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Transport Infrastructure Ireland

## TII Publications



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# Requirements for Measuring and Pricing of CCTV Survey of Road Drainage Systems

**CC-RMP-02900**  
October 2016

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**Updates to TII Publications resulting in changes to  
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Minor edits for clarity in sections 7 and 8.

## TII Publications



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<b>Stream:</b>	Requirements for Measuring and Pricing (RMP)
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# 1. CCTV Survey of Road Drainage Systems

- |              |          |   |
|--------------|----------|---|
| <b>Scope</b> | <b>1</b> | This document applies to the use of CCTV survey for the inspection of road drainage systems, including recording and storage format of the data for drains not exceeding 1800mm diameter. |
|--------------|----------|---|

## CCTV Survey of Road Drainage Systems

- | <b>Units</b>       | <b>2</b>                                      | The units of measurement shall be:<br><ul style="list-style-type: none"><li>(i) site establishment.....item</li><li>(ii) setting up at survey points.....number</li><li>(iii) provision of report.....item</li><li>(iv) surveying of drains.....linear metre</li><li>(v) surveying of gully connections.....linear metre</li><li>(vi) extra over for use of a rodding camera.....linear metre</li><li>(vii) extra over for the use of a pan and tilt camera.....linear metre</li><li>(viii) forced ventilation.....day</li></ul>  |       |         |   |                      |                               |                       |                       |                                  |  |   |                      |    |  |                                       |
|--------------------|---|---|-------|---------|---|----------------------|-------------------------------|-----------------------|-----------------------|----------------------------------|--|---|----------------------|----|--|---------------------------------------|
| <b>Measurement</b> | <b>3</b>                                      | Site establishment shall be measured once only and shall include dismantling and removing from site on completion. Any additional site establishment to suit the Contractor's method of working shall not be measured.  |       |         |   |                      |                               |                       |                       |                                  |  |   |                      |    |  |                                       |
|                    | <b>4</b>                                      | Setting up at survey points shall be measured once only for each individual section between node points that are included in the survey and shall include moving equipment to the survey point and subsequent dismantling.  |       |         |   |                      |                               |                       |                       |                                  |  |   |                      |    |  |                                       |
|                    | <b>5</b>                                      | The length of drain to be surveyed shall be measured as the individual lengths along the centre line between any of the following: <ul style="list-style-type: none"><li>(i) The internal faces of the chambers</li><li>(ii) The external face of headwalls</li><li>(iii) The intersection of the centre lines at pipe junctions</li><li>(iv) The centre of gully gratings (or where no grating is provided, the centre of the gully)</li><li>(v) The position of terminations shown in the Contract</li></ul>  |       |         |   |                      |                               |                       |                       |                                  |  |   |                      |    |  |                                       |
|                    | <b>6</b>                                      | The measurement of forced ventilation shall be per day or part thereof during which forced ventilation is necessary.  |       |         |   |                      |                               |                       |                       |                                  |  |   |                      |    |  |                                       |
| <b>Itemisation</b> | <b>7</b>                                      | Separate items shall be provided for the measurement of CCTV survey of road drainage systems in accordance with Section 3 of CC-RMP-00010, paragraphs 3 and 4 and the following:<br><table border="0"><thead><tr><th>Group</th><th>Feature</th></tr></thead><tbody><tr><td rowspan="8">I</td><td>1 Site establishment</td></tr><tr><td>2 Setting up at survey points</td></tr><tr><td>3 Provision of report</td></tr><tr><td>4 Surveying of drains</td></tr><tr><td>5 Surveying of gully connections</td></tr><tr><td>6 Extra over for use of a rodding camera</td></tr><tr><td>7 Extra over for use of a pan and tilt camera</td></tr><tr><td>8 Forced ventilation</td></tr><tr><td rowspan="2">II</td><td>1 Depth to invert not exceeding 6 metres</td></tr><tr><td>2 Depths to invert exceeding 6 metres</td></tr></tbody></table> | Group | Feature | I | 1 Site establishment | 2 Setting up at survey points | 3 Provision of report | 4 Surveying of drains | 5 Surveying of gully connections | 6 Extra over for use of a rodding camera | 7 Extra over for use of a pan and tilt camera | 8 Forced ventilation | II | 1 Depth to invert not exceeding 6 metres | 2 Depths to invert exceeding 6 metres |
|                    | Group   | Feature   |       |         |   |                      |                               |                       |                       |                                  |  |   |                      |    |  |                                       |
| I                  | 1 Site establishment                          |   |       |         |   |                      |                               |                       |                       |                                  |  |   |                      |    |  |                                       |
|                    | 2 Setting up at survey points                 |   |       |         |   |                      |                               |                       |                       |                                  |  |   |                      |    |  |                                       |
|                    | 3 Provision of report                         |   |       |         |   |                      |                               |                       |                       |                                  |  |   |                      |    |  |                                       |
|                    | 4 Surveying of drains                         |   |       |         |   |                      |                               |                       |                       |                                  |  |   |                      |    |  |                                       |
|                    | 5 Surveying of gully connections              |   |       |         |   |                      |                               |                       |                       |                                  |  |   |                      |    |  |                                       |
|                    | 6 Extra over for use of a rodding camera      |   |       |         |   |                      |                               |                       |                       |                                  |  |   |                      |    |  |                                       |
|                    | 7 Extra over for use of a pan and tilt camera |   |       |         |   |                      |                               |                       |                       |                                  |  |   |                      |    |  |                                       |
|                    | 8 Forced ventilation                          |   |       |         |   |                      |                               |                       |                       |                                  |  |   |                      |    |  |                                       |
| II                 | 1 Depth to invert not exceeding 6 metres      |   |       |         |   |                      |                               |                       |                       |                                  |  |   |                      |    |  |                                       |
|                    | 2 Depths to invert exceeding 6 metres         |   |       |         |   |                      |                               |                       |                       |                                  |  |   |                      |    |  |                                       |

III	1	Diameters not exceeding 125mm
	2	Diameters exceeding 125mm but not exceeding 475mm
	3	Diameters exceeding 475mm but not exceeding 900mm
	4	Diameters exceeding 900mm but not exceeding 1200mm
	5	Diameters exceeding 1200mm but not exceeding 800mm
IV	1	Setting up on pavement
	2	Setting up on verge not exceeding 3m from carriageway edge
	3	Setting up on verge exceeding 3m from carriageway edge
	4	Setting up off highway (beyond highway boundary)
V	1	Existing internal diameter (Rehabilitation only)

Note: Groups II and III features shall only be used with Group I Features 4 and 5. Group IV Features shall only be used with Group I Feature 2.

**CCTV Survey of Highway Drainage Systems**

**8** The items for CCTV survey of road drainage systems shall be in accordance with the Preambles to the Bill of Quantities General Directions and include for:

**Item Coverage**

- (a) lifting of covers and replacement;
- (b) recording and coding;
- (c) plans;
- (d) still photographs;
- (e) video recordings;
- (f) stoppers and over-pumping;
- (g) suspension of work due to high flows;
- (h) scheduling work to avoid times of high flows and to allow clearance of blockages;
- (i) maintaining communication with Employer's Representative and the officers of any other body from whom a Consent has been required for the duration of the survey;
- (j) establishment, moving between locations and removal of forced ventilation plant and equipment;
- (k) protection measures in connection with existing damaged covers and gratings.

## **2. References**


### **2.1 TII Publications (Standards) References**

CC-RMP-00010 Introduction to the Requirements for Measuring and Pricing







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