Area 10

Asset Delivery

Maintenance and Response Contract

Schedule of Rates

Method of Measurement for

Schedule B

CONTENTS AMENDMENT SHEET

Amend. No.	Revision No.	Amendments	Initials	Date
0	0	Tender Issue	SOS	19/02/18
1	1	Under Series 1300: ROAD LIGHTING COLUMNS AND BRACKETS, CCTV MASTS AND CANTILEVER MASTS, in Paragraph 8 Units, deleted item (iv) Maintenance of lighting columns & illuminated traffic signs and item (v) Maintenance of illuminated bollards.	LX	08/03/18
2	1	Under Series 1300: ROAD LIGHTING COLUMNS AND BRACKETS, CCTV MASTS AND CANTILEVER MASTS, in Paragraph 9 Measurement, deleted item "The measurement of maintenance of lighting columns & illuminated traffic signs shall be each lighting column or illuminated traffic sign." And "The measurement of illuminated bollards shall be each illuminated bollard.".	LX	08/03/18
3	1	Under Series 1300: ROAD LIGHTING COLUMNS AND BRACKETS, CCTV MASTS AND CANTILEVER MASTS, in Paragraph 10 Itemisation, deleted wording "…,lighting columns & illuminated traffic sign maintenance and illuminated bollards maintenance".	LX	08/03/18

		Preambles to Schedule of Rates
General Directions	**1**	This Schedule of Rates has been prepared in accordance with 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. The relevant publication date of each page of the Method of Measurement for Highway Works that is incorporated into this contract is given in the relevant Schedule of Pages and Relevant Publication Dates.
	2	(05/01) In the Schedule of Rates 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. In cases where the amendments to the Method of Measurement following these Preambles do not include "item coverage" matters for the respective items then the description of those items measured shall be deemed as sufficient to cover that work. The nature and extent of the work is to be ascertained by reference to the Contract Documents. The rates and prices entered in the Schedule of Rates 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) people not limited to employed and hired-in staff, labour and consultants and costs in connection therewith; (ii) the manufacture, fabrication and supply of Plant and Materials, goods, storage and costs in connection therewith including delivery to the Affected Property. Taking delivery of Plant and Materials and goods supplied by others, unloading, storage, and costs in connection therewith; (iii) Equipment and costs in connection therewith; (iv) fixing, erecting and installing or placing of Plant and Materials and goods in position; (v) temporary works; (vi) the effect on the phasing of the *service* or any

		element of the *service* to the extent set forth or reasonably implied in the Contract Documents; (vii) general obligations, liabilities and risks involved in Providing the Service set forth or reasonably implied in the Contract Documents including repair or replacement that arises from a fault of the *Contractor*; (viii) establishment and other charges not limited to insurances, overheads, profit and Fee; (ix) waste; (x) testing carried out by the *Contractor* in accordance with– the particular requirements of the scope and requirements of the Concept of Delivery document, Cyclic and Reactive Maintenance Delivery Plan and Specification including supplying results of tests, reports and certificates; (xi) supply and delivery of samples to the *Service Manager* in accordance with the particular requirements of the scope and requirements of the Concept of Delivery document, Cyclic and Reactive Maintenance Delivery Plan and Specification; (xii) checking, inspecting, examining, measuring and verifying goods, Plant and Materials, and workmanship including supplying results, reports and certificates; (xiii) attendance and transport for sampling and testing carried out by the *Client* of *Service Manager*; (xiv) complying with quality assurance requirements of this contract and providing certificates of conformity; (xv) preparation and supply of detailed working drawings. (xvi) awaiting approvals and consent. (xvii) complying with the particular requirements of the scope and requirements of the Concept of Delivery document, Cyclic and Reactive Maintenance Delivery Plan and Specification applicable to the items of work described in the Schedule of Rates; (xviii) travelling to, between and from different locations within the Affected Property; (xix) updating information and inventory data to the information database or system; (xx) supervision, management and programming and the like to Provide the Service; (xxi) the use of Subcontractors; (xxii) landfill costs and taxes; (xxiii) traffic safety and management as identified in Series 100 paragraphs 21 to 27 inclusive of the method of measurement referenced in

