**SS17064**

Road Asset Renewal Contract

**Schedule 5**

**FINANCIAL**

Growth, Environment and Transport





**Important Notice**

This document has been prepared by The Kent County Council (“the Client”) to present the Client’s requirements and provides details to tenderers for this stage of the tender process.

This document shall be read in conjunction with:

Schedule 1 Invitation to Tender

Schedule 2 Forms for Completion.

Schedule 3 Conditions of Contract.

Schedule 4 Quality Questions.

Schedule 5 Financial (this document).

Schedule 6 Service Information.

If a bidder considers that any of the information submitted in its tender should not be disclosed by the Client under a Freedom of Information Act 2000 request, it will have to set this out in the Freedom of Information Form provided by the Client in Schedule 2 (Forms for Completion). The bidder will accept any decision made by the Client as set out in the Freedom of Information Form.

You are advised to read all sections carefully before tendering. Should you have any difficulties with the tender, documentation or process please contact Strategic Sourcing & Procurement via the ‘Messages’ facility on the Kent Business Portal as identified in Section 3: Instructions of the Invitation to Tender.

This documentation is non-transferable.

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| PREFACE |
|  |  | 1. The HMEP Method of Measurement for Highways Maintenance Services (MMHMS) has been approved by the sponsors of the Highways Maintenance Efficiency Programme (HMEP) for use in services allied with highways maintenance. The HMEP Method of Measurement has been designed to be used in conjunction with the HMEP Contract and HMEP Price List. Reference to MMHMS in the *Conditions of Contract* is sufficient to give effect to the use of this Method of Measurement within that Contract.
2. It is also recommended that reference is made regarding use of this Method of Measurement within the contract documents to the Preambles to the Price List.
3. The HMEP will review the MMHMS and will consider any suggestions for improvement but compilers of contract documents should ensure that use of this Method of Measurement matches the particular requirements of their project and is classified and covered by their contract specific method of measurement.
4. The objectives of this Method of Measurement are:
* to standardise the order, content and descriptions of the Price List;
* to provide a structured approach in item descriptions;
* to clarify the elements and resources expected to be included in the price of each item.
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| DEFINITIONS |
|  |  | 1. In this document entitled HMEP Method of Measurement for Highway Maintenance Services (hereinafter referred to as the Method of Measurement) unless the context otherwise requires, the following words and expressions shall have the meanings hereby respectively assigned to them, that is to say:
 |
|  |  | 1. (a)
 | 1. *Conditions of Contract* means the HMEP Conditions of Contract referred to in the Tender and Contract documents;
 |
|  |  | 1. (b)
 | 1. Words and expressions to which meanings are assigned in the Service Information, Specification and Contract Drawings have the same meanings in the Method of Measurement;
 |
|  |  | 1. (c)
 | 1. Price List means a list of items giving brief identifying descriptions in the execution of the works or services to be performed;
 |
|  |  | 1. (d)
 | 1. Existing Ground Level means the level of the ground before any work under the Contract is carried out;
 |
|  |  | 1. (e)
 | 1. Hard Material means the following:
 |
|  |  |  | 1. (i)
 | 1. existing pavements, footways, paved areas (but excluding unbound materials) and foundations in masses in excess of 0.10 cubic metres;
 |
|  |  |  | 1. (ii)
 | 1. material which requires the use of breakers or splitters for its removal in masses in excess of 0.10 cubic metres;
 |
|  |  |  | 1. (iii)
 | 1. material so designated as Hard Material in the Price List.
 |
|  |  | 1. (f)
 | 1. Material such as natural rock which requires removal by explosives shall be identified separately.
 |
|  |  | 1. (g)
 | 1. Where item descriptions are designated as ‘not exceeding’ or ‘exceeding’ then the following definitions shall apply:
 |
|  |  |  | 1. (i)
 | 1. ‘not exceeding’ means up to and including the stated dimension or quantity;
 |
|  |  |  | 1. (ii)
 | 1. ‘exceeding’ means in excess of the stated dimension or quantity.
 |
|  |  |  | 1. (iii)
 | 1. where the abbreviation of n.e. is used this shall mean ‘not exceeding’ and exc. shall mean ‘exceeding’.
 |
|  |  | 1. (h)
 | 1. Where descriptions are designated as ‘footway’ this shall mean a way adjacent to a carriageway.
 |
|  |  | 1. (i)
 | 1. Unless otherwise stated in the Preambles to Price List, the Service Information or the Price List item description of the Method of Measurement, a ‘day’ shall mean undertaking works or services within normal specified working hours.
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| GENERAL PRINCIPLES |
| * 1. Method of Measurement
 | * 1. 1
 | * 1. The Method of Measurement is intended for use for highway maintenance contracts although amendments may be required for particular Contract Conditions.
 |
| * 1. Price List
 | * 1. 2
 | * 1. In the Price List the sub-headings and item descriptions identify the work covered by the respective items read in conjunction with the matters listed against the relevant marginal headings for item coverage in the Method of Measurement, Preambles to Price List and amendments. The nature and extent of the work or service to be performed is to be ascertained by reference to the Service Information, Specification, Contract Drawings and Conditions of Contract.
 |
| * 1. Singular or Plural
 | * 1. 3
 | * 1. In the Price List, singular and plural shall be interchanged as appropriate for each other and no particular meaning shall be assigned with the use of each.
 |

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| PREPARATION OF PRICE LIST |
| * 1. Sub-division of Price List
 | * 1. 1
 | * 1. The Price List is to be divided into series as provided within the Method of Measurement and as appropriate to the *Conditions of Contract*, Service or Works Information and Drawings.
 |
| * 1. Quantities
 | * 1. 2
 | * 1. Quantities shall be expressed in whole numbers except for units of measurement of tonnes in which case the quantities shall be to two decimal places.
 |
| * 1. Units of Measurement
 | * 1. 3
 | * 1. The following abbreviations shall be used for the units of measurement:
 |
|  |  | * 1. **Unit**millimetremetre
	2. kilometresquare metre
	3. cubic metre
	4. kilogramme
	5. litretonne
 | * 1. **Abbreviation**mmmkm
	2. m2
	3. m3kg
	4. lt
 | * 1. **Unit**numberitemmonth
	2. week
	3. dayhourmetre per day
 | * 1. **Abbreviation**noitemmonth
	2. week
	3. day
	4. hr
	5. m/day
 |
|  |  | * 1. **General Principles**
 |
| * 1. Itemisation – Group and Features
 | * 1. 4
 | * 1. Each item description is to be consistent with and be compounded from one or more of the Groups listed under the marginal headings within the Method of Measurement. An item description may contain Features from as many Groups as necessary to identify the Service required, but may include only one Feature from any one Group.
 |
| * 1. Items in the Price List
 | * 1. 5
 | * 1. The Price List, unless expressly stated otherwise in the Contract, is to contain all those items compounded in accordance with the foregoing paragraphs required to comprise the Service.
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| PREAMBLES TO HMEP PRICE LIST |
|  |  |  |
| General Directions | 1 | The HMEP Price List has been prepared in accordance with the HMEP Method of Measurement contained within this document. The nature and extent of the Service is to be ascertained by reference to the Service Information, Specification, Contract Drawings and *Conditions of Contract*. The rates and prices entered in the Price List shall be deemed to be the full inclusive value of the Service covered by the several items including the following, unless expressly stated otherwise: |
|  |  | (i) | people, subcontractors, supervision and other associated activities required by the Contract; |
|  |  | (ii) | materials, plant, storage and costs required by the Contract;  |
|  |  | (iii) | equipment required by the Contract; |
|  |  | (iv) | fixing, erecting and installing or placing of materials and plant in position; |
|  |  | (v) | temporary works. |
|  |  | (vi) | management and programming of individual works and the Service;  |
|  |  | (vii) | general obligations, liabilities and risks involved in the execution of the Service; |
|  |  | (viii) | establishment charges; |
|  |  | (ix) | direct and Sub-contract Fees; |
|  |  | (x) | waste, landfill and other disposal taxes; |
|  |  | (xi) | attendance and transport for sampling and testing carried out by the *Service Manager*, supplying results of tests carried out by the *Contractor* and providing test certificates; |
|  |  | (xii) | complying with Quality Assurance schemes and providing certificates of conformity; |
|  |  | (xiii) | preparation and supply of detailed working drawings and reports including evidence of completed work to the *Service Manager*; |
|  |  | (xiv) | awaiting approvals and or consents; |
|  |  | (xv) | calibration of testing equipment to Quality Assurance standards and maintaining to the required tolerances; |
|  |  | (xvi) | temporary accommodation and mess facilities for the *Contractor* on individual schemes of less than five days programmed duration; |
|  |  | (xvii) | setting up at each site and movement between a number of sites; |
|  |  | (xviii) | communication system for the *Contractor;* |
|  |  | (xix) | traffic management as group A in the table in 17 below in these preambles; |
|  |  | (xx) | travelling to, between and from different locations on the network |
|  |  | (xxi) | updating information and inventory data to the information database or system. |
| Summation of Quantities | 2 | Where applicable, items have been aggregated into lengths, areas, volumes, and weights, to cater for the varying amounts and quantities ordered by the *Service Manager*. Unless otherwise stated, the measurement of aggregated quantities for each individual Task Order shall be the summation of quantities for each itemisation feature within that Task Order within a single aggregated kilometre measured length. An aggregated length is the shortest carriageway distance travelled from first to last location via the other locations. |
| Pricing of Items | 3 | Each individual item shall have a rate or price entered against it. Rates and prices shall be expressed to two decimal places. The *Contractor* shall price elements of People (Staff and Labour), Equipment, Materials, Sub-contract, Charges (where applicable), Sub-contract and Direct Fees of each indicated operation in the Price List expressed to three decimal places. |
| Alternative Specified Materials, Designs and Options | 4 | Where in the Contract a choice of alternatives is permitted the description and the rates and prices inserted shall be deemed to cover any of the permitted alternative Services the *Contractor* may elect to use. In all cases the rates and prices inserted in the Price List shall be deemed to include for any adjustments of work content, rates, costs and the like occasioned by the choice of alternatives elected to be used or constructed by the *Contractor*. |
| Privately and Publicly Owned Services or Supplies | 5 | Where information in the Contract as to the whereabouts of existing statutory and private services is believed to be correct, the *Contractor* shall not be relieved thereby of any additional obligations under the Contract. The *Contractor* shall include in the rates and prices for locating and taking measures for the support and full protection of pipes, cables and other apparatus during the progress of the Service, obtaining the written consent of the appropriate authority to interrupt the service or supply and for keeping the *Service Manager* informed of all arrangements made with the owners of privately owned services or supplies, Statutory Undertakers and Public Authorities as appropriate. |
| Site Limitations and Constraints | 7 | The *Contractor* shall allow in the rates and prices for complying with any limitations and constraints contained in the Service or Works Information and the Task Orders. |
| Permanent Works Designed by the *Contractor* | 8 | Where the Contract requires part(s) of the Permanent Works to be designed by the *Contractor*, the rates and prices in the Price List shall include for all the obligations and costs associated with the incorporation of the *Contractor's* design into the Works, including design, provision of data and drawings, certificates, awaiting approvals, resubmissions and modifications and amendments to the Works. |
| New Roads and Streetworks Act and Traffic Management Acts | 10 | The *Contractor* shall allow in the rates and prices for issuing the relevant notices in accordance with the New Roads and Street Works Act and the Traffic Management Acts. |
| Permits | 11 | The *Contractor* shall allow in the rates and prices for applying for and receiving street works permits. |
| Equivalent Products and Materials | 12 | Where the *Contractor* offers an equivalent product or material in place of the one identified or specified, which is accepted for incorporation into the Service by the *Service Manager*, then the rates and prices in the Price List shall be deemed to include for all the obligations and costs associated with the incorporation of the equivalent into the Works, including design, provision of data and drawings, certificates, awaiting approvals, resubmissions and modifications and amendments to the Works. |
| Restricted Working | 14 | Where the *Service Manager* requires the *Contractor* to work under restricted hours or within a limited working window, this shall be carried out in accordance with Series 9000. |
| Disposal of Contaminated, Hazardous or Tar Bound Materials | 15 | Where specifically stated, the rates and prices shall include for handling and disposal of contaminated, hazardous, or tar bound materials |
| Traffic Management | 16 | The *Contracto*r shall allow in the rates and prices for the erection, maintaining and dismantling traffic safety and management on all highways, structures and footpaths to the layouts identified as Group A in the tables below. Traffic management requirements in excess of these situations will be measured separately and paid in accordance with Series 150 and 400 of the Price List identified as Group B in the tables below.Traffic management requirements that are not defined as Group A or Group B in the tables below shall be paid as time charge (Series 8000) and are identified as Group C.  |
| **Table 1: Traffic Management and Pedestrian Management** (as set out in "Safety at Street Works and Road Works - A code of practice" June 2014) |
|

