 Specification (Measurement)

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

July 2017
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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, MRTS01 Introduction to Technical Specifications, MRTS257 Feeder Cable and Loop Cable for Vehicle Detector 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 2.1 – Standard Work Items

<table>
<thead>
<tr>
<th>Standard Item No.</th>
<th>Description</th>
<th>Unit of Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicle detector loops</td>
<td></td>
<td></td>
</tr>
<tr>
<td>67201</td>
<td>Supply of loop detector cable, [conductor size], [number of cores] cores, [core insulation], [sheath insulation], [conductor material]</td>
<td>m</td>
</tr>
<tr>
<td>67202</td>
<td>Supply of cable, [usage], [conductor size], [number of cores] cores, [core insulation], [sheath insulation], [conductor material]</td>
<td>m</td>
</tr>
<tr>
<td>67203</td>
<td>Supply of cable joint, [fused</td>
<td>unfused]</td>
</tr>
<tr>
<td>67204</td>
<td>Installation, jointing and termination of loop detector cable, [cores]</td>
<td>m</td>
</tr>
<tr>
<td>67205</td>
<td>Installation, jointing and termination of cable, [usage], [cores]</td>
<td>m</td>
</tr>
<tr>
<td>67206</td>
<td>Supply of [rectangular</td>
<td>square] preformed loops [dimensions], [no. of turns</td>
</tr>
<tr>
<td>67207</td>
<td>Supply and installation of [rectangular</td>
<td>square] preformed loops [dimensions], [no. of turns</td>
</tr>
<tr>
<td>67208</td>
<td>Installation of [rectangular</td>
<td>square] preformed loops [dimensions], [no. of turns</td>
</tr>
<tr>
<td></td>
<td>Removal of existing equipment</td>
<td></td>
</tr>
<tr>
<td>67291</td>
<td>Removal of Vehicle Detector Loop</td>
<td>each</td>
</tr>
<tr>
<td>67292</td>
<td>Removal of Vehicle Detector Feeder cable</td>
<td>m</td>
</tr>
</tbody>
</table>

2.1.2 Method of measurement

Item 67201 Supply of loop detector cable, [conductor size], [number of cores] cores, [core insulation], [sheath insulation], [conductor material]

Item 67202 Supply of cable, [usage], [conductor size], [number of cores] cores, [core insulation], [sheath insulation], [conductor material]

Item 67203 Supply of cable joint, [fused | unfused]
Item 67204  Installation, jointing and termination of loop detector cable, [cores]

Item 67205  Installation, jointing and termination of cable, [usage], [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 67206  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 67207  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 67208  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 67291  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 67292  Removal of Vehicle Detector Feeder cable

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.