		paragraph 1 of these preambles; (xxi) disposal as identified in Series 600 paragraphs 34 to 39 inclusive of the method of measurement referenced in paragraph 1 of these preambles.
Measurement	**3**	(i) The measurement of work shall be computed net from the dimensions stated in the Contract Documents unless otherwise stated in the Method of Measurement.
		(ii) (11/06) Where the Contract Documents specify the Type of Pavement to be constructed then the measurement of work shall be based upon the thinnest pavement construction and surfacing over structures permitted by this contract for that Type of Pavement. Where the Contract Documents provide for the *Contractor* to select the type of safety barrier, pavement or buried structure (where the structure is not within Designated Outlines) to be constructed then the measurement of all work in each area so affected shall be based upon the thinnest pavement construction and surfacing over structures permitted by this contract in that area for the particular type of safety barrier, pavement or buried structure the *Contractor* has elected to construct.
Pricing of Items	**4**	Each individual item in the Schedule of Rates shall have a rate or price entered against it. Rates and prices shall be expressed to two decimal places which shall be informed by entries inputted by the *Contractor* in the additional columns provided for each cost component and/or cost of Subcontractors and the corresponding fees. The entries in the additional columns shall be to two decimal places.
Alternative Specified Materials, Designs and Options Within Types of Pavement	**5**	Where in the Contract Documents a choice of alternatives is permitted the description scheduled and the rates and prices inserted shall be deemed to cover any of the permitted alternative Plant and Materials or designs the *Contractor* may elect to use. In all cases the rates and prices inserted in the Schedule of Rates shall be deemed to include for any adjustments of work content, rates, costs, taxes and the like occasioned by the choice of alternatives elected to be used by the *Contractor*.
Privately and Publicly Owned Services or Supplies	**6**	The information in the Contract Documents as to the whereabouts of existing services and mains is believed to be correct but the *Contractor* shall not be relieved thereby of his obligations under this

		contract. The *Contractor* shall include in his rates and prices for locating and taking measures for the support and full protection of pipes, cables and other apparatus during the progress of the *service*, obtaining the written consent of the appropriate authority to interrupt the service or supply and for keeping the *Service Manager* informed of all arrangements he makes with the owners of privately owned services or supplies, Statutory Undertakers and Public Authorities as appropriate.
Labours	**7**	NOT USED.
Roadworks Overall Requirements	**8**	The *Contractor* shall allow in his rates and prices for complying with requirements in respect of pavement construction, horizontal alignments, surface levels and surface regularity of pavement courses, dealing with changes in weather conditions, use of surfaces by traffic and construction equipment, and general requirements for sub-bases and road bases.
Work Within and Below Non-tidal Open Water or Tidal Water	**9**	The *Contractor* shall allow in his rates and prices for taking measures required to execute work within and below non-tidal open water or tidal water. The *Contractor* shall include in his rates and prices for any investigations to ascertain actual boundaries, surface levels and ranges affected by non-tidal open water or tidal water.
Dealing with Flow	**10**	The *Contractor* shall allow in his rates and prices for taking measures to deal with the flow of water, sewage and the like.
Reimbursement of Fees, Rates, Taxes and Overseeing Organisation's Telephone Calls	**11**	NOT USED.
Affected Property Limitations and Constraints	**12**	The *Contractor* shall allow in his rates and prices for complying with any limitations and constraints on the use of the Affected Property.
Hard Material	**13**	For the purposes of this contract the following are designated as Hard Material in accordance with Chapter 1 Definitions, paragraph 1(h)(i):
		(a) Not used.
		(b) those deposits designated by limits shown in the Scope;

		(c) existing pavements, footways, paved areas (but excluding unbound materials) and foundations in masses in excess of 0.20 cubic metres.
Equivalent Products and Materials	**14**	Where the *Contractor* offers an equivalent product or Plant and Materials in place of the one identified or specified, then the rates and prices in the Schedule of Rates shall be deemed to include for all the obligations and costs associated with the incorporation of the equivalent into the *service*, including design, provision of data and drawings, certificates, awaiting acceptance, resubmissions and modifications and amendments to the *service*.
		Unless specifically stated to the contrary in the Contract Documents the measurement of the *service* affected by the incorporation of the equivalent products and Plant and Materials shall be based on the Contract Documents and not on the *service* as amended and completed to incorporate the equivalent products and Plant and Materials.
Permanent Works Designed by the Contractor	**15**	(05/01) Where this contract requires part(s) of the *service* to be designed by the *Contractor*, the rates and prices in the Schedule of Rates shall include for all the obligations and costs associated with the incorporation of the *Contractor*'s design into the *service*, including design, provision of data and drawings, certificates, awaiting approvals, resubmissions and modifications and amendments to the *services*.
		Additionally the rates and prices in the Schedule of Rates shall include for the costs of all testing and sampling to be carried out by the *Contractor* in respect of workmanship, goods and Plant and Materials incorporated into the *service* or to prove the *Contractor*'s design.
Structures Designed by the Contractor	**16**	NOT USED.
National Alterations for The Overseeing Organisations of Scotland, Wales and Northern Ireland	**17**	Where a paragraph in Chapter IV of the Method of Measurement for Highway Works (Units and Methods of Measurement) or in the Notes for Guidance on the Method of Measurement for Highway Works or in the Library of Standard Item Descriptions for Highway Works is prefixed by # this indicates that this particular paragraph has a National Alteration for one or more of the Overseeing Organisations of Scotland, Wales or