|  |  |  |  |
| --- | --- | --- | --- |
| **Description** | **Page** | **Distance from first to last cone** | **Group** |
| Basic layout with a works vehicle | 21 |  | A |
| Works entirely on the footway | 33 |  | A |
| Signal - controlled pedestrian facilities at portable traffic signals | 62 |  | B |
| Works on footway with pedestrian diversion into carriageway  | 34 | n.e. 75m | A |
| exc. 75m | B |
| Works between parked vehicles with a speed limit of 30 mph or less | 38 |  | A |
| Works in the centre of a two-way road  | 39 | n.e. 75m | A |
| exc. 75m | B |
| Dual carriageway with a speed limit of 30 or 40 mph. Works in right lane | 41 |  | B |
| Dual carriageway with a speed limit of 30 or 40 mph. Works in left lane | 42 |  | B |
| Works in a side road at a T-junction  | 44 | n.e. 75m | A |
| exc. 75m | B |
| Works in both roads at a T-junction  | 45 | n.e. 75m | A |
| exc. 75m | B |
| Works on a signal island at a T-junction  | 46 | n.e. 75m | A |
| exc. 75m | B |
| Works at a roundabout, cases A to D.  | 48, 49 |  |  |
| on a road with a maximum speed limit of 30 mph | A |
| on a road with a maximum speed limit exceeding 30 mph | C |
| Works obstructing a signal-controlled pedestrian crossing.  |  |  |  |
| on a road with a maximum speed limit of 30 mph | 51 |  | B |
| on a road with a speed limit exceeding 30 mph |  |  | C |

|  |  |  |  |
| --- | --- | --- | --- |
| **Description** | **Page** | **Distance from first to last cone** | **Group** |
| Give and take on a road with a maximum speed limit of 30 mph | 56, 57 | n.e. 50m | A |
| Traffic control by priority signson a road with a maximum speed limit of 30 mphon a road with a speed limit exceeding 30 mph | 58, 59 | n.e. 80m exc. 80m | A C |
| Traffic control by Stop/Go boards | 60, 61 |  | B |
| Traffic control by portable traffic signals | 62 - 67 |  | B |
| Traffic control and speed reductionBy closure of the fast lane slow lane prior to the above traffic control By closure of the fast lane slow lane prior to traffic control by convoy or shuttle working | 67, 68 |  | BB |
| Traffic control by Convoy working | 68, 69 |  | B |
| Traffic control by Mobile closure | 83 - 92 |  | B |
| Traffic control by Road Closure | 70 - 74 |  | B |
| Works next to Tramways and railways | 74 - 77 |  | C |
| Pedestrian barrier in addition of that identified above | 97 - 98 |  | B |
|  |  |  |  |

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SECTION ONE: CORE SERIES

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| SERIES 100: PRELIMINARIES |
|  |  | **Temporary Information signs** |
| Units | 16 | The unit of measurement shall be: |
|  |  | (i) | erection and removal … … … number |
|  |  | (ii) | maintenance and servicing … … … day |
| Measurement | 17 | The measurement of a day shall be deemed to mean a period of 24 hours duration. |
| Itemisation  | 18 | Separate items shall be provided for temporary information signs in accordance with General Principles and the following: |
|  |  | **Group** | **Feature** |  |
|  |  | 1 | 1 | Temporary information sign |
|  |  | 2 | 1 | Stated type |
|  |  | 3 | 12 | Erection and removalMaintenance and servicing |
|  |  |  |
| **Erection and Establishment of Temporary Information Signs** | 19 | The items for erection and removal of temporary information signs shall in accordance with the Preambles to the Price List General Directions include for: |
| Item coverage |  | (a) | supports; |
|  |  | (b) | signs; |
| **Maintenance and Servicing of Temporary Information Signs** | 20 | The items for maintenance and servicing of temporary information signs shall in accordance with the Preambles to the Price List General Directions include for: |
| Item coverage |  | (a) | regular cleaning and inspections of signs; |
|  |  | (b) | maintenance of signs; |
|  |  | (c) | re-positioning; |
|  |  | (d) | amendment of signs to reflect programme changes; |
|  |  | (e) | replacement/repair of stolen, missing and damaged signs; |
|  |  | (f) | replacement/charging of batteries for electronic signs. |
|  |  | **No Parking Measures** |
| Units | 16 | The unit of measurement shall be: |
|  |  | (i) | erection and removal … … … number |
|  |  | (ii) | maintenance and servicing … … … day |
| Measurement | 17 | The measurement of a day shall be deemed to mean a period of 24 hours duration. |
| Itemisation  | 18 | Separate items shall be provided for no parking measures in accordance with General Principles and the following: |
|  |  | **Group** | **Feature** |  |
|  |  | 1 | 1 | No parking measures |
|  |  | 2 | 1 | Stated type |
|  |  | 3 | 12 | Erection and removalMaintenance and servicing |
|  |  |  |
| **Erection and Removal of No Parking Measures** | 19 | The items for erection and removal of no parking measures shall in accordance with the Preambles to the Price List General Directions include for: |
| Item coverage |  | (a) | supports; |
|  |  | (b) | signs/cones; |
| **Maintenance and Servicing of No Parking Measures** | 20 | The items for maintenance and servicing no parking measures shall in accordance with the Preambles to the Price List General Directions include for: |
| Item coverage |  | (a) | regular cleaning and inspections of signs/cones; |
|  |  | (b) | maintenance of signs/cones; |
|  |  | (c) | re-positioning; |
|  |  | (d) | amending signs to reflect programme changes; |
|  |  | (e) | replacement/repair of stolen, missing and damaged signs/cones. |
|  |  | **Customer Communications** |
| Units | 16 | The unit of measurement shall be: |
|  |  | (i) | delivery of letters … … … 100 letters |
|  |  | (ii) | extra over … … … for printing of letters … … … 100 letters |
| Measurement | 17 | The measurement of letters shall be the number of letters delivered to unique addressable properties within the specified area, rounded up to the nearest 100. |
|  |  | Letters shall mean any individual or pack of written customer communication correspondence suitable for postal delivery, including but not limited to letters, leaflets, maps and survey cards |
| Itemisation  | 18 | Separate items shall be provided for customer communication in accordance with General Principles and the following: |
|  |  | **Group** | **Feature** |  |
|  |  | 1 | 1 | Customer Communication |
|  |  | 3 | 12 | Delivery of lettersPrinting of letters |
|  |  |  |
| **Delivery of Letters** | 19 | The items for delivery of letters shall in accordance with the Preambles to the Price List General Directions include for: |
| Item coverage |  | (a) | collection of letters and distribution plans from the overseeing organisations offices; |
|  |  | (b) | collating and folding letters. |
| **Extra over for Printing of Letters** | 20 | The items for extra over for printing of letters shall in accordance with the Preambles to the Price List General Directions include for: |
| Item coverage |  | (a) | printing letters in colour; |
|  |  | (b) | paper; |
|  |  | (c) | ink. |
|  |  |  |  |

