



FORM OF AGREEMENT

THIS AGREEMENT is made on 24 October 2025

BETWEEN:

- (1) The Royal Borough of Windsor and Maidenhead (**the “*Client*”**) and
- (2) Marlborough Highways Ltd (**the “*Contractor*”**)

together “the Parties”.

Whereas:

- (A) The Client wishes to appoint a contractor to provide the services as set out in more detail in this Agreement (“the service”).
- (B) The Contractor has offered to provide the service and the Client has accepted that offer.
- (C) The Parties are entering into this Agreement to record the terms of their agreement.

IT IS HEREBY AGREED AS FOLLOWS:

- 1. In this Agreement (including the recitals) terms in italics are identified in the Contract Data and words and expressions have the meanings given to them in the conditions of contract.
- 2. The following documents comprise the contract and are in the following order of priority. Any conflict between these documents is resolved in accordance with this order of priority:
 - (i) this Agreement
 - (ii) the clarification questions and responses
 - (iii) the conditions of contract and the schedules thereto
 - (iv) Contract Data Part One

- (v) Contract Data Part Two
- (vi) the Scope provided by the Client
- (vii) the Scope provided by the Contractor for its plan

3. In consideration for payment in accordance with the terms of this Agreement, the Contractor Provides the Service.

IN WITNESS whereof this Agreement has been duly executed and delivered as a Deed on the date and year first written above.

THE COMMON SEAL of THE ROYAL BOROUGH OF WINDSOR AND MAIDENHEAD

hereunto affixed is authenticated by:

[Redacted]

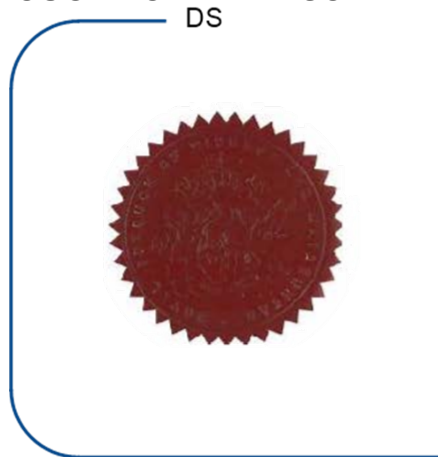
DocuSigned by:

[Redacted]

4C503B81106F410...

Authorised signatory:

Legal Support Coordinator



Seal No: 30635

EXECUTED AS A DEED by THE CONTRACTOR

Name: William Blostone

Job Title: Director

Signature:

DocuSigned by:

[Redacted]

F94BD9A731BD452...

Name: Joseph Revell

Job Title: Director

Signature

Signed by:

2393D89574384F1...

Contract Data

PART ONE – DATA PROVIDED BY THE *CLIENT*

Completion of the data in full, according to the Options chosen, is essential to create a complete contract.

1 General

The *conditions of contract* are the core clauses and the clauses for the following main Option, the Option for resolving and avoiding disputes and secondary Options of the NEC4 Term Service Contract June 2017 (with amendments January 2023)

Main Option	A, C and E	Option for resolving and avoiding disputes	W2
Secondary Options	X1, X2, X4, X12, X13, X17, X18, X19, X21, X24, Y(UK)2 and Additional Option Z		

The Main Options to be applied to the different parts of the service are as presented in the following table. However, the parties agree that each Service Component may transition during the Service Period from any option to any other or back again. **[Note:** Option C may be used for a Works Order if instructed by the Service Manager, or future *services* activities]

Service component	Main Option	Future Option
Reactive Response	A	A, C
Emergency Response	A, E	A, C, E
Routine and Planned Works	A, C	A, C
Drainage Cleansing	A	A, C
Winter Service	A	A, C
Highway Capital Improvement Projects	A, C	A, C
Mobilisation	A	
Demobilisation	A	
Contractor's Local Office Overhead	A	A, C
Highways Operational Management	A	A, C

The <i>service</i> is	the provision of maintenance and construction services, and operational highway management services to the highway network and associated public realm areas for The Royal Borough of Windsor and Maidenhead, defined within the authority boundary

The <i>Client</i> is	
Name	The Royal Borough of Windsor and Maidenhead
Address for communications	The Royal Borough of Windsor & Maidenhead, Town Hall, St Ives Road, Maidenhead, SL6 1RF

Address for electronic communications

highways@rbwm.gov.uk

The *Service Manager* is

Name

TBC

Address for communications

The Royal Borough of Windsor & Maidenhead, Town Hall, St Ives Road, Maidenhead, SL6 1RF

Address for electronic communications

TBC

The Affected Property is

the highway network, any associated highway asset, the adopted open space and public realm within the ownership of the Client and associated areas as set out in the Specification document and known as the “Affected Property”.

The Scope and Service Information is in

Schedules 2 – 6.

The *shared services* which may be carried out outside the Service Areas are

out of hours call centre for receiving emergency and incident response requests.

The *language of the contract* is

English

The *law of the contract* is the law of

England, subject to the jurisdiction of the courts of England

The *period for reply* is

fourteen (14) days

except that

• The *period for reply* for

early warnings

is

ten (10) days

• The *period for reply* for

compensation events

is

twenty-one (21) days

• The *period for reply* for

the priority codes described in the service information

is

as described in the documents

The following matters will be included in the Early Warning Register

Early warning meetings are to be held at intervals no longer than

one (1) month

2 The Contractor’s main responsibilities

If Option C or E is used

The *Contractor* prepares forecasts of the total Defined Cost for the whole of the *service* at intervals no longer than

one (1) month

3 Time

The *starting date* is

01/04/2026

The *service period* is

TBC

The *Contractor* submits revised plans at intervals no longer than

28 days

The period within which the *Contractor* is to submit a Works Order programme for acceptance is

within the period stated in the Works Order or if no period is stated, then within 14 days of receiving the Works Order.

If no plan is identified in part two of the Contract Data

The period after the Contract Date within which the *Contractor* is to submit a first plan for acceptance is

four (4) weeks

4 Quality management

The period after the Contract Date within which the Contractor is to submit the Plans outlined in the Service Information, including a quality policy statement and quality plan is

eight (8) weeks

The defects date is

twelve (12) months post-completion for Capital Works

The defects correction period is

four (4) weeks

5 Payment

The *currency of the contract* is the

The *assessment interval* is

The *interest rate* is % per annum (not less than 2) above the

rate of the bank

If Option C is used

The *Contractor's share percentages* and the *share ranges* are as described in the Pricing Schedule and Performance Framework (Schedule 4 and 6). The *Contractor's* share is assessed monthly on completion of activities and projects, and for Option C activities is from 01st April 2026 to 31st March 2040 until the end of the Service Period

If Option C or E is used

The *exchange rates* are those published by

on

6 Compensation events

If Option A is used

The *value engineering percentage* is 50%,

If there are additional compensation events

These are additional compensation events

The place where weather for weather affected services is to be recorded is the site where the Services are being delivered in the Affected Property

The weather measurements to be recorded for each calendar month are:

- the cumulative rainfall (mm).
- the number of days with rainfall more than 5mm.
- the number of days with minimum air temperature less than 0 degrees Celsius.
- the number of days with snow lying at 12:00 hours GMT
- The weather measurements are supplied from the weather station at the nearest depot, or in the event of depot weather station failure, by the Met Office station nearest the site.

The weather data are the records of past weather measurements for each calendar month which were recorded at the Met Office station nearest to the site or the nearest depot or weather station and which are available respectively from them.

8 Liabilities and insurance

If there are additional Client's liabilities

These are additional Client's liabilities

- The minimum amount of cover for insurance against loss of or damage caused by the Contractor to the Employer's property for any one claim or series of claims arising out of the same cause is £20million
- The minimum amount of cover for insurance in respect of loss of or damage to property (except the Client's property, Plant and Materials and Equipment) and liability for bodily injury to or death of a person (not an employee of the Contractor) arising from or in connection with the Contractor's Providing the Service for any one claim or series of claims arising out of the same cause is £20 million.
- The minimum limit of indemnity for insurance in respect of death of or bodily injury to employees of the Contractor arising out of and in the course of their employment in connection with this contract for any one claim or series of claims arising out of the same cause is £10 million
- Professional indemnity insurance in respect of the liability of the Contractor for negligence in Providing the Service is £2 million in the annual aggregate with one reinstatement or to a value to be agreed for specific Works Order schemes where the design liability is much higher
- Products Liability insurance in respect of the liability of the Contractor for losses or injury to a buyer, user or bystander caused by a defect or malfunction of the product, defective design or failure to warn:

Cover / indemnity is £5 million for any one claim or series of claims arising out of the same cause, provided that such insurance continues to be available at commercially reasonable rates.
- Employer's liability insurance with a limit of at least £10 million in relation to any one claim or series of claims

Resolving and avoiding disputes

The *tribunal* is arbitration, followed by litigation.

If the *tribunal* is arbitration The *arbitration procedure* is the latest version of the ICE Arbitration Procedure in force when the arbitrator is appointed.

The place where arbitration
s to be held is London

The person or organisation who will choose an arbitrator if the Parties cannot agree a choice or if the *arbitration procedure* does not state who selects an arbitrator is

the Institution of Civil Engineers, London

The *Senior Representatives* of the *Client* are

Name (1) The Service Lead - TBC

Address for communications The Royal Borough of Windsor & Maidenhead, Town Hall, St Ives Road, Maidenhead, SL6 1RF

Address for electronic communications TBC

Name (2)	TBC
Address for communications	The Royal Borough of Windsor & Maidenhead, Town Hall, St Ives Road, Maidenhead, SL6 1RF
Address for electronic communications	TBC

The *Adjudicator* is chosen by the Adjudicator nominating body

Name	TBC
Address for communications	TBC
Address for electronic communications	TBC
The <i>Adjudicator nominating body</i> is	The Institution of Civil Engineers

X1: Price adjustment for inflation (used only with Options A and C)

If Option X1 is used	The proportions used to calculate the Price Adjustment Factor are linked to the index for the Consumer Price Index (CPI).
The <i>base date</i> for indices is	01/01/2027
The <i>inflation adjustment dates</i> are	01/04/2027
	and each subsequent 1st April until the end of the Service Period.
These indices are	Consumer Price Index - CPI .

X4: Parent Company Guarantee

If Option X4 is used

The Employer requires a parent company guarantee in the form appended from the Contractor's ultimate parent company to secure the due performance by the Contractor of its obligations to the Employer. The Contractor shall provide (within the time set by the Employer or within a reasonable time if no time is set) such parent company guarantee. The parent company guarantee cover shall be extended to the period identified In Option X18. The Employer requires a parent company guarantee with a value of £1 million per annum.

X12: Multiparty collaboration (not used with Option X20)

If Option X12 is used The details are as set-out in the Collaboration and Partnering document Schedule 5 and shall be developed jointly between the Client and Contractor. The KPI Framework and Performance measures will be implemented by the Contractor and reported monthly.

X13: Performance bond

If Option X13 is used	The amount of the performance bond is	£1,000,000

X17: Low service damages

If Option X17 is used – as applicable to Highway Maintenance and Capital Works Orders
The *service level table* is shown below:

X17 applicable to service performance.

Low service damages will apply to any service area after a 6-month period of failed performance. The value of low service damages applicable will be 5% of the overall service charge for the specific service area that is related to the poor performance. The charge can only be applied to the service area relevant to the poor performance and does not offset any previous or reoccurring penalty or retention. The 5% charge will be applied to the annual final account and deducted from any final payment application in month 12. The penalty can only be applied to the financial year the 6-month low performance period occurs.

X18: Limitation of liability

If Option X18 is used	The <i>Contractor's</i> liability to the <i>Client</i> for indirect or consequential loss is limited to	£10,000,000
	For any one event, the <i>Contractor's</i> liability to the <i>Client</i> for loss of or damage to the <i>Client's</i> property is limited to	£10,000,000
	The <i>Contractor's</i> liability for Defects due to its design of an item of Equipment is limited to	£10,000,000
	The <i>Contractor's</i> total liability to the <i>Client</i> for all matters arising under or in connection with the contract, other than excluded matters, is limited to	125% of the total value of contract expenditure in any calendar year in the aggregate, and not for each and every claim.
	The <i>end of liability date</i> is	twelve (12) years years after the end of the Service Period

X19: Termination by either Party (not used with Option X11)

If Option X19 is used	The <i>minimum period of service</i> is	four (4) years after the <i>starting date</i>
	The <i>notice period</i> is	twelve (12) months

X23: Extending the Service Period

If Option X23 is used	The <i>maximum service period</i> is	84 months after the <i>starting date</i> .
	The <i>periods for extension</i> are 60 months and then a final 24 months. This will be at the absolute discretion of the Employer. The Employer will notify the Contractor at least 12 months prior to each period of extension.	

X29: Climate change

If option X29 is used	The Contractor is to submit a first climate change plan for acceptance at the end of Year 1

Y(UK)2: The Housing Grants, Construction and Regeneration Act 1996

If Y(UK)2 is used and the date on which the final payment becomes due is not fifteen weeks after the end of the accounting period or Service Period	The period is	four (4) weeks

The period for payment is

28

days after the date on which payment becomes due

If Y(UK)2 is used and the final date for payment is not seven days after the date on which payment becomes due

Z: Additional conditions of contract

If Option Z is used

The *additional conditions of contract* are

Z1. IDENTIFIED AND DEFINED TERMS

Z1.1 After Core Clause 11.2(19) add the following:

11.2(23)	The <i>Traffic Manager</i> is appointed by and represents the <i>Client</i> in undertaking the <i>Client's</i> statutory duties under the Traffic Management Act 2004 and New Roads and Street Works Act 1991.
11.2(24)	The following terms are synonymous: 'Works Order' and 'CONFIRM Work Order'.
11.2(26)	A Street is the meaning ascribed by Section 48 of the New Roads and Street Works Act 1991 or any remaking or amendment to such meaning.
11.2(29)	TUPE means the Transfer of Undertakings (Protection of Employment) Regulations and 2006 or any remaking or re-enactment thereof.
11.2(30)	Documents are all drawings, details, plans, reports, calculations, specifications, schedule of rates, levels, quality submission and setting out details and other documents (whether or not in hard copy or in electronic format) of any nature whatsoever and the designs contained in them provided by or on behalf of the <i>Contractor</i> in the course of performing its obligations under this contract.
11.2(31)	Provided Services means the works carried out within the Scope or in response to any issued Works Order

Z2. SUBCONTRACTOR PAYMENT

Z2.1 Renumber Core Clause 24.3 as 24.3B. After the last bullet point add another as follows:-

- they do not comply with the provisions of this clause 24.

And after Core Clause 24.2 insert the following Core Clauses 24.3A and 24.3C:-

24.3A	The <i>Contractor</i> does not propose nor appoints a subcontractor unless the conditions of contract with the subcontractor contains a payment clause the same or better than core clause 51 and secondary option clause Y(UK)2 contained in this contract.
24.3C	The <i>Contractor</i> shall in relation to any subletting of any portion of the <i>service</i> (or the design thereof): ▪ procure that the relevant sub-contract shall contain such obligations as necessary to ensure that it is in all respects compatible with the terms of this contract and in particular steps down the obligation to use the degree of skill and care specified in clause 20.10 (Z26) where the subcontractor has a design responsibility. ▪ provide to the <i>Service Manager</i> promptly certified copies of any subcontract (save for particulars of the cost of such sub-contract works unless other provisions of this Contract oblige the Contractor to disclose them).

Z3. EXTENDED SERVICE PERIOD

Z3.1 After Core Clause 36.1 add the following Core Clause 37:-

37 Extended service period

- 37.1 The *Client* retains the option and may offer the *Contractor* an extension(s) to the *service period* in respect of some or all of the *service*. Extension(s) to the *service period* will be assessed as stated in the Scope.
- 37.2 The *Client* notifies the *Contractor* not less than 52 weeks prior to the end of the latest agreed *service period* of its wish to change the *service period* by the extended period or to implement core clause 37.5.
- 37.3 The *Contractor* may agree the extension to the *service period* within two weeks of the date of the *Client's* notification and the *Contractor* gives unqualified agreement that the *Contractor* and *Client* are bound by the terms and conditions contained in the current contract.
- 37.4 Neither Party has any redress or claim against the other if the option to extend is not invoked or agreed.
- 37.5 Whilst the *Client* will discuss the performance of both of the Parties to the Contract, and the partnering relationship, at regular intervals throughout the contract and will work with the *Contractor* to address any perceived shortcomings, the decision as to whether or not to award contract extensions, is reserved by the *Client* to its absolute discretion. The *Client* does however give its assurance that such decisions will not be taken vexatiously.

Z4. QUALITY MANAGEMENT

Z4.1 Re-number core clause 11.2(5) as 11.2(5A) and after 11.2(5A) insert the following core clause 11.2(5B):-

11.2 Identified and defined terms

- 11.2(5B) The Defects Certificate is either a list of Defects that the *Service Manager* has notified before the *defects date* which the *Contractor* has not corrected or, if there are no such Defects, a statement that there are none.

Z4.2 Delete core clauses 41.1 to 44.2 inclusive and replace with the following core clauses 41.1 to 46.2:-

41 Tests and Inspections

- 41.1 The subclauses in this clause only apply to tests and inspections required by the Scope or the applicable law.
- 41.2 The *Contractor* and the *Client* provide materials, facilities and samples for tests and inspections as stated in the Scope.
- 41.3 The *Contractor* and the *Service Manager* each notifies the other of each of their tests and inspections before it starts and afterwards notifies the other of its results. The *Contractor* notifies the *Service Manager* in time for a test or inspection to be arranged and done before doing work which would obstruct the test or inspection. The *Service Manager* may watch any test done by the *Contractor*.
- 41.4 If a test or inspection shows that any work or *service* has a Defect, the *Contractor* corrects the Defect and the test or inspection is repeated.
- 41.5 The *Service Manager* does tests and inspections without causing unnecessary delay to the work or *service*, or to a payment which is conditional upon a test or inspection being successful. A payment which is conditional upon a

Service Manager's test or inspection being successful becomes due at the later of the *defects date* and the end of the last *defect correction period* if

- the *Service Manager* has not done the test or inspection; and
- the delay to the test or inspection is not the *Contractor's* fault.

- 41.6 The *Service Manager* assesses the cost incurred by the *Client* in repeating a test or inspection after a Defect is found. The *Contractor* pays the amount assessed.

42 Testing and inspection before delivery

- 42.1 The *Contractor* does not bring to the Affected Property those Plant and Materials which the Scope states are to be tested or inspected before delivery until the *Service Manager* has notified the *Contractor* that they have passed the test or inspection.

43 Searching for and notifying Defects

- 43.1 Until the *defects date*, the *Service Manager* may instruct the *Contractor* to search for a Defect. The *Service Manager* gives reasons for the search with the instruction. Searching may include:
- uncovering, dismantling, re-covering and re-erecting work,
 - providing facilities, materials and samples for tests and inspections done by the *Service Manager* and
 - doing tests and inspections which the Scope does not require.
- 43.2 Until the *defects date*, the *Service Manager* notifies the *Contractor* of each Defect as soon as the *Service Manager* finds it and the *Contractor* notifies the *Service Manager* of each Defect as soon as it finds it.

44 Correcting Defects

- 44.1 The *Contractor* corrects a Defect whether or not the *Service Manager* notifies it.
- 44.2 The *Contractor* corrects a notified Defect before the end of the *defect correction period*. The *defect correction period* begins at Completion for Defects notified before Completion and when the Defect is notified for other Defects.
- 44.3 The *Service Manager* issues the Defects Certificate at the later of the *defects date* and the end of the last *defect correction period*. The *Client's* rights in respect of a Defect which the *Service Manager* has not found or notified are not affected by the issue of the Defects Certificate.
- 44.4 The *Contractor* arranges with the *Client's Traffic Manager* to allow the *Contractor* access to and use of a part of the Affected Property which it has taken over if they are needed for correcting a Defect and informs the *Service Manager* of the progress of such arrangements as they occur. In this case the *defect correction period* begins when the necessary access and use have been provided.
- 44.5 The *Contractor*, *Service Manager* and *Client's Traffic Manager* act to minimise the period taken to arrange access.

45 Accepting Defects

- 45.1 The *Contractor* and the *Service Manager* may each propose to the other that the Scope should be changed so that a Defect does not have to be corrected.
- 45.2 If the *Contractor* and the *Service Manager* are prepared to consider the change, the *Contractor* submits a quotation for reduced Prices or an earlier Task Completion Date or both to the *Service Manager* for acceptance. If the *Service Manager* accepts the quotation, he gives an instruction to change the Scope, the Prices and the Task Completion Date accordingly.

46 Uncorrected Defects

- 46.1 If the *Contractor* is given access in order to correct a notified Defect but it has not corrected it within its *defect*

correction period, the *Service Manager* assesses the cost to the *Client* of having the Defect corrected by other people and the *Contractor* pays this amount. The Scope is treated as having been changed to accept the Defect.

- 46.2 If the *Contractor* is not given access in order to correct a notified Defect before the *defects date*, the *Service Manager* assesses the cost to the *Contractor* of correcting the Defect and the *Contractor* pays this amount. The Scope is treated as having been changed to accept the Defect.

Z4.3 Delete Core Clause 61.7 and replace with the following:-

61 Notifying compensation event

- 61.7 A compensation event is not notified after the *defects date* or after the end of the *service period* whichever is earlier.

Z4.4 Re-number Core Clause 81 and 81.1 as Core Clause 81A and 81A.1 respectively.

Z4.5 After Core Clause 81A.1 and insert the following Core Clause:-

81B Repairs

- 81B.1 Until the Defects Certificate has been issued and unless otherwise instructed by the *Service Manager*, the *Contractor* promptly replaces loss of and repairs damage to the Provided Service, Plant and Materials.

Z5. DAMAGE TO THE AFFECTED PROPERTY

Z5.1 Add the following clause after Core Clause 44.2:-

45 Damage to Affected Property

- 45.1 The *Contractor* and *Service Manager* notify each other as soon as either becomes aware of loss or damage to the *Affected Property* caused by the *Contractor*. The *Contractor* corrects the loss or damage (except for an *Client's Liability*) within the period notified by the *Service Manager* after discussions with the *Contractor*. If the *Contractor* has not corrected the loss or damage within the *notified period* then the *Service Manager* may instruct Others to correct the loss or damage. The *Service Manager* assesses the cost of Others correcting the loss or damage and the *Contractor* pays this amount.

Z6. NOT USED

Z7. ASSESSING THE AMOUNT DUE CORE CLAUSE 50

Z7.1 Delete Core Clause 50.3 and replace with the following:-

50 Assessing the amount due

- 50.3 The amount due is
- the Price of completed Works Orders to Date,
 - at *Service Manager's* discretion the Price for Services Provided to Date,
 - plus other amounts to be paid to the *Contractor*,
 - less amounts to be paid by or retained from the *Contractor*.
- Any tax which the law requires the *Client* to pay to the *Contractor* is included in the amount due.

Z8. PAYMENT DATES CORE CLAUSE 51

Z8.1 Amend Core Clause 51 as follows:-

51 Payment

- (i) Core Clause 51.1 line 1:
Delete 'one week' and replace with 'three weeks';
- (ii) Core Clause 51.2 second bullet point:
Delete 'three weeks' and replace with 'four weeks'.

Z9. PAYMENT DATES SECONDARY OPTION Y(UK)2

Z9.1 Amend Secondary Option Clause Y(UK)2 as follows:-

Y2.2 Dates for payment

- (i) Secondary Option Clause Y2.2 2nd bullet point:
Delete 'fourteen days' and replace with 'seven days'
- (ii) Secondary Option Clause Y2.2 Final date for payment:
Delete 'seven days' and replace with 'twenty one days';

Y2.3 Notice of intention to withhold payment

- (i) Secondary Option Clause Y2.3 line 2 (the 'prescribed period'):
Delete 'seven days' and replace with 'three days'.

Y2.2 Dates for payment:

The date on which a payment becomes due is the later of

- the date of receipt by the Party making payment of an invoice, issued in accordance with these conditions of contract and
- Seven Days after the assessment date.

The date on which the final payment becomes due is the later of

- the date of receipt by the Party making payment of an invoice, issued in accordance with these conditions of contract and
- if the Service Manager makes an assessment after the end of the Service Period, fifteen weeks after the end of the Service Period or, if a different period is stated in the Contract Data, within the period stated,
- if the Service Manager does not make an assessment after the end of the Service Period, two weeks after the Contractor issues its assessment or
- if the Service Manager has issued a termination certificate, fifteen weeks after the issue of the certificate.

The final date for payment is twenty-one days after the date on which payment becomes due, or a different period for payment if stated in the Contract Data.

The Service Manager's certificate is the notice of payment specifying the amount due at the payment due date (the notified sum, which may be zero) and stating the basis on which the amount was calculated. If the Service Manager does not make an assessment at the end of the Service Period, the Contractor's assessment is the notice of payment.

Z10. COMPENSATION EVENTS

Z10.1 Core Clause 60: Compensation Events

After the last bullet point in Core Clause 60.1(1) add the following:

or

- a change made to correct an ambiguity or discrepancy in or between any of the documents forming part of this contract where the occurrence of that ambiguity or discrepancy is attributable to the *Contractor*.

At the end of Core Clause 60.1(10) add:

"unless it was reasonable for the *Service Manager* to carry out the test or inspection, having regard to previous instances of work which did not comply with the requirements of this contract."

After Core Clause 60.1(18) and add:

- 60.1(19) When the weather conditions are such as to make the commencement or continuance of work unsafe, undesirable and/or impracticable work may cease with the agreement of the *Service Manager*. In such circumstances and when the work ceases for a period in excess of 4 hours, the *Service Manager* will issue to the *Contractor* confirmation of cessation, if requested to do so by the *Contractor*, and provided:
- (i) the *Contractor* has taken all reasonable steps to mitigate the effects of such weather conditions and
 - (ii) the timely execution of the work is critical to the *Contractor's* Accepted Plan or Works Order programme which ever is applicable.

Only continuous periods of 4 hours or more for which the *Service Manager* has issued confirmation are taken into account for calculating changes to the Works Order completion date. This clause will not apply to Winter Service or other works the purpose of which is to combat the effects of adverse weather and which therefore have to be undertaken in such conditions.

Z11. REASONS FOR TERMINATION

Z11.1 Delete Core Clause 91.2 and replace with the following:-

91.2 Reasons for termination

- 91.2 The *Client* may terminate if the *Service Manager* has notified that the *Contractor* has defaulted in one of the following ways and not put the default right within four weeks of notification.
- Substantially failed to Provide the Service, which includes continued failure to meet agreed performance targets as set out in the *Contractor's* quality submission (R11).
 - Not provided a bond or guarantee which this contract requires (R12).
 - Appointed a Subcontractor for substantial work before the *Service Manager* has accepted the Subcontractor or assigned the Contract without the consent in writing of the Client(R13).

Z12. SUBCONTRACTING

Z12.1 After Core Clause 24.3 add the following Core Clause 24.4:

- 24.4 The Contractor does not subcontract the whole of the *service*. The provision of labour by a third party on a 'labour only' basis will not be deemed to be subcontracted under this Clause of the Contract.

Z13. NAMED KEY PERSONS

Z13.1 Acceptance by the *Client* of key persons stated in the Contract Data Part Two does not constitute acceptance that such individuals are suitable for the roles assigned to them or serve to relieve the *Contractor* of its duties or obligations under the contract.

Z14. NAMED SUBCONTRACTORS

Z14.1 Where the *Contractor* has nominated a Subcontractor in the Contract Data Part Two for part of the *service*, acceptance of the Contract Data Part Two by the *Client* without qualification of such nomination is deemed to be consent on the same legal basis as consent by the *Service Manager* under Core Clause 24.2. Any such Subcontractor is not removed by the *Contractor* from the part of the *service* for which he has been nominated without the prior written consent of the *Service Manager*.

Z14.2 Neither the objection to nor any failure to raise an objection to a proposed Subcontractor either by or through the *Service Manager* relieves the *Contractor* of any liability or obligation under the contract.

Z15. QUALITY SUBMISSION

Z15.1 The *quality submission* sets out the *Contractor's* proposals for the management and resourcing of the *service*.

Z15.2 The *Contractor* warrants:

- that the representations contained in the *quality submission* are accurate in every respect and may be fully relied upon by the *Client* where the standards represented exceed the minimum originally specified by the *Client*.
- that the *quality submission* does not constitute a qualification to his tender. Should any discrepancy arise between the *quality submission* and other contractual documents, the Scope takes precedence.

Z16. RECOVERY OF SUMS DUE FROM THE CONTRACTOR

Z16.1 Whenever under the Contract any sum of money shall be recoverable from or payable by the *Contractor* such sum may be deducted from or reduced by the amount of any sum or sums then due or which at any time thereafter may become due to the *Contractor* under the Contract or any other contract with the *Client*, and this and such contract or contracts shall for all purposes be deemed to be mutual dealings for the purposes of the Insolvency Act 1986 as amended or superseded.

Z17. RETENTION

Z17.1 During the final 12 months of the *service period*, the payment due to the Contractor at each assessment date will be subject to retention at the rate of 5% for all *services* and Works Orders undertaken.

Z17.2 The amount retained at the end of the *service period* is held by the Client for a period of 12 months.

Z17.3 If after the expiry of the *service period* any Defects occurs requiring correction it shall be carried out by Others employed by the *Client*. Prior to the Defect being corrected the *Client* tells the *Contractor* and the Parties meet within 10 working days. The *Client* corrects the Defect within his time frame and this may not give the Parties time to meet. If the Defect is the responsibility of the *Contractor*, the *Client* assesses the cost to him of having the Defect corrected by other people and deducts this from the retention money.

Z17.4 Any *services* provided by the *Contractor* or his subcontractor which are guaranteed against Defect or non performance will be honoured by the *Contractor* for the full duration of the guarantee period regardless of the end date of the *service period*.

Z17.5 The retention amount becomes a single amount and is not related to specific Works Orders. Retention from one Works Order may be assigned to correct a Defect on another Works Order.

Z17.6 The *Client* does not use retention to correct a Defect after the expiry of the *defects date* stated on the Works Order, in the Scope, or 12 months after the Task completion.

Z18. TAX AND NATIONAL INSURANCE CONTRIBUTIONS

Z18.1 This contract falls within the scope of the Construction Industry Scheme Regulations and the *Contractor* must be registered as required in Clause Z18.2.

Z18.2 The *Contractor* must provide the *Client* with details of his HM Revenue & Customs new Construction Industry Scheme registration details for verification; namely:

- i) Company Unique Tax Reference (UTR);
- ii) Company Name;
- iii) Company Trading Name;
- iv) Company Registration Number.

Z19. LOCAL PURCHASING OF SERVICES

Z19.1 The *Client* does and will continue to employ throughout the *service period* local agricultural contractors, hauliers etc to assist with snow and ice clearance during certain weather conditions.

Z20. NOT USED

Z21. MAXIMUM VALUE OF WORKS ORDER

Z21.1 The maximum value of any one Works Order will be as set out in the Scope.

Z22. MINIMUM ANNUAL VALUE OF SERVICE TO BE PROVIDED

Z22.1 The *Client* does not guarantee the *Contractor* a minimum value of *services* in any one contract year between anniversary dates.

Z23. STARTING THE SERVICE PERIOD

Z23.1 Delete core clause 30.1 and replace with the following:-

30.1 The *Contractor* does not start work until the *starting date*, except as stated in the Scope, and Provides the Service throughout the *service period*.

Z24. OPTION X1 PRICE ADJUSTMENT FOR INFLATION

Z24.1 Defined terms

- (a) The Base Date Index (IB) is the latest available Work Category Index before the Base Date.
- (b) The Latest Work Category Index (IA) is the latest available Work Category Index before the date of assessment of an amount due.
- (c) The Price Adjustment Factor is the factor calculated, for each Work Category, using the Option selected in the Contract Data.
- (d) The Price Adjustment Amount is calculated, for the relevant rates and prices in the Price List, using the relevant Work Category Index according to which Option is selected in the Contract Data.
- (e) The Base Date is the 1st January each year commencing on 01st April 2027.
- (f) The Work Categories are the work categories listed.
- (g) Work Category Index is the index applicable to each Work Category.

Z24.2 The formula for calculating the Price Adjustment Factor (PAF) for each Work Category is: $PAF = (IA - IB) / IB$

where:

IA = the Latest Work Category Index (for the relevant Work Category)

IB = the Base Date Index (for the relevant Work Category)

The formula for calculating the Price Adjustment Amount is:

$(VB \times PAF) \times (100\% - NA)$

where:

VB = the value of the work carried out at the base date rates and prices

PAF = the Price Adjustment Factor calculated as set out above.

NA = The non – adjustable element

The non- adjustable element (NA) as specified in the formula above is a reduction for efficiency savings and fixed costs. The value for this is as recommended by the Highway Term Maintenance Association (HTMA) and the Civil Engineering

Contractors Association (CECA).

The NA for this contract is 5%

Z24.3 The indices used to calculate the Price Adjustment Factor for each Work Category are CPI- Consumer Price Index.

- (a) The Price List specifies which Work Category (and therefore which Work Category Index) is applicable to each rate and price included in the Price List.
- (b) The Price Adjustment Factor for each Work Category and the Price Adjustment Amount for the relevant rates and prices in the Price List are applied at the beginning of every April.
- (c) The rates, prices and amounts in the Price List remain the same for the term of this contract unless changed pursuant to any provision of this contract.
- (d) The Service Manager and Contractor may agree to add new items with base date prices to the Price List. In such an event, the Service Manager and Contractor also agree which Work Category Index will be applicable to the new item.

Z24.4 WORK CATEGORY INDICES

<u>Ref No.</u>	<u>Work Category</u>
WC/01	Routine, Planned, and Time Charge Works
WC/02	Renewals and Construction Works
WC/03	Professional Services
WC/04	Machine Surfacing
WC/05	Hand Surfacing / Patching
WC/06	Surface Dressing
WC/07	Road Markings

Z25 COMMUNICATIONS

Z25.1 After Core Clause 13.8 add the following clause:

Communications

13.9 Notwithstanding any other provision of this contract, where the *Service Manager* gives acceptance or approval or similar no such acceptance or approval or similar shall diminish or relieve the *Contractor* from any of its obligations or responsibilities under this contract.

- 13.10 The following communications shall be deemed to have no effect if made by electronic mail transmission:-
- (i) any notification of termination of this contract or the employment of the *Contractor* under it
 - (ii) any notification by the *Contractor* of its intention to suspend performance of his obligations under this contract
 - (iii) any invoking by either party of the procedures applicable under this contract to the resolution of disputes or differences.

Z26. PROVIDING THE SERVICE

Z26.1 After Core Clause 20.2 add the following clauses:

Providing the Service

- 20.3 the *Contractor* Provides the Service and completes it in a good and workmanlike manner using only materials which are new (unless this contract specifically states that used materials of the type in question may be used), sound and of good quality and which are suitable for their intended use and to a standard which it is reasonable to expect from

an experienced contractor familiar with the Affected Property.

- 20.4 The *service* when completed will comply with all appropriate requirements of any relevant local or other relevant authority and all relevant statutory requirements.
- 20.5 The *Contractor* does not and does not authorise or approve the specification or use by others of any products or materials not in conformity with relevant British Standards or Codes of Practice or which at the time of use are well known to builders or designers of the relevant discipline within the United Kingdom to be deleterious to health and safety or to the durability of buildings and/or other structures and/or finishes and/or plant and machinery or any parts thereof in the particular circumstances in which they are used ("Deleterious Material") unless the *Contractor* has been instructed in writing specifically to use such a product or material and also the *Contractor* has advised the *Service Manager* in writing that the said product or material is otherwise prohibited under this clause.
- 20.6 If in the performance of its obligations under this contract the *Contractor* becomes aware that he or any other person has specified or used or authorised or approved the specification or use by others of any Deleterious Material the *Contractor* shall notify the *Service Manager* in writing forthwith. This Clause does not create any additional duty for the *Contractor* to inspect or check the work of others which is not otherwise required by this contract
- 20.8 The *Contractor* in exercising its design responsibilities under this contract exercises (and warrants that it has exercised) all the skill, care and diligence to be expected of a competent and appropriately qualified designer of the design discipline appropriate to the design being undertaken (whether engineer or other) who is experienced in undertaking the design such as that which the Contractor undertakes under this contract in connection with work of the same type, complexity, value and timescale as the *service* and who is familiar with the Affected Property in question.
- 20.9 The *Contractor* in Providing the Service provides the necessary supervision and performs and provides everything necessary for proper organisation and co-ordination in accordance with the requirements of this contract.
- 20.10 The *Client* is entitled to add to or omit from the properties which are Affected Properties and generally to add to or omit from the scope of the *service*. In the event of such omissions but subject to the operation of clause Z38.2 the *Contractor* shall not be entitled to compensation whether for loss of expected profit (or similar) or otherwise in respect of such omissions from the *service* or Affected Properties.
- 20.11 Copyright and registered and unregistered design rights in all Documents will remain vested in the *Client* but the *Client* hereby grants (or if such a grant cannot legally take place until a later date agrees to grant) to the *Contractor* with effect from the date of this contract or in the case of Documents not yet in existence with effect from the creation of them an irrevocable fully paid up royalty free non-exclusive licence to use and reproduce all Documents for any purpose whatsoever connected with the *service* (including but without limitation the execution, completion, maintenance, letting, advertisement, modification, extension, reinstatement and repair of the works which are the subject matter of the *service*). Such licence will carry the right to grant sublicences.

Z27. CHANGE OF CONTROL OF CONTRACTOR

Z27.1 The *Contractor* shall notify the *Client* immediately if the *Contractor* undergoes a change of control within the meaning of Section 1124 of the Corporation Tax Act 2010 ("**Change of Control**"). The *Client* may terminate the Contract by giving notice in writing to the *Contractor* with immediate effect within six (6) months of:-

- (i) being notified that a Change of Control has occurred; or
- (ii) where no notification has been made, the date that the *Client* becomes aware of the Change of Control but shall not be permitted to terminate where the *Client* granted prior written approval of the Change of Control.

Z27.2 A termination on this ground stands as a termination for any reason under Core Clause 90.2

Z28. CONFIDENTIALITY

Z28.1 For purposes of this clause the following definitions apply:

- "Commercially Sensitive Information" comprises the information of a commercially sensitive nature relating to the Contractor, its Intellectual Property Rights or its business which the Contractor has indicated to the Client in writing that, if disclosed by the Client, would cause the Contractor significant commercial disadvantage or material financial loss; and
- "Confidential Information" means any information, which has been designated as confidential by either Party in writing or that ought reasonably to be considered as confidential however it is conveyed, including information that relates to the business, affairs, developments, trade secrets, know-how, personnel and suppliers of the *Client* or the *Contractor*, including Intellectual Property Rights, together with all information derived from the above, and any other information clearly designated as being confidential (whether or not it is marked as "confidential")

Z28.2 All plans, drawings, designs or specifications supplied by the *Client* to the *Contractor* shall remain the exclusive property of, and shall be returned to the *Client* on completion of the Contract and shall not be copied other than for the provision of the service, and no information relating to the Goods or the Services shall be disclosed to any third party, except as required for the purpose of this Contract.

Z28.3 The *Contractor* shall keep secret and shall not divulge to any third party (except subcontractors accepting a like obligation of secrecy, and then only to the extent necessary for the performance of the sub-contract) all information given by the *Client* in connection with the Contract or which becomes known to the *Contractor* through his performance of the Contract or use the same other than for the purpose of executing the Contract.

Z28.4 The *Contractor* shall not mention the *Client's* name in connection with the Contract or disclose the existence of the Contract in any publicity material or other similar communication to third parties without the *Client's* prior consent in writing.

Z28.5 The *Contractor* will keep confidential any information it becomes aware of by reason of the operation of this Contract.

Z28.6 Except to the extent set out in this clause or where disclosure is expressly permitted elsewhere in this Contract, each Party shall:

- treat the other Party's Confidential Information as confidential; and
- not disclose the other Party's Confidential Information to any other person without the owner's prior written consent.

Z28.7 Clause Z28.6 shall not apply to the extent that:

- such disclosure is a requirement of Law placed upon the Party making the disclosure, including any requirements for disclosure under the Audit Commission Act 1998 or under the Freedom of Information Act 2000 (FOIA) or the Environmental Information Regulations 2004 (EIR) or equivalent statutory provisions;
- such information was in the possession of the Party making the disclosure without obligation of confidentiality prior to its disclosure by the information owner;
- such information was obtained from a third party without obligation of confidentiality;
- such information was already in the public domain at the time of disclosure otherwise than by a breach of this Contract; or
- it is independently developed without access to the other Party's Confidential Information.

Z28.8 The *Contractor* may only disclose the *Client's* Confidential Information to their employees or agents ("**Contractor Personnel**") who are directly involved in the provision of the Works or Services and who need to know the information and shall ensure that such *Contractor Personnel* are aware of and shall comply with these obligations as to confidentiality.

Z28.9 The *Contractor* shall not, and shall procure that the *Contractor Personnel* do not, use any of the *Client's* Confidential Information received otherwise than for the purposes of this Contract

Z28.10 Nothing in this Contract shall prevent the *Client* from disclosing the *Contractor's* Confidential Information:

- to any consultant, contractor or other person engaged by the *Client*; or
- for the purpose of the examination and certification of the *Client's* accounts or any other form of audit of the *Client*.

Z28.11 The *Client* shall use all reasonable endeavours to ensure that any government department, employee, third party or Sub-contractor to whom the *Contractor's* Confidential Information is disclosed pursuant to this Contract is made aware of the *Client's* obligations of confidentiality.

Z28.12 Nothing in this clause shall prevent either Party from using any techniques, ideas or know-how gained during the performance of the Contract in the course of its normal business to the extent that this use does not result in a disclosure of the other Party's Confidential Information or an infringement of Intellectual Property Rights.

Z28.13 The provisions of this Clause shall survive the expiration or termination of this Contract.

Z29. PROTECTION OF PERSONAL DATA

Z29.1 For purposes of this Clause Z29, the following definitions shall apply:

- Certified Data Wiping means data destruction through a service that can certify that data held on information technology systems (including hard disk drives and/or other digital media) has been wiped;
- Data Controller has the meaning given under Data Protection Law.
- Data Processor has the meaning given under Data Protection Law.
- Data Protection Law means all law relating to privacy and the processing of personal data, including all applicable guidance and codes of practice issued by the Information Commissioner's Office or any replacement UK data protection or related privacy law in force in England and Wales, including, but not limited to the Data Protection Act 2018;
- Data Subject has the meaning given under the Data Protection Law.
- Data Subject Access Request means a request by a Data Subject under Data Protection Law to access their Personal Data;
- Personal Data means personal data, within the meaning given by Data Protection Law, concerning either Residents or employees or workers of the Contractor or any Sub-Contractor and which is obtained or Processed in connection with the Services or this Contract;
- Personal Data Breach means any event that results or may result in any unauthorised or unlawful access to, Processing, loss and/or destruction of Personal Data in breach of this Contract including any personal data breach (as defined under Data Protection Law);
- Processing has the meaning given under Data Protection Law and "Process" and "Processed" shall be construed accordingly; and
- Sensitive Personal Data has the meaning given under Data Protection Law.

Z29.2 Each Party shall comply with Data Protection Law in connection with this Contract. In particular each Party shall Process Personal Data of which the other is Data Controller only in accordance with Data Protection Law and this Contract.

Z29.3 Each Party shall ensure they have all necessary and appropriate consents required for the lawful Processing of Personal Data under this Contract (including any transfer of Personal Data to the other Party). Personal Data shall be treated as Confidential Information.

Z29.4 Where either Party Processes Personal Data of which the other Party is a Data Controller, the Processing Party shall do so on the basis of one or more of the following legal grounds, that Processing is necessary:

- (1) for compliance with a legal obligation to which that Party is subject;
- (2) for performing a contract to which the Data Subject is a party;
- (3) in order to protect the vital interests of the Data Subject;
- (4) for the performance of a task carried out in the public interest;
- (5) for the purposes of legitimate interests pursued by the Parties, except where the Processing is unwarranted in any particular case because of prejudice to the rights and freedoms or legitimate interests of the Data Subject; or
- (6) for any other purposes for which Personal Data may lawfully be Processed under Data Protection Law.

Z29.5 Where either Party Processes Sensitive Personal Data of which the other Party is a Data Controller, the Processing Party shall do so on the basis of one or more of the following legal grounds, that Processing is necessary:

- (1) to protect the vital interests of the Data Subject or of another person where:
- (2) for the purposes of exercising or performing any right or obligation which is conferred or imposed by Law on the Data Controller in connection with employment;
- (3) the Data Controller cannot reasonably be expected to obtain the Data Subject's consent; or
- (4) the Data Subject is physically or legally incapable of giving his or her consent; or
- (5) for any other purposes for which Sensitive Personal Data may lawfully be Processed under Data Protection Law;

Z29.6 Depending on the factual situation and the Personal Data concerned the Client and the Contractor may each act as either Data Controller or Data Processor in relation to Personal Data under this Contract.

Z29.7 The subject-matter, nature and purpose and the duration of Processing and the types of Personal Data and categories of Data Subject in relation to which Personal Data may be Processed under this Contract shall be agreed between the Parties.

Z29.8 Where either Party is the Data Processor of Personal Data of which the other Party is the Data Controller the Processing Party shall:

- (1) do so only on written instructions from the Data Controller (the first such instructions being those set out in this Contract) as revised by the Data Controller from time to time (where applicable) in accordance with this clause;
- (2) promptly comply with the Data Controller's written instructions and requirements from time to time, including any requests to amend, delete or transfer Personal Data;
- (3) immediately inform the Data Controller if the Data Processor thinks that it has been given an instruction which does not comply with Data Protection Law;
- (4) take all reasonable steps to ensure the reliability and integrity of all persons (including employees) whom that Party authorises to Process the Personal Data and ensure that those persons:
 - a. undergo adequate training in Data Protection Law, the confidentiality, security, use, care, protection and handling of Personal Data and the Data Processor's obligations under this Contract.
 - b. do not Process, publish, disclose or divulge any of the Personal Data other than in accordance with this Contract or the written instructions of the Data Controller; and
 - c. have committed themselves to confidentiality or are under an appropriate statutory obligation of confidentiality;
- (5) Process the Personal Data in such a manner that ensures that at all times the Data Controller complies with Data Protection Law;
- (6) fully cooperate with and assist the Data Controller, by having appropriate technical and organisational measures in place, to give effect to the rights of Data Subjects and respond to requests for exercising the Data Subject's rights including Data Subject Access Requests;
- (7) promptly forward any complaint, request (including a Data Subject Access Request), notice or other communication which relates directly or indirectly to the Personal Data or to either Party's compliance with Data Protection Law (including any request from the Information Commissioner), to the Data Controller and not respond to or otherwise deal with such communication except as instructed by the Data Controller or as required by Data Protection Law;
- (8) keep records of any Processing of Personal Data it carries out on behalf of the Data Controller which are sufficient to demonstrate compliance by the Data Controller and the Data Processor with Data Protection Law;
- (9) on request, provide the Data Controller promptly with all information that the Data Controller needs to show that both the Data Controller and Data Processor have complied with their data protection obligations under this Contract; and
- (10) at the option of the Data Controller, either irretrievably delete or return all Personal Data of which the other Party is Data Controller (unless the Data Processor is required by Law to retain that Personal Data).

Z29.9 A Party that Processes Personal Data shall maintain appropriate technical and organisational measures to protect that Personal Data against unauthorised or unlawful Processing and against accidental loss, destruction or damage having regard to:

- (1) the harm that might result from any Personal Data Breach including the risk (which may be of varying likelihood and severity) for the rights and freedoms of natural persons.
- (2) the nature, scope, context and purpose of the Processing of the Personal Data; and
- (3) the cost of implementing any measures; and
- (4) the state of technological development;

Z29.10 Security measures maintained shall:

- (1) to the greatest extent possible involve pseudonymisation and encryption of Personal Data;
- (2) ensure the ongoing confidentiality, integrity, availability and resilience of the Data Processor's technical and IT Systems;
- (3) ensure that the availability of and access to Personal Data can be restored promptly following a physical or technical incident; and
- (4) include regular testing, assessing and evaluating of the effectiveness of the technical and organisational measures to ensure the security of Processing.

Z29.11 Neither Party shall transfer any Personal Data of which the other is Data Controller outside of the UK without the prior written consent of the Data Controller. Where the Data Controller consents to such a transfer, the Data Processor shall ensure there is adequate protection, as approved by the Data Controller, for such Personal Data in accordance with Data Protection Law.

Z29.12 A Party acting as Data Processor shall notify the Data Controller immediately if it becomes aware of any Personal Data Breach (however caused). Such notification must:

- (1) describe the nature of the breach including the categories and number of Data Subjects and records concerned;

- (2) communicate the name and contact details of all persons from whom more information can be obtained about the breach;
- (3) describe the likely consequences of the breach; and
- (4) describe the measures taken by Data Processor and the measures which the Data Processor wishes the Data Controller (at the expense of the Data Processor) to take to address the breach and mitigate its possible adverse effects.

Z29.13 The Data Processor shall give the Data Controller immediate and full co-operation and assistance in relation to any such Personal Data Breach including:

- (1) taking all reasonable steps the Data Controller requires to assist in the containment, mitigation, remediation and investigation of such breach;
- (2) providing assistance with notifying the Information Commissioner's Office or affected Data Subjects of any breach of Data Protection Law; and
- (3) providing the Data Controller promptly with all relevant information in the Data Processor's possession.

Z29.14 A Party that Processes Personal Data as Data Processor shall provide reasonable assistance to the Data Controller where the Data Controller is required by Data Protection Law to carry out any privacy impact assessment or data protection impact assessment in relation to Processing Personal Data.

Z29.15 A Party that is a Data Controller may inspect and audit the other Party's facilities for Processing the Personal Data of which it is Data Controller to ensure they comply with this Contract and Data Protection Law.

Z29.16 A Party that is a Data Controller may revise their instructions to the Data Processor on the Processing of Personal Data at any time if this is necessary or desirable to comply with Data Protection Law. Such revision shall not entitle either Party to any additional payment, be a compensation event, lead to any paid or unpaid extension of time or be treated as a variation to this Contract. The Data Controller shall use reasonable endeavours to give the Data Processor as much notice of the revision as possible, consistent with their obligation to comply with Data Protection Law and protect against any Personal Data Breach.

Z29.17 Nothing in this Contract requires either Party to disclose any information to the other Party or any third party if to do so would breach Data Protection Law. If any part of this clause Z29 does not comply with Data Protection Law, the Client may amend that part (to the minimum necessary to ensure such compliance) by giving the Contractor at least 20 (twenty) Working Days' notice. The Parties agree that such amendment shall not be regarded as a variation to this Contract.

Z29.18 The Client may replace this clause with any applicable Data Controller to Data Processor standard clauses forming part of an applicable certification scheme (as defined under Data Protection Law) at any time by giving the Contractor at least 20 (twenty) Working Days' notice. The Parties agree that such amendment shall not be regarded as a variation to this Contract

Z103. PUBLIC INTEREST DISCLOSURE ('WHISTLE BLOWING')

Z103.1 The *Contractor* will ensure that his employees and agents are made aware of the *Client's* whistle blowing policy and that the details of this policy are fully explained to them and shall provide the *Client* with evidence of doing so upon request.

Z30. PREVENTION OF PROHIBITED ACTS, FRAUD, BRIBERY AND CORRUPTION

Z30.1 The *Client* may terminate the Contract by way of a written notice with immediate effect pursuant to Core Clause 91.7 and recover from the *Contractor* the amount of any loss resulting from the cancellation if at any time it becomes known to the *Client* that the *Contractor* or any person employed by the *Contractor* or acting on his behalf whether with or without the knowledge of the *Contractor* has:

- a) offered, paid or given or agreed to give directly or indirectly any gift in money or any other form or any financial or other advantage to any member employee or agent of the *Client* as an inducement or reward in relation to the obtaining or execution of the Contract or any other Contract with the *Client*; or
- b) favoured or discriminated against any person in relation to this or any other Contract with the *Client*; or
- c) committed an offence in relation to any Contract with the *Client* under the Prevention of Corruption Acts 1906 to 1916 or the Bribery Act 2010 or Section 117(2) Local Government Act 1972 (as amended).

Z31. EQUALITIES

Z31.1 The Contractor shall not unlawfully discriminate within the meaning and scope of any law, enactment, order or regulation relating to discrimination (whether in race, gender, religion, disability, sexual orientation, age or otherwise).

Z31.2 The Contractor shall take all reasonable steps to secure the observance of Clause Z31.1 by its employees and agents.

Z32. HUMAN RIGHTS

Z32.1 The Contractor shall where appropriate take account of the Human Rights Act 1998 and shall not do anything in breach of it.

Z33. HEALTH AND SAFETY AT WORK

Z33.1 The Contractor will at all times in Providing the Services to the Client comply with the provisions of the Health and Safety at Work Act 1974 and any or equivalent provision as well as any other relevant legislation and guidance and provide evidence of doing so to the Client at any time upon request.

Z34. FREEDOM OF INFORMATION ACT 2000 (FOIA) AND ENVIRONMENTAL INFORMATION REGULATIONS 2004 (EIR)

Z34.1 The Contractor acknowledges that the Client is subject to the requirements of the FOIA and the EIR and shall assist and cooperate with the Client to enable the Client to comply with its information disclosure obligations.

Z34.2 The Contractor shall notify the Client of any Commercially Sensitive Information provided to the Client together with details of the reasons for its sensitivity and the Contractor acknowledges that any lists or schedules of Commercially Sensitive Information so provided are of indicative value only and that the Client may be obliged to disclose such information.

Z34.3 The Contractor shall and shall procure that its Sub-contractors shall:

- (1) transfer to the Client all requests for information that it receives as soon as practicable and in any event within two Working Days of receiving a request for information;
- (2) provide the Client, at the Contractor's expense, with a copy of all information in its possession, or power in the form that the Client requires within five Working Days (or such other period as the Client may specify) of the Client's request; and
- (3) provide, at the Contractor's expense, all necessary assistance as reasonably requested by the Client to enable the Client to respond to the request for information within the time for compliance set out in section 10 of the FOIA or regulation 5 of the EIR

Z34.4 The Client shall be responsible for determining in its absolute discretion and notwithstanding any other provision in this Contract or any other contract whether the Commercially Sensitive information and/or any other Information is exempt from disclosure in accordance with the provisions of the FOIA or the EIR and in considering any response to a request for information the Client may consult with the Contractor prior to making any decision or considering any exemption.

Z34.5 In no event shall the Contractor respond directly to a request for information under the FOIA or EIR unless expressly authorised to do so by the Client.

Z34.6 The Contractor acknowledges that (notwithstanding the provisions of this Freedom of Information clause) the Client may, acting in accordance with the Department of Constitutional Affairs' Code of Practice on the Discharge of the Functions of Public Authorities under Part 1 of the Freedom of Information Act 2000 ("the Code"), be obliged under the FOIA, or the EIR to disclose information concerning the Contractor or the Services:

- in certain circumstances without consulting the Contractor; or

- following consultation with the *Contractor* and having taken their views into account;

provided always that where sub-clause Z34.6 above applies the *Client* shall, in accordance with any recommendations of the Code, take reasonable steps, where appropriate, to give the *Contractor* advanced notice, or failing that, to draw the disclosure to the *Contractor's* attention after any such disclosure.

