

SCHEDULE 2 PART 1

METHOD OF MEASUREMENT

CONTENTS	Page No.
CHAPTER I	1
Definitions	1
CHAPTER II	3
General Principles	3
CHAPTER III	5
Preparation of Schedule of Rates	5
Preambles to Schedule of Rates and Prices	5
SERIES 100: PRELIMINARIES	21
Temporary Accommodation	21
Vehicles for the Overseeing Organisation	21
Communication System for the Overseeing Organisation	21
Operatives for the Overseeing Organisation	21
Information Boards	21
Traffic Safety and Management	21
Temporary Diversion of Traffic	21
Recovery Vehicles	21
Mobilisation	22
SERIES 200: SITE CLEARANCE	25
Site Clearance	25
SERIES 300: FENCING	29
Fencing, Gates and Stiles	29
Repairs to Existing Fencing – Renew Components	30
SERIES 400: ROAD RESTRAINT SYSTEMS (VEHICLE AND PEDESTRIAN)	33
Safety Barriers and Transitions	33
Terminals	33
Reconstruction of Concrete Ramps at Terminal Section	33
Connections to Existing Systems	34
Vehicle Parapets	34
Pedestrian Parapets and Pedestrian Guardrails	35
Remove from Store and Re-erect Safety Barriers, Vehicle Parapets, Pedestrian Parapets, Pedestrian Guardrails and Pedestrian Handrail	36
Concrete Foundation and Socketed Concrete Foundation Volume 0.25m ³ to Re-erected Post	38
Additional Concrete in Foundations to Re-erected Posts	38
Renew Wire Rope Safety Fence Components	41
Renew Standard Length Component Rope and Check Rope	41
Damage to Crown Property: Repairs to Safety Barriers, Vehicle Parapets, Pedestrian Parapets and Pedestrian Guardrails	42
Painting of Safety Barriers, Pedestrian Guardrail and Handrail	43

Temporary Safety Barriers	43
SERIES 500: DRAINAGE AND SERVICE DUCTS	45
Drains and Service Ducts (Excluding Filter Drains, Narrow Filter Drains and Fin Drains)	45
Filter Drains	45
Renewal, Raising or Lowering of Covers and Gratings on Existing Chambers and Gullies	47
Renewal of Rodding Eyes	47
Drain Surveys	49
Closed Circuit Television Drain Surveys	50
SERIES 600: EARTHWORKS	53
Excavation	53
Siding out of Carriageways, Footways and Paved Areas	55
SERIES 700: PAVEMENTS	57
Sub-base	57
Pavement	57
Removal of High Friction Surfacing	59
Reinstatement of Paved Areas	60
Repairs and Patching to Carriageways	60
Pavement Reinforcement	60
SERIES 1100: KERBS, FOOTWAYS AND PAVED AREAS	63
Kerbs, Channels, Edgings, Combined Kerbs and Channels, Combined Drainage and Kerb Blocks, and Linear Drainage Channel Systems	63
Remove from Store or from where previously Set Aside and Relay Paving Flags and Blocks	64
Cold Milling (Planing)	66
Reinstatement of Paved Areas	66
Patching of Footways and Paved Areas	66
SERIES 1200: TRAFFIC SIGNS AND ROAD MARKINGS	69
Traffic Signs Faces	69
Traffic Sign Posts and Passively Safe Traffic Sign Posts	70
Traffic Sign Bases	72
Sign Lighting Units	73
Sign Bracket Arms	74
Remove from Store and Re-erect Traffic Sign Faces, Traffic Sign Posts, Sign Lighting Units, Sign Bracket Arms	75
Road Markings	77
Road Studs	78
Marker Posts	78
Permanent Bollards	79
Remove from Store and Re-erect Bollards	79
Passively Safe Flexible Chevrons	80
Location Lettering and Marking of Existing Traffic Signs	80
Snow Poles	81

SERIES 1300: ROAD LIGHTING COLUMNS AND BRACKETS, CCTV MASTS AND CANTILEVER MASTS	83
Road Lighting Columns and Brackets, Wall Mountings, CCTV Masts and Cantilever Masts	83
Luminaires	85
Replace Lamps	86
Marking and lettering of Existing Road Lighting Columns	87
 SERIES 1400: ELECTRICAL WORK FOR ROAD LIGHTING AND TRAFFIC SIGNS	 89
Locating Buried Road Lighting and Traffic Signs Cable	89
Trench for Cable or Duct	89
Renew Terminations	89
Chambers	91
Disconnection of Cables	91
Equipotential Bonding	92
Temporary Overhead Feed to Road Lighting Units	93
 SERIES 1500: MOTORWAY COMMUNICATIONS	 95
Locating Buried Communications Cable	95
Loop Detector Installations	95
 SERIES 1700: STRUCTURAL CONCRETE	 97
Precast Concrete	97
Structural Concrete Repairs	97
Formwork for Concrete Repairs	98
Steel Reinforcement for Concrete Repairs	98
Backfilling to Structures with Foamed Concrete	99
 SERIES 2000: WATERPROOFING FOR STRUCTURES	 101
Waterproofing	101
Removal of Existing Waterproofing	101
 SERIES 2300: BRIDGE EXPANSION JOINTS AND SEALING OF GAPS	 103
Bridge Deck Expansion Joints	103
Sealing of Gaps	105
 SERIES 2400: BRICKWORK, BLOCKWORK AND STONEMWORK	 107
Brickwork	107
Remove from Store and Relay Brickwork, Blockwork or Stonework	107
Rebedding of Precast Concrete Copings	107
Repointing	108
 SERIES 3000: LANDSCAPE AND ECOLOGY	 111
Ground Preparation and Cultivation	111
Planting	111
Mulching	111
Weed Control	111
Maintenance of Established Trees and Shrubs	111
Maintenance of Established Wildflower Areas, Areas of Nature Conservation Value and Ornamental Planting Areas	113
Tubes, Guards and Ties and Removal of Tubes, Guards and Ties	113

SERIES 3300: SITE INVESTIGATION	115
Rotary Coring of Existing Pavement	115
Rotary Coring of Existing Structures	116
Inspection Patches on Bridge Structures	116
Structural Investigations	117
Falling Weight Deflectometer Tests	118
Dynamic Cone Penetrometer Tests	119
 SERIES 5000: MAINTENANCE PAINTING OF STEELWORK	 121
Surface Preparation and Protective System	121
 SERIES 6100: CORE OPERATIONS	 123
 SERIES 6200: PROFESSIONAL SERVICES	 137
Professional Services	137
 SERIES 6300: PROCUREMENT AND MANAGEMENT OF WORKS CONTRACTS	 139
Procurement and Management of Works Contracts	139
 SERIES 6400: ADJUSTMENT TO SCHEDULE OF RATES AND PRICES	 143
Adjustment for Time Band	143
Adjustment for Works Within and Below Non-Tidal Open Water or Tidal Water	144
 SERIES 6500: TIME WORK SCHEDULE	 147
Time Work Schedule	147
Labour	147
Plant	150
Materials	151
Supplementary Services	153
 SERIES 6700: CHANGES IN SCOPE OF OPERATIONS	 155
Changes in the Extent of the Unit Impacting on Core Operations Items in Series 6100	155
 SERIES 6800: MISCELLANEOUS	 157
Anti-Graffiti Coatings	157
Vehicle Restraint Systems	157
Drainage	158
Cleaning of Street Furniture	159
Landscape Maintenance	160
Grass Cutting	160
Hedge Trimming	161
Road Cleaning and Clearance	161
Litter Clearance	163
 SERIES 7000: LUMP SUM PRICES	 165
Payment of Accounts	165
Lump Sum Quotations	166

SCHEDULE 2 PART 1

METHOD OF MEASUREMENT

CHAPTER I

Definitions

Definitions given in Volume 4 Section 1 Chapter I of the Manual of Contract Documents for Highway Works hereby apply unless amended otherwise and as stated below.

Delete all references to "Bill of Quantities" and replace with "Schedule of Rates and Prices".

Delete all references to "Contractor" and replace with "Operating Company".

Delete sub paragraph 1(c) and insert the following sub paragraph 1(c):

1(c) "Schedule of Rates and Prices" means a list of items giving brief identifying descriptions.

SCHEDULE 2 PART 1

METHOD OF MEASUREMENT

CHAPTER II

General Principles

General Principles given in Volume 4 Section 1 Chapter II of the Manual of Contract Documents for Highway Works hereby apply except as stated below.

Delete all references to "Bill of Quantities" and replace with "Schedule of Rates and Prices".

Delete all references to "Contractor" and replace with "Operating Company".

SCHEDULE 2 PART 1

METHOD OF MEASUREMENT

CHAPTER III

Preparation of Schedule of Rates

Preparation of Schedule of Rates shall be in accordance with Preparation of Bills of Quantities given in Volume 4 Section 1 Chapter III of the Manual of Contract Documents for Highway Works apply unless amended otherwise and as stated below.

Delete all references to "Bill of Quantities" and replace with "Schedule of Rates and Prices".

Delete all references to "Contractor" and replace with "Operating Company".

Preambles to Schedule of Rates and Prices

Delete preambles set down in Volume 4 Section 1 Chapter III of the Manual of Contract Documents for Highway Works and replace with the following:

- General Directions
- 1 The Schedule of Rates and Prices has been prepared generally in accordance with the principles used in the Method of Measurement for Highway Works published by The Stationery Office as Section 1 of Volume 4 of the Manual of Contract Documents for Highway Works as amended by this Part of this Schedule.

The relevant publication date of each page of the Method of Measurement for Highways Works is given in the Schedule of Pages and Relevant Publication Dates.
 - 2 In the Schedule of Rates and Prices 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 "Item coverage" in Chapter IV of the Method of Measurement for Highway Works, these Preambles and the amendments to the Method of Measurement immediately following these Preambles. The nature and extent of the work and, where relevant, its frequency of execution, is to be ascertained or assessed by reference to the Scottish Ministers' requirements and the Conditions of Contract. The rates and prices entered in the Schedule of Rates and Prices shall be deemed to be the full inclusive value of the work covered by the several items including the following, unless expressly stated otherwise:
 - (i) Labour and costs in connection therewith.
 - (ii) The supply of materials, goods, storage and costs in connection therewith including delivery to anywhere within the Unit. Taking delivery of materials and goods supplied by others, unloading, storage, and costs in connection therewith.
 - (iii) Plant and costs in connection therewith.

- (iv) Fixing, erecting and installing or placing of materials and goods in position.
- (v) Temporary works including design of temporary works.
- (vi) The effect on the phasing of the Operations or any element of the Operations to the extent set forth or reasonably implied.
- (vii) General obligations, liabilities and risks involved in the execution of the Operations set forth or reasonably implied in the documents on which the Tender is based.
- (viii) Establishment charges including temporary accommodation at individual Site Operations and all accommodation, depots, stores and other similar facilities required by the Operating Company for the duration of this Contract, overheads and profit.
- (ix) Waste.
- (x) Testing and measuring in accordance with this contract including supplying results of tests and measurements including providing test certificates.
- (xi) Attendance and transport for sampling and testing carried out by the Overseeing Organisation.
- (xii) Checking, inspecting, examining, measuring and verifying goods, materials and workmanship including supplying results, reports and certificates.
- (xiii) Traffic safety and traffic management measures as required by this contract.
- (xiv) All travelling connected with Operations.
- (xv) Complying with the Quality Management requirements of this contract and providing certificates of conformity.
- (xvi) Providing land for plant, stores, working space, borrow pits or spoil dumps required.
- (xvii) Communication system.
- (xviii) Insurance provision.
- (xix) All obligations activities duties and responsibilities of the Operating Company set out in this Contract commencing at the end of the Final Annual Period until such time as such obligations activities duties and responsibilities have been executed by the Operating Company.
- (xx) Complying with Schedule 3 Parts 1 and 3.
- (xxi) Vehicles, communication system and operatives for the Overseeing Organisation.

		(xxii) Consultation approvals consents and any other thing required from to or with the appropriate bodies to obtain access and method of working for rebuilding including but not limited to Historic Scotland to enable timescales for rebuilding to be achieved.
		(xxiii) Site Operations information signs and/or boards on all Sites.
		(xxiv) Access provision maintenance and removal including design of accesses.
		(xxv) Temporary diversion of traffic.
Mobilisation	3	Items for mobilisation are contained within Series 100 Preliminaries sub series 03.
Measurement	4	<p>The measurement of quantity against each item shall be computed from the dimensions stated in the Design or physically measured in the absence of such dimensions unless stated otherwise in the Method of Measurement.</p> <p>The measurement of quantity against each item shall be computed net to the nearest whole number, except for:</p> <ol style="list-style-type: none"> 1. measurement of tonnage, hectares and kilometres in which cases the quantities shall be to three decimal places, 2. measurement of hours for which the quantity shall be to the nearest quarter hour, 3. measurement of mobilisation items which shall be a % of the item sum to the nearest whole percentage point, 4. measurement of months shall be to the nearest whole percentage point. <p>The Schedule of Rates and Prices contains adjustment items.</p> <p>The purpose of the adjustment item is to vary the content of the original item to which the adjustment applies.</p> <p>Separate item coverage has not been included in the amendments to the method of measurement for adjustment items.</p> <p>Where adjustment items have been included in the Schedule of Rates and Prices they shall be deemed to include the same features and item coverage of the original Schedule of Rates and Prices item to which they apply.</p>
Pricing of Items	5	Each individual item shall have a rate or price entered against it, except where noted below.

Rates and prices shall be expressed to two decimal places. The minimum value to be assigned to the items in the Schedule of Rates and Prices shall be £0.01, except where noted below.

Items where the unit of measurement is 'sum', will have a rate preset to '1' and must not be altered.

For items where the unit is percentage, a percentage value (positive, negative or '0') shall be inserted and shall not be expressed as a decimal equivalent. For example, five percent shall be entered as '5' and not '0.05'.

Where a percentage value is entered as 0% or is negative any costs and associated charges will be deemed to be included in the other rates and prices.

Where items have pricing options dependent on quantity bandings, all options shall have a rate or price entered.

Schedule of Rates
and Prices

- 6 Where provision has been made in the Schedule of Rates and Prices for items of work to be measured and paid for in various quantity bands the measurement and payment of such items for each individual Scheme shall be made using only the rate entered under the appropriate quantity band.

The quantity band used shall be that obtained by the summation of the final quantities of like work within a Scheme unless a Scheme covers more than one Site and the distance between discrete Sites within the Scheme exceeds the minimum distances between traffic management measures as detailed in Table F of Chapter 8 of the Traffic Signs Manual in which case the quantity band used shall be that obtained by the summation of the quantities of like work at each discrete Site within the Scheme.

Alternative Specified
Materials, Designs
and Options Within
Types of Pavement

- 7 Where a choice of alternatives is permitted in this Contract, the item description and the rates and prices inserted shall be deemed to include any of the permitted alternative materials or designs the Operating Company may elect to use.

In all cases the rates and prices inserted in all Series of the Schedule of Rates and Prices shall be deemed to include for any adjustments of work content, rates, costs, programming, method of working and other effect occasioned by the choice of alternatives elected to be used or constructed by the Operating Company.

Privately and Publicly
Owned Services or
Supplies

- 8 The Operating Company shall allow in the rates and prices for locating, marking and taking measures for the support and full protection of pipes, cables and other apparatus.

The rates and prices shall include for obtaining the written consent and other thing required of from to or with the appropriate authority to interrupt the service or supply and for

		keeping the Scottish Ministers informed in writing of all arrangements it makes with owners of privately owned services or supplies, Statutory Undertakers and Public Authorities and other parties as appropriate.
Labours	9	<p>Labours in connection with Nominated Sub-contractors shall include but not be limited to:</p> <p>(i) in the case of Operations – for affording the use of existing working space, access, temporary roads, erected scaffolding, working shelters, staging, ladders, hoists, storage, latrines, messing, welfare and all other facilities existing on the Unit and the provision of protection, water, electricity for lighting and clearing away rubbish, debris and waste and other similar material arising from the Operations,</p> <p>(ii) in the case of goods, materials or service supplied – for taking delivery, unloading, storing, protecting and returning crates, cartons and packing materials.</p>
Location, Frequency and timescales of Schedule items	10	<p>The Operating Company shall allow in the rates and prices for carrying out the Operations at any location within or associated with the Unit, and shall also allow for the items in the Schedule of Rates and Prices being used only once, a number of times or not at all during this Contract.</p> <p>The Operating Company shall allow in the rates and prices for undertaking any Operations within the timescales prescribed in this Contract and/or any Order.</p>
Roadworks Overall Requirements	11	<p>The Operating Company shall allow in the rates and prices for complying with requirements in respect of pavement construction, horizontal alignments, surface levels and surface regularity of pavement courses, cold weather working, use of surfaces by traffic and constructional Plant and general requirements for sub-bases and road bases.</p>
Work Within and Below Non-Tidal Open Water or Tidal Water	12	<p>The Operating Company shall allow in the rates and prices for taking measures to execute all Operations above non tidal open water and above Mean High Water Springs.</p> <p>All Operations executed within and below non tidal open water or between Mean High Water Springs and Mean Low Water Springs or below Mean Low Water Springs are subject to adjustment in accordance with Series 6400.</p> <p>The datum for measurement of Operations executed within and below non tidal open water shall be stated in the Order.</p> <p>The Mean High Water Springs and Mean Low Water Springs are equivalent levels relative to Chart Datum determined by the United Kingdom Hydrographic Office.</p>

Dealing with Flow	13	The Operating Company shall allow in the rates and prices for taking measures to deal with the existing flow of water, sewage and other flowing material.
Taxes Levies Contributions Premiums Refunds or Landfill Tax	14	The Operating Company shall allow in the rates and prices for all taxes, levies, contributions, premiums, refunds or landfill tax as described in Schedule 1, the Conditions of Contract.
Site Limitations and Constraints	15	The Operating Company shall allow in the rates and prices for complying with any limitations and constraints on the use of or connected with the Unit.
Hard Material	16	<p>For the purposes of this Contract the following are designated as Hard Material in accordance with Chapter 1 of the Method of Measurement for Highway Works Definitions, paragraph 1(h):</p> <ul style="list-style-type: none"> (i) material which requires the use of blasting, breakers or splitters for the removal but excluding individual masses less than 0.20 cubic metres, (ii) existing pavements, footways, paved areas (but excluding unbound materials) and foundations in masses in excess of 0.20 cubic metres.
Equivalent Products and Materials	17	<p>Where the Operating Company offers an equivalent product or material in place of the one identified or specified, which is accepted for incorporation into the Operations by the Scottish Ministers, then the rates and prices are deemed to include for all the obligations and costs associated with the incorporation of the equivalent into the Operations, including but not limited to Design, provision of data and drawings, certificates, awaiting approvals consents and other similar considerations, re-submissions and modifications and amendments to the Operations.</p> <p>Unless specifically stated to the contrary in this Contract the measurement of the Operations affected by the incorporation of the equivalent products and materials shall be based on this Contract and not on the Operations as amended and completed to incorporate the equivalent products and materials.</p>
Management of Operations	18	The Operating Company shall allow in the rates and prices for the supervision by the Operating Company of Operations.
Repair Work and Alterations	19	<p>Various elements of the Schedule of Rates and Prices identify works of repair and or alteration.</p> <p>Notwithstanding such separately identified items the Operating Company shall allow in the rates and prices for executing any of the other items in the Schedule of Rates and Prices as repairs and or alterations to existing.</p>

Time Bands and Percentage Adjustments	20	<p>The Operating Company shall allow in the rates and prices in the Schedule of Rates and Prices for executing Operations during normal working hours hereby defined as 0700 to 1900 hours Mondays to Fridays inclusive (time band reference 1), except for, 6100 to 6700 (inclusive) and 7000 which are all deemed to be undertaken at any time and shall not be subject to any time band adjustments.</p> <p>Percentage adjustments do not apply to Operations undertaken in time band reference 1.</p> <p>Operations that are executed within normal working hours but subject to working hours restrictions as referred to in Schedule 9 Part 2, Appendix 1/17 shall be deemed to be in time band reference 1 and therefore are not subject to adjustment.</p> <p>Percentage adjustments shall be made to the rates and prices in the Schedules of Rates and Prices in respect of Operations executed outwith normal working hours when the hours of working are subject to restrictions for the routes and locations referred to in Schedule 9 Part 2, Appendix 1/17.</p> <p>Notwithstanding the previous paragraph, Operations executed outwith normal working hours shall only be measured if restrictions stated in Schedule 9 Part 2, Appendix 1/17 prohibit the Operations from being carried out within normal working hours, or if the Director has given written consent that the Operations may be measured using the appropriate time band adjustments.</p> <p>For routes and locations where no working hours restrictions apply, Operations executed outwith normal working hours shall not be subject to time band adjustments unless the Director has given written consent.</p>
Other Work on the Unit, the Police and Emergency Services	21	<p>The Operating Company shall allow in the rates and prices for the presence from time to time of authorised contractors and bodies and other third parties executing work on the Unit.</p> <p>The Police and other emergency services require access through the Unit at all times and the Operating Company shall allow in the rates and prices for complying with this requirement.</p>
Traffic Safety and Traffic Management	22	<p>The Operating Company shall allow in the rates and prices for traffic safety and traffic management to undertake the Operations.</p> <p>The rates and prices shall include the Design, provision, maintenance and removal of and any costs related to traffic safety and traffic management measures referred to in Schedule 9 of this Contract and the following:</p>

- (i) phasing the Operations in a manner acceptable to the Director, the National Network Control Centre and the Police for the continuing flow of traffic including maintaining access to properties,
- (ii) complying with the requirements of the 'Traffic Signs Regulations and General Directions' and with the recommendations contained in Chapter 8 of the Traffic Signs Manual or where the circumstances of any particular case are not covered, including but not limited to any additional traffic safety and traffic management measures required by the Police, submitting proposals for dealing with such situations including but not limited to risk assessments and other similar reports information and advice to the Director,
- (iii) enhancement of the requirements of Chapter 8 of the Traffic Signs Manual as deemed necessary by the Operating Company to satisfy specific Site safety risk assessments,
- (iv) continuing traffic safety and management outside the boundaries of the Unit when associated with Operations on the Unit and including all necessary liaison with relevant authorities and other third parties,
- (v) requirements to deal with reduced Lane widths due to any reason including but not limited to convoy working,
- (vi) alterations to traffic management measures or programmes to take account of events on or outwith the Unit that prevent or constrain the use of traffic management or planned Site Operations.

Measuring, Sampling and Testing 23 The Operating Company shall allow in the rates and prices for measuring, sampling and testing as required by this contract.

Payments to Statutory Undertakers 24 The Operating Company may be required to place orders with Statutory Undertakers holders of licences issued in accordance with Section 109 of the New Roads and Street Works Act 1991 franchise holders and other similar parties for renewal, maintenance or repair of services on the Unit and the payment for such orders may well be required in advance of the work being undertaken.

An Order shall be issued on each occasion but the Operating Company shall allow in the percentage adjustment for all additional cost associated with the payments for such work and the fact that invoices for the Statutory Undertakers may not be immediately available.

Payment of Statutory Undertakers accounts is included in Series 7000.

Format of the Schedule of Rates and Prices	25	An example of the page format of the Schedule of Rates and Prices showing options for separately pricing quantity bands is in Appendix A to this Schedule.
Disposal	26	The Operating Company shall allow in the rates and prices for disposal to a licensed disposal facility which may include a licensed recycling facility.
Remove from Store	27	The Operating Company shall allow in the rates and prices for remove from store for collecting from stores on or off the Site or from where material has been set aside for re-use.
Contract Price Fluctuations	28	The Operating Company shall allow in the rates and prices for all costs in respect of contract price fluctuation that are not covered by the provisions of Schedule 1 for Contract Price Fluctuations.
Amendment to the Method of Measurement	29	For the purpose of this Contract the Method of Measurement for Highway Works is amended: <ul style="list-style-type: none"> (i) by replacing the words "Bills of Quantities" wherever they occur with the words "Schedule of Rates and Prices", (ii) by replacing the word "Contractor" wherever it occurs with the words "Operating Company", (iii) by construing any reference to "rates", "prices", "Rates", "Prices", "rates and prices" or "Rates and Prices" to mean a reference to rates and prices contained in the Schedule of Rates and Prices, (iv) by replacing the full stop to the last item in item coverages with a semi-colon in every case where additional items have been added, and (v) in accordance with the pages immediately following.
Repairs to Category 1 Defects	30	Category 1 Defects shall be classified as "of value not more than £10,000" or "of value more than £10,000". The classification shall be established in accordance with the provisions of Schedule 1 Part 3 for valuation of Orders but shall exclude: <ul style="list-style-type: none"> (i) the cost of maintaining temporary repairs, (ii) all traffic management required in connection with making safe and the repair of a Category 1 Defect, (iii) travel to and from the scene of the Category 1 Defect, (iv) reporting to the Director details of all Operations carried out and materials used, (v) disruption to other work as a result of attending Category 1 Defects,

(vi) attending a reported Category 1 Defect where no defect is found,

(vii) Professional Services.

If a Category 1 Defect is classified initially "of value more than £10,000" but subsequently has a final classification of "costing less than or equal to £10,000", the Operating Company shall reimburse the Director for any payment received.

Category 1 Defects which are classified as "of value more than £10,000" shall be valued in accordance with the provisions of Schedule 1 Part 3 for valuation of Orders. This valuation may include the costs of maintaining traffic management until the commencement of Site Operations for carrying out the permanent repair.

Incident Response
Operations

31

Incident Response Operations for individual Incidents shall be classified as "of value not more than £10,000" or "of value more than £10,000". The classification shall be established in accordance with the provisions of Schedule 1 Part 3 for valuation of Orders and shall include:

- (i) initial, secondary, and back-up Incident Response Operations,
- (ii) temporary repairs and temporary safety measures to allow safety and usability to be restored,
- (iii) establishment, maintenance and removal of traffic management for the duration of the Incident.

