

Report No. J087/TA1app  
September 2012

# DTPC

**PROPOSED RESIDENTIAL DEVELOPMENT  
WADDOW VIEW, LAND OFF MILTON AVENUE, CLITHEROE**

**TRANSPORT ASSESSMENT  
APPENDICES**

## **Appendix A**

## APPEAL APPENDIX PICADY RESULTS TABLES EXTRACTED FROM 2011 TRANSPORT ASSESSMENT

### Milton Avenue / B6478 / Eastham Street

Arm A is B6478 Clitheroe, Arm B is Milton Avenue, Arm C is B6478 Waddington and Arm D is Eastham Street.

| Peak Period | Movement | 2011 Base Flows |       | 2011 Base plus Development Flows |       | 2016 Base Flows |       | 2016 Base plus Development Flows |       |
|-------------|----------|-----------------|-------|----------------------------------|-------|-----------------|-------|----------------------------------|-------|
|             |          | Max RFC         | Queue | Max RFC                          | Queue | Max RFC         | Queue | Max RFC                          | Queue |
| AM          | B-ACD    | 0.009           | 0.01  | 0.060                            | 0.06  | 0.009           | 0.01  | 0.063                            | 0.07  |
|             | A-BCD    | 0.107           | 0.12  | 0.107                            | 0.12  | 0.111           | 0.13  | 0.111                            | 0.13  |
|             | D-ABC    | 0.140           | 0.16  | 0.140                            | 0.16  | 0.145           | 0.17  | 0.146                            | 0.17  |
|             | C-ABD    | 0.002           | 0.00  | 0.008                            | 0.01  | 0.002           | 0.00  | 0.008                            | 0.01  |
| PM          | B-ACD    | 0.008           | 0.01  | 0.027                            | 0.03  | 0.008           | 0.01  | 0.027                            | 0.03  |
|             | A-BCD    | 0.143           | 0.18  | 0.143                            | 0.18  | 0.150           | 0.19  | 0.150                            | 0.19  |
|             | D-ABC    | 0.116           | 0.13  | 0.117                            | 0.13  | 0.120           | 0.14  | 0.120                            | 0.14  |
|             | C-ABD    | 0.000           | 0.00  | 0.000                            | 0.00  | 0.000           | 0.00  | 0.000                            | 0.00  |

### Milton Avenue / B6478 / Eastham Street – 2011 and 2016 PICADY Results

It can be seen from Table 3 that the priority cross road junction operates well within capacity in both 2011 and 2016 with base flows plus the proposed development trips.

### B6478 / Chester Avenue / Park Avenue

Arm A is B6478 Clitheroe, Arm B is Chester Avenue, Arm C is B6478 Waddington and Arm D is Park Avenue.

| Peak Period | Movement | 2011 Base Flows |       | 2011 Base plus Development Flows |       | 2016 Base Flows |       | 2016 Base plus Development Flows |       |
|-------------|----------|-----------------|-------|----------------------------------|-------|-----------------|-------|----------------------------------|-------|
|             |          | Max RFC         | Queue | Max RFC                          | Queue | Max RFC         | Queue | Max RFC                          | Queue |
| AM          | B-ACD    | 0.048           | 0.05  | 0.049                            | 0.05  | 0.049           | 0.05  | 0.049                            | 0.05  |
|             | A-BCD    | 0.006           | 0.01  | 0.006                            | 0.01  | 0.006           | 0.01  | 0.006                            | 0.01  |
|             | D-ABC    | 0.038           | 0.04  | 0.038                            | 0.04  | 0.040           | 0.04  | 0.040                            | 0.04  |
|             | C-ABD    | 0.036           | 0.04  | 0.036                            | 0.04  | 0.038           | 0.04  | 0.038                            | 0.04  |
| PM          | B-ACD    | 0.061           | 0.06  | 0.062                            | 0.07  | 0.065           | 0.07  | 0.066                            | 0.07  |
|             | A-BCD    | 0.035           | 0.04  | 0.035                            | 0.04  | 0.037           | 0.04  | 0.037                            | 0.04  |
|             | D-ABC    | 0.038           | 0.04  | 0.038                            | 0.04  | 0.040           | 0.04  | 0.040                            | 0.04  |
|             | C-ABD    | 0.021           | 0.02  | 0.022                            | 0.02  | 0.022           | 0.02  | 0.022                            | 0.02  |

### Staggered Junction of B6478 / Chester Avenue / Park Avenue - 2011 and 2016 PICADY Results

### B6478 / Railway View Road

Arm A is Railway View Road, Arm B is B6478 Waddington and Arm C is B6478 Clitheroe.

| Peak Period | Movement | 2011 Base Flows |       | 2011 Base plus Development Flows |       | 2016 Base Flows |       | 2016 Base plus Development Flows |       |
|-------------|----------|-----------------|-------|----------------------------------|-------|-----------------|-------|----------------------------------|-------|
|             |          | Max RFC         | Queue | Max RFC                          | Queue | Max RFC         | Queue | Max RFC                          | Queue |
| AM          | B-C      | 0.540           | 1.15  | 0.570                            | 1.30  | 0.564           | 1.27  | 0.594                            | 1.43  |
|             | B-ACD    | 0.183           | 0.22  | 0.200                            | 0.25  | 0.197           | 0.24  | 0.215                            | 0.27  |
|             | C-AB     | 0.290           | 0.45  | 0.297                            | 0.47  | 0.301           | 0.48  | 0.311                            | 0.51  |
| PM          | B-C      | 0.630           | 1.66  | 0.638                            | 1.72  | 0.660           | 1.88  | 0.671                            | 1.97  |
|             | B-ACD    | 0.178           | 0.21  | 0.184                            | 0.22  | 0.197           | 0.24  | 0.205                            | 0.25  |
|             | C-AB     | 0.574           | 1.88  | 0.607                            | 2.19  | 0.600           | 2.15  | 0.634                            | 2.52  |

### Three Arm Priority T junction of B6478 / Railway View Road - 2011 and 2016 PICADY Results

| Peak Period | Movement | 2011 Base plus 50 dwelling trips - Sensitivity Test |       | 2011 Base plus 200 dwelling trips - Sensitivity Test |       |
|-------------|----------|-----------------------------------------------------|-------|------------------------------------------------------|-------|
|             |          | Max RFC                                             | Queue | Max RFC                                              | Queue |
| AM          | B-C      | 0.588                                               | 1.40  | 0.738                                                | 2.67  |
|             | B-ACD    | 0.207                                               | 0.26  | 0.321                                                | 0.46  |
|             | C-AB     | 0.302                                               | 0.48  | 0.338                                                | 0.58  |
| PM          | B-C      | 0.650                                               | 1.80  | 0.713                                                | 2.37  |
|             | B-ACD    | 0.192                                               | 0.23  | 0.247                                                | 0.32  |
|             | C-AB     | 0.607                                               | 2.19  | 0.708                                                | 3.57  |

### Three Arm Priority T junction of B6478 / Railway View Road - 2011 Sensitivity Test PICADY Results

## **Appendix B**

Site 1 : B6478 Waddington Road/Railway View Road

A: B6478 Clitheroe

Day: Thursday

B: Railway View Road

Date: 21 July 2011

C: B6478 Waddington

Weather: Fine/Cloudy

| A - B |     |     |      |      |     |     |     |       | A - C |     |      |      |     |     |     |       |
|-------|-----|-----|------|------|-----|-----|-----|-------|-------|-----|------|------|-----|-----|-----|-------|
| Time  | Car | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total | Car   | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total |
| 07:30 | 20  | 5   | 2    | 0    | 0   | 0   | 0   | 27    | 15    | 5   | 2    | 0    | 1   | 0   | 1   | 24    |
| 07:45 | 34  | 6   | 5    | 1    | 1   | 0   | 0   | 47    | 19    | 7   | 0    | 0    | 1   | 1   | 0   | 28    |
| 08:00 | 38  | 9   | 1    | 0    | 0   | 0   | 3   | 51    | 23    | 9   | 2    | 1    | 0   | 0   | 1   | 36    |
| 08:15 | 45  | 6   | 0    | 1    | 1   | 0   | 0   | 53    | 23    | 7   | 1    | 0    | 0   | 0   | 1   | 32    |
| 08:30 | 32  | 1   | 0    | 1    | 0   | 0   | 1   | 35    | 23    | 8   | 0    | 1    | 0   | 1   | 0   | 33    |
| 08:45 | 42  | 5   | 0    | 0    | 0   | 0   | 1   | 48    | 19    | 5   | 0    | 0    | 1   | 0   | 0   | 25    |
| 09:00 | 59  | 13  | 4    | 0    | 3   | 0   | 1   | 80    | 40    | 11  | 0    | 0    | 0   | 0   | 0   | 51    |
| 09:15 | 43  | 6   | 1    | 0    | 0   | 0   | 0   | 50    | 27    | 11  | 1    | 0    | 0   | 0   | 0   | 39    |
| Total | 313 | 51  | 13   | 3    | 5   | 0   | 6   | 391   | 189   | 63  | 6    | 2    | 3   | 2   | 3   | 268   |

|       |     |    |   |   |    |   |   |     |     |    |   |   |   |   |   |     |
|-------|-----|----|---|---|----|---|---|-----|-----|----|---|---|---|---|---|-----|
| 16:30 | 71  | 4  | 0 | 0 | 1  | 1 | 0 | 77  | 57  | 2  | 0 | 0 | 0 | 1 | 0 | 60  |
| 16:45 | 72  | 9  | 1 | 0 | 5  | 3 | 0 | 90  | 53  | 4  | 0 | 0 | 0 | 1 | 1 | 59  |
| 17:00 | 68  | 15 | 1 | 0 | 1  | 0 | 0 | 85  | 48  | 9  | 0 | 0 | 2 | 0 | 0 | 59  |
| 17:15 | 62  | 9  | 0 | 0 | 4  | 1 | 0 | 76  | 47  | 5  | 0 | 0 | 2 | 2 | 2 | 58  |
| 17:30 | 61  | 10 | 0 | 0 | 2  | 2 | 1 | 76  | 62  | 5  | 0 | 0 | 2 | 0 | 0 | 69  |
| 17:45 | 61  | 6  | 1 | 0 | 1  | 2 | 0 | 71  | 50  | 4  | 0 | 0 | 0 | 0 | 1 | 55  |
| 18:00 | 59  | 10 | 1 | 0 | 1  | 0 | 1 | 72  | 48  | 5  | 0 | 0 | 1 | 0 | 0 | 54  |
| 18:15 | 42  | 7  | 0 | 0 | 0  | 0 | 1 | 50  | 42  | 6  | 1 | 0 | 0 | 3 | 0 | 52  |
| Total | 496 | 70 | 4 | 0 | 15 | 9 | 3 | 597 | 407 | 40 | 1 | 0 | 7 | 7 | 4 | 466 |

| B - A |     |     |      |      |     |     |     |       | B - C |     |      |      |     |     |     |       |
|-------|-----|-----|------|------|-----|-----|-----|-------|-------|-----|------|------|-----|-----|-----|-------|
| Time  | Car | LGV | OGVI | 0GV2 | P/C | M/C | PSV | Total | Car   | LGV | OGVI | 0GV2 | P/C | M/C | PSV | Total |
| 07:30 | 30  | 9   | 2    | 1    | 0   | 0   | 3   | 45    | 8     | 1   | 0    | 0    | 0   | 0   | 0   | 9     |
| 07:45 | 30  | 11  | 1    | 0    | 2   | 0   | 1   | 45    | 10    | 1   | 0    | 0    | 0   | 0   | 0   | 11    |
| 08:00 | 48  | 14  | 6    | 0    | 2   | 1   | 1   | 72    | 6     | 0   | 0    | 0    | 0   | 0   | 0   | 6     |
| 08:15 | 52  | 7   | 2    | 2    | 4   | 1   | 6   | 74    | 20    | 3   | 0    | 0    | 0   | 0   | 1   | 24    |
| 08:30 | 44  | 8   | 2    | 0    | 1   | 0   | 5   | 60    | 12    | 4   | 0    | 0    | 0   | 0   | 0   | 16    |
| 08:45 | 50  | 10  | 1    | 0    | 0   | 0   | 2   | 63    | 12    | 3   | 0    | 0    | 1   | 0   | 0   | 16    |
| 09:00 | 53  | 13  | 2    | 2    | 0   | 0   | 4   | 74    | 13    | 2   | 0    | 0    | 1   | 0   | 0   | 16    |
| 09:15 | 33  | 11  | 3    | 0    | 0   | 0   | 3   | 50    | 18    | 4   | 0    | 0    | 0   | 1   | 0   | 23    |
| Total | 340 | 83  | 19   | 5    | 9   | 2   | 25  | 483   | 99    | 18  | 0    | 0    | 2   | 1   | 1   | 121   |

|       |     |    |   |   |   |   |    |     |     |    |   |   |   |   |   |     |
|-------|-----|----|---|---|---|---|----|-----|-----|----|---|---|---|---|---|-----|
| 16:30 | 65  | 4  | 2 | 1 | 0 | 0 | 2  | 74  | 28  | 1  | 0 | 0 | 2 | 0 | 1 | 32  |
| 16:45 | 53  | 6  | 1 | 1 | 0 | 1 | 2  | 64  | 24  | 7  | 1 | 0 | 0 | 0 | 0 | 32  |
| 17:00 | 78  | 10 | 1 | 0 | 0 | 1 | 4  | 94  | 41  | 3  | 0 | 0 | 1 | 0 | 0 | 45  |
| 17:15 | 65  | 7  | 2 | 0 | 0 | 1 | 0  | 75  | 29  | 4  | 0 | 0 | 1 | 0 | 0 | 34  |
| 17:30 | 75  | 3  | 2 | 0 | 1 | 0 | 2  | 83  | 45  | 3  | 0 | 0 | 0 | 0 | 0 | 48  |
| 17:45 | 56  | 5  | 0 | 1 | 0 | 0 | 1  | 63  | 40  | 0  | 0 | 0 | 0 | 0 | 0 | 40  |
| 18:00 | 52  | 8  | 0 | 0 | 1 | 1 | 3  | 65  | 30  | 0  | 0 | 0 | 0 | 0 | 0 | 30  |
| 18:15 | 51  | 2  | 0 | 0 | 2 | 0 | 1  | 56  | 29  | 2  | 0 | 0 | 0 | 0 | 0 | 31  |
| Total | 495 | 45 | 8 | 3 | 4 | 4 | 15 | 574 | 266 | 20 | 1 | 0 | 4 | 0 | 1 | 292 |

| C - A |     |     |      |      |     |     |     |       | C - B |     |      |      |     |     |     |       |
|-------|-----|-----|------|------|-----|-----|-----|-------|-------|-----|------|------|-----|-----|-----|-------|
| Time  | Car | LGV | OGVI | 0GV2 | P/C | M/C | PSV | Total | Car   | LGV | OGVI | 0GV2 | P/C | M/C | PSV | Total |
| 07:30 | 42  | 4   | 0    | 0    | 0   | 0   | 0   | 46    | 7     | 1   | 0    | 0    | 0   | 0   | 0   | 8     |
| 07:45 | 37  | 8   | 2    | 0    | 0   | 0   | 0   | 47    | 8     | 1   | 0    | 0    | 0   | 0   | 0   | 9     |
| 08:00 | 77  | 7   | 0    | 0    | 1   | 0   | 0   | 85    | 14    | 0   | 0    | 0    | 0   | 0   | 0   | 14    |
| 08:15 | 59  | 10  | 1    | 1    | 2   | 0   | 3   | 76    | 10    | 0   | 0    | 0    | 0   | 0   | 0   | 10    |
| 08:30 | 53  | 5   | 1    | 1    | 0   | 0   | 0   | 60    | 11    | 1   | 0    | 0    | 1   | 0   | 0   | 13    |
| 08:45 | 37  | 4   | 1    | 0    | 0   | 0   | 0   | 42    | 15    | 1   | 1    | 0    | 0   | 0   | 0   | 17    |
| 09:00 | 67  | 5   | 1    | 0    | 0   | 1   | 1   | 75    | 14    | 1   | 0    | 0    | 0   | 0   | 0   | 15    |
| 09:15 | 32  | 2   | 2    | 1    | 0   | 0   | 0   | 37    | 10    | 0   | 0    | 0    | 1   | 0   | 0   | 11    |
| Total | 404 | 45  | 8    | 3    | 3   | 1   | 4   | 468   | 89    | 5   | 1    | 0    | 2   | 0   | 0   | 97    |

|       |     |    |   |   |   |   |   |     |    |   |   |   |   |   |   |    |
|-------|-----|----|---|---|---|---|---|-----|----|---|---|---|---|---|---|----|
| 16:30 | 46  | 5  | 0 | 1 | 0 | 0 | 0 | 52  | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 12 |
| 16:45 | 71  | 10 | 0 | 0 | 0 | 0 | 0 | 81  | 11 | 1 | 0 | 0 | 0 | 0 | 0 | 12 |
| 17:00 | 57  | 10 | 0 | 0 | 1 | 1 | 0 | 69  | 10 | 1 | 0 | 0 | 0 | 0 | 0 | 11 |
| 17:15 | 67  | 9  | 0 | 0 | 0 | 2 | 1 | 79  | 4  | 0 | 0 | 0 | 0 | 0 | 0 | 4  |
| 17:30 | 63  | 11 | 1 | 0 | 0 | 0 | 0 | 75  | 7  | 2 | 0 | 0 | 1 | 0 | 0 | 10 |
| 17:45 | 56  | 5  | 0 | 0 | 1 | 0 | 0 | 62  | 9  | 0 | 0 | 0 | 0 | 0 | 0 | 9  |
| 18:00 | 34  | 3  | 0 | 0 | 3 | 1 | 0 | 41  | 5  | 0 | 0 | 0 | 0 | 0 | 0 | 5  |
| 18:15 | 33  | 2  | 0 | 0 | 0 | 2 | 0 | 37  | 9  | 0 | 0 | 0 | 0 | 0 | 0 | 9  |
| Total | 427 | 55 | 1 | 1 | 5 | 6 | 1 | 496 | 67 | 4 | 0 | 0 | 1 | 0 | 0 | 72 |

**B6479 WADDINGTON ROAD/RAILWAY VIEW ROAD, CLITHEROE - THURSDAY 20 JULY 2011 (08:00-09:00)**

**C - B6479 Waddington**

|              |            |           |          |          |          |          |          |            |
|--------------|------------|-----------|----------|----------|----------|----------|----------|------------|
| <b>C - A</b> | 226        | 26        | 3        | 2        | 3        | 0        | 3        | <b>263</b> |
| <b>C - B</b> | 50         | 2         | 1        | 0        | 1        | 0        | 0        | <b>54</b>  |
| <b>Total</b> | <b>276</b> | <b>28</b> | <b>4</b> | <b>2</b> | <b>4</b> | <b>0</b> | <b>3</b> | <b>317</b> |
|              | Cars       | LGV       | OGV1     | OGV2     | P/C      | M/C      | PSV      | Total      |

|             |            |           |          |          |          |          |          |            |
|-------------|------------|-----------|----------|----------|----------|----------|----------|------------|
| <b>To C</b> | <b>138</b> | <b>39</b> | <b>3</b> | <b>2</b> | <b>2</b> | <b>1</b> | <b>3</b> | <b>188</b> |
|-------------|------------|-----------|----------|----------|----------|----------|----------|------------|

|            |           |           |          |           |          |           |            |             |
|------------|-----------|-----------|----------|-----------|----------|-----------|------------|-------------|
| <b>420</b> | <b>65</b> | <b>14</b> | <b>4</b> | <b>10</b> | <b>2</b> | <b>17</b> | <b>532</b> | <b>To A</b> |
|------------|-----------|-----------|----------|-----------|----------|-----------|------------|-------------|

|  |            |           |          |          |          |          |          |            |              |
|--|------------|-----------|----------|----------|----------|----------|----------|------------|--------------|
|  | Cars       | LGV       | OGV1     | OGV2     | P/C      | M/C      | PSV      | Total      |              |
|  | 88         | 29        | 3        | 2        | 1        | 1        | 2        | <b>126</b> | <b>A - C</b> |
|  | 157        | 21        | 1        | 2        | 1        | 0        | 5        | <b>187</b> | <b>A - B</b> |
|  | <b>245</b> | <b>50</b> | <b>4</b> | <b>4</b> | <b>2</b> | <b>1</b> | <b>7</b> | <b>313</b> | <b>Total</b> |

|              |              |              |       |
|--------------|--------------|--------------|-------|
| 50           | 194          | <b>244</b>   | Cars  |
| 10           | 39           | <b>49</b>    | LGV   |
| 0            | 11           | <b>11</b>    | OGV1  |
| 0            | 2            | <b>2</b>     | OGV2  |
| 1            | 7            | <b>8</b>     | P/C   |
| 0            | 2            | <b>2</b>     | M/C   |
| 1            | 14           | <b>15</b>    | PSV   |
| <b>62</b>    | <b>269</b>   | <b>331</b>   | Total |
| <b>B - C</b> | <b>B - A</b> | <b>Total</b> |       |

|             |
|-------------|
| <b>207</b>  |
| <b>23</b>   |
| <b>2</b>    |
| <b>2</b>    |
| <b>2</b>    |
| <b>0</b>    |
| <b>5</b>    |
| <b>241</b>  |
| <b>To B</b> |

**B - Railway View Road**

**A - B6479 Clitheroe**

**B6479 WADDINGTON ROAD/RAILWAY VIEW ROAD, CLITHEROE - THURSDAY 20 JULY 2011 (16:45-17:45)**

**C - B6479 Waddington**

|              |             |            |             |             |            |            |            |              |
|--------------|-------------|------------|-------------|-------------|------------|------------|------------|--------------|
| <b>C - A</b> | 258         | 40         | 1           | 0           | 1          | 3          | 1          | <b>304</b>   |
| <b>C - B</b> | 32          | 4          | 0           | 0           | 1          | 0          | 0          | <b>37</b>    |
| <b>Total</b> | <b>290</b>  | <b>44</b>  | <b>1</b>    | <b>0</b>    | <b>2</b>   | <b>3</b>   | <b>1</b>   | <b>341</b>   |
|              | <b>Cars</b> | <b>LGV</b> | <b>OGV1</b> | <b>OGV2</b> | <b>P/C</b> | <b>M/C</b> | <b>PSV</b> | <b>Total</b> |

|             |            |           |          |          |          |          |          |            |
|-------------|------------|-----------|----------|----------|----------|----------|----------|------------|
| <b>To C</b> | <b>349</b> | <b>40</b> | <b>1</b> | <b>0</b> | <b>8</b> | <b>3</b> | <b>3</b> | <b>404</b> |
|-------------|------------|-----------|----------|----------|----------|----------|----------|------------|

|            |           |          |          |          |          |          |            |             |
|------------|-----------|----------|----------|----------|----------|----------|------------|-------------|
| <b>529</b> | <b>66</b> | <b>7</b> | <b>1</b> | <b>2</b> | <b>6</b> | <b>9</b> | <b>620</b> | <b>To A</b> |
|------------|-----------|----------|----------|----------|----------|----------|------------|-------------|

|             |            |             |             |            |            |            |              |              |
|-------------|------------|-------------|-------------|------------|------------|------------|--------------|--------------|
| <b>Cars</b> | <b>LGV</b> | <b>OGV1</b> | <b>OGV2</b> | <b>P/C</b> | <b>M/C</b> | <b>PSV</b> | <b>Total</b> |              |
| 210         | 23         | 0           | 0           | 6          | 3          | 3          | <b>245</b>   | <b>A - C</b> |
| 263         | 43         | 2           | 0           | 12         | 6          | 1          | <b>327</b>   | <b>A - B</b> |
| <b>473</b>  | <b>66</b>  | <b>2</b>    | <b>0</b>    | <b>18</b>  | <b>9</b>   | <b>4</b>   | <b>572</b>   | <b>Total</b> |

|              |              |              |              |
|--------------|--------------|--------------|--------------|
| 139          | 271          | <b>410</b>   | <b>Cars</b>  |
| 17           | 26           | <b>43</b>    | <b>LGV</b>   |
| 1            | 6            | <b>7</b>     | <b>OGV1</b>  |
| 0            | 1            | <b>1</b>     | <b>OGV2</b>  |
| 2            | 1            | <b>3</b>     | <b>P/C</b>   |
| 0            | 3            | <b>3</b>     | <b>M/C</b>   |
| 0            | 8            | <b>8</b>     | <b>PSV</b>   |
| <b>159</b>   | <b>316</b>   | <b>475</b>   | <b>Total</b> |
| <b>B - C</b> | <b>B - A</b> | <b>Total</b> |              |

|             |
|-------------|
| <b>295</b>  |
| <b>47</b>   |
| <b>2</b>    |
| <b>0</b>    |
| <b>13</b>   |
| <b>6</b>    |
| <b>1</b>    |
| <b>364</b>  |
| <b>To B</b> |

**B - Railway View Road**

**A - B6479 Clitheroe**

# Summary

Site 1 : B6478 Waddington Road/Railway View Road

Day: Thursday

Date: 21 July 2011

Weather: Fine/Cloudy

A: B6478 Clitheroe

B: Railway View Road

C: B6478 Waddington

| Time  | From A |     |      |      |     |     |     |       | From B |     |      |      |     |     |     |       | From C |     |      |      |     |     |     |       |
|-------|--------|-----|------|------|-----|-----|-----|-------|--------|-----|------|------|-----|-----|-----|-------|--------|-----|------|------|-----|-----|-----|-------|
|       | Car    | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total | Car    | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total | Car    | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total |
| 07:30 | 35     | 10  | 4    | 0    | 1   | 0   | 1   | 51    | 38     | 10  | 2    | 1    | 0   | 0   | 3   | 54    | 49     | 5   | 0    | 0    | 0   | 0   | 0   | 54    |
| 07:45 | 53     | 13  | 5    | 1    | 2   | 1   | 0   | 75    | 40     | 12  | 1    | 0    | 2   | 0   | 1   | 56    | 45     | 9   | 2    | 0    | 0   | 0   | 0   | 56    |
| 08:00 | 61     | 18  | 3    | 1    | 0   | 0   | 4   | 87    | 54     | 14  | 6    | 0    | 2   | 1   | 1   | 78    | 91     | 7   | 0    | 0    | 1   | 0   | 0   | 99    |
| 08:15 | 68     | 13  | 1    | 1    | 1   | 0   | 1   | 85    | 72     | 10  | 2    | 2    | 4   | 1   | 7   | 98    | 69     | 10  | 1    | 1    | 2   | 0   | 3   | 86    |
| 08:30 | 55     | 9   | 0    | 2    | 0   | 1   | 1   | 68    | 56     | 12  | 2    | 0    | 1   | 0   | 5   | 76    | 64     | 6   | 1    | 1    | 1   | 0   | 0   | 73    |
| 08:45 | 61     | 10  | 0    | 0    | 1   | 0   | 1   | 73    | 62     | 13  | 1    | 0    | 1   | 0   | 2   | 79    | 52     | 5   | 2    | 0    | 0   | 0   | 0   | 59    |
| 09:00 | 99     | 24  | 4    | 0    | 3   | 0   | 1   | 131   | 66     | 15  | 2    | 2    | 1   | 0   | 4   | 90    | 81     | 6   | 1    | 0    | 0   | 1   | 1   | 90    |
| 09:15 | 70     | 17  | 2    | 0    | 0   | 0   | 0   | 89    | 51     | 15  | 3    | 0    | 0   | 1   | 3   | 73    | 42     | 2   | 2    | 1    | 1   | 0   | 0   | 48    |
| Total | 502    | 114 | 19   | 5    | 8   | 2   | 9   | 659   | 439    | 101 | 19   | 5    | 11  | 3   | 26  | 604   | 493    | 50  | 9    | 3    | 5   | 1   | 4   | 565   |

|       |     |     |   |   |    |    |   |      |     |    |   |   |   |   |    |     |     |    |   |   |   |   |   |     |
|-------|-----|-----|---|---|----|----|---|------|-----|----|---|---|---|---|----|-----|-----|----|---|---|---|---|---|-----|
| 16:30 | 128 | 6   | 0 | 0 | 1  | 2  | 0 | 137  | 93  | 5  | 2 | 1 | 2 | 0 | 3  | 106 | 58  | 5  | 0 | 1 | 0 | 0 | 0 | 64  |
| 16:45 | 125 | 13  | 1 | 0 | 5  | 4  | 1 | 149  | 77  | 13 | 2 | 1 | 0 | 1 | 2  | 96  | 82  | 11 | 0 | 0 | 0 | 0 | 0 | 93  |
| 17:00 | 116 | 24  | 1 | 0 | 3  | 0  | 0 | 144  | 119 | 13 | 1 | 0 | 1 | 1 | 4  | 139 | 67  | 11 | 0 | 0 | 1 | 1 | 0 | 80  |
| 17:15 | 109 | 14  | 0 | 0 | 6  | 3  | 2 | 134  | 94  | 11 | 2 | 0 | 1 | 1 | 0  | 109 | 71  | 9  | 0 | 0 | 0 | 2 | 1 | 83  |
| 17:30 | 123 | 15  | 0 | 0 | 4  | 2  | 1 | 145  | 120 | 6  | 2 | 0 | 1 | 0 | 2  | 131 | 70  | 13 | 1 | 0 | 1 | 0 | 0 | 85  |
| 17:45 | 111 | 10  | 1 | 0 | 1  | 2  | 1 | 126  | 96  | 5  | 0 | 1 | 0 | 0 | 1  | 103 | 65  | 5  | 0 | 0 | 1 | 0 | 0 | 71  |
| 18:00 | 107 | 15  | 1 | 0 | 2  | 0  | 1 | 126  | 82  | 8  | 0 | 0 | 1 | 1 | 3  | 95  | 39  | 3  | 0 | 0 | 3 | 1 | 0 | 46  |
| 18:15 | 84  | 13  | 1 | 0 | 0  | 3  | 1 | 102  | 80  | 4  | 0 | 0 | 2 | 0 | 1  | 87  | 42  | 2  | 0 | 0 | 0 | 2 | 0 | 46  |
| Total | 903 | 110 | 5 | 0 | 22 | 16 | 7 | 1063 | 761 | 65 | 9 | 3 | 8 | 4 | 16 | 866 | 494 | 59 | 1 | 1 | 6 | 6 | 1 | 568 |

## Summary

| To A  |     |     |      |      |     |     |     |       | To B |     |      |      |     |     |     |       |     | To C |      |      |     |     |     |       |  |  |
|-------|-----|-----|------|------|-----|-----|-----|-------|------|-----|------|------|-----|-----|-----|-------|-----|------|------|------|-----|-----|-----|-------|--|--|
| Time  | Car | LGV | OGVI | 0GV2 | P/C | M/C | PSV | Total | Car  | LGV | OGVI | 0GV2 | P/C | M/C | PSV | Total | Car | LGV  | OGVI | 0GV2 | P/C | M/C | PSV | Total |  |  |
| 07:30 | 72  | 13  | 2    | 1    | 0   | 0   | 3   | 91    | 27   | 6   | 2    | 0    | 0   | 0   | 0   | 35    | 23  | 6    | 2    | 0    | 1   | 0   | 1   | 33    |  |  |
| 07:45 | 67  | 19  | 3    | 0    | 2   | 0   | 1   | 92    | 42   | 7   | 5    | 1    | 1   | 0   | 0   | 56    | 29  | 8    | 0    | 0    | 1   | 1   | 0   | 39    |  |  |
| 08:00 | 125 | 21  | 6    | 0    | 3   | 1   | 1   | 157   | 52   | 9   | 1    | 0    | 0   | 0   | 3   | 65    | 29  | 9    | 2    | 1    | 0   | 0   | 1   | 42    |  |  |
| 08:15 | 111 | 17  | 3    | 3    | 6   | 1   | 9   | 150   | 55   | 6   | 0    | 1    | 1   | 0   | 0   | 63    | 43  | 10   | 1    | 0    | 0   | 0   | 2   | 56    |  |  |
| 08:30 | 97  | 13  | 3    | 1    | 1   | 0   | 5   | 120   | 43   | 2   | 0    | 1    | 1   | 0   | 1   | 48    | 35  | 12   | 0    | 1    | 0   | 1   | 0   | 49    |  |  |
| 08:45 | 87  | 14  | 2    | 0    | 0   | 0   | 2   | 105   | 57   | 6   | 1    | 0    | 0   | 0   | 1   | 65    | 31  | 8    | 0    | 0    | 2   | 0   | 0   | 41    |  |  |
| 09:00 | 120 | 18  | 3    | 2    | 0   | 1   | 5   | 149   | 73   | 14  | 4    | 0    | 3   | 0   | 1   | 95    | 53  | 13   | 0    | 0    | 1   | 0   | 0   | 67    |  |  |
| 09:15 | 65  | 13  | 5    | 1    | 0   | 0   | 3   | 87    | 53   | 6   | 1    | 0    | 1   | 0   | 0   | 61    | 45  | 15   | 1    | 0    | 0   | 1   | 0   | 62    |  |  |
| Total | 744 | 128 | 27   | 8    | 12  | 3   | 29  | 951   | 402  | 56  | 14   | 3    | 7   | 0   | 6   | 488   | 288 | 81   | 6    | 2    | 5   | 3   | 4   | 389   |  |  |

|       |     |     |   |   |   |    |    |      |     |    |   |   |    |   |   |     |     |    |   |   |    |   |   |     |
|-------|-----|-----|---|---|---|----|----|------|-----|----|---|---|----|---|---|-----|-----|----|---|---|----|---|---|-----|
| 16:30 | 111 | 9   | 2 | 2 | 0 | 0  | 2  | 126  | 83  | 4  | 0 | 0 | 1  | 1 | 0 | 89  | 85  | 3  | 0 | 0 | 2  | 1 | 1 | 92  |
| 16:45 | 124 | 16  | 1 | 1 | 0 | 1  | 2  | 145  | 83  | 10 | 1 | 0 | 5  | 3 | 0 | 102 | 77  | 11 | 1 | 0 | 0  | 1 | 1 | 91  |
| 17:00 | 135 | 20  | 1 | 0 | 1 | 2  | 4  | 163  | 78  | 16 | 1 | 0 | 1  | 0 | 0 | 96  | 89  | 12 | 0 | 0 | 3  | 0 | 0 | 104 |
| 17:15 | 132 | 16  | 2 | 0 | 0 | 3  | 1  | 154  | 66  | 9  | 0 | 0 | 4  | 1 | 0 | 80  | 76  | 9  | 0 | 0 | 3  | 2 | 2 | 92  |
| 17:30 | 138 | 14  | 3 | 0 | 1 | 0  | 2  | 158  | 68  | 12 | 0 | 0 | 3  | 2 | 1 | 86  | 107 | 8  | 0 | 0 | 2  | 0 | 0 | 117 |
| 17:45 | 112 | 10  | 0 | 1 | 1 | 0  | 1  | 125  | 70  | 6  | 1 | 0 | 1  | 2 | 0 | 80  | 90  | 4  | 0 | 0 | 0  | 0 | 1 | 95  |
| 18:00 | 86  | 11  | 0 | 0 | 4 | 2  | 3  | 106  | 64  | 10 | 1 | 0 | 1  | 0 | 1 | 77  | 78  | 5  | 0 | 0 | 1  | 0 | 0 | 84  |
| 18:15 | 84  | 4   | 0 | 0 | 2 | 2  | 1  | 93   | 51  | 7  | 0 | 0 | 0  | 0 | 1 | 59  | 71  | 8  | 1 | 0 | 0  | 3 | 0 | 83  |
| Total | 922 | 100 | 9 | 4 | 9 | 10 | 16 | 1070 | 563 | 74 | 4 | 0 | 16 | 9 | 3 | 669 | 673 | 60 | 2 | 0 | 11 | 7 | 5 | 758 |

Site 2 : B6478 Waddington Road/Park Avenue/Chester Avenue

Day: Thursday

Date: 21 July 2011

Weather: Fine/Cloudy

A: Park Avenue

B: B6478 Clitheroe

C: Chester Avenue

D: B6478 Waddington

| A - B |     |     |      |      |     |     |     |       | A - C |     |      |      |     |     |     |       | A - D |     |      |      |     |     |     |       |
|-------|-----|-----|------|------|-----|-----|-----|-------|-------|-----|------|------|-----|-----|-----|-------|-------|-----|------|------|-----|-----|-----|-------|
| Time  | Car | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total | Car   | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total | Car   | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total |
| 07:30 | 2   | 0   | 0    | 0    | 0   | 0   | 0   | 2     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| 07:45 | 4   | 0   | 0    | 0    | 0   | 0   | 0   | 4     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| 08:00 | 5   | 0   | 0    | 0    | 1   | 0   | 0   | 6     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 2     | 0   | 0    | 0    | 0   | 0   | 0   | 2     |
| 08:15 | 3   | 0   | 0    | 0    | 0   | 0   | 0   | 3     | 1     | 0   | 0    | 0    | 0   | 0   | 0   | 1     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| 08:30 | 3   | 0   | 0    | 0    | 1   | 0   | 0   | 4     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 1     | 0   | 0    | 0    | 0   | 0   | 0   | 1     |
| 08:45 | 3   | 0   | 0    | 0    | 0   | 0   | 0   | 3     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| 09:00 | 1   | 0   | 0    | 0    | 0   | 0   | 0   | 1     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 1     | 0   | 0    | 0    | 0   | 0   | 0   | 1     |
| 09:15 | 3   | 0   | 0    | 0    | 0   | 0   | 0   | 3     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| Total | 24  | 0   | 0    | 0    | 2   | 0   | 0   | 26    | 1     | 0   | 0    | 0    | 0   | 0   | 0   | 1     | 4     | 0   | 0    | 0    | 0   | 0   | 0   | 4     |

|       |    |   |   |   |   |   |   |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-------|----|---|---|---|---|---|---|----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16:30 | 3  | 0 | 0 | 0 | 0 | 0 | 0 | 3  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16:45 | 5  | 0 | 0 | 0 | 0 | 0 | 0 | 5  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:00 | 5  | 0 | 0 | 0 | 0 | 0 | 0 | 5  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:15 | 4  | 0 | 0 | 0 | 0 | 0 | 0 | 4  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 17:30 | 6  | 0 | 0 | 0 | 0 | 0 | 0 | 6  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:45 | 4  | 0 | 0 | 0 | 0 | 0 | 0 | 4  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| 18:00 | 1  | 1 | 0 | 0 | 1 | 0 | 0 | 3  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18:15 | 1  | 0 | 0 | 0 | 0 | 0 | 0 | 1  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 29 | 1 | 0 | 0 | 1 | 0 | 0 | 31 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 2 |

| B - A |     |     |      |      |     |     |     |       | B - C |     |      |      |     |     |     |       | B - D |     |      |      |     |     |     |       |
|-------|-----|-----|------|------|-----|-----|-----|-------|-------|-----|------|------|-----|-----|-----|-------|-------|-----|------|------|-----|-----|-----|-------|
| Time  | Car | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total | Car   | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total | Car   | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total |
| 07:30 | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 2     | 0   | 0    | 0    | 0   | 0   | 0   | 2     | 22    | 7   | 2    | 0    | 1   | 0   | 1   | 33    |
| 07:45 | 1   | 0   | 0    | 0    | 0   | 0   | 0   | 1     | 4     | 0   | 0    | 0    | 0   | 1   | 0   | 5     | 23    | 8   | 0    | 0    | 1   | 0   | 0   | 32    |
| 08:00 | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 3     | 1   | 0    | 0    | 0   | 0   | 0   | 4     | 24    | 7   | 2    | 1    | 0   | 0   | 1   | 35    |
| 08:15 | 1   | 0   | 0    | 0    | 0   | 0   | 0   | 1     | 4     | 0   | 0    | 0    | 0   | 0   | 0   | 4     | 39    | 10  | 1    | 0    | 0   | 0   | 2   | 52    |
| 08:30 | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 3     | 2   | 0    | 0    | 0   | 0   | 0   | 5     | 36    | 11  | 0    | 1    | 0   | 1   | 0   | 49    |
| 08:45 | 2   | 0   | 0    | 0    | 0   | 0   | 0   | 2     | 6     | 2   | 0    | 0    | 0   | 0   | 0   | 8     | 34    | 7   | 0    | 0    | 2   | 0   | 0   | 43    |
| 09:00 | 1   | 0   | 0    | 0    | 1   | 0   | 0   | 2     | 3     | 1   | 0    | 0    | 0   | 0   | 0   | 4     | 37    | 10  | 0    | 0    | 0   | 0   | 0   | 47    |
| 09:15 | 3   | 1   | 0    | 0    | 0   | 0   | 0   | 4     | 5     | 2   | 0    | 0    | 0   | 0   | 0   | 7     | 36    | 12  | 1    | 0    | 0   | 1   | 0   | 50    |
| Total | 8   | 1   | 0    | 0    | 1   | 0   | 0   | 10    | 30    | 8   | 0    | 0    | 0   | 1   | 0   | 39    | 251   | 72  | 6    | 2    | 4   | 2   | 4   | 341   |

|       |    |   |   |   |   |   |   |    |    |   |   |   |   |   |   |    |     |    |   |   |   |   |   |     |
|-------|----|---|---|---|---|---|---|----|----|---|---|---|---|---|---|----|-----|----|---|---|---|---|---|-----|
| 16:30 | 5  | 0 | 0 | 0 | 1 | 0 | 0 | 6  | 3  | 0 | 0 | 0 | 0 | 1 | 0 | 4  | 77  | 3  | 0 | 0 | 1 | 0 | 1 | 82  |
| 16:45 | 2  | 0 | 0 | 0 | 0 | 0 | 0 | 2  | 1  | 0 | 0 | 0 | 0 | 0 | 0 | 1  | 74  | 11 | 1 | 0 | 0 | 1 | 1 | 88  |
| 17:00 | 7  | 0 | 0 | 0 | 0 | 0 | 0 | 7  | 1  | 2 | 0 | 0 | 0 | 0 | 0 | 3  | 81  | 10 | 0 | 0 | 3 | 0 | 0 | 94  |
| 17:15 | 3  | 1 | 0 | 0 | 2 | 0 | 0 | 6  | 1  | 1 | 0 | 0 | 1 | 0 | 0 | 3  | 72  | 7  | 0 | 0 | 0 | 2 | 2 | 83  |
| 17:30 | 2  | 0 | 0 | 0 | 0 | 0 | 0 | 2  | 4  | 1 | 0 | 0 | 0 | 0 | 0 | 5  | 101 | 7  | 0 | 0 | 2 | 0 | 0 | 110 |
| 17:45 | 8  | 1 | 0 | 0 | 0 | 0 | 0 | 9  | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 82  | 3  | 0 | 0 | 0 | 0 | 1 | 86  |
| 18:00 | 6  | 0 | 0 | 0 | 0 | 0 | 0 | 6  | 4  | 1 | 0 | 0 | 0 | 0 | 0 | 5  | 68  | 4  | 0 | 0 | 1 | 0 | 0 | 73  |
| 18:15 | 8  | 1 | 0 | 0 | 0 | 0 | 0 | 9  | 2  | 0 | 0 | 0 | 0 | 0 | 0 | 2  | 61  | 7  | 1 | 0 | 0 | 3 | 0 | 72  |
| Total | 41 | 3 | 0 | 0 | 3 | 0 | 0 | 47 | 16 | 5 | 0 | 0 | 1 | 1 | 0 | 23 | 616 | 52 | 2 | 0 | 7 | 6 | 5 | 688 |

| C - A |     |     |      |      |     |     |     |       | C - B |     |      |      |     |     |     |       | C - D |     |      |      |     |     |     |       |
|-------|-----|-----|------|------|-----|-----|-----|-------|-------|-----|------|------|-----|-----|-----|-------|-------|-----|------|------|-----|-----|-----|-------|
| Time  | Car | LGV | OGVI | 0GV2 | P/C | M/C | PSV | Total | Car   | LGV | OGVI | 0GV2 | P/C | M/C | PSV | Total | Car   | LGV | OGVI | 0GV2 | P/C | M/C | PSV | Total |
| 07:30 | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 4     | 0   | 0    | 0    | 0   | 0   | 0   | 4     | 1     | 0   | 0    | 0    | 0   | 0   | 0   | 1     |
| 07:45 | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 2     | 0   | 1    | 0    | 0   | 0   | 0   | 3     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| 08:00 | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 4     | 2   | 0    | 0    | 0   | 0   | 0   | 6     | 0     | 1   | 0    | 0    | 0   | 0   | 0   | 1     |
| 08:15 | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 1     | 1   | 0    | 0    | 1   | 0   | 0   | 3     | 2     | 2   | 0    | 0    | 1   | 0   | 0   | 5     |
| 08:30 | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 2     | 1   | 0    | 0    | 0   | 0   | 0   | 3     | 2     | 0   | 0    | 0    | 0   | 0   | 0   | 2     |
| 08:45 | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 1     | 0   | 0    | 0    | 0   | 0   | 0   | 1     | 0     | 3   | 0    | 0    | 0   | 0   | 0   | 3     |
| 09:00 | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 2     | 1   | 0    | 0    | 0   | 0   | 0   | 3     | 1     | 0   | 0    | 0    | 0   | 0   | 0   | 1     |
| 09:15 | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 2     | 0   | 0    | 0    | 0   | 0   | 0   | 2     | 3     | 0   | 0    | 0    | 0   | 0   | 0   | 3     |
| Total | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 18    | 5   | 1    | 0    | 1   | 0   | 0   | 25    | 9     | 6   | 0    | 0    | 1   | 0   | 0   | 16    |

|       |   |   |   |   |   |   |   |   |    |   |   |   |   |   |   |    |    |   |   |   |   |   |   |    |
|-------|---|---|---|---|---|---|---|---|----|---|---|---|---|---|---|----|----|---|---|---|---|---|---|----|
| 16:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6  | 0 | 0 | 0 | 0 | 0 | 0 | 6  | 1  | 0 | 0 | 0 | 0 | 0 | 0 | 1  |
| 16:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4  | 0 | 0 | 0 | 0 | 0 | 0 | 4  | 2  | 1 | 0 | 0 | 0 | 0 | 0 | 3  |
| 17:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1  | 1 | 0 | 0 | 0 | 0 | 0 | 2  | 1  | 1 | 0 | 0 | 0 | 0 | 0 | 2  |
| 17:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2  | 1 | 0 | 0 | 0 | 0 | 0 | 3  | 2  | 0 | 0 | 0 | 0 | 0 | 0 | 2  |
| 17:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6  | 1 | 0 | 0 | 0 | 0 | 0 | 7  | 4  | 0 | 0 | 0 | 0 | 0 | 0 | 4  |
| 17:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1  | 0 | 0 | 0 | 0 | 0 | 0 | 1  | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0  |
| 18:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1  | 0 | 0 | 0 | 0 | 1 | 0 | 2  | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0  |
| 18:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 3  | 0 | 0 | 0 | 0 | 0 | 0 | 3  |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 3 | 0 | 0 | 0 | 1 | 0 | 25 | 13 | 2 | 0 | 0 | 0 | 0 | 0 | 15 |

| D - A |     |     |      |      |     |     |     |       | D - B |     |      |      |     |     |     |       | D - C |     |      |      |     |     |     |       |
|-------|-----|-----|------|------|-----|-----|-----|-------|-------|-----|------|------|-----|-----|-----|-------|-------|-----|------|------|-----|-----|-----|-------|
| Time  | Car | LGV | OGVI | 0GV2 | P/C | M/C | PSV | Total | Car   | LGV | OGVI | 0GV2 | P/C | M/C | PSV | Total | Car   | LGV | OGVI | 0GV2 | P/C | M/C | PSV | Total |
| 07:30 | 1   | 0   | 0    | 0    | 0   | 0   | 0   | 1     | 44    | 5   | 0    | 0    | 0   | 0   | 0   | 49    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| 07:45 | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 42    | 9   | 1    | 0    | 0   | 0   | 0   | 52    | 0     | 2   | 0    | 0    | 0   | 0   | 0   | 2     |
| 08:00 | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 78    | 5   | 0    | 0    | 0   | 0   | 0   | 83    | 2     | 0   | 0    | 0    | 0   | 0   | 0   | 2     |
| 08:15 | 1   | 0   | 0    | 0    | 0   | 0   | 0   | 1     | 67    | 9   | 1    | 1    | 1   | 0   | 3   | 82    | 5     | 0   | 0    | 0    | 1   | 0   | 0   | 6     |
| 08:30 | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 61    | 5   | 1    | 1    | 0   | 0   | 0   | 68    | 6     | 0   | 0    | 0    | 0   | 0   | 0   | 6     |
| 08:45 | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 59    | 5   | 2    | 0    | 0   | 0   | 1   | 67    | 1     | 3   | 0    | 0    | 0   | 0   | 0   | 4     |
| 09:00 | 1   | 0   | 0    | 0    | 0   | 0   | 0   | 1     | 65    | 5   | 2    | 0    | 0   | 1   | 0   | 73    | 2     | 0   | 0    | 0    | 0   | 0   | 0   | 2     |
| 09:15 | 1   | 0   | 0    | 0    | 0   | 0   | 0   | 1     | 36    | 2   | 1    | 1    | 1   | 0   | 0   | 41    | 0     | 0   | 0    | 0    | 1   | 0   | 0   | 1     |
| Total | 4   | 0   | 0    | 0    | 0   | 0   | 0   | 4     | 452   | 45  | 8    | 3    | 2   | 1   | 4   | 515   | 16    | 5   | 0    | 0    | 2   | 0   | 0   | 23    |

|       |   |   |   |   |   |   |   |   |     |    |   |   |   |   |   |     |    |   |   |   |   |   |   |    |
|-------|---|---|---|---|---|---|---|---|-----|----|---|---|---|---|---|-----|----|---|---|---|---|---|---|----|
| 16:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 49  | 5  | 0 | 1 | 0 | 0 | 0 | 55  | 2  | 0 | 0 | 0 | 0 | 0 | 0 | 2  |
| 16:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 73  | 11 | 0 | 0 | 0 | 0 | 0 | 84  | 1  | 1 | 0 | 0 | 0 | 0 | 0 | 2  |
| 17:00 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 61  | 10 | 0 | 0 | 1 | 1 | 0 | 73  | 4  | 0 | 0 | 0 | 0 | 0 | 0 | 4  |
| 17:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 65  | 8  | 0 | 0 | 0 | 2 | 1 | 76  | 3  | 0 | 0 | 0 | 0 | 0 | 0 | 3  |
| 17:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 58  | 12 | 1 | 0 | 1 | 0 | 0 | 72  | 0  | 1 | 0 | 0 | 0 | 0 | 0 | 1  |
| 17:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 60  | 5  | 0 | 0 | 1 | 0 | 0 | 66  | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0  |
| 18:00 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 37  | 2  | 0 | 0 | 2 | 0 | 0 | 41  | 1  | 0 | 0 | 0 | 0 | 0 | 0 | 1  |
| 18:15 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 41  | 2  | 0 | 0 | 0 | 2 | 0 | 45  | 1  | 0 | 0 | 0 | 0 | 0 | 0 | 1  |
| Total | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 3 | 444 | 55 | 1 | 1 | 5 | 5 | 1 | 512 | 12 | 2 | 0 | 0 | 0 | 0 | 0 | 14 |

# Summary

|          |                                          |    |                  |
|----------|------------------------------------------|----|------------------|
| Site 2 : | B6478 Waddington Rd/Park Ave/Chester Ave | A: | Park Avenue      |
| Day:     | Thursday                                 | B: | B6478 Clitheroe  |
| Date:    | 21 July 2011                             | C: | Chester Avenue   |
| Weather: | Fine/Cloudy                              | D: | B6478 Waddington |

| From A |     |     |      |      |     |     |     |       | From B |     |      |      |     |     |     |       |
|--------|-----|-----|------|------|-----|-----|-----|-------|--------|-----|------|------|-----|-----|-----|-------|
| Time   | Car | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total | Car    | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total |
| 07:30  | 2   | 0   | 0    | 0    | 0   | 0   | 0   | 2     | 24     | 7   | 2    | 0    | 1   | 0   | 1   | 35    |
| 07:45  | 4   | 0   | 0    | 0    | 0   | 0   | 0   | 4     | 28     | 8   | 0    | 0    | 1   | 1   | 0   | 38    |
| 08:00  | 7   | 0   | 0    | 0    | 1   | 0   | 0   | 8     | 27     | 8   | 2    | 1    | 0   | 0   | 1   | 39    |
| 08:15  | 4   | 0   | 0    | 0    | 0   | 0   | 0   | 4     | 44     | 10  | 1    | 0    | 0   | 0   | 2   | 57    |
| 08:30  | 4   | 0   | 0    | 0    | 1   | 0   | 0   | 5     | 39     | 13  | 0    | 1    | 0   | 1   | 0   | 54    |
| 08:45  | 3   | 0   | 0    | 0    | 0   | 0   | 0   | 3     | 42     | 9   | 0    | 0    | 2   | 0   | 0   | 53    |
| 09:00  | 2   | 0   | 0    | 0    | 0   | 0   | 0   | 2     | 41     | 11  | 0    | 0    | 1   | 0   | 0   | 53    |
| 09:15  | 3   | 0   | 0    | 0    | 0   | 0   | 0   | 3     | 44     | 15  | 1    | 0    | 0   | 1   | 0   | 61    |
| Total  | 29  | 0   | 0    | 0    | 2   | 0   | 0   | 31    | 289    | 81  | 6    | 2    | 5   | 3   | 4   | 390   |

|       |    |   |   |   |   |   |   |    |     |    |   |   |    |   |   |     |
|-------|----|---|---|---|---|---|---|----|-----|----|---|---|----|---|---|-----|
| 16:30 | 3  | 0 | 0 | 0 | 0 | 0 | 0 | 3  | 85  | 3  | 0 | 0 | 2  | 1 | 1 | 92  |
| 16:45 | 5  | 0 | 0 | 0 | 0 | 0 | 0 | 5  | 77  | 11 | 1 | 0 | 0  | 1 | 1 | 91  |
| 17:00 | 5  | 0 | 0 | 0 | 0 | 0 | 0 | 5  | 89  | 12 | 0 | 0 | 3  | 0 | 0 | 104 |
| 17:15 | 5  | 0 | 0 | 0 | 0 | 0 | 0 | 5  | 76  | 9  | 0 | 0 | 3  | 2 | 2 | 92  |
| 17:30 | 6  | 0 | 0 | 0 | 0 | 0 | 0 | 6  | 107 | 8  | 0 | 0 | 2  | 0 | 0 | 117 |
| 17:45 | 4  | 1 | 0 | 0 | 0 | 0 | 0 | 5  | 90  | 4  | 0 | 0 | 0  | 0 | 1 | 95  |
| 18:00 | 1  | 1 | 0 | 0 | 1 | 0 | 0 | 3  | 78  | 5  | 0 | 0 | 1  | 0 | 0 | 84  |
| 18:15 | 1  | 0 | 0 | 0 | 0 | 0 | 0 | 1  | 71  | 8  | 1 | 0 | 0  | 3 | 0 | 83  |
| Total | 30 | 2 | 0 | 0 | 1 | 0 | 0 | 33 | 673 | 60 | 2 | 0 | 11 | 7 | 5 | 758 |

# Summary

| From C |     |     |      |      |     |     |     |       | From D |     |      |      |     |     |     |       |
|--------|-----|-----|------|------|-----|-----|-----|-------|--------|-----|------|------|-----|-----|-----|-------|
| Time   | Car | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total | Car    | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total |
| 07:30  | 5   | 0   | 0    | 0    | 0   | 0   | 0   | 5     | 45     | 5   | 0    | 0    | 0   | 0   | 0   | 50    |
| 07:45  | 2   | 0   | 1    | 0    | 0   | 0   | 0   | 3     | 42     | 11  | 1    | 0    | 0   | 0   | 0   | 54    |
| 08:00  | 4   | 3   | 0    | 0    | 0   | 0   | 0   | 7     | 80     | 5   | 0    | 0    | 0   | 0   | 0   | 85    |
| 08:15  | 3   | 3   | 0    | 0    | 2   | 0   | 0   | 8     | 73     | 9   | 1    | 1    | 2   | 0   | 3   | 89    |
| 08:30  | 4   | 1   | 0    | 0    | 0   | 0   | 0   | 5     | 67     | 5   | 1    | 1    | 0   | 0   | 0   | 74    |
| 08:45  | 1   | 3   | 0    | 0    | 0   | 0   | 0   | 4     | 60     | 8   | 2    | 0    | 0   | 0   | 1   | 71    |
| 09:00  | 3   | 1   | 0    | 0    | 0   | 0   | 0   | 4     | 68     | 5   | 2    | 0    | 0   | 1   | 0   | 76    |
| 09:15  | 5   | 0   | 0    | 0    | 0   | 0   | 0   | 5     | 37     | 2   | 1    | 1    | 2   | 0   | 0   | 43    |
| Total  | 27  | 11  | 1    | 0    | 2   | 0   | 0   | 41    | 472    | 50  | 8    | 3    | 4   | 1   | 4   | 542   |

|       |    |   |   |   |   |   |   |    |     |    |   |   |   |   |   |     |
|-------|----|---|---|---|---|---|---|----|-----|----|---|---|---|---|---|-----|
| 16:30 | 7  | 0 | 0 | 0 | 0 | 0 | 0 | 7  | 51  | 5  | 0 | 1 | 0 | 0 | 0 | 57  |
| 16:45 | 6  | 1 | 0 | 0 | 0 | 0 | 0 | 7  | 74  | 12 | 0 | 0 | 0 | 0 | 0 | 86  |
| 17:00 | 2  | 2 | 0 | 0 | 0 | 0 | 0 | 4  | 66  | 10 | 0 | 0 | 1 | 1 | 0 | 78  |
| 17:15 | 4  | 1 | 0 | 0 | 0 | 0 | 0 | 5  | 68  | 8  | 0 | 0 | 0 | 2 | 1 | 79  |
| 17:30 | 10 | 1 | 0 | 0 | 0 | 0 | 0 | 11 | 58  | 13 | 1 | 0 | 1 | 0 | 0 | 73  |
| 17:45 | 1  | 0 | 0 | 0 | 0 | 0 | 0 | 1  | 60  | 5  | 0 | 0 | 1 | 0 | 0 | 66  |
| 18:00 | 1  | 0 | 0 | 0 | 0 | 1 | 0 | 2  | 38  | 3  | 0 | 0 | 2 | 0 | 0 | 43  |
| 18:15 | 3  | 0 | 0 | 0 | 0 | 0 | 0 | 3  | 43  | 2  | 0 | 0 | 0 | 2 | 0 | 47  |
| Total | 34 | 5 | 0 | 0 | 0 | 1 | 0 | 40 | 458 | 58 | 1 | 1 | 5 | 5 | 1 | 529 |

# Summary

| To A  |     |     |      |      |     |     |     |       | To B |     |      |      |     |     |     |       |
|-------|-----|-----|------|------|-----|-----|-----|-------|------|-----|------|------|-----|-----|-----|-------|
| Time  | Car | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total | Car  | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total |
| 07:30 | 1   | 0   | 0    | 0    | 0   | 0   | 0   | 1     | 50   | 5   | 0    | 0    | 0   | 0   | 0   | 55    |
| 07:45 | 1   | 0   | 0    | 0    | 0   | 0   | 0   | 1     | 48   | 9   | 2    | 0    | 0   | 0   | 0   | 59    |
| 08:00 | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 87   | 7   | 0    | 0    | 1   | 0   | 0   | 95    |
| 08:15 | 2   | 0   | 0    | 0    | 0   | 0   | 0   | 2     | 71   | 10  | 1    | 1    | 2   | 0   | 3   | 88    |
| 08:30 | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 66   | 6   | 1    | 1    | 1   | 0   | 0   | 75    |
| 08:45 | 2   | 0   | 0    | 0    | 0   | 0   | 0   | 2     | 63   | 5   | 2    | 0    | 0   | 0   | 1   | 71    |
| 09:00 | 2   | 0   | 0    | 0    | 1   | 0   | 0   | 3     | 68   | 6   | 2    | 0    | 0   | 1   | 0   | 77    |
| 09:15 | 4   | 1   | 0    | 0    | 0   | 0   | 0   | 5     | 41   | 2   | 1    | 1    | 1   | 0   | 0   | 46    |
| Total | 12  | 1   | 0    | 0    | 1   | 0   | 0   | 14    | 494  | 50  | 9    | 3    | 5   | 1   | 4   | 566   |

|       |    |   |   |   |   |   |   |    |     |    |   |   |   |   |   |     |
|-------|----|---|---|---|---|---|---|----|-----|----|---|---|---|---|---|-----|
| 16:30 | 5  | 0 | 0 | 0 | 1 | 0 | 0 | 6  | 58  | 5  | 0 | 1 | 0 | 0 | 0 | 64  |
| 16:45 | 2  | 0 | 0 | 0 | 0 | 0 | 0 | 2  | 82  | 11 | 0 | 0 | 0 | 0 | 0 | 93  |
| 17:00 | 8  | 0 | 0 | 0 | 0 | 0 | 0 | 8  | 67  | 11 | 0 | 0 | 1 | 1 | 0 | 80  |
| 17:15 | 3  | 1 | 0 | 0 | 2 | 0 | 0 | 6  | 71  | 9  | 0 | 0 | 0 | 2 | 1 | 83  |
| 17:30 | 2  | 0 | 0 | 0 | 0 | 0 | 0 | 2  | 70  | 13 | 1 | 0 | 1 | 0 | 0 | 85  |
| 17:45 | 8  | 1 | 0 | 0 | 0 | 0 | 0 | 9  | 65  | 5  | 0 | 0 | 1 | 0 | 0 | 71  |
| 18:00 | 6  | 1 | 0 | 0 | 0 | 0 | 0 | 7  | 39  | 3  | 0 | 0 | 3 | 1 | 0 | 46  |
| 18:15 | 9  | 1 | 0 | 0 | 0 | 0 | 0 | 10 | 42  | 2  | 0 | 0 | 0 | 2 | 0 | 46  |
| Total | 43 | 4 | 0 | 0 | 3 | 0 | 0 | 50 | 494 | 59 | 1 | 1 | 6 | 6 | 1 | 568 |

| To C  |     |     |      |      |     |     |     |       | To D |     |      |      |     |     |     |       |
|-------|-----|-----|------|------|-----|-----|-----|-------|------|-----|------|------|-----|-----|-----|-------|
| Time  | Car | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total | Car  | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total |
| 07:30 | 2   | 0   | 0    | 0    | 0   | 0   | 0   | 2     | 23   | 7   | 2    | 0    | 1   | 0   | 1   | 34    |
| 07:45 | 4   | 2   | 0    | 0    | 0   | 1   | 0   | 7     | 23   | 8   | 0    | 0    | 1   | 0   | 0   | 32    |
| 08:00 | 5   | 1   | 0    | 0    | 0   | 0   | 0   | 6     | 26   | 8   | 2    | 1    | 0   | 0   | 1   | 38    |
| 08:15 | 10  | 0   | 0    | 0    | 1   | 0   | 0   | 11    | 41   | 12  | 1    | 0    | 1   | 0   | 2   | 57    |
| 08:30 | 9   | 2   | 0    | 0    | 0   | 0   | 0   | 11    | 39   | 11  | 0    | 1    | 0   | 1   | 0   | 52    |
| 08:45 | 7   | 5   | 0    | 0    | 0   | 0   | 0   | 12    | 34   | 10  | 0    | 0    | 2   | 0   | 0   | 46    |
| 09:00 | 5   | 1   | 0    | 0    | 0   | 0   | 0   | 6     | 39   | 10  | 0    | 0    | 0   | 0   | 0   | 49    |
| 09:15 | 5   | 2   | 0    | 0    | 1   | 0   | 0   | 8     | 39   | 12  | 1    | 0    | 0   | 1   | 0   | 53    |
| Total | 47  | 13  | 0    | 0    | 2   | 1   | 0   | 63    | 264  | 78  | 6    | 2    | 5   | 2   | 4   | 361   |

|       |    |   |   |   |   |   |   |    |     |    |   |   |   |   |   |     |
|-------|----|---|---|---|---|---|---|----|-----|----|---|---|---|---|---|-----|
| 16:30 | 5  | 0 | 0 | 0 | 0 | 1 | 0 | 6  | 78  | 3  | 0 | 0 | 1 | 0 | 1 | 83  |
| 16:45 | 2  | 1 | 0 | 0 | 0 | 0 | 0 | 3  | 76  | 12 | 1 | 0 | 0 | 1 | 1 | 91  |
| 17:00 | 5  | 2 | 0 | 0 | 0 | 0 | 0 | 7  | 82  | 11 | 0 | 0 | 3 | 0 | 0 | 96  |
| 17:15 | 4  | 1 | 0 | 0 | 1 | 0 | 0 | 6  | 75  | 7  | 0 | 0 | 0 | 2 | 2 | 86  |
| 17:30 | 4  | 2 | 0 | 0 | 0 | 0 | 0 | 6  | 105 | 7  | 0 | 0 | 2 | 0 | 0 | 114 |
| 17:45 | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 82  | 4  | 0 | 0 | 0 | 0 | 1 | 87  |
| 18:00 | 5  | 1 | 0 | 0 | 0 | 0 | 0 | 6  | 68  | 4  | 0 | 0 | 1 | 0 | 0 | 73  |
| 18:15 | 3  | 0 | 0 | 0 | 0 | 0 | 0 | 3  | 64  | 7  | 1 | 0 | 0 | 3 | 0 | 75  |
| Total | 28 | 7 | 0 | 0 | 1 | 1 | 0 | 37 | 630 | 55 | 2 | 0 | 7 | 6 | 5 | 705 |

**B6479 WADDINGTON ROAD/PARK AVENUE/CHESTER AVENUE, CLITHEROE - THURSDAY 20 JULY 2011 (08:00-09:00)**

**D - B6479 Waddington**

|              |             |            |             |             |            |            |            |              |
|--------------|-------------|------------|-------------|-------------|------------|------------|------------|--------------|
| <b>D - A</b> | 1           | 0          | 0           | 0           | 0          | 0          | 0          | <b>1</b>     |
| <b>D - B</b> | 265         | 24         | 4           | 2           | 1          | 0          | 4          | <b>300</b>   |
| <b>D - C</b> | 14          | 3          | 0           | 0           | 1          | 0          | 0          | <b>18</b>    |
| <b>Total</b> | 280         | 27         | 4           | 2           | 2          | 0          | 4          | <b>319</b>   |
|              | <b>Cars</b> | <b>LGV</b> | <b>OGV1</b> | <b>OGV2</b> | <b>P/C</b> | <b>M/C</b> | <b>PSV</b> | <b>Total</b> |

|             |     |    |   |   |   |   |   |            |
|-------------|-----|----|---|---|---|---|---|------------|
| <b>To D</b> | 140 | 41 | 3 | 2 | 3 | 1 | 3 | <b>193</b> |
|-------------|-----|----|---|---|---|---|---|------------|

**A - Park Avenue**

|             |              |              |              |              |              |
|-------------|--------------|--------------|--------------|--------------|--------------|
| <b>To A</b> |              | <b>A - D</b> | <b>A - C</b> | <b>A - B</b> | <b>Total</b> |
| 4           | <b>Cars</b>  | 3            | 1            | 14           | 18           |
| 0           | <b>LGV</b>   | 0            | 0            | 0            | 0            |
| 0           | <b>OGV1</b>  | 0            | 0            | 0            | 0            |
| 0           | <b>OGV2</b>  | 0            | 0            | 0            | 0            |
| 0           | <b>P/C</b>   | 0            | 0            | 2            | 2            |
| 0           | <b>M/C</b>   | 0            | 0            | 0            | 0            |
| 0           | <b>PSV</b>   | 0            | 0            | 0            | 0            |
| 4           | <b>Total</b> | 3            | 1            | 16           | 20           |

|     |    |   |   |   |   |   |            |             |
|-----|----|---|---|---|---|---|------------|-------------|
| 287 | 28 | 4 | 2 | 4 | 0 | 4 | <b>329</b> | <b>To B</b> |
|-----|----|---|---|---|---|---|------------|-------------|

|             |            |             |             |            |            |            |              |              |
|-------------|------------|-------------|-------------|------------|------------|------------|--------------|--------------|
| <b>Cars</b> | <b>LGV</b> | <b>OGV1</b> | <b>OGV2</b> | <b>P/C</b> | <b>M/C</b> | <b>PSV</b> | <b>Total</b> |              |
| 3           | 0          | 0           | 0           | 0          | 0          | 0          | <b>3</b>     | <b>B - A</b> |
| 133         | 35         | 3           | 2           | 2          | 1          | 3          | <b>179</b>   | <b>B - D</b> |
| 16          | 5          | 0           | 0           | 0          | 0          | 0          | <b>21</b>    | <b>B - C</b> |
| 152         | 40         | 3           | 2           | 2          | 1          | 3          | <b>203</b>   | <b>Total</b> |

**B - B6479 Clitheroe**

|              |              |              |              |              |
|--------------|--------------|--------------|--------------|--------------|
| 4            | 0            | 8            | 12           | <b>Cars</b>  |
| 6            | 0            | 4            | 10           | <b>LGV</b>   |
| 0            | 0            | 0            | 0            | <b>OGV1</b>  |
| 0            | 0            | 0            | 0            | <b>OGV2</b>  |
| 1            | 0            | 1            | 2            | <b>P/C</b>   |
| 0            | 0            | 0            | 0            | <b>M/C</b>   |
| 0            | 0            | 0            | 0            | <b>PSV</b>   |
| 11           | 0            | 13           | 24           | <b>Total</b> |
| <b>C - D</b> | <b>C - A</b> | <b>C - B</b> | <b>Total</b> |              |

**C - Chester Avenue**

|             |
|-------------|
| 31          |
| 8           |
| 0           |
| 0           |
| 0           |
| 1           |
| 0           |
| 40          |
| <b>To C</b> |

**B6479 WADDINGTON ROAD/PARK AVENUE/CHESTER AVENUE, CLITHEROE - THURSDAY 20 JULY 2011 (16:45-17:45)**

**D - B6479 Waddington**

|              |             |            |             |             |            |            |            |              |
|--------------|-------------|------------|-------------|-------------|------------|------------|------------|--------------|
| <b>D - A</b> | 1           | 0          | 0           | 0           | 0          | 0          | 0          | <b>1</b>     |
| <b>D - B</b> | 257         | 41         | 1           | 0           | 2          | 3          | 1          | <b>305</b>   |
| <b>D - C</b> | 8           | 2          | 0           | 0           | 0          | 0          | 0          | <b>10</b>    |
| <b>Total</b> | 266         | 43         | 1           | 0           | 2          | 3          | 1          | <b>316</b>   |
|              | <b>Cars</b> | <b>LGV</b> | <b>OGV1</b> | <b>OGV2</b> | <b>P/C</b> | <b>M/C</b> | <b>PSV</b> | <b>Total</b> |

|             |     |    |   |   |   |   |   |            |
|-------------|-----|----|---|---|---|---|---|------------|
| <b>To D</b> | 333 | 41 | 1 | 0 | 6 | 3 | 3 | <b>387</b> |
|-------------|-----|----|---|---|---|---|---|------------|

**A - Park Avenue**

|             |              |              |              |              |              |
|-------------|--------------|--------------|--------------|--------------|--------------|
| <b>To A</b> |              | <b>A - D</b> | <b>A - C</b> | <b>A - B</b> | <b>Total</b> |
| 15          | <b>Cars</b>  | 1            | 0            | 20           | 21           |
| 1           | <b>LGV</b>   | 0            | 0            | 0            | 0            |
| 0           | <b>OGV1</b>  | 0            | 0            | 0            | 0            |
| 0           | <b>OGV2</b>  | 0            | 0            | 0            | 0            |
| 2           | <b>P/C</b>   | 0            | 0            | 0            | 0            |
| 0           | <b>M/C</b>   | 0            | 0            | 0            | 0            |
| 0           | <b>PSV</b>   | 0            | 0            | 0            | 0            |
| <b>18</b>   | <b>Total</b> | <b>1</b>     | <b>0</b>     | <b>20</b>    | <b>21</b>    |

|     |    |   |   |   |   |   |            |             |
|-----|----|---|---|---|---|---|------------|-------------|
| 290 | 44 | 1 | 0 | 2 | 3 | 1 | <b>341</b> | <b>To B</b> |
|-----|----|---|---|---|---|---|------------|-------------|

|             |            |             |             |            |            |            |              |              |
|-------------|------------|-------------|-------------|------------|------------|------------|--------------|--------------|
| <b>Cars</b> | <b>LGV</b> | <b>OGV1</b> | <b>OGV2</b> | <b>P/C</b> | <b>M/C</b> | <b>PSV</b> | <b>Total</b> |              |
| 14          | 1          | 0           | 0           | 2          | 0          | 0          | <b>17</b>    | <b>B - A</b> |
| 328         | 35         | 1           | 0           | 5          | 3          | 3          | <b>375</b>   | <b>B - D</b> |
| 7           | 4          | 0           | 0           | 1          | 0          | 0          | <b>12</b>    | <b>B - C</b> |
| 349         | 40         | 1           | 0           | 8          | 3          | 3          | <b>404</b>   | <b>Total</b> |

**B - B6479 Clitheroe**

|              |              |              |              |              |             |
|--------------|--------------|--------------|--------------|--------------|-------------|
| 4            | 0            | 13           | 17           | <b>Cars</b>  | 15          |
| 6            | 0            | 3            | 9            | <b>LGV</b>   | 6           |
| 0            | 0            | 0            | 0            | <b>OGV1</b>  | 0           |
| 0            | 0            | 0            | 0            | <b>OGV2</b>  | 0           |
| 1            | 0            | 0            | 1            | <b>P/C</b>   | 1           |
| 0            | 0            | 0            | 0            | <b>M/C</b>   | 0           |
| 0            | 0            | 0            | 0            | <b>PSV</b>   | 0           |
| <b>11</b>    | <b>0</b>     | <b>16</b>    | <b>27</b>    | <b>Total</b> | <b>22</b>   |
| <b>C - D</b> | <b>C - A</b> | <b>C - B</b> | <b>Total</b> |              | <b>To C</b> |