Z34.7 The *Contractor* shall ensure that all information required to be produced or maintained under the terms of this Contract, or by law or professional practice or in relation to the Contract is retained for disclosure for at least the duration of the Contract plus one year together with such other time period as required by the Contract, law or practice and shall permit the *Client* to inspect such records as requested from time to time.

Z34.8 The *Client* shall in no event be liable for any loss, damage, harm, or detriment, howsoever caused, arising from or in connection with the reasonable disclosure under FOIA, or any other law, of any information (including information which may fall within an exemption under the FOIA or EIR) whether relating to this Contract or otherwise relating to any other party.

Z35. AUDIT AND MONITORING

Z35.1 The *Contractor* shall on request afford the Client, the Client's representatives and/or the auditor such access to such records and accounts as may be required by the Client from time to time.

Z35.2 The Contractor shall provide such records and accounts (together with copies of the Contractor's published accounts) requested under this Clause during the Contract Period and for a period of six years after the expiry of the Contract Period to the Client and/or the auditor.

Z35.3 The Client shall use reasonable endeavours to ensure that the conduct of each audit does not unreasonably disrupt the Contractor or delay the provision of the Services, except insofar as the Contractor accepts and acknowledges the conduct of audits carried out by the auditor is outside of the control of the Client

Z35.4 The Parties agree that they shall bear their own respective costs and expenses incurred in respect of compliance with their obligations under this Clause unless the audit reveals a material Default by the Contractor in which case the Contractor shall reimburse the Client for the Client's reasonable costs incurred in relation to the audit.

Z36. CONTRACT STATUS AND TRANSPARENCY

Z36.1 The Parties acknowledge that, except for any information which is exempt from disclosure in accordance with the provisions of the FOIA, the content of this Contract and any associated tender documentation provided by the *Contractor* (the Tender Submission) is not Confidential Information. The *Client* shall be responsible for determining in its absolute discretion whether any of the content of the Contract or the Tender Submission is exempt from disclosure in accordance with the provisions of the FOIA.

Z36.2 Notwithstanding any other term of this Contract, the *Contractor* hereby gives his consent for the *Client* to publish this Contract and the Tender Submission in its entirety, including from time to time agreed changes to the Contract, to the general public.

Z36.3 The *Client* may consult with the *Contractor* to inform its decision regarding any exemptions but the *Client* shall have the final decision in its absolute discretion.

Z36.4 The *Contractor* shall assist and cooperate with the *Client* to enable the *Client* to publish this Contract and the Tender Submission.

Z37. SAFEGUARDING

Z37.1 Where the service or work being undertaken in this Contract allows access to premises locations or activities where there is a likelihood of coming into contact with children or vulnerable adults the *Contractor* must ensure that it follows the guidance of the Independent Safeguarding Council and the regulations relating to the Vetting and Barring Scheme to determine whether a Disclosure and Barring Service (DBS) check is required for employees or any person sub-contracted to carry out the service or work on behalf of the *Contractor*. If in any doubt the *Contractor* should discuss the matter further with the officer of the *Client* awarding the contract and raise any concerns arising from disclosures.

Z37.2 Where the service or works requirement or specification determines that a DBS check should be carried out the *Contractor* shall undertake DBS checks prior to the relevant employees or persons commencing the service or work.

Z38. COMPLAINTS PROCEDURE

Z38.1 The *Contractor* shall operate a complaints procedure in respect of Services provided under these terms & conditions, to the entire satisfaction of the *Client*, and comply with the requirements of any Regulatory Body to which the *Contractor* is subject (including any change in such requirements) and ensure that its complaints procedure meets the following minimum standards:

- (1) is easy to access and understand
- (2) clearly sets out time limits for responding to complaints and keeping the complainant and the *Client* informed of progress;
- (3) provides confidential record keeping to protect employees under this contract and the complainant
- (4) provides information to management so that services can be improved
- (5) provides effective and suitable remedies
- (6) is regularly monitored and audited and which takes account of complainant and *Client* feedback

Z38.2 The *Contractor* shall ensure that:

- (1) under no circumstances is a complaint investigated by a member of its staff employed under this contract who may be part of the complaint.
- (2) someone who is independent of the matter complained of carries out the investigation
- (3) the complainant is made aware that they are entitled to have the complaint investigated by the *Client* if they are not satisfied with either the process of investigation or finding of the *Contractor's* investigations
- (4) the *Contractor* will ensure that it responds to the complainant within a maximum of 10 days of receiving the complaint

Z38.3 The *Contractor* will make its complaints procedure available on request

Z38.4 The *Contractor* shall ensure that all its employees and persons employed under this contract are made aware of its complaints procedure and shall designate one employee (who shall be identified to the *Client*) to whom a complaint may be referred should the complainant not be satisfied with the initial response to their complaint

Z38.5 The *Contractor* shall keep accurate and complete written records of all complaints received and the responses to them and shall make these records available to the *Client* on request or at 12 monthly intervals in any event.

Z38.6 Where the *Client* is investigating a complaint the *Contractor* is required to participate fully in all investigations within the timescales requested by the *Client*

Z38.7 The *Contractor* should note that if a complaint is made to the *Client* by a third party relating to the Services provided, the Local Government Ombudsman has the power to investigate such a complaint and the *Client* requires the *Contractor* to fully to co-operate in such investigation. If the *Client* is found guilty of maladministration or injustice by the Local Government Ombudsman because of the act or default of the *Contractor* the *Contractor* shall indemnify the *Client* in respect of the costs arising from such maladministration or injustice.

Z39. TERRORISM PREVENTION DUTY

Z39.1 For the purposes of this Clause Z39, the following definitions apply:

- Extremist means a person who is vocally or actively opposed to fundamental British values, including democracy, the rule of law, individual liberty and mutual respect and tolerance of different faiths and beliefs and including a person who calls for the death of members of the British armed forces whether in this country or overseas; and
- Radicalisation means the process by which a person comes to support terrorism and Extremist ideologies associated with terrorist groups.

Z39.2 The Contractor:

- (1) must not engage in any Extremist activities or espouse Extremist views
- (2) must ensure that staff:
 - a. are trained to recognise a person's vulnerability to being drawn into terrorism;
 - b. are aware to availability programmes to deal with Extremist activity and Radicalisation; and
 - c. have a good understanding of the Terrorism Prevent Programme; and
 - d. must not do or omit to do anything or cause anything to be done that would cause the Client or any Client representative to contravene the Terrorism Prevention Duty or incur any liability in relation to the Terrorism Prevention Duty.

Z40. MODERN SLAVERY

Z40.1 The Contractor warrants that neither the Contractor nor any of the Contractor's officers or employees:

- (1) have been convicted of any offence involving slavery or human trafficking; or
- (2) have, to the best of the Contractor's knowledge, been the subject of any investigation, inquiry or enforcement proceedings by any governmental, administrative or regulatory body regarding any offence or alleged offence of or in connection with slavery and human trafficking.

Z40.2 The Contractor shall take appropriate steps to ensure that there is no slavery or human trafficking in its supply chains and in connection with this the Contractor shall:

- (1) implement due diligence procedures for its sub-consultants;
- (2) require all sub-consultants to warrant that, neither the sub-consultant nor any of the sub-consultant's officers or employees:
 - (i) have been convicted of any offence involving slavery or human trafficking; or
 - (ii) have, to the best of the sub-consultant's knowledge, been the subject of any investigation, inquiry or enforcement proceedings by any governmental, administrative or regulatory body regarding any offence or alleged offence of or in connection with slavery and human trafficking; and
- (3) require all sub-contractors to include provisions having the same effect as this Clause Z40 in all subcontracts (at any stage of remoteness in the supply chain) relating to the Services.

Z41. CONFLICT OF INTEREST

Z41.1 The Contractor shall take appropriate steps to ensure that neither the Contractor nor any employees or agents are placed in a position where (in the reasonable opinion of the Client), there is or may be an actual conflict, or a potential conflict, between the pecuniary or personal interests of the Contractor or its employees or agents and the duties owed to the Client under the provisions of the Contract.

Z41.2 The Contractor shall promptly notify the Client (and provide full particulars to the Client) if any conflict referred to in Clause Z41.1

arises or is reasonably foreseeable.

Z41.2 The Client reserves the right to terminate the Contract immediately by giving notice in writing to the Contractor and/or to take such other steps it deems necessary where, in the reasonable opinion of the Client, there is or may be an actual conflict, or a potential conflict, between the pecuniary or personal interests of the Contractor and the duties owed to the Client under the provisions of the Contract. The actions of the Client under this Clause shall not prejudice or affect any right of action or remedy which shall have accrued or shall thereafter accrue to the Client.

Z42. DISRUPTION AND BUSINESS CONTINUITY

Z42.1 The Contractor shall immediately inform the Council of any actual or potential industrial action, whether such action will be by their own employees or others, which affects or might affect its ability at any time to perform its obligations under the Contract.

Z42.2 For the purposes of this Clause Z42 a Business Continuity Plan means a robust written plan to be prepared by the Contractor in accordance with the Civil Contingencies Act 2004 (and considering the Client's obligations thereunder) detailing how the Contractor shall continue to deliver the Services following the occurrence of certain events, including emergencies, envisaged by the Act.

Z42.3 The Contractor shall (and will ensure that any Sub-Contractor shall) during the Contract Period have a Business Continuity Plan in place. The Contractor shall promptly provide (and shall ensure the Sub-Contractor provides) the Client with its Business Continuity Plan upon demand.

Z42.4 The Contractor shall invoke the Business Continuity Plan, if required by the Client to do so.

Z43 TUPE

Z43.1 For the purposes of Clauses Z43 and Z44, Council shall mean Royal Borough of Windsor and Maidenhead and Provider shall mean the Contractor. For purposes of Clauses Z43 and Z44 only, Employer shall be given its natural meaning and/or be construed in line with definitions provided in Clause Z43.1.2

Z43.1.2 Subject to Clause Z43.1, the definitions and rules of interpretation in this Clause Z43.1.2 shall apply for the purposes of Clauses Z43 and Z44, in addition to the definitions set out in Core Clause 11.2:

Administering Authority	Royal Borough of Windsor and Maidenhead of Town Hall St Ives Road Maidenhead, SL6 1RF - acting in its capacity as the administering authority for the RBWM Pension Fund for the purposes of the LGPS Regulations.
Admission Agreement	an admission agreement to be entered into in accordance with the LGPS Regulations and in the Administering Authority's standard form.
Admission Body	an admission body for the purposes of the LGPS Regulations.
Cessation Date	any date on which the Provider ceases to be an Admission Body other than as a result of the termination of this Contract or because it ceases to employ any Eligible Employees.
Data Protection Legislation	the Data Protection Act 2018 and all applicable laws and regulations relating to the processing of Personal Identifiable Data and privacy, including where applicable the guidance and codes of practice issued by the Information Commissioner.
Effective Date	the date on which the Provided Service (or any part of the Provided Service), transfers from the Employer or any of its Third Party Employers.

Eligible Employees	the Transferring Employees who are active members of (or eligible to join) the LGPS on the date of a Relevant Transfer including the Effective date, or any other individuals nominated by the Contractor or its Sub-Contractors (as appropriate).
Employee Liability Information	the information that a transferor is obliged to notify to a transferee under Regulation 11(2) of TUPE and as set out in Schedule 10L and: • the identity and age of the employee; and • the employee's written statement of employment particulars (as required under section 1 of the Employment Rights Act 1996 or provision of equivalent effect); and • information about any disciplinary action taken against the employee and any grievances raised by the employee, where a Code of Practice issued under Part IV of the Trade Union and Labour Relations (Consolidation) Act 1992 or provision of equivalent effect relating exclusively or primarily to the resolution of Disputes applied, within the previous two years; and • information about any court or tribunal case, claim or action either brought by the employee against the transferor within the previous two years or where the transferor has reasonable grounds to believe that such action may be brought against the Provider arising out of the employee's employment with the Council; and • information about any collective agreement that will have effect after the Effective Date in relation to the employee under regulation 5(a) of TUPE.
Employer's Contribution Rate	the Provider's contribution rate of the pensionable pay of the Eligible Employees, calculated in accordance with the rates and adjustments certificate obtained in accordance with regulation 62 of the LGPS Regulations applicable to the Provider, and certified by an actuary appointed by the Council as being the appropriate amount, as revised from time to time.
Employment Liabilities	all claims, including claims for redundancy payments, unlawful deduction of wages, unfair, wrongful or constructive dismissal compensation, compensation for sex or sexual orientation, race, age, religion of belief, gender re-assignment, marriage, civil partnership, pregnancy, maternity or disability discrimination or other unlawful discrimination within the meaning of the Equality Act 2011 or equivalent, claims for equal pay, compensation for less favourable treatment of part-time workers, and any claims (whether in tort, contract, statute or otherwise), demands, actions, proceedings and any award, compensation, damages, tribunal awards, fine, loss, order, penalty, disbursement, payment made by way of settlement and costs and expenses reasonably incurred in connection with a claim or investigation (including any investigation by any enforcement, regulatory or supervisory body) and of implementing any requirements which may arise from such investigation, and any legal costs and expenses.
Guarantee Bond	the guarantee bond which has to accompany the Admission Agreement and which has to be delivered to the Council by (DATE) in the Administering Authority's standard form.
LGPS	the Local Government Pension Scheme.
LGPS Regulations	the Local Government Pension Scheme Regulations 2003 (SI No 2356). Or provision of equivalent effect
Non-Eligible Employees	the Transferring Employees who are not Eligible Employees.

Relevant Employees	those employees whose contracts of employment will transfer to the Council or a replacement Provider pursuant to TUPE on the expiry or termination of this Contract howsoever occurring.
Relevant Transfer	a relevant transfer for the purposes of TUPE.
Provider's Final Staff List	the complete list of the Providers and its Sub-Contractors Staff engaged in, or wholly or mainly assigned to, the delivery of the Service or any part of the Service at the Service Transfer Date.
Provider's Provisional Staff List	the list prepared and updated by the Provider listing all of the Provider's and Sub-Contractor's Staff engaged in, or wholly or mainly assigned to, the delivery of the Service or any part of the Service at the date of the preparation of the list.
Service Transfer Date	the date on which the Service (or any part of the Service), transfers from the Provider to the Council or any Replacement Provider.
Staff	means the number and type of staff offered by the Provider in its tender return and approved by the Council for assignment to the Service.
Staffing Information	in relation to all persons detailed on the Provider's Provisional Staff List, in an anonymised format, such information as the Council may reasonably request including details of whether the Staff are employees, self-employed, consultants, agency workers or otherwise, and the amount of time spent on the delivery of the Service.
Third Party Employees	employees of the Third Party Employer whose contract of employment will transfer with effect from the Effective Date to the Provider or a Sub-Contractor by virtue of the application of TUPE. Where relevant a list of the Third Party Employees shall be attached.
Third Party Employer	Volker Highways Limited and The Project Centre Limited – who are currently engaged by the Council to provide the Service or some elements of the Service to the Council.
Transferring Employees	employees of the Council whose contract of employment will transfer with effect from the Effective Date to the Provider. Where relevant a list of the Transferring Employees is attached.

Z43.2 The Council and the Provider agree that the delivery of the Provided Service by the Provider as a result of this Contract may constitute a Relevant Transfer and the contracts of employment of the Transferring Employees and any relevant Third Party Employees shall transfer on the Effective Date to the Provider and to any Sub-Contractor of the Provider (as applicable), except insofar as such contracts relate to any benefits for old age, invalidity or survivors under any occupational pension scheme.

Z43.2.1 The Council and the Provider shall comply (and the Council shall procure that the Third Party Employer shall comply) with their obligations under regulation 11, 13 & 14 of TUPE. The Council and the Provider shall indemnify each other against any costs, claims or liabilities sustained as a result of any breach by the Party in Default of this Clause, and the Council will use its best endeavours to procure that the Third Party Employer indemnifies the Provider in respect of any breach of its obligation.

Z43.2.2 The Council shall procure that the Third Party Employer shall co-operate with the Provider to ensure an orderly transfer, including allowing the Provider access to the Third Party Employees and their representatives in good time prior to the Effective Date.

Z43.2.3 The Council shall be responsible for all remuneration, benefits, entitlements and outgoings in respect of the Transferring Employees, including without limitation, all wages, holiday pay, bonuses, commissions, payments of PAYE, national insurance

contributions, pension contributions and otherwise, up to (but excluding) the Effective Date. The Council shall provide and, where necessary, update the Employee Liability Information for the Transferring Employees to the Provider, as required by TUPE.

Z43.2.4 The Council shall procure that the Third Party Employer meets its obligations in respect of all remuneration, benefits, entitlements and outgoings in respect of the Third Party Employees, including without limitation, all wages, holiday pay, bonuses, commissions, payments of PAYE, national insurance contributions, pension contributions and otherwise, up to (but excluding) the Effective Date. The Council shall use its best endeavours to procure that the Third Party Employer shall provide and, where necessary, update the Employee Liability Information for the Third Party Employees to the Provider, as required by TUPE.

Z43.2.5 The Provider shall be responsible for or shall procure that any relevant Sub-Contractor will be responsible for all remuneration, benefits, entitlements and outgoings in respect of the Transferring Employees including without limitation, all wages, holiday pay, bonuses, commissions, payments of PAYE, national insurance contributions, pension contributions and otherwise from the Effective Date.

Z43.2.6 Subject to Clause Z43.2.9, the Council shall indemnify and keep indemnified the Provider against Employment Liabilities incurred by the Provider or any relevant Sub-Contractor in connection with any claim or demand by any Transferring Employee. This indemnity shall only apply provided that the claim or demand arises from any act, fault or omission of the Council arising out of the employment of any Transferring Employee in relation to any period prior to the Effective Date.

Z43.2.7 The Council shall indemnify and keep indemnified the Provider and any relevant Sub-Contractor against any failure of the Council to meet all remuneration, benefits, entitlements and outgoings for the Transferring Employees, including without limitation, all wages, holiday pay, bonuses, commissions, payments of PAYE, national insurance contributions, pension contributions and otherwise up to (but excluding) the Effective Date.

Z43.2.8 The Council shall indemnify and keep indemnified the Provider and any relevant Sub-Contractor in respect of any claims costs, expenses or liabilities whatsoever and howsoever arising in relation to any Council staff (including any representatives of such staff) who are not a Transferring Employee during any period whether before, on or after the Effective Date.

Z43.2.9 Subject to Clause Z43.3, the Provider shall indemnify and keep indemnified the Council or a Replacement Provider against Employment Liabilities incurred by the Council or a Replacement Provider in connection;

- i)* with any claim or demand by any Transferring Employee or Third Party Employees, or trade union, staff association or employee representative (whether or not recognised by the Provider or any Subcontractor in respect of all or any of the Transferring Employees or Third Party Employees). This indemnity shall only apply provided that the claim or demand arises from any act, fault or omission of the Provider, or any relevant Sub-Contractor, arising out of the employment of any Transferring Employee or Third Party Employees; and
- ii)* with any claim arising out of misrepresentation or misstatement whether negligent or otherwise made by the Provider or any Sub-Contractor to a Transferring Employee or Third Party Employees or their representatives whether before on or after the Effective Date; and
- iii)* in relation to the change in identity of employer occurring by virtue of TUPE being significant and detrimental to any of the Transferring Employees or Third Party Employees, or to any person who would have been a Transferring Employee or Third Party Employee but for their resignation (or decision to treat their employment as terminated under Regulation 4(9) TUPE) on or before the Effective Date; and
- iv)* any proposed or actual change by the Provider or a Subcontractor of the Transferring Employees' or Third Party Employees' working conditions, terms and conditions or any proposed measures of the Contractor or relevant Subcontractor which are to the Transferring Employees or Third Party Employees material detriment or the material detriment of any person who would have been a Transferring Employee or Third Party Employee but for their resignation (or decision to treat their employment as terminated under Regulation 4(9) TUPE) on or before the Effective Date.

Z43.2.10 The indemnities contained in Clause Z43.2.9 shall apply as if references in those clauses to Transferring Employee also included a reference to Third Party Employees and any reference to any act, fault or omission of the Provider also includes any act, fault or omission of a Subcontractor employer of a Transferring or Third Party Employee.

Z43.2.11 The Provider shall indemnify and keep indemnified the Council and any Third Party Employer against any failure to meet its obligation for all remuneration, benefits, entitlements and outgoings for the Transferring Employees, the Third Party Employees, and any

other person who is or will be employed or engaged by the Provider or any Sub-Contractor in connection with the delivery of the Service, including without limitation, all wages, holiday pay, bonuses, commissions, payments of PAYE, national insurance contributions, pension contributions and otherwise from and including the Effective Date.

Z43.2.12 The Provider shall immediately on request by the Council and/or the Third Party Employer provide details of any measures that the Provider and any Sub-Contractor of the Provider envisages taking in relation to any Transferring Employees and any Third Party Employees, including any proposed changes to terms and conditions of employment. If there are no measures, the Provider will give confirmation of that fact, and shall indemnify the Council and any Third Party Employer against all Employment Liabilities resulting from any failure by it to comply with this obligation.

Z43.3 During the twelve [12] months prior to expiry of this Contract or at any time following the issuing of a termination notice, the Provider must not and must procure that its Sub-Contractors must not, without the prior written consent of the Authorised Officer (such consent not to unreasonably withheld or delayed), in relation to any persons engaged in the delivery of the Service:

- terminate or give notice to terminate the employment of any person engaged in the delivery of the Provided Services or the relevant Provided Service (other than for gross misconduct);
- increase or reduce the total number of people employed or engaged in the delivery of the Provided Services or the relevant Provided Service by the Provider and any Sub-Contractor by more than 5% (except in the ordinary course of business);
- propose, make or promise to make any material change to the remuneration or other terms and conditions of employment of the individuals engaged in the delivery of the Provided Services or the relevant Provided Service; replace or relocate any persons engaged in the delivery of the Provided Services or the relevant Provided Service or reassign any of them to duties unconnected with the Provided Services or the relevant Provided Service; and/or
- assign or redeploy to the Provided Services or the relevant Provided Service any person who was not previously a member of Staff engaged in the delivery of the Provided Services or the relevant Provided Service.

Z43.3.1 The Parties agree that in the event of a change in the provider of the Services upon expiry or termination of this Contract which constitutes a Relevant Transfer then any Relevant Employees shall transfer to the Replacement Provider and the Provider shall comply (and shall procure that each Sub-Contractor) shall comply with their obligations under TUPE and this Clause Z43.

Z43.3.2 In the final year of this Contract or at any time when termination of the Contract is probable (upon reasonable request of the Authorised Officer) the Provider shall supply the Staffing Information and the following information to the Authorised Officer within fourteen [14] days of said request:

i) For the Staff delivering the Provided Services under this Contract:

- terms and conditions of employment;
- probationary period;
- retirement age;
- pension entitlement;
- pay and other collective agreements – both current, and agreed but not yet in force;
- working hours;
- entitlement to annual, sick, maternity, paternity and special leave;
- entitlement to leased cars, season tickets loans, and other travel related benefits;
- sporting, social, welfare and other facilities which are not conditions of Service; and
- time off and facilities for Trade Union and Health and Safety representatives.

ii) For Staff thought liable to transfer:

- age;
- sex;

- pay rate;
- any other factor affecting redundancy entitlement; and
- details of any outstanding claims against the Provider.

iii) For Staff thought liable to transfer that do not work exclusively on this Service:

- what % of their working day/week is spent working exclusively delivering the Service; and
- evidence to validate the % stated of their working day/week that is spent working exclusively delivering the Service.

Z43.3.3 Without prejudice to the generality of this Clause Z43 and for the avoidance of doubt it is hereby specifically provided that the Provider shall fully, promptly and effectively indemnify and keep so indemnified the Council, its servants and agents from and against all and any actions, charges, claims, reasonable costs, damages, demands, reasonable expenses (including legal and administrative expenses), liabilities, direct Losses and proceedings whatsoever arising from its failure to comply with TUPE or this Clause Z43.

Z43.3.4 Such information provided pursuant to this Clause shall be at no cost to the Council.

Z43.3.5 This Contract envisages that subsequent to its commencement, the identity of the provider of the Service (or any part of the Service) may change (whether as a result of termination of this Contract, or part or otherwise) resulting in a Relevant Transfer. If a Relevant Transfer arises then the Council or replacement Provider will inherit liabilities in respect of the Relevant Employees.

Z43.3.6 If not requested by the Authorised Officer to supply information at an earlier stage in a retender process then at least 28 days prior to the expiry of termination of this Contract, the Provider shall and shall procure that any Sub-Contractor shall prepare and provide to the Council and/or, at the direction of the Council, to the replacement provider, the Provider's Final Staff List, which shall be warranted as complete and accurate in all material respects. The Provider's Final Staff List shall identify which of the Provider's and Sub-Contractor's Staff named are Relevant Employees and shall set out justification for those on Provider's Staff List named as Relevant Employees where they spend less than 60% of their working time in any week exclusively delivering the Service. Where any challenge is made in relation to any of the Staff the Provider will supply any documentation necessary to verify the submission made by the Provider.

Z43.3.7 The Council shall be permitted to use and disclose the Provider's Provisional Staff List, the Provider's Final Staff List and the Staffing Information for informing any tenderer or other prospective Replacement Provider for any Service that is substantially the same type of services as (or any part of) the Service.

Z43.3.8 The Provider warrants that the Provider's Provisional Staff List, the Provider's Final Staff List and the Staffing Information will be true and accurate in all material respects and that no persons are employed or engaged in the delivery of the Service, other than those included on the Provider's Final Staff List.

Z43.3.9 In the event that the Provider enters into any sub-contract in connection with the Provided Service it shall impose obligations on its Sub-Contractors in the same terms as those imposed pursuant to this Schedule and shall procure that the Sub-Contractor complies with such terms. The Provider shall indemnify and keep indemnified the Council against any Employment Liabilities incurred by the Council or Replacement Provider as a result of or in connection with any failure by the Provider to comply with these terms.

Z44 PENSIONS

Z44.1 Where the Provider or a Sub-Contractor employs any Eligible Employees from the date of a Relevant Transfer ("**Relevant Transfer Date**") and wishes to offer those Eligible Employees membership of the LGPS, the Provider shall procure that it and/or each relevant Sub-Contractor shall become an Admission Body. The Provider shall as soon as practicable (and in any cases within three [3] months) after the Relevant Transfer Date execute and procure that each relevant Sub-Contractor executes an Admission Agreement

and, if so required by the Council, a Guarantee Bond in a form to be agreed with the Council which will have effect from and including the Relevant Transfer Date.

Z44.2 The Council shall as soon as practicable after the Relevant Transfer Date execute each of the Admission Agreements referred to in Clause Z44.1.

Z44.3 Without prejudice to the generality of this Clause Z44, the Provider hereby indemnifies the Council and/or any Replacement Provider and, in each case, their Sub-Contractors on demand from and against all Losses, costs, claims, demands, actions, fines, penalties, liabilities and expenses (including legal expenses) suffered or incurred by it or them which arise from any breach by the Provider or any Sub-Contractor of the terms of the Admission Agreement to the extent that such liability arises before or as a result of the termination or expiry of this Contract (howsoever caused).

Z44.4 Without prejudice to the generality of the requirements of this Clause Z44, the Provider shall procure that it and each relevant Sub-Contractor shall as soon as reasonably practicable obtain any indemnity or bond required in accordance with the Admission Agreement which shall be in the form of the Administering Authority's standard form.

Z44.5 The Council shall have a right to set off against any payments due to the Provider under this Contract an amount equal to any overdue employer and employee contributions and other payments (and interest payable under the LGPS Regulations) due from the Provider or from any relevant Sub-Contractor under the Admission Agreement or the LGPS Regulations.

