

NEC4

Term Maintenance Contract

Somerset Method of Measurement

DN581359

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Contents

General Principles.....	7
Preamble to the Price List.....	9
Traffic Management: Diversion / Informatory Signage Not Included in The General Rates	17
Vegetation	18
Take Up or Down and Dispose or Set Aside for Re-Use Fencing, Gates, Safety Barriers, Pedestrian Guardrails, Structures, Kerbing, Paving, Traffic Signs and Ironwork	18
Fences And Gates	21
Temporary Safety Barrier.....	25
Permanent Safety Barrier.....	26
Transitions, Terminals and Connections.....	27
Retensioning	27
Ancillary Items in Connection with Permanent Safety Barrier	28
Parapets.....	29
Pedestrian Restraint	31
Excavation In Hard Material	32
Drainage And Service Ducts.....	33
Linear Drainage Channels.....	35
Chambers, Catchpits, Gullies and Soakaways	36
Small Headwalls.....	38
Grips And Ditches.....	39
Repairs, Maintenance and Alterations to Existing Drainage	40
Gully Cleansing	42

Drainage System Maintenance: Daywork Programmes.....	44
Excavation	47
Extra Over for Excavation in Hard Material	49
Disposal Of Material.....	49
Imported Fill.....	50
Geotextiles.....	52
Soft Spots.....	53
Topsoiling.....	54
Completion Of Formation and Sub-Formation	55
Ditches	56
Gabion Walling and Mattresses.....	57
Trial Pits.....	57
Sub-Base	60
Asphalt Concrete Materials	60
Bond Coat.....	63
Joints With Existing	63
Cold Planing.....	64
Surface Treatments.....	65
Surface Dressing (N/A).....	67
Carriageway Patching and Haunching.....	68
Adjusting The Level of Carriageway Ironwork	70
Excavation For Kerbs, Footways and Paved Areas	74
Kerbs, Channels and Edgings	74
Footways And Paved Areas	76



SOMERSET
County Council

Repairs To Existing Footway: Patching	81
Adjusting The Level of Footway Ironwork.....	83
Traffic Signs, Posts and Marker Posts	86
Finger Arm Sign Painting.....	88
Road Studs	90
Road Markings.....	90
In Situ Concrete	93
Precast Concrete Culvert Units	95
Surface Finish of Concrete – Formwork.....	97
Bar Reinforcement for Structures	100
Fabric Reinforcement for Structures	102
Haunching To Bridges.....	104
Concrete Repairs.....	105
Waterproofing.....	108
Removal Of Waterproofing	109
Brickwork, Blockwork and Stonework	112
Repointing Of Brickwork, Blockwork and Stonework	115
Road Edge Shoring.....	117
Landscape Maintenance.....	122
Drainage System Maintenance: Daywork Programmes.....	125
Sign Cleaning	129
General.....	130
Element A: Response Action	132
Permanent Repair: Carriageway Surface Safety Defect.....	132



SOMERSET
County Council

Permanent Repair: Footway or Cycleway Surface Safety Defect	133
Permanent Repair: Kerbing Safety Defect	134
Permanent Repair: Carriageway/Footway Ironwork Safety Defect	135
Permanent Repair: Non-Illuminated Traffic Sign Safety Defect	135
Permanent Repair: Road Marking Safety Defect	136
Permanent Repair: Gully Blockage	136
Carriageway Sweeping.....	137
Removal Of Litter from Verge and Central Reserve.....	138
Removal Of Objects and Debris	139
Siding	140
Clearing Of Existing Ditches.....	141
Cleaning And Clearing of Cattle Grids (To Include Disposal of Arisings to Contractors Tip Off Site): Daywork Programme.....	144
Winter Service.....	145
Emergency Service	147
General.....	150
Basic Facility	150
Operatives	150
Plant, Equipment and Vehicles	150
Management Of Resources.....	150
Professional Services.....	152
General.....	154
Labour.....	154
Plant	156



Percentage Addition on Invoice Costs.....	156
Time Charge Records	156
Restricted Working Hours Instructed by The Service Manager.....	159

General Principles

General

1. This Method of Measurement is for use in conjunction with the Price List. Its function is to provide a uniform method of measurement both at design stage and at re-measurement stage for the purpose of valuing the works executed.

Measurement

2. Works are measured using the item descriptions and units of measurement in the Price List.

Itemisation

3. Each item description in the Price List is drawn from the individual description associated with each operation code together with the preceding group heading and sub heading.

Provisional Sums

4. Where particular works cannot be pre-measured at design stage because their nature is uncertain or there are no suitable items in the Price List, a Provisional Sum is used. The amount of the Provisional Sum is a best estimate of the projected valuation.
5. After completion of the works for which a Provisional Sum has been allowed the works are valued at either measured prices contained in the Price List, Time Charge or at new prices to be agreed with the Service Manager. The choice of method is at the discretion of the Service Manager.

Prime Cost (PC) Sums

6. Prime Cost (PC) sums are prices included in the description of some items in the Price List for the supply and delivery of materials not fully described. The amount of the PC sum is the amount deemed to be used in the calculation of the rate. The difference between the amount paid for materials used and the PC sum is used for the adjustment of the rate.

Quantity bands

7. Some items in the Price List are described using quantity bands. Quantity bands relate to each separately identified Task Order. The quantity band applicable is determined by aggregating the number of units regardless of whether or not the works were carried out in discrete areas or at different times.
8. Where two quantity bands overlap and the quantity measured is applicable to both, the item with the lower rate applies.

Percentage Additions

9. Where more than one item valued on the basis of a percentage is applicable to a basic item, the percentage addition for each is applied singularly and not cumulatively to the basic item.

Preamble to the Price List

General Directions

1. The sub-headings, group headings and item descriptions identify the work covered by the respective items, read in conjunction with the matters listed against the relevant "Item coverage" headings in the Method of Measurement and these Preambles. The nature and extent of the work is to be ascertained by reference to the Service Information and Conditions of Contract. The rates are deemed to be the full inclusive value of the work covered by the several items including the following, unless expressly stated otherwise: -
 - a) Labour and all costs in connection therewith;
 - b) The supply of materials, goods, storage, and costs in connection therewith including delivery to site. Taking delivery of materials and goods supplied by others, unloading, storage and costs in connection therewith;
 - c) Plant and costs in connection therewith;
 - d) Fixing, erecting, and installing or placing of materials and goods in position; for the avoidance of doubt this includes all forms of multiple handling of materials. Unless directly instructed by the Client.
 - e) Temporary works;
 - f) The effect on the phasing of the works or any element of the works to the extent set forth or reasonably implied in the documents on which this tender is based;
 - g) General obligations, liabilities and risks involved in the execution of the works set forth or reasonably implied in the documents on which the tender is based;
 - h) Establishment charges, overheads, and profit;
 - i) Waste;
 - j) Testing carried out by the Contractor in accordance with the particular requirements of Appendix 1/5 including supplying results of tests, reports, and certificates;
 - k) Supply and delivery of samples to the Service Manager in accordance with the requirements of Appendix 1/6;

- l) Checking, inspecting, examining, measuring, and verifying goods, materials and workmanship including supplying results, reports, and certificates;
- m) Attendance and transport for sampling and testing carried out by the Service Manager;
- n) Complying with Quality Assurance requirements of this contract and providing certificates of conformity;
- o) Awaiting approvals and consents;
- p) Temporary accommodation, mess and storage facilities required to carry out the works;
- q) Completing the Service Manager's record sheets;
- r) Liaising with and keeping informed members of the public who may be affected by the phasing and execution of the works including arranging for the removal of parked vehicles and other obstructions that may be preventing the execution of the works;
- s) Traffic safety and management and traffic safety measures and control for the works (refer to paragraph 14);
- t) The supply, erection, maintenance, and removal of the Service Manager's Information Boards (Clause 110SR);
- u) The procurement of plant, equipment, materials, Subcontract (and any other) services necessary to carry out the works;
- v) The management and control of stores;
- w) Consultation and planning of works with design staff;
- x) Setting out of the works;
- y) Supervision and management of the works;
- z) Post measurement and valuation of the works and preparation of accounts and invoices;
- aa) Management of Client's assets (refer to the Statement on Assets);
- bb) Updating the Client's records which includes, but is not limited to, the Client's Highway Asset Management System (CHAMS);
- cc) Risk Assessments, Safety Inspections and Health and Safety management;

- dd) Construction (Design and Management) Regulations role – Principal Contractor duties;
- ee) Calculating, negotiating, and agreeing ‘star’ rates for items not included in the Price List.

Measurement

- 2. The measurement of work is computed net from the dimensions stated in this contract unless stated otherwise in the Method of Measurement.

Pricing of Items

- 3. Each individual item has a rate entered against it. All prices are expressed to two decimal places except for selected items relating to surface dressing (Series 700) which are expressed to four decimal places and Percentages which are expressed to one decimal place.

Roadworks Overall Requirements

- 4. Rates include 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 plant, and general requirements for sub- bases and road bases.

Privately and Publicly Owned Services

- 5. Rates include for locating and taking measures for the support and full protection of pipes, cables and other apparatus during the progress of the works.

Dealing with Water

- 6. Rates include for taking measures to deal with ground water and the flow of water (including sewage and sludges) in drain systems, trenches, other excavations, work areas and adjacent areas affecting the works. Where damming/diversion of an existing open watercourse is required and approved by the Service Manager this shall be measured separately as Daywork.

Site Limitations and Constraints

- 7. Rates include for complying with any limitations and constraints on the use of works sites.

Access to Works sites

- 8. Rates include for any measures required to gain access to works sites.

Working Above or Below Ground Level

9. Rates include for working above or below ground level. Scaffolding however, is measured separately (as Daywork).

Weigh Bridge Certificates

10. Rates include for the provision of Certified Weigh Bridge Certificates for bulk materials.

Excavation in Paved Areas

11. The definition of a paved area in the context of excavation in paved areas is any type of bituminous, concrete, pre-cast concrete or cut natural stone road pavement or footway construction.

Excavation in Rock

12. The definition of rock in the context of excavation in rock is hard naturally occurring material in individual masses exceeding 0.2 cubic metres that requires the use of percussion type breaking equipment to facilitate removal.

Excavation in Hard Material

13. The definition of hard material is paved areas and/or rock as defined above unless specifically defined otherwise.

Traffic Safety and Management

14. Rates include for traffic safety and management on all highways as follows: -
- a) complying with the recommendations contained in Chapter 8 of the "Traffic Signs Manual" published by The Stationery Office and any amendment thereto or where the circumstances of any particular case are not covered submitting proposals for dealing with such situations to the Service Manager for consent;
 - b) complying with the particular requirements of this contract including Clause 117 of the Works Specification;

- c) initiating or continuing consultation with statutory, police or other authorities concerned, proposing or developing and submitting to the Service Manager, proposals based on such consultation showing a scheme of traffic safety and management measures including details of safety zones, emergency routes and diversion routes and furnishing such details as necessitated by the works or as the Service Manager may require;
- d) modification and resubmission of proposals and designs;
- e) phasing the works in a manner acceptable to the Service Manager and the police for the continuing flow of traffic and minimisation of disruption;
- f) maintaining access to residential and business properties;
- g) all traffic safety and control personnel, including but not limited to, those engaged on manual stop and go, traffic speed control, staff for directing vehicles and pedestrians in and around each site including those sites subject to road closure;
- h) traffic signs, driver information signs, signage in accordance with the Somerset Council Permit Scheme as required under Part 3 of the Traffic Management Act 2004 and the Traffic Management Permit Scheme (England) Regulations 2007/3372 (as amended from time to time), traffic signs provided by the Service Manager, road markings, lamps, barriers, and traffic control signals including maintaining, cleaning, repositioning, covering, uncovering and removing;
- i) collecting and returning traffic signs provided by the Service Manager;
- j) surveillance and maintaining stocks;
- k) immediate reinstatement and replacement of defective or damaged items;
- l) maintenance of highways;
- m) establishment, maintenance and removal of traffic safety and management measures in connection with an official temporary traffic regulation order, including road closures and diversions;
- n) traffic safety and management measures and in particular diversionary signing on the Highway Network of neighbouring Local Authority roads necessitated by the works.

15. Traffic safety and management and in particular diversionary signing necessitated by the contract works to be carried out on trunk roads and the M5 motorway are arranged and paid for by the Contractor via the Highways England. Costs are not included in the contract rates and may be recovered on an invoice cost plus percentage addition basis (Series 8000).

- 16.** Traffic safety and management installed by the Contractor on the instructions of the Service Manager in connection with works or events that are the responsibility of others and not associated with the contract works are measured separately.

General Nature and Extent of the Works

- 17.** The general nature and extent of the works is ascertained by reference to the tender documents.

Circumstances in Which Works are Carried Out

- 18.** The rates in the Price List apply to all works as executed. No adjustment is made for works carried out to any particular timescale or priority specified by the Service Manager or for works that may be performed in disadvantageous circumstances, as these must be regarded as being offset by other works that may be performed in advantageous circumstances.

Contract Management

1. Units

The unit of measurement shall be:

- a) Mobilisation of the Contract as defined in the *Contractor's* Mobilisation Plan item
- b) basic facility for fixed contract overhead for provision of the Service month
- c) demobilisation of the Contract as defined in the Contractor's Demobilisation Plan item

Measurement

The measurement for mobilisation and demobilisation of the Contract shall only be measured once for the whole duration of the Contract including any authorised or extended periods.

The basic facility is exclusive of any sums provided under the basic facility provisions of series 7800 (Winter Maintenance) and 7900 (Emergency Response) but shall account for the remainder of contract management throughout the Contract.

- 2. The measurement of contract management shall be equal monthly sums for the duration of the Contract.

Mobilisation of the Contract

Item coverage;

- (a) providing all measures, equipment and resources required to mobilise the Contract ready to undertake services or works;
- (b) communication, information technology and management systems;
- (c) accommodation;
- (d) vehicle's and equipment;
- (e) infrastructure charges, property and alterations;

- (f) commissioning and training.

3. Basic Facility

- (a) providing all measures, equipment and resources required to manage the Contract for required services or works;
- (b) communication, information technology and management systems;
- (c) utilities, rent and rates, lease requirements and maintenance costs;
- (d) temporary and permanent accommodation;
- (e) vehicles and equipment and
- (f) operational waste transfer stations, Technical Competent Manager (TCM) with the Certificate Of Technical Competence (COTC) qualification coverage, as set out in the Environmental Permitting Regulations 2007, as stated in Scope S 700.

Demobilisation of the Contract

- (a) providing all measures, equipment and resources required to demobilise the Contract;
- (b) removal of communication and management systems;
- (c) removal of accommodation;
- (d) reinstatement of resources to a condition prior to the Contract;
- (e) handing over resources to another supplier;
- (f) decommissioning;
- (g) reinstatement of facilities to the standard required by the Contract.

Traffic Management: Diversion / Informatory Signage Not Included in The General Rates

Measurement

1. Traffic management for the contract works is included in the General Rates – refer to the Preamble to the Price List. Where the Service Manager requires signs not in accordance with the TSRGD to be used in order to provide supplementary information to the public, each supplementary sign shall be measured as an extra over to the General Rates.

Item Coverage

2. Traffic Management: Supplementary Sign not included in the General Rates
 - a) Supplying, erecting, maintaining, protecting, cleaning, covering, uncovering and removing;
 - b) immediate reinstatement and replacement of defective or damaged items.

Vegetation

Measurement

1. The clearance of areas of vegetation up to 1 metre in height is deemed to be included in the general rates.
2. Light vegetation and scrub is defined as growth between 1 and 2 metres in height comprising hedges, shrubs and trees not exceeding 500mm girth.
3. Dense vegetation and scrub is defined as growth exceeding 2 metres in height comprising hedges, shrubs and trees of any height not exceeding 500mm girth.
4. The removal of vegetation attached to structures is measured as the superficial area of each face treated.

Item Coverage

5. Vegetation: -
 - a) clearing all growth including roots;
 - b) uprooting of bushes, small trees and hedges;
 - c) disposal of material (as Series 600);
 - d) in the case of vegetation attached to structures, treatment of roots with herbicide.

Take Up or Down and Dispose or Set Aside for Re-Use Fencing, Gates, Safety Barriers, Pedestrian Guardrails, Structures, Kerbing, Paving, Traffic Signs and Ironwork

Measurement

6. The measurement of items to be set aside for re-use includes for items to be stored on site or transported to store off site for re-use on the same site or elsewhere.

Item Coverage

7. Take up or down and dispose or set aside for re-use: -
 - a) excavation (as Series 600);
 - b) excavation in Hard Material (as Series 600);

- c) breaking up foundations;
- d) de-tensioning, dismantling and extracting posts;
- e) cleaning, stacking, protecting, labelling;



- f) transport and handling;
- g) backfilling with Type 1 granular material and compaction;
- h) making good to severed ends of existing walls, hedges and fencing;
- i) disposal of material (as Series 600);
- j) reinstatement of post holes to match adjoining;
- k) storage facilities;
- l) replacing or making good items damaged during the foregoing operations;
- m) credit value of materials;
- n) multiple handling of materials.

Fences And Gates

Measurement

1. The measurement of fences is the developed line along the centre line after deductions for all gates and openings.
2. The basic item of measurement for timber post and rail fencing is the three or four rail version. Extra Over items are measured for barbed wire, pig mesh and sheep netting. The rates for these additional items are deemed to include any variation to the basic fence design required to accommodate them. Extra Over items are also measured for concreting-in posts where optional in the Works Specification.
3. The basic item of measurement for strained wire fencing is the two plain wire version. Extra Over items are measured for additional plain wire, barbed wire, pig mesh and sheep netting. The rates for these additional items is deemed to include any variation to the basic fence design required to accommodate them. Extra Over items are also measured for end and intermediate straining posts and concrete footings for intermediate posts where optional in the Works Specification.
4. The measurement of width of gates is the distance between the outer edges of the stiles.
5. The basic item of measurement for re-erecting existing fences and gates set aside for re-use includes for re-using posts. Where new posts are required Extra Over items are measurable. Extra Over items are also be measured for concrete footings to posts where optional in the Works Specification.
6. Items for repairs and maintenance to existing fencing and gates is measured where small quantities of fence and gate components are to be replaced rather than a complete installation.

