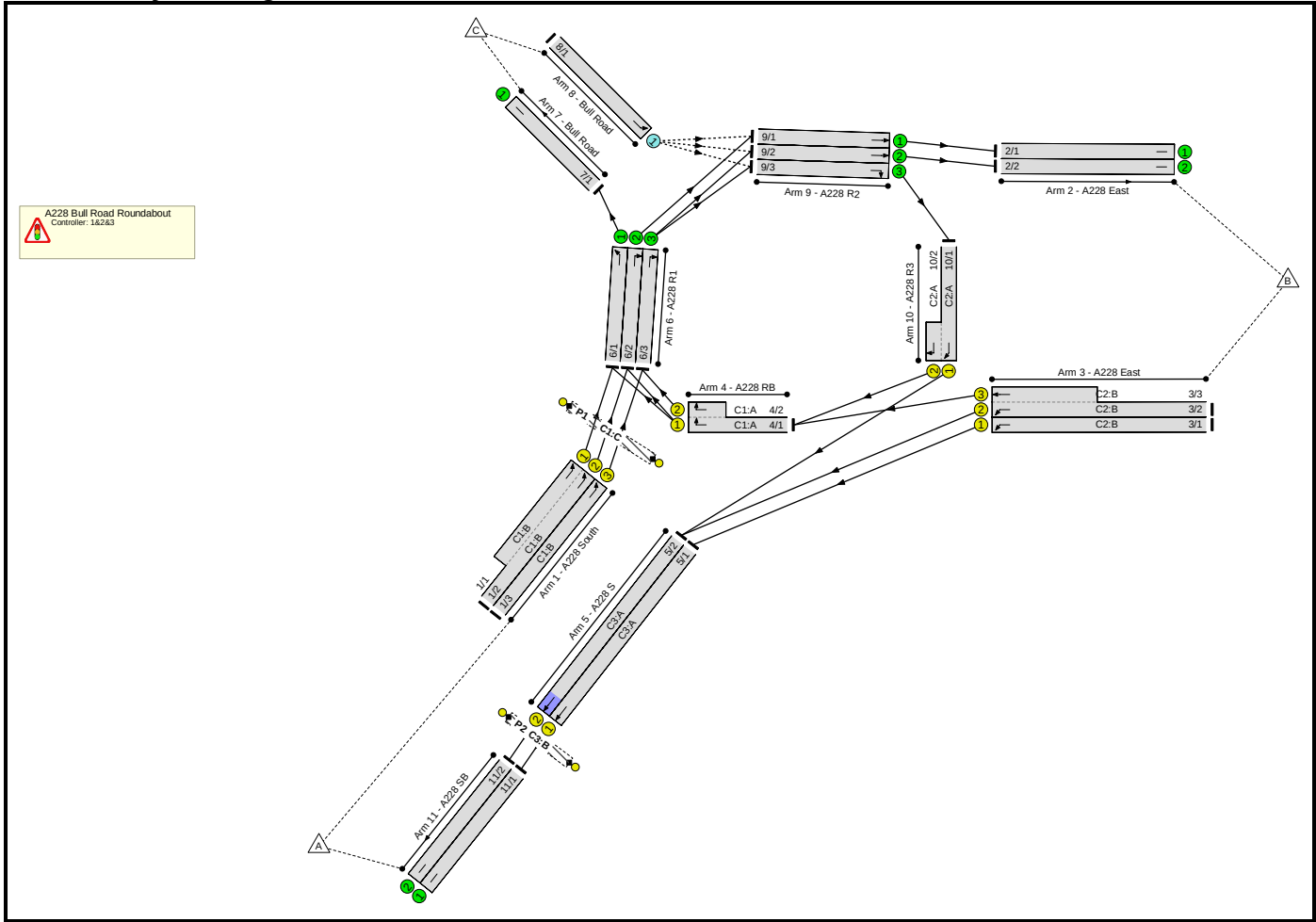


User and Project Details

|                    |                                    |
|--------------------|------------------------------------|
| Project:           |                                    |
| Title:             |                                    |
| Location:          |                                    |
| Additional detail: |                                    |
| File name:         | J9 A228 Bull Road Roundabout.lsg3x |
| Author:            |                                    |
| Company:           |                                    |
| Address:           |                                    |

