



Bonneagar Iompair Éireann
Transport Infrastructure Ireland

TII Publications



Method of Measurement for Road Works Series MM 100 - Preliminaries

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About TII

Transport Infrastructure Ireland (TII) is responsible for managing and improving the country's national road and light rail networks.

About TII Publications

TII maintains an online suite of technical publications, which is managed through the TII Publications website. The contents of TII Publications is clearly split into 'Standards' and 'Technical' documentation. All documentation for implementation on TII schemes is collectively referred to as TII Publications (Standards), and all other documentation within the system is collectively referred to as TII Publications (Technical). This system replaces the NRA Design Manual for Roads and Bridges (NRA DMRB) and the NRA Manual of Contract Documents for Road Works (NRA MCDRW).

Document Attributes

Each document within TII Publications has a range of attributes associated with it, which allows for efficient access and retrieval of the document from the website. These attributes are also contained on the inside cover of each current document, for reference. For migration of documents from the NRA and RPA to the new system, each current document was assigned with new outer front and rear covers. Apart from the covers, and inside cover pages, the documents contain the same information as previously within the NRA or RPA systems, including historical references such as those contained within NRA DMRB and NRA MCDRW.

Document Attributes

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NRA DMRB and MCDRW References

For all documents that existed within the NRA DMRB or the NRA MCDRW prior to the launch of TII Publications, the NRA document reference used previously is listed above under 'historical reference'. The TII Publication Number also shown above now supersedes this historical reference. All historical references within this document are deemed to be replaced by the TII Publication Number. For the equivalent TII Publication Number for all other historical references contained within this document, please refer to the TII Publications website.

Series 100: Preliminaries

Definitions

- 1 (a) “until completion of the Works” shall mean until completion of the whole of the Works certified by the Employer’s Representative in accordance with the Contract Conditions;
- (b) “after completion of the Works” shall mean subsequent to (a) above either until the issue of the Defects Certificate in accordance with Clause 8.7 of the Contract Conditions, or for such lesser period specified in the Contract;
- (c) “temporary diversion for traffic” shall mean (1) a temporary carriageway onto which vehicular traffic is diverted from a road or (2) a temporary footpath or bridleway onto which pedestrian or equestrian traffic is diverted from a road or (3) a combination of (1) and (2) or a temporary carriageway as in (1) with an associated footway and/or way for the use of animals and equestrian traffic; or (4) a temporary private means of access onto which traffic is diverted from a private means of access but in all cases shall not include a central reserve crossover constructed to permit contraflow traffic on an existing carriageway;
- (d) “permanent accommodation” shall mean accommodation which becomes the property of the employer at the end of the Defects Period.

Temporary Accommodation

Units

- 2 The unit of measurement shall be:
- (i) erection, servicing, dismantling of temporary accommodation item.

Itemisation

3 Separate items shall be provided for temporary accommodation in accordance with Chapter II paragraphs 3 and 4 and the following:

| Group | Feature |
|-------|--|
| I | 1 Erection |
| | 2 Servicing |
| | 3 Dismantling |
| II | 1 Principal Offices for the Employer's Representative |
| | 2 Principal laboratories for the Employer's Representative |
| | 3 Portable offices for the Employer's Representative |
| | 4 Portable laboratories for the Employer's Representative |
| | 5 Offices and messes for the Contractor |
| | 6 Stores and workshops for the Contractor |
| III | 1 Provided by the Employer |
| IV | 1 At the place of fabrication or manufacture |
| V | 1 Until completion of the Works |
| | 2 After completion of the Works |

Note: Group IV and Group V features shall be applied only to items of temporary accommodation for the Employer's Representative.