Z44.6 If the Provider or any Sub-Contractor employs any Eligible Employees from the Relevant Transfer Date and:

- i) the Provider or any relevant Sub-Contractor does not wish to offer those Eligible Employees membership of the LGPS;
- ii) the Council and the Provider or any Sub-Contractor are of the opinion that it is not possible to operate the provisions of Clauses Z44.1 to Z44.5 inclusive; or
- iii) if for any reason after the date of a Relevant Transfer the Provider or any relevant Sub-Contractor ceases to be an Admission Body other than on the date of termination or expiry of this Contract or because it ceases to employ any Eligible Employees ("Cessation Date") then the provisions of Clauses Z44.1 to Z44.5 inclusive shall not apply (without prejudice to any rights of the Council under those Clauses) and the provisions of Clause Z44.7 shall apply.

Z44.7 Where this Clause applies pursuant to Clause Z44.6, the following shall apply:

- i) the Provider shall procure or shall procure that any relevant Sub-Contractor shall, not later than the date of a Relevant Transfer or the Cessation Date (as the case may be), nominate to the Council in writing the occupational pension scheme or schemes which it proposes shall be the "**Provider Scheme**" for the purposes of this Clause . Such pension scheme or schemes must be:
 - a) established within three [3] months of the Relevant Transfer Date or Cessation Date (as the case may be);
 - b) reasonably acceptable to the Council (such acceptance not to be unreasonably withheld or delayed);
 - c) a registered pension scheme for the purposes of Part 4 of the Finance Act 2004 or equivalent; and
 - d) at the Providers costs certified by the Government Actuary's Department or an actuary nominated by the Council in accordance with relevant guidance produced by the Government Actuary's Department as providing benefits which are the same as, broadly comparable to or better than those benefits provided by the LGPS.

Z44.8 The Provider undertakes to the Council (for the benefit of the Council itself and for the Council as agent and trustee for the benefit of the Eligible Employees) that it shall procure and shall procure that any relevant Sub-Contractor shall procure that:

- i) the Eligible Employees shall by three [3] months before the Relevant Transfer Date or the Cessation Date (as the case may be) be offered membership of the Provider Scheme with effect from and including the Relevant Transfer Date or Cessation Date (as the case may be);
- ii) the Provider Scheme shall provide benefits in respect of the Eligible Employees' periods of service on and after the Relevant Transfer Date or Cessation Date (as the case may be) which the Government Actuary's Department or an actuary nominated by the Council in accordance with relevant guidance produced by the Government Actuary's Department shall certify to be the same as, broadly comparable to or better than the benefits which the Eligible Employees were entitled to under the LGPS at the Relevant Transfer Date or the Cessation Date (as the case may be);
- iii) if the Provider Scheme is terminated, a replacement pension scheme shall be provided with immediate effect for those Eligible Employees who are still employed by the Provider. The replacement scheme must comply with Clause Z44.7 as if it were the Provider Scheme;
- iv) before the Relevant Transfer Date or Cessation Date (as the case may be) the trustees of the Provider Scheme shall undertake by deed to the Council that they shall co-operate with the provisions of Clause Z44.7;
- v) where the Provider Scheme has not been established at the Relevant Transfer Date or Cessation Date (as the case may be), the Eligible Employees shall be provided with benefits in respect of death-in-service which are no less favourable than the death-in-service benefits provided by the LGPS immediately before the Relevant Transfer Date or Cessation Date (as the case may be). Such benefits will continue to be provided until death-in-service benefits are provided by the Provider Scheme; and
- vi) in relation to the terms for bulk transfers from the LGPS to the Contractors Scheme following the Relevant Transfer Date and any subsequent transfers on termination or expiry of this Contract, the terms shall be determined by the Fund's actuary in line with the fund's admission policy.

Z44.9 The Provider undertakes to the Council (for the benefit of the Council itself and for the Council as agent and trustee for the benefit of the Eligible Employees) that:

- i) all information which the Council or the Administering Council or their respective professional advisers may reasonably request from the Provider or any relevant Sub-Contractor for the administration of the LGPS or concerning any other matters raised in Clause Z44.7 shall be supplied to them as expeditiously as possible;
- ii) it shall not, without the consent in writing of the Council (which shall only be given subject to the payment by the Provider or the relevant Sub-Contractor of such reasonable costs as the Council or the Administering Council may require) consent to instigate, encourage or assist any event which could impose on the LGPS or on the Council a cost in respect of any Eligible Employee greater than the cost which would have been payable in respect of that Eligible Employee had that consent, instigation, encouragement or assistance not been given;
- iii) until the Relevant Transfer Date, it shall not and shall procure that any relevant Sub-Contractor shall not issue any announcements (whether in writing or not) to the Eligible Employees concerning the matters stated in Clauses Z44.1 to Z44.6 inclusive without the consent in writing of the Council and the Administering Council (not to be unreasonably withheld or delayed);

- iv) it shall not and shall procure that any relevant Sub-Contractor shall not take or omit to take any action which would materially affect the benefits under the LGPS or under the Provider Scheme of any Eligible Employees who are or will be employed wholly or partially in connection with the Service without the prior written agreement of the Council (not to be unreasonably withheld or delayed) provided that the Provider and/or such Sub-Contractor will be so entitled without the requirement of consent to give effect to any pre-existing contractual obligations to any Eligible Employees; and
- v) it shall and shall procure that any relevant Sub-Contractor shall offer any of its Eligible Employees who cease to be engaged in the delivery of the Service and thereby cease to be eligible for membership of the LGPS membership of the Provider Scheme as soon as reasonably practicable after ceasing to be so engaged.

Z44.10 Except as provided by this Clause the Provider and any relevant Sub-Contractor has no obligation or liability to any Non-Eligible Employee in respect of pensions.

Z44.11 The Provider shall and shall procure that any relevant Sub-Contractor will in respect of each Non-Eligible Employee, who immediately before the Relevant transfer:

- i) was entitled under section 257 of the Pensions Act 2004 to pension protection in accordance with section 258 of that Act is provided with that protection;
- ii) had rights against the Council or Third Party Employer in respect of a personal pension scheme, remains entitled to those rights or becomes entitled to other rights in lieu of them agreed between him and the Provider and any relevant Sub-Contractor; or
- iii) had no rights under either of sub-clauses (i) and (ii) above is enrolled into a pension scheme in accordance with the Pensions Act 2008 if and when required to be so enrolled.

Z44.12 The Provider hereby indemnifies the Council and/or any Replacement Provider and, in each case, their Sub-Contractor from and against all Losses, costs, claims, demands, actions, fines, penalties, liabilities and expenses (including legal expenses) suffered or incurred by it or them which arise from claims by Eligible Employees of the Provider and/or of any Sub-Contractor or by any trade unions, elected employee representatives or staff associations in respect of all or any such Eligible Employees which Losses:

- i) relate to pension rights in respect of periods of employment on and after the Effective Date until the date of termination or expiry of this Contract; or
- ii) arise out of the failure of the Provider and/or any relevant Sub-Contractor to comply with the provisions of this Clause 4 before the date of termination or expiry of this Contract.

Z44.13 Save on expiry or termination of this Contract, if the employment of any Eligible Employee transfers to another employer (by way of a transfer under TUPE) the Provider shall and shall procure that any relevant Sub-Contractor shall:

- i) consult and inform those Eligible Employees of the pension provisions relating to that transfer; and
- ii) procure that the employer to which the Eligible Employees are transferred (the "**New Employer**") complies with the provisions of this paragraph 4 provided that references to the "**Sub-Contractor**" will become references to the New Employer, references to "**Effective Date**" will become references to the date of the transfer to the New Employer and references to "**Eligible Employees**" will become references to the Eligible Employees so transferred to the New Employer.

Z44.14 The Provider shall and shall procure that each relevant Sub-Contractor shall:

- i) maintain such documents and information as will be reasonably required to manage the pension aspects of any onward transfer of any person engaged or employed by the Provider or any Sub-Contractor in the delivery of the Service on the expiry or termination of this Contract (including without limitation identification of the Eligible Employees);
- ii) promptly provide to the Council such documents and information mentioned in Clause Z44.14.i) which the Council may reasonably request in advance of the expiry or termination of this Contract; and
- iii) fully co-operate (and procure that the trustees of the Provider's Scheme shall fully co-operate) with the reasonable requests of the Council relating to any administrative tasks necessary to deal with the pension aspects of any onward transfer of any person engaged or employed by the Provider or any Sub-Contractor in the delivery of the Service on the expiry or termination of this Contract.

Z44.15 If prior to the Effective Date the provisions of HM Treasury guidance Staff Transfers from Central Government: A Fair deal for Staff Pensions (1999) related guidance and/or the Best Value Authorities Staff transfers (Pensions) Direction 2007 have been amended or revoked then the Provider and the Council shall revisit the terms of this Clause Z44 and may agree alternative provisions reflecting the amended or revoked guidance or Direction.

Z44.16 The Council shall periodically obtain from an actuary a certificate specifying, in the case of the Provider, the percentage or amount by which, in the actuary's opinion, the Employer's Contribution Rate should be increased or reduced. This is with a view to ensuring that, as far as it is reasonably possible, the value of assets of the Fund in respect of the Eligible Employees is neither materially more, nor materially less, than the anticipated liabilities of the Fund in respect of the Eligible Employees at the date of termination or expiry of this Contract.

Z44.17 On the basis of the latest Actuarial Report, the accruals from the Supplier (future employer of the 4 people eligible for LGPS) are 22.3% and the Bond required is £180k (reviewed every 3 years).

Z45 TRANSITION TO NEW CONTRACTOR

Z45.1 During the final twelve months of the term of this Contract (where this expires by effluxion of time) or during the period of any notice of termination of the Contractor's engagement under this Contract (or any part hereof) and in either case for a period of six months thereafter, the Contractor shall co-operate fully with the transfer of responsibility for the Services (or any of the Tasks) to any new contractor, and for the purposes of this Clause Z45.1 the meaning of the term "co-operate" shall include:

- (1) liaising with the Client and/or any new contractor, and providing reasonable assistance and advice concerning the Term Programme and its transfer to the Client or to such new service provider;
- (2) allowing any such new contractor access (at reasonable times and on reasonable notice) to the Client's Premises but not so as to interfere with or impede the provision of the Tasks; and
- (3) providing to the Client and/or to any new contractor all and any information concerning the Client's Premises and the Services which is required for the efficient transfer of responsibility for its performance.

Z45.2 The Contractor shall use all reasonable endeavours so as to facilitate the smooth transfer of responsibility for the Services to a new contractor or to the Client, as the case may be, and the Contractor shall take no action at any time during the Term or thereafter which is calculated or intended, directly or indirectly, to prejudice or frustrate or make more difficult such transfer.

Z46 EMPLOYER'S INTERNAL PAYMENTS PROCEDURE

Z46.1 Delete existing clauses 51.1 & 51.2 and insert:

The Service Manager certifies a payment within 7 days of each assessment date. The certificate from the Service Manager shall specify the amount (if any) of payment to be made or proposed to be made, and the basis upon which that amount was calculated. Immediately

following the issue of a certificate the Contractor shall send a valid invoice to the Service Manager confirming the amount due within the certificate. For the purposes of the Housing Grants, Construction and Regeneration Act 1996 (as amended) the due date for payment in respect of a certificate shall be the date on the Contractor's invoice and the final date for payment pursuant to the certificate shall be 21 days from the date on the Contractor's invoice. The invoice must contain the relevant project purchase order number, the project name and address, the project number and the Royal Borough of Windsor and Maidenhead - Finance Officer's name and must be sent via e-mail to accountspayable@rbwm.gov.uk and copied to invoices@rbwm.gov.uk. Payments are in the currency of this contract unless otherwise stated in this contract.

Z46.2 The Employer or, if applicable, the Contractor makes each payment due under this contract by the final date for payment and interest is paid on the late payment. Interest is assessed from the final date for payment until the date when the late payment is made and is included in the first assessment after the late payment is made.

Z47 ADDITIONAL PROJECTS AND SERVICES INCENTIVE

Z47.1 Where the performance levels are exceeded in accordance with the KPI management process identified within Schedule 5 Collaboration and Partnering, then the Employer may add additional projects and services into the service provision for any given year as part of the incentive process. This will be at the sole discretion of the Employer as to which schemes may be awarded in this method and will be awarded under Main Option mechanisms Option A or Option C.

APPENDIX 1 – CONTRACTOR DATA

PART TWO – DATA PROVIDED BY THE CONTRACTOR

Completion of the data in full, according to the Options chosen, is essential to create a complete contract.

1 General

The Contractor is

Name	Marlborough Highways Limited
Address for communications	Woolf House, 15 Regiment Business Park, Eagle Way, Chelmsford Garden, Chelmsford, CM3 3FY
Address for electronic communications	bids@marlboroughhighways.co.uk

The fee percentage is 13.99 %

The service areas are As defined in the Service Information

The key persons are

Name (1)	[REDACTED]
Job	Contract Manager
Responsibilities	•Deliver a client-focused, commercially aware service. •Ensure the safety of our people and customers, while providing an exemplary service across all work types. • Provide visible leadership, positively engaging with my teams. • Lead by example in all areas of performance and championing the right behaviours in our delivery teams. • Maintain regular contact with the RBWM Service Manager to provide updates on progress and ensure no surprises. • Work with stakeholders to ensure their needs are considered and met, while ensuring service delivery and safety is never compromised. • Expertly discharging the role of Winter Service Operations Manager. • Maintaining regular contact with other Marlborough contract managers to learn lessons and share best practice.

Qualifications	[REDACTED] [REDACTED] [REDACTED] [REDACTED]

Experience	
Name (2)	
Job	Operations Manager
Responsibilities	• Ensuring we provide a safe, responsive, high-quality service. • Oversee proposed Tinkers Lane and Vicus Way depot investment proposals. • Making sure all works requests are seamlessly actioned, scheduled, delivered with records updated in CONFIRM. • Leading safety briefings and embedding our Zero Harm culture. • Attending contract management meetings with the Contract Manager • Coordinating tasks according to priorities and construction phasing plans – working with my supervisory teams. • Working collaboratively with RBWM to review and adjust service provision to meet budget, customer and other competing priorities. • Assuming the role of Winter Service Manager. • Promptly resolving technical / resource issues. • Coordinating daily supervision, planning, and construction of works. • Informing RBWM on progress and making management information available. • Monitoring performance against works programmes and performance indicators. • Providing leadership to operational team and mentorship to apprentice operatives.
Qualifications	
Experience	

The following matters will be included in the Early Warning Register

Treatment of coal tar bound materials

2 The Contractor’s main responsibilities

If the Contractor is to provide Scope for its plan	The Scope provided by the Contractor for its plan is in	ITT_Sch 2 – Highway Service Requirements Updated 03.06’

3 Time

If a plan is to be identified in the Contract Data	The plan identified in the Contract Data is	N/A

5 Payment

If Option A, C or E is used	The price list is	
If Option A or C is used	The tendered total of the Prices is	£12,481,733.09

Resolving and avoiding disputes

The Senior Representatives of the Contractor are

Name (1)	
Address for communications	Woolf House, 15 Regiment Business Park, Eagle Way, Chelmsford Garden, Chelmsford, CM3 3FY
Address for electronic communications	@marlboroughhighways.co.uk
Name (2)	
Address for communications	Woolf House, 15 Regiment Business Park, Eagle Way, Chelmsford Garden, Chelmsford, CM3 3FY
Address for electronic communications	@marlboroughhighways.co.uk

X10: Information modelling

If Option X10 is used		
If an information execution plan is to be identified in the Contract Data	The information execution plan identified in the Contract Data is	

X29: Climate change

If Option X29 is used

If a *climate change plan*
is to be identified in the
Contract Data

The *climate change* plan identified
in the Contract Data is

Y(UK)1: Project Bank Account

If Option Y(UK)1 is used

The *project bank* is

named suppliers are

Data for the Schedule of Cost Components (used only with Options C or E)

The people listed in Contract Data who are employed by the *Contractor*, whose normal place of working is not within the Service Areas and who are working outside of the Service Areas other than on manufacture and fabrication and providing a *shared service* are

category of person	work

The listed items of Equipment purchased for work on the contract, with an on cost charge, are

Equipment	time-related on cost charge	per time period

The rates for special Equipment are

Equipment	rate

The rates for Defined Cost of manufacture and fabrication outside the Service Areas by the *Contractor* are

category of person	rate

The rates for people providing shared services outside the Service Areas are

shared service	category of person	rate

Data for the Short Schedule of Cost Components (used only with Option A)

The *people rates* are

category of person	unit	rate
As per the Pricing Schedule Series 8000 Time Charge (E)		

The published list of Equipment is the edition current at the Contract Date of the list published by

Civil Engineering Contractors Association

The percentage for adjustment for Equipment in the published list is

-10 % (state plus or minus)

The rates for other Equipment are

Equipment	rate
As per the Pricing Schedule Series 8000 Time Charge (E)	

The rates for Defined Cost of manufacture and fabrication outside the Service Areas by the *Contractor* are

category of person	rate
N/A	

The rates for people providing *shared services* outside the Service Areas are

<i>shared service</i>	category of person	rate
As per the Pricing Schedule Series 8000 Time Charge (E)		

Parent Company Guarantee

DATED 24 October 2025

MARLBOROUGH HIGHWAYS GROUP LIMITED

and

THE ROYAL BOROUGH OF WINDSOR & MAIDENHEAD

PARENT COMPANY GUARANTEE

PARENT COMPANY GUARANTEE

DATE 24 October 2025

PARTIES

- (1) **Marlborough Highways Group Limited** (incorporated and registered in England and Wales under company registration number 08479092), the registered office of which is at Woolf House 15 Regiment Business Park, Eagle Way, Little Waltham, Chelmsford, CM3 3FY (the **Guarantor**); and
- (2) **The Royal Borough of Windsor & Maidenhead** of Town Hall, St Ives Road, Maidenhead SL6 1RF (the **Authority**),

the "**parties**" and each a **party**.

RECITALS

- (A) The Authority and Marlborough Highways Ltd (**Contractor**) have entered into an agreement for the provision by the Contractor of Highways services to the Authority (the **Contract**).
- (B) The Contractor is a subsidiary company of the Guarantor.
- (C) The Guarantor has agreed to enter into this guarantee.
- (D) Unless otherwise stated in this deed capitalised terms shall have the same meanings as are respectively assigned to them in the Contract.

IT IS AGREED AS FOLLOWS:

1 The Guarantee

the Guarantor irrevocably and unconditionally guarantees to the Authority the full, complete and punctual performance of the Contract by the Contractor including, without limitation, the guaranteeing of any and all obligations and liabilities of the Contractor which may arise under or in connection with, or as a result of any breach of, the Contract (the **Guaranteed Obligations**) so that:

- 1.1 if the Contractor shall in any respect fail to perform any of its obligations arising under the Contract or shall commit any breach of or fail to fulfil any warranty or indemnity set out in the Contract, then, upon the Authority's demand, the Guarantor shall forthwith perform and fulfil in the place of the Contractor each and every duty, obligation, provision, warranty or indemnity in respect of which the Contractor has committed a breach or which the Contractor has otherwise failed to fulfil;
- 1.2 the Guarantor shall be liable for and shall indemnify and hold harmless the Authority from and against and all losses, damages, expenses, liabilities, claims, costs or proceedings which the Authority may suffer or incur by reason of the said failure or breach; and
- 1.3 if the Contractor suffers and Insolvency Event of Default (as defined in the Contract) or if the Authority terminates the Contractor's employment under the Contract, the Guarantor

shall indemnify the Authority against all loss, debt, damage, interest, cost and expense incurred by the Authority by reason of the Contractor suffering an Insolvency Event of Default or such termination and shall, on first written demand, pay to the Authority without any deduction or set-off the amount of that loss, debt, damage, interest, cost and expense.

2 **Deductions**

2.1 The Guarantor agrees as primary obligor to indemnify the Authority against any and all reasonably incurred costs, losses and expenses of enforcing this guarantee.

2.2 Payment of sums due under this guarantee to the Authority shall be paid to it in full without set-off or counterclaim and free of any present or future taxes, levies, duties or charges, fees, withholdings or deductions (together **Deductions**) which would not have been imposed if such payments had been made by the Contractor, and if the Guarantor is compelled by law to make any Deductions the Guarantor shall gross up the payment so that the net sum received by the Authority is equal to the full amount which the Authority would have received had no such Deductions been made.

2.3 The Guarantor shall pay interest on any sums due under this guarantee from the date of demand until the date of payment in full at the rate of 4% per cent above the Bank of England base rate current at the day for payment of the sum.

3 **Continuing Obligations**

3.1 The Guarantor acknowledges and agrees that its obligations shall remain in force and effect notwithstanding (and that its liability under this deed shall not be discharged or affected in any way by):

3.1.1 any provision, novation, amendments to, extension of, waiver of, variation or alteration to the terms of the Contract or in the extent, nature or method of performance of the Services therein referred to;

3.1.2 any dispute between the Authority and the Contractor or any allegation that the Contractor has claims against the Authority or any objection or representation made by the Contractor;

3.1.3 any composition, discharge, release, waiver or other variation of liability entered into with, or granted to, the Contractor;

3.1.4 any allowance of time, waiver, forbearance, delay, forgiveness, indulgence, compromise or other dealing under or with the Contract or any right or remedy arising thereunder;

3.1.5 any invalidity, illegality, unenforceability or irregularity of the Contract or of any provision thereof;

3.1.6 any disability, incapacity, legal limitation, change in ownership or change in status of the Contractor;

3.1.7 an "Insolvency Event" (as further described in clause 3.2);

3.1.8 a change in the constitution of the Contractor;

- 3.1.9 any other act or omission which (but for this clause 3) might have operated to release, exonerate or discharge the Guarantor or otherwise reduce, extinguish or adversely affect any liability of the Guarantor under the terms of this deed,

and the Guarantor hereby waives notice to it of any such event.

- 3.2 For the purposes of this clause 3 **Insolvency Event** means in relation to the Contractor and/or its parent company:

- 3.2.1 it is unable to pay or has no reasonable prospect of being able to pay its debts within the meaning of section 123 of the Insolvency Act 1986 (as amended), but disregarding the references therein to proving it to the court's satisfaction;
- 3.2.2 it or its directors resolve to appoint an administrator of it or to apply to court for an administration order in respect of it or an application for an administration order in respect of it is made or any steps pursuant to schedule B1 of the Insolvency Act 1986 (as amended) and/or the Insolvency Rules 1986 (as amended) are taken to appoint an administrator to it or it enters administration;
- 3.2.3 it or its directors request or it suffers the appointment of a Law of Property Act 1925, court appointed or other receiver or receiver manager, or similar officer over or in relation to the whole of its undertaking, property, revenue or assets or any part thereof, or any person holding security over all or any of its undertaking, property, revenue or assets takes possession of them or any part of them;
- 3.2.4 it or its directors resolve to wind it up whether as a voluntary liquidation or a compulsory liquidation, or they take any steps under the Insolvency Act 1986 (as amended) and/or the Insolvency Rules 1986 (as amended) to wind it up voluntarily or to apply to the court for a winding-up order or a winding-up petition is presented against it or a provisional liquidator is appointed to it or it goes into liquidation within the meaning of that term under section 247 of the Insolvency Act 1986 (as amended);
- 3.2.5 it or its directors resolve to enter into, or it enters into, or it or its directors commence negotiations, or make any requisite application to court in respect of, or if they convene meetings for the approval of, any composition, compromise, moratorium (to include a moratorium statutorily obtained, whether or not as a precursor to a voluntary arrangement under the Insolvency Act 1986 (as amended), scheme or arrangement with its creditors or any of them, whether or not under the Insolvency Act 1986 (as amended), the Companies Act 1985 (as amended) or otherwise;
- 3.2.6 it is dissolved, or is removed from the Register of Companies, or ceases to exist (whether or not capable of reinstatement or reconstitution) or its directors apply for it to be struck-off the Register of Companies; or
- 3.2.7 it is or becomes subject to, takes or has taken against it or in relation to it, or any or all of its undertaking, property, revenue or assets, any equivalent, analogous, corresponding or similar finding, step, process or proceeding to those in this clause 3.2 in any jurisdiction, whether or not any finding, step, process or proceeding has been taken against or in relation to it, or any or all of its undertaking, property, revenue or assets in England & Wales.

4 **Capacity**

- 4.1 The Guarantor agrees that this guarantee shall be additional to and not in substitution for any rights or remedies that the Authority may have against the Contractor under the Contract or at law and the Authority shall not be obliged before taking steps to enforce this guarantee to take action or proceedings against or enforce any other guarantee or security from time to time held by the Authority, or to make or file any claim in the bankruptcy or liquidation of, the Contractor or any other person.
- 4.2 In the event that the Authority brings proceedings against the Contractor, the Guarantor will be bound to the same extent as the Contractor by any findings of fact, interim or final judgment made by the court in such proceedings save to the extent that such findings of fact, interim or final judgment shall be reversed on appeal.
- 4.3 The Guarantor confirms that it has full power and capacity to enter into this deed and agrees that this deed shall not be revocable by the Guarantor and that the same shall be a continuing guarantee and shall remain in full force and effect for as long as the Contractor remains under any actual or contingent liability under the terms of the Contract and shall not prejudice or be prejudiced by:
- 4.3.1 any other right against any third party which the Authority may have for performance of all or any of the Guaranteed Obligations; and
- 4.3.2 any additional existing or future security for the Guaranteed Obligations which the Authority may have,
- and notwithstanding the winding-up, liquidation, receivership, administration, voluntary arrangement or other composition with creditors (or any event analogous to any of them) of the Contractor.

5 **Indemnity And Security**

- 5.1 The Guarantor indemnifies the Authority on demand against any loss or liability suffered by it if any Guaranteed Obligation is or becomes unenforceable, invalid or illegal as if the Guaranteed Obligation had not become unenforceable, invalid or illegal provided that the Guarantor's liability shall be no greater than the Contractor's liability would have been if the Guaranteed Obligation had not become unenforceable, invalid or illegal.
- 5.2 Until all amounts which may be or become payable under the Contract or this guarantee have been irrevocably paid in full, the Guarantor shall not as a result of this guarantee or any payment or performance under this guarantee be subrogated to any right or security of the Authority or claim or prove in competition with the Authority against the Contractor or any other person or demand or accept repayment of any moneys or claim any right of contribution, set-off or indemnity and any sums received by the Guarantor or the amount of any set-off exercised by the Guarantor in breach of this provision shall be held by the Guarantor in trust for and shall be promptly paid to the Authority.
- 5.3 The Guarantor shall not hold any security from the Contractor in respect of this guarantee and any such security which is held in breach of this provision shall be held by the Guarantor in trust for and shall promptly be transferred to the Authority.

5.4 Until all amounts which may be or become payable under the Contract or this guarantee have been irrevocably paid in full, if (notwithstanding the provisions of clauses 5.2 and 5.3) the Guarantor has any rights of subrogation against the Contractor or any rights to prove in a liquidation of the Contractor, the Guarantor agrees to exercise such rights in accordance with the directions of the Authority.

5.5 Any amount which is not recoverable from the Guarantor under this deed because of any legal limitation, disability or incapacity of the Guarantor shall be recoverable from the Guarantor on the basis of an indemnity.

6 **Claims Procedure**

Any claim under this deed shall be made by notice in writing by the Authority addressed to the secretary of the Guarantor at its registered office stating that the Contractor is in breach of the Guaranteed Obligations. Such notice may be given by first class post or delivered by hand. Notices shall be deemed to be served if by post two days after posting and if by personal delivery when delivered.

7 **Assignment**

7.1 This guarantee and the benefit conferred by it may be assigned (whether in security or otherwise) by the Authority at any time to:

7.1.1 any party to whom the Authority assigns or novates its interest under the Contract; or

7.1.2 any party who has the benefit of a Step-In Right into the Contract.

7.2 Save as expressly provided by clause 7.1, this guarantee and the benefit conferred by it may not be assigned by either party.

8 **Governing Law And Jurisdiction**

8.1 This guarantee shall be governed by and construed in accordance with the laws of England and Wales.

8.2 The parties hereby submit to the non-exclusive jurisdiction of the courts of England and Wales.

8.3 If a term of this guarantee is or becomes illegal, invalid or unenforceable in any jurisdiction, that will not affect the legality, validity or enforceability in that jurisdiction of any other term of this guarantee.