Network Layout Diagram



## Network Results

| Item                                                                                                  | Lane Description     | Lane Type | Demand Flow (pcu) | Deg Sat (%)  | Av. Delay Per PCU (s/pcu) | Mean Max Queue (pcu) |
|-------------------------------------------------------------------------------------------------------|----------------------|-----------|-------------------|--------------|---------------------------|----------------------|
| Network                                                                                               | -                    | -         | -                 | 70.3%        | -                         | -                    |
| A228 Bull Road Roundabout                                                                             | -                    | -         | -                 | 70.3%        | -                         | -                    |
| 1/2+1/1                                                                                               | A228 South Ahead     | U         | 791               | 61.5 : 61.5% | 9.9                       | 8.6                  |
| 1/3                                                                                                   | A228 South Ahead     | U         | 851               | 62.7%        | 10.0                      | 9.6                  |
| 3/1                                                                                                   | A228 East Left       | U         | 897               | 62.7%        | 7.1                       | 8.3                  |
| 3/2+3/3                                                                                               | A228 East Ahead Left | U         | 1259              | 70.3 : 70.3% | 6.6                       | 8.2                  |
| 4/1+4/2                                                                                               | A228 RB Right        | U         | 357               | 54.6 : 54.6% | 25.6                      | 2.7                  |
| 5/1                                                                                                   | A228 S Ahead         | U         | 897               | 67.2%        | 6.7                       | 3.8                  |
| 5/2                                                                                                   | A228 S Ahead         | U         | 917               | 68.6%        | 7.0                       | 4.6                  |
| 8/1                                                                                                   | Bull Road Ahead      | O         | 92                | 17.9%        | 6.4                       | 0.6                  |
| 10/1+10/2                                                                                             | A228 R3 Right Ahead  | U         | 15                | 6.3 : 0.0%   | 31.8                      | 0.2                  |
| Ped Link: P1                                                                                          | Unnamed Ped Link     | -         | 0                 | 0.0%         | -                         | -                    |
| Ped Link: P2                                                                                          | Unnamed Ped Link     | -         | 0                 | 0.0%         | -                         | -                    |
| C1 PRC for Signalled Lanes (%): 43.6 Total Delay for Signalled Lanes (pcuHr): 7.08 Cycle Time (s): 64 |                      |           |                   |              |                           |                      |
| C2 PRC for Signalled Lanes (%): 28.0 Total Delay for Signalled Lanes (pcuHr): 4.22 Cycle Time (s): 64 |                      |           |                   |              |                           |                      |
| C3 PRC for Signalled Lanes (%): 31.2 Total Delay for Signalled Lanes (pcuHr): 3.46 Cycle Time (s): 64 |                      |           |                   |              |                           |                      |
| PRC Over All Lanes (%): 28.0 Total Delay Over All Lanes(pcuHr): 14.91                                 |                      |           |                   |              |                           |                      |