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| SERIES 150: TRAFFIC MANAGEMENT |
|  |  | **Lane Closures on Dual Carriageways** |
| Units | 1 | The unit of measurement shall be: |
|  |  | (i) | establish and remove lane closures … … … number |
|  |  | (ii) | maintain lane closure … … … hour |
| Itemisation | 2 | Separate items shall be provided for lane closures on dual carriageways in accordance with General Principles and the following: |
|  |  | **Group** | **Feature** |  |
|  |  | 1 | 12 | Establish and remove lane closuresMaintain lane closures |
|  |  | 2 | 12 | On a road with speed limit up to and including 40mphOn a road with speed limit over 40mph |
|  |  | 3 | 12 | Stated lane and lengthsExtra over for additional lengths, lamps or signs  |
|  |  |  |
| **Establish and Remove Lane Closures** | 3 | The items for establish and remove lane closures shall in accordance with the Preambles to the Price List General Directions include for: |
| Item coverage |  | (a) | providing all measures, equipment and traffic management resources such as cones, signs, barriers and the like; |
|  |  | (b) | removal and reinstatement on completion; |
|  |  | (c) | notices and communications; |
|  |  | (d) | traffic safety officer;  |
|  |  | (e) | consulting with authorities and services; |
|  |  | (f) | plans and layouts; |
|  |  | (g) | traffic counts. |
| **Maintain Lane Closures** | 4 | The items for maintain lane closures shall in accordance with the Preambles to the Price List General Directions include for: |
| Item coverage |  | (a) | maintenance and inspections; |
|  |  | (b) | batteries and lights for temporary lit cones; |
|  |  | (c)  | all items for the Establishment above, but for maintaining same; |
|  |  | (d) | replacement/repair of stolen, missing and damaged equipment. |
| **Extra Over for Additional Lengths or Maintenance ordered by the *Service Manager*** | 5 | The items for extra over for additional lengths or maintenance ordered by the *Service Manager* shall in accordance with the Preambles to the Price List General Directions include for: |
| Item coverage |  | (a) | providing all measures, equipment and additional resources required for additional lengths or additional periods. |
|  |  | **Temporary Traffic Control** |
| Units | 6 | The unit of measurement shall be: |
|  |  | (i) | establish and remove temporary traffic signals and stop/go boards … … … number |
|  |  | (ii) | establish and remove temporary traffic signals and stop/go boards … … … day |
| Measurement | 7 | The measurement of a day shall be the site specific working hours defined by the task order. |
| Itemisation | 8 | Separate items shall be provided for temporary traffic control in accordance with General Principles and the following: |
|  |  | **Group** | **Feature** |  |
|  |  | 1 | 1 | Establish and remove temporary traffic signals |
|  |  |  | 2 | Maintain temporary traffic signals |
|  |  |  | 3 | Establish and remove stop/go boards |
|  |  |  | 4 | Maintain stop/go board |
|  |  | 2 | 1 | On single carriageway |
|  |  | 3 | 1 | Stated situations or resources |
|  |  | Group 2 Feature 1 shall only apply to Group 1 Features 1, 2, 3, and 4. |
| **Establish and Remove Temporary Traffic Signals, and Stop/Go Boards** | 9 | The items for establish and remove temporary traffic signals and stop/go shall in accordance with the Preambles to the Price List General Directions include for: |
| Item coverage |  | (a) | providing all measures, equipment and traffic & pedestrian management resources such as cones, signs, barriers, traffic lights; |
|  |  | (b) | removal and reinstatement on completion; |
|  |  | (c) | notices and communications; |
|  |  | (d) | communication and management systems; |
|  |  | (e) | equipment; |
|  |  | (f) | traffic safety officer;  |
|  |  | (g) | consulting with authorities and services; |
|  |  | (h) | plans and layouts; |
|  |  | (i) | traffic counts; |
| **Maintain Temporary** **Traffic Signals and Stop/Go Boards** | 10 | The items for maintain temporary traffic signals and stop/go boards shall in accordance with the Preambles to the Price List General Directions include for: |
| Item coverage |  | (a) | maintenance and inspections; |
|  |  | (b) | maintaining all measures, equipment and resources; |
|  |  | (c) | all items for the establishment above, but for maintaining same; |
|  |  | (d) | replacement/repair of stolen, missing and damaged equipment. |
|  |  | **Road Closures** |
| Units | 6 | The unit of measurement shall be: |
|  |  | (i) | establish and remove road closures, side road closures and diversion signs … … … number |
|  |  | (ii) | maintain road closures, side road closures and diversion signs … … … day |
|  |  | (iii) | extra over for non-standard diversion signs … … … number |
| Measurement | 7 | The measurement of a day shall be the site specific working hours defined by the task order. |
| Itemisation | 8 | Separate items shall be provided for road closures in accordance with General Principles and the following: |
|  |  | **Group** | **Feature** |  |
|  |  | 1 | 1 | Establish and remove road closures and diversion signs |
|  |  |  | 2 | Maintain road closures and diversion signs |
|  |  |  | 3 | Establish and remove manned side road closure |
|  |  |  | 4 | Maintain side manned road closure |
|  |  |  | 5 | Extra over for non-standard diversion signs |
|  |  |  |
| **Establish and Remove Road Closures, Manned Side Road Closures and Diversion Signs** | 9 | The items for establish and remove road closures, manned side road closures and diversion signs shall in accordance with the Preambles to the Price List General Directions include for: |
| Item coverage |  | (a) | providing all measures, equipment and traffic & pedestrian management resources such as cones, signs and barriers |
|  |  | (b) | removal and reinstatement on completion; |
|  |  | (c) | notices and communications; |
|  |  | (d) | communication and management systems; |
|  |  | (e) | equipment; |
|  |  | (f) | traffic safety officer;  |
|  |  | (g) | consulting with authorities and services; |
|  |  | (h) | plans and layouts; |
|  |  | (i) | traffic counts; |
|  |  | (j) | gated vehicle access control points. |
| **Maintain Road Closures, Manned Side Road Closures and Diversion Signs** | 10 | The items for maintain road closures, manned side road closures and diversion signs shall in accordance with the Preambles to the Price List General Directions include for: |
| Item coverage |  | (a) | maintenance and inspections; |
|  |  | (b) | maintaining all measures, equipment and resources; |
|  |  | (c) | all items for the establishment above, but for maintaining same; |
|  |  | (d) | traffic management operatives to act as gate persons for all vehicle access control points. |
| **Extra Over For Non-Standard Sign Face** | 12 | The items for extra over for non-standard sign face shall in accordance with the Preambles to the Price List General Directions include for: |
| Item coverage |  | (a) | production of non-standard sign faces as per task order |
|  |  | **Convoy Working** |
| Units | 6 | The unit of measurement shall be: |
|  |  | (i) | single vehicle convoy working … … … day |
|  |  | (ii) | extra over for additional convoy vehicles … … … day |
| Measurement | 7 | The measurement of a day shall be the site specific working hours defined by the task order. |
|  |  | Additional convoy vehicles shall be measured as per day per vehicle. |
| Itemisation | 8 | Separate items shall be provided for convoy working in accordance with General Principles and the following: |
|  |  | **Group** | **Feature** |  |
|  |  | 1 | 1 | Convoy working |
|  |  |  | 2 | Extra over for additional vehicles |
|  |  |  |
| **Single Vehicle Convoy Working** | 9 | The items for single vehicle convoy working shall in accordance with the Preambles to the Price List General Directions include for: |
| Item coverage |  | (a) | providing all measures, equipment and traffic & pedestrian management resources such as cones, signs, barriers, traffic lights; |
|  |  | (b) | removal and reinstatement on completion; |
|  |  | (c) | notices and communications; |
|  |  | (d) | communication and management systems; |
|  |  | (e) | equipment; |
|  |  | (f) | traffic safety officer;  |
|  |  | (g) | consulting with authorities and services; |
|  |  | (h) | plans and layouts; |
|  |  | (i) | traffic counts; |
|  |  | (j) | a convoy vehicle of a type suitable for the site. |
| **Extra Over for Additional Convoy Vehicles** | 10 | The items for extra over for additional convoy vehicles shall in accordance with the Preambles to the Price List General Directions include for: |
| Item coverage |  | (a) | additional convoy vehicles of a type suitable for the site; |
|  |  | (b) | drivers and vehicle operators. |
|  |  | **Traffic Management Operatives** |
| Units | 6 | The unit of measurement shall be: |
|  |  | (i) | traffic management operative for the overseeing organisation … … … day |
| Measurement | 7 | The measurement of a day shall be the site specific working hours defined by the task order. |
|  |  | Traffic management operative shall be measured as per day per operative. |
|  |  | Additional duties shall consist of additional tasks agreed with the overseeing organisation, including (but not limited to) pedestrian management, works guarding and customer communication. |
| Itemisation | 8 | Separate items shall be provided for traffic management operative in accordance with General Principles and the following: |
|  |  | **Group** | **Feature** |  |
|  |  | 1 | 1 | Traffic management operative |
|  |  |  |
| **Traffic Management Operative** | 9 | The items for traffic management operative shall in accordance with the Preambles to the Price List General Directions include for: |
| Item coverage |  | (a) | traffic management operatives trained and certified to an appropriate level to carry out additional duties |
|  |  |  |  |