Erection of Temporary Accommodation

4 The items for erection of temporary accommodation shall in accordance with the Preambles to Bill of Quantities General Directions include for:

Item Coverage

- (i) in the case of accommodation for the Contractor:
 - (a) everything required by the Contractor.
- (ii) in the case of accommodation for the Employer's Representative:
 - (a) initial accommodation and equipment, maintenance, servicing and removing;
 - (b) sites for the accommodation;
 - (c) preparation of sites;
 - (d) foundations, bases and hardstandings;
 - (e) water, sanitation, heating, power and lighting services;
 - (f) fences, notice and direction boards;
 - (g) vehicle access, hardstandings, parking areas and footpaths;
 - (h) equipment, furnishings, fittings, supplies and initial consumable stores;

| | | |
|--|----------|--|
| | | (i) telephones, extensions, switchboard and switching systems separately connected to the telephone system; |
| | | (j) provision of internet/e-mail services and facilities. |
| | | (iii) in the case of accommodation for the Employer's Representative provided by the Employer: |
| | | (a) as paragraph 4(ii) of this Series; |
| | | (b) alterations and refurbishments. |
| Servicing Temporary Accommodation | 5 | The items for servicing temporary accommodation shall in accordance with the Preambles to Bill of Quantities General Directions include for: |
| Item Coverage | | (i) in the case of accommodation for the Contractor: |
| | | (a) everything required by the Contractor. |
| | | (ii) in the case of accommodation for the Employer's Representative: |
| | | (a) rental and leasing including telephone rental; |
| | | (b) heating, sanitation, power, lighting and water; |
| | | (c) depreciation and maintenance of buildings, services, fences, notice and direction boards, vehicle access, parking areas, hardstandings and footpaths; |
| | | (d) depreciation, maintenance and replacement of equipment, furnishings, fittings and supplies; |
| | | (e) cleaning accommodation; |
| | | (f) moving and re-establishing portable accommodation as required; |
| | | (g) replenishment of consumable stores; |
| | | (h) repairing, replacing, calibration of equipment; |
| | | (i) disposal of waste. |
| Dismantling Temporary Accommodation | 6 | The items for dismantling temporary accommodation shall in accordance with the Preambles to Bill of Quantities General Directions include for: |
| Item Coverage | | (a) receiving back from the Employer's Representative and removing equipment, furniture, fittings and supplies off Site; |
| | | (b) disconnecting, removing and sealing off disused services; |
| | | (c) demolishing and removing off Site temporary accommodation, vehicle access, hardstanding, parking areas, footpaths, fences, notice and direction boards; |
| | | (d) disposal of material (as Series 600 paragraph 39); |
| | | (e) reinstatement of the sites occupied by temporary accommodation; |
| | | (f) in the case of accommodation for the Employer's Representative, the credit value of surplus equipment or material which becomes the property of the Contractor and transport and delivery to the Employer of equipment or material which becomes the property of the Employer; |

- (g) in the case of accommodation for the Employer’s Representative provided by the Employer, handing back to the Employer in the condition specified.

Permanent Accommodation

Units

7 The unit of measurement shall be:

- (i) erection, servicing, dismantling of permanent accommodation item.

Itemisation

8 Separate items shall be provided for permanent accommodation in accordance with Chapter II paragraphs 3 and 4 and the following:

| Group | Feature |
|-------|--|
| I | 1 Erection |
| | 2 Servicing |
| | 3 Dismantling |
| II | 1 Principal Offices for the Employer’s Representative |
| II | 2 Principal laboratories for the Employer’s Representative |
| II | 3 Portable Offices for the Employer’s Representative |
| II | 4 Portable laboratories for the Employer’s Representative |
| III | 1 Until completion of the Works |
| | 2 Until completion of the Defects Period |

Erection of Permanent Accommodation

9 The items for erection of permanent accommodation shall in accordance with the Preambles to Bill of Quantities General Directions include for:

Item Coverage

- (a) initial accommodation and equipment, maintenance, servicing and removing;
- (b) sites for the accommodation;
- (c) preparation of sites;
- (d) foundations, bases and hardstandings;
- (e) water, sanitation, heating, power and lighting services;
- (f) fences, notice and direction boards;
- (g) vehicle access, hardstandings, parking areas and footpaths;
- (h) equipment, furnishings, fittings, supplies and initial consumable stores;
- (i) telephones, extensions, switchboard and switching systems separately connected to the telephone system.

