

## **SCHEDULE 21**

### **Description of Toll System**

The Toll System on Highway 407 is described in the attached Section B.3 of the Request for Proposals - Development and Design-Build for the Western Extension of the 407 Express Toll Route (ETR).

### B.3 TOLL SYSTEM DESCRIPTION

The Toll System is a fully accessible, all-electronic toll collection system with no toll booths or automatic coin machines. Users of the highway are identified and billed either through the use of an electronic transponder or from a video image of the vehicle's licence plate. The Toll System is comprised of various elements necessary to identify users (transponder or video), identify class of vehicle, determine trip details (time, entry & exit location), formulate toll charges and issue invoices.

The major system components are:

- |                                      |   |
|--------------------------------------|---|
| Gantry Mounted Equipment             | - located at exit and entrance ramps and includes cameras, antennas, Video Detection and Classification units (VDAC), light sources |
| Roadside Toll Collection (RTC) Units | - Roadside units that process information from Gantry mounted equipment for transmission to Operations Centre                       |
| Fibre Optic Cable and Communication  | - Cable and communication system used to transmit data to Operations Centre. Laid along both sides of the roadway                   |
| Toll Transaction Processor (TTP)     | - Processing unit that receives data at the Operations Centre. Tabulates trips for billing purposes.                                |
| Revenue Management System (RMS)      | - Toll calculation, account and billing system at Operations Centre   |