Item Coverage

7. Fences: -
 - a) driving or excavation (as Series 600);
 - b) excavation in hard material (as Series 600);
 - c) trimming ground on the line of the fencing;
 - d) formwork and concrete in footings;
 - e) backfilling and compaction;
 - f) disposal of material (as Series 600);
 - g) preservation of timber;
 - h) fixing and fittings;

- i) fixing to structures;



- j) adjustment of fence to a flowing alignment including additional length posts;
- k) fabrication and preparation;
- l) tensioning;
- m) joining to existing fences, gates, hedges and walls;
- n) additional posts and rails over ditches;
- o) maintenance of access for owners, tenants and occupiers of adjoining land and patrolling gaps or openings;
- p) reinstatement of surfaces (as Series 500);
- q) additional posts at junctions and changes in direction or adjacent to gates, stiles and other obstacles;
- r) stock proofing as the work proceeds;
- s) for temporary fencing, adjusting fencing to suit the progress of the works;
- t) removal of temporary fencing upon completion of the works.

8. Gates: -

- a) driving or excavation (as Series 600);
- b) excavation in hard material (as Series 600);
- c) trimming ground on the line of the gate from closed to fully open;
- d) formwork and concrete in footings;
- e) backfilling and compaction;
- f) reinstatement of surfaces (as Series 500);
- g) disposal of material (as Series 600);
- h) fabrication and preparation;
- i) preservation of timber;
- j) fixing and fittings;
- k) joining to existing fences, hedges and walls.

9. Re-erect existing fences and gates set aside for re-use: -

- 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) fences (as this Series);
- e) gates (as this Series).

10. Repairs and maintenance to existing fences and gates: -

- a) de-tensioning, dismantling and extracting posts;
- b) cleaning, stacking, protecting and labelling;
- c) making good to severed ends;
- d) disposal of materials (as Series 600);
- e) replacing items damaged during the foregoing operations;
- f) fixing and fittings;
- g) fences (as this Series);

h) gates (as this Series).



Temporary Safety Barrier

Units	1	The unit of measurement shall be:	
	(i)	erect and remove temporary vehicle barrier	linear metre
	(ii)	maintain temporary vehicle barrier	linear metre per day
Measurement	2	The measurement of temporary safety barrier shall be the developed length along the centre line including over connections, transitions and terminals.	
Itemisation	3	Separate items shall be provided for temporary safety barrier in accordance with General Principles and the following:	
		Group	Feature
	1	1	Erect and remove temporary vehicle barrier
		2	Maintain temporary vehicle barrier
	2	1	Stated types
	3	1	Stated lengths
Temporary Safety Barrier	4	The items for temporary safety barrier shall in accordance with the Preambles to the Price List General Directions include for:	
Item coverage	(a)	earthworks, foundations and erection;	
	(b)	maintenance and inspections;	
	(c)	concrete, formwork and reinforcement;	
	(d)	posts, straining posts and struts;	
	(e)	fitting to shape and bends;	
	(f)	protective systems;	
	(g)	removal and reinstatement on completion.	

Permanent Safety Barrier

Units	5	The unit of measurement shall be:
	(i)	permanent safety barrier linear metre
	(ii)	driven, surface mounted, concreted or socketed posts number
	(iii)	extra over for continuous lengths linear metre

Measurement	6	The measurement of permanent safety barrier shall be the developed length along the centre line including over connections, transitions and terminals.
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Itemisation	7	Separate items shall be provided for permanent safety barrier in accordance with General Principles and the following:
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Group	Feature	
1	1	Permanent safety barrier
2	1	End performance
	2	Specified systems
3	1	Exceeding 50 metres radius
	2	Not exceeding 50 metres radius
4	1	Extra over beams for stated continuous lengths

Permanent Safety Barrier	8	The items for permanent safety barrier shall in accordance with the Preambles to the Price List General Directions include for:
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Item coverage	(a)	certificates and approvals;
	(b)	excavation and disposal, backfilling, compaction and trimming;
	(c)	protective systems;
	(d)	fixings and fittings;
	(e)	fabrication and installation;
	(f)	inspection and testing;
	(g)	concrete, formwork and sockets;
	(h)	complying with manufacturers recommendations and code of practices;
	(i)	site drilling, grouting, packing and reinstatement.

Transitions, Terminals and Connections

Units	9	The unit of measurement shall be:
	(i)	transition, terminal or connection number
Measurement	10	The measurement of a transition, terminal or connection shall be extra over to the measurement of a permanent safety barrier.
Itemisation	11	Separate items shall be provided for transition, terminal or connection in accordance with General Principles and the following:

Group	Feature
1	1 Transition, terminal or connection
2	1 Stated types or designs

Transitions, Terminals and Connections	12	The items for transitions, terminals or connections shall in accordance with the Preambles to the Price List General Directions include for:
Item coverage	(a)	design, certificates and approvals;
	(b)	excavation and disposal, backfilling, compaction and trimming;
	(c)	protective systems;
	(d)	fixings and fittings;
	(e)	fabrication and installation;
	(f)	inspection and testing.

Retensioning

Units	13	The unit of measurement shall be:
	(i)	retensioning linear metre

- (ii) extra over for stated post spacing linear metre
- Itemisation 14 Separate items shall be provided for retensioning in accordance with General Principles and the following:

Group	Feature
1	1 Retensioning
2	1 Stated types or designs
3	1 Stated lengths
4	1 Extra over for stated post spacing

- Retensioning** 15 The items for retensioning shall in accordance with the Preambles to the Price List General Directions include for:

- Item coverage (a) certificates and approvals;
- (b) tensioning to correct torque readings;
- (c) protective systems;
- (d) fixings and fittings;
- (e) maintaining records;
- (f) inspection and testing.

Ancillary Items in Connection with Permanent Safety Barrier

- Units 16 The unit of measurement shall be:
- (i) push over tests number
- (ii) additional concrete foundations cubic metre
- (iii) coring existing bituminous road surface number
- (iii) extra over for post extension unit number
- (iv) bike guard linear metre
- Itemisation 17 Separate items shall be provided for ancillary items in connection with permanent safety barrier in accordance with General Principles and the following:

Group	Feature	
1	1	Testing
	2	Additional concrete
	3	Coring existing bituminous road surface
	4	Extra over for post extension unit
	5	Bike guard
2	1	Stated types or designs

Ancillary Items in connection with Permanent Safety Barrier

Item coverage

- 18 The items for ancillary items in connection with permanent safety barrier shall in accordance with the Preambles to the Price List General Directions include for:
- (a) design, certificates and approvals;
 - (b) excavation and disposal, backfilling, compaction and trimming;
 - (c) protective systems;
 - (d) fixings and fittings;
 - (e) fabrication and installation;
 - (f) inspection and testing;
 - (g) concrete, formwork and sockets;
 - (h) complying with manufacturers recommendations and code of practices;
 - (i) site drilling, grouting, packing and reinstatement.

Parapets

Units

- 19 The unit of measurement shall be:
- (i) establishment and removal of equipment number
 - (ii) parapets linear metre
 - (iii) end or terminal number

Itemisation 20 Separate items shall be provided for parapets in accordance with General Principles and the following:

Group	Feature	
1	1	Establishment and removal of equipment
	2	Parapets
	3	End or terminal
2	1	Stated types or designs
3	1	Stated lengths

Group 3 Feature 1 shall only apply to Group 1 Feature 2.

Establishment and Removal of Equipment 21 The items for establishment and removal of equipment shall in accordance with the Preambles to the Price List General Directions include for:

- Item coverage
- (a) providing all measures, equipment and resources required to undertake the works;
 - (b) removal and reinstatement on completion;
 - (c) notices and communications.

Parapets 22 The items for parapets shall in accordance with the Preambles to the Price List General Directions include for:

- Item coverage
- (a) certificates and approvals;
 - (b) excavation and disposal, backfilling, compaction and trimming;
 - (c) protective systems;
 - (d) fixings, fittings and cages;
 - (e) fabrication, installation and templates;
 - (f) inspection and testing;
 - (g) concrete, formwork, reinstatement and finishing;
 - (h) trail erection at place of manufacture;
 - (i) packing and grouting.

End or Terminal	23	The items for end or terminal shall in accordance with the Preambles to the Price List General Directions include for:
Item coverage	(a)	certificates and approvals;
	(b)	excavation and disposal, backfilling, compaction and trimming;
	(c)	protective systems;
	(d)	fixings, fittings and cages;
	(e)	fabrication, installation and templates;
	(f)	inspection and testing;
	(g)	concrete, formwork, reinstatement and finishing;
	(h)	trail erection at place of manufacture;
	(i)	packing and grouting.

Pedestrian Restraint

Units	24	The unit of measurement shall be:
	(i)	pedestrian restraint linear metre
Itemisation	25	Separate items shall be provided for pedestrian restraint in accordance with General Principles and the following:

Group	Feature
1	1 Pedestrian restraint
2	1 Stated types or designs
3	1 Stated lengths

Pedestrian Restraint	26	The items for pedestrian restraint shall in accordance with the Preambles to the Price List General Directions include for:
Item coverage	(a)	certificates and approvals;
	(b)	excavation and disposal, backfilling, compaction and trimming;
	(c)	protective systems;

- (d) fixings and fittings;
- (e) fabrication and installation;
- (f) inspection and testing;
- (g) concrete, formwork, reinstatement and finishing;
- (h) packing and grouting.

Excavation In Hard Material

Units	27	The unit of measurement shall be:						
		(i) extra over for excavation in hard material in vehicle and pedestrian restraints cubic metre						
Itemisation	28	Separate items shall be provided for extra over for excavation in hard material in vehicle and pedestrian restraints in accordance with General Principles and the following:						
		<table><tr><th>Group</th><th>Feature</th></tr><tr><td>1</td><td>1</td></tr><tr><td></td><td>Extra over for excavation in hard material in vehicle and pedestrian restraints</td></tr></table>	Group	Feature	1	1		Extra over for excavation in hard material in vehicle and pedestrian restraints
Group	Feature							
1	1							
	Extra over for excavation in hard material in vehicle and pedestrian restraints							
Extra Over for Excavation in Hard Material in Vehicle and Pedestrian Restraints	29	The items for extra over for excavation in hard material in vehicle and pedestrian restraints shall in accordance with the Preambles to the Price List General Directions include for:						
Item coverage		(a) excavation in hard material;						
		(b) any additional disposal.						

Drainage And Service Ducts

Measurement

1. The measurement of drains and service ducts is the summation of their individual lengths measured along the centre lines of the pipes between any of the following: -
 - a) the external faces of chambers, catchpits, gullies or headwalls;
 - b) the intersections of the centre lines at pipe junctions;
 - c) the position of terminations.
2. The measurement of service ducts is for the complete construction irrespective of the number of ducts contained within any one trench;
3. The depth of drains and ducts is the vertical measurement between the invert and the finished ground or surface level regardless of the depth of the trench. The average depth to invert of a drain or duct run is the calculated arithmetic mean of the measurement of depth taken at each end of a run, i.e., at a chamber, catchpit, gully, headwall, junction or termination.
4. Where the finished ground or surface level between each end of the run does not follow a constant gradient, a sufficient number of additional depths are taken at intermediate points to establish an accurate average depth.
5. The formation level is defined as the underside of the sub-base layer except in verges where it is the underside of the topsoil.
6. Except for drains laid in an existing ditch where no depth differentiation applies, the Price List item to be used for measurement is that which contains the average depth band into which the average depth falls.
7. Backfilling to drains laid in existing ditches, and to drains to structures is measured separately by the volume placed.
8. Connections are only separately measured for connecting to existing drains, existing gullies, existing chambers or existing catchpits.
9. Additional Extra Over items are measured for the following: -
 - a) surface water drains and ducting not exceeding 4 metres in length between intersections or terminations;
 - b) excavation in paved areas;
 - c) excavation in rock;

- d) bedding, haunching, surrounding and backfilling using concrete or granular material where not included in the standard specification;
- e) concrete surround to ducts.

Item Coverage

10. Drains and service ducts: -

- a) excavation (as Series 600);
- b) cutting, laying, jointing and bedding;
- c) building in pipes to headwalls and outfall works;
- d) laying and compacting bedding, haunching and surround material;
- e) formwork (as Series 1700);
- f) backfilling and compaction to formation level;
- g) disposal of material (as Series 600);
- h) movement joints to concrete beds and surrounds and the like;
- i) checking and cleaning;
- j) recording, staking and labelling;
- k) in the case of ducts, fixing draw ropes, removable stoppers, marker blocks and posts;
- l) protective system;
- m) in the case of drains to structures, geotextile materials.

11. Connections to existing: -

- a) excavation (as Series 600);
- b) locating and making entry;
- c) backfilling and compaction to formation level;
- d) disposal of material (as Series 600);
- e) making entry into chambers, concrete benching and channels, and making good the benching channels and walls;
- f) locating severed ends of land and mole drains;
- g) connection to existing including all necessary adaptors, fittings, saddles and short lengths of pipe;
- h) making good pipework, benching, channels and walls;
- i) cutting, laying, jointing and bedding;
- j) laying and compacting bedding, haunching and surround material;
- k) formwork (as Series 1700);
- l) sealing off disused ends;
- m) re-laying existing pipes disturbed;
- n) checking and cleaning.

12. Reinstatement of surfaces: -

- a) grading, measuring, reclaiming, mixing, depositing, spreading and compacting materials, tack coats, forming and sealing joints, finishing, curing and protection;
- b) formwork and reinforcement;
- c) making good new work up to existing;

- d) paving flags and blocks (as Series 1700);
- e) relaying set aside topsoil;
- f) excavation of temporary material (as Series 600);
- g) disposal of temporary material (as Series 600).

13. Extra Over excavation in paved areas: -

- a) cutting guide lines at trench edges;
- b) excavation in hard material (as Series 600);
- c) overbreak and making good;
- d) setting aside precast concrete paving materials for reuse;
- e) cleaning, stacking, protecting and labelling;
- f) disposal of material (as Series 600).

14. Extra Over bedding, haunching, surrounding and backfilling using concrete or granular material where not included in the basic specification.

- a) placing and compaction;
- b) disposal of additional excavated material (as Series 600).

15. Extra Over excavation in rock: -

- a) use of special plant (e.g., rock breaker);
- b) disposal of material (as Series 600).

Linear Drainage Channels

Measurement

16. The measurement of linear drainage channels is the length along the centre line of the channel. No deduction is made for gaps of 1 linear metre or less.

17. Additional Extra Over items are measured for the following: -

- a) excavation in paved areas;
- b) reinstatement of existing paved areas;
- c) junction units, end caps and sump units.

Item Coverage

18. Linear drainage channels: -

- a) excavation (as Series 600);
- b) concrete and formwork (as Series 1700);
- c) gratings, frames, seating and bedding;
- d) tie bars;

- e) drainage layer;
- f) drainage holes or pipes through concrete;
- g) special units and fittings;
- h) connections to gullies, chambers and catchpits;
- i) cleaning;
- j) disposal of material (as Series 600).

19. Extra Over excavation in paved areas: -

- a) excavation in paved areas (as this Series).

20. Extra Over reinstatement of surfaces: -

- a) reinstatement of surfaces (as this Series).

Chambers, Catchpits, Gullies and Soakaways

Measurement

21. The measurement is the complete chamber, gully, catchpit or soakaway.

22. The depths of chamber is the distance between the top surface of the cover and the invert of the main channel. The depth of catchpits and gullies is the distance between the top surface of the cover or grating and the uppermost surface of the base slab.

23. Additional Extra Over items are measured for the following: -

- a) excavation through hard surfaces;
- b) excavation in rock;
- c) backfilling using a different material to that given in the basic specification;
- d) setting in verge with concrete apron;
- e) chambers, catchpits and gullies where the depth exceeds that given in the main header in the Price List for the particular group of items.

Item Coverage

24. Chambers, catchpits, gullies and soakaways: -

- a) excavation (as Series 600);
- b) construction of bases, walls, roof and cover slabs and shafts including in situ concrete surrounds and corbelling for cover;
- c) channels, fittings, benching, building in pipe connections including fitting, pipes and jointing to pipes;
- d) covers, frames, seating and bedding;

- e) lifting keys;
- f) concrete (as Series 1700);
- g) formwork and reinforcement (as Series 1700);
- h) checking and cleaning;
- i) backfilling with specified material from any source and compaction;
- j) disposal of material (as Series 600);
- k) filling;
- l) sealants;
- m) brickwork and blockwork (as Series 2400);
- n) re-laying existing pipes disturbed;
- o) pipework and fittings.

25. Reinstatement of surfaces: -

- a) grading, measuring, reclaiming, mixing, depositing, spreading and compacting materials, tack coats, forming and sealing joints, finishing, curing and protection;
- b) formwork and reinforcement;
- c) making good new work up to existing;
- d) relaying set aside topsoil;
- e) paving flags and blocks (as Series 1100);
- f) excavation of temporary material (as Series 600);
- g) disposal of temporary material (as Series 600).

26. Extra Over excavation in paved areas: -

- a) cutting guide lines;
- b) excavation in hard material (as Series 600);
- c) overbreak and making good;
- d) setting aside precast concrete and stone paving materials for reuse;
- e) cleaning, stacking, protecting and labelling;
- f) disposal of material (as Series 600).

27. Extra Over excavation in rock: -

- a) Use of special plant (e.g., rock breaker);
- b) disposal of material (as Series 600).

28. Extra Over for setting in verge with concrete apron: -

- a) excavation (as Series 600);
- b) kerbs (as Series 1100);
- c) formwork and reinforcement (as Series 1700);
- d) laying, setting, bedding, jointing, wedging, cutting and pointing;
- e) surface finishing, curing and protection;
- f) disposal of material (as Series 600).