## Traffic Data

**Scenario 2: '2042 Forecast Base PM'** (FG2: '2042 Forecast Base PM', Plan 1: 'Network Control Plan 1')

| Item                      | Lane Description             | Lane Type | Demand Flow (pcu)                        | Deg Sat (%)  | Av. Delay Per PCU (s/pcu) | Mean Max Queue (pcu) |
|---------------------------|------------------------------|-----------|------------------------------------------|--------------|---------------------------|----------------------|
| Network                   | -                            | -         | -                                        | 79.7%        | -                         | -                    |
| A228 Bull Road Roundabout | -                            | -         | -                                        | 79.7%        | -                         | -                    |
| 1/2+1/1                   | A228 South Ahead             | U         | 980                                      | 78.9 : 78.9% | 14.8                      | 13.4                 |
| 1/3                       | A228 South Ahead             | U         | 1045                                     | 79.7%        | 14.8                      | 14.7                 |
| 3/1                       | A228 East Left               | U         | 742                                      | 53.0%        | 6.2                       | 5.9                  |
| 3/2+3/3                   | A228 East Ahead Left         | U         | 999                                      | 58.6 : 58.6% | 5.7                       | 6.1                  |
| 4/1+4/2                   | A228 RB Right                | U         | 218                                      | 33.5 : 33.5% | 20.9                      | 1.4                  |
| 5/1                       | A228 S Ahead                 | U         | 742                                      | 57.3%        | 5.7                       | 2.9                  |
| 5/2                       | A228 S Ahead                 | U         | 781                                      | 60.3%        | 6.0                       | 3.1                  |
| 8/1                       | Bull Road Ahead              | O         | 48                                       | 10.7%        | 9.0                       | 0.4                  |
| 10/1+10/2                 | A228 R3 Right Ahead          | U         | 0                                        | 0.0 : 0.0%   | 0.0                       | 0.0                  |
| Ped Link: P1              | Unnamed Ped Link             | -         | 0                                        | 0.0%         | -                         | -                    |
| Ped Link: P2              | Unnamed Ped Link             | -         | 0                                        | 0.0%         | -                         | -                    |
| C1                        | PRC for Signalled Lanes (%): | 12.9      | Total Delay for Signalled Lanes (pcuHr): | 9.61         | Cycle Time (s):           | 60                   |
| C2                        | PRC for Signalled Lanes (%): | 53.6      | Total Delay for Signalled Lanes (pcuHr): | 2.88         | Cycle Time (s):           | 60                   |
| C3                        | PRC for Signalled Lanes (%): | 49.3      | Total Delay for Signalled Lanes (pcuHr): | 2.47         | Cycle Time (s):           | 60                   |
|                           | PRC Over All Lanes (%):      | 12.9      | Total Delay Over All Lanes(pcuHr):       | 15.08        |                           |                      |

## Traffic Data

**Scenario 3: '2040 LP High AM'** (FG3: '2040 Local Plan High AM', Plan 1: 'Network Control Plan 1')

| Item                      | Lane Description             | Lane Type | Demand Flow (pcu)                        | Deg Sat (%)  | Av. Delay Per PCU (s/pcu) | Mean Max Queue (pcu) |
|---------------------------|------------------------------|-----------|------------------------------------------|--------------|---------------------------|----------------------|
| Network                   | -                            | -         | -                                        | 71.8%        | -                         | -                    |
| A228 Bull Road Roundabout | -                            | -         | -                                        | 71.8%        | -                         | -                    |
| 1/2+1/1                   | A228 South Ahead             | U         | 904                                      | 69.2 : 69.2% | 11.3                      | 10.9                 |
| 1/3                       | A228 South Ahead             | U         | 949                                      | 69.9%        | 11.4                      | 11.7                 |
| 3/1                       | A228 East Left               | U         | 913                                      | 63.8%        | 7.3                       | 8.5                  |
| 3/2+3/3                   | A228 East Ahead Left         | U         | 1291                                     | 71.8 : 71.8% | 6.8                       | 8.4                  |
| 4/1+4/2                   | A228 RB Right                | U         | 376                                      | 57.2 : 57.2% | 26.3                      | 2.8                  |
| 5/1                       | A228 S Ahead                 | U         | 913                                      | 68.4%        | 6.8                       | 3.9                  |
| 5/2                       | A228 S Ahead                 | U         | 928                                      | 69.4%        | 7.1                       | 4.6                  |
| 8/1                       | Bull Road Ahead              | O         | 94                                       | 20.3%        | 8.1                       | 0.7                  |
| 10/1+10/2                 | A228 R3 Right Ahead          | U         | 13                                       | 5.5 : 0.0%   | 34.8                      | 0.2                  |
| Ped Link: P1              | Unnamed Ped Link             | -         | 0                                        | 0.0%         | -                         | -                    |
| Ped Link: P2              | Unnamed Ped Link             | -         | 0                                        | 0.0%         | -                         | -                    |
| C1                        | PRC for Signalled Lanes (%): | 28.8      | Total Delay for Signalled Lanes (pcuHr): | 8.58         | Cycle Time (s):           | 64                   |
| C2                        | PRC for Signalled Lanes (%): | 25.4      | Total Delay for Signalled Lanes (pcuHr): | 4.41         | Cycle Time (s):           | 64                   |
| C3                        | PRC for Signalled Lanes (%): | 29.6      | Total Delay for Signalled Lanes (pcuHr): | 3.57         | Cycle Time (s):           | 64                   |
|                           | PRC Over All Lanes (%):      | 25.4      | Total Delay Over All Lanes(pcuHr):       | 16.77        |                           |                      |