9 **Contracts (Rights Of Third Parties) Act 1999**

This guarantee is intended to be for the sole benefit of the parties to it and a person who is not a party to this guarantee shall not have any rights under the Contracts (Rights of Third Parties) Act 1999 to enforce any term of this guarantee. This clause 9 does not affect any right or remedy on any person which exists or is available otherwise than pursuant to the Contracts (Rights of Third Parties) Act 1999.

10 **No Greater Liability**

- 10.1 Without limitation to clauses 2, 3 and 5 of this guarantee, The Authority shall have no greater rights against the Guarantor than if the Guarantor had been a party to the Contract and jointly and severally liable with the Contractor and the same defences set-offs and/or counter claims available to the Contractor shall be available to the Guarantor but without double counting any such entitlement and without limitation to the right of the Authority to counter any such defence.
- 10.2 No delay or omission of the Authority in exercising any right, power or privilege under this guarantee shall impair or be construed as a waiver of such right power or privilege nor shall any single or partial exercise of any such right, power or privilege preclude any further exercise of such right, power or privilege or the exercise of any other right, power or privilege. The rights and remedies of the Authority provided for in this guarantee are cumulative and not exclusive of any rights or remedies provided by law.

11 **Waiver**

- 11.1 A waiver given or consent granted by the Authority under this guarantee will be effective only if given in writing and then only in the instance and for the purpose for which it is given.
- 11.2 A waiver by the Authority shall not constitute a continuing waiver and shall not prevent the Authority from subsequently enforcing any of the provisions of this guarantee.

In witness whereof this guarantee has been executed as a deed on the date set out above.

Executed as a deed by)

Marlborough Highways Group Limited)

acting by two authorised signatories:)

William Blostone

DocuSigned by:
[Redacted]
F94BD9A731BD452...

Authorised Signatory

Matthew Revell

Signed by:
[Redacted]
DE23AED99F07424...

Authorised Signatory

DS



The common seal of)

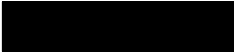
The Royal Borough of Windsor & Maidenhead)

was hereunto affixed in the presence of:)



Seal No: 30636

Authorised Signatory

DocuSigned by:

4C503B81106F410...

Legal Support Coordinator



ROYAL BOROUGH OF
**WINDSOR &
MAIDENHEAD**
WWW.RBWM.GOV.UK

Royal Borough of Windsor and Maidenhead
Highway Services Contract

Highway Maintenance
and Capital Works Contract

Schedule 2
Highway Service Requirements

Contents

.....	ERROR! BOOKMARK NOT DEFINED.
GENERAL SPECIFICATION.....	3
1. SERVICE AND CONTRACT INFORMATION.....	3
1.1 Terms and Definitions	3
1.2 Description of the Service	3
1.3 Highway Maintenance and Capital Works	3
1.4 Lot 2 Street Cleansing.....	4
1.5 Lot 3 Highway, Transport and Bridge Professional Services.....	4
1.6 Lot 4 Traffic Signals and ITS Maintenance	5
2. GENERAL PROVISIONS	5
3. SERVICE KEY PRINCIPLES.....	6
4. PERFORMANCE MANAGEMENT	7
5. POLICIES, REGULATION AND CORPORATE OBJECTIVES	7
5.1 RBWM Policies.....	7
5.2 Regulation	7
6. CONTRACT DILIGENCE	8
7. CONTRACT CONSTRAINTS.....	8
8. CONTRACT MANAGEMENT.....	8
8.1 Supplier's Management Team	9
8.2 Supplier's Staffing	9
8.3 Supplier's Service Delivery Plan	10
8.4 Core Service Delivery Plan(s).....	11
8.5 Supplier's Minor Works and Construction Quality Plan	11
8.6 Supply Chain Quality Plans.....	12
8.7 Partnership Meetings	12
9. PROPERTY PROVISION.....	14
10. THE ANNUAL PROGRAMME.....	15
10.1 Reactive	15
10.2 Drainage.....	15
10.3 Routine and Cyclical	15
10.4 Minor Planned Work.....	15
10.5 Major Planned Work.....	16
11. WORKS ORDER DELIVERY	16
11.1 Role of Supplier's Delivery Team.....	16
11.2 Task Delivery Process	17
11.3 Works Order Delivery Response Times.....	18
12. ANNUAL CAPITAL PROGRAMME	18
12.1 The capital programme	18
13. PROGRAMME MANAGEMENT	20
13.1 Works Programme	20
14. NETWORK CONTROL AND TRAFFIC MANAGEMENT	20
14.1 Traffic Management Act	20
14.2 Parking Suspensions	21
15. FLEET MANAGEMENT.....	22
15.1 Fleet Management Scope	22
15.2 Supply Chain Management.....	22
16. STAKEHOLDER MANAGEMENT	22
16.1 Stakeholder Map	22
16.2 Stakeholder Communication	23
16.3 Stakeholder Online Notification & Support.....	23
16.4 Stakeholder Written & Face to Face Notification	24
16.5 Advanced Information Boards.....	24
17. CUSTOMER SERVICES	25

RBWM Highway Services Contract 2024
Highway Maintenance and Capital Works Contract



17.3	Customer Complaints Procedure	26
18.	QUALITY ASSURANCE	26
18.1	Quality Management:	26
18.2	Quality and Audit Management	26
19.	BUSINESS MANAGEMENT	28
19.1	Business Processes & Systems	29
19.2	Business Environment and Continuity	29
19.3	Health and Safety Policy & Action Plan	29
19.4	Business Continuity & Resilience Policy	29
19.5	Severe Weather Action Plan	30
19.6	Human Resources	30
19.7	Sustainability Policy	30
19.8	Environmental Sustainability	32
19.9	Economic Sustainability	32
19.10	Social Sustainability	32
19.11	Equality and Diversity	32
20.	MOBILISATION AND DEMOBILISATION	32
20.1	Mobilisation Statement of objectives	32
20.2	Scope & Standard of Performance	33
20.3	Implementation	35
20.4	Asset Validation	35
20.5	Exit Strategy and Demobilisation	36
20.6	Exit Strategy	36
20.7	Responsibilities of the Supplier	37
21.	HEALTH AND SAFETY	37
21.1	General	37
21.2	The Supplier's Duties	37
21.3	Health and Safety Responsibilities	38
21.4	Authorised Persons & Permits to Work	38
22.	ICT SYSTEMS AND OPERATION	39
22.1	General Requirements	39
22.2	Supplier to provide Equipment	39

General Specification

1. Service and Contract Information

1.1 Terms and Definitions

A Defined Terms and Definitions list detailing the definitions of all key plans, documents, or terms referenced in this Contract specification.

1.2 Description of the Service

The Highway Services Contract have been divided into 4 service Lots and there is a requirement for all Suppliers to manage and deliver in collaboration, such that all core highway service functions are delivered efficiently and seamlessly for the Borough.

All services are required to deliver the Client's strategic objectives outlined in the Corporate Plan (2021-2026) and the Supplier is expected to demonstrate year on year improvements to satisfy these objectives as follows:

- **Taking action to tackle climate change and its consequences and improving our natural environment** - the Borough has declared a Climate Emergency, and this priority sets out the actions that we will drive forward as a Borough and collectively, to reduce emissions, protect our natural environment and to adapt to climate impacts.
- **Quality infrastructure that connects neighbourhoods and businesses and allows them to prosper** - recognising the need to invest in new infrastructure to support the borough's future prosperity and sustainability, including digital, low carbon, transport and community infrastructure.

In addition, the Suppliers and the Borough will work together in collaboration to ensure that they collectively provide a highway service that:

- is environmentally sustainable.
- provides excellent value for money.
- drives collaboration across all service lots to provide greater efficiency.
- respects and values those engaged on the Contract and across all lots, throughout the entire supply chain.
- strengthens the role of local communities in the decision-making process; and
- builds upon the key principles of.
 - prevention better than cure.
 - right first time.
 - clarity for the public.

1.3 Lot 1 Highway Maintenance and Capital Works

Lot 1 Highway Maintenance and Capital Works is the core reactive, routine, and planned highway maintenance services and will include but not limited to, the following activities:

- Coordination and programming of highway repairs including.
 - Routine and minor planned maintenance of carriageways and footways (including machine laid patching).
 - Routine, reactive and minor planned maintenance of structures including mechanical and electrical

- Routine, reactive and minor planned maintenance of highway signs, including cleaning.
- Replacing carriageway markings and other safety features
- Routine and cyclical programme of works including gully clearance.
- Minor and major project works capital and revenue.
- General civil engineering projects including cycleways, footway maintenance, drainage infrastructure and safety barriers and integrated transport schemes.
- Responding to highway incident, emergency or safety defects following customer reports including structures.
- Emergency response 24/7 including on-call availability.
- High friction surfacing, lining and other surface treatments (including replacement of markings as appropriate).
- Routine, reactive and planned maintenance of safety barriers.
- Winter service (including route planning provision of staff and vehicles).
- Drainage inspections and minor repairs/projects and works programming.
- Routine inspections of subway pump systems and repairs.
- Support for special events, including traffic management.
- Undertaking physical inspections, such as core sampling, bridge inspections and providing other equipment and apparatus as may be required by the Client, or other Lot provider, as instructed.
- Collaboration with all other service lot providers.
- Streetworks Permitting, including road closures, footpath closures, parking suspensions and works related to streetworks regulations.
- Support with the section 81 process as detailed in the HMMP.
- Provide traffic management, equipment and support for other suppliers and stakeholders.

The Supplier will detail all service activity and deliverables in a detailed Service Delivery Plan.

1.4 Lot 2 Street Cleansing – Does this need to be included as already let?

Lot 2 Street Cleansing service is a public realm and highway infrastructure public realm cleansing service including but not limited to the following activities: - Again is this needed as already let?

- Reactive, planned cyclical road sweeping including highway infrastructure and public realm areas such as car parks, cycleways, pedestrianised areas.
- Attendance and response to road traffic accidents
- Highway litter bin emptying
- Fly Tipping removal
- Graffiti removal
- General detritus removal, including pests and accidental wildlife
- Public convenience management
- Collaboration with all other service lot providers.
- Support for special events

1.5 Lot 3 Highway, Transport and Bridge Professional Services – Again same as above?

The professional services Lot 3 will provide technical support for a range of Client services including but not limited to, the following:

- Bridges and structures inspections

- Technical support for structural emergency
- Abnormal Load Management
- Drainage investigation
- Annual capital programme including;
 - Design and project management and Contract governance
 - Drainage Schemes
 - Highway Schemes
 - Traffic and road safety schemes
 - Major projects
 - Road Safety engineering
 - Road Safety Audits
 - Related customer enquiries
- Highway asset management policy support
- Traffic regulatory
- Capital programme development
- Transport Projects
- Development and developer technical advisory
- Project and Programme Management
- Asset data capture, including SCRIM and Scanner, condition surveys and data review
- Collaboration with all other service lot providers

1.6 Lot 4 Traffic Signals and ITS Maintenance – Again same as above?

Lot 4 Traffic Signals and ITS Maintenance will be responsible for the maintenance and routine inspection of all ITS infrastructure including design, maintenance and delivery of Traffic systems and Client highway digital infrastructure.

Activities will include the following but not limited to;

- Annual routine maintenance including inspection of ITS infrastructure.
- Reactive Maintenance including fault and defect repair.
- Emergency response including 24/7 call out requirement.
- Data capture and recording of inspection and maintenance activity.
- Customer related enquiries.
- Maintenance and project design and delivery.
- Collaboration with all other service lot providers.
- Maintenance of VMS Signage, Rising Bollard and Anti-Terrorism assets.
- Support for special events.

2. General Provisions

The service shall be carried out in accordance with industry recognised best practice such as;

- Well Maintained Highways
- NWSRG winter service publications
- Specification for Highway Works
- CIHT Manual for Streets
- Design Manual for Roads and Bridges
- British Standards, and industry guidance notes. (ADEPT)
- NEC 4 Engineer and Construction Contract

All other documents such as Method of Measurement, Schedule of Rates, Standard detail drawings will also be included within this suite of documents.

The Service will be delivered in accordance with the Specification and amended clauses as provided in Schedule 3, Appendix 03 and the Specification.

In addition, a list of data room information, containing Client specific documents which provide guidance and explanation around certain asset requirements and policy standards that shall be adhered to is located in Schedule 8.

RBWM also maintain a number of standard details and drawings that provide an illustrative view of requirements.

Specific Works Orders may require the Supplier to provide a different approach and will be specific and suitably detailed in determining how the services are to be delivered.

RBWM and the Supplier will jointly develop a detailed Delivery Plan, Mobilisation Plan and any other documentation detailed in Schedule 3 which will detail in accordance with ISO Quality Standards, the agreed methodology and approach to delivering these services.

Notwithstanding the overarching provisions of this Contract, RBWM also require a Performance Management Framework, to be operated and maintained by the Supplier.

3. Service Key Principles

The Supplier will plan, monitor and deliver all tasks on the Annual Programme whether reactive, routine or project based.

There are two task types, Annual Tasks or Project Tasks. Annual Tasks are routine, cyclical and reactive maintenance tasks. Project Tasks are minor and major project tasks.

The Delivery Team may also consist of specialists and sub-Contractors as necessary.

The Lot 3 Supplier will also undertake design and project management responsibilities where applicable.

All providers are expected to collaborate and work together and support the following principles.

- Undertake and participate in ECI meetings for both annual tasks and project tasks.
- Plan and deliver collectively with all service lot providers to increase productivity and efficiency.
- To assist in the efficient delivery of all client services.
- Contribute to the service, project and performance governance and performance management.
- Provide feedback to support Contract betterment and continual improvement.
- Review and monitor own performance and share findings and feedback at operational and strategic board groups.
- Maintain a professional and disciplined service etiquette including customer contact and interaction.

- Maintain, respect, and support the Clients customer reputation.

In exceptional circumstances, the Client Representative may also specify requirements which are particular to a special requirement. This will be detailed in the relevant Works Order.

4. Performance Management

A performance framework, detailed in Schedule 6 of the ITT document suite includes performance indicators specific to each Lot, as well as interlinked criteria that is relevant to the whole service (all Lots), however individually assessed. The KPI framework is aimed to promote and reward performance, collaboration, efficiency, and quality.

5. Policies, Regulation and Corporate Objectives

5.1 RBWM Policies – Are these all up to date policies?

The following policies are to be adhered to throughout the Contract term and may be referenced within this Contract document suite.

- Boroughs Corporate Plan
- Boroughs Local Transport Plan (LTP).
- Highway Asset Management Plan (HAMP)
- Highway Safety Inspection Manual (HSIM)
- Winter Service Policy
- Highways Management and Maintenance Plan (HMMP)
- Intelligent Transport Systems Maintenance policy (ITSM)
- Energy and Sustainability Statement
- Borough's Environment and Climate Strategy 2022-25
- Local Flood Risk Management Strategy 2014.

5.2 Regulation

All of the Client's highway management and maintenance activities are shaped in the first instance by the legal framework which places statutory duties and powers on all highway authorities. The following Acts and Regulations place mandatory requirements on the Client (this is not an exhaustive list):

- Highways Act 1980
- Environmental Protection Act 1990
- New Roads and Street Works act 1991
- Road Traffic Reduction Act 1997
- Road Traffic Reduction (National Targets) Act 1998
- Control of Pollution Act 1974
- Land Drainage Act 1991
- Health and Safety at Work Act 1974
- Traffic Signs Regulations and general Directions 1994 & 2002
- Environment Act 1995
- Countryside and Rights of Way Act 2000
- The Noxious Weeds Act 1959
- Road Traffic Act 2000
- The Transport Act 2000
- Rights of Way Act 1990

- Disability Discrimination Act 1995
- Human Rights act 1998
- Freedom of Information Act 2000
- Management of Health and Safety at Work Regulations 1992
- Construction (Design and Management) Regulations 2007
- Railways and Transport Safety Act 2003
- Traffic Management Act 2004
- Local Authorities (Transport Charges) Regulations 1998
- Countryside and Wildlife Act 1980
- Flood and Water Management Act 2010
- Flood Risk Regulations 2009

6. **Contract Diligence**

All Suppliers must maintain Contract diligence through competent and structured strategic performance management and governance. A clear governance structure including operational and strategic group meetings to review and mitigate any Contract or performance arisings will form part of the deliverables for all Lots.

The Supplier will detail suitable working methods in the Service Delivery Plan and will ensure collaboration and team working is at the forefront of any governance procedures and processes.

All Suppliers will;

- Adopt best practice governance structures
- Collaborate with Client and other Suppliers
- Ensure strategic and Contract objectives are always met
- Maintain discipline and continual improvement throughout the Contract
- Have the Clients best interests in all activity.

7. **Contract Constraints**

Successful Lot 1 bidder will not be awarded Lot 3, as the Client wishes to maintain separation of these Contracts – can this be removed as Lot 3 already in place now?

There will be no guarantee of a maximum value for Capital Project based work as part of this Lot 1 Contract, but the Client remains confident that previous years spend (2018 to 2023) can be a good indication of continued spend in this area.

8. **Contract Management**

All Suppliers will be responsible for maintaining consistency with the Contract requirements. The Client is looking for suppliers who want to work collaboratively to achieve greater success and efficiency and to see continual service improvements throughout the Contract term.

The Supplier will be required to provide the Service Manager with sufficient information regarding the operation of the Contract to enable the Service Manager to ensure that the Supplier's performance is meeting the specification and performance indicators. The information required will be subject to regular review and revision during the term of the Contract. The Supplier will record the information monthly to the Monthly Operational Meetings and provide a written report quarterly to the Service Manager and the management board, including a summary report (2pg) or dashboard for the monthly Operations meeting. All reporting and information

requirements will be detailed in the Supplier's **Service Delivery Plan**. The Contract governance structure and partnership meetings can be found in section 8.7 of this document and the Service Delivery Plan requirements are also located in section 8.3.

8.1 Supplier's Management Team

The Supplier shall provide a management team headed by a Contract Manager, who will act as the first point of contact for the Borough. The team will comprise suitably qualified and experienced staff who are able to deliver a cost-effective service that meets the specified quality standards.

In the absence of the Supplier's Contract Manager, a suitably qualified replacement shall be nominated by the Supplier to the Borough. The Supplier shall always provide an adequate level of staff supervision for all Supplier staff engaged in delivery of the Services and this shall be evidenced annually in the Supplier's Delivery Plan with relevant training and competency certificates.

The Supplier's Contract Manager or their representatives shall be available and contactable 24 hours per day, seven days a week, 365 days of the year. A designated member of the Supplier's staff shall act as the Supplier's senior person in charge during delivery, at all times.

Emergency arrangements and contact details must be provided and regularly reviewed. The Supplier shall provide out-of-hours' coverage across all Services.

8.2 Supplier's Staffing

The Supplier shall ensure that there is a sufficient level of trained and competent staff to provide all the requirements of the Services at all required times.

The Supplier shall provide staff who are qualified and competent in the discipline they are performing. The Supplier shall employ competent staff who will be responsible for planning, supervising, and signing off completed works / tasks.

The Supplier shall ensure that all trainees, apprentices, and students engaged in providing the services shall be adequately supervised so that no quality standard is compromised by the use of such staff. Where apprentices and students are used, the Supplier shall ensure that these members of staff supplement but do not replace agreed levels of Contract staffing.

Sub-Contractors remain the responsibility of the Supplier whilst carrying out any work under this Contract for the Borough.

The Borough reserves the right to request the removal of any member of the Supplier staff from the Contract if so required. Additionally, the Supplier shall seek agreement from the Borough if it wishes to remove one of its own staff from the Contract.

In carrying out the duties described in this Specification the Supplier shall ensure all Supplier staff and related parties:

- Undertake, if required, an Enhanced Disclosure and Barring Service (DBS) check prior to working on this Contract.
- Are properly and presentably dressed in appropriate uniforms and work wear, including protective clothing and footwear where required.
- Must not park vehicles on grass verges or gardens in a way to cause an obstruction

- Comply with all Borough's site rules and regulations.
- Behave in an appropriate manner at all times when conducting business.
- Ensure confidentiality in respect of any information observed or overheard by its staff while carrying out their duties and adhering to all GDPR regulations
- Are suitably skilled in oral and written communication as required for the role that they are carrying out.
- Must carry and display the Borough's Supplier passes including name and Contracting company when on the Borough's premises.
- Receive appropriate training courses to enable the Supplier's staff to carry out their duties under the Contract.
- Ensure the Supplier's staff comply with the Borough's no smoking policy including the use of e-cigarettes.
- Comply with safeguarding procedures in place.
- Ensure that any reasonable requirements of the Borough are taken into account in the proposed works.
- Confirm the start and completion dates and hours of working with site personnel.
- Protect all site users and their belongings during such works.
- Provide advice and instructions on the use of any new equipment and/or installations.
- Liaise with the Borough's Service Manager on access issues, such as restrictions to areas that may be out of use, etc.
- Maintain and make good any incidental damage caused.
- Remove all rubbish and clean up after completing tasks at the end of each day or, where the task cannot be completed, the Supplier is to ensure the area is cordoned off and made safe with appropriate signage.
- Carry out all works in accordance with statutory requirements, insurance requirements, Health & Safety requirements, British Standards, manufacturers' instructions and otherwise in compliance with good industry practice.
- Test and service all plant and equipment within the responsibility of the Supplier, as required by legislation.

8.3 Supplier's Service Delivery Plan

The Supplier is required to produce a Service Delivery Plan annually and prior to the Contract commencement. In this document, the Supplier shall describe the overall approach to managing the Contract and delivering the Services. This shall include but not be limited to:

- The name of the Supplier's Contract Manager;
- The names and positions of the Supplier's key staff;
- The names and positions of the Supplier's representatives for attendance at each of the Contract meetings;
- The Supplier's address for serving of notices;
- The management organisational structure for the Contract showing FTE allowances;
- Roles, responsibilities and key skills and competences of each member of the management structure;
- The approach to the daily management of the Core Services;
- Details demonstrating the integration of sustainable work practices.
- Approach to dealing with staff issues and complaints against staff

- Details of all intended Sub-Contractors and how they shall be monitored and managed.
- The Supplier's Contract specific plan for business continuity incorporating the potential risks to business continuity, their mitigation strategies, how the service will be delivered in the event of a serious disruption to normal operations and how the business continuity plan will be tested.
- The Supplier shall set out the Supplier's processes and procedures for managing Health & Safety in the delivery of the service. Including Contract specific risk assessments which relate to the specified activities and the Supplier's permit to work system which has been tailored to meet the requirements of the specified activities, in accordance with the Borough's Health and Safety Policy.
- The Supplier's approach to Risk Management
- The Supplier's details regarding Business Continuity Planning
- Audit methodology and reporting approach
- Complaints procedures
- Details of all software to be used and how these will interface with those of the Borough

8.4 Core Service Delivery Plan(s)

The Supplier shall provide a provisional Core Service Delivery Plan by Contract commencement date which details, on a service-by-service basis, how and when the Supplier shall deliver each service. This shall include but not be limited to:

- Method statements detailing the service requirements and Service Levels that will be met by the Supplier.
- Details of operational resourcing for the specific service including the operational structure, numbers and job titles of Supplier's Staff;
- Staffing rotas and shift patterns and contact information;
- Details of Sub-Contractors to be used in the delivery of the service; and
- Frequencies of Planned Activities including Statutory Inspections and Testing

8.5 Supplier's Minor Works and Construction Quality Plan

The Quality Plan shall identify procedures (which may be a part of the Supplier's general procedures) that cover the topics listed below. Copies of these procedures shall be made available to the Service Manager on request.

- Statement of the Supplier's organisation for quality control.
- Arrangements for "receiving" and "in-process" testing.
- Control of test laboratories.
- Control of test, measuring and inspection equipment.
- Document control.
- Procedure for monitoring and recording the inspection, test and approval status of the constructed/installed work.
- Procedures for tests and inspections for the purpose of the Supplier certifying that prior to covering up, each part of the Works are complete and conform to the Contract.
- Procedure for the review of work submitted for review but not accepted as conforming to the Contract.
- Procedure for the collation of quality records as identified in BS EN ISO 9002, and provision or copies when requested by the Service Manager.

8.6 Supply Chain Quality Plans

The Quality Plan shall include but not be limited to the following:

- Definition of the product or service to be provided.
- The organisation of the Supplier describing the line of command and stating the name of the senior manager responsible for the Contracted Work and the name of the Supplier's on-site management representative. Contact addresses, telephone numbers, etc, shall be provided.
- Identification of the relevant parts of the Supplier's quality system relevant to the product or service being provided. (Copies to be provided to the Service Manager on request.)
- The control of personnel selection (at works and on site), including special requirements for skilled personnel e.g. certification of welders, training of operatives, experience requirements etc.
- Specific procedures for the following:
- Receipt and examination of certificates of conformity and test results for purchased products.
- Product identification and traceability.
- Handling, storage, packaging and delivery to Site and storage and handling on Site.
- Quality records.

The Quality Plan shall be submitted to the Service Manager for its acceptance not later than 3 months after the award of the Contract and prior to commencement date.

The Supplier shall submit other parts of the Quality Plan prior to the commencement of any related work or activity and to a timetable to be agreed with the Service Manager.

Individual "mini" Risks and Method Statements may be required from time-to-time for specific work items, which will be listed within any Works order.

8.7 Partnership Meetings

The Parties shall agree to establish 3 key levels of Contract Governance and Assurance as detailed below :

- Weekly Operational Delivery Meetings (task and activity focused)
- Monthly Operational Meetings (delivery, risk and performance of the Contract)
- Quarterly Management Board (quarterly review of SPI's / KPI's performance)
- Annual Strategic Review (annual review of performance and overall objectives)

The Supplier shall prior to the Commencement date and prior to each subsequent anniversary of the Commencement date, develop and issue to the Borough for agreement, an annual schedule of meetings necessary for the successful delivery of the Service and management of the relationship with the Borough.

The Supplier shall ensure that the Supplier's Staff in attendance at all meetings have delegated power and authority to act on behalf of the Supplier and should reflect the indicative job grades outlined above.

The Supplier shall develop agendas and relevant paperwork five Business Days prior to all meetings, and shall take minutes of all meetings, issuing minutes for agreement

within five Business Days of each meeting. The Monthly Report, is to be prepared and delivered to the Borough seven working days in advance of the meeting.

All meetings shall be held at Tinkers Lane Depot unless agreed otherwise by the Borough. The table below sets out the subject matter to be discussed at Contract partnership meetings.

Monthly Review – Operational Meetings (MOM)

An operational review of performance of the service including: -

- Review of Supplier Performance in previous month;
- Review of the Monthly Report;
- Review of application for payments & payment adjustments;
- Resolution of on-going performance issues;
- Review of forthcoming Projects and finance update;
- Review of Audits that have been carried out;
- Review of Health and Safety matters;

Quarterly Review – Management Board (QMB)

An operational review of Services delivery including:-

- Supplier's plans and authorise changes;
- Review progress in respect of strategy, health and safety and environmental issues (including training plan review);
- Updates to the Forward Maintenance Plan;
- Quarterly review of Supplier performance;
- Review of Early Warning Notices;
- Continuous Improvement Initiatives.

Annual Review – Strategic Meetings (ASR)

A strategic assessment of the relationship between the parties including:-

- Business updates from the Borough and the Supplier;
- Market Review / Industry Trends & Innovations;
- Achievement of the Borough's objectives for the Contract;
- Annual review of Supplier performance;
- Significant Risks and Issues affecting performance; and
- Opportunities for the year ahead.
- Annual Planned Activities
- Forward Maintenance Plan
- Updated & Issued Contract Asset Register
- Service Level alignment with the Borough requirements
- Service Delivery Plan Review

Weekly Operational Meetings

An operational review of performance of the service including: -

- Day to day operational issues
- Projects delivery

- Weekly task review

9. Property Provision

The Supplier will be provided use of the depot facilities at Tinkers Lane. A lease agreement will be in-place for the use of this space and will be agreed between the parties. Details of the Lease agreement and associated property requirements will be agreed during mobilisation.