29. Extra Over backfilling using a different material to that included in the basic specification: -

- a) placing and compaction;
- b) disposal of (additional excavated) material (as Series 600).

Small Headwalls

Measurement

30. A headwall is classified as a small headwall where the exposed face is 2 square metres or less or in the case of a bag constructed headwall 1 square metre or less.

Item Coverage

- 31.** Small headwalls: -
- a) excavation (as Series 600);
 - b) in situ concrete (as Series 1700);
 - c) formwork (as Series 1700);
 - d) blockwork, stonework, string courses, individual blocks, features or stones (as Series 2400);
 - e) building in pipes;
 - f) backfilling and compaction;
 - g) disposal of material (as Series 600);
 - h) brickwork, copings, string courses and the like (as Series 2400);
 - i) waterproofing (as Series 2000).

Grips And Ditches

Measurement

- 32.** The measurement of grips and ditches is the summation of their individual lengths measured along the centre lines except for concrete grip constructions which are measured individually.
- 33.** Forming grips and disposal of material: -
- a) excavation (as Series 600);
 - b) formation of splay;
 - c) trimming side slopes and bottom;
 - d) disposal of material (as Series 600).
- 34.** Forming grips and deposition of material on verge: -
- a) excavation (as Series 600);
 - b) formation of splay;
 - c) trimming side slopes and bottom;
 - d) deposition (as Series 600).
- 35.** Concrete lined grips: -
- a) Excavation (as Series 600);
 - b) formation of splay;
 - c) trimming side slopes and bottom;
 - d) concrete and formwork (as Series 1700);
 - e) kerbing;
 - f) disposal of material (as Series 600).

- 36.** Clearing existing ditches and grips and disposal of material: -
- a) excavation (as Series 600);
 - b) clearing and removing debris and weeds;
 - c) trimming side slopes and grading bottoms;
 - d) working in and dealing with the flow of water;
 - e) maintaining existing outfalls;
 - f) disposal of material (as Series 600).
- 37.** Clearing existing ditches and grips and deposition of material on verge: -
- a) excavation (as Series 600);
 - b) clearing and removing debris and weeds;
 - c) trimming side slopes and grading bottoms;
 - d) working in and dealing with the flow of water;
 - e) maintaining existing outfalls;
 - f) deposition (as Series 600).

Repairs, Maintenance and Alterations to Existing Drainage

Measurement

- 38.** The measurement of the replacement of existing drains is the length measured along the centre lines of the new pipes. Items for reinstatement of surfaces and Extra Over items for excavation in paved areas and backfilling with special material are measurable and the appropriate items relating to Surface Water Drains shall be used for measurement. Where the length of existing drain to be replaced exceeds 4 linear metres in length, items in the Price List for new drainage are applicable.
- 39.** For all items involving the replacement or adjustment of ironwork additional Extra Over items for rebuilding of raising courses are measurable.

Item Coverage

- 40.** Surface water drain – replace: -
- a) drains and service ducts (as this Series);
 - b) connections to existing (as this Series).
- 41.** Filter drains – replace existing filter material with new: -
- a) excavation (as Series 600);
 - b) disposal (as Series 600);
 - c) deposition and layering of new material;
 - d) trimming and shaping to levels and contours.

- 42.** Filter drains – top up existing filter material with new: -
- a) deposition and layering of new material;
 - b) trimming and shaping to levels and contours.
- 43.** Extend gully to create double gully: -
- a) connections to existing (as this Series);
 - b) chambers, catchpits, gullies and soakaways (as this Series);
 - c) reinstatement of surfaces (as this Series);
 - d) excavation in paved areas (as this Series);
 - e) rebuilding courses (as this Series).
- 44.** Move existing gully to verge, from concrete apron: -
- a) chambers, catchpits, gullies and soakaways (as this Series);
 - b) setting in verge with concrete apron (as this Series);
 - c) fill existing gully or chamber (as this Series).
- 45.** Clean gully top by hand: -
- a) removing all mud and vegetation from the cover or grating and in the vicinity of the cover or grating;
 - b) disposal of material (as Series 600).
- 46.** Clean gully by hand: -
- a) removing all mud and vegetation from the cover or grating and in the vicinity of the cover or grating;
 - b) lifting cover, removing all solid matter, reseating cover to accepted level;
 - c) disposal of material (as Series 600).
- 47.** Fill existing gully or chamber: -
- a) removal and disposal of ironwork;
 - b) cleaning out;
 - c) sealing inlet and outlet pipes;
 - d) depositing and compacting fill material;
 - e) curing and protection;
 - f) disposal of material (as Series 600).
- 48.** Take up existing ironwork in undisturbed surface, repair bedding, re-set, reinstate: -
- a) excavation (as Series 600);
 - b) excavation in paved areas (as this Series);
 - c) take up existing cover or grating including frame;

- d) demolition and preparation to receive new construction;
 - e) bedding;
 - f) re-setting cover and frame;
 - g) reinstatement of surfaces (as this Series);
 - h) disposal of material (as Series 600).
- 49.** Provide new cover and frame and bed onto existing chamber (where previously taken up): -
- a) demolition and preparation to receive new construction;
 - b) bedding.
- 50.** Take up ironwork in undisturbed surface, replace with new, reinstate: -
- a) as this Series - Take up existing ironwork in undisturbed surface, repair bedding, re-set, reinstate.
- 51.** Extra Over for rebuilding courses: -
- a) demolition and preparation to receive new construction;
 - b) construction of walls, roof and cover slabs and shafts surrounds and corbelling for cover and making good;
 - c) steps, safety chains, ladders, handholds and the like;
 - d) in situ concrete and formwork (as Series 1700);
 - e) reinforcement;
 - f) backfilling and compaction;
 - g) disposal of material (as Series 600).

Gully Cleansing

Measurement

- 52.** The measurement of gully cleansing undertaken by machine in cyclic programmes is the number of gullies emptied. For the avoidance of doubt, gullies not emptied for any reason (e.g., seized cover) are not measured.
- 53.** The measurement of gully cleansing by hand is the number of gullies emptied or tops cleaned.

Item Coverage

- 54.** Cleanse gully by machine: -
- a) removing all mud and vegetation from the cover or grating and in the vicinity of the cover or grating;

- b) lifting cover, removing all liquid and solid matter, reseating cover to accepted level;
- c) carrying out checks to ensure gully is fully operational after cleaning;
- d) contamination prevention measures;
- e) recording and reporting. Ensure mobile GPS software complies with the latest National Marine Electronics Association (NMEA) protocols.;
- f) marking with spray paint any gullies that were defective or not emptied for any reason;
- g) disposal of material (as Series 600);

- h) provision of water;
- i) all types of gully.

55. Cleanse gully by hand: -

- a) removing all mud and vegetation from the cover or grating and in the vicinity of the cover or grating;
- b) lifting cover, removing all solid matter from sump, inlet and outlet;
- c) reseating cover to accepted level;
- d) recording and reporting. Ensure mobile GPS software complies with the latest National Marine Electronics Association (NMEA) protocols.;
- e) disposal of material (as Series 600);
- f) all types of gully.

56. Cleanse gully top by hand: -

- a) removing all mud and vegetation from the cover or grating and in the vicinity of the cover or grating;
- b) all types of gully.

Drainage System Maintenance: Daywork Programmes

Measurement

- 57.** The hourly rate is applied in respect of the time spent on site undertaking the works. Where two or more sites are attended during the working day, travelling between sites is also measurable. For the avoidance of doubt, time spent travelling to and from the first and last site of the day, to and from tip and to and from water fills is not measurable. Neither is time spent tipping and water filling measurable.
- 58.** Time is charged in multiples of one quarter of an hour.
- 59.** For the avoidance of doubt, the requirements of Clause 15 in the Preamble does apply, and all traffic safety measures including any Stop and Go requirement is included in the hourly rates.

Item Coverage

60. Jetting unit (including 2 crew): -

- a) provision of water;
- b) disposal of material (as Series 600);
- c) as Series 9900, unless the specific provisions in this Series differ.

61. Gully emptying/jetting combination unit (including 2 crew): -

a) provision of water;

- b) disposal of material (as Series 600);
- c) as Series 9900, unless the specific provisions in this Series differ.

62. Gully emptying unit (including 2 crew): -

- a) provision of water;
- b) disposal of material (as Series 600);
- c) as Series 9900, unless the specific provisions in this Series differ.

63. CCTV survey unit (including 2 crew): -

- a) recording and coding;
- b) reports and plans. Ensure mobile GPS software complies with the latest National Marine Electronics Association (NMEA) protocols.;
- c) still photographs;
- d) video recordings;
- e) scheduling of work to avoid high flows and clearance of blockages;
- f) rodding camera;
- g) pan and tilt camera;
- h) as Series 9900, unless the specific provisions in this Series differ.

64. Extra Over CCTV unit for towed jetting unit: -

- a) provision of water;
- b) disposal of material (as Series 600);
- c) as Series 9900, unless the specific provisions in this Series differ.

- | | | |
|------------------------|---|---|
| Definitions | 1 | The Earthworks Outline, unless expressly stated otherwise, is defined as the finished earthworks levels and dimensions (prior to topsoiling) required by the Contract for the construction, where specified, of: <ul style="list-style-type: none"> (a) carriageway, hard shoulder, hard strip, footway, paved area, central reserve, verge, side slope; (b) sub-base; (c) landscape areas, environmental bunds. |
| | 2 | Sub-soil Level is defined as the level of the ground after the removal of topsoil. |
| Measurement
General | 3 | For the purposes of this Series, it shall be assumed that one cubic metre of material excavated forms one cubic metre of compacted fill. No allowance shall be made in the measurement for bulking and shrinkage of any material. |

Excavation

- | | | |
|-------------|---|---|
| Units | 4 | The unit of measurement shall be: <ul style="list-style-type: none"> (i) excavation cubic metre |
| Itemisation | 5 | Separate items shall be provided for excavation in accordance with General Principles and the following: |

Group	Feature	
1	1	Excavation
2	1	Topsoil (Acceptable material Class 5A)
	2	Acceptable or unacceptable material other than Class 5A
3	1	In general excavation
	2	In structural foundations
	3	In watercourses
4	1	Stated aggregated volumes

Excavation

6 The items for excavation shall in accordance with the Preambles to the Price List General Directions include for:

Item coverage

- (a) selection and separation of materials;
- (b) loading into transport;
- (c) multiple handling of material;
- (d) keeping earthworks free of water;
- (e) haulage and deposition in temporary stockpiles including the provision of sites for stockpiles;
- (f) taking precautions to avoid damage to property, structures, drains, sewers, services, instrumentation and the like;
- (g) grading beds and trimming side slopes of watercourses and the like;
- (h) replacing acceptable material rendered unacceptable;
- (i) loosening or breaking up material before or in the process of excavation;
- (j) upholding the sides;
- (k) overbreak and making good;
- (l) trimming the bottom and sides of foundations;
- (m) protection of subgrade;
- (n) additional excavation the *Contractor* may require for working space, timbering, formwork or other temporary works and its subsequent backfilling with approved materials and compaction;
- (o) taking precautions to avoid damage to property, structures, drains, sewers, services, instrumentation and the like;
- (p) disposal of surcharge material.

Extra Over for Excavation in Hard Material

Units	7	The unit of measurement shall be:								
		(i) extra over for excavation in hard material cubic metre								
Itemisation	8	Separate items shall be provided for extra over for excavation in hard material in accordance with General Principles and the following:								
		<table><tr><th>Group</th><th>Feature</th></tr><tr><td>1</td><td>1 Extra over for excavation in hard material</td></tr><tr><td>2</td><td>1 Stated materials</td></tr><tr><td>3</td><td>1 Stated aggregated volumes</td></tr></table>	Group	Feature	1	1 Extra over for excavation in hard material	2	1 Stated materials	3	1 Stated aggregated volumes
Group	Feature									
1	1 Extra over for excavation in hard material									
2	1 Stated materials									
3	1 Stated aggregated volumes									
Extra Over for Excavation in Hard Material	9	The items for extra over for excavation in hard material in accordance with the Preambles to the Price List General Directions include for:								
Item coverage		(a) site trials for removal;								
		(b) splitting, breaking and the like;								
		(c) cutting through reinforcement;								
		(d) saw cutting and trimming;								
		(e) removal of existing paved areas by course or layer, cleaning surfaces, planing, stepping out and treatment to bottoms of foundations.								

Disposal Of Material

Units	10	The unit of measurement shall be:
		(i) disposal of materialcubic metre
Measurement	11	The measurement of disposal of acceptable material shall be the net volume of excavated material.
Itemisation	12	Separate items shall be provided for disposal of material in accordance with the General Principles and the following:

Group	Feature
1	1 Disposal
2	1 Topsoil (Class 5A)
	2 Unacceptable non-hazardous uncontaminated material - clean
	3 Unacceptable non-hazardous uncontaminated material - rough
	4 Unacceptable contaminated non-hazardous material Class U1B
3	1 Stated aggregated volumes

Note: Clean – soil, granular or clay based.

Rough – soil mixed with vegetation, concrete, brick or clayware

Disposal of Material

Item coverage

- 13 The items for disposal of material shall in accordance with the Preambles to Price List General Directions include for:
- (a) haulage and deposition in tips off Site provided by the *Contractor*;
 - (b) special measures for dealing with Classes U1B material;
 - (c) multiple handling of material;
 - (d) additional processing on or off site;
 - (e) landfill tax.

Imported Fill

Units

- 14 The unit of measurement shall be:

- (i) imported fillcubic metre

Measurement

- 15 The measurement of imported acceptable fill shall be the net volume of compacted fill;

- (a) acceptable material, excluding topsoil Class 5A and acceptable material of a particular Class being both surplus to the requirements of the Contract for that class of material and which does not meet the requirements for acceptability for use elsewhere within

the measured volume of compacted fill, excavated from within the Site and measured in this Series;

- (b) other stated classes of imported acceptable fill excluding topsoil Class 5B.

Itemisation 16 Separate items shall be provided for imported acceptable fill in accordance with the General Principles and the following:

Group	Feature
1	1 Imported fill
2	1 Stated classes or types
	2 Extra over imported material for filling in structures

Imported Fill 17 The items for imported fill shall in accordance with the Preambles to Price List General Directions include for:

- Item coverage
- (a) protection of subgrade;
 - (b) multiple handling of material;
 - (c) keeping earthworks free of water;
 - (d) complying with requirements and constraints on the sequence, timing and rate of deposition and filling, and equalisation of earth pressures;
 - (e) complying with the special requirements for Class 3 material and other materials requiring special treatments;
 - (f) complying with the particular requirements and constraints with regard to soil stabilisation, reinforced earth structures, strengthened embankments, anchored earth structures, corrugated steel buried structures and the like;
 - (g) taking precautions to avoid damage to property, structures, sewers, drains, services, instrumentation and the like;
 - (h) fill provided by the *Contractor* from sources outside the Site;
 - (i) replacing acceptable material rendered unacceptable;

- (j) selection of material of stated Classes and layering or depositing in locations stated in the Contract;
- (k) depositing fill to slope away from vertical drainage layers and measures to prevent surface water entering such layers;
- (l) trimming and shaping to levels and contours;
- (m) compaction of fill and settlement from compaction of fill;
- (n) special measures for dealing with processed material.

Geotextiles

Units	18	The unit of measurement shall be:	
	(i)	geotextile square metre	
Measurement	19	The measurement of geotextile shall be the developed area of the geotextile ordered by the <i>Service Manager</i> .	
Itemisation	20	Separate items shall be provided for geotextile in accordance with the General Principles and the following:	
		Group	Feature
		1	1 Geotextile
		2	1 Stated types
Geotextile	21	The items for geotextile shall in accordance with the Preambles to Price List General Directions include for:	
Item coverage	(a)	cleaning, trimming, regulating and preparing surfaces;	
	(b)	laps;	
	(c)	measures to protect material;	
	(d)	cutting, jointing, sealing and fixing;	
	(e)	securing material in place;	
	(f)	complying with the requirements of strengthened earthworks.	

Soft Spots

- Units 22 The unit of measurement shall be:
- (i) soft spots cubic metre
- Measurement 23 The measurement of soft spots shall be the volume of the voids ordered by the *Service Manager*.
- Itemisation 24 Separate items shall be provided for soft spots in accordance with the General Principles and the following:

Group	Feature
1	1 Excavation of soft spots
	2 Filling of soft spots
2	1 Stated types of fill

- Excavation of Soft Spots** 25 The items for excavation of soft spots shall in accordance with the Preambles to Price List General Directions include for:

- Item coverage (a) excavation of acceptable material;
- (b) excavation of unacceptable material;
- (c) disposal of material;
- (d) trimming back cutting faces.

- Filling of Soft Spots** 26 The items for filling of soft spots shall in accordance with the Preambles to Price List General Directions include for:

- Item coverage (a) deposition of fill;
- (b) compaction of fill;
- (c) formwork;
- (d) treatment of cutting faces;
- (e) in situ concrete.

Topsoiling

- Units
- 27 The unit of measurement shall be:
- (i) supply only topsoil cubic metre
 - (ii) topsoiling to a specified thickness square metre
 - (iii) topsoiling in excess of 150mm thick cubic metre

- Measurement
- 28 The measurement of topsoiling shall be the area of the surface to be topsoiled or volumes ordered by the *Service Manager*.

- Itemisation
- 29 Separate items shall be provided for topsoiling in accordance with the General Principles and the following:

Group	Feature
1	1 Supply only topsoil
	2 Topsoiling of stated thicknesses
	3 Topsoiling in excess of 150mm.
2	1 Stated aggregated areas

- Supply only Topsoil**
- 30 The items for supply only topsoil shall in accordance with the Preambles to Price List General Directions include for:

- Item coverage
- (a) the removal of debris;
 - (b) imported topsoil.

- Topsoiling**
- 31 The items for topsoiling shall in accordance with the Preambles to Price List General Directions include for:

- Item coverage
- (a) excavation from stockpile;
 - (b) loading into transport;
 - (c) haulage, deposition, spreading, levelling and compaction;
 - (d) trimming and shaping to levels and contours;
 - (e) harrowing;
 - (f) herbicide treatment;

- (g) supply of topsoil.