The classification shall exclude:

- (i) travel to and from the scene of the Incident,
- (ii) acting on Orders and/or the instructions of the Emergency Services,
- (iii) reporting to the Director details of all Operations carried out and materials used,
- (iv) disruption to other work as a result of attending Incidents,
- (v) attending a reported Incident or Category 1 defect where no defect is found,
- (vi) maintaining temporary repairs until a permanent repair is carried out,
- (vii) Professional Services.

If an individual Incident is classified initially as "of value more than £10,000" but subsequently has a final classification "of value less than or equal to £10,000", the Operating Company shall reimburse the Director for any payment received.

		Incidents which are classified "of value more than £10,000" shall be valued in accordance with the provisions of Schedule 1 Part 3 for valuation of Orders.
Damage to Crown Property	32	<p>Damage to Crown Property will be classified as either "of value not more than £10,000" or "of value more than £10,000". The classification shall be established in accordance with the provisions of Schedule 1 Part 3 for valuation of Orders but shall exclude:</p> <ul style="list-style-type: none"> (i) Police reports, (ii) establishing, maintaining and removing traffic management prior to repair Operations, (iii) Professional Services, (iv) recovery of the costs of repair of the damage to Crown Property from the third party which caused the damage. <p>If an individual incident is classified initially as "of value more than £10,000" but subsequently has a final classification "of value not more than £10,000", the Operating Company shall reimburse the Director for any payment received.</p> <p>Damage to Crown Property Incidents which are classified "of value more than £10,000" shall be valued in accordance with the provisions of Schedule 1 Part 3 for valuation of Orders. Such valuation may include any associated costs listed under (i), (ii) and (iii) of the first sub-paragraph of this paragraph.</p>
Series 6900 Fair Rates and Prices	33	Series 6900 items will be used in accordance with the provisions of Schedule 1 Part 3 for valuation of Orders on the basis of fair rates and prices.

In addition to the standard Series the following additional Series are included:

3300	Site Investigations,
6100	Core Operations,
6200	Professional Services,
6300	Procurement and Management of Works Contracts,
6400	Adjustment to Schedule of Rates and Prices,
6500	Time Work Schedule,
6600	Not used,
6700	Changes in Scope of Operations,
6800	Miscellaneous,
6900	Resource Prices, and
7000	Lump Sum Quotations.

Appendix A

Schedule of Rates and Prices

Page Format

Item No.	Description	Unit	Rate £ : p For Quantity Band	
			A 0-50	B 51+
01	Fencing Gates and Stiles			
	001 Three rail (H15) fencing 1.2 metres high with timber posts	m		
	002 Four rail (H3) fencing 1.4 metres high with timber posts	m		
	003 Five rail (H3) fencing 1.4 metres high with timber posts	m		
	004 High tensile strained wire deer fencing (H5) 1.8 metres high	m		
	005 Chain link fence (H11) exceeding 1.50 metres but not exceeding 3.00 metres high on concrete or steel angle posts	m		
	006 Strained wire fence (H13) not exceeding 1.50 metres high on timber posts	m		
	007 Strained wire fence (H13) exceeding 1.50 metres but not exceeding 3.00 metres high on timber posts	m		
	008 Timber close boarded fence (H14) not exceeding 1.50 metres high	m		
	009 Planting works fence (H39 Type 1) 0.800 high	m		
	010 One strand of galvanised barbed wire to permanent post and rail fencing	m		
	011 One strand of galvanised plain wire to permanent post and rail fencing	m		
	012 Galvanised Type 1 rabbit netting 0.800 high	m		
	013 Galvanised pig netting 0.90 metres high to permanent post and rail fencing	m		
	014 Galvanised sheep netting 0.90 metres high to permanent post and rail fencing	m		

Method of Measurement for Highway Works

Schedule of Pages and Relevant Publication Dates

Chapter/Series	Page Number	Publication Date
Contents	1	November 2004
	2	May 2005
	3	November 2004
	4 to 7 inclusive	May 2005
Chapter I	1 to 3 inclusive	March 1998
Chapter II	1	March 1998
	2	May 2001
Chapter III	1	March 1998
	2	May 2001
	3 to 12 inclusive	May 2004
	13	November 2006
Chapter IV	14 to 16 inclusive	May 2005
	15 to 19 inclusive	November 2006
	1	March 1998
	100 1 to 2 inclusive	March 1998
	3 to 7 inclusive	May 2001
	8	November 2004
	9 to 11 inclusive	May 2001
	12	November 2004
	13 to 15 inclusive	May 2001
	200 1	May 2001
	2 to 3 inclusive	May 2004
	4	May 2001
	300 1 to 5 inclusive	May 2001
	400 1 to 2 and 4 to 8 inclusive	November 2004
	3	November 2006

Chapter/Series	Page Number	Publication Date
500	1 to 5 inclusive	May 2001
	6	November 2004
	7 to 13 inclusive	May 2001
	14	May 2005
	15	May 2001
	16 to 17 inclusive	May 2005
	18	May 2001
	19	November 2003
600	1	May 2002
	2	May 2001
	3	March 1998
	4 to 11 inclusive	November 2004
	12	May 2002
	13 to 14 inclusive	November 2004
	15 to 38 inclusive	May 2001
	N1 to N3 inclusive	May 2002
700	1	May 2001
	2	May 2002
	3	May 2001
	4 to 5 inclusive	May 2002
	6	May 2001
	7 to 9 inclusive	May 2002
	10	May 2001
	11	May 2002
	12 to 13 inclusive	May 2001
	14	May 2002
	15 to 18 inclusive	May 2001
800	Not taken up	
900	Not taken up	
1000	Not taken up	

Chapter/Series	Page Number	Publication Date
1100	1	May 2001
	2	November 2004
	3	May 2001
	4 to 5 inclusive	May 2002
	6	May 2001
	7 to 8 inclusive	May 2005
1200	1 to 2 inclusive	May 2001
	3 to 5 inclusive	March 1998
	6 to 11 inclusive	May 2001
1300	1 to 3 inclusive	November 2003
1400	1 to 2 inclusive	May 2001
	3	May 2005
	4 to 8 inclusive	May 2001
	9	May 2005
1500	1 to 2 inclusive	May 2001
	3	May 2005
	4 to 7 inclusive	February 2003
	8 to 12 inclusive	May 2001
1600	1 to 2 inclusive	March 1998
	3 to 6 inclusive	May 2001
	7	March 1998
	8 to 19 inclusive	May 2001
1700	1	May 2004
	2	May 2001
	3	May 2004
	4 to 11 inclusive	May 2001
1800	1	March 1998
	2 to 5 inclusive	May 2001
1900	1	May 2003
2000	1	May 2002
	2 to 3 inclusive	May 2001
2100	1	March 1998
2200	Not taken up	May 2004
2300	1 to 3 inclusive	March 1998

Chapter/Series	Page Number	Publication Date
2400	1 to 3 inclusive	May 2001
	4	March 1998
2500	1 to 2 inclusive	May 2001
2600	Not taken up	
2700	1	May 2001
3000	1 to 15 inclusive	May 2001
5000	1 to 2 inclusive	May 2003

SCHEDULE 2 PART 1

METHOD OF MEASUREMENT

SERIES 100: PRELIMINARIES

Temporary Accommodation

Delete paragraphs 2 to 6 inclusive.

Vehicles for the Overseeing Organisation

Delete paragraphs 7 to 10 inclusive.

Communication System for the Overseeing Organisation

Delete paragraphs 11 to 13 inclusive.

Operatives for the Overseeing Organisation

Delete paragraphs 14 to 17 inclusive.

Information Boards

Delete paragraphs 18 to 20 inclusive.

Traffic Safety and Management

Delete paragraphs 21 to 27 inclusive.

Temporary Diversion of Traffic

Delete paragraphs 28 to 33 inclusive.

Recovery Vehicles

Delete paragraph 34 to 39 inclusive and insert the following paragraph 34 to 37 inclusive:

Recovery Vehicles						
Units	34	The unit of measurement shall be: (i) recovery vehicleday.				
Measurement	35	The measurement of recovery vehicles shall be for each day or part thereof during which the recovery vehicle is provided. Recovery vehicles are deemed to be site based and not subject to a standby facility.				
Itemisation	36	Separate items shall be provided for recovery vehicles in accordance with Chapter III paragraphs 3 and 4 and the following: <table><tr><th>Group</th><th>Feature</th></tr><tr><td>I</td><td>1 Each type of recovery vehicle.</td></tr></table>	Group	Feature	I	1 Each type of recovery vehicle.
Group	Feature					
I	1 Each type of recovery vehicle.					

Recovery Vehicles 37 The items for recovery vehicles shall in accordance with the Preambles to Schedule of Rates General Directions include for:

- Item coverage
- (a) equipment including communications equipment and identification sign,
 - (b) all taxes levies licensing certification and other similar requirements for operating on the public road or highway,
 - (c) comprehensive insurance,
 - (d) replacement vehicle including equipment,
 - (e) depreciation,
 - (f) maintenance,
 - (g) fuel, oil and consumables,
 - (h) qualified operator and safety officer and provision of documents,
 - (i) completion and submission of information log sheets and record sheets,
 - (j) vehicle inspections and submission of certificates,
 - (k) dealing with shed loads, broken down, accident damaged or abandoned vehicles and removal,
 - (l) explanatory leaflets and distribution,
 - (m) liaising with Police,
 - (n) hardstandings, accommodation and servicing,
 - (o) locations and facilities for vehicle removal,
 - (p) removal of all plant, equipment, hardstandings, accommodation and locations and facilities for vehicle removal,
 - (q) vehicle inspection and report,
 - (r) lighting board,
 - (s) reinstatement.

After paragraph 55 add the following paragraphs 56 to 59 inclusive:

Mobilisation

- Units 56 The unit of measurement shall be:
- (i) provide the Quality Management System, provide resources for Integrated Roads Information System, provide Record Referencing system and storage facilities, liaise with the previous operating company and institute handover of historical records and records register, provide Customer Contact Services, provide Traffic Scotland IT and operational systems, provide Central Office and facilities, provide

		subordinate Offices, Depots and facilities, provide Winter Service Plant and resources, provide Incident Response resources, provide all Plans as required in this Contract, prepare Maintenance Schedule for Management and Maintenance of Structures, provide vehicle and equipment resources for Incident Support Unit, any other Mobilisation Services.....item.				
Measurement	57	<p>The maximum payment that may be made for mobilisation prior to the Commencement of Service is £500,000 or 50% of the mobilisation total, whichever is lower.</p> <p>The balance of payment for mobilisation activities executed will be made in monthly payments following the Commencement of Service Date at a rate of 25% of this balance per month.</p>				
Itemisation	58	<p>Separate items shall be provided for mobilisation in accordance with Chapter III paragraphs 3 and 4 and the following:</p> <table><tr><th>Group</th><th>Feature</th></tr><tr><td>I</td><td>1 Mobilisation activity.</td></tr></table>	Group	Feature	I	1 Mobilisation activity.
Group	Feature					
I	1 Mobilisation activity.					
Mobilisation	59	<p>The items for mobilisation shall in accordance with the Preambles to Schedule of Rates General Directions include for:</p>				
Item coverage		(a) Everything required for mobilisation.				

SCHEDULE 2 PART 1

METHOD OF MEASUREMENT

SERIES 200: SITE CLEARANCE

Site Clearance

Insert the following before paragraph 1:

Definitions Delete all references to "tip" and replace with "licensed facility".

"licensed facility" means a licensed disposal facility or a licensed recycling facility.

Delete paragraphs 2 to 7 inclusive and insert the following paragraphs 2 to 5 inclusive:

Units 2 The units of measurement shall be:

- (i) removing undergrowth square metre,
- (ii) removing hedges linear metre.

Measurement 3 The measurement of removing undergrowth shall be the area to be cleared.

The height of hedges shall be measured from ground level.

Itemisation 4 Separate items shall be provided for site clearance in accordance with Chapter III paragraphs 3 and 4 and the following:

Group	Feature
I	1 Removing undergrowth.
	2 Removing hedges not exceeding 2.5m high.
	3 Removing hedges exceeding 2.5m high.

Site Clearance 5 The items for site clearance shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:

Item coverage

- (a) demolition, breaking up and removal,
- (b) in the case of removing undergrowth, felling trees not exceeding 500mm girth and grubbing up stumps not exceeding 160mm diameter,
- (c) in the case of removing hedges, removing fencing and wires, felling trees not exceeding 500mm girth and grubbing up stumps not exceeding 160mm diameter,
- (d) credit value of materials,

- (e) disposal of material (as Series 600 paragraph 39),
- (f) working around services,
- (g) backfilling and compaction,
- (h) making good to severed ends of existing fences, hedges and walls,
- (i) disconnecting and sealing services,
- (j) preservation of individual or groups of trees, shrubs, hedges and other features,
- (k) reinstatement and making good,
- (l) filling post and stump holes with acceptable material from any source and compaction,
- (m) mechanical chipping of felled trees and saplings and spreading up to 25mm thick,
- (n) treatment of hazardous materials,
- (o) herbicide treatment.

Delete paragraph 8 and substitute the following:

Units

8 The units of measurement shall be:

Take up or down and set aside for re-use or remove to store or to tip off Site the following:

- (i) brickwork, blockwork and stonework cubic metre,
- (ii) paved areas and other similar hardstandings, square metre,
- (iii) kerbs, channels, edgings, combined kerbs and channels, combined drainage and kerb blocks, fencing, safety barrier, pedestrian guardrail, parapets, parapet rails, copings, string courses and other similar features linear metre,
- (iv) cable linear metre,
- (v) road lighting columns, brackets and wall mountings, traffic signs, traffic sign posts, fence posts, safety barrier posts, parapet posts, parapet infill panels, sign lighting units, sign bracket arms, gates and stiles, street furniture, reflecting road studs, communications cabinets, feeder pillars, posts, brackets, signal indicators, shelves, racking, frames, electronic units and other similar features number,
- (vi) chamber covers and frames and gully gratings and frames and other similar features number,
- (vii) quadrants number,
- (viii) individual blocks, features or stones number.

Delete paragraph 9 and substitute the following:

- Measurement 9 The measurement for take up or down and set aside for re-use or remove to store or to tip off Site brickwork, blockwork, stonework, paved areas, kerbs, channels, edgings, combined kerbs and channels, combined drainage and kerb blocks, linear drainage channel systems, fencing, safety barrier, pedestrian guardrail, parapets parapet rails and other similar features, copings, string courses and other similar features, cable, road lighting columns, brackets and wall mountings, traffic sign faces, traffic sign posts, fence posts, safety barrier posts, parapet posts, sign lighting units, sign bracket arms, gates and stiles, street furniture, reflecting road studs, communications cabinets, feeder pillars, posts, brackets, signal indicators, shelves, racking, frames, electronic units and other similar features, chamber covers and frames and gully gratings and frames and other similar features, quadrants, individual blocks, features or stones shall be the volumes, areas, lengths or numbers measured.
- Take up or down and set aside for re-use or remove to store or to tip off Site for fence posts, parapet posts and rails shall only be separately measured when they are a separate operation from the items take up or down and set aside for re-use or remove to store or to tip off Site for fences and parapets.
- The measurement of take up or down and set aside for re-use or remove to store or to tip off Site for safety barrier shall not include the posts which are separately measured.

Delete paragraph 10 and substitute the following:

- Itemisation 10 Separate items shall be provided for take up or down and set aside for re-use or remove to store or to tip off Site in accordance with Chapter III paragraphs 3 and 4 and the following:

Group	Feature
I	1 Take up or down and set aside for re-use or remove to store.
	2 Take up or down and remove to tip off Site.
II	1 Brickwork, blockwork and stonework.
	2 Paved areas and other hardstandings.
	3 Kerbs, channels, edgings, combined kerbs and channels, combined drainage and kerb blocks, fencing, safety barrier, pedestrian guardrail, parapets, parapet rails and the like.
	4 Copings, string courses and the like.

	5	Cable.
	6	Road lighting columns, brackets and wall mountings, traffic signs, traffic sign posts, fence posts, safety barrier posts, parapet posts, sign lighting units, sign bracket arms, gates and stiles, street furniture, reflecting road studs and the like.
	7	Communications cabinets, feeder pillars, posts, brackets, signal indicators and the like.
	8	Shelves, racking, frames and other similar features.
	9	Electronic units and other similar features.
	10	Chamber covers and frames and gully gratings and frames and the like.
	11	Quadrants.
	12	Individual blocks, features or stones.
III	1	Any types and sizes.
	2	Any heights or mounting height.
IV	3	Different arrangements.

In paragraph 11 delete sub-paragraph (e) and replace with the following:

(e) cleaning, stacking, palletising, protecting and labelling.

Add the following sub-paragraph to paragraph 11:

(i) retrieval of displaced materials from their position after displacement (excluding fees to Network Rail).

SCHEDULE 2 PART 1

METHOD OF MEASUREMENT

SERIES 300: FENCING

Fencing, Gates and Stiles

Delete paragraph 1,2 and 3 and substitute the following:

Units	1	The units of measurement shall be:	
		(i)	fencing, wire, wire mesh linear metre,
		(ii)	gates, stiles number,
		(iii)	fenced tree guards number.
Measurement	2	Temporary fencing shall not be measured.	
		The measurement of fencing shall be the developed length along the centre line of the fence. The measurement of height of fencing shall be that stated in this contract for the type of fence.	
		The measurement of wire and wire mesh shall be separately measurable where it is required by this contract to be fixed to fencing, gates and the like, and shall be the developed length along the centre line of the fence.	
		The measurement of width of gates shall be the distance between the outer edges of the stiles, the outer edges of hanging stiles in the case of double gates.	
		The measurement of height of gates shall be the distance between the upper surface of the top rail and the underside of the bottom rail.	
		Concrete foundation to timber posts shall only be measured for those locations stated in Appendices 1/15 or 3/1 of the Specification.	
Itemisation	3	Separate items shall be provided for fencing in accordance with Chapter III paragraphs 3 and 4 and the following:	
		Group	Feature
		I	1 Each type of fencing.
			2 Each type of wire to fencing, gates and the like.
			3 Each type of wire mesh to fencing, gates and the like.
			4 Each type of gate.

		5	Each type of stile.
		6	Each type of fenced tree guard.
	II	1	Fencing of different heights.
		2	Gates of different heights and widths.
	III	1	Painted fencing, gates or stiles.
	Note 1: Group II feature 1 shall only apply to Group 1 feature 1.		
	Note 2: Group II feature 2 shall only apply to Group 1 feature 4.		
Fencing	4		
Item coverage	Add the following:		
	(y)	removal of debris and other similar material on the line of the fencing.	
After paragraph 16 add the following paragraphs 17 to 23 inclusive:			
Repairs to Existing Fencing – Renew Components			
Units	17	The units of measurement shall be:	
	(a)	boarding to close boarded fence square metre,	
	(b)	panel to sound absorption fence square metre,	
	(c)	rails, wire, chain link, wire mesh linear metre,	
	(d)	posts and struts..... number.	
Measurement	18	The measurement of renew boarding to close boarded fence or replace panel to sound absorption fence to existing fencing shall be the net area of boarding or panels replaced.	
		The measurement of renew rails, wire or mesh to existing fencing shall be the net length of rails, wire or mesh replaced.	
		The measurement of renew posts or struts to existing fencing shall be the number of posts or struts replaced.	
		Repairs to Existing Fencing – Renew Components shall not be used for replacement of complete fence.	
Itemisation	19	Separate items shall be provided for repairs to existing fencing in accordance with Chapter III paragraphs 3 and 4 and the following:	
		Group	Feature
	I	1	Renew boarding to close boarded fence.
		2	Renew each type of rail, wire or mesh.
		3	Renew any type of post or strut.
	II	1	Different types of post or strut.

		III	1	Different types of wire or mesh.
			2	Different types of rail.
		IV	1	Not exceeding 1.50 metres long.
			2	Exceeding 1.5 but not exceeding 3 metres long.
		Note 1: Group II shall only apply to Group I feature 3.		
		Note 2: Group III shall only apply to Group I feature 2.		
		Note 3: Group IV shall only apply to Group I feature 3.		
Renew Rails, Wire and Wire Mesh	20	The items for renew rails, wire and wire mesh shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:		
Item coverage		(a)	removal of existing fence rails, wire and wire mesh,	
		(b)	disposal of material (as Series 600 paragraph 39),	
		(c)	removal of old fixings,	
		(d)	dismantling and re-erection of existing fence to facilitate removal of components,	
		(e)	fittings and fixings,	
		(f)	trimming ground on line of fencing,	
		(g)	protective system (as Series 1900 paragraph 4),	
		(h)	preservation of timber.	
Renew Posts and Struts	21	The items for renew posts and struts shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:		
Item coverage		(a)	removal of existing posts, struts and pales,	
		(b)	removal of old fixings,	
		(c)	dismantling and re-erection of existing fence to facilitate renewal of components,	
		(d)	excavation of acceptable material (as Series 600 paragraphs 17 and 18),	
		(e)	excavation of unacceptable material (as Series 600 paragraphs 19),	
		(f)	breaking up foundations,	
		(g)	disposal of material (as Series 600 paragraph 39),	
		(h)	backfilling and compaction,	
		(i)	fittings and fixings,	
		(j)	protective system (as Series 1900 paragraph 4),	
		(k)	preservation of timber,	

		(l) epoxy resin compound and mastic filler to posts fixed in sockets,
		(m) concrete foundations to posts and struts.
Renew Boarding to Close Boarded Fence and Panel to Sound Absorption Fence	23	The items for renew boarding to close boarded fence and panel to sound absorption fence shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) fencing (as this Series paragraph 4),
		(b) removing existing boarding and infills,
		(c) disposal of material (as Series 600 paragraph 39),
		(d) dismantling and re-erection of existing fence to facilitate renewal of items,
		(e) fittings and fixings.

SCHEDULE 2 PART 1

METHOD OF MEASUREMENT

SERIES 400: ROAD RESTRAINT SYSTEMS (VEHICLE AND PEDESTRIAN)

Safety Barriers and Transitions

Itemisation	4	In paragraph 4 delete Group V. Delete Group III and replace with the following:				
		<table><tr><th>Group</th><th>Feature</th></tr><tr><td>III</td><td>1 Each Working Width Class or range of Working Width classes.</td></tr></table>	Group	Feature	III	1 Each Working Width Class or range of Working Width classes.
Group	Feature					
III	1 Each Working Width Class or range of Working Width classes.					
		In paragraph 5 delete (a) (f) and (h) and replace with the following:				
Item coverage	5	(a) design, fabrication, installation, construction and testing, (f) amendments to the Unit,				

Terminals

Itemisation	8	In paragraph 8 delete Groups I to IV and replace with the following Groups I to III:	
		Group	Feature
		I	1 Terminal.
		II	1 Each performance class.
		III	1 Designed to be impacted on one side only.
			2 Designed to be impacted on both sides.

After paragraph 9 insert the following paragraphs 9A to 9D inclusive:

Reconstruction of Concrete Ramps at Terminal Section

Units	9A	The units of measurement shall be: (i) reconstruction of concrete ramps at terminal sections..... number.
Measurement	9B	The measurement of reconstruction of concrete ramps at terminal sections shall be the complete installation.

Itemisation	9C	Separate items shall be provided for the reconstruction of concrete ramps in accordance with Chapter III paragraphs 3 and 4 and the following:
	Group	Feature
	I	1 Reconstruction of concrete ramps at terminal sections.

Reconstruction of Concrete Ramps at Terminal Section

	9D	The items for reconstruction of concrete ramps at terminal sections shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage	(a)	break out existing concrete ramp and disposal of material,
	(b)	cut off and drill out, grout in place new reinforcing rods,
	(c)	design,
	(d)	provision of design calculations and details to the Overseeing Organisation for acceptance,
	(e)	reports, certificates,
	(f)	provision of data and drawings,
	(g)	re-submissions and modifications,
	(h)	amendments to the works,
	(i)	obtaining approvals,
	(j)	everything necessary for the design, fabrication, installation and testing of the works.

Connections to Existing Systems

Itemisation	12	In paragraph 12 delete Groups III and IV.
-------------	----	---

Vehicle Parapets

		In paragraph 18 add the following:
Units	18	(ii) infill panel.....square metre.
		After paragraph 19 insert the following paragraph 19A:
Measurement	19A	Where infill is required to vehicle parapets it shall be separately measured.
		The measurement of infill shall be the developed length along the centre line of the infill multiplied by the height of the infill.

Itemisation

20

In paragraph 20 delete Groups III, V and VI and add the following:

Group	Feature	
I	2	Infill panel to vehicle parapet.
III	1	Each Working Width Class or range of Working Width Class.
V	1	Class of infill panel.
VI	1	Type of infill panel.

Note 1: Group II, III and IV features shall only be applied to Group I feature 1 vehicle parapet.

Note 2: Group V and VI features shall only be applied to Group I feature 2 infill panel to vehicle parapet.

Pedestrian Parapets and Pedestrian Guardrails

Units	23	In paragraph 23 add the following: (ii) infill panel.....square metre. After paragraph 24 insert the following paragraph 24A:								
Measurement	24A	Where infill is required to pedestrian parapets it shall be separately measured. The measurement of infill shall be the developed length along the centre line of the infill multiplied by the height of the infill.								
Itemisation	25	In paragraph 25 delete Groups IV, V and VI and add the following: <table><tr><th>Group</th><th>Feature</th></tr><tr><td>I</td><td>3 Infill panel to pedestrian parapet.</td></tr><tr><td>IV</td><td>1 Class of infill panel.</td></tr><tr><td>V</td><td>1 Type of infill panel.</td></tr></table> Delete Notes 1 and 2 and replace with the following: Note 1: Group II and III features shall only apply to Group I features 1 and 2. Note 2: Group IV and V features shall only be applied to Group I feature 3.	Group	Feature	I	3 Infill panel to pedestrian parapet.	IV	1 Class of infill panel.	V	1 Type of infill panel.
Group	Feature									
I	3 Infill panel to pedestrian parapet.									
IV	1 Class of infill panel.									
V	1 Type of infill panel.									