Servicing Permanent Accommodation

10 The items for servicing permanent accommodation shall in accordance with the Preambles to Bill of Quantities General Directions include for:

Item Coverage

- (a) rental and leasing including telephone rental;

- (b) heating, sanitation, power, lighting and water;
- (c) depreciation and maintenance of buildings, services, fences, notice and direction boards, vehicle access, parking areas, hardstandings and footpaths;
- (d) depreciation, maintenance and replacement of equipment, furnishings, fittings and supplies;
- (e) cleaning accommodation;
- (f) moving and re-establishing portable accommodation as required;
- (g) replenishment of consumable stores;
- (h) repairing, replacing, calibration of equipment;
- (i) disposal of waste.

Dismantling Permanent Accommodation

Item Coverage

11 The items for dismantling permanent accommodation shall in accordance with the Preambles to Bill of Quantities General Directions include for:

- (a) disconnecting, removing and sealing off disused services;
- (b) demolishing and removing off site redundant vehicle access, hardstanding, parking areas, footpaths, fences, notice and direction boards;
- (c) disposal of material (as Series 600 paragraph 39);
- (d) reinstatement of the sites occupied by permanent accommodation;
- (e) transport and delivery to the Employer of equipment or material.

Vehicles for Employer’s Personnel

Units

12 The unit of measurement shall be:

- (i) vehicles for Employer’s Personnel..... vehicle week.

Measurement

13 The measurement of vehicles for the Employer’s Personnel shall be each week or part thereof during which a vehicle is provided.

Itemisation

14 Separate items shall be provided for vehicles for the Employer’s Personnel in accordance with Chapter II paragraphs 3 and 4 and the following:

| Group | Feature |
|-------|---|
| I | 1 Each type of vehicle for the Employer’s Personnel |
| II | 1 Until completion of the Works |
| | 2 After completion of the Works |

Vehicles for the Employer’s Personnel with the Item Coverage

15 The items for vehicles for the Employer’s Personnel shall in accordance Preambles to Bill of Quantities General Directions include for:

- (a) equipment;
- (b) taxing for use on public roads and for the carriage of goods and samples;

- (c) comprehensive insurance;
- (d) suitable replacement including equipment;
- (e) depreciation;
- (f) maintaining in a roadworthy condition and in conformity with the vehicle manufacturer’s recommendations;
- (g) fuel, oil and other consumable items;
- (h) keeping clean inside and out;
- (i) collecting from Site when the vehicle is returned.

Communication System for the Employer’s Representative

Units

16 The unit of measurement shall be:

- (i) communication system for the Employer’s Representative item.

Itemisation

17 Separate items shall be provided for communication system for the Employer’s Representative in accordance with Chapter II paragraphs 3 and 4 and the following:

| Group | Feature |
|-------|--|
| I | 1 Communication system for the Employer’s Representative |
| II | 1 Until completion of the Works |
| | 2 After completion of the Works |

Communication System for the Employer’s Representative

18 The items for communication system for the Employer’s Representative shall in accordance with the Preambles to Bill of Quantities General Directions include for:

Item Coverage

- (a) establishing licences, wavelengths and channels with the relevant Public Authority and costs arising therefrom;
- (b) equipment and installation;
- (c) rental, running costs and power;
- (d) depreciation, maintenance and repairs;
- (e) replacement equipment;
- (f) receiving back from the Employer’s Representative and removing equipment and supplies off Site;
- (g) connections and links to telephone systems;
- (h) mobile telephones units, accessories and rental costs.

Operatives for the Employer’s Representative

Units

19 The unit of measurement shall be:

- (i) operatives for the Employer’s Representative day.

Measurement **20** The measurement of operatives for the Employer’s Representative shall be a continuous period of four hours or more within any one day during which the operative’s services are supplied in accordance with the written direction of the Employer’s Representative .

Itemisation **21** Separate items shall be provided for operatives for the Employer’s Representative in accordance with Chapter II paragraphs 3 and 4 and the following:

| Group | Feature |
|-------|--|
| I | 1 Each type of operative for the Employer’s Representative |
| II | 1 Until completion of the Works 2 After completion of the Works |

Operatives for the Employer’s Representative

22 The items for operatives for the Employer’s Representative shall in accordance with the Preambles to Bill of Quantities General Directions include for:

Item Coverage

- (a) the wages and other emoluments paid including payment for overtime;
- (b) working outside the Contractor’s normal working hours if so required by the Employer’s Representative;
- (c) costs and expenses incurred consequent upon the employment or hiring;
- (d) periods of less than four hours.