10. The Annual Programme

The Annual Programme is divided into a series of specific work activities (“Tasks” to be undertaken by the Supplier):

10.1 Reactive

Carried out in response to inspections, customer enquiries or unforeseen events, and which generally are required to comply with the Client’s statutory duty to maintain the highway in a safe condition, as described in the HMMP. Orders will be raised by Client inspectors for these Tasks and the Supplier will be required to Plan, Manage and Monitor all orders raised.

These tasks do not have a distinct design phase and do not generally require consultation or notification and will be performed by the Suppliers in accordance with the Works Order details and Works specification. Reactive maintenance orders will also include emergency works orders. The Supplier must maintain and update the whereabouts programme daily and provide a copy to the Client for review weekly in preparation of weekly or monthly programme reviews.

10.2 Drainage

All drainage enquiries or defects generated from cyclical drainage maintenance or customer enquiry will be passed directly to the supplier to inspect and raise necessary works orders, and will be expected to manage, monitor and supervise all works in relation to drainage.

All works orders related to drainage will be detailed in the Annual Programme for weekly and monthly review. All Works Orders will be raised on the Client Asset Management System (CONFIRM) by authorised and designated Supplier Personnel. Software access will be restricted to authorised personnel only.

All enquiries received around drainage that are uploaded in Confirm or “Report It” are to be reviewed and responded to by the Lot 1 supplier using pre-populated and autonomous responses. More contentious responses, as per the customer services escalation process, will be responded to by the Client with assistance from the supplier.

10.3 Routine and Cyclical

Routine and Cyclical tasks that are fully defined in advance of the year. Annual or cyclical orders will be placed for these Tasks, and they will then be delivered by the Supplier during the year without further instruction from the Client, in accordance with the Term Brief. For example, this will include drainage and catchpit clearance, – not part of this contract, delivery of Winter Service (although the Client may introduce local controls in the event of extreme weather).

Routine and cyclical activity will be delivered under a fixed cost agreement (NEC 4 Option A) and will be evidenced against previous term service outputs allowing for best value pricing against known activity volumes and quantity. Further pricing information can be found in schedule 4.

10.4 Minor Planned Work

Planned Tasks, these are projects with a value less than £100,000, for which a reactive response time is not required, but which are identified during the year and instructed by the Service Manager. These tasks may have a distinct design and will

require relevant Supplier to attend and support ECI meetings and provide design input, experience, and industry knowledge to promote efficient, sustainable, and innovative design alternatives.

The Supplier will be required to provide a Construction Phase Plan, Method Statements and Risk Assessment to support any Minor Planned Works orders relevant to the size and scale of the project. The Client's prioritisation criteria for these Tasks will be set out in the HMMP. Works Orders will be raised for these Tasks by Client Inspectors or representatives and completion will be required in accordance with the Task Timetable (generally within 3 months). It is generally anticipated that the final Project Order for these Tasks will be issued in September and that no Minor Planned Tasks will be undertaken during the winter period, although the Supplier may agree works outside of this window with the Client.

Each Works order for Minor Planned Tasks will instruct the Suppliers to perform a number of Minor Planned Tasks at a fixed cost (Option A) or, an agreed target cost (Option C) calculated in accordance with an agreed schedule of rates. Further information can be found in Schedule 4 Pricing Information.

10.5 Major Planned Work

Tasks with a value in excess of £100,000 for major planned activities, generally included in the Annual Capital Programme, developed by the Lot 3 Supplier by September annually and issued to the Lot 1 Supplier by November of the same year, in advance of any delivery from 01st April the following year. These are Tasks that have a distinct design and pre-construction phase and construction phase which often require significant consultation with customers and stakeholders – generally, the works will include Safety & Improvement Schemes, planned maintenance such as pre-patching for major surface treatment programmes, footway schemes, drainage schemes and safety barrier schemes.

The Supplier will be required to attend ECI and pre-start meetings including input during design for future prospective schemes. This is also required for Major Planned Schemes that may also be included in a call-off mini tender award where it is possible lot suppliers may not be successfully awarded.

Major Planned Tasks will be delivered under a fixed cost (Option A) or target cost agreement (Option C) calculated in accordance with the schedule of rates.

Lot 3 specifically will also be subject to Design and Project Management Responsibility delivered under either a fixed price, target cost or reimbursable Contract agreement, subject to Client and Programme requirements. The Client will be free at any time to benchmark individual projects and award call-off projects outside of this Contract if commercially beneficial.

11. Works Order Delivery

11.1 Role of Supplier's Delivery Team

The Supplier's Core Delivery Team will coordinate, plan and implement each Task, following the Task Delivery Process outlined in the Service Delivery Plan, ensuring that:

- The order is delivered in accordance with the works order instruction that will include a Client Brief, expected time scale, works description, location, term and Task Proposals (as relevant);

- The works order is implemented within the agreed time and price and to the agreed quality;
- Risk is managed effectively;
- All documents required for the Works Order, including the works timetable, brief and Proposals are produced and stored on a document management system;
- Key stakeholders are notified and communicated with in accordance with the Term Brief;
- KPIs may be agreed and measured in addition to those detailed in the specification;
- The Construction Phase Plan and Health and Safety File are produced;
- Changes are managed in accordance with agreed variation procedure within the Contract;
- Innovation, improved efficiency, cost reduction, lean production, improved sustainability and other measurable continuous improvement is achieved through Value Management and Value Engineering;
- A post-construction review of the completed Project Task is undertaken and recommendations for improvements made;
- An annual review of the Service Specification is undertaken and recommendations for changes made.

11.2 Task Delivery Process

- Procedure for supervising on-site delivery of the Task;
- Procedure for ensuring Task delivery meets Client Brief, expected time scale, works description, term and task proposals (as relevant);
- Procedures for tests/inspections for the purpose of the Supplier certifying that each Task is complete and conforms to the Contract;
- Control of liaison and meetings with third parties;
- Procedures for the regular review and recording by the Supplier of the quality of the Annual Programme;
- Control of off-site activities (where appropriate);
- The composition of the Task Teams, detailing line of command and communication links between the parties involved in the Contract; and
- Procedures for ensuring health and safety on site.

11.3 Works Order Delivery Response Times

Works Order response times are generated from the risk register matrix detailed in the HMMP and ITS Maintenance Policy. The response times for works orders will be determined by inspectors and drainage operatives for each lot respectively. The below table provides a breakdown of the required response times.

Response Timescales Lot 1				
Attend within 2 hours	Attend within 24 hours	Attend within 7 days	Attend within 28 days	Attend within 3 months
Category P1	Category P2	Category P3	Category P4	Category P5
Response Timescales Lot 2				
Attend within 2 hours	Attend within 24 hours	Attend within 7 days	Attend within 28 days	Attend within 3 months
Category P1	Category P2	Category P3	Category P4	Category P5
Response Timescales Lot 4				
Attend within 2 hours	Attend within 24 hours	Attend within 7 days		
Critical	Urgent	Non-urgent		

12. Annual Capital Programme

12.1 The capital programme

The Supplier's responsibility for Programme Management is to undertake the functions of a Programme Management Office for all activities undertaken within the geographical boundaries of The Royal Borough of Windsor and Maidenhead including:

- Developing the Annual Programme in accordance with the Client's capital approval process;
- Ensuring that all Major Planned Tasks are co-ordinated with the Public Utilities, other suppliers undertaking planned activities for the Client under different Contract lots, developers and local restrictions, such as planned public events;
- Ensuring that all Minor and Major Planned and Routine Tasks on the Annual Programme are effectively co-ordinated, so that Routine and Minor Planned Tasks that are not required due to impending Major Planned Tasks, are identified and removed from schedules;
- Co-ordinating Routine and Reactive Tasks with similar activities undertaken by Parishes or other suppliers under this Contract, such as Grounds Maintenance, Gully Emptying, Street Cleaning and Arboriculture activities, to ensure joined up delivery of these functions. This would include the provision of traffic management to allow all these activities to be delivered under one arrangement;

- Planning all Tasks on the Annual Programme to ensure the most cost effective use of resources, including Specialists, and wherever possible, ensuring continuity of work for SME's;
- Ensuring the live programmes are accurate, and reflect actual progress against expectation;
- Providing accurate and timely information on the Annual Programme to key stakeholders in accordance with this Term Brief.
- Where possible look to work collaboratively with other contractors and utility providers

To deliver the Annual Capital Programme following approval, this will then be published on the Clients website. The Supplier will be required to engage as a minimum with the following stakeholders:

- Client internal Stakeholders;
- Public utility organisations;
- Ward and Parish Councillors;
- Neighbouring authorities;
- National Highways
- Environment Agency
- Residents and local businesses

The Supplier will develop an integrated approach to working with the Client's team or its agents who are responsible for the management and authorisation of all traffic management notices on the network.

All works management must be managed and be cohesive with the Client asset management software "Confirm" to ensure data and works orders can be received 2 way electronically with the potential to become a common programme management tool for all works undertaken in RBWM. The software platform should include key planning reports indicated slippage and resource risks. All data will remain the property of the Client.

The key outcomes of effective Programme Management will be:

- The effective co-ordination of Major/Minor Planned and Routine/Reactive Tasks;
- The effective co-ordination of the Annual Programme with planned activities being undertaken by others, including any Capital Projects undertaken by other authorities within Berkshire that may impact upon the Client;
- The effective co-ordination of the Annual Programme with routine and reactive activities being undertaken by others, including Borough, Parish and Town Council activities;
- Effective resource utilisation, to minimise the costs of delivering the Annual Programme;
- Effective management of changes to the Annual Programme, including the early identification of potential changes;
- Accurate forecasting of costs and budget profiling;
- Effective management of progress against expectation;
- Effective management of programme risks;
- Timely and accurate reporting.

13. Programme Management

13.1 Works Programme

A daily whereabouts and programme will be required from the Supplier to create a Works Programme and will include the following information:

- Order location.
- Order description. Order start, end and expected completion dates.
- Gang or works team allocation.
- Defect or works type.
- Defect priority rating.
- Order value.
- Order status (assigned, not assigned, pending, refused, live, completed, cancelled). Etc.
- Traffic management type.
- NRSWA Streetworks Permit Number.

The Annual Programme will include all works orders from all Contract lots including;

- Annual cyclical and routine activity.
- Reactive maintenance tasks orders.
- Minor and Major projects.

This is to be monitored by the Client's inspectors, representatives and senior management to ensure reactive orders are completed within the required time frames, determined by defect priority ratings detailed within the HSIM and HMMP.

Effective Programme Management is vital to ensure the effective delivery of the Annual Programme and that the Client's objectives are met. A key requirement of the Supplier in the Task Delivery Process is to ensure effective Programme Management of all Tasks comprising the Annual Programme.

The Annual Programme will be used to coordinate all work between service lot providers and the Client to ensure Streetworks permitting and coordination with all other network activity.

14. Network Control and Traffic Management

14.1 Traffic Management Act

A key requirement and responsibility of all Suppliers is to ensure the required permits and approvals are in place to work on the Highway. This is including a Permit System, which will require the Supplier and additional third parties or supply chain, to apply for a Permit prior to any intervention work on the highway network. Any permits required for the Client's activities will be at zero cost.

The Supplier will support the Client in complying with the Client's Network Management Duty, as required under Part 2 of the Traffic Management Act (TMA). This will include proactive co-ordination of their works with other activities on the network, and the submission of works notifications and other co-ordination activities in accordance with the New Roads and Street Works Act (NRSWA), as detailed in the Code of Practice for the Co-ordination of Street Works and Works for Road Purposes and Related Matters. An individual order must be submitted for each impacted road.

The Supplier will require compatible software with Clients asset management or works ordering system. The Supplier will also be responsible for raising permits via Streetworks Manager or a process agreed with the Client.

The timescales for NRSWA notifications, as set out in the current CoP for Co-ordination, are to be incorporated into the Supplier's works planning activities.

The Supplier will comply with the notification time constraints detailed below:

- Road Closures - 3 month notification
- 3-or multi-phase portable traffic signals - 21 working days
- 2-way portable traffic signals - 7 working days

The Client will take no responsibility for the requirement to amend any Order because of the failure of the Supplier to follow the appropriate Streetworks permitting requirements.

The Supplier will also manage the following constraints in the delivery of the Annual Programme:

Normal Working Hours - For Project Tasks the normal working hours under this Contract are:

- Monday to Friday between 08:00 and 18:00 hours

Working outside of the Normal Working Hours, if works order instruction requires or must be agreed in advance by the Client.

Parking Restrictions - Avoid vehicles or plant being parked in a manner that contravenes Traffic Regulation Orders. Parking difficulties will not be accepted as a failure on the part of the Client to provide right of access. Should parking suspensions be required, the Contractor must apply for these through the RBWM website.

Noise and Vibration - The Supplier will comply with the restrictions on Noise and Vibration included in the Specification section of the Term Brief and any specific restrictions set out in individual Orders.

The supplier will not be exempt from fixed penalty notices (up to £80) associated with any NRSWA breach as per legislation guidelines. It is expected for the Supplier to apply for permit extensions when necessary although this may not guarantee approval depending on road space.

When a section 74 occurs for a permit overrun, the relevant charges will apply.

RBWM is a Permit Authority coordinating and managing all highway activity under the Streetworks Act.

14.2 Parking Suspensions

Traffic Sensitive Roads - In accordance with NWSRA certain parts of the network are identified as 'Traffic Sensitive', no traffic management measures are permitted on these parts of the network during the Traffic Sensitive hours without the prior approval of the Client.

The Supplier will be wholly responsible and be required to submit permit applications for ALL works in line with the requirements of this Contract, without exception

through the permitting system. The Employer will support these applications, but the Supplier will demonstrate an independent approach and be considered like any other organisation requiring road space and openings. The Supplier shall be responsible for the costs associated with managing and implementing this.

The Supplier will be required to maintain a system complying with the latest Electronic Transfer of Notices EToN specification as published by the Department for Transport, compatible with the systems used by RBWM for the management of permit applications. RBWM uses Confirm for Permitting and the Supplier will need an effective interface that will be agreed by the Service Manager if he proposes to use an alternative system.

All road closures (unless emergencies) require a lead in time of 3 months. The supplier is required to submit all closures including supporting information and diversions through the RBWM website which will be agreed by the RBWM network management team.

15. Fleet Management

15.1 Fleet Management Scope

The Supplier will be required to provide, manage and maintain an operational fleet to deliver the services described in this Contract and specification. The Supplier will maintain an Asset Register of all vehicles dedicated to all Contract lot services. Each provider will provide a Fleet Management Plan to include details of funding arrangements and maintenance schedules and company protocol and procedures.

The provisions and the maintenance of the Client's Winter Fleet will be to the specific standards detailed within the Service Specification and Winter Service Policy.

All vehicles must be fitted with GPS technology. Capacity for Winter Service GPS information to be used for customer interaction for example, Client website.

The Supplier will ensure that all branding wherever required conforms to RBWM's Logo and Vehicle Branding Guidelines Policy.

15.2 Supply Chain Management

Where it is intended to or it is the best way to provide the Service using sub-Contractor (supply-chain) providers, and to meet the requirements of utilising SME's and devolving services to Parishes etc, these should be managed through, and coordinated by the Supplier unless otherwise agreed with the Client.

The Supplier will within its Service Delivery Plan, detail its supply chain selection process, and what systems and mechanisms it will employ to continually performance manage and benchmark its supply chain and encourage use of SME and locally based companies.

16. Stakeholder Management

16.1 Stakeholder Map

The Supplier will be required to provide information regarding activity undertaken on request from Client representatives. Lot 3 Suppliers may also be required to undertake and deliver stakeholder communication on behalf of the Client in relation to project design and management responsibilities.

Further stakeholder communication may also be required of other lot Suppliers as detailed in the **Communication Plan**.

The Supplier will work with the following:

- Customers – both the public and business;
- Elected members – at Borough and parish level;
- Client officers – in particular the highways ae, the Client Contact Centre and the Tree Team, street works and network management team

In addition there are a range of other stakeholders that the Supplier also needs to have effective working relationships with including:

- Emergency services;
- Other local authorities – both within Borough and neighbouring authorities;
- Residents' associations and Traders' associations;
- Voluntary, community and faith sector organisations and forums
- Officers in other directorates within the Authority;
- Any other stakeholders affected by highways works under this Contract;
- Flood risk management authorities (Environment Agency, Thames Water).
- National highways

16.2 Stakeholder Communication

The Supplier will support the Client to ensure that stakeholder's needs are considered in the planning and delivery of the Annual Programme, and that they are kept informed with relevant and up to date information. The supplier will also be required to provide weekly high-level whereabouts for inclusion in member newsletters and communication.

The Supplier will be required to coordinate and communicate with councillors and parish councils in relation to highway works, and project activity. This will mostly be carried out in coordination and instruction from the Service Manager or Client Representative however to ensure efficient and transparent communication with constituents and residents, the Supplier is expected to participate and contribute to the communication regarding planned or reactive works.

16.3 Stakeholder Online Notification & Support

The Client's preferred communication channel for managing customer queries is via the Client External Website. The Client will therefore be responsible for preparing information and activity services to post to its external website or One.Network. The Supplier will be required to assist and support by providing relevant information on request from Client representatives.

Information and processes required for publishing and communicating to stakeholders include:

- Publishing the agreed Annual Programmes and Project Task Timetables 3 months in advance of Task commencement (as applicable);
- System process to report highway defects and mechanism to confirm to stakeholders when defect has been repaired.
- Link Annual Programme activities and reported defects to Virtual Map, enabling stakeholders to view all anticipated works in their area for the next three (3) months. Virtual Map will display all utility, highway and improvement work.

All media releases, publicity material and public information referencing the Client or the Client's activities must have prior approval by the Client's communication team prior to issue.

During business hours (0900 – 1700) the Client will communicate and resolve general customer enquiries and the Supplier will be expected to attend and undertaken emergency response activity under instruction from Client representatives.

Outside of business hours (1700 – 0900) the Supplier will receive calls directly from the Customer Contact Centre in relation to any emergency activity.

The Supplier will comply with the Customer Service Business Process Procedure and Complaints Management Policy.

16.4 Stakeholder Written & Face to Face Notification

The Supplier may also be required to support the Client to respond to written queries and attend stakeholder meetings to review the Annual Programme e.g., Local Committee or Resident Associations. It should be noted that a minority of meetings may be held after 1800 hours.

Any Major Project or works that will likely cause reasonable obstruction, the Supplier will distribute to every household and/or business premises (pre agreed with the client), attach to the windscreen of every parked vehicle, and post on at least four (4) lighting columns in the immediate vicinity, a permit notice letter or notification. They will also be responsible for their appropriate removal.

The wording of the notification must be agreed beforehand with the Client and follow timescales below:

- Reactive Tasks - No notification required
- Routine Tasks - Three (3) working days*
- Minor Planned Tasks - Five (5) working days
- Major Planned Tasks - Ten (10) working days

16.5 Advanced Information Boards

All highway works that require a road closure or that will cause significant disruption, the Supplier will display advanced information boards which comply with Diagram 7008 of the Traffic Signs Regulations and General Directions 2002. The signs must be sited so that the information can be read by traffic travelling in both directions. The display boards must provide the following information:

- The name and logo of the Client;
- The nature of the work involved;
- Start date and estimated duration;
- A telephone number, including an emergency telephone number manned 24 hrs/day, 365 days/year;
- An apology for inconvenience.

The size of the signs may be varied for different locations but must be agreed with the Network management team.

Advanced Information Boards	Project Tasks	Minor Planned Tasks	Routine / Reactive Tasks
High Speed Dual Carriageways	14 days	14 days	14 days
Other SPN1 roads	7 days	7 days	3 days only when the undertaking of the Task in a particular location will cause significant disruption to those travelling in the area.
SPN 2 & 3 roads	7 days	7 days	Not Required

17. Customer Services

17.1 General Provisions

Customer service must underpin and co-ordinate all elements of service activity to enable the Client to achieve positive outcomes for levels of customer satisfaction. The Supplier must ensure all of the activities carried out under this Contract are undertaken with courtesy, consideration and care, respecting the fact they are working in areas where people live, work and travel.

The challenge is to enable processes to be focused from the customer perspective and to enable measurement to show where expectations can be met or effectively managed. An outcome of this will be leaner, more efficient processes maximising opportunities to use lowest cost-effective contact channels.

The majority of engagement with local householders, some of whom will have special needs, and with non-residents using RBWM roads will be communicated by the Client Inspectors or Customer Service Centre however the Supplier will be required to communicate with highway users and local householders and stakeholders. Any communication to do with drainage works and enquiries relating to works being carried out on site will be dealt with by the supplier. This may be resolved through emails/phone calls or in person.

Businesses and organisations (both private and public sector) are also key stakeholders who need to be engaged with individually, on specific locations and issues, and at a business community level.

17.2 Good Communications

The Supplier therefore needs to have an effective **Communication Plan** with both the client, other service lot providers and key stakeholder groups.

Clear and constructive relationships between the Supplier and the client representatives at all levels underpin the successful working of the Contract. The Supplier will work with the Client Representative to ensure that all relevant stakeholders are considered in the planning and delivery of works and that they are kept informed.

A Customer Communication Plan will also be developed by the supplier and Client to detail and explain the triage of customer enquiries, complaints and defect notice across the service lot areas and providers. A key relationship of information is required including compatible and cohesive operating systems.

The Contact Centre is the main interface for the Client with the public for reporting highways defects, issues and complaints. Effective communication by the Supplier with the Contact Centre is critical to ensuring customers are kept informed of progress on addressing defects reported. Where IT operating systems will allow, autonomous responses will be used to notify customers when defects are inspected, orders raised and completed.

Other stakeholders need to be engaged with and kept informed of planned works to ensure disruption is minimised. Critical to managing stakeholder expectations are three defined activities:

- i) The suitability of the Communication Channel
- ii) The Quality of Response
- iii) The success of the Service Level Agreements

17.3 Customer Complaints Procedure

The Supplier will comply with the Client's complaints policy and Freedom of Information requests.

Wherever possible any enquiries raised will be dealt with by site personnel or if unable they will direct the enquiry to the Client.

Site personnel will at all times treat the public with courtesy and respect.

An out of hours emergency number is to be provided.

18. Quality Assurance

18.1 Quality Management:

In the delivery of the Annual Programme the Supplier will operate a Quality Management System (QMS) compatible or compliant with BS EN ISO 9001:1994.

The delivery of the QMS must ensure quality regarding two key areas segmented into the sections detailed below:

- Material Testing
- Provision for the Client's staff, if required to maintain their technical interface with the supply chain;
- Provision of technical expertise to support the Client's staff;
- Actions to react to findings in a timely manner;
- Provide access to facilities able to provide quality testing.
- Livery and Branding
- Accommodation and Facilities Management

18.2 Quality and Audit Management

The Supplier shall set out the Supplier's quality policy statement, quality management system and approach to quality auditing in a Quality Management Plan

within three months of Contract commencement. This should be tailored to the requirements of the Contract and may include but not be limited to the Supplier's:

- Methods and workmanship practices and procedures;
- Quality audit methodology;
- Quality audit plan;
- Compliance audits plan (Legal);
- Key Performance Indicator data collection
- Continuous improvement processes;
- Customer satisfaction monitoring regime;

The Supplier's quality audit methodology shall provide details of the Supplier's approach to auditing the delivery and performance of all services across all sites.

The Supplier's performance and compliance with the Borough's requirements shall be measured continually throughout the service period. The purpose of this shall be to ensure compliance against the Contract and the Borough's requirements.

This shall be achieved by an audit process carried out at three levels:

- Level 1 Audit – monthly self-audits by the Supplier;
- Level 2 Audit – annual periodic self-auditing by the Supplier; and
- Level 3 Audit – Annually (or more frequent if required) by the Borough's auditor.

18.3 Audit Process

Level 1 Audits - shall be undertaken monthly by relevant members of the Supplier's Staff. The purpose of these audits shall be to ensure compliance with the Contract and that deliverables have been achieved.

The procedure for collecting, recording and reporting the results of Level 1 Audits shall be included in the Supplier's plan. Supporting documentation (completed audit sheets and appropriate verification) shall be provided as evidence to substantiate audit results. The results of Level 1 Audits will be included in the Monthly Service Delivery Report, in a format to be agreed with the Borough and presented at the Monthly Operational Meetings.

Level 2 Audits - The Supplier shall include in the Supplier's plan a schedule of periodic audits, in accordance with their quality management system, to be undertaken on an annual basis by suitable and competent persons within the Supplier's organisation, who are independent of the day-to-day delivery of the services, or by independent auditors appointed by the Supplier.

Level 2 Audits shall include the following aspects of the services as a minimum:

- Health & safety
- Quality management
- Statutory compliance
- Environmental/Sustainability
- Supply chain
- Staff training and records

The Supplier shall provide a comprehensive report to the Borough in a format agreed in advance with the Borough within a reasonable period after the completion of each audit.

A summary of each Level 2 Audit will be included within the subsequent Monthly Service Delivery Report.

Level 3 Audits – Independent Audits and Continuous Improvement - The Supplier's overall performance may be evaluated on an annual basis (or more frequent if required by the Borough), by the Borough's auditor. The independent auditor may be asked to provide an assessment of the overall performance of the Supplier which may include a review and assessment of the following aspects of the services:-

Supplier's Organisation & Resources including:

- Resource levels
- Management & structure
- Staff turnover

Service Delivery including:

- Key Performance Indicators
- Planned activities
- Reactive activities
- Compliance with Contractual obligations

Contract Management:

- Reporting
- Meetings
- Communications

Best Practice:

- Continual Improvement
- Processes and Procedures

The basis for the Level 3 audit shall be the Level 1 – Level 2 audits and supplementary detail as identified above.

The primary focus of a Level 3 Audit shall be to present a recommended improvement programme based on any weaknesses identified during the process, which shall be addressed by the Supplier during the subsequent six- month period.

19. Business Management

The Supplier is required to implement, manage, and publish a Business Management System (BMS) divided into four distinct parts:

Part One: Business Processes & Systems – detailing all document control procedures; operational processes; systems and supply chain management procedures to deliver the Contract.

Part Two: Business Environment and Continuity – detailing how you will ensure the safety of your workforce and third parties, while ensuring continuity of the Contract during exceptional incidents.

Part Three: Human Resources – detailing your recruitment induction and training policies to implement a culture of learning and continuous development culture.

Part Four: Sustainability – detailing your waste and energy action plans to support sustainable communities/practices and support biodiversity.

Specific requirements of each section are detailed below.

19.1 Business Processes & Systems

Document Management System – Detail how, through technology, you will ensure safe keeping of all legislative and Contract documents; ensure Change control process adhered to by key staff.

Provide a complete end to end view of the business processes and system architecture that will delivery the Annual Programme. The system architecture must have specific sections relating to:

- Business Processes;
- Website and software system interfaces – detailing how this will work with RBWM systems relevant to the service lot including asset management support, delivery arrangements and BIM file sharing.
- GIS interfaces – detailing how this will be deployed and utilised;
- System Security & Access – where this is required and deployed;
- Programme Management Information – how this is going to be produced and where this is generated and links in where appropriate, to Client Systems;
- Mobile Computing and Hardware Requirements – showing how this will work;
- System Requirements – detailing where appropriate these will interface with 3rd party and Client systems.

Supply Chain Management – Detailing the supplier selection process, and what systems and mechanisms will be employed to continually performance manage and benchmark including the use of SME and locally based companies.

19.2 Business Environment and Continuity

The Supplier will provide the following plans and documentation to support the delivery of the services.