**C - Chester Avenue**

Site 3 : B6478 Waddington Road/Eastham Street/Milton Avenue

Day: Thursday

Date: 21 July 2011

Weather: Fine/Cloudy

A: Eastham Street

B: B6478 Clitheroe

C: Milton Avenue

D: B6478 Waddington

| A - B |     |     |      |      |     |     |     |       | A - C |     |      |      |     |     |     |       | A - D |     |      |      |     |     |     |       |
|-------|-----|-----|------|------|-----|-----|-----|-------|-------|-----|------|------|-----|-----|-----|-------|-------|-----|------|------|-----|-----|-----|-------|
| Time  | Car | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total | Car   | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total | Car   | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total |
| 07:30 | 8   | 2   | 0    | 0    | 0   | 0   | 0   | 10    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| 07:45 | 10  | 4   | 0    | 0    | 0   | 0   | 0   | 14    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| 08:00 | 22  | 3   | 0    | 0    | 0   | 0   | 0   | 25    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| 08:15 | 18  | 3   | 1    | 0    | 1   | 0   | 1   | 24    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 1     | 0   | 0    | 0    | 0   | 0   | 0   | 1     |
| 08:30 | 18  | 1   | 0    | 0    | 0   | 0   | 0   | 19    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 0     | 1   | 0    | 0    | 0   | 0   | 0   | 1     |
| 08:45 | 10  | 4   | 0    | 0    | 0   | 0   | 0   | 14    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 1     | 0   | 0    | 0    | 0   | 0   | 0   | 1     |
| 09:00 | 19  | 1   | 0    | 0    | 0   | 0   | 0   | 20    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| 09:15 | 5   | 1   | 0    | 0    | 1   | 0   | 0   | 7     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| Total | 110 | 19  | 1    | 0    | 2   | 0   | 1   | 133   | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 2     | 1   | 0    | 0    | 0   | 0   | 0   | 3     |

|       |     |    |   |   |   |   |   |     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-------|-----|----|---|---|---|---|---|-----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16:30 | 9   | 3  | 0 | 0 | 0 | 0 | 0 | 12  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16:45 | 8   | 2  | 0 | 0 | 0 | 0 | 0 | 10  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 2 |
| 17:00 | 14  | 3  | 0 | 0 | 0 | 0 | 0 | 17  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 17:15 | 16  | 3  | 0 | 0 | 0 | 0 | 0 | 19  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 2 |
| 17:30 | 14  | 2  | 0 | 0 | 1 | 0 | 0 | 17  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| 17:45 | 15  | 1  | 0 | 0 | 0 | 0 | 0 | 16  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18:00 | 13  | 0  | 0 | 0 | 0 | 0 | 0 | 13  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18:15 | 12  | 0  | 0 | 0 | 0 | 0 | 0 | 12  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Total | 101 | 14 | 0 | 0 | 1 | 0 | 0 | 116 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 1 | 0 | 0 | 2 | 0 | 0 | 8 |

| B - A |     |     |      |      |     |     |     |       | B - C |     |      |      |     |     |     |       | B - D |     |      |      |     |     |     |       |
|-------|-----|-----|------|------|-----|-----|-----|-------|-------|-----|------|------|-----|-----|-----|-------|-------|-----|------|------|-----|-----|-----|-------|
| Time  | Car | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total | Car   | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total | Car   | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total |
| 07:30 | 9   | 2   | 1    | 0    | 0   | 0   | 0   | 12    | 1     | 0   | 0    | 0    | 0   | 0   | 0   | 1     | 10    | 4   | 1    | 0    | 1   | 0   | 1   | 17    |
| 07:45 | 13  | 0   | 0    | 0    | 1   | 0   | 0   | 14    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 10    | 7   | 0    | 0    | 0   | 0   | 0   | 17    |
| 08:00 | 8   | 2   | 0    | 0    | 0   | 0   | 0   | 10    | 1     | 0   | 0    | 0    | 0   | 0   | 0   | 1     | 10    | 7   | 2    | 1    | 0   | 0   | 1   | 21    |
| 08:15 | 16  | 3   | 0    | 0    | 1   | 0   | 1   | 21    | 1     | 0   | 0    | 0    | 0   | 0   | 0   | 1     | 21    | 8   | 1    | 0    | 0   | 0   | 1   | 31    |
| 08:30 | 6   | 2   | 0    | 0    | 0   | 1   | 0   | 9     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 33    | 8   | 0    | 1    | 0   | 0   | 0   | 42    |
| 08:45 | 12  | 2   | 0    | 0    | 0   | 0   | 0   | 14    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 20    | 8   | 0    | 0    | 2   | 0   | 0   | 30    |
| 09:00 | 12  | 1   | 0    | 0    | 0   | 0   | 0   | 13    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 22    | 6   | 0    | 0    | 0   | 0   | 0   | 28    |
| 09:15 | 6   | 3   | 0    | 0    | 0   | 0   | 0   | 9     | 1     | 0   | 0    | 0    | 0   | 0   | 0   | 1     | 25    | 9   | 1    | 0    | 0   | 1   | 0   | 36    |
| Total | 82  | 15  | 1    | 0    | 2   | 1   | 1   | 102   | 4     | 0   | 0    | 0    | 0   | 0   | 0   | 4     | 151   | 57  | 5    | 2    | 3   | 1   | 3   | 222   |

|       |     |    |   |   |   |   |   |     |    |   |   |   |   |   |   |    |     |    |   |   |   |   |   |     |
|-------|-----|----|---|---|---|---|---|-----|----|---|---|---|---|---|---|----|-----|----|---|---|---|---|---|-----|
| 16:30 | 11  | 0  | 0 | 0 | 0 | 0 | 0 | 11  | 2  | 0 | 0 | 0 | 0 | 0 | 0 | 2  | 59  | 1  | 0 | 0 | 1 | 0 | 1 | 62  |
| 16:45 | 14  | 2  | 0 | 0 | 0 | 0 | 0 | 16  | 3  | 0 | 0 | 0 | 0 | 0 | 0 | 3  | 57  | 7  | 1 | 0 | 0 | 1 | 1 | 67  |
| 17:00 | 12  | 5  | 0 | 0 | 2 | 0 | 0 | 19  | 2  | 0 | 0 | 0 | 0 | 0 | 0 | 2  | 56  | 6  | 0 | 0 | 1 | 0 | 0 | 63  |
| 17:15 | 13  | 2  | 0 | 0 | 0 | 0 | 0 | 15  | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 57  | 3  | 0 | 0 | 0 | 2 | 2 | 64  |
| 17:30 | 22  | 1  | 0 | 0 | 0 | 0 | 0 | 23  | 3  | 0 | 0 | 0 | 0 | 0 | 0 | 3  | 76  | 4  | 0 | 0 | 2 | 0 | 0 | 82  |
| 17:45 | 15  | 2  | 0 | 0 | 0 | 0 | 0 | 17  | 2  | 0 | 0 | 0 | 0 | 0 | 0 | 2  | 60  | 3  | 0 | 0 | 0 | 0 | 1 | 64  |
| 18:00 | 7   | 1  | 0 | 0 | 1 | 0 | 0 | 9   | 3  | 0 | 0 | 0 | 0 | 0 | 0 | 3  | 48  | 3  | 0 | 0 | 0 | 0 | 0 | 51  |
| 18:15 | 13  | 2  | 0 | 0 | 0 | 0 | 0 | 15  | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 46  | 3  | 1 | 0 | 0 | 3 | 0 | 53  |
| Total | 107 | 15 | 0 | 0 | 3 | 0 | 0 | 125 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 459 | 30 | 2 | 0 | 4 | 6 | 5 | 506 |

| C - A |     |     |      |      |     |     |     |       | C - B |     |      |      |     |     |     |       | C - D |     |      |      |     |     |     |       |
|-------|-----|-----|------|------|-----|-----|-----|-------|-------|-----|------|------|-----|-----|-----|-------|-------|-----|------|------|-----|-----|-----|-------|
| Time  | Car | LGV | OGVI | 0GV2 | P/C | M/C | PSV | Total | Car   | LGV | OGVI | 0GV2 | P/C | M/C | PSV | Total | Car   | LGV | OGVI | 0GV2 | P/C | M/C | PSV | Total |
| 07:30 | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| 07:45 | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| 08:00 | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 2     | 0   | 0    | 0    | 0   | 0   | 0   | 2     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| 08:15 | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| 08:30 | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 2     | 0   | 0    | 0    | 0   | 0   | 0   | 2     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| 08:45 | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| 09:00 | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| 09:15 | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| Total | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 4     | 0   | 0    | 0    | 0   | 0   | 0   | 4     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |

|       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 16:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 17:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |

| D - A |     |     |      |      |     |     |     |       | D - B |     |      |      |     |     |     |       | D - C |     |      |      |     |     |     |       |
|-------|-----|-----|------|------|-----|-----|-----|-------|-------|-----|------|------|-----|-----|-----|-------|-------|-----|------|------|-----|-----|-----|-------|
| Time  | Car | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total | Car   | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total | Car   | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total |
| 07:30 | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 31    | 3   | 0    | 0    | 0   | 0   | 0   | 34    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| 07:45 | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 26    | 5   | 1    | 0    | 0   | 0   | 0   | 32    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| 08:00 | 1   | 0   | 0    | 0    | 0   | 0   | 0   | 1     | 45    | 3   | 0    | 0    | 0   | 0   | 0   | 48    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| 08:15 | 4   | 0   | 0    | 0    | 0   | 0   | 0   | 4     | 49    | 4   | 0    | 1    | 1   | 0   | 2   | 57    | 1     | 0   | 0    | 0    | 0   | 0   | 0   | 1     |
| 08:30 | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 40    | 4   | 1    | 1    | 0   | 0   | 0   | 46    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| 08:45 | 1   | 0   | 0    | 0    | 0   | 0   | 0   | 1     | 40    | 5   | 2    | 0    | 0   | 0   | 1   | 48    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| 09:00 | 1   | 0   | 0    | 0    | 0   | 0   | 0   | 1     | 43    | 4   | 2    | 0    | 0   | 1   | 0   | 50    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| 09:15 | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 28    | 2   | 1    | 1    | 0   | 0   | 0   | 32    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| Total | 7   | 0   | 0    | 0    | 0   | 0   | 0   | 7     | 302   | 30  | 7    | 3    | 1   | 1   | 3   | 347   | 1     | 0   | 0    | 0    | 0   | 0   | 0   | 1     |

|       |   |   |   |   |   |   |   |   |     |    |   |   |   |   |   |     |   |   |   |   |   |   |   |   |
|-------|---|---|---|---|---|---|---|---|-----|----|---|---|---|---|---|-----|---|---|---|---|---|---|---|---|
| 16:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 36  | 2  | 0 | 1 | 0 | 0 | 0 | 39  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 64  | 10 | 0 | 0 | 0 | 0 | 0 | 74  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 47  | 5  | 1 | 0 | 0 | 1 | 0 | 54  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:15 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 50  | 4  | 0 | 0 | 0 | 2 | 1 | 57  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:30 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 40  | 9  | 1 | 0 | 0 | 0 | 0 | 50  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 34  | 3  | 0 | 0 | 1 | 0 | 0 | 38  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21  | 3  | 0 | 0 | 2 | 0 | 0 | 26  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26  | 2  | 0 | 0 | 0 | 2 | 0 | 30  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 318 | 38 | 2 | 1 | 3 | 5 | 1 | 368 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

# Summary

|          |                                         |    |                  |
|----------|-----------------------------------------|----|------------------|
| Site 3 : | B6478 Waddington Rd/E'ham St/Milton Ave | A: | Eastham Street   |
| Day:     | Thursday                                | B: | B6478 Clitheroe  |
| Date:    | 21 July 2011                            | C: | Milton Avenue    |
| Weather: | Fine/Cloudy                             | D: | B6478 Waddington |

| From A |     |     |      |      |     |     |     |       | From B |     |      |      |     |     |     |       |
|--------|-----|-----|------|------|-----|-----|-----|-------|--------|-----|------|------|-----|-----|-----|-------|
| Time   | Car | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total | Car    | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total |
| 07:30  | 8   | 2   | 0    | 0    | 0   | 0   | 0   | 10    | 20     | 6   | 2    | 0    | 1   | 0   | 1   | 30    |
| 07:45  | 10  | 4   | 0    | 0    | 0   | 0   | 0   | 14    | 23     | 7   | 0    | 0    | 1   | 0   | 0   | 31    |
| 08:00  | 22  | 3   | 0    | 0    | 0   | 0   | 0   | 25    | 19     | 9   | 2    | 1    | 0   | 0   | 1   | 32    |
| 08:15  | 19  | 3   | 1    | 0    | 1   | 0   | 1   | 25    | 38     | 11  | 1    | 0    | 1   | 0   | 2   | 53    |
| 08:30  | 18  | 2   | 0    | 0    | 0   | 0   | 0   | 20    | 39     | 10  | 0    | 1    | 0   | 1   | 0   | 51    |
| 08:45  | 11  | 4   | 0    | 0    | 0   | 0   | 0   | 15    | 32     | 10  | 0    | 0    | 2   | 0   | 0   | 44    |
| 09:00  | 19  | 1   | 0    | 0    | 0   | 0   | 0   | 20    | 34     | 7   | 0    | 0    | 0   | 0   | 0   | 41    |
| 09:15  | 5   | 1   | 0    | 0    | 1   | 0   | 0   | 7     | 32     | 12  | 1    | 0    | 0   | 1   | 0   | 46    |
| Total  | 112 | 20  | 1    | 0    | 2   | 0   | 1   | 136   | 237    | 72  | 6    | 2    | 5   | 2   | 4   | 328   |

|       |     |    |   |   |   |   |   |     |     |    |   |   |   |   |   |     |
|-------|-----|----|---|---|---|---|---|-----|-----|----|---|---|---|---|---|-----|
| 16:30 | 9   | 3  | 0 | 0 | 0 | 0 | 0 | 12  | 72  | 1  | 0 | 0 | 1 | 0 | 1 | 75  |
| 16:45 | 9   | 2  | 0 | 0 | 1 | 0 | 0 | 12  | 74  | 9  | 1 | 0 | 0 | 1 | 1 | 86  |
| 17:00 | 15  | 3  | 0 | 0 | 0 | 0 | 0 | 18  | 70  | 11 | 0 | 0 | 3 | 0 | 0 | 84  |
| 17:15 | 17  | 3  | 0 | 0 | 1 | 0 | 0 | 21  | 70  | 5  | 0 | 0 | 0 | 2 | 2 | 79  |
| 17:30 | 14  | 3  | 0 | 0 | 1 | 0 | 0 | 18  | 101 | 5  | 0 | 0 | 2 | 0 | 0 | 108 |
| 17:45 | 15  | 1  | 0 | 0 | 0 | 0 | 0 | 16  | 77  | 5  | 0 | 0 | 0 | 0 | 1 | 83  |
| 18:00 | 13  | 0  | 0 | 0 | 0 | 0 | 0 | 13  | 58  | 4  | 0 | 0 | 1 | 0 | 0 | 63  |
| 18:15 | 14  | 0  | 0 | 0 | 0 | 0 | 0 | 14  | 59  | 5  | 1 | 0 | 0 | 3 | 0 | 68  |
| Total | 106 | 15 | 0 | 0 | 3 | 0 | 0 | 124 | 581 | 45 | 2 | 0 | 7 | 6 | 5 | 646 |

# Summary

| From C |     |     |      |      |     |     |     |       | From D |     |      |      |     |     |     |       |
|--------|-----|-----|------|------|-----|-----|-----|-------|--------|-----|------|------|-----|-----|-----|-------|
| Time   | Car | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total | Car    | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total |
| 07:30  | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 31     | 3   | 0    | 0    | 0   | 0   | 0   | 34    |
| 07:45  | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 26     | 5   | 1    | 0    | 0   | 0   | 0   | 32    |
| 08:00  | 2   | 0   | 0    | 0    | 0   | 0   | 0   | 2     | 46     | 3   | 0    | 0    | 0   | 0   | 0   | 49    |
| 08:15  | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 54     | 4   | 0    | 1    | 1   | 0   | 2   | 62    |
| 08:30  | 2   | 0   | 0    | 0    | 0   | 0   | 0   | 2     | 40     | 4   | 1    | 1    | 0   | 0   | 0   | 46    |
| 08:45  | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 41     | 5   | 2    | 0    | 0   | 0   | 1   | 49    |
| 09:00  | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 44     | 4   | 2    | 0    | 0   | 1   | 0   | 51    |
| 09:15  | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 28     | 2   | 1    | 1    | 0   | 0   | 0   | 32    |
| Total  | 4   | 0   | 0    | 0    | 0   | 0   | 0   | 4     | 310    | 30  | 7    | 3    | 1   | 1   | 3   | 355   |

|       |   |   |   |   |   |   |   |   |     |    |   |   |   |   |   |     |
|-------|---|---|---|---|---|---|---|---|-----|----|---|---|---|---|---|-----|
| 16:30 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 36  | 2  | 0 | 1 | 0 | 0 | 0 | 39  |
| 16:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 64  | 10 | 0 | 0 | 0 | 0 | 0 | 74  |
| 17:00 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 47  | 5  | 1 | 0 | 0 | 1 | 0 | 54  |
| 17:15 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 51  | 4  | 0 | 0 | 0 | 2 | 1 | 58  |
| 17:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 41  | 9  | 1 | 0 | 0 | 0 | 0 | 51  |
| 17:45 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 34  | 3  | 0 | 0 | 1 | 0 | 0 | 38  |
| 18:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21  | 3  | 0 | 0 | 2 | 0 | 0 | 26  |
| 18:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26  | 2  | 0 | 0 | 0 | 2 | 0 | 30  |
| Total | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 320 | 38 | 2 | 1 | 3 | 5 | 1 | 370 |

# Summary

| To A  |     |     |      |      |     |     |     |       | To B |     |      |      |     |     |     |       |
|-------|-----|-----|------|------|-----|-----|-----|-------|------|-----|------|------|-----|-----|-----|-------|
| Time  | Car | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total | Car  | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total |
| 07:30 | 9   | 2   | 1    | 0    | 0   | 0   | 0   | 12    | 39   | 5   | 0    | 0    | 0   | 0   | 0   | 44    |
| 07:45 | 13  | 0   | 0    | 0    | 1   | 0   | 0   | 14    | 36   | 9   | 1    | 0    | 0   | 0   | 0   | 46    |
| 08:00 | 9   | 2   | 0    | 0    | 0   | 0   | 0   | 11    | 69   | 6   | 0    | 0    | 0   | 0   | 0   | 75    |
| 08:15 | 20  | 3   | 0    | 0    | 1   | 0   | 1   | 25    | 67   | 7   | 1    | 1    | 2   | 0   | 3   | 81    |
| 08:30 | 6   | 2   | 0    | 0    | 0   | 1   | 0   | 9     | 60   | 5   | 1    | 1    | 0   | 0   | 0   | 67    |
| 08:45 | 13  | 2   | 0    | 0    | 0   | 0   | 0   | 15    | 50   | 9   | 2    | 0    | 0   | 0   | 1   | 62    |
| 09:00 | 13  | 1   | 0    | 0    | 0   | 0   | 0   | 14    | 62   | 5   | 2    | 0    | 0   | 1   | 0   | 70    |
| 09:15 | 6   | 3   | 0    | 0    | 0   | 0   | 0   | 9     | 33   | 3   | 1    | 1    | 1   | 0   | 0   | 39    |
| Total | 89  | 15  | 1    | 0    | 2   | 1   | 1   | 109   | 416  | 49  | 8    | 3    | 3   | 1   | 4   | 484   |

|       |     |    |   |   |   |   |   |     |     |    |   |   |   |   |   |     |
|-------|-----|----|---|---|---|---|---|-----|-----|----|---|---|---|---|---|-----|
| 16:30 | 11  | 0  | 0 | 0 | 0 | 0 | 0 | 11  | 45  | 5  | 0 | 1 | 0 | 0 | 0 | 51  |
| 16:45 | 14  | 2  | 0 | 0 | 0 | 0 | 0 | 16  | 72  | 12 | 0 | 0 | 0 | 0 | 0 | 84  |
| 17:00 | 12  | 5  | 0 | 0 | 2 | 0 | 0 | 19  | 62  | 8  | 1 | 0 | 0 | 1 | 0 | 72  |
| 17:15 | 14  | 2  | 0 | 0 | 0 | 0 | 0 | 16  | 68  | 7  | 0 | 0 | 0 | 2 | 1 | 78  |
| 17:30 | 23  | 1  | 0 | 0 | 0 | 0 | 0 | 24  | 54  | 11 | 1 | 0 | 1 | 0 | 0 | 67  |
| 17:45 | 15  | 2  | 0 | 0 | 0 | 0 | 0 | 17  | 50  | 4  | 0 | 0 | 1 | 0 | 0 | 55  |
| 18:00 | 7   | 1  | 0 | 0 | 1 | 0 | 0 | 9   | 34  | 3  | 0 | 0 | 2 | 0 | 0 | 39  |
| 18:15 | 13  | 2  | 0 | 0 | 0 | 0 | 0 | 15  | 38  | 2  | 0 | 0 | 0 | 2 | 0 | 42  |
| Total | 109 | 15 | 0 | 0 | 3 | 0 | 0 | 127 | 423 | 52 | 2 | 1 | 4 | 5 | 1 | 488 |

| To C  |     |     |      |      |     |     |     |       | To D |     |      |      |     |     |     |       |
|-------|-----|-----|------|------|-----|-----|-----|-------|------|-----|------|------|-----|-----|-----|-------|
| Time  | Car | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total | Car  | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total |
| 07:30 | 1   | 0   | 0    | 0    | 0   | 0   | 0   | 1     | 10   | 4   | 1    | 0    | 1   | 0   | 1   | 17    |
| 07:45 | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 10   | 7   | 0    | 0    | 0   | 0   | 0   | 17    |
| 08:00 | 1   | 0   | 0    | 0    | 0   | 0   | 0   | 1     | 10   | 7   | 2    | 1    | 0   | 0   | 1   | 21    |
| 08:15 | 2   | 0   | 0    | 0    | 0   | 0   | 0   | 2     | 22   | 8   | 1    | 0    | 0   | 0   | 1   | 32    |
| 08:30 | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 33   | 9   | 0    | 1    | 0   | 0   | 0   | 43    |
| 08:45 | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 21   | 8   | 0    | 0    | 2   | 0   | 0   | 31    |
| 09:00 | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 22   | 6   | 0    | 0    | 0   | 0   | 0   | 28    |
| 09:15 | 1   | 0   | 0    | 0    | 0   | 0   | 0   | 1     | 25   | 9   | 1    | 0    | 0   | 1   | 0   | 36    |
| Total | 5   | 0   | 0    | 0    | 0   | 0   | 0   | 5     | 153  | 58  | 5    | 2    | 3   | 1   | 3   | 225   |

|       |    |   |   |   |   |   |   |    |     |    |   |   |   |   |   |     |
|-------|----|---|---|---|---|---|---|----|-----|----|---|---|---|---|---|-----|
| 16:30 | 2  | 0 | 0 | 0 | 0 | 0 | 0 | 2  | 60  | 1  | 0 | 0 | 1 | 0 | 1 | 63  |
| 16:45 | 3  | 0 | 0 | 0 | 0 | 0 | 0 | 3  | 58  | 7  | 1 | 0 | 1 | 1 | 1 | 69  |
| 17:00 | 2  | 0 | 0 | 0 | 0 | 0 | 0 | 2  | 57  | 6  | 0 | 0 | 1 | 0 | 0 | 64  |
| 17:15 | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 59  | 3  | 0 | 0 | 1 | 2 | 2 | 67  |
| 17:30 | 3  | 0 | 0 | 0 | 0 | 0 | 0 | 3  | 76  | 5  | 0 | 0 | 2 | 0 | 0 | 83  |
| 17:45 | 2  | 0 | 0 | 0 | 0 | 0 | 0 | 2  | 60  | 3  | 0 | 0 | 0 | 0 | 1 | 64  |
| 18:00 | 3  | 0 | 0 | 0 | 0 | 0 | 0 | 3  | 48  | 3  | 0 | 0 | 0 | 0 | 0 | 51  |
| 18:15 | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 48  | 3  | 1 | 0 | 0 | 3 | 0 | 55  |
| Total | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 466 | 31 | 2 | 0 | 6 | 6 | 5 | 516 |

**B6479 WADDINGTON ROAD/EASTHAM STREET/MILTON AVENUE, CLITHEROE - THURSDAY 20 JULY 2011 (08:00-09:00)**

**D - B6479 Waddington**

|              |             |            |             |             |            |            |            |              |
|--------------|-------------|------------|-------------|-------------|------------|------------|------------|--------------|
| <b>D - A</b> | 6           | 0          | 0           | 0           | 0          | 0          | 0          | <b>6</b>     |
| <b>D - B</b> | 174         | 16         | 3           | 2           | 1          | 0          | 3          | <b>199</b>   |
| <b>D - C</b> | 1           | 0          | 0           | 0           | 0          | 0          | 0          | <b>1</b>     |
| <b>Total</b> | 181         | 16         | 3           | 2           | 1          | 0          | 3          | <b>206</b>   |
|              | <b>Cars</b> | <b>LGV</b> | <b>OGV1</b> | <b>OGV2</b> | <b>P/C</b> | <b>M/C</b> | <b>PSV</b> | <b>Total</b> |

|             |    |    |   |   |   |   |   |            |
|-------------|----|----|---|---|---|---|---|------------|
| <b>To D</b> | 86 | 32 | 3 | 2 | 2 | 0 | 2 | <b>127</b> |
|-------------|----|----|---|---|---|---|---|------------|

**A - Eastham Street**

|             |              |              |              |              |              |
|-------------|--------------|--------------|--------------|--------------|--------------|
| <b>To A</b> |              | <b>A - D</b> | <b>A - C</b> | <b>A - B</b> | <b>Total</b> |
| 48          | <b>Cars</b>  | 2            | 0            | 68           | 70           |
| 9           | <b>LGV</b>   | 1            | 0            | 11           | 12           |
| 0           | <b>OGV1</b>  | 0            | 0            | 1            | 1            |
| 0           | <b>OGV2</b>  | 0            | 0            | 0            | 0            |
| 1           | <b>P/C</b>   | 0            | 0            | 1            | 1            |
| 1           | <b>M/C</b>   | 0            | 0            | 0            | 0            |
| 1           | <b>PSV</b>   | 0            | 0            | 1            | 1            |
| <b>60</b>   | <b>Total</b> | <b>3</b>     | <b>0</b>     | <b>82</b>    | <b>85</b>    |

|     |    |   |   |   |   |   |            |             |
|-----|----|---|---|---|---|---|------------|-------------|
| 246 | 27 | 4 | 2 | 2 | 0 | 4 | <b>285</b> | <b>To B</b> |
|-----|----|---|---|---|---|---|------------|-------------|

|             |            |             |             |            |            |            |              |              |
|-------------|------------|-------------|-------------|------------|------------|------------|--------------|--------------|
| <b>Cars</b> | <b>LGV</b> | <b>OGV1</b> | <b>OGV2</b> | <b>P/C</b> | <b>M/C</b> | <b>PSV</b> | <b>Total</b> |              |
| 42          | 9          | 0           | 0           | 1          | 1          | 1          | <b>54</b>    | <b>B - A</b> |
| 84          | 31         | 3           | 2           | 2          | 0          | 2          | <b>124</b>   | <b>B - D</b> |
| 2           | 0          | 0           | 0           | 0          | 0          | 0          | <b>2</b>     | <b>B - C</b> |
| 128         | 40         | 3           | 2           | 3          | 1          | 3          | <b>180</b>   | <b>Total</b> |

**B - B6479 Clitheroe**

|              |              |              |              |              |             |
|--------------|--------------|--------------|--------------|--------------|-------------|
| 0            | 0            | 4            | 4            | <b>Cars</b>  | 3           |
| 0            | 0            | 0            | 0            | <b>LGV</b>   | 0           |
| 0            | 0            | 0            | 0            | <b>OGV1</b>  | 0           |
| 0            | 0            | 0            | 0            | <b>OGV2</b>  | 0           |
| 0            | 0            | 0            | 0            | <b>P/C</b>   | 0           |
| 0            | 0            | 0            | 0            | <b>M/C</b>   | 0           |
| 0            | 0            | 0            | 0            | <b>PSV</b>   | 0           |
| 0            | 0            | 4            | 4            | <b>Total</b> | <b>3</b>    |
| <b>C - D</b> | <b>C - A</b> | <b>C - B</b> | <b>Total</b> |              | <b>To C</b> |

**C - Milton Avenue**

**B6479 WADDINGTON ROAD/EASTHAM STREET/MILTON AVENUE, CLITHEROE - THURSDAY 20 JULY 2011 (16:45-17:45)**

**D - B6479 Waddington**

|              |             |            |             |             |            |            |            |              |
|--------------|-------------|------------|-------------|-------------|------------|------------|------------|--------------|
| <b>D - A</b> | 2           | 0          | 0           | 0           | 0          | 0          | 0          | <b>2</b>     |
| <b>D - B</b> | 201         | 28         | 2           | 0           | 0          | 3          | 1          | <b>235</b>   |
| <b>D - C</b> | 0           | 0          | 0           | 0           | 0          | 0          | 0          | <b>0</b>     |
| <b>Total</b> | 203         | 28         | 2           | 0           | 0          | 3          | 1          | <b>237</b>   |
|              | <b>Cars</b> | <b>LGV</b> | <b>OGV1</b> | <b>OGV2</b> | <b>P/C</b> | <b>M/C</b> | <b>PSV</b> | <b>Total</b> |

|             |     |    |   |   |   |   |   |            |
|-------------|-----|----|---|---|---|---|---|------------|
| <b>To D</b> | 249 | 21 | 1 | 0 | 5 | 3 | 3 | <b>282</b> |
|-------------|-----|----|---|---|---|---|---|------------|

**A - Eastham Street**

|             |              |              |              |              |              |
|-------------|--------------|--------------|--------------|--------------|--------------|
| <b>To A</b> |              | <b>A - D</b> | <b>A - C</b> | <b>A - B</b> | <b>Total</b> |
| 63          | <b>Cars</b>  | 3            | 0            | 52           | 55           |
| 10          | <b>LGV</b>   | 1            | 0            | 10           | 11           |
| 0           | <b>OGV1</b>  | 0            | 0            | 0            | 0            |
| 0           | <b>OGV2</b>  | 0            | 0            | 0            | 0            |
| 2           | <b>P/C</b>   | 2            | 0            | 1            | 3            |
| 0           | <b>M/C</b>   | 0            | 0            | 0            | 0            |
| 0           | <b>PSV</b>   | 0            | 0            | 0            | 0            |
| <b>75</b>   | <b>Total</b> | <b>6</b>     | <b>0</b>     | <b>63</b>    | <b>69</b>    |

|     |    |   |   |   |   |   |            |             |
|-----|----|---|---|---|---|---|------------|-------------|
| 256 | 38 | 2 | 0 | 1 | 3 | 1 | <b>301</b> | <b>To B</b> |
|-----|----|---|---|---|---|---|------------|-------------|

|             |            |             |             |            |            |            |              |              |
|-------------|------------|-------------|-------------|------------|------------|------------|--------------|--------------|
| <b>Cars</b> | <b>LGV</b> | <b>OGV1</b> | <b>OGV2</b> | <b>P/C</b> | <b>M/C</b> | <b>PSV</b> | <b>Total</b> |              |
| 61          | 10         | 0           | 0           | 2          | 0          | 0          | <b>73</b>    | <b>B - A</b> |
| 246         | 20         | 1           | 0           | 3          | 3          | 3          | <b>276</b>   | <b>B - D</b> |
| 8           | 0          | 0           | 0           | 0          | 0          | 0          | <b>8</b>     | <b>B - C</b> |
| 315         | 30         | 1           | 0           | 5          | 3          | 3          | <b>357</b>   | <b>Total</b> |

**B - B6479 Clitheroe**

|              |              |              |              |              |             |
|--------------|--------------|--------------|--------------|--------------|-------------|
| 0            | 0            | 3            | 3            | <b>Cars</b>  | 8           |
| 0            | 0            | 0            | 0            | <b>LGV</b>   | 0           |
| 0            | 0            | 0            | 0            | <b>OGV1</b>  | 0           |
| 0            | 0            | 0            | 0            | <b>OGV2</b>  | 0           |
| 0            | 0            | 0            | 0            | <b>P/C</b>   | 0           |
| 0            | 0            | 0            | 0            | <b>M/C</b>   | 0           |
| 0            | 0            | 0            | 0            | <b>PSV</b>   | 0           |
| 0            | 0            | 3            | 3            | <b>Total</b> | <b>8</b>    |
| <b>C - D</b> | <b>C - A</b> | <b>C - B</b> | <b>Total</b> |              | <b>To C</b> |

**C - Milton Avenue**

Site 1: B6478 Waddington Road/Railway View Road

A: B6478 Clitheroe

Day: Tuesday

B: Railway View Road

Date: 29 May 2012

C: B6478 Waddington

Weather: Fine & Cloudy AM/Fine & Sunny PM

| A - B |     |     |      |      |     |     |     |       | A - C |     |      |      |     |     |     |       |
|-------|-----|-----|------|------|-----|-----|-----|-------|-------|-----|------|------|-----|-----|-----|-------|
| Time  | Car | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total | Car   | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total |
| 07:00 | 6   | 5   | 1    | 0    | 1   | 0   | 1   | 14    | 6     | 2   | 2    | 0    | 1   | 0   | 2   | 13    |
| 07:15 | 27  | 6   | 0    | 0    | 0   | 0   | 0   | 33    | 8     | 3   | 2    | 0    | 2   | 0   | 4   | 19    |
| 07:30 | 24  | 9   | 3    | 0    | 1   | 0   | 0   | 37    | 19    | 5   | 0    | 0    | 0   | 0   | 2   | 26    |
| 07:45 | 42  | 11  | 3    | 0    | 1   | 1   | 2   | 60    | 17    | 9   | 3    | 0    | 0   | 0   | 0   | 29    |
| 08:00 | 49  | 5   | 3    | 0    | 0   | 0   | 0   | 57    | 28    | 7   | 0    | 0    | 0   | 0   | 2   | 37    |
| 08:15 | 44  | 13  | 1    | 1    | 1   | 1   | 4   | 65    | 33    | 11  | 1    | 0    | 0   | 0   | 2   | 47    |
| 08:30 | 61  | 6   | 3    | 0    | 1   | 1   | 0   | 72    | 35    | 12  | 1    | 0    | 0   | 0   | 3   | 51    |
| 08:45 | 71  | 9   | 0    | 0    | 2   | 0   | 0   | 82    | 20    | 9   | 4    | 1    | 0   | 0   | 0   | 34    |
| 09:00 | 59  | 3   | 2    | 1    | 0   | 0   | 1   | 66    | 31    | 10  | 0    | 0    | 0   | 0   | 0   | 41    |
| 09:15 | 60  | 10  | 1    | 0    | 1   | 0   | 0   | 72    | 16    | 11  | 1    | 0    | 0   | 0   | 0   | 28    |
| 09:30 | 46  | 10  | 1    | 0    | 0   | 1   | 0   | 58    | 20    | 5   | 1    | 1    | 0   | 0   | 0   | 27    |
| 09:45 | 48  | 7   | 1    | 1    | 1   | 0   | 0   | 58    | 20    | 8   | 1    | 0    | 1   | 0   | 1   | 31    |
| Total | 537 | 94  | 19   | 3    | 9   | 4   | 8   | 674   | 253   | 92  | 16   | 2    | 4   | 0   | 16  | 383   |

|       |     |    |    |   |    |   |   |     |     |    |   |   |    |    |   |     |
|-------|-----|----|----|---|----|---|---|-----|-----|----|---|---|----|----|---|-----|
| 16:00 | 78  | 8  | 1  | 1 | 3  | 2 | 2 | 95  | 25  | 8  | 1 | 0 | 0  | 0  | 1 | 35  |
| 16:15 | 64  | 11 | 1  | 0 | 2  | 0 | 0 | 78  | 32  | 10 | 0 | 0 | 0  | 0  | 0 | 42  |
| 16:30 | 68  | 9  | 4  | 1 | 2  | 1 | 0 | 85  | 37  | 7  | 0 | 0 | 0  | 3  | 0 | 47  |
| 16:45 | 71  | 8  | 0  | 2 | 2  | 0 | 0 | 83  | 49  | 6  | 0 | 0 | 0  | 0  | 1 | 56  |
| 17:00 | 61  | 9  | 2  | 1 | 2  | 0 | 0 | 75  | 56  | 2  | 0 | 0 | 1  | 0  | 1 | 60  |
| 17:15 | 74  | 14 | 1  | 0 | 3  | 3 | 1 | 96  | 46  | 3  | 0 | 0 | 3  | 6  | 2 | 60  |
| 17:30 | 59  | 6  | 0  | 0 | 5  | 2 | 0 | 72  | 39  | 2  | 0 | 0 | 0  | 0  | 1 | 42  |
| 17:45 | 56  | 8  | 1  | 0 | 3  | 0 | 0 | 68  | 47  | 5  | 0 | 0 | 0  | 1  | 1 | 54  |
| 18:00 | 49  | 7  | 1  | 0 | 4  | 0 | 0 | 61  | 50  | 7  | 0 | 0 | 3  | 1  | 0 | 61  |
| 18:15 | 44  | 5  | 0  | 0 | 3  | 0 | 1 | 53  | 45  | 2  | 0 | 0 | 0  | 3  | 0 | 50  |
| 18:30 | 46  | 3  | 1  | 1 | 2  | 1 | 0 | 54  | 41  | 6  | 0 | 0 | 3  | 1  | 0 | 51  |
| 18:45 | 42  | 4  | 0  | 0 | 5  | 0 | 0 | 51  | 30  | 3  | 0 | 0 | 3  | 1  | 1 | 38  |
| Total | 712 | 92 | 12 | 6 | 36 | 9 | 4 | 871 | 497 | 61 | 1 | 0 | 13 | 16 | 8 | 596 |

| B - A |     |     |      |      |     |     |     |       | B - C |     |      |      |     |     |     |       |
|-------|-----|-----|------|------|-----|-----|-----|-------|-------|-----|------|------|-----|-----|-----|-------|
| Time  | Car | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total | Car   | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total |
| 07:00 | 24  | 8   | 3    | 1    | 0   | 2   | 1   | 39    | 3     | 1   | 0    | 0    | 0   | 0   | 0   | 4     |
| 07:15 | 35  | 6   | 2    | 1    | 4   | 0   | 2   | 50    | 8     | 1   | 1    | 0    | 0   | 0   | 0   | 10    |
| 07:30 | 46  | 8   | 4    | 0    | 1   | 2   | 3   | 64    | 10    | 3   | 0    | 0    | 0   | 0   | 0   | 13    |
| 07:45 | 45  | 9   | 1    | 0    | 0   | 0   | 6   | 61    | 11    | 1   | 0    | 0    | 0   | 0   | 0   | 12    |
| 08:00 | 47  | 2   | 1    | 0    | 0   | 0   | 3   | 53    | 19    | 3   | 0    | 0    | 1   | 0   | 0   | 23    |
| 08:15 | 49  | 13  | 1    | 0    | 3   | 2   | 4   | 72    | 18    | 2   | 0    | 0    | 0   | 0   | 0   | 20    |
| 08:30 | 79  | 9   | 1    | 0    | 4   | 0   | 6   | 99    | 17    | 2   | 2    | 0    | 0   | 0   | 1   | 22    |
| 08:45 | 52  | 5   | 2    | 0    | 3   | 0   | 4   | 66    | 20    | 6   | 0    | 0    | 0   | 0   | 0   | 26    |
| 09:00 | 39  | 10  | 1    | 0    | 0   | 0   | 1   | 51    | 21    | 1   | 0    | 0    | 1   | 0   | 0   | 23    |
| 09:15 | 37  | 7   | 2    | 1    | 0   | 0   | 1   | 48    | 12    | 0   | 0    | 0    | 1   | 0   | 0   | 13    |
| 09:30 | 46  | 11  | 0    | 2    | 0   | 1   | 2   | 62    | 16    | 2   | 0    | 0    | 1   | 0   | 0   | 19    |
| 09:45 | 47  | 7   | 0    | 1    | 1   | 0   | 4   | 60    | 12    | 4   | 1    | 0    | 0   | 0   | 0   | 17    |
| Total | 546 | 95  | 18   | 6    | 16  | 7   | 37  | 725   | 167   | 26  | 4    | 0    | 4   | 0   | 1   | 202   |

|       |     |    |   |   |    |   |    |     |     |    |   |   |   |   |   |     |
|-------|-----|----|---|---|----|---|----|-----|-----|----|---|---|---|---|---|-----|
| 16:00 | 72  | 5  | 2 | 1 | 1  | 1 | 2  | 84  | 9   | 1  | 0 | 0 | 0 | 0 | 0 | 10  |
| 16:15 | 61  | 5  | 2 | 0 | 0  | 0 | 8  | 76  | 24  | 1  | 0 | 0 | 0 | 1 | 0 | 26  |
| 16:30 | 60  | 14 | 0 | 1 | 0  | 0 | 2  | 77  | 26  | 2  | 0 | 0 | 0 | 0 | 0 | 28  |
| 16:45 | 73  | 9  | 1 | 1 | 3  | 0 | 1  | 88  | 34  | 3  | 0 | 0 | 0 | 0 | 0 | 37  |
| 17:00 | 66  | 10 | 1 | 1 | 1  | 3 | 2  | 84  | 31  | 4  | 0 | 0 | 0 | 1 | 0 | 36  |
| 17:15 | 73  | 3  | 0 | 0 | 1  | 1 | 1  | 79  | 31  | 4  | 0 | 0 | 0 | 0 | 0 | 35  |
| 17:30 | 65  | 6  | 0 | 1 | 1  | 0 | 2  | 75  | 30  | 2  | 0 | 0 | 0 | 0 | 2 | 34  |
| 17:45 | 61  | 7  | 0 | 1 | 1  | 1 | 1  | 72  | 28  | 3  | 0 | 0 | 0 | 0 | 0 | 31  |
| 18:00 | 53  | 4  | 1 | 1 | 1  | 0 | 4  | 64  | 23  | 2  | 0 | 0 | 0 | 0 | 0 | 25  |
| 18:15 | 51  | 4  | 1 | 0 | 2  | 0 | 2  | 60  | 31  | 2  | 0 | 0 | 0 | 1 | 0 | 34  |
| 18:30 | 39  | 3  | 0 | 0 | 0  | 1 | 1  | 44  | 24  | 1  | 0 | 0 | 0 | 0 | 0 | 25  |
| 18:45 | 37  | 5  | 1 | 1 | 1  | 1 | 3  | 49  | 27  | 0  | 0 | 0 | 1 | 0 | 0 | 28  |
| Total | 711 | 75 | 9 | 8 | 12 | 8 | 29 | 852 | 318 | 25 | 0 | 0 | 1 | 3 | 2 | 349 |

| C - A |     |     |      |      |     |     |     |       | C - B |     |      |      |     |     |     |       |
|-------|-----|-----|------|------|-----|-----|-----|-------|-------|-----|------|------|-----|-----|-----|-------|
| Time  | Car | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total | Car   | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total |
| 07:00 | 24  | 3   | 0    | 0    | 1   | 0   | 2   | 30    | 2     | 0   | 0    | 0    | 0   | 0   | 0   | 2     |
| 07:15 | 39  | 3   | 0    | 0    | 0   | 0   | 1   | 43    | 4     | 1   | 0    | 0    | 0   | 0   | 0   | 5     |
| 07:30 | 55  | 6   | 0    | 0    | 0   | 0   | 0   | 61    | 6     | 2   | 1    | 0    | 0   | 0   | 0   | 9     |
| 07:45 | 47  | 5   | 2    | 0    | 1   | 0   | 0   | 55    | 5     | 1   | 0    | 0    | 1   | 0   | 0   | 7     |
| 08:00 | 59  | 7   | 1    | 0    | 1   | 0   | 1   | 69    | 11    | 1   | 1    | 0    | 0   | 0   | 0   | 13    |
| 08:15 | 54  | 8   | 0    | 0    | 0   | 1   | 2   | 65    | 10    | 0   | 0    | 0    | 0   | 0   | 0   | 10    |
| 08:30 | 59  | 12  | 1    | 0    | 0   | 0   | 1   | 73    | 17    | 4   | 0    | 0    | 0   | 0   | 0   | 21    |
| 08:45 | 59  | 10  | 1    | 0    | 0   | 2   | 0   | 72    | 23    | 1   | 0    | 0    | 2   | 0   | 0   | 26    |
| 09:00 | 39  | 7   | 1    | 1    | 1   | 0   | 0   | 49    | 12    | 1   | 1    | 0    | 0   | 0   | 0   | 14    |
| 09:15 | 31  | 11  | 1    | 2    | 0   | 0   | 1   | 46    | 16    | 0   | 0    | 0    | 0   | 0   | 0   | 16    |
| 09:30 | 29  | 6   | 3    | 0    | 1   | 0   | 0   | 39    | 15    | 0   | 0    | 0    | 0   | 0   | 0   | 15    |
| 09:45 | 31  | 7   | 1    | 2    | 0   | 0   | 0   | 41    | 11    | 2   | 1    | 0    | 0   | 0   | 0   | 14    |
| Total | 526 | 85  | 11   | 5    | 5   | 3   | 8   | 643   | 132   | 13  | 4    | 0    | 3   | 0   | 0   | 152   |

|       |     |    |   |   |    |   |   |     |     |    |   |   |   |   |   |     |
|-------|-----|----|---|---|----|---|---|-----|-----|----|---|---|---|---|---|-----|
| 16:00 | 58  | 8  | 0 | 0 | 0  | 0 | 5 | 71  | 17  | 1  | 0 | 0 | 0 | 0 | 0 | 18  |
| 16:15 | 30  | 9  | 1 | 0 | 0  | 1 | 0 | 41  | 12  | 2  | 1 | 0 | 1 | 0 | 0 | 16  |
| 16:30 | 35  | 11 | 0 | 0 | 1  | 1 | 0 | 48  | 16  | 1  | 0 | 0 | 0 | 0 | 0 | 17  |
| 16:45 | 38  | 8  | 0 | 1 | 0  | 0 | 2 | 49  | 8   | 4  | 0 | 0 | 1 | 0 | 0 | 13  |
| 17:00 | 46  | 7  | 1 | 0 | 2  | 0 | 1 | 57  | 13  | 2  | 0 | 0 | 0 | 0 | 0 | 15  |
| 17:15 | 43  | 6  | 0 | 0 | 0  | 1 | 0 | 50  | 16  | 2  | 0 | 0 | 0 | 0 | 0 | 18  |
| 17:30 | 47  | 8  | 0 | 0 | 2  | 0 | 0 | 57  | 18  | 2  | 0 | 0 | 0 | 0 | 0 | 20  |
| 17:45 | 25  | 8  | 0 | 1 | 2  | 0 | 0 | 36  | 13  | 2  | 0 | 0 | 0 | 0 | 0 | 15  |
| 18:00 | 40  | 6  | 0 | 0 | 2  | 2 | 0 | 50  | 10  | 0  | 0 | 0 | 0 | 0 | 0 | 10  |
| 18:15 | 43  | 3  | 0 | 0 | 1  | 1 | 0 | 48  | 11  | 1  | 0 | 0 | 0 | 0 | 0 | 12  |
| 18:30 | 42  | 1  | 0 | 0 | 0  | 0 | 0 | 43  | 8   | 1  | 0 | 0 | 0 | 1 | 0 | 10  |
| 18:45 | 31  | 7  | 0 | 0 | 1  | 1 | 0 | 40  | 10  | 1  | 0 | 0 | 1 | 0 | 0 | 12  |
| Total | 478 | 82 | 2 | 2 | 11 | 7 | 8 | 590 | 152 | 19 | 1 | 0 | 3 | 1 | 0 | 176 |

# Summary

Site 1: B6478 Waddington Road/Railway View Road

Day: Tuesday

Date: 29 May 2012

Weather: Fine & Cloudy AM/Fine & Sunny PM

A: B6478 Clitheroe

B: Railway View Road

C: B6478 Waddington

| From A |     |     |      |      |     |     |     |       | From B |     |      |      |     |     |     |       | From C |     |      |      |     |     |     |       |
|--------|-----|-----|------|------|-----|-----|-----|-------|--------|-----|------|------|-----|-----|-----|-------|--------|-----|------|------|-----|-----|-----|-------|
| Time   | Car | LGV | OGVI | 0GV2 | P/C | M/C | PSV | Total | Car    | LGV | OGVI | 0GV2 | P/C | M/C | PSV | Total | Car    | LGV | OGVI | 0GV2 | P/C | M/C | PSV | Total |
| 07:00  | 12  | 7   | 3    | 0    | 2   | 0   | 3   | 27    | 27     | 9   | 3    | 1    | 0   | 2   | 1   | 43    | 26     | 3   | 0    | 0    | 1   | 0   | 2   | 32    |
| 07:15  | 35  | 9   | 2    | 0    | 2   | 0   | 4   | 52    | 43     | 7   | 3    | 1    | 4   | 0   | 2   | 60    | 43     | 4   | 0    | 0    | 0   | 0   | 1   | 48    |
| 07:30  | 43  | 14  | 3    | 0    | 1   | 0   | 2   | 63    | 56     | 11  | 4    | 0    | 1   | 2   | 3   | 77    | 61     | 8   | 1    | 0    | 0   | 0   | 0   | 70    |
| 07:45  | 59  | 20  | 6    | 0    | 1   | 1   | 2   | 89    | 56     | 10  | 1    | 0    | 0   | 0   | 6   | 73    | 52     | 6   | 2    | 0    | 2   | 0   | 0   | 62    |
| 08:00  | 77  | 12  | 3    | 0    | 0   | 0   | 2   | 94    | 66     | 5   | 1    | 0    | 1   | 0   | 3   | 76    | 70     | 8   | 2    | 0    | 1   | 0   | 1   | 82    |
| 08:15  | 77  | 24  | 2    | 1    | 1   | 1   | 6   | 112   | 67     | 15  | 1    | 0    | 3   | 2   | 4   | 92    | 64     | 8   | 0    | 0    | 0   | 1   | 2   | 75    |
| 08:30  | 96  | 18  | 4    | 0    | 1   | 1   | 3   | 123   | 96     | 11  | 3    | 0    | 4   | 0   | 7   | 121   | 76     | 16  | 1    | 0    | 0   | 0   | 1   | 94    |
| 08:45  | 91  | 18  | 4    | 1    | 2   | 0   | 0   | 116   | 72     | 11  | 2    | 0    | 3   | 0   | 4   | 92    | 82     | 11  | 1    | 0    | 2   | 2   | 0   | 98    |
| 09:00  | 90  | 13  | 2    | 1    | 0   | 0   | 1   | 107   | 60     | 11  | 1    | 0    | 1   | 0   | 1   | 74    | 51     | 8   | 2    | 1    | 1   | 0   | 0   | 63    |
| 09:15  | 76  | 21  | 2    | 0    | 1   | 0   | 0   | 100   | 49     | 7   | 2    | 1    | 1   | 0   | 1   | 61    | 47     | 11  | 1    | 2    | 0   | 0   | 1   | 62    |
| 09:30  | 66  | 15  | 2    | 1    | 0   | 1   | 0   | 85    | 62     | 13  | 0    | 2    | 1   | 1   | 2   | 81    | 44     | 6   | 3    | 0    | 1   | 0   | 0   | 54    |
| 09:45  | 68  | 15  | 2    | 1    | 2   | 0   | 1   | 89    | 59     | 11  | 1    | 1    | 1   | 0   | 4   | 77    | 42     | 9   | 2    | 2    | 0   | 0   | 0   | 55    |
| Total  | 790 | 186 | 35   | 5    | 13  | 4   | 24  | 1057  | 713    | 121 | 22   | 6    | 20  | 7   | 38  | 927   | 658    | 98  | 15   | 5    | 8   | 3   | 8   | 795   |

## Summary

| From A |      |     |      |      |     |     |     |       | From B |     |      |      |     |     |     |       | From C |     |      |      |     |     |     |       |
|--------|------|-----|------|------|-----|-----|-----|-------|--------|-----|------|------|-----|-----|-----|-------|--------|-----|------|------|-----|-----|-----|-------|
| Time   | Car  | LGV | OGVI | 0GV2 | P/C | M/C | PSV | Total | Car    | LGV | OGVI | 0GV2 | P/C | M/C | PSV | Total | Car    | LGV | OGVI | 0GV2 | P/C | M/C | PSV | Total |
| 16:00  | 103  | 16  | 2    | 1    | 3   | 2   | 3   | 130   | 81     | 6   | 2    | 1    | 1   | 1   | 2   | 94    | 75     | 9   | 0    | 0    | 0   | 0   | 5   | 89    |
| 16:15  | 96   | 21  | 1    | 0    | 2   | 0   | 0   | 120   | 85     | 6   | 2    | 0    | 0   | 1   | 8   | 102   | 42     | 11  | 2    | 0    | 1   | 1   | 0   | 57    |
| 16:30  | 105  | 16  | 4    | 1    | 2   | 4   | 0   | 132   | 86     | 16  | 0    | 1    | 0   | 0   | 2   | 105   | 51     | 12  | 0    | 0    | 1   | 1   | 0   | 65    |
| 16:45  | 120  | 14  | 0    | 2    | 2   | 0   | 1   | 139   | 107    | 12  | 1    | 1    | 3   | 0   | 1   | 125   | 46     | 12  | 0    | 1    | 1   | 0   | 2   | 62    |
| 17:00  | 117  | 11  | 2    | 1    | 3   | 0   | 1   | 135   | 97     | 14  | 1    | 1    | 1   | 4   | 2   | 120   | 59     | 9   | 1    | 0    | 2   | 0   | 1   | 72    |
| 17:15  | 120  | 17  | 1    | 0    | 6   | 9   | 3   | 156   | 104    | 7   | 0    | 0    | 1   | 1   | 1   | 114   | 59     | 8   | 0    | 0    | 0   | 1   | 0   | 68    |
| 17:30  | 98   | 8   | 0    | 0    | 5   | 2   | 1   | 114   | 95     | 8   | 0    | 1    | 1   | 0   | 4   | 109   | 65     | 10  | 0    | 0    | 2   | 0   | 0   | 77    |
| 17:45  | 103  | 13  | 1    | 0    | 3   | 1   | 1   | 122   | 89     | 10  | 0    | 1    | 1   | 1   | 1   | 103   | 38     | 10  | 0    | 1    | 2   | 0   | 0   | 51    |
| 18:00  | 99   | 14  | 1    | 0    | 7   | 1   | 0   | 122   | 76     | 6   | 1    | 1    | 1   | 0   | 4   | 89    | 50     | 6   | 0    | 0    | 2   | 2   | 0   | 60    |
| 18:15  | 89   | 7   | 0    | 0    | 3   | 3   | 1   | 103   | 82     | 6   | 1    | 0    | 2   | 1   | 2   | 94    | 54     | 4   | 0    | 0    | 1   | 1   | 0   | 60    |
| 18:30  | 87   | 9   | 1    | 1    | 5   | 2   | 0   | 105   | 63     | 4   | 0    | 0    | 0   | 1   | 1   | 69    | 50     | 2   | 0    | 0    | 0   | 1   | 0   | 53    |
| 18:45  | 72   | 7   | 0    | 0    | 8   | 1   | 1   | 89    | 64     | 5   | 1    | 1    | 2   | 1   | 3   | 77    | 41     | 8   | 0    | 0    | 2   | 1   | 0   | 52    |
| Total  | 1209 | 153 | 13   | 6    | 49  | 25  | 12  | 1467  | 1029   | 100 | 9    | 8    | 13  | 11  | 31  | 1201  | 630    | 101 | 3    | 2    | 14  | 8   | 8   | 766   |

## Summary

| To A  |      |     |      |      |     |     |     |       | To B |     |      |      |     |     |     |       | To C |     |      |      |     |     |     |       |
|-------|------|-----|------|------|-----|-----|-----|-------|------|-----|------|------|-----|-----|-----|-------|------|-----|------|------|-----|-----|-----|-------|
| Time  | Car  | LGV | OGVI | 0GV2 | P/C | M/C | PSV | Total | Car  | LGV | OGVI | 0GV2 | P/C | M/C | PSV | Total | Car  | LGV | OGVI | 0GV2 | P/C | M/C | PSV | Total |
| 07:00 | 48   | 11  | 3    | 1    | 1   | 2   | 3   | 69    | 8    | 5   | 1    | 0    | 1   | 0   | 1   | 16    | 9    | 3   | 2    | 0    | 1   | 0   | 2   | 17    |
| 07:15 | 74   | 9   | 2    | 1    | 4   | 0   | 3   | 93    | 31   | 7   | 0    | 0    | 0   | 0   | 0   | 38    | 16   | 4   | 3    | 0    | 2   | 0   | 4   | 29    |
| 07:30 | 101  | 14  | 4    | 0    | 1   | 2   | 3   | 125   | 30   | 11  | 4    | 0    | 1   | 0   | 0   | 46    | 29   | 8   | 0    | 0    | 0   | 0   | 2   | 39    |
| 07:45 | 92   | 14  | 3    | 0    | 1   | 0   | 6   | 116   | 47   | 12  | 3    | 0    | 2   | 1   | 2   | 67    | 28   | 10  | 3    | 0    | 0   | 0   | 0   | 41    |
| 08:00 | 106  | 9   | 2    | 0    | 1   | 0   | 4   | 122   | 60   | 6   | 4    | 0    | 0   | 0   | 0   | 70    | 47   | 10  | 0    | 0    | 1   | 0   | 2   | 60    |
| 08:15 | 103  | 21  | 1    | 0    | 3   | 3   | 6   | 137   | 54   | 13  | 1    | 1    | 1   | 1   | 4   | 75    | 51   | 13  | 1    | 0    | 0   | 0   | 2   | 67    |
| 08:30 | 138  | 21  | 2    | 0    | 4   | 0   | 7   | 172   | 78   | 10  | 3    | 0    | 1   | 1   | 0   | 93    | 52   | 14  | 3    | 0    | 0   | 0   | 4   | 73    |
| 08:45 | 111  | 15  | 3    | 0    | 3   | 2   | 4   | 138   | 94   | 10  | 0    | 0    | 4   | 0   | 0   | 108   | 40   | 15  | 4    | 1    | 0   | 0   | 0   | 60    |
| 09:00 | 78   | 17  | 2    | 1    | 1   | 0   | 1   | 100   | 71   | 4   | 3    | 1    | 0   | 0   | 1   | 80    | 52   | 11  | 0    | 0    | 1   | 0   | 0   | 64    |
| 09:15 | 68   | 18  | 3    | 3    | 0   | 0   | 2   | 94    | 76   | 10  | 1    | 0    | 1   | 0   | 0   | 88    | 28   | 11  | 1    | 0    | 1   | 0   | 0   | 41    |
| 09:30 | 75   | 17  | 3    | 2    | 1   | 1   | 2   | 101   | 61   | 10  | 1    | 0    | 0   | 1   | 0   | 73    | 36   | 7   | 1    | 1    | 1   | 0   | 0   | 46    |
| 09:45 | 78   | 14  | 1    | 3    | 1   | 0   | 4   | 101   | 59   | 9   | 2    | 1    | 1   | 0   | 0   | 72    | 32   | 12  | 2    | 0    | 1   | 0   | 1   | 48    |
| Total | 1072 | 180 | 29   | 11   | 21  | 10  | 45  | 1368  | 669  | 107 | 23   | 3    | 12  | 4   | 8   | 826   | 420  | 118 | 20   | 2    | 8   | 0   | 17  | 585   |

|       |      |     |    |    |    |    |    |      |     |     |    |   |    |    |   |      |     |    |   |   |    |    |    |     |
|-------|------|-----|----|----|----|----|----|------|-----|-----|----|---|----|----|---|------|-----|----|---|---|----|----|----|-----|
| 16:00 | 130  | 13  | 2  | 1  | 1  | 1  | 7  | 155  | 95  | 9   | 1  | 1 | 3  | 2  | 2 | 113  | 34  | 9  | 1 | 0 | 0  | 0  | 1  | 45  |
| 16:15 | 91   | 14  | 3  | 0  | 0  | 1  | 8  | 117  | 76  | 13  | 2  | 0 | 3  | 0  | 0 | 94   | 56  | 11 | 0 | 0 | 0  | 1  | 0  | 68  |
| 16:30 | 95   | 25  | 0  | 1  | 1  | 1  | 2  | 125  | 84  | 10  | 4  | 1 | 2  | 1  | 0 | 102  | 63  | 9  | 0 | 0 | 0  | 3  | 0  | 75  |
| 16:45 | 111  | 17  | 1  | 2  | 3  | 0  | 3  | 137  | 79  | 12  | 0  | 2 | 3  | 0  | 0 | 96   | 83  | 9  | 0 | 0 | 0  | 0  | 1  | 93  |
| 17:00 | 112  | 17  | 2  | 1  | 3  | 3  | 3  | 141  | 74  | 11  | 2  | 1 | 2  | 0  | 0 | 90   | 87  | 6  | 0 | 0 | 1  | 1  | 1  | 96  |
| 17:15 | 116  | 9   | 0  | 0  | 1  | 2  | 1  | 129  | 90  | 16  | 1  | 0 | 3  | 3  | 1 | 114  | 77  | 7  | 0 | 0 | 3  | 6  | 2  | 95  |
| 17:30 | 112  | 14  | 0  | 1  | 3  | 0  | 2  | 132  | 77  | 8   | 0  | 0 | 5  | 2  | 0 | 92   | 69  | 4  | 0 | 0 | 0  | 0  | 3  | 76  |
| 17:45 | 86   | 15  | 0  | 2  | 3  | 1  | 1  | 108  | 69  | 10  | 1  | 0 | 3  | 0  | 0 | 83   | 75  | 8  | 0 | 0 | 0  | 1  | 1  | 85  |
| 18:00 | 93   | 10  | 1  | 1  | 3  | 2  | 4  | 114  | 59  | 7   | 1  | 0 | 4  | 0  | 0 | 71   | 73  | 9  | 0 | 0 | 3  | 1  | 0  | 86  |
| 18:15 | 94   | 7   | 1  | 0  | 3  | 1  | 2  | 108  | 55  | 6   | 0  | 0 | 3  | 0  | 1 | 65   | 76  | 4  | 0 | 0 | 0  | 4  | 0  | 84  |
| 18:30 | 81   | 4   | 0  | 0  | 0  | 1  | 1  | 87   | 54  | 4   | 1  | 1 | 2  | 2  | 0 | 64   | 65  | 7  | 0 | 0 | 3  | 1  | 0  | 76  |
| 18:45 | 68   | 12  | 1  | 1  | 2  | 2  | 3  | 89   | 52  | 5   | 0  | 0 | 6  | 0  | 0 | 63   | 57  | 3  | 0 | 0 | 4  | 1  | 1  | 66  |
| Total | 1189 | 157 | 11 | 10 | 23 | 15 | 37 | 1442 | 864 | 111 | 13 | 6 | 39 | 10 | 4 | 1047 | 815 | 86 | 1 | 0 | 14 | 19 | 10 | 945 |

**B6478 WADDINGTON ROAD/RAILWAY VIEW ROAD, CLITHEROE - TUESDAY 29 MAY 2012 (08:00-09:00)**

**C - B6478 Waddington**

|              |             |            |             |             |            |            |            |              |
|--------------|-------------|------------|-------------|-------------|------------|------------|------------|--------------|
| <b>C - A</b> | 231         | 37         | 3           | 0           | 1          | 3          | 4          | 279          |
| <b>C - B</b> | 61          | 6          | 1           | 0           | 2          | 0          | 0          | 70           |
| <b>Total</b> | <b>292</b>  | <b>43</b>  | <b>4</b>    | <b>0</b>    | <b>3</b>   | <b>3</b>   | <b>4</b>   | <b>349</b>   |
|              | <b>Cars</b> | <b>LGV</b> | <b>OGV1</b> | <b>OGV2</b> | <b>P/C</b> | <b>M/C</b> | <b>PSV</b> | <b>Total</b> |

|             |            |           |          |          |          |          |          |            |
|-------------|------------|-----------|----------|----------|----------|----------|----------|------------|
| <b>To C</b> | <b>190</b> | <b>52</b> | <b>8</b> | <b>1</b> | <b>1</b> | <b>0</b> | <b>8</b> | <b>260</b> |
|-------------|------------|-----------|----------|----------|----------|----------|----------|------------|

|            |           |          |          |           |          |           |            |             |
|------------|-----------|----------|----------|-----------|----------|-----------|------------|-------------|
| <b>458</b> | <b>66</b> | <b>8</b> | <b>0</b> | <b>11</b> | <b>5</b> | <b>21</b> | <b>569</b> | <b>To A</b> |
|------------|-----------|----------|----------|-----------|----------|-----------|------------|-------------|

|             |            |             |             |            |            |            |              |              |
|-------------|------------|-------------|-------------|------------|------------|------------|--------------|--------------|
| <b>Cars</b> | <b>LGV</b> | <b>OGV1</b> | <b>OGV2</b> | <b>P/C</b> | <b>M/C</b> | <b>PSV</b> | <b>Total</b> |              |
| 116         | 39         | 6           | 1           | 0          | 0          | 7          | 169          | <b>A - C</b> |
| 225         | 33         | 7           | 1           | 4          | 2          | 4          | 276          | <b>A - B</b> |
| <b>341</b>  | <b>72</b>  | <b>13</b>   | <b>2</b>    | <b>4</b>   | <b>2</b>   | <b>11</b>  | <b>445</b>   | <b>Total</b> |

|              |              |              |              |
|--------------|--------------|--------------|--------------|
| 74           | 227          | <b>301</b>   | <b>Cars</b>  |
| 13           | 29           | <b>42</b>    | <b>LGV</b>   |
| 2            | 5            | <b>7</b>     | <b>OGV1</b>  |
| 0            | 0            | <b>0</b>     | <b>OGV2</b>  |
| 1            | 10           | <b>11</b>    | <b>P/C</b>   |
| 0            | 2            | <b>2</b>     | <b>M/C</b>   |
| 1            | 17           | <b>18</b>    | <b>PSV</b>   |
| 91           | 290          | <b>381</b>   | <b>Total</b> |
| <b>B - C</b> | <b>B - A</b> | <b>Total</b> |              |

|             |
|-------------|
| <b>286</b>  |
| <b>39</b>   |
| <b>8</b>    |
| <b>1</b>    |
| <b>6</b>    |
| <b>2</b>    |
| <b>4</b>    |
| <b>346</b>  |
| <b>To B</b> |

**B - Railway View Road**

**A - B6478 Clitheroe**

**B6478 WADDINGTON ROAD/RAILWAY VIEW ROAD, CLITHEROE - TUESDAY 29 MAY 2012 (16:45-17:45)**

**C - B6478 Waddington**

|              |             |            |             |             |            |            |            |              |
|--------------|-------------|------------|-------------|-------------|------------|------------|------------|--------------|
| <b>C - A</b> | 174         | 29         | 1           | 1           | 4          | 1          | 3          | 213          |
| <b>C - B</b> | 55          | 10         | 0           | 0           | 1          | 0          | 0          | 66           |
| <b>Total</b> | <b>229</b>  | <b>39</b>  | <b>1</b>    | <b>1</b>    | <b>5</b>   | <b>1</b>   | <b>3</b>   | <b>279</b>   |
|              | <b>Cars</b> | <b>LGV</b> | <b>OGV1</b> | <b>OGV2</b> | <b>P/C</b> | <b>M/C</b> | <b>PSV</b> | <b>Total</b> |

|             |            |           |          |          |          |          |          |            |
|-------------|------------|-----------|----------|----------|----------|----------|----------|------------|
| <b>To C</b> | <b>316</b> | <b>26</b> | <b>0</b> | <b>0</b> | <b>4</b> | <b>7</b> | <b>7</b> | <b>360</b> |
|-------------|------------|-----------|----------|----------|----------|----------|----------|------------|

|            |           |          |          |           |          |          |            |             |
|------------|-----------|----------|----------|-----------|----------|----------|------------|-------------|
| <b>451</b> | <b>57</b> | <b>3</b> | <b>4</b> | <b>10</b> | <b>5</b> | <b>9</b> | <b>539</b> | <b>To A</b> |
|------------|-----------|----------|----------|-----------|----------|----------|------------|-------------|

|             |            |             |             |            |            |            |              |              |
|-------------|------------|-------------|-------------|------------|------------|------------|--------------|--------------|
| <b>Cars</b> | <b>LGV</b> | <b>OGV1</b> | <b>OGV2</b> | <b>P/C</b> | <b>M/C</b> | <b>PSV</b> | <b>Total</b> |              |
| 190         | 13         | 0           | 0           | 4          | 6          | 5          | 218          | <b>A - C</b> |
| 265         | 37         | 3           | 3           | 12         | 5          | 1          | 326          | <b>A - B</b> |
| <b>455</b>  | <b>50</b>  | <b>3</b>    | <b>3</b>    | <b>16</b>  | <b>11</b>  | <b>6</b>   | <b>544</b>   | <b>Total</b> |

|              |              |              |              |
|--------------|--------------|--------------|--------------|
| 126          | 277          | <b>403</b>   | <b>Cars</b>  |
| 13           | 28           | <b>41</b>    | <b>LGV</b>   |
| 0            | 2            | <b>2</b>     | <b>OGV1</b>  |
| 0            | 3            | <b>3</b>     | <b>OGV2</b>  |
| 0            | 6            | <b>6</b>     | <b>P/C</b>   |
| 1            | 4            | <b>5</b>     | <b>M/C</b>   |
| 2            | 6            | <b>8</b>     | <b>PSV</b>   |
| 142          | 326          | <b>468</b>   | <b>Total</b> |
| <b>B - C</b> | <b>B - A</b> | <b>Total</b> |              |

|             |
|-------------|
| <b>320</b>  |
| <b>47</b>   |
| <b>3</b>    |
| <b>3</b>    |
| <b>13</b>   |
| <b>5</b>    |
| <b>1</b>    |
| <b>392</b>  |
| <b>To B</b> |

**B - Railway View Road**

**A - B6478 Clitheroe**

Site 2: B6478 Waddington Road/Eastham Street

Day: Tuesday

Date: 29 May 2012

Weather: Fine & Cloudy AM/Fine & Sunny PM

A: Eastham Street (North)

B: B6478 Clitheroe

C: Eastham Street (South)

D: B6478 Waddington

| A - B |     |     |      |      |     |     |     |       | A - C |     |      |      |     |     |     |       | A - D |     |      |      |     |     |     |       |
|-------|-----|-----|------|------|-----|-----|-----|-------|-------|-----|------|------|-----|-----|-----|-------|-------|-----|------|------|-----|-----|-----|-------|
| Time  | Car | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total | Car   | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total | Car   | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total |
| 07:00 | 7   | 0   | 0    | 0    | 0   | 0   | 2   | 9     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 1     | 0   | 0    | 0    | 0   | 0   | 0   | 1     |
| 07:15 | 12  | 0   | 0    | 0    | 1   | 0   | 1   | 14    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| 07:30 | 13  | 1   | 1    | 0    | 0   | 0   | 0   | 15    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| 07:45 | 18  | 1   | 0    | 0    | 0   | 0   | 0   | 19    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| 08:00 | 24  | 2   | 0    | 0    | 0   | 0   | 0   | 26    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| 08:15 | 23  | 3   | 0    | 0    | 0   | 0   | 1   | 27    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| 08:30 | 24  | 5   | 0    | 0    | 0   | 0   | 0   | 29    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 1     | 0   | 0    | 0    | 0   | 0   | 0   | 1     |
| 08:45 | 25  | 3   | 1    | 0    | 2   | 0   | 0   | 31    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 2     | 0   | 0    | 0    | 0   | 0   | 0   | 2     |
| 09:00 | 16  | 2   | 0    | 0    | 1   | 0   | 0   | 19    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| 09:15 | 15  | 4   | 0    | 0    | 0   | 0   | 0   | 19    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 0     | 1   | 0    | 0    | 0   | 0   | 0   | 1     |
| 09:30 | 11  | 2   | 0    | 0    | 0   | 0   | 0   | 13    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| 09:45 | 4   | 2   | 0    | 0    | 0   | 0   | 0   | 6     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 1     | 1   | 0    | 0    | 0   | 0   | 0   | 2     |
| Total | 192 | 25  | 2    | 0    | 4   | 0   | 4   | 227   | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 5     | 2   | 0    | 0    | 0   | 0   | 0   | 7     |

| A - B |     |     |      |      |     |     |     |       | A - C |     |      |      |     |     |     |       | A - D |     |      |      |     |     |     |       |
|-------|-----|-----|------|------|-----|-----|-----|-------|-------|-----|------|------|-----|-----|-----|-------|-------|-----|------|------|-----|-----|-----|-------|
| Time  | Car | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total | Car   | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total | Car   | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total |
| 16:00 | 28  | 3   | 0    | 0    | 0   | 0   | 4   | 35    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| 16:15 | 14  | 5   | 1    | 0    | 0   | 0   | 0   | 20    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 1     | 0   | 0    | 0    | 0   | 0   | 0   | 1     |
| 16:30 | 14  | 4   | 0    | 0    | 1   | 0   | 0   | 19    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 2     | 0   | 0    | 0    | 0   | 0   | 0   | 2     |
| 16:45 | 11  | 6   | 0    | 0    | 1   | 0   | 0   | 18    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| 17:00 | 17  | 6   | 0    | 0    | 0   | 0   | 0   | 23    | 0     | 0   | 0    | 0    | 1   | 0   | 0   | 1     | 3     | 0   | 0    | 0    | 0   | 0   | 0   | 3     |
| 17:15 | 26  | 0   | 0    | 0    | 0   | 0   | 0   | 26    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 2     | 0   | 0    | 0    | 0   | 0   | 0   | 2     |
| 17:30 | 14  | 4   | 0    | 0    | 0   | 0   | 0   | 18    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 4     | 0   | 0    | 0    | 0   | 0   | 0   | 4     |
| 17:45 | 12  | 1   | 0    | 0    | 1   | 0   | 0   | 14    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| 18:00 | 19  | 0   | 0    | 0    | 0   | 0   | 0   | 19    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 1     | 0   | 0    | 0    | 0   | 0   | 0   | 1     |
| 18:15 | 13  | 2   | 0    | 0    | 0   | 0   | 0   | 15    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| 18:30 | 14  | 1   | 0    | 0    | 0   | 0   | 0   | 15    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 1     | 0   | 0    | 0    | 0   | 0   | 0   | 1     |
| 18:45 | 13  | 3   | 0    | 0    | 0   | 0   | 0   | 16    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 1     | 0   | 0    | 0    | 0   | 0   | 0   | 1     |
| Total | 195 | 35  | 1    | 0    | 3   | 0   | 4   | 238   | 0     | 0   | 0    | 0    | 1   | 0   | 0   | 1     | 15    | 0   | 0    | 0    | 0   | 0   | 0   | 15    |

| B - A |     |     |      |      |     |     |     |       | B - C |     |      |      |     |     |     |       |     | B - D |      |      |     |     |     |       |  |  |
|-------|-----|-----|------|------|-----|-----|-----|-------|-------|-----|------|------|-----|-----|-----|-------|-----|-------|------|------|-----|-----|-----|-------|--|--|
| Time  | Car | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total | Car   | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total | Car | LGV   | OGVI | OGV2 | P/C | M/C | PSV | Total |  |  |
| 07:00 | 3   | 0   | 0    | 0    | 1   | 0   | 0   | 4     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 3   | 3     | 2    | 0    | 0   | 0   | 2   | 10    |  |  |
| 07:15 | 7   | 2   | 1    | 0    | 1   | 0   | 0   | 11    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 8   | 1     | 2    | 0    | 0   | 0   | 4   | 15    |  |  |
| 07:30 | 12  | 3   | 0    | 0    | 0   | 0   | 0   | 15    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 10  | 5     | 0    | 0    | 0   | 0   | 2   | 17    |  |  |
| 07:45 | 11  | 3   | 0    | 0    | 1   | 0   | 0   | 15    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 10  | 5     | 3    | 0    | 0   | 0   | 0   | 18    |  |  |
| 08:00 | 20  | 4   | 0    | 0    | 0   | 0   | 0   | 24    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 16  | 6     | 0    | 0    | 1   | 0   | 1   | 24    |  |  |
| 08:15 | 28  | 8   | 1    | 0    | 0   | 0   | 1   | 38    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 22  | 5     | 0    | 0    | 0   | 0   | 2   | 29    |  |  |
| 08:30 | 21  | 3   | 0    | 0    | 0   | 0   | 4   | 28    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 27  | 7     | 0    | 0    | 0   | 0   | 0   | 34    |  |  |
| 08:45 | 16  | 2   | 0    | 0    | 0   | 0   | 0   | 18    | 2     | 1   | 0    | 0    | 0   | 0   | 0   | 3     | 17  | 11    | 2    | 1    | 0   | 0   | 0   | 31    |  |  |
| 09:00 | 9   | 4   | 0    | 0    | 0   | 0   | 0   | 13    | 1     | 0   | 0    | 0    | 0   | 0   | 0   | 1     | 19  | 5     | 0    | 0    | 1   | 0   | 0   | 25    |  |  |
| 09:15 | 9   | 5   | 0    | 0    | 0   | 0   | 0   | 14    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 19  | 6     | 1    | 0    | 0   | 0   | 0   | 26    |  |  |
| 09:30 | 7   | 1   | 0    | 0    | 0   | 0   | 0   | 8     | 2     | 0   | 0    | 0    | 0   | 0   | 0   | 2     | 18  | 6     | 1    | 1    | 0   | 1   | 0   | 27    |  |  |
| 09:45 | 5   | 2   | 0    | 0    | 0   | 0   | 0   | 7     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 22  | 7     | 2    | 0    | 0   | 0   | 1   | 32    |  |  |
| Total | 148 | 37  | 2    | 0    | 3   | 0   | 5   | 195   | 5     | 1   | 0    | 0    | 0   | 0   | 0   | 6     | 191 | 67    | 13   | 2    | 2   | 1   | 12  | 288   |  |  |

|       |     |    |   |   |   |   |   |     |    |   |   |   |   |   |   |    |     |    |   |   |    |    |   |     |
|-------|-----|----|---|---|---|---|---|-----|----|---|---|---|---|---|---|----|-----|----|---|---|----|----|---|-----|
| 16:00 | 10  | 2  | 0 | 0 | 0 | 0 | 0 | 12  | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 24  | 3  | 1 | 0 | 0  | 0  | 1 | 29  |
| 16:15 | 9   | 1  | 0 | 0 | 0 | 0 | 0 | 10  | 0  | 1 | 0 | 0 | 0 | 0 | 0 | 1  | 42  | 6  | 0 | 0 | 1  | 1  | 0 | 50  |
| 16:30 | 16  | 3  | 0 | 0 | 0 | 0 | 0 | 19  | 2  | 0 | 0 | 0 | 0 | 0 | 0 | 2  | 38  | 5  | 0 | 0 | 0  | 3  | 0 | 46  |
| 16:45 | 27  | 2  | 0 | 0 | 0 | 0 | 0 | 29  | 1  | 1 | 0 | 0 | 0 | 0 | 0 | 2  | 40  | 8  | 0 | 0 | 0  | 0  | 1 | 49  |
| 17:00 | 22  | 1  | 0 | 0 | 0 | 0 | 1 | 24  | 3  | 0 | 0 | 0 | 0 | 0 | 0 | 3  | 51  | 2  | 0 | 0 | 0  | 0  | 0 | 53  |
| 17:15 | 27  | 2  | 0 | 0 | 0 | 0 | 0 | 29  | 0  | 0 | 0 | 0 | 1 | 0 | 0 | 1  | 44  | 3  | 0 | 0 | 1  | 3  | 2 | 53  |
| 17:30 | 24  | 2  | 0 | 0 | 0 | 0 | 3 | 29  | 1  | 0 | 0 | 0 | 0 | 0 | 0 | 1  | 37  | 2  | 0 | 0 | 0  | 4  | 0 | 43  |
| 17:45 | 14  | 1  | 0 | 0 | 0 | 0 | 0 | 15  | 2  | 0 | 0 | 0 | 0 | 0 | 0 | 2  | 57  | 4  | 0 | 0 | 0  | 1  | 1 | 63  |
| 18:00 | 12  | 0  | 0 | 0 | 0 | 0 | 0 | 12  | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 58  | 9  | 0 | 0 | 2  | 0  | 0 | 69  |
| 18:15 | 11  | 2  | 0 | 0 | 0 | 1 | 0 | 14  | 3  | 0 | 0 | 0 | 0 | 0 | 0 | 3  | 52  | 2  | 0 | 0 | 0  | 3  | 0 | 57  |
| 18:30 | 19  | 1  | 0 | 0 | 0 | 0 | 0 | 20  | 2  | 0 | 0 | 0 | 0 | 0 | 0 | 2  | 24  | 3  | 0 | 0 | 3  | 1  | 0 | 31  |
| 18:45 | 9   | 1  | 0 | 0 | 1 | 0 | 0 | 11  | 2  | 0 | 0 | 0 | 0 | 0 | 0 | 2  | 35  | 2  | 0 | 0 | 3  | 1  | 1 | 42  |
| Total | 200 | 18 | 0 | 0 | 1 | 1 | 4 | 224 | 16 | 2 | 0 | 0 | 1 | 0 | 0 | 19 | 502 | 49 | 1 | 0 | 10 | 17 | 6 | 585 |

| C - A |     |     |      |      |     |     |     |       | C - B |     |      |      |     |     |     |       | C - D |     |      |      |     |     |     |       |
|-------|-----|-----|------|------|-----|-----|-----|-------|-------|-----|------|------|-----|-----|-----|-------|-------|-----|------|------|-----|-----|-----|-------|
| Time  | Car | LGV | OGVI | 0GV2 | P/C | M/C | PSV | Total | Car   | LGV | OGVI | 0GV2 | P/C | M/C | PSV | Total | Car   | LGV | OGVI | 0GV2 | P/C | M/C | PSV | Total |
| 07:00 | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 1     | 0   | 0    | 0    | 0   | 0   | 0   | 1     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| 07:15 | 0   | 0   | 0    | 0    | 1   | 0   | 0   | 1     | 1     | 0   | 0    | 0    | 0   | 0   | 0   | 1     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| 07:30 | 0   | 0   | 0    | 0    | 1   | 0   | 0   | 1     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| 07:45 | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| 08:00 | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| 08:15 | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 1     | 0   | 0    | 0    | 0   | 0   | 0   | 1     |
| 08:30 | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 1     | 0   | 0    | 0    | 0   | 0   | 0   | 1     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| 08:45 | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| 09:00 | 0   | 0   | 0    | 0    | 2   | 0   | 0   | 2     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| 09:15 | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| 09:30 | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 1     | 0   | 0    | 0    | 0   | 0   | 0   | 1     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| 09:45 | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 1     | 0   | 0    | 0    | 0   | 0   | 0   | 1     | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| Total | 0   | 0   | 0    | 0    | 4   | 0   | 0   | 4     | 5     | 0   | 0    | 0    | 0   | 0   | 0   | 5     | 1     | 0   | 0    | 0    | 0   | 0   | 0   | 1     |

|       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 |
| 17:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 2 |
| 17:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 18:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 2 | 1 | 0 | 0 | 1 | 0 | 0 | 4 |

| D - A |     |     |      |      |     |     |     |       | D - B |     |      |      |     |     |     |       | D - C |     |      |      |     |     |     |       |
|-------|-----|-----|------|------|-----|-----|-----|-------|-------|-----|------|------|-----|-----|-----|-------|-------|-----|------|------|-----|-----|-----|-------|
| Time  | Car | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total | Car   | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total | Car   | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total |
| 07:00 | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 15    | 3   | 0    | 0    | 0   | 0   | 0   | 18    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| 07:15 | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 24    | 3   | 0    | 0    | 0   | 0   | 0   | 27    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| 07:30 | 1   | 0   | 0    | 0    | 0   | 0   | 0   | 1     | 35    | 7   | 0    | 0    | 1   | 0   | 0   | 43    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| 07:45 | 1   | 0   | 0    | 0    | 0   | 0   | 0   | 1     | 28    | 5   | 2    | 0    | 0   | 0   | 0   | 35    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| 08:00 | 1   | 0   | 0    | 0    | 0   | 0   | 0   | 1     | 31    | 3   | 2    | 0    | 1   | 0   | 1   | 38    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| 08:15 | 3   | 0   | 0    | 0    | 0   | 0   | 0   | 3     | 28    | 5   | 0    | 0    | 0   | 0   | 1   | 34    | 1     | 0   | 0    | 0    | 0   | 0   | 0   | 1     |
| 08:30 | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 50    | 5   | 1    | 0    | 0   | 0   | 1   | 57    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| 08:45 | 3   | 1   | 0    | 0    | 0   | 0   | 0   | 4     | 43    | 4   | 0    | 0    | 0   | 2   | 0   | 49    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| 09:00 | 2   | 0   | 0    | 0    | 0   | 0   | 0   | 2     | 34    | 5   | 0    | 2    | 0   | 0   | 0   | 41    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| 09:15 | 1   | 0   | 0    | 0    | 0   | 0   | 0   | 1     | 23    | 6   | 0    | 1    | 0   | 0   | 1   | 31    | 1     | 0   | 0    | 0    | 0   | 0   | 0   | 1     |
| 09:30 | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 29    | 3   | 4    | 0    | 0   | 0   | 0   | 36    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| 09:45 | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 28    | 4   | 1    | 2    | 0   | 0   | 0   | 35    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0     |
| Total | 12  | 1   | 0    | 0    | 0   | 0   | 0   | 13    | 368   | 53  | 10   | 5    | 2   | 2   | 4   | 444   | 2     | 0   | 0    | 0    | 0   | 0   | 0   | 2     |

|       |   |   |   |   |   |   |   |    |     |    |   |   |    |   |   |     |   |   |   |   |   |   |   |   |
|-------|---|---|---|---|---|---|---|----|-----|----|---|---|----|---|---|-----|---|---|---|---|---|---|---|---|
| 16:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 35  | 3  | 0 | 0 | 0  | 0 | 1 | 39  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16:15 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1  | 25  | 4  | 1 | 0 | 1  | 1 | 0 | 32  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 28  | 6  | 0 | 0 | 0  | 1 | 0 | 35  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 29  | 5  | 0 | 1 | 1  | 0 | 2 | 38  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 25  | 3  | 0 | 0 | 2  | 0 | 1 | 31  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:15 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2  | 25  | 7  | 0 | 0 | 0  | 1 | 0 | 33  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:30 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 3  | 39  | 6  | 0 | 0 | 1  | 0 | 0 | 46  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:45 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1  | 16  | 7  | 0 | 1 | 1  | 0 | 0 | 25  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18:00 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2  | 27  | 5  | 0 | 0 | 2  | 2 | 0 | 36  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 28  | 2  | 0 | 0 | 1  | 0 | 0 | 31  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18:30 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1  | 29  | 0  | 0 | 0 | 0  | 1 | 0 | 30  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 21  | 2  | 0 | 0 | 1  | 1 | 0 | 25  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 9 | 1 | 0 | 0 | 0 | 0 | 0 | 10 | 327 | 50 | 1 | 2 | 10 | 7 | 4 | 401 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

