

BC MINISTRY OF TRANSPORTATION

Electrical Maintenance Specification E-180 (Version 6 – May/05)

FIRE SIGNAL MAINTENANCE

1. OBJECTIVE

To ensure Fire Signals 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 Specifications are routine.

2.2 Additional Services

Not applicable to this Electrical Maintenance Specifications.

3. DETAILED PERFORMANCE SPECIFICATIONS

3.1 Routine Maintenance Services

The Contractor must:

- a) Repair or replace Fire Signals and their components;
- b) perform preventative maintenance of Fire Signals;
- c) replace non-LED lamps;
- d) replace LED signal head light sources;
- g) meet on site with fire department staff to confirm operation and timings;
- h) test all conflict monitors;
- i) notify the PHCC of any malfunctioning Fire Signals causing a major traffic disruption and inform the PHCC when repaired;

- j) remove or cover graffiti in accordance with the *Highway Maintenance Specification – Litter collection and Graffiti Removal*;
- k) document all activities related to electrical maintenance of Fire Signals 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) Fire Signals and their components that constitute or have the potential to constitute an immediate safety hazard to the Highway User or cause a traffic disruption, within 1 hour;
- b) Fire Signals and their components that do not operate as per their original design intent but are not immediate safety hazards, on the next regularly scheduled work day;
- c) Fire Signals and/or their components that operate as per the original design intent, do not create a safety hazard, and are structurally sound but have identified deficiencies, within 3 months;

The Contractor must:

- a) perform preventative maintenance as required;
- b) replace all non-LED lamps of signal heads once every 12 months;
- c) replace LED signal head light sources as required;
- d) test all conflict monitors every 12 months;
- e) meet on site with fire department staff to confirm operation once a year and as required;

- f) notify the PHCC of any malfunctioning Fire Signal 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;
- g) remove or cover graffiti in accordance with the Performance Time Frames listed in the *Highway Maintenance Specification – Litter Collection and Graffiti Removal*; and
- h) document all activities related to electrical maintenance of Fire Signals immediately.

3.2 Additional Services

Not applicable to the Electrical Maintenance Specifications.

3.3 Materials

Refer to the Introduction.