

ELECTRICAL MAINTENANCE SPECIFICATION E-330

TUNNEL AND SNOWSHED LIGHTING MAINTENANCE

1. OBJECTIVE

To ensure that tunnel and snowshed lighting is operational and functions in accordance with their design and Ministry standards.

2. DETAILED PERFORMANCE SPECIFICATIONS

2.1 Routine Maintenance Services

The Contractor must:

- a) repair or replace any tunnel and snowshed lighting that constitutes a Safety Hazard to the highway user and Respond within 1 hour;
- b) repair or replace tunnel and snowshed lighting and their components that create Traffic Disruptions and Respond within 1 hour;
- c) repair or replace tunnel and snowshed lighting and/or their components that do not create a Safety Hazard, do not cause Traffic Disruptions, and are structurally sound but have identified deficiencies and Respond within 30 days;
- d) repair or replace tunnel and snowshed lighting and/or their components and Respond within 1 hour if:
 - (i) three adjacent luminaires or more than 10% of the luminaires in the tunnel on the emergency/night circuit are not operational in a tunnel or snowshed; and
 - (ii) more than 33% of the luminaires for a given daytime circuit are not operational in a tunnel.
- e) repair or replace tunnel and snowshed lighting and/or their components and Respond within 7 days if two adjacent luminaires on the emergency/night circuit are not operational in a tunnel or snowshed;
- f) perform Preventative Maintenance as required;
- g) replace all tunnel and snowshed lighting HID lamps every 48 months;
- h) spot relamp and clean all tunnel and snowshed lighting luminaires every 6 months;
- i) notify the RTMC of any malfunctioning tunnel and snowshed lighting causing a Traffic Disruption within 5 minutes from the time the malfunction was detected by or reported to the Contractor and notify the RTMC when repaired;

- j) remove or cover graffiti in accordance with the performance time frames listed in the *Highway Maintenance Specification – Litter Collection and Graffiti Removal*;
- k) mark the replacement lamps with the date at the time of replacement; and
- l) document all activities related to electrical maintenance of tunnel and snowshed lighting including but not limited to field inspections, Patrols, testing, complaints received / responses made, and all changes made to the equipment and operations in a timely manner to the Province's satisfaction.

2.2 Materials

Refer to Article 3 of the Introduction to the Specifications.