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| SERIES 500: DRAINAGE AND SERVICE DUCTS |
|  |  | **Refix or Adjust Ironwork** |
| Units | 44 | The unit of measurement shall be: |
|  |  | (i) refix or adjust ironwork … … … number |
| Measurement | 45 | Measurement note; additional items shall be measured for the provision of new covers. |
|  |  | Measurement for refix or adjust ironwork shall be the quantity ordered by the *Service Manager*. |
| Itemisation | 47 | Separate items shall be provided for refix or adjust ironwork in accordance with the General Principles and the following: |
|  |  | **Group** | **Feature** |  |
|  |  | 1 | 1 | Refix or adjust ironwork |
|  |  | 2 | 1 | Stated sizes of cover or grating |
|  |  | 3 | 12 | Extra over for reduced quantitiesExtra over for use of mastic asphalt reinstatement system |
|  |  |  |
| **Refix or Adjust Ironwork** | 48 | The items for refix or adjust ironwork shall in accordance with the Preambles to Price List General Directions include for: |
| Item coverage |  | (a) | excavation of acceptable material; |
|  |  | (b) | excavation of unacceptable material; |
|  |  | (c) | take up existing cover or grating including frame and clean and set aside for re-use; |
|  |  | (d) | excavation in hard material; |
|  |  | (e) | demolition and preparation to receive new construction; |
|  |  | (f) | construction of walls; |
|  |  | (g) | bedding existing cover or grating including frame; |
|  |  | (h) | concrete; |
|  |  | (i) | formwork; |
|  |  | (j) | backfilling and compaction; |
|  |  | (k) | disposal of material; |
|  |  | (l) | taking precautions to avoid damage to drains and sewers; |
|  |  | (m) | cleaning; |
|  |  | (n) | brickwork; |
|  |  | (o) | mortar. |
| **Extra Over for Reduced Quantities** | 48 | The items for extra over for reduced quantities shall in accordance with the Preambles to Price List General Directions include for: |
| Item coverage |  | (a) | any additional costs, resources or reduced productivity resulting from the stated and ordered quantities |
| **Extra Over for Mastic Asphalt Reinstatement System** | 48 | The items for extra over for mastic asphalt reinstatement system shall in accordance with the Preambles to Price List General Directions include for: |
| Item coverage |  | (a) | trial area and trials; |
|  |  | (b) | making good after sampling and testing; |
|  |  | (c) | designing and verifying mixes; |
|  |  | (d) | grading, measuring, mixing and depositing materials; |
|  |  | (e) | making joints; |
|  |  | (f) | cleaning surfaces; |
|  |  | (g) | protection and masking and unmasking or kerbs, drainage, channels, chamber covers, gully gratings, expansion joints, road studs, road markings and the like and obtaining clean markings; |
|  |  | (h) | cutting back, preparing and working on or up to adjacent faces, surfaces and features; |
|  |  | (i) | admixtures and additives; |
|  |  | (j) | the use of a BBA HAPAS approved mastic asphalt ironwork reinstatement system; |
|  |  | (k) | certification. |
|  |  | **Extra Over Refix or Adjust Cover for New** |
| Units | 49 | The unit of measurement shall be: |
|  |  | (i) | extra over refix or adjust cover for new ... ... … number |
| Measurement | 50 | Measurement note; additional items shall be measured for the provision of new covers. |
| Itemisation | 52 | Separate items shall be provided for extra over refix or adjust cover for new in accordance with the General Principles and the following: |
|  |  | **Group** | **Feature** |  |
|  |  | 1 | 1 | Extra over refix or adjust cover for new |
|  |  | 2 | 1 | Stated sizes and type of cover or grating |
|  |  |  |
| **Extra Over Refix or Adjust Cover for New**  | 53 | The items for extra over refix or adjust cover for new shall in accordance with the Preambles to Price List General Directions include for: |
| Item coverage |  | (a) | supply of new cover and frame to site; |
|  |  | (b) | transport and disposal of old cover and frame. |
|  |  | **Refix or Adjust BT Ironwork** |
| Units | 54 | The unit of measurement shall be: |
|  |  | (i) | refix or adjust BT cover and frame … … … number |
| Measurement | 55 | Measurement for refix or adjust BT ironwork shall be the quantity ordered by the *Service Manager*. |
| Itemisation | 56 | Separate items shall be provided for refix or adjust BT ironwork in lieu of selected excavated material in accordance with the General Principles and the following: |
|  |  | **Group** | **Feature** |  |
|  |  | 1 | 1 | Refix or adjust BT ironwork |
|  |  | 2 | 1 | Stated size and type of cover |
|  |  | 3 | 12 | Extra over for mastic asphalt reinstatement systemExtra over for use of new cover supplied by BT |
|  |  |  |
| **Refix or Adjust BT Ironwork** | 57 | The items refix or adjust BT ironwork shall in accordance with the Preambles to Price List General Direction include for: |
| Item coverage |  | (a) | excavation of acceptable material; |
|  |  | (b) | excavation of unacceptable material; |
|  |  | (c) | take up existing cover or grating including frame and clean and set aside for re-use; |
|  |  | (d) | excavation in hard material; |
|  |  | (e) | demolition and preparation to receive new construction; |
|  |  | (f) | construction of walls; |
|  |  | (g) | bedding existing cover or grating including frame; |
|  |  | (h) | concrete; |
|  |  | (i) | formwork; |
|  |  | (j) | backfilling and compaction; |
|  |  | (k) | disposal of material; |
|  |  | (l) | taking precautions to avoid damage to drains and sewers; |
|  |  | (m) | cleaning; |
|  |  | (n) | brickwork; |
|  |  | (o) | mortar; |
|  |  | (p) | any additional costs or materials required to comply with BT specification LN320. |
| **Extra Over for Use of Mastic Asphalt Reinstatement System** | 57 | The items extra over for use of mastic asphalt reinstatement system shall in accordance with the preambles to price list general Direction include for: |
| Item coverage |  | (a) | trial area and trials; |
|  |  | (b) | making good after sampling and testing; |
|  |  | (c) | designing and verifying mixes; |
|  |  | (d) | grading, measuring, mixing and depositing materials; |
|  |  | (e) | making joints; |
|  |  | (f) | cleaning surfaces; |
|  |  | (g) | protection and masking and unmasking or kerbs, drainage, channels, chamber covers, gully gratings, expansion joints, road studs, road markings and the like and obtaining clean markings; |
|  |  | (h) | cutting back, preparing and working on or up to adjacent faces, surfaces and features; |
|  |  | (i) | admixtures and additives; |
|  |  | (j) | the use of a BBA HAPAS approved mastic asphalt ironwork reinstatement system; |
|  |  | (k) | certification. |
|  |  | (p) | any additional costs or materials required to comply with BT specification LN320. |
| **Extra Over for Use of New Cover and Frame Supplied by BT** | 57 | The items extra over for use of new cover and frame supplied by BT shall in accordance with the Preambles to Price List General Direction include for: |
| Item coverage |  | (a) | taking receipt of delivery from BT; |
|  |  | (b) | storing and handling; |
|  |  | (c) | transport to site; |
|  |  | (d) | disposal of old cover and frame |
|  |  |  |  |
|  |  | **Cleaning Gullies** |
| Units | 58 | The unit of measurement shall be: |
|  |  | (i) | cleaning gully catchpit chamber … … … number |
|  |  | (ii) | Establishment of pipe cleaning crew … … … number |
|  |  | (iii) | Clean gully connection and drainage pipes … … … meter |
| Measurement | 59 | Measurement for the cleaning gullies shall be the quantity ordered by the *Service Manager.* |
|  |  | The establishment of pipe cleaning gang and equipment shall only be measured once for each package of work. |
|  |  | A package of work is a clearly defined schedule of work of a variable extent and duration at a specific location on a single task order. |
| Itemisation | 60 | Separate items shall be provided for cleaning gullies and the like in accordance with the General Principles and the following: |
|  |  | **Group** | **Feature** |  |
|  |  | 1 | 1 | Cleaning gullies  |
|  |  | 2 | 1 | Establishment of pipe cleaning works crew |
|  |  | 3 | 1 | Cleaning pipes |
|  |  |  |
| **Cleaning Gullies** | 57 | The items extra over for cleaning gullies shall in accordance with the Preambles to Price List General Direction include for: |
| Item coverage |  | (a) | cleaning material from gully catchpits; |
|  |  | (b) | transport and disposal of material. |
| **Cleaning Pipes** | 57 | The items extra over for cleaning pipes shall in accordance with the Preambles to Price List General Direction include for: |
| Item coverage |  | (a) | cleaning material from pipes; |
|  |  | (b) | transport and disposal of material; |
|  |  | (c) | transport and disposal of water; |
|  |  | (d) | supply of water required for jet washing; |
|  |  | (e) | lifting and replacing covers. |

