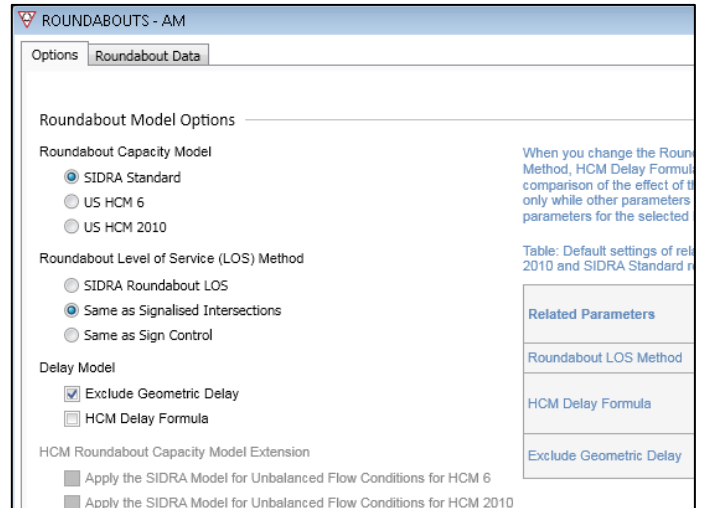


DOTD Sidra Parameters: Required Settings

Model Settings

Site Input Menu

- Sidra Standard
- Same as Signalised Intersections
- Exclude Geometric Delay
- Queue Blockage 5%
- Cross-check capacity model settings shown to the right for proper settings of options.



The screenshot shows the 'ROUNDABOUTS - AM' software interface with the 'Roundabout Data' tab selected. The 'Roundabout Model Options' section includes:

- Roundabout Capacity Model:**
 - SIDRA Standard
 - US HCM 6
 - US HCM 2010
- Roundabout Level of Service (LOS) Method:**
 - SIDRA Roundabout LOS
 - Same as Signalised Intersections
 - Same as Sign Control
- Delay Model:**
 - Exclude Geometric Delay
 - HCM Delay Formula
- HCM Roundabout Capacity Model Extension:**
 - Apply the SIDRA Model for Unbalanced Flow Conditions for HCM 6
 - Apply the SIDRA Model for Unbalanced Flow Conditions for HCM 2010

On the right side, there is a note: 'When you change the Roundabout Method, HCM Delay Formula, and Roundabout LOS Method, you must also update the Roundabout Capacity Model parameters for the selected method.' Below this note is a table titled 'Table: Default settings of roundabout parameters for the selected method' with columns for 'Method' and 'Default Settings'. The table lists 'SIDRA Standard' and 'US HCM 2010' with their respective default settings. Below the table are buttons for 'Related Parameters', 'Roundabout LOS Method', 'HCM Delay Formula', and 'Exclude Geometric Delay'.

Geometric Parameters

NOTE: Geometric Parameters are for analysis only. Design engineering is required to verify the actual geometry of the roundabout.

Environmental Factor

1.1 for Design Year

Single Lane Roundabout

- Circulating Width = 20 Ft
- Minimum Island Diameter = 70 Ft
- Inscribed Diameter = Program
- Entry Radius = 100 Ft
- Entry Angle = Default

Double Lane Roundabout

- Circulating Width = 30 Ft – 32 Ft
- Minimum Island Diameter = 115 Ft
- Inscribed Diameter = Program
- Entry Radius = 100 Ft
- Entry Angle = Default

Demand and Sensitivity

- Analysis objective: Final Year
- Growth Model: Compound
- Number of Years: 20 (dependent on project)
- Results for: Intersection – Vehicles

Sequence Data

To compare a roundabout to a signal, the optimum phasing sequence should be developed using an approved signal timing software and the results put into Sidra as User-Given data in the respective tabs.

To use the signal comparison, open *Phasing & Timing* in the *Site Input Menu* and input the cycle length, phasing and split time in the necessary tabs to manually match the optimum phasing sequence already developed. See Timing Option and Sequence Editor tabs example below:

