

## **BC MINISTRY OF TRANSPORTATION**

### **Electrical Maintenance Specification E-520 (Version 6 – May/05)**

#### **DYNAMIC MESSAGE SIGN MAINTENANCE**

##### **1. OBJECTIVE**

- To ensure Dynamic Message Signs (also referred to as Changeable Message Signs) are operational and function in accordance with their design and Ministry standards.

##### **2. GENERAL PERFORMANCE SPECIFICATIONS**

###### **2.1 Routine Maintenance Services**

- All services for this Electrical Maintenance Specification are routine.

###### **2.2 Additional Services**

- Not applicable to this Electrical Maintenance Specification.

##### **3. DETAILED PERFORMANCE SPECIFICATIONS**

###### **3.1 Routine Maintenance Services**

The Contractor must:

- a) repair or replace Dynamic Message Signs and their components that constitute or have the potential to constitute a safety hazard to the Highway User;
- b) repair or replace Dynamic Message Signs and their components that create traffic disruptions;
- c) repair or replace Dynamic Message Signs and their components that do not operate as per their original design but are not immediate safety hazards or causing traffic disruptions;
- d) repair or replace Dynamic Message Signs and/or their components that do not create a safety hazard, do not cause traffic disruptions, and are structurally sound but have identified deficiencies;

- e) perform preventative maintenance;
- f) replace all high pressure sodium and mercury vapour lamps
- g) notify the PHCC of any malfunctioning Dynamic Message Signs causing a traffic disruption and inform the PHCC when repaired;
- h) remove or cover graffiti in accordance with the *Highway Maintenance Specification – Litter collection and Graffiti Removal*;
- i) document all activities related to electrical maintenance of Dynamic Message Signs including but not limited to field inspections, patrols, testing, complaints received / responses made, and all changes made to the equipment and operations.

### **3.1.1 Performance Time Frames**

The following establishes the maximum time, from the time the deficiency was detected or reported to the Contractor, within which the Contractor must Respond to deficiencies:

- a) repair or replace Dynamic Message Signs and their components that constitute or have the potential to constitute a safety hazard to the Highway User within 1 hour;
- b) repair or replace Dynamic Message Signs and their components that create traffic disruptions within 1 hour;
- c) repair or replace Dynamic Message Signs and their components that do not operate as per their original design but are not immediate safety hazards or causing traffic disruptions within 7 working days;
- d) repair or replace Dynamic Message Signs and/or their components that do not create a safety hazard, do not cause traffic disruptions, and are structurally sound but have identified deficiencies within 3 months;

The Contractor must:

- a) perform preventative maintenance as required;
- b) replace all high pressure sodium and mercury vapour lamps every 48 months;
- c) notify the PHCC of any malfunctioning Dynamic Message Signs causing a traffic disruption within 5 minutes from the time the malfunction was detected by or reported to the Contractor and inform the PHCC when repaired;
- d) remove or cover graffiti in accordance with the Performance Time Frames listed in the *Highway Maintenance Specification – Litter Collection and Graffiti Removal*; and
- e) document all activities related to electrical maintenance of Dynamic Message Signs immediately.

### **3.2 Additional Services**

- Not applicable to this Electrical Maintenance Specification.

### **3.3 Materials**

- Refer to the Introduction.