Specification (Measurement)

Transport and Main Roads Specifications
MRS257 Feeder Cable and Loop Cable for Vehicle Detector

July 2015
1 Introduction

This Specification applies to the supply and installation of Feeder Cable and Loop Cable for Vehicle Loop Detector.

This Specification shall be read in conjunction with MRS01 Introduction to Specifications, MRTS257 Feeder Cable and Loop Cable for Vehicle Detector, MRTS01 Introduction to Technical Specifications and other Specifications as appropriate.

This Specification forms part of the Transport and Main Roads Specifications Manual.

2 Measurement of works

2.1 Vehicle Detectors

2.1.1 Standard Work Items

In accordance with the provisions of Clause 2 of MRS01 Introduction to Specifications, the Standard Work Items covered by this Specification are listed in Table 2.1.

<table>
<thead>
<tr>
<th>Standard Item No.</th>
<th>Description</th>
<th>Unit of Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>6814</td>
<td>Supply of detector loop cable, [conductor size], [number of cores] cores, [core insulation], [sheath insulation], [conductor material].</td>
<td>m</td>
</tr>
<tr>
<td>6815</td>
<td>Supply of loop feeder cable, [conductor size], [number of cores] cores, [core insulation], [sheath insulation], [conductor material].</td>
<td>m</td>
</tr>
<tr>
<td>6816</td>
<td>Supply of cable joint, [fused</td>
<td>unfused].</td>
</tr>
<tr>
<td>6823</td>
<td>Installation, jointing and termination of loop detector cable, [cores].</td>
<td>m</td>
</tr>
<tr>
<td>6824</td>
<td>Installation, jointing and termination of loop feeder cable, [cores].</td>
<td>m</td>
</tr>
<tr>
<td>6841</td>
<td>Supply of [rectangular</td>
<td>square] preformed loops [dimensions], [no. of turns</td>
</tr>
<tr>
<td>6842</td>
<td>Supply and Installation of [rectangular</td>
<td>square] preformed loops [dimensions], [no. of turns</td>
</tr>
<tr>
<td>6843</td>
<td>Installation of [rectangular</td>
<td>square] preformed loops [dimensions], [no. of turns</td>
</tr>
<tr>
<td>6857</td>
<td>Removal of Vehicle Detector Loop</td>
<td>each</td>
</tr>
<tr>
<td>6858</td>
<td>Removal of Vehicle Detector Feeder Cable</td>
<td>m</td>
</tr>
</tbody>
</table>

2.1.2 Method of measurement

Item 6814 Supply of loop detector cable, [conductor size], [number of cores] cores, [core insulation], [sheath insulation], [conductor material]

Item 6815 Supply of cable, [usage], [conductor size], [number of cores] cores, [core insulation], [sheath insulation], [conductor material]

Item 6816 Supply of cable joint, [fused | unfused]

Item 6823 Installation, jointing and termination of loop detector cable, [cores]
Item 6824  Installation, jointing and termination of loop feeder cable, [cores]

Work Operations incorporated in the above items include:

a) Work Operations listed in Clause 2.1.5 of MRS01 Introduction to Specifications
b) installation of cables
c) connection and termination of cables, and
d) testing of installation.

Item 6841  Supply of [rectangular | square] preformed loops [dimensions], [no. of turns | inductance range] in [concrete | asphalt] pavement

Work Operations incorporated in the above item include:

a) Work Operations listed in Clause 2.1.5 of MRS01 Introduction to Specifications
b) general equipment requirements stated in MRTS257.

Item 6842  Supply and installation of [rectangular | square] preformed loops [dimensions], [no. of turns | inductance range] in [concrete | asphalt] pavement

Work Operations incorporated in the above item include:

a) Work Operations listed in Clause 2.1.5 of MRS01 Introduction to Specifications
b) general equipment requirements stated in MRTS257.

Item 6843  Installation of [rectangular | square] preformed loops [dimensions], [no. of turns | inductance range] in [concrete | asphalt] pavement

Work Operations incorporated in the above item include:

a) Work Operations listed in Clause 2.1.5 of MRS01 Introduction to Specifications
b) general equipment requirements stated in MRTS257.

Item 6857  Removal of vehicle detector loop

Work Operations incorporated in the above item include:

a) Work Operations listed in Clause 2.1.5 of MRS01 Introduction to Specifications
b) disconnection of electrical supply including termination and “making safe” of supply cable
c) disconnection of telecommunications connection
d) removal of Internal cabinet equipment, supporting pole and associated cabinet enclosure
e) transport of all components to Principal’s storage facility or designated site storage area for re-use.

Item 6858  Removal of Vehicle Detection Equipment for disposal

Work Operations incorporated in the above item include:

a) Work Operations listed in Clause 2.1.5 of MRS01 Introduction to Specifications
b) disconnection of electrical supply including termination and “making safe” of supply cable
c) disconnection of telecommunications connection
d) removal of internal cabinet equipment, supporting pole and associated cabinet enclosure

e) transport of all components and disposal.

2.2 Method of measurement of vehicle detection equipment

This specification provides Standard Work Items for:

a) supply only of individual components

b) installation only of individual components

c) supply and installation of individual components, and

d) supply and installation of complete vehicle detection site on a lump sum basis.

Any combination of Standard Work Items relating to these methods of measurement may be used in
the Schedule of Rates. However:

a) Where a Standard Work Item for supply and installation of a particular component or group of
components is included in the Schedule of Rates, no supply only nor installation only Standard
Work Item shall also apply to that component or group of components, as applicable, and

b) Where a Standard Work Item for supply and installation of a complete vehicle detection site on
a lump sum basis is included in the Schedule of Rates, no supply only, installation only nor
supply and installation Standard Work Item shall also apply to that work.

2.3 Supply of materials

Any materials to be supplied by the Principal will be as stated in the Principal Supplied Material List,
Form C6827. All other material shall be supplied by the Contractor.

The responsibility for transport to the Site of materials supplied by the Principal shall be as stated in
the Principal Supplied Material List, Form C6827. Transport to the Site of all other materials shall be
the responsibility of the Contractor.

2.4 Removal of existing equipment

The Superintendent will inspect the salvaged materials at the storage site and will reject any materials
which, in the opinion of the Superintendent, have been damaged during the salvage operation. The
Contractor shall be required to reimburse the Principal for materials damaged during salvage.