Delete heading after paragraph 30 and substitute the following:

Remove from Store and Re-erect Safety Barriers, Vehicle Parapets, Pedestrian Parapets, Pedestrian Guardrails and Pedestrian Handrail

Units

31 In paragraph 31 add the following:

The units of measurement shall be:

- (iv) infill panels.....square metres,
- (v) additional concrete in foundations to re-erected posts.....cubic metres.

After paragraph 35 add the following paragraph 35A to 35C:

Measurement

35A Where infill is required to vehicle parapets it shall be a separately measured item.

The measurement of remove from store or from where previously set aside and re-erect infill panels shall be the area of the infill panel.

35B The measurement of re-erected vehicle parapets parapet rails and pedestrian parapets, pedestrian guardrails and pedestrian handrails shall be the developed length along the centreline of the units between the end of each type of unit at a connection to a safety barrier a different type of parapet, guardrail or handrail or within a connection piece assembly.

35C The measurement of additional concrete in foundations to re-erected posts is the volume of concrete required by the design less the volume contained in concrete foundations and socketed foundations measured under paragraph 36 Group I feature 22.

Delete paragraph 36 and substitute the following:

Itemisation

36 Separate items shall be provided for remove from store or from where previously set aside and re-erect safety barrier in accordance with Chapter III paragraphs 3 and 4 and the following:

Group	Feature	
I	1	Single-sided safety beam.
	2	Double-sided safety beam.
	3	Driven post.
	4	Long driven post
	5	Post for setting in concrete or socket
	6	Surface mounted post
	7	Mounting bracket.

		8	Single sided terminal section.
		9	Double sided terminal section.
		10	Full height anchorage.
		11	Expansion joint anchorage.
		12	Connection to bridge parapet.
		13	Tension assembly.
		14	Adjuster assembly.
		15	Vehicle parapet.
		16	Vehicle parapet rail.
		17	Vehicle parapet post.
		18	Pedestrian parapet.
		19	Pedestrian guardrail.
		20	Pedestrian handrail.
		21	Parapet infill panel.
		22	Concrete foundation and socketed concrete foundation volume 0.25m ³ to re-erected post.
		23	Additional concrete in foundations to re-erected posts.
		After paragraph 40 add the following paragraph 40A:	
Remove from Store and Re-erect Vehicle Parapets, Pedestrian Parapets, Pedestrian Guardrails and Pedestrian Handrail	40A	The items for remove from store and re-erect vehicle parapets, parapet rails and infill panels, pedestrian parapets, pedestrian guardrails and pedestrian handrails shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:	
Item coverage		(a)	loading, transporting from store or from where previously set aside, unloading and positioning for re-erection,
		(b)	replacing items damaged during the foregoing operations,
		(c)	modification and new materials,
		(d)	making good to protective system.

**Concrete
Foundation and
Socketed Concrete
Foundation Volume
0.25m³ to Re-
erected Post**

Delete the marginal heading to paragraph 41 and substitute the following:

After paragraph 41 add the following paragraphs 41A to 41O:

**Additional Concrete
in Foundations to
Re-erected Posts**

41A

The items for additional concrete in foundations to re-erected posts shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:

Item coverage

- (a) excavation in any material (as Series 600 paragraphs 17, 18, 19 and 23),
- (b) disposal of material (as Series 600 paragraph 39),
- (c) concrete (as Series 1700 paragraphs 5 and 10),
- (d) formwork (as Series 1700 paragraph 15),
- (e) reinforcement (as Series 1700 paragraph 26),
- (f) granular fill and compaction,
- (g) plastic sheeting.

Remove from Store and Re-erect Wire Rope Safety Fence

Units

41B

The units of measurement shall be:

- (i) remove from store and re-erect wire rope..... linear metre,
- (ii) remove from store and re-erect posts, intermediate anchorages and end anchorages number,
- (iii) concrete foundation and socketed foundations to re-erected posts number,
- (iv) additional concrete in foundations to re-erected posts.....cubic metres.

Measurement

41C

The measurement of remove from store and re-erect wire rope shall be the developed length measured once along the centre line of the fence on plan from midway between the anchor blocks at one end to midway between the anchor blocks at the other end.

Itemisation	41D	The measurement of remove from store and re-erect intermediate anchorages and end anchorages shall be the complete installation. Concrete foundations and socketed foundations to re-erected posts, between those points defined in paragraph 41C shall only be measured for those locations stated in this Contract.		
	41E	The measurement of additional concrete in foundations to re-erected posts is the volume of concrete required by the design less the volume contained in concrete foundations and socketed foundations measured under paragraph 41F Group I feature 6.		
	41F	Separate items shall be provided for remove from store or from where previously set aside and re-erect wire rope safety fences in accordance with Chapter III paragraphs 3 and 4 and the following:		
		Group	Feature	
Remove from Store and Re-erect Wire Rope	I	1	Standard length component rope,	
		2	Non-standard length component rope,	
		3	Post,	
		4	Intermediate anchorage,	
		5	End anchorage,	
		6	Concrete foundation and Socketed concrete foundation volume 0.25m³ to re-erected post,	
		7	Additional concrete in foundations to re-erected posts.	
	Remove from Store and Re-erect Wire Rope	41G	The items for remove from store wire rope shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:	
Item Coverage	(a)	loading, transporting from store, unloading and positioning for re-erection,		
	(b)	replacing items damaged during the foregoing operations,		
	(c)	modification and new materials,		
	(d)	adjustments and tensioning,		
	(e)	threading ropes into and around posts.		
Remove from Store and Re-erect Posts.	41H	The items for remove from store and re-erect posts shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:		
Item Coverage	(a)	loading, transporting from store, unloading and positioning for re-erection,		

		<ul style="list-style-type: none"> (b) replacing items damaged during the foregoing operations, (c) modification and new materials, (d) making good to protective system, (e) fabrication (as Series 1800 paragraph 6), (f) protective system (as Series 1900 paragraph 4), (g) driving in any material, (h) fixing to structures including attachment systems, (i) post caps, excluders, hooks and fittings, (j) drilling or foaming holes and pockets and casting in bolts, base plates and anchorage assemblies, (k) bedding, (l) filling, (m) making good protective system, (n) facilities for proof loading.
Remove from Store and Re-erect Intermediate Anchorages and End Anchorages	41J	The items for remove from store and re-erect intermediate anchorages and end anchorages shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item Coverage		<ul style="list-style-type: none"> (a) loading, transporting from store, unloading and positioning fro re-erection, (b) replacing items damages during the foregoing operations, (c) modification and new materials, (d) making good to protective system, (e) fixing to anchor block including attachment system.
Concrete Foundations and Socketed Foundations to Re-erected Posts for Wire Rope Safety Fence	41K	The items for concrete foundations and socketed concrete foundations to re-erected posts for Wire Rope Safety Fence shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		<ul style="list-style-type: none"> (a) Concrete Foundations and Socketed Foundations to Re-erected Posts (as this Series paragraph 41).

Additional Concrete in Foundations to Re-erected Posts for Wire Rope Safety Fence 41L The items for additional concrete in foundations to re-erected posts for Wire Rope Safety Fence shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:

Item coverage (a) additional concrete in foundations to re-erected posts (as this Series paragraph 41A).

Renew Wire Rope Safety Fence Components

Units 41M The units of measurement shall be:
(i) renew component rope..... metre,
(ii) renew check rope, caps, base cover number.

Itemisation Separate items shall be provided for renew wire rope safety fence components in accordance with Chapter III paragraphs 3 and 4 and the following:

Group	Feature
I	1 Renew different types of components.

Renew Standard Length Component Rope and Check Rope 41N The items for renew wire rope shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:

Item coverage (a) fabrication (as Series 1800 paragraph 6),
(b) protective system (as Series 1900 paragraph 4),
(c) rigging screws, threaded terminals, attachments, fittings and fixings,
(d) adjustments and tensioning,
(e) threading ropes into and around posts,
(f) take up or down existing wire rope and remove to tip off site (as Series 200 paragraph 11).

Renew Posts, Post Caps and Base Covers 41O The items for renew posts, post caps and base covers shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:

Item coverage (a) fabrication (as Series 1800 paragraph 6),
(b) protective system (as Series 1900 paragraph 4),
(c) driving in any material,
(d) post caps excluders, hooks and fittings,
(e) drilling or forming holes and pockets and casting in bolts, base plates, sockets and anchorage assemblies,
(f) bedding,

- (g) filling,
- (h) take up or down existing post including concrete surround and remove to Tip off Site (as Series 200 paragraph 11).

After paragraph 47 add the following paragraphs 48 to 61 inclusive:

Damage to Crown Property: Repairs to Safety Barriers, Vehicle Parapets, Pedestrian Parapets and Pedestrian Guardrails

Definition	48	Repairs to safety barriers, vehicle parapets, pedestrian parapets and pedestrian guardrails shall be the complete replacement of the whole of the damaged apparatus and shall include posts and rails.
Units	49	<p>The units of measurement shall be:</p> <ul style="list-style-type: none"> (i) invoiced costs of new components sum, (ii) percentage to be added to invoiced costs percentage.
Measurement	50	Measurement will be in accordance with the provisions of Schedule 4 Part 4 'Damage to Crown Property'.
	51	<p>The measurement of repairs to safety barriers, vehicle parapets, pedestrian parapets and pedestrian guardrails shall be as follows:</p> <ul style="list-style-type: none"> (i) Take up or down and remove to tip of Site (measured in Series 200 Site Clearance) for any components that cannot be re-used. (ii) Take up or down and set aside or remove to store (measured in Series 200 Site Clearance) for any components that can be re-used. (iii) Remove from store and re-erect (measured as this Series paragraphs 31 to 40) for any components that can be reused. (iv) Remove from store and re-erect (measured as this Series paragraphs 31 to 41L) for any components that are available in store. (v) Invoiced costs of any new components. <p>The measurement of invoiced costs of new components shall be the value of invoices received excluding VAT, after any discounts given except in respect of any discount for prompt payment not exceeding 2.5% which may be retained by the Operating Company.</p>

Itemisation 52 Separate items shall be provided for invoiced costs of new components in accordance with Chapter III paragraphs 3 and 4 and the following:

Group	Feature
I	1 Invoiced costs of new components.
	2 Percentage adjustment to invoiced costs.

Percentage Adjustment to Invoiced Costs of New Components.

Item Coverage (a) all costs in connection with the procurement of new components.

Painting of Safety Barriers, Pedestrian Guardrail and Handrail

Units 54 The unit of measurement shall be:
(i) painting of Safety Barriers, Pedestrian Guardrail and Handrail linear metre.

Measurement 55 The measurement of painting of Safety Barriers, Pedestrian Guardrail and Handrail shall be the developed length along the centreline of the units.
Painting of Safety Barriers, Pedestrian Guardrail and Handrail shall only be measured when painting in excess of the protective system is required.

Itemisation 56 Separate items shall be provided for Painting of Safety Barriers, Pedestrian Guardrail and Handrail Units in accordance with Chapter III paragraphs 3 and 4 and the following:

Group	Feature
I	1 Painting of safety barrier.
	2 Painting of pedestrian guardrail.
	3 Painting of pedestrian handrail.

Painting of Safety Barriers, Pedestrian Guardrail and Handrail Units

Item coverage (a) protection of steelwork against corrosion (as Series 1900 paragraph 4),
(b) painting of all components.

Temporary Safety Barriers

Units 58 The units of measurement shall be:
(i) temporary safety barrier metre.

Measurement	59	The measurement of temporary safety barrier shall be the developed length along the centreline of the temporary safety barrier including terminal sections.		
		Temporary safety barrier shall only be measured where the temporary safety barrier is acting as a permanent parapet. All other temporary safety barrier shall not be measured.		
Itemisation	60	Separate items shall be provided for temporary safety barriers in accordance with Chapter III paragraphs 3 and 4 and the following:		
		Group	Feature	
		I	1	Temporary Safety Barrier.
		II	1	Each containment performance class.
		III	1	Each Working Width Class or range of Working Width Classes.
Temporary Safety Barriers	61	The items for temporary safety barriers shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:		
Item coverage		(a)	safety barriers and transitions (as this series paragraph 5),	
		(b)	terminals (as this series paragraph 9),	
		(c)	dismantling, loading, transporting removal and unloading,	
		(d)	maintenance, which includes for all time-related costs associated with keeping the temporary safety barrier in both condition and position.	

SCHEDULE 2 PART 1

METHOD OF MEASUREMENT

SERIES 500: DRAINAGE AND SERVICE DUCTS

Drains and Service Ducts (Excluding Filter Drains, Narrow Filter Drains and Fin Drains)

Units	9	Add the following sub paragraphs:						
	(ii)	Extra over drain for concrete bed and surround (bed Type Z)metre.						
	(iii)	Extra over drain in trench for backfilling with concretecubic metre.						
Itemisation	15	In paragraph 15 delete group VI, add the following:						
		<table><tr><th>Group</th><th>Feature</th></tr><tr><td>I</td><td>3 Extra over drain for concrete bed and surround (bed Type Z).</td></tr><tr><td></td><td>4 Extra over drain or service duct for backfilling with concrete to underside of pavement.</td></tr></table>	Group	Feature	I	3 Extra over drain for concrete bed and surround (bed Type Z).		4 Extra over drain or service duct for backfilling with concrete to underside of pavement.
Group	Feature							
I	3 Extra over drain for concrete bed and surround (bed Type Z).							
	4 Extra over drain or service duct for backfilling with concrete to underside of pavement.							
		Insert "1" after "Note".						
		Add the following:						
		Note 2: Itemisation for drains includes compliance with any Groups, materials and bed types for the stated depths, excluding bed type Z which will be measured as extra over.						
		Note 3: Groups II, IV and V shall not apply to Group I features 3 and 4.						

Filter Drains

		In paragraph 17 add the following:
Units	17	(v) renew geotextile membrane to replaced filter material..... square metre.
Measurement	20	In paragraph 20 delete the last paragraph and add the following:
		The measurement of excavate and replace filter material shall include contiguous filter material between the filter drain and the adjacent carriageway, hardshoulder and hardstrip.
		The measurement of excavate and replace filter material excluding contiguous filter material shall be the product of the lengths, widths and depths ordered with no deduction for pipes, ducts or chambers. Lengths and widths for filter drains shall be taken as the lengths and widths at the level of the

drain invert or, in the case that partial excavation is ordered, at the depth to which excavation is ordered."

The widths of excavate and replace contiguous filter material shall be between the side of the contiguous filter material next to the filter drain which shall be taken as the vertical extension of the side at the level of the drain invert or, in the case of partial excavation, at the depth to which excavation is ordered and the adjacent carriageway, hardshoulder and hardstrip. The depth of the contiguous filter material next to the filter drain shall be taken above capping or where no capping is provided above subgrade level. Where the filter material is covered with red chippings the top surface of the excavate and replace filter material shall be the underside of the red chippings.

Itemisation 21 In paragraph 21 add the following Feature 6 to Group I and delete group V.

Group	Feature
I	1 Renew geotextile membrane to replaced filter material.

Delete paragraph 24 and replace with the following:

Excavate and Replace Filter Material 24 The items for excavate and replace filter material shall in accordance with the Preambles to Bill of Quantities General Directions include for:

- Item coverage
- (a) filter drains (as this Series paragraph 22), excluding geotextile membrane,
 - (b) cleaning and replacing excavated filter material,
 - (c) new and recycled filter material.

After paragraph 24 add the following paragraph 24A:

Renew Geotextile Membrane to Replaced Filter Material 24A The items for renew geotextile membrane to replaced filter material shall in accordance with the Preambles to Bill of Quantities General Directions include for:

- Item coverage
- (a) regulating and preparing surfaces,
 - (b) laps,
 - (c) measures to protect material,
 - (d) cutting, jointing, and fixing.

Renewal, Raising or Lowering of Covers and Gratings on Existing Chambers and Gullies

Itemisation	63	In paragraph 63 delete group I to VI and add the following:	
		Group	Feature
		I	1 Renewal.
			2 Raising or lowering the level.
		II	1 Area exceeding 0.30 square metres.
			2 Area exceeding 0.30 but not exceeding 0.60 square metres.
			3 Area exceeding 0.30 but not exceeding 0.60 square metres.
		III	1 Not exceeding 150 mm.
			2 Exceeding 150 mm but not exceeding 300 mm and so on in steps of 150 mm.
		In paragraph 64 add the following:	
Item coverage		(u) paving material infilling to covers.	
		After paragraph 64 add the following paragraphs 64A to 64D inclusive:	
		Renewal of Rodding Eyes	
Units	64A	The unit of measurement shall be:	
		(i) renewal of rodding eyes number.	
Measurement	64B	The measurement shall be of the complete installation to be renewed.	
		The depths of rodding eyes shall be the distance measured vertically between the top surface of the cover and the invert of the drain or, in the case of double rodding eyes, of the lower drain.	
Itemisation	64C	Separate items shall be provided for rodding eyes in accordance with Chapter III paragraphs 3 and 4 and the following:	
		Group	Feature
		I	1 Renewal of rodding eyes to different pipe sizes.
			1 Depth to invert not exceeding 1 metre.
			2 Depths to invert exceeding 1 metre but not exceeding 2 metres, and so on in steps of 1 metre.
			1 Access from one end only.
			2 Access from both ends.

**Renewal of
Rodding Eyes**

64D The items for renewal of rodding eyes shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:

- Item coverage
- (a) excavation (as Series 600 paragraphs 17, 18, 19 and 23),
 - (b) cutting, laying, jointing and bedding pipes and fittings,
 - (c) connecting drain pipe,
 - (d) formwork (as Series 17 paragraph 15),
 - (e) in-situ concrete (as Series 17 paragraphs 5 and 10),
 - (f) brickwork (as Series 2400 paragraph 4),
 - (g) covers, frames and bedding, and cover keys,
 - (h) backfilling with acceptable material from any source and compaction,
 - (i) disposal of material (as Series 600 paragraph 39).

After paragraph 80 add the following paragraphs 80A to 80D inclusive:

Protection of Existing Sewer, Drain or Service Duct

Units 80A The unit of measurement shall be:

- (i) protection of existing sewer, drain or service duct
..... linear metre.

Measurement 80B The measurement of protection shall be the individual lengths of sewer, drain or service duct to be protected.

Itemisation 80C Separate items shall be provided for protection of existing sewer, drain or service duct in accordance with Chapter III paragraphs 3 and 4 and the following:

Group	Feature
I	1 Different widths.
II	1 Different types of protection.

**Protection of
Existing Sewer,
Drain or Service
Duct**

80D The items for protection of existing sewer, drain or service duct shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:

- (a) concrete (as Series 1700 paragraphs 5 and 10),
- (b) formwork (as Series 1700 paragraph 15),
- (c) reinforcement (as Series 1700 paragraph 26),
- (f) bedding and compaction,
- (g) fabric reinforcement.

After paragraph 84 add the following paragraphs 85 to 94 inclusive:

Drain Surveys

Units	85	The unit of measurement shall be: (i) drain survey kilometre.													
Measurement	86	The measurement of drain survey shall be the length of carriageway.													
Itemisation	87	Separate items shall be provided for drain surveys in accordance with Chapter III paragraphs 3 and 4 and the following:													
<table> <tr> <th>Group</th><th colspan="2">Feature</th></tr> <tr> <td>I</td><td>1</td><td>Drain survey.</td></tr> <tr> <td rowspan="3">II</td><td>1</td><td>Type 1.</td></tr> <tr> <td>2</td><td>Type 2.</td></tr> <tr> <td>3</td><td>Type 3.</td></tr> </table>			Group	Feature		I	1	Drain survey.	II	1	Type 1.	2	Type 2.	3	Type 3.
Group	Feature														
I	1	Drain survey.													
II	1	Type 1.													
	2	Type 2.													
	3	Type 3.													
Drain Survey Type 1	88	The items for drain survey Type 1 shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:													
Item coverage		<ul style="list-style-type: none"> (a) carrying out desk study using available data, (b) locating chambers, pump chambers, balancing ponds, penstocks, flap valves, headwalls, outfalls, and the like, (c) recording, (d) reporting. 													
Drain Survey Type 2	89	The items for drain survey Type 2 shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:													
Item coverage		<ul style="list-style-type: none"> (a) locating chambers, pump chambers, balancing ponds, penstocks, flap valves, headwalls, outfalls, and the like, (b) removing, and reinstalling covers and gratings, (c) measuring pipe sizes, (d) measuring depth to invert from surface, (e) recording, (f) reporting. 													

Drain Survey Type 3 90 The items for drain survey Type 3 shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:

- Item coverage
- (a) locating chambers, pump chambers, balancing ponds, penstocks, flap valves, headwalls, outfalls, and the like,
 - (b) removing and reinstalling covers and gratings,
 - (c) measuring pipe sizes,
 - (d) measuring invert level of pipes,
 - (e) condition survey,
 - (f) recording,
 - (g) reporting.

Closed Circuit Television Drain Surveys

Units 91 The units of measurement shall be:

- (i) setting up closed circuit television equipment for drain survey number,
- (ii) closed circuit television drain survey..... linear metre.

Measurement 92 The measurement of setting up closed circuit television equipment for drain survey shall be the number of chambers at which the equipment is set up.

Any additional setting up of equipment for drain survey to suit the Operating Company's method of working shall not be measured.

The measurement of drain survey by closed circuit television camera shall be the length measured along the centre lines of the pipes between any of the following:

- (a) the external faces of chambers, gullies or headwalls,
- (b) the intersection of the centre lines at pipe junctions,
- (c) the position of any known terminations.

Itemisation 93 Separate items shall be provided for closed circuit television surveys in accordance with Chapter III paragraphs 3 and 4 and the following:

Group	Feature
I	1 Setting up closed circuit television equipment for drain survey.
	2 Closed circuit television drain survey.
II	1 Not exceeding 450mm diameter.
	2 Exceeding 450mm diameter but not exceeding 900mm diameter.

Note: Group II shall only apply to Group I feature 2.

**Closed Circuit
Television Drain
Surveys**

94

The items for closed circuit television drain surveys shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:

Item coverage

- (a) locating chambers, pump chambers, balancing ponds, penstocks, flap valves, headwalls, outfalls, and the like,
- (b) removing and reinstalling covers and gratings,
- (c) moving and setting up closed circuit television camera equipment,
- (d) inserting equipment into drains,
- (e) water supply,
- (f) recording,
- (g) identification of locations recorded,
- (h) picture quality tests and linear measurement checks,
- (i) reporting.

SCHEDULE 2 PART 1

METHOD OF MEASUREMENT

SERIES 600: EARTHWORKS

Excavation

Itemisation 16 In paragraph 16 replace Groups and Features with the following:

Group	Features
I	1 Excavation.
II	1 Acceptable material Class 5A.
	2 Acceptable material excluding Class 5A.
	3 Unacceptable material Class U1A or U1B.
	4 Unacceptable material Class U2.
III	1 In existing culverts.
	2 In ditches or watercourses.
	3 In all other locations.

Delete Note 2.

In paragraph 18 add the following:

Item coverage 18 (w) completion of formation and sub-formation

In paragraph 22 replace Group II with the following:

Group	Features
II	1 In ditches or watercourses.
	2 In all other locations.

Excavation in Hard Material

In paragraph 23 add the following:

Item coverage 23 (f) completion of formation and sub-formation

Deposition of Fill

Itemisation 32 In paragraph 32 replace Group III with the following:

Group	Features
III	1 To any Location.

Disposal of Material

Itemisation 38 In paragraph 38 replace Group II with the following:

Group	Features
II	1 Acceptable material Class 5A.

		2	Acceptable material excluding Class 5A.
		3	Unacceptable material Class U1A or U1B.
		4	Unacceptable material Class U2.
		Imported Fill	
Itemisation	44	In paragraph 44 replace Groups and Features with the following:	
		Group	Feature
		I	1 Imported acceptable material.
			2 Imported topsoil Class 5B.
		II	1 Any location.
		Compaction of Fill	
Itemisation	51	In paragraph 51 replace Group III with the following:	
		Group	Feature
		III	1 Any location.
		Soft Spots and Other Voids	
Itemisation	63	In paragraph 63 replace Group II with the following:	
		Group	Feature
		II	1 Any location.
		Topsoiling and Storage of Topsoil	
Itemisation	79	In paragraph 79 delete Group II and Note.	
		Completion of Formation and Sub-formation	
	84 & 85	Delete paragraphs 84 and 85	
		Lining of Watercourses	
Itemisation	88	In paragraph 88 replace Group II as follows:	
		Group	Feature
		II	1 To inverts or side slopes.
		Trial Pits	
Itemisation	168	In paragraph 168 replace Group II with the following:	
		Group	Feature
		II	1 0 metres to 0.5 metres in depth.
			2 0 metres to 1.5 metres in depth, and so on in steps of 1.0 metre.

Breaking Up and Perforation of Redundant Pavements

Itemisation	172	In paragraph 172 replace Groups and features with the following:	
		Group	Feature
		I	1 Breaking up redundant pavements, paved areas or slabs.
			2 Perforation of redundant pavements, paved areas or slabs.
		II	1 Depth not exceeding 150mm.
			2 Depth exceeding 150mm but not exceeding 300mm.
		After paragraph 177 add the following paragraphs 178 to 181 inclusive.	