# Summary

|          |                                      |    |                        |
|----------|--------------------------------------|----|------------------------|
| Site 2:  | B6478 Waddington Road/Eastham Street | A: | Eastham Street (North) |
| Day:     | Tuesday                              | B: | B6478 Clitheroe        |
| Date:    | 29 May 2012                          | C: | Eastham Street (South) |
| Weather: | Fine & Cloudy AM/Fine & Sunny PM     | D: | B6478 Waddington       |

| From A |     |     |      |      |     |     |     |       | From B |     |      |      |     |     |     |       |
|--------|-----|-----|------|------|-----|-----|-----|-------|--------|-----|------|------|-----|-----|-----|-------|
| Time   | Car | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total | Car    | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total |
| 07:00  | 8   | 0   | 0    | 0    | 0   | 0   | 2   | 10    | 6      | 3   | 2    | 0    | 1   | 0   | 2   | 14    |
| 07:15  | 12  | 0   | 0    | 0    | 1   | 0   | 1   | 14    | 15     | 3   | 3    | 0    | 1   | 0   | 4   | 26    |
| 07:30  | 13  | 1   | 1    | 0    | 0   | 0   | 0   | 15    | 22     | 8   | 0    | 0    | 0   | 0   | 2   | 32    |
| 07:45  | 18  | 1   | 0    | 0    | 0   | 0   | 0   | 19    | 21     | 8   | 3    | 0    | 1   | 0   | 0   | 33    |
| 08:00  | 24  | 2   | 0    | 0    | 0   | 0   | 0   | 26    | 36     | 10  | 0    | 0    | 1   | 0   | 1   | 48    |
| 08:15  | 23  | 3   | 0    | 0    | 0   | 0   | 1   | 27    | 50     | 13  | 1    | 0    | 0   | 0   | 3   | 67    |
| 08:30  | 25  | 5   | 0    | 0    | 0   | 0   | 0   | 30    | 48     | 10  | 0    | 0    | 0   | 0   | 4   | 62    |
| 08:45  | 27  | 3   | 1    | 0    | 2   | 0   | 0   | 33    | 35     | 14  | 2    | 1    | 0   | 0   | 0   | 52    |
| 09:00  | 16  | 2   | 0    | 0    | 1   | 0   | 0   | 19    | 29     | 9   | 0    | 0    | 1   | 0   | 0   | 39    |
| 09:15  | 15  | 5   | 0    | 0    | 0   | 0   | 0   | 20    | 28     | 11  | 1    | 0    | 0   | 0   | 0   | 40    |
| 09:30  | 11  | 2   | 0    | 0    | 0   | 0   | 0   | 13    | 27     | 7   | 1    | 1    | 0   | 1   | 0   | 37    |
| 09:45  | 5   | 3   | 0    | 0    | 0   | 0   | 0   | 8     | 27     | 9   | 2    | 0    | 0   | 0   | 1   | 39    |
| Total  | 197 | 27  | 2    | 0    | 4   | 0   | 4   | 234   | 344    | 105 | 15   | 2    | 5   | 1   | 17  | 489   |

|       |     |    |   |   |   |   |   |     |     |    |   |   |    |    |    |     |
|-------|-----|----|---|---|---|---|---|-----|-----|----|---|---|----|----|----|-----|
| 16:00 | 28  | 3  | 0 | 0 | 0 | 0 | 4 | 35  | 34  | 5  | 1 | 0 | 0  | 0  | 1  | 41  |
| 16:15 | 15  | 5  | 1 | 0 | 0 | 0 | 0 | 21  | 51  | 8  | 0 | 0 | 1  | 1  | 0  | 61  |
| 16:30 | 16  | 4  | 0 | 0 | 1 | 0 | 0 | 21  | 56  | 8  | 0 | 0 | 0  | 3  | 0  | 67  |
| 16:45 | 11  | 6  | 0 | 0 | 1 | 0 | 0 | 18  | 68  | 11 | 0 | 0 | 0  | 0  | 1  | 80  |
| 17:00 | 20  | 6  | 0 | 0 | 1 | 0 | 0 | 27  | 76  | 3  | 0 | 0 | 0  | 0  | 1  | 80  |
| 17:15 | 28  | 0  | 0 | 0 | 0 | 0 | 0 | 28  | 71  | 5  | 0 | 0 | 2  | 3  | 2  | 83  |
| 17:30 | 18  | 4  | 0 | 0 | 0 | 0 | 0 | 22  | 62  | 4  | 0 | 0 | 0  | 4  | 3  | 73  |
| 17:45 | 12  | 1  | 0 | 0 | 1 | 0 | 0 | 14  | 73  | 5  | 0 | 0 | 0  | 1  | 1  | 80  |
| 18:00 | 20  | 0  | 0 | 0 | 0 | 0 | 0 | 20  | 70  | 9  | 0 | 0 | 2  | 0  | 0  | 81  |
| 18:15 | 13  | 2  | 0 | 0 | 0 | 0 | 0 | 15  | 66  | 4  | 0 | 0 | 0  | 4  | 0  | 74  |
| 18:30 | 15  | 1  | 0 | 0 | 0 | 0 | 0 | 16  | 45  | 4  | 0 | 0 | 3  | 1  | 0  | 53  |
| 18:45 | 14  | 3  | 0 | 0 | 0 | 0 | 0 | 17  | 46  | 3  | 0 | 0 | 4  | 1  | 1  | 55  |
| Total | 210 | 35 | 1 | 0 | 4 | 0 | 4 | 254 | 718 | 69 | 1 | 0 | 12 | 18 | 10 | 828 |

# Summary

| From C |     |     |      |      |     |     |     |       | From D |     |      |      |     |     |     |       |
|--------|-----|-----|------|------|-----|-----|-----|-------|--------|-----|------|------|-----|-----|-----|-------|
| Time   | Car | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total | Car    | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total |
| 07:00  | 1   | 0   | 0    | 0    | 0   | 0   | 0   | 1     | 15     | 3   | 0    | 0    | 0   | 0   | 0   | 18    |
| 07:15  | 1   | 0   | 0    | 0    | 1   | 0   | 0   | 2     | 24     | 3   | 0    | 0    | 0   | 0   | 0   | 27    |
| 07:30  | 0   | 0   | 0    | 0    | 1   | 0   | 0   | 1     | 36     | 7   | 0    | 0    | 1   | 0   | 0   | 44    |
| 07:45  | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 29     | 5   | 2    | 0    | 0   | 0   | 0   | 36    |
| 08:00  | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 32     | 3   | 2    | 0    | 1   | 0   | 1   | 39    |
| 08:15  | 1   | 0   | 0    | 0    | 0   | 0   | 0   | 1     | 32     | 5   | 0    | 0    | 0   | 0   | 1   | 38    |
| 08:30  | 1   | 0   | 0    | 0    | 0   | 0   | 0   | 1     | 50     | 5   | 1    | 0    | 0   | 0   | 1   | 57    |
| 08:45  | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 46     | 5   | 0    | 0    | 0   | 2   | 0   | 53    |
| 09:00  | 0   | 0   | 0    | 0    | 2   | 0   | 0   | 2     | 36     | 5   | 0    | 2    | 0   | 0   | 0   | 43    |
| 09:15  | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 25     | 6   | 0    | 1    | 0   | 0   | 1   | 33    |
| 09:30  | 1   | 0   | 0    | 0    | 0   | 0   | 0   | 1     | 29     | 3   | 4    | 0    | 0   | 0   | 0   | 36    |
| 09:45  | 1   | 0   | 0    | 0    | 0   | 0   | 0   | 1     | 28     | 4   | 1    | 2    | 0   | 0   | 0   | 35    |
| Total  | 6   | 0   | 0    | 0    | 4   | 0   | 0   | 10    | 382    | 54  | 10   | 5    | 2   | 2   | 4   | 459   |

|       |   |   |   |   |   |   |   |   |     |    |   |   |    |   |   |     |
|-------|---|---|---|---|---|---|---|---|-----|----|---|---|----|---|---|-----|
| 16:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 35  | 3  | 0 | 0 | 0  | 0 | 1 | 39  |
| 16:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26  | 4  | 1 | 0 | 1  | 1 | 0 | 33  |
| 16:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28  | 6  | 0 | 0 | 0  | 1 | 0 | 35  |
| 16:45 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 29  | 5  | 0 | 1 | 1  | 0 | 2 | 38  |
| 17:00 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 25  | 3  | 0 | 0 | 2  | 0 | 1 | 31  |
| 17:15 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 27  | 7  | 0 | 0 | 0  | 1 | 0 | 35  |
| 17:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 41  | 7  | 0 | 0 | 1  | 0 | 0 | 49  |
| 17:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17  | 7  | 0 | 1 | 1  | 0 | 0 | 26  |
| 18:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 29  | 5  | 0 | 0 | 2  | 2 | 0 | 38  |
| 18:15 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 28  | 2  | 0 | 0 | 1  | 0 | 0 | 31  |
| 18:30 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 30  | 0  | 0 | 0 | 0  | 1 | 0 | 31  |
| 18:45 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 21  | 2  | 0 | 0 | 1  | 1 | 0 | 25  |
| Total | 7 | 1 | 0 | 0 | 1 | 0 | 0 | 9 | 336 | 51 | 1 | 2 | 10 | 7 | 4 | 411 |

# Summary

| To A  |     |     |      |      |     |     |     |       | To B |     |      |      |     |     |     |       |
|-------|-----|-----|------|------|-----|-----|-----|-------|------|-----|------|------|-----|-----|-----|-------|
| Time  | Car | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total | Car  | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total |
| 07:00 | 3   | 0   | 0    | 0    | 1   | 0   | 0   | 4     | 23   | 3   | 0    | 0    | 0   | 0   | 2   | 28    |
| 07:15 | 7   | 2   | 1    | 0    | 2   | 0   | 0   | 12    | 37   | 3   | 0    | 0    | 1   | 0   | 1   | 42    |
| 07:30 | 13  | 3   | 0    | 0    | 1   | 0   | 0   | 17    | 48   | 8   | 1    | 0    | 1   | 0   | 0   | 58    |
| 07:45 | 12  | 3   | 0    | 0    | 1   | 0   | 0   | 16    | 46   | 6   | 2    | 0    | 0   | 0   | 0   | 54    |
| 08:00 | 21  | 4   | 0    | 0    | 0   | 0   | 0   | 25    | 55   | 5   | 2    | 0    | 1   | 0   | 1   | 64    |
| 08:15 | 31  | 8   | 1    | 0    | 0   | 0   | 1   | 41    | 51   | 8   | 0    | 0    | 0   | 0   | 2   | 61    |
| 08:30 | 21  | 3   | 0    | 0    | 0   | 0   | 4   | 28    | 75   | 10  | 1    | 0    | 0   | 0   | 1   | 87    |
| 08:45 | 19  | 3   | 0    | 0    | 0   | 0   | 0   | 22    | 68   | 7   | 1    | 0    | 2   | 2   | 0   | 80    |
| 09:00 | 11  | 4   | 0    | 0    | 2   | 0   | 0   | 17    | 50   | 7   | 0    | 2    | 1   | 0   | 0   | 60    |
| 09:15 | 10  | 5   | 0    | 0    | 0   | 0   | 0   | 15    | 38   | 10  | 0    | 1    | 0   | 0   | 1   | 50    |
| 09:30 | 7   | 1   | 0    | 0    | 0   | 0   | 0   | 8     | 41   | 5   | 4    | 0    | 0   | 0   | 0   | 50    |
| 09:45 | 5   | 2   | 0    | 0    | 0   | 0   | 0   | 7     | 33   | 6   | 1    | 2    | 0   | 0   | 0   | 42    |
| Total | 160 | 38  | 2    | 0    | 7   | 0   | 5   | 212   | 565  | 78  | 12   | 5    | 6   | 2   | 8   | 676   |

|       |     |    |   |   |   |   |   |     |     |    |   |   |    |   |   |     |
|-------|-----|----|---|---|---|---|---|-----|-----|----|---|---|----|---|---|-----|
| 16:00 | 10  | 2  | 0 | 0 | 0 | 0 | 0 | 12  | 63  | 6  | 0 | 0 | 0  | 0 | 5 | 74  |
| 16:15 | 10  | 1  | 0 | 0 | 0 | 0 | 0 | 11  | 39  | 9  | 2 | 0 | 1  | 1 | 0 | 52  |
| 16:30 | 16  | 3  | 0 | 0 | 0 | 0 | 0 | 19  | 42  | 10 | 0 | 0 | 1  | 1 | 0 | 54  |
| 16:45 | 27  | 2  | 0 | 0 | 0 | 0 | 0 | 29  | 40  | 11 | 0 | 1 | 2  | 0 | 2 | 56  |
| 17:00 | 22  | 1  | 0 | 0 | 0 | 0 | 1 | 24  | 42  | 9  | 0 | 0 | 2  | 0 | 1 | 54  |
| 17:15 | 29  | 2  | 0 | 0 | 0 | 0 | 0 | 31  | 52  | 7  | 0 | 0 | 0  | 1 | 0 | 60  |
| 17:30 | 26  | 3  | 0 | 0 | 0 | 0 | 3 | 32  | 53  | 10 | 0 | 0 | 1  | 0 | 0 | 64  |
| 17:45 | 15  | 1  | 0 | 0 | 0 | 0 | 0 | 16  | 28  | 8  | 0 | 1 | 2  | 0 | 0 | 39  |
| 18:00 | 14  | 0  | 0 | 0 | 0 | 0 | 0 | 14  | 46  | 5  | 0 | 0 | 2  | 2 | 0 | 55  |
| 18:15 | 11  | 2  | 0 | 0 | 0 | 1 | 0 | 14  | 44  | 4  | 0 | 0 | 1  | 0 | 0 | 49  |
| 18:30 | 20  | 1  | 0 | 0 | 0 | 0 | 0 | 21  | 43  | 1  | 0 | 0 | 0  | 1 | 0 | 45  |
| 18:45 | 9   | 1  | 0 | 0 | 1 | 0 | 0 | 11  | 35  | 5  | 0 | 0 | 1  | 1 | 0 | 42  |
| Total | 209 | 19 | 0 | 0 | 1 | 1 | 4 | 234 | 527 | 85 | 2 | 2 | 13 | 7 | 8 | 644 |

# Summary

| Time  | To C |     |      |      |     |     |     |       | To D |     |      |      |     |     |     |       |
|-------|------|-----|------|------|-----|-----|-----|-------|------|-----|------|------|-----|-----|-----|-------|
|       | Car  | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total | Car  | LGV | OGVI | OGV2 | P/C | M/C | PSV | Total |
| 07:00 | 0    | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 4    | 3   | 2    | 0    | 0   | 0   | 2   | 11    |
| 07:15 | 0    | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 8    | 1   | 2    | 0    | 0   | 0   | 4   | 15    |
| 07:30 | 0    | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 10   | 5   | 0    | 0    | 0   | 0   | 2   | 17    |
| 07:45 | 0    | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 10   | 5   | 3    | 0    | 0   | 0   | 0   | 18    |
| 08:00 | 0    | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 16   | 6   | 0    | 0    | 1   | 0   | 1   | 24    |
| 08:15 | 1    | 0   | 0    | 0    | 0   | 0   | 0   | 1     | 23   | 5   | 0    | 0    | 0   | 0   | 2   | 30    |
| 08:30 | 0    | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 28   | 7   | 0    | 0    | 0   | 0   | 0   | 35    |
| 08:45 | 2    | 1   | 0    | 0    | 0   | 0   | 0   | 3     | 19   | 11  | 2    | 1    | 0   | 0   | 0   | 33    |
| 09:00 | 1    | 0   | 0    | 0    | 0   | 0   | 0   | 1     | 19   | 5   | 0    | 0    | 1   | 0   | 0   | 25    |
| 09:15 | 1    | 0   | 0    | 0    | 0   | 0   | 0   | 1     | 19   | 7   | 1    | 0    | 0   | 0   | 0   | 27    |
| 09:30 | 2    | 0   | 0    | 0    | 0   | 0   | 0   | 2     | 18   | 6   | 1    | 1    | 0   | 1   | 0   | 27    |
| 09:45 | 0    | 0   | 0    | 0    | 0   | 0   | 0   | 0     | 23   | 8   | 2    | 0    | 0   | 0   | 1   | 34    |
| Total | 7    | 1   | 0    | 0    | 0   | 0   | 0   | 8     | 197  | 69  | 13   | 2    | 2   | 1   | 12  | 296   |

|       |    |   |   |   |   |   |   |    |     |    |   |   |    |    |   |     |
|-------|----|---|---|---|---|---|---|----|-----|----|---|---|----|----|---|-----|
| 16:00 | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 24  | 3  | 1 | 0 | 0  | 0  | 1 | 29  |
| 16:15 | 0  | 1 | 0 | 0 | 0 | 0 | 0 | 1  | 43  | 6  | 0 | 0 | 1  | 1  | 0 | 51  |
| 16:30 | 2  | 0 | 0 | 0 | 0 | 0 | 0 | 2  | 40  | 5  | 0 | 0 | 0  | 3  | 0 | 48  |
| 16:45 | 1  | 1 | 0 | 0 | 0 | 0 | 0 | 2  | 40  | 8  | 0 | 0 | 1  | 0  | 1 | 50  |
| 17:00 | 3  | 0 | 0 | 0 | 1 | 0 | 0 | 4  | 55  | 3  | 0 | 0 | 0  | 0  | 0 | 58  |
| 17:15 | 0  | 0 | 0 | 0 | 1 | 0 | 0 | 1  | 46  | 3  | 0 | 0 | 1  | 3  | 2 | 55  |
| 17:30 | 1  | 0 | 0 | 0 | 0 | 0 | 0 | 1  | 41  | 2  | 0 | 0 | 0  | 4  | 0 | 47  |
| 17:45 | 2  | 0 | 0 | 0 | 0 | 0 | 0 | 2  | 57  | 4  | 0 | 0 | 0  | 1  | 1 | 63  |
| 18:00 | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 59  | 9  | 0 | 0 | 2  | 0  | 0 | 70  |
| 18:15 | 3  | 0 | 0 | 0 | 0 | 0 | 0 | 3  | 52  | 2  | 0 | 0 | 0  | 3  | 0 | 57  |
| 18:30 | 2  | 0 | 0 | 0 | 0 | 0 | 0 | 2  | 26  | 3  | 0 | 0 | 3  | 1  | 0 | 33  |
| 18:45 | 2  | 0 | 0 | 0 | 0 | 0 | 0 | 2  | 36  | 2  | 0 | 0 | 3  | 1  | 1 | 43  |
| Total | 16 | 2 | 0 | 0 | 2 | 0 | 0 | 20 | 519 | 50 | 1 | 0 | 11 | 17 | 6 | 604 |

**B6478 WADDINGTON ROAD/EASTHAM STREET, CLITHEROE - TUESDAY 29 MAY 2012 (08:00-09:00)**

**D - B6478 Waddington**

**A - Eastham Street (North)**

| To A |       | A - D | A - C | A - B | Total |
|------|-------|-------|-------|-------|-------|
| 92   | Cars  | 3     | 0     | 96    | 99    |
| 18   | LGV   | 0     | 0     | 13    | 13    |
| 1    | OGV1  | 0     | 0     | 1     | 1     |
| 0    | OGV2  | 0     | 0     | 0     | 0     |
| 0    | P/C   | 0     | 0     | 2     | 2     |
| 0    | M/C   | 0     | 0     | 0     | 0     |
| 5    | PSV   | 0     | 0     | 1     | 1     |
| 116  | Total | 3     | 0     | 113   | 116   |

|              |      |     |      |      |     |     |     |       |
|--------------|------|-----|------|------|-----|-----|-----|-------|
| <b>D - A</b> | 7    | 1   | 0    | 0    | 0   | 0   | 0   | 8     |
| <b>D - B</b> | 152  | 17  | 3    | 0    | 1   | 2   | 3   | 178   |
| <b>D - C</b> | 1    | 0   | 0    | 0    | 0   | 0   | 0   | 1     |
| <b>Total</b> | 160  | 18  | 3    | 0    | 1   | 2   | 3   | 187   |
|              | Cars | LGV | OGV1 | OGV2 | P/C | M/C | PSV | Total |

|             |    |    |   |   |   |   |   |     |
|-------------|----|----|---|---|---|---|---|-----|
| <b>To D</b> | 86 | 29 | 2 | 1 | 1 | 0 | 3 | 122 |
|-------------|----|----|---|---|---|---|---|-----|

|     |    |   |   |   |   |   |     |             |
|-----|----|---|---|---|---|---|-----|-------------|
| 249 | 30 | 4 | 0 | 3 | 2 | 4 | 292 | <b>To B</b> |
|-----|----|---|---|---|---|---|-----|-------------|

| Cars | LGV | OGV1 | OGV2 | P/C | M/C | PSV | Total |              |
|------|-----|------|------|-----|-----|-----|-------|--------------|
| 85   | 17  | 1    | 0    | 0   | 0   | 5   | 108   | <b>B - A</b> |
| 82   | 29  | 2    | 1    | 1   | 0   | 3   | 118   | <b>B - D</b> |
| 2    | 1   | 0    | 0    | 0   | 0   | 0   | 3     | <b>B - C</b> |
| 169  | 47  | 3    | 1    | 1   | 0   | 8   | 229   | <b>Total</b> |

**B - B6478 Clitheroe**

|              |              |              |              |       |             |
|--------------|--------------|--------------|--------------|-------|-------------|
| 1            | 0            | 1            | 2            | Cars  | 3           |
| 0            | 0            | 0            | 0            | LGV   | 1           |
| 0            | 0            | 0            | 0            | OGV1  | 0           |
| 0            | 0            | 0            | 0            | OGV2  | 0           |
| 0            | 0            | 0            | 0            | P/C   | 0           |
| 0            | 0            | 0            | 0            | M/C   | 0           |
| 0            | 0            | 0            | 0            | PSV   | 0           |
| 1            | 0            | 1            | 2            | Total | 4           |
| <b>C - D</b> | <b>C - A</b> | <b>C - B</b> | <b>Total</b> |       | <b>To C</b> |

**C - Eastham Street (South)**

**B6478 WADDINGTON ROAD/EASTHAM STREET, CLITHEROE - TUESDAY 29 MAY 2012 (16:45-17:45)**

**D - B6478 Waddington**

|              |             |            |             |             |            |            |            |              |
|--------------|-------------|------------|-------------|-------------|------------|------------|------------|--------------|
| <b>D - A</b> | 4           | 1          | 0           | 0           | 0          | 0          | 0          | 5            |
| <b>D - B</b> | 118         | 21         | 0           | 1           | 4          | 1          | 3          | 148          |
| <b>D - C</b> | 0           | 0          | 0           | 0           | 0          | 0          | 0          | 0            |
| <b>Total</b> | 122         | 22         | 0           | 1           | 4          | 1          | 3          | 153          |
|              | <b>Cars</b> | <b>LGV</b> | <b>OGV1</b> | <b>OGV2</b> | <b>P/C</b> | <b>M/C</b> | <b>PSV</b> | <b>Total</b> |

|             |     |    |   |   |   |   |   |     |
|-------------|-----|----|---|---|---|---|---|-----|
| <b>To D</b> | 182 | 16 | 0 | 0 | 2 | 7 | 3 | 210 |
|-------------|-----|----|---|---|---|---|---|-----|

**A - Eastham Street (North)**

|             |              |              |              |              |              |
|-------------|--------------|--------------|--------------|--------------|--------------|
| <b>To A</b> |              | <b>A - D</b> | <b>A - C</b> | <b>A - B</b> | <b>Total</b> |
| 104         | <b>Cars</b>  | 9            | 0            | 68           | 77           |
| 8           | <b>LGV</b>   | 0            | 0            | 16           | 16           |
| 0           | <b>OGV1</b>  | 0            | 0            | 0            | 0            |
| 0           | <b>OGV2</b>  | 0            | 0            | 0            | 0            |
| 0           | <b>P/C</b>   | 0            | 1            | 1            | 2            |
| 0           | <b>M/C</b>   | 0            | 0            | 0            | 0            |
| 4           | <b>PSV</b>   | 0            | 0            | 0            | 0            |
| 116         | <b>Total</b> | <b>9</b>     | <b>1</b>     | <b>85</b>    | <b>95</b>    |

|     |    |   |   |   |   |   |     |             |
|-----|----|---|---|---|---|---|-----|-------------|
| 187 | 37 | 0 | 1 | 5 | 1 | 3 | 234 | <b>To B</b> |
|-----|----|---|---|---|---|---|-----|-------------|

|             |            |             |             |            |            |            |              |              |
|-------------|------------|-------------|-------------|------------|------------|------------|--------------|--------------|
| <b>Cars</b> | <b>LGV</b> | <b>OGV1</b> | <b>OGV2</b> | <b>P/C</b> | <b>M/C</b> | <b>PSV</b> | <b>Total</b> |              |
| 100         | 7          | 0           | 0           | 0          | 0          | 4          | 111          | <b>B - A</b> |
| 172         | 15         | 0           | 0           | 1          | 7          | 3          | 198          | <b>B - D</b> |
| 5           | 1          | 0           | 0           | 1          | 0          | 0          | 7            | <b>B - C</b> |
| 277         | 23         | 0           | 0           | 2          | 7          | 7          | 316          | <b>Total</b> |

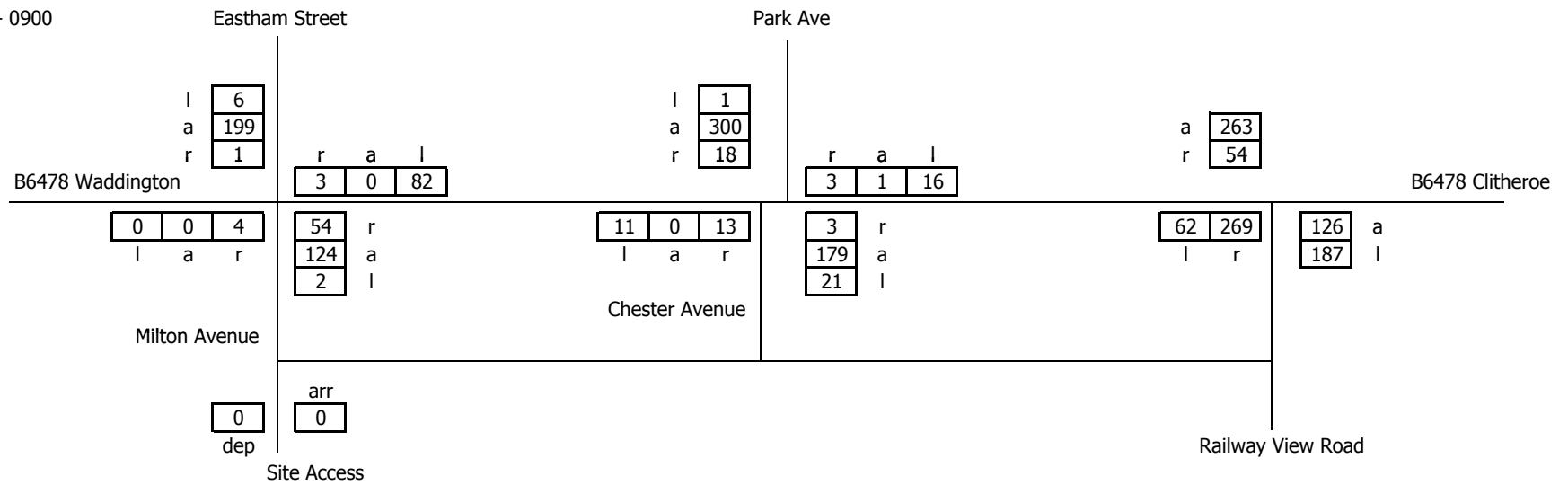
**B - B6478 Clitheroe**

|              |              |              |              |              |             |
|--------------|--------------|--------------|--------------|--------------|-------------|
| 1            | 0            | 1            | 2            | <b>Cars</b>  | 5           |
| 1            | 0            | 0            | 1            | <b>LGV</b>   | 1           |
| 0            | 0            | 0            | 0            | <b>OGV1</b>  | 0           |
| 0            | 0            | 0            | 0            | <b>OGV2</b>  | 0           |
| 1            | 0            | 0            | 1            | <b>P/C</b>   | 2           |
| 0            | 0            | 0            | 0            | <b>M/C</b>   | 0           |
| 0            | 0            | 0            | 0            | <b>PSV</b>   | 0           |
| 3            | 0            | 1            | 4            | <b>Total</b> | 8           |
| <b>C - D</b> | <b>C - A</b> | <b>C - B</b> | <b>Total</b> |              | <b>To C</b> |

**C - Eastham Street (South)**

## **Appendix C**

AM 0800 - 0900



PM 1645 - 1745

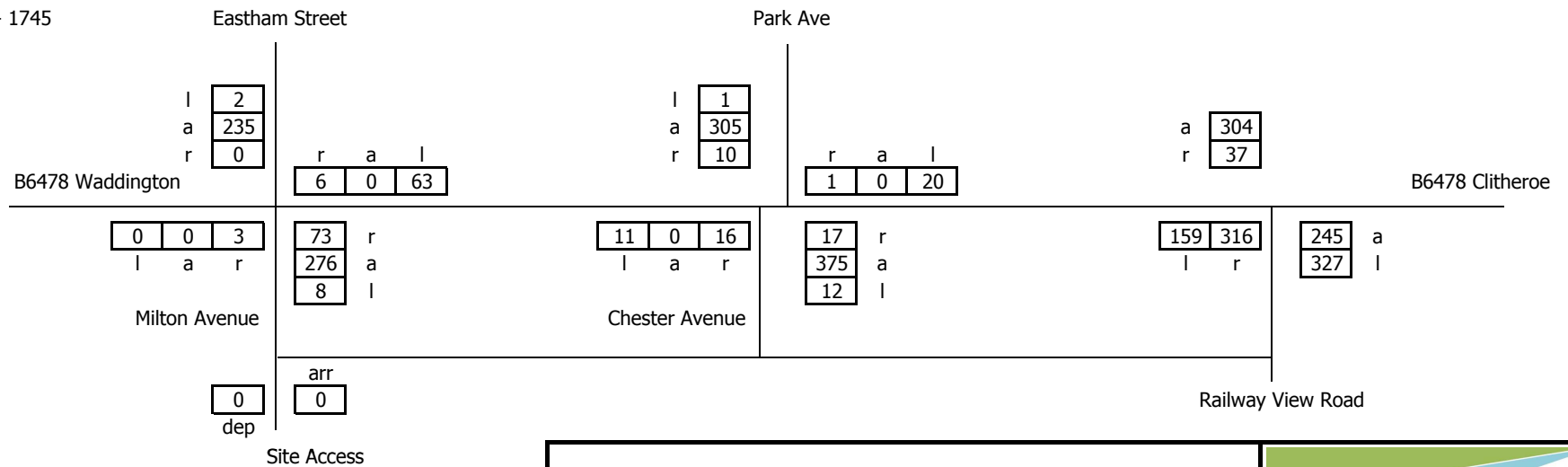
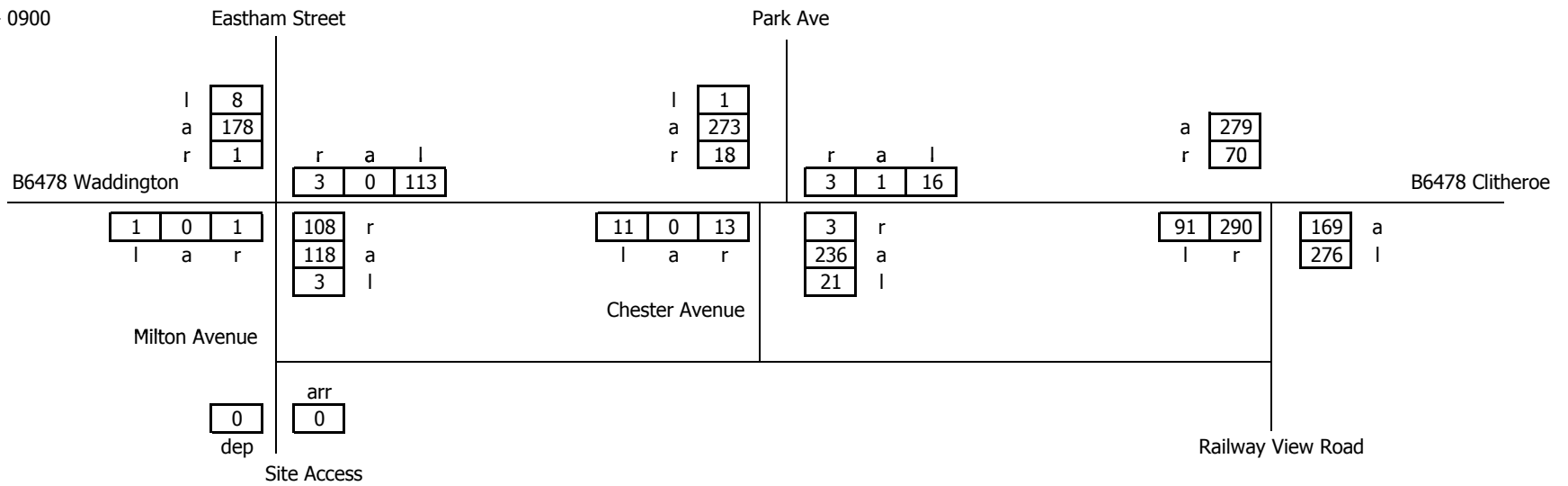


Figure: 1  
Title: 2011 Survey Flows - Vehicles



AM 0800 - 0900



PM 1645 - 1745

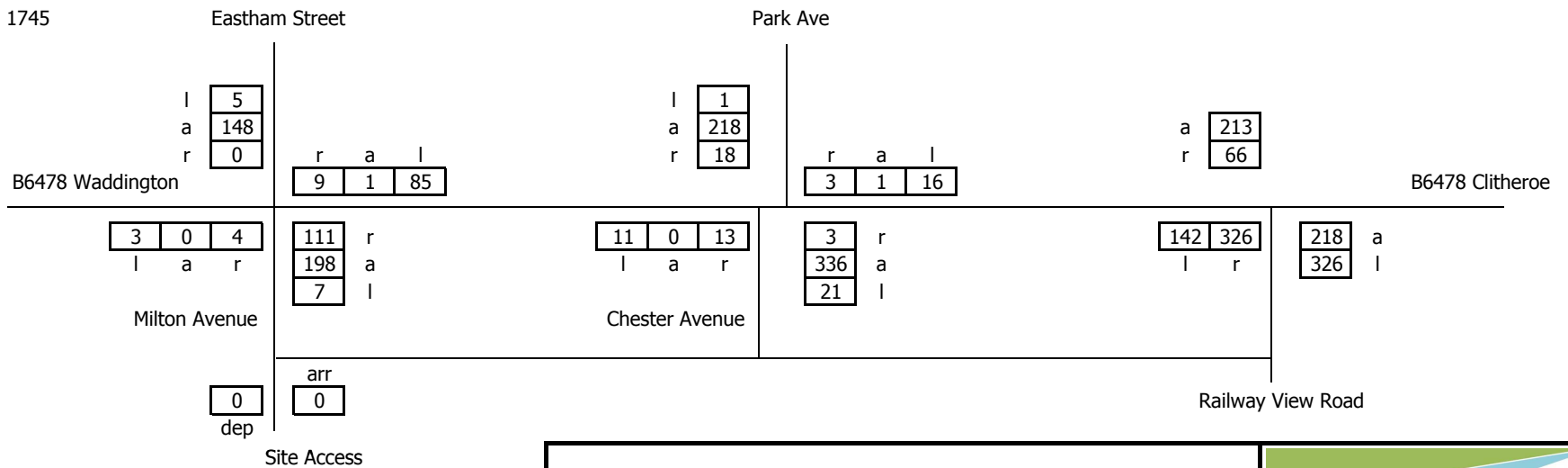
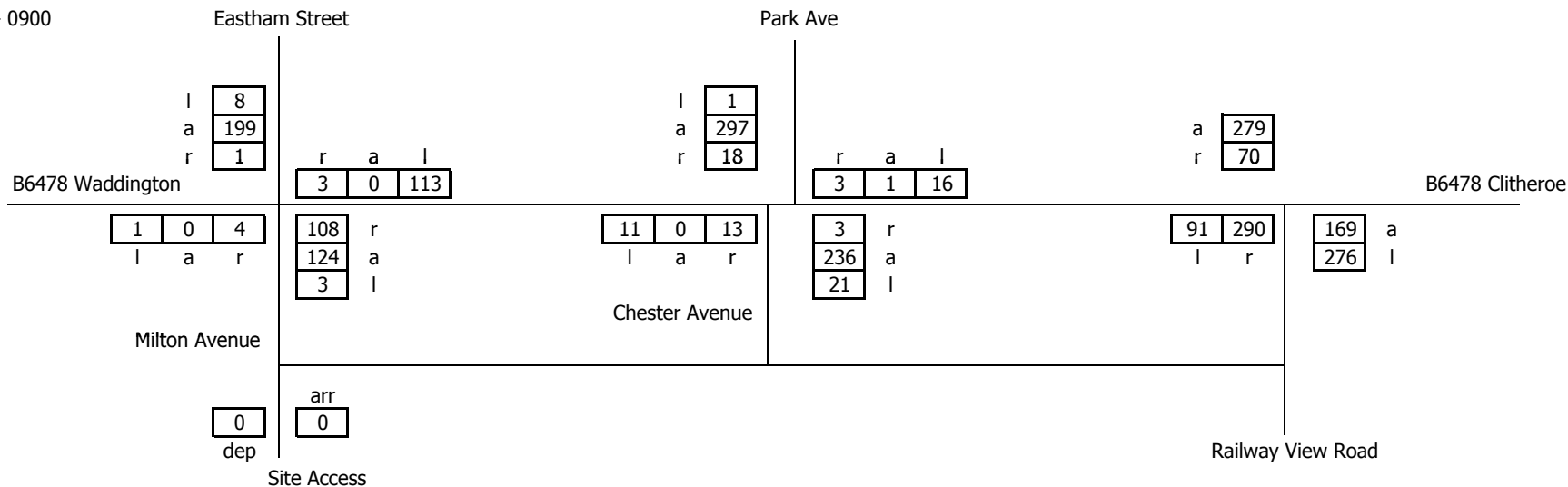


Figure: 2  
Title: 2012 Survey Flows - Vehicles



AM 0800 - 0900



PM 1645 - 1745

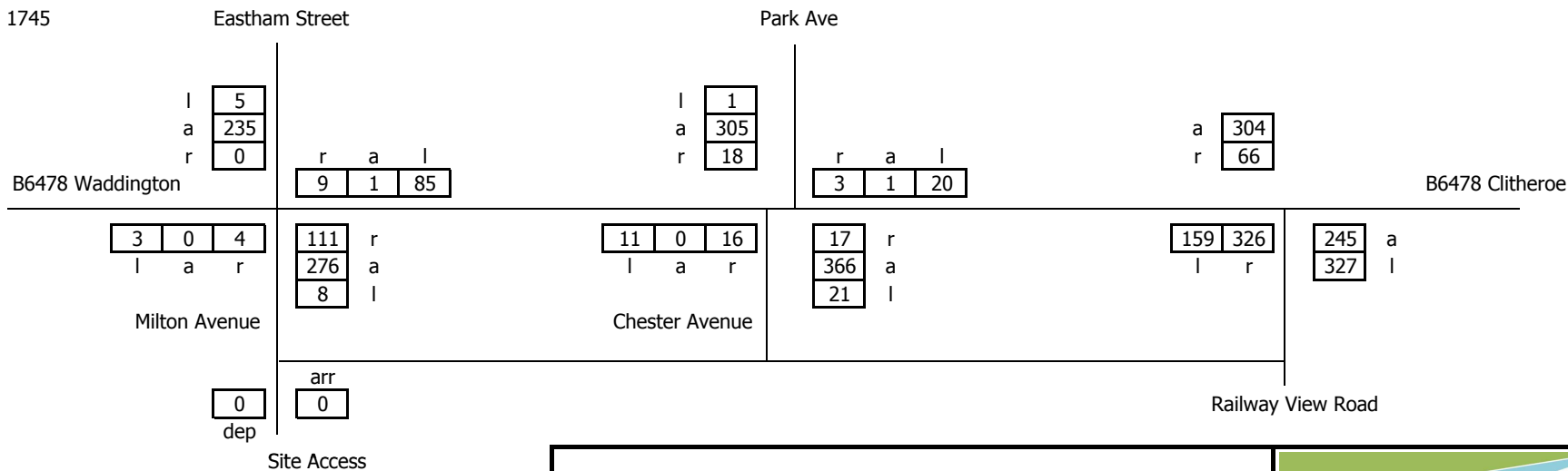
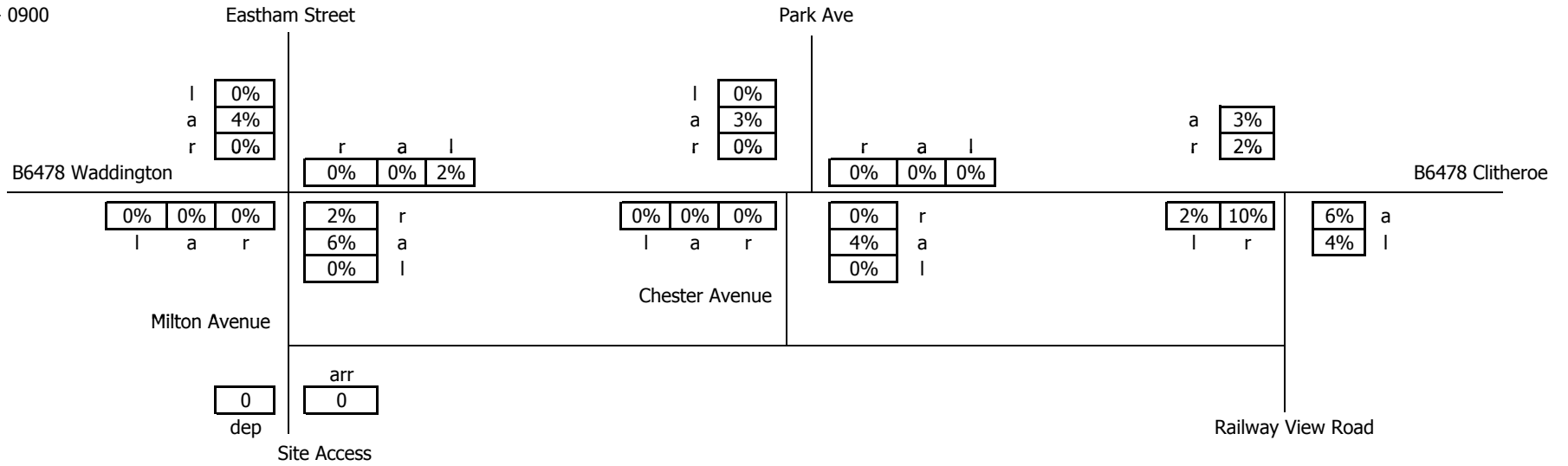


Figure: 3  
Title: Maximum Vehicle Flow Movements - Derived From 2011 and 2012 Surveys



AM 0800 - 0900



PM 1645 - 1745

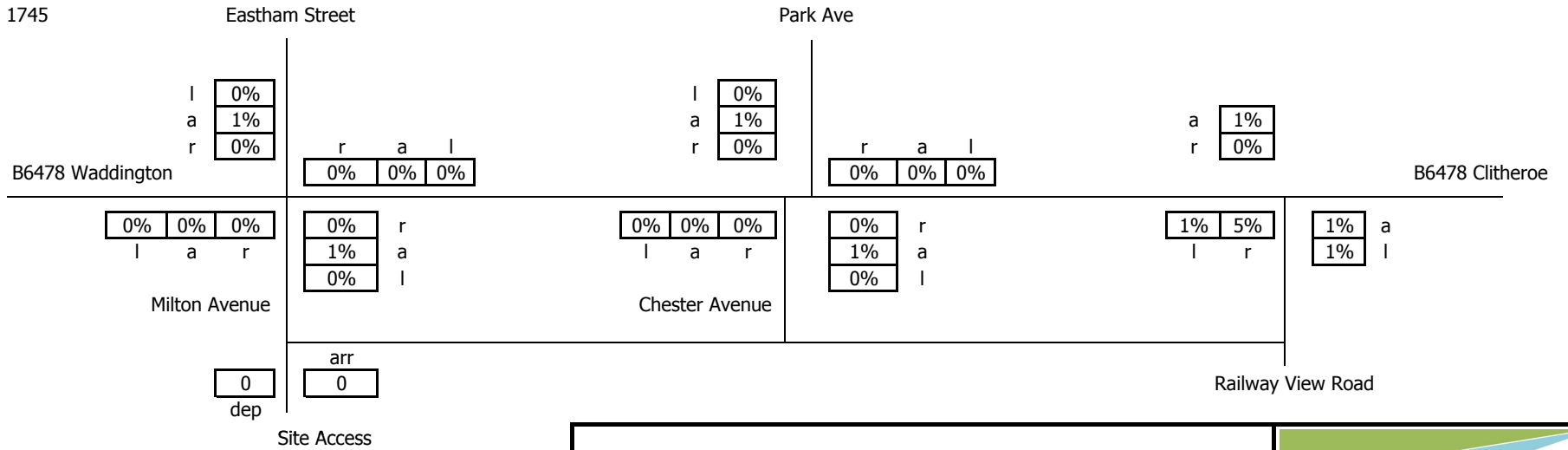


Figure: 4  
Title: 2011 Survey Flows - % HGV



AM 0800 - 0900

Eastham Street

Park Ave

|   |     |
|---|-----|
| l | 0%  |
| a | 0%  |
| r | 25% |

B6478 Waddington

| r  | a  | l  |
|----|----|----|
| 0% | 0% | 0% |

|   |     |
|---|-----|
| l | 0%  |
| a | 62% |
| r | 0%  |

| r  | a  | l  |
|----|----|----|
| 0% | 0% | 0% |

|   |     |
|---|-----|
| a | 50% |
| r | 12% |

B6478 Clitheroe

|     |    |     |
|-----|----|-----|
| 38% | 0% | 62% |
| l   | a  | r   |

|     |   |
|-----|---|
| 0%  | r |
| 0%  | a |
| 75% | l |

|    |    |    |
|----|----|----|
| 0% | 0% | 0% |
| l  | a  | r  |

|     |   |
|-----|---|
| 0%  | r |
| 75% | a |
| 0%  | l |

|     |    |
|-----|----|
| 26% | 0% |
| l   | r  |

|     |   |
|-----|---|
| 49% | a |
| 0%  | l |

Milton Avenue

Chester Avenue

100%  
dep

arr  
100%

Railway View Road

## Site Access

PM 1645 - 1745

Eastham Street

Park Ave

|   |    |
|---|----|
| l | 0% |
| a | 0% |
| r | 0% |

B6478 Waddington

|    |    |    |
|----|----|----|
| r  | a  | l  |
| 0% | 0% | 0% |

|   |     |
|---|-----|
| l | 0%  |
| a | 46% |
| r | 0%  |

| r  | a  | l  |
|----|----|----|
| 0% | 0% | 0% |

|   |     |
|---|-----|
| a | 38% |
| r | 8%  |

B6478 Clitheroe

|     |    |     |
|-----|----|-----|
| 54% | 0% | 46% |
| l   | a  | r   |

|      |   |
|------|---|
| 0%   | r |
| 0%   | a |
| 100% | l |

|    |    |    |
|----|----|----|
| 0% | 0% | 0% |
| l  | a  | r  |

|      |   |
|------|---|
| 0%   | r |
| 100% | a |
| 0%   | l |

|     |    |
|-----|----|
| 39% | 0% |
| l   | r  |

|     |   |
|-----|---|
| 61% | a |
| 0%  | l |

Milton Avenue

Chester Avenue

100%  
dep

arr  
100%

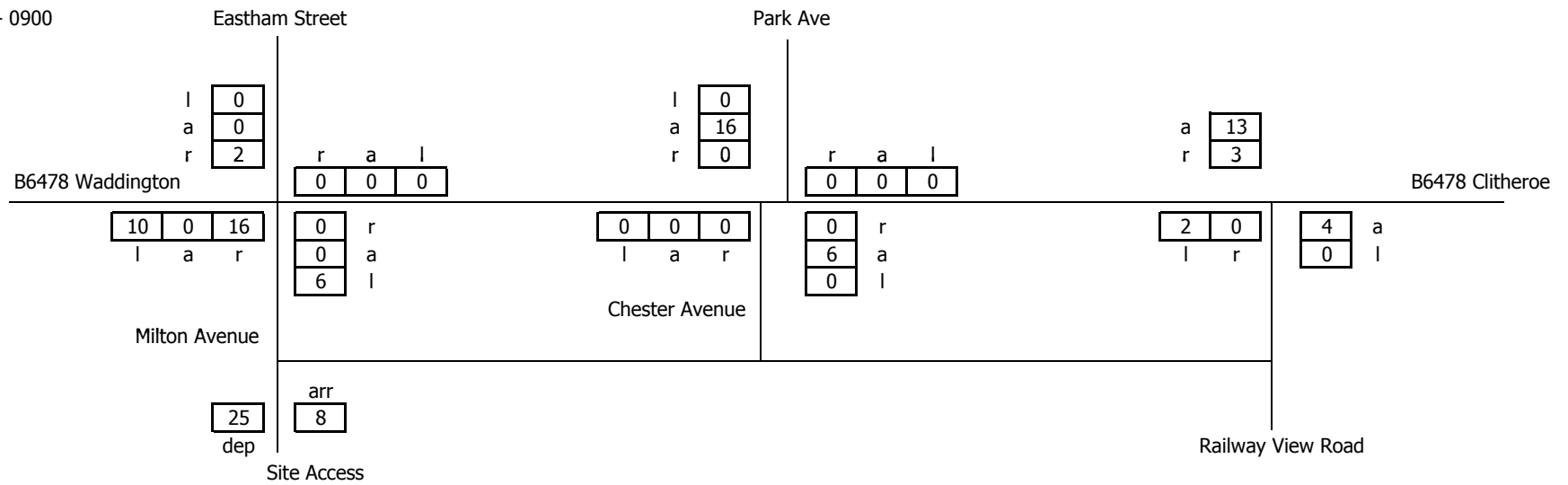
Railway View Road

## Site Access

Figure: 5  
Title: % Distribution



AM 0800 - 0900



PM 1645 - 1745

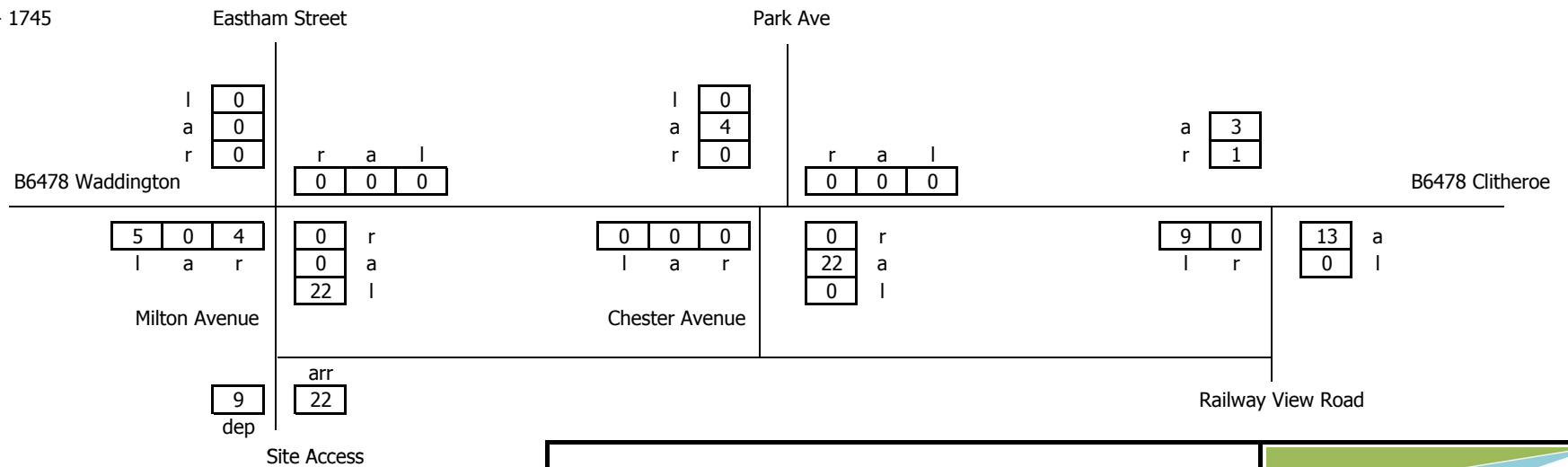
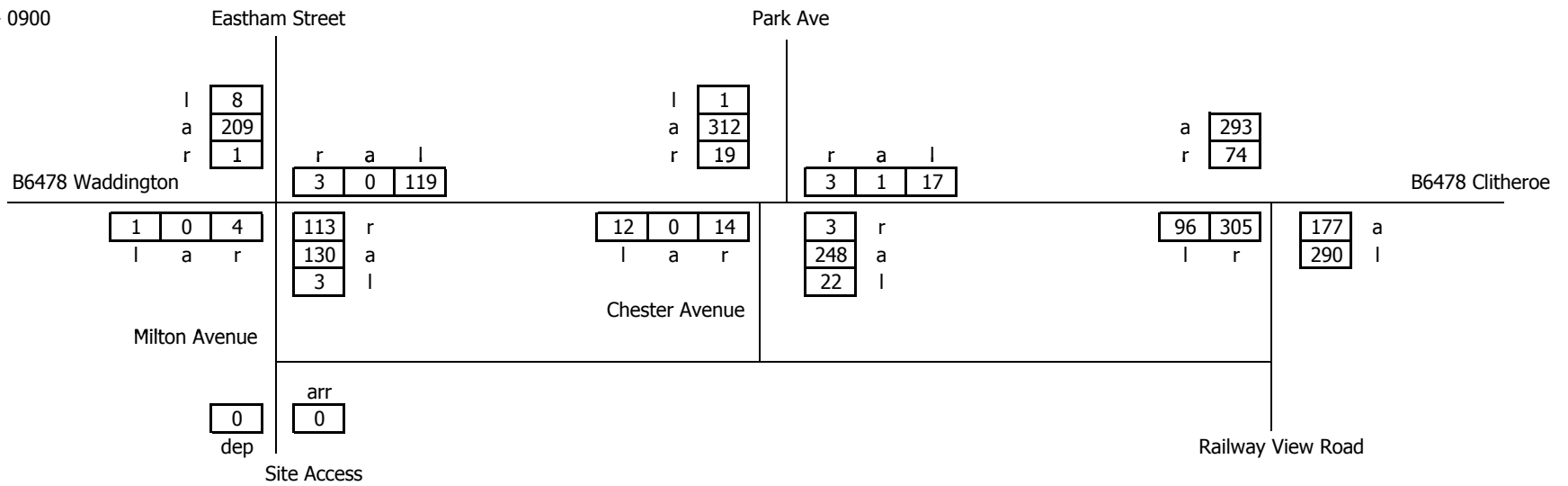


Figure: 6  
Title: Development Flows - 50 dwellings



AM 0800 - 0900



PM 1645 - 1745

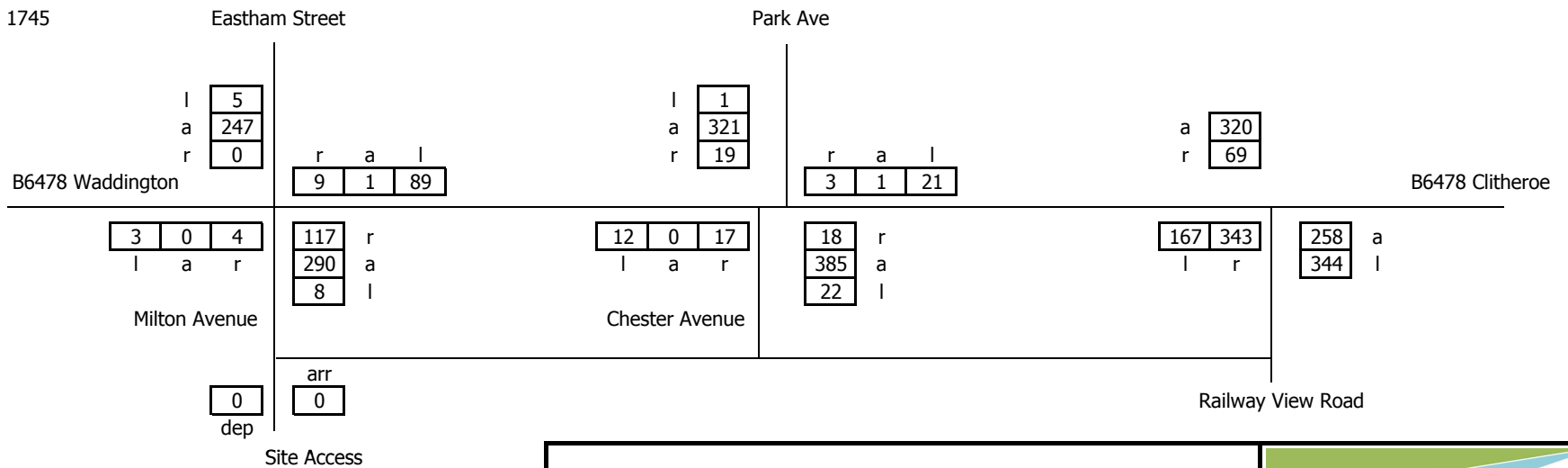
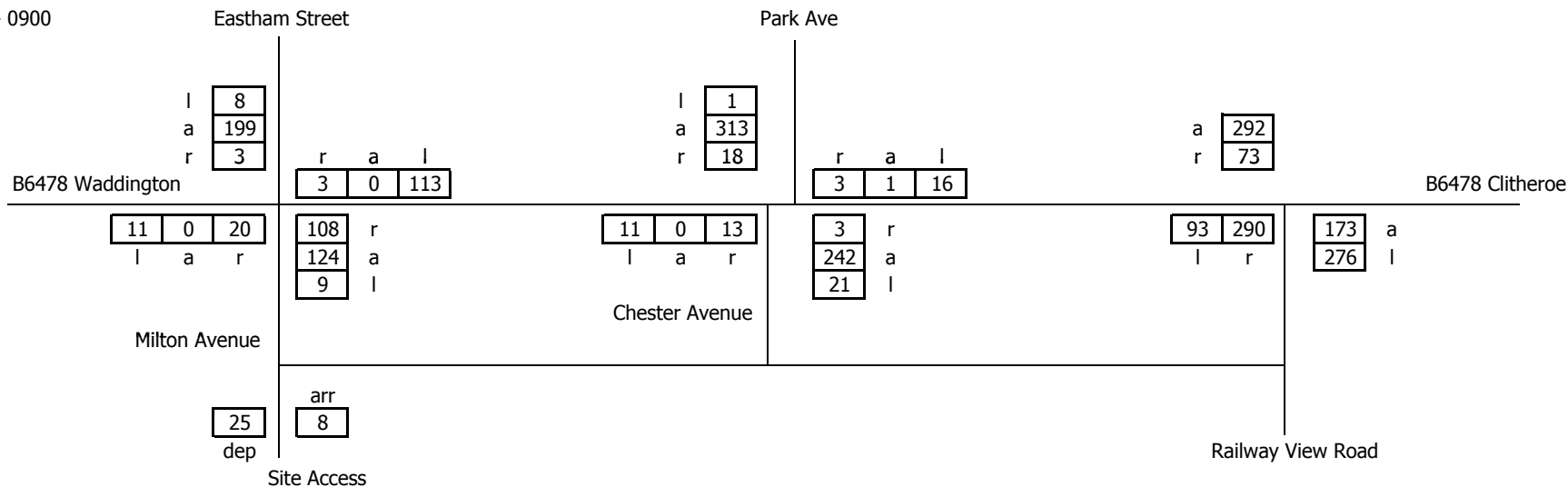


Figure: 7  
Title: 2017 Base Flows



AM 0800 - 0900



PM 1645 - 1745

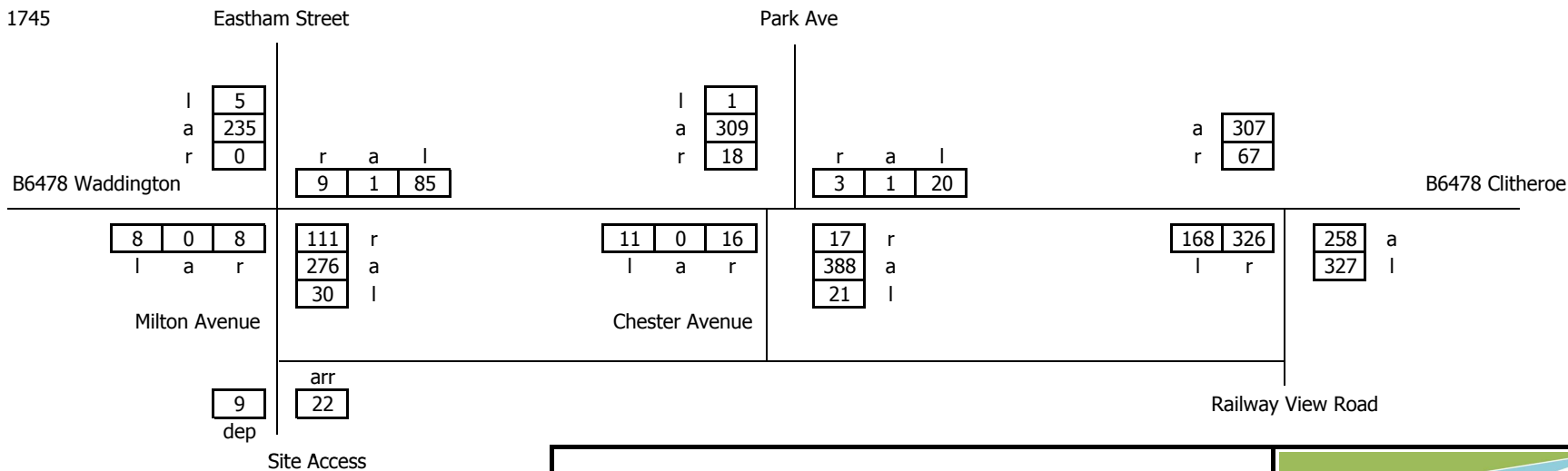
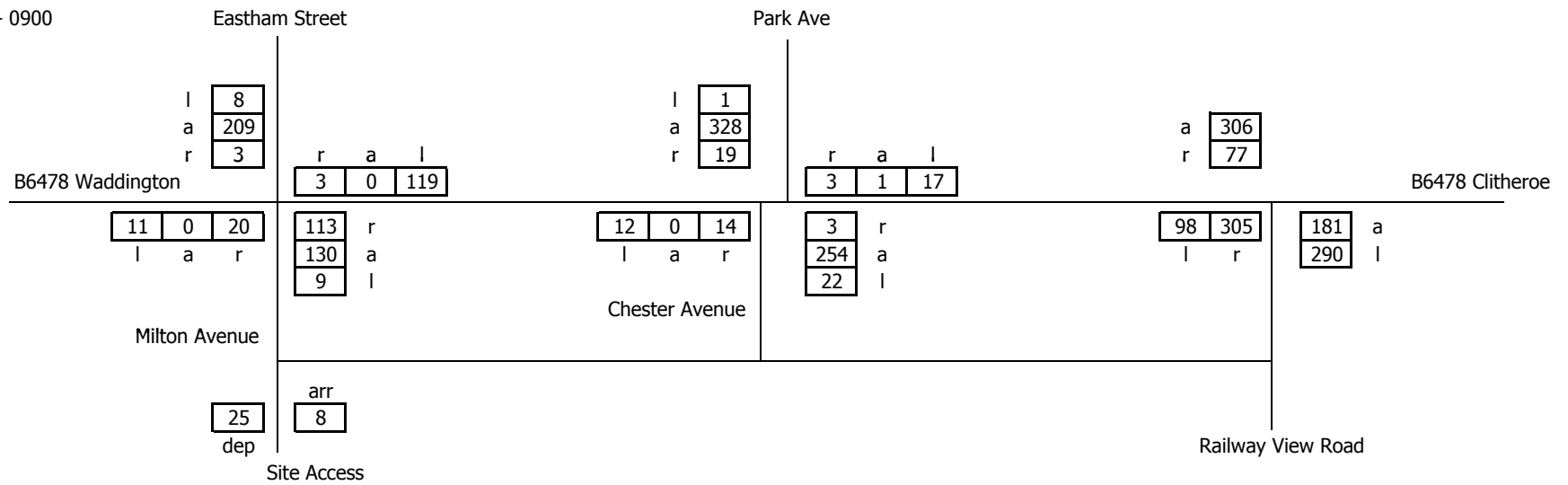


Figure: 8

Title: Maximum Surveyed Flows (2011/2012) - Base Plus Development Flows



AM 0800 - 0900



PM 1645 - 1745

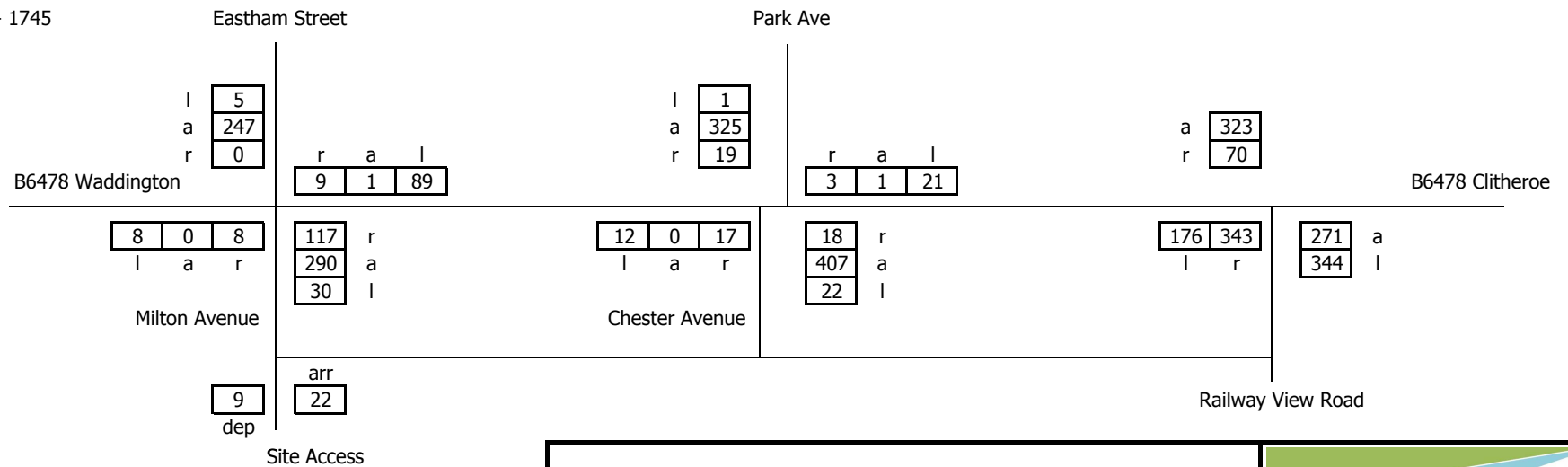


Figure: 9

Title: 2017 Base Plus Development flows



## **Appendix D**

SITE: 1

DAY: Thursday

LOCATION: Gatherley Rd/Gatherley Rd ind estate / Stephenson Rd

DATE: 26/05/2011

| TIME         | CAR       | LGV      | A - D<br>HGV | PSV      | MCL      | TOT       | CAR        | LGV        | A - C<br>HGV | PSV      | MCL      | TOT        |
|--------------|-----------|----------|--------------|----------|----------|-----------|------------|------------|--------------|----------|----------|------------|
| 07:00        | 1         | 0        | 0            | 0        | 0        | 1         | 56         | 12         | 10           | 0        | 1        | 79         |
| 07:15        | 0         | 0        | 0            | 0        | 0        | 0         | 77         | 16         | 12           | 1        | 0        | 106        |
| 07:30        | 0         | 0        | 0            | 0        | 0        | 0         | 77         | 17         | 8            | 0        | 3        | 105        |
| 07:45        | 2         | 1        | 0            | 0        | 0        | 3         | 78         | 15         | 6            | 1        | 0        | 100        |
| <b>H/TOT</b> | <b>3</b>  | <b>1</b> | <b>0</b>     | <b>0</b> | <b>0</b> | <b>4</b>  | <b>288</b> | <b>60</b>  | <b>36</b>    | <b>2</b> | <b>4</b> | <b>390</b> |
| 08:00        | 1         | 0        | 0            | 0        | 0        | 1         | 69         | 8          | 12           | 1        | 0        | 90         |
| 08:15        | 3         | 0        | 0            | 1        | 0        | 4         | 52         | 10         | 10           | 0        | 0        | 72         |
| 08:30        | 0         | 1        | 0            | 0        | 0        | 1         | 63         | 14         | 10           | 1        | 1        | 89         |
| 08:45        | 1         | 1        | 0            | 0        | 0        | 2         | 72         | 5          | 14           | 3        | 0        | 94         |
| <b>H/TOT</b> | <b>5</b>  | <b>2</b> | <b>0</b>     | <b>1</b> | <b>0</b> | <b>8</b>  | <b>256</b> | <b>37</b>  | <b>46</b>    | <b>5</b> | <b>1</b> | <b>345</b> |
| 09:00        | 1         | 1        | 0            | 0        | 0        | 2         | 40         | 8          | 5            | 0        | 0        | 53         |
| 09:15        | 1         | 0        | 0            | 0        | 0        | 1         | 46         | 9          | 6            | 1        | 0        | 62         |
| <b>H/TOT</b> | <b>2</b>  | <b>1</b> | <b>0</b>     | <b>0</b> | <b>0</b> | <b>3</b>  | <b>86</b>  | <b>17</b>  | <b>11</b>    | <b>1</b> | <b>0</b> | <b>115</b> |
| <b>H/TOT</b> | <b>10</b> | <b>4</b> | <b>0</b>     | <b>1</b> | <b>0</b> | <b>15</b> | <b>630</b> | <b>114</b> | <b>93</b>    | <b>8</b> | <b>5</b> | <b>850</b> |

| TIME         | CAR       | LGV      | A - D<br>HGV | PSV      | MCL      | TOT       | CAR        | LGV       | A - C<br>HGV | PSV      | MCL      | TOT        |
|--------------|-----------|----------|--------------|----------|----------|-----------|------------|-----------|--------------|----------|----------|------------|
| 16:00        | 2         | 1        | 0            | 1        | 0        | 4         | 53         | 5         | 12           | 2        | 0        | 72         |
| 16:15        | 4         | 0        | 0            | 0        | 0        | 4         | 79         | 13        | 10           | 4        | 0        | 106        |
| 16:30        | 1         | 0        | 0            | 0        | 0        | 1         | 51         | 7         | 7            | 0        | 0        | 65         |
| 16:45        | 2         | 0        | 0            | 0        | 0        | 2         | 79         | 11        | 2            | 1        | 0        | 93         |
| <b>H/TOT</b> | <b>9</b>  | <b>1</b> | <b>0</b>     | <b>1</b> | <b>0</b> | <b>11</b> | <b>262</b> | <b>36</b> | <b>31</b>    | <b>7</b> | <b>0</b> | <b>336</b> |
| 17:00        | 7         | 1        | 0            | 0        | 0        | 8         | 75         | 8         | 8            | 0        | 0        | 91         |
| 17:15        | 1         | 0        | 0            | 0        | 0        | 1         | 77         | 12        | 6            | 0        | 0        | 95         |
| 17:30        | 3         | 0        | 0            | 0        | 0        | 3         | 86         | 2         | 2            | 1        | 0        | 91         |
| 17:45        | 9         | 0        | 0            | 0        | 0        | 9         | 74         | 7         | 6            | 0        | 2        | 89         |
| <b>H/TOT</b> | <b>20</b> | <b>1</b> | <b>0</b>     | <b>0</b> | <b>0</b> | <b>21</b> | <b>312</b> | <b>29</b> | <b>22</b>    | <b>1</b> | <b>2</b> | <b>366</b> |
| 18:00        | 6         | 0        | 0            | 0        | 0        | 6         | 53         | 3         | 4            | 0        | 0        | 60         |
| 18:15        | 5         | 0        | 0            | 0        | 0        | 5         | 61         | 1         | 2            | 0        | 0        | 64         |
| <b>H/TOT</b> | <b>11</b> | <b>0</b> | <b>0</b>     | <b>0</b> | <b>0</b> | <b>11</b> | <b>114</b> | <b>4</b>  | <b>6</b>     | <b>0</b> | <b>0</b> | <b>124</b> |
| <b>P/TOT</b> | <b>40</b> | <b>2</b> | <b>0</b>     | <b>1</b> | <b>0</b> | <b>43</b> | <b>688</b> | <b>69</b> | <b>59</b>    | <b>8</b> | <b>2</b> | <b>826</b> |



