 151                       | Paga su de Governous estados en un como estados en como estado |
| Turn Type              | pm+pt      |                   |                   | Free         | 707                       | pm+ov                     |  |
| Protected Phases       | 5          | 2                 | 6                 |              | 4                         | and the second second     |  |
| Permitted Phases       | 2          | S10.27.0          |                   | Free         | 4                         | 4                         |  |
| Detector Phases        | 5          |                   | 1. 3 4 4 3        |              | 4                         |                           |  |
| Minimum Initial (s)    | 2.0        | 5.0               | 5.0               | 10000        | 5.0                       | 2.0                       |  |
| Minimum Split (s)      | 7.0        | 54.0              | 54.0              |              | 10.0                      | 7.0                       | oka ili kandisti sa marangan manangan sa manangan sa manangan sa manangan sa manangan sa manangan sa manangan s  |
| Total Split (s)        | 16.0       | 70.0              | 54.0              | 0.0          | 30.0                      | 16.0                      |  |
| Total Split (%)        | 16%        | 70%               | 54%               | 0%           | 30%                       | 16%                       | r of the grant of  |
| Maximum Green (s)      | 11.0       | 65.0              | 49.0              |              | 25.0                      | 11.0                      |  |
| Yellow Time (s)        | 3.0        | 3.0               | 3.0               |              | 3.0                       | 3.0                       |  |
| All-Red Time (s)       | 2.0        | 2.0               | 2.0               |              | 2.0                       | 2.0                       |  |
| Lead/Lag               | Lag        |                   | Lead              | Sy Tiles     | 0<br>,                    | Lag                       |  |
| Lead-Lag Optimize?     |            |                   |                   |              |                           | ag                        |  |
| Vehicle Extension (s)  | 2.0        | 1.0               | 1.0               | a Sit w      | 2.0                       | 2.0                       |  |
| Recall Mode            |            |                   | Coord             |              | None                      | None                      |  |
| Act Effct Green (s)    | 75.8       | 75.8              |                   | 100.0        | 18.2                      | 34.2                      | HISTORIAN STANISH TO THE CONTRACTOR OF THE CONTR |
| Actuated g/C Ratio     | 0.76       | 0.76              | 0.60              | 1.00         | 0.18                      | 0.34                      |  |
| //c Ratio              | 0.36       | 0.43              | 0.54              | 0.24         | 0.68                      | 0.27                      | Section 255 Compressed 25 miles and page 250 miles are required  |
| Jniform Delay, d1      | 6.3        | 4.3               | 11.9              | 0.0          | 38.2                      | 23.9                      |  |
| Delay                  | 14.3       | 7.9               | 12.7              | 0.0          | 37.8                      | 23.3                      | and the country of the same and the same and the   |
| .os                    | В          | Α.                | В                 | Α            | 37.0<br>D                 | 23.3<br>C                 |  |
| Approach Delay         | STANIA I   | 8.6               | 9.5               |              |                           |                           | San and Production of the Section of |
| Approach LOS           | 41. 315    | 0.0<br>A          | 9.5<br>A          |              | 34.1<br>C                 | ' - '3' Y                 |  |
| ntersection Summary    | (C) 707 MG |                   |                   | I SP GRA     |                           | BB 110100                 |  |
|                        | thor       |                   | 1,2 %             | E 1 11 2 2 1 | <b>医性学</b> 节的             | ME STATE OF               | 李 中的第三人称:"是一个一种一种  |

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow

Natural Cycle: 75

Control Type: Actuated-Coordinated

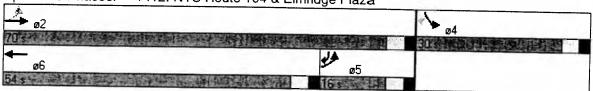
Maximum v/c Ratio: 0.68

Intersection Signal Delay: 13.4

Intersection Capacity Utilization 62.5%

Intersection LOS: B
ICU Level of Service B

Splits and Phases: 1412: NYS Route 104 & Elmridge Plaza



| Walk Time (s) Flash Dont Walk (s) Pedestrian Calls (#/hr) Act Effct Green (s) 25.8   | 3.0<br>60<br>0<br>3540 | 1900<br>0<br>0<br>3.0  | 1900<br>170<br>13.0           | <b>↑</b> ⊅         | 1900<br>0 |             | 4          | Property and the State of | STATE OF THE PARTY. | SB   | Γ. SBR                                  |
|--|------------------------|--|-------------------------------|--------------------|-----------|-------------|------------|---------------------------|---------------------|--|---|
| Ideal Flow (vphpl)   1900   Storage Length (ft)   245   Storage Lanes   1   Total Lost Time (s)   3.0   Leading Detector (ft)   60   Trailing Detector (ft)   1805   Satd. Flow (prot)   1805   Flt Permitted   0.230   Satd. Flow (perm)   437   Right Turn on Red   Satd. Flow (RTOR)   Link Speed (mph)   Link Distance (ft)   Travel Time (s)   Volume (vph)   63   Lane Group Flow (vph)   69   pm+pt   Protected Phases   5   Permitted Phases   5   Sermitted Phases   5   Minimum Initial (s)   2.0   Minimum Split (s)   7.0   Total Split (%)   19%   Maximum Green (s)   1.5   Lead/Lag   Lead   Lead-Lag Optimize?   Vehicle Extension (s)   1.0   Recall Mode   Walk Time (s)   Flash Dont Walk (s)   Pedestrian Calls (#/hr)   Act Effct Green (s)   25.8   Actuated g/C Ratio   0.53   Actuated g/C Ratio   1.0   Contact   Con   | 3.0<br>60<br>0<br>3540 | 0<br><b>0</b>  | 1900<br>170<br>1<br>3.0       | <b>↑</b> ⊅         | 1900      |             | 4          | Property and the State of | STATE OF THE PARTY. | . OD   | 300                                     |
| Storage Length (ft) Storage Lanes Total Lost Time (s) Leading Detector (ft) Trailing Detector (ft) Turning Speed (mph) Satd. Flow (prot) Flt Permitted Satd. Flow (perm) Right Turn on Red Satd. Flow (RTOR) Link Speed (mph) Link Distance (ft) Travel Time (s) Volume (vph) Lane Group Flow (vph) Turn Type Protected Phases Permitted Phases Detector Phases Minimum Initial (s) Minimum Split (s) Total Split (s) Total Split (s) Total Split (s) Selead/Lag Lead Lead-Lag Optimize? Vehicle Extension (s) Flash Dont Walk (s) Pedestrian Calls (#/hr) Act Effct Green (s) Actuated g/C Ratio  1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.  | 3.0<br>60<br>0<br>3540 | 0<br><b>0</b>  | 1900<br>170<br>1<br>3.0       | 1900               |           | 1000        |            |                           | 7                   |  |   |
| Storage Lanes Total Lost Time (s) Leading Detector (ft) Trailing Detector (ft) Turning Speed (mph) Satd. Flow (prot) Flt Permitted O.230 Satd. Flow (perm) Right Turn on Red Satd. Flow (RTOR) Link Speed (mph) Link Distance (ft) Travel Time (s) Volume (vph) Lane Group Flow (vph) Turn Type Protected Phases Permitted Phases Detector Phases Minimum Initial (s) Minimum Split (s) Total Split (s) Selead/Lag Lead Lead-Lag Optimize? Vehicle Extension (s) Flash Dont Walk (s) Pedestrian Calls (#/hr) Act Effct Green (s) Actuated g/C Ratio  150 1805 1805 1806 1807 1807 1807 1807 1807 1807 1807 1807  | 60<br>0<br>3540        | . 0  | 170<br>1<br>3.0               |                    |           | 1.77.11     | 1900       |                           |                     | 4000   |   |
| Total Lost Time (s) Leading Detector (ft) Trailing Detector (ft) Turning Speed (mph) Satd. Flow (prot) Flt Permitted O.230 Satd. Flow (perm) Right Turn on Red Satd. Flow (RTOR) Link Speed (mph) Link Distance (ft) Travel Time (s) Volume (vph) Lane Group Flow (vph) Turn Type Protected Phases Permitted Phases Detector Phases Minimum Initial (s) Detector Phases Minimum Split (s) Total Split (s) Total Split (s) Total Split (s) Yellow Time (s) Lead Lead-Lag Optimize? Vehicle Extension (s) Flash Dont Walk (s) Pedestrian Calls (#/hr) Act Effct Green (s) Actuated g/C Ratio  150 0.230  | 60<br>0<br>3540        | . 0  | 3.0                           |                    | ( )       | 0           | Comment of | 150                       |                     |  |   |
| Leading Detector (ft) Trailing Detector (ft) Turning Speed (mph) Satd. Flow (prot) Flt Permitted Satd. Flow (perm) Right Turn on Red Satd. Flow (RTOR) Link Speed (mph) Link Distance (ft) Travel Time (s) Volume (vph) Satd. Flow (vph) Turn Type Protected Phases Permitted Phases Detector Phases Minimum Initial (s) Minimum Split (s) Total Split (%) Maximum Green (s) Yellow Time (s) Yellow Time (s) Lead/Lag Lead Lead-Lag Optimize? Vehicle Extension (s) Flash Dont Walk (s) Pedestrian Calls (#/hr) Act Effct Green (s) Actuated g/C Ratio  150 1805 1805 1805 1805 1805 1805 1805   | 60<br>0<br>3540        |  | 3.0                           |                    | 0         |             |            | 130                       |                     |  | 100                                     |
| Leading Detector (ft) Trailing Detector (ft) Turning Speed (mph) Satd. Flow (prot) Flt Permitted Satd. Flow (perm) Right Turn on Red Satd. Flow (RTOR) Link Speed (mph) Link Distance (ft) Travel Time (s) Volume (vph) Lane Group Flow (vph) Turn Type Protected Phases Permitted Phases Detector Phases Minimum Initial (s) Total Split (s) Total Split (%) Maximum Green (s) Yellow Time (s) Lead/Lag Lead-Lag Optimize? Vehicle Extension (s) Flash Dont Walk (s) Pedestrian Calls (#/hr) Act Effct Green (s) Actuated g/C Ratio  150 230 437 837 838 838 848 858 868 868 8688 8688 86888 86888 86888 86888 86888 86888 868888 868888 868888 8688888 86888888  | 60<br>0<br>3540        |  |                               | 3.0                | 3.0       | 3.0         | 3.0        | The second second         |                     |  |   |
| Trailing Detector (ft) Turning Speed (mph) Satd. Flow (prot) Flt Permitted 0.230 Satd. Flow (perm) Right Turn on Red Satd. Flow (RTOR) Link Speed (mph) Link Distance (ft) Travel Time (s) Volume (vph) Satd. Flow (RTOR) Link Speed (mph) Link Distance (ft) Travel Time (s) Volume (vph) Turn Type Protected Phases Spermitted Phases Spermitt | 0<br>3540              |  | 60                            |                    |           | 60          |            |                           |                     |  |   |
| Turning Speed (mph) Satd. Flow (prot) Flt Permitted O.230 Satd. Flow (perm) Right Turn on Red Satd. Flow (RTOR) Link Speed (mph) Link Distance (ft) Travel Time (s) Volume (vph) Lane Group Flow (vph) Turn Type Protected Phases Permitted Phases Permitted Phases Detector Phases Minimum Initial (s) Minimum Split (s) Total Split (%) Maximum Green (s) Yellow Time (s) 150 Mead-Lag Optimize? Vehicle Extension (s) Flash Dont Walk (s) Pedestrian Calls (#/hr) Act Effct Green (s) Actuated g/C Ratio 137  437  1805  18 | 3540                   |  | 0                             | Ö                  |           | 00          | 00         | Mary                      |                     | 14 A. S. |   |
| Satd. Flow (prot)       1805         Flt Permitted       0.230         Satd. Flow (perm)       437         Right Turn on Red       347         Satd. Flow (RTOR)       147         Link Speed (mph)       148         Link Distance (ft)       148         Travel Time (s)       149         Volume (vph)       63         Lane Group Flow (vph)       69         Turn Type       149         Permitted Phases       15         Permitted Phases       15         Detector Phases       15         Minimum Initial (s)       20         Minimum Split (s)       20         Total Split (s)       20         Total Split (s)       20         Maximum Green (s)       15         Yellow Time (s)       15         Lead/Lag       Lead         Lead-Lag Optimize?       Lead         Vehicle Extension (s)       1.0         Recall Mode       None         Walk Time (s)       1.0         Flash Dont Walk (s)       25.8         Pedestrian Calls (#/hr)         Actuated g/C Ratio       0.53   |                        | 9  | 15                            |                    | 9         | 15          |            | 9                         |                     | C  |   |
| Fit Permitted 0.230 Satd. Flow (perm) 437 Right Turn on Red Satd. Flow (RTOR) Link Speed (mph) Link Distance (ft) Travel Time (s) Volume (vph) 63 Lane Group Flow (vph) 69 Turn Type pm+pt Protected Phases 5 Permitted Phases 2 Detector Phases 5 Minimum Initial (s) 2.0 Minimum Split (s) 7.0 Total Split (s) 7.0 Total Split (%) 19% Maximum Green (s) 15.0 Yellow Time (s) 3.5 All-Red Time (s) 1.5 Lead/Lag Lead Lead-Lag Optimize? Vehicle Extension (s) 1.0 Recall Mode None Walk Time (s) Flash Dont Walk (s) Pedestrian Calls (#/hr) Act Effct Green (s) 25.8 Actuated g/C Ratio 0.53  |                        | 0  | 1787                          | 3509               | 0         | 0           | 1829       |                           |                     |  | 9                                       |
| Satd. Flow (perm) Right Turn on Red Satd. Flow (RTOR) Link Speed (mph) Link Distance (ft) Travel Time (s) Volume (vph) Lane Group Flow (vph) Turn Type Protected Phases Permitted Phases Permitted Phases Detector Phases Minimum Initial (s) Total Split (s) Total Split (%) Maximum Green (s) Yellow Time (s) All-Red Time (s) Lead Lead-Lag Optimize? Vehicle Extension (s) Flash Dont Walk (s) Pedestrian Calls (#/hr) Act Effct Green (s) Actuated g/C Ratio  437 437 437 437 437 437 437 437 437 43  |                        |  | 0.225                         | 0000               |           |             | 0.839      | 1583                      | 0                   | 1791   |   |
| Right Turn on Red Satd. Flow (RTOR) Link Speed (mph) Link Distance (ft) Travel Time (s) Volume (vph) 63 Lane Group Flow (vph) 69 Turn Type pm+pt Protected Phases 5 Permitted Phases 2 Detector Phases 5 Minimum Initial (s) 2.0 Minimum Split (s) 7.0 Total Split (%) 19% Maximum Green (s) 15.0 Yellow Time (s) 3.5 All-Red Time (s) 1.5 Lead/Lag Lead Lead-Lag Optimize? Vehicle Extension (s) 1.0 Recall Mode None Walk Time (s) Pedestrian Calls (#/hr) Act Effct Green (s) 25.8 Actuated g/C Ratio 0.53  | 3540                   | 0  | 423                           | 3509               | 0         | 0           |            | 4500                      | Hadrida II.         | 0.760  |   |
| Satd. Flow (RTOR) Link Speed (mph) Link Distance (ft) Travel Time (s) Volume (vph) 63 Lane Group Flow (vph) 69 Turn Type pm+pt Protected Phases 5 Permitted Phases 2 Detector Phases 5 Minimum Initial (s) 2.0 Minimum Split (s) 7.0 Total Split (s) 7.0 Total Split (%) 19% Maximum Green (s) 15.0 Yellow Time (s) 3.5 All-Red Time (s) 1.5 Lead/Lag Lead Lead-Lag Optimize? Vehicle Extension (s) 1.0 Recall Mode None Walk Time (s) Flash Dont Walk (s) Pedestrian Calls (#/hr) Act Effct Green (s) 25.8 Actuated g/C Ratio 0.53  | And the Andrew         | Yes  | 120                           |                    | No        | esta anno   | 1563       | 1583                      | 0                   | 1395   |   |
| Link Speed (mph) Link Distance (ft) Travel Time (s) Volume (vph) 63 Lane Group Flow (vph) 69 Turn Type pm+pt Protected Phases 5 Permitted Phases 2 Detector Phases 5 Minimum Initial (s) 2.0 Minimum Split (s) 7.0 Total Split (s) 20.0 Total Split (%) 19% Maximum Green (s) 15.0 Yellow Time (s) 3.5 All-Red Time (s) 1.5 Lead/Lag Lead Lead-Lag Optimize? Vehicle Extension (s) 1.0 Recall Mode None Walk Time (s) Flash Dont Walk (s) Pedestrian Calls (#/hr) Act Effct Green (s) 25.8 Actuated g/C Ratio 0.53   | 8                      | . 00   |                               |                    | INO       |             |            | Yes                       |                     |  | Yes                                     |
| Link Distance (ft) Travel Time (s) Volume (vph) 63 Lane Group Flow (vph) 69 Turn Type pm+pt Protected Phases 5 Permitted Phases 2 Detector Phases 5 Minimum Initial (s) 2.0 Minimum Split (s) 7.0 Total Split (s) 7.0 Total Split (%) 19% Maximum Green (s) 15.0 Yellow Time (s) 3.5 All-Red Time (s) 1.5 Lead/Lag Lead-Lag Optimize? Vehicle Extension (s) 1.0 Recall Mode None Walk Time (s) Flash Dont Walk (s) Pedestrian Calls (#/hr) Act Effct Green (s) 25.8 Actuated g/C Ratio 0.53  | 40                     |  | 14 300 3                      | 40                 | Bereit se |             | 1990a.a.   | 107                       |                     |  | 110                                     |
| Travel Time (s)  Volume (vph) 63  Lane Group Flow (vph) 69  Turn Type pm+pt  Protected Phases 5  Permitted Phases 2  Detector Phases 5  Minimum Initial (s) 2.0  Minimum Split (s) 7.0  Total Split (s) 20.0  Total Split (%) 19%  Maximum Green (s) 15.0  Yellow Time (s) 3.5  All-Red Time (s) 1.5  Lead/Lag Lead Lead-Lag Optimize?  Vehicle Extension (s) 1.0  Recall Mode None  Walk Time (s)  Flash Dont Walk (s)  Pedestrian Calls (#/hr)  Act Effct Green (s) 25.8  Actuated g/C Ratio 0.53  | 1211                   |  |                               | 2287               |           |             | 40         |                           | Participa           | 40   | 1 24                                    |
| Volume (vph) 63 Lane Group Flow (vph) 69 Turn Type pm+pt Protected Phases 5 Permitted Phases 2 Detector Phases 5 Minimum Initial (s) 2.0 Minimum Split (s) 7.0 Total Split (s) 20.0 Total Split (%) 19% Maximum Green (s) 15.0 Yellow Time (s) 3.5 All-Red Time (s) 1.5 Lead/Lag Lead Lead-Lag Optimize? Vehicle Extension (s) 1.0 Recall Mode None Walk Time (s) Flash Dont Walk (s) Pedestrian Calls (#/hr) Act Effct Green (s) 25.8 Actuated g/C Ratio 0.53   | 20.6                   | deciments.   |                               | 39.0               |           |             | 1361       |                           |                     | 1370   |   |
| Lane Group Flow (vph) Turn Type Protected Phases Permitted Phases Detector Phases Minimum Initial (s) Minimum Split (s) Total Split (s) Total Split (%) Maximum Green (s) Yellow Time (s) All-Red Time (s) Lead/Lag Lead-Lag Optimize? Vehicle Extension (s) Recall Mode Walk Time (s) Flash Dont Walk (s) Pedestrian Calls (#/hr) Act Effct Green (s) Potential Split (vpm) Pm+pt Ppm+pt Pp | 716                    | 44   | 144                           | 673                | 00        |             | 23.2       |                           |                     | 23.4   |   |
| Turn Type pm+pt Protected Phases 5 Permitted Phases 2 Detector Phases 5 Minimum Initial (s) 2.0 Minimum Split (s) 7.0 Total Split (s) 20.0 Total Split (%) 19% Maximum Green (s) 15.0 Yellow Time (s) 3.5 All-Red Time (s) 1.5 Lead/Lag Lead Lead-Lag Optimize? Vehicle Extension (s) 1.0 Recall Mode None Walk Time (s) Flash Dont Walk (s) Pedestrian Calls (#/hr) Act Effct Green (s) 25.8 Actuated g/C Ratio 0.53  | 835                    | 0  | 157                           |                    | 83        | 55          | 97         | 131                       | 79                  | 84   |   |
| Protected Phases Permitted Phases Permitted Phases Detector Phases Minimum Initial (s) Minimum Split (s) Total Split (s) Total Split (%) Maximum Green (s) Yellow Time (s) All-Red Time (s) Lead/Lag Lead-Lag Optimize? Vehicle Extension (s) Recall Mode Walk Time (s) Flash Dont Walk (s) Pedestrian Calls (#/hr) Act Effct Green (s) Actuated g/C Ratio  5 2.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7  | 000                    |  | and the state of the state of | 822                | 0         | 0           | 160        | 138                       | 0                   | 190  | 110                                     |
| Permitted Phases 2 Detector Phases 5 Minimum Initial (s) 2.0 Minimum Split (s) 7.0 Total Split (s) 20.0 Total Split (%) 19% Maximum Green (s) 15.0 Yellow Time (s) 3.5 All-Red Time (s) 1.5 Lead/Lag Lead Lead-Lag Optimize? Vehicle Extension (s) 1.0 Recall Mode None Walk Time (s) Flash Dont Walk (s) Pedestrian Calls (#/hr) Act Effct Green (s) 25.8 Actuated g/C Ratio 0.53   | 2                      |  | pm+pt                         | Institute of       |           | Perm        |            | pm+ov                     | Perm                |  | pm+ov                                   |
| Detector Phases 5 Minimum Initial (s) 2.0 Minimum Split (s) 7.0 Total Split (s) 20.0 Total Split (%) 19% Maximum Green (s) 15.0 Yellow Time (s) 3.5 All-Red Time (s) 1.5 Lead/Lag Lead-Lag Optimize? Vehicle Extension (s) 1.0 Recall Mode None Walk Time (s) Flash Dont Walk (s) Pedestrian Calls (#/hr) Act Effct Green (s) 25.8 Actuated g/C Ratio 0.53   |                        |  | 1                             | 6                  |           |             | 8          | 1                         |                     | 4  | 5                                       |
| Minimum Initial (s) 2.0  Minimum Split (s) 7.0  Total Split (s) 20.0  Total Split (%) 19%  Maximum Green (s) 15.0  Yellow Time (s) 3.5  All-Red Time (s) 1.5  Lead/Lag Lead Lead-Lag Optimize?  Vehicle Extension (s) 1.0  Recall Mode None  Walk Time (s)  Flash Dont Walk (s)  Pedestrian Calls (#/hr)  Act Effct Green (s) 25.8  Actuated g/C Ratio 0.53  | 2                      |  | 6                             | SESSION ALDER      |           | 8           |            | 8                         | 4                   |  | 4                                       |
| Minimum Split (s) 7.0 Total Split (s) 20.0 Total Split (%) 19% Maximum Green (s) 15.0 Yellow Time (s) 3.5 All-Red Time (s) 1.5 Lead/Lag Lead Lead-Lag Optimize? Vehicle Extension (s) 1.0 Recall Mode None Walk Time (s) Flash Dont Walk (s) Pedestrian Calls (#/hr) Act Effct Green (s) 25.8 Actuated g/C Ratio 0.53  | 15.0                   |  | 1                             | 6                  |           | 8           | 8          | <b>1</b> .                | 4                   | 4  | 5                                       |
| Total Split (s) 20.0 Total Split (%) 19% Maximum Green (s) 15.0 Yellow Time (s) 3.5 All-Red Time (s) 1.5 Lead/Lag Lead Lead-Lag Optimize? Vehicle Extension (s) 1.0 Recall Mode None Walk Time (s) Flash Dont Walk (s) Pedestrian Calls (#/hr) Act Effct Green (s) 25.8 Actuated g/C Ratio 0.53  | 20.5                   | Sisanta  | 2.0                           | 15.0               |           | 5.0         | 5.0        | 2.0                       | 5.0                 | 5.0  | 2.0                                     |
| Total Split (%) 19% Maximum Green (s) 15.0 Yellow Time (s) 3.5 All-Red Time (s) 1.5 Lead/Lag Lead Lead-Lag Optimize? Vehicle Extension (s) 1.0 Recall Mode None Walk Time (s) Flash Dont Walk (s) Pedestrian Calls (#/hr) Act Effct Green (s) 25.8 Actuated g/C Ratio 0.53   | 50.5                   | 0.0  | 7.0                           | 20.5               |           | 27.5        | 27.5       | 7.0                       | 27.5                | 27.5   | 7.0                                     |
| Maximum Green (s) 15.0 Yellow Time (s) 3.5 All-Red Time (s) 1.5 Lead/Lag Lead Lead-Lag Optimize? Vehicle Extension (s) 1.0 Recall Mode None Walk Time (s) Flash Dont Walk (s) Pedestrian Calls (#/hr) Act Effct Green (s) 25.8 Actuated g/C Ratio 0.53   | 48%                    | 0.0  | 20.0                          | 50.5               | 0.0       | 35.5        | 35.5       | 20.0                      | 35.5                | 35.5   | 20.0                                    |
| Yellow Time (s) 3.5 All-Red Time (s) 1.5 Lead/Lag Lead Lead-Lag Optimize? Vehicle Extension (s) 1.0 Recall Mode None Walk Time (s) Flash Dont Walk (s) Pedestrian Calls (#/hr) Act Effct Green (s) 25.8 Actuated g/C Ratio 0.53  | 45.0                   | 0%   | 19%                           | 48%                | 0%        | 33%         | 33%        | 19%                       | 33%                 | 33%  | 19%                                     |
| All-Red Time (s) 1.5 Lead/Lag Lead Lead-Lag Optimize? Vehicle Extension (s) 1.0 Recall Mode None Walk Time (s) Flash Dont Walk (s) Pedestrian Calls (#/hr) Act Effct Green (s) 25.8 Actuated g/C Ratio 0.53  | 43.0<br>3.5            |  | 15.0                          | 45.0               |           | 30.0        | 30.0       | 15.0                      | 30.0                | 30.0   | 15.0                                    |
| Lead/Lag Lead Lead-Lag Optimize? Vehicle Extension (s) 1.0 Recall Mode None Walk Time (s) Flash Dont Walk (s) Pedestrian Calls (#/hr) Act Effct Green (s) 25.8 Actuated g/C Ratio 0.53   |                        |  | 3.5                           | 3.5                |           | 3.5         | 3.5        | 3.5                       | 3.5                 | 3.5  | 3.5                                     |
| Lead-Lag Optimize?  Vehicle Extension (s) 1.0  Recall Mode None  Walk Time (s)  Flash Dont Walk (s)  Pedestrian Calls (#/hr)  Act Effct Green (s) 25.8  Actuated g/C Ratio 0.53  | 2.0                    |  | 1.5                           | 2.0                | ALC: HOLE | 2.0         | 2.0        | 1.5                       | 2.0                 | 2.0  | 1.5                                     |
| Vehicle Extension (s) 1.0 Recall Mode None Walk Time (s) Flash Dont Walk (s) Pedestrian Calls (#/hr) Act Effct Green (s) 25.8 Actuated g/C Ratio 0.53  | Lag                    |  | Lead                          | Lag                |           |             |            | Lead                      | 医毒丸的                | · "  | Lead                                    |
| Recall Mode None  Walk Time (s)  Flash Dont Walk (s)  Pedestrian Calls (#/hr)  Act Effct Green (s) 25.8  Actuated g/C Ratio 0.53   | the same               |  | Maria Caraca                  | vinit variation is |           |             |            |                           |                     | ***  |   |
| Walk Time (s) Flash Dont Walk (s) Pedestrian Calls (#/hr) Act Effct Green (s) 25.8 Actuated g/C Ratio 0.53   | 1.0                    |  | 1.0                           | 1.0                |           | 2.0         | 2.0        | 1.0                       | 2.0                 | 2.0  | 1.0                                     |
| Flash Dont Walk (s) Pedestrian Calls (#/hr) Act Effct Green (s) 25.8 Actuated g/C Ratio 0.53   | None                   |  | None                          | None               |           | None        | None       | None                      | None                | None   | None                                    |
| Pedestrian Calls (#/hr) Act Effct Green (s) 25.8 Actuated g/C Ratio 0.53   |                        |  |                               |                    |           | 7.0         | 7.0        |                           | 7.0                 | 7.0  |   |
| Act Effct Green (s) 25.8<br>Actuated g/C Ratio 0.53  |                        |  |                               |                    |           | 15.0        | 15.0       |                           | 15.0                | 15.0   | * |
| Actuated g/C Ratio 0.53  |                        |  |                               |                    |           | . 0         | 0          |                           | 0                   | 0  |   |
| A STATE OF THE PROPERTY OF THE | 23.9                   |  | 27.9                          | 24.9               |           |             | 13.6       | 21.2                      |                     | 13.6   | 20.2                                    |
| v/c Ratio 0.16   | 0.51                   |  | 0.57                          | 0.53               |           |             | 0.28       | 0.44                      | in the              | 0.28   | 0.42                                    |
|  | 0.46                   |  | 0.34                          | 0.44               |           |             | 0.37       | 0.18                      |                     | 0.49   | 0.15                                    |
| Uniform Delay, d1 3.4  | 9.5                    | MINE   | 3.5                           | 8.9                |           |             |            | 1.8                       |                     | 16.5   | 0.0                                     |
| Delay 5.4  | 12.4                   |  | 5.4                           | 11.3               |           |             | 16.1       | 3.0                       | 4                   | 16.7   | 2.4                                     |
| LOS A  | В                      |  | Α                             | В                  |           |             | В          | A                         | 11000               | В  | Δ.4                                     |
|  |                        |  |                               | 10.4               |           |             | 10.0       |                           |                     | 11.5   |   |
| Approach LOS   | 11.9                   |  |                               | В                  |           |             | В          |                           |                     | B  |   |
| ntersection Summary  | 11.9<br>B              | 91) Albania  | na kata ma                    | 51.45, WO 194 -    | 90000W    | Carlo Maria |            | Time superior             |                     | Р.   |   |
| rea Type: Other  |                        | Control of the last of the las | · 知识是                         | Marie Carlos       | Dest 1    |             |            |                           |                     | J. Santa                                     |   |