Siding out of Carriageways, Footways and Paved Areas

Units	178	<p>The units of measurement shall be:</p> <p>(i) siding out of carriageways, footways and paved areas linear metre.</p>										
Measurement	179	<p>The measurement of siding out of carriageways, footways and paved areas shall be the length along the cut edge.</p> <p>No deduction shall be made for gaps within the length of 2 metres or less.</p>										
Itemisation	180	<p>Separate items shall be provided for siding out of carriageways, footways and paved areas in accordance with Chapter III paragraphs 3 and 4 and the following:</p> <table><tr><th>Group</th><th>Feature</th></tr><tr><td>I</td><td>1 Siding out of carriageways.</td></tr><tr><td></td><td>2 Siding out of footways and paved areas.</td></tr><tr><td>II</td><td>1 Not exceeding 250 mm wide.</td></tr><tr><td></td><td>2 Exceeding 250 mm.</td></tr></table>	Group	Feature	I	1 Siding out of carriageways.		2 Siding out of footways and paved areas.	II	1 Not exceeding 250 mm wide.		2 Exceeding 250 mm.
Group	Feature											
I	1 Siding out of carriageways.											
	2 Siding out of footways and paved areas.											
II	1 Not exceeding 250 mm wide.											
	2 Exceeding 250 mm.											

**Siding out of
Carriageways
Footways
and Paved
Areas**

181

The items for siding out of carriageways, footways and paved areas shall in accordance with the Preamble to Schedule of Rates and Prices General Directions include for:

Item coverage

- (a) programming the work in advance of any other operation at the site,
- (b) breaking up and removal of hardened dirt areas,
- (c) prevention of damage to existing carriageways, footways and paved areas,
- (d) disposal of material by spreading and levelling on verge or disposal of material (as Series 600 paragraph 39),
- (e) trimming of edges to a neat line,
- (f) leaving carriageway, footway and verge clear of debris.

SCHEDULE 2 PART 1

METHOD OF MEASUREMENT

SERIES 700: PAVEMENTS

Sub-base

In paragraph 4 delete Group II.

Pavement

In paragraph 7 delete the first sub-paragraph and substitute the following:

- 7 The measurement of base, lower base, upper base, binder course, surface course concrete slab, adjustment for each 5mm variation above or below the stated thickness, adjustment for alternative PSV and adjustment for alternative AAV on Surface Course shall be calculated using the width of the top surface of the course or slab.

After the last sub-paragraph of paragraph 7, insert the following sub-paragraphs:

When base course is 150mm or less total thickness it shall be measured as a single layer of base course 100mm thick with +/- adjustments for each 5mm thickness increment where applicable.

When base course is greater than 150mm but not exceeding 250mm total thickness it shall be measured as two layers of base course with +/- adjustments for each 5mm thickness increment where applicable.

When base course is greater than 250mm but not exceeding 350mm total thickness it shall be measured as three layers of base course with +/- adjustments for each 5mm thickness increment where applicable.

When binder course is 90mm or less total thickness it shall be measured as a single layer of binder course 60mm thick with +/- adjustments for each 5mm thickness increment where applicable.

When binder course is greater than 90mm but not exceeding 150mm total thickness it shall be measured as two layers of binder course with +/- adjustments for each 5mm thickness increment where applicable.

In paragraph 8:

Add to Group II the following features:

Group	Feature
II	7 Adjustment for each 5mm variation above or below the stated thickness.
	8 Adjustment for alternative PSV on Surface Course.
	9 Adjustment for alternative AAV on Surface Course.

Delete Groups VI and VII and replace with the following:

Group	Feature
VI	1 Each Type to which the adjustment applies.
VII	1 Each thickness to which the adjustment applies.
VIII	1 Each alternative PSV.
IX	1 Each alternative AAV.

Note 1: Groups III, IV and V shall only apply to Group II features 1 to 6.

Note 2: Group VI shall only apply to Group II feature 7, 8 and 9.

Note 3: Group VII shall only apply to Group II feature 7.

Note 4: Group VIII shall only apply to Group II features 8.

Note 5: Group IX shall only apply to Group II features 9.

**Base, Lower Base,
Upper Base, Binder
Course, Surface
Course and
Concrete Slab**

Item coverage

- 9 Delete (aa) and replace with the following:
- (aa) slurry sealing, surface dressing, bituminous spray, resin based treatment and tack coat.
- Add the following after (ee):
- (ff) removing loose material and water,
- (gg) forming joints and sealing.

		Add the following after paragraph 9:	
Adjustment for each 5mm variation above or below the stated thickness, Adjustment for alternative PSV on Surface Course and Adjustment for alternative AAV on Surface Course	9A	The items for the adjustment for each 5mm variation above or below the stated thickness and alternative PSV on Surface Course and alternative AAV on Surface Course shall in accordance with the Preambles to Bill of Quantities General Directions include for:	
Item coverage	(a)	Base, Lower Base, Upper Base, Binder Course, Surface Course and Concrete Slab (as this Series paragraph 9).	
Surface Treatment	19	Add the following:	
Item coverage	(f)	different colours.	
After paragraph 19 insert the following paragraphs 19A to 19D inclusive :			
Removal of High Friction Surfacing			
Units	19A	(i)	The unit of measurement shall be: removal of high friction surfacing square metre.
Measurement	19B	The removal of high friction surfacing shall only be measured when:	
		(i)	Existing high friction surfacing is required to be removed, and
		(ii)	Removal does not form part of any other measurable operation including milling.
Itemisation	19C	Separate items shall be provided for removal of high friction surfacing in accordance with Chapter III paragraphs 3 and 4 and the following:	
		Group	Feature
		I	1 Removal of high friction surfacing.
		II	1 Any type.
Removal of High Friction Surfacing			
Item coverage	19D	The items for the removal of high friction surfacing shall in accordance with the Preambles to Bill of Quantities General Directions include for:	
		(a)	disposal of material (as Series 600 paragraph 39),
		(b)	reinstatement,

- (c) preparing surfaces to receive new high friction surfacing.

Tack Coat

Delete paragraph 22 and substitute the following:

- 22 Tack coat shall not be separately measured.

Reinstatement of Paved Areas

Itemisation

- 35 In paragraph 35 delete Group II and replace with the following:

Group	Feature
II	1 In carriageway, hardshoulder, emergency crossing, hardstrip, lay-by or bus bay,
	2 In footway or paved area.
III	1 Not exceeding 150mm total thickness,
	2 Over 150mm but not exceeding 300mm total thickness and so on in stages of 150mm.

Reinstatement of Paved Area

- 36 In paragraph 36 add the following:

Item coverage

- (m) excavation (as Series 600 paragraph 17, 18, 19 and 23),
(n) disposal of material (as Series 600, paragraph 39).

Itemisation

- 42 In paragraph 42 delete Groups III and IV.

Repairs and Patching to Carriageways

Delete paragraphs 77 to 81 and replace with the following paragraphs 77 to 87 inclusive:

Measurement

- 77 Measurement of:
(i) Permanent repairs to Category 1 defects exceeding £10,000, and
(ii) Patching to carriageways,
shall be in accordance with Series 600 and this Series paragraphs 1 to 28 inclusive.

Pavement Reinforcement

Units

- 79 The units of measurement shall be:
(i) pavement reinforcement..... square metre.

Measurement

- 80 The measurement of pavement reinforcement shall be the area of the reinforcement.
81 No deductions shall be made for openings of 1 square metre or less.

Itemisation	82	Separate items shall be provided for pavement reinforcement in accordance with Chapter III paragraphs 3 and 4 and the following:				
		<table><tr><th>Group</th><th>Feature</th></tr><tr><td>I</td><td>1 Pavement reinforcement.</td></tr></table>	Group	Feature	I	1 Pavement reinforcement.
Group	Feature					
I	1 Pavement reinforcement.					
Pavement Reinforcement	83	<p>The items for pavement reinforcement shall in accordance with Preambles to Schedule of Rates and Prices General Directions include for:</p> <p>(a) cleaning, trimming, regulating and preparing surfaces,</p> <p>(b) laps,</p> <p>(c) measures to protect material,</p> <p>(d) cutting, jointing, sealing and fixing,</p> <p>(e) securing material in place,</p> <p>(f) tensioning of reinforcement,</p> <p>(g) tack coat (as this Series paragraph 24).</p>				
		Grip Testing				
Units	84	<p>The units of measurement shall be:</p> <p>(i) grip testing..... km.</p>				
Measurement	85	Each carriageway lane tested shall be separately measured. The measurement shall be computed net to the nearest whole number.				
Itemisation	86	Separate items shall be provided for grip testing in accordance with Chapter III paragraphs 3 and 4 and the following:				
		<table><tr><th>Group</th><th>Feature</th></tr><tr><td>I</td><td>1 Grip testing.</td></tr></table>	Group	Feature	I	1 Grip testing.
Group	Feature					
I	1 Grip testing.					
Grip Testing	87	<p>The items for grip testing shall in accordance with Preambles to Schedule of Rates and Prices General Directions include for:</p>				
Item Coverage		<p>(a) calibration checks,</p> <p>(b) pre-survey,</p> <p>(c) testing each section twice where required,</p> <p>(d) multiple and repeat testing,</p> <p>(e) recording of GPS data,</p> <p>(f) reporting.</p>				

SCHEDULE 2 PART 1

METHOD OF MEASUREMENT

SERIES 1100: KERBS, FOOTWAYS AND PAVED AREAS

Kerbs, Channels, Edgings, Combined Kerbs and Channels, Combined Drainage and Kerb Blocks, and Linear Drainage Channel Systems

Itemisation	3	In paragraph 3 delete Group III.										
		Delete paragraphs 13 to 22 and insert the following paragraphs 13 to 18 inclusive:										
Units	13	(i) Bituminous material, in-situ concrete paving, precast concrete paving and lean mix square metre. (ii) Sub-base cubic metre.										
Measurement	14	The measurement of footways and paved areas shall be the area of the top surface of the layer.										
	15	No deduction shall be made for openings of 1 square metre or less.										
Itemisation	17	Separate items shall be provided for footways and paved areas in accordance with Chapter III paragraphs 3 and 4 and the following:										
		<table><tr><th>Group</th><th>Feature</th></tr><tr><td>I</td><td>1 Footways and paved areas.</td></tr><tr><td>II</td><td>1 Bituminous material layer. 2 In-situ concrete layer. 3 Precast concrete layer. 4 Lean mix concrete layer. 5 Subbase layer.</td></tr><tr><td>III</td><td>1 Different materials.</td></tr><tr><td>IV</td><td>1 Different thicknesses.</td></tr></table>	Group	Feature	I	1 Footways and paved areas.	II	1 Bituminous material layer. 2 In-situ concrete layer. 3 Precast concrete layer. 4 Lean mix concrete layer. 5 Subbase layer.	III	1 Different materials.	IV	1 Different thicknesses.
Group	Feature											
I	1 Footways and paved areas.											
II	1 Bituminous material layer. 2 In-situ concrete layer. 3 Precast concrete layer. 4 Lean mix concrete layer. 5 Subbase layer.											
III	1 Different materials.											
IV	1 Different thicknesses.											
		Note: Group IV feature shall not apply to Group II feature 5.										

**Footways and
Paved Areas**

Item coverage

- 18 The items for footways and paved areas shall in accordance with the Preambles to Bill of Quantities General Directions include for:
- (a) edge support,
 - (b) concrete (as Series 1700 paragraphs 5 and 10),
 - (c) formwork (as Series 1700 paragraph 15),
 - (d) void formers (as Series 1700 paragraph 16),
 - (e) working round obstructions,
 - (f) reinforcement (as Series 1700 paragraph 26),
 - (g) joint filler and sealant (as Series 2300 paragraphs 9 and 10),
 - (h) mortar and sand beds,
 - (i) surface finishes,
 - (j) trial mixes,
 - (k) regulating, laying to levels and falls,
 - (l) bedding, laying course, jointing and pointing,
 - (m) straight, circular and radial cutting and fitting,
 - (n) rough and fair cutting and fitting,
 - (o) not used,
 - (p) not used,
 - (q) compacting,
 - (r) membrane,
 - (s) topsoiling (as Series 600 paragraph 80),
 - (t) grass seeding (as Series 3000 paragraph 9).

18A The item coverage of items for sub-base shall include for compliance with Series 700 paragraph 5.

18B The item coverage of items for bituminous layers shall include for compliance with Series 700 paragraph 9.

Delete paragraphs 23 to 29 inclusive and substitute the following paragraphs 23 to 29 inclusive:

**Remove from Store or from where previously Set Aside and Relay
Paving Flags and Blocks**

Units

- 23 The unit of measurement shall be:
- (i) remove from store and relay paving flags and blocks
..... square metre.

Measurement	24	The measurement of remove from store and relay paving flags and blocks shall be the area of the top surface of the work. No deduction shall be made for openings of 1 square metre or less.		
	25	Separate items shall be provided for remove from store and relay paving flags and blocks in accordance with Chapter III paragraphs 3 and 4 and the following:		
		Group	Feature	
		I	1	Remove from store or where previously set aside and relay paving in footways and paved areas.
		II	1	Different materials.
Remove from Store and Relay Paving Flags and Blocks		The items for remove from store and relay paving flags and blocks shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:		
Item coverage	26	(a)	loading, transporting from store or from where previously set aside, unloading and positioning for relaying,	
		(b)	replacing items damaged during the foregoing operations,	
		(c)	modification and new materials,	
		(d)	footways and paved areas (as this Series paragraph 18).	
		Steps		
Units	27	The unit of measurement shall be: (i) flight of steps..... linear metre.		
Measurement	28	The measurement steps shall be the complete flight including landings and shall be measured along the slope length of the steps and the plan length of all integral landings.		
Itemisation	29	Separate items shall be provided for steps in accordance with Chapter III paragraphs 3 and 4 and the following:		
		Group	Feature	
		I	1	Steps.
		II	1	Different widths.

After paragraph 3e add the following paragraphs 34 to 40 inclusive:

Cold Milling (Planing)

- 34 The units, measurement, itemisation and item coverage for cold milling (planing) shall be as Series 700 paragraphs 25 to 28 inclusive.

Reinstatement of Paved Areas

- 35 The units, measurement, itemisation and item coverage for reinstatement of paved areas shall be as Series 700 paragraphs 33 to 36 inclusive.

Patching of Footways and Paved Areas

- | | | |
|-------------|----|--|
| Definition | 36 | Patching covers the replacement of surfacing materials in any number of individual areas of not exceeding 5 square metres. |
| Units | 37 | The unit of measurement shall be:

patching, square metre. |
| Measurement | 38 | The measurement of patching shall be the area of the top surface of the patch.

Where several patches are in a single Scheme the measurement shall be the summated area of all the patches in that Scheme. |
| Itemisation | 39 | Separate items shall be provided for patching in accordance with Chapter III paragraphs 3 and 4 and the following: |

Group	Feature	
I	1	Patching in existing footway or paved area.
II	1	Surface course.
	2	Binder course.
III	1	Different thicknesses.

**Patching of
Footways and
Paved Areas**

Item coverage

- 40 The items for patching of footways and paved areas shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
- (a) excavation (as Series 600 paragraphs 17, 18, 19 and 23),
 - (b) breaking out each course of existing pavement to defined depths and lines, stepped back between successive courses,
 - (c) milling (as this Series paragraph 35),
 - (d) disposal of material (as Series 600 paragraph 39),
 - (e) trimming and protecting vertical edges,
 - (f) making good up to adjacent courses, cleaning and painting with bitumen,
 - (g) regulating,
 - (h) temporary and permanent reinstatement (as Series paragraph 36),
 - (i) tack coat (as Series 700 paragraph 24),
 - (j) all of the above if the patching fails within 12 months.

SCHEDULE 2 PART 1

METHOD OF MEASUREMENT

SERIES 1200: TRAFFIC SIGNS AND ROAD MARKINGS

Delete heading "Traffic Signs" and replace with:

Traffic Signs Faces

Delete paragraph 1 to 5 and replace with the following paragraphs 1 to 5P inclusive:

Units	1	The unit of measurement shall be:	
		(i)	traffic sign faces.....square metre.
Measurement	2	The measurement of traffic sign faces shall be the surface area of the sign.	
Itemisation	3	Separate items shall be provided for traffic signs faces in accordance with Chapter III paragraphs 3 and 4 and the following:	
		Group	Feature
		I	1 Permanent traffic sign faces.
		II	1 Class RA2 retroreflective.
			2 Microprismatic Grade retroreflective.
		III	1 Sign face not exceeding 0.50 square metres in area.
			2 Sign face exceeding 0.5 but not exceeding 1.0 square metres in area.
			3 Sign face exceeding 1.0 but not exceeding 2.0 square metres in area.
			4 Sign face exceeding 2.0 but not exceeding 5.0 square metres in area.
			5 Sign face exceeding 5.0 square metres in area.
Traffic Sign Faces	4	The items for traffic sign faces shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:	
Item coverage		(a)	covering and removal of coverings of signs,
		(b)	location lettering and marking,
		(c)	drilling or forming holes and pockets in Structures or lighting columns and casting in bolts, sockets and anchorage assemblies,

- (d) sign plates,
- (e) rivets, bolts nuts and other fastenings,
- (f) purlins and fixings,
- (g) protective treatment,
- (h) notices and recording,
- (i) preparation and supply of record drawings,
- (j) fixing to Structures including attachment systems and additional materials for hinges.

Traffic Sign Posts and Passively Safe Traffic Sign Posts

Definitions		'Passively safe traffic sign posts' refers to posts compliant with BS EN 12767.
Units	5	The unit of measurement shall be: <ul style="list-style-type: none"> (i) traffic sign posts linear metre, (ii) passively safe traffic sign posts.....linear metre, (iii) extra over for electrical housing.....number.
Measurement	5A	The measurement of traffic sign posts and Passively Safe Traffic Sign Posts shall be the complete installation. 'Cross-sectional area' shall be measured as: <ul style="list-style-type: none"> 1 For triangular and quadrilateral profiles the cross-sectional area shall be the external area of the triangle or quadrilateral. 2 For all other profiles the cross-sectional area will be the minimum area of a quadrilateral that the profile may be contained within.
Itemisation	5B	Separate items shall be provided for traffic sign posts and Passively Safe Traffic Sign Posts in accordance with Chapter III paragraphs 3 and 4 and the following:

Group	Feature
I	<ul style="list-style-type: none"> 1 Steel traffic sign posts. 2 Passively safe traffic sign posts. 3 Extra over steel traffic sign posts for electrical housing. 4 Extra over passively safe traffic sign posts for electrical housing.
II	<ul style="list-style-type: none"> 1 Circular. 2 Other profile.
III	<ul style="list-style-type: none"> 1 Planted. 2 Flanged base.

		IV	1	Diameter.
		V	1	Cross-sectional area not exceeding 0.05 square metres.
			2	Cross-sectional area exceeding 0.05 but not exceeding 0.10 square metres.
			3	Cross-sectional area exceeding 0.10 square metres.
		VI	1	Post length not exceeding 4 metres.
			2	Post length exceeding four metres.
		Note 1: Group IV shall only apply to Group II feature 1.		
		Note 2: Group V shall only apply to Group II features 2.		
		Note 3: Group III to V shall not apply to Group II features 3 and 4.		
Traffic Sign Posts and Passively Safe Traffic Sign Posts	5C	The items for traffic sign posts shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:		
Item coverage		<ul style="list-style-type: none"> (a) location lettering and marking, (b) electrical equipment, wiring, and connections, excluding supply and control cable, (c) conduit including screwed and threaded connections, bends, tees and other similar features draw wires, (d) backboard, fixing, protective caps, sealing, grommets, spacers, mounting plates and strips, (e) doors, locks and keys, (f) drilling or forming holes and pockets in Structures or foundations, (g) base plates, bolts, sockets and anchorage assemblies, (h) top plates and caps, (i) aligning, fixing and casting into foundations, (j) cutting post to length, (k) bedding and grouting, (l) protective system (as Series 1900 paragraph 4), (m) identification numbers, (n) threading cable through ducts sleeves and conduits, (o) complying with wiring regulations, earthing (other than earth electrodes), (p) protective treatment, 		

- (q) notices and recording,
- (r) preparation and supply of record drawings.

Traffic Sign Bases

Units	5D	The unit of measurement shall be:	
		(i)	small traffic sign basesnumber,
		(ii)	large traffic sign bases.....cubic metres,
		(iii)	Electrical access chamber in traffic sign basesnumber.
Measurement	5E	The measurement of traffic sign bases shall be the complete installation. Small concrete traffic sign bases shall be those not exceeding 1.2 cubic metres. Large concrete traffic sign bases shall be those exceeding 1.2 cubic metres.	
Itemisation	5F	Separate items shall be provided for traffic sign bases in accordance with Chapter III paragraphs 3 and 4 and the following:	
		Group	Feature
		I	1 Small concrete traffic sign bases.
			2 Large concrete traffic sign bases.
			3 Electrical access chamber in traffic sign bases.
		II	1 Not exceeding 0.3 cubic metres.
			2 Exceeding 0.3 cubic metres but not exceeding 0.6 cubic metres.
			3 Exceeding 0.6 cubic metres but not exceeding 1.2 cubic metres.
		Note: Group II shall only apply to Group I feature 1.	
Small and Large Traffic Sign Bases	5G	The items for small and large traffic sign bases shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:	
Item coverage		(a)	excavation of any material (as Series 600 paragraphs 17, 18, 19 and 23),
		(b)	disposal of material (as Series 600 paragraph 39),
		(c)	backfilling and compaction,
		(d)	in situ concrete (as Series 1700 paragraph 5),
		(e)	formwork (as Series 1700 paragraph 15),

		(f) reinforcement (as Series 1700 paragraph 26),
		(g) ducts, sleeves, sockets and anchorages in bases,
		(h) reinstatement of surfaces,
		(i) preparation and supply of record drawings.
Electrical access chamber in traffic sign bases	5H	The items for Electrical access chamber in traffic sign bases shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) excavation of any material (as Series 600 paragraphs 17, 18, 19 and 23),
		(b) disposal of material (as Series 600 paragraph 39),
		(c) backfilling and compaction,
		(d) in situ concrete (as Series 1700 paragraph 5),
		(e) formwork (as Series 1700 paragraph 15),
		(f) reinforcement (as Series 1700 paragraph 26),
		(g) ducts, sleeves, sockets and anchorages in bases, electrical equipment, wiring, and connections, excluding supply and control cable,
		(h) conduit including screwed and threaded connections, bends, tees and other similar features draw wires,
		(i) backboard, fixing, protective caps, sealing, grommets, spacers, mounting plates and strips,
		(j) doors, locks and keys,
		(k) reinstatement of surfaces,
		(l) preparation and supply of record drawings.

Sign Lighting Units

Units	5I	The unit of measurement shall be: (i) sign lighting units..... number.				
Measurement	5J	The measurement for sign lighting units shall be of the complete installation. The measurement of traffic sign lighting units shall be the complete installation except for earth electrodes which shall be measured separately under Series 1400 (paragraphs 24 to 27).				
Itemisation	5K	Separate items shall be provided for sign lighting units in accordance with Chapter III paragraphs 3 and 4 and the following: <table><tr><th>Group</th><th>Feature</th></tr><tr><td>I</td><td>1 Sign lighting units.</td></tr></table>	Group	Feature	I	1 Sign lighting units.
Group	Feature					
I	1 Sign lighting units.					

		III	1	Mounting height not exceeding 2 metres.
			2	Mounting height exceeding 2 metres.
Sign Lighting Units	5L	The items for sign lighting units shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:		
Item coverage		(a)	electrical equipment, wiring, and connections, excluding supply and control cable,	
		(b)	conduit including screwed and threaded connections, bends, tees and other similar features draw wires,	
		(c)	threading cable through ducts, sleeves and conduits,	
		(d)	complying with wiring regulations, earthing (other than earth electrodes), and inspection,	
		(e)	earth block and earthing of sign post and equipment,	
		(f)	light spill screens.	
Sign Bracket Arms				
Units	5M	The unit of measurement shall be:		
		(i)	sign bracket arms number.	
Measurement	5N	The measurement for sign bracket arms shall be of the complete installation.		
Itemisation	5O	Separate items shall be provided for sign bracket arms in accordance with Chapter III paragraphs 3 and 4 and the following:		
		Group	Feature	
		I	1	Sign bracket arms.
		II	2	Different types.
		III	1	Mounting height not exceeding 2 metres.
			2	Mounting height exceeding 2 metres.
Sign Bracket Arms	5P	The items for sign bracket arms shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:		
Item coverage		(a)	earthing of sign post and equipment,	
		(b)	fixtures and fittings,	
		(c)	protective system (as Series 1900 paragraph 4),	
		(d)	threading cable through ducts sleeves, conduit and the like.	

Delete paragraphs 6 to 9 inclusive and replace with the following paragraphs 6 to 9 inclusive:

Remove from Store and Re-erect Traffic Sign Faces, Traffic Sign Posts, Sign Lighting Units, Sign Bracket Arms

Units	6	The unit of measurement shall be:	
	(i)	remove from store and re erect traffic sign faces number,	
	(ii)	remove from store and re-erect traffic sign posts number,	
	(iii)	remove from store and re-erect sign lighting units number,	
	(iv)	remove from store and re-erect bracket arms number.	
Measurement	6A	The measurement of mounting height shall be to the lowest point of the sign face.	
Itemisation	7	Separate items shall be provided for remove from store and re-erect traffic sign faces, traffic sign posts, sign lighting units, sign bracket arms in accordance with Chapter III paragraphs 3 and 4 and the following:	
		Group	Feature
		I	1 Remove from store and re-erect.
		II	1 Traffic sign face.
			2 Traffic sign post.
			3 Sign lighting unit.
			4 Bracket arm.
		III	1 Different types.
		IV	1 Sign face not exceeding 0.50 square metres in area.
			2 Sign face exceeding 0.5 but not exceeding 1.0 square metres in area.
			3 Sign face exceeding 1.0 but not exceeding 2.0 square metres in area.
			4 Sign face exceeding 2.0 but not exceeding 5.0 square metres in area.
			5 Sign face exceeding 5.0 but not exceeding 10.0 square metres in area.
			6 Sign face exceeding 10.0 but not exceeding 20.0 square metres in area.
			7 Sign face exceeding 20.0 square metres in area.