Completion Of Formation and Sub-Formation

Units	32	The unit of measurement shall be: (i) completion of formation, sub-formation.....square metre								
Measurement	33	The measurement of completion of formation and sub-formation shall be the areas ordered by the <i>Service Manager</i> .								
Itemisation	34	Separate items shall be provided for completion of formation and sub-formation in accordance with the General Principles and the following: <table><tr><th>Group</th><th>Feature</th></tr><tr><td>1</td><td>1 Completion of sub-formation</td></tr><tr><td></td><td>2 Completion of formation</td></tr><tr><td>2</td><td>1 Stated aggregated areas</td></tr></table>	Group	Feature	1	1 Completion of sub-formation		2 Completion of formation	2	1 Stated aggregated areas
Group	Feature									
1	1 Completion of sub-formation									
	2 Completion of formation									
2	1 Stated aggregated areas									
Completion of Formation and Sub-formation	35	The items for completion of formation and sub-formation shall in accordance with the Preambles to Price List General Directions include for:								
Item coverage		(a) removal of protective layer, mud and slurry; (b) compaction; (c) cleaning, trimming, regulating, making good and rolling; (d) cement bound materials; (e) excavation, processing, compaction of naturally occurring hard material; (f) measures to protect formation and sub-formation against deterioration or degradation.								

Ditches

- Units 36 The unit of measurement shall be:
- (i) ditches.....square metre
- Measurement 37 Measurement of ditches shall be the permanently exposed face area of the work ordered by the *Service Manager*.
- Itemisation 38 Separate items shall be provided for ditches in accordance with the General Principles and the following:

Group	Feature
1	1 Ditches
2	1 Lining any watercourses
3	1 Stated thicknesses
4	1 To invert
	2 To side slopes

- Ditches** 39 The items for ditches shall in accordance with the Preambles to Price List General Directions include for:
- Item coverage (a) preparation, bedding and compaction;
- (b) laying, setting, bedding, jointing, wedging, cutting and pointing;
- (c) building in pipes;
- (d) concrete;
- (e) formwork;
- (f) reinforcement;
- (g) bags, filling, staking and securing;
- (h) laying to levels and falls;
- (i) bedding, jointing and pointing.

Gabion Walling and Mattresses

Units	40	The unit of measurement shall be: (i) gabion walling and mattressesnumber												
Measurement	41	The measurement of gabion walling, and mattresses shall be the number of cages ordered by the <i>Service Manager</i> .												
Itemisation	42	Separate items shall be provided for gabion walling and mattresses in accordance with the General Principles and the following:												
<table> <tr> <th>Group</th><th colspan="2">Feature</th></tr> <tr> <td>1</td><td>1</td><td>Gabion walling</td></tr> <tr> <td>2</td><td>1</td><td>Stated mesh size and filling materials</td></tr> <tr> <td>3</td><td>1</td><td>Stated cage sizes</td></tr> </table>			Group	Feature		1	1	Gabion walling	2	1	Stated mesh size and filling materials	3	1	Stated cage sizes
Group	Feature													
1	1	Gabion walling												
2	1	Stated mesh size and filling materials												
3	1	Stated cage sizes												
Gabion Walling	43	The items for gabion walling shall in accordance with the Preambles to Price List General Directions include for:												
Item coverage	(a)	assembling, tying, fixing, staking and tensioning;												
	(b)	fill, compaction and finishes;												
	(c)	mesh including cutting and folding to form special units and shapes;												
	(d)	bracing and wiring lids.												

Trial Pits

Units	44	The unit of measurement shall be: (i) trial pits cubic metre
Measurement	45	The measurement of trial pits shall be the volumes ordered by the <i>Service Manager</i> .
	46	The measurement of reinstatement of paved areas shall be measured separately.

Itemisation

- 47 Separate items shall be provided for trial pits in accordance with the General Principles and the following:

Group	Feature
1	1 Trial pits.
2	1 In verge
	2 In footway
	3 In carriageway
3	1 Not exceeding 1.00m deep
	2 Exceeding 1.00m deep

Trial Pits

- 48 The items for trial pits shall in accordance with the Preambles to Price List General Directions include for:

Item coverage

- (a) excavation of acceptable material;
- (b) excavation of unacceptable material;
- (c) excavation in hard material;
- (d) locating, working around and supporting pipes, cables, services, apparatus and the like;
- (e) attendance on the *Service Manager* and others for inspection and investigation purposes;
- (f) disposal of material;
- (g) backfilling and compaction;
- (h) reinstatement of non-paved surfaces only.

Breaking Up and Perforation of Redundant Pavements

Units

- 49 The unit of measurement shall be:

- (i) breaking up of redundant pavements, perforation of redundant pavementssquare metre

Itemisation

- 50 Separate items shall be provided for breaking up and perforation of redundant pavements in accordance with the General Principles and the following:

Group	Feature	
1	1	Breaking up and perforation of redundant pavements
2	1	Flexible paved area
3	1	Not exceeding 100mm deep
	2	Exceeding 100mm but not exceeding 200mm deep

Breaking Up and Perforation of Redundant Pavements

Item coverage

- 51 The items for breaking up and perforation of redundant pavements shall in accordance with the Preambles to Price List General Directions include for:
- (a) excavation in hard material;
 - (b) taking precautions to avoid damage to property, structures, drains, sewers, services, instrumentation and the like;
 - (c) perforations.

Sub-Base

Measurement

1. The conversion factor for the purpose of measurement is 2.15 tonnes per cubic metre.

Item Coverage

2. Sub-base: -
 - a) trial areas and trials;
 - b) making good after sampling and testing;
 - c) protection of material in transit and while awaiting deposition;
 - d) grading, measuring, mixing and depositing materials;
 - e) spreading and compaction;
 - f) cleaning, preparing and working on or up to existing surfaces and features;
 - g) curing and protection;
 - h) edge support;
 - i) maintenance of surface;
 - j) taking measures to protect the sub-base and subgrade from deterioration due to the ingress of water and the use of constructional plant;
 - k) taking measures to improve the sub-base to protect the sub-base and subgrade from damage due to the Contractor's method of construction and choice of constructional plant;
 - l) shaping to cambers, falls and crowns;
 - m) provision of soundness test certificate.

Asphalt Concrete Materials

Measurement

3. The various rates include for existing and new carriageways.
4. Asphalt concrete materials are classified according to the layer of construction and type of material.
5. Machine-lay schemes and hand-lay schemes are measured separately. Asphalt concrete materials laid by hand in conjunction with machine laid materials in areas where for any reason the machine cannot get access are deemed to be included in the rates for machine laid materials.

6. The tonnage of asphalt concrete materials to be measured is that quantity necessarily incorporated into the construction in accordance with the design criteria.
7. The measurement of coated chippings excludes any un-chipped channels.
8. Where the total combined tonnage of all asphalt concrete materials in a machine-lay scheme does not exceed 500 tonnes an Extra Over item is measured for the total tonnage of laid material in accordance with the quantity bands in the Price List.
9. An Extra Over item is measured for the total combined tonnage of all asphalt concrete material laid in a hand-lay scheme in accordance with the quantity bands in the Price List.
10. Extra Over items are measured for binder grades different to those quoted in the material item descriptions, indicator mesh and asphalt reinforcement.

Item Coverage

11. Asphalt concrete materials: -
 - a) trial areas and trials;
 - b) making good after sampling and testing;
 - c) protection of material in transit and while awaiting deposition;
 - d) designing and verifying mixes;
 - e) removing all loose material and clearance of standing water;
 - f) grading, measuring, reclaiming, mixing and depositing materials;
 - g) air entrainment;
 - h) spreading and compaction;
 - i) cutting back, saw cutting, cleaning, preparing and working on or up to existing surfaces and features;
 - j) edge support;
 - k) chippings;
 - l) surface texturing;
 - m) formwork (as Series 1700);
 - n) forming or sawing grooves, cleaning, grit blasting, priming, caulking, temporary and permanent sealing of joints;
 - o) shaping to cambers, falls and crowns;
 - p) forming sockets, recesses, openings and bays;
 - q) curing and protection;
 - r) protection and masking and unmasking of kerbs, drainage channels, chamber covers, gully gratings, expansion joints and the like;
 - s) maintenance of surface including making and removing temporary joints and ramps to existing carriageway at the beginning and end of each working shift;
 - t) removing ramps in planed areas;
 - u) sealing temporary joints;

- v) taking measures to protect and maintain the pavement from deterioration by the use of constructional plant and the ingress of water and other materials;

- w) measures required for aftercare and opening the road to traffic;
- x) admixtures and additives;
- y) saw cutting and sealing;
- z) weighbridge tickets and copies.

Bond Coat

Measurement

- 12.** Bond coat is measured as the nett surface area to be treated.

Item Coverage

- 13.** Bond coat: -
- a) trial areas and trials;
 - b) make good after sampling and testing;
 - c) grading, measuring, mixing and depositing materials;
 - d) making joints;
 - e) removing all loose material and clearance of standing water;
 - f) protection and masking and unmasking of kerbs, drainage channels, chamber covers, gully gratings, expansion joints, road studs, road markings and the like;
 - g) cutting back, preparing and working on or up to adjacent faces, surfaces and features;
 - h) admixtures and additives.

Joints With Existing

Measurement

- 14.** Let-in joints are measured as the area cut back into the existing surface. Feathered joints are the area of feathering with fine material. Material used in surfacing over joints is added to the general surfacing quantities.
- 15.** No distinction is made between different depths of joint.

Item Coverage

- 16.** Joints with existing: -
- a) cutting and sawing guidelines;
 - b) excavation in hard material (as Series 600);
 - c) overbreak and making good;

- d) disposal of material (as Series 600).

Cold Planing

Measurement

17. Cold planing is measured as the nett surface area to be treated. No deductions are made for openings of 1 square metre or less.
18. The depth measurable is the average total depth required to be removed irrespective of the number of passes made by the planer.
19. Quantity bands are determined by the total surface area of planing for the complete scheme, regardless of any separate average depth requirements for different parts of the scheme.
20. Haulage and disposal of planings is the volume calculated from the surface area of planing and the average thickness specified.
21. Haulage of planings to the Service Manager's store is classified according to the distance between the mid-point of the scheme and the store. The distance measured is the shortest suitable one-way route.

Item Coverage

22. Cold planing: -
 - a) shaping to cambers, falls and crowns;
 - b) reshaping and rolling;
 - c) multiple handling of material;
 - d) loading into transport;
 - e) disposal of material (as Series 600);
 - f) working around drainage channels, chamber covers, gully gratings, expansion joints and the like;
 - g) ramps;
 - h) removing road studs not required for re-use;
 - i) surface preparation and cleaning;
 - j) cutting out and removal of material by other means;
 - k) water supply and damping down;
 - l) electronic detection sweep, referencing and reports.
23. Haulage and disposal of planings: -
 - a) haulage and deposition in accordance with the Service Manager's instructions (where to be taken to the Service Manager's store);
 - b) haulage, deposition and disposal (as Earthworks Series) – where to be disposed of by the Contractor.

Surface Treatments

Measurement

- 24.** Surface treatments include for high friction surfacing and slurry sealing but

exclude surface dressing which is measured under its own heading;

- 25.** Surface Treatments are measured as the nett surface area to be treated and classified in accordance with the quantity bands shown in the Price List.
- 26.** Extra over items are measurable for non-natural colours for high friction surfaces.
- 27.** Quantity bands for high friction surfacing are determined by the total surface area for the complete scheme, regardless of any separate colour requirements within that scheme.
- 28.** Quantity bands for slurry surfacing are determined by the total surface area for the complete scheme, regardless of any separate thickness requirements within that scheme.

Item Coverage

- 29.** Surface treatments: -
 - a) trial areas and trials;
 - b) removing all loose material from existing surfaces;
 - c) protection and masking of ironwork and street furniture and subsequent removal of masking material;
 - d) mixing, spreading and rolling deposited materials;
 - e) bond coat (as this Series);
 - f) in the case of resin based surface treatment, certification of spraying equipment and supplying copy of certificate at monthly intervals to the Service Manager;
 - g) measures required for aftercare and opening road to traffic;
 - h) disposal of material (as Series 600).

Surface Dressing (N/A)

Measurement

- 30.** Surface dressing is measured as the nett surface area to be treated.
- 31.** Where a different rate of spread of binder is specified to that stated in the standard operation descriptions for surface dressing an Extra Over/Under item is measured for the nett surface area treated at the varied rate of spread.
- 32.** The standard operation descriptions for surface dressing include for all rural roads. An Extra Over item is measured for the nett area of surface dressing undertaken on urban roads. An urban road is defined as a road where the speed limit is 30 mph or less. Urban roads are classified in accordance with the Class of road as defined in the Somerset County Council highway register.

- 33.** Where a temporary 20 mph speed restriction is required it is measured once for each restriction regardless of length or duration.

Item Coverage

- 34.** Surface Dressing: -
- a) on-site information for the public;
 - b) sweeping the carriageway surface free of all loose material;
 - c) protection and masking of ironwork and street furniture and subsequent removal of masking material;
 - d) spreading and rolling deposited materials;
 - e) measures required for aftercare (Clause 919SR);
 - f) disposal of material (as Series 600);
 - g) supplying the Service Manager with work records;
 - h) recording details of existing road markings to facilitate subsequent reinstatement.
- 35.** Additional aftercare measures – 20 mph temporary speed restriction: -
- a) complying with the recommendations contained in Chapter 8 of the “Traffic Signs Manual” published by The Stationery Office and any amendment thereto or where the circumstances of any particular case are not covered submitting proposals for dealing with such situations to the Service Manager for consent;
 - b) initiating or continuing consultation with statutory, police or other authorities concerned;
 - c) traffic signs and lamps, including maintaining, cleaning, repositioning, covering, uncovering and removing;
 - d) immediate reinstatement and replacement of defective or damaged items.
 - a) applying for the speed restriction order and erecting and taking down all notices.

Carriageway Patching and Haunching

Measurement

- 36.** Carriageway patching and haunching is measured as the nett surface area to be treated. No deductions are made for ironwork of less than 0.5 sq. m in area.
- 37.** For measurement purposes, each separate repair is considered separately. The measurement of thickness is the average depth of material laid over the whole area of the repair.
- 38.** The various items in the Price List include for all types of asphalt concrete material except pre-coated chippings which are measured Extra Over.

39. Areas of patching and haunching exceeding the maximum areas covered in

the various items in the Price List for patching and haunching are measured using appropriate items in Price List for mechanised operations.

Item Coverage

40. Carriageway Patching and Haunching: -

- a) sawing guidelines;
- b) excavation (as Series 600);
- c) excavation in hard material (as Series 600);
- d) loading into transport;
- e) multiple handling of material;
- f) disposal of material (as Series 600);
- g) removing all loose material, detritus and clearance of standing water;
- h) grading, measuring, mixing, depositing, spreading and compacting materials, tack coats, forming and sealing joints, finishing, curing and protection;
- i) tack coat (as this Series).

Adjusting The Level of Carriageway Ironwork

Measurement

41. No distinction is made between raising or lowering or different depths of adjustment.

Item Coverage

42. Adjusting the level of carriageway ironwork prior to patching or resurfacing: -

- a) cutting and sawing guide lines;
- b) excavation (as Series 600);
- c) excavation in hard material (as Series 600);
- d) overbreak and making good;
- e) take up existing cover or grating including frame;
- f) demolition and preparation to receive new construction;
- g) bedding;
- h) re-setting cover and frame;
- i) temporary ramps;
- j) disposal of material (as Series 600).

43. Adjusting the level of carriageway ironwork after surfacing or patching and reinstate: -

- a) as this Series – Adjusting the level of carriageway ironwork prior to patching or resurfacing;

- b) grading, measuring, mixing, depositing, spreading and compacting materials, tack coats, forming and sealing joints, finishing, curing and

protection.

Series 1000 ROAD PAVEMENTS – CONCRETE MATERIALS

Refer to Series 1000 MCDHW Specification

Excavation For Kerbs, Footways and Paved Areas

Measurement

1. Excavation for kerbs, footways and paved areas is only measured where it is necessarily executed as a separate operation. It is not measured where any earthworks (Series 600) include for the excavation for the kerbs, footways and paved areas. Where excavation is by cold planning, separate items are measurable in this Series.
2. An Extra Over item is measurable for excavation in hard material.
3. The measurement of excavation for kerbing, channelling and edging is the length of construction.

Item Coverage

4. Excavation for kerbs, footways and paved areas: -
 - a) excavation (as Series 600);
 - b) disposal of material (as Series 600)
- 4a Excavation for kerbs, footways and paved areas in tar-bound material:-
 - a) excavation (as Series 600);
 - b) loading into transport.
5. Extra over excavation in hard material: -
 - a) excavation in hard material (as Series 600).

Kerbs, Channels and Edgings

Measurement

6. The measurement of kerbing, channelling and edging is the length of construction excluding quadrants which are measured individually. No deduction is made for gaps of 1 linear metre or less.
7. An Extra Over item is measurable for kerbing, channelling, kerbing and channelling and edging of any type in discrete lengths of less than 10 metres.

8. Where the reinstatement of existing surfaces is required on both sides of a new kerb then each side is measured separately. Reinstatement of existing surfaces is not measured where kerbs are laid flush to an existing

undisturbed surface and making good is unnecessary.

9. An Extra Over item is measured where additional concrete to that in the standard specification is necessarily included in the construction.