Cycle Length: 106

Actuated Cycle Length: 46.9

Natural Cycle: 60

Control Type: Actuated-Uncoordinated

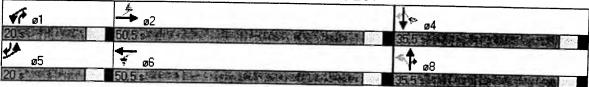
Maximum v/c Ratio: 0.49

Intersection Signal Delay: 11.0

Intersection Capacity Utilization 58.8%

Intersection LOS: B
ICU Level of Service A

Splits and Phases: 1056: NYS Route 104 & NYS Route 261



|                         | ٠        | -            | 7    | 1                | -     | *  | •             | †              | /          |  | . ↓                                   | 4                                     |
|-------------------------|----------|--------------|------|------------------|-------|--|---------------|----------------|------------|--|---------------------------------------|---------------------------------------|
| Lane Group              | EBL      | EBT          | EBR  | WBL              | WBT   | WBR  | NBL           | NBT            | NBF        | SBL  | SBT                                   | 000                                   |
| Lane Configurations     | ,        | ነ ተው         |      | 75               | 47>   |  | *             | PROPERTY IN    | INDI       | Service State of the State of t | COLUMN SCHOOL                         | SBR                                   |
| Ideal Flow (vphpl)      | 1900     |              | 1900 | 1900             | 1900  | 1900   |               |                |            |  | 1900                                  | 4000                                  |
| Storage Length (ft)     | 295      | 5            | 0    | 295              |       | 0  |               |                | 205        |  |                                       | 1900                                  |
| Storage Lanes           | <b>/</b> |              | 0    | 1.               |       |  |               | New Contract   | 200        |  | 100 67 29                             | 0                                     |
| Total Lost Time (s)     | 3.0      | 3.0          | 3.0  | 3.0              | 3.0   | 3.0  | ALL ALL AFTER | 3.0            |            |  |                                       | 0                                     |
| Leading Detector (ft)   | 60       | 5            |      | 60               | 5     |  | 60            | 60             |            |  |                                       | 3.0                                   |
| Trailing Detector (ft)  | 0        | 5            |      | 0                | 5     | 1.55-3.50  | 0             | 0              |            |  |                                       |                                       |
| Turning Speed (mph)     | 15       |              | 9    | 15               |       | 9  | 15            |                | 9          |  | _                                     | Series.                               |
| Satd. Flow (prot)       | 1805     | 3506         | 0    | 1787             | 3481  | 0  | 1770          | 1900           | 1615       |  | 1798                                  | 9                                     |
| Flt Permitted           | 0.114    |              |      | 0.115            |       |  | 0.161         | TOOU<br>Tegran | 1013       | 0.180  | 1790                                  | 0                                     |
| Satd. Flow (perm)       | 217      | 3506         | 0    | 216              | 3481  | 0  | 300           | 1900           | 1615       | 339  | 1798                                  |                                       |
| Right Turn on Red       |          |              | Yes  |                  |       | Yes  | nigarbania.   | 1000           | No         | 339  | 1798                                  | 0                                     |
| Satd. Flow (RTOR)       |          | 16           |      | ,                | 28    |  |               | Valence of the | 140        |  |                                       | No                                    |
| Link Speed (mph)        |          | 40           |      |                  | 40    |  |               | 30             |            | markaine.  | 35                                    | , kita-                               |
| Link Distance (ft)      |          | 3397         |      |                  | 1383  |  |               | 1526           |            |  | 857                                   |                                       |
| Travel Time (s)         |          | 57.9         |      | Frais -          | 23.6  |  |               | 34.7           | 3          |  | 16.7                                  |                                       |
| Volume (vph)            | 126      | 765          | 102  | 202              | 711   | 151  | 123           | 363            | 264        | 201  | 265                                   |                                       |
| Lane Group Flow (vph)   | 137      | 943          | 0    | 222              | 947   | 0  | 135           | 399            | 290        | 214  | 412                                   | 122                                   |
| Turn Type               | pm+pt    |              |      | pm+pt            |       |  | pm+pt         |                |            | pm+pt  | , 412 ,                               | <b>₹</b>                              |
| Protected Phases        | 5        | 2            |      | E. 63.14         | 43.46 | , v 44 jy s                                      | 3             | 8              | 1          | 7  | distribution in the                   | . 19                                  |
| Permitted Phases        | 2        |              |      | 6                |       |  | 8             |                | 8          | 4  | · · · · · · · · · · · · · · · · · · · | 1 2 to                                |
| Detector Phases         | 5        | · 2          |      | 9 5 5 <b>1</b> 6 | 6.    | (Respect)  | 3             | 8              | 1 1        | 3 (2) <b>7</b> :   | 174-3-A15                             |                                       |
| Minimum Initial (s)     | 2.0      | 33.0         |      | 2.0              | 33.0  | The National Association (National Association ) | 2.0           | 5.0            | 2.0        | 2.0  | 5.0                                   | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |
| Minimum Split (s)       | 9.0      | 38.0         |      | 9.0              | 38.0  |  | 7.0           | 27.0           | 9.0        | 7.0  | 27.0                                  | 1000                                  |
| Total Split (s)         | 15.0     | 38.0         | 0.0  | 15.0             | 38.0  | 0.0  | 17.0          | 30.0           | 15.0       | 17.0   | 30.0                                  | 0.0                                   |
| Total Split (%)         | 15%      | 38%          | 0%   | 15%              | 38%   | 0%   | 17%           | 30%            | 15%        | 17%  | 30%                                   | 0%                                    |
| Maximum Green (s)       | 10.0     | 33.0         |      | 10.0             | 33.0  |  | 12.0          | 25.0           | 10.0       | 12.0   | 25.0                                  | · 0,76                                |
| Yellow Time (s)         | 3.0      | 3.0          |      | 3.0              | 3.0   |  | 3.0           | 3.0            | 3.0        | 3.0  | 3.0                                   |                                       |
| All-Red Time (s)        | 2.0      | 2.0          |      | 2.0              | 2.0   |  | 2.0           | 2.0            | 2.0        | 2.0  | 2.0                                   | 11 (14 (174))                         |
| Lead/Lag                | Lead     | Lag          |      | Lead             | Lag   | 1300 K   | Lead          | Lag            | Lead       | Lead   | Lag                                   | There's                               |
| Lead-Lag Optimize?      |          |              |      |                  |       |  |               |                | . ;,       |  | Lay                                   | a salah ja                            |
| Vehicle Extension (s)   | 1.0      | 1.0          |      | 1.0              | 2.0   | · 经分别。   | 2.0           | 2.0            | 1.0        | 3.0  | 2.0                                   | 3038                                  |
| Recall Mode             | None     |              |      | None (           | Coord |  | N≏ne          | None           | None       | None   | None                                  | ાં કે કે                              |
| Walk Time (s)           | ,        | 7.0          |      |                  | 7.0   |  |               | 7.0            |            |  | 7.0                                   | - K. 194                              |
| Flash Dont Walk (s)     |          | 15.0         |      |                  | 15.0  |  |               | 15.0           | 20020000   | 3,77   | 15.0                                  |                                       |
| Pedestrian Calls (#/hr) |          | 0            |      | 4 - 1 1          | 0.4   |  | 全国。<br>1      | 0              | ectricity. |  | 0.0                                   |                                       |
| Act Effct Green (s)     | 48.3     | 38.9         |      | 51.2             | 40.4  |  | 35.9          | 24.8           | 38.6       | 40.3   | 27.1                                  |                                       |
| Actuated g/C Ratio      | 0.48     | 0.39         |      | 0.51             | 0.40  |  | 0.36          | 0.25           | 0.39       | 0.40   | 0.27                                  |                                       |
| v/c Ratio               | 0.54     | 0.69         |      | 0.79             | 0.67  |  | 0.50          | 0.85           | 0.46       | 0.65   | 0.85                                  | A- 95                                 |
| Uniform Delay, d1       | 12.4     | 25.1         |      | 15.0             | 23.6  |  | 18.9          | 35.7           | 22.8       | 19.6   | 34.4                                  | Carry S.                              |
| Delay                   | 14.7     | 26.4         |      | 42.9             | 15.7  |  | 18.3          | 38.5           | 22.5       | 19.8   | 41.1                                  |                                       |
| LOS                     | В        | C            | -    | D.               | В     |  | В             | D :            | C          | 13.0<br>B  | 41.1<br>D                             | ,                                     |
| Approach Delay          |          | 24.9         |      |                  | 20.9  | -1.3   | - 10          | 29.6           | 4.5        |  | 33.8                                  |                                       |
| Approach LOS            |          | C            |      |                  | С     |  |               | C              |            | - / 44.5   | 33.6<br>C                             |                                       |
| Intersection Summary    |          | PROPERTY AND |      | 13.745           |       | <b>等表现</b> 。                                     |               |                |            | <b>4.</b>  | CE ENERGY                             | \$4.R                                 |

Area Type:

Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 10 (10%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 26.2

Intersection Capacity Utilization 86.0%

Intersection LOS: C
ICU Level of Service D

Splits and Phases: 499: NYS Route 104 & N Greece

| <b>€</b> 01 | <b>♣</b> ø2                                     | <b>1</b> ø3     | ₩ ø4                         |
|-------------|---|-----------------|------------------------------|
| 153         | 38 8  | 17、张明显显示        |                              |
| ø5          | ₩ ø6  | <b>→</b> ø7     | <b>♦</b>                     |
| 153年時期      | 38 多达计划。1955年1955年1955年1955年1955年1955年1955年1955 | 17 382 18 18 19 | SU KATAN KATAN MENERAL KATAN |

|                        | و     |  | . +                                     | . 4                      | . \                      | . 1  |  |
|------------------------|-------|--|---|--------------------------|--------------------------|--|--|
| Lane Group             | EBI   | L EBT  | WBT                                     | WBR                      | SBI                      | SBR  |  |
| Lane Configurations    |       | <u>ነ</u> ተተ  | THE PERSON NAMED IN                     | Breech State of State of | A1100 1000 100 100 100   | Carried Control Control  | and the second   |
| Ideal Flow (vphpl)     | 1900  |  |   |                          |                          |  |  |
| Storage Length (ft)    | 300   | The state of the s | , ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | 215                      | the second of the        | and the second of  |  |
| Storage Lanes          |       |  |   |                          | and the same of the same | _  | and the first of the second of |
| Total Lost Time (s)    | 3.0   |  | 3.0                                     | - 1111                   |                          | A STATE OF THE STA |  |
| Leading Detector (ft)  | 60    |  |   |                          |                          |  |  |
| Trailing Detector (ft) |       | COLOR SERVICE STATE  |   |                          |                          | 20   |  |
| Turning Speed (mph)    | 15    |  |   | 9                        |                          | _  |  |
| Satd. Flow (prot)      | 1787  |  | 3574                                    |                          |                          | · 10.  |  |
| Flt Permitted          | 0.188 |  | 0074                                    | 1333                     | 0.950                    |  |  |
| Satd. Flow (perm)      | 354   |  | 3574                                    | 1599                     | 3467                     |  |  |
| Right Turn on Red      |       | 0074   | 0074                                    | Yes                      | 3407                     |  |  |
| Satd. Flow (RTOR)      |       |  |   | 255                      |                          | No   |  |
| Link Speed (mph)       |       | 40   | 40                                      | 255                      | 20                       | atili e sacen  | NO SECURE AND A CONTRACT OF THE CONTRACT OF TH |
| Link Distance (ft)     |       | 1383   | 1664                                    |                          | 30                       |  |  |
| Travel Time (s)        |       | 23.6   | 28.4                                    | *                        | 478                      | SESSOR SIGN  |  |
| Volume (vph)           | 170   |  | 908                                     | 352                      | 10.9                     |  |  |
| Lane Group Flow (vph)  | 181   | 1127   | 1020                                    | 396                      | 526                      | 157  | THE DATE OF THE U.S. A.  |
| Turn Type              | pm+pt |  | 1020                                    | Free                     | 591                      | 176  |  |
| Protected Phases       | 5     |  |   | riee                     | Siuliso de la            | pm+ov  |  |
| Permitted Phases       | 2     | 4  | 6                                       | F                        | 3. • 35 · <b>4</b>       | 5.   |  |
| Detector Phases        | 5     | 2  |   | Free                     | 4                        | 4  | Allow Market Control of the Control  |
| Minimum Initial (s)    | 2.0   | 5.0  | - 6                                     |                          | - 4                      | 5  |  |
| Minimum Split (s)      | 7.0   | 54.0   | 5.0                                     |                          | 5.0                      | 2.0  |  |
| Total Split (s)        | 16.0  | 70.0   | 54.0                                    |                          | 10.0                     | 7.0  |  |
| Total Split (%)        | 16%   |  | 54.0                                    | 0.0                      | 30.0                     | 16.0   | LANGUAR SOLON ACCOUNTS   |
| Maximum Green (s)      | 11.0  | Martin School Printer  | 54%                                     | 0%                       | 30%                      | 16%  |  |
| Yellow Time (s)        | 3.0   | 65.0   | 49.0                                    |                          | 25.0                     | 11.0   | All things of the second   |
| All-Red Time (s)       |       | 3.0  | 3.0                                     |                          | 3.0                      | 3.0  |  |
| _ead/Lag               | 2.0   | 2.0  | 2.0                                     | ·***********             | 2.0                      | 2.0  | With the second  |
| _ead-Lag Optimize?     | Lag   | 15.5   | Lead                                    | e see the                |                          | Lag  |  |
| /ehicle Extension (s)  | 0.0   |  |   |                          |                          | Management of the Contract of  | Minute Property and the Control of t |
| Recall Mode            | 2.0   | 1.0  | 1.0                                     |                          | 2.0                      | 2.0  |  |
| Act Effct Green (s)    |       | Coord  |   | 400.6                    | None                     | None   | 110,10   |
| Actuated g/C Ratio     |       | 71.5   | 55.5                                    | 100.0                    | 22.5                     | 38.5   |  |
| /c Ratio               | 0.72  | 0.72   | 0.56                                    | 1.00                     | 0.23                     | 0.39   |  |
|                        | 0.41  | 0.44   | 0.51                                    | 0.25                     | 0.76                     | 0.28   |  |
| Jniform Delay, d1      | 8.3   | 5.9  | 13.8                                    | 0.0                      | 36.2                     | 21.2   |  |
| Delay                  | 12.8  | 7.4  | 14.6                                    | 0.0                      | 35.8                     | 20.7   |  |
| .OS                    | В     | Α  | В                                       | Α                        | D                        | С  |  |
| Approach Delay         |       | 8.1  |   |                          | 32.4                     |  |  |
| Approach LOS           |       | Α  | В                                       |                          | С                        |  | The second secon |

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

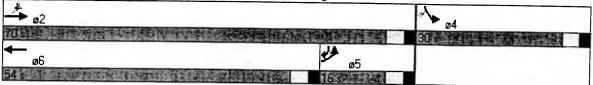
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow

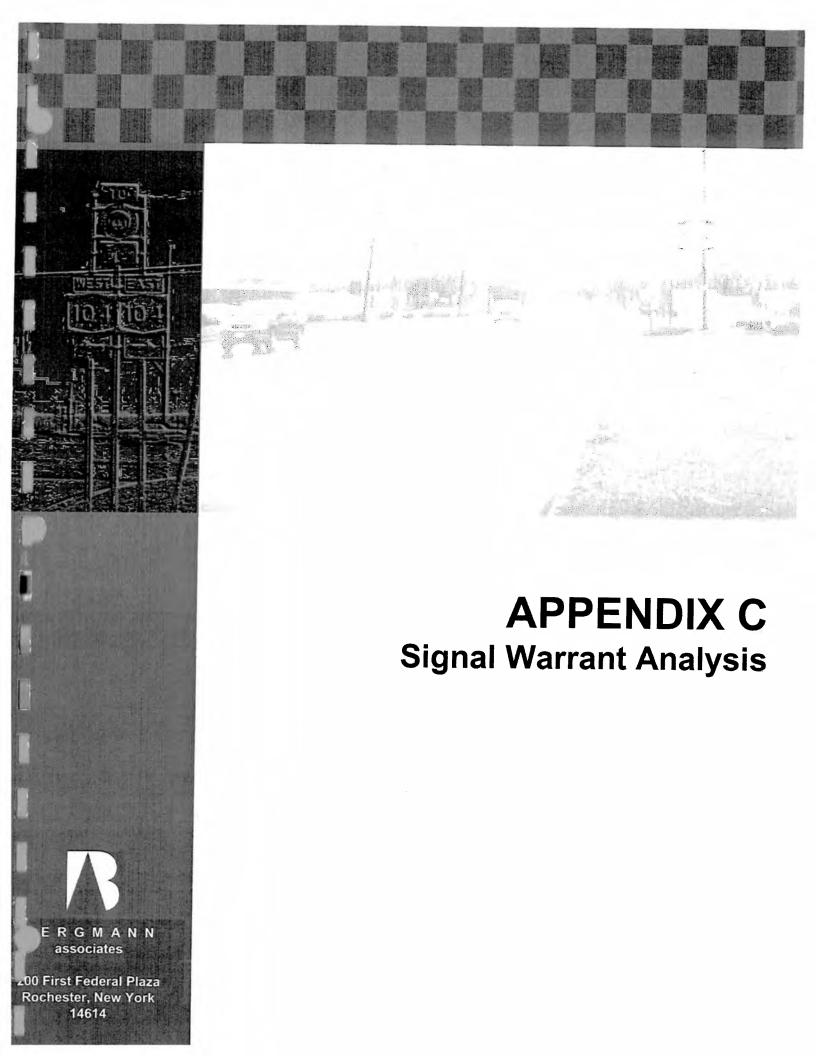
Natural Cycle: 75

Intersection Signal Delay: 14.4 Intersection LOS: B Intersection Capacity Utilization 65.1%

ICU Level of Service B

Splits and Phases: 1412: NYS Route 104 & Elmridge Plaza





### West Ridge Road - Greece SIGNAL WARRANT ANALYSIS 2006 FUTURE CONDITIONS

40 MPH = Average speed on ROUTE 104

southbound right turns are reduced by 40%

|                | AFS)   | ANT 2<br>MINOR<br>100*.8=80              | 80 vph YES  | Iours            |
|----------------|--|--|---|------------------|
|                | WARRANT 8<br>(80% OF WARRANTS 1.8.2 VOLUMES) | WARRANT 2  MAJOR MII  900*.8=720 100*    | 720 vph YES   | MET 8 HOURS      |
|                | WARRANT                                      | WARRANT 1<br>DR MINOR<br>=480 200*.8=160 | 160 vph YES   | HOURS            |
| WARRANTS MET   | %08)<br>———                                  | WARH<br>MAJOR<br>600*.8=480              | 480 vph YES   | MET 8 HOURS      |
| WARRA          | WARRANT 2                                    | MINOR<br>100 vph                         | *   | MET 8 HOURS      |
|                | WARE   | MAJOR<br>900 vph                         | FES S S S S S S S S S S S S S S S S S S   | MET 8 H          |
|                | IANT 1                                       | MINOR<br>200 vph                         | YES<br>YES<br>YES<br>YES<br>YES<br>YES  | HOURS            |
|                | WARRANT                                      | MAJOR<br>600 vph                         | YES<br>YES<br>YES<br>YES<br>YES<br>YES  | MET 8 HOURS      |
|                | MINOR ST.<br>NEW DRIVE                       | SB                                       | 214<br>342<br>458<br>475<br>510<br>516<br>527<br>550  |                  |
| VOLUMES - 2006 | MAJOR ST.<br>Route 104                       | 2-Way                                    | 1180<br>1076<br>1080<br>1135<br>1264<br>1317<br>1354<br>1417<br>1672<br>1743                                  |                  |
| NOF            |  | ÷  | 8:00 AM<br>11:00 AM<br>12:00 PM<br>1:00 PM<br>2:00 PM<br>3:00 PM<br>5:00 PM<br>7:00 PM<br>7:00 PM             |                  |
|                | TIME   | /OLUME CRITERIA:                         | 2222222222  | ATISFIED         |
|                |  | VOLUME                                   | 7:00 AM<br>8:00 AM<br>10:00 AM<br>11:00 AM<br>12:00 PM<br>2:00 PM<br>3:00 PM<br>4:00 PM<br>5:00 PM<br>6:00 PM | HOURS SATISFIED: |

## CONCLUSION

IN YEAR 2006:

WARRANT 1 IS MET 100% OF 8 HOUR CRITERIA

WARRANT 2 IS MET 100% OF 8 HOUR CRITERIA

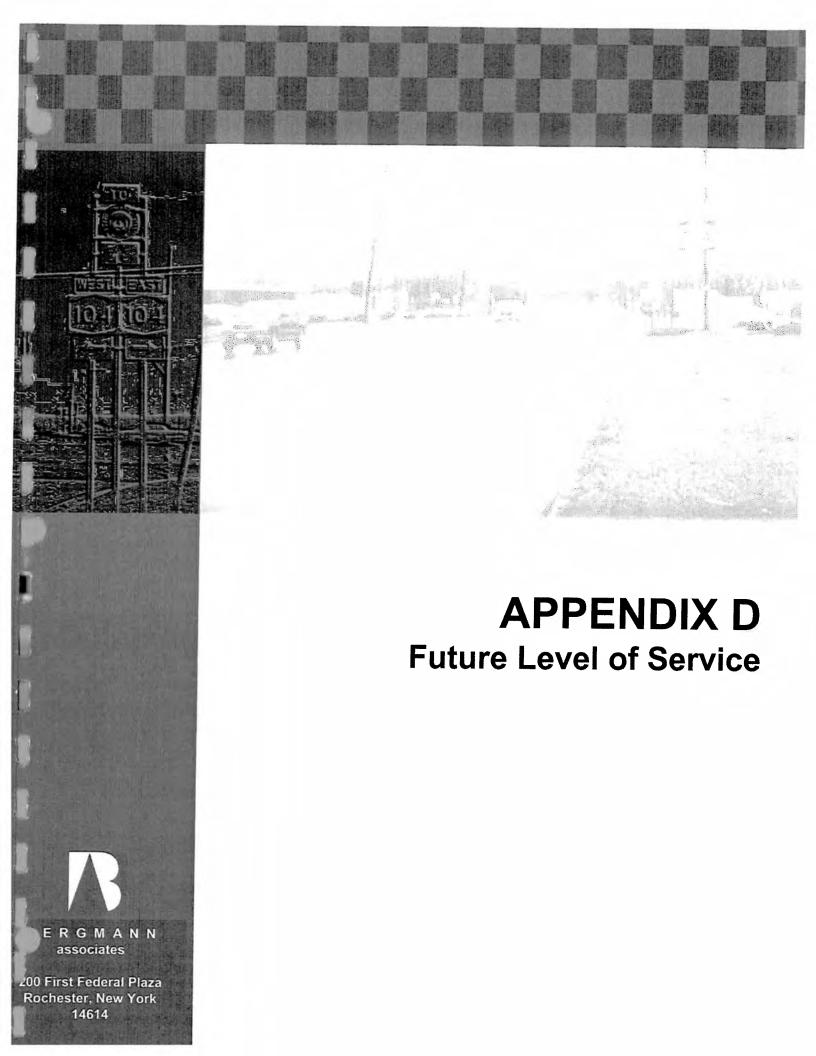
WARRANT 8 IS MET 100% OF 8 HOUR CRITERIA

# WARRANT DEFINITIONS:

WARRANT 1 = MINIMUM VEHICULAR VOLUME

WARRANT 2 = INTERRUPTION OF CONTINUOUS TRAFFIC

WARRANT 8 = COMBINATION OF WARRANTS (1&2)