		Northern Ireland. The use of national paragraphs is permitted only within the countries to which they specifically apply and they are deemed to replace corresponding paragraphs in the main body of Chapter IV of the Method of Measurement for Highway Works (Units and Methods of Measurement) or in the Notes for Guidance on the Method of Measurement for Highway Works or in the Library of Standard Item Descriptions for Highway Works as appropriate. The National paragraphs correspond to the particular requirements of the National Alterations for the Overseeing Organisations of Scotland, Wales or Northern Ireland contained in Volume 1 of the Manual of Contract Documents for Highway Works. The substitute or additional paragraphs are located at the end of the relevant Series
Testing	**18**	Testing as paragraph 2(x) above, is in respect of tests to be carried out by the *Contractor* to verify workmanship, goods and Plant and Materials incorporated into the *service* and testing of the *service* in order to prove the Overseeing Organisation's design as set out in the scope and requirements of the Concept of Delivery document, Cyclic and Reactive Maintenance Delivery Plan and Specification.
		Checking, inspecting, examining, measuring and verifying goods, Plant and Materials and workmanship incorporated in the *service*, as paragraph 2(xii) above, is in respect of other operations set forth or reasonably implied in the Contract Documents to be carried out by the *Contractor* to demonstrate compliance with the particular requirements of this contract, or to prove the Overseeing Organisation's design where not separately listed in the scope and requirements of the Concept of Delivery document, Cyclic and Reactive Maintenance Delivery Plan and Specification.
		Procedural trials, trial panels and trial areas required to be carried out or constructed as separate operations in advance of the *service* in order to verify goods, Plant and Materials and workmanship shall not be measured separately but are included within the items in the Schedule of Rates.
		Testing of existing structures and other investigative works shall be individually measured within the relevant Series.

Landscape and Ecology	**19**	(05/01) The rates and prices inserted in the Schedule of Rates for new Planting, Seeding and Turfing measured in accordance with Volume 4 – Series 3000 include for all post-planting maintenance work required to be carried out in accordance with the Contract Documents.
		In order to properly reflect the scope and duration of the planting and post- planting requirements a series of staged payments for the various items of planting, seeding and turfing will be made in accordance with the Staged Payments Schedule.
		The Staged Payments Schedule is to be inserted in the Schedule of Rates immediately preceding the collection page for Landscape and Ecology and shall be used for assessing payments due to the Contractor in accordance with this contract.
Amendments to the Method of Measurement (05/01)	**20**	(05/01) For the purposes of this contract the Method of Measurement for Highway Works is amended in accordance with the paragraphs below and pages immediately following.
Notes for Guidance	**21**	e Notes for Guidance on the Method of Measurement published by The Stationery Office as Section 2 of Volume 4 of the Manual of Contract Documents for Highway Works is incorporated into this contract. The relevant publication date of each page of the Notes for Guidance on the Method of Measurement for Highway Works is given in the relevant Schedule of Pages and Relevant Publication Dates.
Terms	**22**	Terms identified in table 1 below that are included within the Method of Measurement for Highway Works (and the amendments to that method of measurement that follow these Preambles herein) should be replaced with the revised terms listed in table 1 also; Table 1:

Terms	Revised terms
…Site	…Affected Property
…Bill of Quantities	…Schedule of Rates
…Contractor	*…Contractor*
…Works	*…service*
…Employer	*…Client*
…Engineer	*…Service Manager*
…Engineer's Representative	*…Service Manager*
…Contract	…Form of Agreement
…Specification	*…Scope*
…Drawings	…Scope

		…Tender Total — …tendered total of the Prices …Contract Price — …amount due …Permanent Works — …*service* …Temporary Works — …temporary works …Section — …section …Constructional Plant — …Equipment
Definitions – "Conditions of Contract"	**23**	In Chapter I replace all wording in paragraph 1(a) with "Not used.".
Definitions – "Conditions of Contract" **Definitions – "Provisional"**	**24**	In Chapter I replace all wording in paragraph 1(d) with "Not used.".