Item Coverage

10. Construction of kerbing, channelling and edging: -
- a) trial mixes;
 - b) make good after sampling and testing;
 - c) Concrete (as in situ concrete, Series 1700);
 - d) Formwork (as Surface Finish – Formed, Series 1700);
 - e) mixing materials;
 - f) bedding, jointing, filling and sealing of joints;
 - g) reinforcement;
 - h) drainage holes or pipes through concrete;
 - i) edge support;
 - j) cutting, including working around gully gratings and frames;
 - k) backfilling and compaction;
 - l) cleaning old kerbs when re-using existing.
11. Reinstatement of existing surfaces: -
- a) grading, measuring, mixing and depositing materials;
 - b) spreading and compaction;
 - c) freeing surfaces of areas to be grass seeded from stones and other debris and reducing the soil to a fine tilth immediately prior to seeding.
12. Additional concrete: -
- a) Additional excavation (as this Series - Excavation for kerbs, footways and paved areas);
 - b) in situ concrete (as Series 1700);
 - c) formwork (as Series 1700);
 - d) forming, filling and sealing joints;
 - e) surface finishing, curing and protecting;
 - f) movement joints;
 - g) drainage holes or pipes through concrete;
 - h) disposal of material (as Series 600).

Footways And Paved Areas

Measurement

- 13.** The measurement of footways and paved areas is the nett surface area of construction using the width of the upper surface of each layer. No deductions are made for openings of 1 square metre or less.

14. For items where the unit of measurement is by weight of material the measurement is the tonnage necessarily incorporated into the construction.
15. The measurement of let-in joints is the area cut back into the existing surface. The area of new surfacing over joints is included in the surface course area. No distinction is made between different depths of joint.
16. Quantity bands for slurry surfacing are determined by the total surface area for the complete scheme. The thickness measurable is the average total thickness specified.
- 16a Proprietary footway slurry sealing treatments are classified according to the type of material and nominal thickness.
17. Cold planing footways is measured as the nett surface area treated. The depth measurable is the average total depth required to be removed irrespective of the number of passes made by the planer. Quantity bands are determined by the total surface area of planing for the complete scheme, regardless of any separate average depth requirements for different parts of the scheme.
18. An Extra Over item is measurable for discrete areas of paving slabs and paving blocks not exceeding one square metre. This item is measurable even if the areas in question are on the same site, always providing they are unattached.
19. An Extra Over item is measured where red pigment is specified to be added to the surface course.
- 19a Extra Over items are measurable for weedkilling and jetwashing carried out in preparation for proprietary footway slurry sealing. The measurement shall be the nett area specified to be treated.

Item Coverage

20. Footway base, base course and wearing course: -
 - a) sub-base (as Series 700);
 - b) edge support;
 - c) concrete (as Series 1700);
 - d) formwork (as Series 1700);
 - e) void formers (as Series 1700);
 - f) reinforcement (as Series 1700);
 - g) joint filler and sealant;
 - h) trial mixes;
 - i) laying to levels and falls;
 - j) bedding, jointing and pointing;
 - k) straight, circular and radial cutting and fitting;
 - l) compacting;
 - m) membrane;

- n) removing all detritus and loose material and clearance of standing water;
- o) disposal of material (as Series 600);
- p) grading, measuring, mixing and depositing materials;
- q) spreading and compaction;
- r) edge support;
- s) shaping to cambers, falls and crowns;
- t) making, removing and sealing temporary joints;
- u) protection and masking of kerbs, channels and ironwork;
- v) working around obstructions.

21. Footway slurry sealing: -

- a) trial areas and trials;
- b) sweeping the footway surface free of all loose material;
- c) protection and masking of ironwork and street furniture and subsequent removal of masking material;
- d) mixing, spreading and rolling deposited materials;
- e) bond coat (as this Series);
- f) measures required for aftercare and opening footway to traffic;
- g) disposal of material (as Series 600).

21a Proprietary footway slurry surfacing:-

- a) trial areas and trials;
- b) sweeping the footway surface free of all loose material;
- c) protection and masking of ironwork and street furniture and subsequent removal of masking material;
- d) mixing, spreading and rolling deposited materials;
- e) bond coat (as this Series);
- f) measures required for aftercare and opening footway to traffic;
- g) disposal of material (as Series 600).
- h) regulating material

22. Cold planing and scabbling footways: -

- a) shaping to cambers, falls and crowns;
- b) multiple handling of material;
- c) loading into transport;
- d) disposal of material (as Series 600);
- e) working around obstructions;
- f) temporary ramps;
- g) surface preparation and cleaning;
- h) water supply and damping down;
- i) cutting out and removal of material by other means.

23. Bond coat: -

- a) removing all detritus and loose material and clearance of standing water;
- b) disposal of material (as Series 600);

- c) grading, measuring and mixing materials;
- d) making joints;
- e) protection and masking and unmasking of kerbs, obstructions, drainage channels, chamber covers, and the like;
- f) cutting back, preparing and working on or up to adjacent faces, surfaces and features;
- g) admixtures and additives.

24. Joints with existing: -

- a) sawing guidelines;
- b) breaking out hard materials (as Series 600);
- c) overbreak and making good;
- d) disposal of material (as Series 600).

25. Paving flags and blocks: -

- a) bedding, jointing and pointing;
- b) shaping to cambers, falls and crowns;
- c) straight and radial cutting and fitting;
- d) working around obstructions;
- e) making good with existing paving;
- f) edge support;
- g) cleaning old paving flags when re-using existing.

26. Take up existing paving flags and blocks and replace, re-bed or patch with bituminous material: -

- a) as this Series - Precast concrete paving flags and blocks;
- b) as this Series - Footway base, basecourse and wearing course;
- c) as Take up or down, dispose, set aside or take to depot (as Series 200).

26a Surface Mounted Tactile Paving: -

- c) preparation of substrate and masking;
- d) adhesive bedding, jointing and edge filleting;
- e) shaping to cambers, falls and crowns;
- f) straight and radial cutting and fitting;
- g) working around obstructions;
- h) disposal of material (as Series 600)

Repairs To Existing Footway: Patching

Measurement

- 27.** Footway patching is measured as the nett surface area to be treated. No deductions are made for ironwork of less than 0.5 sq. m in area.

- 28. For measurement purposes, each separate repair is considered separately. The thickness is the average depth of material laid over the whole area of the repair.
- 29. An Extra Over item is measured where red pigment is specified to be added to the surface course.
- 30. Areas of footway patching exceeding the maximum areas covered in the various items in the Price List for footway patching are measured using other appropriate items in Series 1100.

Item Coverage

- 31. Footway Patching: -
 - a) cutting and sawing guidelines;
 - b) excavation (as Series 600);
 - c) excavation in hard material (as Series 600);
 - d) loading into transport;
 - e) multiple handling of material;
 - f) disposal of material (as Series 600);
 - g) removing all detritus and loose material and clearance of standing water;
 - h) grading, measuring, mixing, depositing, spreading and compacting materials, tack coats, forming and sealing joints, finishing, curing and protection;
 - i) tack coat (as this Series).

Adjusting The Level of Footway Ironwork

Measurement

- 32. No distinction is made between raising or lowering or different depths of adjustment.

Item Coverage

- 33. Adjusting the level of footway ironwork prior to patching or resurfacing: -
 - a) cutting and sawing guidelines;
 - b) excavation (as Series 600);
 - c) excavation in hard material (as Series 600);
 - d) overbreak and making good;
 - e) take up existing cover or grating including frame;
 - f) demolition and preparation to receive new construction;
 - g) bedding;
 - h) re-setting cover and frame;
 - i) temporary ramps;

j) disposal of material (as Series 600).

34. Adjusting the level of footway ironwork after patching or surfacing and reinstate: -

- a) as this Series - Adjusting the level of footway ironwork prior to patching or resurfacing;
- b) grading, measuring, mixing, depositing, spreading and compacting materials, tack coats, forming and sealing joints, finishing, curing and protection.

Traffic Signs, Posts and Marker Posts

Measurement

1. Base items for the supply of traffic signs are for steel plate or GRP plate with BS EN 12899-1:2007 Class RA2 retro-reflective facing material. The unit of measure for sign plates shall be number and shall be square metres for rectangular information signs.
2. Extra Over items are measurable for signs, or part thereof, manufactured using other plate and/or sign face materials.
3. Extra Over items are measurable for self-adhesive patches and shall be measured in square metres.
4. Extra Over items are measurable for butting clamps (unique to Morelock systems) and shall be measured as numbers.
5. An Extra Over item to the erection of posts is measured where additional concrete to that specified in the post foundation schedule in Appendix 12/1 of the Works Specification is required.
6. An Extra Over item to the erection of marker posts is measured where a concrete surround to the base of the post is required.
7. An Extra Over item to the erection of each post, marker post and bollard is measured where this occurs in paved surfaces. The item is classified according to the type of paving.

Item Coverage

8. Traffic signs, posts, bollards, and marker posts: -
 - a) excavation (as Series 600);
 - b) excavation in hard material (as Series 600) below any paved surface;
 - c) disposal of material (as Series 600);
 - d) backfilling and compaction;
 - e) reinstatement of unpaved surface to match existing;
 - f) formwork and in situ concrete; (as Series 1700);
 - g) sign faces of any design, colour and number of overlay panels;
 - h) covering and removal of covering of signs;
 - i) protective system;
 - j) supports, clips, fixings, fittings and protective caps;
 - k) sign back marking.

- 9.** Extra Over excavation and reinstatement in paved areas: -
a) excavation in hard material (as Series 600);

- b) overbreak and making good;
- c) setting aside precast concrete and stone paving materials for reuse;
- d) cleaning, stacking, protecting and labelling;
- e) disposal of material (as Series 600);
- f) grading, measuring, reclaiming, mixing, depositing, spreading and compacting materials, tack coats, forming and sealing joints, finishing, curing and protection;
- g) formwork;
- h) making good new work up to existing;
- i) paving flags and blocks (as Series 1100).

10. Repairs and maintenance: Paint standard sign post: -

- a) rubbing down;
- b) washing;
- c) priming areas of bare metal;
- d) masking and other measures to protect adjacent areas and removal upon completion;
- e) coating;
- f) removal and replacement of signs, supports, clips and fittings;
- g) take up or down and dispose or set aside for re-use (as Series 200).

Finger Arm Sign Painting

Measurement

- 11.** The measurement of finger arm sign painting is classified according to the type of treatment and the number of fingers on the installation.
- 12.** For the purposes of valuation, a location name collar counts as a finger.
- 13.** The treatment includes for the whole installation including post, fingers, collars and finial.

Item Coverage

- 14.** In situ treatment: -
 - a) preparing surfaces;
 - b) preparing materials for application;
 - c) 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.
- 15.** Workshop treatment: -
 - a) dismantling;

- b) storage and labelling;
- c) preparing surfaces;
- d) preparing materials for application;

- e) 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;
- f) removing from store and re-erecting.

Road Studs

Measurement

- 16.** The measurement of road studs is the number of units, classified according to the type of stud and type of operation.

Item Coverage

- 17.** Road Studs: -
- a) cutting or forming holes;
 - b) milling;
 - c) reinstatement of surfaces;
 - d) adhesives and grout;
 - e) attaching reflector units to bases;
 - f) detaching old reflector units from bases;
 - g) any colour reflectors;
 - h) duo directional and unidirectional reflectors;
 - i) loading, transporting from store, unloading and positioning for re-installation;
 - j) storage facilities;
 - k) disposal of material (as Series 600).

Road Markings

Measurement

- 18.** The various items for road markings include for the refurbishment (overlay or overspray) of existing markings. Extra Over items are measurable for new markings and classified according to the type of surface upon which they are laid. New surfaces are defined as those laid in the previous 3 months.
- 19.** Lines measured in linear metre units are measured the net length of line laid.
- 20.** Intermittent line markings are measured the net length of line laid, excluding the gaps between the markings.
- 21.** Double lines are measured the net length of line laid. The length of the two lines (excluding the gaps between intermittent markings) plus any diagonal lines is aggregated to determine the length.

- 22.** Where the unit of measurement is square metre, the measurement is the nett area of markings laid, markings removed, or tack coat laid and not the included area measured overall.

- 23.** The application of tack coat is measured as an Extra Over to the marking for which it is applied. The area of tack coat is the same as the area of the marking.

Item Coverage

- 24.** Road Markings: -

- a) cleaning, brushing and drying surfaces;
- b) application of the marking materials including the incorporation of the specified reflecting medium;
- c) thinners and primers;
- d) apostrophes in the case of letters and numerals;
- e) markings down the face of kerbs;
- f) adhesives.

- 25.** Removal of Road Markings: -

- a) disposal of material (as Series 600);
- b) reinstatement;
- c) apostrophise in the case of letters and numerals;
- d) markings down the face of kerbs.

In Situ Concrete

Units

- 10.** The unit of measurement shall be:
- a. in situ concrete..... cubic metre.
 - b. Extra over for small quantities cubic metre
 - c. Extra over where direct discharge is not possibleday

Measurement

- 11.** No deduction shall be made for:
- (a) holes, ducts, pockets, sockets, mortices and the like
 not exceeding 0.15 cubic metres each in volume;
 - (b) reinforcement;
 - (c) individual chamfers, splays, rebates, recesses, drips,
 grooves and the like of 100mm total girth or less
 when measured overall the faces of the individual
 feature formed in the concrete;
 - (d) in the case of concrete with a patterned profile face,
 any indentations of 100mm total girth or less when
 measured overall the faces of the indentations
 formed in the concrete;
 - (e) cast in components not exceeding 0.15 cubic
 metres each in volume.

Itemisation

- 12.** Separate items shall be provided for in situ concrete in accordance with the General Principles paragraph 3 and the following:

Group	Feature
I	1. In situ concrete
II	1. Stated mixes and grades
	2. Extra over for small quantities.
	3. Extra over where direct discharge is not possible

Item Coverage

4. The items for in situ concrete shall in accordance with the Price List General Directions include for:
- (a) mix design;
 - (b) trial mixes;
 - (c) mixing, placing in or against any surface, including soil faces, compaction, finishing and unformed surface finishes;
 - (d) curing and protection;
 - (e) formwork (as this Series paragraph 16) to upper surfaces inclined at an angle of less than 15° to the horizontal;
 - (f) falls, cambers, and shaped profiles;
 - (g) construction joints, (whether or not shown on the Drawings) water bars and stops including formwork (as this Series paragraph 16);
 - (h) weep pipes, pipe sleeves and the like;
 - (i) holes, ducts, pockets, sockets, mortices and the like not exceeding 0.15 cubic metres each in volume including formwork (as this Series paragraph 16);
 - (j) formwork (as this Series paragraph 16) to edges of blinding concrete 75mm or less in thickness;
 - (k) filling to overbreak and working space;
 - (l) measures to control alkali-silica reaction;
 - (m) air entrainment;
 - (n) facilities and assistance for the Service Manager's cover meter survey;
 - (o) admixtures and additives.
- 4a. The items for extra over for small quantities shall in accordance with the Preambles to Price List General Directions include for:

Item Coverage

- (a) additional costs and resources due to part loads;
- (b) additional waste;
- (c) handling and placing;

- 4b. The items for extra over for remote discharge shall in accordance with the Preambles to Price List General Directions include for:

Item coverage

- (a) additional costs and resources due to remote locations;
- (b) changes to mixes to suit delivery methods;
- (c) handling and placing;

Precast Concrete Culvert Units

5. The term “precast” applies to a concrete unit cast on Site but not in its final position, and to concrete units manufactured off the Site.

Units

6. The unit of measurement shall be:
- (i) precast concrete culvert unit linear metre.

Measurement

7. The measurement of precast concrete culverts designed by the Contractor shall be the length measured along the centreline. Cross-sectional area shall be measured to the internal faces of the unit, measured perpendicular to the centreline of the unit.

Itemisation

8. Separate items shall be provided for precast concrete in accordance with the General Principles paragraph 3 and the following:

Group	Feature
I	1. Precast concrete unit
II	1. Different sizes

Item Coverage

9. The items for precast concrete units shall in accordance with the Price List General Directions include for:
- (a) design;
 - (b) Provision of design calculations and drawings;
 - (c) Certificates;
 - (d) Resubmissions and modifications;
 - (e) Completing of Approval in Principle forms and submitting to the Service Manager for acceptance;
 - (f) mix design;
 - (g) trial mixes;
 - (h) reinforcement (as this Series paragraphs 20 and 24);
 - (i) formwork (as this Series paragraph 16);
 - (j) mixing, placing in or against any surface; including soil faces, compaction finishing and unformed surface finishes;
 - (k) curing and protection;
 - (l) individual chamfers, splays, rebates, recesses, drips, grooves, and the like;
 - (m) holes, ducts, pockets, sockets, mortices and the like;
 - (n) matching members;
 - (o) marking members for identification and delivery in matching sequence;
 - (p) lifting devices including removal and bearing plates;
 - (q) temporary bracing or stays to prevent displacement;
 - (r) bedding, jointing and pointing including cramps, dowels or other fixing devices;
 - (s) caulking and sealing between and under units and members;
 - (t) infilling to joints between adjacent units and members where the maximum width of the joint is less than 150mm including surface finish and formwork;
 - (u) cutting and trimming;
 - (v) admixtures and additives;

- (w) measures to control alkali-silica reaction;
- (x) facilities and assistance for the *Service Manager's* cover meter survey.
- (y) Installation including positioning, priming sockets & fixing jointing strips, bedding onto foundations, levelling and fixing/tying into adjacent structures

Surface Finish of Concrete – Formwork

Units

- 10.** The unit of measurement shall be:
- (i) formwork.....square metre.

Measurement

- 11.** The measurement shall be the area of formwork which is in contact with the finished concrete but measured over the face of openings of 1 square metre or less and features described in (c) below.

Formwork shall not be measured to:

- (a) construction joints whether or not shown on the Drawings;
- (b) holes, ducts, pockets, sockets, mortices and the like, not exceeding 0.15 cubic metres each in volume;
- (c) individual fillets, chamfers, splays, drips, rebates, recesses, grooves and the like of 100mm total girth or less when measured overall the faces in contact with the concrete;
- (d) edges of blinding concrete 75mm or less in thickness;
- (e) upper surfaces of concrete inclined at an angle of less than 15° to the horizontal;
- (f) unformed surfaces.

12. Where concrete, other than blinding concrete 75mm or less in thickness, is placed in structural foundations, formwork shall be measured to the sides of such concrete foundations regardless of whether or not any formwork is used, except where it is expressly stated on the Drawings that the concrete is to be cast against the soil face.