Information Board

Units **23** The unit of measurement shall be:

- (i) information board number.

Itemisation **24** Separate items shall be provided for information boards in accordance with Chapter II paragraphs 3 and 4 and the following:

| Group | Feature |
|-------|-------------------|
| I | 1 Information |
| II | 1 Different types |

Information Board

25 The items for information board shall in accordance with the Preambles to Bill of Quantities General Directions include for:

Item Coverage

- (a) excavation of acceptable material (as Series 600 paragraphs 17 and 18);
- (b) excavation of unacceptable material (as Series 600 paragraph 19);
- (c) excavation in Hard Material (as Series 600 paragraph 23);
- (d) backfilling and compaction;

- (e) in situ concrete (as Series 1700 paragraph 4);
- (f) formwork (as Series 1700 paragraph 14);
- (g) disposal of material (as Series 600 paragraph 39);
- (h) painting, reflectorisation and illumination;
- (i) cleaning, maintaining and repairing;
- (j) dismantling and removing from Site;
- (k) reinstatement of surfaces.

Traffic Safety and Management

Units

26 The units of measurement shall be:

- (i) traffic safety and management Item.
- (ii) taking measures for or construction, maintenance, removal of contraflow arrangements item.
- (iii) removing from store and installing temporary vertical concrete safety barriers item.
- (iv) taking up or down and removing to store off site item.

Measurement

27 Traffic safety and management shall be measured once only.

28 Unless expressly stated otherwise in the Contract, taking measures for or construction, maintenance, removal of contraflow arrangements shall be measured once only to include for all contraflow arrangements specified by the Employer in Appendix 1/17 and all contraflow arrangements proposed by the Contractor.

Unless expressly stated otherwise in the Contract, removing from store and installing temporary vertical concrete safety barriers shall be measured once only to include for all contraflow arrangements specified by the Employer in Appendix 1/17 and all contraflow arrangements proposed by the Contractor.

Unless expressly stated otherwise in the Contract, taking up or down and removing to store off site shall be measured once only to include for all contraflow arrangements specified by the Employer in Appendix 1/17 and all contraflow arrangements proposed by the Contractor.

Itemisation

- 29** Separate items shall be provided for traffic safety and management in accordance with Chapter II paragraphs 3 and 4 and the following:

| Group | Feature |
|-------|--|
| I | 1 Traffic safety and management |
| | 2 Taking measures for or construction, maintenance, removal of contraflow arrangements |
| | 3 Removing from store and installing temporary vertical concrete safety barriers |
| | 4 Taking up or down and removing to store off site |

Traffic Safety and Management

Item Coverage

- 30** The items for traffic safety and management shall in accordance with the Preambles to Bill of Quantities General Directions include for:
- (a) complying with the recommendations contained in “Guidelines for the Control and management of Traffic at Roadworks” published by the Department of Transport and any amendment thereto or where the circumstances of any particular case are not covered submitting proposals for dealing with such situations to the Employer’s Representative for his consent;
 - (b) complying with particular requirements of the Contract;
 - (c) initiating or continuing consultation with statutory authorities, An Garda Siochana or other authorities concerned, proposing or developing and submitting to the Employer’s Representative for his consent, proposals based on such consultation showing a scheme of traffic safety and management measures including details of safety zones and emergency routes and furnishing such details as necessitated by the Works or as the Employer’s Representative may require;
 - (d) design of traffic safety and management measures specified by the Employer’s Representative;
 - (e) modification and resubmission of proposals and designs;
 - (f) traffic signs, traffic signs provided by the Employer, road markings, lamps, barriers and traffic control signals including maintaining, cleaning, repositioning, covering, uncovering and removing;
 - (g) complying with the requirements for labour and plant working on or adjacent to a road and at entry and exit points to the Site including signing;
 - (h) road lighting, modification and removal;
 - (i) giving of notice to the Employer’s Representative;
 - (j) collecting and returning traffic signs provided by the Employer;
 - (k) surveillance and maintaining stocks;
 - (l) immediate reinstatement and replacement of defective or damaged items;
 - (m) maintenance of roadways.