	V	1	Different diameters.
		2	Different cross-sectional areas.
	VI	1	Mounting height not exceeding 2 metres.
		2	Mounting height exceeding 2 metres.
	VII	1	Post length not exceeding 4 metres.
		2	Post length exceeding 4 metres.
	VIII	1	Cross-sectional area not exceeding 0.05 square metres.
		2	Cross-sectional area exceeding 0.05 but not exceeding 0.10 square metres.
		3	Cross-sectional area exceeding 0.10 square metres.
	<p>Note 1: Group III shall only apply to Group II features 2, 3 and 4.</p> <p>Note 2: Group IV shall only apply to Group II feature 1.</p> <p>Note 3: Group V shall only apply to Group II feature 2.</p> <p>Note 4: Group VI shall only apply to Group II feature 1.</p> <p>Note 5: Group VII shall only apply to Group II feature 2.</p> <p>Note 6: Group VIII shall only apply to Group V feature 2.</p>		
Remove from Store and Re-erect Traffic Sign Faces, Traffic Sign Posts, Sign Lighting Units, Sign Bracket Arms	8	The items for remove from store and re-erect traffic sign faces, traffic sign posts, sign lighting units,, sign bracket arms shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:	
Item coverage		(a)	loading, transporting, unloading and positioning for re-erection,
		(b)	replacing items damaged during the foregoing operations,
		(c)	modification and new materials,
		(d)	painting existing painted items,
		(e)	traffic signs faces (as this Series paragraph 4),
		(f)	traffic signs posts (as this Series paragraph 5G),
		(g)	sign lighting units (as this Series paragraph 5O),
		(h)	sign bracket arms (as this Series paragraph 5S).

Road Markings

Units	9	The unit of measurement shall be:
	(i)	marking of solid areassquare metre,
	(ii)	marking of lines.....linear metre,
	(iii)	marking of triangles, circles, circles with enclosing arrows, arrows, kerb markings, symbols, nodes, letters and numeralsnumber,
	(iv)	adjustment for yellow thermoplastic screed and white thermoplastic screed (measured extra over) percentage,
	(v)	removal of solid areas, lines, triangles, circles, circles with enclosing arrows, arrows, kerb markings, symbols, letters and numerals square metre.

Measurement In paragraph 11 delete the following from the second paragraph:
'but the length of the mark and gap shall be stated'.

Delete paragraph 16 and substitute the following paragraph 16:

Itemisation	16	Separate items shall be provided for marking and removal of road markings in accordance with Chapter III paragraphs 3 and 4 and the following:
-------------	----	--

Group	Features
I	1 Removal of road markings.
	2 Road markings.
II	1 Solid areas.
	2 Continuous lines.
	3 Intermittent lines.
	4 Ancillary lines.
	5 Raised rib lines.
	6 Triangles.
	7 Circle with enclosing arrows.
	8 Arrows.
	9 Kerb markings.
	10 Letters and numerals.
	11 Symbols.
III	1 Different materials.

		IV	1	Different widths of lines.
			2	Different sizes of circles with and without enclosing arrows.
			3	Different lengths of arrows.
			4	Different lengths of kerb markings.
			5	Different heights of letters and numerals.
			6	Different sizes of symbols.
		V	1	Different diagram numbers for arrows, kerb markings and symbols.
		VI	1	Different types.
		VII	1	Different colours.
		VIII	1	Reflectorised.
		IX	1	Any line, solid area symbol or letter excluding raised rib lines.
			2	Raised rib lines.
		Note 1: Group III to V, VII and VIII shall only apply to Group I feature 2.		
		Note 2: Group IX shall only apply to Group I feature 1.		
		Road Studs		
		In paragraph 19 add the following:		
Units	19	(ii)	road stud cylinders.....number,	
		(iii)	replace rubber pads.....number.	
		In paragraph 21 add the following Group I features and delete Group IV:		
Itemisation	21	Group	Features	
		I	2	Road Stud cylinders.
			3	Replace rubber pads.
		Road Studs		
		In paragraph 22 add the following:		
Item coverage		(f)	surface preparation,	
		(g)	cleaning out existing sockets.	
		Marker Posts		
Marker Posts	39	In paragraph 39 delete sub paragraph (c) and substitute the following:		
Item coverage		(c)	driving or excavating in acceptable material and driving or excavating in any material (as Series 600 paragraphs 17, 18, 19 and 23).	

Permanent Bollards

Units	40	In paragraph 40 add the following:		
		(i)	Renew permanent bollard shell	number,
		(ii)	Re-fix existing permanent bollard shell	number.
Itemisation	41	In paragraph 41 delete Group I and substitute the following:		
		Group	Feature	
		I	1	Permanent bollard.
			2	Renew permanent bollard shell.
			3	Refix existing permanent bollard shell.
Permanent Bollards	42	In paragraph 42 delete paragraph (a) and (b) and replace with the following:		
Item coverage		(a)	traffic signs faces (as this Series, paragraph 4),	
		(b)	traffic signs posts (as this Series, paragraph 5G),	
		(c)	traffic signs bases (as this Series, paragraph 5K),	
		(d)	preservation treatment of timber.	

After paragraph 42 add the following paragraphs 42A to 42C inclusive:

Remove from Store and Re-erect Bollards

Units	42A	The unit of measurement shall be:		
		(i) remove from store and re-erect bollards number.		
Itemisation	42B	Separate items shall be provided for remove from store and re-erect bollards in accordance with Chapter III paragraphs 3 and 4 and the following:		
		Group	Feature	
		I	1	Remove from store and re-erect.
		II	1	Bollards.
		III	1	Non-illuminated.
			2	Internally illuminated.
Remove from Store and Re-erect Bollards	42C	The items for remove from store and re-erect bollards shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:		
Item coverage		(a)	loading, transporting from store, unloading and positioning for re-erection,	
		(b)	replacing items damaged during the foregoing operations,	
		(c)	modification and new materials,	
		(d)	painting existing painted items,	

- (e) traffic signs faces (as this Series paragraph 4),
- (f) traffic signs posts (as this Series paragraph 5G),
- (g) traffic signs bases (as this Series paragraph 5K).

After paragraph 45 add the following paragraphs 46 to 57 inclusive:

Passively Safe Flexible Chevrons

Units	46	The unit of measurement shall be: Flexible chevrons linear metre.			
Measurement	47	Measurement shall be the horizontal length of the complete chevron installation.			
Itemisation	48	Separate items shall be provided for flexible chevrons in accordance with Chapter III paragraphs 3 and 4 and the following:			
		Group	Feature		
		I	1	Passively safe RA2 retroreflective rebound chevrons to BS EN 12767.	
		II	1	Different heights of chevron symbol:	
Item coverage	49	(a)	traffic signs faces (as this Series paragraph 4),		
		(b)	traffic signs posts (as this Series paragraph 5G),		
		(c)	traffic signs bases (as this Series paragraph 5K).		

Location Lettering and Marking of Existing Traffic Signs

Units	50	The units of measurement shall be: (i) location lettering and marking of existing traffic signsnumber.						
Measurement	51	The measurement of location lettering and marking of existing traffic signs shall be for the complete installation. The location lettering and marking of traffic signs shall not be separately measured for Sign Faces measured in accordance with this Series, paragraphs 1 to 4.						
Itemisation	52	Separate items shall be provided for location lettering and marking of existing traffic signs in accordance with Chapter III paragraphs 3 and 4 and the following: <table><tr><th>Group</th><th>Feature</th></tr><tr><td>I</td><td>1 Location lettering and marking.</td></tr><tr><td>II</td><td>1 Existing traffic signs.</td></tr></table>	Group	Feature	I	1 Location lettering and marking.	II	1 Existing traffic signs.
Group	Feature							
I	1 Location lettering and marking.							
II	1 Existing traffic signs.							

Location lettering and marking of Existing Traffic Signs 53 The item for location lettering and marking of existing traffic signs shall in accordance with the Preamble to Schedule of Rates and Prices General Directions include for:

- Item Coverage
- (a) preparing surface,
 - (b) removing old number,
 - (c) marking and lettering,
 - (d) recording,
 - (e) reporting.

Snow Poles

Units 54 The unit of measurement shall be:

- (i) Snow polesnumber.

Measurement 55 The measurement of snow poles shall be for the complete installation.

Itemisation 56 Separate items shall be provided for snow poles in accordance with Chapter III paragraphs 3 and 4 and the following:

Group	Feature
I	1 Snow poles.
II	1 External diameter.
III	1 Length.

Snow Poles 57 The items for snow poles shall in accordance with the Preambles to Schedule of Rates and Prices 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) backfilling and compaction,
 - (d) disposal of material (as Series 600 paragraph 39),
 - (e) in situ concrete (as Series 1700 paragraph 5),
 - (f) formwork (as Series 1700 paragraph 15),
 - (g) reinforcement (as Series 1700 paragraph 26),
 - (h) reinstatement of surfaces,
 - (i) protective system (as Series 1900 paragraph 4),
 - (j) numerals, symbols and reflectorised strips or discs including adhesive.

SCHEDULE 2 PART 1

METHOD OF MEASUREMENT

SERIES 1300: ROAD LIGHTING COLUMNS AND BRACKETS, CCTV MASTS AND CANTILEVER MASTS

Road Lighting Columns and Brackets, Wall Mountings, CCTV Masts and Cantilever Masts

Definitions 'Passively Safe Lighting Columns' refers to columns compliant with BS EN 12767.

Delete paragraphs 2 and 3, and substitute the following paragraphs 2 and 3:

Measurement 2 The measurement of road lighting columns and brackets, wall mountings, CCTV masts and cantilever masts shall be the complete installation except for:

- (i) earth electrodes which shall be measured separately (under Series 1400 paragraphs 24 to 27),
- (ii) earth equipotential bonding which shall be measured separately (under Series 1400 paragraphs 37 to 40),
- (iii) luminaires which shall be measured separately (under this Series paragraphs 9 to 12).

Itemisation 3 Separate items shall be provided for road lighting columns and brackets, wall mountings CCTV masts and cantilever masts in accordance with Chapter III paragraphs 3 and 4 and the following:

Group	Feature
I	1 Road lighting columns.
	2 Wall mountings.
	3 CCTV masts.
	4 Cantilever masts
II	1 Steel.
	2 Passively safe.
III	1 Not exceeding 10 metres nominal height.
	2 Exceeding 10 metres nominal height.
IV	1 Types of base.
V	1 Single bracket.
	2 Double bracket.

Note 1: Groups III and IV shall only apply to Group I features 1 and 4.

Note 2: Group V shall only apply to Group I feature 1.

Remove from Store and Re-erect Road Lighting Columns and Brackets, Wall Mountings, CCTV Masts and Cantilever Masts

Delete paragraphs 5 to 7 inclusive and replace with the following paragraphs 5 to 20 inclusive:

- | | | |
|-------------|---|--|
| Units | 5 | The unit of measurement shall be: |
| | | (i) remove from store and re-erect road lighting columns and brackets, wall mountings CCTV masts and cantilever masts number. |
| Measurement | 6 | The measurement of remove from store and re-erect road lighting columns and brackets, wall mountings, CCTV masts and cantilever masts shall be the complete installation except for: |
| | | (i) earth electrodes which shall be measured separately (under Series 1400 paragraphs 24 to 27), |
| | | (ii) earth equipotential bonding which shall be measured separately (under Series 1400 paragraphs 37 to 40). |
| Itemisation | 7 | Separate items shall be provided for remove from store and re-erect road lighting columns and brackets, wall mountings, CCTV masts and cantilever masts in accordance with Chapter III paragraphs 3 and 4 and the following: |

Group	Feature	
I	1	Remove from store and re-erect road lighting columns and brackets.
	2	Remove from store and re-erect wall mountings.
	3	Remove from store and re-erect CCTV masts.
	4	Remove from store and re-erect cantilever masts.
II	1	Not exceeding 10m nominal height.
	2	Exceeding 10m but not exceeding 15 metres nominal height.
III	3	Different types of bases.

Remove from Store and Re-Erect Road Lighting Columns and Brackets, Wall Mountings, CCTV Masts and Cantilever Masts 8 The items for remove from store and re-erect road lighting columns, brackets and wall mountings, CCTV masts and cantilever masts shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:

- Item coverage
- (a) loading, transporting from store, unloading and positioning for re-erection,
 - (b) replacing items damaged during the foregoing operation,
 - (c) modification and new materials,
 - (d) painting existing painted items,
 - (e) road lighting columns and brackets, wall mountings, CCTV masts and cantilever masts (as this Series paragraphs 4.

Luminaires

Units 9 The units of measurement shall be:

- (i) luminaires, number,
- (ii) photo-electric control unit number.

Measurement 10 The measurement of luminaires shall be the complete installation.

Itemisation 11 Separate items shall be provided for luminaires, in accordance with Chapter III paragraphs 3 and 4 and the following:

Group	Feature
I	1 Luminaires.
	2 Photo-electric control unit.
II	2 Different types.

Note: Group II shall only apply to Group I feature 1.

Luminaires 12 The items for luminaires, shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:

- Item coverage
- (a) electrical equipment, wiring and making connections, excluding network cabling,
 - (b) remote or integral control gear,
 - (c) wiring from lighting unit to cut-out,
 - (d) conduit including draw wires, screwed and threaded connections, bends, tees, and other similar features,

		<ul style="list-style-type: none"> (e) threading cable through ducts sleeves, conduit and the like, (f) fixings, protective caps, sealing grommets, spacers, mountings, plates and strips, (g) notices, recording and preparation and supply of record drawings, (h) complying with wiring regulations, earthing (other than earth electrodes), (i) complying with required lighting levels of all Scheme designs.
Photo-electric control Unit	13	The items for photo-electric control units shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		<ul style="list-style-type: none"> (a) electrical equipment, wiring and making connections, excluding network cabling, (b) remote or integral control gear, (c) wiring from lighting unit, conduit including draw wires, screwed and threaded connections, bends, tees, and other similar features, (d) threading cable through ducts sleeves, conduit and the like, (e) fixings, protective caps, sealing grommets, spacers, mountings, plates and strips, (f) recording and preparation and supply of record drawings, (g) complying with wiring regulations, earthing (other than earth electrodes).
		Replace Lamps
Units	13A	The units of measurement shall be: <ul style="list-style-type: none"> (i) replace lamps, number.
Measurement	14	Replacement of lamps shall only be measured for lamp outages; provided the outage has occurred prior to the due date for bulk lamp change and the outage occurs within a 30mph zone.

Itemisation	15	Separate items shall be provided for replace lamps, in accordance with Chapter III paragraphs 3 and 4 and the following:				
		<table><tr><th>Group</th><th>Feature</th></tr><tr><td>I</td><td>1 Replace high-intensity discharge lamp within 30mph zone.</td></tr></table>	Group	Feature	I	1 Replace high-intensity discharge lamp within 30mph zone.
Group	Feature					
I	1 Replace high-intensity discharge lamp within 30mph zone.					
Replace Lamps	16	The items for replace lamps, shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:				
Item coverage		(a) removal of existing lamp, (b) disposal of material.				
Marking and lettering of Existing Road Lighting Columns						
Units	17	The units of measurement shall be: Marking and lettering of existing road lighting columnsnumber.				
Measurement	18	The measurement of marking and lettering of existing road lighting columns shall be for the complete installation. Marking and lettering of lighting columns shall not be separately measured for road lighting columns measured in accordance with this Series, paragraphs 1 to 4.				
Itemisation	19	Separate items shall be provided for marking and lettering of existing road lighting columns in accordance with Chapter III paragraphs 3 and 4 and the following:				
		<table><tr><th>Group</th><th>Feature</th></tr><tr><td>I</td><td>1 Marking and lettering existing road lighting columns.</td></tr></table>	Group	Feature	I	1 Marking and lettering existing road lighting columns.
Group	Feature					
I	1 Marking and lettering existing road lighting columns.					
Marking and lettering of Existing Road Lighting Columns	20	The item for numbering of existing road lighting columns shall in accordance with the Preamble to Schedule of Rates and Prices General Directions include for:				
Item Coverage		(a) preparing surface (as Series 5000 paragraph 5), (b) removing old number, (c) making good protective system (as Series 5000 paragraph 6), (d) marking and lettering, (e) recording, (f) reporting, (g) conspicuity banding.				

SCHEDULE 2 PART 1

METHOD OF MEASUREMENT

SERIES 1400: ELECTRICAL WORK FOR ROAD LIGHTING AND TRAFFIC SIGNS

Locating Buried Road Lighting and Traffic Signs Cable

Delete paragraphs 1 to 4 inclusive.

Trench for Cable or Duct

Itemisation 7 In paragraph 7 delete Groups I, II, III and IV and replace with the following:

Group	Feature
I	1 Trench for cable or duct.
II	1 Not exceeding 500mm wide.
	2 Exceeding 500mm but not exceeding 1000mm wide.
III	1 Trench depth not exceeding 600mm.
	2 Trench depth exceeding 600mm but not exceeding 900mm and so on in steps of 300mm.

Cable and Duct

Cable and Duct 9 In paragraph 9 delete sub paragraph (g) and substitute the following:

Item coverage (g) scheduled and unscheduled joints.

Cable Joints and Terminations

After paragraph 19 add the following heading and paragraphs 19A to 19D inclusive:

Renew Terminations

Units 19A The unit of measurement shall be:
(i) renew terminations number.

Measurement 19B The measurement for renew terminations shall be for the complete operation.

Itemisation	19C	Separate items shall be provided for renew terminations in accordance with Chapter III paragraphs 3 and 4 and the following:								
		<table><tr><th>Group</th><th>Feature</th></tr><tr><td>I</td><td>1 Renew terminations.</td></tr><tr><td>II</td><td>1 Different types.</td></tr><tr><td>III</td><td>1 Different sizes.</td></tr></table>	Group	Feature	I	1 Renew terminations.	II	1 Different types.	III	1 Different sizes.
Group	Feature									
I	1 Renew terminations.									
II	1 Different types.									
III	1 Different sizes.									
Renew Terminations	19D	The items for renew terminations shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:								
Item coverage		<ul style="list-style-type: none">(a) preparing, stripping and cleaning ends,(b) connectors, glands, clamps, sleeves, cleats, tags and terminal blocks,(c) connecting conductors to terminals,(d) removing "knock outs" and drilling backboard,(e) insulating ends of unused conductors,(f) bonding,(g) jointing kits,(h) numbering and lettering,(i) complying with wiring regulations and earthing (other than earth electrodes),(j) protection, curing and support of cable joints and keeping the cable joint free of moisture,(k) markers,(l) additional excavation of acceptable material (as Series 600 paragraphs 17 and 18),(m) additional excavation of unacceptable material (as Series 600 paragraph 19),(n) excavation in Hard Material (as Series 600 paragraph 23),(o) disposal of material (as Series 600 paragraph 39),(p) links and jumper leads,(q) building out,(r) site records,(s) phase labelling,(t) temporary sealing of cable ends,(u) isolation,								

- (v) disconnection of cables (as this Series paragraph 36),
- (w) cable joints and termination (as this Series paragraph 19).

Chambers

Itemisation	31	In paragraph 31 delete Group II and substitute the following:		
		Group	Feature	
		II	1	Not exceeding 0.30 square metres internal area.
			2	Exceeding 0.30 square metres internal area.

Remove from Store and Re-erect Feeder Pillars

Itemisation	34	In paragraph 34 delete Group II Feature 1.		
		After paragraph 35 add the following paragraphs 36 to 47 inclusive.		

Disconnection of Cables

Units	36	The unit of measurement shall be:		
		(i)	disconnection of cables number.	
Measurement	37	The measurement for disconnection of cables from equipment shall be for the complete operation.		
		Disconnection of cables shall not be separately measured where removal of equipment taken up or down and set aside for re-use or remove to store or tip off Site measured in accordance with Series 200.		
Itemisation	38	Separate items shall be provided for disconnection of cables in accordance with Chapter III paragraphs 3 and 4 and the following:		
		Group	Feature	
		I	1	Disconnection of cables.
		II	1	Permanent.
			2	Temporary.
		III	1	Different sizes.
		IV	1	Different types.
Disconnection of Cables	39	The items for disconnection of cables shall in accordance with the Preambles to Schedule of Rates and Prices 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, compaction and making good of the surface,
- (e) disposal of materials (as Series 600 paragraph 39),
- (f) locating, working around and supporting pipes, cables, services, apparatus and other similar features,
- (g) isolating cables at feeder pillar,
- (h) disconnecting cables from termination unit and withdrawing of cable from equipment,
- (i) temporary sealing of cable ends,
- (j) permanent sealing of cable ends,
- (k) cleaning trimming, taping, sealing and capping including clamps,
- (l) complying with wiring regulations,
- (m) reconnect at feeder pillar,
- (n) loading, transporting from store unloading and positioning of materials for erection,
- (o) replacing items damaged during operations in (l) above,
- (p) take up or down termination unit and remove to tip off Unit (as Series 200 paragraph 11),
- (q) providing new site records and updating existing site records,
- (r) reports,
- (s) reinstatement of surfaces.

Equipotential Bonding

- | | | |
|-------------|----|---|
| Units | 40 | <p>The units of measurement shall be:</p> <ul style="list-style-type: none"> (i) earth pits and rods number, (ii) additional earth rods number, (iii) additional earth conductors linear metre. |
| Measurement | 41 | <p>The measurement of earth conductors shall be the summation of the distance along the centre line of the route between the earth pit and the column earth block.</p> <p>The measurement of earth conductors shall include the terminations to the earth rods and column earth blocks.</p> |

Itemisation	42	Separate items shall be provided for equipotential bonding in accordance with Chapter III paragraphs 3 and 4 and the following:										
		<table><tr><th>Group</th><th>Feature</th></tr><tr><td>I</td><td>1 Equipotential bonding.</td></tr><tr><td>II</td><td>1 Earth pits and rods.</td></tr><tr><td></td><td>2 Additional earth conductors.</td></tr><tr><td></td><td>3 Additional earth rods.</td></tr></table>	Group	Feature	I	1 Equipotential bonding.	II	1 Earth pits and rods.		2 Additional earth conductors.		3 Additional earth rods.
Group	Feature											
I	1 Equipotential bonding.											
II	1 Earth pits and rods.											
	2 Additional earth conductors.											
	3 Additional earth rods.											
Equipotential Bonding	43	The items for equipotential bonding shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:										
Item coverage		<ul style="list-style-type: none">(a) trench for cable or duct (as this Series, paragraph 8),(b) intermediate supports and fixing devices where cables leave trench and prior to entry into equipment,(c) twisting and snaking,(d) preparing, stripping and cleaning ends,(e) glands and clamps,(f) driving,(g) clamps, cables and making connections,(h) covers frames seating and bedding,(i) earth rods including pressure plates, glands and clamps,(j) conduit including draw wires, all purpose made screwed and threaded connections, bends, tees and other similar features,(k) threading cable through ducts, sleeves, conduit and the like,(l) conductor cable including preparing, stripping and cleaning ends and connections,(m) markers, notices, recording and reports,(n) preparation and supply of record drawings.										
		Temporary Overhead Feed to Road Lighting Units										
Units	44	The unit of measurement shall be: <ul style="list-style-type: none">(i) temporary overhead feed to road lighting units linear metre.										
Measurement	45	The measurement of temporary overhead feed to road lighting units shall be the distance between supports.										

Itemisation	46	Separate items shall be provided for temporary overhead feed to road lighting units in accordance with Chapter III paragraphs 3 and 4 and the following:	
		Group	Feature
		I	1 Temporary overhead feed to road lighting units.
		II	1 Not exceeding 10 metres nominal height.
			2 10 metres to 15 metres nominal height.
			3 Exceeding 15 metres nominal height.
Temporary Overhead Feed to Road Lighting Units	47	The items for temporary overhead feed to road lighting units shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:	
Item coverage		(a)	fixing brackets and supports,
		(b)	catenary wire,
		(c)	replacement of faulty fuses,
		(d)	fit wiring,
		(e)	connectors, glands, clamps, sleeves, cleats, tags, terminal blocks,
		(f)	connecting conductors to terminals, removing knock-outs and drilling backboard, insulating ends of unused conductors, bonding, numbering and lettering, removal of temporary supply,
		(g)	markers,
		(h)	complying with wiring regulations, earthing (other than earth electrodes),
		(i)	site records and reports,
		(j)	disconnection of cables (as this Series paragraph 39).

SCHEDULE 2 PART 1

METHOD OF MEASUREMENT

SERIES 1500: MOTORWAY COMMUNICATIONS

Locating Buried Communications Cable

Delete paragraphs 1 to 4 inclusive.

Loop Detector Installations

Delete paragraph 29 and replace with the following:

Measurement	29	The measurement of loop detector installations shall be the complete installation from the joint with the feeder cable in the communications cabinet, chamber, box or pit within which the loop installation or feeder cable is terminated.
		In paragraph 31 add the following:
Loop Detector Installations	31	
Item coverage	(r)	joints or terminations to feeder cable within communications cabinet, chamber, box or pit.