19.3 Health and Safety Policy & Action Plan

The Supplier will implement a policy and action plan that demonstrates a strong commitment to health and safety beyond those required by law. The policy should enable a risk based approach to employees, stakeholders and supply chain partners, with a strong commitment to training and development. With clear reporting standards and a commitment to continuous development.

The policy should be bespoke to the Client's needs with a clear action plan that will embed and deliver a culture of safety over the lifetime of the Contract.

19.4 Business Continuity & Resilience Policy

The Supplier will implement a policy that ensures its organisation and the Annual Programme has a clear framework for responding to emergency incidents. For clarification these are incidents which would affect a significant element of the Client's highway or impede the Annual Programme.

The business continuity process should be underpinned through a regular training and testing regime, with documentation and audit trail.

19.5 Severe Weather Action Plan

The Supplier will provide a **Severe Weather Plan** to deliver the following key objectives:

- To ensure activation at the appropriate level within the Supplier at the initial stages of severe weather incidents.
- To develop the Contract strategy for dealing with a severe weather incident.
- To ensure co-ordinated management of any severe weather incident.
- To ensure a co-ordinated approach with partners, where required, during a severe weather incident.
- To provide Departmental Flood Teams with a detailed list of actions to cover the activation and initial period following notification of severe weather.

The types of severe weather and flooding conditions that the UK Government uses for contingency planning purposes are severe storms and gales, persistent low temperatures and heavy snow, heat waves, and major flooding coastal, tidal and fluvial at local and national scales).

The Severe Weather Plan would be initiated by the Client Joint Emergency Planning Unit; the Supplier should detail their response to the activation of the plan; what actions would be taken following activation; and how actions and events would be communicated.

19.6 Human Resources

Part Three focuses on the management of directly employed workforce and requires a policy and procedure for three key areas:

Recruitment & Performance Management

The Supplier will employ an appropriately skilled workforce at all times.

Local Employment and Skills Strategy

The Client would like to improve opportunities to improve local employment and skills and will demonstrate how it will support and utilise local SME's and youth employment. The Supplier will develop an Employment and Skills Plan (ESP).

Equality and Diversity

Deliver the responsibilities as set out in the client's Equal Opportunities Policy, which sets clear expectations for those who live in, work in and visit RBWM. The Supplier will confirm how the Client's policy is reflected in its own commitment to fairness, equality and accessibility and provide evidence of initiatives to raise E&D awareness.

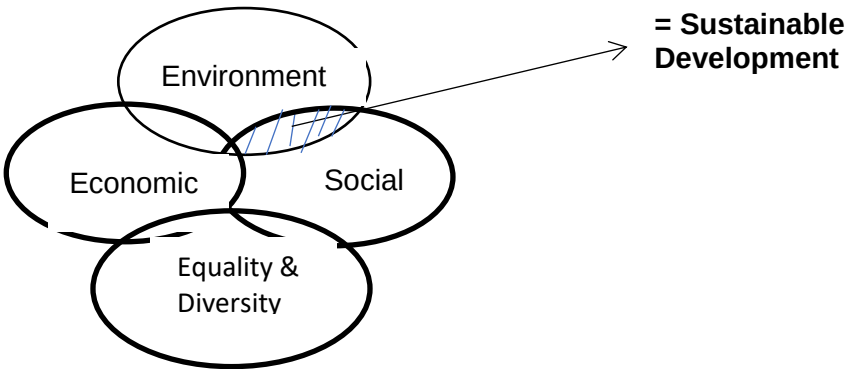
19.7 Sustainability Policy

The Client recognises its socio-economic and environmental activity can have a major impact both locally and globally. The Supplier is therefore required to deliver the Annual Programme according to the Client's principles of Sustainable development:

- Promoting equity and social inclusion;

- Improving quality of life and well-being;
- Supporting the viability of sustainable local communities;
- Sustaining our natural resources through sustainable activity & communities;
- Protecting the health of residents and of ecosystems;
- Meeting local, national and global performance standards and obligations.

The principles will be delivered through the Supplier’s Sustainability Policy detailing the voluntary actions that it will deliver, over and above compliance with its minimum legal requirements, to address both its own competitive interests. The policy will be composed of four key interdependent areas:



19.8 Environmental Sustainability

The Supplier will ensure their operations have a positive impact upon the five defined categories of Environmental Sustainability:

- i. Minimising Impact of Energy Consumption – provide an action plan demonstrating how it will minimise and reduce its own logistics and supply chain energy consumption over the Contract period. This should include benchmark figures including carbon footprint from Contract go-live.
- ii. Minimising Impacts of Materials Production – provide an action plan demonstrating the steps achieved to date to reduce the amount of energy and material used in the production of materials, both in-house and via the supply chain. The action plan should confirm benchmarks in year one with clear strategy to improve over life of Contract.
- iii. Embedding Climate Change mitigating actions and recognising the impact of activities on the biodiversity.
- iv. Buying “Green” Resources – demonstrate its commitment to buying “green” resources wither through recyclable materials; energy and energy efficient plant/appliances.
- v. Continuous improvement – the Supplier will work with RBWM to exploit the best of market innovations and advances within highways and civil engineering and adopt best practices to drive improved quality, reliability and life of materials and other resources whilst improving efficiency and productivity.

19.9 Economic Sustainability

The Supplier will recognise its obligation to support local businesses and Small Medium Enterprises, (SME’s) and organisations from the third sector, so far as it is legally and practically possible to do so.

19.10 Social Sustainability

The Supplier will wherever possible seek to exploit areas of community benefit and support the development of sustainable communities. The Supplier will also ensure that their operation and supply chain partners operate to equality and diversity and ethical working practices.

19.11 Equality and Diversity

Deliver the responsibilities as set out in the client’s Equality Policy 2018, which sets clear expectations for those who live in, work in and visit RBWM. The Supplier will confirm how the Client’s policy is reflected in its own commitment to fairness, equality and accessibility and provide evidence of initiatives to raise E&D awareness.

20. Mobilisation and Demobilisation

20.1 Mobilisation Statement of objectives

The Supplier shall ensure the seamless transfer from the existing service provision and outgoing Suppliers’ staff to the delivery a fully operational service from the Contract Commencement Date. The Supplier shall have in place by the end of the mobilisation period all the necessary arrangements to ensure a continuous service, minimising any effect on the Borough’s core business.

20.2 Scope & Standard of Performance

There shall be a minimum of a 12-week period (unless otherwise agreed with the Client) during which the Contract mobilisation shall take place. The legal rights and obligations of the Supplier during this period are those stipulated in the Contract. The Supplier shall provide the Borough with contact details and role descriptions of the Supplier's Staff who are involved in implementing the Mobilisation Plan.

The Supplier shall, prior to the Mobilisation Commencement Date, meet the milestones outlined below, forming a Mobilisation Plan:

Milestone	Theme	Description	Evidence Required	Deadline
1	Stakeholder Management /Engagement	To arrange stakeholder introductions and kick-off meetings which is to include establishment of meeting pattern, a risk register and a plan to identify specified properties.	Written confirmation to the contract manager of the list of identified stakeholders and meetings arranged.	No later than two weeks following contract signature
2	Systems/IT	Obtain confirmation that the Supplier's digital systems and IT can successfully interact and communicate with the Authority's systems.	Written confirmation to the contract manager that this has been obtained.	No later than four weeks following contract signature
3	Transition	To liaise with the incumbent supplier and develop a transition plan to ensure a smooth transition and business continuity. As a minimum, this plan should touch on: - TUPE transition; - Depot space – when the incumbent will fit out and when the Supplier can enter.	Written confirmation to the contract manager that this has taken place and production of a high-level transition plan (including clear milestones and dates)	No later than four weeks following contract signature

RBWM Highway Services Contract 2024
Highway Maintenance and Capital Works Contract



4	Assets	To develop a plan, with RBWM agreement, that will ensure suitable assets (e.g. the Supplier's fleet) will be ready for contract commencement.	Production of a plan (with clear milestones and dates) and written evidence of the contract manager's sign off	No later than five weeks following contract signature
5	Stakeholder Management /Engagement	To develop a high-level communication plan (with clear dates and milestones) and agree branding approach with RBWM.	Production of a plan and written confirmation of RBWM's agreement.	No later than 6 weeks following contract signature.
6	Staff/Supply Chain	Where applicable, to have recruited successfully the individuals and staff required to deliver the contract. This milestone includes confirming that arrangements for transferring staff (under TUPE) have been made.	Written confirmation to the contract manager.	No later than 12 weeks prior to contract commencement.
7	Staff/Supply Chain	To have trained all staff (including any transferring staff under TUPE) to the standards required by any legislation, regulations or industry standards. Staff should also be suitably vetted where appropriate.	Written confirmation to the contract manager, including training attendance registers where possible.	No later than four weeks prior to contract commencement.
8	Staff/Supply Chain	To confirm that you have contractually engaged with your proposed supply chain and that your sub-contractors are ready for service delivery.	Preference for evidence of sub-contracts; however, written confirmation to the contract manager will be sufficient.	No later than four weeks prior to contract commencement.
9	Assets	To confirm that all assets have been obtained and are ready to be deployed for service delivery. This should include any transport or logistics requirements to move	Written confirmation to the contract manager	No later than two weeks prior to contract commencement.

		materials/personnel to sites as needed.		
10	Transition	To confirm that the outputs of the transition plan have realised.	Written confirmation to the contract manager, including written confirmation from the incumbent that they agree.	No later than two weeks prior to contract commencement.
11	Stakeholder Management /Engagement	To confirm readiness to go-live	Written confirmation/ oral confirmation to the contract manager.	No later than one week prior to contract commencement.

20.3 Implementation

The progress meetings as agreed with the Supplier during the mobilisation period, are intended to assist and keep Client informed as to how well duties are being assumed, and to assist in problem resolution as any such matters occur.

Prior to each mobilisation meeting the Supplier shall provide the Borough with a report providing updates and progress toward achieving Mobilisation Outputs

The Contract shall ensure that all Operational Readiness Tests with relevant software systems have been passed successfully by no later than 3 weeks before the Contract Commencement date.

The Supplier may be required to deal with any back-log tasks as agreed with the Service Manager.

20.4 Asset Validation

During the mobilisation period the Borough requires the Supplier to carry out an Asset Validation Survey of any plant and equipment included in the Asset Schedule.

It is the responsibility of the Supplier to confirm the accuracy and completeness of the Asset information provided. It is expected that the Supplier will collect all the existing Asset Inventory information for all aspects of the Highway network within the first 6 months of the contract to validate the asset data and support any cyclical and routine programmes created.

The updated Asset Register will be confirmed as the Contract Asset Register. The Supplier shall develop the final service delivery schedules and programmes of work using this confirmed Asset Register.

During the process of validation any changes, due to additional Assets or Assets not found, should be detailed and pricing agreed for inclusion in the Contract Pricing.

Asset Identification and Service Delivery

The Supplier may be required to support the client for asset data collection, whereby the same provisions shall apply.

The comprehensive asset records should as a minimum contain the following:

- Unique asset reference
- Details of each asset, such as including make/model/serial number/location/type;
- Full risk assessment and service implications for each item;

20.5 Exit Strategy and Demobilisation

The Supplier shall ensure the seamless transfer from the existing service provision and outgoing Suppliers' staff to the delivery a fully operational service from the new Contract Commencement Date.

The Supplier shall, by the end of the mobilisation period, make all the necessary arrangements to ensure a continuous service, minimising any effect on the Borough's core business.

In order to ensure the effective exit from the Supplier's Contractual responsibilities, it is imperative that all the affected parties work together and co-operate fully. For the duration of such exit transition the following will apply:

- The obligations in accordance with this Contract will continue until the termination date of the Contract.
- Specification and Key Performance Indicators shall continue in force until expiry or the termination date of this Contract.
- Both Parties shall, as a minimum, maintain the same levels of staffing as before notification of Contract expiry or termination.

20.6 Exit Strategy

Within six calendar months after the Contract Commencement Date, the Supplier is required to provide the Borough with the Supplier's Exit Strategy documentation.

Upon notification at a minimum of nine months prior to Contract termination date, the Supplier shall prepare and deliver to the Borough a draft Exit and Transfer Plan to transfer the service to the Borough or the replacement Supplier(s). The Exit and Transfer Plan shall include but not be limited to:

- The name of the Supplier's Contract Exit Manager who shall manage the Contract exit and execute the Exit and Transfer Plan;
- The methodology and timescales for completion of Contract exit tasks;
- The methodology and timescales for ensuring the completeness and accuracy of the Maintenance Records on the expiry of the Contract;
- The process for provision of data to the Borough in accordance with this Schedule;
- A description of the process for transfer of data from the Supplier's systems to the Borough or replacement Supplier(s); and
- The communication protocol to be put in place (if applicable) with a replacement Supplier or Suppliers during the Mobilisation Period.

20.7 Responsibilities of the Supplier

Provide appropriate handover support to any relevant replacement Supplier(s) and/or advisors, including but not necessarily limited to: timely provision of relevant documentation such as technical specifications, software and documentation, issues logs and such other information as the Borough /replacement Supplier(s) may reasonably require in order to ensure an orderly handover without disruption to the service.

Facilitate reasonable access to the Affected Property to any replacement Supplier.

Return all Confidential Information it holds in respect of the Borough upon request. Confidentiality requirements shall survive this Contract. All information and data relating to the Borough are the sole intellectual property of the Borough and as such must be transferred to the Borough prior to the Contract ending.

On the expiry, or earlier determination of the Contract, the Supplier shall:

- Draw any outstanding work to a close at an appropriate stage as agreed with the Borough;
- Provide clarity around any costs outstanding
- Ensure timely submission of invoices for work after physical completion of work
- Return to the Borough any equipment (including keys, security passes and access codes) owned by the Borough and used by the Supplier;

The Supplier may be required to attend meetings for a period of 3 months after termination if necessary to explain details of work carried out during the Contract and answer queries arising from the information provided.

21. Health and Safety

21.1 General

The Borough is delegating significant authority to the Supplier for its professional Health & Safety expertise and it shall remain the Supplier's responsibility to guarantee the professional expertise of all staff it employs for this service or associated services, providing additional training as necessary. The Supplier shall demonstrate this capability throughout the duration of the Contract.

In relation to the Services being carried out under the Contract, the Supplier shall work in association with the Service Manager to protect staff and members of the public on the premises through compliance with all relevant statutory obligations and legislation and with the Borough's policy.

21.2 The Supplier's Duties

- To act as Principal Contractor or Contractor for the purposes of the CDM Regulations 2015
- Act as technical advisor to the Borough in relation to the Services being carried out under the Contract.
- Participate in the development, review and revision of policies and procedures in respect of the Services delivered.
- Ensure Borough policies and procedures, site rules and regulations are adhered to.

- Conduct generic and specific risk assessments and produce method statements relating to the Services and activities for properties in line with requirements of the Management of Health and Safety at Work Regulations 1999 (MHSWR).
- The Supplier shall ensure that Emergency Plans are included in risk assessments and method statements.
- Check and approve risk assessments and method statements of the supply chain.
- Liaise with the Borough's Health & Safety representative as appropriate.
- Attend/contribute to regular and ad-hoc meetings in relation to the Services being provided.
- Conduct building inspections/audits.
- The Supplier will implement the requirements under COSHH regulations for all activities and provide this to the Boroughs Service Manager.
- The Supplier shall remain up to date with changing legislation.

21.3 Health and Safety Responsibilities

The Supplier shall:

- Be responsible for ensuring that all Supplier and Sub-Contractor staff are aware of the protocol to be used in case of an emergency and assist the Borough in making certain that emergency procedures are kept up-to-date and applicable for the Services under their control.
- Provide a single contact point for all professional advice pertaining to Health & Safety matters as they relate to the delivery of the Services. The Supplier shall ensure the availability of such Health & Safety advice within one hour, 24 hours per day/365 days per year.
- Warrant that it shall take all practicable steps to ensure that the premises shall comply with all Health & Safety legislation and any other statutory obligations at all times, as this relates to the Services being provided.
- The Supplier shall advise the Service Manager of any areas which appear not to comply with legislation or best practice.
- The Supplier shall provide details of any H&S incidents or near misses with the management reports.
- Be required to report to the Borough monthly on all Health & Safety matters and to conduct an annual review of all Health & Safety matters with the Service Manager, including performance, any matters outstanding, recommended works programmes, exception reporting, and for issuing formal minutes of the annual review within one week of its taking place.

21.4 Authorised Persons & Permits to Work

The Supplier shall be responsible for implementing and managing the Permit to Work System as it relates to the Services. The Supplier shall be responsible for the publication of all relevant Health & Safety notices for staff and guests and all other necessary signage in the specified properties in relation to works being carried out under any permit that they have issued. The Supplier shall obtain the Service Manager's prior written agreement before adopting any revised working method.

22. ICT Systems and Operation

22.1 General Requirements

- The Borough is keen to ensure that all its service Contracts operate a suite of ICT systems and platforms that are wholly compatible to those it operates for routine service delivery.
- The Supplier will adopt a joint agreed approach to ICT provision and will operate a number of systems and actively share data and information in order to collaborate effectively and avoid duplication of effort and unnecessary wasted resources.
- The Borough is keen to remove duplication of processes and manual double handling of data and aspires to establish a single reporting and delivery interface with the Supplier.
- The software systems currently operated by the Borough are fully licenced by the Borough and in some instances have multiple user licences that could be assigned to the Supplier.
- The Supplier co-operates with the Borough to develop an On-line Reporting Tool, on-line portal and website improvements to reduce customer enquiries.
- The Supplier co-operates with the Borough during the Contract to continually develop ICT systems that provide data and information that is shared, open, compatible, accessible, reliable, scalable, accurate and secure.
- The Supplier provides open access to the Service Manager and the Borough's Contract Management Team to their proposed commercial and accounting systems at all times.
- The Borough's ICT strategy for works management is centred on the MICROSOFT suite and developing the Office365 as a shared information portal.
- If any other data or information held by the Supplier is not on a shared ICT system the Supplier provides access to the Borough's people and provides training and licences. Alternatively, where access to the Borough's operating systems is required by the Supplier, the Borough will provide relevant access clearance to be agreed and detailed in the **service delivery plan**.

22.2 Supplier to provide Equipment

The Supplier shall provide all equipment required to deliver the service.

Where the Supplier's provided equipment needs to be used on the Borough's IT network, this shall be subject to compliance with the Borough's IT protocols and the agreement of the Borough. The Supplier shall ensure monthly secure back-ups are retained for the systems for which they are in control.

The Supplier shall liaise in detail with the Borough's IT department and application support staff, and its existing IT supplier as needed during the mobilisation period, in order to put in place any interfaces that the Borough requires relating to the provision of the Services.

The Supplier, subject to complying with various end-user agreements and security requirements, which will be agreed and completed during the mobilisation period, will be allowed to interface to the Borough's systems at no additional costs. Details of RBWM systems can be found in Schedule 3 Specification, Clause 194AR.



ROYAL BOROUGH OF
**WINDSOR &
MAIDENHEAD**
WWW.RBWM.GOV.UK

Royal Borough of Windsor and Maidenhead
Highway Services Contract

Highway Maintenance and Capital Works
Contract

Schedule 3

Appendix 03 to Lot 1 Service Specification
Series 100 to 700

Appendix 0/3

List of numbered appendices referred to in the Specification and included in the contract

Appendix 0/3 is comprised of two lists, A and B, of Numbered Appendices as follows:

List 'A' is a complete list of the Numbered Appendices referred to in the Specification for Highway Works with those not adopted marked 'Not Used'. Those identified by the letters T or C shall be completed by the Tenderer or Supplier respectively.

Guide to types of Numbered Appendices - who compiles/completes

Symbol

- (Co) Compiler compiles: Identified in the Notes for Guidance examples by the term 'Sample' included in their title
- (Co/C) Compiler partially compiles and Supplier completes and returns to Overseeing Organisation
- (Co/T) Compiler partially compiles and Tenderer completes and returns with Tender
- (C) Supplier completes and returns to Service Manager
- (P) This indicates the Appendix is a national pro-forma and format must not be altered

Not Used Indicates that this clause or Specification at the time of producing this Contract was not considered relevant. The Clause may be re-instated through specific Work Orders however.

List 'B' gives the list of Contract-specific Numbered Appendices devised for the Contract.

Appendix 0/3 (continued)

List 'A' : List of Numbered Appendices Referred to in the Specification for Highway Works (Nov 09)

Completed by	Appendix No.	Title
INTRODUCTION		
(Co)	0/1	Contract-specific Additional, Substitute and Cancelled Clauses and Tables and Figures Included in the Contract
Not used	0/2	Contract-specific Minor Alterations to Existing Clauses and Tables and Figures Included in the Contract
(Co)	0/3	List of Numbered Appendices Referred to in the Specification and Included in the Contract
(Co)	0/4	List of Drawings Included in the Contract
Not used	0/5	Special National Alterations of the Overseeing Department of Scotland, Wales or Northern Ireland
PRELIMINARIES		
(Co) (C)	1/1	Temporary Accommodation and Equipment for the Service Manager
Not used	1/2	Vehicles for the Service Manager
Not used	1/3	Communication System for the Service Manager
Not used	1/4	Working and Fabrication Drawings
(Co)	1/5	Testing to be Carried out by the Supplier
(Co)	1/6	Supply and Delivery of Samples to the Service Manager
(Co)	1/7	Site Extent and Limitations on Use
Not used	1/8	Operatives for the Service Manager
(Co)	1/9	Control of Noise and Vibration
Not used	1/10	Structures to be Designed by the Supplier
Not used	1/11	Structural Elements and Other Features to be Designed by the Supplier
(Co)	1/12	Setting Out and Existing Ground Levels
(Co)	1/13	Programme of Works
Not used	1/14	Work Orders, Quotation Process, Aggregation and Payment Applications
Not used	1/15	Accommodation Works
Not used	1/16	Privately and Publicly Owned Services and Supplies
(Co)	1/17	Traffic Safety and Management
(Co)	1/18	Temporary Diversions for Traffic
(Co)	1/19	Routeing of Vehicles
Not used	1/20	Recovery Vehicles for Breakdowns
(Co)	1/21	Information Boards and Notifying Works
(Co)	1/22	Progress Photographs
(Co)	1/23	Risks to Health and Safety from Materials or Substances
(Co)	1/24	Quality Management System
Not used	1/25	Temporary Closed Circuit Television (CCTV) System for the Monitoring of Traffic
Not used	1/26	Temporary Automatic Speed Camera System for the Enforcement of Mandatory Speed Limits at Road Works (TASCAR)

RBWM Highway Services Contract 2024
Highway Maintenance and Capital Works Contract



Not used	1/27	Temporary Automatic Speed Camera System for the Enforcement of Mandatory Speed Limits at Road Works (TASCAR) Requirements
(Co)	1/70	Disposal of Materials
SITE CLEARANCE		
Not used	2/1	List of Buildings, etc. to be Demolished or Partially Demolished
Not used	2/2	Filling of Trenches and Pipes
(Co)	2/3	Retention of Material Arising from Site Clearance
Not used	2/4	Explosives and Blasting
Not used	2/5	Hazardous Materials
FENCING		
(Co)	3/1	Fencing, Gates and Stiles
ROAD RESTRAINT SYSTEMS (VEHICLE AND PEDESTRIAN)		
(Co)	4/1	Road Restraint Systems (Vehicle and Pedestrian)
Not used	4/2	Information Required to Demonstrate Compliance of Road Restraint Systems to BS EN 1317-1, BS EN 1317-2, BS EN 1317-3 and DD ENV 1317-4:2002
DRAINAGE AND SERVICE DUCTS		
(Co)	5/1	Drainage Requirements
(Co)	5/2	Service Duct Requirements
Not used	5/3	Surface Water Channels and Drainage Channel Blocks
Not used	5/4	Fin Drains and Narrow Filter Drains
(Co)	5/5	Combined Drainage and Kerb Systems
Not used	5/6	Linear Drainage Channel Systems
Not used	5/7	Thermoplastics Structural Wall Pipes and Fittings
EARTHWORKS		
(Co)	6/1	Requirements for Acceptability and Testing etc. of Earthworks Materials
(Co)	6/2	Requirements for Dealing with Class U1B and Class U2 Unacceptable Materials (11/04)
(Co)	6/3	Requirements for Excavation, Deposition, Compaction (Other than Dynamic Compaction)
Not used	6/4	Requirements for Class 3 Material
Not used	6/5	Geotextiles Used to Separate Earthworks Materials
(Co)	6/6	Fill to Structures and Fill Above Structural Foundations
(Co)	6/7	Sub-formation and Capping and Preparation and Surface Treatment of Formation
(Co)	6/8	Topsoiling and Seeding
Not used	6/9	Earthwork Environmental Bunds, Landscape Areas, Strengthened Embankments
(Co)	6/10	Ground Anchorages, Crib Walling and Gabions
Not used	6/11	Swallow Holes and Other Naturally Occurring Cavities and Disused Mine Workings
Not used	6/12	Instrumentation and Monitoring
Not used	6/13	Ground Improvement
Not used	6/14	Limiting Values for Pollution of Controlled Waters (11/06)
Not used	6/15	Limiting Values for Harm to Human Health and the Environment (11/04)
ROAD PAVEMENTS – GENERAL		
(Co)	7/1	Permitted Pavement Options (Schedules 1, 2, 3, 4 and 5)
(Co)	7/2	Excavation, Trimming and Reinstatement of Existing Surfaces

RBWM Highway Services Contract 2024
Highway Maintenance and Capital Works Contract



Not used	7/3	Surface Dressing – Performance Specification (Sheets 1, 2 and 3)
(Co/C)	7/4	Bond Coats, Tack Coats and Other Bituminous Sprays (Sheets 1, 2 and Binder Data Sheet)
Not used	7/5	In Situ Recycling: The Remix and Repave Process
(Co)	7/6	Breaking Up or Perforation of Existing Pavement
(Co/C)	7/7	Slurry Surfacing Incorporating Microsurfacing (Sheets 1, 2 and 3)
Not used	7/8	Not Used
(Co)	7/9	Cold-Milling (Planing) of Bituminous Bound Flexible Pavement
Not used	7/10	Not Used (11/09)
Not used	7/11	Overband and Inlaid Crack Sealing Systems
Not used	7/12	Arrester Beds
Not used	7/13	Saw-Cut Crack and Seal Bituminous Overlays on Existing Jointed Concrete Pavements
Not used	7/14	Preparation of Jointed Concrete Pavements Prior to Overlaying and Saw-Cutting and Seal of Bituminous Overlay (11/03)
Not used	7/15	Saw-Cut, Crack and Seat Existing Jointed Reinforced Concrete Pavements (11/03)
Not used	7/16	Cracking and Seating of Existing Jointed Unreinforced Concrete Pavements and CBM Bases
Not used	7/17	Cracking Plant and Equipment Progress Record
Not used	7/18	Site Specific Details and Requirements for Cold Recycled Bitumen Bound Material
Not used	7/19	Site Specific Details and Requirements for Recycled Cement Bound Material
Not used	7/20	Not Used
Not used	7/21	Surface Dressing – Recipe Specification (Sheets 1 & 2 and Binder Data Sheet)
(Co/C)	7/22	Repair to Potholes (11/03)
ROAD PAVEMENTS – CONCRETE AND CEMENT BOUND MATERIALS		
Not used	10/1	Equipment for the Construction of Exposed Aggregate Concrete Surface
KERBS, FOOTWAYS AND PAVED AREAS		
(Co)	11/1	Kerbs, Footways and Paved Areas
Not used	11/2	Access Steps
TRAFFIC SIGNS		
(Co)	12/1	Traffic Signs: General
(Co)	12/2	Traffic Signs: Marker Posts
(Co)	12/3	Traffic Signs: Road Markings and Studs
Not used	12/4	Traffic Signs: Cones, Cylinders, FTD's and Other Traffic Delineators
Not used	12/5	Traffic Signs: Traffic Signals
Not used	12/6	Traffic Signs: Special Sign Requirements on Gantries
ROAD LIGHTING COLUMNS AND BRACKETS, CCTV MASTS AND CANTILEVER MASTS		
Not Used	13/1	Information to be Provided When Specifying Lighting Columns and Brackets
Not used	13/2	(Specification for Highway Works) Typical Lighting Column and Bracket Data Sheets 1 and 2
Not used	13/3	Instructions for Completion of Lighting Column and Bracket Data Sheet
Not used	13/4	Information to be Provided When Specifying CCTV Masts
Not used	13/5	(Specification for Highway Works) Typical CCTV Mast Data Sheet