1334 Catterick  
MAY 11  
MANUAL CLASSIFIED COUNT

SITE: 1

DAY: Thursday

LOCATION: Gatherley Rd/Gatherley Rd ind estate / Stephenson Rd

DATE: 26/05/2011

| TIME         | CAR       | LGV       | A - B<br>HGV | PSV      | MCL      | TOT       | CAR      | LGV       | B - A<br>HGV | PSV      | MCL      | TOT       |
|--------------|-----------|-----------|--------------|----------|----------|-----------|----------|-----------|--------------|----------|----------|-----------|
| 07:00        | 5         | 2         | 0            | 0        | 0        | 7         | 0        | 0         | 0            | 0        | 0        | 0         |
| 07:15        | 11        | 2         | 2            | 0        | 0        | 15        | 2        | 0         | 2            | 0        | 0        | 4         |
| 07:30        | 10        | 1         | 0            | 0        | 0        | 11        | 0        | 2         | 4            | 0        | 0        | 6         |
| 07:45        | 6         | 1         | 3            | 0        | 0        | 10        | 1        | 7         | 2            | 0        | 0        | 10        |
| <b>H/TOT</b> | <b>32</b> | <b>6</b>  | <b>5</b>     | <b>0</b> | <b>0</b> | <b>43</b> | <b>3</b> | <b>9</b>  | <b>8</b>     | <b>0</b> | <b>0</b> | <b>20</b> |
| 08:00        | 2         | 1         | 0            | 0        | 0        | 3         | 0        | 1         | 3            | 0        | 0        | 4         |
| 08:15        | 4         | 2         | 2            | 0        | 0        | 8         | 0        | 2         | 0            | 0        | 0        | 2         |
| 08:30        | 20        | 2         | 0            | 0        | 0        | 22        | 0        | 1         | 2            | 0        | 0        | 3         |
| 08:45        | 5         | 1         | 2            | 0        | 0        | 8         | 1        | 1         | 0            | 0        | 0        | 2         |
| <b>H/TOT</b> | <b>31</b> | <b>6</b>  | <b>4</b>     | <b>0</b> | <b>0</b> | <b>41</b> | <b>1</b> | <b>5</b>  | <b>5</b>     | <b>0</b> | <b>0</b> | <b>11</b> |
| 09:00        | 1         | 1         | 0            | 0        | 0        | 2         | 2        | 2         | 0            | 0        | 0        | 4         |
| 09:15        | 4         | 0         | 1            | 0        | 0        | 5         | 1        | 2         | 3            | 0        | 0        | 6         |
| <b>H/TOT</b> | <b>5</b>  | <b>1</b>  | <b>1</b>     | <b>0</b> | <b>0</b> | <b>7</b>  | <b>3</b> | <b>4</b>  | <b>3</b>     | <b>0</b> | <b>0</b> | <b>10</b> |
| <b>H/TOT</b> | <b>68</b> | <b>13</b> | <b>10</b>    | <b>0</b> | <b>0</b> | <b>91</b> | <b>7</b> | <b>18</b> | <b>16</b>    | <b>0</b> | <b>0</b> | <b>41</b> |

| TIME         | CAR       | LGV      | A - B<br>HGV | PSV      | MCL      | TOT       | CAR       | LGV      | B - A<br>HGV | PSV      | MCL      | TOT       |
|--------------|-----------|----------|--------------|----------|----------|-----------|-----------|----------|--------------|----------|----------|-----------|
| 07:00        | 8         | 1        | 1            | 0        | 0        | 10        | 16        | 1        | 0            | 0        | 0        | 17        |
| 07:15        | 0         | 2        | 2            | 0        | 0        | 4         | 9         | 2        | 1            | 0        | 0        | 12        |
| 16:30        | 2         | 1        | 3            | 0        | 0        | 6         | 4         | 1        | 0            | 0        | 0        | 5         |
| 16:45        | 1         | 1        | 0            | 0        | 0        | 2         | 4         | 0        | 0            | 0        | 0        | 4         |
| <b>H/TOT</b> | <b>11</b> | <b>5</b> | <b>6</b>     | <b>0</b> | <b>0</b> | <b>22</b> | <b>33</b> | <b>4</b> | <b>1</b>     | <b>0</b> | <b>0</b> | <b>38</b> |
| 17:00        | 1         | 0        | 0            | 0        | 0        | 1         | 20        | 1        | 0            | 0        | 0        | 21        |
| 17:15        | 1         | 0        | 2            | 0        | 0        | 3         | 4         | 0        | 0            | 0        | 0        | 4         |
| 17:30        | 2         | 1        | 2            | 0        | 0        | 5         | 6         | 0        | 0            | 0        | 0        | 6         |
| 17:45        | 0         | 0        | 5            | 0        | 0        | 5         | 4         | 1        | 0            | 0        | 0        | 5         |
| <b>H/TOT</b> | <b>4</b>  | <b>1</b> | <b>9</b>     | <b>0</b> | <b>0</b> | <b>14</b> | <b>34</b> | <b>2</b> | <b>0</b>     | <b>0</b> | <b>0</b> | <b>36</b> |
| 18:00        | 2         | 0        | 0            | 0        | 0        | 2         | 5         | 2        | 2            | 0        | 0        | 9         |
| 18:15        | 0         | 0        | 2            | 0        | 0        | 2         | 3         | 0        | 0            | 0        | 0        | 3         |
| <b>H/TOT</b> | <b>2</b>  | <b>0</b> | <b>2</b>     | <b>0</b> | <b>0</b> | <b>4</b>  | <b>8</b>  | <b>2</b> | <b>2</b>     | <b>0</b> | <b>0</b> | <b>12</b> |
| <b>P/TOT</b> | <b>17</b> | <b>6</b> | <b>17</b>    | <b>0</b> | <b>0</b> | <b>40</b> | <b>75</b> | <b>8</b> | <b>3</b>     | <b>0</b> | <b>0</b> | <b>86</b> |

SITE: 1

DAY: Thursday

LOCATION: Gatherley Rd/Gatherley Rd ind estate / Stephenson Rd

DATE: 26/05/2011

| TIME         | CAR | LGV | B - D<br>HGV | PSV | MCL | TOT | CAR | LGV | B - C<br>HGV | PSV | MCL | TOT |
|--------------|-----|-----|--------------|-----|-----|-----|-----|-----|--------------|-----|-----|-----|
| 07:00        | 0   | 0   | 0            | 0   | 0   | 0   | 0   | 0   | 2            | 0   | 0   | 2   |
| 07:15        | 0   | 0   | 0            | 0   | 0   | 0   | 2   | 0   | 0            | 0   | 0   | 2   |
| 07:30        | 0   | 0   | 0            | 0   | 0   | 0   | 2   | 0   | 3            | 0   | 0   | 5   |
| 07:45        | 0   | 0   | 0            | 0   | 0   | 0   | 1   | 0   | 4            | 0   | 0   | 5   |
| <b>H/TOT</b> | 0   | 0   | 0            | 0   | 0   | 0   | 5   | 0   | 9            | 0   | 0   | 14  |
| 08:00        | 0   | 0   | 1            | 0   | 0   | 1   | 1   | 1   | 2            | 0   | 0   | 4   |
| 08:15        | 1   | 0   | 0            | 0   | 0   | 1   | 3   | 1   | 1            | 0   | 0   | 5   |
| 08:30        | 0   | 1   | 0            | 0   | 0   | 1   | 0   | 1   | 3            | 0   | 0   | 4   |
| 08:45        | 0   | 0   | 0            | 0   | 0   | 0   | 2   | 4   | 4            | 0   | 0   | 10  |
| <b>H/TOT</b> | 1   | 1   | 1            | 0   | 0   | 3   | 6   | 7   | 10           | 0   | 0   | 23  |
| 09:00        | 0   | 1   | 0            | 0   | 0   | 1   | 2   | 2   | 1            | 0   | 0   | 5   |
| 09:15        | 0   | 0   | 0            | 0   | 0   | 0   | 1   | 1   | 2            | 0   | 0   | 4   |
| <b>H/TOT</b> | 0   | 1   | 0            | 0   | 0   | 1   | 3   | 3   | 3            | 0   | 0   | 9   |
| <b>H/TOT</b> | 1   | 2   | 1            | 0   | 0   | 4   | 14  | 10  | 22           | 0   | 0   | 46  |

| TIME         | CAR | LGV | B - D<br>HGV | PSV | MCL | TOT | CAR | LGV | B - C<br>HGV | PSV | MCL | TOT |
|--------------|-----|-----|--------------|-----|-----|-----|-----|-----|--------------|-----|-----|-----|
| 07:00        | 0   | 0   | 0            | 0   | 0   | 0   | 10  | 4   | 0            | 0   | 0   | 14  |
| 07:15        | 0   | 0   | 0            | 0   | 0   | 0   | 13  | 3   | 3            | 0   | 0   | 19  |
| 16:30        | 0   | 1   | 0            | 0   | 0   | 1   | 11  | 0   | 1            | 0   | 0   | 12  |
| 16:45        | 0   | 0   | 0            | 0   | 0   | 0   | 7   | 0   | 1            | 0   | 0   | 8   |
| <b>H/TOT</b> | 0   | 1   | 0            | 0   | 0   | 1   | 41  | 7   | 5            | 0   | 0   | 53  |
| 17:00        | 0   | 0   | 0            | 0   | 0   | 0   | 27  | 2   | 0            | 0   | 0   | 29  |
| 17:15        | 0   | 0   | 0            | 0   | 0   | 0   | 12  | 0   | 1            | 0   | 0   | 13  |
| 17:30        | 0   | 0   | 0            | 0   | 0   | 0   | 13  | 3   | 1            | 0   | 0   | 17  |
| 17:45        | 1   | 0   | 0            | 0   | 0   | 1   | 3   | 0   | 0            | 0   | 0   | 3   |
| <b>H/TOT</b> | 1   | 0   | 0            | 0   | 0   | 1   | 55  | 5   | 2            | 0   | 0   | 62  |
| 18:00        | 0   | 0   | 0            | 0   | 0   | 0   | 7   | 1   | 0            | 0   | 0   | 8   |
| 18:15        | 0   | 0   | 0            | 0   | 0   | 0   | 1   | 0   | 1            | 0   | 0   | 2   |
| <b>H/TOT</b> | 0   | 0   | 0            | 0   | 0   | 0   | 8   | 1   | 1            | 0   | 0   | 10  |
| <b>P/TOT</b> | 1   | 1   | 0            | 0   | 0   | 2   | 104 | 13  | 8            | 0   | 0   | 125 |

SITE: 1

DAY: Thursday

LOCATION: Gatherley Rd/Gatherley Rd ind estate / Stephenson Rd

DATE: 26/05/2011

| TIME         | CAR       | LGV       | C - B<br>HGV | PSV      | MCL      | TOT        | CAR        | LGV       | C - A<br>HGV | PSV       | MCL      | TOT        |
|--------------|-----------|-----------|--------------|----------|----------|------------|------------|-----------|--------------|-----------|----------|------------|
| 07:00        | 6         | 0         | 0            | 0        | 0        | 6          | 34         | 8         | 8            | 1         | 0        | 51         |
| 07:15        | 16        | 2         | 5            | 0        | 0        | 23         | 38         | 5         | 13           | 1         | 0        | 57         |
| 07:30        | 8         | 1         | 1            | 0        | 0        | 10         | 61         | 4         | 10           | 0         | 0        | 75         |
| 07:45        | 7         | 2         | 3            | 0        | 0        | 12         | 72         | 5         | 4            | 3         | 1        | 85         |
| <b>H/TOT</b> | <b>37</b> | <b>5</b>  | <b>9</b>     | <b>0</b> | <b>0</b> | <b>51</b>  | <b>205</b> | <b>22</b> | <b>35</b>    | <b>5</b>  | <b>1</b> | <b>268</b> |
| 08:00        | 9         | 3         | 2            | 0        | 0        | 14         | 66         | 6         | 7            | 1         | 1        | 81         |
| 08:15        | 14        | 3         | 2            | 0        | 0        | 19         | 64         | 8         | 7            | 3         | 1        | 83         |
| 08:30        | 12        | 2         | 1            | 0        | 0        | 15         | 68         | 8         | 9            | 0         | 0        | 85         |
| 08:45        | 9         | 3         | 1            | 0        | 0        | 13         | 72         | 10        | 11           | 1         | 0        | 94         |
| <b>H/TOT</b> | <b>44</b> | <b>11</b> | <b>6</b>     | <b>0</b> | <b>0</b> | <b>61</b>  | <b>270</b> | <b>32</b> | <b>34</b>    | <b>5</b>  | <b>2</b> | <b>343</b> |
| 09:00        | 1         | 2         | 2            | 0        | 0        | 5          | 52         | 6         | 17           | 0         | 0        | 75         |
| 09:15        | 2         | 3         | 2            | 0        | 0        | 7          | 53         | 11        | 7            | 0         | 0        | 71         |
| <b>H/TOT</b> | <b>3</b>  | <b>5</b>  | <b>4</b>     | <b>0</b> | <b>0</b> | <b>12</b>  | <b>105</b> | <b>17</b> | <b>24</b>    | <b>0</b>  | <b>0</b> | <b>146</b> |
| <b>H/TOT</b> | <b>84</b> | <b>21</b> | <b>19</b>    | <b>0</b> | <b>0</b> | <b>124</b> | <b>580</b> | <b>71</b> | <b>93</b>    | <b>10</b> | <b>3</b> | <b>757</b> |

| TIME         | CAR       | LGV      | C - B<br>HGV | PSV      | MCL      | TOT       | CAR        | LGV       | C - A<br>HGV | PSV      | MCL      | TOT        |
|--------------|-----------|----------|--------------|----------|----------|-----------|------------|-----------|--------------|----------|----------|------------|
| 16:00        | 2         | 1        | 4            | 0        | 0        | 7         | 73         | 15        | 7            | 1        | 1        | 97         |
| 16:15        | 5         | 2        | 1            | 0        | 0        | 8         | 80         | 13        | 10           | 1        | 1        | 105        |
| 16:30        | 2         | 1        | 4            | 0        | 0        | 7         | 109        | 13        | 10           | 0        | 0        | 132        |
| 16:45        | 1         | 0        | 1            | 0        | 0        | 2         | 94         | 15        | 3            | 0        | 1        | 113        |
| <b>H/TOT</b> | <b>10</b> | <b>4</b> | <b>10</b>    | <b>0</b> | <b>0</b> | <b>24</b> | <b>356</b> | <b>56</b> | <b>30</b>    | <b>2</b> | <b>3</b> | <b>447</b> |
| 17:00        | 3         | 1        | 0            | 0        | 0        | 4         | 123        | 13        | 8            | 0        | 1        | 145        |
| 17:15        | 0         | 0        | 2            | 0        | 0        | 2         | 86         | 8         | 6            | 0        | 1        | 101        |
| 17:30        | 2         | 1        | 0            | 0        | 0        | 3         | 83         | 4         | 1            | 0        | 0        | 88         |
| 17:45        | 1         | 0        | 3            | 0        | 0        | 4         | 69         | 5         | 1            | 1        | 2        | 78         |
| <b>H/TOT</b> | <b>6</b>  | <b>2</b> | <b>5</b>     | <b>0</b> | <b>0</b> | <b>13</b> | <b>361</b> | <b>30</b> | <b>16</b>    | <b>1</b> | <b>4</b> | <b>412</b> |
| 18:00        | 1         | 0        | 0            | 0        | 0        | 1         | 65         | 5         | 6            | 2        | 0        | 78         |
| 18:15        | 0         | 0        | 0            | 0        | 0        | 0         | 51         | 4         | 3            | 0        | 0        | 58         |
| <b>H/TOT</b> | <b>1</b>  | <b>0</b> | <b>0</b>     | <b>0</b> | <b>0</b> | <b>1</b>  | <b>116</b> | <b>9</b>  | <b>9</b>     | <b>2</b> | <b>0</b> | <b>136</b> |
| <b>P/TOT</b> | <b>17</b> | <b>6</b> | <b>15</b>    | <b>0</b> | <b>0</b> | <b>38</b> | <b>833</b> | <b>95</b> | <b>55</b>    | <b>5</b> | <b>7</b> | <b>995</b> |

SITE: 1

DAY: Thursday

LOCATION: Gatherley Rd/Gatherley Rd ind estate / Stephenson Rd

DATE: 26/05/2011

| TIME         | CAR       | LGV      | C - D<br>HGV | PSV      | MCL      | TOT       | CAR        | LGV      | D - C<br>HGV | PSV      | MCL      | TOT        |
|--------------|-----------|----------|--------------|----------|----------|-----------|------------|----------|--------------|----------|----------|------------|
| 07:00        | 1         | 1        | 0            | 0        | 0        | 2         | 3          | 1        | 0            | 0        | 0        | 4          |
| 07:15        | 1         | 1        | 0            | 0        | 0        | 2         | 3          | 0        | 0            | 0        | 0        | 3          |
| 07:30        | 1         | 0        | 0            | 0        | 0        | 1         | 14         | 2        | 0            | 0        | 0        | 16         |
| 07:45        | 0         | 0        | 0            | 0        | 0        | 0         | 13         | 1        | 0            | 0        | 0        | 14         |
| <b>H/TOT</b> | <b>3</b>  | <b>2</b> | <b>0</b>     | <b>0</b> | <b>0</b> | <b>5</b>  | <b>33</b>  | <b>4</b> | <b>0</b>     | <b>0</b> | <b>0</b> | <b>37</b>  |
| 08:00        | 2         | 0        | 0            | 0        | 0        | 2         | 17         | 1        | 0            | 0        | 0        | 18         |
| 08:15        | 4         | 0        | 0            | 0        | 0        | 4         | 9          | 0        | 0            | 0        | 0        | 9          |
| 08:30        | 2         | 0        | 0            | 0        | 0        | 2         | 23         | 1        | 0            | 0        | 0        | 24         |
| 08:45        | 2         | 2        | 0            | 0        | 0        | 4         | 10         | 0        | 0            | 0        | 0        | 10         |
| <b>H/TOT</b> | <b>10</b> | <b>2</b> | <b>0</b>     | <b>0</b> | <b>0</b> | <b>12</b> | <b>59</b>  | <b>2</b> | <b>0</b>     | <b>0</b> | <b>0</b> | <b>61</b>  |
| 09:00        | 4         | 1        | 0            | 0        | 0        | 5         | 8          | 2        | 0            | 0        | 0        | 10         |
| 09:15        | 1         | 0        | 0            | 0        | 0        | 1         | 7          | 1        | 0            | 0        | 0        | 8          |
| <b>H/TOT</b> | <b>5</b>  | <b>1</b> | <b>0</b>     | <b>0</b> | <b>0</b> | <b>6</b>  | <b>15</b>  | <b>3</b> | <b>0</b>     | <b>0</b> | <b>0</b> | <b>18</b>  |
| <b>H/TOT</b> | <b>18</b> | <b>5</b> | <b>0</b>     | <b>0</b> | <b>0</b> | <b>23</b> | <b>107</b> | <b>9</b> | <b>0</b>     | <b>0</b> | <b>0</b> | <b>116</b> |

| TIME         | CAR        | LGV      | C - D<br>HGV | PSV      | MCL      | TOT        | CAR       | LGV      | D - C<br>HGV | PSV      | MCL      | TOT       |
|--------------|------------|----------|--------------|----------|----------|------------|-----------|----------|--------------|----------|----------|-----------|
| 16:00        | 6          | 1        | 0            | 0        | 0        | 7          | 6         | 0        | 0            | 1        | 0        | 7         |
| 16:15        | 4          | 0        | 0            | 0        | 0        | 4          | 4         | 1        | 0            | 0        | 0        | 5         |
| 16:30        | 9          | 1        | 1            | 0        | 0        | 11         | 2         | 1        | 0            | 0        | 0        | 3         |
| 16:45        | 11         | 0        | 0            | 0        | 0        | 11         | 8         | 0        | 0            | 0        | 0        | 8         |
| <b>H/TOT</b> | <b>30</b>  | <b>2</b> | <b>1</b>     | <b>0</b> | <b>0</b> | <b>33</b>  | <b>20</b> | <b>2</b> | <b>0</b>     | <b>1</b> | <b>0</b> | <b>23</b> |
| 17:00        | 13         | 1        | 0            | 0        | 0        | 14         | 2         | 1        | 0            | 0        | 0        | 3         |
| 17:15        | 18         | 1        | 0            | 0        | 0        | 19         | 4         | 1        | 0            | 0        | 0        | 5         |
| 17:30        | 13         | 2        | 0            | 0        | 0        | 15         | 9         | 0        | 0            | 0        | 0        | 9         |
| 17:45        | 16         | 1        | 0            | 0        | 0        | 17         | 5         | 0        | 1            | 0        | 0        | 6         |
| <b>H/TOT</b> | <b>60</b>  | <b>5</b> | <b>0</b>     | <b>0</b> | <b>0</b> | <b>65</b>  | <b>20</b> | <b>2</b> | <b>1</b>     | <b>0</b> | <b>0</b> | <b>23</b> |
| 18:00        | 12         | 0        | 0            | 0        | 0        | 12         | 8         | 0        | 0            | 0        | 0        | 8         |
| 18:15        | 5          | 0        | 0            | 0        | 0        | 5          | 4         | 0        | 0            | 0        | 0        | 4         |
| <b>H/TOT</b> | <b>17</b>  | <b>0</b> | <b>0</b>     | <b>0</b> | <b>0</b> | <b>17</b>  | <b>12</b> | <b>0</b> | <b>0</b>     | <b>0</b> | <b>0</b> | <b>12</b> |
| <b>P/TOT</b> | <b>107</b> | <b>7</b> | <b>1</b>     | <b>0</b> | <b>0</b> | <b>115</b> | <b>52</b> | <b>4</b> | <b>1</b>     | <b>1</b> | <b>0</b> | <b>58</b> |

SITE: 1

DAY: Thursday

LOCATION: Gatherley Rd/Gatherley Rd ind estate / Stephenson Rd

DATE: 26/05/2011

| TIME         | CAR | LGV | D - B<br>HGV | PSV | MCL | TOT | CAR | LGV | D - A<br>HGV | PSV | MCL | TOT |
|--------------|-----|-----|--------------|-----|-----|-----|-----|-----|--------------|-----|-----|-----|
| 07:00        | 0   | 0   | 0            | 0   | 0   | 0   | 4   | 0   | 0            | 0   | 0   | 4   |
| 07:15        | 0   | 0   | 0            | 0   | 0   | 0   | 3   | 0   | 0            | 0   | 0   | 3   |
| 07:30        | 0   | 0   | 0            | 0   | 0   | 0   | 5   | 0   | 0            | 0   | 0   | 5   |
| 07:45        | 0   | 0   | 0            | 0   | 0   | 0   | 3   | 0   | 0            | 0   | 0   | 3   |
| <b>H/TOT</b> | 0   | 0   | 0            | 0   | 0   | 0   | 15  | 0   | 0            | 0   | 0   | 15  |
| 08:00        | 0   | 0   | 0            | 0   | 0   | 0   | 3   | 1   | 0            | 0   | 0   | 4   |
| 08:15        | 0   | 0   | 0            | 0   | 0   | 0   | 5   | 0   | 0            | 0   | 0   | 5   |
| 08:30        | 0   | 0   | 0            | 0   | 0   | 0   | 6   | 0   | 0            | 1   | 0   | 7   |
| 08:45        | 0   | 1   | 0            | 0   | 0   | 1   | 4   | 0   | 0            | 0   | 0   | 4   |
| <b>H/TOT</b> | 0   | 1   | 0            | 0   | 0   | 1   | 18  | 1   | 0            | 1   | 0   | 20  |
| 09:00        | 0   | 0   | 0            | 0   | 0   | 0   | 3   | 1   | 0            | 0   | 0   | 4   |
| 09:15        | 0   | 0   | 0            | 0   | 0   | 0   | 6   | 0   | 0            | 0   | 0   | 6   |
| <b>H/TOT</b> | 0   | 0   | 0            | 0   | 0   | 0   | 9   | 1   | 0            | 0   | 0   | 10  |
| <b>H/TOT</b> | 0   | 1   | 0            | 0   | 0   | 1   | 42  | 2   | 0            | 1   | 0   | 45  |

| TIME         | CAR | LGV | D - B<br>HGV | PSV | MCL | TOT | CAR | LGV | D - A<br>HGV | PSV | MCL | TOT |
|--------------|-----|-----|--------------|-----|-----|-----|-----|-----|--------------|-----|-----|-----|
| 16:00        | 0   | 0   | 0            | 0   | 0   | 0   | 0   | 0   | 0            | 0   | 0   | 0   |
| 16:15        | 0   | 0   | 0            | 0   | 0   | 0   | 4   | 0   | 0            | 0   | 0   | 4   |
| 16:30        | 0   | 0   | 0            | 0   | 0   | 0   | 1   | 0   | 0            | 0   | 0   | 1   |
| 16:45        | 0   | 0   | 0            | 0   | 0   | 0   | 1   | 0   | 0            | 0   | 0   | 1   |
| <b>H/TOT</b> | 0   | 0   | 0            | 0   | 0   | 0   | 6   | 0   | 0            | 0   | 0   | 6   |
| 17:00        | 0   | 0   | 0            | 0   | 0   | 0   | 1   | 0   | 0            | 0   | 0   | 1   |
| 17:15        | 0   | 0   | 0            | 0   | 0   | 0   | 1   | 0   | 0            | 0   | 0   | 1   |
| 17:30        | 0   | 0   | 0            | 0   | 0   | 0   | 2   | 0   | 0            | 0   | 0   | 2   |
| 17:45        | 0   | 0   | 0            | 0   | 0   | 0   | 2   | 0   | 0            | 0   | 0   | 2   |
| <b>H/TOT</b> | 0   | 0   | 0            | 0   | 0   | 0   | 6   | 0   | 0            | 0   | 0   | 6   |
| 18:00        | 0   | 0   | 0            | 0   | 0   | 0   | 0   | 0   | 0            | 0   | 0   | 0   |
| 18:15        | 0   | 0   | 0            | 0   | 0   | 0   | 2   | 0   | 0            | 0   | 0   | 2   |
| <b>H/TOT</b> | 0   | 0   | 0            | 0   | 0   | 0   | 2   | 0   | 0            | 0   | 0   | 2   |
| <b>P/TOT</b> | 0   | 0   | 0            | 0   | 0   | 0   | 14  | 0   | 0            | 0   | 0   | 14  |

SITE: 1

DAY: Thursday

LOCATION: Gatherley Rd/Gatherley Rd ind estate / Stephenson Rd

DATE: 26/05/2011

| TIME         | TO ARM A   |           |            |           |          | TOT        | FROM ARM A |            |            |          |          | TOT        |
|--------------|------------|-----------|------------|-----------|----------|------------|------------|------------|------------|----------|----------|------------|
|              | CAR        | LGV       | HGV        | PSV       | MCL      |            | CAR        | LGV        | HGV        | PSV      | MCL      |            |
| 07:00        | 38         | 8         | 8          | 1         | 0        | 55         | 62         | 14         | 10         | 0        | 1        | 87         |
| 07:15        | 43         | 5         | 15         | 1         | 0        | 64         | 88         | 18         | 14         | 1        | 0        | 121        |
| 07:30        | 66         | 6         | 14         | 0         | 0        | 86         | 87         | 18         | 8          | 0        | 3        | 116        |
| 07:45        | 76         | 12        | 6          | 3         | 1        | 98         | 86         | 17         | 9          | 1        | 0        | 113        |
| <b>H/TOT</b> | <b>223</b> | <b>31</b> | <b>43</b>  | <b>5</b>  | <b>1</b> | <b>303</b> | <b>323</b> | <b>67</b>  | <b>41</b>  | <b>2</b> | <b>4</b> | <b>437</b> |
| 08:00        | 69         | 8         | 10         | 1         | 1        | 89         | 72         | 9          | 12         | 1        | 0        | 94         |
| 08:15        | 69         | 10        | 7          | 3         | 1        | 90         | 59         | 12         | 12         | 1        | 0        | 84         |
| 08:30        | 74         | 9         | 11         | 1         | 0        | 95         | 83         | 17         | 10         | 1        | 1        | 112        |
| 08:45        | 77         | 11        | 11         | 1         | 0        | 100        | 78         | 7          | 16         | 3        | 0        | 104        |
| <b>H/TOT</b> | <b>289</b> | <b>38</b> | <b>39</b>  | <b>6</b>  | <b>2</b> | <b>374</b> | <b>292</b> | <b>45</b>  | <b>50</b>  | <b>6</b> | <b>1</b> | <b>394</b> |
| 09:00        | 57         | 9         | 17         | 0         | 0        | 83         | 42         | 10         | 5          | 0        | 0        | 57         |
| 09:15        | 60         | 13        | 10         | 0         | 0        | 83         | 51         | 9          | 7          | 1        | 0        | 68         |
| <b>H/TOT</b> | <b>117</b> | <b>22</b> | <b>27</b>  | <b>0</b>  | <b>0</b> | <b>166</b> | <b>93</b>  | <b>19</b>  | <b>12</b>  | <b>1</b> | <b>0</b> | <b>125</b> |
| <b>H/TOT</b> | <b>629</b> | <b>91</b> | <b>109</b> | <b>11</b> | <b>3</b> | <b>843</b> | <b>708</b> | <b>131</b> | <b>103</b> | <b>9</b> | <b>5</b> | <b>956</b> |

| TIME         | TO ARM A   |            |           |          |          | TOT         | FROM ARM A |           |           |          |          | TOT        |
|--------------|------------|------------|-----------|----------|----------|-------------|------------|-----------|-----------|----------|----------|------------|
|              | CAR        | LGV        | HGV       | PSV      | MCL      |             | CAR        | LGV       | HGV       | PSV      | MCL      |            |
| 16:00        | 89         | 16         | 7         | 1        | 1        | 114         | 63         | 7         | 13        | 3        | 0        | 86         |
| 16:15        | 93         | 15         | 11        | 1        | 1        | 121         | 83         | 15        | 12        | 4        | 0        | 114        |
| 16:30        | 114        | 14         | 10        | 0        | 0        | 138         | 54         | 8         | 10        | 0        | 0        | 72         |
| 16:45        | 99         | 15         | 3         | 0        | 1        | 118         | 82         | 12        | 2         | 1        | 0        | 97         |
| <b>H/TOT</b> | <b>395</b> | <b>60</b>  | <b>31</b> | <b>2</b> | <b>3</b> | <b>491</b>  | <b>282</b> | <b>42</b> | <b>37</b> | <b>8</b> | <b>0</b> | <b>369</b> |
| 17:00        | 144        | 14         | 8         | 0        | 1        | 167         | 83         | 9         | 8         | 0        | 0        | 100        |
| 17:15        | 91         | 8          | 6         | 0        | 1        | 106         | 79         | 12        | 8         | 0        | 0        | 99         |
| 17:30        | 91         | 4          | 1         | 0        | 0        | 96          | 91         | 3         | 4         | 1        | 0        | 99         |
| 17:45        | 75         | 6          | 1         | 1        | 2        | 85          | 83         | 7         | 11        | 0        | 2        | 103        |
| <b>H/TOT</b> | <b>401</b> | <b>32</b>  | <b>16</b> | <b>1</b> | <b>4</b> | <b>454</b>  | <b>336</b> | <b>31</b> | <b>31</b> | <b>1</b> | <b>2</b> | <b>401</b> |
| 18:00        | 70         | 7          | 8         | 2        | 0        | 87          | 61         | 3         | 4         | 0        | 0        | 0          |
| 18:15        | 56         | 4          | 3         | 0        | 0        | 63          | 66         | 1         | 4         | 0        | 0        | 0          |
| <b>H/TOT</b> | <b>126</b> | <b>11</b>  | <b>11</b> | <b>2</b> | <b>0</b> | <b>150</b>  | <b>127</b> | <b>4</b>  | <b>8</b>  | <b>0</b> | <b>0</b> | <b>139</b> |
| <b>P/TOT</b> | <b>922</b> | <b>103</b> | <b>58</b> | <b>5</b> | <b>7</b> | <b>1095</b> | <b>745</b> | <b>77</b> | <b>76</b> | <b>9</b> | <b>2</b> | <b>909</b> |

SITE: 1

DAY: Thursday

LOCATION: Gatherley Rd/Gatherley Rd ind estate / Stephenson Rd

DATE: 26/05/2011

| TIME         | TO ARM B   |           |           |          |          | TOT        | FROM ARM B |           |           |          |          | TOT       |
|--------------|------------|-----------|-----------|----------|----------|------------|------------|-----------|-----------|----------|----------|-----------|
|              | CAR        | LGV       | HGV       | PSV      | MCL      |            | CAR        | LGV       | HGV       | PSV      | MCL      |           |
| 07:00        | 11         | 2         | 0         | 0        | 0        | 13         | 0          | 0         | 2         | 0        | 0        | 2         |
| 07:15        | 27         | 4         | 7         | 0        | 0        | 38         | 4          | 0         | 2         | 0        | 0        | 6         |
| 07:30        | 18         | 2         | 1         | 0        | 0        | 21         | 2          | 2         | 7         | 0        | 0        | 11        |
| 07:45        | 13         | 3         | 6         | 0        | 0        | 22         | 2          | 7         | 6         | 0        | 0        | 15        |
| <b>H/TOT</b> | <b>69</b>  | <b>11</b> | <b>14</b> | <b>0</b> | <b>0</b> | <b>94</b>  | <b>8</b>   | <b>9</b>  | <b>17</b> | <b>0</b> | <b>0</b> | <b>34</b> |
| 08:00        | 11         | 4         | 2         | 0        | 0        | 17         | 1          | 2         | 6         | 0        | 0        | 9         |
| 08:15        | 18         | 5         | 4         | 0        | 0        | 27         | 4          | 3         | 1         | 0        | 0        | 8         |
| 08:30        | 32         | 4         | 1         | 0        | 0        | 37         | 0          | 3         | 5         | 0        | 0        | 8         |
| 08:45        | 14         | 5         | 3         | 0        | 0        | 22         | 3          | 5         | 4         | 0        | 0        | 12        |
| <b>H/TOT</b> | <b>75</b>  | <b>18</b> | <b>10</b> | <b>0</b> | <b>0</b> | <b>103</b> | <b>8</b>   | <b>13</b> | <b>16</b> | <b>0</b> | <b>0</b> | <b>37</b> |
| 09:00        | 2          | 3         | 2         | 0        | 0        | 7          | 4          | 5         | 1         | 0        | 0        | 10        |
| 09:15        | 6          | 3         | 3         | 0        | 0        | 12         | 2          | 3         | 5         | 0        | 0        | 10        |
| <b>H/TOT</b> | <b>8</b>   | <b>6</b>  | <b>5</b>  | <b>0</b> | <b>0</b> | <b>19</b>  | <b>6</b>   | <b>8</b>  | <b>6</b>  | <b>0</b> | <b>0</b> | <b>20</b> |
| <b>H/TOT</b> | <b>152</b> | <b>35</b> | <b>29</b> | <b>0</b> | <b>0</b> | <b>216</b> | <b>22</b>  | <b>30</b> | <b>39</b> | <b>0</b> | <b>0</b> | <b>91</b> |

| TIME         | TO ARM B  |           |           |          |          | TOT       | FROM ARM B |           |           |          |          | TOT        |
|--------------|-----------|-----------|-----------|----------|----------|-----------|------------|-----------|-----------|----------|----------|------------|
|              | CAR       | LGV       | HGV       | PSV      | MCL      |           | CAR        | LGV       | HGV       | PSV      | MCL      |            |
| 16:00        | 10        | 2         | 5         | 0        | 0        | 17        | 26         | 5         | 0         | 0        | 0        | 31         |
| 16:15        | 5         | 4         | 3         | 0        | 0        | 12        | 22         | 5         | 4         | 0        | 0        | 31         |
| 16:30        | 4         | 2         | 7         | 0        | 0        | 13        | 15         | 2         | 1         | 0        | 0        | 18         |
| 16:45        | 2         | 1         | 1         | 0        | 0        | 4         | 11         | 0         | 1         | 0        | 0        | 12         |
| <b>H/TOT</b> | <b>21</b> | <b>9</b>  | <b>16</b> | <b>0</b> | <b>0</b> | <b>46</b> | <b>74</b>  | <b>12</b> | <b>6</b>  | <b>0</b> | <b>0</b> | <b>92</b>  |
| 17:00        | 4         | 1         | 0         | 0        | 0        | 5         | 47         | 3         | 0         | 0        | 0        | 50         |
| 17:15        | 1         | 0         | 4         | 0        | 0        | 5         | 16         | 0         | 1         | 0        | 0        | 17         |
| 17:30        | 4         | 2         | 2         | 0        | 0        | 8         | 19         | 3         | 1         | 0        | 0        | 23         |
| 17:45        | 1         | 0         | 8         | 0        | 0        | 9         | 8          | 1         | 0         | 0        | 0        | 9          |
| <b>H/TOT</b> | <b>10</b> | <b>3</b>  | <b>14</b> | <b>0</b> | <b>0</b> | <b>27</b> | <b>90</b>  | <b>7</b>  | <b>2</b>  | <b>0</b> | <b>0</b> | <b>99</b>  |
| 18:00        | 3         | 0         | 0         | 0        | 0        | 3         | 12         | 3         | 2         | 0        | 0        | 17         |
| 18:15        | 0         | 0         | 2         | 0        | 0        | 2         | 4          | 0         | 1         | 0        | 0        | 5          |
| <b>H/TOT</b> | <b>3</b>  | <b>0</b>  | <b>2</b>  | <b>0</b> | <b>0</b> | <b>5</b>  | <b>16</b>  | <b>3</b>  | <b>3</b>  | <b>0</b> | <b>0</b> | <b>22</b>  |
| <b>P/TOT</b> | <b>34</b> | <b>12</b> | <b>32</b> | <b>0</b> | <b>0</b> | <b>78</b> | <b>180</b> | <b>22</b> | <b>11</b> | <b>0</b> | <b>0</b> | <b>213</b> |



SITE: 1

DAY: Thursday

LOCATION: Gatherley Rd/Gatherley Rd ind estate / Stephenson Rd

DATE: 26/05/2011

| TIME         | TO ARM C   |            |            |          |          | TOT         | FROM ARM C |           |            |           |          | TOT        |
|--------------|------------|------------|------------|----------|----------|-------------|------------|-----------|------------|-----------|----------|------------|
|              | CAR        | LGV        | HGV        | PSV      | MCL      |             | CAR        | LGV       | HGV        | PSV       | MCL      |            |
| 07:00        | 59         | 13         | 12         | 0        | 1        | 85          | 41         | 9         | 8          | 1         | 0        | 59         |
| 07:15        | 82         | 16         | 12         | 1        | 0        | 111         | 55         | 8         | 18         | 1         | 0        | 82         |
| 07:30        | 93         | 19         | 11         | 0        | 3        | 126         | 70         | 5         | 11         | 0         | 0        | 86         |
| 07:45        | 92         | 16         | 10         | 1        | 0        | 119         | 79         | 7         | 7          | 3         | 1        | 97         |
| <b>H/TOT</b> | <b>326</b> | <b>64</b>  | <b>45</b>  | <b>2</b> | <b>4</b> | <b>441</b>  | <b>245</b> | <b>29</b> | <b>44</b>  | <b>5</b>  | <b>1</b> | <b>324</b> |
| 08:00        | 87         | 10         | 14         | 1        | 0        | 112         | 77         | 9         | 9          | 1         | 1        | 97         |
| 08:15        | 64         | 11         | 11         | 0        | 0        | 86          | 82         | 11        | 9          | 3         | 1        | 106        |
| 08:30        | 86         | 16         | 13         | 1        | 1        | 117         | 82         | 10        | 10         | 0         | 0        | 102        |
| 08:45        | 84         | 9          | 18         | 3        | 0        | 114         | 83         | 15        | 12         | 1         | 0        | 111        |
| <b>H/TOT</b> | <b>321</b> | <b>46</b>  | <b>56</b>  | <b>5</b> | <b>1</b> | <b>429</b>  | <b>324</b> | <b>45</b> | <b>40</b>  | <b>5</b>  | <b>2</b> | <b>416</b> |
| 09:00        | 50         | 12         | 6          | 0        | 0        | 68          | 57         | 9         | 19         | 0         | 0        | 85         |
| 09:15        | 54         | 11         | 8          | 1        | 0        | 74          | 56         | 14        | 9          | 0         | 0        | 79         |
| <b>H/TOT</b> | <b>104</b> | <b>23</b>  | <b>14</b>  | <b>1</b> | <b>0</b> | <b>142</b>  | <b>113</b> | <b>23</b> | <b>28</b>  | <b>0</b>  | <b>0</b> | <b>164</b> |
| <b>H/TOT</b> | <b>751</b> | <b>133</b> | <b>115</b> | <b>8</b> | <b>5</b> | <b>1012</b> | <b>682</b> | <b>97</b> | <b>112</b> | <b>10</b> | <b>3</b> | <b>904</b> |

| TIME         | TO ARM C   |           |           |          |          | TOT         | FROM ARM C |            |           |          |          | TOT         |
|--------------|------------|-----------|-----------|----------|----------|-------------|------------|------------|-----------|----------|----------|-------------|
|              | CAR        | LGV       | HGV       | PSV      | MCL      |             | CAR        | LGV        | HGV       | PSV      | MCL      |             |
| 16:00        | 69         | 9         | 12        | 3        | 0        | 93          | 81         | 17         | 11        | 1        | 1        | 111         |
| 16:15        | 96         | 17        | 13        | 4        | 0        | 130         | 89         | 15         | 11        | 1        | 1        | 117         |
| 16:30        | 64         | 8         | 8         | 0        | 0        | 80          | 120        | 15         | 15        | 0        | 0        | 150         |
| 16:45        | 94         | 11        | 3         | 1        | 0        | 109         | 106        | 15         | 4         | 0        | 1        | 126         |
| <b>H/TOT</b> | <b>323</b> | <b>45</b> | <b>36</b> | <b>8</b> | <b>0</b> | <b>412</b>  | <b>396</b> | <b>62</b>  | <b>41</b> | <b>2</b> | <b>3</b> | <b>504</b>  |
| 17:00        | 104        | 11        | 8         | 0        | 0        | 123         | 139        | 15         | 8         | 0        | 1        | 163         |
| 17:15        | 93         | 13        | 7         | 0        | 0        | 113         | 104        | 9          | 8         | 0        | 1        | 122         |
| 17:30        | 108        | 5         | 3         | 1        | 0        | 117         | 98         | 7          | 1         | 0        | 0        | 106         |
| 17:45        | 82         | 7         | 7         | 0        | 2        | 98          | 86         | 6          | 4         | 1        | 2        | 99          |
| <b>H/TOT</b> | <b>387</b> | <b>36</b> | <b>25</b> | <b>1</b> | <b>2</b> | <b>451</b>  | <b>427</b> | <b>37</b>  | <b>21</b> | <b>1</b> | <b>4</b> | <b>490</b>  |
| 18:00        | 68         | 4         | 4         | 0        | 0        | 76          | 78         | 5          | 6         | 2        | 0        | 91          |
| 18:15        | 66         | 1         | 3         | 0        | 0        | 70          | 56         | 4          | 3         | 0        | 0        | 63          |
| <b>H/TOT</b> | <b>134</b> | <b>5</b>  | <b>7</b>  | <b>0</b> | <b>0</b> | <b>146</b>  | <b>134</b> | <b>9</b>   | <b>9</b>  | <b>2</b> | <b>0</b> | <b>154</b>  |
| <b>P/TOT</b> | <b>844</b> | <b>86</b> | <b>68</b> | <b>9</b> | <b>2</b> | <b>1009</b> | <b>957</b> | <b>108</b> | <b>71</b> | <b>5</b> | <b>7</b> | <b>1148</b> |

SITE: 1

DAY: Thursday

LOCATION: Gatherley Rd/Gatherley Rd ind estate / Stephenson Rd

DATE: 26/05/2011

| TIME         | TO ARM D  |           |          |          |          | TOT       | FROM ARM D |           |          |          |          | TOT        |
|--------------|-----------|-----------|----------|----------|----------|-----------|------------|-----------|----------|----------|----------|------------|
|              | CAR       | LGV       | HGV      | PSV      | MCL      |           | CAR        | LGV       | HGV      | PSV      | MCL      |            |
| 07:00        | 2         | 1         | 0        | 0        | 0        | 3         | 7          | 1         | 0        | 0        | 0        | 8          |
| 07:15        | 1         | 1         | 0        | 0        | 0        | 2         | 6          | 0         | 0        | 0        | 0        | 6          |
| 07:30        | 1         | 0         | 0        | 0        | 0        | 1         | 19         | 2         | 0        | 0        | 0        | 21         |
| 07:45        | 2         | 1         | 0        | 0        | 0        | 3         | 16         | 1         | 0        | 0        | 0        | 17         |
| <b>H/TOT</b> | <b>6</b>  | <b>3</b>  | <b>0</b> | <b>0</b> | <b>0</b> | <b>9</b>  | <b>48</b>  | <b>4</b>  | <b>0</b> | <b>0</b> | <b>0</b> | <b>52</b>  |
| 08:00        | 3         | 0         | 1        | 0        | 0        | 4         | 20         | 2         | 0        | 0        | 0        | 22         |
| 08:15        | 8         | 0         | 0        | 1        | 0        | 9         | 14         | 0         | 0        | 0        | 0        | 14         |
| 08:30        | 2         | 2         | 0        | 0        | 0        | 4         | 29         | 1         | 0        | 1        | 0        | 31         |
| 08:45        | 3         | 3         | 0        | 0        | 0        | 6         | 14         | 1         | 0        | 0        | 0        | 15         |
| <b>H/TOT</b> | <b>16</b> | <b>5</b>  | <b>1</b> | <b>1</b> | <b>0</b> | <b>23</b> | <b>77</b>  | <b>4</b>  | <b>0</b> | <b>1</b> | <b>0</b> | <b>82</b>  |
| 09:00        | 5         | 3         | 0        | 0        | 0        | 8         | 11         | 3         | 0        | 0        | 0        | 14         |
| 09:15        | 2         | 0         | 0        | 0        | 0        | 2         | 13         | 1         | 0        | 0        | 0        | 14         |
| <b>H/TOT</b> | <b>7</b>  | <b>3</b>  | <b>0</b> | <b>0</b> | <b>0</b> | <b>10</b> | <b>24</b>  | <b>4</b>  | <b>0</b> | <b>0</b> | <b>0</b> | <b>28</b>  |
| <b>H/TOT</b> | <b>29</b> | <b>11</b> | <b>1</b> | <b>1</b> | <b>0</b> | <b>42</b> | <b>149</b> | <b>12</b> | <b>0</b> | <b>1</b> | <b>0</b> | <b>162</b> |

| TIME         | TO ARM D   |           |          |          |          | TOT        | FROM ARM D |          |          |          |          | TOT       |
|--------------|------------|-----------|----------|----------|----------|------------|------------|----------|----------|----------|----------|-----------|
|              | CAR        | LGV       | HGV      | PSV      | MCL      |            | CAR        | LGV      | HGV      | PSV      | MCL      |           |
| 16:00        | 8          | 2         | 0        | 1        | 0        | 11         | 6          | 0        | 0        | 1        | 0        | 7         |
| 16:15        | 8          | 0         | 0        | 0        | 0        | 8          | 8          | 1        | 0        | 0        | 0        | 9         |
| 16:30        | 10         | 2         | 1        | 0        | 0        | 13         | 3          | 1        | 0        | 0        | 0        | 4         |
| 16:45        | 13         | 0         | 0        | 0        | 0        | 13         | 9          | 0        | 0        | 0        | 0        | 9         |
| <b>H/TOT</b> | <b>39</b>  | <b>4</b>  | <b>1</b> | <b>1</b> | <b>0</b> | <b>45</b>  | <b>26</b>  | <b>2</b> | <b>0</b> | <b>1</b> | <b>0</b> | <b>29</b> |
| 17:00        | 20         | 2         | 0        | 0        | 0        | 22         | 3          | 1        | 0        | 0        | 0        | 4         |
| 17:15        | 19         | 1         | 0        | 0        | 0        | 20         | 5          | 1        | 0        | 0        | 0        | 6         |
| 17:30        | 16         | 2         | 0        | 0        | 0        | 18         | 11         | 0        | 0        | 0        | 0        | 11        |
| 17:45        | 26         | 1         | 0        | 0        | 0        | 27         | 7          | 0        | 1        | 0        | 0        | 8         |
| <b>H/TOT</b> | <b>81</b>  | <b>6</b>  | <b>0</b> | <b>0</b> | <b>0</b> | <b>87</b>  | <b>26</b>  | <b>2</b> | <b>1</b> | <b>0</b> | <b>0</b> | <b>29</b> |
| 18:00        | 18         | 0         | 0        | 0        | 0        | 18         | 8          | 0        | 0        | 0        | 0        | 8         |
| 18:15        | 10         | 0         | 0        | 0        | 0        | 10         | 6          | 0        | 0        | 0        | 0        | 6         |
| <b>H/TOT</b> | <b>28</b>  | <b>0</b>  | <b>0</b> | <b>0</b> | <b>0</b> | <b>28</b>  | <b>14</b>  | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>14</b> |
| <b>P/TOT</b> | <b>148</b> | <b>10</b> | <b>1</b> | <b>1</b> | <b>0</b> | <b>160</b> | <b>66</b>  | <b>4</b> | <b>1</b> | <b>1</b> | <b>0</b> | <b>72</b> |

SITE: 2

DAY: Thursday

LOCATION: A6136 Gatherley road / Citadilla Close

DATE: 26/05/2011

| TIME         | CAR | LGV | A - C<br>HGV | PSV | MCL | TOT | CAR | LGV | A - B<br>HGV | PSV | MCL | TOT  |
|--------------|-----|-----|--------------|-----|-----|-----|-----|-----|--------------|-----|-----|------|
| 07:00        | 0   | 0   | 0            | 0   | 0   | 0   | 55  | 14  | 12           | 0   | 2   | 83   |
| 07:15        | 0   | 0   | 0            | 0   | 0   | 0   | 84  | 16  | 12           | 1   | 0   | 113  |
| 07:30        | 0   | 0   | 0            | 0   | 0   | 0   | 93  | 17  | 12           | 0   | 2   | 124  |
| 07:45        | 0   | 0   | 0            | 0   | 0   | 0   | 87  | 21  | 10           | 1   | 0   | 119  |
| <b>H/TOT</b> | 0   | 0   | 0            | 0   | 0   | 0   | 319 | 68  | 46           | 2   | 4   | 439  |
| 08:00        | 1   | 0   | 0            | 0   | 0   | 1   | 88  | 12  | 12           | 1   | 0   | 113  |
| 08:15        | 0   | 1   | 0            | 0   | 0   | 1   | 65  | 11  | 10           | 0   | 1   | 87   |
| 08:30        | 1   | 0   | 0            | 0   | 0   | 1   | 85  | 17  | 12           | 1   | 1   | 116  |
| 08:45        | 0   | 0   | 0            | 0   | 0   | 0   | 84  | 12  | 17           | 3   | 0   | 116  |
| <b>H/TOT</b> | 2   | 1   | 0            | 0   | 0   | 3   | 322 | 52  | 51           | 5   | 2   | 432  |
| 09:00        | 0   | 0   | 0            | 0   | 0   | 0   | 49  | 11  | 7            | 0   | 0   | 67   |
| 09:15        | 0   | 0   | 0            | 0   | 0   | 0   | 49  | 12  | 7            | 1   | 0   | 69   |
| <b>H/TOT</b> | 0   | 0   | 0            | 0   | 0   | 0   | 98  | 23  | 14           | 1   | 0   | 136  |
| <b>H/TOT</b> | 2   | 1   | 0            | 0   | 0   | 3   | 739 | 143 | 111          | 8   | 6   | 1007 |

| TIME         | CAR | LGV | A - C<br>HGV | PSV | MCL | TOT | CAR | LGV | A - B<br>HGV | PSV | MCL | TOT  |
|--------------|-----|-----|--------------|-----|-----|-----|-----|-----|--------------|-----|-----|------|
| 16:00        | 1   | 0   | 0            | 0   | 0   | 1   | 70  | 8   | 12           | 3   | 0   | 93   |
| 16:15        | 2   | 0   | 0            | 0   | 0   | 2   | 89  | 19  | 13           | 4   | 0   | 125  |
| 16:30        | 1   | 0   | 0            | 0   | 0   | 1   | 66  | 8   | 8            | 0   | 0   | 82   |
| 16:45        | 0   | 0   | 0            | 0   | 0   | 0   | 96  | 11  | 3            | 1   | 0   | 111  |
| <b>H/TOT</b> | 4   | 0   | 0            | 0   | 0   | 4   | 321 | 46  | 36           | 8   | 0   | 411  |
| 17:00        | 2   | 0   | 0            | 0   | 0   | 2   | 98  | 11  | 7            | 0   | 0   | 116  |
| 17:15        | 1   | 0   | 0            | 0   | 0   | 1   | 92  | 15  | 8            | 0   | 0   | 115  |
| 17:30        | 2   | 0   | 0            | 0   | 0   | 2   | 105 | 6   | 3            | 1   | 0   | 115  |
| 17:45        | 0   | 0   | 0            | 0   | 0   | 0   | 83  | 8   | 7            | 0   | 2   | 100  |
| <b>H/TOT</b> | 5   | 0   | 0            | 0   | 0   | 5   | 378 | 40  | 25           | 1   | 2   | 446  |
| 18:00        | 1   | 0   | 0            | 0   | 0   | 1   | 71  | 4   | 4            | 0   | 0   | 79   |
| 18:15        | 0   | 0   | 0            | 0   | 0   | 0   | 65  | 2   | 3            | 0   | 0   | 70   |
| <b>H/TOT</b> | 1   | 0   | 0            | 0   | 0   | 1   | 136 | 6   | 7            | 0   | 0   | 149  |
| <b>P/TOT</b> | 10  | 0   | 0            | 0   | 0   | 10  | 835 | 92  | 68           | 9   | 2   | 1006 |

SITE: 2

DAY: Thursday

LOCATION: A6136 Gatherley road / Citadilla Close

DATE: 26/05/2011

| TIME         | CAR        | LGV        | B - A<br>HGV | PSV       | MCL      | TOT        | CAR       | LGV      | B - C<br>HGV | PSV      | MCL      | TOT       |
|--------------|------------|------------|--------------|-----------|----------|------------|-----------|----------|--------------|----------|----------|-----------|
| 07:00        | 37         | 15         | 10           | 1         | 0        | 63         | 0         | 0        | 0            | 0        | 0        | 0         |
| 07:15        | 50         | 13         | 16           | 1         | 0        | 80         | 2         | 0        | 0            | 0        | 0        | 2         |
| 07:30        | 65         | 9          | 10           | 0         | 0        | 84         | 1         | 0        | 0            | 0        | 0        | 1         |
| 07:45        | 75         | 12         | 7            | 3         | 1        | 98         | 1         | 0        | 0            | 0        | 0        | 1         |
| <b>H/TOT</b> | <b>227</b> | <b>49</b>  | <b>43</b>    | <b>5</b>  | <b>1</b> | <b>325</b> | <b>4</b>  | <b>0</b> | <b>0</b>     | <b>0</b> | <b>0</b> | <b>4</b>  |
| 08:00        | 69         | 11         | 9            | 1         | 1        | 91         | 0         | 0        | 0            | 0        | 0        | 0         |
| 08:15        | 76         | 13         | 9            | 3         | 1        | 102        | 2         | 0        | 0            | 0        | 0        | 2         |
| 08:30        | 82         | 12         | 10           | 0         | 0        | 104        | 1         | 0        | 0            | 0        | 0        | 1         |
| 08:45        | 82         | 14         | 12           | 1         | 0        | 109        | 3         | 0        | 0            | 0        | 0        | 3         |
| <b>H/TOT</b> | <b>309</b> | <b>50</b>  | <b>40</b>    | <b>5</b>  | <b>2</b> | <b>406</b> | <b>6</b>  | <b>0</b> | <b>0</b>     | <b>0</b> | <b>0</b> | <b>6</b>  |
| 09:00        | 53         | 9          | 19           | 0         | 0        | 81         | 2         | 0        | 0            | 0        | 0        | 2         |
| 09:15        | 55         | 16         | 9            | 0         | 0        | 80         | 1         | 0        | 0            | 0        | 0        | 1         |
| <b>H/TOT</b> | <b>108</b> | <b>25</b>  | <b>28</b>    | <b>0</b>  | <b>0</b> | <b>161</b> | <b>3</b>  | <b>0</b> | <b>0</b>     | <b>0</b> | <b>0</b> | <b>3</b>  |
| <b>H/TOT</b> | <b>644</b> | <b>124</b> | <b>111</b>   | <b>10</b> | <b>3</b> | <b>892</b> | <b>13</b> | <b>0</b> | <b>0</b>     | <b>0</b> | <b>0</b> | <b>13</b> |

| TIME         | CAR        | LGV        | B - A<br>HGV | PSV      | MCL      | TOT         | CAR       | LGV      | B - C<br>HGV | PSV      | MCL      | TOT       |
|--------------|------------|------------|--------------|----------|----------|-------------|-----------|----------|--------------|----------|----------|-----------|
| 16:00        | 82         | 16         | 13           | 1        | 1        | 113         | 2         | 0        | 0            | 0        | 0        | 2         |
| 16:15        | 88         | 16         | 11           | 1        | 1        | 117         | 1         | 0        | 0            | 0        | 0        | 1         |
| 16:30        | 119        | 16         | 15           | 0        | 0        | 150         | 1         | 1        | 0            | 0        | 0        | 2         |
| 16:45        | 105        | 16         | 4            | 0        | 1        | 126         | 3         | 0        | 0            | 0        | 0        | 3         |
| <b>H/TOT</b> | <b>394</b> | <b>64</b>  | <b>43</b>    | <b>2</b> | <b>3</b> | <b>506</b>  | <b>7</b>  | <b>1</b> | <b>0</b>     | <b>0</b> | <b>0</b> | <b>8</b>  |
| 17:00        | 138        | 14         | 8            | 0        | 1        | 161         | 6         | 0        | 0            | 0        | 0        | 6         |
| 17:15        | 106        | 9          | 7            | 0        | 1        | 123         | 5         | 0        | 0            | 0        | 0        | 5         |
| 17:30        | 97         | 7          | 1            | 0        | 0        | 105         | 6         | 0        | 0            | 0        | 0        | 6         |
| 17:45        | 85         | 6          | 4            | 1        | 2        | 98          | 3         | 0        | 1            | 0        | 0        | 4         |
| <b>H/TOT</b> | <b>426</b> | <b>36</b>  | <b>20</b>    | <b>1</b> | <b>4</b> | <b>487</b>  | <b>20</b> | <b>0</b> | <b>1</b>     | <b>0</b> | <b>0</b> | <b>21</b> |
| 18:00        | 79         | 6          | 6            | 2        | 0        | 93          | 3         | 0        | 0            | 0        | 0        | 3         |
| 18:15        | 54         | 4          | 3            | 0        | 0        | 61          | 2         | 0        | 0            | 0        | 0        | 2         |
| <b>H/TOT</b> | <b>133</b> | <b>10</b>  | <b>9</b>     | <b>2</b> | <b>0</b> | <b>154</b>  | <b>5</b>  | <b>0</b> | <b>0</b>     | <b>0</b> | <b>0</b> | <b>5</b>  |
| <b>P/TOT</b> | <b>953</b> | <b>110</b> | <b>72</b>    | <b>5</b> | <b>7</b> | <b>1147</b> | <b>32</b> | <b>1</b> | <b>1</b>     | <b>0</b> | <b>0</b> | <b>34</b> |

SITE: 2

DAY: Thursday

LOCATION: A6136 Gatherley road / Citadilla Close

DATE: 26/05/2011

| TIME         | CAR | LGV | C - B<br>HGV | PSV | MCL | TOT | CAR | LGV | C - A<br>HGV | PSV | MCL | TOT |
|--------------|-----|-----|--------------|-----|-----|-----|-----|-----|--------------|-----|-----|-----|
| 07:00        | 0   | 0   | 0            | 0   | 0   | 0   | 0   | 0   | 0            | 0   | 0   | 0   |
| 07:15        | 3   | 1   | 0            | 0   | 0   | 4   | 0   | 0   | 0            | 0   | 0   | 0   |
| 07:30        | 4   | 2   | 0            | 0   | 0   | 6   | 1   | 0   | 1            | 0   | 0   | 2   |
| 07:45        | 2   | 1   | 0            | 0   | 0   | 3   | 2   | 0   | 0            | 0   | 0   | 2   |
| <b>H/TOT</b> | 9   | 4   | 0            | 0   | 0   | 13  | 3   | 0   | 1            | 0   | 0   | 4   |
| 08:00        | 4   | 0   | 0            | 0   | 0   | 4   | 2   | 1   | 0            | 0   | 0   | 3   |
| 08:15        | 1   | 0   | 0            | 0   | 0   | 1   | 0   | 0   | 0            | 0   | 0   | 0   |
| 08:30        | 6   | 0   | 0            | 0   | 0   | 6   | 0   | 0   | 0            | 0   | 0   | 0   |
| 08:45        | 1   | 0   | 0            | 0   | 0   | 1   | 1   | 1   | 0            | 0   | 0   | 2   |
| <b>H/TOT</b> | 12  | 0   | 0            | 0   | 0   | 12  | 3   | 2   | 0            | 0   | 0   | 5   |
| 09:00        | 0   | 0   | 0            | 0   | 0   | 0   | 1   | 0   | 0            | 0   | 0   | 1   |
| 09:15        | 1   | 0   | 0            | 0   | 0   | 1   | 0   | 0   | 0            | 0   | 0   | 0   |
| <b>H/TOT</b> | 1   | 0   | 0            | 0   | 0   | 1   | 1   | 0   | 0            | 0   | 0   | 1   |
| <b>H/TOT</b> | 22  | 4   | 0            | 0   | 0   | 26  | 7   | 2   | 1            | 0   | 0   | 10  |

| TIME         | CAR | LGV | C - B<br>HGV | PSV | MCL | TOT | CAR | LGV | C - A<br>HGV | PSV | MCL | TOT |
|--------------|-----|-----|--------------|-----|-----|-----|-----|-----|--------------|-----|-----|-----|
| 16:00        | 2   | 0   | 0            | 0   | 0   | 2   | 0   | 0   | 0            | 0   | 0   | 0   |
| 16:15        | 2   | 0   | 0            | 0   | 0   | 2   | 1   | 0   | 0            | 0   | 0   | 1   |
| 16:30        | 3   | 0   | 0            | 0   | 0   | 3   | 0   | 1   | 0            | 0   | 0   | 1   |
| 16:45        | 1   | 0   | 0            | 0   | 0   | 1   | 0   | 0   | 0            | 0   | 0   | 0   |
| <b>H/TOT</b> | 8   | 0   | 0            | 0   | 0   | 8   | 1   | 1   | 0            | 0   | 0   | 2   |
| 17:00        | 2   | 0   | 0            | 0   | 0   | 2   | 1   | 0   | 0            | 0   | 0   | 1   |
| 17:15        | 2   | 0   | 0            | 0   | 0   | 2   | 1   | 0   | 0            | 0   | 0   | 1   |
| 17:30        | 2   | 0   | 0            | 0   | 0   | 2   | 0   | 0   | 0            | 0   | 0   | 0   |
| 17:45        | 2   | 0   | 0            | 0   | 0   | 2   | 2   | 0   | 0            | 0   | 0   | 2   |
| <b>H/TOT</b> | 8   | 0   | 0            | 0   | 0   | 8   | 4   | 0   | 0            | 0   | 0   | 4   |
| 18:00        | 3   | 0   | 0            | 0   | 0   | 3   | 0   | 0   | 0            | 0   | 0   | 0   |
| 18:15        | 2   | 1   | 0            | 0   | 0   | 3   | 2   | 0   | 0            | 0   | 0   | 2   |
| <b>H/TOT</b> | 5   | 1   | 0            | 0   | 0   | 6   | 2   | 0   | 0            | 0   | 0   | 2   |
| <b>P/TOT</b> | 21  | 1   | 0            | 0   | 0   | 22  | 7   | 1   | 0            | 0   | 0   | 8   |

SITE: 2

DAY: Thursday

LOCATION: A6136 Gatherley road / Citadilla Close

DATE: 26/05/2011

| TIME         | TO ARM A   |            |            |           |          | TOT        | FROM ARM A |            |            |          |          | TOT         |
|--------------|------------|------------|------------|-----------|----------|------------|------------|------------|------------|----------|----------|-------------|
|              | CAR        | LGV        | HGV        | PSV       | MCL      |            | CAR        | LGV        | HGV        | PSV      | MCL      |             |
| 07:00        | 37         | 15         | 10         | 1         | 0        | 63         | 55         | 14         | 12         | 0        | 2        | 83          |
| 07:15        | 50         | 13         | 16         | 1         | 0        | 80         | 84         | 16         | 12         | 1        | 0        | 113         |
| 07:30        | 66         | 9          | 11         | 0         | 0        | 86         | 93         | 17         | 12         | 0        | 2        | 124         |
| 07:45        | 77         | 12         | 7          | 3         | 1        | 100        | 87         | 21         | 10         | 1        | 0        | 119         |
| <b>H/TOT</b> | <b>230</b> | <b>49</b>  | <b>44</b>  | <b>5</b>  | <b>1</b> | <b>329</b> | <b>319</b> | <b>68</b>  | <b>46</b>  | <b>2</b> | <b>4</b> | <b>439</b>  |
| 08:00        | 71         | 12         | 9          | 1         | 1        | 94         | 89         | 12         | 12         | 1        | 0        | 114         |
| 08:15        | 76         | 13         | 9          | 3         | 1        | 102        | 65         | 12         | 10         | 0        | 1        | 88          |
| 08:30        | 82         | 12         | 10         | 0         | 0        | 104        | 86         | 17         | 12         | 1        | 1        | 117         |
| 08:45        | 83         | 15         | 12         | 1         | 0        | 111        | 84         | 12         | 17         | 3        | 0        | 116         |
| <b>H/TOT</b> | <b>312</b> | <b>52</b>  | <b>40</b>  | <b>5</b>  | <b>2</b> | <b>411</b> | <b>324</b> | <b>53</b>  | <b>51</b>  | <b>5</b> | <b>2</b> | <b>435</b>  |
| 09:00        | 54         | 9          | 19         | 0         | 0        | 82         | 49         | 11         | 7          | 0        | 0        | 67          |
| 09:15        | 55         | 16         | 9          | 0         | 0        | 80         | 49         | 12         | 7          | 1        | 0        | 69          |
| <b>H/TOT</b> | <b>109</b> | <b>25</b>  | <b>28</b>  | <b>0</b>  | <b>0</b> | <b>162</b> | <b>98</b>  | <b>23</b>  | <b>14</b>  | <b>1</b> | <b>0</b> | <b>136</b>  |
| <b>H/TOT</b> | <b>651</b> | <b>126</b> | <b>112</b> | <b>10</b> | <b>3</b> | <b>902</b> | <b>741</b> | <b>144</b> | <b>111</b> | <b>8</b> | <b>6</b> | <b>1010</b> |

| TIME         | TO ARM A   |            |           |          |          | TOT         | FROM ARM A |           |           |          |          | TOT         |
|--------------|------------|------------|-----------|----------|----------|-------------|------------|-----------|-----------|----------|----------|-------------|
|              | CAR        | LGV        | HGV       | PSV      | MCL      |             | CAR        | LGV       | HGV       | PSV      | MCL      |             |
| 16:00        | 82         | 16         | 13        | 1        | 1        | 113         | 71         | 8         | 12        | 3        | 0        | 94          |
| 16:15        | 89         | 16         | 11        | 1        | 1        | 118         | 91         | 19        | 13        | 4        | 0        | 127         |
| 16:30        | 119        | 17         | 15        | 0        | 0        | 151         | 67         | 8         | 8         | 0        | 0        | 83          |
| 16:45        | 105        | 16         | 4         | 0        | 1        | 126         | 96         | 11        | 3         | 1        | 0        | 111         |
| <b>H/TOT</b> | <b>395</b> | <b>65</b>  | <b>43</b> | <b>2</b> | <b>3</b> | <b>508</b>  | <b>325</b> | <b>46</b> | <b>36</b> | <b>8</b> | <b>0</b> | <b>415</b>  |
| 17:00        | 139        | 14         | 8         | 0        | 1        | 162         | 100        | 11        | 7         | 0        | 0        | 118         |
| 17:15        | 107        | 9          | 7         | 0        | 1        | 124         | 93         | 15        | 8         | 0        | 0        | 116         |
| 17:30        | 97         | 7          | 1         | 0        | 0        | 105         | 107        | 6         | 3         | 1        | 0        | 117         |
| 17:45        | 87         | 6          | 4         | 1        | 2        | 100         | 83         | 8         | 7         | 0        | 2        | 100         |
| <b>H/TOT</b> | <b>430</b> | <b>36</b>  | <b>20</b> | <b>1</b> | <b>4</b> | <b>491</b>  | <b>383</b> | <b>40</b> | <b>25</b> | <b>1</b> | <b>2</b> | <b>451</b>  |
| 18:00        | 79         | 6          | 6         | 2        | 0        | 93          | 72         | 4         | 4         | 0        | 0        | 80          |
| 18:15        | 56         | 4          | 3         | 0        | 0        | 63          | 65         | 2         | 3         | 0        | 0        | 70          |
| <b>H/TOT</b> | <b>135</b> | <b>10</b>  | <b>9</b>  | <b>2</b> | <b>0</b> | <b>156</b>  | <b>137</b> | <b>6</b>  | <b>7</b>  | <b>0</b> | <b>0</b> | <b>150</b>  |
| <b>P/TOT</b> | <b>960</b> | <b>111</b> | <b>72</b> | <b>5</b> | <b>7</b> | <b>1155</b> | <b>845</b> | <b>92</b> | <b>68</b> | <b>9</b> | <b>2</b> | <b>1016</b> |

SITE: 2

DAY: Thursday

LOCATION: A6136 Gatherley road / Citadilla Close

DATE: 26/05/2011

| TIME         | TO ARM B   |            |            |          |          | TOT         | FROM ARM B |            |            |           |          | TOT        |
|--------------|------------|------------|------------|----------|----------|-------------|------------|------------|------------|-----------|----------|------------|
|              | CAR        | LGV        | HGV        | PSV      | MCL      |             | CAR        | LGV        | HGV        | PSV       | MCL      |            |
| 07:00        | 55         | 14         | 12         | 0        | 2        | 83          | 37         | 15         | 10         | 1         | 0        | 63         |
| 07:15        | 87         | 17         | 12         | 1        | 0        | 117         | 52         | 13         | 16         | 1         | 0        | 82         |
| 07:30        | 97         | 19         | 12         | 0        | 2        | 130         | 66         | 9          | 10         | 0         | 0        | 85         |
| 07:45        | 89         | 22         | 10         | 1        | 0        | 122         | 76         | 12         | 7          | 3         | 1        | 99         |
| <b>H/TOT</b> | <b>328</b> | <b>72</b>  | <b>46</b>  | <b>2</b> | <b>4</b> | <b>452</b>  | <b>231</b> | <b>49</b>  | <b>43</b>  | <b>5</b>  | <b>1</b> | <b>329</b> |
| 08:00        | 92         | 12         | 12         | 1        | 0        | 117         | 69         | 11         | 9          | 1         | 1        | 91         |
| 08:15        | 66         | 11         | 10         | 0        | 1        | 88          | 78         | 13         | 9          | 3         | 1        | 104        |
| 08:30        | 91         | 17         | 12         | 1        | 1        | 122         | 83         | 12         | 10         | 0         | 0        | 105        |
| 08:45        | 85         | 12         | 17         | 3        | 0        | 117         | 85         | 14         | 12         | 1         | 0        | 112        |
| <b>H/TOT</b> | <b>334</b> | <b>52</b>  | <b>51</b>  | <b>5</b> | <b>2</b> | <b>444</b>  | <b>315</b> | <b>50</b>  | <b>40</b>  | <b>5</b>  | <b>2</b> | <b>412</b> |
| 09:00        | 49         | 11         | 7          | 0        | 0        | 67          | 55         | 9          | 19         | 0         | 0        | 83         |
| 09:15        | 50         | 12         | 7          | 1        | 0        | 70          | 56         | 16         | 9          | 0         | 0        | 81         |
| <b>H/TOT</b> | <b>99</b>  | <b>23</b>  | <b>14</b>  | <b>1</b> | <b>0</b> | <b>137</b>  | <b>111</b> | <b>25</b>  | <b>28</b>  | <b>0</b>  | <b>0</b> | <b>164</b> |
| <b>H/TOT</b> | <b>761</b> | <b>147</b> | <b>111</b> | <b>8</b> | <b>6</b> | <b>1033</b> | <b>657</b> | <b>124</b> | <b>111</b> | <b>10</b> | <b>3</b> | <b>905</b> |

| TIME         | TO ARM B   |           |           |          |          | TOT         | FROM ARM B |            |           |          |          | TOT         |
|--------------|------------|-----------|-----------|----------|----------|-------------|------------|------------|-----------|----------|----------|-------------|
|              | CAR        | LGV       | HGV       | PSV      | MCL      |             | CAR        | LGV        | HGV       | PSV      | MCL      |             |
| 16:00        | 72         | 8         | 12        | 3        | 0        | 95          | 84         | 16         | 13        | 1        | 1        | 115         |
| 16:15        | 91         | 19        | 13        | 4        | 0        | 127         | 89         | 16         | 11        | 1        | 1        | 118         |
| 16:30        | 69         | 8         | 8         | 0        | 0        | 85          | 120        | 17         | 15        | 0        | 0        | 152         |
| 16:45        | 97         | 11        | 3         | 1        | 0        | 112         | 108        | 16         | 4         | 0        | 1        | 129         |
| <b>H/TOT</b> | <b>329</b> | <b>46</b> | <b>36</b> | <b>8</b> | <b>0</b> | <b>419</b>  | <b>401</b> | <b>65</b>  | <b>43</b> | <b>2</b> | <b>3</b> | <b>514</b>  |
| 17:00        | 100        | 11        | 7         | 0        | 0        | 118         | 144        | 14         | 8         | 0        | 1        | 167         |
| 17:15        | 94         | 15        | 8         | 0        | 0        | 117         | 111        | 9          | 7         | 0        | 1        | 128         |
| 17:30        | 107        | 6         | 3         | 1        | 0        | 117         | 103        | 7          | 1         | 0        | 0        | 111         |
| 17:45        | 85         | 8         | 7         | 0        | 2        | 102         | 88         | 6          | 5         | 1        | 2        | 102         |
| <b>H/TOT</b> | <b>386</b> | <b>40</b> | <b>25</b> | <b>1</b> | <b>2</b> | <b>454</b>  | <b>446</b> | <b>36</b>  | <b>21</b> | <b>1</b> | <b>4</b> | <b>508</b>  |
| 18:00        | 74         | 4         | 4         | 0        | 0        | 82          | 82         | 6          | 6         | 2        | 0        | 96          |
| 18:15        | 67         | 3         | 3         | 0        | 0        | 73          | 56         | 4          | 3         | 0        | 0        | 63          |
| <b>H/TOT</b> | <b>141</b> | <b>7</b>  | <b>7</b>  | <b>0</b> | <b>0</b> | <b>155</b>  | <b>138</b> | <b>10</b>  | <b>9</b>  | <b>2</b> | <b>0</b> | <b>159</b>  |
| <b>P/TOT</b> | <b>856</b> | <b>93</b> | <b>68</b> | <b>9</b> | <b>2</b> | <b>1028</b> | <b>985</b> | <b>111</b> | <b>73</b> | <b>5</b> | <b>7</b> | <b>1181</b> |

SITE: 2

DAY: Thursday

LOCATION: A6136 Gatherley road / Citadilla Close

DATE: 26/05/2011

| TIME         | TO ARM C |     |     |     |     | TOT | FROM ARM C |     |     |     |     | TOT |
|--------------|----------|-----|-----|-----|-----|-----|------------|-----|-----|-----|-----|-----|
|              | CAR      | LGV | HGV | PSV | MCL |     | CAR        | LGV | HGV | PSV | MCL |     |
| 07:00        | 0        | 0   | 0   | 0   | 0   | 0   | 0          | 0   | 0   | 0   | 0   | 0   |
| 07:15        | 2        | 0   | 0   | 0   | 0   | 2   | 3          | 1   | 0   | 0   | 0   | 4   |
| 07:30        | 1        | 0   | 0   | 0   | 0   | 1   | 5          | 2   | 1   | 0   | 0   | 8   |
| 07:45        | 1        | 0   | 0   | 0   | 0   | 1   | 4          | 1   | 0   | 0   | 0   | 5   |
| <b>H/TOT</b> | 4        | 0   | 0   | 0   | 0   | 4   | 12         | 4   | 1   | 0   | 0   | 17  |
| 08:00        | 1        | 0   | 0   | 0   | 0   | 1   | 6          | 1   | 0   | 0   | 0   | 7   |
| 08:15        | 2        | 1   | 0   | 0   | 0   | 3   | 1          | 0   | 0   | 0   | 0   | 1   |
| 08:30        | 2        | 0   | 0   | 0   | 0   | 2   | 6          | 0   | 0   | 0   | 0   | 6   |
| 08:45        | 3        | 0   | 0   | 0   | 0   | 3   | 2          | 1   | 0   | 0   | 0   | 3   |
| <b>H/TOT</b> | 8        | 1   | 0   | 0   | 0   | 9   | 15         | 2   | 0   | 0   | 0   | 17  |
| 09:00        | 2        | 0   | 0   | 0   | 0   | 2   | 1          | 0   | 0   | 0   | 0   | 1   |
| 09:15        | 1        | 0   | 0   | 0   | 0   | 1   | 1          | 0   | 0   | 0   | 0   | 1   |
| <b>H/TOT</b> | 3        | 0   | 0   | 0   | 0   | 3   | 2          | 0   | 0   | 0   | 0   | 2   |
| <b>H/TOT</b> | 15       | 1   | 0   | 0   | 0   | 16  | 29         | 6   | 1   | 0   | 0   | 36  |

| TIME         | TO ARM C |     |     |     |     | TOT | FROM ARM C |     |     |     |     | TOT |
|--------------|----------|-----|-----|-----|-----|-----|------------|-----|-----|-----|-----|-----|
|              | CAR      | LGV | HGV | PSV | MCL |     | CAR        | LGV | HGV | PSV | MCL |     |
| 16:00        | 3        | 0   | 0   | 0   | 0   | 3   | 2          | 0   | 0   | 0   | 0   | 2   |
| 16:15        | 3        | 0   | 0   | 0   | 0   | 3   | 3          | 0   | 0   | 0   | 0   | 3   |
| 16:30        | 2        | 1   | 0   | 0   | 0   | 3   | 3          | 1   | 0   | 0   | 0   | 4   |
| 16:45        | 3        | 0   | 0   | 0   | 0   | 3   | 1          | 0   | 0   | 0   | 0   | 1   |
| <b>H/TOT</b> | 11       | 1   | 0   | 0   | 0   | 12  | 9          | 1   | 0   | 0   | 0   | 10  |
| 17:00        | 8        | 0   | 0   | 0   | 0   | 8   | 3          | 0   | 0   | 0   | 0   | 3   |
| 17:15        | 6        | 0   | 0   | 0   | 0   | 6   | 3          | 0   | 0   | 0   | 0   | 3   |
| 17:30        | 8        | 0   | 0   | 0   | 0   | 8   | 2          | 0   | 0   | 0   | 0   | 2   |
| 17:45        | 3        | 0   | 1   | 0   | 0   | 4   | 4          | 0   | 0   | 0   | 0   | 4   |
| <b>H/TOT</b> | 25       | 0   | 1   | 0   | 0   | 26  | 12         | 0   | 0   | 0   | 0   | 12  |
| 18:00        | 4        | 0   | 0   | 0   | 0   | 4   | 3          | 0   | 0   | 0   | 0   | 3   |
| 18:15        | 2        | 0   | 0   | 0   | 0   | 2   | 4          | 1   | 0   | 0   | 0   | 5   |
| <b>H/TOT</b> | 6        | 0   | 0   | 0   | 0   | 6   | 7          | 1   | 0   | 0   | 0   | 8   |
| <b>P/TOT</b> | 42       | 1   | 1   | 0   | 0   | 44  | 28         | 2   | 0   | 0   | 0   | 30  |

## **Appendix E**

TRL LIMITED

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM  
RELEASE 4.0 (SEPT 2008)

ADAPTED FROM PICADY/3 WHICH IS CROWN COPYRIGHT  
BY PERMISSION OF THE CONTROLLER OF HMSO

FOR SALES AND DISTRIBUTION INFORMATION,  
PROGRAM ADVICE AND MAINTENANCE CONTACT:  
TRL SOFTWARE BUREAU  
TEL: CROWTHORNE (01344) 770758, FAX: 770356  
EMAIL: Software@trl.co.uk

THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS  
IN NO WAY RELIEVED OF HIS/HER RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

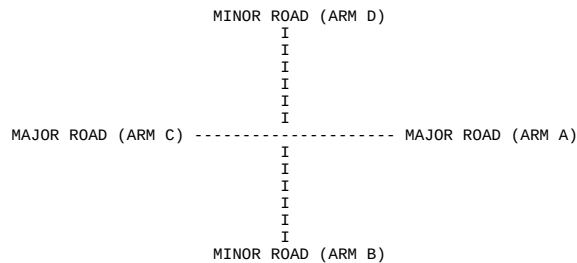
Run with file:-  
"P:\A05022 Adoc Technical Work-DTPC\Analysis\Clitheroe\Appeal Work 260812\PICADY\Milton Ave\  
Milton Av B6478 August 2012.vpi"  
(drive-on-the-left) at 18:39:39 on Friday, 31 August 2012

RUN INFORMATION  
\*\*\*\*\*

RUN TITLE : Run 1  
LOCATION :  
DATE : 09/08/11  
CLIENT :  
ENUMERATOR :  
JOB NUMBER :  
STATUS :  
DESCRIPTION :

MAJOR/MINOR JUNCTION CAPACITY AND DELAY  
\*\*\*\*\*

INPUT DATA  
-----



ARM A IS B6478 Clitheroe  
ARM B IS Milton Avenue  
ARM C IS B6478 Waddington  
ARM D IS Eastham Street

STREAM LABELLING CONVENTION  
-----

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B  
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C  
ETC.