SCHEDULE 2 PART 1

METHOD OF MEASUREMENT

SERIES 1700: STRUCTURAL CONCRETE

Precast Concrete

Itemisation 9 In paragraph 9 add the following Group V:

Group	Feature
V	1 Cross sectional area not exceeding 0.025m ² .
	2 Cross sectional area exceeding 0.025m ² but not exceeding 0.05m ² .
	3 Cross sectional area exceeding 0.05m ² but not exceeding 0.10m ² .

Note 1: Group III shall only apply to Group I features 1 and 3.

Note 2: Group V shall only apply to Group I feature 2.

After paragraph 39 add the following new paragraphs 40 to 49 inclusive:

Structural Concrete Repairs

Units 40 The units of measurement shall be:

- (i) structural concrete repairs using normal flow concrete and high flow repair concrete, structural concrete repairs using proprietary sprayed concrete cubic metre,
- (ii) structural concrete repairs using proprietary repair mortars litre,
- (iii) crack injection using proprietary resinslitre.

Measurement 41 Measurement of structural concrete repairs shall be the volume of the void to be filled with repair mortar resin or concrete.

Itemisation 42 Separate items shall be provided for structural concrete repairs in accordance with Chapter III paragraphs 3 and 4 and the following:

Group	Feature
I	1 Structural concrete repairs.
	2 Crack injection.

	II	1	Using proprietary repair mortars.
		2	Using normal flow concrete.
		3	Using high flow repair concrete.
		4	Using proprietary sprayed concrete.
		5	Using proprietary resins.
Structural Concrete Repairs	43	The items for structural concrete repairs shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:	
Item coverage		(a)	saw cutting,
		(b)	removal of defective concrete,
		(c)	disposal of material (as Series 600 paragraph 39),
		(d)	protective sheeting or shielding against debris and or spray and its removal,
		(e)	blast cleaning reinforcement,
		(f)	preparation of concrete surfaces to receive concrete repair materials,
		(g)	concrete repair materials (as Series 1700 paragraph 5),
		(h)	finishing,
		(i)	curing and protection of concrete repair materials,
		(j)	procedure trials,
		(k)	sample panels,
		(l)	masking adjacent areas,
		(m)	removal of rust and chloride deposits from reinforcement,
		(n)	production tests,
		(o)	water supply.
Formwork for Concrete Repairs			
	44	The units, measurement, itemisation and item coverage for formwork for concrete repairs shall be as this Series paragraphs 11-21 inclusive.	
Steel Reinforcement for Concrete Repairs			
	45	The units, measurement, itemisation and item coverage for steel reinforcement for concrete repairs shall be as this Series, paragraphs 22 to 27 inclusive.	

Backfilling to Structures with Foamed Concrete

The units of measurement shall be:

Units	46	(i) Backfilling to Structures with foamed concrete cubic metre.
Measurement	47	The Measurement of backfilling to Structures with foamed concrete will be the volume of the void to be filled.
Itemisation	48	Separate items shall be provided for backfilling to Structures with foamed concrete in accordance with Chapter III paragraphs 3 and 4 and the following:
<hr/>		
	Group	Feature
	I	1 Backfilling to Structures with foamed concrete.
<hr/>		
Backfilling to Structures with Foamed Concrete	49	The items for the backfilling to Structures with foamed concrete shall in accordance with the Preambles to Schedule of Rates and Prices General Direction include for:
Item Coverage		(a) in situ concrete (as this Series paragraph 5),
		(b) formwork (as this Series paragraph 15).

SCHEDULE 2 PART 1

METHOD OF MEASUREMENT

SERIES 2000: WATERPROOFING FOR STRUCTURES

		Waterproofing				
Itemisation	3	In paragraph 3 delete Group III.				
		Removal of Existing Waterproofing				
		Add the following to paragraph 10:				
Measurement	10	Structural repairs required to the existing deck shall be measured in accordance with series 1700 (Structural Concrete).				
Itemisation	11	In paragraph 11 delete Group II and substitute the following:				
		<table><tr><th>Group</th><th>Feature</th></tr><tr><td>II</td><td>1 Different types.</td></tr></table>	Group	Feature	II	1 Different types.
Group	Feature					
II	1 Different types.					
		Removal of Existing Waterproofing				
		In paragraph 12, delete (d) and substitute the following:				
Item coverage	12	(d) additional preparation of bridge decks to receive new waterproofing.				

SCHEDULE 2 PART 1

METHOD OF MEASUREMENT

SERIES 2300: BRIDGE EXPANSION JOINTS AND SEALING OF GAPS

Bridge Deck Expansion Joints

Definition	<p>1 Add the following to paragraph 1:</p> <p>Types of replacement bridge expansion joints and abbreviations used in the descriptions in the Schedule of Rates and Prices are as follows:</p>							
Units	<p>2 (ii) Replacement bridge deck expansion joints linear metre.</p> <p>In paragraph 3 add the following:</p>							
Measurement	<p>3 The measurement of replacement bridge deck expansion joints shall be the complete installation measured along the centre line of the joint.</p> <p>Alterations and or repairs to the Structure excluding any damage caused by the removal of the existing bridge expansion joint, shall be measured under Series 1700 concrete repairs.</p> <p>Delete paragraph 4 and substitute the following:</p>							
Itemisation	<p>4 Separate items shall be provided for replacement of bridge expansion joints in accordance with Chapter III paragraphs 3 and 4 and the following:</p> <table border="1"> <thead> <tr> <th>Group</th><th>Feature</th></tr> </thead> <tbody> <tr> <td rowspan="2">I</td><td>1 Bridge deck expansion joints.</td></tr> <tr> <td>2 Replacement bridge expansion joints.</td></tr> <tr> <td>II</td><td>1 Different types or materials.</td></tr> </tbody> </table>	Group	Feature	I	1 Bridge deck expansion joints.	2 Replacement bridge expansion joints.	II	1 Different types or materials.
Group	Feature							
I	1 Bridge deck expansion joints.							
	2 Replacement bridge expansion joints.							
II	1 Different types or materials.							

	III	1	Different lengths.
	IV	1	Different gap widths.
	V	1	Movement range not exceeding 30mm.
		2	Movement range exceeding 30mm but not exceeding 100mm.
		3	Movement range exceeding 100mm but not exceeding 200mm.
	VI	1	Cross sectional area not exceeding 0.05 square metres.
		2	Cross sectional area exceeding 0.05 square metres but not exceeding 0.10 square metres.
		3	Cross sectional area exceeding 0.10 square metres but not exceeding 0.15 square metres.
		4	Cross sectional area exceeding 0.15 square metres but not exceeding 0.20 square metres.
	Note 1: Group III feature 1 and Group IV feature 1 shall only apply to Group 1 feature 1.		
	Note 2: Groups V and VI shall only apply to Group 1 feature 2.		
	Note 3: Groups V shall not apply to asphalt plug joints (APJ).		
	Note 4: Groups VI shall only apply to asphalt plug joints (APJ).		
Bridge Expansion Joints	5	In paragraph 5 add the following:	
Item coverage	(q)	removing existing bridge expansion joints including sealants, metalwork and joint filler, sub-surface drainage, below joint drainage and in situ nosings,	
	(r)	cutting out and making good existing pavements, footways, kerbs, structures and the like,	
	(s)	making good any damage caused by the foregoing operations,	
	(t)	disposal of material (as Series 600 paragraph 39),	
	(u)	removal and renewal of broken studs,	
	(v)	additional bedding and nosing material.	
	After paragraph 5 add the following paragraph 5A:		
Replacement Bridge Deck Expansion Joints	5A		
Item coverage	(a)	As this Series paragraph 5.	

Note 2: Group IV shall only apply to Group I features 1 and 4.

Note 3: Group V shall only apply to Group I feature 5.

Note 4: Group VI shall only apply to Group I features 4.

**Joint Filler and
Renew Joint
Filler**

Item coverage

9 The items for joint filler and renew joint filler shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:

- (a) cutting and shaping,
- (b) preparing, cleaning and priming surfaces,
- (c) adhesives and the like,
- (d) applying, inserting and casting in,
- (e) compressible strip,
- (f) masking and protection,
- (g) complying with temperature constraints,
- (h) removal of existing sealants, metalwork, and backing strips,
- (i) making good any damage caused by the foregoing operations,
- (j) disposal of material (as Series 600 paragraph 39).

**Joint Sealant
and Renew
Joint Sealants**

Item coverage

10 The items for joint sealant and renew joint sealants shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:

- (a) preparing and cleaning surfaces,
- (b) priming the surface of the joint,
- (c) compressible strip,
- (d) masking and protection,
- (e) complying with temperature constraints,
- (f) removal of existing sealants, metalwork, and backing strips,
- (g) making good any damage caused by the foregoing operations,
- (h) disposal of material (as Series 600 paragraph 39).

SCHEDULE 2 PART 1

METHOD OF MEASUREMENT

SERIES 2400: BRICKWORK, BLOCKWORK AND STONEMWORK

Brickwork

Itemisation 3 In paragraph 3 delete Features 1 to 4 from Group IX and replace with Features 1 and 2 as follows:

Group	Feature
IX	1 In walls and in facework to concrete.
	2 In arches.

Remove from Store and Relay Brickwork, Blockwork or Stonework

Itemisation 11 In paragraph 11 delete Features 1 to 4 from Group IX and replace with Features 1 to 2 as follows:

Group	Feature
IX	1 In walls or in facework to concrete.
	2 In arches.

**Remove from
Store and
Relay
Brickwork,
Blockwork or
Stonework**

12 In paragraph 12 add the following:

Item coverage (f) retrieval of displaced materials from their position after displacement (excluding fees to Network Rail).

After paragraph 12 add the following paragraphs 13 to 20 inclusive:

Rebedding of Precast Concrete Copings

Units 13 The unit of measurement shall be:
(i) rebedding of precast concrete coping linear metre.

Measurement 14 The measurement of rebedding of precast concrete copings shall be the length of the work required.

Itemisation 15 Separate items shall be provided for rebedding of precast concrete copings in accordance with Chapter III paragraphs 3 and 4 and the following:

Group	Feature
I	1 Rebedding precast concrete coping.

	II	1	Cross sectional area not exceeding 0.025m ² .
		2	Cross sectional area exceeding 0.025m ² but not exceeding 0.05m ² .
		3	Cross sectional area exceeding 0.05m ² but not exceeding 0.10m ² .
		4	Cross sectional area exceeding 0.1m ² but not exceeding 0.15m ² .
Rebedding Precast Concrete Coping	16	The items for rebedding precast concrete copings shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:	
Item coverage		(a)	take up or down and set aside for re-use or remove to store or tip off Site (as Series 200 paragraph 11),
		(b)	loading, transporting from store unloading and positioning for rebedding,
		(c)	removal of old mortar,
		(d)	bedding in any mortar.
Repointing			
Units	17	The units of measurement shall be:	
		(i)	repointing in walls and in facework to concrete and arches square metre,
		(ii)	repointing in string courses and copings linear metre.
Measurement	18	The measurement of repointing in walls and in facework to concrete and in arches shall be the superficial area of brickwork, blockwork and stonework required by this Contract. No deductions shall be made for openings of 0.10 square metres or less.	
		The measurement of repointing in string courses and copings shall be the length of the joints in the brickwork, blockwork and stonework required by this Contract.	
		All items in this series shall be deemed to cover alteration and repair works as well as new works.	
Itemisation	19	Separate items shall be provided for repointing in accordance with Chapter III paragraphs 3 and 4 and the following:	
		Group	Feature
		I	1 Brickwork or blockwork.
			2 Stonework.
		II	1 Different types of mortar.

III	1	In walls, in facework to concrete and in arches.
	2	In string courses and in copings.
IV	1	Not exceeding 300mm girth.
	2	Exceeding 300mm girth.

Note: Group IV shall only apply to Group III feature 2.

Repointing

20 The items for and repointing shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:

Item coverage

- (a) sample panels,
- (b) grinding out or raking out joints,
- (c) removing loose material and washing clean,
- (d) curing and protection,
- (e) admixtures and additives,
- (f) disposal of material (as Series 600 paragraph 39),
- (g) multiple operations for deep cavities,
- (h) replacing items damaged during the foregoing operations.

SCHEDULE 2 PART 1

METHOD OF MEASUREMENT

SERIES 3000: LANDSCAPE AND ECOLOGY

Ground Preparation and Cultivation

Definitions

Delete paragraph 1 and replace with the following:

- 1 Landscape and ecology works in this Series shall comprise new works and maintenance of existing areas that are outwith the items in Series 6100 and 6800.

Itemisation

In paragraph 4 delete Group II and substitute the following:

Group	Feature
II	1 Different percentages of cover.

Planting

Itemisation

In paragraph 12 delete Groups IV and Group V and replace with the following:

Group	Feature
IV	1 Transplanted.

Mulching

Itemisation

In paragraph 15 delete Group VI.

Weed Control

Units

In paragraph 17 delete (i) and (ii) and replace with the following:

- (i) weed control square metre.

Measurement

Delete paragraph 18 and substitute the following:

- 18 The measurement of weed control shall be the plan area.

Itemisation

In paragraph 19 delete Groups II, III, IV and V and replace with the following:

Group	Feature
II	1 Different types of herbicide.

Maintenance of Established Trees and Shrubs

In paragraph 21 add new paragraph (iv):

- (iv) removal of branches.....number.

Measurement	Add to paragraph 22 the following:	
	The girth of trees for felling shall be measured at a height of 1 metre above ground level.	
	The girth of branches to be removed shall be measured at the severance point.	
Itemisation	In paragraph 23 Group I add the following:	
	Group	Feature
	I	9 Removal of branches.
	In paragraph 23 delete Group II, III, IV, V, VI and VII and replace with the following:	
	Group	Feature
	II	1 Different size categories.
	III	1 Not exceeding 300mm girth.
		2 Exceeding 300mm not exceeding 900mm girth.
		3 Exceeding 900mm girth.
	IV	1 Different density of cover.
	V	1 Type of felling.
	VI	1 Arisings spread on site.
		2 Arisings removed from site.
	Note 1: Group II and V shall only apply to Group I feature 8.	
	Note 2: Group III shall only apply to Group I feature 9.	
	Note 3: Group IV shall only apply to Group I feature 3.	
Item coverage	In paragraph 25 add the following:	
	(h)	spreading of arisings on site.
Item coverage	In paragraph 26 add the following:	
	(g)	spreading of arisings on site,
	(h)	grubbing out or treating stumps.
Item coverage	In paragraph 27 add the following:	
	(i)	spreading of arisings on site.
Item coverage	In paragraph 28 add the following:	
	(h)	spreading of arisings on site.
Item coverage	In paragraph 29 add the following:	
	(m)	spreading of arisings on site.
Item coverage	In paragraph 30 add the following:	
	(l)	spreading of arisings on site.

After paragraph 30 add the following new paragraph 30A:

Removal of Branches

30A The items for removal of branches shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:

Item coverage (a) as paragraph 29 items (a) to (m).

Maintenance of Established Wildflower Areas, Areas of Nature Conservation Value and Ornamental Planting Areas

Itemisation In paragraph 37 delete Group III.

After paragraph 52 add the following paragraphs 53 to 56 inclusive:

Tubes, Guards and Ties and Removal of Tubes, Guards and Ties

Units 53 The units of measurement shall be:

(i) tree tubes, guards and ties and removal of tree tubes, guards and ties number.

Measurement 54 The measurement shall be the number of individual tubes, guards and ties provided or removed.

Itemisation 55 Separate items shall be provided for replacement and removal of tree tubes, guards and ties in accordance with Chapter III paragraphs 3 and 4 and the following:

Group	Feature
I	1 Tree tube.
	2 Tree guard.
	3 Tree tie.
	4 Remove tree tube.
	5 Remove tree guard.
	6 Remove tree tie.

Tree Tubes, Guards and Ties and Removal of Tubes Guards and Ties

56 The items for tree tubes, guards and ties and removal of tubes, guards and ties shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:

Item coverage (a) removal of existing tree tubes, guards and ties,
(b) take up or down and set aside for re-use or remove to store or tip off Site (as Series 200 paragraph 11).

SCHEDULE 2 PART 1

METHOD OF MEASUREMENT

SERIES 3300: SITE INVESTIGATION

Rotary Coring of Existing Pavement

Units	1	The unit of measurement shall be:		
	(i)	rotary coring of existing pavement and extra over for each increase in depth number.		
Measurement	2	The measurement of rotary coring of existing pavement and extra over for each increase in depth shall be for the complete operation and the depth of core shall be taken as the overall length of the extracted core.		
Itemisation	3	Separate items shall be provided for rotary coring of existing pavement in accordance with Chapter III paragraphs 3 and 4 and the following:		
		Group	Feature	
		I	1	Rotary coring of existing pavement depth of core not exceeding 150mm.
			2	Extra over for each increase in depth of core of 150mm or part thereof.
		II	1	Not exceeding 150mm diameter.
Rotary Coring of Existing Pavement	4	The items for rotary coring of existing pavement and extra over for each increase in depth shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:		
Item coverage	(a)	cutting and extracting sample,		
	(b)	labelling, packaging and delivery to the Operating Company's store,		
	(c)	recording data analysing interpreting and reporting,		
	(d)	supplying the Overseeing Organisation with copies of the data and reports,		
	(e)	protecting and storing samples,		
	(f)	removing all loose or superfluous material,		
	(g)	disposal of material (as Series 600 paragraph 39),		
	(h)	reinstatement of paved area (as Series 700 paragraph 36).		

Rotary Coring of Existing Structures

Units	5	The unit of measurement shall be: (i) rotary coring of existing Structures and extra over for each increase in depth number.
Measurement	6	The measurement of rotary coring of existing Structures and extra over for each increase in depth shall be the complete operation and the depth of core shall be taken as the overall length of the extracted core.
Itemisation	7	Separate items shall be provided for rotary coring of existing Structures in accordance with Chapter III paragraphs 3 and 4 and the following:

Group	Feature
I	1 Rotary coring of existing Structures depth of core not exceeding 150mm.
	2 Extra over for each increase in depth of core of 150mm or part thereof.
II	1 Not exceeding 150mm diameter.

Rotary Coring of Existing Structures	8	The items for rotary coring of existing Structures and extra over for each increase in depth shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) locating reinforcement, (b) cutting and extracting sample, (c) labelling, packaging and delivery to the Operating Company's store, (d) recording data analysing interpreting and reporting, (e) supplying the Overseeing Organisation with copies of the data and reports, (f) protecting and storing samples, (g) removing all loose or superfluous material, (h) disposal of material (as Series 600 paragraph 39), (i) reinstatement.

Inspection Patches on Bridge Structures

Units	9	The unit of measurement shall be: (i) excavate inspection patches, reinstate inspection patches number.
Measurement	10	The measurement of excavate and reinstate inspection patches shall be for the complete operation.

Itemisation 11 Separate items shall be provided for excavate and reinstate inspection patches on bridge Structures in accordance with Chapter III paragraphs 3 and 4 and the following:

Group	Feature
I	1 Excavate inspection patches on bridge Structures.
	2 Reinstatement inspection patches on bridge Structures.
II	1 Not exceeding 0.25 square metres in area.
	2 Over 0.25 square metres but not exceeding 0.50 square metres in area, and so on in steps of 0.50 square metres.
III	1 Not exceeding 150mm deep.
	2 Over 150mm but not exceeding 300mm deep.

Excavate and Reinstatement Inspection Patches on Bridge Structure

Item coverage

12 The items for excavate and reinstatement inspection patches on bridge Structure shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:

- (i) in the case of excavate:
 - (a) excavation (as Series 600 paragraphs 17,18 19 and 23),
 - (b) removal of waterproofing system (as Series 2000 paragraph 12),
 - (c) disposal of material (as Series 600 paragraph 39).
- (ii) in the case of reinstatement:
 - (a) reinstatement of paved area (as Series 700 paragraph 36),
 - (b) waterproofing (as Series 2000 paragraph 4).

Structural Investigations

Units

13 The unit of measurement shall be:

- (i) half cell potential survey, cover survey, delamination/soundness survey, exposing reinforcement square metre,
- (ii) other surveys, tests and examinations number.

Measurement 14 The measurement of half cell potential surveys, cover surveys, delamination/soundness surveys and exposing reinforcement shall be the area surveyed or exposed.

The measurement of other surveys tests and examinations shall be the number of surveys tests and examinations performed.

Itemisation 15 Separate items shall be provided for structural investigations in accordance with Chapter III paragraphs 3 and 4 and the following:

Group	Feature
I	1 Surveys.
	2 Tests.
II	Different types.

Structural Investigations 16 The items for structural investigations shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:

- Item coverage
- (a) obtaining samples,
 - (b) protecting and storing samples,
 - (c) labelling, packaging and delivery of samples to the laboratory,
 - (d) testing at an accredited laboratory,
 - (e) recording data analysing interpreting and reporting,
 - (f) supplying the Overseeing Organisation with advance copies of the results,
 - (g) supplying the Overseeing Organisation with copies of the data and reports,
 - (h) disposal of material (as Series 600 paragraph 39),
 - (i) reinstatement.

Falling Weight Deflectometer Tests

Units 17 The unit of measurement shall be:

- (i) falling weight deflectometer test number.

Measurement 18 The measurement of falling weight deflectometer tests shall be for the complete operation.

Itemisation 19 Separate items shall be provided for falling weight deflectometer in accordance with Chapter III paragraphs 3 and 4 and the following:

Group	Feature
I	1 Falling weight deflectometer tests.

		II	1	Location.
Falling Weight Deflectometer Tests	20	The items for falling weight deflectometer tests shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:		
Item coverage		(a)	temperature measurements including repairs to pavement,	
		(b)	recording required data analysing interpretation and supplying the Overseeing Organisation with a copy of the data and reports.	
Dynamic Cone Penetrometer Tests				
Units	21	The unit of measurement shall be:		
		(a)	dynamic cone penetrometer testing of unbound carriageway subbase, capping layer, subgrade and verges number.	
Measurement	22	The measurement of dynamic cone penetrometer tests of unbound carriageway subbase, capping layer, subgrade and verges shall be for the complete operation.		
Itemisation	23	Separate items shall be provided for dynamic cone penetrometer tests of unbound carriageway subbase, capping layer, subgrade and verges in accordance with Chapter III paragraphs 3 and 4 and the following:		
		Group	Feature	
		I	1	Dynamic cone penetrometer testing of unbound carriageway subbase, capping layer, subgrade and verges.
Dynamic Cone Penetrometer Tests of Unbound Carriageway Subbase/Capping Layer/Subgrade and Verges	24	The items for dynamic cone penetrometer tests of unbound carriageway subbase, capping layer, subgrade and verges shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:		
Item coverage		(a)	drilling or coring,	
		(b)	repeating failed tests,	
		(c)	recording data, analysing, interpreting and reporting,	
		(d)	supplying the Overseeing Organisation with copies of the data and reports,	
		(e)	disposal of material (as Series 600 paragraph 39),	
		(f)	reinstatement.	

SCHEDULE 2 PART 1

METHOD OF MEASUREMENT

SERIES 5000: MAINTENANCE PAINTING OF STEELWORK

	Surface Preparation and Protective System
Itemisation	<p>In paragraph 4 delete Groups III, IV, and VI, and the Note at the bottom of the paragraph 'Group VI shall be applied only to Group II Feature 1'.</p> <p>Re-number Group V as Group III.</p>

SCHEDULE 2 PART 1

METHOD OF MEASUREMENT

SERIES 6100: CORE OPERATIONS

Management, Inspection and Maintenance Core Operations

Definitions	1	The Core Operations to be provided under this Contract shall be measured in accordance with this Series.
	2	Operations which are additional to Core Operations are subject to Orders and shall be measured in the appropriate Series in this Schedule of Rates and Prices.
Units	3	<p>The units of measurement shall be:</p> <p>(i) management, inspection and maintenance Core Operationsmonth.</p>
Measurement	4	<p>The measurement of:</p> <p>(i) inspections and safety patrols,</p> <p>(ii) Detailed Inspections,</p> <p>(iii) Repair of Category 1 Defects of value not more than £10,000,</p> <p>(iv) linear drainage systems,</p> <p>(v) gullies, catchpits, interceptors, soakaways, manholes and oil separators,</p> <p>(vi) drainage grips,</p> <p>(vii) filter material,</p> <p>(viii) high, medium, low and minimal frequency grass cutting,</p> <p>(ix) vehicle restraint systems,</p> <p>(x) road traffic signs,</p> <p>(xi) Incident Response Operations of value not more than £10,000,</p> <p>which have a Payment Adjustment Factor for each month, shall be 1 multiplied by the Payment Adjustment Factor (Detailed in Schedule 5 Part 6, Annex C) for that month.</p>

Itemisation	5	Separate items shall be provided for management, inspection and maintenance operations in accordance with Chapter III paragraphs 3 and 4 and the following:						
		<table><tr><th>Group</th><th>Feature</th></tr><tr><td>I</td><td>1 Schedule and Part number.</td></tr><tr><td>II</td><td>1 Different management, inspection and maintenance Operations.</td></tr></table>	Group	Feature	I	1 Schedule and Part number.	II	1 Different management, inspection and maintenance Operations.
Group	Feature							
I	1 Schedule and Part number.							
II	1 Different management, inspection and maintenance Operations.							
Provide, Maintain and Update Register of staff and Professional Services staff	6	The item for provide, maintain and update register of staff and Professional Services staff shall in accordance with the Preambles to the Schedule of Rates and Prices General Directions include for:						
Item coverage		(a) compliance with Clause 4.2 of Schedule 1 Part 1.						
Overall Requirements	7	The item for overall requirements shall in accordance with the Preambles to the Schedule of Rates and Prices General Directions include for:						
Item coverage		(a) compliance with Schedule 3 Part 1.						
Extent of the Unit	8	The item for the extent of the Unit shall in accordance with the Preambles to the Schedule of Rates and Prices General Directions include for:						
Item coverage		(a) compliance with Schedule 3 Part 2.						
Reference Documents	9	The item for the reference documents shall in accordance with the Preambles to the Schedule of Rates and Prices General Directions include for:						
Item coverage		(a) compliance with Schedule 3 Part 3.						
Other Contracts within the Unit	10	The item for other contracts within the Unit shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:						
Item coverage		(a) compliance with Schedule 3 Part 4. Where the Director appoints the Operating Company to procure or manage a Works Contracts which the previous operating company was procuring or managing the Operating Company shall be paid separately under Series 6200.						
Communications Strategy, Correspondence Enquiries and Complaints	11	The item for communications strategy, correspondence, enquiries and complaints shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:						
Item coverage		(a) compliance with Schedule 3 Part 5.						