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| SERIES 600: EARTHWORKS |
|  |  |  |
| Definitions | 1 | The Earthworks Outline, unless expressly stated otherwise, is defined as the finished earthworks levels and dimensions (prior to topsoiling) required by the Contract for the construction, where specified, of: |
|  |  | (a) | carriageway, hard shoulder, hard strip, footway, paved area, central reserve, verge, side slope; |
|  |  | (b) | sub-base; |
|  |  | (c) | landscape areas, environmental bunds. |
|  | 2 | Sub-soil Level is defined as the level of the ground after the removal of topsoil. |
| Measurement General | 3 | For the purposes of this Series it shall be assumed that one cubic metre of material excavated forms one cubic metre of compacted fill. No allowance shall be made in the measurement for bulking and shrinkage of any material. |
|  |  | **Excavation** |
| Units | 4 | The unit of measurement shall be: |
|  |  | (i) | excavation … … … cubic metre |
| Itemisation | 5 | Separate items shall be provided for excavation in accordance with General Principles and the following: |
|  |  | **Group** | **Feature** |  |
|  |  | 1 | 1 | Excavation |
|  |  | 2 | 12 | Topsoil (Acceptable material Class 5A)Acceptable or unacceptable material other than Class 5A |
|  |  | 3 | 1 | In general excavation |
|  |  | 4 | 1 | Stated aggregated volumes |
|  |  |  |
| **Excavation** | 6 | The items for excavation shall in accordance with the Preambles to the Price List General Directions include for: |
| Item coverage |  | (a) | selection and separation of materials; |
|  |  | (b) | loading into transport; |
|  |  | (c) | multiple handling of material; |
|  |  | (d) | keeping earthworks free of water; |
|  |  | (e) | haulage and deposition in temporary stockpiles including the provision of sites for stockpiles; |
|  |  | (f) | taking precautions to avoid damage to property, structures, drains, sewers, services, instrumentation and the like; |
|  |  | (g) | grading beds and trimming side slopes of watercourses and the like; |
|  |  | (h) | replacing acceptable material rendered unacceptable; |
|  |  | (i) | loosening or breaking up material before or in the process of excavation; |
|  |  | (j) | upholding the sides; |
|  |  | (k) | overbreak and making good; |
|  |  | (l) | trimming the bottom and sides of foundations; |
|  |  | (m) | protection of subgrade; |
|  |  | (n) | additional excavation the *Contractor* may require for working space, timbering, formwork or other temporary works and its subsequent backfilling with approved materials and compaction; |
|  |  | (o) | taking precautions to avoid damage to property, structures, drains, sewers, services, instrumentation and the like; |
|  |  | (p) | disposal of surcharge material. |
|  |  | **Extra Over for Excavation in Hard Material** |
| Units | 7 | The unit of measurement shall be: |
|  |  | (i) | extra over for excavation in hard material … … … cubic metre |
| Itemisation | 8 | Separate items shall be provided for extra over for excavation in hard material in accordance with General Principles and the following: |
|  |  | **Group** | **Feature** |  |
|  |  | 1 | 1 | Extra over for excavation in hard material |
|  |  | 2 | 1 | Stated materials |
|  |  | 3 | 1 | Stated aggregated volumes |
|  |  |  |  |  |
| **Extra Over for Excavation in Hard Material** | 9 | The items for extra over for excavation in hard material in accordance with the Preambles to the Price List General Directions include for: |
| Item coverage |  | (a) | site trials for removal; |
|  |  | (b) | splitting, breaking and the like; |
|  |  | (c) | cutting through reinforcement; |
|  |  | (d) | saw cutting and trimming; |
|  |  | (e) | removal of existing paved areas by course or layer, cleaning surfaces, planing, stepping out and treatment to bottoms of foundations. |
|  |  | **Deposition of Fill** |
| Units | 7 | The unit of measurement shall be: |
|  |  | (i) | deposition of fill … … … cubic metre |
| Itemisation | 8 | Separate items shall be provided for extra over for deposition of fill in accordance with General Principles and the following: |
|  |  | **Group** | **Feature** |  |
|  |  | 1 | 1 | Deposition of fill material arising from excavation |
|  |  | 3 | 1 | Stated aggregated volumes |
|  |  |  |  |  |
| **Deposition of Fill** | 9 | The items for extra over deposition of fill in accordance with the Preambles to the Price List General Directions include for: |
| Item coverage |  | (a) | depositing fill to slope away from vertical drainage layers and measures to prevent surface water entering such layers; |
|  |  | (b) | trimming and shaping to levels and contours; |
|  |  | (c) | compaction of fill and settlement from compaction of fill; |
|  |  | **Disposal of Material** |
| Units | 10 | The unit of measurement shall be: |
|  |  | (i) | disposal of material ... … … cubic metre |
| Measurement | 11 | The measurement of disposal of acceptable material shall be the net volume of excavated material. |
| Itemisation | 12 | Separate items shall be provided for disposal of material in accordance with the General Principles and the following: |
|  | **Group** | **Feature** |  |
|  | 1 | 1 | Disposal |
|  | 2 | 1234 | Topsoil (Class 5A)Unacceptable non-hazardous uncontaminated material - cleanUnacceptable non-hazardous uncontaminated material - roughUnacceptable contaminated non-hazardous material Class U1B |
|  | 3 | 1 | Stated aggregated volumes |
|  |  |  |
|  |  | **Note:** Clean – soil, granular or clay based.Rough – soil mixed with vegetation, concrete, brick or clayware |
| **Disposal of Material** | 13 | The items for disposal of material shall in accordance with the Preambles to Price List General Directions include for: |
| Item coverage |  | (a) | haulage and deposition in tips or recycling facilities off Site provided by the *Contractor*; |
|  |  | (b) | special measures for dealing with Classes U1B material; |
|  |  | (c) | multiple handling of material; |
|  |  | (d) | additional processing on or off site; |
|  |  | (e) | landfill tax. |
|  |  | **Imported Fill** |
| Units | 14 | The unit of measurement shall be: |
|  |  | (i) | imported fill ... … … cubic metre |
| Measurement | 15 | The measurement of imported acceptable fill shall be the net volume of compacted fill; |
|  |  | (a) | acceptable material, excluding topsoil Class 5A and acceptable material of a particular Class being both surplus to the requirements of the Contract for that class of material and which does not meet the requirements for acceptability for use elsewhere within the measured volume of compacted fill, excavated from within the Site and measured in this Series; |
|  |  | (b) | other stated classes of imported acceptable fill excluding topsoil Class 5B. |
| Itemisation | 16 | Separate items shall be provided for imported acceptable fill in accordance with the General Principles and the following: |
|  | **Group** | **Feature** |
|  | 1 | 1 Imported fill |
|  | 2 | 1 Stated classes or types2 Extra over imported material for filling in structures |
|  | 3 | 1 Stated aggregated volumes |
|  |  |
| **Imported Fill** |  17 | The items for imported fill shall in accordance with the Preambles to Price List General Directions include for: |
| Item coverage |  | (a) | protection of subgrade; |
|  |  | (b) | multiple handling of material; |
|  |  | (c) | keeping earthworks free of water; |
|  |  | (d) | complying with requirements and constraints on the sequence, timing and rate of deposition and filling, and equalisation of earth pressures; |
|  |  | (e) | complying with the special requirements for Class 3 material and other materials requiring special treatments; |
|  |  | (f) | complying with the particular requirements and constraints with regard to soil stabilisation, reinforced earth structures, strengthened embankments, anchored earth structures, corrugated steel buried structures and the like; |
|  |  | (g) | taking precautions to avoid damage to property, structures, sewers, drains, services, instrumentation and the like; |
|  |  | (h) | fill provided by the *Contractor* from sources outside the Site; |
|  |  | (i) | replacing acceptable material rendered unacceptable; |
|  |  | (j) | selection of material of stated Classes and layering or depositing in locations stated in the Contract; |
|  |  | (k) | depositing fill to slope away from vertical drainage layers and measures to prevent surface water entering such layers; |
|  |  | (l) | trimming and shaping to levels and contours; |
|  |  | (m) | compaction of fill and settlement from compaction of fill; |
|  |  | (n) | special measures for dealing with processed material. |
|  |  | **Geotextiles** |
| Units | 18 | The unit of measurement shall be: |
|  |  | (i) | geotextile ... ... … square metre |
| Measurement | 19 | The measurement of geotextile shall be the developed area of the geotextile ordered by the *Service Manager*. |
| Itemisation | 20 | Separate items shall be provided for geotextile in accordance with the General Principles and the following: |
|  |  | **Group** | **Feature** |  |
|  |  | 1 | 1 | Geotextile |
|  |  | 2 | 1 | Stated types |
|  |  |  |
| **Geotextile** | 21 | The items for geotextile shall in accordance with the Preambles to Price List General Directions include for: |
| Item coverage |  | (a) | cleaning, trimming, regulating and preparing surfaces; |
|  |  | (b) | laps; |
|  |  | (c) | measures to protect material; |
|  |  | (d) | cutting, jointing, sealing and fixing; |
|  |  | (e) | securing material in place; |
|  |  | (f) | complying with the requirements of strengthened earthworks. |
|  |  | **Topsoiling** |
| Units | 27 | The unit of measurement shall be: |
|  |  | (i) | supply and lay topsoil … … … cubic metre |
| Measurement | 28 | The measurement of topsoiling shall be the area of the surface to be topsoiled or volumes ordered by the *Service Manager.* |
| Itemisation | 29 | Separate items shall be provided for topsoiling in accordance with the General Principles and the following: |
|  |  | **Group** | **Feature** |  |
|  |  | 1 | 1 | Supply and lay topsoil |
|  |  | 2 | 1 | Stated aggregated areas |
|  |  |  |
| **Supply and Lay Topsoil** | 30 | The items for supply and lay topsoil shall in accordance with the Preambles to Price List General Directions include for: |
| Item coverage |  | (a) | the removal of debris; |
|  |  | (b) | imported topsoil. |
|  |  | (c) | excavation from stockpile; |
|  |  | (d) | loading into transport; |
|  |  | (e) | haulage, deposition, spreading, levelling and compaction; |
|  |  | (f) | trimming and shaping to levels and contours; |
|  |  | (g) | harrowing; |
|  |  | (h) | herbicide treatment; |
|  |  | (i) | supply of topsoil. |
|  |  | **Completion of Formation and Sub-formation** |
| Units | 32 | The unit of measurement shall be: |
|  |  | (i) | completion of formation, sub-formation ... … … square metre |
| Measurement | 33 | The measurement of completion of formation and sub-formation shall be the areas ordered by the *Service Manager*. |
| Itemisation | 34 | Separate items shall be provided for completion of formation and sub-formation in accordance with the General Principles and the following: |
|  |  | **Group** | **Feature** |  |
|  |  | 1 | 12 | Completion of sub-formationCompletion of formation |
|  |  | 2 | 1 | Stated aggregated areas |
|  |  |  |
| **Completion of Formation and Sub-formation** | 35 | The items for completion of formation and sub-formation shall in accordance with the Preambles to Price List General Directions include for: |
| Item coverage |  | (a) | removal of protective layer, mud and slurry; |
|  |  | (b) | compaction; |
|  |  | (c) | cleaning, trimming, regulating, making good and rolling; |
|  |  | (d) | cement bound materials; |
|  |  | (e) | excavation, processing, compaction of naturally occurring hard material; |
|  |  | (f) | measures to protect formation and sub-formation against deterioration or degradation. |

