

# MOVEMENT SUMMARY

 Site: 03 [Build 2050 PM - SL (Site Folder: 03\_Cedar Creek Road and Youngsville Bypass (NE))]

Cedar Creek Road and Youngsville Bypass

Site Category: (None)

Roundabout

| Vehicle Movement Performance               |      |                  |           |                  |           |           |             |                  |                   |              |           |                     |                  |             |
|--|------|------------------|-----------|------------------|-----------|-----------|-------------|------------------|-------------------|--------------|-----------|---------------------|------------------|-------------|
| Mov ID                                     | Turn | INPUT VOLUMES    |           | DEMAND FLOWS     |           | Deg. Satn | Aver. Delay | Level of Service | 95% BACK OF QUEUE |              | Prop. Que | Effective Stop Rate | Aver. No. Cycles | Aver. Speed |
|  |      | [ Total<br>veh/h | HV ]<br>% | [ Total<br>veh/h | HV ]<br>% |           |             |                  | [ Veh.<br>veh     | Dist ]<br>ft |           |                     |                  |             |
| South: Cedar Creek Road/Youngsville Bypass |      |                  |           |                  |           |           |             |                  |                   |              |           |                     |                  |             |
| 3  | L2   | 196              | 2.0       | 218              | 2.0       | 0.842     | 22.1        | LOS C            | 26.4              | 670.7        | 0.99      | 1.18                | 1.87             | 29.7        |
| 8  | T1   | 629              | 2.0       | 699              | 2.0       | 0.842     | 22.1        | LOS C            | 26.4              | 670.7        | 0.99      | 1.18                | 1.87             | 28.7        |
| Approach                                   |      | 825              | 2.0       | 917              | 2.0       | 0.842     | 22.1        | LOS C            | 26.4              | 670.7        | 0.99      | 1.18                | 1.87             | 28.9        |
| North: Cedar Creek Road                    |      |                  |           |                  |           |           |             |                  |                   |              |           |                     |                  |             |
| 4  | T1   | 464              | 2.0       | 516              | 2.0       | 0.641     | 12.3        | LOS B            | 7.4               | 187.3        | 0.68      | 0.60                | 0.86             | 33.3        |
| 14   | R2   | 158              | 2.0       | 176              | 2.0       | 0.641     | 12.3        | LOS B            | 7.4               | 187.3        | 0.68      | 0.60                | 0.86             | 34.0        |
| Approach                                   |      | 622              | 2.0       | 691              | 2.0       | 0.641     | 12.3        | LOS B            | 7.4               | 187.3        | 0.68      | 0.60                | 0.86             | 33.5        |
| West: Youngsville Bypass                   |      |                  |           |                  |           |           |             |                  |                   |              |           |                     |                  |             |
| 5  | L2   | 188              | 2.0       | 209              | 2.0       | 0.513     | 11.8        | LOS B            | 3.7               | 94.1         | 0.72      | 0.81                | 1.02             | 33.7        |
| 12   | R2   | 177              | 2.0       | 197              | 2.0       | 0.513     | 11.8        | LOS B            | 3.7               | 94.1         | 0.72      | 0.81                | 1.02             | 33.0        |
| Approach                                   |      | 365              | 2.0       | 406              | 2.0       | 0.513     | 11.8        | LOS B            | 3.7               | 94.1         | 0.72      | 0.81                | 1.02             | 33.4        |
| All Vehicles                               |      | 1812             | 2.0       | 2013             | 2.0       | 0.842     | 16.7        | LOS C            | 26.4              | 670.7        | 0.83      | 0.91                | 1.35             | 31.2        |

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Geometric Delay is not included).

Queue Model: HCM Queue Formula.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

**SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com**

Organisation: BOLTON & MENK, INC. | Licence: NETWORK / 1PC | Processed: Monday, June 10, 2024 11:51:31 AM

Project: H:\CAMPONC\_MU\0T4132737\Modeling\Traffic\Operations\SIDRA\Youngsville Build.sip9