GEOMETRIC DATA

| DATA ITEM                          | MINOR ROAD B    | MINOR ROAD D    |
|------------------------------------|-----------------|-----------------|
| TOTAL MAJOR ROAD CARRIAGEWAY WIDTH | ( W ) 8.30 M.   | ( W ) 8.30 M.   |
| CENTRAL RESERVE WIDTH              | (WCR ) 0.00 M.  | (WCR ) 0.00 M.  |
| MAJOR ROAD RIGHT TURN - WIDTH      | (WC-B) 2.20 M.  | (WA-D) 2.20 M.  |
| - VISIBILITY                       | (VC-B) 66.00 M. | (VA-D) 76.00 M. |
| - BLOCKS TRAFFIC                   | YES             | YES             |
| MINOR ROAD - VISIBILITY TO LEFT    | (VB-C) 12.0 M.  | (VD-A) 13.0 M.  |
| - VISIBILITY TO RIGHT              | (VB-A) 12.0 M.  | (VD-C) 12.0 M.  |
| - LANE 1 WIDTH                     | (WB-C) 4.80 M.  | (WD-A) 4.90 M.  |
| - LANE 2 WIDTH                     | (WB-A) 0.00 M.  | (WD-C) 0.00 M.  |

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

STREAM B-C

| Intercept For | Slope For Opposing | Slope For Opposing |
|---------------|--------------------|--------------------|
| STREAM B-C    | STREAM A-C         | STREAM A-B         |
| 745.29        | 0.26               | 0.10               |

STREAM D-A

| Intercept For | Slope For Opposing | Slope For Opposing |
|---------------|--------------------|--------------------|
| STREAM D-A    | STREAM C-A         | STREAM C-D         |
| 751.61        | 0.26               | 0.10               |

STREAM B-A

| Intercept For | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing |
|---------------|--------------------|--------------------|--------------------|--------------------|
| STREAM B-A    | STREAM A-C         | STREAM A-D         | STREAM D-A         | STREAM D-B         |
| 575.31        | 0.24               | 0.24               | 0.24               | 0.24               |

| Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing |
|--------------------|--------------------|--------------------|--------------------|
| STREAM A-B         | STREAM C-A         | STREAM C-B         | STREAM D-C         |
| 0.09               | 0.15               | 0.34               | 0.12               |

STREAM D-C

| Intercept For | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing |
|---------------|--------------------|--------------------|--------------------|--------------------|
| STREAM D-C    | STREAM C-A         | STREAM C-B         | STREAM B-C         | STREAM B-D         |
| 580.57        | 0.24               | 0.24               | 0.24               | 0.24               |

| Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing |
|--------------------|--------------------|--------------------|--------------------|
| STREAM C-D         | STREAM A-C         | STREAM A-D         | STREAM B-A         |
| 0.10               | 0.15               | 0.34               | 0.12               |

STREAM C-B

| Intercept For | Slope For Opposing | Slope For Opposing |
|---------------|--------------------|--------------------|
| STREAM C-B    | STREAM A-C         | STREAM A-D         |
| 612.18        | 0.21               | 0.30               |

STREAM A-D

| Intercept For | Slope For Opposing | Slope For Opposing |
|---------------|--------------------|--------------------|
| STREAM A-D    | STREAM C-A         | STREAM C-B         |
| 617.98        | 0.21               | 0.31               |

B-D Stream From Left Hand Lane

| Intercept For | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing |
|---------------|--------------------|--------------------|--------------------|--------------------|
| STREAM B-D    | STREAM A-C         | STREAM A-D         | STREAM A-B         | STREAM C-B         |
| 575.31        | 0.24               | 0.24               | 0.09               | 0.34               |

| Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing |
|--------------------|--------------------|--------------------|--------------------|
| STREAM C-A         | STREAM C-D         | STREAM C-B         | STREAM D-C         |
| 0.15               | 0.15               |                    |                    |

B-D Stream From Right Hand Lane

| Intercept For | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing |
|---------------|--------------------|--------------------|--------------------|--------------------|
| STREAM B-D    | STREAM A-C         | STREAM A-D         | STREAM A-B         | STREAM C-B         |
| 575.31        | 0.24               | 0.24               | 0.09               | 0.34               |

| Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing |
|--------------------|--------------------|--------------------|--------------------|
| STREAM C-A         | STREAM C-D         | STREAM C-B         | STREAM D-C         |
|                    |                    |                    |                    |

|   |      |      |   |
|---|------|------|---|
| I | 0.15 | 0.15 | I |
|---|------|------|---|

# D-B Stream From Left Hand Lane

| I Intercept For<br>I STREAM D-B | Slope For<br>STREAM | Opposing<br>C-A | Slope For<br>STREAM | Opposing<br>C-B | Slope For<br>STREAM | Opposing<br>D-C | Slope For<br>STREAM | Opposing<br>A-D | I |
|---------------------------------|---------------------|-----------------|---------------------|-----------------|---------------------|-----------------|---------------------|-----------------|---|
| I 580.57                        |                     | I 0.24          |                     | I 0.24          |                     | I 0.10          |                     | I 0.34          | I |
| I                               | Slope For<br>STREAM | Opposing<br>A-C | Slope For<br>STREAM | Opposing<br>A-B | Slope For<br>STREAM | Opposing        | Slope For<br>STREAM | Opposing        | I |
| I                               |                     | I 0.15          |                     | I 0.15          |                     |                 |                     |                 | I |

# D-B Stream From Right Hand Lane

| I Intercept For<br>I STREAM B-D | Slope For<br>STREAM | Opposing<br>C-A | Slope For<br>STREAM | Opposing<br>C-B | Slope For<br>STREAM | Opposing<br>C-D | Slope For<br>STREAM | Opposing<br>A-D | I |
|---------------------------------|---------------------|-----------------|---------------------|-----------------|---------------------|-----------------|---------------------|-----------------|---|
| I 580.57                        |                     | I 0.24          |                     | I 0.24          |                     | I 0.10          |                     | I 0.34          | I |
| I                               | Slope For<br>STREAM | Opposing<br>A-C | Slope For<br>STREAM | Opposing<br>A-B | Slope For<br>STREAM | Opposing        | Slope For<br>STREAM | Opposing        | I |
| I                               |                     | I 0.15          |                     | I 0.15          |                     |                 |                     |                 | I |

# TRAFFIC DEMAND DATA

| I ARM | I FLOW | SCALE(%) | I |
|-------|--------|----------|---|
| I A   | I 100  |          | I |
| I B   | I 100  |          | I |
| I C   | I 100  |          | I |
| I D   | I 100  |          | I |

Demand set: 2011/2012 Base Flows AM

TIME PERIOD BEGINS 08.00 AND ENDS 09.30

LENGTH OF TIME PERIOD - 90 MIN.  
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

| I ARM   | I | NUMBER OF<br>FLOW STARTS<br>TO RISE | I | MINUTES FROM<br>TOP OF PEAK<br>IS REACHED | I | SLOPE WHEN<br>FLOW STOPS<br>FALLING | I | RATE OF FLOW (VEH/MIN)<br>BEFORE I AT TOP<br>PEAK I OF PEAK I AFTER<br>PEAK I | I |
|---------|---|-------------------------------------|---|-------------------------------------------|---|-------------------------------------|---|-------------------------------------------------------------------------------|---|
| I ARM A | I | I 15.00                             | I | I 45.00                                   | I | I 75.00                             | I | I 2.94 I 4.41 I 2.94                                                          | I |
| I ARM B | I | I 15.00                             | I | I 45.00                                   | I | I 75.00                             | I | I 0.06 I 0.09 I 0.06                                                          | I |
| I ARM C | I | I 15.00                             | I | I 45.00                                   | I | I 75.00                             | I | I 2.60 I 3.90 I 2.60                                                          | I |
| I ARM D | I | I 15.00                             | I | I 45.00                                   | I | I 75.00                             | I | I 1.45 I 2.18 I 1.45                                                          | I |

Demand set: 2011/2012 Base Flows AM

| I | I               | TURNING PROPORTIONS<br>TURNING COUNTS<br>(PERCENTAGE OF H.V.S) | I |
|---|-----------------|----------------------------------------------------------------|---|
| I | TIME            | I FROM/TO I ARM A I ARM B I ARM C I ARM D                      | I |
| I | I 08.00 - 08.15 | I                                                              | I |
| I | I               | I ARM A I 0.000 I 0.013 I 0.528 I 0.460                        | I |
| I | I               | I 0.0 I 3.0 I 124.0 I 108.0                                    | I |
| I | I               | I ( 0.0)I ( 0.0)I ( 6.0)I ( 2.0)                               | I |
| I | I               | I I I I I                                                      | I |
| I | I               | I ARM B I 0.800 I 0.000 I 0.200 I 0.000                        | I |
| I | I               | I 4.0 I 0.0 I 1.0 I 0.0                                        | I |
| I | I               | I ( 0.0)I ( 0.0)I ( 0.0)I ( 0.0)                               | I |
| I | I               | I I I I I                                                      | I |
| I | I               | I ARM C I 0.957 I 0.005 I 0.000 I 0.038                        | I |
| I | I               | I 199.0 I 1.0 I 0.0 I 8.0                                      | I |
| I | I               | I ( 4.0)I ( 0.0)I ( 0.0)I ( 0.0)                               | I |
| I | I               | I I I I I                                                      | I |
| I | I               | I ARM D I 0.974 I 0.000 I 0.026 I 0.000                        | I |
| I | I               | I 113.0 I 0.0 I 3.0 I 0.0                                      | I |
| I | I               | I ( 2.0)I ( 0.0)I ( 0.0)I ( 0.0)                               | I |
| I | I               | I I I I I                                                      | I |

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA  
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

# QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2011/2012 Base Flows AM  
AND FOR TIME PERIOD 1

| I TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I 08.00-08.15 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I B-ACD       | I 0.06              | I 8.68                | I 0.007                      |                                  | I 0.00                   | I 0.01                 | I 0.1                               |                                               | I 0.12                                         | I |
| I A-BCD       | I 1.36              | I 9.52                | I 0.142                      |                                  | I 0.00                   | I 0.17                 | I 2.5                               |                                               | I 0.12                                         | I |
| I D-ABC       | I 1.46              | I 11.49               | I 0.127                      |                                  | I 0.00                   | I 0.14                 | I 2.1                               |                                               | I 0.10                                         | I |
| I C-ABD       | I 0.01              | I 9.42                | I 0.001                      |                                  | I 0.00                   | I 0.00                 | I 0.0                               |                                               | I 0.11                                         | I |

| TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) |
|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|
| 08.15-08.30 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                |
| B-ACD       | 0.07                | 8.40                  | 0.009                        |                                  | 0.01                     | 0.01                   | 0.1                                 |                                               | 0.12                                           |
| A-BCD       | 1.62                | 9.41                  | 0.172                        |                                  | 0.17                     | 0.21                   | 3.2                                 |                                               | 0.13                                           |
| D-ABC       | 1.74                | 11.35                 | 0.153                        |                                  | 0.14                     | 0.18                   | 2.6                                 |                                               | 0.10                                           |
| C-ABD       | 0.01                | 9.27                  | 0.002                        |                                  | 0.00                     | 0.00                   | 0.0                                 |                                               | 0.11                                           |

| TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) |
|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|
| 08.30-08.45 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                |
| B-ACD       | 0.09                | 8.03                  | 0.011                        |                                  | 0.01                     | 0.01                   | 0.2                                 |                                               | 0.13                                           |
| A-BCD       | 1.98                | 9.26                  | 0.214                        |                                  | 0.21                     | 0.28                   | 4.3                                 |                                               | 0.14                                           |
| D-ABC       | 2.13                | 11.15                 | 0.191                        |                                  | 0.18                     | 0.23                   | 3.4                                 |                                               | 0.11                                           |
| C-ABD       | 0.02                | 9.06                  | 0.002                        |                                  | 0.00                     | 0.00                   | 0.0                                 |                                               | 0.11                                           |

| TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) |
|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|
| 08.45-09.00 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                |
| B-ACD       | 0.09                | 8.02                  | 0.011                        |                                  | 0.01                     | 0.01                   | 0.2                                 |                                               | 0.13                                           |
| A-BCD       | 1.98                | 9.26                  | 0.214                        |                                  | 0.28                     | 0.29                   | 4.3                                 |                                               | 0.14                                           |
| D-ABC       | 2.13                | 11.15                 | 0.191                        |                                  | 0.23                     | 0.23                   | 3.5                                 |                                               | 0.11                                           |
| C-ABD       | 0.02                | 9.05                  | 0.002                        |                                  | 0.00                     | 0.00                   | 0.0                                 |                                               | 0.11                                           |

| TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) |
|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|
| 09.00-09.15 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                |
| B-ACD       | 0.07                | 8.40                  | 0.009                        |                                  | 0.01                     | 0.01                   | 0.1                                 |                                               | 0.12                                           |
| A-BCD       | 1.62                | 9.41                  | 0.172                        |                                  | 0.29                     | 0.22                   | 3.3                                 |                                               | 0.13                                           |
| D-ABC       | 1.74                | 11.35                 | 0.153                        |                                  | 0.23                     | 0.18                   | 2.8                                 |                                               | 0.10                                           |
| C-ABD       | 0.01                | 9.26                  | 0.002                        |                                  | 0.00                     | 0.00                   | 0.0                                 |                                               | 0.11                                           |

| TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) |
|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|
| 09.15-09.30 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                |
| B-ACD       | 0.06                | 8.67                  | 0.007                        |                                  | 0.01                     | 0.01                   | 0.1                                 |                                               | 0.12                                           |
| A-BCD       | 1.36                | 9.52                  | 0.142                        |                                  | 0.22                     | 0.17                   | 2.6                                 |                                               | 0.12                                           |
| D-ABC       | 1.46                | 11.49                 | 0.127                        |                                  | 0.18                     | 0.15                   | 2.2                                 |                                               | 0.10                                           |
| C-ABD       | 0.01                | 9.42                  | 0.001                        |                                  | 0.00                     | 0.00                   | 0.0                                 |                                               | 0.11                                           |

\*WARNING\* NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

#### QUEUE FOR STREAM B-ACD

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 08.15                     | 0.0                            |
| 08.30                     | 0.0                            |
| 08.45                     | 0.0                            |
| 09.00                     | 0.0                            |
| 09.15                     | 0.0                            |
| 09.30                     | 0.0                            |

#### QUEUE FOR STREAM A-BCD

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 08.15                     | 0.2                            |
| 08.30                     | 0.2                            |
| 08.45                     | 0.3                            |
| 09.00                     | 0.3                            |
| 09.15                     | 0.2                            |
| 09.30                     | 0.2                            |

#### QUEUE FOR STREAM D-ABC

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 08.15                     | 0.1                            |
| 08.30                     | 0.2                            |
| 08.45                     | 0.2                            |
| 09.00                     | 0.2                            |
| 09.15                     | 0.2                            |
| 09.30                     | 0.1                            |

-----  
QUEUE FOR STREAM C-ABD  
-----

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 08.15                     | 0.0                            |
| 08.30                     | 0.0                            |
| 08.45                     | 0.0                            |
| 09.00                     | 0.0                            |
| 09.15                     | 0.0                            |
| 09.30                     | 0.0                            |

## QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

| I | STREAM | I | TOTAL DEMAND | I       | * QUEUEING<br>* DELAY | I         | * INCLUSIVE QUEUEING<br>* DELAY | I         |
|---|--------|---|--------------|---------|-----------------------|-----------|---------------------------------|-----------|
| I | I      | I | I            | I       | I                     | I         | I                               | I         |
| I | I      | I | (VEH)        | (VEH/H) | (MIN)                 | (MIN/VEH) | (MIN)                           | (MIN/VEH) |
| I | B-ACD  | I | 6.9          | I 4.6   | I 0.8                 | I 0.12    | I 0.8                           | I 0.12    |
| I | A-BCD  | I | 148.7        | I 99.1  | I 20.1                | I 0.14    | I 20.1                          | I 0.14    |
| I | D-ABC  | I | 159.7        | I 106.4 | I 16.7                | I 0.10    | I 16.7                          | I 0.10    |
| I | C-ABD  | I | 1.4          | I 0.9   | I 0.2                 | I 0.11    | I 0.2                           | I 0.11    |
| I | ALL    | I | 776.3        | I 517.5 | I 37.8                | I 0.05    | I 37.8                          | I 0.05    |

\* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD  
 \* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES  
 WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD  
 \* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS  
 A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

\*\*\*\*\*END OF RUN\*\*\*\*\*

## .SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

## STREAM B-C

| I | Intercept For | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|---|
| I | STREAM B-C    | STREAM A-C         | STREAM A-B         | I |
| I | 745.29        | 0.26               | 0.10               | I |

## STREAM D-A

| I | Intercept For | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|---|
| I | STREAM D-A    | STREAM C-A         | STREAM C-D         | I |
| I | 751.61        | 0.26               | 0.10               | I |

## STREAM B-A

| I | Intercept For | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|--------------------|--------------------|---|
| I | STREAM B-A    | STREAM A-C         | STREAM A-D         | STREAM D-A         | STREAM D-B         | I |
| I | 575.31        | 0.24               | 0.24               | 0.24               | 0.24               | I |
| I |               | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing | I |
| I |               | STREAM A-B         | STREAM C-A         | STREAM C-B         | STREAM D-C         | I |
| I |               | 0.09               | 0.15               | 0.34               | 0.12               | I |

## STREAM D-C

| I | Intercept For | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|--------------------|--------------------|---|
| I | STREAM D-C    | STREAM C-A         | STREAM C-B         | STREAM B-C         | STREAM B-D         | I |
| I | 580.57        | 0.24               | 0.24               | 0.24               | 0.24               | I |
| I |               | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing | I |
| I |               | STREAM C-D         | STREAM A-C         | STREAM A-D         | STREAM B-A         | I |
| I |               | 0.10               | 0.15               | 0.34               | 0.12               | I |

## STREAM C-B

| I | Intercept For | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|---|
| I | STREAM C-B    | STREAM A-C         | STREAM A-D         | I |
| I | 612.18        | 0.21               | 0.30               | I |

## STREAM A-D

| I | Intercept For | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|---|
| I | STREAM A-D    | STREAM C-A         | STREAM C-B         | I |
| I | 617.98        | 0.21               | 0.31               | I |

## B-D Stream From Left Hand Lane

| I | Intercept For | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|--------------------|--------------------|---|
| I | STREAM B-D    | STREAM A-C         | STREAM A-D         | STREAM A-B         | STREAM C-B         | I |
| I | 575.31        | 0.24               | 0.24               | 0.09               | 0.34               | I |
| I |               | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing | I |
| I |               | STREAM C-A         | STREAM C-D         |                    |                    | I |
| I |               | 0.15               | 0.15               |                    |                    | I |

## B-D Stream From Right Hand Lane

| I | Intercept For | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|--------------------|--------------------|---|
| I | STREAM B-D    | STREAM A-C         | STREAM A-D         | STREAM A-B         | STREAM C-B         | I |

|   |                                  |      |                                  |                    |                    |   |
|---|----------------------------------|------|----------------------------------|--------------------|--------------------|---|
| I | 575.31                           | 0.24 | 0.24                             | 0.09               | 0.34               | I |
| I | Slope For Opposing<br>STREAM C-A |      | Slope For Opposing<br>STREAM C-D | Slope For Opposing | Slope For Opposing | I |
| I | 0.15                             | 0.15 |                                  |                    |                    | I |

D-B Stream From Left Hand Lane

|   |                                  |                                  |                                  |                                  |                                  |   |
|---|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|---|
| I | Intercept For<br>STREAM D-B      | Slope For Opposing<br>STREAM C-A | Slope For Opposing<br>STREAM C-B | Slope For Opposing<br>STREAM D-C | Slope For Opposing<br>STREAM A-D | I |
| I | 580.57                           | 0.24                             | 0.24                             | 0.10                             | 0.34                             | I |
| I | Slope For Opposing<br>STREAM A-C |                                  | Slope For Opposing<br>STREAM A-B | Slope For Opposing               | Slope For Opposing               | I |
| I | 0.15                             | 0.15                             |                                  |                                  |                                  | I |

D-B Stream From Right Hand Lane

|   |                                  |                                  |                                  |                                  |                                  |   |
|---|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|---|
| I | Intercept For<br>STREAM B-D      | Slope For Opposing<br>STREAM C-A | Slope For Opposing<br>STREAM C-B | Slope For Opposing<br>STREAM C-D | Slope For Opposing<br>STREAM A-D | I |
| I | 580.57                           | 0.24                             | 0.24                             | 0.10                             | 0.34                             | I |
| I | Slope For Opposing<br>STREAM A-C |                                  | Slope For Opposing<br>STREAM A-B | Slope For Opposing               | Slope For Opposing               | I |
| I | 0.15                             | 0.15                             |                                  |                                  |                                  | I |

TRAFFIC DEMAND DATA

|   |     |   |               |   |
|---|-----|---|---------------|---|
| I | ARM | I | FLOW SCALE(%) | I |
| I | A   | I | 100           | I |
| I | B   | I | 100           | I |
| I | C   | I | 100           | I |
| I | D   | I | 100           | I |

Demand set: 2011/2012 Base Flows PM

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.  
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

| I | ARM   | I | NUMBER OF<br>FLOW STARTS<br>TO RISE | I | MINUTES FROM<br>TOP OF PEAK<br>IS REACHED | I | START WHEN<br>FLOW STOPS<br>FALLING | I | RATE OF FLOW (VEH/MIN)<br>BEFORE I AT TOP I AFTER<br>I OF PEAK I PEAK | I |
|---|-------|---|-------------------------------------|---|-------------------------------------------|---|-------------------------------------|---|-----------------------------------------------------------------------|---|
| I | ARM A | I | 15.00                               | I | 45.00                                     | I | 75.00                               | I | 4.94                                                                  | I |
| I | ARM B | I | 15.00                               | I | 45.00                                     | I | 75.00                               | I | 0.09                                                                  | I |
| I | ARM C | I | 15.00                               | I | 45.00                                     | I | 75.00                               | I | 3.00                                                                  | I |
| I | ARM D | I | 15.00                               | I | 45.00                                     | I | 75.00                               | I | 1.19                                                                  | I |

Demand set: 2011/2012 Base Flows PM

| I | TIME          | I | FROM/TO | I | ARM    | A | I      | ARM | B      | I | ARM    | C | I | ARM | D | I |
|---|---------------|---|---------|---|--------|---|--------|-----|--------|---|--------|---|---|-----|---|---|
| I | 16.45 - 17.00 | I | ARM A   | I | 0.000  | I | 0.020  | I   | 0.699  | I | 0.281  | I |   |     |   | I |
| I |               | I |         | I | 0.0    | I | 8.0    | I   | 276.0  | I | 111.0  | I |   |     |   | I |
| I |               | I | ( 0.0)  | I | ( 0.0) | I | ( 0.0) | I   | ( 1.0) | I | ( 0.0) | I |   |     |   | I |
| I |               | I | ARM B   | I | 0.571  | I | 0.000  | I   | 0.429  | I | 0.000  | I |   |     |   | I |
| I |               | I |         | I | 4.0    | I | 0.0    | I   | 3.0    | I | 0.0    | I |   |     |   | I |
| I |               | I | ( 0.0)  | I | ( 0.0) | I | ( 0.0) | I   | ( 0.0) | I | ( 0.0) | I |   |     |   | I |
| I |               | I | ARM C   | I | 0.979  | I | 0.000  | I   | 0.000  | I | 0.021  | I |   |     |   | I |
| I |               | I |         | I | 235.0  | I | 0.0    | I   | 0.0    | I | 5.0    | I |   |     |   | I |
| I |               | I | ( 1.0)  | I | ( 0.0) | I | ( 0.0) | I   | ( 0.0) | I | ( 0.0) | I |   |     |   | I |
| I |               | I | ARM D   | I | 0.895  | I | 0.011  | I   | 0.095  | I | 0.000  | I |   |     |   | I |
| I |               | I |         | I | 85.0   | I | 1.0    | I   | 9.0    | I | 0.0    | I |   |     |   | I |
| I |               | I | ( 0.0)  | I | ( 0.0) | I | ( 0.0) | I   | ( 0.0) | I | ( 0.0) | I |   |     |   | I |

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA  
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2011/2012 Base Flows PM  
AND FOR TIME PERIOD 2

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 16.45-17.00 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.09                | 8.97                  | 0.010                        |                                  | 0.00                     | 0.01                   | 0.1                                 |                                               | 0.11                                           | I |
| I | A-BCD       | 1.39                | 9.64                  | 0.144                        |                                  | 0.00                     | 0.18                   | 2.6                                 |                                               | 0.12                                           | I |
| I | D-ABC       | 1.19                | 11.17                 | 0.107                        |                                  | 0.00                     | 0.12                   | 1.7                                 |                                               | 0.10                                           | I |
| I | C-ABD       | 0.00                | 8.19                  | 0.000                        |                                  | 0.00                     | 0.00                   | 0.0                                 |                                               | 0.00                                           | I |
| I |             |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 17.00-17.15 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.10                | 8.63                  | 0.012                        |                                  | 0.01                     | 0.01                   | 0.2                                 |                                               | 0.12                                           | I |
| I | A-BCD       | 1.66                | 9.52                  | 0.175                        |                                  | 0.18                     | 0.23                   | 3.4                                 |                                               | 0.13                                           | I |
| I | D-ABC       | 1.42                | 10.98                 | 0.130                        |                                  | 0.12                     | 0.15                   | 2.2                                 |                                               | 0.10                                           | I |
| I | C-ABD       | 0.00                | 7.98                  | 0.000                        |                                  | 0.00                     | 0.00                   | 0.0                                 |                                               | 0.00                                           | I |
| I |             |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 17.15-17.30 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.13                | 8.16                  | 0.016                        |                                  | 0.01                     | 0.02                   | 0.2                                 |                                               | 0.12                                           | I |
| I | A-BCD       | 2.04                | 9.34                  | 0.218                        |                                  | 0.23                     | 0.31                   | 4.6                                 |                                               | 0.14                                           | I |
| I | D-ABC       | 1.74                | 10.70                 | 0.163                        |                                  | 0.15                     | 0.19                   | 2.8                                 |                                               | 0.11                                           | I |
| I | C-ABD       | 0.00                | 7.69                  | 0.000                        |                                  | 0.00                     | 0.00                   | 0.0                                 |                                               | 0.00                                           | I |
| I |             |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 17.30-17.45 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.13                | 8.16                  | 0.016                        |                                  | 0.02                     | 0.02                   | 0.2                                 |                                               | 0.12                                           | I |
| I | A-BCD       | 2.04                | 9.34                  | 0.218                        |                                  | 0.31                     | 0.31                   | 4.7                                 |                                               | 0.14                                           | I |
| I | D-ABC       | 1.74                | 10.70                 | 0.163                        |                                  | 0.19                     | 0.19                   | 2.9                                 |                                               | 0.11                                           | I |
| I | C-ABD       | 0.00                | 7.68                  | 0.000                        |                                  | 0.00                     | 0.00                   | 0.0                                 |                                               | 0.00                                           | I |
| I |             |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 17.45-18.00 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.10                | 8.63                  | 0.012                        |                                  | 0.02                     | 0.01                   | 0.2                                 |                                               | 0.12                                           | I |
| I | A-BCD       | 1.66                | 9.52                  | 0.175                        |                                  | 0.31                     | 0.23                   | 3.5                                 |                                               | 0.13                                           | I |
| I | D-ABC       | 1.42                | 10.98                 | 0.130                        |                                  | 0.19                     | 0.15                   | 2.3                                 |                                               | 0.10                                           | I |
| I | C-ABD       | 0.00                | 7.97                  | 0.000                        |                                  | 0.00                     | 0.00                   | 0.0                                 |                                               | 0.00                                           | I |
| I |             |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 18.00-18.15 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.09                | 8.96                  | 0.010                        |                                  | 0.01                     | 0.01                   | 0.2                                 |                                               | 0.11                                           | I |
| I | A-BCD       | 1.39                | 9.64                  | 0.144                        |                                  | 0.23                     | 0.18                   | 2.7                                 |                                               | 0.12                                           | I |
| I | D-ABC       | 1.19                | 11.17                 | 0.107                        |                                  | 0.15                     | 0.12                   | 1.8                                 |                                               | 0.10                                           | I |
| I | C-ABD       | 0.00                | 8.19                  | 0.000                        |                                  | 0.00                     | 0.00                   | 0.0                                 |                                               | 0.00                                           | I |
| I |             |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |

\*WARNING\* NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

#### QUEUE FOR STREAM B-ACD

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 17.00                     | 0.0                            |
| 17.15                     | 0.0                            |
| 17.30                     | 0.0                            |
| 17.45                     | 0.0                            |
| 18.00                     | 0.0                            |
| 18.15                     | 0.0                            |

#### QUEUE FOR STREAM A-BCD

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 17.00                     | 0.2                            |
| 17.15                     | 0.2                            |
| 17.30                     | 0.3                            |
| 17.45                     | 0.3                            |
| 18.00                     | 0.2                            |
| 18.15                     | 0.2                            |

-----  
QUEUE FOR STREAM D-ABC  
-----

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 17.00                     | 0.1                            |
| 17.15                     | 0.1                            |
| 17.30                     | 0.2                            |
| 17.45                     | 0.2                            |
| 18.00                     | 0.2                            |
| 18.15                     | 0.1                            |

-----  
QUEUE FOR STREAM C-ABD  
-----

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 17.00                     | 0.0                            |
| 17.15                     | 0.0                            |
| 17.30                     | 0.0                            |
| 17.45                     | 0.0                            |
| 18.00                     | 0.0                            |
| 18.15                     | 0.0                            |

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

| I | STREAM | I | TOTAL DEMAND | I       | * QUEUEING *<br>* DELAY * | I         | * INCLUSIVE QUEUEING *<br>* DELAY * | I         |      |
|---|--------|---|--------------|---------|---------------------------|-----------|-------------------------------------|-----------|------|
| I | I      | I | I            | I       | I                         | I         | I                                   | I         |      |
| I | I      | I | (VEH)        | (VEH/H) | (MIN)                     | (MIN/VEH) | (MIN)                               | (MIN/VEH) |      |
| I | B-ACD  | I | 9.6          | I       | 6.4                       | I         | 1.1                                 | I         | 0.12 |
| I | A-BCD  | I | 152.8        | I       | 101.9                     | I         | 21.5                                | I         | 0.14 |
| I | D-ABC  | I | 130.8        | I       | 87.2                      | I         | 13.8                                | I         | 0.11 |
| I | C-ABD  | I | 0.0          | I       | 0.0                       | I         | 0.00                                | I         | 0.00 |
| I | ALL    | I | 1014.4       | I       | 676.3                     | I         | 36.4                                | I         | 0.04 |

\* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD  
 \* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES  
 WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD  
 \* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS  
 A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

\*\*\*\*\*END OF RUN\*\*\*\*\*

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

STREAM B-C

| I | Intercept For | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|---|
| I | STREAM B-C    | STREAM A-C         | STREAM A-B         | I |
| I | 745.29        | 0.26               | 0.10               | I |

STREAM D-A

| I | Intercept For | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|---|
| I | STREAM D-A    | STREAM C-A         | STREAM C-D         | I |
| I | 751.61        | 0.26               | 0.10               | I |

STREAM B-A

| I | Intercept For | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|--------------------|--------------------|---|
| I | STREAM B-A    | STREAM A-C         | STREAM A-D         | STREAM D-A         | STREAM D-B         | I |
| I | 575.31        | 0.24               | 0.24               | 0.24               | 0.24               | I |
| I |               | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing | I |
| I |               | STREAM A-B         | STREAM C-A         | STREAM C-B         | STREAM D-C         | I |
| I |               | 0.09               | 0.15               | 0.34               | 0.12               | I |

STREAM D-C

| I | Intercept For | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|--------------------|--------------------|---|
| I | STREAM D-C    | STREAM C-A         | STREAM C-B         | STREAM B-C         | STREAM B-D         | I |
| I | 580.57        | 0.24               | 0.24               | 0.24               | 0.24               | I |
| I |               | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing | I |
| I |               | STREAM C-D         | STREAM A-C         | STREAM A-D         | STREAM B-A         | I |
| I |               | 0.10               | 0.15               | 0.34               | 0.12               | I |

STREAM C-B

| I | Intercept For | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|---|
| I | STREAM C-B    | STREAM A-C         | STREAM A-D         | I |
| I | 612.18        | 0.21               | 0.30               | I |

STREAM A-D

| I | Intercept For | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|---|
| I | STREAM A-D    | STREAM C-A         | STREAM C-B         | I |
| I | 617.98        | 0.21               | 0.31               | I |

B-D Stream From Left Hand Lane

| I | Intercept For | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|--------------------|--------------------|---|
| I | STREAM B-D    | STREAM A-C         | STREAM A-D         | STREAM A-B         | STREAM C-B         | I |
| I | 575.31        | 0.24               | 0.24               | 0.09               | 0.34               | I |
| I |               | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing | I |
| I |               | STREAM C-A         | STREAM C-D         |                    |                    | I |
| I |               | 0.15               | 0.15               |                    |                    | I |

B-D Stream From Right Hand Lane

| I | Intercept For | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|--------------------|--------------------|---|
| I | STREAM B-D    | STREAM A-C         | STREAM A-D         | STREAM A-B         | STREAM C-B         | I |

|   |                                  |      |                                  |                    |                    |   |
|---|----------------------------------|------|----------------------------------|--------------------|--------------------|---|
| I | 575.31                           | 0.24 | 0.24                             | 0.09               | 0.34               | I |
| I | Slope For Opposing<br>STREAM C-A |      | Slope For Opposing<br>STREAM C-D | Slope For Opposing | Slope For Opposing | I |
| I | 0.15                             |      | 0.15                             |                    |                    | I |

D-B Stream From Left Hand Lane

|   |                                  |                                  |                                  |                                  |                                  |   |
|---|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|---|
| I | Intercept For<br>STREAM D-B      | Slope For Opposing<br>STREAM C-A | Slope For Opposing<br>STREAM C-B | Slope For Opposing<br>STREAM D-C | Slope For Opposing<br>STREAM A-D | I |
| I | 580.57                           | 0.24                             | 0.24                             | 0.10                             | 0.34                             | I |
| I | Slope For Opposing<br>STREAM A-C |                                  | Slope For Opposing<br>STREAM A-B | Slope For Opposing               | Slope For Opposing               | I |
| I | 0.15                             |                                  | 0.15                             |                                  |                                  | I |

D-B Stream From Right Hand Lane

|   |                                  |                                  |                                  |                                  |                                  |   |
|---|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|---|
| I | Intercept For<br>STREAM B-D      | Slope For Opposing<br>STREAM C-A | Slope For Opposing<br>STREAM C-B | Slope For Opposing<br>STREAM C-D | Slope For Opposing<br>STREAM A-D | I |
| I | 580.57                           | 0.24                             | 0.24                             | 0.10                             | 0.34                             | I |
| I | Slope For Opposing<br>STREAM A-C |                                  | Slope For Opposing<br>STREAM A-B | Slope For Opposing               | Slope For Opposing               | I |
| I | 0.15                             |                                  | 0.15                             |                                  |                                  | I |

TRAFFIC DEMAND DATA

|   |     |   |               |   |
|---|-----|---|---------------|---|
| I | ARM | I | FLOW SCALE(%) | I |
| I | A   | I | 100           | I |
| I | B   | I | 100           | I |
| I | C   | I | 100           | I |
| I | D   | I | 100           | I |

Demand set: 2011/2012 Base Flows With Dev 50 Dwellings PM

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.  
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

| I | ARM   | I | NUMBER OF<br>FLOW STARTS<br>TO RISE | I | MINUTES FROM<br>TOP OF PEAK<br>IS REACHED | I | START WHEN<br>FLOW STOPS<br>FALLING | I | RATE OF FLOW (VEH/MIN)<br>BEFORE I AT TOP I AFTER<br>PEAK I OF PEAK I PEAK | I |
|---|-------|---|-------------------------------------|---|-------------------------------------------|---|-------------------------------------|---|----------------------------------------------------------------------------|---|
| I | ARM A | I | 15.00                               | I | 45.00                                     | I | 75.00                               | I | 5.21 I 7.82 I 5.21                                                         | I |
| I | ARM B | I | 15.00                               | I | 45.00                                     | I | 75.00                               | I | 0.20 I 0.30 I 0.20                                                         | I |
| I | ARM C | I | 15.00                               | I | 45.00                                     | I | 75.00                               | I | 3.00 I 4.50 I 3.00                                                         | I |
| I | ARM D | I | 15.00                               | I | 45.00                                     | I | 75.00                               | I | 1.19 I 1.78 I 1.19                                                         | I |

Demand set: 2011/2012 Base Flows With Dev 50 Dwellings PM

| I | TIME          | I | FROM/TO | I | ARM    | A | I      | ARM | B      | I | ARM    | C | I | ARM | D | I |
|---|---------------|---|---------|---|--------|---|--------|-----|--------|---|--------|---|---|-----|---|---|
| I | 16.45 - 17.00 | I | ARM A   | I | 0.000  | I | 0.072  | I   | 0.662  | I | 0.266  | I |   |     |   | I |
| I |               | I |         | I | 0.0    | I | 30.0   | I   | 276.0  | I | 111.0  | I |   |     |   | I |
| I |               | I | ( 0.0)  | I | ( 0.0) | I | ( 0.0) | I   | ( 1.0) | I | ( 0.0) | I |   |     |   | I |
| I |               | I | ARM B   | I | 0.500  | I | 0.000  | I   | 0.500  | I | 0.000  | I |   |     |   | I |
| I |               | I |         | I | 8.0    | I | 0.0    | I   | 8.0    | I | 0.0    | I |   |     |   | I |
| I |               | I | ( 0.0)  | I | ( 0.0) | I | ( 0.0) | I   | ( 0.0) | I | ( 0.0) | I |   |     |   | I |
| I |               | I | ARM C   | I | 0.979  | I | 0.000  | I   | 0.000  | I | 0.021  | I |   |     |   | I |
| I |               | I |         | I | 235.0  | I | 0.0    | I   | 0.0    | I | 5.0    | I |   |     |   | I |
| I |               | I | ( 1.0)  | I | ( 0.0) | I | ( 0.0) | I   | ( 0.0) | I | ( 0.0) | I |   |     |   | I |
| I |               | I | ARM D   | I | 0.895  | I | 0.011  | I   | 0.095  | I | 0.000  | I |   |     |   | I |
| I |               | I |         | I | 85.0   | I | 1.0    | I   | 9.0    | I | 0.0    | I |   |     |   | I |
| I |               | I | ( 0.0)  | I | ( 0.0) | I | ( 0.0) | I   | ( 0.0) | I | ( 0.0) | I |   |     |   | I |

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA  
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2011/2012 Base Flows With Dev 50 Dwellings PM  
AND FOR TIME PERIOD 2

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 16.45-17.00 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.20                | 9.19                  | 0.022                        |                                  | 0.00                     | 0.02                   | 0.3                                 |                                               | 0.11                                           | I |
| I | A-BCD       | 1.39                | 9.64                  | 0.144                        |                                  | 0.00                     | 0.18                   | 2.6                                 |                                               | 0.12                                           | I |
| I | D-ABC       | 1.19                | 11.17                 | 0.107                        |                                  | 0.00                     | 0.12                   | 1.7                                 |                                               | 0.10                                           | I |
| I | C-ABD       | 0.00                | 8.14                  | 0.000                        |                                  | 0.00                     | 0.00                   | 0.0                                 |                                               | 0.00                                           | I |
| I |             |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 17.00-17.15 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.24                | 8.86                  | 0.027                        |                                  | 0.02                     | 0.03                   | 0.4                                 |                                               | 0.12                                           | I |
| I | A-BCD       | 1.66                | 9.52                  | 0.175                        |                                  | 0.18                     | 0.23                   | 3.4                                 |                                               | 0.13                                           | I |
| I | D-ABC       | 1.42                | 10.97                 | 0.130                        |                                  | 0.12                     | 0.15                   | 2.2                                 |                                               | 0.10                                           | I |
| I | C-ABD       | 0.00                | 7.91                  | 0.000                        |                                  | 0.00                     | 0.00                   | 0.0                                 |                                               | 0.00                                           | I |
| I |             |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 17.15-17.30 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.29                | 8.40                  | 0.035                        |                                  | 0.03                     | 0.04                   | 0.5                                 |                                               | 0.12                                           | I |
| I | A-BCD       | 2.04                | 9.34                  | 0.218                        |                                  | 0.23                     | 0.31                   | 4.7                                 |                                               | 0.14                                           | I |
| I | D-ABC       | 1.74                | 10.69                 | 0.163                        |                                  | 0.15                     | 0.19                   | 2.8                                 |                                               | 0.11                                           | I |
| I | C-ABD       | 0.00                | 7.61                  | 0.000                        |                                  | 0.00                     | 0.00                   | 0.0                                 |                                               | 0.00                                           | I |
| I |             |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 17.30-17.45 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.29                | 8.40                  | 0.035                        |                                  | 0.04                     | 0.04                   | 0.5                                 |                                               | 0.12                                           | I |
| I | A-BCD       | 2.04                | 9.34                  | 0.218                        |                                  | 0.31                     | 0.31                   | 4.7                                 |                                               | 0.14                                           | I |
| I | D-ABC       | 1.74                | 10.69                 | 0.163                        |                                  | 0.19                     | 0.19                   | 2.9                                 |                                               | 0.11                                           | I |
| I | C-ABD       | 0.00                | 7.61                  | 0.000                        |                                  | 0.00                     | 0.00                   | 0.0                                 |                                               | 0.00                                           | I |
| I |             |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 17.45-18.00 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.24                | 8.86                  | 0.027                        |                                  | 0.04                     | 0.03                   | 0.4                                 |                                               | 0.12                                           | I |
| I | A-BCD       | 1.66                | 9.52                  | 0.175                        |                                  | 0.31                     | 0.23                   | 3.5                                 |                                               | 0.13                                           | I |
| I | D-ABC       | 1.42                | 10.97                 | 0.130                        |                                  | 0.19                     | 0.15                   | 2.3                                 |                                               | 0.10                                           | I |
| I | C-ABD       | 0.00                | 7.91                  | 0.000                        |                                  | 0.00                     | 0.00                   | 0.0                                 |                                               | 0.00                                           | I |
| I |             |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 18.00-18.15 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.20                | 9.19                  | 0.022                        |                                  | 0.03                     | 0.02                   | 0.3                                 |                                               | 0.11                                           | I |
| I | A-BCD       | 1.39                | 9.64                  | 0.144                        |                                  | 0.23                     | 0.18                   | 2.7                                 |                                               | 0.12                                           | I |
| I | D-ABC       | 1.19                | 11.17                 | 0.107                        |                                  | 0.15                     | 0.12                   | 1.8                                 |                                               | 0.10                                           | I |
| I | C-ABD       | 0.00                | 8.13                  | 0.000                        |                                  | 0.00                     | 0.00                   | 0.0                                 |                                               | 0.00                                           | I |
| I |             |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |

\*WARNING\* NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

#### QUEUE FOR STREAM B-ACD

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 17.00                     | 0.0                            |
| 17.15                     | 0.0                            |
| 17.30                     | 0.0                            |
| 17.45                     | 0.0                            |
| 18.00                     | 0.0                            |
| 18.15                     | 0.0                            |

#### QUEUE FOR STREAM A-BCD

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 17.00                     | 0.2                            |
| 17.15                     | 0.2                            |
| 17.30                     | 0.3                            |
| 17.45                     | 0.3                            |
| 18.00                     | 0.2                            |
| 18.15                     | 0.2                            |

-----  
QUEUE FOR STREAM D-ABC  
-----

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 17.00                     | 0.1                            |
| 17.15                     | 0.1                            |
| 17.30                     | 0.2                            |
| 17.45                     | 0.2                            |
| 18.00                     | 0.2                            |
| 18.15                     | 0.1                            |

-----  
QUEUE FOR STREAM C-ABD  
-----

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 17.00                     | 0.0                            |
| 17.15                     | 0.0                            |
| 17.30                     | 0.0                            |
| 17.45                     | 0.0                            |
| 18.00                     | 0.0                            |
| 18.15                     | 0.0                            |

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

| I | STREAM | I | TOTAL DEMAND | I       | * QUEUEING *<br>* DELAY * | I         | * INCLUSIVE QUEUEING *<br>* DELAY * | I         |
|---|--------|---|--------------|---------|---------------------------|-----------|-------------------------------------|-----------|
| I | I      | I | I            | I       | I                         | I         | I                                   | I         |
| I | I      | I | (VEH)        | (VEH/H) | (MIN)                     | (MIN/VEH) | (MIN)                               | (MIN/VEH) |
| I | B-ACD  | I | 22.0         | 14.7    | I                         | 2.6       | I                                   | 0.12      |
| I | A-BCD  | I | 152.8        | 101.9   | I                         | 21.6      | I                                   | 0.14      |
| I | D-ABC  | I | 130.8        | 87.2    | I                         | 13.8      | I                                   | 0.11      |
| I | C-ABD  | I | 0.0          | 0.0     | I                         | 0.0       | I                                   | 0.00      |
| I | ALL    | I | 1057.1       | 704.7   | I                         | 38.0      | I                                   | 0.04      |

\* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD  
 \* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES  
 WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD  
 \* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS  
 A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

\*\*\*\*\*END OF RUN\*\*\*\*\*

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

STREAM B-C

| I | Intercept For | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|---|
| I | STREAM B-C    | STREAM A-C         | STREAM A-B         | I |
| I | 745.29        | 0.26               | 0.10               | I |

STREAM D-A

| I | Intercept For | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|---|
| I | STREAM D-A    | STREAM C-A         | STREAM C-D         | I |
| I | 751.61        | 0.26               | 0.10               | I |

STREAM B-A

| I | Intercept For | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|--------------------|--------------------|---|
| I | STREAM B-A    | STREAM A-C         | STREAM A-D         | STREAM D-A         | STREAM D-B         | I |
| I | 575.31        | 0.24               | 0.24               | 0.24               | 0.24               | I |
| I |               | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing | I |
| I |               | STREAM A-B         | STREAM C-A         | STREAM C-B         | STREAM D-C         | I |
| I |               | 0.09               | 0.15               | 0.34               | 0.12               | I |

STREAM D-C

| I | Intercept For | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|--------------------|--------------------|---|
| I | STREAM D-C    | STREAM C-A         | STREAM C-B         | STREAM B-C         | STREAM B-D         | I |
| I | 580.57        | 0.24               | 0.24               | 0.24               | 0.24               | I |
| I |               | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing | I |
| I |               | STREAM C-D         | STREAM A-C         | STREAM A-D         | STREAM B-A         | I |
| I |               | 0.10               | 0.15               | 0.34               | 0.12               | I |

STREAM C-B

| I | Intercept For | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|---|
| I | STREAM C-B    | STREAM A-C         | STREAM A-D         | I |
| I | 612.18        | 0.21               | 0.30               | I |

STREAM A-D

| I | Intercept For | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|---|
| I | STREAM A-D    | STREAM C-A         | STREAM C-B         | I |
| I | 617.98        | 0.21               | 0.31               | I |

B-D Stream From Left Hand Lane

| I | Intercept For | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|--------------------|--------------------|---|
| I | STREAM B-D    | STREAM A-C         | STREAM A-D         | STREAM A-B         | STREAM C-B         | I |
| I | 575.31        | 0.24               | 0.24               | 0.09               | 0.34               | I |
| I |               | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing | I |
| I |               | STREAM C-A         | STREAM C-D         |                    |                    | I |
| I |               | 0.15               | 0.15               |                    |                    | I |

B-D Stream From Right Hand Lane

| I | Intercept For | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|--------------------|--------------------|---|
| I | STREAM B-D    | STREAM A-C         | STREAM A-D         | STREAM A-B         | STREAM C-B         | I |

|   |                                  |      |                                  |                    |                    |   |
|---|----------------------------------|------|----------------------------------|--------------------|--------------------|---|
| I | 575.31                           | 0.24 | 0.24                             | 0.09               | 0.34               | I |
| I | Slope For Opposing<br>STREAM C-A |      | Slope For Opposing<br>STREAM C-D | Slope For Opposing | Slope For Opposing | I |
| I | 0.15                             | 0.15 |                                  |                    |                    | I |

D-B Stream From Left Hand Lane

|   |                                  |                                  |                                  |                                  |                                  |   |
|---|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|---|
| I | Intercept For<br>STREAM D-B      | Slope For Opposing<br>STREAM C-A | Slope For Opposing<br>STREAM C-B | Slope For Opposing<br>STREAM D-C | Slope For Opposing<br>STREAM A-D | I |
| I | 580.57                           | 0.24                             | 0.24                             | 0.10                             | 0.34                             | I |
| I | Slope For Opposing<br>STREAM A-C |                                  | Slope For Opposing<br>STREAM A-B | Slope For Opposing               | Slope For Opposing               | I |
| I | 0.15                             | 0.15                             |                                  |                                  |                                  | I |

D-B Stream From Right Hand Lane

|   |                                  |                                  |                                  |                                  |                                  |   |
|---|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|---|
| I | Intercept For<br>STREAM B-D      | Slope For Opposing<br>STREAM C-A | Slope For Opposing<br>STREAM C-B | Slope For Opposing<br>STREAM C-D | Slope For Opposing<br>STREAM A-D | I |
| I | 580.57                           | 0.24                             | 0.24                             | 0.10                             | 0.34                             | I |
| I | Slope For Opposing<br>STREAM A-C |                                  | Slope For Opposing<br>STREAM A-B | Slope For Opposing               | Slope For Opposing               | I |
| I | 0.15                             | 0.15                             |                                  |                                  |                                  | I |

TRAFFIC DEMAND DATA

|   |     |   |               |   |
|---|-----|---|---------------|---|
| I | ARM | I | FLOW SCALE(%) | I |
| I | A   | I | 100           | I |
| I | B   | I | 100           | I |
| I | C   | I | 100           | I |
| I | D   | I | 100           | I |

Demand set: 2011/2012 Base Flows With Dev 50 Dwelling AM

TIME PERIOD BEGINS 08.00 AND ENDS 09.30

LENGTH OF TIME PERIOD - 90 MIN.  
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

| I | ARM   | I | NUMBER OF<br>FLOW STARTS<br>TO RISE | I | MINUTES FROM<br>TOP OF PEAK<br>IS REACHED | I | START WHEN<br>FLOW STOPS<br>FALLING | I | RATE OF FLOW (VEH/MIN)<br>BEFORE I AT TOP I AFTER<br>PEAK I OF PEAK I PEAK | I |
|---|-------|---|-------------------------------------|---|-------------------------------------------|---|-------------------------------------|---|----------------------------------------------------------------------------|---|
| I | ARM A | I | 15.00                               | I | 45.00                                     | I | 75.00                               | I | 3.01                                                                       | I |
| I | ARM B | I | 15.00                               | I | 45.00                                     | I | 75.00                               | I | 0.39                                                                       | I |
| I | ARM C | I | 15.00                               | I | 45.00                                     | I | 75.00                               | I | 2.63                                                                       | I |
| I | ARM D | I | 15.00                               | I | 45.00                                     | I | 75.00                               | I | 1.45                                                                       | I |

Demand set: 2011/2012 Base Flows With Dev 50 Dwelling AM

| I | TIME          | I | FROM/TO | I | ARM    | A | I      | ARM | B      | I | ARM    | C | I | ARM | D | I |
|---|---------------|---|---------|---|--------|---|--------|-----|--------|---|--------|---|---|-----|---|---|
| I | 08.00 - 08.15 | I | ARM A   | I | 0.000  | I | 0.037  | I   | 0.515  | I | 0.448  | I |   |     |   | I |
| I |               | I |         | I | 0.0    | I | 9.0    | I   | 124.0  | I | 108.0  | I |   |     |   | I |
| I |               | I | ( 0.0)  | I | ( 0.0) | I | ( 0.0) | I   | ( 6.0) | I | ( 2.0) | I |   |     |   | I |
| I |               | I | ARM B   | I | 0.645  | I | 0.000  | I   | 0.355  | I | 0.000  | I |   |     |   | I |
| I |               | I |         | I | 20.0   | I | 0.0    | I   | 11.0   | I | 0.0    | I |   |     |   | I |
| I |               | I | ( 0.0)  | I | ( 0.0) | I | ( 0.0) | I   | ( 0.0) | I | ( 0.0) | I |   |     |   | I |
| I |               | I | ARM C   | I | 0.948  | I | 0.014  | I   | 0.000  | I | 0.038  | I |   |     |   | I |
| I |               | I |         | I | 199.0  | I | 3.0    | I   | 0.0    | I | 8.0    | I |   |     |   | I |
| I |               | I | ( 4.0)  | I | ( 0.0) | I | ( 0.0) | I   | ( 0.0) | I | ( 0.0) | I |   |     |   | I |
| I |               | I | ARM D   | I | 0.974  | I | 0.000  | I   | 0.026  | I | 0.000  | I |   |     |   | I |
| I |               | I |         | I | 113.0  | I | 0.0    | I   | 3.0    | I | 0.0    | I |   |     |   | I |
| I |               | I | ( 2.0)  | I | ( 0.0) | I | ( 0.0) | I   | ( 0.0) | I | ( 0.0) | I |   |     |   | I |

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA  
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2011/2012 Base Flows With Dev 50 Dwelling AM  
AND FOR TIME PERIOD 1

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 08.00-08.15 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.39                | 9.16                  | 0.042                        |                                  | 0.00                     | 0.04                   | 0.6                                 |                                               | 0.11                                           | I |
| I | A-BCD       | 1.36                | 9.52                  | 0.142                        |                                  | 0.00                     | 0.17                   | 2.5                                 |                                               | 0.12                                           | I |
| I | D-ABC       | 1.46                | 11.48                 | 0.127                        |                                  | 0.00                     | 0.14                   | 2.1                                 |                                               | 0.10                                           | I |
| I | C-ABD       | 0.04                | 9.41                  | 0.004                        |                                  | 0.00                     | 0.00                   | 0.1                                 |                                               | 0.11                                           | I |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 08.15-08.30 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.46                | 8.89                  | 0.052                        |                                  | 0.04                     | 0.05                   | 0.8                                 |                                               | 0.12                                           | I |
| I | A-BCD       | 1.62                | 9.40                  | 0.172                        |                                  | 0.17                     | 0.21                   | 3.2                                 |                                               | 0.13                                           | I |
| I | D-ABC       | 1.74                | 11.34                 | 0.153                        |                                  | 0.14                     | 0.18                   | 2.6                                 |                                               | 0.10                                           | I |
| I | C-ABD       | 0.04                | 9.25                  | 0.005                        |                                  | 0.00                     | 0.00                   | 0.1                                 |                                               | 0.11                                           | I |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 08.30-08.45 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.57                | 8.53                  | 0.067                        |                                  | 0.05                     | 0.07                   | 1.0                                 |                                               | 0.13                                           | I |
| I | A-BCD       | 1.98                | 9.25                  | 0.214                        |                                  | 0.21                     | 0.28                   | 4.3                                 |                                               | 0.14                                           | I |
| I | D-ABC       | 2.13                | 11.15                 | 0.191                        |                                  | 0.18                     | 0.23                   | 3.4                                 |                                               | 0.11                                           | I |
| I | C-ABD       | 0.06                | 9.03                  | 0.006                        |                                  | 0.00                     | 0.01                   | 0.1                                 |                                               | 0.11                                           | I |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 08.45-09.00 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.57                | 8.53                  | 0.067                        |                                  | 0.07                     | 0.07                   | 1.1                                 |                                               | 0.13                                           | I |
| I | A-BCD       | 1.98                | 9.25                  | 0.214                        |                                  | 0.28                     | 0.29                   | 4.3                                 |                                               | 0.14                                           | I |
| I | D-ABC       | 2.13                | 11.15                 | 0.191                        |                                  | 0.23                     | 0.23                   | 3.5                                 |                                               | 0.11                                           | I |
| I | C-ABD       | 0.06                | 9.03                  | 0.006                        |                                  | 0.01                     | 0.01                   | 0.1                                 |                                               | 0.11                                           | I |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 09.00-09.15 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.46                | 8.89                  | 0.052                        |                                  | 0.07                     | 0.06                   | 0.9                                 |                                               | 0.12                                           | I |
| I | A-BCD       | 1.62                | 9.40                  | 0.172                        |                                  | 0.29                     | 0.22                   | 3.3                                 |                                               | 0.13                                           | I |
| I | D-ABC       | 1.74                | 11.34                 | 0.153                        |                                  | 0.23                     | 0.18                   | 2.8                                 |                                               | 0.10                                           | I |
| I | C-ABD       | 0.04                | 9.24                  | 0.005                        |                                  | 0.01                     | 0.00                   | 0.1                                 |                                               | 0.11                                           | I |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 09.15-09.30 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.39                | 9.15                  | 0.043                        |                                  | 0.06                     | 0.04                   | 0.7                                 |                                               | 0.11                                           | I |
| I | A-BCD       | 1.36                | 9.52                  | 0.142                        |                                  | 0.22                     | 0.17                   | 2.6                                 |                                               | 0.12                                           | I |
| I | D-ABC       | 1.46                | 11.48                 | 0.127                        |                                  | 0.18                     | 0.15                   | 2.2                                 |                                               | 0.10                                           | I |
| I | C-ABD       | 0.04                | 9.40                  | 0.004                        |                                  | 0.00                     | 0.00                   | 0.1                                 |                                               | 0.11                                           | I |

\*WARNING\* NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

#### QUEUE FOR STREAM B-ACD

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 08.15                     | 0.0                            |
| 08.30                     | 0.1                            |
| 08.45                     | 0.1                            |
| 09.00                     | 0.1                            |
| 09.15                     | 0.1                            |
| 09.30                     | 0.0                            |

#### QUEUE FOR STREAM A-BCD

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 08.15                     | 0.2                            |
| 08.30                     | 0.2                            |
| 08.45                     | 0.3                            |
| 09.00                     | 0.3                            |
| 09.15                     | 0.2                            |
| 09.30                     | 0.2                            |

-----  
QUEUE FOR STREAM D-ABC  
-----

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 08.15                     | 0.1                            |
| 08.30                     | 0.2                            |
| 08.45                     | 0.2                            |
| 09.00                     | 0.2                            |
| 09.15                     | 0.2                            |
| 09.30                     | 0.1                            |

-----  
QUEUE FOR STREAM C-ABD  
-----

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 08.15                     | 0.0                            |
| 08.30                     | 0.0                            |
| 08.45                     | 0.0                            |
| 09.00                     | 0.0                            |
| 09.15                     | 0.0                            |
| 09.30                     | 0.0                            |

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

| I | STREAM | I | TOTAL DEMAND |         | I     | * QUEUEING *<br>* DELAY * |           | I | * INCLUSIVE QUEUEING *<br>* DELAY * |           | I    |   |
|---|--------|---|--------------|---------|-------|---------------------------|-----------|---|-------------------------------------|-----------|------|---|
| I | I      | I | (VEH)        | (VEH/H) | I     | (MIN)                     | (MIN/VEH) | I | (MIN)                               | (MIN/VEH) | I    |   |
| I | B-ACD  | I | 42.7         | I       | 28.4  | I                         | 5.1       | I | 0.12                                | I         | 0.12 | I |
| I | A-BCD  | I | 148.7        | I       | 99.1  | I                         | 20.1      | I | 0.14                                | I         | 0.14 | I |
| I | D-ABC  | I | 159.7        | I       | 106.4 | I                         | 16.7      | I | 0.10                                | I         | 0.10 | I |
| I | C-ABD  | I | 4.1          | I       | 2.8   | I                         | 0.5       | I | 0.11                                | I         | 0.11 | I |
| I | ALL    | I | 823.1        | I       | 548.7 | I                         | 42.4      | I | 0.05                                | I         | 0.05 | I |

\* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD  
 \* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES  
 WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD  
 \* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS  
 A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

\*\*\*\*\*END OF RUN\*\*\*\*\*

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

STREAM B-C

| I | Intercept For | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|---|
| I | STREAM B-C    | STREAM A-C         | STREAM A-B         | I |
| I | 745.29        | 0.26               | 0.10               | I |

STREAM D-A

| I | Intercept For | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|---|
| I | STREAM D-A    | STREAM C-A         | STREAM C-D         | I |
| I | 751.61        | 0.26               | 0.10               | I |

STREAM B-A

| I | Intercept For | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|--------------------|--------------------|---|
| I | STREAM B-A    | STREAM A-C         | STREAM A-D         | STREAM D-A         | STREAM D-B         | I |
| I | 575.31        | 0.24               | 0.24               | 0.24               | 0.24               | I |
| I |               | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing | I |
| I |               | STREAM A-B         | STREAM C-A         | STREAM C-B         | STREAM D-C         | I |
| I |               | 0.09               | 0.15               | 0.34               | 0.12               | I |

STREAM D-C

| I | Intercept For | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|--------------------|--------------------|---|
| I | STREAM D-C    | STREAM C-A         | STREAM C-B         | STREAM B-C         | STREAM B-D         | I |
| I | 580.57        | 0.24               | 0.24               | 0.24               | 0.24               | I |
| I |               | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing | I |
| I |               | STREAM C-D         | STREAM A-C         | STREAM A-D         | STREAM B-A         | I |
| I |               | 0.10               | 0.15               | 0.34               | 0.12               | I |

STREAM C-B

| I | Intercept For | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|---|
| I | STREAM C-B    | STREAM A-C         | STREAM A-D         | I |
| I | 612.18        | 0.21               | 0.30               | I |

STREAM A-D

| I | Intercept For | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|---|
| I | STREAM A-D    | STREAM C-A         | STREAM C-B         | I |
| I | 617.98        | 0.21               | 0.31               | I |

B-D Stream From Left Hand Lane

| I | Intercept For | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|--------------------|--------------------|---|
| I | STREAM B-D    | STREAM A-C         | STREAM A-D         | STREAM A-B         | STREAM C-B         | I |
| I | 575.31        | 0.24               | 0.24               | 0.09               | 0.34               | I |
| I |               | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing | I |
| I |               | STREAM C-A         | STREAM C-D         |                    |                    | I |
| I |               | 0.15               | 0.15               |                    |                    | I |

B-D Stream From Right Hand Lane

| I | Intercept For | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|--------------------|--------------------|---|
| I | STREAM B-D    | STREAM A-C         | STREAM A-D         | STREAM A-B         | STREAM C-B         | I |

|   |                                  |      |                                  |                    |                    |   |
|---|----------------------------------|------|----------------------------------|--------------------|--------------------|---|
| I | 575.31                           | 0.24 | 0.24                             | 0.09               | 0.34               | I |
| I | Slope For Opposing<br>STREAM C-A |      | Slope For Opposing<br>STREAM C-D | Slope For Opposing | Slope For Opposing | I |
| I | 0.15                             |      | 0.15                             |                    |                    | I |

D-B Stream From Left Hand Lane

|   |                                  |                    |                                  |                    |                    |   |
|---|----------------------------------|--------------------|----------------------------------|--------------------|--------------------|---|
| I | Intercept For                    | Slope For Opposing | Slope For Opposing               | Slope For Opposing | Slope For Opposing | I |
| I | STREAM D-B                       | STREAM C-A         | STREAM C-B                       | STREAM D-C         | STREAM A-D         | I |
| I | 580.57                           | 0.24               | 0.24                             | 0.10               | 0.34               | I |
| I | Slope For Opposing<br>STREAM A-C |                    | Slope For Opposing<br>STREAM A-B | Slope For Opposing | Slope For Opposing | I |
| I | 0.15                             |                    | 0.15                             |                    |                    | I |

D-B Stream From Right Hand Lane

|   |                                  |                    |                                  |                    |                    |   |
|---|----------------------------------|--------------------|----------------------------------|--------------------|--------------------|---|
| I | Intercept For                    | Slope For Opposing | Slope For Opposing               | Slope For Opposing | Slope For Opposing | I |
| I | STREAM B-D                       | STREAM C-A         | STREAM C-B                       | STREAM C-D         | STREAM A-D         | I |
| I | 580.57                           | 0.24               | 0.24                             | 0.10               | 0.34               | I |
| I | Slope For Opposing<br>STREAM A-C |                    | Slope For Opposing<br>STREAM A-B | Slope For Opposing | Slope For Opposing | I |
| I | 0.15                             |                    | 0.15                             |                    |                    | I |

TRAFFIC DEMAND DATA

|   |     |   |               |   |
|---|-----|---|---------------|---|
| I | ARM | I | FLOW SCALE(%) | I |
| I | A   | I | 100           | I |
| I | B   | I | 100           | I |
| I | C   | I | 100           | I |
| I | D   | I | 100           | I |

Demand set: 2017 Base Flows AM

TIME PERIOD BEGINS 08.00 AND ENDS 09.30

LENGTH OF TIME PERIOD - 90 MIN.  
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

| I | ARM   | I | NUMBER OF MINUTES FROM START WHEN<br>FLOW STARTS I TOP OF PEAK I FLOW STOPS I<br>TO RISE I IS REACHED I FALLING I | I | RATE OF FLOW (VEH/MIN)<br>BEFORE I AT TOP I AFTER<br>PEAK I OF PEAK I PEAK I | I |
|---|-------|---|-------------------------------------------------------------------------------------------------------------------|---|------------------------------------------------------------------------------|---|
| I | ARM A | I | 15.00 I 45.00 I 75.00 I                                                                                           | I | 3.08 I 4.61 I 3.08 I                                                         | I |
| I | ARM B | I | 15.00 I 45.00 I 75.00 I                                                                                           | I | 0.06 I 0.09 I 0.06 I                                                         | I |
| I | ARM C | I | 15.00 I 45.00 I 75.00 I                                                                                           | I | 2.72 I 4.09 I 2.72 I                                                         | I |
| I | ARM D | I | 15.00 I 45.00 I 75.00 I                                                                                           | I | 1.52 I 2.29 I 1.52 I                                                         | I |

Demand set: 2017 Base Flows AM

| I | TIME          | I | FROM/TO | I | ARM    | A | I      | ARM | B      | I | ARM    | C | I | ARM | D | I |
|---|---------------|---|---------|---|--------|---|--------|-----|--------|---|--------|---|---|-----|---|---|
| I | 08.00 - 08.15 | I | ARM A   | I | 0.000  | I | 0.012  | I   | 0.528  | I | 0.459  | I |   |     |   | I |
| I |               | I |         | I | 0.0    | I | 3.0    | I   | 130.0  | I | 113.0  | I |   |     |   | I |
| I |               | I | ( 0.0)  | I | ( 0.0) | I | ( 6.0) | I   | ( 2.0) | I |        |   |   |     |   | I |
| I |               | I | ARM B   | I | 0.800  | I | 0.000  | I   | 0.200  | I | 0.000  | I |   |     |   | I |
| I |               | I |         | I | 4.0    | I | 0.0    | I   | 1.0    | I | 0.0    | I |   |     |   | I |
| I |               | I | ( 0.0)  | I | ( 0.0) | I | ( 0.0) | I   | ( 0.0) | I | ( 0.0) | I |   |     |   | I |
| I |               | I | ARM C   | I | 0.959  | I | 0.005  | I   | 0.000  | I | 0.037  | I |   |     |   | I |
| I |               | I |         | I | 209.0  | I | 1.0    | I   | 0.0    | I | 8.0    | I |   |     |   | I |
| I |               | I | ( 4.0)  | I | ( 0.0) | I | ( 0.0) | I   | ( 0.0) | I | ( 0.0) | I |   |     |   | I |
| I |               | I | ARM D   | I | 0.975  | I | 0.000  | I   | 0.025  | I | 0.000  | I |   |     |   | I |
| I |               | I |         | I | 119.0  | I | 0.0    | I   | 3.0    | I | 0.0    | I |   |     |   | I |
| I |               | I | ( 2.0)  | I | ( 0.0) | I | ( 0.0) | I   | ( 0.0) | I | ( 0.0) | I |   |     |   | I |

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA  
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2017 Base Flows AM  
AND FOR TIME PERIOD 1

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 08.00-08.15 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.06                | 8.61                  | 0.007                        |                                  | 0.00                     | 0.01                   | 0.1                                 |                                               | 0.12                                           | I |
| I | A-BCD       | 1.42                | 9.50                  | 0.149                        |                                  | 0.00                     | 0.18                   | 2.6                                 |                                               | 0.12                                           | I |
| I | D-ABC       | 1.53                | 11.46                 | 0.134                        |                                  | 0.00                     | 0.15                   | 2.2                                 |                                               | 0.10                                           | I |
| I | C-ABD       | 0.01                | 9.38                  | 0.001                        |                                  | 0.00                     | 0.00                   | 0.0                                 |                                               | 0.11                                           | I |
| I |             |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 08.15-08.30 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.07                | 8.32                  | 0.009                        |                                  | 0.01                     | 0.01                   | 0.1                                 |                                               | 0.12                                           | I |
| I | A-BCD       | 1.69                | 9.38                  | 0.181                        |                                  | 0.18                     | 0.23                   | 3.4                                 |                                               | 0.13                                           | I |
| I | D-ABC       | 1.83                | 11.31                 | 0.162                        |                                  | 0.15                     | 0.19                   | 2.8                                 |                                               | 0.11                                           | I |
| I | C-ABD       | 0.01                | 9.22                  | 0.002                        |                                  | 0.00                     | 0.00                   | 0.0                                 |                                               | 0.11                                           | I |
| I |             |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 08.30-08.45 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.09                | 7.93                  | 0.012                        |                                  | 0.01                     | 0.01                   | 0.2                                 |                                               | 0.13                                           | I |
| I | A-BCD       | 2.07                | 9.22                  | 0.225                        |                                  | 0.23                     | 0.30                   | 4.6                                 |                                               | 0.14                                           | I |
| I | D-ABC       | 2.24                | 11.11                 | 0.202                        |                                  | 0.19                     | 0.25                   | 3.7                                 |                                               | 0.11                                           | I |
| I | C-ABD       | 0.02                | 9.00                  | 0.002                        |                                  | 0.00                     | 0.00                   | 0.0                                 |                                               | 0.11                                           | I |
| I |             |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 08.45-09.00 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.09                | 7.92                  | 0.012                        |                                  | 0.01                     | 0.01                   | 0.2                                 |                                               | 0.13                                           | I |
| I | A-BCD       | 2.07                | 9.22                  | 0.225                        |                                  | 0.30                     | 0.31                   | 4.6                                 |                                               | 0.14                                           | I |
| I | D-ABC       | 2.24                | 11.11                 | 0.202                        |                                  | 0.25                     | 0.25                   | 3.8                                 |                                               | 0.11                                           | I |
| I | C-ABD       | 0.02                | 9.00                  | 0.002                        |                                  | 0.00                     | 0.00                   | 0.0                                 |                                               | 0.11                                           | I |
| I |             |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 09.00-09.15 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.07                | 8.32                  | 0.009                        |                                  | 0.01                     | 0.01                   | 0.1                                 |                                               | 0.12                                           | I |
| I | A-BCD       | 1.69                | 9.38                  | 0.181                        |                                  | 0.31                     | 0.23                   | 3.5                                 |                                               | 0.13                                           | I |
| I | D-ABC       | 1.83                | 11.31                 | 0.162                        |                                  | 0.25                     | 0.19                   | 3.0                                 |                                               | 0.11                                           | I |
| I | C-ABD       | 0.01                | 9.22                  | 0.002                        |                                  | 0.00                     | 0.00                   | 0.0                                 |                                               | 0.11                                           | I |
| I |             |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 09.15-09.30 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.06                | 8.61                  | 0.007                        |                                  | 0.01                     | 0.01                   | 0.1                                 |                                               | 0.12                                           | I |
| I | A-BCD       | 1.42                | 9.50                  | 0.149                        |                                  | 0.23                     | 0.18                   | 2.7                                 |                                               | 0.12                                           | I |
| I | D-ABC       | 1.53                | 11.46                 | 0.134                        |                                  | 0.19                     | 0.16                   | 2.4                                 |                                               | 0.10                                           | I |
| I | C-ABD       | 0.01                | 9.38                  | 0.001                        |                                  | 0.00                     | 0.00                   | 0.0                                 |                                               | 0.11                                           | I |
| I |             |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |

\*WARNING\* NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

#### QUEUE FOR STREAM B-ACD

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 08.15                     | 0.0                            |
| 08.30                     | 0.0                            |
| 08.45                     | 0.0                            |
| 09.00                     | 0.0                            |
| 09.15                     | 0.0                            |
| 09.30                     | 0.0                            |

#### QUEUE FOR STREAM A-BCD

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 08.15                     | 0.2                            |
| 08.30                     | 0.2                            |
| 08.45                     | 0.3                            |
| 09.00                     | 0.3                            |
| 09.15                     | 0.2                            |
| 09.30                     | 0.2                            |

-----  
QUEUE FOR STREAM D-ABC  
-----

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 08.15                     | 0.2                            |
| 08.30                     | 0.2                            |
| 08.45                     | 0.3                            |
| 09.00                     | 0.3                            |
| 09.15                     | 0.2                            |
| 09.30                     | 0.2                            |

-----  
QUEUE FOR STREAM C-ABD  
-----

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 08.15                     | 0.0                            |
| 08.30                     | 0.0                            |
| 08.45                     | 0.0                            |
| 09.00                     | 0.0                            |
| 09.15                     | 0.0                            |
| 09.30                     | 0.0                            |

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

| I | STREAM | I | TOTAL DEMAND | I       | * QUEUEING *<br>* DELAY * | I         | * INCLUSIVE QUEUEING *<br>* DELAY * | I         |
|---|--------|---|--------------|---------|---------------------------|-----------|-------------------------------------|-----------|
| I | I      | I | I            | I       | I                         | I         | I                                   | I         |
| I | I      | I | (VEH)        | (VEH/H) | (MIN)                     | (MIN/VEH) | (MIN)                               | (MIN/VEH) |
| I | B-ACD  | I | 6.9          | I 4.6   | I 0.8                     | I 0.12    | I 0.8                               | I 0.12    |
| I | A-BCD  | I | 155.5        | I 103.7 | I 21.4                    | I 0.14    | I 21.4                              | I 0.14    |
| I | D-ABC  | I | 167.9        | I 111.9 | I 17.8                    | I 0.11    | I 17.8                              | I 0.11    |
| I | C-ABD  | I | 1.4          | I 0.9   | I 0.2                     | I 0.11    | I 0.2                               | I 0.11    |
| I | ALL    | I | 813.5        | I 542.3 | I 40.2                    | I 0.05    | I 40.2                              | I 0.05    |

\* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD  
 \* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES  
 WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD  
 \* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS  
 A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

\*\*\*\*\*END OF RUN\*\*\*\*\*

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

STREAM B-C

| I | Intercept For | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|---|
| I | STREAM B-C    | STREAM A-C         | STREAM A-B         | I |
| I | 745.29        | 0.26               | 0.10               | I |

STREAM D-A

| I | Intercept For | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|---|
| I | STREAM D-A    | STREAM C-A         | STREAM C-D         | I |
| I | 751.61        | 0.26               | 0.10               | I |

STREAM B-A

| I | Intercept For | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|--------------------|--------------------|---|
| I | STREAM B-A    | STREAM A-C         | STREAM A-D         | STREAM D-A         | STREAM D-B         | I |
| I | 575.31        | 0.24               | 0.24               | 0.24               | 0.24               | I |
| I |               | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing | I |
| I |               | STREAM A-B         | STREAM C-A         | STREAM C-B         | STREAM D-C         | I |
| I |               | 0.09               | 0.15               | 0.34               | 0.12               | I |

STREAM D-C

| I | Intercept For | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|--------------------|--------------------|---|
| I | STREAM D-C    | STREAM C-A         | STREAM C-B         | STREAM B-C         | STREAM B-D         | I |
| I | 580.57        | 0.24               | 0.24               | 0.24               | 0.24               | I |
| I |               | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing | I |
| I |               | STREAM C-D         | STREAM A-C         | STREAM A-D         | STREAM B-A         | I |
| I |               | 0.10               | 0.15               | 0.34               | 0.12               | I |

STREAM C-B

| I | Intercept For | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|---|
| I | STREAM C-B    | STREAM A-C         | STREAM A-D         | I |
| I | 612.18        | 0.21               | 0.30               | I |

STREAM A-D

| I | Intercept For | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|---|
| I | STREAM A-D    | STREAM C-A         | STREAM C-B         | I |
| I | 617.98        | 0.21               | 0.31               | I |

B-D Stream From Left Hand Lane

| I | Intercept For | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|--------------------|--------------------|---|
| I | STREAM B-D    | STREAM A-C         | STREAM A-D         | STREAM A-B         | STREAM C-B         | I |
| I | 575.31        | 0.24               | 0.24               | 0.09               | 0.34               | I |
| I |               | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing | I |
| I |               | STREAM C-A         | STREAM C-D         |                    |                    | I |
| I |               | 0.15               | 0.15               |                    |                    | I |

B-D Stream From Right Hand Lane

| I | Intercept For | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|--------------------|--------------------|---|
| I | STREAM B-D    | STREAM A-C         | STREAM A-D         | STREAM A-B         | STREAM C-B         | I |

|   |                                  |      |                                  |                    |                    |   |
|---|----------------------------------|------|----------------------------------|--------------------|--------------------|---|
| I | 575.31                           | 0.24 | 0.24                             | 0.09               | 0.34               | I |
| I | Slope For Opposing<br>STREAM C-A |      | Slope For Opposing<br>STREAM C-D | Slope For Opposing | Slope For Opposing | I |
| I | 0.15                             | 0.15 |                                  |                    |                    | I |

D-B Stream From Left Hand Lane

|   |                                  |                                  |                                  |                                  |                                  |   |
|---|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|---|
| I | Intercept For<br>STREAM D-B      | Slope For Opposing<br>STREAM C-A | Slope For Opposing<br>STREAM C-B | Slope For Opposing<br>STREAM D-C | Slope For Opposing<br>STREAM A-D | I |
| I | 580.57                           | 0.24                             | 0.24                             | 0.10                             | 0.34                             | I |
| I | Slope For Opposing<br>STREAM A-C |                                  | Slope For Opposing<br>STREAM A-B | Slope For Opposing               | Slope For Opposing               | I |
| I | 0.15                             | 0.15                             |                                  |                                  |                                  | I |

D-B Stream From Right Hand Lane

|   |                                  |                                  |                                  |                                  |                                  |   |
|---|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|---|
| I | Intercept For<br>STREAM B-D      | Slope For Opposing<br>STREAM C-A | Slope For Opposing<br>STREAM C-B | Slope For Opposing<br>STREAM C-D | Slope For Opposing<br>STREAM A-D | I |
| I | 580.57                           | 0.24                             | 0.24                             | 0.10                             | 0.34                             | I |
| I | Slope For Opposing<br>STREAM A-C |                                  | Slope For Opposing<br>STREAM A-B | Slope For Opposing               | Slope For Opposing               | I |
| I | 0.15                             | 0.15                             |                                  |                                  |                                  | I |

TRAFFIC DEMAND DATA

|   |     |   |               |   |
|---|-----|---|---------------|---|
| I | ARM | I | FLOW SCALE(%) | I |
| I | A   | I | 100           | I |
| I | B   | I | 100           | I |
| I | C   | I | 100           | I |
| I | D   | I | 100           | I |

Demand set: 2017 Base Flows PM

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.  
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

| I | ARM   | I | NUMBER OF<br>FLOW STARTS<br>TO RISE | I | MINUTES FROM<br>TOP OF PEAK<br>IS REACHED | I | START WHEN<br>FLOW STOPS<br>FALLING | I | RATE OF FLOW (VEH/MIN)<br>BEFORE I AT TOP I AFTER<br>PEAK I OF PEAK I PEAK | I |
|---|-------|---|-------------------------------------|---|-------------------------------------------|---|-------------------------------------|---|----------------------------------------------------------------------------|---|
| I | ARM A | I | 15.00                               | I | 45.00                                     | I | 75.00                               | I | 5.19 I 7.78 I 5.19                                                         | I |
| I | ARM B | I | 15.00                               | I | 45.00                                     | I | 75.00                               | I | 0.09 I 0.13 I 0.09                                                         | I |
| I | ARM C | I | 15.00                               | I | 45.00                                     | I | 75.00                               | I | 3.15 I 4.73 I 3.15                                                         | I |
| I | ARM D | I | 15.00                               | I | 45.00                                     | I | 75.00                               | I | 1.24 I 1.86 I 1.24                                                         | I |

Demand set: 2017 Base Flows PM

| I | TIME          | I | FROM/TO | I | ARM    | A | I      | ARM | B      | I | ARM    | C | I | ARM | D | I |
|---|---------------|---|---------|---|--------|---|--------|-----|--------|---|--------|---|---|-----|---|---|
| I | 16.45 - 17.00 | I | ARM A   | I | 0.000  | I | 0.019  | I   | 0.699  | I | 0.282  | I |   |     |   | I |
| I |               | I |         | I | 0.0    | I | 8.0    | I   | 290.0  | I | 117.0  | I |   |     |   | I |
| I |               | I | ( 0.0)  | I | ( 0.0) | I | ( 0.0) | I   | ( 1.0) | I | ( 0.0) | I |   |     |   | I |
| I |               | I | ARM B   | I | 0.571  | I | 0.000  | I   | 0.429  | I | 0.000  | I |   |     |   | I |
| I |               | I |         | I | 4.0    | I | 0.0    | I   | 3.0    | I | 0.0    | I |   |     |   | I |
| I |               | I | ( 0.0)  | I | ( 0.0) | I | ( 0.0) | I   | ( 0.0) | I | ( 0.0) | I |   |     |   | I |
| I |               | I | ARM C   | I | 0.980  | I | 0.000  | I   | 0.000  | I | 0.020  | I |   |     |   | I |
| I |               | I |         | I | 247.0  | I | 0.0    | I   | 0.0    | I | 5.0    | I |   |     |   | I |
| I |               | I | ( 1.0)  | I | ( 0.0) | I | ( 0.0) | I   | ( 0.0) | I | ( 0.0) | I |   |     |   | I |
| I |               | I | ARM D   | I | 0.899  | I | 0.010  | I   | 0.091  | I | 0.000  | I |   |     |   | I |
| I |               | I |         | I | 89.0   | I | 1.0    | I   | 9.0    | I | 0.0    | I |   |     |   | I |
| I |               | I | ( 0.0)  | I | ( 0.0) | I | ( 0.0) | I   | ( 0.0) | I | ( 0.0) | I |   |     |   | I |
| I |               | I |         | I |        | I |        | I   |        | I |        | I |   |     |   | I |

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA  
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2017 Base Flows PM  
AND FOR TIME PERIOD 2

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 16.45-17.00 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.09                | 8.88                  | 0.010                        |                                  | 0.00                     | 0.01                   | 0.1                                 |                                               | 0.11                                           | I |
| I | A-BCD       | 1.47                | 9.61                  | 0.153                        |                                  | 0.00                     | 0.19                   | 2.8                                 |                                               | 0.12                                           | I |
| I | D-ABC       | 1.24                | 11.15                 | 0.111                        |                                  | 0.00                     | 0.12                   | 1.8                                 |                                               | 0.10                                           | I |
| I | C-ABD       | 0.00                | 8.14                  | 0.000                        |                                  | 0.00                     | 0.00                   | 0.0                                 |                                               | 0.00                                           | I |
| I |             |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 17.00-17.15 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.10                | 8.53                  | 0.012                        |                                  | 0.01                     | 0.01                   | 0.2                                 |                                               | 0.12                                           | I |
| I | A-BCD       | 1.75                | 9.48                  | 0.185                        |                                  | 0.19                     | 0.24                   | 3.7                                 |                                               | 0.13                                           | I |
| I | D-ABC       | 1.48                | 10.94                 | 0.136                        |                                  | 0.12                     | 0.16                   | 2.3                                 |                                               | 0.11                                           | I |
| I | C-ABD       | 0.00                | 7.91                  | 0.000                        |                                  | 0.00                     | 0.00                   | 0.0                                 |                                               | 0.00                                           | I |
| I |             |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 17.15-17.30 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.13                | 8.03                  | 0.016                        |                                  | 0.01                     | 0.02                   | 0.2                                 |                                               | 0.13                                           | I |
| I | A-BCD       | 2.15                | 9.29                  | 0.231                        |                                  | 0.24                     | 0.34                   | 5.0                                 |                                               | 0.14                                           | I |
| I | D-ABC       | 1.82                | 10.65                 | 0.171                        |                                  | 0.16                     | 0.20                   | 3.0                                 |                                               | 0.11                                           | I |
| I | C-ABD       | 0.00                | 7.60                  | 0.000                        |                                  | 0.00                     | 0.00                   | 0.0                                 |                                               | 0.00                                           | I |
| I |             |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 17.30-17.45 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.13                | 8.03                  | 0.016                        |                                  | 0.02                     | 0.02                   | 0.2                                 |                                               | 0.13                                           | I |
| I | A-BCD       | 2.15                | 9.29                  | 0.231                        |                                  | 0.34                     | 0.34                   | 5.1                                 |                                               | 0.14                                           | I |
| I | D-ABC       | 1.82                | 10.65                 | 0.171                        |                                  | 0.20                     | 0.20                   | 3.1                                 |                                               | 0.11                                           | I |
| I | C-ABD       | 0.00                | 7.60                  | 0.000                        |                                  | 0.00                     | 0.00                   | 0.0                                 |                                               | 0.00                                           | I |
| I |             |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 17.45-18.00 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.10                | 8.52                  | 0.012                        |                                  | 0.02                     | 0.01                   | 0.2                                 |                                               | 0.12                                           | I |
| I | A-BCD       | 1.75                | 9.48                  | 0.185                        |                                  | 0.34                     | 0.25                   | 3.8                                 |                                               | 0.13                                           | I |
| I | D-ABC       | 1.48                | 10.94                 | 0.136                        |                                  | 0.20                     | 0.16                   | 2.4                                 |                                               | 0.11                                           | I |
| I | C-ABD       | 0.00                | 7.91                  | 0.000                        |                                  | 0.00                     | 0.00                   | 0.0                                 |                                               | 0.00                                           | I |
| I |             |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 18.00-18.15 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.09                | 8.88                  | 0.010                        |                                  | 0.01                     | 0.01                   | 0.2                                 |                                               | 0.11                                           | I |
| I | A-BCD       | 1.47                | 9.61                  | 0.153                        |                                  | 0.25                     | 0.19                   | 2.9                                 |                                               | 0.12                                           | I |
| I | D-ABC       | 1.24                | 11.14                 | 0.111                        |                                  | 0.16                     | 0.13                   | 1.9                                 |                                               | 0.10                                           | I |
| I | C-ABD       | 0.00                | 8.13                  | 0.000                        |                                  | 0.00                     | 0.00                   | 0.0                                 |                                               | 0.00                                           | I |
| I |             |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |

\*WARNING\* NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

#### QUEUE FOR STREAM B-ACD

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 17.00                     | 0.0                            |
| 17.15                     | 0.0                            |
| 17.30                     | 0.0                            |
| 17.45                     | 0.0                            |
| 18.00                     | 0.0                            |
| 18.15                     | 0.0                            |

#### QUEUE FOR STREAM A-BCD

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 17.00                     | 0.2                            |
| 17.15                     | 0.2                            |
| 17.30                     | 0.3                            |
| 17.45                     | 0.3                            |
| 18.00                     | 0.2                            |
| 18.15                     | 0.2                            |

-----  
QUEUE FOR STREAM D-ABC  
-----

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 17.00                     | 0.1                            |
| 17.15                     | 0.2                            |
| 17.30                     | 0.2                            |
| 17.45                     | 0.2                            |
| 18.00                     | 0.2                            |
| 18.15                     | 0.1                            |

-----  
QUEUE FOR STREAM C-ABD  
-----

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 17.00                     | 0.0                            |
| 17.15                     | 0.0                            |
| 17.30                     | 0.0                            |
| 17.45                     | 0.0                            |
| 18.00                     | 0.0                            |
| 18.15                     | 0.0                            |

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

| I | STREAM | I | TOTAL DEMAND | I       | * QUEUEING *<br>* DELAY * | I         | * INCLUSIVE QUEUEING *<br>* DELAY * | I         |      |
|---|--------|---|--------------|---------|---------------------------|-----------|-------------------------------------|-----------|------|
| I | I      | I | I            | I       | I                         | I         | I                                   | I         |      |
| I | I      | I | (VEH)        | (VEH/H) | (MIN)                     | (MIN/VEH) | (MIN)                               | (MIN/VEH) |      |
| I | B-ACD  | I | 9.6          | I       | 6.4                       | I         | 1.2                                 | I         | 0.12 |
| I | A-BCD  | I | 161.0        | I       | 107.4                     | I         | 23.3                                | I         | 0.14 |
| I | D-ABC  | I | 136.3        | I       | 90.8                      | I         | 14.5                                | I         | 0.11 |
| I | C-ABD  | I | 0.0          | I       | 0.0                       | I         | 0.0                                 | I         | 0.00 |
| I | ALL    | I | 1064.0       | I       | 709.3                     | I         | 38.9                                | I         | 0.04 |

\* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD  
 \* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES  
 WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD  
 \* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS  
 A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

\*\*\*\*\*END OF RUN\*\*\*\*\*

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

STREAM B-C

| I | Intercept For | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|---|
| I | STREAM B-C    | STREAM A-C         | STREAM A-B         | I |
| I | 745.29        | 0.26               | 0.10               | I |

STREAM D-A

| I | Intercept For | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|---|
| I | STREAM D-A    | STREAM C-A         | STREAM C-D         | I |
| I | 751.61        | 0.26               | 0.10               | I |

STREAM B-A

| I | Intercept For | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|--------------------|--------------------|---|
| I | STREAM B-A    | STREAM A-C         | STREAM A-D         | STREAM D-A         | STREAM D-B         | I |
| I | 575.31        | 0.24               | 0.24               | 0.24               | 0.24               | I |
| I |               | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing | I |
| I |               | STREAM A-B         | STREAM C-A         | STREAM C-B         | STREAM D-C         | I |
| I |               | 0.09               | 0.15               | 0.34               | 0.12               | I |

STREAM D-C

| I | Intercept For | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|--------------------|--------------------|---|
| I | STREAM D-C    | STREAM C-A         | STREAM C-B         | STREAM B-C         | STREAM B-D         | I |
| I | 580.57        | 0.24               | 0.24               | 0.24               | 0.24               | I |
| I |               | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing | I |
| I |               | STREAM C-D         | STREAM A-C         | STREAM A-D         | STREAM B-A         | I |
| I |               | 0.10               | 0.15               | 0.34               | 0.12               | I |

STREAM C-B

| I | Intercept For | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|---|
| I | STREAM C-B    | STREAM A-C         | STREAM A-D         | I |
| I | 612.18        | 0.21               | 0.30               | I |

STREAM A-D

| I | Intercept For | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|---|
| I | STREAM A-D    | STREAM C-A         | STREAM C-B         | I |
| I | 617.98        | 0.21               | 0.31               | I |

B-D Stream From Left Hand Lane

| I | Intercept For | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|--------------------|--------------------|---|
| I | STREAM B-D    | STREAM A-C         | STREAM A-D         | STREAM A-B         | STREAM C-B         | I |
| I | 575.31        | 0.24               | 0.24               | 0.09               | 0.34               | I |
| I |               | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing | I |
| I |               | STREAM C-A         | STREAM C-D         |                    |                    | I |
| I |               | 0.15               | 0.15               |                    |                    | I |

B-D Stream From Right Hand Lane

| I | Intercept For | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|--------------------|--------------------|---|
| I | STREAM B-D    | STREAM A-C         | STREAM A-D         | STREAM A-B         | STREAM C-B         | I |

|   |                                  |      |                                  |                    |                    |   |
|---|----------------------------------|------|----------------------------------|--------------------|--------------------|---|
| I | 575.31                           | 0.24 | 0.24                             | 0.09               | 0.34               | I |
| I | Slope For Opposing<br>STREAM C-A |      | Slope For Opposing<br>STREAM C-D | Slope For Opposing | Slope For Opposing | I |
| I | 0.15                             | 0.15 |                                  |                    |                    | I |

D-B Stream From Left Hand Lane

|   |                                  |                                  |                                  |                                  |                                  |   |
|---|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|---|
| I | Intercept For<br>STREAM D-B      | Slope For Opposing<br>STREAM C-A | Slope For Opposing<br>STREAM C-B | Slope For Opposing<br>STREAM D-C | Slope For Opposing<br>STREAM A-D | I |
| I | 580.57                           | 0.24                             | 0.24                             | 0.10                             | 0.34                             | I |
| I | Slope For Opposing<br>STREAM A-C |                                  | Slope For Opposing<br>STREAM A-B | Slope For Opposing               | Slope For Opposing               | I |
| I | 0.15                             | 0.15                             |                                  |                                  |                                  | I |

D-B Stream From Right Hand Lane

|   |                                  |                                  |                                  |                                  |                                  |   |
|---|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|---|
| I | Intercept For<br>STREAM B-D      | Slope For Opposing<br>STREAM C-A | Slope For Opposing<br>STREAM C-B | Slope For Opposing<br>STREAM C-D | Slope For Opposing<br>STREAM A-D | I |
| I | 580.57                           | 0.24                             | 0.24                             | 0.10                             | 0.34                             | I |
| I | Slope For Opposing<br>STREAM A-C |                                  | Slope For Opposing<br>STREAM A-B | Slope For Opposing               | Slope For Opposing               | I |
| I | 0.15                             | 0.15                             |                                  |                                  |                                  | I |

TRAFFIC DEMAND DATA

|   |     |   |               |   |
|---|-----|---|---------------|---|
| I | ARM | I | FLOW SCALE(%) | I |
| I | A   | I | 100           | I |
| I | B   | I | 100           | I |
| I | C   | I | 100           | I |
| I | D   | I | 100           | I |

Demand set: 2017 Base Flows With Dev 50 Dwellings AM

TIME PERIOD BEGINS 08.00 AND ENDS 09.30

LENGTH OF TIME PERIOD - 90 MIN.  
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

| I | ARM   | I | NUMBER OF<br>FLOW STARTS<br>TO RISE | I | MINUTES FROM<br>TOP OF PEAK<br>IS REACHED | I | START WHEN<br>FLOW STOPS<br>FALLING | I | RATE OF FLOW (VEH/MIN)<br>BEFORE PEAK | I | AT TOP<br>OF PEAK | I | AFTER<br>PEAK | I |
|---|-------|---|-------------------------------------|---|-------------------------------------------|---|-------------------------------------|---|---------------------------------------|---|-------------------|---|---------------|---|
| I | ARM A | I | 15.00                               | I | 45.00                                     | I | 75.00                               | I | 3.15                                  | I | 4.73              | I | 3.15          | I |
| I | ARM B | I | 15.00                               | I | 45.00                                     | I | 75.00                               | I | 0.39                                  | I | 0.58              | I | 0.39          | I |
| I | ARM C | I | 15.00                               | I | 45.00                                     | I | 75.00                               | I | 2.75                                  | I | 4.13              | I | 2.75          | I |
| I | ARM D | I | 15.00                               | I | 45.00                                     | I | 75.00                               | I | 1.52                                  | I | 2.29              | I | 1.52          | I |

Demand set: 2017 Base Flows With Dev 50 Dwellings AM

| I | TIME          | I | FROM/TO | I | ARM    | A | I      | ARM | B      | I | ARM    | C | I | ARM | D | I |
|---|---------------|---|---------|---|--------|---|--------|-----|--------|---|--------|---|---|-----|---|---|
| I | 08.00 - 08.15 | I | ARM A   | I | 0.000  | I | 0.036  | I   | 0.516  | I | 0.448  | I |   |     |   | I |
| I |               | I |         | I | 0.0    | I | 9.0    | I   | 130.0  | I | 113.0  | I |   |     |   | I |
| I |               | I | ( 0.0)  | I | ( 0.0) | I | ( 0.0) | I   | ( 6.0) | I | ( 2.0) | I |   |     |   | I |
| I |               | I | ARM B   | I | 0.645  | I | 0.000  | I   | 0.355  | I | 0.000  | I |   |     |   | I |
| I |               | I |         | I | 20.0   | I | 0.0    | I   | 11.0   | I | 0.0    | I |   |     |   | I |
| I |               | I | ( 0.0)  | I | ( 0.0) | I | ( 0.0) | I   | ( 0.0) | I | ( 0.0) | I |   |     |   | I |
| I |               | I | ARM C   | I | 0.950  | I | 0.014  | I   | 0.000  | I | 0.036  | I |   |     |   | I |
| I |               | I |         | I | 209.0  | I | 3.0    | I   | 0.0    | I | 8.0    | I |   |     |   | I |
| I |               | I | ( 4.0)  | I | ( 0.0) | I | ( 0.0) | I   | ( 0.0) | I | ( 0.0) | I |   |     |   | I |
| I |               | I | ARM D   | I | 0.975  | I | 0.000  | I   | 0.025  | I | 0.000  | I |   |     |   | I |
| I |               | I |         | I | 119.0  | I | 0.0    | I   | 3.0    | I | 0.0    | I |   |     |   | I |
| I |               | I | ( 2.0)  | I | ( 0.0) | I | ( 0.0) | I   | ( 0.0) | I | ( 0.0) | I |   |     |   | I |

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA  
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2017 Base Flows With Dev 50 Dwellings AM  
AND FOR TIME PERIOD 1

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 08.00-08.15 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.39                | 9.09                  | 0.043                        |                                  | 0.00                     | 0.04                   | 0.6                                 |                                               | 0.11                                           | I |
| I | A-BCD       | 1.42                | 9.49                  | 0.149                        |                                  | 0.00                     | 0.18                   | 2.7                                 |                                               | 0.12                                           | I |
| I | D-ABC       | 1.53                | 11.45                 | 0.134                        |                                  | 0.00                     | 0.15                   | 2.2                                 |                                               | 0.10                                           | I |
| I | C-ABD       | 0.04                | 9.37                  | 0.004                        |                                  | 0.00                     | 0.00                   | 0.1                                 |                                               | 0.11                                           | I |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 08.15-08.30 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.46                | 8.82                  | 0.053                        |                                  | 0.04                     | 0.06                   | 0.8                                 |                                               | 0.12                                           | I |
| I | A-BCD       | 1.69                | 9.37                  | 0.181                        |                                  | 0.18                     | 0.23                   | 3.4                                 |                                               | 0.13                                           | I |
| I | D-ABC       | 1.83                | 11.31                 | 0.162                        |                                  | 0.15                     | 0.19                   | 2.8                                 |                                               | 0.11                                           | I |
| I | C-ABD       | 0.04                | 9.20                  | 0.005                        |                                  | 0.00                     | 0.00                   | 0.1                                 |                                               | 0.11                                           | I |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 08.30-08.45 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.57                | 8.44                  | 0.067                        |                                  | 0.06                     | 0.07                   | 1.1                                 |                                               | 0.13                                           | I |
| I | A-BCD       | 2.07                | 9.21                  | 0.225                        |                                  | 0.23                     | 0.30                   | 4.6                                 |                                               | 0.14                                           | I |
| I | D-ABC       | 2.24                | 11.10                 | 0.202                        |                                  | 0.19                     | 0.25                   | 3.7                                 |                                               | 0.11                                           | I |
| I | C-ABD       | 0.06                | 8.98                  | 0.006                        |                                  | 0.00                     | 0.01                   | 0.1                                 |                                               | 0.11                                           | I |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 08.45-09.00 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.57                | 8.44                  | 0.067                        |                                  | 0.07                     | 0.07                   | 1.1                                 |                                               | 0.13                                           | I |
| I | A-BCD       | 2.07                | 9.21                  | 0.225                        |                                  | 0.30                     | 0.31                   | 4.6                                 |                                               | 0.14                                           | I |
| I | D-ABC       | 2.24                | 11.10                 | 0.202                        |                                  | 0.25                     | 0.25                   | 3.8                                 |                                               | 0.11                                           | I |
| I | C-ABD       | 0.06                | 8.98                  | 0.006                        |                                  | 0.01                     | 0.01                   | 0.1                                 |                                               | 0.11                                           | I |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 09.00-09.15 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.46                | 8.81                  | 0.053                        |                                  | 0.07                     | 0.06                   | 0.9                                 |                                               | 0.12                                           | I |
| I | A-BCD       | 1.69                | 9.37                  | 0.181                        |                                  | 0.31                     | 0.23                   | 3.5                                 |                                               | 0.13                                           | I |
| I | D-ABC       | 1.83                | 11.31                 | 0.162                        |                                  | 0.25                     | 0.19                   | 3.0                                 |                                               | 0.11                                           | I |
| I | C-ABD       | 0.04                | 9.20                  | 0.005                        |                                  | 0.01                     | 0.00                   | 0.1                                 |                                               | 0.11                                           | I |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 09.15-09.30 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.39                | 9.09                  | 0.043                        |                                  | 0.06                     | 0.05                   | 0.7                                 |                                               | 0.11                                           | I |
| I | A-BCD       | 1.42                | 9.49                  | 0.149                        |                                  | 0.23                     | 0.18                   | 2.7                                 |                                               | 0.12                                           | I |
| I | D-ABC       | 1.53                | 11.45                 | 0.134                        |                                  | 0.19                     | 0.16                   | 2.4                                 |                                               | 0.10                                           | I |
| I | C-ABD       | 0.04                | 9.36                  | 0.004                        |                                  | 0.00                     | 0.00                   | 0.1                                 |                                               | 0.11                                           | I |

\*WARNING\* NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

#### QUEUE FOR STREAM B-ACD

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 08.15                     | 0.0                            |
| 08.30                     | 0.1                            |
| 08.45                     | 0.1                            |
| 09.00                     | 0.1                            |
| 09.15                     | 0.1                            |
| 09.30                     | 0.0                            |

#### QUEUE FOR STREAM A-BCD

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 08.15                     | 0.2                            |
| 08.30                     | 0.2                            |
| 08.45                     | 0.3                            |
| 09.00                     | 0.3                            |
| 09.15                     | 0.2                            |
| 09.30                     | 0.2                            |

-----  
QUEUE FOR STREAM D-ABC  
-----

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 08.15                     | 0.2                            |
| 08.30                     | 0.2                            |
| 08.45                     | 0.3                            |
| 09.00                     | 0.3                            |
| 09.15                     | 0.2                            |
| 09.30                     | 0.2                            |

-----  
QUEUE FOR STREAM C-ABD  
-----

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 08.15                     | 0.0                            |
| 08.30                     | 0.0                            |
| 08.45                     | 0.0                            |
| 09.00                     | 0.0                            |
| 09.15                     | 0.0                            |
| 09.30                     | 0.0                            |

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

| I | STREAM | I | TOTAL DEMAND | I       | * QUEUEING *<br>* DELAY * | I         | * INCLUSIVE QUEUEING *<br>* DELAY * | I         |      |
|---|--------|---|--------------|---------|---------------------------|-----------|-------------------------------------|-----------|------|
| I | I      | I | I            | I       | I                         | I         | I                                   | I         |      |
| I | I      | I | (VEH)        | (VEH/H) | (MIN)                     | (MIN/VEH) | (MIN)                               | (MIN/VEH) |      |
| I | B-ACD  | I | 42.7         | I       | 28.4                      | I         | 5.1                                 | I         | 0.12 |
| I | A-BCD  | I | 155.5        | I       | 103.7                     | I         | 21.5                                | I         | 0.14 |
| I | D-ABC  | I | 167.9        | I       | 111.9                     | I         | 17.8                                | I         | 0.11 |
| I | C-ABD  | I | 4.1          | I       | 2.8                       | I         | 0.5                                 | I         | 0.11 |
| I | ALL    | I | 860.3        | I       | 573.5                     | I         | 44.9                                | I         | 0.05 |

\* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD  
 \* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES  
 WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD  
 \* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS  
 A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

\*\*\*\*\*END OF RUN\*\*\*\*\*

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

STREAM B-C

| I | Intercept For | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|---|
| I | STREAM B-C    | STREAM A-C         | STREAM A-B         | I |
| I | 745.29        | 0.26               | 0.10               | I |

STREAM D-A

| I | Intercept For | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|---|
| I | STREAM D-A    | STREAM C-A         | STREAM C-D         | I |
| I | 751.61        | 0.26               | 0.10               | I |

STREAM B-A

| I | Intercept For | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|--------------------|--------------------|---|
| I | STREAM B-A    | STREAM A-C         | STREAM A-D         | STREAM D-A         | STREAM D-B         | I |
| I | 575.31        | 0.24               | 0.24               | 0.24               | 0.24               | I |
| I |               | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing | I |
| I |               | STREAM A-B         | STREAM C-A         | STREAM C-B         | STREAM D-C         | I |
| I |               | 0.09               | 0.15               | 0.34               | 0.12               | I |

STREAM D-C

| I | Intercept For | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|--------------------|--------------------|---|
| I | STREAM D-C    | STREAM C-A         | STREAM C-B         | STREAM B-C         | STREAM B-D         | I |
| I | 580.57        | 0.24               | 0.24               | 0.24               | 0.24               | I |
| I |               | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing | I |
| I |               | STREAM C-D         | STREAM A-C         | STREAM A-D         | STREAM B-A         | I |
| I |               | 0.10               | 0.15               | 0.34               | 0.12               | I |

STREAM C-B

| I | Intercept For | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|---|
| I | STREAM C-B    | STREAM A-C         | STREAM A-D         | I |
| I | 612.18        | 0.21               | 0.30               | I |

STREAM A-D

| I | Intercept For | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|---|
| I | STREAM A-D    | STREAM C-A         | STREAM C-B         | I |
| I | 617.98        | 0.21               | 0.31               | I |

B-D Stream From Left Hand Lane

| I | Intercept For | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|--------------------|--------------------|---|
| I | STREAM B-D    | STREAM A-C         | STREAM A-D         | STREAM A-B         | STREAM C-B         | I |
| I | 575.31        | 0.24               | 0.24               | 0.09               | 0.34               | I |
| I |               | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing | I |
| I |               | STREAM C-A         | STREAM C-D         |                    |                    | I |
| I |               | 0.15               | 0.15               |                    |                    | I |

B-D Stream From Right Hand Lane

| I | Intercept For | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|--------------------|--------------------|---|
| I | STREAM B-D    | STREAM A-C         | STREAM A-D         | STREAM A-B         | STREAM C-B         | I |

|   |                                  |      |                                  |                    |                    |   |
|---|----------------------------------|------|----------------------------------|--------------------|--------------------|---|
| I | 575.31                           | 0.24 | 0.24                             | 0.09               | 0.34               | I |
| I | Slope For Opposing<br>STREAM C-A |      | Slope For Opposing<br>STREAM C-D | Slope For Opposing | Slope For Opposing | I |
| I | 0.15                             | 0.15 |                                  |                    |                    | I |

#### D-B Stream From Left Hand Lane

|   |                                  |                                  |                                  |                                  |                                  |   |
|---|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|---|
| I | Intercept For<br>STREAM D-B      | Slope For Opposing<br>STREAM C-A | Slope For Opposing<br>STREAM C-B | Slope For Opposing<br>STREAM D-C | Slope For Opposing<br>STREAM A-D | I |
| I | 580.57                           | 0.24                             | 0.24                             | 0.10                             | 0.34                             | I |
| I | Slope For Opposing<br>STREAM A-C |                                  | Slope For Opposing<br>STREAM A-B | Slope For Opposing               | Slope For Opposing               | I |
| I | 0.15                             | 0.15                             |                                  |                                  |                                  | I |

#### D-B Stream From Right Hand Lane

|   |                                  |                                  |                                  |                                  |                                  |   |
|---|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|---|
| I | Intercept For<br>STREAM B-D      | Slope For Opposing<br>STREAM C-A | Slope For Opposing<br>STREAM C-B | Slope For Opposing<br>STREAM C-D | Slope For Opposing<br>STREAM A-D | I |
| I | 580.57                           | 0.24                             | 0.24                             | 0.10                             | 0.34                             | I |
| I | Slope For Opposing<br>STREAM A-C |                                  | Slope For Opposing<br>STREAM A-B | Slope For Opposing               | Slope For Opposing               | I |
| I | 0.15                             | 0.15                             |                                  |                                  |                                  | I |

#### TRAFFIC DEMAND DATA

|   |     |   |               |   |
|---|-----|---|---------------|---|
| I | ARM | I | FLOW SCALE(%) | I |
| I | A   | I | 100           | I |
| I | B   | I | 100           | I |
| I | C   | I | 100           | I |
| I | D   | I | 100           | I |

Demand set: 2017 Base Flows With Dev 50 Dwellings PM

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.  
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

| I | ARM   | I | NUMBER OF<br>FLOW STARTS<br>TO RISE | I | MINUTES FROM<br>TOP OF PEAK<br>IS REACHED | I | START WHEN<br>FLOW STOPS<br>FALLING | I | RATE OF FLOW (VEH/MIN)<br>BEFORE<br>PEAK | I | AT TOP<br>OF PEAK | I | AFTER<br>PEAK | I |
|---|-------|---|-------------------------------------|---|-------------------------------------------|---|-------------------------------------|---|------------------------------------------|---|-------------------|---|---------------|---|
| I | ARM A | I | 15.00                               | I | 45.00                                     | I | 75.00                               | I | 5.46                                     | I | 8.19              | I | 5.46          | I |
| I | ARM B | I | 15.00                               | I | 45.00                                     | I | 75.00                               | I | 0.20                                     | I | 0.30              | I | 0.20          | I |
| I | ARM C | I | 15.00                               | I | 45.00                                     | I | 75.00                               | I | 3.15                                     | I | 4.73              | I | 3.15          | I |
| I | ARM D | I | 15.00                               | I | 45.00                                     | I | 75.00                               | I | 1.24                                     | I | 1.86              | I | 1.24          | I |

Demand set: 2017 Base Flows With Dev 50 Dwellings PM

| I | TIME          | I | FROM/TO | I | ARM    | A | I      | ARM | B      | I | ARM    | C | I      | ARM | D      | I |
|---|---------------|---|---------|---|--------|---|--------|-----|--------|---|--------|---|--------|-----|--------|---|
| I | 16.45 - 17.00 | I | ARM A   | I | 0.000  | I | 0.069  | I   | 0.664  | I | 0.268  | I | 0.000  | I   | 0.000  | I |
| I |               | I |         | I | 0.0    | I | 30.0   | I   | 290.0  | I | 117.0  | I | 0.0    | I   | 0.0    | I |
| I |               | I | ( 0.0)  | I | ( 0.0) | I | ( 0.0) | I   | ( 1.0) | I | ( 0.0) | I | ( 0.0) | I   | ( 0.0) | I |
| I |               | I | ARM B   | I | 0.500  | I | 0.000  | I   | 0.500  | I | 0.000  | I | 0.000  | I   | 0.000  | I |
| I |               | I |         | I | 8.0    | I | 0.0    | I   | 8.0    | I | 0.0    | I | 0.0    | I   | 0.0    | I |
| I |               | I | ( 0.0)  | I | ( 0.0) | I | ( 0.0) | I   | ( 0.0) | I | ( 0.0) | I | ( 0.0) | I   | ( 0.0) | I |
| I |               | I | ARM C   | I | 0.980  | I | 0.000  | I   | 0.000  | I | 0.020  | I | 0.000  | I   | 0.000  | I |
| I |               | I |         | I | 247.0  | I | 0.0    | I   | 0.0    | I | 5.0    | I | 0.0    | I   | 0.0    | I |
| I |               | I | ( 1.0)  | I | ( 0.0) | I | ( 0.0) | I   | ( 0.0) | I | ( 0.0) | I | ( 0.0) | I   | ( 0.0) | I |
| I |               | I | ARM D   | I | 0.899  | I | 0.010  | I   | 0.091  | I | 0.000  | I | 0.000  | I   | 0.000  | I |
| I |               | I |         | I | 89.0   | I | 1.0    | I   | 9.0    | I | 0.0    | I | 0.0    | I   | 0.0    | I |
| I |               | I | ( 0.0)  | I | ( 0.0) | I | ( 0.0) | I   | ( 0.0) | I | ( 0.0) | I | ( 0.0) | I   | ( 0.0) | I |

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA  
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

#### QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2017 Base Flows With Dev 50 Dwellings PM  
AND FOR TIME PERIOD 2

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 16.45-17.00 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.20                | 9.11                  | 0.022                        |                                  | 0.00                     | 0.02                   | 0.3                                 |                                               | 0.11                                           | I |
| I | A-BCD       | 1.47                | 9.61                  | 0.153                        |                                  | 0.00                     | 0.19                   | 2.8                                 |                                               | 0.12                                           | I |
| I | D-ABC       | 1.24                | 11.14                 | 0.111                        |                                  | 0.00                     | 0.12                   | 1.8                                 |                                               | 0.10                                           | I |
| I | C-ABD       | 0.00                | 8.08                  | 0.000                        |                                  | 0.00                     | 0.00                   | 0.0                                 |                                               | 0.00                                           | I |
| I |             |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 17.00-17.15 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.24                | 8.76                  | 0.027                        |                                  | 0.02                     | 0.03                   | 0.4                                 |                                               | 0.12                                           | I |
| I | A-BCD       | 1.75                | 9.48                  | 0.185                        |                                  | 0.19                     | 0.25                   | 3.7                                 |                                               | 0.13                                           | I |
| I | D-ABC       | 1.48                | 10.93                 | 0.136                        |                                  | 0.12                     | 0.16                   | 2.3                                 |                                               | 0.11                                           | I |
| I | C-ABD       | 0.00                | 7.85                  | 0.000                        |                                  | 0.00                     | 0.00                   | 0.0                                 |                                               | 0.00                                           | I |
| I |             |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 17.15-17.30 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.29                | 8.27                  | 0.036                        |                                  | 0.03                     | 0.04                   | 0.5                                 |                                               | 0.13                                           | I |
| I | A-BCD       | 2.15                | 9.29                  | 0.231                        |                                  | 0.25                     | 0.34                   | 5.1                                 |                                               | 0.14                                           | I |
| I | D-ABC       | 1.82                | 10.64                 | 0.171                        |                                  | 0.16                     | 0.20                   | 3.0                                 |                                               | 0.11                                           | I |
| I | C-ABD       | 0.00                | 7.53                  | 0.000                        |                                  | 0.00                     | 0.00                   | 0.0                                 |                                               | 0.00                                           | I |
| I |             |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 17.30-17.45 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.29                | 8.27                  | 0.036                        |                                  | 0.04                     | 0.04                   | 0.5                                 |                                               | 0.13                                           | I |
| I | A-BCD       | 2.15                | 9.29                  | 0.231                        |                                  | 0.34                     | 0.34                   | 5.2                                 |                                               | 0.14                                           | I |
| I | D-ABC       | 1.82                | 10.64                 | 0.171                        |                                  | 0.20                     | 0.20                   | 3.1                                 |                                               | 0.11                                           | I |
| I | C-ABD       | 0.00                | 7.52                  | 0.000                        |                                  | 0.00                     | 0.00                   | 0.0                                 |                                               | 0.00                                           | I |
| I |             |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 17.45-18.00 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.24                | 8.76                  | 0.027                        |                                  | 0.04                     | 0.03                   | 0.4                                 |                                               | 0.12                                           | I |
| I | A-BCD       | 1.75                | 9.48                  | 0.185                        |                                  | 0.34                     | 0.25                   | 3.8                                 |                                               | 0.13                                           | I |
| I | D-ABC       | 1.48                | 10.93                 | 0.136                        |                                  | 0.20                     | 0.16                   | 2.4                                 |                                               | 0.11                                           | I |
| I | C-ABD       | 0.00                | 7.84                  | 0.000                        |                                  | 0.00                     | 0.00                   | 0.0                                 |                                               | 0.00                                           | I |
| I |             |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 18.00-18.15 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.20                | 9.11                  | 0.022                        |                                  | 0.03                     | 0.02                   | 0.3                                 |                                               | 0.11                                           | I |
| I | A-BCD       | 1.47                | 9.61                  | 0.153                        |                                  | 0.25                     | 0.19                   | 2.9                                 |                                               | 0.12                                           | I |
| I | D-ABC       | 1.24                | 11.14                 | 0.112                        |                                  | 0.16                     | 0.13                   | 1.9                                 |                                               | 0.10                                           | I |
| I | C-ABD       | 0.00                | 8.08                  | 0.000                        |                                  | 0.00                     | 0.00                   | 0.0                                 |                                               | 0.00                                           | I |
| I |             |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |

\*WARNING\* NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

#### QUEUE FOR STREAM B-ACD

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 17.00                     | 0.0                            |
| 17.15                     | 0.0                            |
| 17.30                     | 0.0                            |
| 17.45                     | 0.0                            |
| 18.00                     | 0.0                            |
| 18.15                     | 0.0                            |

#### QUEUE FOR STREAM A-BCD

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 17.00                     | 0.2                            |
| 17.15                     | 0.2                            |
| 17.30                     | 0.3                            |
| 17.45                     | 0.3                            |
| 18.00                     | 0.3                            |
| 18.15                     | 0.2                            |

QUEUE FOR STREAM D-ABC

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 17.00                     | 0.1                            |
| 17.15                     | 0.2                            |
| 17.30                     | 0.2                            |
| 17.45                     | 0.2                            |
| 18.00                     | 0.2                            |
| 18.15                     | 0.1                            |

QUEUE FOR STREAM C-ABD

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 17.00                     | 0.0                            |
| 17.15                     | 0.0                            |
| 17.30                     | 0.0                            |
| 17.45                     | 0.0                            |
| 18.00                     | 0.0                            |
| 18.15                     | 0.0                            |

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

| I | STREAM | I | TOTAL DEMAND | I       | * QUEUEING * | I         | * INCLUSIVE QUEUEING * | I         |      |
|---|--------|---|--------------|---------|--------------|-----------|------------------------|-----------|------|
| I | I      | I | I            | I       | * DELAY *    | I         | * DELAY *              | I         |      |
| I | I      | I | (VEH)        | (VEH/H) | (MIN)        | (MIN/VEH) | (MIN)                  | (MIN/VEH) |      |
| I | B-ACD  | I | 22.0         | I       | 14.7         | I         | 2.6                    | I         | 0.12 |
| I | A-BCD  | I | 161.0        | I       | 107.4        | I         | 23.4                   | I         | 0.15 |
| I | D-ABC  | I | 136.3        | I       | 90.8         | I         | 14.5                   | I         | 0.11 |
| I | C-ABD  | I | 0.0          | I       | 0.0          | I         | 0.00                   | I         | 0.00 |
| I | ALL    | I | 1106.6       | I       | 737.8        | I         | 40.6                   | I         | 0.04 |

\* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD  
\* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES  
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD  
\* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS  
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

\*\*\*\*\*END OF RUN\*\*\*\*\*

===== end of file =====

TRL LIMITED

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM  
RELEASE 4.0 (SEPT 2008)

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EMAIL: Software@trl.co.uk

THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS  
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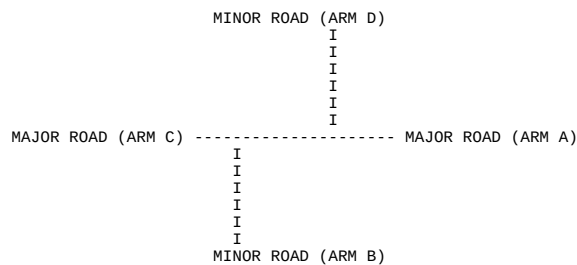
Run with file:-  
"P:\A05022 Adoc Technical Work-DTPC\Analysis\Clitheroe\Appeal Work 260812\PICADY\Chester ave\  
Chester Av Park Av B6478 August 2012.vpi"  
(drive-on-the-left) at 18:08:35 on Friday, 31 August 2012

RUN INFORMATION  
\*\*\*\*\*

RUN TITLE : Run 1  
LOCATION :  
DATE : 09/08/11  
CLIENT :  
ENUMERATOR :  
JOB NUMBER :  
STATUS :  
DESCRIPTION :

MAJOR/MINOR JUNCTION CAPACITY AND DELAY  
\*\*\*\*\*

INPUT DATA  
-----



ARM A IS B6478 Clitheroe  
ARM B IS Chester Avenue  
ARM C IS B6478 Waddington  
ARM D IS Park Avenue

STREAM LABELLING CONVENTION  
-----

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B  
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C  
ETC.

# GEOMETRIC DATA

| DATA ITEM                          | MINOR ROAD B    | MINOR ROAD D    |
|------------------------------------|-----------------|-----------------|
| TOTAL MAJOR ROAD CARRIAGEWAY WIDTH | ( W ) 7.60 M.   | ( W ) 7.50 M.   |
| CENTRAL RESERVE WIDTH              | (WCR ) 0.00 M.  | (WCR ) 0.00 M.  |
| MAJOR ROAD RIGHT TURN - WIDTH      | (WC-B) 2.20 M.  | (WA-D) 2.20 M.  |
| - VISIBILITY                       | (VC-B) 57.00 M. | (VA-D) 68.00 M. |
| - BLOCKS TRAFFIC                   | YES             | YES             |
| MINOR ROAD - VISIBILITY TO LEFT    | (VB-C) 11.0 M.  | (VD-A) 12.0 M.  |
| - VISIBILITY TO RIGHT              | (VB-A) 12.0 M.  | (VD-C) 12.0 M.  |
| - LANE 1 WIDTH                     | (WB-C) 4.90 M.  | (WD-A) 4.50 M.  |
| - LANE 2 WIDTH                     | (WB-A) 0.00 M.  | (WD-C) 0.00 M.  |

## .SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

### B-C Stream

| Intercept For Stream B-C | Slope For Opposing Stream A-C | Slope For Opposing Stream D-C | Slope For Opposing Stream A-B | Slope For Opposing Stream D-B |
|--------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| 751.61                   | 0.27                          | 0.27                          | 0.11                          | 0.11                          |

### B-AD Stream

| Intercept For Stream B-AD | Slope For Opposing Stream A-C | Slope For Opposing Stream A-D | Slope For Opposing Stream D-A | Slope For Opposing Stream D-B |
|---------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| 579.81                    | 0.25                          | 0.25                          | 0.10                          | 0.10                          |

| Slope For Opposing Stream C-A | Slope For Opposing Stream C-B | Slope For Opposing Stream C-D | Slope For Opposing Stream |
|-------------------------------|-------------------------------|-------------------------------|---------------------------|
| 0.16                          | 0.16                          | 0.35                          |                           |

### D-A Stream

| Intercept For Stream D-A | Slope For Opposing Stream C-A | Slope For Opposing Stream D-C | Slope For Opposing Stream A-B | Slope For Opposing Stream D-B |
|--------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| 726.33                   | 0.26                          | 0.26                          | 0.10                          | 0.10                          |

### D-BC Stream

| Intercept For Stream D-BC | Slope For Opposing Stream C-A | Slope For Opposing Stream B-A | Slope For Opposing Stream C-D | Slope For Opposing Stream B-D |
|---------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| 560.67                    | 0.24                          | 0.24                          | 0.10                          | 0.10                          |

| Slope For Opposing Stream A-C | Slope For Opposing Stream A-B | Slope For Opposing Stream A-D | Slope For Opposing Stream |
|-------------------------------|-------------------------------|-------------------------------|---------------------------|
| 0.15                          | 0.15                          | 0.34                          |                           |

### C-B Stream

| Intercept For Stream C-B | Slope For Opposing Stream A-C | Slope For Opposing Stream A-B | Slope For Opposing Stream D-C | Slope For Opposing Stream D-B |
|--------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| 606.97                   | 0.22                          | 0.22                          | 0.22                          | 0.22                          |

### A-D Stream

| Intercept For Stream A-D | Slope For Opposing Stream C-A | Slope For Opposing Stream C-D | Slope For Opposing Stream B-A | Slope For Opposing Stream B-D |
|--------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| 606.97                   | 0.22                          | 0.22                          | 0.22                          | 0.22                          |

## TRAFFIC DEMAND DATA

| ARM | FLOW SCALE(%) |
|-----|---------------|
| A   | 100           |
| B   | 100           |
| C   | 100           |
| D   | 100           |

Demand set: 2011/2012 Base Flows PM

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.  
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

| ARM   | NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE | TOP OF PEAK IS REACHED | FLOW STOPS FALLING | RATE OF FLOW (VEH/MIN) BEFORE PEAK | AT TOP OF PEAK | AFTER PEAK |
|-------|-------------------------------------------------------|------------------------|--------------------|------------------------------------|----------------|------------|
| ARM A | 15.00                                                 | 45.00                  | 75.00              | 5.05                               | 7.58           | 5.05       |
| ARM B | 15.00                                                 | 45.00                  | 75.00              | 0.34                               | 0.51           | 0.34       |
| ARM C | 15.00                                                 | 45.00                  | 75.00              | 4.05                               | 6.08           | 4.05       |
| ARM D | 15.00                                                 | 45.00                  | 75.00              | 0.30                               | 0.45           | 0.30       |

Demand set: 2011/2012 Base Flows PM

| TIME          | FROM/TO | ARM    | A      | ARM    | B      | ARM   | C    | ARM   | D    |
|---------------|---------|--------|--------|--------|--------|-------|------|-------|------|
| 16.45 - 17.00 | ARM A   | 0.000  | 0.052  | 0.906  | 0.042  | 0.0   | 21.0 | 366.0 | 17.0 |
|               |         | ( 0.0) | ( 0.0) | ( 1.0) | ( 0.0) |       |      |       |      |
|               | ARM B   | 0.593  | 0.000  | 0.407  | 0.000  | 16.0  | 0.0  | 11.0  | 0.0  |
|               |         | ( 0.0) | ( 0.0) | ( 0.0) | ( 0.0) |       |      |       |      |
|               | ARM C   | 0.941  | 0.056  | 0.000  | 0.003  | 305.0 | 18.0 | 0.0   | 1.0  |
|               |         | ( 1.0) | ( 0.0) | ( 0.0) | ( 0.0) |       |      |       |      |
|               | ARM D   | 0.833  | 0.042  | 0.125  | 0.000  | 20.0  | 1.0  | 3.0   | 0.0  |
|               |         | ( 0.0) | ( 0.0) | ( 0.0) | ( 0.0) |       |      |       |      |

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA  
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2011/2012 Base Flows PM  
AND FOR TIME PERIOD 2

| TIME        | DEMAND (VEH/MIN) | CAPACITY (VEH/MIN) | DEMAND/CAPACITY (RFC) | PEDESTRIAN FLOW (PEDS/MIN) | START QUEUE (VEHS) | END QUEUE (VEHS) | DELAY (VEH.MIN/ TIME SEGMENT) | GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT) | AVERAGE DELAY PER ARRIVING VEHICLE (MIN) |
|-------------|------------------|--------------------|-----------------------|----------------------------|--------------------|------------------|-------------------------------|-----------------------------------------|------------------------------------------|
| 16.45-17.00 |                  |                    |                       |                            |                    |                  |                               |                                         |                                          |
| B-ACD       | 0.34             | 8.90               | 0.038                 |                            | 0.00               | 0.04             | 0.6                           |                                         | 0.12                                     |
| A-BCD       | 0.21             | 9.32               | 0.023                 |                            | 0.00               | 0.02             | 0.4                           |                                         | 0.11                                     |
| D-ABC       | 0.30             | 10.24              | 0.029                 |                            | 0.00               | 0.03             | 0.4                           |                                         | 0.10                                     |
| C-ABD       | 0.23             | 9.03               | 0.025                 |                            | 0.00               | 0.03             | 0.4                           |                                         | 0.11                                     |

| TIME        | DEMAND (VEH/MIN) | CAPACITY (VEH/MIN) | DEMAND/CAPACITY (RFC) | PEDESTRIAN FLOW (PEDS/MIN) | START QUEUE (VEHS) | END QUEUE (VEHS) | DELAY (VEH.MIN/ TIME SEGMENT) | GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT) | AVERAGE DELAY PER ARRIVING VEHICLE (MIN) |
|-------------|------------------|--------------------|-----------------------|----------------------------|--------------------|------------------|-------------------------------|-----------------------------------------|------------------------------------------|
| 17.00-17.15 |                  |                    |                       |                            |                    |                  |                               |                                         |                                          |
| B-ACD       | 0.40             | 8.55               | 0.047                 |                            | 0.04               | 0.05             | 0.7                           |                                         | 0.12                                     |
| A-BCD       | 0.25             | 9.14               | 0.028                 |                            | 0.02               | 0.03             | 0.4                           |                                         | 0.11                                     |
| D-ABC       | 0.36             | 9.99               | 0.036                 |                            | 0.03               | 0.04             | 0.5                           |                                         | 0.10                                     |
| C-ABD       | 0.27             | 8.82               | 0.031                 |                            | 0.03               | 0.03             | 0.5                           |                                         | 0.12                                     |

| TIME        | DEMAND (VEH/MIN) | CAPACITY (VEH/MIN) | DEMAND/CAPACITY (RFC) | PEDESTRIAN FLOW (PEDS/MIN) | START QUEUE (VEHS) | END QUEUE (VEHS) | DELAY (VEH.MIN/ TIME SEGMENT) | GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT) | AVERAGE DELAY PER ARRIVING VEHICLE (MIN) |
|-------------|------------------|--------------------|-----------------------|----------------------------|--------------------|------------------|-------------------------------|-----------------------------------------|------------------------------------------|
| 17.15-17.30 |                  |                    |                       |                            |                    |                  |                               |                                         |                                          |
| B-ACD       | 0.50             | 8.07               | 0.061                 |                            | 0.05               | 0.06             | 1.0                           |                                         | 0.13                                     |
| A-BCD       | 0.31             | 8.90               | 0.035                 |                            | 0.03               | 0.04             | 0.6                           |                                         | 0.12                                     |
| D-ABC       | 0.44             | 9.62               | 0.046                 |                            | 0.04               | 0.05             | 0.7                           |                                         | 0.11                                     |
| C-ABD       | 0.33             | 8.53               | 0.039                 |                            | 0.03               | 0.04             | 0.6                           |                                         | 0.12                                     |

| TIME        | DEMAND (VEH/MIN) | CAPACITY (VEH/MIN) | DEMAND/CAPACITY (RFC) | PEDESTRIAN FLOW (PEDS/MIN) | START QUEUE (VEHS) | END QUEUE (VEHS) | DELAY (VEH.MIN/ TIME SEGMENT) | GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT) | AVERAGE DELAY PER ARRIVING VEHICLE (MIN) |
|-------------|------------------|--------------------|-----------------------|----------------------------|--------------------|------------------|-------------------------------|-----------------------------------------|------------------------------------------|
| 17.30-17.45 |                  |                    |                       |                            |                    |                  |                               |                                         |                                          |
| B-ACD       | 0.50             | 8.07               | 0.061                 |                            | 0.06               | 0.07             | 1.0                           |                                         | 0.13                                     |
| A-BCD       | 0.31             | 8.90               | 0.035                 |                            | 0.04               | 0.04             | 0.6                           |                                         | 0.12                                     |
| D-ABC       | 0.44             | 9.62               | 0.046                 |                            | 0.05               | 0.05             | 0.7                           |                                         | 0.11                                     |
| C-ABD       | 0.33             | 8.53               | 0.039                 |                            | 0.04               | 0.04             | 0.6                           |                                         | 0.12                                     |

| TIME        | DEMAND (VEH/MIN) | CAPACITY (VEH/MIN) | DEMAND/CAPACITY (RFC) | PEDESTRIAN FLOW (PEDS/MIN) | START QUEUE (VEHS) | END QUEUE (VEHS) | DELAY (VEH.MIN/ TIME SEGMENT) | GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT) | AVERAGE DELAY PER ARRIVING VEHICLE (MIN) |
|-------------|------------------|--------------------|-----------------------|----------------------------|--------------------|------------------|-------------------------------|-----------------------------------------|------------------------------------------|
| 17.45-18.00 |                  |                    |                       |                            |                    |                  |                               |                                         |                                          |
| B-ACD       | 0.40             | 8.55               | 0.047                 |                            | 0.07               | 0.05             | 0.8                           |                                         | 0.12                                     |
| A-BCD       | 0.25             | 9.14               | 0.028                 |                            | 0.04               | 0.03             | 0.4                           |                                         | 0.11                                     |
| D-ABC       | 0.36             | 9.99               | 0.036                 |                            | 0.05               | 0.04             | 0.6                           |                                         | 0.10                                     |
| C-ABD       | 0.27             | 8.82               | 0.031                 |                            | 0.04               | 0.03             | 0.5                           |                                         | 0.12                                     |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 18.00-18.15 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.34                | 8.90                  | 0.038                        |                                  | 0.05                     | 0.04                   | 0.6                                 |                                               | 0.12                                           | I |
| I | A-BCD       | 0.21                | 9.32                  | 0.023                        |                                  | 0.03                     | 0.02                   | 0.4                                 |                                               | 0.11                                           | I |
| I | D-ABC       | 0.30                | 10.24                 | 0.029                        |                                  | 0.04                     | 0.03                   | 0.5                                 |                                               | 0.10                                           | I |
| I | C-ABD       | 0.23                | 9.03                  | 0.025                        |                                  | 0.03                     | 0.03                   | 0.4                                 |                                               | 0.11                                           | I |
| I |             |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |

\*WARNING\* NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-ACD

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 17.00                     | 0.0                            |
| 17.15                     | 0.0                            |
| 17.30                     | 0.1                            |
| 17.45                     | 0.1                            |
| 18.00                     | 0.1                            |
| 18.15                     | 0.0                            |

QUEUE FOR STREAM A-BCD

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 17.00                     | 0.0                            |
| 17.15                     | 0.0                            |
| 17.30                     | 0.0                            |
| 17.45                     | 0.0                            |
| 18.00                     | 0.0                            |
| 18.15                     | 0.0                            |

QUEUE FOR STREAM D-ABC

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 17.00                     | 0.0                            |
| 17.15                     | 0.0                            |
| 17.30                     | 0.0                            |
| 17.45                     | 0.0                            |
| 18.00                     | 0.0                            |
| 18.15                     | 0.0                            |

QUEUE FOR STREAM C-ABD

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 17.00                     | 0.0                            |
| 17.15                     | 0.0                            |
| 17.30                     | 0.0                            |
| 17.45                     | 0.0                            |
| 18.00                     | 0.0                            |
| 18.15                     | 0.0                            |

## QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

| I | STREAM | I | TOTAL  | DEMAND  | I     | * QUEUEING | I         | * INCLUSIVE | QUEUEING | I         |
|---|--------|---|--------|---------|-------|------------|-----------|-------------|----------|-----------|
| I | I      | I | I      | I       | I     | * DELAY    | I         | * DELAY     | I        | I         |
| I | I      | I | (VEH)  | (VEH/H) | I     | (MIN)      | (MIN/VEH) | I           | (MIN)    | (MIN/VEH) |
| I | B-ACD  | I | 37.2   | I       | 24.8  | I          | 4.6       | I           | 0.12     | I         |
| I | A-BCD  | I | 23.4   | I       | 15.6  | I          | 2.7       | I           | 0.12     | I         |
| I | D-ABC  | I | 33.0   | I       | 22.0  | I          | 3.4       | I           | 0.10     | I         |
| I | C-ABD  | I | 24.8   | I       | 16.5  | I          | 3.0       | I           | 0.12     | I         |
| I | ALL    | I | 1072.2 | I       | 714.8 | I          | 13.7      | I           | 0.01     | I         |

\* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD  
 \* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES  
 WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD  
 \* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS  
 A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

\*\*\*\*\*END OF RUN\*\*\*\*\*

## .SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

## B-C Stream

| I | Intercept | For    | Slope  | For  | Opposing | Slope | For    | Opposing | Slope  | For  | Opposing | Slope | For | Opposing | I |
|---|-----------|--------|--------|------|----------|-------|--------|----------|--------|------|----------|-------|-----|----------|---|
| I | STREAM    | B-C    | STREAM | A-C  | STREAM   | D-C   | STREAM | A-B      | STREAM | D-B  | STREAM   | I     | I   | I        | I |
| I |           | 751.61 |        | 0.27 |          | 0.27  |        | 0.11     |        | 0.11 |          | I     | I   | I        | I |

## B-AD Stream

| I | Intercept | For    | Slope  | For  | Opposing | Slope | For    | Opposing | Slope  | For  | Opposing | Slope | For | Opposing | I |
|---|-----------|--------|--------|------|----------|-------|--------|----------|--------|------|----------|-------|-----|----------|---|
| I | STREAM    | B-AD   | STREAM | A-C  | STREAM   | A-D   | STREAM | D-A      | STREAM | D-B  | STREAM   | I     | I   | I        | I |
| I |           | 579.81 |        | 0.25 |          | 0.25  |        | 0.10     |        | 0.10 |          | I     | I   | I        | I |

| I |        | Slope | For    | Opposing | Slope  | For  | Opposing | Slope | For | Opposing | Slope | For | Opposing | I |
|---|--------|-------|--------|----------|--------|------|----------|-------|-----|----------|-------|-----|----------|---|
| I | STREAM | C-A   | STREAM | C-B      | STREAM | C-D  | STREAM   | I     | I   | I        | I     | I   | I        | I |
| I |        | 0.16  |        | 0.16     |        | 0.35 |          | I     | I   | I        | I     | I   | I        | I |

## D-A Stream

| I | Intercept | For    | Slope  | For  | Opposing | Slope | For    | Opposing | Slope  | For  | Opposing | Slope | For | Opposing | I |
|---|-----------|--------|--------|------|----------|-------|--------|----------|--------|------|----------|-------|-----|----------|---|
| I | STREAM    | D-A    | STREAM | C-A  | STREAM   | D-C   | STREAM | A-B      | STREAM | D-B  | STREAM   | I     | I   | I        | I |
| I |           | 726.33 |        | 0.26 |          | 0.26  |        | 0.10     |        | 0.10 |          | I     | I   | I        | I |

## D-BC Stream

| I | Intercept | For    | Slope  | For  | Opposing | Slope | For    | Opposing | Slope  | For  | Opposing | Slope | For | Opposing | I |
|---|-----------|--------|--------|------|----------|-------|--------|----------|--------|------|----------|-------|-----|----------|---|
| I | STREAM    | D-BC   | STREAM | C-A  | STREAM   | B-A   | STREAM | C-D      | STREAM | B-D  | STREAM   | I     | I   | I        | I |
| I |           | 560.67 |        | 0.24 |          | 0.24  |        | 0.10     |        | 0.10 |          | I     | I   | I        | I |

| I |        | Slope | For    | Opposing | Slope  | For  | Opposing | Slope | For | Opposing | Slope | For | Opposing | I |
|---|--------|-------|--------|----------|--------|------|----------|-------|-----|----------|-------|-----|----------|---|
| I | STREAM | A-C   | STREAM | A-B      | STREAM | A-D  | STREAM   | I     | I   | I        | I     | I   | I        | I |
| I |        | 0.15  |        | 0.15     |        | 0.34 |          | I     | I   | I        | I     | I   | I        | I |

## C-B Stream

| I | Intercept | For    | Slope  | For  | Opposing | Slope | For    | Opposing | Slope  | For  | Opposing | Slope | For | Opposing | I |
|---|-----------|--------|--------|------|----------|-------|--------|----------|--------|------|----------|-------|-----|----------|---|
| I | STREAM    | C-B    | STREAM | A-C  | STREAM   | A-B   | STREAM | D-C      | STREAM | D-B  | STREAM   | I     | I   | I        | I |
| I |           | 606.97 |        | 0.22 |          | 0.22  |        | 0.22     |        | 0.22 |          | I     | I   | I        | I |

## A-D Stream

| I | Intercept | For    | Slope  | For  | Opposing | Slope | For    | Opposing | Slope  | For  | Opposing | Slope | For | Opposing | I |
|---|-----------|--------|--------|------|----------|-------|--------|----------|--------|------|----------|-------|-----|----------|---|
| I | STREAM    | A-D    | STREAM | C-A  | STREAM   | C-D   | STREAM | B-A      | STREAM | B-D  | STREAM   | I     | I   | I        | I |
| I |           | 606.97 |        | 0.22 |          | 0.22  |        | 0.22     |        | 0.22 |          | I     | I   | I        | I |

## TRAFFIC DEMAND DATA

| I | ARM | I | FLOW | SCALE(%) | I |
|---|-----|---|------|----------|---|
| I | A   | I | 100  | I        | I |
| I | B   | I | 100  | I        | I |
| I | C   | I | 100  | I        | I |
| I | D   | I | 100  | I        | I |

Demand set: 2011/2012 Base Flows With Dev 50 Dwellings PM

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.  
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

| ARM   | NUMBER OF FLOW STARTS TO RISE | MINUTES TOP OF IS | FROM PEAK REACHED | START WHEN FLOW FALLING | RATE BEFORE PEAK | OF FLOW AT TOP OF PEAK | (VEH/MIN) AFTER PEAK |
|-------|-------------------------------|-------------------|-------------------|-------------------------|------------------|------------------------|----------------------|
| ARM A | 15.00                         | 45.00             | 75.00             | 5.32                    | 7.99             | 5.32                   |                      |
| ARM B | 15.00                         | 45.00             | 75.00             | 0.34                    | 0.51             | 0.34                   |                      |
| ARM C | 15.00                         | 45.00             | 75.00             | 4.10                    | 6.15             | 4.10                   |                      |
| ARM D | 15.00                         | 45.00             | 75.00             | 0.30                    | 0.45             | 0.30                   |                      |

Demand set: 2011/2012 Base Flows With Dev 50 Dwellings PM

|       |         | TURNING PROPORTIONS      |        |        |        |        |     |   |     |   |  |
|-------|---------|--------------------------|--------|--------|--------|--------|-----|---|-----|---|--|
|       |         | TURNING COUNTS           |        |        |        |        |     |   |     |   |  |
|       |         | (PERCENTAGE OF H. V. S.) |        |        |        |        |     |   |     |   |  |
| TIME  |         | FROM/TO                  | ARM    | A      | ARM    | B      | ARM | C | ARM | D |  |
| 16.45 | - 17.00 | ARM A                    | 0.000  | 0.049  | 0.911  | 0.040  |     |   |     |   |  |
|       |         |                          | 0.0    | 21.0   | 388.0  | 17.0   |     |   |     |   |  |
|       |         |                          | ( 0.0) | ( 0.0) | ( 1.0) | ( 0.0) |     |   |     |   |  |
|       |         | ARM B                    | 0.593  | 0.000  | 0.407  | 0.000  |     |   |     |   |  |
|       |         |                          | 16.0   | 0.0    | 11.0   | 0.0    |     |   |     |   |  |
|       |         |                          | ( 0.0) | ( 0.0) | ( 0.0) | ( 0.0) |     |   |     |   |  |
|       |         | ARM C                    | 0.942  | 0.055  | 0.000  | 0.003  |     |   |     |   |  |
|       |         |                          | 309.0  | 18.0   | 0.0    | 1.0    |     |   |     |   |  |
|       |         |                          | ( 1.0) | ( 0.0) | ( 0.0) | ( 0.0) |     |   |     |   |  |
|       |         | ARM D                    | 0.833  | 0.042  | 0.125  | 0.000  |     |   |     |   |  |
|       |         |                          | 20.0   | 1.0    | 3.0    | 0.0    |     |   |     |   |  |
|       |         |                          | ( 0.0) | ( 0.0) | ( 0.0) | ( 0.0) |     |   |     |   |  |

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA  
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2011/2012 Base Flows With Dev 50 Dwellings PM  
AND FOR TIME PERIOD 2

| TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH. MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH. MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) |
|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|--------------------------------------|------------------------------------------------|------------------------------------------------|
| 16.45-17.00 |                     |                       |                              |                                  |                          |                        |                                      |                                                |                                                |
| B-ACD       | 0.34                | 8.82                  | 0.038                        |                                  | 0.00                     | 0.04                   | 0.6                                  |                                                | 0.12                                           |
| A-BCD       | 0.21                | 9.31                  | 0.023                        |                                  | 0.00                     | 0.02                   | 0.4                                  |                                                | 0.11                                           |
| D-ABC       | 0.30                | 10.22                 | 0.029                        |                                  | 0.00                     | 0.03                   | 0.4                                  |                                                | 0.10                                           |
| C-ABD       | 0.23                | 8.97                  | 0.025                        |                                  | 0.00                     | 0.03                   | 0.4                                  |                                                | 0.11                                           |

| TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH. MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH. MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) |
|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|--------------------------------------|------------------------------------------------|------------------------------------------------|
| 17.00-17.15 |                     |                       |                              |                                  |                          |                        |                                      |                                                |                                                |
| B-ACD       | 0.40                | 8.46                  | 0.048                        |                                  | 0.04                     | 0.05                   | 0.7                                  |                                                | 0.12                                           |
| A-BCD       | 0.25                | 9.13                  | 0.028                        |                                  | 0.02                     | 0.03                   | 0.4                                  |                                                | 0.11                                           |
| D-ABC       | 0.36                | 9.95                  | 0.036                        |                                  | 0.03                     | 0.04                   | 0.5                                  |                                                | 0.10                                           |
| C-ABD       | 0.27                | 8.75                  | 0.031                        |                                  | 0.03                     | 0.03                   | 0.5                                  |                                                | 0.12                                           |

|             | TIME | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH. MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH. MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) |
|-------------|------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|--------------------------------------|------------------------------------------------|------------------------------------------------|
| 17.15-17.30 |      |                     |                       |                              |                                  |                          |                        |                                      |                                                |                                                |
| B-ACD       |      | 0.50                | 7.95                  | 0.062                        |                                  | 0.05                     | 0.07                   | 1.0                                  |                                                | 0.13                                           |
| A-BCD       |      | 0.31                | 8.88                  | 0.035                        |                                  | 0.03                     | 0.04                   | 0.6                                  |                                                | 0.12                                           |
| D-ABC       |      | 0.44                | 9.58                  | 0.046                        |                                  | 0.04                     | 0.05                   | 0.7                                  |                                                | 0.11                                           |
| C-ABD       |      | 0.33                | 8.44                  | 0.039                        |                                  | 0.03                     | 0.04                   | 0.6                                  |                                                | 0.12                                           |

|             | TIME | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH. MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH. MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) |
|-------------|------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|--------------------------------------|------------------------------------------------|------------------------------------------------|
| 17.30-17.45 |      |                     |                       |                              |                                  |                          |                        |                                      |                                                |                                                |
| B-ACD       | 0.50 | 7.95                | 0.062                 | 0.07                         | 0.07                             | 1.0                      |                        | 0.13                                 |                                                |                                                |
| A-BCD       | 0.31 | 8.88                | 0.035                 | 0.04                         | 0.04                             | 0.6                      |                        | 0.12                                 |                                                |                                                |
| D-ABC       | 0.44 | 9.58                | 0.046                 | 0.05                         | 0.05                             | 0.7                      |                        | 0.11                                 |                                                |                                                |
| C-ABD       | 0.33 | 8.44                | 0.039                 | 0.04                         | 0.04                             | 0.6                      |                        | 0.12                                 |                                                |                                                |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 17.45-18.00 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.40                | 8.46                  | 0.048                        |                                  | 0.07                     | 0.05                   | 0.8                                 |                                               | 0.12                                           | I |
| I | A-BCD       | 0.25                | 9.13                  | 0.028                        |                                  | 0.04                     | 0.03                   | 0.4                                 |                                               | 0.11                                           | I |
| I | D-ABC       | 0.36                | 9.95                  | 0.036                        |                                  | 0.05                     | 0.04                   | 0.6                                 |                                               | 0.10                                           | I |
| I | C-ABD       | 0.27                | 8.75                  | 0.031                        |                                  | 0.04                     | 0.03                   | 0.5                                 |                                               | 0.12                                           | I |
| I |             |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 18.00-18.15 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.34                | 8.82                  | 0.038                        |                                  | 0.05                     | 0.04                   | 0.6                                 |                                               | 0.12                                           | I |
| I | A-BCD       | 0.21                | 9.30                  | 0.023                        |                                  | 0.03                     | 0.02                   | 0.4                                 |                                               | 0.11                                           | I |
| I | D-ABC       | 0.30                | 10.22                 | 0.029                        |                                  | 0.04                     | 0.03                   | 0.5                                 |                                               | 0.10                                           | I |
| I | C-ABD       | 0.23                | 8.97                  | 0.025                        |                                  | 0.03                     | 0.03                   | 0.4                                 |                                               | 0.11                                           | I |
| I |             |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |

\*WARNING\* NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-ACD

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 17.00                     | 0.0                            |
| 17.15                     | 0.0                            |
| 17.30                     | 0.1                            |
| 17.45                     | 0.1                            |
| 18.00                     | 0.1                            |
| 18.15                     | 0.0                            |

QUEUE FOR STREAM A-BCD

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 17.00                     | 0.0                            |
| 17.15                     | 0.0                            |
| 17.30                     | 0.0                            |
| 17.45                     | 0.0                            |
| 18.00                     | 0.0                            |
| 18.15                     | 0.0                            |

QUEUE FOR STREAM D-ABC

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 17.00                     | 0.0                            |
| 17.15                     | 0.0                            |
| 17.30                     | 0.0                            |
| 17.45                     | 0.0                            |
| 18.00                     | 0.0                            |
| 18.15                     | 0.0                            |

QUEUE FOR STREAM C-ABD

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 17.00                     | 0.0                            |
| 17.15                     | 0.0                            |
| 17.30                     | 0.0                            |
| 17.45                     | 0.0                            |
| 18.00                     | 0.0                            |
| 18.15                     | 0.0                            |

## QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

| I | STREAM | I | TOTAL  | DEMAND  | I     | * QUEUEING | I         | * INCLUSIVE | QUEUEING | I         |
|---|--------|---|--------|---------|-------|------------|-----------|-------------|----------|-----------|
| I | I      | I | I      | I       | I     | * DELAY    | I         | * DELAY     | I        | I         |
| I | I      | I | (VEH)  | (VEH/H) | I     | (MIN)      | (MIN/VEH) | I           | (MIN)    | (MIN/VEH) |
| I | B-ACD  | I | 37.2   | I       | 24.8  | I          | 4.7       | I           | 0.13     | I         |
| I | A-BCD  | I | 23.4   | I       | 15.6  | I          | 2.7       | I           | 0.12     | I         |
| I | D-ABC  | I | 33.0   | I       | 22.0  | I          | 3.5       | I           | 0.10     | I         |
| I | C-ABD  | I | 24.8   | I       | 16.5  | I          | 3.0       | I           | 0.12     | I         |
| I | ALL    | I | 1108.0 | I       | 738.7 | I          | 13.8      | I           | 0.01     | I         |

\* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD  
 \* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES  
 WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD  
 \* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS  
 A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

\*\*\*\*\*END OF RUN\*\*\*\*\*

## .SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

## B-C Stream

| I | Intercept | For    | Slope  | For  | Opposing | Slope | For    | Opposing | Slope  | For  | Opposing | Slope | For    | Opposing | I |
|---|-----------|--------|--------|------|----------|-------|--------|----------|--------|------|----------|-------|--------|----------|---|
| I | STREAM    | B-C    | STREAM | A-C  | STREAM   | D-C   | STREAM | A-B      | STREAM | D-B  | STREAM   | D-B   | STREAM | D-B      | I |
| I |           | 751.61 |        | 0.27 |          | 0.27  |        | 0.11     |        | 0.11 |          |       |        |          | I |

## B-AD Stream

| I | Intercept | For    | Slope  | For  | Opposing | Slope | For    | Opposing | Slope  | For  | Opposing | Slope | For    | Opposing | I |
|---|-----------|--------|--------|------|----------|-------|--------|----------|--------|------|----------|-------|--------|----------|---|
| I | STREAM    | B-AD   | STREAM | A-C  | STREAM   | A-D   | STREAM | D-A      | STREAM | D-B  | STREAM   | D-B   | STREAM | D-B      | I |
| I |           | 579.81 |        | 0.25 |          | 0.25  |        | 0.10     |        | 0.10 |          |       |        |          | I |

| I |  | Slope  | For  | Opposing | Slope | For    | Opposing | Slope  | For | Opposing | Slope | For    | Opposing | I |
|---|--|--------|------|----------|-------|--------|----------|--------|-----|----------|-------|--------|----------|---|
| I |  | STREAM | C-A  | STREAM   | C-B   | STREAM | C-D      | STREAM | C-D | STREAM   | C-D   | STREAM | C-D      | I |
| I |  |        | 0.16 |          | 0.16  |        | 0.35     |        |     |          |       |        |          | I |

## D-A Stream

| I | Intercept | For    | Slope  | For  | Opposing | Slope | For    | Opposing | Slope  | For  | Opposing | Slope | For    | Opposing | I |
|---|-----------|--------|--------|------|----------|-------|--------|----------|--------|------|----------|-------|--------|----------|---|
| I | STREAM    | D-A    | STREAM | C-A  | STREAM   | D-C   | STREAM | A-B      | STREAM | D-B  | STREAM   | D-B   | STREAM | D-B      | I |
| I |           | 726.33 |        | 0.26 |          | 0.26  |        | 0.10     |        | 0.10 |          |       |        |          | I |

## D-BC Stream

| I | Intercept | For    | Slope  | For  | Opposing | Slope | For    | Opposing | Slope  | For  | Opposing | Slope | For    | Opposing | I |
|---|-----------|--------|--------|------|----------|-------|--------|----------|--------|------|----------|-------|--------|----------|---|
| I | STREAM    | D-BC   | STREAM | C-A  | STREAM   | B-A   | STREAM | C-D      | STREAM | C-D  | STREAM   | B-D   | STREAM | B-D      | I |
| I |           | 560.67 |        | 0.24 |          | 0.24  |        | 0.10     |        | 0.10 |          |       |        |          | I |

| I |  | Slope  | For  | Opposing | Slope | For    | Opposing | Slope  | For | Opposing | Slope | For    | Opposing | I |
|---|--|--------|------|----------|-------|--------|----------|--------|-----|----------|-------|--------|----------|---|
| I |  | STREAM | A-C  | STREAM   | A-B   | STREAM | A-D      | STREAM | A-D | STREAM   | A-D   | STREAM | A-D      | I |
| I |  |        | 0.15 |          | 0.15  |        | 0.34     |        |     |          |       |        |          | I |

## C-B Stream

| I | Intercept | For    | Slope  | For  | Opposing | Slope | For    | Opposing | Slope  | For  | Opposing | Slope | For    | Opposing | I |
|---|-----------|--------|--------|------|----------|-------|--------|----------|--------|------|----------|-------|--------|----------|---|
| I | STREAM    | C-B    | STREAM | A-C  | STREAM   | A-B   | STREAM | D-C      | STREAM | D-C  | STREAM   | D-B   | STREAM | D-B      | I |
| I |           | 606.97 |        | 0.22 |          | 0.22  |        | 0.22     |        | 0.22 |          | 0.22  |        |          | I |

## A-D Stream

| I | Intercept | For    | Slope  | For  | Opposing | Slope | For    | Opposing | Slope  | For  | Opposing | Slope | For    | Opposing | I |
|---|-----------|--------|--------|------|----------|-------|--------|----------|--------|------|----------|-------|--------|----------|---|
| I | STREAM    | A-D    | STREAM | C-A  | STREAM   | C-D   | STREAM | B-A      | STREAM | B-A  | STREAM   | B-D   | STREAM | B-D      | I |
| I |           | 606.97 |        | 0.22 |          | 0.22  |        | 0.22     |        | 0.22 |          | 0.22  |        |          | I |

## TRAFFIC DEMAND DATA

| I | ARM | I | FLOW | SCALE(%) | I |
|---|-----|---|------|----------|---|
| I | A   | I | 100  | I        | I |
| I | B   | I | 100  | I        | I |
| I | C   | I | 100  | I        | I |
| I | D   | I | 100  | I        | I |

Demand set: 2011/2012 Base Flows AM

TIME PERIOD BEGINS 08.00 AND ENDS 09.30

LENGTH OF TIME PERIOD - 90 MIN.

LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

| ARM   | NUMBER OF FLOW STARTS TO RISE | MINUTES TOP OF IS | FROM PEAK REACHED | START WHEN FLOW FALLING | RATE BEFORE PEAK | OF FLOW AT TOP OF PEAK | (VEH/MIN) AFTER PEAK |
|-------|-------------------------------|-------------------|-------------------|-------------------------|------------------|------------------------|----------------------|
| ARM A | 15.00                         | 45.00             | I                 | 75.00                   | 3.25             | 4.88                   | 3.25                 |
| ARM B | 15.00                         | 45.00             | I                 | 75.00                   | 0.30             | 0.45                   | 0.30                 |
| ARM C | 15.00                         | 45.00             | I                 | 75.00                   | 3.95             | 5.93                   | 3.95                 |
| ARM D | 15.00                         | 45.00             | I                 | 75.00                   | 0.25             | 0.38                   | 0.25                 |

Demand set: 2011/2012 Base Flows AM

|               |  | TURNING PROPORTIONS<br>TURNING COUNTS<br>(PERCENTAGE OF H.V.S) |        |        |        |        |     |   |     |   |  |
|---------------|--|----------------------------------------------------------------|--------|--------|--------|--------|-----|---|-----|---|--|
| TIME          |  | FROM/TO                                                        | ARM    | A      | ARM    | B      | ARM | C | ARM | D |  |
| 08.00 - 08.15 |  | ARM A                                                          | 0.000  | 0.081  | 0.908  | 0.012  |     |   |     |   |  |
|               |  |                                                                | 0.0    | 21.0   | 236.0  | 3.0    |     |   |     |   |  |
|               |  |                                                                | ( 0.0) | ( 0.0) | ( 4.0) | ( 0.0) |     |   |     |   |  |
|               |  | ARM B                                                          | 0.542  | 0.000  | 0.458  | 0.000  |     |   |     |   |  |
|               |  |                                                                | 13.0   | 0.0    | 11.0   | 0.0    |     |   |     |   |  |
|               |  |                                                                | ( 0.0) | ( 0.0) | ( 0.0) | ( 0.0) |     |   |     |   |  |
|               |  | ARM C                                                          | 0.940  | 0.057  | 0.000  | 0.003  |     |   |     |   |  |
|               |  |                                                                | 297.0  | 18.0   | 0.0    | 1.0    |     |   |     |   |  |
|               |  |                                                                | ( 3.0) | ( 0.0) | ( 0.0) | ( 0.0) |     |   |     |   |  |
|               |  | ARM D                                                          | 0.800  | 0.050  | 0.150  | 0.000  |     |   |     |   |  |
|               |  |                                                                | 16.0   | 1.0    | 3.0    | 0.0    |     |   |     |   |  |
|               |  |                                                                | ( 0.0) | ( 0.0) | ( 0.0) | ( 0.0) |     |   |     |   |  |

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA  
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2011/2012 Base Flows AM  
AND FOR TIME PERIOD 1

| TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH. MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH. MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) |
|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|--------------------------------------|------------------------------------------------|------------------------------------------------|
| 08.00-08.15 |                     |                       |                              |                                  |                          |                        |                                      |                                                |                                                |
| B-ACD       | 0.30                | 9.47                  | 0.032                        |                                  | 0.00                     | 0.03                   | 0.5                                  |                                                | 0.11                                           |
| A-BCD       | 0.04                | 9.33                  | 0.004                        |                                  | 0.00                     | 0.00                   | 0.1                                  |                                                | 0.11                                           |
| D-ABC       | 0.25                | 10.22                 | 0.025                        |                                  | 0.00                     | 0.03                   | 0.4                                  |                                                | 0.10                                           |
| C-ABD       | 0.23                | 9.37                  | 0.024                        |                                  | 0.00                     | 0.02                   | 0.4                                  |                                                | 0.11                                           |

| TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH. MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH. MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) |
|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|--------------------------------------|------------------------------------------------|------------------------------------------------|
| 08.15-08.30 |                     |                       |                              |                                  |                          |                        |                                      |                                                |                                                |
| B-ACD       | 0.36                | 9.21                  | 0.039                        |                                  | 0.03                     | 0.04                   | 0.6                                  |                                                | 0.11                                           |
| A-BCD       | 0.04                | 9.16                  | 0.005                        |                                  | 0.00                     | 0.00                   | 0.1                                  |                                                | 0.11                                           |
| D-ABC       | 0.30                | 9.98                  | 0.030                        |                                  | 0.03                     | 0.03                   | 0.5                                  |                                                | 0.10                                           |
| C-ABD       | 0.27                | 9.23                  | 0.029                        |                                  | 0.02                     | 0.03                   | 0.5                                  |                                                | 0.11                                           |

|             | TIME | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH. MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH. MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) |
|-------------|------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|--------------------------------------|------------------------------------------------|------------------------------------------------|
| 08.30-08.45 |      |                     |                       |                              |                                  |                          |                        |                                      |                                                |                                                |
| B-ACD       |      | 0.44                | 8.85                  | 0.050                        |                                  | 0.04                     | 0.05                   | 0.8                                  |                                                | 0.12                                           |
| A-BCD       |      | 0.06                | 8.92                  | 0.006                        |                                  | 0.00                     | 0.01                   | 0.1                                  |                                                | 0.11                                           |
| D-ABC       |      | 0.37                | 9.65                  | 0.038                        |                                  | 0.03                     | 0.04                   | 0.6                                  |                                                | 0.11                                           |
| C-ABD       |      | 0.33                | 9.03                  | 0.037                        |                                  | 0.03                     | 0.04                   | 0.6                                  |                                                | 0.11                                           |

| TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH. MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH. MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) |
|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|--------------------------------------|------------------------------------------------|------------------------------------------------|
| 08.45-09.00 |                     |                       |                              |                                  |                          |                        |                                      |                                                |                                                |
| B-ACD       | 0.44                | 8.85                  | 0.050                        |                                  | 0.05                     | 0.05                   | 0.8                                  |                                                | 0.12                                           |
| A-BCD       | 0.06                | 8.92                  | 0.006                        |                                  | 0.01                     | 0.01                   | 0.1                                  |                                                | 0.11                                           |
| D-ABC       | 0.37                | 9.65                  | 0.038                        |                                  | 0.04                     | 0.04                   | 0.6                                  |                                                | 0.11                                           |
| C-ABD       | 0.33                | 9.03                  | 0.037                        |                                  | 0.04                     | 0.04                   | 0.6                                  |                                                | 0.11                                           |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 09.00-09.15 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.36                | 9.21                  | 0.039                        |                                  | 0.05                     | 0.04                   | 0.6                                 |                                               | 0.11                                           | I |
| I | A-BCD       | 0.04                | 9.16                  | 0.005                        |                                  | 0.01                     | 0.00                   | 0.1                                 |                                               | 0.11                                           | I |
| I | D-ABC       | 0.30                | 9.98                  | 0.030                        |                                  | 0.04                     | 0.03                   | 0.5                                 |                                               | 0.10                                           | I |
| I | C-ABD       | 0.27                | 9.23                  | 0.029                        |                                  | 0.04                     | 0.03                   | 0.5                                 |                                               | 0.11                                           | I |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 09.15-09.30 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.30                | 9.47                  | 0.032                        |                                  | 0.04                     | 0.03                   | 0.5                                 |                                               | 0.11                                           | I |
| I | A-BCD       | 0.04                | 9.33                  | 0.004                        |                                  | 0.00                     | 0.00                   | 0.1                                 |                                               | 0.11                                           | I |
| I | D-ABC       | 0.25                | 10.22                 | 0.025                        |                                  | 0.03                     | 0.03                   | 0.4                                 |                                               | 0.10                                           | I |
| I | C-ABD       | 0.23                | 9.37                  | 0.024                        |                                  | 0.03                     | 0.03                   | 0.4                                 |                                               | 0.11                                           | I |

\*WARNING\* NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-ACD

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 08.15                     | 0.0                            |
| 08.30                     | 0.0                            |
| 08.45                     | 0.1                            |
| 09.00                     | 0.1                            |
| 09.15                     | 0.0                            |
| 09.30                     | 0.0                            |

QUEUE FOR STREAM A-BCD

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 08.15                     | 0.0                            |
| 08.30                     | 0.0                            |
| 08.45                     | 0.0                            |
| 09.00                     | 0.0                            |
| 09.15                     | 0.0                            |
| 09.30                     | 0.0                            |

QUEUE FOR STREAM D-ABC

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 08.15                     | 0.0                            |
| 08.30                     | 0.0                            |
| 08.45                     | 0.0                            |
| 09.00                     | 0.0                            |
| 09.15                     | 0.0                            |
| 09.30                     | 0.0                            |

QUEUE FOR STREAM C-ABD

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 08.15                     | 0.0                            |
| 08.30                     | 0.0                            |
| 08.45                     | 0.0                            |
| 09.00                     | 0.0                            |
| 09.15                     | 0.0                            |
| 09.30                     | 0.0                            |

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

| I | STREAM | I | TOTAL DEMAND | I       | * QUEUEING *<br>* DELAY * | I         | * INCLUSIVE QUEUEING *<br>* DELAY * | I         |
|---|--------|---|--------------|---------|---------------------------|-----------|-------------------------------------|-----------|
| I | I      | I | I            | I       | I                         | I         | I                                   | I         |
| I | I      | I | (VEH)        | (VEH/H) | (MIN)                     | (MIN/VEH) | (MIN)                               | (MIN/VEH) |
| I | B-ACD  | I | 33.0         | I       | 22.0                      | I         | 3.7                                 | I         |
| I | A-BCD  | I | 4.1          | I       | 2.8                       | I         | 0.5                                 | I         |
| I | D-ABC  | I | 27.5         | I       | 18.4                      | I         | 2.8                                 | I         |
| I | C-ABD  | I | 24.8         | I       | 16.5                      | I         | 2.8                                 | I         |
| I | ALL    | I | 853.4        | I       | 568.9                     | I         | 9.9                                 | I         |

\* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD  
 \* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES  
 WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD  
 \* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS  
 A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

\*\*\*\*\*END OF RUN\*\*\*\*\*

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

B-C Stream

| I | Intercept For | Slope For | Opposing | Slope For | Opposing | Slope For | Opposing | Slope For | Opposing | I |
|---|---------------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|---|
| I | STREAM B-C    | STREAM    | A-C      | STREAM    | D-C      | STREAM    | A-B      | STREAM    | D-B      | I |
| I | 751.61        |           | 0.27     |           | 0.27     |           | 0.11     |           | 0.11     | I |

B-AD Stream

| I | Intercept For | Slope For | Opposing | Slope For | Opposing | Slope For | Opposing | Slope For | Opposing | I |
|---|---------------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|---|
| I | STREAM B-AD   | STREAM    | A-C      | STREAM    | A-D      | STREAM    | D-A      | STREAM    | D-B      | I |
| I | 579.81        |           | 0.25     |           | 0.25     |           | 0.10     |           | 0.10     | I |

| I |  | Slope For | Opposing | Slope For | Opposing | Slope For | Opposing | Slope For | Opposing | I |
|---|--|-----------|----------|-----------|----------|-----------|----------|-----------|----------|---|
| I |  | STREAM    | C-A      | STREAM    | C-B      | STREAM    | C-D      |           |          | I |
| I |  |           | 0.16     |           | 0.16     |           | 0.35     |           |          | I |

D-A Stream

| I | Intercept For | Slope For | Opposing | Slope For | Opposing | Slope For | Opposing | Slope For | Opposing | I |
|---|---------------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|---|
| I | STREAM D-A    | STREAM    | C-A      | STREAM    | D-C      | STREAM    | A-B      | STREAM    | D-B      | I |
| I | 726.33        |           | 0.26     |           | 0.26     |           | 0.10     |           | 0.10     | I |

D-BC Stream

| I | Intercept For | Slope For | Opposing | Slope For | Opposing | Slope For | Opposing | Slope For | Opposing | I |
|---|---------------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|---|
| I | STREAM D-BC   | STREAM    | C-A      | STREAM    | B-A      | STREAM    | C-D      | STREAM    | B-D      | I |
| I | 560.67        |           | 0.24     |           | 0.24     |           | 0.10     |           | 0.10     | I |

| I |  | Slope For | Opposing | Slope For | Opposing | Slope For | Opposing | Slope For | Opposing | I |
|---|--|-----------|----------|-----------|----------|-----------|----------|-----------|----------|---|
| I |  | STREAM    | A-C      | STREAM    | A-B      | STREAM    | A-D      |           |          | I |
| I |  |           | 0.15     |           | 0.15     |           | 0.34     |           |          | I |

C-B Stream

| I | Intercept For | Slope For | Opposing | Slope For | Opposing | Slope For | Opposing | Slope For | Opposing | I |
|---|---------------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|---|
| I | STREAM C-B    | STREAM    | A-C      | STREAM    | A-B      | STREAM    | D-C      | STREAM    | D-B      | I |
| I | 606.97        |           | 0.22     |           | 0.22     |           | 0.22     |           | 0.22     | I |

A-D Stream

| I | Intercept For | Slope For | Opposing | Slope For | Opposing | Slope For | Opposing | Slope For | Opposing | I |
|---|---------------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|---|
| I | STREAM A-D    | STREAM    | C-A      | STREAM    | C-D      | STREAM    | B-A      | STREAM    | B-D      | I |
| I | 606.97        |           | 0.22     |           | 0.22     |           | 0.22     |           | 0.22     | I |

TRAFFIC DEMAND DATA

| I | ARM | I | FLOW SCALE(%) | I |
|---|-----|---|---------------|---|
| I | A   | I | 100           | I |
| I | B   | I | 100           | I |
| I | C   | I | 100           | I |
| I | D   | I | 100           | I |

Demand set: 2011/2012 Base Flows With Dev 50 Dwellings AM

TIME PERIOD BEGINS 08.00 AND ENDS 09.30

LENGTH OF TIME PERIOD - 90 MIN.  
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

| ARM   | NUMBER OF FLOW STARTS TO RISE | MINUTES TOP OF IS | FROM PEAK REACHED | START WHEN FLOW FALLING | RATE BEFORE PEAK | OF FLOW AT TOP OF PEAK | (VEH/MIN) AFTER PEAK |
|-------|-------------------------------|-------------------|-------------------|-------------------------|------------------|------------------------|----------------------|
| ARM A | 15.00                         | 45.00             | I                 | 75.00                   | 3.33             | 4.99                   | 3.33                 |
| ARM B | 15.00                         | 45.00             | I                 | 75.00                   | 0.30             | 0.45                   | 0.30                 |
| ARM C | 15.00                         | 45.00             | I                 | 75.00                   | 4.15             | 6.23                   | 4.15                 |
| ARM D | 15.00                         | 45.00             | I                 | 75.00                   | 0.25             | 0.38                   | 0.25                 |

Demand set: 2011/2012 Base Flows With Dev 50 Dwellings AM

|       |         | TURNING PROPORTIONS      |        |        |        |        |     |   |     |   |  |
|-------|---------|--------------------------|--------|--------|--------|--------|-----|---|-----|---|--|
|       |         | TURNING COUNTS           |        |        |        |        |     |   |     |   |  |
|       |         | (PERCENTAGE OF H. V. S.) |        |        |        |        |     |   |     |   |  |
| TIME  |         | FROM/TO                  | ARM    | A      | ARM    | B      | ARM | C | ARM | D |  |
| 08.00 | - 08.15 | ARM A                    | 0.000  | 0.079  | 0.910  | 0.011  |     |   |     |   |  |
|       |         |                          | 0.0    | 21.0   | 242.0  | 3.0    |     |   |     |   |  |
|       |         |                          | ( 0.0) | ( 0.0) | ( 4.0) | ( 0.0) |     |   |     |   |  |
|       |         | ARM B                    | 0.542  | 0.000  | 0.458  | 0.000  |     |   |     |   |  |
|       |         |                          | 13.0   | 0.0    | 11.0   | 0.0    |     |   |     |   |  |
|       |         |                          | ( 0.0) | ( 0.0) | ( 0.0) | ( 0.0) |     |   |     |   |  |
|       |         | ARM C                    | 0.943  | 0.054  | 0.000  | 0.003  |     |   |     |   |  |
|       |         |                          | 313.0  | 18.0   | 0.0    | 1.0    |     |   |     |   |  |
|       |         |                          | ( 3.0) | ( 0.0) | ( 0.0) | ( 0.0) |     |   |     |   |  |
|       |         | ARM D                    | 0.800  | 0.050  | 0.150  | 0.000  |     |   |     |   |  |
|       |         |                          | 16.0   | 1.0    | 3.0    | 0.0    |     |   |     |   |  |
|       |         |                          | ( 0.0) | ( 0.0) | ( 0.0) | ( 0.0) |     |   |     |   |  |

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA  
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2011/2012 Base Flows With Dev 50 Dwellings AM  
AND FOR TIME PERIOD 1

| TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH. MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH. MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) |
|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|--------------------------------------|------------------------------------------------|------------------------------------------------|
| 08.00-08.15 |                     |                       |                              |                                  |                          |                        |                                      |                                                |                                                |
| B-ACD       | 0.30                | 9.43                  | 0.032                        |                                  | 0.00                     | 0.03                   | 0.5                                  |                                                | 0.11                                           |
| A-BCD       | 0.04                | 9.28                  | 0.004                        |                                  | 0.00                     | 0.00                   | 0.1                                  |                                                | 0.11                                           |
| D-ABC       | 0.25                | 10.16                 | 0.025                        |                                  | 0.00                     | 0.03                   | 0.4                                  |                                                | 0.10                                           |
| C-ABD       | 0.23                | 9.36                  | 0.024                        |                                  | 0.00                     | 0.02                   | 0.4                                  |                                                | 0.11                                           |

| TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH. MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH. MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) |
|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|--------------------------------------|------------------------------------------------|------------------------------------------------|
| 08.15-08.30 |                     |                       |                              |                                  |                          |                        |                                      |                                                |                                                |
| B-ACD       | 0.36                | 9.16                  | 0.039                        |                                  | 0.03                     | 0.04                   | 0.6                                  |                                                | 0.11                                           |
| A-BCD       | 0.04                | 9.10                  | 0.005                        |                                  | 0.00                     | 0.00                   | 0.1                                  |                                                | 0.11                                           |
| D-ABC       | 0.30                | 9.91                  | 0.030                        |                                  | 0.03                     | 0.03                   | 0.5                                  |                                                | 0.10                                           |
| C-ABD       | 0.27                | 9.21                  | 0.029                        |                                  | 0.02                     | 0.03                   | 0.5                                  |                                                | 0.11                                           |

| TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH. MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH. MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) |
|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|--------------------------------------|------------------------------------------------|------------------------------------------------|
| 08.30-08.45 |                     |                       |                              |                                  |                          |                        |                                      |                                                |                                                |
| B-ACD       | 0.44                | 8.78                  | 0.050                        |                                  | 0.04                     | 0.05                   | 0.8                                  |                                                | 0.12                                           |
| A-BCD       | 0.06                | 8.85                  | 0.006                        |                                  | 0.00                     | 0.01                   | 0.1                                  |                                                | 0.11                                           |
| D-ABC       | 0.37                | 9.56                  | 0.038                        |                                  | 0.03                     | 0.04                   | 0.6                                  |                                                | 0.11                                           |
| C-ABD       | 0.33                | 9.01                  | 0.037                        |                                  | 0.03                     | 0.04                   | 0.6                                  |                                                | 0.12                                           |

| TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH. MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH. MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) |
|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|--------------------------------------|------------------------------------------------|------------------------------------------------|
| 08.45-09.00 |                     |                       |                              |                                  |                          |                        |                                      |                                                |                                                |
| B-ACD       | 0.44                | 8.78                  | 0.050                        |                                  | 0.05                     | 0.05                   | 0.8                                  |                                                | 0.12                                           |
| A-BCD       | 0.06                | 8.85                  | 0.006                        |                                  | 0.01                     | 0.01                   | 0.1                                  |                                                | 0.11                                           |
| D-ABC       | 0.37                | 9.56                  | 0.038                        |                                  | 0.04                     | 0.04                   | 0.6                                  |                                                | 0.11                                           |
| C-ABD       | 0.33                | 9.01                  | 0.037                        |                                  | 0.04                     | 0.04                   | 0.6                                  |                                                | 0.12                                           |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 09.00-09.15 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.36                | 9.16                  | 0.039                        |                                  | 0.05                     | 0.04                   | 0.6                                 |                                               | 0.11                                           | I |
| I | A-BCD       | 0.04                | 9.10                  | 0.005                        |                                  | 0.01                     | 0.01                   | 0.1                                 |                                               | 0.11                                           | I |
| I | D-ABC       | 0.30                | 9.91                  | 0.030                        |                                  | 0.04                     | 0.03                   | 0.5                                 |                                               | 0.10                                           | I |
| I | C-ABD       | 0.27                | 9.21                  | 0.029                        |                                  | 0.04                     | 0.03                   | 0.5                                 |                                               | 0.11                                           | I |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 09.15-09.30 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.30                | 9.43                  | 0.032                        |                                  | 0.04                     | 0.03                   | 0.5                                 |                                               | 0.11                                           | I |
| I | A-BCD       | 0.04                | 9.28                  | 0.004                        |                                  | 0.01                     | 0.00                   | 0.1                                 |                                               | 0.11                                           | I |
| I | D-ABC       | 0.25                | 10.16                 | 0.025                        |                                  | 0.03                     | 0.03                   | 0.4                                 |                                               | 0.10                                           | I |
| I | C-ABD       | 0.23                | 9.36                  | 0.024                        |                                  | 0.03                     | 0.03                   | 0.4                                 |                                               | 0.11                                           | I |

\*WARNING\* NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-ACD

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 08.15                     | 0.0                            |
| 08.30                     | 0.0                            |
| 08.45                     | 0.1                            |
| 09.00                     | 0.1                            |
| 09.15                     | 0.0                            |
| 09.30                     | 0.0                            |

QUEUE FOR STREAM A-BCD

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 08.15                     | 0.0                            |
| 08.30                     | 0.0                            |
| 08.45                     | 0.0                            |
| 09.00                     | 0.0                            |
| 09.15                     | 0.0                            |
| 09.30                     | 0.0                            |

QUEUE FOR STREAM D-ABC

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 08.15                     | 0.0                            |
| 08.30                     | 0.0                            |
| 08.45                     | 0.0                            |
| 09.00                     | 0.0                            |
| 09.15                     | 0.0                            |
| 09.30                     | 0.0                            |

QUEUE FOR STREAM C-ABD

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 08.15                     | 0.0                            |
| 08.30                     | 0.0                            |
| 08.45                     | 0.0                            |
| 09.00                     | 0.0                            |
| 09.15                     | 0.0                            |
| 09.30                     | 0.0                            |

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

| I | STREAM | I | TOTAL | DEMAND  | I     | * QUEUEING | I         | * INCLUSIVE | QUEUEING | I         |
|---|--------|---|-------|---------|-------|------------|-----------|-------------|----------|-----------|
| I | I      | I | I     | I       | I     | * DELAY    | I         | * DELAY     | I        | I         |
| I | I      | I | (VEH) | (VEH/H) | I     | (MIN)      | (MIN/VEH) | I           | (MIN)    | (MIN/VEH) |
| I | B-ACD  | I | 33.0  | I       | 22.0  | I          | 3.8       | I           | 0.11     | I         |
| I | A-BCD  | I | 4.1   | I       | 2.8   | I          | 0.5       | I           | 0.11     | I         |
| I | D-ABC  | I | 27.5  | I       | 18.4  | I          | 2.9       | I           | 0.10     | I         |
| I | C-ABD  | I | 24.8  | I       | 16.5  | I          | 2.8       | I           | 0.11     | I         |
| I | ALL    | I | 883.7 | I       | 589.1 | I          | 9.9       | I           | 0.01     | I         |

\* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD  
 \* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES  
 WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD  
 \* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS  
 A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

\*\*\*\*\*END OF RUN\*\*\*\*\*

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

B-C Stream

| I | Intercept | For    | Slope  | For  | Opposing | Slope | For    | Opposing | Slope  | For  | Opposing | Slope | For    | Opposing | I |
|---|-----------|--------|--------|------|----------|-------|--------|----------|--------|------|----------|-------|--------|----------|---|
| I | STREAM    | B-C    | STREAM | A-C  | STREAM   | D-C   | STREAM | A-B      | STREAM | D-B  | STREAM   | D-B   | STREAM | D-B      | I |
| I |           | 751.61 |        | 0.27 |          | 0.27  |        | 0.11     |        | 0.11 |          | 0.11  |        | 0.11     | I |

B-AD Stream

| I | Intercept | For    | Slope  | For  | Opposing | Slope | For    | Opposing | Slope  | For  | Opposing | Slope | For    | Opposing | I |
|---|-----------|--------|--------|------|----------|-------|--------|----------|--------|------|----------|-------|--------|----------|---|
| I | STREAM    | B-AD   | STREAM | A-C  | STREAM   | A-D   | STREAM | D-A      | STREAM | D-B  | STREAM   | D-B   | STREAM | D-B      | I |
| I |           | 579.81 |        | 0.25 |          | 0.25  |        | 0.10     |        | 0.10 |          | 0.10  |        | 0.10     | I |

| I |        | Slope  | For  | Opposing | Slope | For    | Opposing | Slope  | For  | Opposing | Slope | For    | Opposing | I |
|---|--------|--------|------|----------|-------|--------|----------|--------|------|----------|-------|--------|----------|---|
| I | STREAM | STREAM | C-A  | STREAM   | C-B   | STREAM | C-D      | STREAM | C-D  | STREAM   | C-D   | STREAM | C-D      | I |
| I |        |        | 0.16 |          | 0.16  |        | 0.35     |        | 0.35 |          | 0.35  |        | 0.35     | I |

D-A Stream

| I | Intercept | For    | Slope  | For  | Opposing | Slope | For    | Opposing | Slope  | For  | Opposing | Slope | For    | Opposing | I |
|---|-----------|--------|--------|------|----------|-------|--------|----------|--------|------|----------|-------|--------|----------|---|
| I | STREAM    | D-A    | STREAM | C-A  | STREAM   | D-C   | STREAM | A-B      | STREAM | D-B  | STREAM   | D-B   | STREAM | D-B      | I |
| I |           | 726.33 |        | 0.26 |          | 0.26  |        | 0.10     |        | 0.10 |          | 0.10  |        | 0.10     | I |

D-BC Stream

| I | Intercept | For    | Slope  | For  | Opposing | Slope | For    | Opposing | Slope  | For  | Opposing | Slope | For    | Opposing | I |
|---|-----------|--------|--------|------|----------|-------|--------|----------|--------|------|----------|-------|--------|----------|---|
| I | STREAM    | D-BC   | STREAM | C-A  | STREAM   | B-A   | STREAM | C-D      | STREAM | B-D  | STREAM   | B-D   | STREAM | B-D      | I |
| I |           | 560.67 |        | 0.24 |          | 0.24  |        | 0.10     |        | 0.10 |          | 0.10  |        | 0.10     | I |

| I |        | Slope  | For  | Opposing | Slope | For    | Opposing | Slope  | For  | Opposing | Slope | For    | Opposing | I |
|---|--------|--------|------|----------|-------|--------|----------|--------|------|----------|-------|--------|----------|---|
| I | STREAM | STREAM | A-C  | STREAM   | A-B   | STREAM | A-D      | STREAM | A-D  | STREAM   | A-D   | STREAM | A-D      | I |
| I |        |        | 0.15 |          | 0.15  |        | 0.34     |        | 0.34 |          | 0.34  |        | 0.34     | I |

C-B Stream

| I | Intercept | For    | Slope  | For  | Opposing | Slope | For    | Opposing | Slope  | For  | Opposing | Slope | For    | Opposing | I |
|---|-----------|--------|--------|------|----------|-------|--------|----------|--------|------|----------|-------|--------|----------|---|
| I | STREAM    | C-B    | STREAM | A-C  | STREAM   | A-B   | STREAM | D-C      | STREAM | D-C  | STREAM   | D-B   | STREAM | D-B      | I |
| I |           | 606.97 |        | 0.22 |          | 0.22  |        | 0.22     |        | 0.22 |          | 0.22  |        | 0.22     | I |

A-D Stream

| I | Intercept | For    | Slope  | For  | Opposing | Slope | For    | Opposing | Slope  | For  | Opposing | Slope | For    | Opposing | I |
|---|-----------|--------|--------|------|----------|-------|--------|----------|--------|------|----------|-------|--------|----------|---|
| I | STREAM    | A-D    | STREAM | C-A  | STREAM   | C-D   | STREAM | B-A      | STREAM | B-A  | STREAM   | B-D   | STREAM | B-D      | I |
| I |           | 606.97 |        | 0.22 |          | 0.22  |        | 0.22     |        | 0.22 |          | 0.22  |        | 0.22     | I |

TRAFFIC DEMAND DATA

| I | ARM | I | FLOW | SCALE(%) | I |
|---|-----|---|------|----------|---|
| I | A   | I | 100  | I        | I |
| I | B   | I | 100  | I        | I |
| I | C   | I | 100  | I        | I |
| I | D   | I | 100  | I        | I |

Demand set: 2017 Base Flows AM

TIME PERIOD BEGINS 08.00 AND ENDS 09.30

LENGTH OF TIME PERIOD - 90 MIN.  
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

| I | I     | NUMBER OF MINUTES FROM START WHEN |             |   | I          | RATE OF FLOW (VEH/MIN) |        |   | I       |
|---|-------|-----------------------------------|-------------|---|------------|------------------------|--------|---|---------|
|   |       | I                                 | I           | I |            | I                      | I      | I |         |
| I | ARM   | I                                 | TOP OF PEAK | I | FLOW STOPS | I                      | BEFORE | I | AT TOP  |
| I | I     | I                                 | IS REACHED  | I | FALLING    | I                      | PEAK   | I | OF PEAK |
| I | I     | I                                 | I           | I | I          | I                      | I      | I | I       |
| I | ARM A | I                                 | 15.00       | I | 45.00      | I                      | 75.00  | I | 3.41    |
| I | ARM B | I                                 | 15.00       | I | 45.00      | I                      | 75.00  | I | 0.32    |
| I | ARM C | I                                 | 15.00       | I | 45.00      | I                      | 75.00  | I | 4.15    |
| I | ARM D | I                                 | 15.00       | I | 45.00      | I                      | 75.00  | I | 0.26    |

Demand set: 2017 Base Flows AM

|               |  | TURNING PROPORTIONS   |     |        |        |        |        |   |     |   |  |  |  |  |  |  |  |  |
|---------------|--|-----------------------|-----|--------|--------|--------|--------|---|-----|---|--|--|--|--|--|--|--|--|
|               |  | TURNING COUNTS        |     |        |        |        |        |   |     |   |  |  |  |  |  |  |  |  |
|               |  | (PERCENTAGE OF H.V.S) |     |        |        |        |        |   |     |   |  |  |  |  |  |  |  |  |
|               |  | -----                 |     |        |        |        |        |   |     |   |  |  |  |  |  |  |  |  |
| TIME          |  | FROM/TO               | ARM | A      | ARM    | B      | ARM    | C | ARM | D |  |  |  |  |  |  |  |  |
| 08.00 - 08.15 |  |                       |     |        |        |        |        |   |     |   |  |  |  |  |  |  |  |  |
|               |  | ARM                   | A   | 0.000  | 0.081  | 0.908  | 0.011  |   |     |   |  |  |  |  |  |  |  |  |
|               |  |                       |     | 0.0    | 22.0   | 248.0  | 3.0    |   |     |   |  |  |  |  |  |  |  |  |
|               |  |                       |     | ( 0.0) | ( 0.0) | ( 4.0) | ( 0.0) |   |     |   |  |  |  |  |  |  |  |  |
|               |  |                       |     |        |        |        |        |   |     |   |  |  |  |  |  |  |  |  |
|               |  | ARM                   | B   | 0.538  | 0.000  | 0.462  | 0.000  |   |     |   |  |  |  |  |  |  |  |  |
|               |  |                       |     | 14.0   | 0.0    | 12.0   | 0.0    |   |     |   |  |  |  |  |  |  |  |  |
|               |  |                       |     | ( 0.0) | ( 0.0) | ( 0.0) | ( 0.0) |   |     |   |  |  |  |  |  |  |  |  |
|               |  |                       |     |        |        |        |        |   |     |   |  |  |  |  |  |  |  |  |
|               |  | ARM                   | C   | 0.940  | 0.057  | 0.000  | 0.003  |   |     |   |  |  |  |  |  |  |  |  |
|               |  |                       |     | 312.0  | 19.0   | 0.0    | 1.0    |   |     |   |  |  |  |  |  |  |  |  |
|               |  |                       |     | ( 3.0) | ( 0.0) | ( 0.0) | ( 0.0) |   |     |   |  |  |  |  |  |  |  |  |
|               |  |                       |     |        |        |        |        |   |     |   |  |  |  |  |  |  |  |  |
|               |  | ARM                   | D   | 0.810  | 0.048  | 0.143  | 0.000  |   |     |   |  |  |  |  |  |  |  |  |
|               |  |                       |     | 17.0   | 1.0    | 3.0    | 0.0    |   |     |   |  |  |  |  |  |  |  |  |
|               |  |                       |     | ( 0.0) | ( 0.0) | ( 0.0) | ( 0.0) |   |     |   |  |  |  |  |  |  |  |  |
|               |  |                       |     |        |        |        |        |   |     |   |  |  |  |  |  |  |  |  |

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA  
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

# QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2017 Base Flows AM  
AND FOR TIME PERIOD 1

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 08.00-08.15 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.33                | 9.42                  | 0.035                        |                                  | 0.00                     | 0.04                   | 0.5                                 |                                               | 0.11                                           | I |
| I | A-BCD       | 0.04                | 9.28                  | 0.004                        |                                  | 0.00                     | 0.00                   | 0.1                                 |                                               | 0.11                                           | I |
| I | D-ABC       | 0.26                | 10.19                 | 0.026                        |                                  | 0.00                     | 0.03                   | 0.4                                 |                                               | 0.10                                           | I |
| I | C-ABD       | 0.24                | 9.34                  | 0.026                        |                                  | 0.00                     | 0.03                   | 0.4                                 |                                               | 0.11                                           | I |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 08.15-08.30 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.39                | 9.14                  | 0.043                        |                                  | 0.04                     | 0.04                   | 0.7                                 |                                               | 0.11                                           | I |
| I | A-BCD       | 0.04                | 9.10                  | 0.005                        |                                  | 0.00                     | 0.00                   | 0.1                                 |                                               | 0.11                                           | I |
| I | D-ABC       | 0.31                | 9.94                  | 0.032                        |                                  | 0.03                     | 0.03                   | 0.5                                 |                                               | 0.10                                           | I |
| I | C-ABD       | 0.28                | 9.19                  | 0.031                        |                                  | 0.03                     | 0.03                   | 0.5                                 |                                               | 0.11                                           | I |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 08.30-08.45 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.48                | 8.76                  | 0.054                        |                                  | 0.04                     | 0.06                   | 0.8                                 |                                               | 0.12                                           | I |
| I | A-BCD       | 0.06                | 8.85                  | 0.006                        |                                  | 0.00                     | 0.01                   | 0.1                                 |                                               | 0.11                                           | I |
| I | D-ABC       | 0.39                | 9.60                  | 0.040                        |                                  | 0.03                     | 0.04                   | 0.6                                 |                                               | 0.11                                           | I |
| I | C-ABD       | 0.35                | 8.98                  | 0.039                        |                                  | 0.03                     | 0.04                   | 0.6                                 |                                               | 0.12                                           | I |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 08.45-09.00 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.48                | 8.76                  | 0.054                        |                                  | 0.06                     | 0.06                   | 0.9                                 |                                               | 0.12                                           | I |
| I | A-BCD       | 0.06                | 8.85                  | 0.006                        |                                  | 0.01                     | 0.01                   | 0.1                                 |                                               | 0.11                                           | I |
| I | D-ABC       | 0.39                | 9.60                  | 0.040                        |                                  | 0.04                     | 0.04                   | 0.6                                 |                                               | 0.11                                           | I |
| I | C-ABD       | 0.35                | 8.98                  | 0.039                        |                                  | 0.04                     | 0.04                   | 0.6                                 |                                               | 0.12                                           | I |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 09.00-09.15 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.39                | 9.14                  | 0.043                        |                                  | 0.06                     | 0.04                   | 0.7                                 |                                               | 0.11                                           | I |
| I | A-BCD       | 0.04                | 9.10                  | 0.005                        |                                  | 0.01                     | 0.01                   | 0.1                                 |                                               | 0.11                                           | I |
| I | D-ABC       | 0.31                | 9.94                  | 0.032                        |                                  | 0.04                     | 0.03                   | 0.5                                 |                                               | 0.10                                           | I |
| I | C-ABD       | 0.28                | 9.19                  | 0.031                        |                                  | 0.04                     | 0.03                   | 0.5                                 |                                               | 0.11                                           | I |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 09.15-09.30 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.33                | 9.42                  | 0.035                        |                                  | 0.04                     | 0.04                   | 0.6                                 |                                               | 0.11                                           | I |
| I | A-BCD       | 0.04                | 9.28                  | 0.004                        |                                  | 0.01                     | 0.00                   | 0.1                                 |                                               | 0.11                                           | I |
| I | D-ABC       | 0.26                | 10.19                 | 0.026                        |                                  | 0.03                     | 0.03                   | 0.4                                 |                                               | 0.10                                           | I |
| I | C-ABD       | 0.24                | 9.34                  | 0.026                        |                                  | 0.03                     | 0.03                   | 0.4                                 |                                               | 0.11                                           | I |

\*WARNING\* NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-ACD

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 08.15                     | 0.0                            |
| 08.30                     | 0.0                            |
| 08.45                     | 0.1                            |
| 09.00                     | 0.1                            |
| 09.15                     | 0.0                            |
| 09.30                     | 0.0                            |

QUEUE FOR STREAM A-BCD

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 08.15                     | 0.0                            |
| 08.30                     | 0.0                            |
| 08.45                     | 0.0                            |
| 09.00                     | 0.0                            |
| 09.15                     | 0.0                            |
| 09.30                     | 0.0                            |

QUEUE FOR STREAM D-ABC

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 08.15                     | 0.0                            |
| 08.30                     | 0.0                            |
| 08.45                     | 0.0                            |
| 09.00                     | 0.0                            |
| 09.15                     | 0.0                            |
| 09.30                     | 0.0                            |

QUEUE FOR STREAM C-ABD

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 08.15                     | 0.0                            |
| 08.30                     | 0.0                            |
| 08.45                     | 0.0                            |
| 09.00                     | 0.0                            |
| 09.15                     | 0.0                            |
| 09.30                     | 0.0                            |

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
|---|--|---|--|---|--|---|--|---|--|---|--|---|--|
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  | I |  | I |  | I |  | I |  |
| I |  | I |  | I |  |   |  |   |  |   |  |   |  |

\* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD  
 \* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES  
 WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD  
 \* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS  
 A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

\*\*\*\*\*END OF RUN\*\*\*\*\*

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

B-C Stream

| I | Intercept | For    | Slope  | For  | Opposing | Slope | For    | Opposing | Slope  | For  | Opposing | Slope | For    | Opposing | I |
|---|-----------|--------|--------|------|----------|-------|--------|----------|--------|------|----------|-------|--------|----------|---|
| I | STREAM    | B-C    | STREAM | A-C  | STREAM   | D-C   | STREAM | A-B      | STREAM | D-B  | STREAM   | D-B   | STREAM | D-B      | I |
| I |           | 751.61 |        | 0.27 |          | 0.27  |        | 0.11     |        | 0.11 |          | 0.11  |        | 0.11     | I |

B-AD Stream

| I | Intercept | For    | Slope  | For  | Opposing | Slope | For    | Opposing | Slope  | For  | Opposing | Slope | For    | Opposing | I |
|---|-----------|--------|--------|------|----------|-------|--------|----------|--------|------|----------|-------|--------|----------|---|
| I | STREAM    | B-AD   | STREAM | A-C  | STREAM   | A-D   | STREAM | D-A      | STREAM | D-B  | STREAM   | D-B   | STREAM | D-B      | I |
| I |           | 579.81 |        | 0.25 |          | 0.25  |        | 0.10     |        | 0.10 |          | 0.10  |        | 0.10     | I |

| I | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing |
|---|--------------------|--------------------|--------------------|--------------------|
| I | STREAM C-A         | STREAM C-B         | STREAM C-D         | STREAM C-D         |
| I | 0.16               | 0.16               | 0.35               | I                  |

D-A Stream

| I | Intercept | For    | Slope  | For  | Opposing | Slope | For    | Opposing | Slope  | For  | Opposing | Slope | For    | Opposing | I |
|---|-----------|--------|--------|------|----------|-------|--------|----------|--------|------|----------|-------|--------|----------|---|
| I | STREAM    | D-A    | STREAM | C-A  | STREAM   | D-C   | STREAM | A-B      | STREAM | D-B  | STREAM   | D-B   | STREAM | D-B      | I |
| I |           | 726.33 |        | 0.26 |          | 0.26  |        | 0.10     |        | 0.10 |          | 0.10  |        | 0.10     | I |

D-BC Stream

| I | Intercept | For    | Slope  | For  | Opposing | Slope | For    | Opposing | Slope  | For  | Opposing | Slope | For    | Opposing | I |
|---|-----------|--------|--------|------|----------|-------|--------|----------|--------|------|----------|-------|--------|----------|---|
| I | STREAM    | D-BC   | STREAM | C-A  | STREAM   | B-A   | STREAM | C-D      | STREAM | B-D  | STREAM   | B-D   | STREAM | B-D      | I |
| I |           | 560.67 |        | 0.24 |          | 0.24  |        | 0.10     |        | 0.10 |          | 0.10  |        | 0.10     | I |

| I | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For OpposingI |
|---|--------------------|--------------------|--------------------|---------------------|
| I | STREAM A-C         | STREAM A-B         | STREAM A-D         |                     |
| I | 0.15               | 0.15               | 0.34               | I                   |

C-B Stream

| I | Intercept | For    | Slope  | For  | Opposing | Slope | For    | Opposing | Slope  | For  | Opposing | Slope | For    | Opposing | I |
|---|-----------|--------|--------|------|----------|-------|--------|----------|--------|------|----------|-------|--------|----------|---|
| I | STREAM    | C-B    | STREAM | A-C  | STREAM   | A-B   | STREAM | D-C      | STREAM | D-C  | STREAM   | D-B   | STREAM | D-B      | I |
| I |           | 606.97 |        | 0.22 |          | 0.22  |        | 0.22     |        | 0.22 |          | 0.22  |        | 0.22     | I |

A-D Stream

| I | Intercept | For    | Slope  | For  | Opposing | Slope | For    | Opposing | Slope  | For  | Opposing | Slope | For    | Opposing | I |
|---|-----------|--------|--------|------|----------|-------|--------|----------|--------|------|----------|-------|--------|----------|---|
| I | STREAM    | A-D    | STREAM | C-A  | STREAM   | C-D   | STREAM | B-A      | STREAM | B-A  | STREAM   | B-D   | STREAM | B-D      | I |
| I |           | 606.97 |        | 0.22 |          | 0.22  |        | 0.22     |        | 0.22 |          | 0.22  |        | 0.22     | I |

TRAFFIC DEMAND DATA

| I | ARM | I | FLOW | SCALE(%) | I |
|---|-----|---|------|----------|---|
| I | A   | I | 100  | I        | I |
| I | B   | I | 100  | I        | I |
| I | C   | I | 100  | I        | I |
| I | D   | I | 100  | I        | I |

Demand set: 2017 Base Flows PM

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.  
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

| ARM   | NUMBER OF FLOW STARTS TO RISE | MINUTES TOP OF IS | FROM PEAK REACHED | START WHEN FLOW FALLING | RATE BEFORE PEAK | OF FLOW AT TOP OF PEAK | (VEH/MIN) AFTER PEAK |
|-------|-------------------------------|-------------------|-------------------|-------------------------|------------------|------------------------|----------------------|
| ARM A | 15.00                         | 45.00             | I                 | 75.00                   | 5.31             | 7.97                   | 5.31                 |
| ARM B | 15.00                         | 45.00             | I                 | 75.00                   | 0.36             | 0.54                   | 0.36                 |
| ARM C | 15.00                         | 45.00             | I                 | 75.00                   | 4.26             | 6.39                   | 4.26                 |
| ARM D | 15.00                         | 45.00             | I                 | 75.00                   | 0.31             | 0.47                   | 0.31                 |

Demand set: 2017 Base Flows PM

|       |         | TURNING PROPORTIONS   |     |         |         |         |         |   |     |   |  |  |
|-------|---------|-----------------------|-----|---------|---------|---------|---------|---|-----|---|--|--|
|       |         | TURNING COUNTS        |     |         |         |         |         |   |     |   |  |  |
|       |         | (PERCENTAGE OF H.V.S) |     |         |         |         |         |   |     |   |  |  |
| TIME  |         | FROM/TO               | ARM | A       | ARM     | B       | ARM     | C | ARM | D |  |  |
| 16.45 | - 17.00 |                       |     |         |         |         |         |   |     |   |  |  |
|       |         | ARM A                 |     | 0.000   | 0.052   | 0.906   | 0.042   |   |     |   |  |  |
|       |         |                       |     | 0.0     | 22.0    | 385.0   | 18.0    |   |     |   |  |  |
|       |         |                       |     | ( 0.0 ) | ( 0.0 ) | ( 1.0 ) | ( 0.0 ) |   |     |   |  |  |
|       |         |                       |     |         |         |         |         |   |     |   |  |  |
|       |         | ARM B                 |     | 0.586   | 0.000   | 0.414   | 0.000   |   |     |   |  |  |
|       |         |                       |     | 17.0    | 0.0     | 12.0    | 0.0     |   |     |   |  |  |
|       |         |                       |     | ( 0.0 ) | ( 0.0 ) | ( 0.0 ) | ( 0.0 ) |   |     |   |  |  |
|       |         |                       |     |         |         |         |         |   |     |   |  |  |
|       |         | ARM C                 |     | 0.941   | 0.056   | 0.000   | 0.003   |   |     |   |  |  |
|       |         |                       |     | 321.0   | 19.0    | 0.0     | 1.0     |   |     |   |  |  |
|       |         |                       |     | ( 1.0 ) | ( 0.0 ) | ( 0.0 ) | ( 0.0 ) |   |     |   |  |  |
|       |         |                       |     |         |         |         |         |   |     |   |  |  |
|       |         | ARM D                 |     | 0.840   | 0.040   | 0.120   | 0.000   |   |     |   |  |  |
|       |         |                       |     | 21.0    | 1.0     | 3.0     | 0.0     |   |     |   |  |  |
|       |         |                       |     | ( 0.0 ) | ( 0.0 ) | ( 0.0 ) | ( 0.0 ) |   |     |   |  |  |
|       |         |                       |     |         |         |         |         |   |     |   |  |  |

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA  
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2017 Base Flows PM  
AND FOR TIME PERIOD 2

|  | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH. MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH. MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) |
|--|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|--------------------------------------|------------------------------------------------|------------------------------------------------|
|  | 16.45-17.00 |                     |                       |                              |                                  |                          |                        |                                      |                                                |                                                |
|  | B-ACD       | 0.36                | 8.83                  | 0.041                        |                                  | 0.00                     | 0.04                   | 0.6                                  |                                                | 0.12                                           |
|  | A-BCD       | 0.23                | 9.27                  | 0.024                        |                                  | 0.00                     | 0.03                   | 0.4                                  |                                                | 0.11                                           |
|  | D-ABC       | 0.31                | 10.20                 | 0.031                        |                                  | 0.00                     | 0.03                   | 0.5                                  |                                                | 0.10                                           |
|  | C-ABD       | 0.24                | 8.98                  | 0.027                        |                                  | 0.00                     | 0.03                   | 0.4                                  |                                                | 0.11                                           |

| TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH. MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH. MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) |
|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|--------------------------------------|------------------------------------------------|------------------------------------------------|
| 17.00-17.15 |                     |                       |                              |                                  |                          |                        |                                      |                                                |                                                |
| B-ACD       | 0.43                | 8.46                  | 0.051                        |                                  | 0.04                     | 0.05                   | 0.8                                  |                                                | 0.12                                           |
| A-BCD       | 0.27                | 9.08                  | 0.030                        |                                  | 0.03                     | 0.03                   | 0.5                                  |                                                | 0.11                                           |
| D-ABC       | 0.37                | 9.93                  | 0.038                        |                                  | 0.03                     | 0.04                   | 0.6                                  |                                                | 0.10                                           |
| C-ABD       | 0.28                | 8.76                  | 0.033                        |                                  | 0.03                     | 0.03                   | 0.5                                  |                                                | 0.12                                           |

| TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH. MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH. MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) |
|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|--------------------------------------|------------------------------------------------|------------------------------------------------|
| 17.15-17.30 |                     |                       |                              |                                  |                          |                        |                                      |                                                |                                                |
| B-ACD       | 0.53                | 7.95                  | 0.067                        |                                  | 0.05                     | 0.07                   | 1.0                                  |                                                | 0.13                                           |
| A-BCD       | 0.33                | 8.83                  | 0.037                        |                                  | 0.03                     | 0.04                   | 0.6                                  |                                                | 0.12                                           |
| D-ABC       | 0.46                | 9.55                  | 0.048                        |                                  | 0.04                     | 0.05                   | 0.7                                  |                                                | 0.11                                           |
| C-ABD       | 0.35                | 8.45                  | 0.041                        |                                  | 0.03                     | 0.04                   | 0.7                                  |                                                | 0.12                                           |

|  | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH. MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH. MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) |
|--|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|--------------------------------------|------------------------------------------------|------------------------------------------------|
|  | 17.30-17.45 |                     |                       |                              |                                  |                          |                        |                                      |                                                |                                                |
|  | B-ACD       | 0.53                | 7.95                  | 0.067                        |                                  | 0.07                     | 0.07                   | 1.1                                  |                                                | 0.13                                           |
|  | A-BCD       | 0.33                | 8.83                  | 0.037                        |                                  | 0.04                     | 0.04                   | 0.6                                  |                                                | 0.12                                           |
|  | D-ABC       | 0.46                | 9.55                  | 0.048                        |                                  | 0.05                     | 0.05                   | 0.8                                  |                                                | 0.11                                           |
|  | C-ABD       | 0.35                | 8.45                  | 0.041                        |                                  | 0.04                     | 0.04                   | 0.7                                  |                                                | 0.12                                           |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 17.45-18.00 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.43                | 8.46                  | 0.051                        |                                  | 0.07                     | 0.05                   | 0.8                                 |                                               | 0.12                                           | I |
| I | A-BCD       | 0.27                | 9.08                  | 0.030                        |                                  | 0.04                     | 0.03                   | 0.5                                 |                                               | 0.11                                           | I |
| I | D-ABC       | 0.37                | 9.93                  | 0.038                        |                                  | 0.05                     | 0.04                   | 0.6                                 |                                               | 0.10                                           | I |
| I | C-ABD       | 0.28                | 8.76                  | 0.033                        |                                  | 0.04                     | 0.03                   | 0.5                                 |                                               | 0.12                                           | I |
| I |             |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 18.00-18.15 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.36                | 8.83                  | 0.041                        |                                  | 0.05                     | 0.04                   | 0.7                                 |                                               | 0.12                                           | I |
| I | A-BCD       | 0.23                | 9.27                  | 0.024                        |                                  | 0.03                     | 0.03                   | 0.4                                 |                                               | 0.11                                           | I |
| I | D-ABC       | 0.31                | 10.20                 | 0.031                        |                                  | 0.04                     | 0.03                   | 0.5                                 |                                               | 0.10                                           | I |
| I | C-ABD       | 0.24                | 8.98                  | 0.027                        |                                  | 0.03                     | 0.03                   | 0.4                                 |                                               | 0.11                                           | I |
| I |             |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |

\*WARNING\* NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-ACD

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 17.00                     | 0.0                            |
| 17.15                     | 0.1                            |
| 17.30                     | 0.1                            |
| 17.45                     | 0.1                            |
| 18.00                     | 0.1                            |
| 18.15                     | 0.0                            |

QUEUE FOR STREAM A-BCD

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 17.00                     | 0.0                            |
| 17.15                     | 0.0                            |
| 17.30                     | 0.0                            |
| 17.45                     | 0.0                            |
| 18.00                     | 0.0                            |
| 18.15                     | 0.0                            |

QUEUE FOR STREAM D-ABC

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 17.00                     | 0.0                            |
| 17.15                     | 0.0                            |
| 17.30                     | 0.1                            |
| 17.45                     | 0.1                            |
| 18.00                     | 0.0                            |
| 18.15                     | 0.0                            |

QUEUE FOR STREAM C-ABD

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 17.00                     | 0.0                            |
| 17.15                     | 0.0                            |
| 17.30                     | 0.0                            |
| 17.45                     | 0.0                            |
| 18.00                     | 0.0                            |
| 18.15                     | 0.0                            |

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

| I | STREAM | I | TOTAL  | DEMAND  | I     | * QUEUEING | I         | * INCLUSIVE | QUEUEING | I         |
|---|--------|---|--------|---------|-------|------------|-----------|-------------|----------|-----------|
| I | I      | I | I      | I       | I     | * DELAY    | I         | * DELAY     | I        | I         |
| I | I      | I | (VEH)  | (VEH/H) | I     | (MIN)      | (MIN/VEH) | I           | (MIN)    | (MIN/VEH) |
| I | B-ACD  | I | 39.9   | I       | 26.6  | I          | 5.0       | I           | 0.13     | I         |
| I | A-BCD  | I | 24.8   | I       | 16.5  | I          | 2.9       | I           | 0.12     | I         |
| I | D-ABC  | I | 34.4   | I       | 22.9  | I          | 3.6       | I           | 0.11     | I         |
| I | C-ABD  | I | 26.2   | I       | 17.4  | I          | 3.2       | I           | 0.12     | I         |
| I | ALL    | I | 1128.7 | I       | 752.4 | I          | 14.7      | I           | 0.01     | I         |

\* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD  
 \* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES  
 WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD  
 \* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS  
 A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

\*\*\*\*\*END OF RUN\*\*\*\*\*

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

B-C Stream

| I | Intercept | For    | Slope  | For  | Opposing | Slope | For    | Opposing | Slope  | For  | Opposing | Slope | For | Opposing |
|---|-----------|--------|--------|------|----------|-------|--------|----------|--------|------|----------|-------|-----|----------|
| I | STREAM    | B-C    | STREAM | A-C  | STREAM   | D-C   | STREAM | A-B      | STREAM | D-B  | STREAM   | I     | I   | I        |
| I |           | 751.61 |        | 0.27 |          | 0.27  |        | 0.11     |        | 0.11 |          | I     | I   | I        |

B-AD Stream

| I | Intercept | For    | Slope  | For  | Opposing | Slope | For    | Opposing | Slope  | For  | Opposing | Slope | For | Opposing |
|---|-----------|--------|--------|------|----------|-------|--------|----------|--------|------|----------|-------|-----|----------|
| I | STREAM    | B-AD   | STREAM | A-C  | STREAM   | A-D   | STREAM | D-A      | STREAM | D-B  | STREAM   | I     | I   | I        |
| I |           | 579.81 |        | 0.25 |          | 0.25  |        | 0.10     |        | 0.10 |          | I     | I   | I        |

| I |        | Slope | For    | Opposing | Slope  | For  | Opposing | Slope | For | Opposing | Slope | For | Opposing |
|---|--------|-------|--------|----------|--------|------|----------|-------|-----|----------|-------|-----|----------|
| I | STREAM | C-A   | STREAM | C-B      | STREAM | C-D  | STREAM   | I     | I   | I        | I     | I   | I        |
| I |        | 0.16  |        | 0.16     |        | 0.35 |          | I     | I   | I        | I     | I   | I        |

D-A Stream

| I | Intercept | For    | Slope  | For  | Opposing | Slope | For    | Opposing | Slope  | For  | Opposing | Slope | For | Opposing |
|---|-----------|--------|--------|------|----------|-------|--------|----------|--------|------|----------|-------|-----|----------|
| I | STREAM    | D-A    | STREAM | C-A  | STREAM   | D-C   | STREAM | A-B      | STREAM | D-B  | STREAM   | I     | I   | I        |
| I |           | 726.33 |        | 0.26 |          | 0.26  |        | 0.10     |        | 0.10 |          | I     | I   | I        |

D-BC Stream

| I | Intercept | For    | Slope  | For  | Opposing | Slope | For    | Opposing | Slope  | For  | Opposing | Slope | For | Opposing |
|---|-----------|--------|--------|------|----------|-------|--------|----------|--------|------|----------|-------|-----|----------|
| I | STREAM    | D-BC   | STREAM | C-A  | STREAM   | B-A   | STREAM | C-D      | STREAM | B-D  | STREAM   | I     | I   | I        |
| I |           | 560.67 |        | 0.24 |          | 0.24  |        | 0.10     |        | 0.10 |          | I     | I   | I        |

| I |        | Slope | For    | Opposing | Slope  | For  | Opposing | Slope | For | Opposing | Slope | For | Opposing |
|---|--------|-------|--------|----------|--------|------|----------|-------|-----|----------|-------|-----|----------|
| I | STREAM | A-C   | STREAM | A-B      | STREAM | A-D  | STREAM   | I     | I   | I        | I     | I   | I        |
| I |        | 0.15  |        | 0.15     |        | 0.34 |          | I     | I   | I        | I     | I   | I        |

C-B Stream

| I | Intercept | For    | Slope  | For  | Opposing | Slope | For    | Opposing | Slope  | For  | Opposing | Slope | For | Opposing |
|---|-----------|--------|--------|------|----------|-------|--------|----------|--------|------|----------|-------|-----|----------|
| I | STREAM    | C-B    | STREAM | A-C  | STREAM   | A-B   | STREAM | D-C      | STREAM | D-B  | STREAM   | I     | I   | I        |
| I |           | 606.97 |        | 0.22 |          | 0.22  |        | 0.22     |        | 0.22 |          | I     | I   | I        |

A-D Stream

| I | Intercept | For    | Slope  | For  | Opposing | Slope | For    | Opposing | Slope  | For  | Opposing | Slope | For | Opposing |
|---|-----------|--------|--------|------|----------|-------|--------|----------|--------|------|----------|-------|-----|----------|
| I | STREAM    | A-D    | STREAM | C-A  | STREAM   | C-D   | STREAM | B-A      | STREAM | B-D  | STREAM   | I     | I   | I        |
| I |           | 606.97 |        | 0.22 |          | 0.22  |        | 0.22     |        | 0.22 |          | I     | I   | I        |

TRAFFIC DEMAND DATA

| I | ARM | I | FLOW | SCALE(%) | I |
|---|-----|---|------|----------|---|
| I | A   | I | 100  | I        | I |
| I | B   | I | 100  | I        | I |
| I | C   | I | 100  | I        | I |
| I | D   | I | 100  | I        | I |

LENGTH OF TIME PERIOD - 90 MIN.  
LENGTH OF TIME SEGMENT - 15 MIN.

|       | ARM | I<br>F<br>L<br>O<br>W<br>T<br>O<br>R<br>I<br>S<br>E | N<br>U<br>M<br>B<br>E<br>R<br>O<br>F<br>S<br>T<br>A<br>R<br>T<br>S<br>T<br>O<br>R<br>I<br>S<br>E | M<br>I<br>N<br>U<br>T<br>E<br>S<br>T<br>O<br>P<br>O<br>F<br>P<br>E<br>A<br>K<br>I<br>S<br>R<br>E<br>A<br>C<br>H<br>E<br>D | F<br>R<br>O<br>M<br>S<br>T<br>A<br>R<br>T<br>O<br>F<br>F<br>L<br>O<br>W<br>F<br>A<br>L<br>L<br>I<br>N<br>G | R<br>A<br>T<br>E<br>B<br>E<br>F<br>O<br>R<br>E<br>P<br>E<br>A<br>K | O<br>F<br>F<br>L<br>O<br>W<br>A<br>T<br>O<br>P<br>O<br>F<br>P<br>E<br>A<br>K | (V<br>E<br>H/<br>M<br>I<br>N)<br>A<br>F<br>T<br>E<br>R<br>P<br>E<br>A<br>K |   |      |   |      |
|-------|-----|-----------------------------------------------------|--------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|------------------------------------------------------------------------------|----------------------------------------------------------------------------|---|------|---|------|
| ARM A | B   | I                                                   | 15.00                                                                                            | I                                                                                                                         | 45.00                                                                                                      | I                                                                  | 75.00                                                                        | 5.59                                                                       | I | 8.38 | I | 5.59 |
| ARM B | A   | I                                                   | 15.00                                                                                            | I                                                                                                                         | 45.00                                                                                                      | I                                                                  | 75.00                                                                        | 0.36                                                                       | I | 0.54 | I | 0.36 |
| ARM C | D   | I                                                   | 15.00                                                                                            | I                                                                                                                         | 45.00                                                                                                      | I                                                                  | 75.00                                                                        | 4.31                                                                       | I | 6.47 | I | 4.31 |
| ARM D | C   | I                                                   | 15.00                                                                                            | I                                                                                                                         | 45.00                                                                                                      | I                                                                  | 75.00                                                                        | 0.31                                                                       | I | 0.47 | I | 0.31 |

|       |         | TURNING PROPORTIONS<br>TURNING COUNTS<br>(PERCENTAGE OF H. V. S.) |        |        |        |        |     |   |     |   |
|-------|---------|-------------------------------------------------------------------|--------|--------|--------|--------|-----|---|-----|---|
| TIME  |         | FROM/TO                                                           | ARM    | A      | ARM    | B      | ARM | C | ARM | D |
| 16.45 | - 17.00 | ARM A                                                             | 0.000  | 0.049  | 0.911  | 0.040  |     |   |     |   |
|       |         |                                                                   | 0.0    | 22.0   | 407.0  | 18.0   |     |   |     |   |
|       |         |                                                                   | ( 0.0) | ( 0.0) | ( 1.0) | ( 0.0) |     |   |     |   |
|       |         | ARM B                                                             | 0.586  | 0.000  | 0.414  | 0.000  |     |   |     |   |
|       |         |                                                                   | 17.0   | 0.0    | 12.0   | 0.0    |     |   |     |   |
|       |         |                                                                   | ( 0.0) | ( 0.0) | ( 0.0) | ( 0.0) |     |   |     |   |
|       |         | ARM C                                                             | 0.942  | 0.055  | 0.000  | 0.003  |     |   |     |   |
|       |         |                                                                   | 325.0  | 19.0   | 0.0    | 1.0    |     |   |     |   |
|       |         |                                                                   | ( 1.0) | ( 0.0) | ( 0.0) | ( 0.0) |     |   |     |   |
|       |         | ARM D                                                             | 0.840  | 0.040  | 0.120  | 0.000  |     |   |     |   |
|       |         |                                                                   | 21.0   | 1.0    | 3.0    | 0.0    |     |   |     |   |
|       |         |                                                                   | ( 0.0) | ( 0.0) | ( 0.0) | ( 0.0) |     |   |     |   |

FOR DEMAND SET 2017 Base Flows With Dev 50 Dwellings PM  
AND FOR TIME PERIOD 2

| TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH. MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH. MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) |
|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|--------------------------------------|------------------------------------------------|------------------------------------------------|
| 17.30-17.45 |                     |                       |                              |                                  |                          |                        |                                      |                                                |                                                |
| B-ACD       | 0.53                | 7.83                  | 0.068                        |                                  | 0.07                     | 0.07                   | 1.1                                  |                                                | 0.14                                           |
| A-BCD       | 0.33                | 8.81                  | 0.037                        |                                  | 0.04                     | 0.04                   | 0.6                                  |                                                | 0.12                                           |
| D-ABC       | 0.46                | 9.51                  | 0.048                        |                                  | 0.05                     | 0.05                   | 0.8                                  |                                                | 0.11                                           |
| C-ABD       | 0.35                | 8.36                  | 0.042                        |                                  | 0.04                     | 0.04                   | 0.7                                  |                                                | 0.12                                           |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 17.45-18.00 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.43                | 8.37                  | 0.052                        |                                  | 0.07                     | 0.06                   | 0.8                                 |                                               | 0.13                                           | I |
| I | A-BCD       | 0.27                | 9.07                  | 0.030                        |                                  | 0.04                     | 0.03                   | 0.5                                 |                                               | 0.11                                           | I |
| I | D-ABC       | 0.37                | 9.90                  | 0.038                        |                                  | 0.05                     | 0.04                   | 0.6                                 |                                               | 0.11                                           | I |
| I | C-ABD       | 0.28                | 8.68                  | 0.033                        |                                  | 0.04                     | 0.03                   | 0.5                                 |                                               | 0.12                                           | I |
| I |             |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 18.00-18.15 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.36                | 8.75                  | 0.042                        |                                  | 0.06                     | 0.04                   | 0.7                                 |                                               | 0.12                                           | I |
| I | A-BCD       | 0.23                | 9.26                  | 0.024                        |                                  | 0.03                     | 0.03                   | 0.4                                 |                                               | 0.11                                           | I |
| I | D-ABC       | 0.31                | 10.18                 | 0.031                        |                                  | 0.04                     | 0.03                   | 0.5                                 |                                               | 0.10                                           | I |
| I | C-ABD       | 0.24                | 8.92                  | 0.027                        |                                  | 0.03                     | 0.03                   | 0.4                                 |                                               | 0.12                                           | I |
| I |             |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |

\*WARNING\* NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-ACD

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 17.00                     | 0.0                            |
| 17.15                     | 0.1                            |
| 17.30                     | 0.1                            |
| 17.45                     | 0.1                            |
| 18.00                     | 0.1                            |
| 18.15                     | 0.0                            |

QUEUE FOR STREAM A-BCD

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 17.00                     | 0.0                            |
| 17.15                     | 0.0                            |
| 17.30                     | 0.0                            |
| 17.45                     | 0.0                            |
| 18.00                     | 0.0                            |
| 18.15                     | 0.0                            |

QUEUE FOR STREAM D-ABC

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 17.00                     | 0.0                            |
| 17.15                     | 0.0                            |
| 17.30                     | 0.1                            |
| 17.45                     | 0.1                            |
| 18.00                     | 0.0                            |
| 18.15                     | 0.0                            |

QUEUE FOR STREAM C-ABD

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 17.00                     | 0.0                            |
| 17.15                     | 0.0                            |
| 17.30                     | 0.0                            |
| 17.45                     | 0.0                            |
| 18.00                     | 0.0                            |
| 18.15                     | 0.0                            |

## QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

| I | STREAM | I | TOTAL  | DEMAND  | I     | * QUEUEING | I         | * INCLUSIVE | QUEUEING | I         |
|---|--------|---|--------|---------|-------|------------|-----------|-------------|----------|-----------|
| I | I      | I | I      | I       | I     | * DELAY    | I         | * DELAY     | I        | I         |
| I | I      | I | (VEH)  | (VEH/H) | I     | (MIN)      | (MIN/VEH) | I           | (MIN)    | (MIN/VEH) |
| I | B-ACD  | I | 39.9   | I       | 26.6  | I          | 5.1       | I           | 0.13     | I         |
| I | A-BCD  | I | 24.8   | I       | 16.5  | I          | 2.9       | I           | 0.12     | I         |
| I | D-ABC  | I | 34.4   | I       | 22.9  | I          | 3.6       | I           | 0.11     | I         |
| I | C-ABD  | I | 26.2   | I       | 17.4  | I          | 3.2       | I           | 0.12     | I         |
| I | ALL    | I | 1164.5 | I       | 776.3 | I          | 14.8      | I           | 0.01     | I         |

\* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD  
 \* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES  
 WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD  
 \* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS  
 A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

\*\*\*\*\*END OF RUN\*\*\*\*\*

## .SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

## B-C Stream

| I | Intercept | For    | Slope  | For  | Opposing | Slope | For    | Opposing | Slope  | For  | Opposing | Slope | For    | Opposing | I |
|---|-----------|--------|--------|------|----------|-------|--------|----------|--------|------|----------|-------|--------|----------|---|
| I | STREAM    | B-C    | STREAM | A-C  | STREAM   | D-C   | STREAM | A-B      | STREAM | D-B  | STREAM   | D-B   | STREAM | D-B      | I |
| I |           | 751.61 |        | 0.27 |          | 0.27  |        | 0.11     |        | 0.11 |          | 0.11  |        | 0.11     | I |

## B-AD Stream

| I | Intercept | For    | Slope  | For  | Opposing | Slope | For    | Opposing | Slope  | For  | Opposing | Slope | For    | Opposing | I |
|---|-----------|--------|--------|------|----------|-------|--------|----------|--------|------|----------|-------|--------|----------|---|
| I | STREAM    | B-AD   | STREAM | A-C  | STREAM   | A-D   | STREAM | D-A      | STREAM | D-B  | STREAM   | D-B   | STREAM | D-B      | I |
| I |           | 579.81 |        | 0.25 |          | 0.25  |        | 0.10     |        | 0.10 |          | 0.10  |        | 0.10     | I |

| I |        | Slope | For    | Opposing | Slope  | For  | Opposing | Slope | For    | Opposing | Slope  | For  | Opposing | I    |
|---|--------|-------|--------|----------|--------|------|----------|-------|--------|----------|--------|------|----------|------|
| I | STREAM | C-A   | STREAM | C-A      | STREAM | C-B  | STREAM   | C-D   | STREAM | C-D      | STREAM | C-D  | STREAM   | C-D  |
| I |        | 0.16  |        | 0.16     |        | 0.16 |          | 0.35  |        | 0.35     |        | 0.35 |          | 0.35 |

## D-A Stream

| I | Intercept | For    | Slope  | For  | Opposing | Slope | For    | Opposing | Slope  | For  | Opposing | Slope | For    | Opposing | I |
|---|-----------|--------|--------|------|----------|-------|--------|----------|--------|------|----------|-------|--------|----------|---|
| I | STREAM    | D-A    | STREAM | C-A  | STREAM   | D-C   | STREAM | A-B      | STREAM | D-B  | STREAM   | D-B   | STREAM | D-B      | I |
| I |           | 726.33 |        | 0.26 |          | 0.26  |        | 0.10     |        | 0.10 |          | 0.10  |        | 0.10     | I |