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| SERIES 700: PAVEMENTS |
|  |  |  |
|  |  | **Sub-base** |
| Units | 1 | The unit of measurement shall be: |
|  |  | (i) | sub-base … … … cubic metre |
| Measurement | 2 | The measurement of sub-base shall be the installed, compacted volume of sub-base measured to the dimensions stated or quantities ordered by the *Service Manager*. |
| Itemisation | 3 | Separate items shall be provided for sub-base in accordance with the General Principles and the following: |
|  |  | **Group** | **Feature** |  |
|  |  | 1 | 1 | Each group or type of sub-base. |
|  |  | 2 | 1 | In carriageway |
|  |  | 3 | 1234 | Not exceeding 5 cubic metresExceeding 5 but not exceeding 25 cubic metresExceeding 25 but not exceeding 100 cubic metresExceeding 100 cubic metres |
|  |  |  |
| **Sub-base** | 4 | The items for sub-base shall in accordance with the Preambles to Price List General Directions include for: |
| Item coverage |  | (a) | trial areas and trials; |
|  |  | (b) | making good after sampling and testing; |
|  |  | (c) | supply of the stated material; |
|  |  | (d) | protection of material in transit and while awaiting tipping; |
|  |  | (e) | grading, measuring, mixing and depositing materials; |
|  |  | (f) | spreading and compaction; |
|  |  | (g) | cleaning, preparing and working on or up to existing surfaces and features; |
|  |  | (h) | curing and protection; |
|  |  | (i) | edge support; |
|  |  | (j) | maintenance of surface; |
|  |  | (k) | taking measures to protect the subgrade, capping and sub-base from deterioration due to the ingress of water and the use of constructional plant; |
|  |  | (l) | taking measures to improve the subgrade, capping and sub-base from damage due to the *Contractor's* method of construction and choice of constructional plant; |
|  |  | (m) | shaping to cambers, falls and crowns; |
|  |  | (n) | provision of test certificates. |
|  |  | **Pavement** |
| Units | 5 | The unit of measurement shall be: |
|  |  | (i) | base course, binder course and surface course … … … square metre |
| Measurement | 6 | The measurement of the base course, binder course and surface course shall be calculated using the width of the top surface of the course. |
|  | 7 | The width of the top surface of the course shall be the width required by dimensions or ordered by the *Service Manager* and shall exclude sloping sides or edges. |
|  | 8 | No deductions shall be made for openings of 1 square metre or less. |
| Itemisation | 9 | Separate items shall be provided for base course, binder course and surface course in accordance with the General Principles and the following: |
|  |  | **Group** | **Feature** |  |
|  |  | 1 | 1 | Pavements |
|  |  | 2 | 1234 | Base courseBinder courseSurface CourseCoated chippings |
|  |  | 3 | 1 | Each material type |
|  |  | 4 | 1 | Stated PSV |
|  |  | 5 | 12 | Nominal thicknessesStated adjustment to nominal thickness |
|  |  | 6 | 1 | In contiguous areas exceeding 3,000 square metres |
|  |  |  |
| **Base Course, Binder Course and Surface Course** | 10 | The items for base course, binder and surface course shall in accordance with the Preambles to Price List General Directions include for: |
| Item coverage |  | (a) | trial areas and trials; |
|  |  | (b) | making good after sampling and testing; |
|  |  | (c) | supply of the stated material |
|  |  | (d) | protection of material in transit and while awaiting tipping; |
|  |  | (e) | designing and verifying mixes; |
|  |  | (f) | grading, measuring, reclaiming, mixing and depositing materials; |
|  |  | (g) | spreading and compacting; |
|  |  | (h) | cutting back, saw cutting, cleaning, preparing and working on or up to existing surfaces and features; |
|  |  | (i) | edge support; |
|  |  | (j) | waterproof and separation membranes; |
|  |  | (k) | chippings; |
|  |  | (l) | surface texturing; |
|  |  | (m) | making joints; |
|  |  | (n) | forming or sawing grooves, cleaning, grit blasting, priming, caulking, temporary and permanent sealing of joints; |
|  |  | (o) | shaping to cambers, falls, crowns and covers; |
|  |  | (p) | forming sockets, recesses, openings, and bays; |
|  |  | (q) | curing and protection; |
|  |  | (r) | protection and masking and unmasking or kerbs, drainage, channels, chamber covers, gully gratings, expansion joints, and the like; |
|  |  | (s) | maintenance of surfacing; |
|  |  | (t) | taking measures to protect and maintain the pavement from deterioration by the use of constructional plant and the ingress of water and other materials; |
|  |  | (u) | measures required for aftercare and opening the road to traffic; |
|  |  | (v) | painting vertical surfaces with bitumen; |
|  |  | (w) | grit to clause 935 AR. |
|  |  | **Regulating** |
| Units | 11 | The unit of measurement shall be: |
|  |  | (i) | regulating … … … tonne |
| Measurement | 12 | The tonnage certified by the *Service Manager* shall only be the material included on delivery tickets which are incorporated in the Permanent Works. Material in excess of those ordered by the *Service Manager* material used for any other purpose shall not be included within the certified tonnage. |
| Itemisation | 13 | Separate items shall be provided for regulating in accordance with the General Principles and the following: |
|  |  | **Group** | **Feature** |  |
|  |  | 1 | 1 | Each group or type of regulating |
|  |  | 2 | 123 | BaseBinderSurface Course |
| **Regulating** | 14 | The items for regulating shall in accordance with the Preambles to Price List General Directions include for: |
| Item coverage |  | (a) | base course, binder course and surface course; |
|  |  | (b) | supplying authorised copies of delivery tickets. |
|  |  | **Extra Over Asphalt Concrete Materials** |
| Units | 15 | The unit of measurement shall be: |
|  |  | (i) | extra over asphalt concrete materials … … … square metre |
| Measurement | 16 | The measurement of extra over asphalt concrete materials shall be the top surface area of the pavement ordered by the *Service Manager*. |
| Itemisation | 17 | Separate items shall be provided for extra over asphalt concrete materials in accordance with the General Principles and the following: |
|  |  | **Group** | **Feature** |  |
|  |  | 1 | 1 | Extra over asphalt concrete materials |
|  |  | 2 | 1 | For contiguous areas |
|  |  | 3 | 123 | Exceeding 150 but not exceeding 500 square metresExceeding 500 square metres but not exceeding 1,000 square metresExceeding 1,000 square metres but not exceeding 3,000 square metres |
|  |  |  |
| **Extra Over Asphalt Concrete Materials** | 18 | The items for extra over asphalt concrete materials shall in accordance with the Preambles to Price List General Directions include for: |
| Item coverage |  | (a) | additional costs and resources due to stated and designated quantities. |
|  |  | **Asphalt Reinforcement** |
| Units | 19 | The unit of measurement shall be: |
|  |  | (i) | asphalt reinforcement … … … square metre |
| Measurement | 20 | The measurement of asphalt reinforcement shall be calculated using the surface area of the works ordered by the *Service Manager*. Additional quantities due to overlap of reinforcing material shall not be measured. |
|  | 21 | No deductions shall be made for opening of 1 square metre or less. |
| Itemisation | 22 | Separate items shall be provided for asphalt reinforcement in accordance with the General Principles and the following: |
|  |  | **Group** | **Feature** |  |
|  |  | 1 | 1 | Asphalt reinforcement |
|  |  | 2 | 1 | Stated types |
|  |  | 3 | 12 | Not exceeding 1,000 square metresExceeding 1,000 square metres |
|  |  |  |
| **Asphalt Reinforcement** | 23 | The items for asphalt reinforcement shall in accordance with the Preambles to Price List General Directions include for: |
| Item coverage |  | (a) | trial areas and trials; |
|  |  | (b) | supply of stated material; |
|  |  | (c) | spreading and roiling deposited materials; |
|  |  | (d) | bond or tack coat; |
|  |  | (e) | measures required for aftercare and opening road to traffic; |
|  |  | (f) | overlaps and bonding; |
|  |  | (g) | surface preparation and treatment shall include bonding coat; |
|  |  | (h) | shrinkage. |
|  |  | **Bond or Tack Coat** |
| Units | 24 | The unit of measurement shall be: |
|  |  | (i) | bond or tack coat … … … square metre |
| Measurement | 25 | The measurement of bond or tack coat shall be the surface area to be coated as ordered by the *Service Manager*. |
| Itemisation | 26 | Separate items shall be provided for bond or tack coat in accordance with the General Principles and the following: |
|  |  | **Group** | **Feature** |  |
|  |  | 1 | 1 | Bond or tack coat |
|  |  | 2 | 1 | Stated materials |
|  |  | 3 | 1 | Stated rates of spread |
|  |  |  |
| **Bond or Tack Coat** | 27 | The items for bond or tack coat shall in accordance with the Preambles to Price List General Directions include for: |
| Item coverage |  | (a) | trial area and trials; |
|  |  | (b) | making good after sampling and testing; |
|  |  | (c) | designing and verifying mixes; |
|  |  | (d) | grading, measuring, mixing and depositing materials; |
|  |  | (e) | making joints; |
|  |  | (f) | cleaning surfaces; |
|  |  | (g) | protection and masking and unmasking or kerbs, drainage, channels, chamber covers, gully gratings, expansion joints, road studs, road markings and the like and obtaining clean markings; |
|  |  | (h) | cutting back, preparing and working on or up to adjacent faces, surfaces and features; |
|  |  | (i) | admixtures and additives. |
|  |  | **Joints**  |
| Units | 28 | The unit of measurement shall be: |
|  |  | (i) | cut back existing flexible pavement … … … linear metre |
|  |  | (ii) | saw cutting flexible pavement … … … linear metre |
| Measurement | 29 | The measurement of joints shall be the length of work ordered by the *Service Manager*.  |
|  | 30 | Cut back existing pavement shall be for work required to existing surfaces and include for saw cutting to form a vertical face. Saw cutting pavement shall only be measured as a separate item where specifically ordered by the *Service Manager*. |
|  | 31 | Cut back existing pavement shall not be used for temporary joints required in day to day operations as these are deemed to be temporary works. |
| Itemisation | 32 | Separate items shall be provided for joints in accordance with the General Principles and the following: |
|  |  | **Group** | **Feature** |  |
|  |  | 1 | 1 | Joints |
|  |  | 2 | 12 | Cut back flexible pavementSaw cutting flexible pavement |
|  |  | 3 | 1 | Not exceeding 300mm wide |
|  |  | 4 | 12 | Not exceeding 50mm deepExceeding 50mm but not exceeding 100mm deep |
|  |  | Group 3 Feature 1 shall only apply to Group 2 Feature 1. |
| **Cut Back Flexible Pavements** | 33 | The items for cut back flexible pavements shall in accordance with the Preambles to Price List General Directions include for: |
| Item coverage |  | (a) | loading into transport, upholding the sides and keeping the earthworks free of water; |
|  |  | (b) | taking precautions to avoid damage to property, structures, existing sewers, drains and services; |
|  |  | (c) | multiple handling of excavated materials; |
|  |  | (d) | disposal; |
|  |  | (e) | coating vertical face with bitumen; |
|  |  | (f) | saw cut full depth. |
| **Saw Cutting Flexible Pavements** | 34 | The items for saw cutting flexible pavements shall in accordance with the Preambles to Price List General Directions include for: |
| Item coverage |  | (a) | saw cutting to full depths; |
|  |  | (b) | coating vertical face with bitumen. |
|  |  | **Cold Milling (Planing)** |
| Units | 35 | The unit of measurement shall be: |
|  |  | (i) | cold milling … … … square metre |
|  |  | (ii) | Extra over, Cold Milling bituminous carriageway … … … cubic metre  |
|  |  | (iii) | Extra over, all items of cold milling for Fine/Micro milling finish … … … square metre  |
| Measurement | 36 | The measurement of cold milling shall be the quantities ordered by the *Service Manager*. No deductions shall be made for openings of 1 square metres or less. |
|  | 37 | The measurement for extra over cold milling for milling in concrete and milling exceeding 150mm deep shall be the volume (prior to excavation) of relevant material. |
|  | 38 | The measurement for extra over cold milling for disposal of coal tar contaminated planings shall be the volume (prior to excavation) of material sent for disposal supported by certified delivery tickets. This shall only apply to planings shown to be contaminated by coal tar by a PAC marker spray test or WAC test, carried out on core samples from the site. |
| Itemisation | 39 | Separate items shall be provided for cold milling in accordance with the General Principles and the following: |
|  |  | **Group** | **Feature** |  |
|  |  | 1 | 1 | Cold milling bituminous carriageway |
|  |  | 2 | 1 | Stated thicknesses or depths |
|  |  | 3 | 1234 | Exceeding 50 square metres but not exceeding 250 square metresExceeding 250 square metres but not exceeding 500 square metresExceeding 500 square metres but not exceeding 1,000 square metresExceeding 1,000 square metres but not exceeding 3,000 square metresExceeding 3,000 square metres |
|  |  |  |
| Itemisation | 40 | Separate items shall be provided for extra over, Cold Milling bituminous carriageway in accordance with the General Principles and the following: |
|  |  | **Group** | **Feature** |  |
|  |  | 1 | 1 | Extra over, cold milling bituminous carriageway, for |
|  |  | 2 | 123 | Disposal of coal tar contaminated planingsCold milling in concreteCold milling exceeding 150mm deep |
|  |  |  |
| Itemisation | 41 | Separate items shall be provided for extra over, Cold Milling bituminous carriageway for fine/micro milling finish in accordance with the General Principles and the following: |
|  |  | **Group** | **Feature** |  |
|  |  | 1 | 1 | Extra over, cold milling bituminous carriageway |
|  |  | 2 | 1 | For fine/micro milling finish |
|  |  | 3 | 1234 | Exceeding 250 square metres but not exceeding 500 square metresExceeding 500 square metres but not exceeding 1,000 square metresExceeding 1,000 square metres but not exceeding 3,000 square metresExceeding 3,000 square metres |
|  |  |  |
| **Planing** | 42 | The items for cold milling shall in accordance with the Preambles to Price List General Directions include for: |
| Item coverage |  | (a) | re-shaping and rolling; |
|  |  | (b) | shaping to cambers, falls and crowns; |
|  |  | (c) | multiple handling of material; |
|  |  | (d) | loading into transport; |
|  |  | (e) | working around drainage channels, covers, gulley gratings, expansion joints and the like; |
|  |  | (f) | ramps; |
|  |  | (g) | removing road studs; |
|  |  | (h) | surface preparation and cleaning. |
|  |  | (i) | transport of material |
|  |  | (j) | recycling or disposal of material; |
|  |  | (k) | the supply and use of appropriate dust suppression equipment and water; |
|  |  | (l) | milling plant teeth and other disposable/wear items; |
| **Extra Over Cold Milling**  | 43 | The items for extra over Cold Milling shall in accordance with the Preambles to Price List General Directions include for: |
| Item coverage |  | (a) | disposal of coal tar contaminated planings at a suitable licenced waste disposal facility |
|  |  | (b) | additional costs and resources needed for milling concrete carriageways  |
|  |  | (c) | additional costs and resources needed for milling below 150mm depth |
|  |  | (d) | any surveys or testing required to allow safe milling below 150mm depth |
|  |  | (e) | additional costs and resources needed for fine/micromilling |
|  |  | **High Friction Surfacing** |
| Units | 44 | The unit of measurement shall be: |
|  |  | (i) | establishment of works crew and equipment … … … number |
|  |  | (ii) | high friction surfacing … … … square metre |
|  |  | (iii) | extra over high friction surfacing … … … square metre |
|  |  | (iv) | hand applied high friction surfacing patch repair … … … square metre |
| Measurement | 45 | Establishment of equipment for high friction surfacing shall be measured once for task order |
|  |  | A package of work is a clearly defined schedule of work of a variable extent and duration at a specific location on a single task order. |
|  | 46 | The measurement of high friction surfacing shall be the area of the top surface of the work ordered by the *Service Manager*. |
|  | 47 | No deductions shall be made for openings of 1 square metre or less. |
| Itemisation | 48 | Separate items shall be provided for surface treatments in accordance with the General Principles and the following: |
|  |  | **Group** | **Feature** |  |
|  |  | **1** | **1** | **High friction surfacing** |
|  |  | **2** | **1** | **Stated types** |
|  |  | **3** | **1****2****3****4** | **Establishment****Not exceeding 100 square metres****Exceeding 100 square metres but not exceeding 250 square metres****Exceeding 250 square metres** |
|  |  |  |
| Itemisation | 49 | Separate items shall be provided for extra over high friction surfacing in accordance with the General Principles and the following: |
|  |  | **Group** | **Feature** |  |
|  |  | **1** | **1** | **Extra over high friction surfacing** |
|  |  | **2** | **1** | **For colours other than grey** |
|  |  | **3** | **1****2****3** | **Red****Buff****Green** |
|  |  |  |
| **Establishment** | 51 | The items for establishment shall in accordance with the Preambles to Price List General Directions include for: |
| Item coverage |  | (a) | provision and setting up of equipment and works crew on sites; |
|  |  | (b) | maintaining equipment; |
|  |  | (c) | removing equipment upon completion. |
|  |  |  |
| **High Friction Surfacing** | 52 | The items for high friction surfacing shall in accordance with the Preambles to Price List General Directions include for: |
| Item coverage |  | (a) | provision and supplying trial areas, trials, samples and site visit; |
|  |  | (b) | making good after sampling; |
|  |  | (c) | storing, handling or materials; |
|  |  | (d) | supplying, spreading and rolling deposited materials; |
|  |  | (e) | assessment of the site, designing and verifying of the high friction surfacing |
|  |  | (f) | measures required for aftercare and opening to traffic. |
|  |  | (g) | masking of road markings, ironwork or other features |
| **Extra Over high friction surfacing** | 53 | The items for extra over high friction surfacing shall in accordance with the Preambles to Price List General Directions include for: |
| Item coverage |  | (a) | additional costs and resources needed for high friction surfacing in the appropriate colour |
|  |  | **Crack Repairs and Joint Sealants** |
| Units | 94 | The unit of measurement shall be: |
|  |  | (i) | establishment of works crew and equipment… … … number |
|  |  | (ii) | Crack repair/joint sealant… … … metre |
| Measurement | 95 | The measurement of crack repair/joint sealant shall be the linear length of the treatment ordered by the service manager |
|  |  | Establishment of equipment for crack repair/joint sealant shall be measured once for each task order. |
|  |  | A package of work is a clearly defined schedule of work of a variable extent and duration at a specific location on a single task order. |
| Itemisation | 96 | Separate items shall be provided for crack repair/joint sealant in accordance with the General Principles and the following: |
|  |  | **Group** | **Feature** |  |
|  |  | 1 | 12 | Establishment of works crew and equipmentCrack repairs/joint sealant |
|  |  | 2 | 1 | Stated type of material |
|  |  | 3 | 123 | Not exceeding 50mExceeding 50m but not exceeeding 250mExceeding 250m |
|  |  |  |
| **Crack Repairs and Joint Sealants** | 97 | The items for crack repairs/joint sealants shall in accordance with the Preambles to Price List General Directions include for: |
| Item coverage |  | (a) | sub-base, formation and sub-formation; |
|  |  | (b) | scarifying,milling and scabbling; |
|  |  | (c) | excavation of unacceptable and hard material; |
|  |  | (d) | disposal of materials; |
|  |  | (e) | supply, laying and application of a suitable BBA HAPAS approved joint sealing/crack repair material |
|  |  | (f) | supply, spreading, embedding and rolling surface aggregate |
|  |  | (g) | tack coat and bond coat; |
|  |  | (h) | curing, measures required for aftercare and opening the road to traffic; |
|  |  | (i) | provision of test certificates |
|  |  | **Insitu Recycling** |
| Units | 94 | The unit of measurement shall be: |
|  |  | (i) | establishment of works crew and equipment… … … number |
|  |  | (ii) | insitu recycling … … … metre |
|  |  | (iii) | binder % adjustment … … … percentage |
|  |  | (iv) | thickness adjustment … … … millimetres |
|  |  | (v) | work in urban areas … … … square metre |
|  |  | (vi) | site investigation trial pits … … … number |
| Measurement | 95 | The measurement of insitu recycling shall be the top surface area of the treatment ordered by the service manager. |
|  |  | Establishment of equipment for crack repair/joint sealant shall be measured once for each task order. |
|  |  | A package of work is a clearly defined schedule of work of a variable extent and duration at a specific location on a single task order. |
|  |  | For the purposes of this measure, rural areas shall be defined as lengths of road where less than 10% of the total length of carriageway edge has kerbs, dropped kerbs, side roads or other private accesses, where the finished level of the works must match the existing road levels. Sites with more than 10% shall be classed as urban for the purposes of this measure. |
|  |  | The measured thickness shall be the total nominal, completed and compacted thickness of the HMB base, rounded up to the nearest 25cm. |
|  |  | The weight of the binder shall be measured as the proportion of the mass of the completed, compacted HBM base which consists of the pre mass of the binder. The mass of water present in the base before pulverisation/mixing and that added to activate the binder shall not be included in this measure.  |
|  |  | Site investigation trial pits shall include all separate tests and samples taken from within one single trial pit. |
| Itemisation | 96 | Separate items shall be provided for insitu recycling in accordance with the General Principles and the following: |
|  |  | **Group** | **Feature** |  |
|  |  | 1 | 12 | Establishment of works crew and equipmentInsitu recycling |
|  |  | 2 | 1 | Stated quantities |
|  |  | 3 | 1234 | Extra over for binder % adjustmentExtra over for thickness adjustmentExtra over for work in urban areasExtra over for site investigation trial pits |
|  |  |  |
| **Establishment of Works Crew and Equipment** | 97 | The items for insitu recycling shall in accordance with the Preambles to Price List General Directions include for: |
| Item coverage |  | (a) | supplying, maintaining and removing works crew and equipment; |
|  |  | (b) | necessary surveys to determine location and depths of utilities and privately owned services; |
|  |  | (c) | design of the HBM base, based on results of site testing data. |
| **Insitu Recycling** | 97 | The items for insitu recycling shall in accordance with the Preambles to Price List General Directions include for: |
| Item coverage |  | (a) | work around ironwork and other restrictions; |
|  |  | (b) | pulverisation; |
|  |  | (c) | supply and application of binder; |
|  |  | (d) | mixing; |
|  |  | (e) | supply and application of suitable quantities of water; |
|  |  | (f) | grading/profiling; |
|  |  | (g) | rolling and compacting |
|  |  | (h) | grit sealing |
|  |  | (i) | removal and disposal of any surcharge of bulked material |
| **Extra Over for Binder Percentage Adjustment** | 97 | The items for extra over for binder percentage adjustment shall in accordance with the Preambles to Price List General Directions include for: |
| Item coverage |  | (a) | additional costs, resources and material required to different binder content specified in task order. |
| **Extra Over for Thickness Adjustment** | 97 | The items for extra over for thickness adjustment shall in accordance with the Preambles to Price List General Directions include for: |
| Item coverage |  | (a) | additional costs, resources and material due to different HBM base thickness specified in task order |
| **Extra Over for Works in Urban Area** | 97 | The items for extra over for works in urban area shall in accordance with the Preambles to Price List General Directions include for: |
| Item coverage |  | (a) | additional costs, resources and material due to works in urban area requiring additional level control due to need to match existing levels |
| **Extra Over for Site Investigation Trial Pits** | 97 | The items for extra over for site investigation trial pits shall in accordance with the Preambles to Price List General Directions include for: |
| Item coverage |  | (a) | digging and reinstating trial pits as specified in the task order; |
|  |  | (b) | site testing of sufficient detail to permit a detailed HBM base design to be produced; |
|  |  | (c) | collecting, storing, transporting and collating samples of sufficient size to allow testing. |
|  |  | **Speed Humps/Cushions** |
| Units | 94 | The unit of measurement shall be: |
|  |  | (i) | round top/flat top hump and speed cushion … … … square metre |
| Measurement | 95 | The measurement of speed humps/cushions shall be the top surface area of the relevant material ordered by the service manager |
| Itemisation | 96 | Separate items shall be provided for speed humps/cushions in accordance with the General Principles and the following: |
|  |  | **Group** | **Feature** |  |
|  |  | 1 | 1 | Stated type of material |
|  |  | 2 | 1 | Stated quantity |
|  |  |  |
| **Speed Humps/Cushios** | 97 | The items for speed humps/cushions shall in accordance with the Preambles to Price List General Directions include for: |
| Item coverage |  | (a) | saw cutting; |
|  |  | (b) | milling; |
|  |  | (c) | supply, laying and compaction of specified material; |
|  |  | (d) | disposal of waste materials; |
|  |  | (e) | tack/bond coat; |
|  |  | (f) | sealing joints; |
|  |  | (g) | profiling/shaping of material to provide correct shape; |
|  |  | (h) | curing, measures required for aftercare and opening the road to traffic; |