Taking Measures for or Construction, Maintenance, Removal of Contraflow Arrangements

Item Coverage

- 31** The items for taking measures for or construction, maintenance, removal of contraflow arrangements shall in accordance with the Preambles to Bill of Quantities General Directions include for:
- (a) traffic safety and management (as this Series paragraph 30);
 - (b) temporary diversions for traffic (as this Series paragraphs 37, 38 and 39);
 - (c) crossovers;
 - (d) temporary removal and reinstatement;
 - (e) design of contraflow arrangement specified in the Contract.

Removing from Store and Installing Temporary Vertical Concrete Safety Barriers

Item Coverage

- 32** The items for removing from store and installing temporary vertical concrete safety barriers shall in accordance with the Preambles to Bill of Quantities General Directions include for:
- (a) loading, transporting from store, unloading and installing;
 - (b) replacing items damaged during the foregoing operations;
 - (c) terminal sections, gaskets, belts, nuts, washers and anchor plates.

Taking Up or Down and Removing to Store Off Site

Item Coverage

- 33** The items for taking up or down and removing to store off site shall in accordance with the Preambles to Bill of Quantities General Directions include for:
- (a) disconnecting nuts, bolts, gaskets and anchor plates
 - (b) cleaning and stacking
 - (c) transport and handling
 - (d) Replacing items damaged during the foregoing operations.

Temporary Diversion for Traffic

| Units | <p>34 The unit of measurement shall be:</p> <p>(i) taking measures for or construction, maintenance, removal of temporary diversion for traffic item.</p> | | | | | | | | | | | | | | | | | | |
|---|--|-------|--|---|---|---|--|---|--|---|--|----|--|---|--------------------------------------|---|--|---|---|
| Measurement | <p>35 The measurement of taking measures for or construction, maintenance, removal of temporary diversion for traffic shall be in respect of the complete measures for or construction at the locations listed in Appendix 1/18 to the Specification and at locations proposed by the Contractor.</p> | | | | | | | | | | | | | | | | | | |
| Itemisation | <p>36 Separate items shall be provided for temporary diversion for traffic in accordance with Chapter II paragraphs 3 and 4 and the following:</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: left; padding: 5px;">Group</th> <th style="text-align: left; padding: 5px;">Feature</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">I</td> <td style="padding: 5px;"> <table border="0" style="width: 100%;"> <tr> <td style="width: 20px; text-align: right; padding-right: 10px;">1</td> <td>Taking measures for or construction of temporary diversion for traffic</td> </tr> <tr> <td style="text-align: right; padding-right: 10px;">2</td> <td>Maintenance of measures for or construction of temporary diversion for traffic</td> </tr> <tr> <td style="text-align: right; padding-right: 10px;">3</td> <td>Removal of measures for or construction of temporary diversion for traffic</td> </tr> </table> </td> </tr> <tr> <td style="padding: 5px;">II</td> <td style="padding: 5px;"> <table border="0" style="width: 100%;"> <tr> <td style="width: 20px; text-align: right; padding-right: 10px;">1</td> <td>At locations listed in Appendix 1/18</td> </tr> <tr> <td style="text-align: right; padding-right: 10px;">2</td> <td>At those locations listed in Appendix 1/18 but not measured individually</td> </tr> <tr> <td style="text-align: right; padding-right: 10px;">3</td> <td>At locations proposed by the Contractor</td> </tr> </table> </td> </tr> </tbody> </table> | Group | Feature | I | <table border="0" style="width: 100%;"> <tr> <td style="width: 20px; text-align: right; padding-right: 10px;">1</td> <td>Taking measures for or construction of temporary diversion for traffic</td> </tr> <tr> <td style="text-align: right; padding-right: 10px;">2</td> <td>Maintenance of measures for or construction of temporary diversion for traffic</td> </tr> <tr> <td style="text-align: right; padding-right: 10px;">3</td> <td>Removal of measures for or construction of temporary diversion for traffic</td> </tr> </table> | 1 | Taking measures for or construction of temporary diversion for traffic | 2 | Maintenance of measures for or construction of temporary diversion for traffic | 3 | Removal of measures for or construction of temporary diversion for traffic | II | <table border="0" style="width: 100%;"> <tr> <td style="width: 20px; text-align: right; padding-right: 10px;">1</td> <td>At locations listed in Appendix 1/18</td> </tr> <tr> <td style="text-align: right; padding-right: 10px;">2</td> <td>At those locations listed in Appendix 1/18 but not measured individually</td> </tr> <tr> <td style="text-align: right; padding-right: 10px;">3</td> <td>At locations proposed by the Contractor</td> </tr> </table> | 1 | At locations listed in Appendix 1/18 | 2 | At those locations listed in Appendix 1/18 but not measured individually | 3 | At locations proposed by the Contractor |
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| 2 | At those locations listed in Appendix 1/18 but not measured individually | | | | | | | | | | | | | | | | | | |
| 3 | At locations proposed by the Contractor | | | | | | | | | | | | | | | | | | |
| Taking Measures for or Construction of Temporary Diversion for Traffic | <p>37 The items for taking measures for or construction of temporary diversion for traffic shall in accordance with the Preambles to Bill of Quantities General Directions include for:</p> | | | | | | | | | | | | | | | | | | |
| Item Coverage | <p>(a) obtaining licences and agreements;</p> <p>(b) making arrangements with owners and occupiers of land temporarily required and costs arising therefrom;</p> <p>(c) preparing, amending and submitting to the Employer's Representative and other interested bodies, proposals and programme;</p> <p>(d) consulting with An Garda Siochana and other authorities;</p> <p>(e) design of temporary diversions for traffic specified in the Contract;</p> <p>(f) preparation of site;</p> <p>(g) site clearance, fencing, safety fencing, concrete safety barriers, drainage, earthworks, pavements, kerbs, footways, traffic signs, road markings, road lighting, structures, parapets, ramps and accesses;</p> <p>(h) temporary diversions of services;</p> <p>(i) emergency lanes.</p> | | | | | | | | | | | | | | | | | | |
| Maintenance of Measures for or Construction of | <p>38 The items for maintenance of measures for or construction of temporary diversion for traffic shall in accordance with the Preambles</p> | | | | | | | | | | | | | | | | | | |