Customer Contact Services	12	The item for customer contact services shall in accordance with the Preambles to the Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with Schedule 3 Part 6.
Network Operations Services	13	The item for network operations services shall in accordance with the Preambles to the Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with Schedule 3 Part 7.
Statutory Functions	14	The item for Statutory Functions shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with Schedule 3 Part 8.
Collaboration Requirements	15	The item for collaboration requirements shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with Schedule 3 Part 9.
Partnering	16	The item for partnering shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with Schedule 3 Part 10.
Community Benefits	17	The item for community benefits shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with Schedule 3 Part 11.
Financial and Contract Management	18	The item for financial and contract management shall in accordance with the Preambles to the Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with Schedule 4 Part 1 excluding provision of resources for Integrated Roads Information System measured as mobilisation under Series 100.
Integrated Roads Information System	19	The item for Integrated Roads Information System shall in accordance with the Preambles to the Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with Schedule 4 Part 2 except paragraph 2.4.
Inventory Requirements	20	The item for inventory requirements shall in accordance with the Preambles to the Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with paragraph 2.4 of Schedule 4 Part 2.

Roadside Electrical Apparatus, and Power Supplies	21	The item for roadside electrical apparatus and power supplies shall in accordance with the Preambles to the Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with Schedule 4 Part 3.
Damage To Crown Property and Third Party Claims	22	The item for damage to Crown Property and third party claims shall in accordance with the Preambles to the Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with Schedule 4 Part 4 excluding paragraph 3.2.
Damage to Crown Property of Value not more than £10,000	23	The item for damage to Crown Property of value not more than £10,000 shall in accordance with the Preambles to the Schedule of Rates and Prices General Directions include for:
Item coverage		<p>(a) compliance with paragraph 3.2 of Schedule 4 Part 4, excluding removal of graffiti.</p> <p>(b) Police reports,</p> <p>(c) establishing, maintaining and removing traffic management while the Design and Operations are completed to allow the repair to be executed,</p> <p>(d) recovery of the costs of repair of the damage to Crown Property from the third party which caused the damage,</p> <p>(e) betterment,</p> <p>(f) Professional Services,</p> <p>(g) non-recovery of any costs of repair from any third party including the Motor Insurance Bureau.</p>
Management System	24	The item for management system shall in accordance with the Preambles to the Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with Schedule 5 Part 1 and paragraph 1.10 of Schedule 7 Part 1.
Records, Information and communication Technology	25	The item for records, information and communication technology shall in accordance with the Preambles to the Schedule of Rates and Prices General Directions include for:
		(a) compliance with Schedule 5 Part 2.

Reporting and Submission Requirements and Progress Meetings	26	The item for reporting and submission requirements and progress meetings shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with Schedule 5 Part 3.
Operating Company's Representative, Core Management Team and Key Staff	27	The item for Operating Company's representative, core management team and key staff shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with Schedule 5 Part 4.
Audits by the Performance Audit Group	28	The item for audits by the performance audit group shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with Schedule 5 Part 5.
Performance Measurement	29	The item for performance measurement shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with Schedule 5 Part 6.
Operating Company's Offices and Depots	30	The item for Operating Company's offices and depots shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with Schedule 5 Part 7.
Environmental Sustainability and Waste	31	The item for environmental sustainability and waste shall in accordance with the Preambles to the Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with Schedule 5 Part 8.
Procurement and Management of Schemes	32	The item for procurement and management of schemes shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with Schedule 6 Part 1 excluding procurement and management of Works Contracts measured under Series 6300.
Construction (Design and Management) Regulations 2007	33	The item for Construction (Design and Management) Regulations 2007 shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with Schedule 6 Part 2.

Road Safety Audits	34	The item for road safety audits shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with Schedule 6 Part 3.
Design and Certification of Operations and works	35	The item for design and certification of operations and works shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with Schedule 6 Part 4 excluding design costs measured under Series 6200.
Routine Maintenance Management Function	36	The item for Routine Maintenance Management Function shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with paragraph 1.2 of Schedule 7 Part 1.
Defect Categories and Response Times	37	The item for defect categories and response times shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with paragraph 2 of Schedule 7 Part 1, excluding permanent repair Operations.
Hazard Notices and Observations Identified by Performance Audit Group	38	The item for hazard notices and observations identified by performance audit group shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with paragraph 3 of Schedule 7 Part 1.
Inspections and Safety Patrols	39	The item for inspections and safety patrols shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with all Safety Inspections, Safety Patrols, ad-hoc inspections requirements of Schedule 7 Part 1.
Repair of Category 1 Defects Costing Less Than or Equal to £10,000	40	The item for Repair of Category 1 Defects of value not more than £10,000 shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with paragraph 2, Schedule 7 Part 1, in respect of permanent repair Operations of value not more than £10,000, (b) the cost of maintaining temporary repairs,

		(c)	all traffic management required in connection with making safe and the repair of a Category 1 Defect,
		(d)	travel to and from the scene of the Category 1 Defect,
		(e)	reporting to the Director details of all Operations carried out and materials used,
		(f)	disruption to other work as a result of attending Category 1 Defects,
		(g)	attending a reported Category 1 Defect where no defect is found,
		(h)	Professional Services.
Detailed Inspections	41		The item for Detailed Inspections shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a)	compliance with all Detailed Inspection requirements of Schedule 7 Part 1, excluding paragraph 1.8.14 in respect of inventory validation,
		(b)	reports and recording of results and data in Routine Maintenance and Management System.
Carriageway	42		The item for carriageway shall in accordance with the Preambles to Schedule of Rates General Directions include for:
Item coverage		(a)	compliance with paragraph 4.1 of Schedule 7 Part 1 excluding Detailed Inspections.
Pedestrian and Cycle Facilities	43		The item for pedestrian and cycle facilities shall in accordance with the Preambles to Schedule of Rates General Directions include for:
Item coverage		(a)	compliance with paragraph 4.2 of Schedule 7 Part 1 excluding Detailed Inspections.
Covers, Gratings and Frames	44		The item for covers, gratings and frame shall in accordance with the Preambles to Schedule of Rates General Directions include for:
Item coverage		(a)	compliance with paragraph 4.3 of Schedule 7 Part 1 excluding Detailed Inspections.
Kerbs, Channels Edgings and Quadrants	45		The item for kerbs, channels, edgings and quadrants shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a)	compliance with paragraph 4.4 of Schedule 7 Part 1 excluding Detailed Inspections.

Linear Drainage Systems	46	The item for linear drainage systems shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with paragraph 4.5 of Schedule 7 Part 1 excluding Detailed Inspections.
Gullies, Catchpits, Interceptors, Soakaways, Manholes and Oil Separators	47	The item for gullies, catchpits, interceptors, soakaways, manholes and oil separators shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with paragraph 4.6 of Schedule 7 Part 1 excluding Detailed Inspections.
Drainage Grips	48	The item for drainage grips shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with paragraph 4.7 of Schedule 7 Part 1 excluding Detailed Inspections.
Ditches	49	The item for ditches shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with paragraph 4.8 of Schedule 7 Part 1 excluding Detailed Inspections.
Filter Material	50	The item for filter material shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with paragraph 4.9 of Schedule 7 Part 1 excluding Detailed Inspections.
Drainage Structures	51	The item for drainage Structures shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with paragraph 4.10 of Schedule 7 Part 1 excluding Detailed Inspections.
Balancing Ponds	52	The item for balancing ponds shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with paragraph 4.11 of Schedule 7 Part 1 excluding Detailed Inspections.
Ancillary Drainage Items	53	The item for ancillary drainage items shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with paragraph 4.12 of Schedule 7 Part 1 excluding Detailed Inspections.

Communications and Miscellaneous Equipment	54	The item for communications and miscellaneous equipment shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with paragraph 4.13 of Schedule 7 Part 1.
Geotechnical Assets	55	The item for geotechnical assets shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with paragraph 4.14 of Schedule 7 Part 1 excluding Detailed Inspections.
Grassed Areas	56	The items for grassed areas shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with paragraph 4.15 of Schedule 7 Part 1 excluding Detailed Inspections.
Bulb and Wildflower Areas	57	The item for bulb and wildflower areas shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with paragraph 4.16 of Schedule 7 Part 1 excluding Detailed Inspections.
Woodland Areas and Trees	58	The item for woodland areas and trees shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with paragraph 4.17 of Schedule 7 Part 1 excluding Detailed Inspections.
Scrub Areas, Shrub Areas and Hedges	59	The item for scrub areas shrub areas and hedges shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with paragraph 4.18 of Schedule 7 Part 1 excluding Detailed Inspections.
Wetland Areas	60	The item for wetland areas shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with paragraph 4.19 of Schedule 7 Part 1 excluding Detailed Inspections.
Special Ecological Measures	61	The item for special ecological measures shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with paragraph 4.20 of Schedule 7 Part 1 excluding Detailed Inspections.

Invasive Species	62	The item for special invasive species shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with paragraph 4.21 of Schedule 7 Part 1 excluding Detailed Inspections.
Vehicle Restraint Systems	63	The item for vehicle restraint systems shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with paragraph 4.22 of Schedule 7 Part 1 excluding Detailed Inspections.
Road Traffic Signs	64	The item for road traffic signs shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with paragraph 4.27 of Schedule 7 Part 1 excluding Detailed Inspections.
Traffic Signals	65	The item for traffic signals shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with paragraph 4.28 of Schedule 7 Part 1 excluding Detailed Inspections.
Roadside Electrical Apparatus, Road Lighting and Power Supplies	66	The item for roadside electrical apparatus, road lighting and power supplies shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with paragraph 4.29 of Schedule 7 Part 1 excluding Detailed Inspections.
Weather Stations	67	The item for weather stations shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with paragraph 4.30 of Schedule 7 Part 1 excluding Detailed Inspections.
Arrester Beds	68	The item for arrester beds shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item Coverage		(a) compliance with paragraph 4.31 of Schedule 7 Part 1 excluding Detailed Inspections.
Traffic Control Barriers	69	The item for traffic control barriers shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with paragraph 4.33 of Schedule 7 Part 1 excluding Detailed Inspections.

Litter and Refuse	70	The item for litter and refuse shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with paragraph 4.34 of Schedule 7 Part 1 excluding Detailed Inspections.
Dead Animals	71	The item for dead animals shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with paragraph 4.35 of Schedule 7 Part 1.
Removal of Graffiti	72	The item for removal of graffiti shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with paragraph 4.36 of Schedule 7 Part 1 excluding Detailed Inspections.
Node Markers	73	The item for node markers shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with paragraph 4.37 of Schedule 7 Part 1 excluding Detailed Inspections.
Network Referencing	74	The item for network referencing shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with paragraph 4.38 of Schedule 7 Part 1 excluding Detailed Inspections.
Flooding	75	The item for flooding shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with paragraph 4.39 of Schedule 7 Part 1 excluding Detailed Inspections.
Winter Service	76	The item for Winter Service shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with Schedule 7 Part 2.

Incident Response excluding Incident Response Operations for Incidents of Value not more than £10,000	77	The item for Incident Response shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with Schedule 7 Part 3, excluding Incident Response Operations
Incident Response Operations for Incidents of Value not more than £10,000	78	The item for Incident Response Operations for Incidents of value not more than £10,000 shall in accordance with the Preambles to the Schedule of Rates and Prices General Directions include for:
Item coverage		<ul style="list-style-type: none"> (a) compliance with Schedule 7 Part 3 Incident Response Operations, (b) travel to and from the scene of the Incident, (c) acting on Orders and/or the instructions of the Emergency Services, (d) Reporting to the Overseeing Organisation details of all Operations carried out and materials used, (e) Disruption to other work as a result of attending Incidents, (f) Attending a reported Incident or Category 1 defect where no defect is found, (g) maintaining temporary repairs until a permanent repair is carried out, (h) Professional Services.
Landscape Development Process and Deliverables	79	The item for landscape development process and deliverables shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with Schedule 7 Part 4.
New Roads and Street Works Act 1991	80	The item for New Roads and Street Works Act 1991 shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with Schedule 7 Part 5.

Management and Maintenance of Structures excluding Requirements for Maintenance of Structures	81	The item for management and maintenance of structures shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with Schedule 7 Part 6 excluding paragraph 4 and excluding the cost of Possessions.
Management and Maintenance of Structures: Requirements for Maintenance of Structures	82	The item for management and maintenance of Structures: requirements for maintenance of structures shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with paragraph 4 of Schedule 7 Part 6 excluding the cost of Possessions.
Structures with Particular Requirements	83	The item for structures with particular requirements shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with Schedule 7 Part 7.
Severe Weather Services	84	The item for severe weather services shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with Schedule 7 Part 8.
Abnormal Indivisible Load Routeing	85	The item for abnormal indivisible load routeing shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with Schedule 8 Part 1.
Development Management	86	The item for development management shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with Schedule 8 Part 2.
Road Safety and Accident Investigation and Prevention	87	The item for road safety and accident investigation and prevention shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with Schedule 8 Part 3 excluding Procurement and management of Works Contracts measured under Series 6300.

Signs Requiring Authorisation	88	The item for signs requiring authorisation shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with Schedule 8 Part 4.
Manage and Maintain Grip Tester	89	The item for Manage and Maintain Grip Tester shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		(a) compliance with Clauses 972AR and 973AR of Schedule 9 Part 1.

SCHEDULE 2 PART 1

METHOD OF MEASUREMENT

SERIES 6200: PROFESSIONAL SERVICES

Professional Services

Definition	1	Professional Services rates shall apply for the Designs referred to in paragraph 1.1.1 of Schedule 6 Part 4 except where included within the item coverage of other Series. Professional Services shall only be measured for Design Operations stated as being subject to an Order.						
Units	2	The units of measurement shall be: (i) staff category and classification hour.						
Measurement	3	The measurement of work at professional services rates shall be based on certified timesheet records. Travel time shall be paid for travel from the Central Office or a sub office within the Unit to the location where the services are being undertaken whichever is the lesser.						
Itemisation	4	Separate items shall be provided for professional services rates in accordance with Chapter III paragraphs 3 and 4 and the following: <table><tr><th>Group</th><th>Feature</th></tr><tr><td>I</td><td>1 Category of staff.</td></tr><tr><td></td><td>2 Staff classification.</td></tr></table>	Group	Feature	I	1 Category of staff.		2 Staff classification.
Group	Feature							
I	1 Category of staff.							
	2 Staff classification.							
Professional Services	5	The items for professional services rates shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:						
Item Coverage		(a) basic time and overtime worked, (b) non-productive overtime payments, (c) bonuses and incentive payments, (d) National Insurance, (e) holidays with pay, (f) sickness benefits, (g) pension and life insurance benefits, (h) travel and subsistence, (i) car and car allowance, (j) office accommodation, equipment and supplies,						

- (k) administration (including managerial, supervisory, clerical, administrative and accountancy staff),
- (l) any tax, charge, levy impost or payment of any kind which the Operating Company shall be obliged to pay by law to make on behalf of persons employed by the Operating Company including all mobilisation and demobilisation requirements,
- (m) appropriate computers and general office applications and software,
- (n) printing, binding, photocopying and similar administrative tasks,
- (o) preparation, updating and submission to the Director of registers of staff, curricula vitae and other details,
- (p) all other costs and all charges whatsoever associated with the employment of any such professional.

SCHEDULE 2 PART 1

METHOD OF MEASUREMENT

SERIES 6300: PROCUREMENT AND MANAGEMENT OF WORKS CONTRACTS

Procurement and Management of Works Contracts

Definition	<p>1 Procurement and Management of Works Contracts fee percentages shall be used for the procurement and supervision of all Works Contracts.</p> <p>Works Contracts shall be classified as follows:</p> <ul style="list-style-type: none">(i) Roadworks – having a bridgeworks content of 10% or less of the Cost,(iii) Bridgeworks – having a bridgeworks content of 11% or more of the Cost,(iii) Lane rental – in combination with any of the above items (i) and (ii) under a lane rental regime. <p>The percentages in this Series shall also apply to works on the Unit undertaken by others that the Scottish Ministers require the Operating Company to procure and/or Supervise.</p> <p>2 The following definitions shall apply to this Series of this Schedule:</p> <ul style="list-style-type: none">(i) "Roadworks" means all works other than bridgeworks,(ii) "Bridgeworks" means works on Structures,(iii) "Lane rental" means a Works Contract where the requirements of a lane rental Clause for a bonus for early completion and charge for late completion are included,(iv) "Cost" means the final construction cost which shall be the value of the final account for Works Contracts excluding VAT, liquidated and ascertained damages and any bonus adjustments or other charges related to lane rental Works Contracts. <p>The Order of procurement and management for Works Contracts with element construction costs up to £350,000 shall be at the discretion of the Director.</p>
Measurement	<p>3</p> <ul style="list-style-type: none">(i) The percentage entered against the first Cost band shall be applied to the element of Cost of a Works Contract below £250,000,(ii) The percentage entered against the second Cost band shall be applied to the element of the Cost of a Works Contract between £250,000 and £750,000,

- (iii) The percentage entered against the third Cost band shall be applied to the element of the Cost of a Works Contract between £750,000 and £1,500,000,
- (iv) The percentage entered against the fourth Cost band shall be applied to the element of the Cost of a Works Contract between £1,500,000 and £3,000,000,
- (v) The percentage entered against the fifth Cost band shall be applied to the element of the Cost of a Works Contract above £3,000,000,
- (vi) The percentage entered against extra over fees for management for lane rental shall be applied to the total of management fees measured under the five cost bands above.

Units

- 4 The unit of measurement shall be:
 - (i) Fees for procurement and management of Works Contracts and extra over fees for management for lane rental..... percentage.
- 5 Separate items shall be provided for the procurement and management of Works Contracts in accordance with Chapter III paragraphs 3 and 4 and the following:

Itemisation

Group	Feature
I	1 Works Contracts.
II	1 Procurement.
	2 Management.
	3 Extra over management fees for lane rental.
III	1 Roadworks.
	2 Bridgeworks.
IV	1 Element of Cost of a Works Contract below £250,000.
	2 Element of the Cost of a Works Contract between £250,000 and £750,000.
	3 Element of the Cost of a Works Contract between £750,000 and £1,500,000.
	4 Element of the Cost of a Works Contract between £1,500,000 and £2,000,000.
	5 Element of the Cost of a Works Contract between £2,000,000 and £3,500,000.
	6 Element of the Cost of a Works Contract above £3,500,000.

Note: Group IV shall only apply to Group II feature 1 and 2.

Fees for Procurement of Works Contracts	6	The items for the Fees for Procurement of Works Contracts shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item Coverage	(a)	compliance with paragraphs 1, 3 and 4 of Schedule 6 Part 1.
Fees for Management of Works Contracts	7	The items for Fees for management of Works Contracts shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item Coverage	(a)	compliance with paragraphs 1 and 5 of Schedule 6 Part 1.
		The following items shall not be included in the percentage adjustments but shall be included in Series 100 of the Method of Measurement for Highway Works of the Works Contract where appropriate:
	(a)	temporary accommodation for the Engineer,
	(b)	vehicles for the Engineer,
	(c)	communication system for the Engineer,
	(d)	operatives for the Engineer,
	(e)	scheme information boards,
	(f)	information signs.

SCHEDULE 2 PART 1

METHOD OF MEASUREMENT

SERIES 6400: ADJUSTMENT TO SCHEDULE OF RATES AND PRICES

Adjustment for Time Band

- 1 The percentage adjustments apply to each of the time bands shown below, excluding time band reference 1 which is not subject to adjustment.

Time Bands		
Time Band Reference	Day of Week	Hours
1	Monday to Friday (inclusive)	0700 to 1900 inclusive
2	Monday pm to Tuesday am	1900 to 0700 inclusive
2	Tuesday pm to Wednesday am	1900 to 0700 inclusive
2	Wednesday pm to Thursday am	1900 to 0700 inclusive
2	Thursday pm to Friday am	1900 to 0700 inclusive
3	Friday pm to Monday am	1900 to 0700 inclusive
4	Public Holiday	1900* to †0700 inclusive

* previous day to Public Holiday

† following day to Public Holiday

- 2 Each time band adjustment shall comprise a single percentage adjustment to cover all Series except for Series 700 which shall be separately measured and those Series stated in the Preambles to Schedule of Rates and Prices paragraph 20 as not being subject to any time band adjustment.
 - 3 The unit of measurement shall be:
 - (i) Percentage adjustment to rates and prices for Operations percentage.
 - 4 The percentages shall be applied where relevant to the value of the relevant Operations executed within each time band.
- Units
- Measurement

Itemisation 5 Separate items shall be provided for time band adjustments in accordance with Chapter III paragraphs 3 and 4 and the following:

Group	Feature
I	1 Percentage adjustment to rates for Operations.
II	1 Time band reference.
III	1 Series 700.
	2 All other Series (excluding Series 700).

Time Band Adjustment to Schedule of Rates and Prices 6 The percentage adjustments inserted in the items for time band adjustment to Schedule of Rates and Prices shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:

Item Coverage (a) all additional costs.

Adjustment for Works Within and Below Non-Tidal Open Water or Tidal Water

7 The unit of measurement shall be:

Units (i) Percentage adjustment to rates for Operations executed within and below non tidal open water percentage,
(ii) Percentage adjustment to rates for Operations executed between mean high water springs and mean low waters springs percentage,
(iii) Percentage adjustment to rates for Operations executed below mean low water springs percentage.

Measurement 8 The percentage adjustment shall be applied to the value of the Operations executed within and below non-tidal open water or tidal water below mean high water springs.

Itemisation 9 Separate items shall be provided for Operations within and below non-tidal open water or tidal water below mean high water springs in accordance with Chapter III paragraphs 3 and 4 and the following:

Group	Feature
I	1 Percentage adjustment to rates for Operations.
II	1 Within and below non-tidal open water.
	2 Within and below tidal water.
III	1 Between mean high water springs and mean low waters springs.
	2 Below mean low water springs.

Note: Group III shall only apply to Group II feature 2.

**Adjustment for
Works Within and
Below Non-Tidal
Open Water or Tidal
Water**

Item Coverage

- 10 The percentage adjustments inserted in the items for adjustment for Operations within and below non-tidal open water or tidal water to Schedule of Rates and Prices shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
- (a) all additional costs.

SCHEDULE 2 PART 1

METHOD OF MEASUREMENT

SERIES 6500: TIME WORK SCHEDULE

Time Work Schedule

Definition

- 1 The following terms and conditions shall apply to all work the subject of an Order in accordance with Schedule 1 to this Contract to be executed on a Time Work Schedule basis.

The term 'Sub-contractors' used in this Series shall include "Labour only" sub-contractors.

Sub-contractors labour plant and materials shall be included on the statements submitted by the Operating Company and shall be paid at the Rates and Prices contained herein as though they are directly employed by the Operating Company in accordance with this Series. No adjustment or allowance shall be applied in respect of labour plant and materials supplied by sub-contractors.

For the purposes of labour the Operating Company's normal working hours shall be defined as 0700 hrs to 1900 hrs Monday to Friday inclusive.

Unless otherwise ordered by the Overseeing Organisation, Series 6500 time work schedule items shall not be measured where there are appropriate items in Series 0200 to 6400 and Series 6700 to 6800 of this Schedule, or where similar items exist from which a rate can be deduced in accordance with Clause 10.1 of Schedule 1.

Labour

- 2 Trades and activities to be carried out by the labour type as detailed under this Series shall be as Table 1 below.

Table 1

Labour Type	Trades and Activities Applicable (inclusive of sub-contractors).
Ganger	Working foreman, covering all trades.
Driver/machine operator	Heavy goods vehicle driver, machine/plant operator.
Skilled operative	Surfacing operative, traffic management operative, fencing operative, footway and kerb laying operative, drainage operative, scaffolder, reinforcement bar fixer, steelwork erectors/fabricator, mechanic/fitter, welder, landscaping operative and other skilled operative.
Craftsman	Bricklayer, painter, decorator, carpenter, joiner, plumber and other skilled craftsman.
Electrician	Traffic signals, road lighting and communications engineer.
General Operative	Labourer, watchman, banksman, handyman, light duty driver and other general or unskilled operative.

Units 3 The units of measurement shall be:

(i) ganger, driver/machine operator, skilled operative, craftsman, electrical engineer, general operativehour.

Measurement 4 The measurement of ganger, driver/machine operator, skilled operative, craftsman, electrical engineer and general operative shall be the actual hours spent on work on the Site Operations when such Site Operations are subject of an Order to be carried out at Rates and Prices in this Series.

The measurement of outside the Operating Company's normal working hours shall only be applicable when the Site Operations are either so referred to an Order or required due to time work restraints to be carried outside the Operating Companies normal working hours.