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| SERIES 1200: TRAFFIC SIGNS AND ROAD MARKINGS |
|  |  | **Road Markings** |
| Units | 23 | The unit of measurement shall be: |
|  |  | (i) | establishment of road marking removal gang and equipment or establishment of road marking application gang and equipment per ordered package of works … … … number |
|  |  | (ii) | removal of existing road markings … … … square metre |
|  |  | (iii) | permanent road markings to a specified width ... ... … linear metre |
|  |  | (iv) | permanent road markings solid areas ... ... … square metre |
|  |  | (v) | permanent road markings of triangles, circles with enclosing arrows, arrows, kerb markings, symbols, letters and numerals ... … … number |
|  |  | (vi) | extra over for road marking for drying of existing surface … … … square metre |
| Measurement | 24 | The establishment of road marking removal gang and equipment or establishment of road marking application gang and equipment shall only be measured once for each package of work. |
|  | 25 | A package of work is a clearly defined schedule of work of a variable extent and duration at a specific location on a single task order. |
|  | 26 | The marking and removal of solid areas shall only be measured for the solid infilling between converging lines; the enclosing lines themselves shall be measured as lines. |
|  | 27 | In the case of intermittent lines the measurement shall be of the marks only. Double lines shall be measured as two single lines. |
|  | 28 | Diagonal lines between double lines and short transverse lines at the ends of any longitudinal lines shall be measured with the lines of which they form part. |
|  | 29 | Ancillary lines shall include lines forming hatched areas, chevrons, zigzag lines, boxed areas and lines enclosing boxed areas. In the case of hatched areas and chevrons the enclosing lines shall be measured as the longitudinal line of which they form part. The measurement of zigzag lines shall include any transverse or longitudinal lines at their ends. |
|  | 30 | The measurement of circles with enclosing arrows (mini roundabouts) shall be for the complete marking, the external diameter of the circle being stated. |
|  | 31 | Kerb markings shall be measured as a single item irrespective of the number of lines forming any one marking. |
|  | 32 | Each letter or numeral shall be separately measured with all letters or numerals grouped together according to height. |
|  | 33 | Symbols shall be measured separately and grouped together according to size. |
| Itemisation | 34 | Separate items shall be provided for road markings in accordance with the General Principles and the following: |
|  |  | **Group** | **Feature** |  |
|  |  | 1 | 12 | Removal of existing road markingsPermanent road markings |
|  |  | 2 | 12 | Establishment of road marking removal equipmentEstablishment of road marking application equipment |
|  |  | 3 | 1 | Stated materials, sizes or types |
|  |  | 4 | 1 | Extra over for road marking for drying of existing surface |
|  |  |  |
| **Removal of Road Markings** | 35 | The items for the removal of road markings shall in accordance with the Preambles to Price List General Directions include for: |
| Item coverage |  | (a) | disposal of material; |
|  |  | (b) | reinstatement of existing surfaces; |
|  |  | (c) | cleaning of surfaces; |
|  |  | (d) | partial or complete removal of marking; |
|  |  | (e) | consumable media such as (but not limited to) shot, grit, sand and water. |
| **Road Markings** | 36 | The items for road markings shall in accordance with the Preambles to Price List General Directions include for: |
| Item coverage |  | (a) | cleaning, brushing and drying surfaces (except where drying is specifically instructed by the *Service Manager*); |
|  |  | (b) | application of the marking materials including the incorporation of specified reflecting medium; |
|  |  | (c) | thinners, primers and tack coats; |
|  |  | (d) | apostrophes in the case of letters and numerals; |
|  |  | (e) | markings down the face of kerbs; |
|  |  | (f) | adhesives and two part materials; |
|  |  | (g) | setting out; |
|  |  | (h) | sampling and testing; |
|  |  | (i) | time required for cooling, drying and/or setting of road marking materials. |
|  |  | **Road Studs** |
| Units | 37 | The unit of measurement shall be: |
|  |  | (i) | establishment of road stud application equipment … … … number |
|  |  | (i) | road studs ... ... … number |
| Measurement | 38 | The establishment of road stud application equipment shall only be measured once for each package of work. |
|  | 39 | A package of work is a clearly defined schedule of work of a variable extent and duration at a specific location on a single task order. |
| Itemisation | 40 | Separate items shall be provided for road studs in accordance with the General Principles and the following: |
|  |  | **Group** | **Feature** |  |
|  |  | 1 | 1234 | Establishment of road stud application equipmentUni-directional studsBi-directional studsPedestrian crossing studs |
|  |  | 2 | 1 | Stated sizes, types. |
|  |  |  |
| **Road Studs** | 41 | The items for road studs shall in accordance with the Preambles to Price List General Directions include for: |
| Item coverage |  | (a) | cutting or forming holes; |
|  |  | (b) | adhesives and grout; |
|  |  | (c) | reinstatement of surfaces; |
|  |  | (d) | disposal of material. |