**Level of Service** 

Future 2006 No-Build

Weekday Evening Peak Hour

|                         | •            | -                                       | *                  | •              | -          | *                    | 4        | <b>†</b>   | /              | · 💃  | . ↓  | 4          |
|-------------------------|--------------|---|--------------------|----------------|------------|----------------------|----------|------------|----------------|--|--|------------|
| Lane Group              | EBL          | EBT                                     | EBR                | WBL            | WBT        | WBR                  | NBL      | NBT        | NBF            | SBL  | SBT  | SBI        |
| Lane Configurations     | *            | i †\$                                   |                    | 75             | <b>↑</b> ₽ |                      |          | 4          |                | The second second  | - COD  |            |
| Ideal Flow (vphpl)      | 1900         | 1900                                    | 1900               | 1900           | 1900       | 1900                 | 1900     | 1900       |                |  |  |            |
| Storage Length (ft)     | 245          |   | 0                  | 170            |            | 0                    | 0        |            | 150            |  |  | 100        |
| Storage Lanes           |              |   | 0                  |                |            | 0                    | 0        | 4          |                |  |  |            |
| Total Lost Time (s)     | 3.0          | 3.0                                     | 3.0                | 3.0            | 3.0        | 3.0                  | 3.0      | 3.0        |                | a way to the state of the state | 4 4 4  |            |
| Leading Detector (ft)   | 60           | 60                                      |                    | 60             |            |                      | 60       | 60         |                |  |  |            |
| Trailing Detector (ft)  | 0            |   |                    | 0              | 0          |                      | 0        | 00         |                |  |  |            |
| Turning Speed (mph)     | 15           |   | 9                  | 15             |            | 9                    | 15       |            | - KN9          | _  | _  |            |
| Satd. Flow (prot)       | 1719         |   | 0                  | 1787           | 3273       | 0                    | 0        | 1802       | 1615           | 0  |  |            |
| Flt Permitted           | 0.105        |   | in see             | 0.167          |            |                      | STATE OF | 0.760      |                |  | 0.201  | 1538       |
| Satd. Flow (perm)       | 190          | 3436                                    | 0                  | 314            | 3273       | 0                    | 0        | 1383       | 1615           | 0  |  | 4.500      |
| Right Turn on Red       | BREES!       | WE STORES                               | Yes                |                |            | No                   |          |            | Yes            | U  | 377  | 1538       |
| Satd. Flow (RTOR)       |              | 8                                       |                    |                |            | 140                  |          | a set para | 59             | A.C. LON   |  | Yes        |
| Link Speed (mph)        |              | 40                                      |                    | STEEL STEEL    | 40         | ER ELAVIE            | d sta    | 40         | 39             |  | 150 1040   | 27         |
| Link Distance (ft)      |              | 1211                                    |                    | Carried Se     | 2287       |                      | -11,7,31 | 1361       | 3.5            |  | 40   |            |
| Travel Time (s)         |              | 20.6                                    |                    |                | 39.0       | SILEANS              |          | 23.2       |                |  | 1370   | 454 S - 11 |
| Volume (vph)            | 144          | 687                                     | 51                 | 204            | 877        | 186                  | 107      | 438        | 212            | 4.57   | 23.4   |            |
| Lane Group Flow (vph)   | 164          | 839                                     | 0                  | 227            | 1181       | 0                    | 0        | 641        | 249            | 157  | 102  | 126        |
| Turn Type               | pm+pt        | , ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |                    | pm+pt          |            | 7 to 1               | Perm     |            |                | 0  | 302  | 147        |
| Protected Phases        | 5            | 2                                       | in Willer I        | μι.ι , μι<br>• | 6          | - 1. No. 18 41       | r eiiii  | 8          | pm+ov          | Perm   | The State of the S | pm+ov      |
| Permitted Phases        | 2            |   | TS ( 1 )           | 6              |            | in the state of      | 8        | 0          |                |  | 4  | 5          |
| Detector Phases         | <b>5</b> .   | 2                                       | The state of       |                | 6          | 200445               | 8        | 8          | 8              | 4  |  | 4          |
| Minimum Initial (s)     | 2.0          | 15.0                                    | instruction at the | 2.0            | 15.0       |                      | 5.0      | 5.0        | Control of the | 4  | 4  | 5.4.5      |
| Minimum Split (s)       | 7.0          | 20.5                                    |                    | 7.0            | 20.5       | 9-140.1,563          | 27.5     | 27.5       | 2.0            | 5.0  | 5.0  | 2.0        |
| Total Split (s)         | 15.0         | 41.0                                    | 0.0                | 15.0           | 41.0       | 0.0                  | 50.0     | 50.0       | 7.0            | 27.5   | 27.5   | 7.0        |
| Total Split (%)         | 14%          | 39%                                     | 0%                 | 14%            | 39%        | 0.0                  | 47%      | 47%        | 15.0           | 50.0   | 50.0   | 15.0       |
| Maximum Green (s)       | 10.0         | 35.5                                    | 0.70               | 10.0           | 35.5       | U.70                 | 44.5     |            | 14%            | 47%  | 47%  | 14%        |
| Yellow Time (s)         | 3.5          | 3.5                                     | Mr. Sala           | 3.5            | 3.5        |                      | 3.5      | 44.5       | 10.0           | 44.5   | 44.5   | 10.0       |
| All-Red Time (s)        | 1.5          | 2.0                                     |                    | 1.5            | 2.0        |                      |          | 3.5        | 3.5            | 3.5  | 3.5  | 3,5        |
| _ead/Lag                | Lead         | Lag                                     | a water            | Lead           |            | ·> · ->:             | 2.0      | 2.0        | 1.5            | 2.0  | 2.0  | 1.5        |
| _ead-Lag Optimize?      | Lodd         | Lag                                     |                    | Leau           | Lag        | e Who year My a      | 445.18   | interior.  | Lead           |  |  | Lead       |
| /ehicle Extension (s)   | 1.0          | 1.0                                     |                    | 1.0            | 1.0        | A SECTION ASSESSMENT | . 0.0    | 0.0        | 15a 20a - 1    | · · · · · · · · · · · · · · · · · · ·  | * *, *, * · _ · _ · _ ·  |            |
| Recall Mode             | None         | None                                    | - 31568            | None           | None       |                      | 2.0      | 2.0        | 1.0            | 2.0  | 2.0  | 1.0        |
| Walk Time (s)           | None         | **************************************  |                    | NOHE           | NOTE       | of Charles           | None     | None       | None           | None   | None   | None       |
| Flash Dont Walk (s)     | and contains |   |                    | - 11/25/21/    |            |                      | 7.0      | 7.0        |                | 7.0  |  |            |
| Pedestrian Calls (#/hr) |              |   |                    |                | ALEXANDERS | wath is              | 15.0     | 15.0       |                | 15.0   | 15.0   |            |
| Act Effct Green (s)     | 47.5         | 37.0                                    |                    | 40 C           | 00.0       |                      | 0        | 0          |                | 0  | 4  |            |
| Actuated g/C Ratio      | 0.45         |   |                    | 49.5           | 38.0       |                      |          | 47.0       | 61.5           |  | 47.0   | 60.5       |
| /c Ratio                |              | 0.35                                    | 11-210             | 0.47           | 0.36       | 特格、作為                |          | 0.45       | 0.59           | *  | 0.45   | 0.58       |
| Jniform Delay, d1       | 0.68         | 0.69                                    |                    | 0.73           | 0.99       |                      |          | 1.03       | 0.26           |  | 1.79   | 0.16       |
|                         | 15.4         | 28.4                                    |                    | 15.5           | 33.1       |                      |          | 28.7       | 7.7            |  | 28.8   | 8.2        |
| Delay                   | 19.8         | 28.9                                    |                    | 20.3           | 53.9       |                      |          | 67.2       | 8.0            |  | 243.8  | 8.3        |
| OS                      | В            | C                                       |                    | C              | D          |                      |          | E          | Α              |  | F.   | A          |
| pproach Delay           | SE MAL.      | 27.4                                    |                    |                | 48.5       |                      |          | 50.6       |                |  | 166.7  |            |
| pproach LOS             |              | C                                       |                    |                | D          |                      |          | D          |                |  | F  |            |

Area Type:

Other

Cycle Length: 106

Actuated Cycle Length: 104.5

Natural Cycle: 70

Control Type: Actuated-Uncoordinated

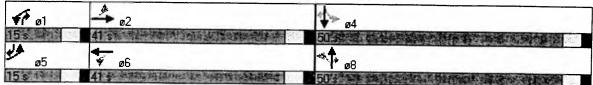
Maximum v/c Ratio: 1.79

Intersection Signal Delay: 57.5

Intersection Capacity Utilization 106.4%

Intersection LOS: E
ICU Level of Service F

Splits and Phases: 1056: NYS Route 104 & NYS Route 261



| Lane Group             | CDP                    | FD   | 14/55 | LANDE             |              |                |  |
|------------------------|------------------------|------|-------|-------------------|--------------|----------------|--|
| Lane Group             | EBL                    |      | ****  | # . · · · · · · · | SBL          | SBR            |  |
| Lane Configurations    | 4000<br><u>J</u>       |      |       |                   | ሻ            | 7              | 240.1.1.0  |
| Ideal Flow (vphpl)     | 1900                   |      | 1900  |                   | 1900         | 1900           |  |
| Storage Length (ft)    | 300                    |      |       | 200               | 0            | 0              |  |
| Storage Lanes          | 1                      |      |       |                   | * & 1        |                |  |
| Total Lost Time (s)    | 3.0                    |      |       |                   | 3.0          | 3.0            |  |
| Leading Detector (ft)  | 50                     |      |       | 50                | 50           | 50             |  |
| Trailing Detector (ft) | 0                      | C    |       | _                 | 0            | 0              |  |
| Turning Speed (mph)    | 15                     |      |       | 9                 | 15           | 9              |  |
| Satd. Flow (prot)      | 1770                   | 3574 | 3539  | 1583              | 1770         | 1583           | to the second to have to be to be seen in  |
| Flt Permitted          | 0.078                  |      |       |                   | 0.950        |                |  |
| Satd. Flow (perm)      | 145                    | 3574 | 3539  | 1583              | 1770         | 1583           |  |
| Right Turn on Red      |                        |      |       | Yes               |              | Yes            |  |
| Satd. Flow (RTOR)      |                        |      |       | 185               |              | 149            |  |
| Link Speed (mph)       |                        | 40   | 40    |                   | 30           | Carrent.       |  |
| Link Distance (ft)     |                        | 1046 |       |                   | 419          | Author VEVISOR | Secretary and deposits of the secretary of the second secretary  |
| Travel Time (s)        |                        | 17.8 | 17.9  |                   | 9.5          |                |  |
| Volume (vph)           | 115                    | 941  | 1133  | 211               | 213          | 134            |  |
| Lane Group Flow (vph)  | 142                    | 1162 | 1218  | 227               | 237          | 149            | COMMISSION MARKS OF THE RESIDENCE OF THE SECOND PROPERTY.  |
|                        | pm+pt                  |      |       | Perm              | 201          | Perm           |  |
| Protected Phases       | 5                      | 2    | 6     | I GIIII           | 4            | r Cilli        | TO MAKE THE CALL MAKE A STATE OF THE CALL  |
| Permitted Phases       | 2                      |      |       | 6                 | 50 F 14 Sec. |                |  |
| Detector Phases        | 5                      | 2    | 6     | 6                 | 4            | 4<br>(57) 200  | E-13/Secure Performance New Yorks - Agreement  |
| Minimum Initial (s)    | 4.0                    | 10.0 | 10.0  | 10.0              | 4.0          | 4              |  |
| Minimum Split (s)      | 9.0                    | 15.0 | 15.0  | 15.0              |              | 4.0            | In the Committee of the |
| Fotal Split (s)        | 25.0                   | 76.0 |       |                   | 9.0          | 9.0            |  |
| Fotal Split (%)        | 23%                    |      | 51.0  | 51.0              | 34.0         | 34.0           | SURPLIES AND A STATE OF THE STA |
| Maximum Green (s)      |                        | 69%  | 46%   | 46%               | 31%          | 31%            |  |
|                        | 20.0                   | 71.0 | 46.0  | 46.0              | 29.0         | 29.0           | Waster Character Control   |
| /ellow Time (s)        | 3.0                    | 3.0  | 3.0   | 3.0               | 3.0          | 3.0            |  |
| All-Red Time (s)       | 2.0                    | 2.0  | 2.0   | 2.0               | 2.0          | 2.0            |  |
| ead/Lag                | Lead                   |      | Lag   | Lag               |              |                |  |
| ead-Lag Optimize?      | ineria de la constante |      |       |                   |              |                |  |
| /ehicle Extension (s)  | 1.0                    | 1.0  | 1.0   | 1.0               | 2.0          | 2.0            |  |
| Recall Mode            |                        |      | Coord |                   | Min          | Min            |  |
| act Effct Green (s)    | 83.8                   | 83.8 | 71.8  | 71.8              | 20.3         | 20.3           |  |
| ctuated g/C Ratio      | 0.76                   | 0.76 | 0.65  | 0.65              | 0.18         | 0.18           |  |
| /c Ratio               | 0.59                   | 0.43 | 0.53  | 0.21              | 0.73         | 0.36           |  |
| Iniform Delay, d1      | 3.4                    | 4.7  | 10.1  | 1.3               | 42.2         | 0.0            | AND THE PERSONNELS OF A STREET WAY   |
| elay                   | 11.0                   | 5.2  | 6.4   | 0.6               | 41.5         | 5.8            | Balkingka, a files, as as societies.   |
| os                     | В                      | A    | A     | Α                 | D            | Α              | stand on a stand of the stand of the state of  |
| pproach Delay          | 2017 WHE               | 5.9  | 5.5   | State water       | 27.7         | andire as      |  |
| pproach LOS            |                        | A    | Α     |                   | C            | A 100 July 1   |  |

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 1 (1%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow

Natural Cycle: 45

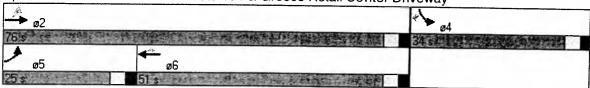
Splits and Phases:

Intersection Signal Delay: 8.4

Intersection LOS: A ICU Level of Service B

Intersection Capacity Utilization 64.7%

5: NYS Route 104 & Greece Retail Center Driveway



|                        | ۶         |       | 7            | 1                                     | -        | •           |                  | †                                     | ~        | <b>,</b> | . ↓        | 4     |
|------------------------|-----------|-------|--------------|---------------------------------------|----------|-------------|------------------|---------------------------------------|----------|----------|------------|-------|
| Lane Group             | EBL       | EBT   | EBR          | WBL                                   | WBT      | WBR         | NBL              | NBT                                   | NBF      | SBL      | SBT        | SBR   |
| Lane Configurations    | T         | ተተው   |              | Th.                                   | ተተ4      |             | ATT THE PARTY OF | 7777 100 1                            |          |          |            | 7     |
| Ideal Flow (vphpl)     | 1900      |       | 1900         |                                       |          |             |                  |                                       |          |          | . ,        |       |
| Storage Length (ft)    | 295       |       | 0            | 295                                   | -        | 295         |                  |                                       | 205      |          |            | 200   |
| Storage Lanes          | i 1       |       | . 0          |                                       | Mar da e | 3 8 6 J 6 1 |                  |                                       | 1        |          |            | 200   |
| Total Lost Time (s)    | 3.0       | 3.0   | 3.0          | 3.0                                   | 3.0      | 3.0         | 3.0              | 3.0                                   |          |          |            | 3.0   |
| Leading Detector (ft)  | 60        | 5.    |              | 60                                    | 5        |             |                  |                                       |          |          |            |       |
| Trailing Detector (ft) | 0         | 5     |              | 0                                     | 44-1-1   |             | A Alleria        | 0                                     |          |          |            |       |
| Turning Speed (mph)    | 15        |       | 9            | 15                                    |          | 9           | 15               | · · · · · · · · · · · · · · · · · · · | 9        | -        | _          | 9     |
| Satd. Flow (prot)      | 1805      | 5007  | 0            | 1805                                  | 5085     |             |                  | 3574                                  |          |          |            | 1599  |
| Flt Permitted          | 0.950     |       |              | 0.950                                 |          |             | 0.149            |                                       |          | 0.290    |            | 1000  |
| Satd. Flow (perm)      | 1805      | 5007  | 0            | 1805                                  | 5085     | 1455        | 278              | 3574                                  | 1583     |          |            | 1599  |
| Right Turn on Red      | evete.    |       | Yes          |                                       |          | Yes         |                  | Palification)                         | No       |          | 1001       | No    |
| Satd. Flow (RTOR)      |           | 40    |              |                                       |          | 122         |                  |                                       |          |          |            | 140   |
| Link Speed (mph)       |           | 40    | EE E         | · · · · · · · · · · · · · · · · · · · | 40       |             |                  | 35                                    |          |          | 35         |       |
| Link Distance (ft)     |           | 1299  |              |                                       | 1383     |             |                  | 647                                   |          |          | 458        |       |
| Travel Time (s)        |           | 22.1  |              |                                       | 23.6     |             |                  | 12.6                                  |          | ST 430   | 8.9        |       |
| Volume (vph)           | 249       | 937   | 191          | 206                                   | 960      | 187         | 293              | 515                                   |          | 254      | 318        | 277   |
| Lane Group Flow (vph)  | 286       | 1297  | 0            | 219                                   | 1021     | 199         | 308              | 542                                   |          | 289      | 361        | 315   |
| Turn Type              | Prot      |       |              | Prot                                  |          | pm+ov       |                  | modern 12                             |          | pm+pt    | 501        | pm+ov |
| Protected Phases       | 5         | 2     |              | ণ <sub>ক</sub> াবাং                   | 6        | 7           | 3                | 8                                     |          | 7        | 4          | 5 3 5 |
| Permitted Phases       |           |       |              | 4                                     |          | 6           | 8                | ant-w E                               | 8        | 4        |            | 4     |
| Detector Phases        | 5         | 2     |              | Brown.                                | . 6      | 7           | 3                | 8                                     | 1        | 7        | 4          | 5     |
| Minimum Initial (s)    | 2.0       | 5.0   | ,            | 2.0                                   | 5.0      | 2.0         | 2.0              | 5.0                                   | 2.0      | 2.0      | 5.0        | 2.0   |
| Minimum Split (s)      | 9.0       | 29.0  |              | 9.0                                   | 29.0     | 7.0         | 7.0              | 29.0                                  | 9.0      | 7.0      | 29.0       | 9.0   |
| Total Split (s)        | 26.0      | 36.0  | 0.0          | 26.0                                  | 36.0     | 16.0        | 19.0             | 32.0                                  | 26.0     | 16.0     | 29.0       | 26.0  |
| Total Split (%)        | 24%       | 33%   | 0%           | 24%                                   | 33%      | 15%         | 17%              | 29%                                   | 24%      | 15%      | 26%        | 24%   |
| Maximum Green (s)      | 21.0      | 31.0  | 14 1410 2 24 | 21.0                                  | 31.0     | 11.0        | 14.0             | 27.0                                  | 21.0     | 11.0     | 24.0       | 21.0  |
| Yellow Time (s)        | 3.0       | 3.0   |              | 3.0                                   | 3.0      | 3.0         | 3.0              | 3.0                                   | 3.0      | 3.0      | 3.0        | 3.0   |
| All-Red Time (s)       | 2.0       | 2.0   |              | 2.0                                   | 2.0      | 2.0         | 2.0              | 2.0                                   | 2.0      | 2.0      | 2.0        | 2.0   |
| Lead/Lag               | Lead      | Lag   |              | Lead                                  | Lag      | Lead        | Lead             | Lag                                   | Lead     | Lead     | Lag        | Lead  |
| Lead-Lag Optimize?     |           |       |              |                                       |          |             |                  |                                       |          |          | <u>-</u> 9 | Loud  |
| Vehicle Extension (s)  | 1.0       | 1.0   |              | 1.0                                   | 2.0      | 3.0         | 2.0              | 2.0                                   | 1.0      | 3.0      | 2.0        | 1.0   |
| Recall Mode            | None      | Coord |              | None                                  | Coord    | None        | None             | None                                  | None     | None     | None       | None  |
| Act Effct Green (s)    | 20.8      | 39.7  |              | 17.8                                  | 36.8     | 52.7        | 43.4             | 27.5                                  | 48.3     | 37.5     | 24.4       | 48.3  |
| Actuated g/C Ratio     | 0.19      | 0.36  |              | 0.16                                  | 0.33     | 0.48        | 0.39             | 0.25                                  | 0.44     | 0.34     | 0.22       | 0.44  |
| v/c Ratio              | 0.84      | 0.71  |              | 0.75                                  | 0.60     | 0.26        | 0.94             | 0.61                                  | 0.32     | 0.87     | 0.86       | 0.45  |
| Uniform Delay, d1      | 42.9      | 29.0  |              | 44.0                                  | 30.4     | 6.1         | 26.7             | 36.5                                  | 20.2     | 24.4     | 41.2       | 21.6  |
| Delay                  | 42.1      | 32.7  |              | 31.7                                  | 27.0     | 15.1        | 53.3             | 36.4                                  | 19.2     | 37.1     | 46.2       | 21.1  |
| LOS                    | D         | С     |              | С                                     | C        | В           | D.O              | D.4                                   | В        | D D      | 40.2<br>D  | C C   |
| Approach Delay         | 1.1.1.1.1 | 34.4  | CAS II       |                                       | 26.1     |             |                  | 37.7                                  | Below it |          | 35.3       |       |
| Approach LOS           |           | С     | 32211 131    |                                       | C        |             | 7                | D                                     |          |          | D          | 117.4 |

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 34 (31%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow

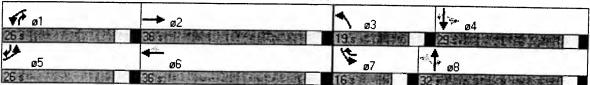
Natural Cycle: 90

Intersection Signal Delay: 32.9

Intersection Capacity Utilization 87.3%

Intersection LOS: C ICU Level of Service D

Splits and Phases: 499: NYS Route 104 & N Greece



|                        |       | -             |   |          | *     | *     |  |
|------------------------|-------|---------------|---|----------|-------|-------|--|
| Lane Group             | EBL   | EBT           | WBT                                     | WBR      | SBL   | SBR   |  |
| Lane Configurations    | 7     | 5 <b>ተ</b> ተተ | * | 7        | KA    | 7     | The second secon |
| Ideal Flow (vphpl)     | 1900  | 1900          |   |          | 190C  |       | Andrew Control of the |
| Storage Length (ft)    | 300   | )             |   | 215      | C     | 0     |  |
| Storage Lanes          | 1     |               |   | Sec. 5.1 | 2     |       | THE POLICE AND A CONTROL OF THE PARK.  |
| Total Lost Time (s)    | 3.0   | 3.0           | 3.0                                     | 3.0      | 3.0   | 3.0   |  |
| Leading Detector (ft)  | 60    | 5             | 5                                       | . 5      | 60    | 60    |  |
| Trailing Detector (ft) | 0     | 5             | 5                                       | 5        | 0     | 0     |  |
| Turning Speed (mph)    | 15    |               |   | 9        | 15    | 9     |  |
| Satd. Flow (prot)      | 1805  | 5085          | 5136                                    | 1615     | 3502  | 1615  |  |
| Flt Permitted          | 0.950 |               |   |          | 0.950 |       |  |
| Satd. Flow (perm)      | 1805  | 5085          | 5136                                    | 1615     | 3502  | 1615  |  |
| Right Turn on Red      |       |               |   | Yes      |       | No    |  |
| Satd. Flow (RTOR)      |       |               |   | 251      |       |       | and the relation of the second control of any  |
| Link Speed (mph)       | 1754  | 40            | 40                                      |          | 30    |       | Control of the Contro |
| Link Distance (ft)     |       | 1383          | 1664                                    |          | 478   |       |  |
| Travel Time (s)        |       | 23.6          | 28.4                                    |          | 10.9  |       |  |
| Volume (vph)           | 148   | 1254          | 1199                                    | 351      | 418   | 153   |  |
| ane Group Flow (vph)   | 163   | 1378          | 1347                                    | 394      | 449   | 165   |  |
| Turn Type              | Prot  |               |   | Free     |       | pm+ov | error-on-united and private and present the first stable   |
| Protected Phases       | 5     | 2             | 6                                       |          | 4     | × 5   |  |
| Permitted Phases       |       |               |   | Free     | 4     | 4     |  |
| Detector Phases        | 5     | 2             | 6                                       |          | 4     | -5    |  |
| Minimum Initial (s)    | 2.0   | 5.0           | 5.0                                     |          | 5.0   | 2.0   |  |
| Minimum Split (s)      | 7.0   | 54.0          | 54.0                                    |          | 10.0  | 7.0   | Configuration of the second of the second  |
| Total Split (s)        | 25.0  | 82.0          | 57.0                                    | 0.0      | 28.0  | 25.0  |  |
| Total Split (%)        | 23%   | 75%           | 52%                                     | . 0%     | 25%   | 23%   |  |
| Maximum Green (s)      | 20.0  | 77.0          | 52.0                                    |          | 23.0  | 20.0  |  |
| ellow Time (s)         | 3.0   | 3.0           | 3.0                                     |          | 3.0   | 3.0   |  |
| All-Red Time (s)       | 2.0   | 2.0           | 2.0                                     |          | 2.0   | 2.0   |  |
| .ead/Lag               | Lead  |               | Lag                                     |          |       | Lead  |  |
| .ead-Lag Optimize?     |       |               |   |          |       |       |  |
| ehicle Extension (s)   | 2.0   | 1.0           | 1.0                                     |          | 2.0   | 2.0   |  |
| Recall Mode            | None  | Coord         | Coord                                   |          | None  | None  |  |
| ct Effct Green (s)     | 15.7  | 84.0          | 65.4                                    | 110.0    | 20.0  | 38.6  |  |
| ctuated g/C Ratio      | 0.14  | 0.76          | 0.59                                    | 1.00     | 0.18  | 0.35  |  |
| /c Ratio               | 0.63  | 0.35          | 0.44                                    | 0.24     | 0.71  | 0.29  |  |
| Iniform Delay, d1      | 44.5  | 4.2           | 12.2                                    | 0.0      | 42.2  | 25.8  |  |
| elay.                  | 33.2  | 3.2           | 13.5                                    | 0.0      | 41.8  | 24.3  |  |
| os                     | С     | Α             | В                                       | Α        | D     | C     |  |
| pproach Delay          |       | 6.4           | 10.4                                    |          | 37.1  |       |  |
| pproach LOS            |       | A             | В                                       |          | D     |       |  |

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

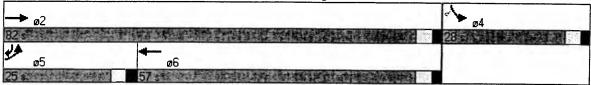
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow, Master Intersection

Natural Cycle: 80

Intersection Signal Delay: 13.0 Intersection Capacity Utilization 57.9%

Intersection LOS: B
ICU Level of Service A

Splits and Phases: 1412: NYS Route 104 & Elmridge Plaza



**Level of Service** 

Future 2006 No-Build

Saturday Mid-day Peak Hour

|                         | •            | $\rightarrow$ | •           | 1      | -           | •              | 1                                     | <b>†</b>          | -                    | 1  | . ↓                                      | 4                  |
|-------------------------|--------------|---------------|-------------|--------|-------------|----------------|---------------------------------------|-------------------|----------------------|--|--|--------------------|
| Lane Group              | EBL          | EBT           | EBR         | WBL    | WBT         | WBR            | NBL                                   | NBT               | NBR                  | SBL  | SBT                                      | SBF                |
| Lane Configurations     | ¥            | <b>†</b>      |             | ሻ      | <b>†</b> ‡  |                |                                       | 4                 | California Transfer  |  | 4  | St Alexander - Co. |
| Ideal Flow (vphpl)      | 1900         | 1900          | 1900        | 1900   | 1900        | 1900           | 1900                                  |                   |                      | 1900   |  |                    |
| Storage Length (ft)     | 245          |               | 0           | 170    |             | 0              | 0                                     |                   | 150                  | 0  | 12411 71.5                               | 100                |
| Storage Lanes           | 4 4.1.       |               | 0           | 1      |             | 0              | 0                                     |                   | <b>31.</b>           | 0  |  |                    |
| Total Lost Time (s)     | 3.0          | 3.0           | 3.0         | 3.0    | 3.0         | 3.0            | 3.0                                   | 3.0               | 3.0                  | 3.0  | 3.0                                      | 3.0                |
| Leading Detector (ft)   | 60           | 60            |             | 60     | 60          |                | 60,                                   | 60                |                      | 60   | 60                                       |                    |
| Trailing Detector (ft)  | 0            | 0             |             | 0      | 0           |                | 0                                     | 0                 | 0                    | 0  | 0  | (                  |
| Turning Speed (mph)     | 15           |               | 9           | 15     |             | 9              | 15                                    |                   | 9                    | 15   |  | A Trail            |
| Satd. Flow (prot)       | 1805         | 3544          | 0           | 1787   | 3477        | 0              | 0                                     | 1839              | 1583                 | 0  | 1789                                     | 1568               |
| Flt Permitted           | 0.159        |               |             | 0.164  |             |                |                                       | 0.557             |                      |  | 0.556                                    |                    |
| Satd. Flow (perm)       | 302          | 3544          | 0           | 309    | 3477        | 0              | 0                                     | 1038              | 1583                 | 0  | 1021                                     | 1568               |
| Right Turn on Red       |              |               | Yes         |        |             | No             |                                       |                   | Yes                  |  |  | Yes                |
| Satd. Flow (RTOR)       |              | 7             |             |        |             |                |                                       |                   | 68                   |  |  | 9                  |
| Link Speed (mph)        |              | 40            |             |        | 40          | 10 7 1 1       |                                       | 40                |                      | 1 /2 -                                       | 40                                       |                    |
| Link Distance (ft)      |              | 1211          |             |        | 2287        |                |                                       | 1361              |                      |  | 1370                                     |                    |
| Travel Time (s)         |              | 20.6          |             |        | 39.0        |                |                                       | 23.2              |                      |  | 23.4                                     | No ex              |
| Volume (vph)            | 81           | 850           | 46          | 173    | 770         | 149            | 56                                    | 154               | 171                  | 177  | 152                                      | 121                |
| Lane Group Flow (vph)   | 89           | 985           | 0           | 188    | 999         | 0              | 0                                     | 221               | 180                  | 0  | 383                                      | 141                |
| Turn Type               | pm+pt        |               |             | pm+pt  |             |                | Perm                                  | *,                | pm+ov                | Perm   | Α'                                       | pm+ov              |
| Protected Phases        | 5            | . 2           |             | 1      | 6           |                |                                       | 8                 |                      |  | 4  |                    |
| Permitted Phases        | 2            |               |             | 6      |             |                | 8                                     |                   | 8                    | 4  |  | 4                  |
| Detector Phases         | 5            | 2             |             | 18 1 · | 6           |                | 8                                     | 8                 |                      | 4  | 4  | <b>.</b>           |
| Minimum Initial (s)     | 2.0          | 15.0          |             | 2.0    | 15.0        | 7,11           | 5.0                                   | 5.0               | 2.0                  | 5.0  | 5.0                                      | 2.0                |
| Minimum Split (s)       | 7.0          | 20.5          |             | 7.0    | 20.5        |                | 27.5                                  | 27.5              | 7.0                  | 27.5   | 27.5                                     | 7.0                |
| Total Split (s)         | 20.0         | 50.5          | 0.0         | 20.0   | 50.5        | 0.0            | 35.5                                  | 35.5              | 20.0                 | 35.5   | 35.5                                     | 20.0               |
| Total Split (%)         | 19%          | 48%           | <b>6.0%</b> | 19%    | 48%         | 0%             | 33%                                   | 33%               | 19%                  | 33%  | 33%                                      | 19%                |
| Maximum Green (s)       | 15.0         | 45.0          |             | 15.0   | 45.0        | "              | 30.0                                  | 30.0              | 15.0                 | 30.0   | 30.0                                     | 15.0               |
| Yellow Time (s)         | 3.5          | 3.5           |             | 3.5    | 3.5         |                | 3.5                                   | 3.5               | 3.5                  | 3.5  | 3.5                                      |                    |
| All-Red Time (s)        | 1.5          | 2.0           |             | 1.5    | 2.0         | No Market Land | 2.0                                   | 2.0               | 1.5                  | 2.0  | 2.0                                      | 1.5                |
| Lead/Lag                | Lead         | Lag           |             | Lead   | Lag         |                |                                       |                   | Lead                 |  |  | Lead               |
| Lead-Lag Optimize?      |              |               |             |        |             |                | , , , , , , , , , , , , , , , , , , , | £ a <b>v</b> e.'− |                      | 14 A. S. | 74 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | <i>⊕ =47.57</i>    |
| Vehicle Extension (s)   | 1.0          | 1.0           |             | 1.0    | 1.0         |                | 2.0                                   | 2.0               | 1.0                  | 2.0  | 2.0                                      | 1.0                |
| Recall Mode             | None         | None          |             | None   | None        |                | None                                  | None              | None                 | None   | None                                     | None               |
| Walk Time (s)           |              |               |             | 4.54   |             |                | 7.0                                   | 7.0               |                      | 7.0  | 7.0                                      |                    |
| Flash Dont Walk (s)     |              |               |             |        |             |                | 15.0                                  | 15.0              | 21                   | 15.0   | 15.0                                     | Section 1          |
| Pedestrian Calls (#/hr) |              |               |             |        | je rekti ka |                | 0                                     | 0                 | 21 <b>- 3</b> 3 - 10 | 0  | 0  |                    |
| Act Effct Green (s)     | 35.0         | 27.5          |             | 40.2   | 32.1        | 100            |                                       | 32.9              | 45.9                 | · · · · · · · · · · · · · · · · · · ·        | 32.9                                     | 42.5               |
| Actuated g/C Ratio      | 0.43         | 0.35          |             | 0.51   | 0.40        |                |                                       | 0.41              | 0.58                 |  | 0.41                                     | 0.52               |
| v/c Ratio               | 0.33         | 0.80          |             | 0.55   | 0.71        |                |                                       | 0.51              | 0.19                 | 250  | 0.91                                     | 0.16               |
| Uniform Delay, d1       | 10.2         | 22.8          |             | 10.5   | 20.4        | \$10 14 PM     |                                       | 17.9              | 5.0                  |  | 22.5                                     | 3.3                |
| Delay                   | 9.9          | 23.2          |             | 10.2   | 20.3        |                |                                       | 21.0              | 6.1                  | TE PPACE.                                    | 50.2                                     | 4.9                |
| LOS                     | A            | C             |             | В      | C           |                |                                       | C                 | A                    |  | D  | 4.5<br>A           |
| Approach Delay          | ar a rap has | 22.1          |             |        | 18.7        |                |                                       | 14.3              |                      |  | 38.0                                     | - C 17 C           |
| Approach LOS            |              | C             |             |        | В           |                |                                       | В                 |                      |  | D  |                    |
| Intersection Summary    |              |               |             |        |             |                |                                       |                   | a a sa               |  |  |                    |

