

## ELECTRICAL MAINTENANCE SPECIFICATION E-220

### WARNING SIGNS WITH FLASHERS MAINTENANCE

#### 1. OBJECTIVE

To ensure that warning signs with flashers are operational and function in accordance with their design and Ministry standards.

#### 2. DETAILED PERFORMANCE SPECIFICATIONS

##### 2.1 Routine Maintenance Services

The Contractor must:

- a) repair or replace warning signs with flashers and their components that constitute or have the potential to constitute an immediate Safety Hazard to the highway user, and Respond within 1 hour;
- b) repair or replace warning signs with flashers and their components that do not operate as per their original design but are not immediate Safety Hazards, and Respond on the next Work Day;
- c) repair or replace warning signs with flashers and/or their components that operate as per the original design, do not create a Safety Hazard, and are structurally sound but have identified deficiencies, and Respond within 30 days;
- d) perform Preventative Maintenance as required;
- e) replace HID lamps every 4 years;
- f) replace all non-LED lamps other than HID lamps once every 12 months;
- g) replace LED signal head light sources as required;
- h) notify the RTMC of any malfunctioning warning signs with flashers causing a Traffic Disruption within 5 minutes from the time the malfunction was detected by or reported to the Contractor and inform the RTMC when repaired;
- i) remove or cover graffiti in accordance with the performance time frames listed in the *Highway Maintenance Specification – Litter Collection and Graffiti Removal*; and
- j) document all activities related to electrical maintenance of warning signs with flashers 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.