Temporary Diversion for Traffic

to Bill of Quantities General Directions include for:

Item Coverage

- (a) continuous adequate provision for traffic flows;
- (b) modifications and amendments to suit the requirements of the Contract including temporary removal and subsequent reinstatement.

Removal of Measures for or Construction of Temporary Diversion for Traffic

39 The items for removal of measures for or construction of temporary diversion for traffic shall in accordance with the Preambles to Bill of Quantities General Directions include for:

Item Coverage

- (a) breaking up;
- (b) disposal of material (as Series 600 paragraph 39);
- (c) reinstatement of the Site to its previous condition.

Recovery Vehicles

Units

40 The unit of measurement shall be:

- (i) recovery vehicle item.

Itemisation

41 Separate items shall be provided for recovery vehicles in accordance with Chapter II paragraphs 3 and 4 and the following:

| Group | Feature |
|-------|---------------------------------|
| I | 1 Each type of recovery vehicle |

Recovery Vehicles

42 The items for recovery vehicles shall in accordance with the Preambles to Bill of Quantities General Directions include for:

Item Coverage

- (a) equipment including communication equipment and identification sign;
- (b) taxing for use on public roads;
- (c) comprehensive insurance;
- (d) replacement vehicle including equipment;
- (e) depreciation;
- (f) maintenance;
- (g) fuel, oil and other consumables;
- (h) qualified operatives;
- (i) completion and submission of information log sheets;
- (j) dealing with shed loads, broken down, accident damaged or abandoned vehicles and removal;
- (k) explanatory leaflets and distribution;
- (l) liaising with An Garda Siochana;
- (m) hardstandings, accommodation and servicing;

- (n) removal;
- (o) vehicle inspection and report;
- (p) lighting board.