Area Type:

Other

Cycle Length: 106

Actuated Cycle Length: 79.5

Natural Cycle: 60

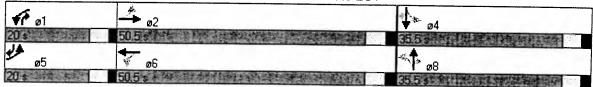
Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.91

Intersection Signal Delay: 22.5
Intersection Capacity Utilization 83.7%

Intersection LOS: C
ICU Level of Service D

Splits and Phases: 1056: NYS Route 104 & NYS Route 261



|                        |       |                   |                    | _           | -             | *         |  |
|------------------------|-------|-------------------|--------------------|-------------|---------------|-----------|--|
| Lane Group             | EBL   | . EB              | r wb1              | WBR         | SBL           | SBR       |  |
| Lane Configurations    | T.    |                   | <u> </u>           | 1           | *             | #         | The second secon |
| Ideal Flow (vphpl)     | 1900  | 1900              | 1900               | 1900        | 1900          | 1900      |  |
| Storage Length (ft)    | 300   |                   |                    | 200         | 0             | 0         |  |
| Storage Lanes          |       |                   |                    |             |               |           |  |
| Total Lost Time (s)    | 3.0   | 3.0               | 3.0                | 3.0         | 3.0           | 3.0       |  |
| Leading Detector (ft)  | 50    | 50                | 50                 |             | 50            | 50        |  |
| Trailing Detector (ft) | 0     | C                 | C                  | 0           | 0             | 0         |  |
| Turning Speed (mph)    | 15    |                   |                    | 9           | 15            | 9         |  |
| Satd. Flow (prot)      | 1770  | 3574              | 3574               |             | 1770          | 1583      |  |
| Flt Permitted          | 0.108 |                   |                    |             | 0.950         |           | Penedicting websers the execution in   |
| Satd. Flow (perm)      | 201   | 3574              | 3574               | 1583        | 1770          | 1583      | Charles State Association Control of Control   |
| Right Turn on Red      |       |                   |                    | Yes         |               | Yes       |  |
| Satd. Flow (RTOR)      |       |                   |                    | 382         |               | 226       | are exercised to a market and the self-and   |
| ink Speed (mph)        |       | 40                | 40                 |             | 30            | Carlon Pá |  |
| ink Distance (ft)      |       | 1046              |                    |             | 419           | -2-02,24  |  |
| Fravel Time (s)        |       | 17.8              |                    |             | 9.5           |           |  |
| /olume (vph)           | 270   | 928               |                    | 419         | 449           | 203       |  |
| ane Group Flow (vph)   | 293   | 1009              |                    |             | 499           | 226       | SECURE PROPERTY OF A SECURE OF A SECURE  |
| Turn Type              | pm+pt | , , , , , , , , , | 1. T. T. T. T.     | Perm        |               | Perm      |  |
| Protected Phases       | 5     | 2                 | 6                  |             | 4             |           |  |
| Permitted Phases       | 2     | O CONTRACTOR      | THE REAL PROPERTY. | 6           |               | 4         |  |
| Detector Phases        | 5     | 2                 | 6.                 | - 6.1       | 4             | · 4 · .   |  |
| Minimum Initial (s)    | 4.0   | 10.0              | 10.0               | 10.0        | 4.0           | 4.0       |  |
| /linimum Split (s)     | 9.0   | 15.0              | 15.0               | 15.0        | 9.0           | 9.0       |  |
| otal Split (s)         | 28.0  | 65.0              | 37.0               | 37.0        | 45.0          | 45.0      |  |
| otal Split (%)         | 25%   | 59%               | 34%                | 34%         | 41%           | 41%       |  |
| faximum Green (s)      | 23.0  | 60.0              | 32.0               | 32.0        | 40.0          | 40.0      |  |
| ellow Time (s)         | 3.0   | 3.0               | 3.0                | 3.0         | 3.0           | 3.0       |  |
| II-Red Time (s)        | 2.0   | 2.0               | 2.0                | 2.0         | 2.0           | 2.0       |  |
| ead/Lag                | Lead  | are the same      | Lag                | Lag         |               |           |  |
| ead-Lag Optimize?      |       |                   | 9                  | <b></b> 9 ; | F (1) (1) (1) |           |  |
| ehicle Extension (s)   | 3.0   | 3.0               | 3.0                | 3.0         | 3.0           | 3.0       | ing in the second of the secon |
| ecall Mode             |       | Coord             |                    | Coord       | Min           | Min       |  |
| ct Effct Green (s)     | 67.7  | 67.7              | 45.9               | 45.9        | 36.4          | 36.4      | 4  |
| ctuated g/C Ratio      | 0.62  | 0.62              | 0.42               | 0.42        | 0.33          | 0.33      |  |
| c Ratio                | 0.75  | 0.46              | 0.65               | 0.52        | 0.85          | 0.33      | a file beating a confirmation of the   |
| niform Delay, d1       | 20.5  | 11.4              | 25.7               | 3.4         | 34.3          | 0.0       |  |
| elay                   | 21.1  | 12.4              | 21.2               | 1.3         | 33.9          |           | Artistantina ne del monto en en  |
| OS                     | C     | В                 | C C                |             |               | 3.1       |  |
| pproach Delay          |       | 14.3              | 14.9               | Α           | C             | <b>A</b>  | Marie Committee and Committee and  |
| pproach LOS            |       | 14.0              | 14.5               |             | 24.3          |           |  |

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

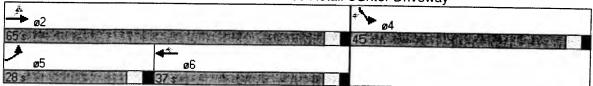
Offset: 71 (65%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow

Natural Cycle: 45

Intersection Signal Delay: 16.6 Intersection Capacity Utilization 80.9%

Intersection LOS: B
ICU Level of Service D

Splits and Phases: 5: NYS Route 104 & Greece Retail Center Driveway



|                        | ۶     | -            | •                                       | 1         | •                                       | •               | •         | <b>†</b> | /     | -                        | . ↓                       | 4            |
|------------------------|-------|--------------|---|-----------|---|-----------------|-----------|----------|-------|--------------------------|---------------------------|--------------|
| Lane Group             | EBL   | EBT          | EBR                                     | WBL       | WBT                                     | WBR             | NBL       | NBT      | NBF   | SBL                      | SBT                       | SBR          |
| Lane Configurations    | 7     | <u> ተ</u> ተጉ |   | 7         | 1 111                                   |                 |           |          |       | The second second second | A PARTICULAR OF THE PARTY | COL          |
| Ideal Flow (vphpl)     | 1900  |              | 1900                                    | 1900      |   |                 |           |          |       |                          |                           |              |
| Storage Length (ft)    | 295   | 5            | 0                                       | 295       |   | 295             |           | ē.       | 205   | **                       | 1                         | 200          |
| Storage Lanes          | 1     |              | 0                                       | W 37      |   | ****** <b>1</b> |           |          |       | 200                      |                           | 200<br>3 3 1 |
| Total Lost Time (s)    | 3.0   | 3.0          | 3.0                                     | 3.0       | 3.0                                     | 220             |           | 3.0      | S. 6  | 4 4 74 W 1 10T           |                           |              |
| Leading Detector (ft)  | 60    | 5.           |   | 60        |   |                 |           | 60       |       |                          |                           |              |
| Trailing Detector (ft) | 0     |              | , , ,                                   | 0         |   |                 |           | 0        |       |                          |                           | A            |
| Turning Speed (mph)    | 15    | " ' . «:     | 9                                       | 15        |   | 9               |           |          | 9     |                          |                           | 9            |
| Satd. Flow (prot)      | 1805  |              | 0                                       | 1787      |   |                 | 1770      | 3610     |       | 1787                     | 1881                      | 1615         |
| Flt Permitted          | 0.950 |              |   | 0.950     |   | n dynai (i      | 0.262     | 0010     | 1010  | 0.339                    | 1001                      | 1015         |
| Satd. Flow (perm)      | 1805  |              | 0                                       | 1787      | 5136                                    | 1599            | 488       | 3610     | 1615  | 638                      | 1881                      | 1645         |
| Right Turn on Red      |       | 5503040      | Yes                                     |           |   | Yes             | PARABA    | 4        | No    | 030                      | 1001                      | 1615         |
| Satd. Flow (RTOR)      |       | 35           | , , ,                                   |           | 14/19/01/19                             | 203             |           | 6.4.0    | 140   |                          |                           | No           |
| Link Speed (mph)       |       | 40           |   |           | 40                                      |                 |           | 30       |       |                          | 25                        |              |
| Link Distance (ft)     |       | 1299         | 110000000000000000000000000000000000000 | 7.1       | 1383                                    |                 |           | 647      |       |                          | 35                        | 3 .          |
| Travel Time (s)        |       | 22.1         |   |           | 23.6                                    |                 |           | 14.7     |       |                          | 458                       | S 5,95 x     |
| Volume (vph)           | 263   | 1017         | 200                                     | 208       | 941                                     | 191             | 195       | 392      | 272   | 241                      | 8.9                       | 054          |
| Lane Group Flow (vph)  |       | 1295         | 0                                       | 221       | 1001                                    | 203             | 207       | 417      | 289   | 254                      | 290                       | 251          |
| Turn Type              | Prot  |              | •                                       | Prot      | ,, 100 i                                | pm+ov           |           | 1 11     |       |                          | 305                       | 264          |
| Protected Phases       | 5     | 2            | fa, X rg                                | The Karte | 6                                       | 7               | 3         | 8        | pm+ov | -07-0 L                  | A 150 P. SE               | pm+ov        |
| Permitted Phases       |       |              |   |           | : . · · · · · · · · · · · · · · · · · · | 6               | 8         |          | 8     | 7<br>4                   | 4                         | 5            |
| Detector Phases        | 5.5   | 2            |   | 3 .1.     | 6                                       | 7               | 3.        | 8        |       | <b></b>                  | State Second              | 4<br>1149345 |
| Minimum Initial (s)    | 2.0   | 5.0          |   | 2.0       | 5.0                                     | 2.0             | 2.0       | 5.0      | 2.0   | 2.0                      | - 4                       | . 5          |
| Minimum Split (s)      | 9.0   | 29.0         |   | 9.0       | 29.0                                    | 7.0             | 7.0       | 29.0     | 9.0   | 7.0                      | 5.0                       | 2.0          |
| Total Split (s)        | 37.0  | 29.0         | 0.0                                     | 37.0      | 29.0                                    | 15.0            | 15.0      | 29.0     | 37.0  | 15.0                     | 29.0                      | 9.0          |
| Total Split (%)        | 34%   | 26%          | 0%                                      | 34%       | 26%                                     | 14%             | 14%       | 26%      | 34%   |                          | 29.0                      | 37.0         |
| Maximum Green (s)      | 32.0  | 24.0         | · · · · · · · · · · · · · · · · · · ·   | 32.0      | 24.0                                    | 10.0            | 10.0      | 24.0     | 32.0  | 14%                      | 26%                       | 34%          |
| Yellow Time (s)        | 3.0   | 3.0          |   | 3.0       | 3.0                                     | 3.0             | 3.0       | 3.0      | 3.0   | 10.0                     | 24.0                      | 32.0         |
| All-Red Time (s)       | 2.0   | 2.0          |   | 2.0       | 2.0                                     | 2.0             | 2.0       | 2.0      |       | 3.0                      | 3.0                       | 3.0          |
| Lead/Lag               | Lead  | Lag          |   | Lead      | Lag                                     | Lead            | Lead      |          | 2.0   | 2.0                      | 2.0                       | 2.0          |
| Lead-Lag Optimize?     | Loud  | Lag          |   | Leau      | - Lay                                   | Leau            | Leau      | Lag      | Lead  | Lead                     | Lag                       | Lead         |
| Vehicle Extension (s)  | 1.0   | 1.0          |   | 1.0       | 2.0                                     | 3.0             | 2.0       | n n      |       |                          | ** *** <b>~</b> ****      | 81.11        |
| Recall Mode            | None  | Coord        |   | None      | Coord                                   | None            | None      | 2.0      | 1.0   | 3.0                      | 2.0                       | 1.0          |
| Act Effct Green (s)    | 22.4  | 41.0         |   | 22.6      | 41.3                                    |                 |           | None     | None  | None                     | None                      | None         |
| Actuated g/C Ratio     | 0.20  | 0.37         | 55000                                   |           |   | 56.2            | 34.2      |          | 48.0  | 34.5                     | 22.5                      | 47.9         |
| v/c Ratio              |       |              |   | 0.21      | 0.38                                    | 0.51            | 0.31      | 0.20     | 0.44  | 0.31                     | 0.20                      | 0.44         |
| Uniform Delay, d1      | 0.76  | 0.69         |   | 0.60      | 0.52                                    | 0.22            | 0.71      | 0.57     | 0.41  | 0.78                     | 0.79                      | 0.38         |
|                        | 41.2  | 28.2         |   | 39.6      | 26.7                                    | 0.0             | 27.2      | 39.4     | 21.3  | 28.0                     | 41.5                      | 20.9         |
| Delay                  | 40.1  | 43.3         | Ton 5                                   | 24.1      | 20.7                                    |                 | 28.0      | 38.9     | 19.7  | 31.6                     | 41.3                      | 19.7         |
| LOS                    | D     | D            |   | С         | С                                       | Α               | С         | D        | В     | С                        | D                         | В            |
| Approach Delay         |       | 42.7         |   |           | 19.5                                    | *               | 13.1 11 X | 30.4     |       |                          | 31.4                      |              |
| Approach LOS           |       | D            |   |           | В                                       |                 |           | С        |       |                          | C                         |              |

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 32 (29%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow

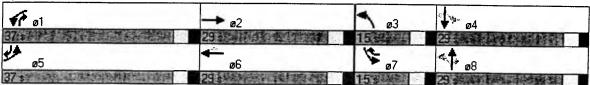
Natural Cycle: 80

Intersection Signal Delay: 31.4

Intersection Capacity Utilization 78.8%

Intersection LOS: C
ICU Level of Service C

Splits and Phases: 499: NYS Route 104 & N Greece



|                        |          | -             |           | ~           | -     | •                |
|------------------------|----------|---------------|-----------|-------------|-------|------------------|
| Lane Group             | EBL      | . EBT         | WBT       | WBR         | SBL   | SBR              |
| Lane Configurations    | *        | <b>†</b> ††   | ተተተ       | 7           | ሻሻ    | 7                |
| Ideal Flow (vphpl)     | 1900     |               |           |             | 1900  |                  |
| Storage Length (ft)    | 300      |               |           | 215         | 0     | ***              |
| Storage Lanes          | 3.41     |               |           |             | 2     | 04.53 <b>%</b> 1 |
| Total Lost Time (s)    | 3.0      | 3.0           | 3.0       | 3.0         | 3.0   | 3.0              |
| Leading Detector (ft)  | 60       |               |           | · 5.        | 60    |                  |
| Trailing Detector (ft) | 0        |               |           | 5           | 0     | 0                |
| Turning Speed (mph)    | 15       |               |           | 9           | 15    | 9                |
| Satd. Flow (prot)      | 1787     |               | 5136      | 1599        | 3467  |                  |
| Flt Permitted          | 0.950    |               |           |             | 0.950 |                  |
| Satd. Flow (perm)      | 1787     |               | 5136      | 1599        | 3467  | 1615             |
| Right Turn on Red      |          |               |           | Yes         |       | No               |
| Satd. Flow (RTOR)      |          |               |           | 266         | ::    | 110              |
| Link Speed (mph)       |          | 40            | 40        | 200         | 30    |                  |
| Link Distance (ft)     |          | 1383          | 1664      |             | 478   |                  |
| Travel Time (s)        |          | 23.6          |           |             | 10.9  | 24,504           |
| Volume (vph)           | 185      | 1344          | 1171      | 363         | 542   | 169              |
| Lane Group Flow (vph)  | 197      | 1430          | 1316      | 408         | 609   | 190              |
| Turn Type              | Prot     | 1400          | 1310      | Free        | 009   |                  |
| Protected Phases       | 5        | 2             | 6         | riee        | 250   | pm+ov            |
| Permitted Phases       | 5        | 2             | 0         | Fund        | 4     | - ' <b>.</b>     |
|                        | arua i 🚗 | · · · · · · · |           | Free        | 4     | 4                |
| Detector Phases        | 5        | 2             | 6         |             | 4.    | 5                |
| Minimum Initial (s)    | 2.0      | 5.0           | 5.0       | 1           | 5.0   | 2.0              |
| Minimum Split (s)      | 7.0      | 54.0          | 54.0      |             | 10.0  | 7.0              |
| Total Split (s)        | 24.0     | 79.0          | 55.0      | 0.0         | 31.0  | 24.0             |
| Total Split (%)        | 22%      | 72%           | 50%       | 0%          | 28%   | 22%              |
| Maximum Green (s)      | 19.0     | 74.0          | 50.0      | ,           | 26.0  | 19.0             |
| Yellow Time (s)        | 3.0      | 3.0           | 3.0       |             | 3.0   | 3.0              |
| All-Red Time (s)       | 2.0      | 2.0           | 2.0       |             | 2.0   | 2.0              |
| Lead/Lag               | Lead     |               | Lag       |             |       | Lead             |
| Lead-Lag Optimize?     |          |               |           |             |       |                  |
| Vehicle Extension (s)  | 2.0      | 1.0           | 1.0       |             | 2.0   | 2.0              |
| Recall Mode            | None     | Coord         | Coord     |             | None  | None             |
| Act Effct Green (s)    | 17.5     | 79.5          | 59.0      | 110.0       | 24.5  |                  |
| Actuated g/C Ratio     | 0.16     | 0.72          | 0.54      | 1.00        | 0.22  | 0.41             |
| v/c Ratio              | 0.69     | 0.39          | 0.48      | 0.26        | 0.79  | 0.29             |
| Uniform Delay, d1      | 43.7     | 5.9           | 15.9      | 0.0         | 40.3  | 21.7             |
| Delay                  | 30.7     | 7.0           | 17.1      | 0.0         | 40.0  | 20.6             |
| LOS                    | C        | A             | В         | A           | D     | C                |
| Approach Delay         | 2 6 16   | 9.9           | 13.0      | S. Dec 2750 | 35.4  |                  |
| Approach LOS           |          | Α.5           | 13.0<br>B |             | D     |                  |
| approach 200           |          | ^             | Ь         |             | U     |                  |

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow, Master Intersection

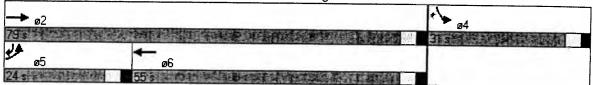
Natural Cycle: 90

Intersection Signal Delay: 16.1

Intersection Capacity Utilization 63.7%

Intersection LOS: B
ICU Level of Service B

Splits and Phases: 1412: NYS Route 104 & Elmridge Plaza



**Level of Service** 

2006 Build

Weekday Evening Peak Hour

| •                 |  | *  | ₩  | •  |   | 1                                      | T  | · /                                     | . ,  | ·  | 4                                       |
|-------------------|--|--|--|--|---|--|--|---|--|--|---|
| EBL               | . EBT  | EBR  | WBL  | WBT  | WBR   | NBL                                    | NBT  | NBF                                     | SBI  | SB   | r SBI                                   |
| ¥                 | i <b>†</b> }   |  | ,  | 414  |   |  | Annahing the Control   | UNIFORMATION AND                        | Table of Mary  |  |   |
|                   |  | 1900   |  |  | 1900  | 1900                                   |  |   |  |  |   |
| 245               |  | 0  |  |  |   |  |  |   |  |  | 100                                     |
|                   |  | 0  |  |  |   |  |  | A 1 1 11                                |  |  |   |
| 3.0               | 3.0  | 3.0  |  |  |   |  | Section Trees to   | PART TO MANY                            | The state of the s | * 4  | 3.(                                     |
| 60                |  |  |  |  |   |  |  |   |  |  |   |
| 0                 | Tarrist, or home Agents  |  |  | The state of the s |   |  |  |   |  | Section of the Control of the Contro | street in a state of                    |
|                   |  | 9  |  |  | g   |  | lessant to the   |   | · · · · · · · · · · · · · · · · · · ·  | •  | e el disconincialità il                 |
|                   |  | 0  |  |  |   |  | THE RESERVE OF THE PARTY OF THE |   |  |  | 1500                                    |
|                   |  | STATE OF   |  |  |   |  |  |   |  |  |   |
|                   |  | 0  |  |  | 0   | 0                                      |  |   |  |  |   |
|                   |  |  |  |  |   |  | 1200   |   |  | 295  |   |
| ALTO STATE        | 7  | , 00   |  | SIGN PROPERTY.   | Transition of   |  |  |   |  |  | Yes                                     |
|                   | =  |  |  | 40   |   | Sel Silvini                            | 40   |   |  | 53.66.46   | 27                                      |
| The Light Control |  |  |  |  |   |  |  |   |  |  | 1                                       |
|                   |  |  |  |  |   |  |  |   |  |  |   |
| 144               |  | 51   | 228  | The state of the s | 210   | 107                                    |  |   | 100  |  |   |
|                   |  |  |  |  |   |  |  |   |  |  |   |
|                   |  |  | 44.5   | 1012   |   | 1                                      | 041  |   |  | 332  | 147                                     |
|                   | 2  |  |  | e .  |   | Генн                                   |  | pm+ov                                   | Perm   | DANGE .  | pm+ov                                   |
|                   |  |  | 1 - 1 - 1 - 1 - 1 - 1                                    |  |   | 0                                      | 0  |   |  | . 4  | 5                                       |
|                   | 2  |  |  | 6  |   |  |  |   |  |  | 4                                       |
|                   |  | #.1,   | 1 4 4 4 4  |  | daiski.   |  |  |   |  | 4  |   |
|                   |  |  |  |  |   |  |  |   |  |  | 2.0                                     |
|                   |  | 0.0  |  |  | 0.0   |  |  |   |  |  | 7.0                                     |
|                   |  |  |  |  |   |  |  |   |  |  | 14.0                                    |
|                   |  | 0.76   |  |  | 076   |  | Company of the last  |   |  |  | 13%                                     |
|                   |  |  |  |  |   |  |  |   |  |  | 9.0                                     |
|                   |  |  |  | THE RESERVE OF THE PARTY OF THE |   |  |  | 200                                     |  | ,  | 3.5                                     |
|                   |  |  |  | The state of the s |   | 2.0                                    | 2.0  |   | 2.0  | 2.0  | 1.5                                     |
| Leau              | Lag  | 5-10-4   | Leau   | Lag  |   |  |  | Lead                                    | i bjehu j  |  | Lead                                    |
| 10                | 1000110  | e et alle sava   | 40   | ISCHIA ANS   |   |  |  | teal/triangle on a                      | Court and the St   | Grin, averag   | 9000 9000 0                             |
|                   |  | 120  |  |  |   |  |  |   |  |  | 1.0                                     |
| NONE              | Coord  |  | MOUG   | Coord  | di terretan   |  |  | None                                    |  | None   | None                                    |
|                   |  |  | MH2  |  | F 124 F4  |  | The state of the s |   |  | 7.0  |   |
|                   |  |  |  |  |   |  |  |   |  |  |   |
| E2.0              | 40.0   |  | E 4.0  |  |   | 0                                      |  |   | 0  | 0  | (1917)                                  |
|                   |  |  |  |  |   |  |  |   |  | 47.0   | 60.2                                    |
|                   |  |  |  |  |   |  |  |   |  | 0.43   | 0.55                                    |
|                   |  |  |  |  |   |  |  |   |  | 2.63   | 0.17                                    |
|                   |  |  |  |  | 引起人   | 1 2: 2                                 |  | 10.6                                    |  | 31.5   | 10.0                                    |
|                   |  |  |  |  |   |  | 111.3  | 10.9                                    |  | 349.7  | 10.0                                    |
| C                 |  |  | D  |  |   | 18-19                                  | F  | В                                       |  | F  | В                                       |
|                   |  |  |  | 47.7   |   |  | 79.0   |   |  | 245.4  | 2000 000                                |
|                   | С  |  |  | D  |   |  | u <sub>e</sub> o E   |   |  | F  |   |
|                   | 1900<br>245<br>1<br>3.0<br>60<br>0<br>15<br>1719<br>0.093<br>168<br>144<br>164<br>pm+pt<br>5<br>2.0<br>7.0<br>14.0<br>13%<br>9.0<br>3.5<br>1.5<br>Lead | 1900 1900 245 1900 3.0 3.0 3.0 60 60 0 0 15 1719 3440 0.093 168 3440  7 40 1211 20.6 144 769 164 932 pm+pt 5 2 2 2.0 15.0 7.0 20.5 14.0 46.0 13% 42% 9.0 40.5 3.5 3.5 1.5 2.0 Lead Lag  1.0 1.0 None Coord  53.2 43.0 0.48 0.39 0.73 0.69 16.9 27.7 24.9 28.1 C C 27.6 | 1900 1900 1900 245 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | 1900 1900 1900 1900 245 0 1700 1 3.0 3.0 3.0 3.0 3.0 3.0 60 60 60 60 60 60 60 60 60 60 60 60 60  | 1900 1900 1900 1900 1900 1900 245 0 170 1 3.0 3.0 3.0 3.0 3.0 3.0 60 60 60 60 60 0 0 0 0 0 0 15 99 15 1719 3440 0 1787 3257 0.093 0.149 168 3440 0 280 3257 Yes 7 40 40 1211 2287 20.6 39.0 144 769 51 228 962 164 932 0 253 1312 pm+pt pm+pt 5 2 1 6 2 6 5 2 1 6 2.0 15.0 7.0 20.5 14.0 46.0 13% 42% 9.0 40.5 3.5 3.5 3.5 3.5 1.5 2.0 Lead Lag Lead Lag 1.0 1.0 None Coord None Coord 53.2 43.0 0.73 0.69 0.87 1.01 16.9 27.7 15.1 33.1 24.9 28.1 51.0 47.0 C C C D D D 27.6 | 1900 1900 1900 1900 1900 1900 1900 245 | 1900 1900 1900 1900 1900 1900 1900 245   | 1900 1900 1900 1900 1900 1900 1900 1900 | 1900      | 1900 1900 1900 1900 1900 1900 1900 1900  | 1900 1900 1900 1900 1900 1900 1900 1900 |