Method of Measurement for Highway Works
Schedule of Pages and Relevant Publication Dates

Chapter/Series	Page Number	Publication Date
Contents	1 2 3 4 to 7	November 2004 May 2005 November 2004 May 2005
Chapter I	1 to 3 inclusive	March 1998
Chapter II	1 2	March 1998 May 2001
Chapter III	1 2 3 to 11 inclusive	March 1998 May 2001 May 2004
Chapter IV	1	March 1998
100	1 to 2 inclusive 3 to 7 inclusive 8 9 to 11 inclusive 12 13 to15 inclusive	March 1998 May 2001 November 2004 May 2001 November 2004 May 2001
200	1 2 to 3 inclusive 4	May 2001 May 2004 May 2001
300	1 to 5 inclusive	May 2001
400	1 to 2 and 4 to 8 inclusive 3	November 2004 November 2006
500	1 to 5 inclusive 6 7 to 13 inclusive 14 15 16 to 17 inclusive 18 19	May 2001 November 2004 May 2001 May 2005 May 2001 May 2005 May 2001 November 2003
600	1 2 3 4 to 11 inclusive 12 13 to 14 inclusive 15 to 38 inclusive N1 to N3 inclusive	May 2002 May 2001 March 1998 November 2004 May 2002 November 2004 May 2001 May 2002
700	1 2 3 4 to 5 inclusive 6 7 to 9 inclusive 10 11	May 2001 May 2002 May 2001 May 2002 May 2001 May 2002 May 2001 May 2002

Chapter/Series	Page Number	Publication Date
	12 to 13 inclusive 14 15 to 18 inclusive	May 2001 May 2002 May 2001
800 900 1000	)) Not taken up)	
1100	1 2 3 4 to 5 inclusive 6 7 to 8 inclusive	May 2001 November 2004 May 2001 May 2002 May 2001 May 2005
1200	1 to 2 inclusive 3 to 5 inclusive 6 to 11 inclusive	May 2001 March 1998 May 2001
1300	1 to 3 inclusive	November 2003
1400	1 to 2 inclusive 3 4 to 8 inclusive 9	May 2001 May 2005 May 2001 May 2005
1500	1 to 2 inclusive 3 4 to 7 inclusive 8 to 12 inclusive	May 2001 May 2005 Feb 2003 May 2001
1600	1 to 2 inclusive 3 to 6 inclusive 7 8 to 19 inclusive	March 1998 May 2001 March 1998 May 2001
1700	1 2 3 4 to 11 inclusive	May 2004 May 2001 May 2004 May 2001
1800	1 2 to 5 inclusive	March 1998 May 2001
1900	1	May 2003
2000	1 2 to 3 inclusive	May 2002 May 2001
2100	1	March 1998
2200	Not taken up	
2300	1 to 3 inclusive	March 1998
2400	1 to 3 inclusive 4	May 2001 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

Notes for Guidance on the Method of Measurement for Highway Works
Schedule of Pages and Relevant Publication Dates

Chapter/Series	Page Number	Publication Date
Contents	1	May 2004
	2	May 2001
	3	May 2004
Introduction	1	March 1998
Chapters I,II and III	1	November 2004
	2	November 2006
	3	May 2001
Chapter IV 100	1	March 1998
	2	May 2001
200	1	May 2001
300	1	May 2001
400	1	November 2004
500	1	March 1998
	2	May 2001
600	1 to 2 inclusive	November 2004
	3	March 1998
	4 to 8 inclusive	May 2001
	9 to 10 inclusive	November 2004
700	1	May 2004
	2	March 1998
800	)	
900	) Not taken up	
1000	)	
1100	1	May 2004
1200	1	May 2001
1300	(No guidance on this Series)	
1400	1	March 1998
1500	1	May 2001
1600	1 to 2 inclusive	March 1998
1700	1	March 1998
1800	1	March 1998
1900	(No guidance on this Series)	
2000	1	March 1998
2100	(No guidance on this Series)	
2200	Not taken up	May 2004
2300	(No guidance on this Series)	
2400	1	March 1998
2500	1	November 2004
	2	May 2001
2600	Not taken up	
2700	1	May 2001
3000	1	May 2001
	2	May 2004
	3	May 2001
5000	1	May 2003