- 13.** For measurement of formwork:
- (i) “straight” at any inclination, including horizontal, vertical or inclined at any angle.
 - (ii) “curved” and “domed” shall include formwork curved to a radius of 50 metres or less. Any formwork curved to a greater radius than 50 metres will be included as “straight” formwork,
- 14.** Where a trial panel for a particular class of formwork is ordered by a Task Order then it shall be measured and paid for in accordance with the relevant items (i.e. concrete, formwork and disposal, etc.).

Itemisation

- 15.** Separate items shall be provided for formwork in accordance with the General Principle paragraph 3 and the following:

Group	Feature
I	1. Formwork.
II	1. Different classes of surface finish.
III	1. Straight - 300mm wide or less at any inclination
	2. Straight - 300mm wide or more at any inclination
	3. Curved or domed - 300mm wide or less at any inclination
	4. Curved or domed - 300mm wide or more at any inclination
	5. Extra over for small quantities

- 15a.** The items for extra over for small quantities shall in accordance with the Preambles to Price List General Directions include for

Item Coverage

- (a) additional costs and resources due to smaller sizes;
- (b) additional waste;
- (c) handling and placing;

Item Coverage

- 16.** The items for formwork shall in accordance with the Preambles to Price List General Directions include for:

- (a) scaffolding, falsework, centering, fabricating, assembling, cutting, fitting, and fixing in position and taking measures to produce the required shapes of concrete;
- (b) forming cambers and falls;
- (d) cutting and fitting around projecting members, pipes, reinforcement and the like;
- (e) individual fillets, chamfers, splays, drips, rebates, recesses, grooves and the like of 100mm total girth or less when measured overall the faces in contact with the concrete;
- (f) maintaining in place until striking and allowing for any variation from the minimum period for striking arising from prevailing weather conditions;
- (g) striking, taking down and removing;
- (h) concrete provided in lieu of formwork to fill overbreak and working space.

Bar Reinforcement for Structures

Units

- 17.** The unit of measurement shall be:
- (i) bar reinforcement.....tonne.
 - (ii) dowels.....linear metres

- (iii) Extra over for small quantities..... tonne

Measurement

- 18.** The mass of plain bar reinforcement shall be calculated on the basis that the nominal density of steel is 0.00785 kilogrammes per square millimetre of cross sectional area per linear metre; the mass of deformed bar reinforcement shall be calculated as the nominal rolling mass of the reinforcement. Steel bar supports to reinforcement where described in the contract shall be measured as reinforcement.

No allowance shall be made for the mass of welds and mechanical connections.

Itemisation

- 19.** Separate items shall be provided for bar reinforcement for structures in accordance with the General Principle paragraph 3 and the following:

Group	Feature
I	1. Bar reinforcement.
	2. Dowels .
II	1. Different bar sizes.
	2. Extra over for small quantities .

- 19a.** The items for extra over for small quantities shall in accordance with the Preambles to Price List General Directions include for:

Item Coverage

- (a) additional costs and resources due to smaller quantities;
- (b) additional waste;
- (c) handling and placing;

Item Coverage

- 20.** The items for bar reinforcement shall in accordance with the Preambles to Price List General Directions include for:
- (a) cleaning, cutting and bending;
 - (b) binding with wire or other material;
 - (c) supports, cover blocks and spacers (except for steel bar supports to reinforcement where shown on the Drawings);
 - (d) welding;
 - (e) mechanical connections.

Fabric Reinforcement for Structures

Units

- 21.** The unit of measurement shall be:
- (i) fabric reinforcement.....square metre.
 - (ii) Extra over for small quantities..... square metre.

Measurement

- 22.** Fabric reinforcement shall be measured as the area of work covered; the BS reference being stated.

Itemisation

- 23.** Separate items shall be provided for fabric reinforcement for structures in accordance with the General Principle paragraph 3 and the following:

Group	Feature
I	1. Fabric reinforcement.
II	1. Different BS Mesh sizes

	2. Extra over for small quantities .
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- 23a.** The items for extra over for small quantities shall in accordance with the Preambles to Price List General Directions include for

Item Coverage

- (a) additional costs and resources due to smaller quantities;
- (b) handling and placing;

Item Coverage

- 24.** The items for fabric reinforcement shall in accordance with the Preambles to Price List General Directions include for:

- (a) cleaning, cutting and bending;
- (b) binding with wire or other material;
- (c) supports, cover blocks and spacers;
- (d) extra fabric reinforcement at laps;
- (e) welding;
- (f) mechanical connections.

Haunching To Bridges

Units

- 25.** The unit of measurement shall be:

- (ii) haunching to bridges cubic metre.

Measurement

- 26.** The measurement of haunching to bridges shall be the surface area multiplied by the nominal depth. No deduction shall be made for any decrease in thickness due to the arch ring or for other obstacles not exceeding 0.15 cubic metres in volume.

Itemisation

- 27.** Separate items shall be provided for haunching to bridges in accordance with the General Principle paragraph 3 and the following:

Group	Feature
I	1. Haunching to bridge.

Item Coverage

- 28.** The items for haunching to bridges shall in accordance with the Preambles to Price List General Directions include for:
- (a) excavation of acceptable material (as Series 600 paragraphs 13 and 14);
 - (b) excavation of unacceptable material (as Series 600 paragraph 15);
 - (c) excavation of hard material (as Series 600 paragraph 19);
 - (d) saw cut;
 - (e) disposal of material (as Series 600 paragraph 31);
 - (f) in situ concrete (as this Series paragraph 4);
 - (g) formwork (as this Series paragraph 16);
 - (h) hand sealing of carriageway with surface dressing (as Series 700 paragraph 78).

Concrete Repairs

Units

29. The unit of measurement shall be:

- (iii) repair mortar kg.

Measurement

- 30.** The measurement of concrete repair material shall be by the volume of concrete to be repaired.

Itemisation

- 31.** Separate items shall be provided for repair mortar in accordance with the General Principle paragraph 3 and the following:

Group	Feature
I	1. Repair mortar.

Item Coverage

- 32.** The items for concrete repairs shall conform to BD 27/86 and be in accordance with the Preambles to Price List General Directions include for:
- (a) surface preparation including concrete and reinforcement;
 - (b) priming of substrate (concrete and reinforcement)
 - (c) application of repair material;
 - (d) finishing of repair material to match adjacent concrete;
 - (e) disposal of material (as Series 600)

Waterproofing

Units

1. The units of measurement shall be:
 - (i) waterproofing square metre.

Measurement

2. The measurement shall be the area of surface covered by the waterproofing. No deduction shall be made for openings of 1 square metre or less.

Itemisation

3. Separate items shall be provided for waterproofing for structures in accordance with the General principle paragraph 3 and the following:

Group	Feature
I	1. Different types.
II	2. Mobilisation.
III	1. More than 300mm wide.
	2. 300mm wide or less at any inclination.

Item Coverage

4. The items for waterproofing shall in accordance with the Preambles to the Price List General Directions include for:
 - (a) preparing, cleaning and drying;
 - (b) priming and bonding agents;
 - (c) laying to cambers, falls and crowns;
 - (d) protective layers;
 - (e) additional protection;
 - (f) levelling courses;
 - (g) formwork (as Series 1700 paragraph 16);
 - (h) additional basecourse or wearing course required as a result of the *Contractor's* choice of waterproofing;
 - (i) nibs, angle fillets, external angles, mitres, stops and the like;

- (j) sealing and making good at edges and chases, around interruptions and projections and up to abutting surfaces including cleaning and priming;
- (k) cutting out and rectifying imperfections;
- (l) joints and laps;
- (m) preparation and supply of data sheets;
- (n) preparing surfaces at gullies and the like;
- (o) masking and other measures to protect adjacent untreated areas;
- (p) complying with any special requirements in respect of ambient conditions and for intervals between successive operations and applications.

Removal Of Waterproofing

Units

5. The units of measurement shall be:
- (i) waterproofing..... square metre.

Measurement

6. The measurement shall be the area of surface covered by the waterproofing. No deduction shall be made for openings of 1 square metre or less.

Itemisation

7. Separate items shall be provided for waterproofing for structures in accordance with the General principle paragraph 3 and the following:

Group	Feature
I	1. Different types of waterproofing.
II	1. More than 300mm wide
	2. 300mm wide or less at any inclination

Item Coverage

8. The items for removal of waterproofing shall in accordance with the Preambles to the Price List General Directions include for:
- (a) marking out the area of waterproofing to be removed;
 - (b) removal of protective layer;

(c) removal of primer;

- (d) preparation of existing surfaces to receive new waterproofing;
- (e) disposal of materials (as Series 600);
- (f) trials and approved tests
- (g) measures to prevent damage to existing surfaces

Brickwork, Blockwork and Stonework

Units

1. The unit of measurement shall be:
 - (i) brickwork, blockwork and stonework square metre.
 - (ii) Extra Over brickwork, blockwork and stonework for fair faced work
...square metre.
 - (iii) Extra Over brickwork, blockwork and stonework for work curved on plan
square metre.
 - (iv) Extra over brickwork, blockwork and stonework for lime mortar
instead of cement mortar... square metre
 - (v) coping, string courses and the like..... linear metre.

Measurement

2. The measurement shall be the superficial area of brickwork required by the contract.

Bricks, blocks and stone masonry shall be ordered and paid for under the Daywork series.

No deduction shall be made for openings of 0.10 square metres or less.
3. The measurement of fair face work may include the use of different bricks, blocks or stone from the body of the work. These shall be ordered and paid for under the Daywork series.
4. The measurement of copings, string courses and the like shall be the length of the work required by the Task Order.

Itemisation

5. Separate items shall be provided for brickwork, blockwork and stonework in accordance with the General Principles paragraph 3 and the following:

Group	Feature
I	1. Brickwork, blockwork and stonework.
	2. Extra over brickwork, blockwork and stonework
	3. Copings, string courses and the like
II	4. Stated types of bricks, blocks or stone
III	5. Different thicknesses.

Item Coverage

6. The items for brickwork, blockwork and stonework shall in accordance with the Preambles to Price List General Directions include for:
- (a) setting, bedding, jointing, pointing, raking out, wetting and fair-faced work, including rough and fair cutting;
 - (b) plinths, corbels, bull-noses, quoins, chases, grooves, rebates, recesses, stoolings, weatherings and the like, grouting;
 - (c) ties, dowels, cramps, joggles and the like, including sinkings, mortices and running in;
 - (d) bonding into existing work;
 - (e) forming cavity;
 - (f) reinforcement (as Series 1700 paragraphs 20 and 24);
 - (g) cavity filling between the brickwork, blockwork or stonework and the backing;
 - (h) building in pipes, holdfasts, bolts and the like and forming small openings;
 - (i) sample panels;
 - (j) damp proof courses and membranes;
 - (k) removing loose material from the backing and washing clean;

(1) curing and protection;

- (n) marking for identification and delivery in any matching sequence;
- (o) manufacturer's certificates and supplying a copy to the Service Manager.

Repointing Of Brickwork, Blockwork and Stonework

Units

- 7.** The unit of measurement shall be:
- (i) repointing of brickwork, blockwork and stonework..... square metre.
 - (ii) Extra Over stonework for raised pointing..... square metre.
 - (iii) Extra Over brickwork, blockwork and stonework for lime mortar instead of cement mortar..... square metre.

Measurement

- 8.** The measurement of repointing brickwork, blockwork and stonework shall be the surface area of the work measured on each face
- No deduction shall be made for openings of 0.10 square metres or less.

Itemisation

- 9.** Separate items shall be provided for repointing brickwork, blockwork and stonework in accordance with the General Principles paragraph 3 and the following:

Group	Feature
I	1. Repointing of brickwork, blockwork and stonework.
	2. Extra over brickwork, blockwork and stonework.
II	1. Stated types of mortar or pointing.

Item Coverage

- 10.** The items for repointing of brickwork, blockwork and stonework shall in accordance with the Preambles to Price List General Directions include for:
- (a) raking out of existing mortar;
 - (b) matching new and existing mortars, gaining approvals for proposed mortar mixes, forming of trial panels;;
 - (c) finishing to match existing or as specified by the task order;
 - (d) measures to protect joints and pointing during curing;
 - (e) mortar.

Road Edge Shoring

Measurement

1. The measurement of road edge shoring is the developed length along the centre line of the pile posts.

Item Coverage

2. Road edge shoring: -
 - a) trimming ditch;
 - b) driving in pile posts and anchorage posts;
 - c) tensioning and fixing straining wires;
 - d) fixing galvanised sheeting;
 - e) backfilling and compaction;
 - f) disposal of material (as Series 600).
 - g) topsoil and grass seed reinstatement

Grass Seeding and Turfing

- | | | |
|-------------|-----|---|
| Units | 1 | The unit of measurement shall be: |
| | (i) | grass seeding and turfing square metre |
| Measurement | 2 | The measurement of grass seeding, and turfing shall be the quantities ordered by the <i>Service Manager</i> . |
| Itemisation | 3 | Separate items shall be provided for grass seeding and turfing in accordance with the General Principles and the following: |

Group	Feature
1	1 Grass seeding
	2 Turfing
2	1 Stated specifications
3	1 Stated aggregated quantities

- | | | |
|----------------------------------|-----|--|
| Grass Seeding and Turfing | 4 | The items for grass seeding and turfing shall in accordance with the Preambles to Price List General Directions include for: |
| Item coverage | (a) | preparation of existing surfaces to a fine tilth; |
| | (b) | application of soil conditioner or fertiliser; |
| | (c) | raking, watering and herbicide treatment; |
| | (d) | initial cutting and maintenance; |
| | (e) | reseeding, strimming and cutting; |
| | (f) | importing turf, pegging and pinning; |
| | (g) | levelling, infilling, herbicide; |
| | (h) | dispersal, cutting around objectives and edges; |
| | (i) | weed control and disposal of material; |
| | (j) | certificates and notices. |

Planting

- Units 5 The unit of measurement shall be:
- (i) planting number
- Measurement 6 The measurement of planting shall be the quantities ordered by the *Service Manager*.
- Itemisation 7 Separate items shall be provided for planting in accordance with the General Principles and the following:

Group	Feature
1	1 Planting
2	1 Tree planting
	2 Hedge planting
3	1 Stated species

- Planting** 8 The items for planting shall in accordance with the Preambles to Price List General Directions include for:
- Item coverage (a) excavation of pits, trenches, planting and maintenance of plants;
- (b) backfilling with excavated materials;
- (c) stakes and plant identification labels;
- (d) soil conditioning or fertiliser;
- (c) storage, selection and handling;
- (d) protection and treatment of stock;
- (e) stakes, labelling, ties and the like;
- (f) pruning and watering;
- (g) levelling, infilling, herbicide;
- (h) sprays and additives;
- (i) notices, inspections and reporting;
- (e) disposal of surplus materials.

Arboriculture Works

Units	9	The unit of measurement shall be:
	(i)	taking down trees, grub up stumps, crown lift or thin trees, prune tree, removal of branch or limb number
Measurement	10	The measurement of taking down trees, grub up stumps, crown lift or thin trees, prune tree, removal of branch or limb planting shall be the quantities ordered by the <i>Service Manager</i> .
Itemisation	11	Separate items shall be provided for taking down trees, grub up stumps, crown lift or thin trees, prune tree, removal of branch or limb in accordance with the General Principles and the following:

Group	Feature	
1	1	Take down tree from ground level
	2	Take down tree including roots
	3	Grub up tree stump and roots
	4	Crown lift or thin tree
	5	Prune tree
	6	Removal of branch or limb
2	1	Stated sizes, girths or heights

Note: The girth of trees shall be measured at a height of 1.2 metres above ground.

Taking Down Trees, Grub Up Stumps, Crown Lift or Thin Trees, Prune Tree, Removal of Branch or Limb	12	The items for taking down trees, grub up stumps, crown lift or thin trees, prune tree, removal of branch or limb shall in accordance with the Preambles to Price List General Directions include for:
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Item coverage	(a)	taking down tree;
	(b)	cutting into pieces and removal;
	(c)	specific, general pruning, crown thinning or reduction;

- (d) achieving highway or street furniture clearance as required;
- (e) grinding up stumps;
- (f) filling holes and making good adjacent surfaces;
- (g) applying treatments;
- (h) disposal of materials from site.

Series 7000 LANDSCAPE MAINTENANCE

Landscape Maintenance

Units	1	The unit of measurement shall be:	
	(i)	hedge trimming, weed spraying, swath cutting kilometre	
	(ii)	hand held hedge trimming, footway weed spraying, total residual herbicide square metre	
	(iii)	visibility cutting number	
Measurement	2	The measurement of landscape maintenance shall be quantities ordered by the <i>Service Manager</i> .	
Itemisation	3	Separate items shall be provided for landscape maintenance in accordance with the General Principles and the following:	
		Group	Feature
	1	1	Hedge trimming
		2	Weed spraying
		3	Total residual herbicide
		4	Swath cutting
		5	Visibility cutting
	2	1	Stated specifications
	3	1	Stated locations or quantities
Landscape Maintenance	4	The items for landscape maintenance shall in accordance with the Preambles to Price List General Directions include for:	
Item coverage	(a)	providing all measures, equipment and resources necessary to ensure compliance with the specification;	
	(b)	reports to the <i>Service Manager</i> ;	
	(c)	collecting data and maintaining the inventory.	
	(d)	To include restricted working hours to comply with the County's published Traffic Sensitive Routes	

Series 7100 DRAINAGE CLEANSING

Measurement

1. The measurement of gully cleansing undertaken by machine in cyclic programmes is the number of gullies emptied. For the avoidance of doubt, gullies not emptied for any reason (e.g., seized cover) are not measured.
2. The measurement of gully cleansing by hand is the number of gullies emptied or tops cleaned.
3. All items include restricted working hours to comply with the County's published Traffic Sensitive Routes
- 4.