Area Type:

Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 41 (37%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow

Natural Cycle: 75

Control Type: Actuated-Coordinated

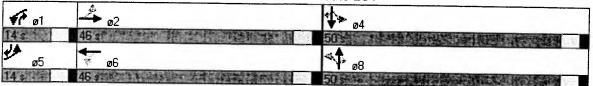
Maximum v/c Ratio: 2.63

Intersection Signal Delay: 72.7

Intersection Capacity Utilization 111.8%

Intersection LOS: E
ICU Level of Service G

Splits and Phases: 1056: NYS Route 104 & NYS Route 261



#### 296: NYS Route 104 & Hampton Ridge Center Driveway

|  |       |                              |            | _                   | 1     | 4          |  |
|--|-------|------------------------------|------------|---------------------|-------|------------|--|
| Lane Group   | EB    | L EB                         | r wbt      | WBR                 | SBL   | SBR        |  |
| Lane Configurations  |       | <b>ኘ ተ</b> ⁄                 |            | 7                   | 18.34 | 7          | THE PROPERTY OF THE PROPERTY O |
| Ideal Flow (vphpl)   | 1900  |                              | 1900       | 1900                | 1900  | 1900       |  |
| Storage Length (ft)  | 500   | )                            |            | 350                 | 0     | 0          |  |
| Storage Lanes  |       |                              |            | 4 5 5 1             | . 2   | 4.4        |  |
| Total Lost Time (s)  | 3.0   | 3.0                          | 3.0        | 3.0                 | 3.0   | 3.0        |  |
| Leading Detector (ft)  | 50    | 50                           | 50         | 50                  | 50    | 50         |  |
| Trailing Detector (ft)   | (     | ) (                          | ) (        | 0                   | Ó     | 0          | State of the state |
| Turning Speed (mph)  | 15    | <b>;</b>                     |            | 9                   | 15    | 9          |  |
| Satd. Flow (prot)  | 1770  | 3574                         | 3539       | 1583                | 3433  | 1583       | er Enter of the Property of th |
| Flt Permitted  | 0.086 |                              |            | ,<br>,<br>,         | 0.950 |            | Difference and the contraction of the contraction o |
| Satd. Flow (perm)  | 160   | 3574                         | 3539       | 1583                | 3433  | 1583       | Control of the Contro |
| Right Turn on Red  |       |                              |            | Yes                 |       | Yes        | Transfer Section 2   |
| Satd. Flow (RTOR)  |       |                              |            | 416                 |       | 307        | Article Manual Control of Control |
| ink Speed (mph)  |       | 40                           | 40         |                     | 30    |            | DNATABLE CONTRACTOR OF THE STATE OF THE STAT |
| ink Distance (ft)  |       | 2287                         |            | Harris and Property | 500   | NAME TO SE |  |
| Fravel Time (s)  |       | 39.0                         |            |                     | 11.4  |            | LONG TO THE CONTRACT OF THE PARTY OF THE PAR |
| Volume (vph)   | 273   |                              |            |                     | 440   | 276        |  |
| ane Group Flow (vph)   |       |                              |            |                     | 489   | 307        |  |
| urn Type   | pm+pt |                              | 1210       | Free                | 403   | Perm       |  |
| Protected Phases   | 5     |                              | 6          |                     | 4     | reilli     |  |
| Permitted Phases   | 2     |                              | , <b>U</b> | Free                |       | 4          |  |
| Detector Phases  | 5     | 2                            | 6          | 1166                | 4     | eneleo wek | Bullion (Albert Carls Consulted in Charles Consulted in C |
| /linimum Initial (s)   | 3.0   | 10.0                         | 10.0       | o e divisioni de    | 4.0   | 4.0        |  |
| Minimum Split (s)  | 8.0   | 25.0                         | 25.0       | a indake            | 25.0  | 25.0       |  |
| otal Split (s)   | 31.0  | 84.0                         | 53.0       | 0.0                 | 26.0  | 26.0       |  |
| otal Split (%)   | 28%   | 76%                          | 48%        | 0.0                 | 24%   | 24%        |  |
| Maximum Green (s)  | 26.0  | 79.0                         | 48.0       |                     | 21.0  | 21.0       |  |
| ellow Time (s)   | 3.0   | 3.0                          | 3.0        |                     | 3.0   | 3.0        | ACROMOMOTORIO AND STATE OF THE  |
| II-Red Time (s)  | 2.0   | 2.0                          | 2.0        |                     | 2.0   | 2.0        |  |
| ead/Lag  | Lead  |                              | Lag        |                     | 2.0   | 2.0        |  |
| ead-Lag Optimize?  | Loud  | 4.11.24                      | Lay        |                     |       |            |  |
| ehicle Extension (s)   | 1.0   | 1.0                          | 1.0        | Salv. Salv.         | 2.0   | 00         | THE CANADA SECTION OF THE PROPERTY OF THE PARTY OF THE PA |
| lecall Mode  |       | Coord                        |            |                     |       | 2.0        |  |
| ct Effct Green (s)   | 83.3  | 83.3                         | 59.0       | 110.0               | Min   | Min        | Christian Artist Control   |
| ctuated g/C Ratio  | 0.76  | 0.76                         |            |                     | 20.7  | 20.7       |  |
| c Ratio  | 0.78  |                              | 0.54       | 1.00                | 0.19  | 0.19       |  |
| niform Delay, d1   |       | 0.43                         | 0.64       | 0.34                | 0.76  | 0.56       |  |
| A CONTRACTOR OF THE PROPERTY O | 24.1  | 4.8                          | 18.0       | 0.0                 | 42.3  | 0.0        |  |
| <b>elay</b><br>OS  | 16.1  | 2.4                          | 7.8        | 0.0                 | 42.1  | 4.5        |  |
|  | В     | Α                            | A          | Α                   | D     | Α          |  |
| pproach Delay  | HARW. | 5.5                          | 5.4        |                     | 27.6  |            |  |
| pproach LOS  |       | Α                            | Α          |                     | С     |            | 10.249   |
| tersection Summary   |       | , <b>,</b> , , , , , , , , , |            |                     | TEE E |            | 生物 医神经管 医神经 医阴囊管 医阴影 精神  |
| rea Type:  | thor  |                              |            |                     |       |            | 是一个人,我们就是一个人的,我们就是一个人的。<br>第一个人的,我们就是一个人的,我们就是一个人的,我们就是一个人的,我们就是一个人的,我们就是一个人的,我们就是一个人的,我们就是一个人的,我们就是一个人的,我们  |

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

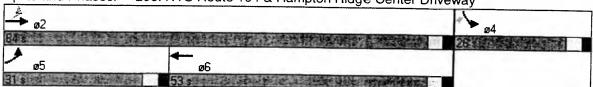
Offset: 11 (10%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow

Natural Cycle: 70

Maximum v/c Ratio: 0.78
Intersection Signal Delay: 9.8
Intersection Capacity Utilization 76.3%

Intersection LOS: A ICU Level of Service C

Splits and Phases: 296: NYS Route 104 & Hampton Ridge Center Driveway



|                        |          |             |       | •                 | -        | 4  |
|------------------------|----------|-------------|-------|-------------------|----------|--|
| Lane Group             | EBL      | EBT         | WBT   | WBR               | SBL      | SBR  |
| Lane Configurations    | þ        | <u>ነ</u> ተተ | 1     | . 7               | ¥        | The Control of the Co |
| Ideal Flow (vphpl)     | 1900     | 1900        | 1900  | 1900              |          |  |
| Storage Length (ft)    | 300      |             |       | 200               | 0        | 0  |
| Storage Lanes          | 1        |             |       |                   |          | - 30 <b>1</b>  |
| Total Lost Time (s)    | 3.0      | 3.0         | 3.0   |                   | 3.0      | 3.0  |
| Leading Detector (ft)  | 50       |             |       |                   |          | 50   |
| Trailing Detector (ft) | 0        | 40          |       | F-16-7-17-10-18-7 | 0        | 0  |
| Turning Speed (mph)    | 15       |             |       | 9                 | 15       | 9  |
| Satd. Flow (prot)      | 1770     |             | 3539  |                   | 1770     | 1583   |
| Flt Permitted          | 0.060    |             |       | 3.1-1.2-1.        | 0.950    | 1000   |
| Satd. Flow (perm)      | 112      |             | 3539  | 1583              | 1770     | 1583   |
| Right Turn on Red      | March 1  | eenes.      | 1,*   | Yes               |          | Yes  |
| Satd. Flow (RTOR)      |          |             |       | 188               |          | 149  |
| Link Speed (mph)       |          | 40          | 40    |                   | 30       | 143  |
| Link Distance (ft)     |          | 1046        | 1053  |                   | 419      |  |
| Travel Time (s)        |          | 17.8        | 17.9  | ·                 |          |  |
| Volume (vph)           | 115      | 1262        | 1504  | 211               | 9.5      | 104  |
| Lane Group Flow (vph)  | 142      | 1558        | 1617  |                   | 213      | 134  |
| Turn Type              |          | **          | 1017  |                   | 237      | 149  |
| Protected Phases       | pm+pt    |             |       | Perm              | 73       | Perm   |
| Permitted Phases       | 5<br>2   | 2           | 6     | W. M. W. W. W.    | 4        | N  |
| Detector Phases        |          |             | o-`C  | 6                 | Comments | 4  |
| Minimum Initial (s)    | 5<br>4.0 | 10.0        | 14 12 | 6                 | 4        | 4.   |
| Minimum Split (s)      |          | 10.0        | 10.0  | 10.0              | 4.0      | 4.0  |
|                        | 9.0      | 15.0        | 15.0  | 15.0              | 9.0      | 9.0  |
| Total Split (s)        | 16.0     | 83.0        | 67.0  | 67.0              | 27.0     | 27.0   |
| Total Split (%)        | 15%      | 75%         | 61%   | 61%               | 25%      | 25%  |
| Maximum Green (s)      | 11.0     | 78.0        | 62.0  | 62.0              | 22.0     | 22.0   |
| Yellow Time (s)        | 3.0      | 3.0         | 3.0   | 3.0               | 3.0      | 3.0  |
| All-Red Time (s)       | 2.0      | 2.0         | 2.0   | 2.0               | 2.0      | 2.0  |
| Lead/Lag               | Lead     | i, i ije    | Lag   | Lag               |          | \$ 18 C.   |
| Lead-Lag Optimize?     |          |             |       |                   |          |  |
| Vehicle Extension (s)  | 1.0      | 1.0         | 1.0   | 1.0               | 2.0      | 2.0  |
| Recall Mode            | None     | Coord       | Coord | Coord             | Min      | Min  |
| Act Effct Green (s)    | 84.1     | 84.1        | 71.8  | 71.8              | 19.9     | 19.9   |
| Actuated g/C Ratio     | 0.76     | 0.76        | 0.65  | 0.65              | 0.18     | 0.18   |
| v/c Ratio              | 0.63     | 0.57        | 0.70  | 0.21              | 0.74     | 0.36   |
| Uniform Delay, d1      | 12.8     | 5.4         | 12.2  | 1.2               | 42.6     | 0.0  |
| Delay                  | 25.2     | 2.6         | 13.8  | 2.4               | 42.1     | 6.1  |
| LOS                    | C        | Α           | В     | A                 | D        | A  |
| Approach Delay         | CO FOR   | 4.5         | 12.4  | rie in a          | 28.2     | SCHOOL STATE   |
| Approach LOS           | 144.149  | Α.          | В     |                   |          |  |
|                        |          |             | U     |                   | С        |  |

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

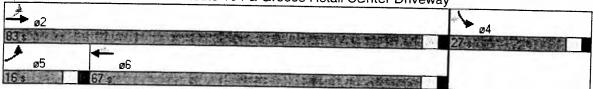
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow, Master Intersection

Natural Cycle: 55

Intersection Signal Delay: 10.5 Intersection Capacity Utilization 75.7%

Intersection LOS: B
ICU Level of Service C

Splits and Phases: 5: NYS Route 104 & Greece Retail Center Driveway



|                        | •         | -              | 7         | •              | 4         | •             | •              | †                          | _             | <b>,</b>   |                  | 4                   |
|------------------------|-----------|----------------|-----------|----------------|-----------|---------------|----------------|----------------------------|---------------|------------|------------------|---------------------|
| Lane Group             | EBL       | EBT            | EBR       | WBL            | WBT       | WBR           | NBL            | NBT                        | NBR           | SBI        | SBT              | SBR                 |
| Lane Configurations    | *5        | ተተሱ            |           | ሻ              | <b>^</b>  |               |                | SECTION AND ADDRESS OF THE | -             |            | OF SUIT SERVICES |                     |
| Ideal Flow (vphpl)     | 1900      | 1900           | 1900      | 1900           | 1900      |               |                |                            |               |            |                  | 1000                |
| Storage Length (ft)    | 295       |                | 0         | 295            |           | 295           |                | ,                          | 205           |            |                  | 1 <b>900</b><br>200 |
| Storage Lanes          | (149 HJ); | and the second | Ö         | \$ Ex.1        |           |               |                |                            | 200           |            |                  |                     |
| Total Lost Time (s)    | 3.0       | 3.0            | 3.0       | 3.0            | 3.0       |               | 2 52           | 3.0                        | 4 - 4 . 4 . 3 |            | 1 -1             | <b>1</b><br>3.0     |
| Leading Detector (ft)  | 60        | 5              |           | 60             | 5         |               |                | 60                         |               |            |                  |                     |
| Trailing Detector (ft) | 0         | 5              |           | 0              | 5         | 0             | 0              | 0                          |               |            |                  | C.                  |
| Turning Speed (mph)    | 15        |                | 9         | 15             |           | 9             | 15             | a Xant                     | 9             | _          | _                | 0<br><b>9</b>       |
| Satd. Flow (prot)      | 1770      | 4943           | 0         | 1770           | 5085      | 1583          | 3433           | 1863                       |               | 3433       |                  |                     |
| Flt Permitted          | 0.950     |                |           | 0.950          | *         |               | 0.950          |                            | 1000          | 0.950      |                  | 1583                |
| Satd. Flow (perm)      | 1770      | 4943           | 0         | 1770           | 5085      | 1583          | 3433           | 1863                       | 1583          | 3433       |                  | 1500                |
| Right Turn on Red      |           |                | Yes       |                |           | Yes           | - 100<br>- 100 | 1000                       | No            | 0400       | 1003             | 1583                |
| Satd. Flow (RTOR)      |           | 44             |           | -17146496190   |           | 126           |                |                            | 140           |            |                  | No                  |
| Link Speed (mph)       |           | 40             |           | 11.40          | 40        |               |                | 35                         | also are      | estilla se | 35               |                     |
| Link Distance (ft)     |           | 1299           |           |                | 1383      | 5             |                | 647                        |               |            | 458              |                     |
| Travel Time (s)        |           | 22.1           | J. 18 (1) |                | 23.6      | 1 W 1 1       |                | 12.6                       |               | 100.00     | 8.9              | N. Carlon           |
| Volume (vph)           | 334       | 1117           | 257       | 206            | 1134      | 187           | 406            | 515                        | 211           | 254        |                  | 0.40                |
| Lane Group Flow (vph)  | 355       | 1461           | . 0       | 215            | 1181      | 195           | 423            | 536                        | 220           | 270        | 318              | 349                 |
| Turn Type              | Prot      |                |           | Prot           |           | pm+ov         | Prot           |                            | pm+ov         | Prot       | 338              | 371                 |
| Protected Phases       | 5         | 2              |           | e esta         | 6         | 7             | 3              | 8                          | 1 1           | 7          |                  | pm+ov               |
| Permitted Phases       |           |                |           | er i er itekt. | ,         | 6             |                | ;; <b>O</b> .              | 8             | 「四山」       | 4                | 5                   |
| Detector Phases        | 5         | 2              |           | 1              | 6         | 3 48 <b>7</b> |                | 8                          |               | 7          |                  | 4                   |
| Minimum Initial (s)    | 2.0       | 5.0            | ,         | 2.0            | 5.0       | 2.0           | 2.0            | 5.0                        | 2.0           | 2.0        | 5.0              | 5                   |
| Minimum Split (s)      | 9.0       | 29.0           |           | 9.0            | 29.0      | 7.0           | 7.0            | 29.0                       | 9.0           | 7.0        | 29.0             | 2.0                 |
| Total Split (s)        | 32.0      | 42.0           | 0.0       | 24.0           | 34.0      | 17.0          | 24.0           | 42.0                       | 24.0          | 17.0       | 35.0             | 9.0                 |
| Total Split (%)        | 26%       | 34%            | 0%        | 19%            | 27%       | 14%           | 19%            | 34%                        | 19%           | 14%        | 28%              | 32.0                |
| Maximum Green (s)      | 27.0      | 37.0           |           | 19.0           | 29.0      | 12.0          | 19.0           | 37.0                       | 19.0          | 12.0       | 30.0             | 26%                 |
| Yellow Time (s)        | 3.0       | 3.0            |           | 3.0            | 3.0       | 3.0           | 3.0            | 3.0                        | 3.0           | 3.0        |                  | 27.0                |
| All-Red Time (s)       | 2.0       | 2.0            |           | 2.0            | 2.0       | 2.0           | 2.0            | 2.0                        | 2.0           | 2.0        | 3.0              | 3.0                 |
| Lead/Lag               | Lead      | Lag            |           | Lead           | Lag       | Lead          | Lead           | Lag                        | Lead          |            | 2.0              | 2.0                 |
| Lead-Lag Optimize?     |           |                | ,         |                | -49       | Locus         | Loau,          | Lay                        | Leau          | Leau       | Lag              | Lead                |
| Vehicle Extension (s)  | 1.0       | 1.0            |           | 1.0            | 2.0       | 3.0           | 2.0            | 2.0                        | 1.0           | 3.0        | . ° 0 0          | 4.0                 |
| Recall Mode            | None      | Min            |           | None           | Min       | None          | None           | None                       | None          | None       | 2.0              | 1.0                 |
| Act Effct Green (s)    | 26.4      | 38.0           |           | 18.1           | 29.7      | 46.2          | 19.0           | 36.4                       | 57.6          |            | None             | None                |
| Actuated g/C Ratio     | 0.22      | 0.32           |           | 0.15           | 0.25      | 0.39          | 0.16           | 0.31                       |               | 13.5       | 30.8             | 60.3                |
| v/c Ratio              | 0.90      | 0.90           |           | 0.79           | 0.92      | 0.28          | 0.76           |                            | 0.49          | 0.11       | 0.26             | 0.51                |
| Uniform Delay, d1      | 44.3      | 37.0           |           | 48.0           | 43.0      | 8.1           | 47.2           | 0.93                       | 0.28          | 0.69       | 0.70             | 1                   |
| Delay                  | 54.1      | 42.7           |           | 52.2           | 51.1      | 10.0          |                | 39.5                       | 17.9          | 50.2       | 39.2             | 18.4                |
| LOS                    | D D       | D              |           | 52.2<br>D      | D D       |               | 48.6           | 52.0                       | 18.3          | 52.3       | 41.4             | 19,3                |
| Approach Delay         |           | 44.9           |           |                |           | В             | D              | D                          | В             | D          | D                | В                   |
| Approach LOS           |           | 44.9<br>D      |           | 10.00          | 46.2<br>D |               |                | 44.5<br>D                  |               |            | 36.0<br>D        |                     |

Area Type: Other

Cycle Length: 125

Actuated Cycle Length: 118.1

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.93

Intersection Signal Delay: 43.6 Intersection Capacity Utilization 91.8%

Intersection LOS: D
ICU Level of Service E

Splits and Phases: 499: NYS Route 104 & N Greece



|                                  | الحرأ   |            | -                                     | 4          | -            |  |
|----------------------------------|---------|------------|---------------------------------------|------------|--------------|--|
| Lane Group                       | EBL     | EBT        | WBT                                   | WBR        | SBL          | SBR  |
| Lane Configurations              |         | ተተተ        | <b>^</b>                              | VVDI       |              |  |
| Ideal Flow (vphpl)               | 1900    | 1900       | 1900                                  |            |              |  |
| Storage Length (ft)              | 300     | ,,,,,,,,,, | , , , , , , , , , , , , , , , , , , , | 215        | 1300         |  |
| Storage Lanes                    | 200     |            |                                       | 1          | 2            |  |
| Total Lost Time (s)              | 3.0     | 3.0        | 3.0                                   | 3.0        | 3.C          |  |
| Leading Detector (ft)            | 60      | 5.5        | 5.0<br>5.                             | 5.0        | 6C           |  |
| Trailing Detector (ft)           | 0       | 5          | 5                                     | 5          |              | SECTION OF THE PARTY OF THE PAR |
| Turning Speed (mph)              | 15      |            |                                       | 9          | 0<br>15      |  |
| Satd. Flow (prot)                | 1805    | 5085       | 5136                                  | 1615       | 3502         | The state of the s |
| Flt Permitted                    | 0.950   | 3003       | J 130                                 | 1015       | 0.950        |  |
| Satd. Flow (perm)                | 1805    | 5085       | 5136                                  | 1615       |              |  |
| Right Turn on Red                | 1000    | 3003       | 3130                                  | Yes        | 3502         |  |
| Satd. Flow (RTOR)                |         |            |                                       | 219        |              | No   |
| Link Speed (mph)                 |         | 40         | 40                                    | 219        | 20           |  |
| Link Distance (ft)               |         | 1383       | 1664                                  |            | 30           | THE RESERVE OF THE PARTY OF THE |
| Travel Time (s)                  |         | 23.6       | 28.4                                  |            | 478          |  |
| Volume (vph)                     | 148     | 1434       | 1373                                  | 251        | 10.9         |  |
| Lane Group Flow (vph)            | 163     | 1576       | 1543                                  | 351<br>394 | 418          | 153  |
| Turn Type                        | Prot    | 1370       | 1040                                  |            | 449          | 165  |
| Protected Phases                 | 5       | 2          | 6                                     | Free       | dentifica    | pm+ov  |
| Permitted Phases                 | 4.35(1) | -          | D                                     | F          | 4            | 5  |
| Detector Phases                  | 5       | 2          | 6                                     | Free       | 4            | 4  |
| Minimum Initial (s)              | 2.0     | 5.0        | 5.0                                   |            | 4            | 5  |
| Minimum Split (s)                | 7.0     | 54.0       |                                       |            | 5.0          | 2.0  |
| Total Split (s)                  | 24.0    | 82.0       | 54.0                                  | 0.0        | 10.0         | 7.0  |
| Total Split (%)                  | 22%     | 75%        | 58.0                                  | 0.0        | 28.0         | 24.0   |
| Maximum Green (s)                |         | Y          | 53%                                   | 0%         | 25%          | 22%  |
|                                  | 19.0    | 77.0       | 53.0                                  | Helsensen  | 23.0         | 19.0   |
| Yellow Time (s) All-Red Time (s) | 3.0     | 3.0        | 3.0                                   |            | 3.0          | 3.0  |
|                                  | 2.0     | 2.0        | 2.0                                   |            | 2.0          | 2.0  |
| Lead/Lag Optimize?               | Lead    | istes ette | Lag                                   |            |              | Lead   |
| Lead-Lag Optimize?               |         |            |                                       |            | An ordinario |  |
| Vehicle Extension (s)            | 2.0     | 1.0        | 1.0                                   |            | 2.0          | 2.0  |
| Recall Mode                      | None    | Min        | Min                                   |            | None         | None   |
| Act Effct Green (s)              | 11.9    | 34.6       | 23.1                                  | 56.1       | 14.4         | 28.0   |
| Actuated g/C Ratio               | 0.21    | 0.62       | 0.41                                  | 1.00       | 0.26         | 0.48   |
| v/c Ratio                        | 0.44    | 0.50       | 0.73                                  | 0.24       | 0.50         | 0.21   |
| Uniform Delay, d1                | 20.6    | 5.2        | 13.9                                  | 0.0        | 17.8         | 8.2  |
| Delay                            | 24.0    | 5.5        | 15.4                                  | 0.0        | 21.0         | 9.7  |
| LOS                              | С       | Α          | В                                     | Α          | С            | Α  |
|                                  |         | 7.2        | 12.3                                  |            | 17.9         | wilder ?   |
| Approach LOS                     |         | Α          | В                                     |            | В            |  |

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 56.1

Natural Cycle: 80

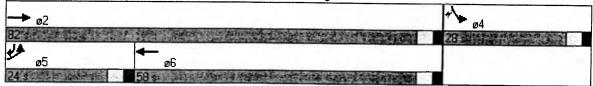
Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.73