Amendments to Chapter IV of the Method of Measurement for Highway Works

Series 400: ROAD RESTRAINT SYSTEMS (VEHICLE AND PEDESTRIAN)

		Insert new paragraphs 48 to 50.
	Check All Road Restraint Systems and Re-Tension Road Restraint Systems Requiring Re-tensioning	
Units	48	The units of measurement shall be:
		(i) check all road restraint systems and re-tension road restraint systems requiring re-tensioning…..linear metre.
Measurement	49	The measurement of check all road restraint systems and re-tension road restraint systems requiring re-tensioning shall be the length along the centre line of the beams for single sided road restraint systems. If the road restraint system is double sided the measurement shall be the length of one side for the entire length of each road restraint system subject to the limitations on lengths instructed by the *Service Manager*. Transitions and terminals shall be included in lengths measured where applicable.
Itemisation	50	Separate items shall be provided for check all road restraint systems and re-tension road restraint systems requiring re-tensioning in accordance with Chapter II paragraphs 3 and 4 and the following:

Group	Feature	
I	1	Sub-Asset Type.
II	1	Item.

Series 500: DRAINAGE AND SERVICE DUCTS		
		Replace paragraphs 81 to 83 inclusive. Insert new paragraphs 81a to 83a.
	Emptying, Clearing, Cleaning, Jetting and Proving, Weed and Vegetation Clearance, Rubbish / Obstruction Clearance, Edge Scraping, Cutting Back, Re-cutting, De-Silting of Gullies, Gully Covers, Combined Kerb and Drainage Systems, Linear Drainage Systems, Combined Channel and Pipe Systems, Catch Pits, Ditches, Outfalls, Interceptors, Manholes, Culverts, Filter Drains	
Units	81 a	The units of measurement shall be:
		(i) gully emptying, clean covers and clear obstructions……number. (ii) Clean covers and clear obstructions……number. (iii) cleaning, rodding, jetting and proving combined kerb and drainage systems, linear drainage channels, combined channel and pipe systems….linear metre. (iv) clear weed/vegetation growth, clean, recut drainage Grip inlet and non-piped drainage Grip and counterfort drain……number. (v) clear weed/vegetation growth, cleaning, rodding, jetting proving of drainage Grip inlet and piped drainage Grip ……number. (vi) clear weed/vegetation growth around frames, clean, empty catch pits, interceptors, manholes….number. (vii) clean ditches by removing all material that could impair operation (overgrown vegetation, silt, debris/rubbish, or eroded banks where present impede flow and impair operation) ……linear metre. (viii) clean outfalls by removing all material that could impair operation (Headwalls, Pipe outfall) ……number. (ix) clean remove any blockage (silt, overgrown vegetation / weed, debris/rubbish, eroded bank material) restricting the free flow of water through the culvert……number. (x) edge scrape, clear vegetation/weed cut back to remove build up from edge of carriage way through to

		filter material in Filter Drain and Combined carrier and Filter drain that could impair operation….linear metre.