## D-BC Stream

| I | Intercept | For    | Slope  | For  | Opposing | Slope | For    | Opposing | Slope  | For  | Opposing | Slope | For    | Opposing | I |
|---|-----------|--------|--------|------|----------|-------|--------|----------|--------|------|----------|-------|--------|----------|---|
| I | STREAM    | D-BC   | STREAM | C-A  | STREAM   | B-A   | STREAM | C-D      | STREAM | C-D  | STREAM   | B-D   | STREAM | B-D      | I |
| I |           | 560.67 |        | 0.24 |          | 0.24  |        | 0.10     |        | 0.10 |          | 0.10  |        | 0.10     | I |

| I |        | Slope | For    | Opposing | Slope  | For  | Opposing | Slope | For    | Opposing | Slope  | For  | Opposing | I    |
|---|--------|-------|--------|----------|--------|------|----------|-------|--------|----------|--------|------|----------|------|
| I | STREAM | A-C   | STREAM | A-C      | STREAM | A-B  | STREAM   | A-D   | STREAM | A-D      | STREAM | A-D  | STREAM   | A-D  |
| I |        | 0.15  |        | 0.15     |        | 0.15 |          | 0.34  |        | 0.34     |        | 0.34 |          | 0.34 |

## C-B Stream

| I | Intercept | For    | Slope  | For  | Opposing | Slope | For    | Opposing | Slope  | For  | Opposing | Slope | For    | Opposing | I |
|---|-----------|--------|--------|------|----------|-------|--------|----------|--------|------|----------|-------|--------|----------|---|
| I | STREAM    | C-B    | STREAM | A-C  | STREAM   | A-B   | STREAM | D-C      | STREAM | D-C  | STREAM   | D-B   | STREAM | D-B      | I |
| I |           | 606.97 |        | 0.22 |          | 0.22  |        | 0.22     |        | 0.22 |          | 0.22  |        | 0.22     | I |

## A-D Stream

| I | Intercept | For    | Slope  | For  | Opposing | Slope | For    | Opposing | Slope  | For  | Opposing | Slope | For    | Opposing | I |
|---|-----------|--------|--------|------|----------|-------|--------|----------|--------|------|----------|-------|--------|----------|---|
| I | STREAM    | A-D    | STREAM | C-A  | STREAM   | C-D   | STREAM | B-A      | STREAM | B-A  | STREAM   | B-D   | STREAM | B-D      | I |
| I |           | 606.97 |        | 0.22 |          | 0.22  |        | 0.22     |        | 0.22 |          | 0.22  |        | 0.22     | I |

## TRAFFIC DEMAND DATA

| I | ARM | I | FLOW | SCALE(%) | I |
|---|-----|---|------|----------|---|
| I | A   | I | 100  | I        | I |
| I | B   | I | 100  | I        | I |
| I | C   | I | 100  | I        | I |
| I | D   | I | 100  | I        | I |

Demand set: 2017 Base Flows With Dev 50 Dwellings AM

TIME PERIOD BEGINS 08.00 AND ENDS 09.30

LENGTH OF TIME PERIOD - 90 MIN.  
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

| ARM   | NUMBER OF FLOW STARTS TO RISE | MINUTES TOP OF IS | FROM PEAK REACHED | START WHEN FLOW FALLING | RATE BEFORE PEAK | OF FLOW AT TOP OF PEAK | (VEH/MIN) AFTER PEAK |
|-------|-------------------------------|-------------------|-------------------|-------------------------|------------------|------------------------|----------------------|
| ARM A | 15.00                         | 45.00             | I                 | 75.00                   | 3.49             | 5.23                   | 3.49                 |
| ARM B | 15.00                         | 45.00             | I                 | 75.00                   | 0.32             | 0.49                   | 0.32                 |
| ARM C | 15.00                         | 45.00             | I                 | 75.00                   | 4.35             | 6.52                   | 4.35                 |
| ARM D | 15.00                         | 45.00             | I                 | 75.00                   | 0.26             | 0.39                   | 0.26                 |

Demand set: 2017 Base Flows With Dev 50 Dwellings AM

|               |         | TURNING PROPORTIONS      |        |        |        |        |   |     |   |
|---------------|---------|--------------------------|--------|--------|--------|--------|---|-----|---|
|               |         | TURNING COUNTS           |        |        |        |        |   |     |   |
|               |         | (PERCENTAGE OF H. V. S.) |        |        |        |        |   |     |   |
| TIME          | FROM/TO | ARM                      | A      | ARM    | B      | ARM    | C | ARM | D |
| 08.00 - 08.15 | ARM A   |                          | 0.000  | 0.079  | 0.910  | 0.011  |   |     |   |
|               |         |                          | 0.0    | 22.0   | 254.0  | 3.0    |   |     |   |
|               |         |                          | ( 0.0) | ( 0.0) | ( 4.0) | ( 0.0) |   |     |   |
|               |         |                          |        |        |        |        |   |     |   |
|               | ARM B   |                          | 0.538  | 0.000  | 0.462  | 0.000  |   |     |   |
|               |         |                          | 14.0   | 0.0    | 12.0   | 0.0    |   |     |   |
|               |         |                          | ( 0.0) | ( 0.0) | ( 0.0) | ( 0.0) |   |     |   |
|               |         |                          |        |        |        |        |   |     |   |
|               | ARM C   |                          | 0.943  | 0.055  | 0.000  | 0.003  |   |     |   |
|               |         |                          | 328.0  | 19.0   | 0.0    | 1.0    |   |     |   |
|               |         |                          | ( 3.0) | ( 0.0) | ( 0.0) | ( 0.0) |   |     |   |
|               |         |                          |        |        |        |        |   |     |   |
| ARM D         |         | 0.810                    | 0.048  | 0.143  | 0.000  |        |   |     |   |
|               |         | 17.0                     | 1.0    | 3.0    | 0.0    |        |   |     |   |
|               |         | ( 0.0)                   | ( 0.0) | ( 0.0) | ( 0.0) |        |   |     |   |
|               |         |                          |        |        |        |        |   |     |   |

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA  
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2017 Base Flows With Dev 50 Dwellings AM  
AND FOR TIME PERIOD 1

|  | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH. MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH. MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) |
|--|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|--------------------------------------|------------------------------------------------|------------------------------------------------|
|  | 08.00-08.15 |                     |                       |                              |                                  |                          |                        |                                      |                                                |                                                |
|  | B-ACD       | 0.33                | 9.37                  | 0.035                        |                                  | 0.00                     | 0.04                   | 0.5                                  |                                                | 0.11                                           |
|  | A-BCD       | 0.04                | 9.24                  | 0.004                        |                                  | 0.00                     | 0.00                   | 0.1                                  |                                                | 0.11                                           |
|  | D-ABC       | 0.26                | 10.14                 | 0.026                        |                                  | 0.00                     | 0.03                   | 0.4                                  |                                                | 0.10                                           |
|  | C-ABD       | 0.24                | 9.32                  | 0.026                        |                                  | 0.00                     | 0.03                   | 0.4                                  |                                                | 0.11                                           |

| TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH. MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH. MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) |
|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|--------------------------------------|------------------------------------------------|------------------------------------------------|
| 08.15-08.30 |                     |                       |                              |                                  |                          |                        |                                      |                                                |                                                |
| B-ACD       | 0.39                | 9.09                  | 0.043                        |                                  | 0.04                     | 0.04                   | 0.7                                  |                                                | 0.11                                           |
| A-BCD       | 0.04                | 9.05                  | 0.005                        |                                  | 0.00                     | 0.00                   | 0.1                                  |                                                | 0.11                                           |
| D-ABC       | 0.31                | 9.88                  | 0.032                        |                                  | 0.03                     | 0.03                   | 0.5                                  |                                                | 0.10                                           |
| C-ABD       | 0.28                | 9.16                  | 0.031                        |                                  | 0.03                     | 0.03                   | 0.5                                  |                                                | 0.11                                           |

|             | TIME | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH. MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH. MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) |
|-------------|------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|--------------------------------------|------------------------------------------------|------------------------------------------------|
| 08.30-08.45 |      |                     |                       |                              |                                  |                          |                        |                                      |                                                |                                                |
| B-ACD       |      | 0.48                | 8.69                  | 0.055                        |                                  | 0.04                     | 0.06                   | 0.8                                  |                                                | 0.12                                           |
| A-BCD       |      | 0.06                | 8.78                  | 0.006                        |                                  | 0.00                     | 0.01                   | 0.1                                  |                                                | 0.11                                           |
| D-ABC       |      | 0.39                | 9.51                  | 0.041                        |                                  | 0.03                     | 0.04                   | 0.6                                  |                                                | 0.11                                           |
| C-ABD       |      | 0.35                | 8.95                  | 0.039                        |                                  | 0.03                     | 0.04                   | 0.6                                  |                                                | 0.12                                           |

| TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH. MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH. MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) |
|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|--------------------------------------|------------------------------------------------|------------------------------------------------|
| 08.45-09.00 |                     |                       |                              |                                  |                          |                        |                                      |                                                |                                                |
| B-ACD       | 0.48                | 8.69                  | 0.055                        |                                  | 0.06                     | 0.06                   | 0.9                                  |                                                | 0.12                                           |
| A-BCD       | 0.06                | 8.78                  | 0.006                        |                                  | 0.01                     | 0.01                   | 0.1                                  |                                                | 0.11                                           |
| D-ABC       | 0.39                | 9.51                  | 0.041                        |                                  | 0.04                     | 0.04                   | 0.6                                  |                                                | 0.11                                           |
| C-ABD       | 0.35                | 8.95                  | 0.039                        |                                  | 0.04                     | 0.04                   | 0.6                                  |                                                | 0.12                                           |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 09.00-09.15 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.39                | 9.09                  | 0.043                        |                                  | 0.06                     | 0.05                   | 0.7                                 |                                               | 0.11                                           | I |
| I | A-BCD       | 0.04                | 9.05                  | 0.005                        |                                  | 0.01                     | 0.01                   | 0.1                                 |                                               | 0.11                                           | I |
| I | D-ABC       | 0.31                | 9.88                  | 0.032                        |                                  | 0.04                     | 0.03                   | 0.5                                 |                                               | 0.10                                           | I |
| I | C-ABD       | 0.28                | 9.16                  | 0.031                        |                                  | 0.04                     | 0.03                   | 0.5                                 |                                               | 0.11                                           | I |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 09.15-09.30 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-ACD       | 0.33                | 9.37                  | 0.035                        |                                  | 0.05                     | 0.04                   | 0.6                                 |                                               | 0.11                                           | I |
| I | A-BCD       | 0.04                | 9.24                  | 0.004                        |                                  | 0.01                     | 0.00                   | 0.1                                 |                                               | 0.11                                           | I |
| I | D-ABC       | 0.26                | 10.14                 | 0.026                        |                                  | 0.03                     | 0.03                   | 0.4                                 |                                               | 0.10                                           | I |
| I | C-ABD       | 0.24                | 9.32                  | 0.026                        |                                  | 0.03                     | 0.03                   | 0.4                                 |                                               | 0.11                                           | I |

\*WARNING\* NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

#### QUEUE FOR STREAM B-ACD

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 08.15                     | 0.0                            |
| 08.30                     | 0.0                            |
| 08.45                     | 0.1                            |
| 09.00                     | 0.1                            |
| 09.15                     | 0.0                            |
| 09.30                     | 0.0                            |

#### QUEUE FOR STREAM A-BCD

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 08.15                     | 0.0                            |
| 08.30                     | 0.0                            |
| 08.45                     | 0.0                            |
| 09.00                     | 0.0                            |
| 09.15                     | 0.0                            |
| 09.30                     | 0.0                            |

#### QUEUE FOR STREAM D-ABC

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 08.15                     | 0.0                            |
| 08.30                     | 0.0                            |
| 08.45                     | 0.0                            |
| 09.00                     | 0.0                            |
| 09.15                     | 0.0                            |
| 09.30                     | 0.0                            |

#### QUEUE FOR STREAM C-ABD

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 08.15                     | 0.0                            |
| 08.30                     | 0.0                            |
| 08.45                     | 0.0                            |
| 09.00                     | 0.0                            |
| 09.15                     | 0.0                            |
| 09.30                     | 0.0                            |

#### QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

| I | STREAM | I | TOTAL DEMAND | I | * QUEUEING * | I | * INCLUSIVE QUEUEING * | I |
|---|--------|---|--------------|---|--------------|---|------------------------|---|
| I | I      | I | I            | I | * DELAY *    | I | * DELAY *              | I |
| I | I      | I | (VEH)        | I | (MIN)        | I | (MIN)                  | I |
| I | I      | I | (VEH/H)      | I | (MIN/VEH)    | I | (MIN/VEH)              | I |
| I | B-ACD  | I | 35.8         | I | 4.1          | I | 4.1                    | I |
| I | A-BCD  | I | 4.1          | I | 0.5          | I | 0.5                    | I |
| I | D-ABC  | I | 28.9         | I | 3.0          | I | 3.0                    | I |
| I | C-ABD  | I | 26.2         | I | 3.0          | I | 3.0                    | I |
| I | ALL    | I | 927.7        | I | 10.6         | I | 10.6                   | I |

\* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD  
 \* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES  
 WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD  
 \* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS  
 A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

\*\*\*\*\*END OF RUN\*\*\*\*\*

===== end of file =====

TRL LIMITED

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM  
RELEASE 4.0 (SEPT 2008)

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THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS  
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Run with file:-  
"P:\A05022 Adoc Technical Work-DTPC\Analysis\Clitheroe\Appeal Work 260812\PICADY\Rail View Rd\  
Railway View Road.vpi"  
(drive-on-the-left) at 17:12:40 on Friday, 31 August 2012

RUN INFORMATION  
\*\*\*\*\*

RUN TITLE : Run 1  
LOCATION :  
DATE : 09/08/11  
CLIENT :  
ENUMERATOR :  
JOB NUMBER :  
STATUS :  
DESCRIPTION :

MAJOR/MINOR JUNCTION CAPACITY AND DELAY  
\*\*\*\*\*

INPUT DATA  
-----

MAJOR ROAD (ARM C) ----- MAJOR ROAD (ARM A)  
I  
I  
I  
I  
I  
I  
MINOR ROAD (ARM B)

ARM A IS Railway View Road  
ARM B IS B6478 Waddington  
ARM C IS B6478 Clitheroe

STREAM LABELLING CONVENTION  
-----

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B  
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C  
ETC.

## GEOMETRIC DATA

| I | DATA ITEM                          | I | MINOR ROAD B    | I |
|---|------------------------------------|---|-----------------|---|
| I | TOTAL MAJOR ROAD CARRIAGEWAY WIDTH | I | ( W ) 7.20 M.   | I |
| I | CENTRAL RESERVE WIDTH              | I | (WCR ) 0.00 M.  | I |
| I |                                    | I |                 | I |
| I | MAJOR ROAD RIGHT TURN - WIDTH      | I | (WC-B) 2.20 M.  | I |
| I | - VISIBILITY                       | I | (VC-B) 33.00 M. | I |
| I | - BLOCKS TRAFFIC                   | I | YES             | I |
| I |                                    | I |                 | I |
| I | MINOR ROAD - VISIBILITY TO LEFT    | I | (VB-C) 38.0 M.  | I |
| I | - VISIBILITY TO RIGHT              | I | (VB-A) 25.0 M.  | I |
| I | - LANE 1 WIDTH                     | I | (WB-C) -        | I |
| I | - LANE 2 WIDTH                     | I | (WB-A) -        | I |
| I | WIDTH AT 0 M FROM JUNCTION         | I | 9.00 M.         | I |
| I | WIDTH AT 5 M FROM JUNCTION         | I | 3.60 M.         | I |
| I | WIDTH AT 10 M FROM JUNCTION        | I | 3.50 M.         | I |
| I | WIDTH AT 15 M FROM JUNCTION        | I | 2.70 M.         | I |
| I | WIDTH AT 20 M FROM JUNCTION        | I | 2.50 M.         | I |
| I | - LENGTH OF FLARED SECTION         | I | 1 VEHS          | I |

## .SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

| I | Intercept For | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|---|
| I | STREAM B-C    | STREAM A-C         | STREAM A-B         | I |
| I | 0.00          | 0.00               | 0.00               | I |

\* Due to the presence of a flare, data is not available

| I | Intercept For | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|--------------------|--------------------|---|
| I | STREAM B-A    | STREAM A-C         | STREAM A-B         | STREAM C-A         | STREAM C-B         | I |
| I | 0.00          | 0.00               | 0.00               | 0.00               | 0.00               | I |

\* Due to the presence of a flare, data is not available

| I | Intercept For | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|---|
| I | STREAM C-B    | STREAM A-C         | STREAM A-B         | I |
| I | 593.07        | 0.22               | 0.22               | I |

(NB These values do not allow for any site specific corrections)

## TRAFFIC DEMAND DATA

| I | ARM | I | FLOW SCALE(%) | I |
|---|-----|---|---------------|---|
| I | A   | I | 100           | I |
| I | B   | I | 100           | I |
| I | C   | I | 100           | I |

Demand set: 2011/2012 Base Flows AM

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

LENGTH OF TIME PERIOD - 90 MIN.  
 LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

| I | ARM   | I | NUMBER OF MINUTES FROM START WHEN                        | I | RATE OF FLOW (VEH/MIN) | I |
|---|-------|---|----------------------------------------------------------|---|------------------------|---|
| I | I     | I | I TOP OF PEAK I FLOW STOPS I BEFORE I AT TOP I AFTER     | I | I                      | I |
| I | I     | I | I TO RISE I IS REACHED I FALLING I PEAK I OF PEAK I PEAK | I | I                      | I |
| I | ARM A | I | 15.00 I 45.00 I 75.00 I 4.76 I 7.14 I 4.76               | I |                        | I |
| I | ARM B | I | 15.00 I 45.00 I 75.00 I 4.36 I 6.54 I 4.36               | I |                        | I |
| I | ARM C | I | 15.00 I 45.00 I 75.00 I 5.56 I 8.34 I 5.56               | I |                        | I |

Demand set: 2011/2012 Base Flows AM

| I | TIME          | I | FROM/TO | I | ARM    | A | I       | ARM | B     | I | ARM | C | I |
|---|---------------|---|---------|---|--------|---|---------|-----|-------|---|-----|---|---|
| I | 07.45 - 08.00 | I | ARM A   | I | 0.000  | I | 0.239   | I   | 0.761 | I |     |   | I |
| I |               | I |         | I | 0.0    | I | 91.0    | I   | 290.0 | I |     |   | I |
| I |               | I | ( 0.0)  | I | ( 2.0) | I | ( 10.0) | I   |       | I |     |   | I |
| I |               | I |         | I |        | I |         | I   |       | I |     |   | I |
| I |               | I | ARM B   | I | 0.201  | I | 0.000   | I   | 0.799 | I |     |   | I |
| I |               | I |         | I | 70.0   | I | 0.0     | I   | 279.0 | I |     |   | I |
| I |               | I | ( 2.0)  | I | ( 0.0) | I | ( 3.0)  | I   |       | I |     |   | I |
| I |               | I |         | I |        | I |         | I   |       | I |     |   | I |
| I |               | I | ARM C   | I | 0.620  | I | 0.380   | I   | 0.000 | I |     |   | I |
| I |               | I |         | I | 276.0  | I | 169.0   | I   | 0.0   | I |     |   | I |
| I |               | I | ( 4.0)  | I | ( 6.0) | I | ( 0.0)  | I   |       | I |     |   | I |
| I |               | I |         | I |        | I |         | I   |       | I |     |   | I |

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA  
 THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

## QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2011/2012 Base Flows AM  
AND FOR TIME PERIOD 1

| TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) |
|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|
| 07.45-08.00 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                |
| B-C         | 3.50                | 9.39                  | 0.373                        |                                  | 0.00                     | 0.58                   | 8.3                                 |                                               | 0.17                                           |
| B-A         | 0.88                | 6.39                  | 0.137                        |                                  | 0.00                     | 0.16                   | 2.2                                 |                                               | 0.18                                           |
| C-AB        | 2.12                | 8.26                  | 0.257                        |                                  | 0.00                     | 0.38                   | 5.5                                 |                                               | 0.16                                           |
| A-B         | 1.14                |                       |                              |                                  |                          |                        |                                     |                                               |                                                |
| A-C         | 3.64                |                       |                              |                                  |                          |                        |                                     |                                               |                                                |

| TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) |
|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|
| 08.00-08.15 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                |
| B-C         | 4.18                | 9.04                  | 0.462                        |                                  | 0.58                     | 0.84                   | 12.0                                |                                               | 0.20                                           |
| B-A         | 1.05                | 5.70                  | 0.184                        |                                  | 0.16                     | 0.22                   | 3.2                                 |                                               | 0.21                                           |
| C-AB        | 2.53                | 8.06                  | 0.314                        |                                  | 0.38                     | 0.52                   | 7.8                                 |                                               | 0.18                                           |
| A-B         | 1.36                |                       |                              |                                  |                          |                        |                                     |                                               |                                                |
| A-C         | 4.35                |                       |                              |                                  |                          |                        |                                     |                                               |                                                |

| TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) |
|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|
| 08.15-08.30 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                |
| B-C         | 5.12                | 8.48                  | 0.604                        |                                  | 0.84                     | 1.46                   | 20.3                                |                                               | 0.29                                           |
| B-A         | 1.28                | 4.59                  | 0.280                        |                                  | 0.22                     | 0.38                   | 5.4                                 |                                               | 0.30                                           |
| C-AB        | 3.10                | 7.77                  | 0.399                        |                                  | 0.52                     | 0.81                   | 12.1                                |                                               | 0.21                                           |
| A-B         | 1.67                |                       |                              |                                  |                          |                        |                                     |                                               |                                                |
| A-C         | 5.32                |                       |                              |                                  |                          |                        |                                     |                                               |                                                |

| TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) |
|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|
| 08.30-08.45 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                |
| B-C         | 5.12                | 8.47                  | 0.604                        |                                  | 1.46                     | 1.49                   | 22.2                                |                                               | 0.30                                           |
| B-A         | 1.28                | 4.56                  | 0.282                        |                                  | 0.38                     | 0.39                   | 5.7                                 |                                               | 0.31                                           |
| C-AB        | 3.10                | 7.77                  | 0.399                        |                                  | 0.81                     | 0.82                   | 12.5                                |                                               | 0.21                                           |
| A-B         | 1.67                |                       |                              |                                  |                          |                        |                                     |                                               |                                                |
| A-C         | 5.32                |                       |                              |                                  |                          |                        |                                     |                                               |                                                |

| TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) |
|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|
| 08.45-09.00 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                |
| B-C         | 4.18                | 9.03                  | 0.463                        |                                  | 1.49                     | 0.88                   | 14.0                                |                                               | 0.21                                           |
| B-A         | 1.05                | 5.66                  | 0.185                        |                                  | 0.39                     | 0.23                   | 3.6                                 |                                               | 0.22                                           |
| C-AB        | 2.53                | 8.06                  | 0.314                        |                                  | 0.82                     | 0.54                   | 8.3                                 |                                               | 0.18                                           |
| A-B         | 1.36                |                       |                              |                                  |                          |                        |                                     |                                               |                                                |
| A-C         | 4.35                |                       |                              |                                  |                          |                        |                                     |                                               |                                                |

| TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) |
|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|
| 09.00-09.15 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                |
| B-C         | 3.50                | 9.38                  | 0.373                        |                                  | 0.88                     | 0.61                   | 9.5                                 |                                               | 0.17                                           |
| B-A         | 0.88                | 6.36                  | 0.138                        |                                  | 0.23                     | 0.16                   | 2.5                                 |                                               | 0.18                                           |
| C-AB        | 2.12                | 8.26                  | 0.257                        |                                  | 0.54                     | 0.39                   | 5.9                                 |                                               | 0.16                                           |
| A-B         | 1.14                |                       |                              |                                  |                          |                        |                                     |                                               |                                                |
| A-C         | 3.64                |                       |                              |                                  |                          |                        |                                     |                                               |                                                |

\*WARNING\* NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

## QUEUE FOR STREAM B-C

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |   |
|---------------------------|--------------------------------|---|
| 08.00                     | 0.6                            | * |
| 08.15                     | 0.8                            | * |
| 08.30                     | 1.5                            | * |
| 08.45                     | 1.5                            | * |
| 09.00                     | 0.9                            | * |
| 09.15                     | 0.6                            | * |

-----  
 QUEUE FOR STREAM B-A  
 -----

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 08.00                     | 0.2                            |
| 08.15                     | 0.2                            |
| 08.30                     | 0.4                            |
| 08.45                     | 0.4                            |
| 09.00                     | 0.2                            |
| 09.15                     | 0.2                            |

QUEUE FOR STREAM C-AB  
 -----

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |   |
|---------------------------|--------------------------------|---|
| 08.00                     | 0.4                            |   |
| 08.15                     | 0.5                            | * |
| 08.30                     | 0.8                            | * |
| 08.45                     | 0.8                            | * |
| 09.00                     | 0.5                            | * |
| 09.15                     | 0.4                            |   |

-----  
 QUEUEING DELAY INFORMATION OVER WHOLE PERIOD  
 -----

| I | STREAM | I | TOTAL DEMAND | I       | * QUEUEING | *         | I     | * INCLUSIVE QUEUEING | *         | I |
|---|--------|---|--------------|---------|------------|-----------|-------|----------------------|-----------|---|
| I | I      | I | I            | I       | * DELAY    | *         | I     | * DELAY              | *         | I |
| I | I      | I | (VEH)        | (VEH/H) | (MIN)      | (MIN/VEH) | I     | (MIN)                | (MIN/VEH) | I |
| I | B-C    | I | 384.0        | I       | 256.0      | I         | 86.3  | I                    | 0.22      | I |
| I | B-A    | I | 96.3         | I       | 64.2       | I         | 22.7  | I                    | 0.24      | I |
| I | C-AB   | I | 232.6        | I       | 155.1      | I         | 52.1  | I                    | 0.22      | I |
| I | A-B    | I | 125.3        | I       | 83.5       | I         | I     | I                    | I         | I |
| I | A-C    | I | 399.2        | I       | 266.1      | I         | I     | I                    | I         | I |
| I | ALL    | I | 1617.3       | I       | 1078.2     | I         | 161.1 | I                    | 0.10      | I |

\* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD  
 \* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES  
 WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD  
 \* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS  
 A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

\*\*\*\*\*END OF RUN\*\*\*\*\*

.SLOPES AND INTERCEPT  
 -----

(NB:Streams may be combined, in which case capacity will be adjusted)

| I | Intercept For | Slope For | Opposing | Slope For | Opposing | I |
|---|---------------|-----------|----------|-----------|----------|---|
| I | STREAM B-C    | STREAM    | A-C      | STREAM    | A-B      | I |
| I | 0.00          |           | 0.00     |           | 0.00     | I |

\* Due to the presence of a flare, data is not available

| I | Intercept For | Slope For | Opposing | Slope For | Opposing | Slope For | Opposing | I |
|---|---------------|-----------|----------|-----------|----------|-----------|----------|---|
| I | STREAM B-A    | STREAM    | A-C      | STREAM    | A-B      | STREAM    | C-A      | I |
| I | 0.00          |           | 0.00     |           | 0.00     |           | 0.00     | I |

\* Due to the presence of a flare, data is not available

| I | Intercept For | Slope For | Opposing | Slope For | Opposing | I |
|---|---------------|-----------|----------|-----------|----------|---|
| I | STREAM C-B    | STREAM    | A-C      | STREAM    | A-B      | I |
| I | 593.07        |           | 0.22     |           | 0.22     | I |

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA  
 -----

| I | ARM | I | FLOW | SCALE(%) | I |
|---|-----|---|------|----------|---|
| I | I   | I | I    | I        | I |
| I | A   | I | 100  | I        | I |
| I | B   | I | 100  | I        | I |
| I | C   | I | 100  | I        | I |

Demand set: 2011/2012 Base Flows PM

TIME PERIOD BEGINS 16.30 AND ENDS 18.00

LENGTH OF TIME PERIOD - 90 MIN.  
 LENGTH OF TIME SEGMENT - 15 MIN.



| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 17.45-18.00 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-C         | 3.81                | 9.41                  | 0.405                        |                                  | 1.05                     | 0.69                   | 10.9                                |                                               | 0.18                                           | I |
| I | B-A         | 0.83                | 5.89                  | 0.141                        |                                  | 0.25                     | 0.17                   | 2.6                                 |                                               | 0.20                                           | I |
| I | C-AB        | 3.07                | 8.43                  | 0.365                        |                                  | 1.08                     | 0.69                   | 10.5                                |                                               | 0.19                                           | I |
| I | A-B         | 2.00                |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | A-C         | 4.09                |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I |             |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |

\*WARNING\* NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

#### QUEUE FOR STREAM B-C

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |    |
|---------------------------|--------------------------------|----|
| 16.45                     | 0.7                            | *  |
| 17.00                     | 1.0                            | *  |
| 17.15                     | 1.9                            | ** |
| 17.30                     | 2.0                            | ** |
| 17.45                     | 1.1                            | *  |
| 18.00                     | 0.7                            | *  |

#### QUEUE FOR STREAM B-A

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |  |
|---------------------------|--------------------------------|--|
| 16.45                     | 0.2                            |  |
| 17.00                     | 0.2                            |  |
| 17.15                     | 0.5                            |  |
| 17.30                     | 0.5                            |  |
| 17.45                     | 0.3                            |  |
| 18.00                     | 0.2                            |  |

#### QUEUE FOR STREAM C-AB

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |    |
|---------------------------|--------------------------------|----|
| 16.45                     | 0.7                            | *  |
| 17.00                     | 1.0                            | *  |
| 17.15                     | 1.9                            | ** |
| 17.30                     | 1.9                            | ** |
| 17.45                     | 1.1                            | *  |
| 18.00                     | 0.7                            | *  |

#### QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

| I | STREAM | I | TOTAL DEMAND | I | * QUEUEING *<br>* DELAY * | I | * INCLUSIVE QUEUEING *<br>* DELAY * | I |           | I |
|---|--------|---|--------------|---|---------------------------|---|-------------------------------------|---|-----------|---|
| I |        | I | (VEH)        | I | (MIN)                     | I | (MIN)                               | I | (MIN/VEH) | I |
| I | B-C    | I | 418.4        | I | 106.3                     | I | 106.3                               | I | 0.25      | I |
| I | B-A    | I | 90.8         | I | 25.8                      | I | 25.8                                | I | 0.28      | I |
| I | C-AB   | I | 337.2        | I | 108.7                     | I | 108.7                               | I | 0.32      | I |
| I | A-B    | I | 218.9        | I |                           | I |                                     | I |           | I |
| I | A-C    | I | 448.7        | I |                           | I |                                     | I |           | I |
| I | ALL    | I | 1964.2       | I | 240.7                     | I | 240.8                               | I | 0.12      | I |

\* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD  
 \* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES  
 WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD  
 \* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS  
 A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

\*\*\*\*\*END OF RUN\*\*\*\*\*

#### .SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

| I | Intercept For | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|---|
| I | STREAM B-C    | STREAM A-C         | STREAM A-B         | I |
| I | 0.00          | 0.00               | 0.00               | I |

\* Due to the presence of a flare, data is not available

| I | Intercept For | Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|--------------------|--------------------|---|
| I | STREAM B-A    | STREAM A-C         | STREAM A-B         | STREAM C-A         | STREAM C-B         | I |
| I | 0.00          | 0.00               | 0.00               | 0.00               | 0.00               | I |

\* Due to the presence of a flare, data is not available

| I | Intercept For | Slope For Opposing | Slope For Opposing | I |
|---|---------------|--------------------|--------------------|---|
| I | STREAM C-B    | STREAM A-C         | STREAM A-B         | I |
| I | 593.07        | 0.22               | 0.22               | I |

(NB These values do not allow for any site specific corrections)



| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 08.30-08.45 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-C         | 5.36                | 8.40                  | 0.638                        |                                  | 1.66                     | 1.71                   | 25.4                                |                                               | 0.33                                           | I |
| I | B-A         | 1.34                | 4.37                  | 0.307                        |                                  | 0.42                     | 0.43                   | 6.5                                 |                                               | 0.33                                           | I |
| I | C-AB        | 3.17                | 7.76                  | 0.409                        |                                  | 0.85                     | 0.86                   | 13.1                                |                                               | 0.22                                           | I |
| I | A-B         | 1.71                |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | A-C         | 5.32                |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I |             |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 08.45-09.00 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-C         | 4.38                | 8.99                  | 0.487                        |                                  | 1.71                     | 0.97                   | 15.5                                |                                               | 0.22                                           | I |
| I | B-A         | 1.09                | 5.55                  | 0.197                        |                                  | 0.43                     | 0.25                   | 3.9                                 |                                               | 0.23                                           | I |
| I | C-AB        | 2.59                | 8.05                  | 0.322                        |                                  | 0.86                     | 0.57                   | 8.6                                 |                                               | 0.18                                           | I |
| I | A-B         | 1.39                |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | A-C         | 4.35                |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I |             |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 09.00-09.15 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-C         | 3.66                | 9.35                  | 0.392                        |                                  | 0.97                     | 0.66                   | 10.3                                |                                               | 0.18                                           | I |
| I | B-A         | 0.92                | 6.30                  | 0.146                        |                                  | 0.25                     | 0.17                   | 2.7                                 |                                               | 0.19                                           | I |
| I | C-AB        | 2.17                | 8.26                  | 0.263                        |                                  | 0.57                     | 0.40                   | 6.1                                 |                                               | 0.17                                           | I |
| I | A-B         | 1.17                |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | A-C         | 3.64                |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I |             |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |

\*WARNING\* NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

#### QUEUE FOR STREAM B-C

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |    |
|---------------------------|--------------------------------|----|
| 08.00                     | 0.6                            | *  |
| 08.15                     | 0.9                            | *  |
| 08.30                     | 1.7                            | ** |
| 08.45                     | 1.7                            | ** |
| 09.00                     | 1.0                            | *  |
| 09.15                     | 0.7                            | *  |

#### QUEUE FOR STREAM B-A

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |  |
|---------------------------|--------------------------------|--|
| 08.00                     | 0.2                            |  |
| 08.15                     | 0.2                            |  |
| 08.30                     | 0.4                            |  |
| 08.45                     | 0.4                            |  |
| 09.00                     | 0.2                            |  |
| 09.15                     | 0.2                            |  |

#### QUEUE FOR STREAM C-AB

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |   |
|---------------------------|--------------------------------|---|
| 08.00                     | 0.4                            |   |
| 08.15                     | 0.5                            | * |
| 08.30                     | 0.8                            | * |
| 08.45                     | 0.9                            | * |
| 09.00                     | 0.6                            | * |
| 09.15                     | 0.4                            |   |

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

| I | STREAM | I | TOTAL DEMAND | I       | * QUEUEING *<br>* DELAY * | I         | * INCLUSIVE QUEUEING *<br>* DELAY * | I         |      |
|---|--------|---|--------------|---------|---------------------------|-----------|-------------------------------------|-----------|------|
| I | I      | I | I            | I       | I                         | I         | I                                   | I         |      |
| I | I      | I | (VEH)        | (VEH/H) | (MIN)                     | (MIN/VEH) | (MIN)                               | (MIN/VEH) |      |
| I | B-C    | I | 401.9        | I       | 267.9                     | I         | 96.2                                | I         | 0.24 |
| I | B-A    | I | 100.5        | I       | 67.0                      | I         | 24.9                                | I         | 0.25 |
| I | C-AB   | I | 238.1        | I       | 158.7                     | I         | 54.3                                | I         | 0.23 |
| I | A-B    | I | 128.0        | I       | 85.3                      | I         | I                                   | I         | I    |
| I | A-C    | I | 399.2        | I       | 266.1                     | I         | I                                   | I         | I    |
| I | ALL    | I | 1647.6       | I       | 1098.4                    | I         | 175.4                               | I         | 0.11 |

\* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD  
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 WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD  
 \* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS  
 A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

\*\*\*\*\*END OF RUN\*\*\*\*\*

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

| I | Intercept For | Slope For | Opposing | Slope For | Opposing | I |
|---|---------------|-----------|----------|-----------|----------|---|
| I | STREAM B-C    | STREAM    | A-C      | STREAM    | A-B      | I |
| I | 0.00          |           | 0.00     |           | 0.00     | I |

\* Due to the presence of a flare, data is not available

| I | Intercept For | Slope For | Opposing | Slope For | Opposing | Slope For | Opposing | Slope For | Opposing | I |
|---|---------------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|---|
| I | STREAM B-A    | STREAM    | A-C      | STREAM    | A-B      | STREAM    | C-A      | STREAM    | C-B      | I |
| I | 0.00          |           | 0.00     |           | 0.00     |           | 0.00     |           | 0.00     | I |

\* Due to the presence of a flare, data is not available

| I | Intercept For | Slope For | Opposing | Slope For | Opposing | I |
|---|---------------|-----------|----------|-----------|----------|---|
| I | STREAM C-B    | STREAM    | A-C      | STREAM    | A-B      | I |
| I | 593.07        |           | 0.22     |           | 0.22     | I |

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

| I | ARM | I | FLOW SCALE(%) | I |
|---|-----|---|---------------|---|
| I | I   | I | I             | I |
| I | A   | I | 100           | I |
| I | B   | I | 100           | I |
| I | C   | I | 100           | I |

Demand set: 2011/2012 Base Flows With Dev 50 Dwellings PM

TIME PERIOD BEGINS 16.30 AND ENDS 18.00

LENGTH OF TIME PERIOD - 90 MIN.  
 LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

| I | ARM   | I | NUMBER OF MINUTES FROM START WHEN<br>FLOW STARTS TO RISE | I | TOP OF PEAK IS REACHED | I | FLOW STOPS FALLING | I | RATE OF FLOW (VEH/MIN)<br>BEFORE PEAK | I | AT TOP OF PEAK | I | AFTER PEAK | I |
|---|-------|---|----------------------------------------------------------|---|------------------------|---|--------------------|---|---------------------------------------|---|----------------|---|------------|---|
| I | I     | I | I                                                        | I | I                      | I | I                  | I | I                                     | I | I              | I | I          | I |
| I | ARM A | I | 15.00                                                    | I | 45.00                  | I | 75.00              | I | 6.18                                  | I | 9.26           | I | 6.18       | I |
| I | ARM B | I | 15.00                                                    | I | 45.00                  | I | 75.00              | I | 4.68                                  | I | 7.01           | I | 4.68       | I |
| I | ARM C | I | 15.00                                                    | I | 45.00                  | I | 75.00              | I | 7.31                                  | I | 10.97          | I | 7.31       | I |

Demand set: 2011/2012 Base Flows With Dev 50 Dwellings PM

| TIME          | TURNING PROPORTIONS<br>TURNING COUNTS<br>(PERCENTAGE OF H.V.S) |     |        |     |        |     |        |
|---------------|----------------------------------------------------------------|-----|--------|-----|--------|-----|--------|
|               | FROM/TO                                                        | ARM | A      | ARM | B      | ARM | C      |
| 16.30 - 16.45 | ARM A                                                          | I   | 0.000  | I   | 0.340  | I   | 0.660  |
|               |                                                                | I   | 0.0    | I   | 168.0  | I   | 326.0  |
|               |                                                                | I   | ( 0.0) | I   | ( 1.0) | I   | ( 5.0) |
|               | ARM B                                                          | I   | 0.179  | I   | 0.000  | I   | 0.821  |
|               |                                                                | I   | 67.0   | I   | 0.0    | I   | 307.0  |
|               |                                                                | I   | ( 0.0) | I   | ( 0.0) | I   | ( 1.0) |
|               | ARM C                                                          | I   | 0.559  | I   | 0.441  | I   | 0.000  |
|               |                                                                | I   | 327.0  | I   | 258.0  | I   | 0.0    |
|               |                                                                | I   | ( 1.0) | I   | ( 1.0) | I   | ( 0.0) |

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA  
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

## QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2011/2012 Base Flows With Dev 50 Dwellings PM  
AND FOR TIME PERIOD 2

| TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) |
|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|
| 16.30-16.45 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                |
| B-C         | 3.85                | 9.40                  | 0.410                        |                                  | 0.00                     | 0.68                   | 9.6                                 |                                               | 0.18                                           |
| B-A         | 0.84                | 5.86                  | 0.144                        |                                  | 0.00                     | 0.17                   | 2.4                                 |                                               | 0.20                                           |
| C-AB        | 3.24                | 8.40                  | 0.385                        |                                  | 0.00                     | 0.72                   | 10.6                                |                                               | 0.19                                           |
| A-B         | 2.11                |                       |                              |                                  |                          |                        |                                     |                                               |                                                |
| A-C         | 4.09                |                       |                              |                                  |                          |                        |                                     |                                               |                                                |

| TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) |
|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|
| 16.45-17.00 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                |
| B-C         | 4.60                | 8.98                  | 0.512                        |                                  | 0.68                     | 1.02                   | 14.5                                |                                               | 0.23                                           |
| B-A         | 1.00                | 4.99                  | 0.201                        |                                  | 0.17                     | 0.25                   | 3.6                                 |                                               | 0.25                                           |
| C-AB        | 3.87                | 8.13                  | 0.475                        |                                  | 0.72                     | 1.12                   | 16.8                                |                                               | 0.23                                           |
| A-B         | 2.52                |                       |                              |                                  |                          |                        |                                     |                                               |                                                |
| A-C         | 4.88                |                       |                              |                                  |                          |                        |                                     |                                               |                                                |

| TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) |
|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|
| 17.00-17.15 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                |
| B-C         | 5.63                | 8.28                  | 0.681                        |                                  | 1.02                     | 1.99                   | 27.0                                |                                               | 0.36                                           |
| B-A         | 1.23                | 3.62                  | 0.340                        |                                  | 0.25                     | 0.50                   | 6.9                                 |                                               | 0.41                                           |
| C-AB        | 4.73                | 7.76                  | 0.610                        |                                  | 1.12                     | 2.16                   | 31.9                                |                                               | 0.32                                           |
| A-B         | 3.08                |                       |                              |                                  |                          |                        |                                     |                                               |                                                |
| A-C         | 5.98                |                       |                              |                                  |                          |                        |                                     |                                               |                                                |

| TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) |
|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|
| 17.15-17.30 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                |
| B-C         | 5.63                | 8.25                  | 0.683                        |                                  | 1.99                     | 2.07                   | 30.6                                |                                               | 0.38                                           |
| B-A         | 1.23                | 3.55                  | 0.346                        |                                  | 0.50                     | 0.52                   | 7.6                                 |                                               | 0.43                                           |
| C-AB        | 4.73                | 7.76                  | 0.610                        |                                  | 2.16                     | 2.23                   | 34.3                                |                                               | 0.34                                           |
| A-B         | 3.08                |                       |                              |                                  |                          |                        |                                     |                                               |                                                |
| A-C         | 5.98                |                       |                              |                                  |                          |                        |                                     |                                               |                                                |

| TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) |
|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|
| 17.30-17.45 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                |
| B-C         | 4.60                | 8.96                  | 0.513                        |                                  | 2.07                     | 1.09                   | 17.4                                |                                               | 0.24                                           |
| B-A         | 1.00                | 4.91                  | 0.204                        |                                  | 0.52                     | 0.26                   | 4.2                                 |                                               | 0.26                                           |
| C-AB        | 3.87                | 8.13                  | 0.475                        |                                  | 2.23                     | 1.21                   | 18.6                                |                                               | 0.24                                           |
| A-B         | 2.52                |                       |                              |                                  |                          |                        |                                     |                                               |                                                |
| A-C         | 4.88                |                       |                              |                                  |                          |                        |                                     |                                               |                                                |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 17.45-18.00 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-C         | 3.85                | 9.39                  | 0.410                        |                                  | 1.09                     | 0.71                   | 11.1                                |                                               | 0.18                                           | I |
| I | B-A         | 0.84                | 5.81                  | 0.145                        |                                  | 0.26                     | 0.17                   | 2.7                                 |                                               | 0.20                                           | I |
| I | C-AB        | 3.24                | 8.40                  | 0.385                        |                                  | 1.21                     | 0.77                   | 11.6                                |                                               | 0.20                                           | I |
| I | A-B         | 2.11                |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | A-C         | 4.09                |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |

\*WARNING\* NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

#### QUEUE FOR STREAM B-C

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |    |
|---------------------------|--------------------------------|----|
| 16.45                     | 0.7                            | *  |
| 17.00                     | 1.0                            | *  |
| 17.15                     | 2.0                            | ** |
| 17.30                     | 2.1                            | ** |
| 17.45                     | 1.1                            | *  |
| 18.00                     | 0.7                            | *  |

#### QUEUE FOR STREAM B-A

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |   |
|---------------------------|--------------------------------|---|
| 16.45                     | 0.2                            |   |
| 17.00                     | 0.2                            |   |
| 17.15                     | 0.5                            |   |
| 17.30                     | 0.5                            | * |
| 17.45                     | 0.3                            |   |
| 18.00                     | 0.2                            |   |

#### QUEUE FOR STREAM C-AB

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |    |
|---------------------------|--------------------------------|----|
| 16.45                     | 0.7                            | *  |
| 17.00                     | 1.1                            | *  |
| 17.15                     | 2.2                            | ** |
| 17.30                     | 2.2                            | ** |
| 17.45                     | 1.2                            | *  |
| 18.00                     | 0.8                            | *  |

#### QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

| I | STREAM | I | TOTAL DEMAND | I | * QUEUEING * | I | * INCLUSIVE QUEUEING * | I |
|---|--------|---|--------------|---|--------------|---|------------------------|---|
| I | I      | I | I            | I | * DELAY *    | I | * DELAY *              | I |
| I | I      | I | (VEH)        | I | (MIN)        | I | (MIN)                  | I |
| I | I      | I | (VEH/H)      | I | (MIN/VEH)    | I | (MIN/VEH)              | I |
| I | B-C    | I | 422.6        | I | 110.3        | I | 110.3                  | I |
| I | B-A    | I | 92.2         | I | 27.3         | I | 27.3                   | I |
| I | C-AB   | I | 355.1        | I | 123.9        | I | 124.0                  | I |
| I | A-B    | I | 231.2        | I |              | I |                        | I |
| I | A-C    | I | 448.7        | I |              | I |                        | I |
| I | ALL    | I | 1999.9       | I | 261.5        | I | 261.6                  | I |

\* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD  
 \* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES  
 WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD  
 \* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS  
 A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

\*\*\*\*\*END OF RUN\*\*\*\*\*

#### .SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

| I | Intercept  | For Slope | For Opposing | Slope For Opposing | I |
|---|------------|-----------|--------------|--------------------|---|
| I | STREAM B-C | STREAM    | A-C          | STREAM A-B         | I |
| I | 0.00       |           | 0.00         | 0.00               | I |

\* Due to the presence of a flare, data is not available

| I | Intercept  | For Slope | For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing | I |
|---|------------|-----------|--------------|--------------------|--------------------|--------------------|---|
| I | STREAM B-A | STREAM    | A-C          | STREAM A-B         | STREAM C-A         | STREAM C-B         | I |
| I | 0.00       |           | 0.00         | 0.00               | 0.00               | 0.00               | I |

\* Due to the presence of a flare, data is not available

| I | Intercept  | For Slope | For Opposing | Slope For Opposing | I |
|---|------------|-----------|--------------|--------------------|---|
| I | STREAM C-B | STREAM    | A-C          | STREAM A-B         | I |
| I | 593.07     |           | 0.22         | 0.22               | I |

(NB These values do not allow for any site specific corrections)



| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 08.30-08.45 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-C         | 5.38                | 8.28                  | 0.650                        |                                  | 1.74                     | 1.80                   | 26.6                                |                                               | 0.34                                           | I |
| I | B-A         | 1.36                | 4.20                  | 0.323                        |                                  | 0.46                     | 0.47                   | 7.0                                 |                                               | 0.35                                           | I |
| I | C-AB        | 3.25                | 7.69                  | 0.422                        |                                  | 0.91                     | 0.93                   | 14.1                                |                                               | 0.23                                           | I |
| I | A-B         | 1.76                |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | A-C         | 5.60                |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 08.45-09.00 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-C         | 4.39                | 8.90                  | 0.493                        |                                  | 1.80                     | 1.00                   | 16.0                                |                                               | 0.23                                           | I |
| I | B-A         | 1.11                | 5.42                  | 0.204                        |                                  | 0.47                     | 0.26                   | 4.1                                 |                                               | 0.23                                           | I |
| I | C-AB        | 2.65                | 7.99                  | 0.332                        |                                  | 0.93                     | 0.60                   | 9.1                                 |                                               | 0.19                                           | I |
| I | A-B         | 1.44                |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | A-C         | 4.57                |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 09.00-09.15 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-C         | 3.68                | 9.29                  | 0.396                        |                                  | 1.00                     | 0.67                   | 10.5                                |                                               | 0.18                                           | I |
| I | B-A         | 0.93                | 6.19                  | 0.150                        |                                  | 0.26                     | 0.18                   | 2.8                                 |                                               | 0.19                                           | I |
| I | C-AB        | 2.22                | 8.21                  | 0.271                        |                                  | 0.60                     | 0.42                   | 6.4                                 |                                               | 0.17                                           | I |
| I | A-B         | 1.20                |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | A-C         | 3.83                |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |

\*WARNING\* NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

#### QUEUE FOR STREAM B-C

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |    |
|---------------------------|--------------------------------|----|
| 08.00                     | 0.6                            | *  |
| 08.15                     | 0.9                            | *  |
| 08.30                     | 1.7                            | ** |
| 08.45                     | 1.8                            | ** |
| 09.00                     | 1.0                            | *  |
| 09.15                     | 0.7                            | *  |

#### QUEUE FOR STREAM B-A

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |  |
|---------------------------|--------------------------------|--|
| 08.00                     | 0.2                            |  |
| 08.15                     | 0.2                            |  |
| 08.30                     | 0.5                            |  |
| 08.45                     | 0.5                            |  |
| 09.00                     | 0.3                            |  |
| 09.15                     | 0.2                            |  |

#### QUEUE FOR STREAM C-AB

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |   |
|---------------------------|--------------------------------|---|
| 08.00                     | 0.4                            |   |
| 08.15                     | 0.6                            | * |
| 08.30                     | 0.9                            | * |
| 08.45                     | 0.9                            | * |
| 09.00                     | 0.6                            | * |
| 09.15                     | 0.4                            |   |

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

| I | STREAM | I | TOTAL DEMAND | I       | * QUEUEING *<br>* DELAY * | I         | * INCLUSIVE QUEUEING *<br>* DELAY * | I         |      |
|---|--------|---|--------------|---------|---------------------------|-----------|-------------------------------------|-----------|------|
| I | I      | I | I            | I       | I                         | I         | I                                   | I         |      |
| I | I      | I | (VEH)        | (VEH/H) | (MIN)                     | (MIN/VEH) | (MIN)                               | (MIN/VEH) |      |
| I | B-C    | I | 403.3        | I       | 268.9                     | I         | 99.5                                | I         | 0.25 |
| I | B-A    | I | 101.9        | I       | 67.9                      | I         | 26.4                                | I         | 0.26 |
| I | C-AB   | I | 243.6        | I       | 162.4                     | I         | 57.9                                | I         | 0.24 |
| I | A-B    | I | 132.1        | I       | 88.1                      | I         | I                                   | I         | I    |
| I | A-C    | I | 419.8        | I       | 279.9                     | I         | I                                   | I         | I    |
| I | ALL    | I | 1699.9       | I       | 1133.3                    | I         | 183.8                               | I         | 0.11 |

\* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD  
 \* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES  
 WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD  
 \* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS  
 A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

\*\*\*\*\*END OF RUN\*\*\*\*\*

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

| I | Intercept For | Slope For | Opposing | Slope For | Opposing | I |
|---|---------------|-----------|----------|-----------|----------|---|
| I | STREAM B-C    | STREAM    | A-C      | STREAM    | A-B      | I |
| I | 0.00          |           | 0.00     |           | 0.00     | I |

\* Due to the presence of a flare, data is not available

| I | Intercept For | Slope For | Opposing | Slope For | Opposing | Slope For | Opposing | Slope For | Opposing | I |
|---|---------------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|---|
| I | STREAM B-A    | STREAM    | A-C      | STREAM    | A-B      | STREAM    | C-A      | STREAM    | C-B      | I |
| I | 0.00          |           | 0.00     |           | 0.00     |           | 0.00     |           | 0.00     | I |

\* Due to the presence of a flare, data is not available

| I | Intercept For | Slope For | Opposing | Slope For | Opposing | I |
|---|---------------|-----------|----------|-----------|----------|---|
| I | STREAM C-B    | STREAM    | A-C      | STREAM    | A-B      | I |
| I | 593.07        |           | 0.22     |           | 0.22     | I |

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

| I | ARM | I | FLOW SCALE(%) | I |
|---|-----|---|---------------|---|
| I | I   | I | I             | I |
| I | A   | I | 100           | I |
| I | B   | I | 100           | I |
| I | C   | I | 100           | I |

Demand set: 2017 Base Flows PM

TIME PERIOD BEGINS 16.30 AND ENDS 18.00

LENGTH OF TIME PERIOD - 90 MIN.  
 LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

| I | ARM   | I | NUMBER OF MINUTES FROM START WHEN<br>FLOW STARTS TO RISE | I | TOP OF PEAK IS REACHED | I | FLOW STOPS FALLING | I | RATE OF FLOW (VEH/MIN)<br>BEFORE PEAK | I | AT TOP OF PEAK | I | AFTER PEAK | I |
|---|-------|---|----------------------------------------------------------|---|------------------------|---|--------------------|---|---------------------------------------|---|----------------|---|------------|---|
| I | I     | I | I                                                        | I | I                      | I | I                  | I | I                                     | I | I              | I | I          | I |
| I | ARM A | I | 15.00                                                    | I | 45.00                  | I | 75.00              | I | 6.38                                  | I | 9.56           | I | 6.38       | I |
| I | ARM B | I | 15.00                                                    | I | 45.00                  | I | 75.00              | I | 4.86                                  | I | 7.29           | I | 4.86       | I |
| I | ARM C | I | 15.00                                                    | I | 45.00                  | I | 75.00              | I | 7.53                                  | I | 11.29          | I | 7.53       | I |

Demand set: 2017 Base Flows PM

| TIME          | TURNING PROPORTIONS<br>TURNING COUNTS<br>(PERCENTAGE OF H.V.S) |     |        |     |        |     |        |
|---------------|----------------------------------------------------------------|-----|--------|-----|--------|-----|--------|
|               | FROM/TO                                                        | ARM | A      | ARM | B      | ARM | C      |
| 16.30 - 16.45 | ARM A                                                          | I   | 0.000  | I   | 0.327  | I   | 0.673  |
|               |                                                                | I   | 0.0    | I   | 167.0  | I   | 343.0  |
|               |                                                                | I   | ( 0.0) | I   | ( 1.0) | I   | ( 5.0) |
|               | ARM B                                                          | I   | 0.177  | I   | 0.000  | I   | 0.823  |
|               |                                                                | I   | 69.0   | I   | 0.0    | I   | 320.0  |
|               |                                                                | I   | ( 0.0) | I   | ( 0.0) | I   | ( 1.0) |
|               | ARM C                                                          | I   | 0.571  | I   | 0.429  | I   | 0.000  |
|               |                                                                | I   | 344.0  | I   | 258.0  | I   | 0.0    |
|               |                                                                | I   | ( 1.0) | I   | ( 1.0) | I   | ( 0.0) |

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA  
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

## QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2017 Base Flows PM  
AND FOR TIME PERIOD 2

| TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) |
|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|
| 16.30-16.45 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                |
| B-C         | 4.02                | 9.32                  | 0.431                        |                                  | 0.00                     | 0.74                   | 10.4                                |                                               | 0.19                                           |
| B-A         | 0.87                | 5.72                  | 0.151                        |                                  | 0.00                     | 0.18                   | 2.5                                 |                                               | 0.20                                           |
| C-AB        | 3.24                | 8.36                  | 0.387                        |                                  | 0.00                     | 0.74                   | 10.8                                |                                               | 0.19                                           |
| A-B         | 2.10                |                       |                              |                                  |                          |                        |                                     |                                               |                                                |
| A-C         | 4.30                |                       |                              |                                  |                          |                        |                                     |                                               |                                                |

| TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) |
|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|
| 16.45-17.00 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                |
| B-C         | 4.79                | 8.88                  | 0.540                        |                                  | 0.74                     | 1.14                   | 16.1                                |                                               | 0.24                                           |
| B-A         | 1.03                | 4.79                  | 0.216                        |                                  | 0.18                     | 0.27                   | 3.9                                 |                                               | 0.27                                           |
| C-AB        | 3.87                | 8.08                  | 0.479                        |                                  | 0.74                     | 1.15                   | 17.3                                |                                               | 0.24                                           |
| A-B         | 2.50                |                       |                              |                                  |                          |                        |                                     |                                               |                                                |
| A-C         | 5.14                |                       |                              |                                  |                          |                        |                                     |                                               |                                                |

| TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) |
|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|
| 17.00-17.15 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                |
| B-C         | 5.87                | 8.11                  | 0.724                        |                                  | 1.14                     | 2.39                   | 31.9                                |                                               | 0.42                                           |
| B-A         | 1.27                | 3.31                  | 0.383                        |                                  | 0.27                     | 0.59                   | 8.1                                 |                                               | 0.48                                           |
| C-AB        | 4.73                | 7.69                  | 0.615                        |                                  | 1.15                     | 2.25                   | 33.3                                |                                               | 0.33                                           |
| A-B         | 3.06                |                       |                              |                                  |                          |                        |                                     |                                               |                                                |
| A-C         | 6.29                |                       |                              |                                  |                          |                        |                                     |                                               |                                                |

| TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) |
|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|
| 17.15-17.30 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                |
| B-C         | 5.87                | 8.07                  | 0.727                        |                                  | 2.39                     | 2.52                   | 37.1                                |                                               | 0.45                                           |
| B-A         | 1.27                | 3.22                  | 0.393                        |                                  | 0.59                     | 0.62                   | 9.2                                 |                                               | 0.51                                           |
| C-AB        | 4.73                | 7.69                  | 0.615                        |                                  | 2.25                     | 2.32                   | 35.8                                |                                               | 0.35                                           |
| A-B         | 3.06                |                       |                              |                                  |                          |                        |                                     |                                               |                                                |
| A-C         | 6.29                |                       |                              |                                  |                          |                        |                                     |                                               |                                                |

| TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) |
|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|
| 17.30-17.45 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                |
| B-C         | 4.79                | 8.85                  | 0.542                        |                                  | 2.52                     | 1.22                   | 19.8                                |                                               | 0.26                                           |
| B-A         | 1.03                | 4.70                  | 0.220                        |                                  | 0.62                     | 0.29                   | 4.6                                 |                                               | 0.28                                           |
| C-AB        | 3.87                | 8.08                  | 0.479                        |                                  | 2.32                     | 1.25                   | 19.2                                |                                               | 0.25                                           |
| A-B         | 2.50                |                       |                              |                                  |                          |                        |                                     |                                               |                                                |
| A-C         | 5.14                |                       |                              |                                  |                          |                        |                                     |                                               |                                                |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 17.45-18.00 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-C         | 4.02                | 9.31                  | 0.431                        |                                  | 1.22                     | 0.77                   | 12.2                                |                                               | 0.19                                           | I |
| I | B-A         | 0.87                | 5.67                  | 0.153                        |                                  | 0.29                     | 0.18                   | 2.9                                 |                                               | 0.21                                           | I |
| I | C-AB        | 3.24                | 8.36                  | 0.387                        |                                  | 1.25                     | 0.78                   | 11.9                                |                                               | 0.20                                           | I |
| I | A-B         | 2.10                |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | A-C         | 4.30                |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |

\*WARNING\* NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

#### QUEUE FOR STREAM B-C

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |     |
|---------------------------|--------------------------------|-----|
| 16.45                     | 0.7                            | *   |
| 17.00                     | 1.1                            | *   |
| 17.15                     | 2.4                            | **  |
| 17.30                     | 2.5                            | *** |
| 17.45                     | 1.2                            | *   |
| 18.00                     | 0.8                            | *   |

#### QUEUE FOR STREAM B-A

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |   |
|---------------------------|--------------------------------|---|
| 16.45                     | 0.2                            |   |
| 17.00                     | 0.3                            |   |
| 17.15                     | 0.6                            | * |
| 17.30                     | 0.6                            | * |
| 17.45                     | 0.3                            |   |
| 18.00                     | 0.2                            |   |

#### QUEUE FOR STREAM C-AB

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |    |
|---------------------------|--------------------------------|----|
| 16.45                     | 0.7                            | *  |
| 17.00                     | 1.1                            | *  |
| 17.15                     | 2.3                            | ** |
| 17.30                     | 2.3                            | ** |
| 17.45                     | 1.2                            | *  |
| 18.00                     | 0.8                            | *  |

#### QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

| I | STREAM | I | TOTAL DEMAND | I | * QUEUEING * | I | * INCLUSIVE QUEUEING * | I |
|---|--------|---|--------------|---|--------------|---|------------------------|---|
| I | I      | I | I            | I | * DELAY *    | I | * DELAY *              | I |
| I | I      | I | (VEH)        | I | (MIN)        | I | (MIN)                  | I |
| I | I      | I | (VEH/H)      | I | (MIN/VEH)    | I | (MIN/VEH)              | I |
| I | B-C    | I | 440.5        | I | 127.5        | I | 127.6                  | I |
| I | B-A    | I | 95.0         | I | 31.1         | I | 31.1                   | I |
| I | C-AB   | I | 355.1        | I | 128.2        | I | 128.3                  | I |
| I | A-B    | I | 229.9        | I |              | I |                        | I |
| I | A-C    | I | 472.1        | I |              | I |                        | I |
| I | ALL    | I | 2066.0       | I | 286.9        | I | 287.0                  | I |

\* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD  
 \* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES  
 WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD  
 \* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS  
 A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

\*\*\*\*\*END OF RUN\*\*\*\*\*

#### .SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

| I | Intercept For Slope For Opposing | Slope For Opposing | I          |
|---|----------------------------------|--------------------|------------|
| I | STREAM B-C                       | STREAM A-C         | STREAM A-B |
| I | 0.00                             | 0.00               | 0.00       |

\* Due to the presence of a flare, data is not available

| I | Intercept For Slope For Opposing | Slope For Opposing | Slope For Opposing | Slope For Opposing | I          |
|---|----------------------------------|--------------------|--------------------|--------------------|------------|
| I | STREAM B-A                       | STREAM A-C         | STREAM A-B         | STREAM C-A         | STREAM C-B |
| I | 0.00                             | 0.00               | 0.00               | 0.00               | 0.00       |

\* Due to the presence of a flare, data is not available

| I | Intercept For Slope For Opposing | Slope For Opposing | I          |
|---|----------------------------------|--------------------|------------|
| I | STREAM C-B                       | STREAM A-C         | STREAM A-B |
| I | 593.07                           | 0.22               | 0.22       |

(NB These values do not allow for any site specific corrections)



| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 08.30-08.45 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-C         | 5.62                | 8.20                  | 0.685                        |                                  | 2.01                     | 2.09                   | 30.9                                |                                               | 0.38                                           | I |
| I | B-A         | 1.41                | 3.98                  | 0.355                        |                                  | 0.52                     | 0.54                   | 8.0                                 |                                               | 0.39                                           | I |
| I | C-AB        | 3.32                | 7.68                  | 0.432                        |                                  | 0.95                     | 0.97                   | 14.8                                |                                               | 0.23                                           | I |
| I | A-B         | 1.80                |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | A-C         | 5.60                |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 08.45-09.00 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-C         | 4.58                | 8.86                  | 0.518                        |                                  | 2.09                     | 1.11                   | 17.8                                |                                               | 0.24                                           | I |
| I | B-A         | 1.15                | 5.30                  | 0.218                        |                                  | 0.54                     | 0.28                   | 4.5                                 |                                               | 0.24                                           | I |
| I | C-AB        | 2.71                | 7.98                  | 0.340                        |                                  | 0.97                     | 0.63                   | 9.5                                 |                                               | 0.19                                           | I |
| I | A-B         | 1.47                |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | A-C         | 4.57                |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 09.00-09.15 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-C         | 3.84                | 9.26                  | 0.415                        |                                  | 1.11                     | 0.72                   | 11.4                                |                                               | 0.19                                           | I |
| I | B-A         | 0.97                | 6.12                  | 0.158                        |                                  | 0.28                     | 0.19                   | 3.0                                 |                                               | 0.19                                           | I |
| I | C-AB        | 2.27                | 8.20                  | 0.277                        |                                  | 0.63                     | 0.44                   | 6.6                                 |                                               | 0.17                                           | I |
| I | A-B         | 1.23                |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | A-C         | 3.83                |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |

\*WARNING\* NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

#### QUEUE FOR STREAM B-C

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 08.00                     | 0.7 *                          |
| 08.15                     | 1.0 *                          |
| 08.30                     | 2.0 **                         |
| 08.45                     | 2.1 **                         |
| 09.00                     | 1.1 *                          |
| 09.15                     | 0.7 *                          |

#### QUEUE FOR STREAM B-A

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 08.00                     | 0.2                            |
| 08.15                     | 0.3                            |
| 08.30                     | 0.5 *                          |
| 08.45                     | 0.5 *                          |
| 09.00                     | 0.3                            |
| 09.15                     | 0.2                            |

#### QUEUE FOR STREAM C-AB

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |
|---------------------------|--------------------------------|
| 08.00                     | 0.4                            |
| 08.15                     | 0.6 *                          |
| 08.30                     | 1.0 *                          |
| 08.45                     | 1.0 *                          |
| 09.00                     | 0.6 *                          |
| 09.15                     | 0.4                            |

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

| I | STREAM | I | TOTAL DEMAND | I       | * QUEUEING *<br>* DELAY * | I         | * INCLUSIVE QUEUEING *<br>* DELAY * | I         |      |
|---|--------|---|--------------|---------|---------------------------|-----------|-------------------------------------|-----------|------|
| I | I      | I | I            | I       | I                         | I         | I                                   | I         |      |
| I | I      | I | (VEH)        | (VEH/H) | (MIN)                     | (MIN/VEH) | (MIN)                               | (MIN/VEH) |      |
| I | B-C    | I | 421.2        | I       | 280.8                     | I         | 111.8                               | I         | 0.27 |
| I | B-A    | I | 106.0        | I       | 70.7                      | I         | 29.2                                | I         | 0.28 |
| I | C-AB   | I | 249.1        | I       | 166.1                     | I         | 60.3                                | I         | 0.24 |
| I | A-B    | I | 134.9        | I       | 89.9                      | I         | I                                   | I         | I    |
| I | A-C    | I | 419.8        | I       | 279.9                     | I         | I                                   | I         | I    |
| I | ALL    | I | 1730.2       | I       | 1153.4                    | I         | 201.3                               | I         | 0.12 |

\* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD  
 \* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES  
 WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD  
 \* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS  
 A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

\*\*\*\*\*END OF RUN\*\*\*\*\*

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

| I | Intercept For | Slope For | Opposing | Slope For | Opposing | I |
|---|---------------|-----------|----------|-----------|----------|---|
| I | STREAM B-C    | STREAM    | A-C      | STREAM    | A-B      | I |
| I | 0.00          |           | 0.00     |           | 0.00     | I |

\* Due to the presence of a flare, data is not available

| I | Intercept For | Slope For | Opposing | Slope For | Opposing | Slope For | Opposing | Slope For | Opposing | I |
|---|---------------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|---|
| I | STREAM B-A    | STREAM    | A-C      | STREAM    | A-B      | STREAM    | C-A      | STREAM    | C-B      | I |
| I | 0.00          |           | 0.00     |           | 0.00     |           | 0.00     |           | 0.00     | I |

\* Due to the presence of a flare, data is not available

| I | Intercept For | Slope For | Opposing | Slope For | Opposing | I |
|---|---------------|-----------|----------|-----------|----------|---|
| I | STREAM C-B    | STREAM    | A-C      | STREAM    | A-B      | I |
| I | 593.07        |           | 0.22     |           | 0.22     | I |

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

| I | ARM | I | FLOW SCALE(%) | I |
|---|-----|---|---------------|---|
| I | I   | I | I             | I |
| I | A   | I | 100           | I |
| I | B   | I | 100           | I |
| I | C   | I | 100           | I |

Demand set: 2017 Base Flows With Dev 50 Dwellings PM

TIME PERIOD BEGINS 16.30 AND ENDS 18.00

LENGTH OF TIME PERIOD - 90 MIN.  
 LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

| I | ARM   | I | NUMBER OF MINUTES FROM START WHEN<br>FLOW STARTS TO RISE | I | TOP OF PEAK IS REACHED | I | FLOW STOPS FALLING | I | RATE OF FLOW (VEH/MIN)<br>BEFORE PEAK | I | AT TOP OF PEAK | I | AFTER PEAK | I |
|---|-------|---|----------------------------------------------------------|---|------------------------|---|--------------------|---|---------------------------------------|---|----------------|---|------------|---|
| I | I     | I | I                                                        | I | I                      | I | I                  | I | I                                     | I | I              | I | I          | I |
| I | ARM A | I | 15.00                                                    | I | 45.00                  | I | 75.00              | I | 6.49                                  | I | 9.73           | I | 6.49       | I |
| I | ARM B | I | 15.00                                                    | I | 45.00                  | I | 75.00              | I | 4.91                                  | I | 7.37           | I | 4.91       | I |
| I | ARM C | I | 15.00                                                    | I | 45.00                  | I | 75.00              | I | 7.69                                  | I | 11.53          | I | 7.69       | I |

Demand set: 2017 Base Flows With Dev 50 Dwellings PM

| TIME          | TURNING PROPORTIONS<br>TURNING COUNTS<br>(PERCENTAGE OF H.V.S) |     |        |     |        |     |        |
|---------------|----------------------------------------------------------------|-----|--------|-----|--------|-----|--------|
|               | FROM/TO                                                        | ARM | A      | ARM | B      | ARM | C      |
| 16.30 - 16.45 | ARM A                                                          | I   | 0.000  | I   | 0.339  | I   | 0.661  |
|               |                                                                | I   | 0.0    | I   | 176.0  | I   | 343.0  |
|               |                                                                | I   | ( 0.0) | I   | ( 1.0) | I   | ( 5.0) |
|               | ARM B                                                          | I   | 0.178  | I   | 0.000  | I   | 0.822  |
|               |                                                                | I   | 70.0   | I   | 0.0    | I   | 323.0  |
|               |                                                                | I   | ( 0.0) | I   | ( 0.0) | I   | ( 1.0) |
|               | ARM C                                                          | I   | 0.559  | I   | 0.441  | I   | 0.000  |
|               |                                                                | I   | 344.0  | I   | 271.0  | I   | 0.0    |
|               |                                                                | I   | ( 1.0) | I   | ( 1.0) | I   | ( 0.0) |

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA  
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

## QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2017 Base Flows With Dev 50 Dwellings PM  
AND FOR TIME PERIOD 2

| TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) |
|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|
| 16.30-16.45 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                |
| B-C         | 4.05                | 9.30                  | 0.436                        |                                  | 0.00                     | 0.76                   | 10.6                                |                                               | 0.19                                           |
| B-A         | 0.88                | 5.65                  | 0.156                        |                                  | 0.00                     | 0.18                   | 2.6                                 |                                               | 0.21                                           |
| C-AB        | 3.40                | 8.33                  | 0.408                        |                                  | 0.00                     | 0.81                   | 11.8                                |                                               | 0.20                                           |
| A-B         | 2.21                |                       |                              |                                  |                          |                        |                                     |                                               |                                                |
| A-C         | 4.30                |                       |                              |                                  |                          |                        |                                     |                                               |                                                |

| TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) |
|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|
| 16.45-17.00 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                |
| B-C         | 4.84                | 8.85                  | 0.547                        |                                  | 0.76                     | 1.17                   | 16.5                                |                                               | 0.25                                           |
| B-A         | 1.05                | 4.69                  | 0.223                        |                                  | 0.18                     | 0.28                   | 4.0                                 |                                               | 0.27                                           |
| C-AB        | 4.06                | 8.05                  | 0.504                        |                                  | 0.81                     | 1.29                   | 19.4                                |                                               | 0.25                                           |
| A-B         | 2.64                |                       |                              |                                  |                          |                        |                                     |                                               |                                                |
| A-C         | 5.14                |                       |                              |                                  |                          |                        |                                     |                                               |                                                |

| TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) |
|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|
| 17.00-17.15 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                |
| B-C         | 5.93                | 8.04                  | 0.737                        |                                  | 1.17                     | 2.54                   | 33.6                                |                                               | 0.44                                           |
| B-A         | 1.28                | 3.18                  | 0.404                        |                                  | 0.28                     | 0.64                   | 8.8                                 |                                               | 0.51                                           |
| C-AB        | 4.97                | 7.66                  | 0.649                        |                                  | 1.29                     | 2.63                   | 38.6                                |                                               | 0.36                                           |
| A-B         | 3.23                |                       |                              |                                  |                          |                        |                                     |                                               |                                                |
| A-C         | 6.29                |                       |                              |                                  |                          |                        |                                     |                                               |                                                |

| TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) |
|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|
| 17.15-17.30 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                |
| B-C         | 5.93                | 7.99                  | 0.742                        |                                  | 2.54                     | 2.70                   | 39.5                                |                                               | 0.48                                           |
| B-A         | 1.28                | 3.08                  | 0.417                        |                                  | 0.64                     | 0.69                   | 10.1                                |                                               | 0.55                                           |
| C-AB        | 4.97                | 7.66                  | 0.649                        |                                  | 2.63                     | 2.73                   | 42.1                                |                                               | 0.38                                           |
| A-B         | 3.23                |                       |                              |                                  |                          |                        |                                     |                                               |                                                |
| A-C         | 6.29                |                       |                              |                                  |                          |                        |                                     |                                               |                                                |

| TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) |
|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|
| 17.30-17.45 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                |
| B-C         | 4.84                | 8.81                  | 0.549                        |                                  | 2.70                     | 1.26                   | 20.6                                |                                               | 0.26                                           |
| B-A         | 1.05                | 4.59                  | 0.228                        |                                  | 0.69                     | 0.30                   | 4.9                                 |                                               | 0.29                                           |
| C-AB        | 4.06                | 8.05                  | 0.504                        |                                  | 2.73                     | 1.41                   | 21.7                                |                                               | 0.26                                           |
| A-B         | 2.64                |                       |                              |                                  |                          |                        |                                     |                                               |                                                |
| A-C         | 5.14                |                       |                              |                                  |                          |                        |                                     |                                               |                                                |

| I | TIME        | DEMAND<br>(VEH/MIN) | CAPACITY<br>(VEH/MIN) | DEMAND/<br>CAPACITY<br>(RFC) | PEDESTRIAN<br>FLOW<br>(PEDS/MIN) | START<br>QUEUE<br>(VEHS) | END<br>QUEUE<br>(VEHS) | DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | GEOMETRIC DELAY<br>(VEH.MIN/<br>TIME SEGMENT) | AVERAGE DELAY<br>PER ARRIVING<br>VEHICLE (MIN) | I |
|---|-------------|---------------------|-----------------------|------------------------------|----------------------------------|--------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------|---|
| I | 17.45-18.00 |                     |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | B-C         | 4.05                | 9.28                  | 0.437                        |                                  | 1.26                     | 0.79                   | 12.5                                |                                               | 0.19                                           | I |
| I | B-A         | 0.88                | 5.59                  | 0.157                        |                                  | 0.30                     | 0.19                   | 3.0                                 |                                               | 0.21                                           | I |
| I | C-AB        | 3.40                | 8.33                  | 0.408                        |                                  | 1.41                     | 0.86                   | 13.1                                |                                               | 0.21                                           | I |
| I | A-B         | 2.21                |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |
| I | A-C         | 4.30                |                       |                              |                                  |                          |                        |                                     |                                               |                                                | I |

\*WARNING\* NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |     |
|---------------------------|--------------------------------|-----|
| 16.45                     | 0.8                            | *   |
| 17.00                     | 1.2                            | *   |
| 17.15                     | 2.5                            | *** |
| 17.30                     | 2.7                            | *** |
| 17.45                     | 1.3                            | *   |
| 18.00                     | 0.8                            | *   |

QUEUE FOR STREAM B-A

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |   |
|---------------------------|--------------------------------|---|
| 16.45                     | 0.2                            |   |
| 17.00                     | 0.3                            |   |
| 17.15                     | 0.6                            | * |
| 17.30                     | 0.7                            | * |
| 17.45                     | 0.3                            |   |
| 18.00                     | 0.2                            |   |

QUEUE FOR STREAM C-AB

| TIME<br>SEGMENT<br>ENDING | NO. OF<br>VEHICLES<br>IN QUEUE |     |
|---------------------------|--------------------------------|-----|
| 16.45                     | 0.8                            | *   |
| 17.00                     | 1.3                            | *   |
| 17.15                     | 2.6                            | *** |
| 17.30                     | 2.7                            | *** |
| 17.45                     | 1.4                            | *   |
| 18.00                     | 0.9                            | *   |

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

| I | STREAM | I | TOTAL DEMAND | I       | * QUEUEING * | I         | * INCLUSIVE QUEUEING * | I         |
|---|--------|---|--------------|---------|--------------|-----------|------------------------|-----------|
| I | I      | I | I            | I       | * DELAY *    | I         | * DELAY *              | I         |
| I | I      | I | (VEH)        | (VEH/H) | (MIN)        | (MIN/VEH) | (MIN)                  | (MIN/VEH) |
| I | B-C    | I | 444.6        | I       | 133.4        | I         | 133.4                  | I         |
| I | B-A    | I | 96.3         | I       | 33.3         | I         | 33.3                   | I         |
| I | C-AB   | I | 373.0        | I       | 146.8        | I         | 146.9                  | I         |
| I | A-B    | I | 242.3        | I       |              | I         |                        | I         |
| I | A-C    | I | 472.1        | I       |              | I         |                        | I         |
| I | ALL    | I | 2101.8       | I       | 313.5        | I         | 313.6                  | I         |

\* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD  
 \* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES  
 WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD  
 \* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS  
 A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

\*\*\*\*\*END OF RUN\*\*\*\*\*

===== end of file =====