Item Coverage

5. Cleanse gully by machine: -
 - a) removing all mud and vegetation from the cover or grating and in the vicinity of the cover or grating;
 - b) lifting cover, removing all liquid and solid matter, reseating cover to accepted level;
 - c) carrying out checks to ensure gully is fully operational after cleaning;
 - d) contamination prevention measures;
 - e) recording and reporting to the *Client* any gullies that were defective or not emptied for any reason;
 - f) disposal of material (as Series [600](#));
 - g) provision of water;
 - h) all types of gully.
6. Cleanse gully by hand: -
 - a) removing all mud and vegetation from the cover or grating and in the vicinity of the cover or grating;
 - b) lifting cover, removing all solid matter from sump, inlet and outlet;
 - c) carrying out checks to ensure gully is fully operational after cleaning;
 - d) reseating cover to accepted level;
 - e) recording and reporting to the *Client* any gullies that were defective or not emptied for any reason;
 - f) disposal of material (as Series [600](#));
 - g) all types of gully.
7. Cleanse gully top by hand: -
 - a) removing all mud and vegetation from the cover or grating and in the vicinity of the cover or grating;

b) all types of gully.

Drainage System Maintenance: Daywork Programmes

Measurement

8. The hourly rate is applied in respect of the time spent on site undertaking the works. Where two or more sites are attended during the working day, travelling between sites is also measurable. For the avoidance of doubt, time spent travelling to and from the first and last site of the day, to and from tip and to and from water fills is not measurable. Neither is time spent tipping and water filling measurable.
9. Time is charged in multiples of one quarter of an hour.
10. For the avoidance of doubt, the requirements of Clause 15 in the Preamble does apply, and all traffic safety measures including any Stop and Go requirement is included in the hourly rates.

Item Coverage

11. Jetting unit (including 2 crew): -
 - a) provision of water;
 - b) disposal of material (as Series [600](#));
 - c) as Series [9000](#), unless the specific provisions in this Series differ.
12. Gully emptying/jetting combination unit (including 2 crew): -
 - a) provision of water;
 - b) disposal of material (as Series [600](#));
 - c) as Series [9000](#), unless the specific provisions in this Series differ.
13. Gully emptying unit (including 2 crew): -
 - a) provision of water;
 - b) disposal of material (as Series [600](#));
 - c) as Series [9000](#), unless the specific provisions in this Series differ.
14. CCTV survey unit (including 2 crew): -
 - a) recording and coding;
 - b) reports and plans; including annotation of all items, size of gully/chamber item indexing, invert levels, size/diameter and construction material of pipes and/or culverts
 - c) still photographs;
 - d) video recordings;
 - e) scheduling of work to avoid high flows and clearance of blockages;
 - f) rodding camera;

- g) pan and tilt camera;
- h) as Series 9000, unless the specific provisions in this Series differ.

- 15.** Extra Over CCTV survey unit (including 2 crew): -
- a). reports and plans as detailed in item 12 above, presented in GIS data shape file format, showing a line feature including nodes where there is a directional change.
- 16.** Extra Over CCTV unit for towed jetting unit: -
- a) provision of water;
b) disposal of material (as Series 600);
as Series 9000, unless the specific provisions in this Series differ.
- 17.** The measurement of gully cleansing undertaken by machine in cyclic programmes is the number of gullies emptied. For the avoidance of doubt, gullies not emptied for any reason (e.g., seized cover) are not measured.
- 18.** The measurement of gully cleansing by hand is the number of gullies emptied or tops cleaned.

Item Coverage

- 19.** Cleanse gully by machine: -
- a) removing all mud and vegetation from the cover or grating and in the vicinity of the cover or grating;
b) lifting cover, removing all liquid and solid matter, reseating cover to accepted level;
c) carrying out checks to ensure gully is fully operational after cleaning;
d) contamination prevention measures;
e) recording and reporting to the *Client* any gullies that were defective or not emptied for any reason;
f) disposal of material (as Series 600);
g) provision of water;
h) all types of gully.
- 20.** Cleanse gully by hand: -
- a) removing all mud and vegetation from the cover or grating and in the vicinity of the cover or grating;
b) lifting cover, removing all solid matter from sump, inlet and outlet;
c) reseating cover to accepted level;
d) recording and reporting to the *Client* any gullies that were defective or not emptied for any reason;
e) disposal of material (as Series 600);
f) all types of gully.
- 21.** Cleanse gully top by hand: -

- a) removing all mud and vegetation from the cover or grating and in the vicinity of the cover or grating;
- b) all types of gully.

Sign Cleaning

Measurement

1. The measurement of sign cleaning is classified according to the type of programme. Cleaning signs in a programme of works whereby all signs on specified routes are to be cleaned is measured separately from orders to clean individually specified signs.

Item Coverage

2. Sign Cleaning: -
 - a) water supply and cleaning agents;
 - b) access equipment;
 - c) straightening signs and marker posts.

General

Measurement

1. The measurement of each Safety Defect comprises of two Elements:

A) Response action;

and

B) Carrying out the permanent repair.
2. Element A, the response action, includes for providing all aspects of the Safety Defect Repair Service in respect of each individual Safety Defect, except for carrying out the permanent repair.
3. The measurement of Element A is classified according to the Maximum Response Time specified. The valuation is that of the Maximum Response Time specified, regardless of the Response Time achieved.
4. Element B, carrying out the permanent repair, is valued using the various items for permanent repairs in this Series 7300. Where there are no suitable items and no other method of valuing the work has been approved by the Service Manager, the Daywork Schedule, Series 8000 is used. The hourly rates are applied in respect of the time spent on site and charged in multiples 1/60 of an hour (one minute).
5. Where the permanent repair is to be undertaken by a third party such as a Statutory Undertaker or another contractor, Element B is not measured.
6. Where a specific Safety Defect repair is instructed by the Service Manager to be carried out at times outside Normal Working Hours, the appropriate percentage addition in Series 100 applies to both Element A and Element B. The necessity of working outside Normal Working Hours to comply with the Maximum Response Time does not attract any such percentage addition.
7. Where a Safety Defect is notified to the Contractor outside Normal Working Hours and is allocated a 1½ hours (Immediate) Maximum Response Time, the works are valued in accordance with Series 7900 (Emergency Service). Where such Safety Defects are made safe but not permanently repaired by the Emergency Service response, the Service Manager determines whether or not the permanent repair is undertaken in accordance with this Series 7300. If so, a new Maximum Response Time is allocated, and subsequent valuation is undertaken in accordance with this Series 7300.

8. Each individual Safety Defect is counted as one regardless of proximity to any other. Road marking and crack sealing type Safety Defects may however

be aggregated to count as a single Safety Defect at a specific site such as a road junction or a 100m length of highway.

- 8a** Clause 8 notwithstanding, where two or more Cat 2 carriageway surface Safety Defects are immediately adjacent, a single repair may be specified. The valuation is one Response Action item (Element A) and one Permanent Repair: Carriageway Surface – Multiple Safety Defects item (Element B) regardless of the number of Safety Defects within the repair. The items applicable are those relating to the Safety Defect within the repair with the shortest Maximum Response Time.
- 9.** The Price List in this Series 7300 are exclusively used for Safety Defect repairs.

Element A: Response Action

Item coverage

- 10.** Element A: Response action: -
- a) receiving information, reports and instructions, making any necessary site inspections, planning, programming and responding within the Maximum Response Time;
 - b) all arrangements (including direct and indirect costs of any standby or other payments) to ensure that operatives, plant, equipment and materials are available to meet the Maximum Response Time;
 - c) making safe and temporary repairs, maintaining signing and guarding measures until the permanent repair is carried out and removing afterwards;
 - d) multiple visits to site including all travelling time necessary to make safe, maintain signing and guarding measures, carry out temporary repairs and carry out permanent repairs;
 - e) all other costs not included in the Item Coverage for Element B.

Permanent Repair: Carriageway Surface Safety Defect

Item coverage

- 11.** Asphalt concrete inlay repair: -
- a) sawing guidelines;
 - b) excavation (as Series 600);
 - c) excavation in hard material (as Series 600);
 - d) loading into transport;
 - e) multiple handling of material;
 - f) disposal of material (as Series 600);
 - g) removing all detritus and loose material and clearance of standing water;

- h) grading, measuring, mixing, depositing, spreading and compacting materials, tack coats, forming and sealing joints, finishing, curing and protection.

12. Crack sealing: -

- a) removing all detritus and loose material and clearance of standing water;
- b) disposal of material (as Series 600);
- c) grading, measuring, mixing, depositing, spreading and compacting materials, finishing, curing and protection.

Permanent Repair: Footway or Cycleway Surface Safety Defect

Item coverage

13. Asphalt concrete inlay repair: -

- a) sawing guidelines;
- b) excavation (as Series 600);
- c) excavation in hard material (as Series 600);
- d) loading into transport;
- e) multiple handling of material;
- f) disposal of material (as Series 600);
- g) removing all detritus and loose material and clearance of standing water;
- h) grading, measuring, mixing, depositing, spreading and compacting materials, tack coats, forming and sealing joints, finishing, curing and protection.

14. Crack sealing: -

- a) removing all detritus and loose material and clearance of standing water;
- b) disposal of material (as Series 600);
- c) grading, measuring, mixing, depositing, spreading and compacting materials, finishing, curing and protection.

15. Take up paving slabs, blocks, setts or cobbles and replace, re-bed or patch with concrete or bituminous material: -

- a) removing all detritus and loose material and clearance of standing water;
- b) disposal of material (as Series 600);
- c) take up or down and dispose or set aside for re-use (as Series 200);
- d) removing and replacing adjacent paving to facilitate the repair;
- e) bedding, jointing, pointing and forming surface finish;
- f) shaping to cambers, falls and crowns;
- g) straight and radial cutting and fitting;
- h) working around obstructions;

- i) making good with existing paving;
- j) edge support;
- k) cleaning existing when re-using;
- l) footway base, binder and surface course (as Series 1100).

16. Repairs to paving with concrete/asphalt concrete patch: -

- a) excavation (as Series 600);
- b) excavation in hard material (as Series 600);
- c) loading into transport;
- d) multiple handling of material;
- e) disposal of material (as Series 600);
- f) removing all detritus and loose material and clearance of standing water;
- g) grading, measuring, mixing, depositing, spreading and compacting materials, tack coats, forming and sealing joints, finishing, curing and protection.

Permanent Repair: Kerbing Safety Defect

Item coverage

17. Kerbing: take up and re-bed or replace with new: -

- a) excavation (as Series 600);
- b) excavation in Hard Material (as Series 600);
- c) breaking up foundations;
- d) cleaning, stacking, protecting, labelling;
- e) transport and handling;
- f) disposal of material (as Series 600);
- g) concrete (as Series 1700);
- h) formwork (as Series 1700);
- i) reinforcement (as Series 1700);
- j) cutting;
- k) mixing materials;
- l) bedding, jointing, filling and sealing of joints;
- m) backfilling and compaction;
- n) reinstatement of existing surfaces (as Series 1100);
- o) cleaning old kerbs when re-using existing.

18. Repair kerbing with concrete patch: -

- a) surface preparation;
- b) priming;
- c) disposal of material (as Series 600);
- d) grading, measuring, mixing, depositing, spreading and compacting materials, finishing, curing and protection.

Permanent Repair: Carriageway/Footway Ironwork Safety Defect

Item coverage

- 19.** Carriageway and footway ironwork: Adjust level / repair bedding and raising courses / replace ironwork: -
- a) excavation (as Series 600);
 - b) excavation in Hard Material (as Series 600);
 - c) over-break and making good;
 - d) take up cover or grating including frame;
 - e) demolition and preparation to receive new construction;
 - f) cleaning, stacking, protecting, labelling;
 - g) rebuilding courses (as Series 500);
 - h) bedding;
 - i) reinstatement of surfaces (as Series 500);
 - j) disposal of material (as Series 600);
 - k) temporary ramps;
 - l) grading, measuring, mixing, depositing, spreading and compacting materials, tack coats, forming and sealing joints, finishing, curing and protection.
- 20.** Apply anti-skid/slip material to ironwork cover: -
- a) cleaning, and drying the surface;
 - b) grading, measuring, mixing, depositing, spreading, forming surface finish, curing and protection.
- 21.** Replace/make good mortar fillet between frame and paving: -
- a) demolition and preparation to receive new construction;
 - b) disposal of material (as Series 600);
 - c) grading, measuring, mixing, depositing, spreading and compacting materials, tack coats, forming and sealing joints, finishing, curing and protection.

Permanent Repair: Non-Illuminated Traffic Sign Safety Defect

Item coverage

- 22.** Re-align/re-fix sign plate: -
- a) dismantling;
 - b) cleaning, stacking, protecting, labelling;
 - c) disposal of material (as Series 600);
 - d) supports, clips and fittings.

23. Replace sign post: -

- a) re-align/refix sign plate (as this Series);
- b) excavation;
- c) disposal of material (as Series 600);
- d) excavation and reinstatement in paved areas (as Series 1200);
- e) formwork and in-situ concrete;
- f) backfilling and compaction.

24. Clean sign: -

- a) removal of foreign material including detritus, algae and graffiti.

Permanent Repair: Road Marking Safety Defect

Item coverage

25. Road marking: -

- a) road marking (as Series 1200).

Permanent Repair: Gully Blockage

Item coverage

26. Clean gully top

- a) removing all detritus and vegetation from the cover or grating and in the vicinity of the cover or grating;
- b) disposal of material (as Series 600)

27. Clean gully

- a) removing all detritus and vegetation from the cover or grating and in the vicinity of the cover or grating;
- b) lifting cover, removing all solid matter, rodding of interconnecting pipes;
- c) reseating cover to accepted level;
- d) disposal of material (as Series 600)

Carriageway Sweeping

Units	1	The unit of measurement shall be:																								
		(i) carriageway sweeping kilometre																								
		(ii) disposal of materials off site tonne																								
Measurement	2	The measurement of carriageway sweeping shall be the lengths ordered by the <i>Service Manager</i> .																								
	3	The measurement of disposal of materials off site shall be the quantities ordered by the <i>Service Manager</i> supported by authorised and certified weighbridge tickets for disposal.																								
Itemisation	4	Separate items shall be provided for carriageway sweeping in accordance with the General Principles and the following:																								
<table> <tr> <th>Group</th><th colspan="2">Feature</th></tr> <tr> <td>1</td><td>1</td><td>Carriageway sweeping</td></tr> <tr> <td>2</td><td>1</td><td>Not exceeding 2m wide</td></tr> <tr> <td>3</td><td>1</td><td>Urban</td></tr> <tr> <td></td><td>2</td><td>Rural</td></tr> <tr> <td>4</td><td>1</td><td>Stated aggregated lengths</td></tr> <tr> <td></td><td>2</td><td>Additional widths</td></tr> <tr> <td></td><td>3</td><td>Disposal of materials off site</td></tr> </table>			Group	Feature		1	1	Carriageway sweeping	2	1	Not exceeding 2m wide	3	1	Urban		2	Rural	4	1	Stated aggregated lengths		2	Additional widths		3	Disposal of materials off site
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1	1	Carriageway sweeping																								
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	2	Rural																								
4	1	Stated aggregated lengths																								
	2	Additional widths																								
	3	Disposal of materials off site																								
Carriageway Sweeping	5	The items for carriageway sweeping shall in accordance with the Preambles to Price List General Directions include for:																								
Item coverage		(a) providing all measures, equipment and resources necessary to ensure compliance with the specification;																								
		(b) reports to the <i>Service Manager</i> ;																								
		(c) collecting data and maintaining the inventory;																								
		(d) removal of loose material by sweeping.																								

Disposal of Materials Off Site	6	The items for disposal of materials off site shall in accordance with the Preambles to Price List General Directions include for:
Item coverage	(a)	disposal of materials off site;
	(b)	provision of authorised weighbridge tickets;
	(c)	processing of waste;
	(c)	reports and data to the Service Manager.

Removal Of Litter from Verge and Central Reserve

Units	7	The unit of measurement shall be:																
	(i)	removal of litter from central reserve kilometre																
	(ii)	disposal of materials off site tonne																
Measurement	8	The measurement of removal of litter from verge and central reserve shall be the lengths ordered by the <i>Service Manager</i> .																
	9	The measurement of disposal of materials off site shall be the quantities ordered by the <i>Service Manager</i> supported by authorised and certified weighbridge tickets for disposal.																
Itemisation	10	Separate items shall be provided for removal of litter from verge and central reserve in accordance with the General Principles and the following:																
		<table><tr><th>Group</th><th>Feature</th></tr><tr><td>1</td><td>1 Removal of litter from verge and central reserve</td></tr><tr><td>2</td><td>1 Note exceeding 2m wide</td></tr><tr><td>3</td><td>1 Urban</td></tr><tr><td></td><td>2 Rural</td></tr><tr><td>4</td><td>1 Stated aggregated lengths</td></tr><tr><td></td><td>2 Additional widths</td></tr><tr><td></td><td>3 Disposal of materials off site</td></tr></table>	Group	Feature	1	1 Removal of litter from verge and central reserve	2	1 Note exceeding 2m wide	3	1 Urban		2 Rural	4	1 Stated aggregated lengths		2 Additional widths		3 Disposal of materials off site
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3	1 Urban																	
	2 Rural																	
4	1 Stated aggregated lengths																	
	2 Additional widths																	
	3 Disposal of materials off site																	
Removal of Litter from Verge and Central Reserve	11	The items for removal of litter from verge and central reserve shall in accordance with the Preambles to Price List General Directions include for:																

Item coverage		(a) providing all measures, equipment and resources necessary to ensure compliance with the specification;
		(b) reports to the <i>Service Manager</i> ;
		(c) collecting data and maintaining the inventory.
Disposal of Materials Off Site	12	The items for disposal of materials off site shall in accordance with the Preambles to Price List General Directions include for:
Item coverage		(a) disposal of materials off site;
		(b) provision of authorised weighbridge tickets;
		(c) reports and data to the <i>Service Manager</i> .