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| SERIES 1500: COMMUNICATIONS |
|  |  | **Loop Detectors** |
| Units | 23 | The unit of measurement shall be: |
|  |  | (i) | establishment of loop detector works crew and equipment per ordered package of works … … … number |
|  |  | (ii) | loop detector installation … … … number |
| Measurement | 24 | The establishment of road marking removal gang and equipment or establishment of road marking application gang and equipment shall only be measured once for each package of work. |
|  | 25 | A package of work is a clearly defined schedule of work of a variable extent and duration at a specific location on a single task order. |
|  |  | System D loop detectors shall be measured as individual detectors |
|  |  | Speed loops shall be measured as sets of two detectors installed longitudinally from one another. |
|  |  | All other loop detectors shall be measured as individual detectors. |
| Itemisation | 34 | Separate items shall be provided for road markings in accordance with the General Principles and the following: |
|  |  | **Group** | **Feature** |  |
|  |  | 1 | 1 | Loop detector installation |
|  |  | 2 | 1 | Establishment of loop detector works crew and equipment |
|  |  | 3 | 1 | Stated loop types |
|  |  | 4 | 1 | Extra over for clearing blocked under kerb ducts. |
|  |  |  |
| **Loop Detector Installation** | 35 | The items for the loop detector installation shall in accordance with the Preambles to Price List General Directions include for: |
| Item coverage |  | (a) | loop detector installation; |
|  |  | (b) | feeder to connection pit; |
|  |  | (c) | connection with controller within junction pit; |
|  |  | (d) | loop electrical testing and certification; |
|  |  | (e) | provision of test results and certification to overseeing organisation; |
|  |  | (f) | cleaning and sweeping road surface. |
|  |  | (g) | additional costs, resources and equipment needed to install loop detectors through high friction surfacing or within concrete carriageways. |
| **Extra Over for Clearing of Blocked Underkerb Ducts** | 36 | The items for extra over for clearing of blocked underkerb ducts shall in accordance with the Preambles to Price List General Directions include for: |
| Item coverage |  | (a) | all additional works, costs, resources and equipment required to clear/unblock existing blocked underkerb ducts to permit loop detector connection and commissioning.  |