## Traffic Data

**Scenario 4: '2040 LP High PM'** (FG4: '2040 Local Plan High PM', Plan 1: 'Network Control Plan 1')

| Item                      | Lane Description     | Lane Type                    | Demand Flow (pcu) | Deg Sat (%)                              | Av. Delay Per PCU (s/pcu) | Mean Max Queue (pcu) |
|---------------------------|----------------------|------------------------------|-------------------|------------------------------------------|---------------------------|----------------------|
| Network                   | -                    | -                            | -                 | 80.0%                                    | -                         | -                    |
| A228 Bull Road Roundabout | -                    | -                            | -                 | 80.0%                                    | -                         | -                    |
| 1/2+1/1                   | A228 South Ahead     | U                            | 1022              | 79.8 : 79.8%                             | 14.7                      | 13.8                 |
| 1/3                       | A228 South Ahead     | U                            | 1048              | 80.0%                                    | 14.9                      | 14.8                 |
| 3/1                       | A228 East Left       | U                            | 850               | 60.7%                                    | 7.1                       | 7.4                  |
| 3/2+3/3                   | A228 East Ahead Left | U                            | 1133              | 66.3 : 66.3%                             | 6.5                       | 7.6                  |
| 4/1+4/2                   | A228 RB Right        | U                            | 253               | 41.1 : 41.1%                             | 22.1                      | 1.8                  |
| 5/1                       | A228 S Ahead         | U                            | 850               | 65.7%                                    | 6.6                       | 3.7                  |
| 5/2                       | A228 S Ahead         | U                            | 880               | 67.9%                                    | 6.9                       | 4.0                  |
| 8/1                       | Bull Road Ahead      | O                            | 53                | 11.9%                                    | 9.3                       | 0.4                  |
| 10/1+10/2                 | A228 R3 Right Ahead  | U                            | 0                 | 0.0 : 0.0%                               | 0.0                       | 0.0                  |
| Ped Link: P1              | Unnamed Ped Link     | -                            | 0                 | 0.0%                                     | -                         | -                    |
| Ped Link: P2              | Unnamed Ped Link     | -                            | 0                 | 0.0%                                     | -                         | -                    |
|                           |                      |                              |                   |                                          |                           |                      |
|                           | C1                   | PRC for Signalled Lanes (%): | 12.5              | Total Delay for Signalled Lanes (pcuHr): | 10.08                     | Cycle Time (s): 60   |
|                           | C2                   | PRC for Signalled Lanes (%): | 35.8              | Total Delay for Signalled Lanes (pcuHr): | 3.74                      | Cycle Time (s): 60   |
|                           | C3                   | PRC for Signalled Lanes (%): | 32.5              | Total Delay for Signalled Lanes (pcuHr): | 3.22                      | Cycle Time (s): 60   |
|                           |                      | PRC Over All Lanes (%):      | 12.5              | Total Delay Over All Lanes(pcuHr):       | 17.18                     |                      |