Progress Photographs

Units

- 43** The units of measurement shall be:
- (i) set of progress photographs, set of aerial progress photographs number.
 - (ii) additional progress photographs, additional aerial progress photographs number.

Measurement

- 44** A set of photographs shall comprise such numbers of negatives and prints as described in the Contract taken on any one flight or visit to Site.
- Where in any one flight or visit the Employer’s Representative directs less than one complete set of photographs, then one set shall be measured.
- Where in any flight or visit the Employer’s Representative instructs progress or aerial photographs in excess of the number in the set then the additional photographs shall be measured and be deemed to include the negative and the same number of prints per negative as those in the set.

Itemisation

- 45** Separate items shall be provided for progress photographs in accordance with Chapter II paragraphs 3 and 4 and the following:

| Group | Feature |
|-------|--|
| I | 1 Set of progress photographs |
| | 2 Set of aerial progress photographs |
| | 3 Additional progress photographs |
| | 4 Additional aerial progress photographs |
| II | 1 Monochrome prints |
| | 2 Colour prints |

**Progress Photographs,
 Aerial Progress Photographs,
 Additional Progress
 Photographs and Additional
 Aerial Progress Photographs**

Item Coverage

- 46** The items for progress photographs, aerial progress photographs, additional progress photographs and additional aerial progress photographs shall in accordance with the Preambles to Bill of Quantities General Directions include for:
- (a) delivery of negatives and prints to the Employer’s Representative;
 - (b) identification marking on the prints;
 - (c) albums;
 - (d) providing photographs in digital format on CD-ROM;
 - (e) provision of hoist.

Road Sweeping and Cleaning

Units **47** The units of measurement shall be:

- (i) road sweeping and cleaning item.

Measurement **48** Road sweeping and cleaning shall be measured once only.

Itemisation **49** Separate items shall be provided for road sweeping and cleaning in accordance with Chapter II paragraphs 3 and 4 and the following:

| Group | Feature |
|-------|------------------------------|
| I | 1 Road sweeping and cleaning |

Road Sweeping and Cleaning

50 The items for road sweeping and cleaning shall in accordance with the Preambles to Bill of Quantities General Directions include for:

Item Coverage

- (a) vehicles;
- (b) radio communications;
- (c) equipment;
- (d) taxing for use on public roads;
- (e) depreciation;
- (f) maintenance;
- (g) fuel, oil and other consumables;
- (h) qualified and non-qualified operatives.

Emergency Services

Units **51** The units of measurement shall be:

- (i) emergency services item.

Measurement **52** Emergency services shall be measured once only.

Itemisation **53** Separate items shall be provided for emergency services in accordance with Chapter II paragraphs 3 and 4 and the following:

| Group | Feature |
|-------|----------------------|
| I | 1 Emergency services |

Emergency Services

54 The items for emergency services shall in accordance with the Preambles to Bill of Quantities General Directions include for:

Item Coverage

- (a) vehicles;
- (b) radio communications;
- (c) equipment;

- (d) taxing for use on public roads;
- (e) comprehensive insurance;
- (f) depreciation;
- (g) maintenance;
- (h) fuel, oil and other consumables;
- (i) qualified operatives;
- (j) replacement or relocation of signs, lights and safety items on public roads;
- (k) repair of damaged or inadequate stockproof fencing;
- (l) restoration of water supplies or other services;
- (m) repair work on any damaged or inadequate temporary works;
- (n) liaising with An Garda Síochána.

Facilities for Local Authority, Public or Private Utility Undertakers and Other Contractors