Removal Of Objects and Debris

Units	13	The unit of measurement shall be:
		(i) removal of objects and debris from verge and central reserve number, cubic metre
Measurement	14	The measurement of removal of objects and debris shall be the quantities ordered by the <i>Service Manager</i> .
Itemisation	15	Separate items shall be provided for removal of objects and debris in accordance with the General Principles and the following:

Group	Feature
1	1 Removal of objects and debris
2	1 Verge and central reserve
3	1 Not exceeding 0.25 cubic metres
	2 Exceeding 0.25 cubic metre but not exceeding 0.50 cubic metres
	3 Exceeding 0.50 cubic metre but not exceeding 1.00 cubic metres
	4 Exceeding 1.00 cubic metres
	5 Disposal of materials off site

Removal of Objects or Debris	16	The items for removal of objects or debris shall in accordance with the Preambles to Price List General Directions include for:
Item coverage	(a)	providing all measures, equipment and resources necessary to ensure compliance with the specification;
	(b)	reports to the <i>Service Manager</i> ;
	(c)	leaving the site tidy and clean.
Disposal of Materials Off Site	17	The items for disposal of materials off site shall in accordance with the Preambles to Price List General Directions include for:
Item coverage	(a)	disposal of materials off site;
	(b)	provision of authorised weighbridge tickets;
	(c)	reports and data to the <i>Service Manager</i> .

Siding

Units	18	The unit of measurement shall be:																					
	(i)	siding linear metre																					
	(ii)	disposal of materials off site cubic metre																					
Measurement	19	The measurement of siding shall be the quantities ordered by the <i>Service Manager</i> .																					
Itemisation	20	Separate items shall be provided for siding in accordance with the General Principles and the following:																					
<table> <tr> <th>Group</th><th colspan="2">Feature</th></tr> <tr> <td>1</td><td>1</td><td>Siding</td></tr> <tr> <td>2</td><td>1</td><td>Footway</td></tr> <tr> <td></td><td>2</td><td>Carriageway</td></tr> <tr> <td>3</td><td>1</td><td>Not exceeding 150mm wide</td></tr> <tr> <td></td><td>2</td><td>Exceeding 150mm wide but not exceeding 300mm wide</td></tr> <tr> <td></td><td>3</td><td>Disposal of materials off site</td></tr> </table>			Group	Feature		1	1	Siding	2	1	Footway		2	Carriageway	3	1	Not exceeding 150mm wide		2	Exceeding 150mm wide but not exceeding 300mm wide		3	Disposal of materials off site
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1	1	Siding																					
2	1	Footway																					
	2	Carriageway																					
3	1	Not exceeding 150mm wide																					
	2	Exceeding 150mm wide but not exceeding 300mm wide																					
	3	Disposal of materials off site																					

Siding	21	The items for siding shall in accordance with the Preambles to Price List General Directions include for
Item coverage	(a)	providing all measures, equipment and resources necessary to ensure compliance with the specification;
	(b)	trimming edges to a neat line;
	(c)	spreading surplus materials on the verge within one kilometre of the excavated material or loading away into transport;
	(d)	leaving the site tidy and clean;
	(e)	reports to the <i>Service Manager</i> .
Disposal of Materials Off Site	22	The items for disposal of materials off site shall in accordance with the Preambles to Price List General Directions include for:
Item coverage	(a)	disposal of materials off site;
	(b)	submitting records and weighbridge tickets to the <i>Service Manager</i> ;
	(c)	compiling reports of waste disposal.

Clearing Of Existing Ditches

Units	23	The unit of measurement shall be:
	(i)	clearing of existing ditches linear metre
	(ii)	disposal of materials off site cubic metre
Measurement	24	The measurement of clearing of existing ditches shall be the quantities ordered by the <i>Service Manager</i> .
	25	The measurement of disposal of materials off site shall be the quantities ordered by the <i>Service Manager</i> .
Itemisation	26	Separate items shall be provided for clearing of existing ditches in accordance with the General Principles and the following:

Group	Feature
1	1 Clearing of existing ditches
2	1 Depth to invert not exceeding 0.50 metres
	2 Depth to invert exceeding 0.50 metres but not exceeding 1.00 metres
	3 Depth to invert exceeding 1.00 metres but not exceeding 1.50 metres
	4 Disposal of materials off site

Clearing of Existing Ditches

Item coverage

The items for clearing of existing ditches shall in accordance with the Preambles to Price List General Directions include for:

- (a) providing all measures, equipment and resources necessary to ensure compliance with the specification;
- (b) trimming edges to a neat line;
- (c) spreading surplus materials on the verge within one kilometre of excavated material or loading away into transport;
- (d) leaving the site tidy and clean;
- (e) reports to the *Service Manager*.

Disposal of Materials Off Site

Item coverage

The items for disposal of materials off site shall in accordance with the Preambles to Price List General Directions include for:

- (a) disposal of materials off site;
- (b) submitting records and weighbridge tickets to the *Service Manager*;
- (c) compiling reports of waste disposal.

Grips

Units

The unit of measurement shall be:

- (i) grips linear metre
- (ii) disposal of materials off site cubic metre

Measurement	30	The measurement of grips shall be the quantities ordered by the <i>Service Manager</i> .	
Itemisation	31	Separate items shall be provided for grips in accordance with the General Principles and the following:	
		Group	Feature
		1	1 Grips
		2	1 Form new grip Reshape
		2	existing grip
	3	Disposal of materials off site	
Grips	32	The items for grips shall in accordance with the Preambles to Price List General Directions include for:	
Item coverage	(a)	providing all measures, equipment and resources necessary to ensure compliance with the specification;	
	(b)	trimming edges to a neat line;	
	(c)	spreading surplus materials on the verge within one kilometre of excavated material or loading away into transport;	
	(d)	leaving the site tidy and clean;	
	(e)	reports to the <i>Service Manager</i> .	
Disposal of Materials Off Site	33	The items for disposal of materials off site shall in accordance with the Preambles to Price List General Directions include for:	
Item coverage	(a)	disposal of materials off site;	
	(b)	submitting records and weighbridge tickets to the <i>Service Manager</i> ;	
	(c)	compiling reports of waste disposal.	

Cleaning And Clearing of Cattle Grids (To Include Disposal of Arisings to Contractors Tip Off Site): Daywork Programme

Measurement

- 1.** The hourly rate is applied in respect of the time spent on site undertaking the works. Where two or more sites are attended during the working day, travelling between sites is also measurable. For the avoidance of doubt, time spent travelling to and from the first and last site of the day, to and from tip and to and from water fills is not measurable. Neither is time spent tipping and water filling measurable.
- 2.** Time is charged in multiples of one quarter of an hour.
- 3.** For the avoidance of doubt, the requirements of Clause 14 in the Preamble do apply, and all traffic safety measures including any Stop and Go requirement is included in the hourly rates.

Item Coverage

- 1.** Gully emptying/jetting combination unit (including 2 crew): -
 - a) provision of water;
 - b) disposal of material (as Series 600);
 - c) as Series 9000, uplift applicable when instructed by the client

Winter Service

Measurement

1. The measurement of Winter Service shall be: -
 - a) monthly sums for the basic facility mid April – mid October and mid October – mid April for the whole of the county;
 - b) equal monthly sums for the global positioning system;
 - c) time charges for operatives and vehicles;
 - d) the value of De-Icing Material purchased and stored in the Client's depots calculated using the weight evidenced by delivery notes from a certificated weighbridge and usage from Schmidt Red Forge weighing equipment;
 - e) invoice costs for farmers/operators engaged on snow clearance plus a percentage addition;
 - f) equal monthly sums for maintenance of the Client's Winter Fleet.
2. The cost of hardware and software to allow the Service Manager to access current or historic information about vehicle tracking as recorded by the Global Positioning Equipment shall be borne by the Client.
3. The measurement of time charges for operatives shall be the elapsed time from the instructed time of commencement to the instructed time of stand- down (where standby instructed) or completion of Winter Service (where operations are instructed) rounded to the nearest quarter hour, with a minimum period of two hours unless the period is contiguous with the normal working day.
4. The measurement of time charges for vehicles shall be the time engaged on the highway on Winter Service. Time spent in the depot on standby, mounting and demounting equipment, loading, unloading, cleaning and maintenance shall not be measured.
5. Time shall be charged in multiples of one quarter of an hour.
6. The percentage addition on invoice costs for farmers and other operators engaged on snow clearance shall be applied to the net invoice costs after any discount and shall be deemed to include for all establishment charges, overheads and profit.
7. The measurement of the maintenance of the Client's Winter Fleet shall be classified according to type and age. The age of each item on April 1 each year shall determine which item in the Price List is applicable for the succeeding year.

Item Coverage

8. Basic Facility: -

- a) complying with the requirements of Works Specification Series 7800 Winter Service and within the Service Specification relating to Winter Service except where requirements are included in the item coverage for other items within this section of the method of measurement;
- b) all arrangements necessary to undertake Winter Service in accordance with this contract that are not separately measured.

9. Operatives for Winter Service: -

- a) all costs of employing labour including small non mechanical tools, traffic safety equipment including signs, cones and lamps, personal protective equipment; establishment charges, overheads and profit;
- b) disruption to other works including any costs of standing resources and wasted materials.

10. Client's dedicated gritters: -

- a) fuel and consumable stores;
- b) daily and weekly checks.

11. Contractor's reserve gritting capability: -

- a) all costs including fuel, consumable stores, repairs, checks, maintenance, insurance, establishment charges, overheads and profit;
- b) disruption to other works.

12. Maintenance of Client's Winter Fleet: -

- a) costs and charges associated with keeping the item in a roadworthy and operational condition in conformity with the Specification;
- b) inspection and cleaning for inspections;
- c) routine maintenance, servicing and repairs;
- d) spares;
- e) tyres, punctures and snow plough rubbers;
- f) oils and consumable items;
- g) breakdown repair and recovery;
- h) modification of vehicles and plant to which fleet items are to be fitted;
- i) substitutes for items unavailable for any reason;
- j) statutory requirements including licenses and fees;
- k) oil samples;
- l) testing and calibration;
- m) accident repairs;
- n) insurances not provided by the Client and all insurance excesses;
- o) processing warranty claims;
- p) signwriting on dedicated gritters

Emergency Service

Measurement

1. The measurement of Emergency Service shall be: -
 - a) equal monthly sums for the basic facility for the whole of the county;
 - b) time charges for operatives and vehicles;
 - c) time charges for other plant owned by the Contractor using rates contained in the time charge schedule ([Series 8000](#)) of the Price List;
 - d) invoice costs for Specialist Services and Equipment plus a percentage addition.
2. The measurement of time charge for operatives and vehicles where a team is called out outside Normal Working Hours shall be from the time the team leaves the depot to attend to the incident to the time it returns to the depot, subject to a minimum period of two hours unless the period is contiguous with the normal Working Day.
3. Where a team is ordered to attend to an incident during Normal Working Hours when engaged upon the service, the measurement of time charge for operatives shall be from the time the team leaves the part of the service it is working on to the time it returns.
4. Time shall be charged in multiples of one quarter of an hour.

Item Coverage

5. Basic Facility: -
 - a) complying with the requirements of Works Specification Series 7900 Emergency Service and within the Service Specification relating to Emergency Service except where requirements are included in the item coverage for other items within this section of the method of measurement;
 - b) all arrangements necessary to undertake Emergency Service and respond to Civil Emergencies in accordance with this contract that are not separately measured.
6. Operatives: -

- a) all costs of employing labour including small non mechanical tools, traffic safety equipment including signs, cones and lamps, personal protective equipment; establishment charges, overheads and profit;

- b) disruption to other works including any costs of standing resources and wasted materials.

7. Tipper Lorry as clause 7904AR: -

- a) all costs including fuel, consumable stores, repairs, checks, maintenance, insurance, establishment charges, overheads and profit;
- b) disruption to other works.

General

1. Civil Emergencies are, subject to the following, valued on a time charge basis in accordance with the rates and methods defined in Series 7900 Emergency Service.

Basic Facility

2. No monthly sums for basic facility are payable in respect of Civil Emergencies nor will the basic facility rate for Emergency Service be amended if and when a Civil Emergency is declared.

Operatives

3. Rates in the section headed “Operative for Emergency Service Team” only apply to operatives employed directly by the Contractor.

Where operatives are provided by other companies or agencies these costs are reimbursed at cost with a percentage addition tendered against Series 7900 in the Price List

4. Where personal protective equipment or consumable materials are purchased for directly employed operatives in excess of normal operational needs or specifically for or in preparation for a Civil Emergency, the costs, credits and reasonable restocking charges are reimbursed at net invoice cost with a percentage addition tendered against Series 7900 in the Price List.

Plant, Equipment and Vehicles

5. The value of plant, equipment and vehicles owned by the Contractor and engaged in a Civil Emergency is calculated using the rates and method of measurement contained in Series 7900 of the Price List as appropriate.
6. The value of plant, equipment and vehicles hired and engaged in a Civil Emergency is calculated using actual net costs with a percentage addition as tendered against Series 7900 item in the Price List.

Management Of Resources

7. The cost of management, administration and procurement of resources engaged in a Civil Emergency is deemed to be included in the rates contained in the Price List excluding only the cost of personal protective equipment incurred specifically to prepare for or deal with an emergency which is reimbursed at net invoice cost without percentage addition.

- 8.** The Design Fee Percentage is not applied to the value of services provided in a Civil Emergency except where, for certain services agreed between the Service Manager and the Contractor, CDM applies. Under these
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circumstances the Contractor will be required to take on the CDM Principal Designer role and the Design Fee Percentage will be paid on the value of those services where CDM applies.

Professional Services

9. Where engineering or technical staff are provided by the Contractor to give professional or expert advice e.g., providing advice on a damaged structure or building, the value of services provided is calculated by multiplying the time spent by the appropriate time charge hourly rates in the Price List. Where no appropriate rates exist then the Service Manager fixes reasonable rates having regard to other rates in the Price List.

General

1. Items in Series 8000 are used for valuing works for which there are no appropriate items in other Series of the Price List and no other method of valuing the works has been agreed.
2. The items are applicable to works of any type and any duration ranging from minor elements of Task Orders to complete Task Orders.
3. The Contractor is required to minimise the volume of works valued on a Time Charge basis by using other Series of the Price List to the full and negotiating new prices with the Service Manager for works that have not been covered.
4. The value of works that have been valued on a Time Charge basis is only included in the amount to be paid to the Contractor where the following conditions are fulfilled:
 -
 - a) the time spent on the works is both factually correct and, in the opinion of the Service Manager, represents effective and efficient working.
 - b) detailed and accurate substantiating records are kept of all work undertaken, resources used and the start and finish times of all activities in accordance with Paragraph 14.
 - c) invoice costs, where appropriate, are included only when the invoices are from companies supplying the goods or services who have been commissioned by the Contractor following a comprehensive procurement exercise that ensures quality of service, compliance with contract requirements and best value to the reasonable satisfaction of the Service Manager.
5. Where these conditions are not fulfilled the Service Manager may instruct the Contractor to revise his valuation of works to reflect the correct hours and/or efficient and effective working and/or commercially competitive costs for goods, materials or services.

Labour

6. The items in the Price List for Labour apply to operatives employed directly by the Contractor and also his Subcontractors, including labour only Subcontractors.
7. Labour rates are deemed to include all costs of employing labour, including but not limited to, the provision of small non-mechanical tools, traffic safety and management equipment including signs, cones, pedestrian barriers and lamps,

personal protective equipment, consumable materials, establishment charges, overheads and profit.

8. The amount of time measurable for labour is the period during which operatives are actively engaged in the works being valued on a Time Charge basis. Time is charged in multiples of one quarter of an hour.
9. The items in the Price List for overtime working are only used where work is required to be carried out outside Normal Working Hours by the Service Manager. The item applicable is determined in accordance with the rules for payment of overtime as laid down by the Construction Industry Joint Council in the Working Rule Agreement for the Construction Industry or other appropriate wage fixing body.

Plant

10. The items in the Price List for plant apply to plant owned by the Contractor and plant hired in without an operator. Plant hired in with an operator is valued on the basis of invoice cost plus a percentage addition in accordance with paragraph 13.
11. Plant prices are deemed to include all operational costs including but not limited to transportation to and from site, travelling time, fuel, consumables, repairs, maintenance, traffic safety and management requirements, insurance, depreciation, establishment charges, overheads and profit.
12. The amount of time measurable for an item of plant is the period during which the plant is actively engaged on the works being valued on a Time Charge basis. The unit of measure is generally per hour and time is charged in multiples of one quarter of an hour. In the case of traffic signals however, a daily price may apply, subject to the following: -
 - a) where engaged on Time Charge for 8 hours or more in any calendar day, the daily price applies.
 - b) where engaged on Time Charge for less than 8 hours in any calendar day, the hourly price applies, always providing the total hourly charge in respect of any calendar day does not exceed the daily price, in which case the daily price applies.

Percentage Addition on Invoice Costs

13. The percentage addition is applied to net invoice costs (including any discounts) and is deemed to include for all establishment charges, overheads and profit.

Time Charge Records

- 14.** Detailed daily records are kept of the resources employed on all works valued on a Time Charge basis. The records are maintained in a format to be agreed

with the Service Manager and include: -

- a) full description of the works;
- b) Task Order/Job/ number references;
- c) names of operatives and time started and finished;
- d) plant used and time started and finished;
- e) materials used;
- f) Subcontractor charges;
- g) waste disposal quantities and charges.

Restricted Working Hours Instructed by The Service Manager

Measurement

1. Where works are instructed by the Service Manager to be undertaken at restricted times and/or outside Normal Working Hours, a percentage addition may apply to the standard rates applicable to those items of work. For the avoidance of doubt, only one such percentage addition can apply to any standard rate.
2. The percentage addition does not apply to items in the Price List that specifically include rates for working outside Normal Working Hours.
3. Restricted working hours instructed by the Service Manager are classified according to the type of works as described in the Price List.

Item Coverage

4. Restricted working hours instructed by the Service Manager: -
 - a) all additional costs;
 - b) unproductive working time.
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