Itemisation 5 Separate items shall be provided for Labour in accordance with chapter II paragraphs 3 and 4 and the following:

Group	Feature
I	1 Ganger.
	2 Driver/machine operator.
	3 Skilled operative.
	4 Craftsman.
	5 Electrician.
	6 General operative.

	II	1	During the Operating Company's normal working hours.
		2	Outside the Operating Company's normal working hours.
Labour	6	The items for Labour shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:	
Item coverage		(a)	basic cost of labour for workmen,
		(b)	plus rates for skill,
		(c)	all other amounts of every kind paid in accordance with the rules of the appropriate wage fixing body,
		(d)	non-productive overtime and costs associated therewith,
		(e)	all bonuses, payments and incentives in excess of the basic cost of labour,
		(f)	national Insurance and Surcharges,
		(g)	normal contract works, Third Party and Employers liability insurances,
		(h)	annual and public holidays with pay and benefit scheme,
		(i)	non-contributory sick pay scheme,
		(j)	industrial training levy,
		(k)	redundancy payments,
		(l)	the Employment Rights Act 1996,
		(m)	site supervision and staff including foremen and walking gangers,
		(n)	small tools, appliances and plant not provided for in paragraphs 7, 8 and 9 of this Series,
		(o)	protective clothing,
		(p)	transport within or related to the Unit,
		(q)	welfare facilities,
		(r)	establishment charges, overheads and profit,
		(s)	preparation, updating and submission to the Director of registers of staff, curricula vitae,
		(t)	travelling time to from within or related to the Unit.

Plant

Definitions

- 7 Basic cost of plant and percentage adjustment:
- (i) The basic cost of plant shall be charged at the Hire Rates set down in Section 4 Plant of Schedules of Dayworks Carried Out Incidental to Contract Work published by the Civil Engineering Contractors Association current forty two days prior to the Tender submission date for this Contract.

The notices and conditions set down in Section 4 Plant of the Schedules of Dayworks Carried Out Incidental to Contract Work shall not apply.
 - (ii) Only the actual time plant is working or made available on site in accordance with sub paragraph (iv) of this paragraph 7 on Time Work Operations shall be chargeable.
 - (iii) The period stated in Section 4 Plant of the Schedules of Dayworks Carried Out Incidental to Contract Work for plant not listed shall be the minimum chargeable.
 - (iv) Plant the subject of an Order by the Director to be made available on site for a Time Work Operation shall be charged at two-thirds of the rate obtained in accordance with sub-paragraph (i) of this paragraph 7 for the time the plant is made available but not used, subject to a maximum of 8 hours per working day and 40 hours in a working week.
 - (v) Rates for mechanical and other special plant not normally classed as small tools and not included in the Schedule of Rates and Prices or Section 4 Plant of the Schedules of Dayworks Carried Out Incidental to Contract Work shall be paid for at hire rates reasonably related to those obtained in accordance with sub-paragraph (i) of this paragraph 7.
 - (vi) The Operating Company shall include for percentage adjustment to the basic cost of plant in Section 4 Plant of the Schedule of Dayworks Carried Out Incidental to Contract Work. The adjustment may be positive or negative.

Units

- 8 The units of measurement shall be:
- (i) basic cost of plant sum,
 - (ii) percentage adjustment to the basic cost of plant percentage.

Itemisation	9	Separate items shall be provided for the basic cost of plant in accordance with chapter II paragraphs 3 and 4 and the following:						
		<table><tr><th>Group</th><th>Feature</th></tr><tr><td>I</td><td>1 Basic cost of plant.</td></tr><tr><td></td><td>2 Percentage adjustment to the basic cost of plant.</td></tr></table>	Group	Feature	I	1 Basic cost of plant.		2 Percentage adjustment to the basic cost of plant.
Group	Feature							
I	1 Basic cost of plant.							
	2 Percentage adjustment to the basic cost of plant.							
Basic Cost of Plant	10	The basic cost of plant for Time Work shall in accordance with Section 4 Plant of the Schedules of Dayworks carried out incidental to Contract Work and in accordance with the Preambles to Schedule of Rates and Prices General Directions include for include for:						
Item coverage		(a) all associated costs irrespective of whether plant is owned, hired or leased, (b) fuel, (c) consumable stores, (d) repairs, (e) maintenance, (f) insurance, (g) establishment charges overheads and profit, (h) be exclusive of operator, driver and attendants.						
Percentage Adjustment to the Basic Cost of Plant	11	The percentage adjustment to the basic cost of plant shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for include for:						
Item coverage		(a) owned, hired or leased plant, (b) general servicing, overheads and replacements, (c) fuel distribution, (d) transporting within or related to the Unit, (e) all other charges and costs not recovered in basic cost of plant, (f) discounts.						
Materials								
Definitions	12	Basic cost of materials and percentage adjustment:						
		(i) the basic cost of materials shall be charged at the net invoiced price of materials delivered to the Operating Company,						

		(ii)	the Operating Company shall include for percentage adjustment to the basic cost of materials in Section 2 Materials of the Schedule of Dayworks Carried Out Incidental to Contract Work. The adjustment may be positive or negative.	
Units	13	The units of measurement shall be:		
		(i)	basic cost of materials sum,	
		(ii)	percentage adjustment to the basic cost of materials percentage.	
Itemisation	14	Separate items shall be provided for the basic cost of materials in accordance with chapter II paragraphs 3 and 4 and the following:		
		Group	Feature	
		I	1	Basic cost of materials.
			2	Percentage adjustment to the basic cost of materials.
Basic Cost of Material	15	The basic cost of material for Time Work shall in accordance with Section 2 Materials of the Schedules of Dayworks carried out incidental to Contract Work and in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:		
Item coverage		(a)	all costs of materials delivered to the Unit.	
Percentage Adjustment to the Basic Cost of Materials	16	The percentage adjustment to the basic cost of materials shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:		
Item coverage		(a)	ordering and taking delivery,	
		(b)	unloading, storing and protecting,	
		(c)	double handling,	
		(d)	waste,	
		(e)	discounts,	
		(f)	establishment charges overheads and profit,	
		(g)	delivery within or related to the Unit,	
		(h)	all other charges and costs not recovered in basic cost of materials.	

Supplementary Services

Definition	17	Services involving the payment of invoiced costs for supplementary services shall include: (i) procurement of supplementary services for items that are not included in the Schedule of Rates and Prices or covered by a method of payment in Clause 10.1 of Schedule 1, (ii) procurement of supplementary services shall not include labour plant and materials paid elsewhere in this Series 6500: Time Work Schedule, (iii) tipping charges. Tipping charges incurred by the Operating Company shall only be separately measured in respect of arisings resulting from work ordered to be carried out on a Time Work basis.									
Units	18	The units of measurement shall be: (i) invoiced costs of accounts sum, (ii) percentage adjustment to invoiced costs percentage.									
Measurement	19	The measurement of invoiced costs for payment of accounts for supplementary services shall be the value of invoices received, after any discounts given except in respect of any discount for prompt payment not exceeding 2½% which may be retained by the Operating Company. The percentage adjustment shall be applied to the correctly submitted invoiced costs excluding VAT.									
Itemisation	20	Separate items shall be provided for invoiced costs of accounts for supplementary services in accordance with Chapter III paragraphs 3 and 4 and the following: <table><tr><th>Group</th><th>Feature</th></tr><tr><td rowspan="2">I</td><td>1 Invoiced costs of accounts.</td></tr><tr><td>2 Percentage adjustment to invoiced costs.</td></tr><tr><td rowspan="3">II</td><td>1 Supplementary services.</td></tr><tr><td>2 Nominated Subcontractors.</td></tr><tr><td>3 Tipping charges.</td></tr></table>	Group	Feature	I	1 Invoiced costs of accounts.	2 Percentage adjustment to invoiced costs.	II	1 Supplementary services.	2 Nominated Subcontractors.	3 Tipping charges.
Group	Feature										
I	1 Invoiced costs of accounts.										
	2 Percentage adjustment to invoiced costs.										
II	1 Supplementary services.										
	2 Nominated Subcontractors.										
	3 Tipping charges.										

**Percentage
Adjustment to
Invoiced Costs for
Supplementary
Services.**

21 The percentage adjustment to invoiced costs for supplementary services shall in accordance with the Preambles to the Schedule of Rates and Prices General Directions include for:

Item coverage

- (a) general management of the relevant services,
- (b) obtaining quotations and placing orders,
- (c) payment of invoices and subsequent inclusion of the relevant amounts in monthly statements including any interest costs,
- (d) any cost incurred by the Operating Company in respect of supplementary services,
- (e) procurement (as Series 6300 paragraph 5),
- (f) supervision (as Series 6300 paragraph 6),
- (g) establishment charges overheads and profit,
- (h) labours in connection with Nominated Subcontractors as detailed in the Preambles to the method of this measurement of measurement paragraph 8.

SCHEDULE 2 PART 1

METHOD OF MEASUREMENT

SERIES 6700: CHANGES IN SCOPE OF OPERATIONS

Changes in the Extent of the Unit Impacting on Core Operations Items in Series 6100

Definition	<p>The provisions of this Series shall not apply to Operations, activities duties and responsibilities in any other part of the Scottish Trunk Road network outside the boundary of the Unit.</p> <p>If at any time during the currency of this Contract the extent of the Unit increases or decreases, items in this Series shall be measured to cover the impact of the change on Core Operations items measured in Series 6100. Measurement of these items shall be deemed to cover the impact on all items within Series 6100.</p> <p>Cumulative spans of bridges are the summation of the individual clear span(s) that makes up the bridge.</p>
Units	<p>1 The units of measurement shall be:</p> <p>(a) addition/deduction for change in the extent of the Unit for carriageways kilometre/month,</p> <p>(b) addition/deduction for change in the extent the Unit for Structures number/month.</p>
Measurement	<p>2 The measurement of the change in the extent of Trunk Roads in the Unit shall be the length of carriageway added to or removed from the Unit.</p> <p>No deduction from the measurement of carriageway shall be made for structures.</p> <p>Roundabouts and slip roads shall be measured as single carriageway.</p> <p>For slip roads the length shall be the distance between the mid point of the nominal channel at its junctions. Roundabouts shall be measured along the centre line between the outer edges of its carriageway.</p> <p>A footbridge shall be defined as the totality of the Structure.</p> <p>Additions to the length of the road network shall be measured as a positive quantity. Deductions from the length of the road network shall be measured as a negative quantity.</p> <p>Additions to the number of Structures shall be measured as a positive quantity. Deduction from the number of Structures shall be measured as a negative quantity.</p>

Itemisation	3	Separate items shall be provided for changes in the extent of the Trunk Road Network impacting on Core Operation items in Series 6100 in accordance with Chapter III paragraphs 3 and 4 and the following:	
		Group	Feature
		I	1 Addition/deduction for change in the extent of the Unit.
		II	1 Carriageway.
			2 Structure.
		III	1 Bridge with cumulative clear spans not exceeding 10 metres.
			2 Bridge with cumulative clear spans exceeding 10 metres but not exceeding 50 metres.
			3 Bridge with cumulative clear spans exceeding 50 metres.
			4 Footbridge.
			5 Sign gantry/signal gantry.
		Note: Group III shall only apply to Group II feature 2.	
Changes in the Extent of the Unit Impacting on Core Operation Items in Series 6100	4	The items for changes in the extent of the Unit impacting on Core Operation items in Series 6100 shall in accordance with the Preambles to the Schedule of Rates and Prices General Directions include for:	
Item coverage	(a)	all costs or savings occasioned by the change.	

SCHEDULE 2 PART 1

METHOD OF MEASUREMENT

SERIES 6800: MISCELLANEOUS

Definitions Operations in excess of the requirements measured in accordance with Series 6100 shall be measured in accordance with this Series.

Anti-Graffiti Coatings

- | | | |
|-------------|---|--|
| Units | 1 | The units of measurement shall be:
(i) apply anti-graffiti coatings square metre. |
| Measurement | 2 | The measurement of anti-graffiti coatings shall be the plane surface area. |
| Itemisation | 3 | Separate items shall be provided for anti-graffiti coatings in accordance with Chapter III paragraphs 3 and 4 and the following: |

Group	Feature
I	1

Anti-graffiti coatings.

Anti-Graffiti Coatings	4	The items for anti-graffiti coatings shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
-------------------------------	---	---

- | | | |
|---------------|--|---|
| Item coverage | | <ul style="list-style-type: none"> (a) preparation of surfaces, (b) masking and other measures to protect adjacent untreated work and the removal of masking and other measures upon completion, (c) preparing materials for applications, (d) complying with any special requirements in respect of ambient conditions including the containment of dust and debris and for intervals between successive operations and applications, (e) multiple coat as recommended by manufacturer, (f) sealer/primer as recommended by manufacturer, (g) preparation and supply of system and data sheets, (h) measures for protection. |
|---------------|--|---|

Vehicle Restraint Systems

- | | | |
|-------|---|--|
| Units | 6 | The unit of measurement shall be:
(i) re-tensioning safety barriersmetre. |
|-------|---|--|

Itemisation	7	Separate items shall be provided for re-tensioning safety barriers in accordance with Chapter III paragraphs 3 and 4 and the following:												
		<table><tr><th>Group</th><th>Feature</th></tr><tr><td>I</td><td>1 Re-tensioning.</td></tr><tr><td>II</td><td>1 Safety barrier.</td></tr><tr><td></td><td>2 Wire rope.</td></tr><tr><td>III</td><td>1 Single sided.</td></tr><tr><td></td><td>2 Double sided.</td></tr></table>	Group	Feature	I	1 Re-tensioning.	II	1 Safety barrier.		2 Wire rope.	III	1 Single sided.		2 Double sided.
Group	Feature													
I	1 Re-tensioning.													
II	1 Safety barrier.													
	2 Wire rope.													
III	1 Single sided.													
	2 Double sided.													
Re-tensioning Safety Barrier	8	The items for re-tensioning safety barrier shall in accordance with the Preambles to Bill of Quantities General Directions include for:												
Item coverage		(a) applying a releasing agent to adjuster assembly, (b) ensuring the nut is capable of travel along the whole of the threaded portion of the adjuster bolt, (c) remove existing and replace beam to post screws, nut and washers, (d) tighten adjuster bolt to correct torque appropriate to the ambient temperature, (e) tighten lock nut to correct torque, (f) tighten beam to post bolt to the correct torque, (g) adjust wire rope rigging screws to achieve tension appropriate to the ambient temperature, (h) additional adjuster assemblies.												
		Drainage												
Units	9	The units of measurement shall be: (i) low pressure high volume jettingmetre, (ii) extra over any item of low pressure high volume jettingmetre.												
Itemisation	10	Separate items shall be provided for low pressure high volume jetting in accordance with Chapter III paragraphs 3 and 4 and the following:												
		<table><tr><th>Group</th><th>Feature</th></tr><tr><td>I</td><td>1 Low pressure high volume jetting.</td></tr><tr><td>II</td><td>1 Piped drain.</td></tr><tr><td></td><td>2 Combined drainage and kerb system.</td></tr><tr><td></td><td>3 Linear drainage channel system.</td></tr></table>	Group	Feature	I	1 Low pressure high volume jetting.	II	1 Piped drain.		2 Combined drainage and kerb system.		3 Linear drainage channel system.		
Group	Feature													
I	1 Low pressure high volume jetting.													
II	1 Piped drain.													
	2 Combined drainage and kerb system.													
	3 Linear drainage channel system.													

		III	1	Different diameters.
			2	Any diameter.
			3	Any type.
		IV	1	Extra over for use of root cutter.
Low Pressure High Volume Jetting	11	The items for low pressure high volume jetting shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:		
Item coverage		(a)	cleaning existing drainage systems (as Series 500 paragraph 84).	
Extra Over any item of Jetting for use of Root Cutter	12	The items for extra over any item of jetting for use of root cutter shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:		
Item coverage		(a)	all additional costs for use of root cutter.	

Cleaning of Street Furniture

Units	13	The unit of measurement shall be:		
		(a)	Cleaning of sign faces, sign faces on gantry, marker posts hazard posts, ECP cylinders, bollard, refuge beacon.....number.	
		(b)	Painted safety fence.....linear metre.	
Itemisation	14	Separate items shall be provided for cleaning of street furniture in accordance with Chapter III paragraphs 3 and 4 and the following:		
		Group	Feature	
		I	1	Cleaning.
		II	1	Sign face.
			2	Marker post, hazard post, ECP cylinder, bollard or refuge beacon.
			3	Painted safety fence.
		III	1	Not exceeding 5.0 square metres in area.
			2	Exceeding 5.0 square metres but not exceeding 10.0 square metres.
			3	Exceeding 10.0 square metres but not exceeding 20.0 square metres.

Note: Group III shall only apply to Group II feature 1.

Cleaning of Street Furniture	15	The items for cleaning of street furniture shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
Item coverage		<ul style="list-style-type: none"> (a) detergent cleaner, (b) water supply and all costs in connection therewith, (c) cleaning spillage on hard surfaces below signs.

Landscape Maintenance

Grass Cutting

Units	16	The unit of measurement shall be: <ul style="list-style-type: none"> (i) cutting close mown grass, amenity grass, grass banks and ditches, grass in road verge in selected full width cuts.....square metre, (ii) close mown grass trimming edges, trimming edges, amenity grass trimming edges, close mown grass reforming edges, grass reforming edges, amenity grass reforming edges,linear metre, (iii) cutting grass in verge in 1.2m wide swathe cut kilometre.
-------	----	--

Itemisation	17	Separate items shall be provided for grass cutting, trimming edges and reforming edges in accordance with Chapter III paragraphs 3 and 4 and the following:
-------------	----	---

Group	Feature
I	1 Grass cutting.
II	1 In close mown areas.
	2 In amenity areas.
	3 In banks and ditches.
	4 In highway verge in 1.20 metre swathe cut.
	5 In highway verge in selected full width cuts.

Grass Cutting	18	The items for grass cutting shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
----------------------	----	--

Item coverage		<ul style="list-style-type: none"> (a) mowing, cutting or strimming, (b) taking precautions to avoid any damage, (c) cutting around posts, signs and superficial obstructions, (d) cutting around trees, cutting around flowering bulbs, (e) removing cuttings from paved areas and other hardstandings, (f) removing seats, litter bins, temporary signs and other similar features, and replacing upon completion,
---------------	--	--

- (g) removal of litter, stones and other deleterious materials,
- (h) dispersal of cuttings from non-hard areas evenly over the sward.

Hedge Trimming

Units	19	The units of measurement shall be:		
		(i) trimming hedgeslinear metre.		
Itemisation	20	Separate items shall be provided for hedge trimming in accordance with Chapter III paragraphs 3 and 4 and the following:		
		Group	Feature	
		I	1	Trimming hedges.
		II	1	Less than 2 metres high.
			2	Over 2 metres high.
		III	1	One side and top.
			2	Both sides and top.
Hedge Trimming	21	The items for hedge trimming shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:		
Item coverage		(a)	trimming,	
		(b)	taking precautions to avoid damage,	
		(c)	disposal of all hedge cuttings, litter and debris,	
		(d)	where appropriate shredding and disposal on Site,	
		(e)	removal of clippings lodged in top or sides of the hedge,	
		(f)	removal of all litter and debris from within the Structure of the hedge.	

Road Cleaning and Clearance

Units	22	The units of measurement shall be: (i) cleaning carriageway, hard shoulder, nearside channel, offside channel, roundabout channel, central reserve, footways/cycling facilities kilometre, (ii) remove dead animal carcasses, remove single objects weighing over 25kgnumber.						
Itemisation	23	Separate items shall be provided for road cleaning and clearance in accordance with Chapter III paragraphs 3 and 4 and the following: <table><tr><th>Group</th><th>Feature</th></tr><tr><td>I</td><td>1 Cleaning.</td></tr><tr><td></td><td>2 Remove animal carcasses and single objects.</td></tr></table>	Group	Feature	I	1 Cleaning.		2 Remove animal carcasses and single objects.
Group	Feature							
I	1 Cleaning.							
	2 Remove animal carcasses and single objects.							

	II	1	Carriageway.
		2	Hard shoulder.
		3	Nearside channel.
		4	Offside channel.
		5	Roundabout channel.
		6	Central reserves.
		7	Footways and cycleways.
	III	1	Verges.
		2	Carriageway and hardshoulders.
		3	Central reserves.
		4	Other Areas.
	Note 1: Group II shall only apply to Group I feature 1.		
	Note 2: Group II shall only apply to Group I feature 2.		
	Cleaning	24	The items for cleaning shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
	Item coverage		<ul style="list-style-type: none"> (a) hand or mechanical sweeping, (b) picking up objects not exceeding 25kg from hard areas in timescales appropriate to the prevailing circumstances, (c) water supply, (d) removal of sweepings, objects not exceeding 25kg and debris, (e) disposal of material (as Series 600 paragraph 39).
	Remove Animal Carcasses and Single Objects	25	The items for remove animal carcasses and single objects shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:
	Item coverage		<ul style="list-style-type: none"> (a) picking up animal carcasses and picking up single objects exceeding 25kg in timescales appropriate to the prevailing circumstances, (b) placing in sacks, (c) where an animal carcass is a domestic pet, removal of any identification tags and delivery to the Police together with a brief description of the animal, attempting to contact the owner, keeping the carcass of any domestic animal for a period of two weeks and arranging return of the carcass to the owner, (d) disposal of material (as Series 600 paragraph 39).

Litter Clearance

Units	26	The units of measurement shall be:		
		(i)	Litter clearance kilometre.	
Measurement	27	Measurement shall be the linear length of associated highway irrespective of the width of clearance.		
Itemisation	28	Separate items shall be provided for keeping land clear of litter and refuse in accordance with Chapter III paragraphs 3 and 4 and the following:		
		Group	Feature	
		I	1	Litter clearance from highway.
		II	1	Grade C to B.
			2	Grade D to B.
Litter clearance	29	The items for litter clearance shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:		
Item coverage		(a)	picking up litter,	
		(b)	placing in sacks,	
		(c)	disposal of material (as Series 600 paragraph 39).	

Validating Network Inventory

Units	30	The units of measurement shall be: (i) Validate network inventory.				
Itemisation	31	Separate items shall be provided for validate network inventory and in accordance with Chapter III paragraphs 3 and 4 and the following: <table><tr><th>Group</th><th>Feature</th></tr><tr><td>I</td><td>1 Validate network inventory.</td></tr></table>	Group	Feature	I	1 Validate network inventory.
Group	Feature					
I	1 Validate network inventory.					
Validate network inventory		The item for validate network inventory shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:				
Item coverage		(a) Survey complete extent of network, (b) Identify incorrect or missing inventory records or attributes, (c) Update inventory and inventory attributes in the Routine Management and Maintenance System including adding, deleting or amending records as required, (d) Reporting to the Overseeing Organisation details of all of all updates made to the network inventory.				

SCHEDULE 2 PART 1

METHOD OF MEASUREMENT

SERIES 7000: LUMP SUM PRICES

Payment of Accounts

Definition	1	Services involving the payment of accounts shall include but not be limited to the following:		
		(a)	payment of statutory undertakers accounts,	
		(b)	payment of Network Rail possession charge accounts.	
Units	2	The units of measurement shall be:		
		(i)	invoiced costs of accounts sum,	
		(ii)	percentage to be added to invoiced costs.	
Measurement	3	The measurement of invoiced costs for payment of accounts shall be the value of invoices received, after any discounts given except in respect of any discount for prompt payment not exceeding 2½% which may be retained by the Operating Company.		
		The percentage adjustment shall be applied to the invoiced costs excluding VAT.		
Itemisation	4	Separate items shall be provided for invoiced costs of accounts in accordance with Chapter III paragraphs 3 and 4 and the following:		
		Group	Feature	
		I	1	Invoiced costs of statutory undertakers accounts.
			2	Invoiced costs of Network Rail accounts.
			3	Percentage to be added to invoiced costs of statutory undertakers accounts.
			4	Percentage to be added to invoiced costs of Network Rail accounts.
Percentage to be Added to Invoiced Costs for Statutory Undertakers Accounts.	5	The percentage to be added to invoiced costs of Statutory Undertakers accounts. shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:		
Item coverage		(a)	payment of invoices and subsequent inclusion of the relevant amounts in monthly statements including any interest costs,	
		(b)	any other costs in connection with the payment of invoices.	

Percentage to be Added to Invoiced Costs for Network Rail Possession Charge Accounts

6 The percentage to be added to invoiced costs of Network Rail possession charge accounts. shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:

- Item Coverage
- (a) payment of invoices and subsequent inclusion of the relevant amounts in monthly statements including any interest costs,
 - (b) all costs in connection with working on or in the vicinity of Network Rail land,
 - (c) any other costs in connection with the payment of invoices.

Lump Sum Quotations

Units

7 The units of measurement shall be:

- (i) Lump Sum Quotation, Lump Sum Quotation for the construction of Schemes costing less than £350,000sum.

Itemisation

8 Separate items shall be provided for Lump Sum Quotations in accordance with Chapter III paragraphs 3 and 4 and the following:

Group	Feature
I	1 Lump Sum Quotation.
	2 Lump Sum Quotation for the Construction of Schemes costing less than £350,000.

Lump Sum Quotation

9 The item for Lump Sum Quotation shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:

- Item coverage
- (a) all costs to undertake the Operations as a Lump Sum Quotation.

Lump Sum Quotation for the construction of Schemes costing less than £250,000

10 The item for Lump Sum Quotation for the construction of Schemes costing less than £350,000 shall in accordance with the Preambles to Schedule of Rates and Prices General Directions include for:

- Item coverage
- (a) all costs to undertake the Operations as a Lump Sum Quotation.