## Traffic Data

**Scenario 5: 'Base AM'** (FG5: 'Base AM', Plan 1: 'Network Control Plan 1')

| Item                      | Lane Description             | Lane Type | Demand Flow (pcu)                        | Deg Sat (%)  | Av. Delay Per PCU (s/pcu) | Mean Max Queue (pcu) |
|---------------------------|------------------------------|-----------|------------------------------------------|--------------|---------------------------|----------------------|
| Network                   | -                            | -         | -                                        | 59.5%        | -                         | -                    |
| A228 Bull Road Roundabout | -                            | -         | -                                        | 59.5%        | -                         | -                    |
| 1/2+1/1                   | A228 South Ahead             | U         | 571                                      | 44.2 : 44.2% | 7.8                       | 5.1                  |
| 1/3                       | A228 South Ahead             | U         | 618                                      | 45.5%        | 7.8                       | 5.7                  |
| 3/1                       | A228 East Left               | U         | 739                                      | 51.6%        | 5.9                       | 5.9                  |
| 3/2+3/3                   | A228 East Ahead Left         | U         | 1068                                     | 59.5 : 59.5% | 5.4                       | 6.0                  |
| 4/1+4/2                   | A228 RB Right                | U         | 307                                      | 47.4 : 47.4% | 24.7                      | 2.3                  |
| 5/1                       | A228 S Ahead                 | U         | 739                                      | 55.4%        | 5.5                       | 2.6                  |
| 5/2                       | A228 S Ahead                 | U         | 779                                      | 58.3%        | 5.9                       | 3.5                  |
| 8/1                       | Bull Road Ahead              | O         | 124                                      | 19.3%        | 4.2                       | 0.5                  |
| 10/1+10/2                 | A228 R3 Right Ahead          | U         | 18                                       | 7.5 : 0.0%   | 32.4                      | 0.3                  |
| Ped Link: P1              | Unnamed Ped Link             | -         | 0                                        | 0.0%         | -                         | -                    |
| Ped Link: P2              | Unnamed Ped Link             | -         | 0                                        | 0.0%         | -                         | -                    |
| C1                        | PRC for Signalled Lanes (%): | 89.7      | Total Delay for Signalled Lanes (pcuHr): | 4.68         | Cycle Time (s):           | 64                   |
| C2                        | PRC for Signalled Lanes (%): | 51.2      | Total Delay for Signalled Lanes (pcuHr): | 2.97         | Cycle Time (s):           | 64                   |
| C3                        | PRC for Signalled Lanes (%): | 54.4      | Total Delay for Signalled Lanes (pcuHr): | 2.42         | Cycle Time (s):           | 64                   |
|                           | PRC Over All Lanes (%):      | 51.2      | Total Delay Over All Lanes(pcuHr):       | 10.22        |                           |                      |

## Traffic Data

**Scenario 6: 'Base PM'** (FG6: 'Base PM', Plan 1: 'Network Control Plan 1')

| Item                      | Lane Description     | Lane Type                    | Demand Flow (pcu) | Deg Sat (%)                              | Av. Delay Per PCU (s/pcu) | Mean Max Queue (pcu) |
|---------------------------|----------------------|------------------------------|-------------------|------------------------------------------|---------------------------|----------------------|
| Network                   | -                    | -                            | -                 | 66.8%                                    | -                         | -                    |
| A228 Bull Road Roundabout | -                    | -                            | -                 | 66.8%                                    | -                         | -                    |
| 1/2+1/1                   | A228 South Ahead     | U                            | 817               | 65.7 : 65.7%                             | 11.1                      | 9.2                  |
| 1/3                       | A228 South Ahead     | U                            | 875               | 66.8%                                    | 11.1                      | 10.2                 |
| 3/1                       | A228 East Left       | U                            | 552               | 39.4%                                    | 5.1                       | 3.7                  |
| 3/2+3/3                   | A228 East Ahead Left | U                            | 809               | 46.4 : 46.4%                             | 4.8                       | 4.1                  |
| 4/1+4/2                   | A228 RB Right        | U                            | 207               | 33.2 : 33.2%                             | 21.1                      | 1.5                  |
| 5/1                       | A228 S Ahead         | U                            | 552               | 42.6%                                    | 4.6                       | 1.7                  |
| 5/2                       | A228 S Ahead         | U                            | 602               | 46.5%                                    | 4.8                       | 2.2                  |
| 8/1                       | Bull Road Ahead      | O                            | 133               | 24.7%                                    | 7.2                       | 0.9                  |
| 10/1+10/2                 | A228 R3 Right Ahead  | U                            | 0                 | 0.0 : 0.0%                               | 0.0                       | 0.0                  |
| Ped Link: P1              | Unnamed Ped Link     | -                            | 0                 | 0.0%                                     | -                         | -                    |
| Ped Link: P2              | Unnamed Ped Link     | -                            | 0                 | 0.0%                                     | -                         | -                    |
|                           |                      |                              |                   |                                          |                           |                      |
|                           | C1                   | PRC for Signalled Lanes (%): | 34.8              | Total Delay for Signalled Lanes (pcuHr): | 6.42                      | Cycle Time (s): 60   |
|                           | C2                   | PRC for Signalled Lanes (%): | 93.9              | Total Delay for Signalled Lanes (pcuHr): | 1.86                      | Cycle Time (s): 60   |
|                           | C3                   | PRC for Signalled Lanes (%): | 93.8              | Total Delay for Signalled Lanes (pcuHr): | 1.50                      | Cycle Time (s): 60   |
|                           |                      | PRC Over All Lanes (%):      | 34.8              | Total Delay Over All Lanes(pcuHr):       | 10.05                     |                      |