Intersection Signal Delay: 11.0
Intersection Capacity Utilization 61.6%

Intersection LOS: B ICU Level of Service B

Splits and Phases: 1412: NYS Route 104 & Elmridge Plaza



**Level of Service** 

2006 Build

Saturday Mid-day Peak Hour

|                         | محر  | $\rightarrow$ | *                                       | 1      | -           | •            | 1       | †             | _  | - /                                     | . ↓   | 4                 |
|-------------------------|--|---------------|---|--------|-------------|--------------|---------|---------------|--|---|-------|-------------------|
| Lane Group              | EBI  | L EBT         | EBR                                     | WBL    | WBT         | WBR          | NBL     | NB1           | NBF  | SBL                                     | SBT   | Γ SBI             |
| Lane Configurations     | 1  | ጎ ተጉ          |   | )n     | <b>↑</b> 1> |              |         | 4             | The second secon | 200000000000000000000000000000000000000 | 4     | 100 mm (a) 100 mm |
| Ideal Flow (vphpl)      | 1900   |               | 1900                                    | 1900   | 1900        | 1900         | 1900    |               |  |   |       |                   |
| Storage Length (ft)     | 245  | 5             | 0                                       | 170    |             | 0            | 0       |               | 150  |   |       | 10                |
| Storage Lanes           |  |               | 0                                       | 1      |             | 0            |         | Section 15    |  |   |       |                   |
| Total Lost Time (s)     | 3.0  | 3.0           | 3.0                                     | 3.0    | 3.0         | 3.0          | 3.0     | 3.0           |  |   | 1 , 1 |                   |
| Leading Detector (ft)   | 60   | 60            |   | 60     | 60          |              | 60      |               |  |   |       |                   |
| Trailing Detector (ft)  | (  | 0             |   | 0      | 0           |              | 0       | 0             |  |   |       | 4 3 4             |
| Turning Speed (mph)     | 15   |               | 9                                       | 15     |             | 9            | 15      |               | 9  |   |       |                   |
| Satd. Flow (prot)       | 1805   | 3551          | 0                                       | 1787   | 3473        | 0            | 0       | 1839          |  |   |       |                   |
| Flt Permitted           | 0.100  |               |   | 0.100  |             |              |         | 0.686         |  |   | 0.609 |                   |
| Satd. Flow (perm)       | 190  | 3551          | 0                                       | 188    | 3473        | 0            | 0       | 1278          |  | 0                                       |       | ,                 |
| Right Turn on Red       |  |               | Yes                                     |        | 42          | No           |         |               | Yes  |   | 1113  | Yes               |
| Satd. Flow (RTOR)       |  | 4             |   |        |             |              |         | a             | 13   |   | ٠,    | 28                |
| Link Speed (mph)        |  | 40            |   |        | 40          | u project    |         | 40            |  |   | 40    |                   |
| Link Distance (ft)      |  | 1211          |   |        | 2287        | "            | *       | 1361          | Manual Control   |   | 1370  |                   |
| Travel Time (s)         |  | 20.6          |   |        | 39.0        |              |         | 23.2          |  |   | 23.4  |                   |
| Volume (vph)            | 81   | 1070          | 46                                      | 216    | 906         | 183          | 56      | 154           | 241  | 237                                     | 152   | 121               |
| Lane Group Flow (vph)   | 89   | 1227          | 0                                       | 235    | 1184        | 0            | 0       | 221           | 254  | 207                                     | 453   |                   |
| Turn Type               | pm+pt  |               |   | pm+pt  |             | PHONE - IT   | Perm    |               | pm+ov  | Perm                                    | 400   |                   |
| Protected Phases        | 5  |               |   |        | 6           |              |         | 8             |  | CITII                                   | 4     | pm+ov             |
| Permitted Phases        | 2  |               | Trans- a- line                          | 6      |             |              | 8       | · · · · · · · | 8  | 4                                       |       | · (於) <b>5</b>    |
| Detector Phases         | 5  |               |   | - 5.1  | 6           | 1.50         | 8       | 8             |  | 4                                       | 4     | 4                 |
| Minimum Initial (s)     | 2.0  | 15.0          |   | 2.0    | 15.0        |              | 5.0     | 5.0           | 2.0  | 5.0                                     | 5.0   | 5                 |
| Minimum Split (s)       | 7.0  | 20.5          |   | 7.0    | 20.5        | W. 18 (1945) | 27.5    | 27.5          | 7.0  | 27.5                                    | 27.5  | 2.0               |
| Total Split (s)         | 16.0   | 43.0          | 0.0                                     | 16.0   | 43.0        | 0.0          | 51.0    | 51.0          | 16.0   | 51.0                                    | 51.0  | 7.0               |
| Total Split (%)         | 15%  | 39%           | 0%                                      | 15%    | 39%         | 0%           | 46%     | 46%           | 15%  | 46%                                     | 46%   | 16.0              |
| Maximum Green (s)       | 11.0   | 37.5          | ., .,.,                                 | 11.0   | 37.5        | .0.10        | 45.5    | 45.5          | 11.0   | 45.5                                    | 45.5  | 15%               |
| Yellow Time (s)         | 3.5  | 3.5           | JA 9554                                 | 3.5    | 3.5         |              | 3.5     | 3.5           | 3.5  | 45.5<br>3.5                             |       | 11.0              |
| All-Red Time (s)        | 1.5  | 2.0           | pade les sesses                         | 1.5    | 2.0         | Carried to   | 2.0     | 2.0           | 1.5  | 2.0                                     | 3.5   | 3.5               |
| Lead/Lag                | Lead   | Lag           | ACCUSES:                                | Lead   | Lag         |              | 2.0     | 2.0           | Lead   | 2.0                                     | 2.0   | 1.5               |
| Lead-Lag Optimize?      |  | 3             |   |        | 9           |              | 1.3 3.5 |               | Leau   |   |       | Lead              |
| Vehicle Extension (s)   | 1.0  | 1.0           | , - , - , - , - , - , - , - , - , - , - | 1.0    | a1.0        | 1 .          | 2.0     | 2.0           | 1.0  | - 00                                    | 0.0   | TID WATE          |
| Recall Mode             | The Part of the State of the St | Coord         | · · · · · · · · · · · · · · · · · · ·   | None   |             |              | None    | None          | None   | 2.0                                     | 2.0   | 1.0               |
| Walk Time (s)           | A BULLINE  |               |   | 11011C | 00014       |              | 7.0     | 7.0           | None   | None                                    | None  | None              |
| Flash Dont Walk (s)     |  |               |   |        |             | ·            | 15.0    | 15.0          |  | 7.0                                     | 7.0   |                   |
| Pedestrian Calls (#/hr) |  |               |   | 30000  |             |              | 0       |               |  | 15.0                                    | 15.0  | 1.5               |
| Act Effct Green (s)     | 50.5   | 42.2          | -130,000                                | 57.4   | 46.2        |              | 0       |               |  | 0                                       | 0     |                   |
| Actuated g/C Ratio      | 0.46   | 0.38          |   | 0.52   | 0.42        |              |         | 46.5          | 61.8   |   | 46.5  | 57.8              |
| //c Ratio               | 0.43   | 0.90          |   | 0.85   |             |              | -71179  | 0.42          | 0.56   | ACT STATE                               | 0.42  | 0.53              |
| Jniform Delay, d1       | 13.6   | 31.8          | State of                                | 21.3   | 0.81        |              |         | 0.41          | 0.28   |   | 0.96  | 0.17              |
| Delay                   | 14.6   | 41.5          | *                                       |        | 28.1        | -1-11        | A ART   | 22.1          | 11.8   |   | 30.8  | 10.7              |
| OS                      | 14.0<br>B  |               |   | 49.1   | 10.0        |              |         | 22.2          | 11.6   |   | 48.1  | 10.1              |
| Approach Delay          | D  | D 20.7        |   | D      | A           |              |         | C             | В  |   | D     | В                 |
|                         |  | 39.7          |   |        | 16.5        |              |         | 16.5          |  |   | 39.1  |                   |
| Approach LOS            |  | D             |   |        | В           |              |         | В             |  |   | _ D   |                   |

Area Type:

Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 56 (51%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.96

Intersection Signal Delay: 28.0
Intersection Capacity Utilization 96.8%

Intersection LOS: C
ICU Level of Service E

Splits and Phases: 1056: NYS Route 104 & NYS Route 261

| <b>₹</b> Ø1 | <u>♣</u> ø2              | <b>↓</b> ► ø4  |
|-------------|--------------------------|--|
| 163         | 43 家人生工                  | The state of the s |
| <b>9</b> 5  | <b>♦</b> ø6              | <b>↑↑</b> ø8   |
| 165 4 34    | 43 美华州中心岛。中央外中区中华公司34360 | 5的。2018年,当时代,李阳克政政党,2018年至   |

|                        |       |          |          |          |       | •  |   |
|------------------------|-------|----------|----------|----------|-------|--|---|
| Lane Group             | EBL   | EBT      | WBT      | WBR      | SBL   | SBR  |   |
| Lane Configurations    | 7     | <u> </u> | <b>^</b> | . 7      | 77.74 | 7  |   |
| Ideal Flow (vphpl)     | 1900  |          |          |          |       |  |   |
| Storage Length (ft)    | 500   | )        |          | 350      | 0     | AND CONTRACTOR OF THE  | <ul> <li>On the Property of the Control of the</li></ul> |
| Storage Lanes          |       |          |          | 4        | 2     | 1  |   |
| Total Lost Time (s)    | 3.0   | 3.0      | 3.0      | 3.0      | 3.0   | The state of the s | and the contract of the state of the contract       |
| Leading Detector (ft)  | 50    | 50       | 50       | 50       | 50    |  |   |
| Trailing Detector (ft) | C     | 0        | 0        | 0        | 0     |  |   |
| Turning Speed (mph)    | 15    |          |          | 9        | 15    | 9  | of application of the property  |
| Satd. Flow (prot)      | 1770  | 3574     | 3574     | 1583     | 3433  | 1583   |   |
| Flt Permitted          | 0.103 |          |          |          | 0.950 |  |   |
| Satd. Flow (perm)      | 192   | 3574     | 3574     | 1583     | 3433  | 1583   |   |
| Right Turn on Red      |       |          |          | Yes      |       | Yes  |   |
| Satd. Flow (RTOR)      |       |          |          | 679      |       | 399  |   |
| Link Speed (mph)       |       | 40       | 40       | A MARKET | 30    | a in the   |   |
| Link Distance (ft)     |       | 2287     | 1046     |          | 500   | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,  |   |
| Travel Time (s)        |       | 39.0     | 17.8     |          | 11.4  |  |   |
| Volume (vph)           | 529   | 1019     | 946      | 821      | 786   | 359  | A STATE OF THE STA      |
| Lane Group Flow (vph)  | 575   | 1108     | 1040     | 902      | 873   | 399  |   |
| Turn Type              | pm+pt |          |          | Free     |       | Perm   |   |
| Protected Phases       | 5     | 2        | 6        |          | 4     |  |   |
| Permitted Phases       | 2     |          |          | Free     |       | 4  | The Article Control of the Control o      |
| Detector Phases        | 5     |          | 6        |          | 4     | 4:   |   |
| Minimum Initial (s)    | 4.0   | 10.0     | 10.0     |          | 4.0   | 4.0  | The state of the s      |
| Minimum Split (s)      | 9.0   | 25.0     | 25.0     |          | 25.0  | 25.0   |   |
| Total Split (s)        | 38.0  | 77.0     | 39.0     | 0.0      | 33.0  | 33.0   | The state of the s      |
| Total Split (%)        | 35%   | 70%      | 35%      | 0%       | 30%   | 30%  |   |
| Maximum Green (s)      | 33.0  | 72.0     | 34.0     |          | 28.0  | 28.0   |   |
| Yellow Time (s)        | 3.0   | 3.0      | 3.0      |          | 3.0   | 3.0  | 能够是有多数。<br>第14章 14章 14章 14章 14章 14章 14章 14章 14章 14章   |
| All-Red Time (s)       | 2.0   | 2.0      | 2.0      |          | 2.0   | 2.0  |   |
| Lead/Lag               | Lead  |          | Lag      |          |       |  |   |
| Lead-Lag Optimize?     |       |          |          |          |       |  |   |
| Vehicle Extension (s)  | 1.0   | 1.0      | 1.0      | Massa.   | 2.0   | 2.0  |   |
| Recall Mode            | None  | Coord    | Coord    |          | None  | None   |   |
| Act Effct Green (s)    | 74.1  | 74.1     | 38.1     | 110.0    | 30.0  | 30.0   |   |
| Actuated g/C Ratio     | 0.67  | 0.67     | 0.35     | 1.00     | 0.27  | 0.27   |   |
| v/c Ratio              | 0.96  | 0.46     | 0.84     | 0.57     | 0.93  | 0.55   |   |
| Uniform Delay, d1      | 28.7  | 8.5      | 33.2     | 0.0      | 39.0  | 0.0  |   |
| Delay                  | 21.1  | 3.0      | 11.3     | 4.7      | 48.9  |  | 赞赞的 计图像控制 经收益 医皮肤   |
| LOS                    | С     | Α        | В        | Α        | D     | Α  |   |
| Approach Delay         |       | 9.2      |          |          | 34.6  |  |   |
| Approach LOS           |       | Α        | Α        |          | С     |  | V 1. M. H.  |
|                        |       |          |          |          |       |  |   |

## Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 18 (16%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow

Natural Cycle: 75

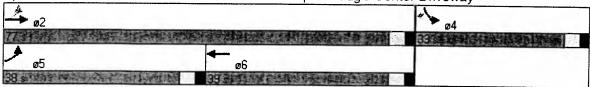
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.96

Intersection Signal Delay: 15.4
Intersection Capacity Utilization 95.5%

Intersection LOS: B
ICU Level of Service E

Splits and Phases: 296: NYS Route 104 & Hampton Ridge Center Driveway



|                        |       | -     |         | •       | *     | *                                 |  |
|------------------------|-------|-------|---------|---------|-------|-----------------------------------|--|
| Lane Group             | EBL   | EBT   | WBT     | WBR     | SBL   | SBR                               |  |
| Lane Configurations    | *     | ነ ተተ  | 11      | . 7     | 75    | 7                                 | 一 一  |
| Ideal Flow (vphpl)     | 1900  | 1900  |         |         | 1900  | 1900                              |  |
| Storage Length (ft)    | 300   | )     | , , , , | 200     | 0     | 0                                 |  |
| Storage Lanes          | 1     |       |         |         | 1     | 1                                 |  |
| Total Lost Time (s)    | 3.0   | 3.0   | 3.0     | 3.0     | 3.0   | 3.0                               |  |
| Leading Detector (ft)  | 50    | 50    | 50      | 50      | 50    | 50                                |  |
| Trailing Detector (ft) | O     | 0     | 0       | 0       | 0     | 0                                 |  |
| Turning Speed (mph)    | 15    |       |         | 9       | 15    | 9.                                | ta kaj jaj en saj komuna ko jos in e   |
| Satd. Flow (prot)      | 1770  | 3574  | 3574    |         | 1770  | 1583                              | erent (Set) with the control of the  |
| Flt Permitted          | 0.073 |       |         |         | 0.950 |                                   |  |
| Satd. Flow (perm)      | 136   | 3574  | 3574    | 1583    | 1770  | 1583                              | SALES MANUAL STREET, AND AND THE STREET,   |
| Right Turn on Red      |       |       |         | Yes     |       | Yes                               |  |
| Satd. Flow (RTOR)      |       |       |         | 284     |       | 226                               |  |
| Link Speed (mph)       |       | 40    | 40      |         | 30    |                                   |  |
| Link Distance (ft)     |       | 1046  | 1053    |         | 419   |                                   |  |
| Travel Time (s)        |       | 17.8  | 17.9    |         | 9.5   |                                   |  |
| Volume (vph)           | 270   | 1535  | 1564    | 419     | 449   | 203                               | 1.14 ± 5.14 ° 3.14 ° 4.24 ° 5.14 ° 5. |
| Lane Group Flow (vph)  | 293   | 1668  | 1719    | 460     | 499   | 226                               |  |
| Turn Type              | pm+pt |       |         | Perm    |       | Perm                              |  |
| Protected Phases       | 5     | 2     | 6       |         | 4     | magnes de<br>Selection de la lace |  |
| Permitted Phases       | 2     | ,     |         | 6       |       | 4                                 |  |
| Detector Phases        | √ ° 5 | 2     | 6       | 6       | 4     | 4                                 |  |
| Minimum Initial (s)    | 4.0   | 10.0  | 10.0    | 10.0    | 4.0   | 4.0                               |  |
| Minimum Split (s)      | 9.0   | 15.0  | 15.0    | 15.0    | 9.0   | 9.0                               |  |
| Total Split (s)        | 18.0  | 73.0  | 55.0    | 55.0    | 37.0  | 37.0                              |  |
| Total Split (%)        | 16%   | 66%   | 50%     | 50%     | 34%   | 34%                               |  |
| Maximum Green (s)      | 13.0  | 68.0  | 50.0    | 50.0    | 32.0  | 32.0                              | i kantantin 1971 - La i timi kake a katisa je silijih ka sila sayotti bilandiga a fatik  |
| Yellow Time (s)        | 3.0   | 3.0   | 3.0     | 3.0     | 3.0   | 3.0                               |  |
| All-Red Time (s)       | 2.0   | 2.0   | 2.0     | 2.0     | 2.0   | 2.0                               |  |
| Lead/Lag               | Lead  | ,     | Lag     | Lag     |       |                                   |  |
| Lead-Lag Optimize?     |       |       |         |         | , ,   |                                   |  |
| Vehicle Extension (s)  | 1.0   | 1.0   | 1.0     | 1.0     | 2.0   | 2.0                               |  |
| Recall Mode            | None  | Coord | Coord   | Coord   | Min   | Min                               |  |
| Act Effct Green (s)    | 70.9  | 70.9  | 53.0    | 53.0    | 33.0  | 33.0                              | The carry the common the street with the   |
| Actuated g/C Ratio     | 0.64  | 0.64  | 0.48    | 0.48    | 0.30  | 0.30                              |  |
| //c Ratio              | 0.95  | 0.72  | 1.00    | 0.51    | 0.94  |                                   |  |
| Jniform Delay, d1      | 29.6  | 13.0  | 28.4    | 6.5     | 37.4  | 0.0                               |  |
| Delay                  | 51.2  | 6.5   | 49.5    | 7.2     | 50.3  |                                   |  |
| OS                     | D     | A     | D       | A       | D     | Α                                 |  |
| Approach Delay         |       | 13.1  | 40.6    |         |       |                                   |  |
| Approach LOS           |       | В     | D       | - 11-14 | D     | 4 6                               |  |

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow, Master Intersection

Natural Cycle: 70

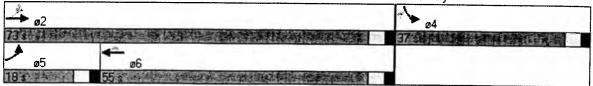
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.00

Intersection Signal Delay: 28.8
Intersection Capacity Utilization 101.4%

Intersection LOS: C ICU Level of Service F

Splits and Phases: 5: NYS Route 104 & Greece Retail Center Driveway



| Lane Group   |  | •          |      | 7  | •        | -           | *  | 1               | <u>†</u>             | -  | -           |             | 4                                     |
|--|--|------------|------|--|----------|-------------|--|-----------------|----------------------|--|-------------|-------------|---------------------------------------|
| Lane Configurations     | Lane Group   | EBL        | EBT  | EBR  | WBL      | WBT         | WBR                                      | NBL             | NBT                  | NBR  | SBI         | SBT         | SRR                                   |
| Ideal Flow (vphpl)   | Lane Configurations  | ሻ          | ተተው  |  | *        | <b>ተ</b> ተተ | . 7                                      | COLUMN STATE    | AUG BORDERY TO SERVE | A STATE OF THE PARTY OF THE PAR |             |             | 11. 14.00 14                          |
| Storage Length (ft)  | Ideal Flow (vphpl)   | 1900       |      | 1900   |          |             |  |                 |                      |  |             |             |                                       |
| Storage Lanes  | Storage Length (ft)  | 295        |      | 0  | 295      |             |  |                 | 47244                | . , ,  |             |             | 1 1000                                |
| Total Lost Time (s)  | Storage Lanes  | 1          |      | 0  |          |             | 1 To 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |                 |                      |  |             |             |                                       |
| Leading Detector (ft) 60 5 60 5 50 60 60 60 60 60 60 60 50 5 50 0 0 0  | Total Lost Time (s)  | 3.0        | 3.0  | 3.0  | 3.0      | 3.0         | 3.0                                      | a come of their | and the same         | Start Start Start of   | ***         | 7 7 7 67 75 |                                       |
| Trailing Detector (ft) 0 5 0 5 0 5 0 0 0 0 0 0 0 0 0 0 0 0 0   | Leading Detector (ft)  | 60         | 5    |  | 60       | 5           |  |                 |                      |  |             |             |                                       |
| Turning Speed (mph)  | Trailing Detector (ft)   | 0          | 5    |  | 0        |             | 0  |                 |                      | 8  |             | ` ' '       | 0                                     |
| Satd, Flow (prot)         1770         4928         0         1770         5085         1583         3433         1863         1583         3433         1863         1583           Fit Permitted         0.950 <t< td=""><td>Turning Speed (mph)</td><td>15</td><td>美国潜艇</td><td>9</td><td>15</td><td></td><td>9</td><td>15</td><td>1 - 12-12-</td><td>_</td><td>_</td><td>Silvan</td><td></td></t<>   | Turning Speed (mph)  | 15         | 美国潜艇 | 9  | 15       |             | 9  | 15              | 1 - 12-12-           | _  | _           | Silvan      |                                       |
| Fit Permitted 0.950 0.950 0.950 0.950 0.950 0.950 Satd. Flow (perm) 1770 4928 0 1770 5085 1583 3433 1863 1583 3433 1863 1583 1583 1583 1583 1583 1583 1583 158   | Satd. Flow (prot)  | 1770       | 4928 | 0  | 1770     | 5085        | 1583                                     |                 | 1863                 | ,  |             | 1863        |                                       |
| Satd. Flow (perm)   1770   4928   0   1770   5085   1583   3433   1863   1583   3433   1458   1583   3433   1863   1583   3433   1863   1583   3433   1863   1583   3433   1863   1583   3433   1458   1583   3433   1863   1583   3433   1458   1458   1458   1583   1458   | Flt Permitted  | 0.950      |      |  | 0.950    |             |  |                 |                      |  |             |             | 1000                                  |
| Right Turn on Red Satd. Flow (RTOR) 59 129  Link Speed (mph) 40 40 30 35  Link Distance (ft) 1299 1383 647 458  Travel Time (s) 22.1 23.6 14.7 8.9  Volume (vph) 415 1347 352 208 1300 191 315 392 272 241 290 421  Lane Group Flow (vph) 432 1770 0 219 1368 201 328 408 283 248 299 434  Turn Type Prot Prot Prot Prot Prot Prot Prot Prot   | Satd. Flow (perm)  | 1770       | 4928 | 0  | 1770     | 5085        | 1583                                     |                 | 1863                 | 1583   |             | 1863        | 1583                                  |
| Satd. Flow (RTOR) 59 129  Link Speed (mph) 40 40 30 35  Travel Time (s) 22.1 23.6 14.7 8.9  Volume (vph) 415 1347 352 208 1300 191 315 392 272 241 290 421  Lane Group Flow (vph) 432 1770 0 219 1368 201 328 408 283 248 299 434  Trum Type Prot Prot Prot Prot Prot Prot Prot Prot   | Right Turn on Red  |            |      | Yes  |          |             |  |                 | West Adv.            |  |             | 412,43      |                                       |
| Link Distance (ft) 1299 1383 647 458 Travel Time (s) 22.1 23.6 14.7 8.9 Volume (vph) 415 1347 352 208 1300 191 315 392 272 241 290 421 Lane Group Flow (vph) 432 1770 0 219 1368 201 328 408 283 248 299 434 Turn Type Prot Prot Prot Prot Prot Prot Prot Prot   | Satd. Flow (RTOR)  |            | 59   |  |          |             | 129                                      |                 | S. de 10             |  |             |             |                                       |
| Link Distance (ft) 1299 1383 647 458   Travel Time (s) 22.1 23.6 14.7 8.9   Volume (vph) 415 1347 352 208 1300 191 315 392 272 241 290 421   Lane Group Flow (vph) 432 1770 0 219 1368 201 328 408 283 248 299 434   Turn Type Prot Prot Prot Prot Prot Prot Prot Prot   | Link Speed (mph)   |            | 40   |  |          | 40          | The Edit                                 |                 | 30                   |  |             | 35          |                                       |
| Travel Time (s)  | Link Distance (ft)   |            | 1299 |  |          | 1383        |  |                 |                      |  | dil a sale. |             |                                       |
| Volume (vph)   | Travel Time (s)  |            | 22.1 |  |          | 23.6        |  |                 |                      |  |             |             | Ny sign                               |
| Lane Group Flow (vph)  | Volume (vph)   | 415        | 1347 | 352  | 208      | 1300        | 191                                      | 315             |                      | 272  | 241         |             |                                       |
| Turn Type  | Lane Group Flow (vph)  | 432        | 1770 | 0  | 219      | 1368        | 201                                      |                 |                      |  |             |             |                                       |
| Protected Phases Permitted Phases Detector Phases Detector Phases Detector Phases S D D D D D D D D D D D D D D D D D D  | Turn Type  | Prot       |      |  | Prot     |             | pm+ov                                    | Prot            |                      |  |             |             |                                       |
| Permitted Phases Detector Phas | Protected Phases   | 5          | 2    |  | 1        | 6           | 7  |                 | 8                    |  |             |             |                                       |
| Minimum Initial (s) 2.0 5.0 2.0 5.0 2.0 2.0 5.0 2.0 2.0 5.0 2.0 2.0 5.0 2.0 Minimum Split (s) 9.0 29.0 9.0 29.0 7.0 7.0 29.0 9.0 7.0 29.0 29.0 29.0 29.0 29.0 29.0 29.0 29   | Permitted Phases   |            |      |  |          |             | 6  |                 | 111-11-1             | 8  |             |             | 7 A 1 Y                               |
| Minimum Initial (s)         2.0         5.0         2.0         5.0         2.0         5.0         2.0         5.0         2.0         5.0         2.0         5.0         2.0         5.0         2.0         5.0         2.0         5.0         2.0         5.0         2.0         5.0         2.0         5.0         2.0         5.0         2.0         5.0         2.0         5.0         2.0         5.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         3.0  | Detector Phases  | 5          | 2    |  | 19-16-18 | 6           | 7.                                       | ·3.             | 8                    | <b></b>  | 7           | 4           |                                       |
| Minimum Split (s) 9.0 29.0 9.0 29.0 7.0 7.0 29.0 9.0 7.0 29.0 9.0 7.0 29.0 9.0 7.0 29.0 9.0 7.0 29.0 9.0 7.0 29.0 9.0 7.0 29.0 9.0 7.0 29.0 9.0 7.0 29.0 9.0 7.0 29.0 9.0 7.0 29.0 9.0 7.0 29.0 9.0 7.0 29.0 9.0 7.0 29.0 9.0 7.0 29.0 9.0 7.0 29.0 9.0 7.0 29.0 9.0 7.0 29.0 9.0 7.0 29.0 29.0 37.0 7.0 29.0 37.0 7.0 29.0 29.0 37.0 7.0 29.0 29.0 37.0 7.0 29.0 29.0 37.0 7.0 29.0 29.0 29.0 37.0 7.0 29.0 29.0 29.0 29.0 29.0 29.0 29.0 29  | Vinimum Initial (s)  | 2.0        | 5.0  |  | 2.0      | 5.0         | 2.0                                      | 2.0             | 5.0                  | 2.0  | 2.0         | 5.0         |                                       |
| Total Split (s)         37.0         48.0         0.0         27.0         38.0         16.0         21.0         34.0         27.0         16.0         29.0         37.0           Total Split (%)         30%         38%         0%         22%         30%         13%         17%         27%         22%         13%         23%         30%           Maximum Green (s)         32.0         43.0         22.0         33.0         11.0         16.0         29.0         22.0         11.0         24.0         32.0           Yellow Time (s)         3.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0 </td <td>Vinimum Split (s)</td> <td>9.0</td> <td>29.0</td> <td></td> <td>9.0</td> <td>29.0</td> <td>7.0</td> <td>7.0</td> <td>29.0</td> <td></td> <td></td> <td></td> <td></td>   | Vinimum Split (s)  | 9.0        | 29.0 |  | 9.0      | 29.0        | 7.0                                      | 7.0             | 29.0                 |  |             |             |                                       |
| Total Split (%)         30%         38%         0%         22%         30%         13%         17%         27%         22%         13%         23%         30%           Maximum Green (s)         32.0         43.0         22.0         33.0         11.0         16.0         29.0         22.0         11.0         24.0         32.0           Yellow Time (s)         3.0         2.0         1.0         3.0         2.0         1.0         3.0         2.0 </td <td>Total Split (s)</td> <td>37.0</td> <td>48.0</td> <td>0.0</td> <td>27.0</td> <td>38.0</td> <td>16.0</td> <td>21.0</td> <td></td> <td></td> <td></td> <td></td> <td>" " " " " " " " " " " " " " " " " " "</td>  | Total Split (s)  | 37.0       | 48.0 | 0.0  | 27.0     | 38.0        | 16.0                                     | 21.0            |                      |  |             |             | " " " " " " " " " " " " " " " " " " " |
| Maximum Green (s)       32.0       43.0       22.0       33.0       11.0       16.0       29.0       22.0       11.0       24.0       32.0         Yellow Time (s)       3.0       2.0       1.0       3.0       2.0       1.0       3.0       2.0       1.0       3.0       2.0       1.0       3.0       2.0       1.0       3.0       2.0       1.0       3.0       2.0       1.  | Fotal Split (%)  | 30%        | 38%  | 0%   | 22%      | 30%         | 13%                                      | 17%             | 27%                  |  |             |             |                                       |
| Kellow Time (s)       3.0       2.0       1.0       3.0       2.0       2.0       1.0       3.0       2.0       2.0       1.0       3.0       2.0       1.0       3.0       2.0       1.0       3.0       2.0       1.0       3.0       2.0       2.0       1.0       3.0       2.0       2.0  | Maximum Green (s)  | 32.0       | 43.0 |  | 22.0     | 33.0        | 11.0                                     | 16.0            |                      |  |             |             |                                       |
| All-Red Time (s) 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0   | Yellow Time (s)  | 3.0        | 3.0  |  | 3.0      | 3.0         | 3.0                                      | 3.0             | 3.0                  |  |             |             |                                       |
| Lead/Lag         Lead         Lag         Lead         Lag         Lead         Lead         Lag  | All-Red Time (s)   | 2.0        | 2.0  |  | 2.0      | 2.0         | 2.0                                      | 2.0             |                      |  |             |             |                                       |
| Lead-Lag Optimize?  Vehicle Extension (s) 1.0 1.0 1.0 2.0 3.0 2.0 2.0 1.0 3.0 2.0 1.0  Recall Mode None Min None Min None None None None None None None Non  | _ead/Lag   | Lead       | Lag  |  | Lead     | Lag         | Lead                                     | Lead            | Lag                  |  |             |             |                                       |
| Recall Mode         None         Min         None         Min         None   | ead-Lag Optimize?  |            |      |  |          | , ,         | ·  |                 |                      |  |             | 3.          | * **********                          |
| Recall Mode         None         Min         None         Min         None   | /ehicle Extension (s)  | 1.0        | 1.0  |  | 1.0      | 2.0         | 3.0                                      | 2.0             | 2.0                  | 1.0  | 3.0         | 2.0         | 1.0                                   |
| Act Effct Green (s) 31.5 46.1 19.2 33.8 49.5 16.3 28.9 51.1 12.6 25.2 59.8 Actuated g/C Ratio 0.26 0.39 0.16 0.28 0.42 0.14 0.24 0.43 0.11 0.21 0.50 c/c Ratio 0.92 0.91 0.77 0.95 0.27 0.70 0.90 0.42 0.68 0.76 0.55 Uniform Delay, d1 42.4 33.1 47.6 41.6 7.6 48.9 43.5 23.5 51.1 43.9 20.2 Delay 54.8 41.5 48.5 51.0 9.3 50.2 54.6 23.6 53.1 49.0 21.2 COS D D D A D D C D D C Approach Delay 44.1 46.0 44.6 37.7   | Recall Mode  | None       | Min  |  | None     | Min         | None                                     |                 |                      |  |             |             | a state of the state of               |
| Actuated g/C Ratio 0.26 0.39 0.16 0.28 0.42 0.14 0.24 0.43 0.11 0.21 0.50 c/c Ratio 0.92 0.91 0.77 0.95 0.27 0.70 0.90 0.42 0.68 0.76 0.55 0.27 0.70 0.90 0.42 0.68 0.76 0.55 0.27 0.70 0.90 0.42 0.68 0.76 0.55 0.27 0.70 0.90 0.42 0.68 0.76 0.55 0.20 0.20 0.90 0.42 0.68 0.76 0.55 0.20 0.20 0.20 0.20 0.20 0.20 0.20  | Act Effct Green (s)  | 31.5       | 46.1 |  | 19.2     | 33.8        | 49.5                                     | 16.3            |                      |  |             |             |                                       |
| 0/c Ratio     0.92     0.91     0.77     0.95     0.27     0.70     0.90     0.42     0.68     0.76     0.55       Uniform Delay, d1     42.4     33.1     47.6     41.6     7.6     48.9     43.5     23.5     51.1     43.9     20.2       Delay     54.8     41.5     48.5     51.0     9.3     50.2     54.6     23.6     53.1     49.0     21.2       DOS     D     D     D     D     D     D     C     D     D     C       Approach Delay     44.1     46.0     44.6     37.7  | Actuated g/C Ratio   | 0.26       | 0.39 |  | 0.16     | 0.28        | 0.42                                     | 0.14            | 1 1/4                |  |             |             |                                       |
| Uniform Delay, d1 42.4 33.1 47.6 41.6 7.6 48.9 43.5 23.5 51.1 43.9 20.2 Delay 54.8 41.5 48.5 51.0 9.3 50.2 54.6 23.6 53.1 49.0 21.2 COS D D D D A D D C D D C Approach Delay 44.1 46.0 44.6 37.7   | /c Ratio   | 0.92       | 0.91 |  |          |             |  |                 |                      |  |             |             |                                       |
| Delay 54.8 41.5 48.5 51.0 9.3 50.2 54.6 23.6 53.1 49.0 21.2 CS D D D A D D C D D C Approach Delay 44.1 46.0 44.6 37.7  | Jniform Delay, d1  | 42.4       | 33.1 |  | 47.6     |             |  | 3               |                      |  |             |             |                                       |
| OS D D D D A D D C D D C Approach Delay 44.1 46.0 44.6 37.7  | The state of the control of the cont |            |      |  |          |             |  |                 |                      |  |             |             |                                       |
| Approach Delay 44.1 46.0 44.6 37.7   | The second secon |            |      |  |          |             |  |                 |                      |  |             |             |                                       |
| and the second s | pproach Delay  |            |      | SELECTION OF THE PERSON OF THE |          |             |  |                 |                      |  |             |             | _                                     |
|  |  | 104111 104 |      |  |          |             | - MANGE                                  | 10000000000     |                      |  | Han, A      |             |                                       |