Measurement	82 a	The measurement of gully emptying and clean covers, clean covers, clear weed/vegetation growth, clean, recut drainage Grip inlet and non-piped drainage Grip, clear weed/vegetation growth, clean, recut counterfort drains, clear weed/vegetation growth, cleaning, rodding, jetting proving of drainage Grip inlet and non-piped drainage Grip, clear weed/vegetation growth around frames, clean, empty catch pits, clear weed/vegetation growth around frames, clean, empty interceptors, clear weed/vegetation growth around frames, clean, empty manholes, clean outfalls by removing all material that could impair operation (Headwalls, Pipe outfall) and clean remove any blockage (silt, overgrown vegetation / weed, debris/rubbish, eroded bank material) restricting the free flow of water through the culvert shall be the complete installation.
		The measurement of cleaning, rodding, jetting and proving combined kerb and drainage systems, linear drainage channels, combined channel and pipe systems, clean ditches by removing all material that could impair operation (overgrown vegetation, silt, debris/rubbish, or eroded banks where present impede flow and impair operation) shall be the individual lengths measured along the centre lines between any of the following: (a) the internal faces of catch pits, manholes, interceptors; (b) the external faces of headwalls; (c) the intersections of the centre lines at pipe junctions; (d) the centre of gully gratings (or where no grating is provided, the centre of the gully); (e) the position of terminations shown in the Contract. The measurement of cleaning, rodding, jetting and proving linear drainage systems, combined drainage and kerb systems and combined channel and pipe systems shall be deemed to include associated manholes, chambers, sumps and the like.
		The measurement of edge scrape, clear vegetation/weed cut back to remove build up from edge of carriage way through to filter material in Filter Drain and Combined carrier and Filter drain that could impair operation shall be the lengths stated in the Service Manager's instruction of changes to the planned number of Interventions.
Itemisation	83 a	Separate items shall be provided for emptying, clearing, cleaning, jetting and proving, weed and vegetation clearance, rubbish / obstruction clearance, edge scraping, cutting back, re-cutting, de-silting of gullies, gully covers, combined kerb and drainage systems, linear drainage systems, combined channel and pipe systems, catch pits, ditches, outfalls, interceptors, manholes, culverts, and filter drains in accordance with Chapter II paragraphs 3 and 4 and the following:

Group	Feature	
I	1	Sub-Asset Type.

		II	1	Item.
Series 600: EARTHWORKS				
		Delete paragraphs 90 to 93 inclusive.		
Series 1200: TRAFFIC SIGNS AND ROAD MARKING				
		Add the following paragraphs 46 to 48.		
	Cleaning of Traffic Signs and Bollards			
Units	46	The units of measurement shall be:		
		(i) Clean all traffic sign faces and reference numbers and clean all illuminated and non-illuminated (retroflective) bollards…..number. (ii) Clean all traffic sign faces and reference numbers of all Gantry signs ….. number.		
Measurement	47	The measurement of clean all traffic sign faces and reference numbers shall be each sign face. The measurement of clean all traffic sign faces and reference numbers of all Gantry signs shall be each gantry.		
		The measurement of clean all illuminated and non-illuminated (retroflective) bollards shall be each bollard.		
Itemisation	48	Separate items shall be provided for cleaning of traffic signs and bollards in accordance with Chapter II paragraphs 3 and 4 and the following:		
		Group	**Feature**	
		I	1	Sub-Asset Type.
		II	1	Item.

Series 1300: ROAD LIGHTING COLUMNS AND BRACKETS, CCTV MASTS AND CANTILEVER MASTS	
	Insert new paragraphs 8 to 10
	Cleaning and Changing of Lighting Lamps, Electrical Testing of Network Cabling and Good Condition Maintenance of Feeder Pillars, Lighting columns, illuminated traffic signs and illuminated bollards.
Units	8 The units of measurement shall be:
	(i) Bulk clean, bulk clean optics and translucent surfaces, bulk lamp clean and change…..number. (ii) Electrical testing of network cabling and electrical components including structural testing of columns (<20m in height)…..number. (iii) Good condition of feeder pillars to be maintained…..number. ~~**(iv)** Maintenance of lighting columns & illuminated traffic signs …..number.~~ ~~**(v)** Maintenance of illuminated bollards …..number.~~
Measurement	9 The measurement of bulk clean, bulk clean optics and translucent surfaces, bulk lamp clean and change shall be the number of lamps within which the item is carried out.
	The measurement of electrical testing of network cabling and electrical components including structural testing of columns (<20m in height), shall be the number of columns within which the item is carried out.
	The measurement of good condition of feeder pillars to be maintained shall be each feeder pillar.
	~~The measurement of maintenance of lighting columns & illuminated traffic signs shall be each lighting column or illuminated traffic sign.~~
	~~The measurement of illuminated bollards shall be each illuminated bollard.~~

Itemisation	10	Separate items shall be provided for cleaning and changing of lighting lamps, electrical testing of network cabling and good condition maintenance of feeder pillars~~, lighting columns & illuminated traffic sign maintenance and illuminated bollards maintenance~~ in accordance with Chapter II paragraphs 3 and 4 and the following:

Group	Feature	
I	1	Sub-Asset Type.
II	1	Item.