| Units | <p>55 The units of measurement shall be:</p> <ul style="list-style-type: none"> (i) facilities for Service Undertakers and other Contractors..... item. | | | | | | |
|-------------|--|-------|---------|---|--|----|---|
| Measurement | <p>56 Unless expressly stated otherwise in the Contract, facilities for Service Undertakers and other Contractors shall be measured once only to include for all facilities for local authorities, public or private utility undertakers and other contractors.</p> | | | | | | |
| Itemisation | <p>57 Separate items shall be provided for facilities for Local Authority, public or private Utility Undertakers and other contractors in accordance with Chapter II paragraphs 3 and 4 and the following:</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: center;">Group</th> <th style="text-align: center;">Feature</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">I</td> <td style="text-align: center;">1 Facilities for Service Undertakers and other Contractors</td> </tr> <tr> <td style="text-align: center;">II</td> <td style="text-align: center;">1 Different Service Undertakers and other Contractors</td> </tr> </tbody> </table> | Group | Feature | I | 1 Facilities for Service Undertakers and other Contractors | II | 1 Different Service Undertakers and other Contractors |
| Group | Feature | | | | | | |
| I | 1 Facilities for Service Undertakers and other Contractors | | | | | | |
| II | 1 Different Service Undertakers and other Contractors | | | | | | |

Facilities for Service Undertakers and Other Contractors

| | |
|---------------|--|
| Item Coverage | <p>58 The items for facilities for Service Undertakers and other Contractors shall in accordance with the Preamble to Bill of Quantities General Directions include for:</p> <ul style="list-style-type: none"> (a) consultation and liaison with the relevant Local Authority, Public or Private Utility Undertakers or Private Owners and other Contractors as necessary, particularly in respect of the timing or phasing of the Works and furnishing such details as the Employer’s Representative may require; (b) restrictions of and hindrances to the Works arising from the requirements and activities of Local Authorities, Public or Private Utility Undertakers or Private Owners and other Contractors; |
|---------------|--|

- (c) restrictions of and hindrances to the Works arising from the activities of other Contractors who are engaged in alteration, renewals, provisions for future requirements or other Works authorised by the Employer’s Representative in respect of the Services or Undertakings belonging to the relevant Local Authority, Public or Private Utility Undertakers either on or in the vicinity of the site;
- (d) ascertainment of and compliance with all requirements of the relevant Local Authority, Public or Private Utility Undertakers or Private Owners in respect of Accommodation Works involving or affecting their services or Undertakings;
- (e) all losses arising from the activities of the various Local Authorities, Public or Private Utility Undertakers and other Contractors;
- (f) excavations to ascertain the locations of underground services including excavations by hand and provision of working space;
- (g) compliance with the relevant Clauses of the Conditions of Contract;
- (h) attendance including working outside of normal working hours, lighting, traffic control, signing and backfilling with approved material for Local Authority, Public or Private Utility Undertakers;
- (i) support and protection of pipes, cables and other apparatus during the progress of the Works;
- (j) taking measures to ensure that no existing services are interrupted without the written consent of the relevant Local Authority, Public or Private Utility Undertakers or Private Owners;
- (k) awaiting the Employer’s Representative’s consent to proposals;
- (l) restrictions and hindrances to the Works from the activities of other Contractors of the Employer including the activities for plantings and other landscape works to be carried out by the Local Authorities and their agents;
- (m) keeping the Employer’s Representative informed of arrangements made with the owners of public and privately owned services.

Property Condition Surveys

Units **59** The unit of measurement shall be:

- (i) property condition survey.....item.

Itemisation **60** Separate items shall be provided for condition survey in accordance with Chapter II paragraphs 3 and 4 and the following:

| Group | Feature |
|-------|-----------------------------|
| I | 1 Property condition survey |
| II | 1 Different locations |

Property Condition Surveys **61** The items for condition survey shall in accordance with the Preambles to Bill of Quantities General Directions include for:

- Item Coverage (a) undertaking condition surveys as specified;

- (b) installing tell-tails, taking measurements, precision levelling and monitoring;
- (c) taking photographs;
- (d) preparation of survey reports and issuing them to the Employer's Representative;
- (e) preparation of monitoring reports and issuing them to the Employer's Representative;
- (f) appointment of a Chartered Surveyor or Chartered Structural Engineer.



Bonneagar Iompair Éireann
Transport Infrastructure Ireland



Ionad Ghnó Gheata na
Páirce,
Stráid Gheata na Páirce,
Baile Átha Cliath 8, Éire



Parkgate Business Centre,
Parkgate Street,
Dublin 8, Ireland



www.tii.ie



info@tii.ie



+353 (01) 646 3600



+353 (01) 646 3601