Intersection Summary

Area Type: Other

Cycle Length: 125

Actuated Cycle Length: 119

Natural Cycle: 90

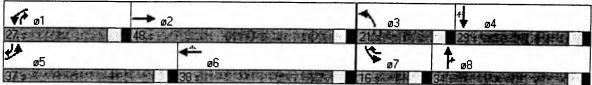
Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.95

Intersection Signal Delay: 43.7
Intersection Capacity Utilization 92.3%

Intersection LOS: D
ICU Level of Service E

Splits and Phases: 499: NYS Route 104 & N Greece



|                        |               | -                  |           |   | *               | •                    |  |
|------------------------|---------------|--------------------|-----------|---|-----------------|----------------------|--|
| Lane Group             | EBL           | EBT                | WBT       | WBR                                     | SBL             | SBR                  |  |
| Lane Configurations    | ሻ             | ተተተ                | ተተተ       | 7                                       | 15.00           | i 7                  |  |
| Ideal Flow (vphpl)     | 1900          | 1900               | 1900      | 1900                                    |                 |                      |  |
| Storage Length (ft)    | 300           |                    |           | 215                                     | O               | 0                    |  |
| Storage Lanes          | 1             |                    |           | 1                                       | 2               |                      |  |
| Total Lost Time (s)    | 3.0           | 3.0                | 3.0       | 3.0                                     | 3.0             | 3.0                  | man summer in the property of the second of  |
| Leading Detector (ft)  | 60            | 5                  | 5         | 5                                       | 60              | 60                   |  |
| Trailing Detector (ft) | 0             | 5                  | 5         | 5                                       | 0               |                      |  |
| Turning Speed (mph)    | 15            |                    | 4.11      | 9                                       | 15              | 9                    |  |
| Satd. Flow (prot)      | 1787          | 5136               | 5136      | 1599                                    | 3467            |                      |  |
| Flt Permitted          | 0.950         |                    |           |   | 0.950           |                      |  |
| Satd. Flow (perm)      | 1787          | 5136               | 5136      | 1599                                    | 3467            |                      | indicated by the service of the serv |
| Right Turn on Red      |               |                    |           | Yes                                     |                 | No                   |  |
| Satd. Flow (RTOR)      |               |                    |           | 203                                     | Mary Mary       | C To South Land      |  |
| Link Speed (mph)       |               | 40                 | 40        |   | 30              |                      | M. Same and the second   |
| Link Distance (ft)     |               | 1383               | 1664      | 1-7 . 7-4                               | 478             |                      |  |
| Travel Time (s)        |               | 23.6               | 28.4      |   | 10.9            |                      |  |
| Volume (vph)           | 185           | 1674               | 1530      | 363                                     | 542             | 169                  |  |
| ane Group Flow (vph)   | 197           | 1781               | 1719      | 408                                     | 609             | 190                  |  |
| Turn Type              | Prot          |                    |           | Free                                    |                 | pm+ov                |  |
| Protected Phases       | 5             | 2                  | 6         |   | 4               | 7                    |  |
| Permitted Phases       | CONTRACTOR OF | · ; <del>- ,</del> | · · ·     | Free                                    | 4               | 4                    |  |
| Detector Phases        | 5             | 2                  | 6         |   | (* 100 <b>4</b> | 1817 (191 <b>5</b> ) |  |
| Minimum Initial (s)    | 2.0           | 5.0                | 5.0       | W. J                                    | 5.0             | 2.0                  |  |
| Minimum Split (s)      | 7.0           | 54.0               | 54.0      | (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) | 10.0            | 7.0                  |  |
| Total Split (s)        | 24.0          | 79.0               | 55.0      | 0.0                                     | 31.0            | 24.0                 |  |
| Total Split (%)        | 22%           | 72%                | 50%       | 0%                                      | 28%             | 22%                  |  |
| Maximum Green (s)      | 19.0          | 74.0               | 50.0      |   | 26.0            | 19.0                 |  |
| Yellow Time (s)        | 3.0           | 3.0                |           |   | 3.0             | 3.0                  | 소설하다 한국 기업들은 100 등 등 학급이 개념한 기업자 유민이 18  |
| All-Red Time (s)       | 2.0           | 2.0                | 2.0       | * W. L.                                 | 2.0             | 2.0                  | 사람들은 그 이 아이들이 되었다.   |
| _ead/Lag               | Lead          |                    | Lag       |   |                 | Lead                 |  |
| _ead-Lag Optimize?     |               |                    |           | , 1. 6 .,                               |                 | LUAG                 |  |
| /ehicle Extension (s)  | 2.0           | 1.0                | 1.0       |   | 2.0             | 2.0                  | Section of the second section of the |
| Recall Mode            | None          | Min                | Min       |   | None            | None                 | The state of the s |
| Act Effct Green (s)    | 14.0          | 43.7               | 30.2      | 70.2                                    | 19.4            | 35.2                 | ······································   |
| Actuated g/C Ratio     | 0.19          | 0.62               | 0.43      | 1.00                                    | 0.28            | 0.49                 |  |
| /c Ratio               | 0.57          | 0.56               | 0.78      | 0.26                                    | 0.28            | 0.49                 |  |
| Jniform Delay, d1      | 27.0          | 6.9                | 17.0      | 0.20                                    | 22.3            | 10.5                 |  |
| Delay                  | 30.9          | 7.2                | 19.0      |   |                 |                      | of the first of the same of th |
| .OS                    | . 30.9<br>C   | 7.2<br>A           |           | 0.0                                     | 25.7            | 12.1                 |  |
| Approach Delay         |               |                    | B<br>15.3 | Α                                       | C               | В                    | Market Carlos Section 1 Section 2015   |
| Approach LOS           |               | 18                 |           |   | 22.5            | 4.4.                 |  |
| approach LOS           |               | Α                  | В         |   | С               |                      |  |
|                        |               |                    |           |   |                 |                      |  |

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 70.2

Natural Cycle: 90

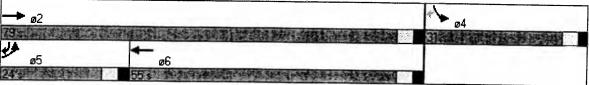
Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.78

Intersection Signal Delay: 14.2
Intersection Capacity Utilization 71.5%

Intersection LOS: B
ICU Level of Service C

Splits and Phases: 1412: NYS Route 104 & Elmgrove Plaza



|                         | ۶              | -                                     | •         | 1          | -                                      | *  | 4                               | <b>†</b>    | /   | -           | 1  | 1     |
|-------------------------|----------------|---------------------------------------|-----------|------------|--|--|---------------------------------|-------------|---|-------------|--|-------|
| Lane Group              | EBL            | EBT                                   | EBR       | WBL        | WBT                                    | WBR  | NBL                             | NBT         | NBR                                       | SBL         | SBT  | SBR   |
| Lane Configurations     | *              | <b>†</b>                              |           | ሻ          | ∱ĵ⇒                                    | P-04-10-10-10-10-10-10-10-10-10-10-10-10-10- | ķ                               | +           | . 79                                      | K           | The Contract of the Contract o | 1     |
| Ideal Flow (vphpl)      | 1900           |                                       | 1900      | 1900       | 1900                                   | 1900   | 1900                            | 1900        |   | 1900        | 1900   |       |
| Storage Length (ft)     | 245            |                                       | 0         | 170        | C                                      | 0  | 0                               |             | 150                                       |             | 1000   | 100   |
| Storage Lanes           | 1              | · · · · · · · · · · · · · · · · · · · | 0         |            |  | 0  |                                 |             |   | - T         | SOMETHING.   | 100   |
| Total Lost Time (s)     | 3.0            | 3.0                                   | 3.0       | 3.0        | 3.0                                    | 3.0  | 3.0                             | 3.0         |   | 3.0         | 3.0  | tra y |
| Leading Detector (ft)   | 60             | 60                                    |           | 60         | 60                                     |  | 60                              | 60          |   | 60          |  |       |
| Trailing Detector (ft)  | 0              | 0                                     |           | 0          | 0                                      |  | 0                               | 0           | *   | 0           | 0  | 0     |
| Turning Speed (mph)     | 15             |                                       | 9         | 15         |  | 9  | 15                              | 1.70        | 9   | 15          | 1444-1443  | 9     |
| Satd. Flow (prot)       | 1719           | 3436                                  | 0         | 1787       | 3273                                   | 0  | 1703                            | 1827        | 1615                                      | 1805        | 1845   | 1538  |
| Flt Permitted           | 0.105          |                                       |           | 0.167      | in 125                                 |  | 0.663                           |             | 453/54/604                                | 0.266       | 1043   | 1336  |
| Satd. Flow (perm)       | 190            | 3436                                  | 0         | 314        | 3273                                   | 0  | 1188                            | 1827        | 1615                                      | 505         | 1845   | 1538  |
| Right Turn on Red       |                |                                       | Yes       | EXM'S      |  | No   |                                 | 1027        | Yes                                       | 303         | 1045   | Yes   |
| Satd. Flow (RTOR)       |                | 8                                     |           |            |  | STEEL TOP                                    |                                 |             | 59  | - L22       |  | 27    |
| Link Speed (mph)        |                | 40                                    |           | 14 R. L. S | 40                                     |  |                                 | 40          |   | Direction   | 40   | 21    |
| Link Distance (ft)      | MANAGE SECTION | 1211                                  |           |            | 2287                                   |  |                                 | 1361        |   |             |  |       |
| Travel Time (s)         |                | 20.6                                  |           |            | 39.0                                   | THE NAME OF                                  |                                 | 23.2        | Service Service                           | 250, 600    | 1370<br>23.4   |       |
| Volume (vph)            | 144            | 687                                   | 51        | 204        | 877                                    | 186  | 107                             | 438         | 212                                       | 157         |  | 400   |
| Lane Group Flow (vph)   | 164            | 839                                   | 0         | 227        | 1181                                   | 0  | 126                             | 515         | 249                                       | 157<br>183  | 102  | 126   |
| Turn Type               | pm+pt          | 000                                   |           | pm+pt      | 1101                                   | U  | Perm                            | ้าเก        |   |             | 119  | 147   |
| Protected Phases        | 55             | 2                                     |           | PITITUL    | 6                                      |  | T CITII                         | 8           | pm+ov                                     | Perm        |  | pm+ov |
| Permitted Phases        | 2              |                                       | · (5., *) | 6          |  | 466 14 460                                   | 8                               | July Los O  | , , , <u>, l</u> .                        |             | 4  | 5     |
| Detector Phases         | 5              | 2                                     | S*30%     | 0<br>1     | 6                                      |  |                                 | . 8         | 8<br>************************************ | 4           | , so the second  | 4     |
| Minimum Initial (s)     | 2.0            | 15.0                                  |           | 2.0        | 15.0                                   |  | 5.0                             | 5.0         | 2.0                                       | 5.0         | - 4  | 5     |
| Minimum Split (s)       | 7.0            | 20.5                                  |           | 7.0        | 20.5                                   |  | 27.5                            | 27.5        | 7.0                                       |             | 5.0  | 2.0   |
| Total Split (s)         | 15.0           | 41.0                                  | 0.0       | 15.0       | 41.0                                   | 0.0  | 50.0                            | 50.0        | 15.0                                      | 27.5        | 27.5   | 7.0   |
| Total Split (%)         | 14%            | 39%                                   | 0%        | 14%        | 39%                                    | 0.0  | 47%                             | 47%         | 14%                                       | 50.0        | 50.0   | 15.0  |
| Maximum Green (s)       | 10.0           | 35.5                                  | O,70      | 10.0       | 35.5                                   | 0.76   | 44.5                            | 44.5        | 10.0                                      | 47%<br>44.5 | 47%  | 14%   |
| Yellow Time (s)         | 3.5            | 3.5                                   |           | 3.5        | 3.5                                    |  | 3.5                             | 3.5         | 3.5                                       | 3.5         | 44.5   | 10.0  |
| All-Red Time (s)        | 1.5            | 2.0                                   | Marsay.   | 1.5        | 2.0                                    |  | 2.0                             | 2.0         | 1.5                                       |             | 3.5  | 3.5   |
| Lead/Lag                | Lead           | Lag                                   |           | Lead       | Lag                                    |  | 2.0                             | 2.0         |   | 2.0         | 2.0  | 1.5   |
| Lead-Lag Optimize?      | Loud           | Lag                                   | 16 - 1-21 | Leau       | Lay                                    |  | · · · · · · · · · · · · · · · · |             | Lead                                      |             |  | Lead  |
| Vehicle Extension (s)   | 1.0            | 1.0                                   |           | 1.0        | 1.0                                    | n he care                                    | 200                             | 200         | 4.0                                       | 0.0         | - Nove & 200   | 4, 1  |
| Recall Mode             | None           | None                                  |           | None       | None                                   | () - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -     | 2.0<br>None                     | 2.0<br>None | 1.0,                                      | 2.0         | 2.0  | 1.0   |
| Walk Time (s)           | 140116         | INOTIC                                | de tales  | INOTIC     | NONE                                   |  |                                 |             | None                                      | None        | None   | None  |
| Flash Dont Walk (s)     |                |                                       |           |            | 7                                      |  | 7.0                             | 7.0         | 155                                       | 7.0         | 7.0  |       |
| Pedestrian Calls (#/hr) |                | الإسلام ورووا                         |           |            | 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |  | 15.0                            | 15.0        |   | 15.0        | 15.0   |       |
| Act Effct Green (s)     | 46.8           | 36.9                                  |           | 40.4       | 07.7                                   |  | 07.0                            | 0           |   | 0           | 0  |       |
| Actuated g/C Ratio      |                |                                       |           | 48.4       | 37.7                                   |  | 37.9                            | 37.9        | 51.8                                      | 37.9        | 37.9   | 51.0  |
| /c Ratio                | 0.49           | 0.39                                  | With the  | 0.51       | 0.40                                   |  | 0.40                            | 0.40        | 0.55                                      | 0.40        | 0.40   | 0.54  |
|                         | 0.65           | 0.63                                  |           | 0.70       | 0.91                                   | - 4  | 0.27                            | 0.70        | 0.27                                      | 0.91        | 0.16   | 0.18  |
| Jniform Delay, d1       | 11.8           | 22.9                                  |           | 11.8       | 26.7                                   |  | 18.8                            | 23.5        | 8.4                                       | 26.4        | 18.0   | 8.9   |
| Delay                   | 18.8           | 25.7                                  |           | 18.6       | 44.9                                   |  | 19.0                            | 23.6        | 8.2                                       | 41.6        | 17.9   | 8.5   |
| os                      | В              | C                                     |           | В          | D                                      | No. with                                     | В                               | C           | Α   | D           | В  | Α     |
| Approach Delay          |                | 24.5                                  |           |            | 40.7                                   |  |                                 | 18.6        |   |             | 24.5   |       |
| Approach LOS            |                | С                                     |           |            | D                                      |  |                                 | В           |   |             | С  |       |

Intersection Summary

Area Type: Other

Cycle Length: 106

Actuated Cycle Length: 94.9

Natural Cycle: 65

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.91

Intersection Signal Delay: 29.2
Intersection Capacity Utilization 93.2%

Intersection LOS: C
ICU Level of Service E

Splits and Phases: 1056: NYS Route 104 & NYS Route 261

| <b>€</b> Ø1 | -\$ <sub>ø2</sub>     | <b>↓</b> ► ø4  |
|-------------|-----------------------|--|
| 15 s        | 413                   | 50多种种种种种种种种种种种种种种种种种种种种种种种种种种种种种种种种种种种种  |
| <b>9</b> 5  | <b>♦</b> ø6           | <b>≪</b> ↑ <sub>Ø8</sub>   |
| 15          | 419多少年,是中华的统义。中华的美国社会 | 50 CONTRACTOR REPORTS TO THE PROPERTY OF THE PERSON OF THE |

|  | •      | -                 | *         | *                                      | - 4-            | *                                     | 4         | <b>†</b>  | /                         | -       | 1                | 1               |
|--|--------|-------------------|-----------|--|-----------------|---------------------------------------|-----------|-----------|---------------------------|---------|------------------|-----------------|
| Lane Group   | EBL    | EBT               | EBR       | WBL                                    | WBT             | WBR                                   | NBL       | NBT       | NBR                       | SBL     | SBT              | SBR             |
| Lane Configurations  | À      | <b>†</b> }        |           | 7                                      | i ተው            |                                       | 7         |           | <b>,</b> 74               | , obc   | CONTROL SECURIOR | COL             |
| Ideal Flow (vphpl)   | 1900   |                   | 1900      | 1900                                   |                 | 1900                                  |           |           |                           |         |                  |                 |
| Storage Length (ft)  | 245    |                   | 0         | 170                                    |                 | 0                                     | 0         |           | 150                       | 0       |                  | 100             |
| Storage Lanes  | 1944   | er parities to fi | Ô         |  |                 | 0                                     |           | neus es   | 100<br>1001               | 1       |                  | 100             |
| Total Lost Time (s)  | 3.0    | 3.0               | 3.0       | 3.0                                    | 0 2 42 112 5 62 | 3.0                                   | 3.0       | 3.0       |                           | 3.0     | 3.0              |                 |
| Leading Detector (ft)  | 60     | 60                |           | 60                                     | 60              |                                       | 60        | 60        |                           | 60      | 60               |                 |
| Trailing Detector (ft)   | 0      | 0                 |           | 0                                      |                 | * *                                   | 0         | 0         | the state of the state of | 0       | 0                |                 |
| Turning Speed (mph)  | 15     |                   | 9         | 15                                     |                 | 9                                     | 15        |           | 9                         | 15      |                  | 9               |
| Satd. Flow (prot)  | 1719   | 3440              | 0         | 1787                                   |                 | 0                                     | 1703      | 1827      | 1615                      | 1805    | 1845             | 1538            |
| Flt Permitted  | 0.114  |                   |           | 0.105                                  |                 |                                       | 0.665     |           | 1013                      | 0.282   | 1043             | 1536            |
| Satd. Flow (perm)  | 206    | 3440              | 0         | 198                                    |                 | 0                                     | 1192      | 1827      | 1615                      | 536     | 1845             | 1538            |
| Right Turn on Red  |        |                   | Yes       |  | BEAUTA          | No                                    | our Share | ETHALIES. | Yes                       | 330     | 1045             | Yes             |
| Satd. Flow (RTOR)  |        | 6                 | 44.0      |  |                 |                                       |           |           | 26                        | 7.11    |                  |                 |
| Link Speed (mph)   |        | 40                |           |  | 40              |                                       | 6-12-13   | 40        | 20                        | State . | 40               | 22              |
| Link Distance (ft)   |        | 1211              |           |  | 2287            | , , , , , , , , , , , , , , , , , , , |           | 1361      | 201021                    | 1月1日日日  | 40<br>1370       | ` `7'           |
| Travel Time (s)  |        | 20.6              | 3-3-1     |  | 39.0            |                                       |           | 23.2      |                           | 2000    |                  |                 |
| Volume (vph)   | 144    | 769               | 51        | 228                                    | and the second  | 219                                   | 107       | 438       | 258                       | 183     | 23.4             |                 |
| Lane Group Flow (vph)  | 164    | 932               | 0         | 253                                    |                 | 0                                     | 126       | 515       | 304                       | 213     | 102              | 126             |
| Turn Type  | pm+pt  |                   |           | pm+pt                                  |                 | 0,1                                   | Perm      | 313       |                           |         | 119              | 147             |
| Protected Phases   | 5      | 2                 | E-50/74-3 | 1                                      | 6               |                                       | 1 61111   | 8         | pm+ov<br>1                | Perm    | er Eller         | pm+ov           |
| Permitted Phases   | 2      | SECTION AND       |           | 6                                      |                 |                                       | 8         | 0.        | 8                         | 1       | 4                | 5               |
| Detector Phases  | 5      | 2                 | ,         | ্ৰ                                     | 6               |                                       | 8         | 8         | 4 - 4 <b>1</b> ~          | 4       | 4                | 4<br>- 2 (4 ) E |
| Minimum Initial (s)  | 2.0    | 15.0              |           | 2.0                                    | 15.0            |                                       | 5.0       | 5.0       | 2.0                       | 5.0     | 5.0              | 2.0             |
| Minimum Split (s)  | 7.0    | 20.5              |           | 7.0                                    | 20.5            | • `                                   | 27.5      | 27.5      | 7.0                       | 27.5    | 27.5             | 7.0             |
| Total Split (s)  | 12.0   | 38.0              | 0.0       | 18.0                                   | 44.0            | 0.0                                   | 54.0      | 54.0      | 18.0                      | 54.0    | 54.0             |                 |
| Total Split (%)  | 11%    | 35%               | 0%        | 16%                                    | 40%             | 0%                                    | 49%       | 49%       | 16%                       | 49%     | 49%              | 12.0            |
| Maximum Green (s)  | 7.0    | 32.5              | 0.0       | 13.0                                   | 38.5            | 0,0                                   | 48.5      | 48.5      | 13.0                      | 48.5    |                  | 11%             |
| Yellow Time (s)  | 3.5    | 3.5               |           | 3.5                                    | 3.5             |                                       | 3.5       | 3.5       | 3.5                       | 3.5     | 48.5             | 7.0             |
| All-Red Time (s)   | 1.5    | 2.0               |           | 1.5                                    | 2.0             |                                       | 2.0       | 2.0       | 1.5                       | 2.0     | 3.5              | 3.5             |
| Lead/Lag   | Lead   | Lag               | of Tak    | Lead                                   | Lag             | 544.                                  | 2.0       | 2.0       | Lead                      | 2.0     | 2.0              | 1.5             |
| Lead-Lag Optimize?   |        | Lag               |           | LCau                                   | Lag             |                                       |           | i di tana | Leau                      |         | 1. 21. 1. 1.     | Lead            |
| Vehicle Extension (s)  | 1.0    | 1.0               |           | 1.0                                    | 1.0             | 6500.63                               | 2.0       | 2.0       | 1.0                       | 20      | 0.0              |                 |
| Recall Mode  |        | Coord             | , , , , , |  | Coord           | Route A.P.                            | None      | None      | 1.0<br>None               | 2.0     | 2.0              | 1.0             |
| Walk Time (s)  | 140110 |                   |           | TACHE                                  | Ooord           |                                       | 7.0       | 7.0       | None                      | None    | None             | None            |
| Flash Dont Walk (s)  |        |                   |           | ************************************** |                 |                                       | 15.0      |           |                           | 7.0     | 7.0              |                 |
| Pedestrian Calls (#/hr)  |        |                   |           |  | ze Enchla       | SA Sada                               | 0         | 15.0      |                           | 15.0    | 15.0             |                 |
| Act Effct Green (s)  | 50.5   | 41.7              | 111       | 57.1                                   | 46.0            |                                       | 46.2      | 16.0      | 00.0                      | 0       | 0                |                 |
| Actuated g/C Ratio   | 0.46   | 0.38              |           | 0.52                                   | 0.42            |                                       |           | 46.2      | 62.3                      | 46.2    | 46.2             | 58.0            |
| //c Ratio  | 0.76   | 0.33              |           | 0.32                                   | 0.42            |                                       | 0.42      | 0.42      | 0.57                      | 0.42    | 0.42             | 0.53            |
| Uniform Delay, d1  | 14.9   |                   |           |  |                 |                                       | 0.25      | 0.67      | 0.33                      | 0.95    | 0.15             | 0.18            |
| Delay  |        | 28.8              |           | 21.8                                   | 31.2            | 1732,45                               | 20.7      | 25.8      | 11.5                      | 30.7    | 19.7             | 11.4            |
| .OS  | 34.3   | 33.1              |           | 46.6                                   | 52.9            |                                       | 19.4      | 25.2      | 10.6                      | 47.2    | 18.4             | 10.3            |
| man and the control of the control o | С      | C                 |           | D                                      | D               |                                       | В         | С         | В                         | D       | В                | В               |
| Approach Delay<br>Approach LOS   | E+137  | 33.3<br>C         |           |  | 51.9<br>D       |                                       |           | 19.8<br>B |                           |         | 28.7<br>C        |                 |

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 41 (37%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow

Natural Cycle: 65

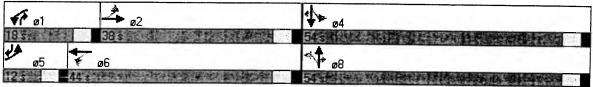
Control Type: Actuated-Coordinated

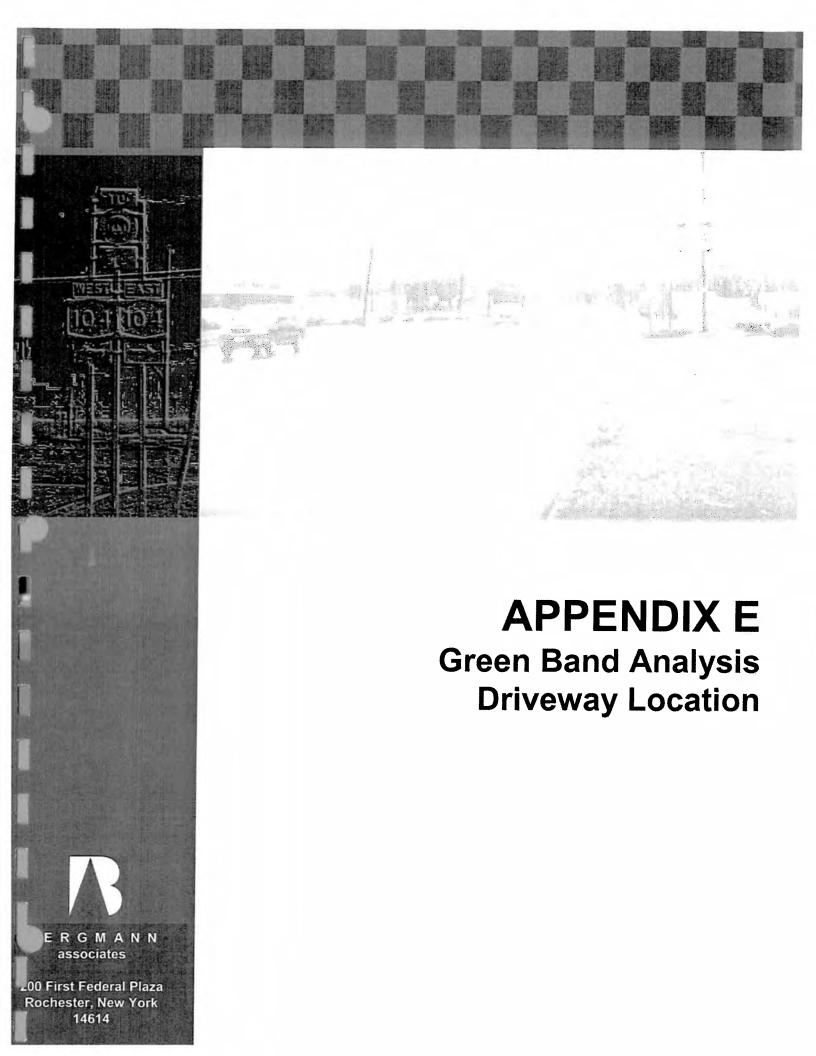
Maximum v/c Ratio: 0.96

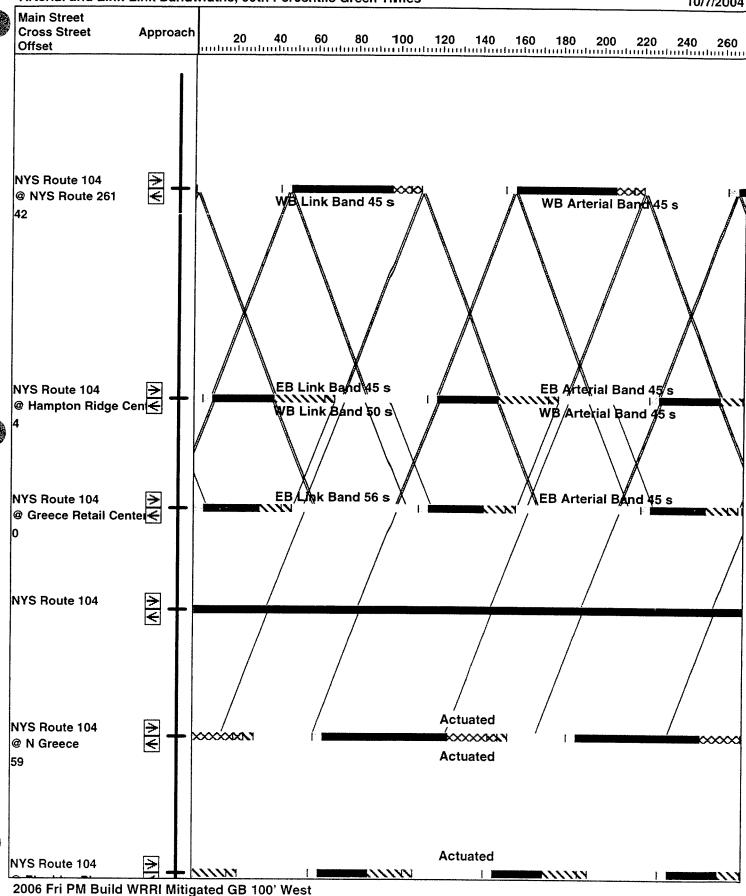
Intersection Signal Delay: 36.8
Intersection Capacity Utilization 98.6%

Intersection LOS: D
ICU Level of Service E

Splits and Phases: 1056: NYS Route 104 & NYS Route 261

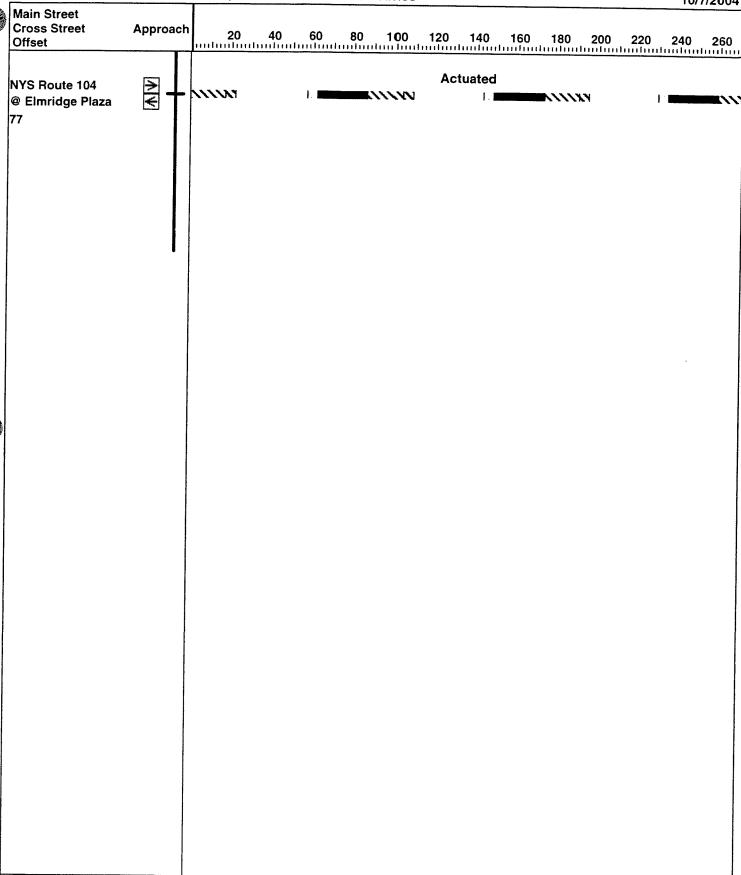


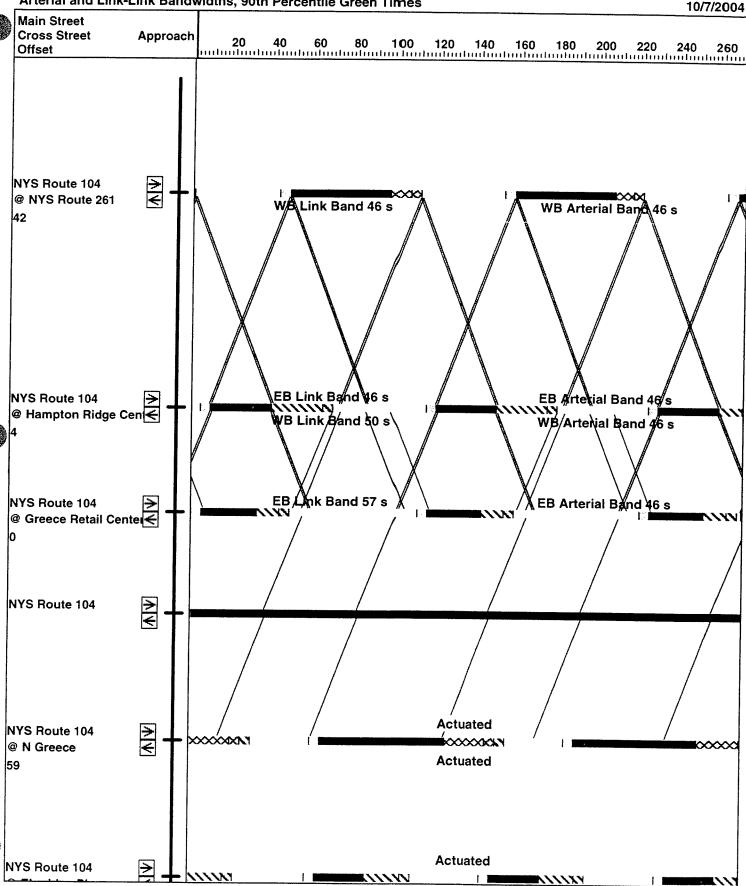




Time-Space Diagram - NYS Route 104 Arterial and Link-Link Bandwidths, 90th Percentile Green Times

10/7/2004





2006 Fri PM Build WRRI Mitigated GB 50' West

Time-Space Diagram - NYS Route 104 Arterial and Link-Link Bandwidths, 90th Percentile Green Times 10/7/2004 Main Street **Cross Street** Approach 20 40 60 80 100 120 140 160 180 200 220 240 260 Offset **Actuated** NYS Route 104 ≯ 111/11 NX///X @ Elmridge Plaza 77 2006 Fri PM Build WRRI Mitigated GB 50' West

Time-Space Diagram - NYS Route 104 Arterial and Link-Link Bandwidths, 90th Percentile Green Times 10/7/2004 Main Street **Cross Street** Approach 20 40 60 80 100 120 140 160 180 200 220 240 260 Offset **Actuated** NYS Route 104 <u>≯</u> 11/1/1/ @ Elmridge Plaza 77

Time-Space Diagram - NYS Route 104 Arterial and Link-Link Bandwidths, 90th Percentile Green Times 10/7/2004 Main Street **Cross Street** Approach 20 40 60 80 100 120 140 160 180 200 220 240 260 Offset **Actuated** NYS Route 104 <u>\*</u> 11/1/1/ WILLE @ Elmridge Plaza 77

NYS Route 104

NYS Route 104

© N Greece

Actuated

Actuated

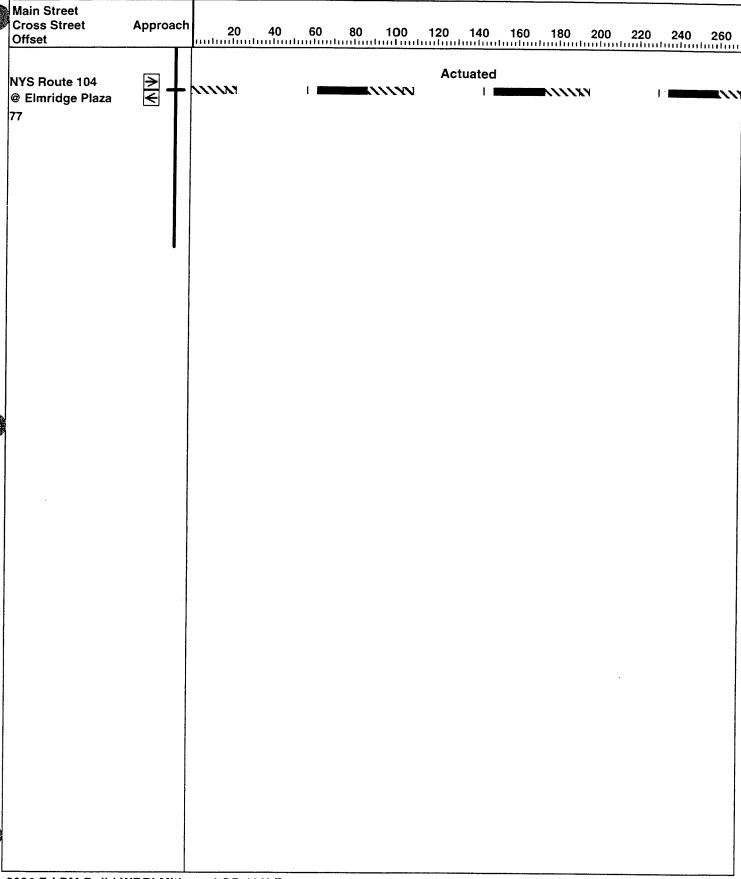
Actuated

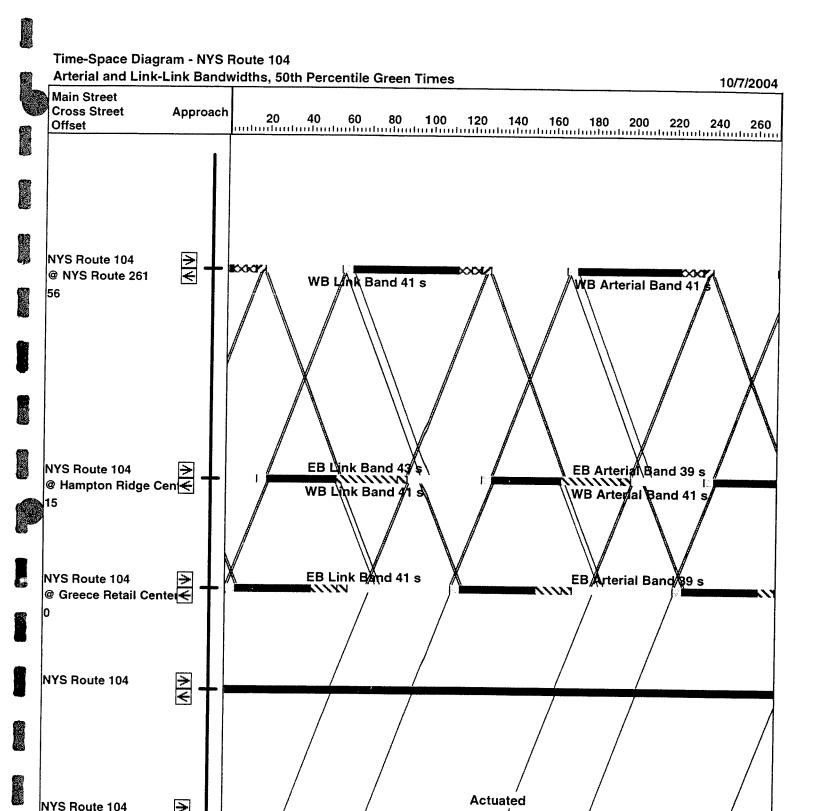
**Actuated** 

2006 Fri PM Build WRRI Mitigated GB 100' East

NYS Route 104

Arterial and Link-Link Bandwidths, 90th Percentile Green Times





KKÓRXXX

**Actuated** 

Actuated

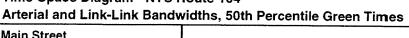
2006 Sat Mid Build WRRI Mitigated (not at Manitou) GB 100' West

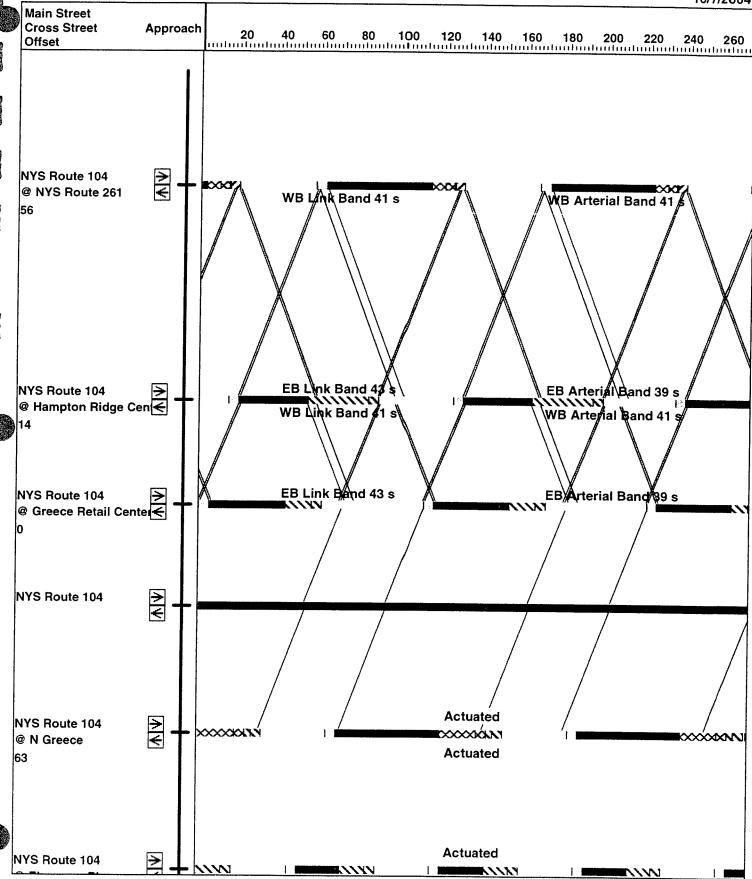
@ N Greece

NYS Route 104

63

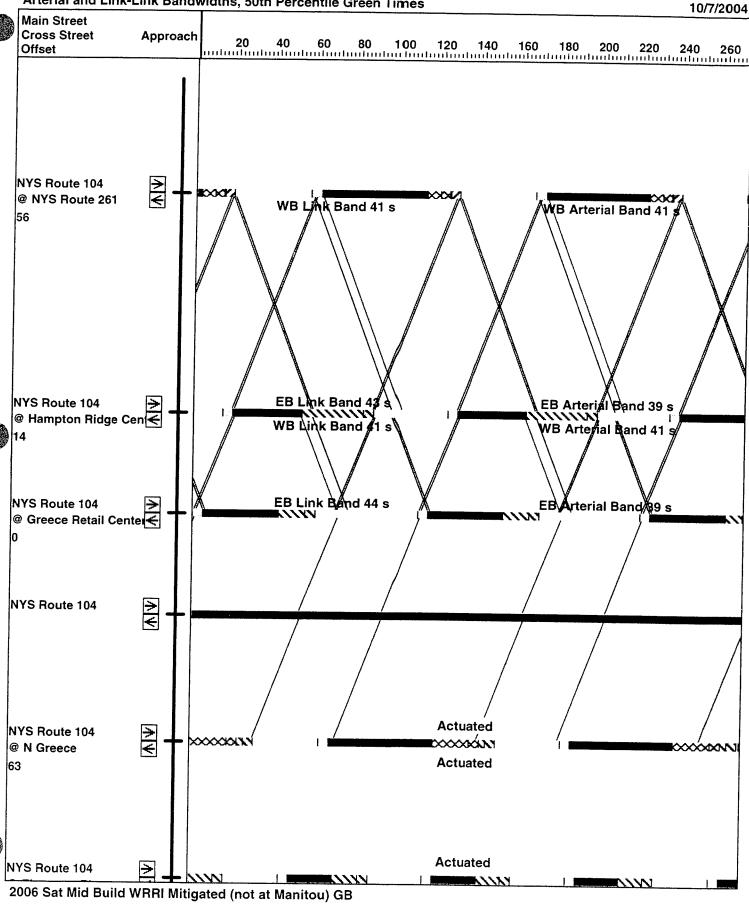
Time-Space Diagram - NYS Route 104 Arterial and Link-Link Bandwidths, 50th Percentile Green Times 10/7/2004 Main Street **Cross Street** Approach 20 40 60 80 100 120 140 160 180 200 220 240 260 Offset Actuated NYS Route 104 <u>≯</u> @ Elmgrove Plaza 74 2006 Sat Mid Build WRRI Mitigated (not at Manitou) GB 100' West





2006 Sat Mid Build WRRI Mitigated (not at Manitou) GB 50' West

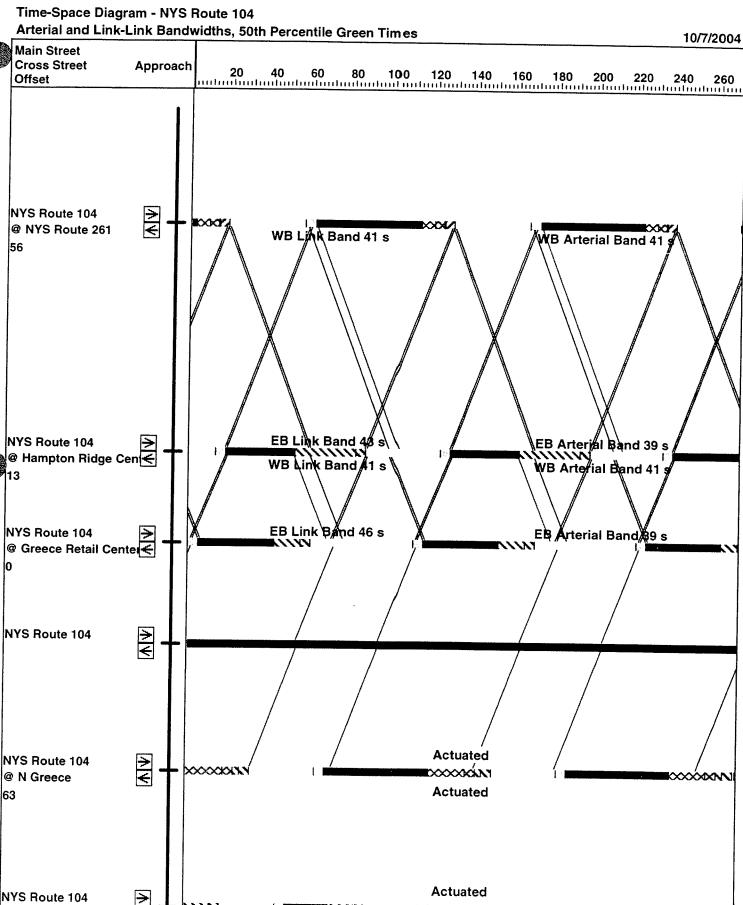
|                                   | K-Link Bandwidths, 50th Percentile Green Times       | 7/2004 |
|-----------------------------------|--|--------|
| Main Street Cross Street Offset   | Approach 20 40 60 80 100 120 140 160 180 200 220 240 | 260    |
| NYS Route 104 @ Elmgrove Plaza 74 | Actuated   |        |
|                                   |  |        |
|                                   |  |        |



NYS Route 104

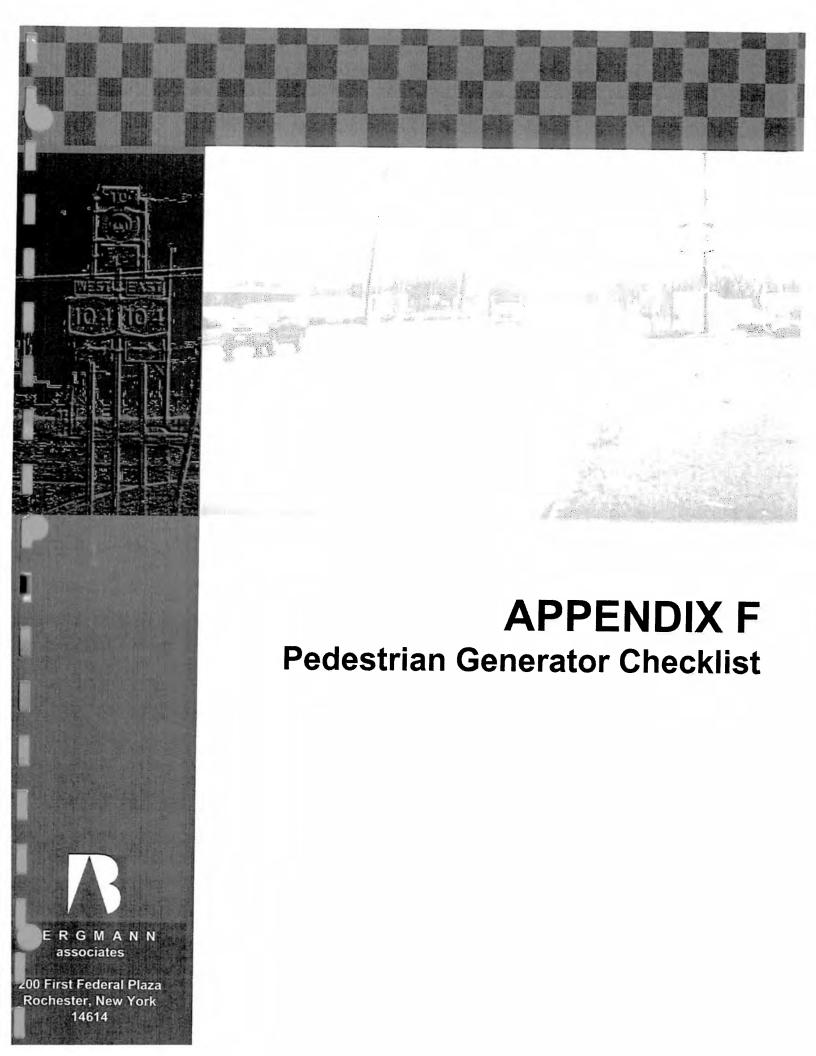
2006 Sat Mid Build WRRI Mitigated (not at Manitou) GB 50' East

Time-Space Diagram - NYS Route 104 Arterial and Link-Link Bandwidths, 50th Percentile Green Times 10/7/2004 Main Street **Cross Street** Approach 20 40 60 80 100 120 140 160 180 200 220 240 260 Offset Actuated NYS Route 104 <u>≯</u> WII @ Elmgrove Plaza 74



2006 Sat Mid Build WRRI Mitigated (not at Manitou) GB 100' East

Time-Space Diagram - NYS Route 104 Arterial and Link-Link Bandwidths, 50th Percentile Green Times 10/7/2004 **Main Street Cross Street** Approach 20 40 60 80 100 120 140 160 180 200 220 240 260 Offset **Actuated** ★マ NYS Route 104 WII @ Elmgrove Plaza 74



## Attachment A

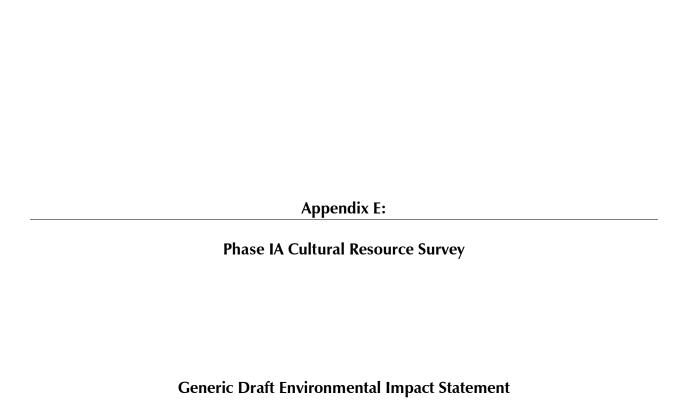
## PEDESTRIAN GENERATOR CHECKLIST

Note: The term "generator" in this document refers to both pedestrian generators (where pedestrians originate) and destinations (where pedestrians travel to)

A check of yes indicates a potential need to accommodate pedestrians and coordination with the Regional Bicycle and Pedestrian Coordinator is necessary during project scoping. Answers to the following questions should be checked with the local municipality to ensure accuracy.

| 1. | Is there an existing or planned sidewalk, trail, or pedestrian crossing facility?   | YES  | NO□  |
|----|---|------|------|
| 2. | Are there bus stops, transit stations, or depots/terminals located in or within 800 m of the project area?  | YES≅ | NO□  |
| 3. | Is there more than occasional pedestrian activity? Evidence of pedestrian activity may include a worn path.   | YES□ | NOM  |
| 4. | Are there existing or approved plans for generators of pedestrian activity in or within 800 m of the project that promote or have the potential to promote pedestrian traffic in the project area, such as schools, parks, playgrounds, places of employment, places of worship, post offices, municipal buildings, restaurants, shopping centers or other commercial areas, or multiuse paths? | YES♥ | NO□  |
| 5. | Are there existing or approved plans for seasonal generators of pedestrian activity in or within 800 m of the project that promote or have the potential to promote pedestrian traffic in the project area, such as ski resorts, state parks, camps, amusement parks?   | YES□ | NO 🗹 |
| 6. | Is the project located in a residential area within 800 m of existing or planned pedestrian generators such as those listed in #4?  | YES□ | NO   |
| 7. | From record plans, were pedestrian facilities removed during a previous highway reconstruction project?   | YES□ | NO   |
| 8. | Did a study of secondary impacts indicate that the project promotes or is likely to promote commercial and/or residential development within the intended life cycle of the project?  | YES≝ | NO□  |
| 9. | Does the community's comprehensive plan call for development of pedestrian facilities in the area?  | YES  | NO□  |
|    |   |      |      |

Note: This checklist should be revisited due to a project delay or if site conditions or local planning changes during the project development process.



**Hampton Ridge Center Rezoning**