Series 3000: LANDSCAPE AND ECOLOGY

		Insert new paragraphs 53 to 55
		Control Of Weeds, Plants, Scrub, Vegetation, Material Removal and Maintenance of Open Water
Units	53	The units of measurement shall be: (i) Maintain Affected Property to control the spread or increase of instances of Injurious Weeds and Invasive Plant Species…… square metre. (ii) Maintain habitat integrity, including removal of scrub encroachment….. square metre. (iii) Pond maintenance, clear vegetation and maintain open water…..square metre. (iv) Remove all material that could impair operation…..number.
Measurement	54	The measurement of Maintain Affected Property to control the spread or increase of instances of Injurious Weeds and Invasive Plant Species, Maintain habitat integrity, including removal of scrub encroachment, Pond maintenance, clear vegetation and maintain open water shall be plan area to be maintained.
		The measurement of remove all material that could impair operation shall be the number of tunnels. For the purpose of measurement one number tunnel is the complete length of pipe.

Itemisation	55	Separate items shall be provided for control of weeds, plants, scrub, vegetation, material removal and maintenance of open water in accordance with Chapter II paragraphs 3 and 4 and the following:		
		Group	**Feature**	
		I	1	Sub-Asset Type.
		II	1	Item.

Series 3100: SOFT ESTATE LANDSCAPE		
	Insert new Series 3100 paragraphs 1 to 3	
	Control and Maintenance of Shrubs, Trees, Woodland, Grassland, Grass and Vegetation	
Units	1	The units of measurement shall be: (i) Hedgerow trimming……linear metre. (ii) Thin/ coppice, cut and remove arising, and maintain and preserve sight lines and stopping distance, including junctions, access points, curves, bends and central reserve, facilitate safe access to and use of footways, cycle tracks, bridleways, footpaths and paved pedestrian areas. ……square metre. (iii) Preserve CCTV camera operational visibility splays, maintain and preserve road users' visibility of road traffic signs and signals, ensure illumination / lumination from lighting is not obscured, removing obstructions that prevent safe access, inspection and maintenance of technology equipment…… number (iv) Undertake 2m wide amenity cut of amenity grass areas, including gates way features, village verges and special landscape features, grass cut from road edge to face of barrier on the central reserve Spray selective herbicide to control weeds and broad leaf species, spray grass growth retarder after first cut of season……square metre. (v) Undertake 2m wide amenity cut of all highway verges to ensure strip remains unobstructed by vegetation throughout the year (in addition to visibility splay maintenance)…..linear metre
Measurement	2	The measurement of hedgerow trimming and undertake 2m wide amenity cut of all highway verges to ensure strip remains unobstructed by vegetation throughout the year (in addition to

		visibility splay maintenance shall be the lengths as instructed by the *Service Manager*.
		The measurement of thin / coppice, cut and remove arising, and maintain and preserve sight lines and stopping distance, including junctions, access points, curves, bends and central reserve, facilitate safe access to and use of footways, cycle tracks, bridleways, footpaths and paved pedestrian areas and undertake 2m wide amenity cut of amenity grass areas, including gates way features, village verges and special landscape features, grass cut from road edge to face of barrier on the central reserve Spray selective herbicide to control weeds and broad leaf species, spray grass growth retarder after first cut of season shall be the plan area.
		The measurement of preserve CCTV camera operational visibility splays, maintain and preserve road users' visibility of road traffic signs and signals, ensure illumination / lumination from lighting is not obscured, removing obstructions that prevent safe access, inspection and maintenance of technology equipment shall be each CCTV mast, traffic sign or signal support, lighting support or other technology equipment support structure.
Itemisation	3	Separate items shall be provided for control and maintenance of shrubs, trees, woodland, grassland, grass and vegetation in accordance with Chapter II paragraphs 3 and 4 and the following:

Group	Feature	
I	1	Sub-Asset Type.
II	1	Item.

Series 4000: SWEEPING AND CLEANING

		Insert new Series 4000 paragraphs 1 to 3.
	Sweeping and Litter Picking of Paved, Non-Paved and Amenity Areas	
Units	1	The units of measurement shall be:
		(i) Full sweep, litter picking to maintain Grade……square metre.
Measurement	2	The measurement for full sweep and litter picking to maintain Grade shall be the plan area.

Itemisation	3	Separate items shall be provided for sweeping and litter picking of paved, non-paved and amenity areas in accordance with Chapter II paragraphs 3 and 4 and the following:		
		Group	**Feature**	
		I	1	Sub-Asset Type.
		II	1	Item.