Not used	13/6	Instructions for Completion of CCTV Mast Sheets
Not Used	13/7	Information to be Provided When Specifying Cantilever Masts (11/03)
Not Used	13/8	(Specification for Highway Works) Typical Cantilever Masts Data Sheets 1 and 2 (11/03)
Not Used	13/9	Instructions for completion of Cantilever Masts Data Sheet (11/03)
ELECTRICAL WORK FOR ROAD LIGHTING AND TRAFFIC SIGNS		
Not used	14/1	Site Records
Not used	14/2	Location of Lighting Units and Feeder Pillars
Not used	14/3	Temporary Lighting
Not used	14/4	Electrical Equipment for Road Lighting
Not used	14/5	Electrical Equipment for Traffic Signs
MOTORWAY COMMUNICATIONS		
Not used	15/1.	Motorway Communications
Not used	15/2.	Cable Duct Requirements
PILING AND EMBEDDED RETAINING WALLS		
Not used	16/1.	General Requirements for Piling and Embedded Retaining Walls
Not used	16/2.	Precast Reinforced and Prestressed Concrete Piles and Precast Reinforced Concrete Segmental Piles
Not used	16/3.	Bored Cast-In Place Piles
Not used	16/4.	Bored Piles Constructed using Continuous Flight Augers and Concrete or Grout Injection through Hollow Auger Stems.
Not used	16/5.	Driven Cast-in Place Piles
Not used	16/6.	Steel Bearing Piles
Not used	16/7.	Reduction of Friction on Piles
Not used	16/8.	Non-Destructive Methods of Testing Piles
Not used	16/9	Static Load Testing of Piles
Not used	16/10.	Diaphragm Walls
Not used	16/11.	Hard/Hard Secant Pile Walls
Not used	16/12.	Hard/Soft Secant Pile Walls
Not used	16/13	Contiguous Bored Pile Walls
Not used	16/14	King Post Walls
Not used	16/15	Steel Sheet Piles
Not used	16/16	Integrity Testing of Wall Elements
Not used	16/17	Instrumentation for Piles and Embedded Walls
Not used	16/18	Support Fluid
STRUCTURAL CONCRETE		
(Co/C)	17/1	Schedule for the Specification of Designed Concrete (05/06)
Not used	17/2	Concrete - Impregnation Schedule
(Co)	17/3	Concrete - Surface Finishes
(Co)	17/4	Concrete – General
Not used	17/5	Buried Concrete (05/02)
Not used	17/6	Grouting and Duct Systems for Post-tensioned Tendons
STRUCTURAL STEELWORK		
Not used	18/1	Requirements for Structural Steelwork
PROTECTION OF STEELWORK AGAINST CORROSION		
Not used	19/1	(Specification for Highway Works) Form HA/P1 (New Works) Paint System Sheet
Not used	19/2	Requirements for Other Works

RBWM Highway Services Contract 2024
Highway Maintenance and Capital Works Contract



Not used	19/3	(Specification for Highway Works) Form HA/P2 Paint Data Sheet
Not used	19/4	(Specification for Highway Works) Form HA/P3 Paint Sample Despatch List: Sheets 1 & 2
(C/Co)	19/5	General Requirements
WATERPROOFING FOR STRUCTURES		
(Co)	20/1	Waterproofing for Concrete Structures
BRIDGE BEARINGS		
Not used	21/1	Bridge Bearing Schedule
Not used	22/1	(o5/04) Not Used
BRIDGE EXPANSION JOINTS AND SEALING OF GAPS		
Not used	23/1	Bridge Deck Expansion Joint Schedule
Not used	23/2	Sealing of Gaps Schedule (Other than in Bridge Deck Expansion Joints)
BRICKWORK, BLOCKWORK AND STONEMASONRY		
(Co)	24/1	Brickwork, Blockwork and Stonemasonry
SPECIAL STRUCTURES		
Not used	25/1	Requirements for Corrugated Steel Buried Structures
Not used	25/2	Requirements for Reinforced soil and Anchored Earth Structures
Not used	25/3	Requirements for Pocket-Type and Grouted Cavity Reinforced Brickwork Retaining Wall Structures
Not used	25/4	Environmental Barriers
Not used	25/5	Requirements for Buried Rigid Pipes for Drainage Structures
MISCELLANEOUS		
(Co)	26/1	Ancillary Concrete
(Co)	26/2	Bedding Mortar
Not used	26/3	Cored Thermoplastic Node Markers
LANDSCAPE AND ECOLOGY		
(Co) (C)	30/1	General, sheets 1, 2 and 3
Not used	30/2	Weed Control
Not used	30/3	Control of Rabbits and Deer
Not used	30/4	Ground Preparation
(Co)	30/5	Grass Seeding, Wildflower Seeding and Turfing
(Co) (C)	30/6	Planting, sheets 1 and 2
Not used	30/7	Grass, Bulbs and Wildflower Maintenance
Not used	30/8	Watering
Not used	30/9	Establishment Maintenance for Planting
Not used	30/10	Maintenance of Established Trees and Shrubs
Not used	30/11	Management of Waterbodies
Not used	30/12	Special Ecological Measures
MAINTENANCE PAINTING OF STEELWORK		
(C) (Co)	50/1	(Specification for Highway Works) Form HA/P1 (Maintenance) Paint System Sheet
Not used	50/2	Requirements for Other Work
(C) (Co)	50/3	(Specification for Highway Works) Form HA/P2 Paint Data Sheet
(C) (Co)	50/4	(Specification for Highway Works) Form HA/P3 Paint Sample Despatch List: Sheets 1 & 2
Not used	50/5	General Requirements
INTRODUCTION		
(Co)	1/70	Disposal of Material

RBWM Highway Services Contract 2024
Highway Maintenance and Capital Works Contract



(Co) (C)	7/70	Carriageway Surface Dressing Proforma
(Co)	12/91	Cleaning Solutions
(Co)	13/70	Routine Structural Inspections
(Co)	13/91	Cleaning Solutions
(C)	14/70	List of Personnel, Plant and Equipment
(C)	14/71	Tenderers Proposed Materials
(Co)	60/1	Winter Service
(Co)	60/2	Winter Service Vehicles Provided by The Supplier
(Co)	60/3	Winter Service: Routine Driver Maintenance of the Employer's Winter Service Vehicles and Equipment
(Co)	60/4	Winter Service: Employer's Salt Stores
(Co)	60/5	Winter Service: Salting Route Information
(Co)	60/6	Winter Service: Gritting Record Sheet
(Co)	60/7	Winter Service: Weighbridge Report

SERIES 100 PRELIMINARIES

Appendix 1/1 : Temporary Accommodation and Equipment for the Service Manager

RBWM and the Supplier will work collaboratively during the commission to achieve the stated aims and objectives. This includes collaborative working, colocation and joint problem solving.

RBWM is considering all options to support its Property rationalisation programme across its estate, including the location of its Highways Team(s) into the Tinkers Lane Depot., The Employer will utilise the desk space available in the 1st floor office at the Tinkers Lane Depot? – within a co-located collaborative environment, to help engender and develop the right behaviours throughout the life of this contract. An additional desk shall be made available for the Service Manager.

The Supplier will be required to provide all necessary desk space and basic facilities (desks, chairs, phone, wireless, welfare facilities, insurances, etc) in a location suitable to manage the service requirements and to foster a collocated environment. The Supplier in conjunction with RBWM will be required to make all internal modifications to the office space. All ICT interfaces and connections required by RBWM staff will be provided by RBWM.

The Employer at all stages reserves the right to increase the number of staff to be co-located at the Depot and associated additional desk space. RBWM and the Supplier will work together to achieve the same common aims and objectives for this contract and consider the best approach and location for any co-located staff.

Appendix 1/5: Testing to be carried out by the Supplier

1. The Supplier is to carry out all testing as required under the Specification, as specified in the following table, unless included within **Appendix 1/6**.
2. All costs for samples, sampling, testing and supplying the test results to the Overseeing Organisation shall be included in the rates and prices entered in the Schedule of Rates.
3. Notes:
 - a. Tests comparable to those specified in this Appendix will be necessary for any equivalent work, goods or material proposed by the Supplier.
 - b. (N) indicates that a NAMAS test report or certificate is required.
 - c. Unless otherwise shown in this Appendix tests for works, goods or materials as scheduled under any one Clause for all such work, goods or materials for the Works.
 - d. Cube strength tests are not required for concrete complying with Clause 2602
 - e. All test results shall be presented in accordance with the relevant testing standard and shall incorporate the following information:
 - Specimen reference; Material brief description; Manufacturer's supplier names or origin as appropriate; Batch reference number (proprietary material only); Quality of material;
 - Location of material in works;
 - Date sampled, by whom and method used; Date(s) tested;
 - Results of all tests

- f. When appropriate, samples shall be taken in sufficient time to allow testing to be completed and the Overseeing Organisation's approval obtained before the material is used in the works.
- g. The Supplier shall provide at his own cost all samples required for testing;
- h. Test results where tests to be carried out by the Supplier or his suppliers shall be passed to the Overseeing Organisation within 24 hours of the completion of each test.
- i. Nothing in this Appendix shall relieve the Supplier of his responsibilities for the Works under the Contract.
- j. Frequency of Testing: Tests specified as 1 per week, 1 every month, 1 every two months and the like; are to be carried out at those time intervals and not just within those periods. More frequent testing may be required to achieve the minimum number of tests per source.
- k. Testing shall accord with the table in the Specification for Highway Works unless otherwise instructed. The Supplier will provide a schedule within the Service Plan of all testing that will be carried out for the approval of the Service Manager, on an annual basis.
- l. For bituminous materials – national sector schemes and HAPAS approvals apply. Sampling shall at least be one per source.

Appendix 1/6 : Supply and Delivery of Samples to the Overseeing Organisation

1. It is the Overseeing Organisation's intention to undertake the sampling and testing which they consider necessary to confirm compliance with the Contract.
2. The Supplier should allow in his rates for those samples and reinstatement, which will be taken at the rates given in the following table, unless otherwise agreed by the Overseeing Organisation.
3. All material samples shall be taken from those materials delivered to site.

Table of Overseeing Organisation's Sampling Rates

Sample	Tests	British Standard	Sampling Rate
Core Samples	PRD and as defined	Clause 929 of SHW	Core pairs every 500 lane metres or part thereof for Binder and Base.
Surface Course and Regulating	Grading	BS 594987:2007	1 per 100 tonnes or part thereof
	Binder Content		All loads
	Temperature		
Binder Course and Regulating	Grading	BS 594987:2007	1 per 150 tonnes or part thereof
	Binder Content		All loads
	Temperature		
Sub-Base Type 1	Grading	SHW Cl.803	1 per 150 tonnes
	Plasticity	1377, SHW Cl.803	
Road Surface	Texture	SHW Cl.921	All Machine laid Surface Course

	Rolling Straight Edge	BS 594987:2007... Cl. 8.2	
		SHW Cl.702	

Appendix 1/7 : Site Extent and Limitations on Use

1 Extent of the Site

- (i) The Affected Property is described in Contract Data Part One and the 'Site' which relates to Work Orders is defined in Conditions of Contract and Service Information.
- (ii) The Site Boundary, where appropriate, will be indicated on the Work Order.
- (iii) The extent of the Site includes those areas of highway necessary for all temporary signs, cones, road markings and the like, which may be outside the Site Boundary of the permanent works stated in the Work Order.

2 Limitation on Use of the Site

- (i) Refer to Specification Clause 171AR

Appendix 1/9 : Control of Noise and Vibration

- 1 Working outside the hours in Table No 1 below will require the consent of the Service Manager.
- 2 The noise levels (see Note (i) below) scheduled below for periods outside the normal working hours will only be permitted when consent has been given to exceptional working.
- 3 The ambient noise level, Leq (see Note (ii) below) from all sources when measured 2.0 m above ground at noise control stations shall either not exceed the appropriate level given in the schedule or not exceed by more than 3dB (A) the existing ambient noise level, Leq (see Note (iii) below), at the control station measured over the same period, whichever level is greater. The maximum sound level at any noise control station shall not exceed the level given in the Schedule. Exceptionally the Supplier may be given permission to carry out works which exceed the noise levels in the schedule, provided that 14day notice of the date and timing of these works is given to the Overseeing Organisation and the Supplier demonstrates that he intends to take all reasonable measures to mitigate the noise nuisance. After consultation with the Local Authority and any other interested bodies a decision will be given within 10 days of receipt of the notice.

**Table No. 1**

Schedule		Total Noise Level at Control Stations		
Period	Hours	Ambient noise level Leq measured at control station dB(A)	Period of hours over which Leq is applicable	Maximum sound level (see note (iv) below) measured at control station dB(A)
Mondays to Fridays	0800-1700	70	1	75
Mon-Fri (when permitted)	1700-0800	60	1	65
Saturday	0800-1700	60	1	75
Saturday (when Permitted)	1700-0800	60	1	65
Sunday and Public Holidays	0800-1700	60	1	65
All unattended equipment outside normal working hours		See Para 4 (iv) below		

Notes:

- (i) Noise levels relate to free field conditions. Where noise control stations are located 1 m from facades of buildings, the permitted noise levels can be increased by 3 dB(a)
- (ii) The ambient noise level, Leq, at a noise control station is the total Leq from all the noise sources in the vicinity over the specified period.
- (iii) The existing ambient noise level, Leq, at a control station is the total Leq from all sources in the vicinity over the specified period prior to the commencement of the Works.
- (iv) Maximum sound level is the highest value indicated on a sound level meter which meets the requirements of BS EN 60651 Type 1 or 2 set to SLOW response and frequency weighting A or on an integrating – averaging sound level meter to BS EN 60804

4 Without prejudice to the generality of the Supplier's obligations under Clause 109 paragraph 1, the Supplier shall comply in particular with the following requirements:-

- (i) All vehicles and mechanical Equipment used for the purpose of the works shall be fitted with effective exhaust silencers and shall be maintained in good and effective working order;
- (ii) All compressors shall be 'sound reduced' models fitted with properly lined and sealed acoustic covers which shall be kept closed whenever the machines are in use and all ancillary pneumatic percussive tools shall be fitted with mufflers or silencers of the type recommended by the manufacturers;
- (iii) Machines in intermittent use shall be shut down in intervening periods of non-use or where this is impracticable, shall be throttled down to a minimum.

- (iv) Unattended equipment outside normal working hours (see 2 above) should if possible, be powered by mains electricity otherwise acoustic enclosures will be necessary to minimise sound levels.
- 5 Without prejudice to the foregoing and to the requirements of the Conditions of Contract, the Supplier shall not be permitted to carry out work as stated below, except where such work is required under the terms of the Contract or is absolutely necessary for the saving of life or property or for the safety of the Works:-
- (i) Piling, including sheet piling, by percussive methods on Saturdays or Sundays or outside the hours of 08.00 to 17.00hrs on Mondays to Fridays, inclusive;
 - (ii) Loading or unloading of materials or Equipment or the use of power tools within 60 metres of residential property between the hours of 17:00 and 08:00hrs.

Appendix 1/12 : Setting Out and Existing Ground Levels

Setting out of individual jobs will vary considerably in complexity and appropriate information will be given for each Works Order in the form of a schedule of levels, dimensions, locations and/or co-ordinates as required.

- 1 The Supplier shall set out the works and services using information provided by the Service Manager; or in the absence of setting out information the Supplier and Service Manager shall jointly set out the works and services. Setting out shall be carried out prior to work commencing on site.
- 2 In order that the Service Manager may have the opportunity to carry out checks of Supplier's setting out, the Supplier shall give 48hour notice that the setting out will be ready for checking. The Service Manager's check does not relieve the Supplier of his responsibilities.
- 3 Where setting out is undertaken by the Service Manager the methods of referencing will be consistent with those used by the Supplier.
- 4 The Supplier will record the level of existing ground at regular intervals prior to the commencement of works. The completed work will be reinstated to the levels and profiles which existed prior to the commencement of the works unless otherwise instructed by the Service Manager.

Appendix 1/13 : Programme of Works

The Supplier shall provide a programme of work which details the sequence of Work Orders which will be undertaken within the next four weeks. The Supplier shall provide a Programme of Works for each Works Order (lasting more than two days in duration) with the quotation in a form of a Bar Chart produced as a result of a Critical Path Analysis and must abide by the constraints below. It shall show the level of detail appropriate to each stage of the Works and all activities and restraints, each of which shall be given a short title. All events shall be numbered and annotated with earliest and latest event dates.

Schedule of Constraints

1. The Supplier must install a computer software system capable of receiving information from and transmitting information to the Client Asset Management system CONFIRM (see Specification Clause 194AR) within at least one month from the commencement of the Contract.

2. The Supplier shall install a communication system to fulfil his Contract obligations to permit rapid communication between the Supplier's staff and the Service Manager at least one month from the commencement of the Contract works.
3. Works Orders will be divided into Categories for timed response:
 - a. Cat P1: attendance on site within 2 hour during normal working day;
 - b. Cat P2: attendance on site within 24 hours outside the normal working day;
 - c. Cat P3: work to be completed in between 2 and 7 working days;
 - d. Cat P4: work to be completed within 28 days
 - e. Cat P5: work to be programmed as approved by the Service Manager (90 days)
 - f. Note: Maintenance Team and Winter Service will be instructed in accordance with the Specification's for these operations.
 - g. All schemes which require any traffic management will need to be agreed by the service manager prior to works commencing.
4. Where required, the programme will incorporate the following constraints: Appendix 1/17 for Traffic Safety and Management, Appendix 1/9 Control of Noise, Appendix 5/1 Drainage Requirements and Appendix 1/12 Setting Out and any working hours restrictions specified on the order for the works, to complete the works within the period specified for each Works Order. Additional Requirements (AR) will also apply.
5. The operatives undertaking work on a Works Order must complete the ordered work before they commence work on another Works Order, unless instructed to cease work by the Service Manager or the Police.
6. The Supplier shall be responsible for making arrangements with Public Authorities and Statutory Undertakers for the phasing into the Programme of Works, any work which needs to be done by them or their Supplier concurrent with the Works (See Clause 186AR).
7. The Supplier shall maintain pedestrian and vehicle access to properties affected by the works unless access cannot be achieved safely.
8. The Highways Manager reserves the right, in the event of adverse weather conditions or abnormal traffic, to suspend the Works without prior notice and/or remove the Supplier from the highway in an emergency.
9. The Supplier should endeavour to programme Works to minimise disruption to normal traffic. Special attention should be given to events and other planned works and activities already booked to take place on the highway, or such aspects as detailed in the Service Requirements and discussed at the monthly operational meetings, which the Supplier must attend.
10. Collaborative working is encouraged with other service providers to carry out, where possible, including improvement, maintenance, emergency works and investigations as the Service Manager considers necessary. However, these works will be carried out so as not to affect the Supplier's programme.
11. The Supplier can programme the work to suit any pattern of working hours which comply with constraints detailed within the contract. The Service Manager must agree the Supplier's hours of working for each Work Order and will not pay any enhancements for any hours of work proposed by the Supplier. The Supplier's Price List will not be enhanced for work undertaken on Monday to Friday between 07.30 to 18.00hrs, except

where this applies to restricted working hours on traffic sensitive routes, etc – when it will be dealt with through the provisions in the schedule of rates.

Appendix 1/17 : Traffic Safety and Management

1 General

- 1.1 The Suppliers traffic safety and management proposal shall comply with Chapters 1 to 14 of the Traffic Signs Manual published by the Stationary Office (or any amendments thereto or other conditions stated within this Contract), and with 'Guidance for Safer Temporary Traffic Management' and 'Safety at Street Works and Road Works a Code of Practice'.
- 1.2 The Supplier's traffic safety and management proposals for should we specifically mention this treatment type since we have not used it for years??will in addition comply with the Code of Practice for Traffic Safety and Control of Surface Dressing Operations.
- 1.3 Where the circumstances of any particular case are not covered by the recommendations of 'Safety at Street works and Road Works' and Chapter 8, the Supplier shall submit his proposals for dealing with such situations in writing to the Service Manager for his approval.
- 1.4 The Supplier shall be responsible for designing traffic management proposals and submitting them to the Service Manager for approval The Service Manager will then write to the Supplier to approve, amend or reject the proposal within the period of time specified within the Table for Replies. The same applies to changes to any approved layouts.
- 1.5 The Supplier should also liaise with bus service operators and the other Emergency Services to inform them of the phasing and any diversions a minimum of 5 working days prior to commencing the work. This should be done in coordination with the RBWM team who will also provide statutory notifications.
Should road closures be needed where the diversion goes through other Local Authorities boundaries, or on other owned networks (M4) confirmation of this approval from the other parties is required before the works can be undertaken.

2 Traffic Safety and Management Requirements

- 2.1 The Supplier shall be responsible for traffic management and all associated work as described in Clause 117 and shall provide the following information:
 - (i) Phasing of Works.
 - (ii) Drawings showing traffic management layout including as appropriate:-
 - (a) Position of traffic signs and traffic signals.
 - (b) Width of lanes.
 - (c) Working area.
 - (d) Safety zone.
 - (e) Cross over.
 - (f) Provision of access for emergency service vehicles
 - (g) The location of temporary vehicular access
 - (h) Green lined diversion drawings
 - (iii) Timing of operations.

- (iv) Road Lighting requirements.
- (v) A safety zone, delineated by traffic cones, must be maintained between any live traffic lane and all site staff/workmen.
- (vi) 24 hour cover for traffic management.

2.2 In providing the details listed above the following constraints shall apply:

1. The location of signs shall not hinder the movement of pedestrians or cyclists. Any street furniture mounted signs shall have a minimum ground clearance of 2.1m to the underside or lowest point of the sign.
2. The Supplier shall inspect the existing road lighting and shall if necessary shall provide additional lighting to protect and aid the workforce and pedestrians during working hours.
3. The Supplier shall provide a protected and well-defined pedestrian route through all traffic management areas.
4. Emergency traffic shall be permitted through the site all times, unless materials or open excavations prohibit this.
5. No work shall be permitted outside the traffic management areas.
6. Two-way shuttle working is restricted to a maximum coned area length of 300m unless otherwise agreed with the Service Manager.
7. Restricted works will be carried out as follows:
 - i. Monday to Friday 09:00 to 15:30
 - ii. Monday to Friday 20:00 to 06:00
 - iii. Saturday 07:30 to 16:00
 - iv. Saturday 20:00 to Sunday 06:00
 - v. Sunday 09:00 to 15:00
 - vi. Sunday 20:00 to Monday 06:00
 - vii. Statutory Holiday

The above sets out the typical restrictions. The permit team will discuss with the supplier where roads are deemed restricted on a case by case basis. Percentage uplifts applied should reflect pro rata the restriction applied – can we remove this? This is a huge cost for us? One for discussion

For example, a restriction of 2 hours should attract an uplift of 50% of a 4 hour restriction. Same as above

Where work is to be undertaken within 800m of a half barrier level crossing the Supplier shall notify the Network management team at least 21days before the planned start date.

8. When planning the traffic safety and management measures the Supplier shall include for covering existing permanent traffic signs, within or outside the area of the Works, which conflict with the traffic safety and management proposals. These measures shall be carried out in accordance with Clause 1209.
9. Schedule of Traffic Sensitive Routes as provided in the Data room. This is managed by RBWM's permit Team and shall be complied with in undertaking all Traffic Management, including restricted hours working, types of traffic

management, constraints and events.

10. Any specific requirements as described in Appendix 1/9.

2.3 The Supplier's attention is drawn to the need to assess the risk and develop and operate safe working practices if vehicles need to reverse. This should in all cases be the last resort for all vehicles entering the working area where operatives are present.

3 Traffic Safety and Control Officer

3.1 The Supplier is to provide a Traffic Safety and Control Officer (TSCO) for each works Order who shall be responsible for maintaining all traffic safety and management systems while work is in progress. A Traffic Officer will be available when work is not in progress to maintain the Supplier's traffic safety and management systems within one and a half hours of receiving an instruction from the Service Manager.

3.2 The responsibilities of the Traffic Safety and Control Officer and of his nominated deputy shall also include the following matters:

- (i) Monitoring, with the assistance of sufficient mobile personnel and of sufficient other suitable and appropriate aids, the flow of traffic within the area and within the period defined for the operation of the vehicle recovery service;
- (ii) Ensuring that, within 5 minutes of notification of the occurrence of an incident, as defined below, resulting in stationary vehicle(s) on a highway open to the public, the incident is reported to the vehicle recovery service;
- (iii) Recording and logging all incidents and all movements of recovery vehicles and, when called, all movements of the emergency services. For the purposes of this Appendix, an "incident" is defined as a shed load, vehicle breakdown, vehicle abandonment or traffic accident, whether or not the latter involves personal injury.
- (iv) 24-hour everyday availability in emergencies (achieved through a nominated deputy if necessary). The Officer shall be equipped with a mobile cellular phone and the phone number shall be supplied to the Overseeing Organisation and the Police. All officer contact information must be provided to RBWM.
- (v) Ensuring that the traffic control requirements of the Authority are carried out.
- (vi) Undertake regular patrols to ensure that all equipment is inspected and maintained (and keeping site records of inspections).
- (vii) Ensuring that there are adequate replacement signs or traffic signal equipment in the event of loss, damage or equipment failure. Any defect in the temporary traffic management reported by the Employer or the Police shall be rectified within 1.5 hours
- (viii) Arranging and agreeing all lane and carriageway closures, dimensions, working areas and safety zones.
- (ix) Arranging duties for watchmen so that the site is patrolled and inspected and equipment attended to and maintained at all times.

(x) The provision of an experienced person responsible for maintaining the smooth

running of traffic during critical periods, if necessary by manual control of traffic signals.

(xi) Liaison with businesses and private individuals to ensure that the work does not prevent people entering / leaving their workplaces and residences.

(xii) Liaison with bus operators, Police etc

4 Highway Maintenance Functions

4.1 Until the completion of a Work Order the Supplier shall be responsible for ensuring that within the limits of the works:

- (i) the highway is swept clear of debris (including dirt and mud) from any source to the satisfaction of the Service Manager
- (ii) Drains will be cleaned of any material arising from the works
- (iii) General removal of debris between fence lines and or highway boundary, as far as is reasonable

4.2 The limits of the works shall be the full extent of the traffic management system including all approach and 'end of road works' signing.

If the approved traffic management measures require a temporary traffic order or statutory approval the Supplier shall allow the following additional period of time to elapse between receiving approval and the commencement of works:

5 Temporary Traffic Orders

5.1 The Supplier must obtain the relevant permits and licences for all Works Orders. This includes applying for Temporary Traffic Regulation Orders for Road Closures, in consultation with the Service Manager. The notice period required by the Employer in order to arrange for making temporary traffic orders are as follows:

- (i) Works which affect only RBWM roads **3 months**.
- (ii) Works which affect Highways England (Motorway and Trunk road) **3 months**.

5.2 Minimum notice required by the Employer in order to arrange for Temporary Statutory Approvals are as follows:

(i) Works which affect Railway Level crossings	six weeks
(ii) Works with 2 way traffic lights	two weeks
(ii) Works with 3 or more way traffic signals	four weeks
(iii) Works which involve the use of non-prescribed signs	two weeks

6 Details of Events That Could Have a Bearing on The Works

6.1 Shall be detailed in each Works Order. The Supplier will however be expected to be aware of local events and activities promoted by RBWM and its partners that will have an impact on the availability of the high, ie Carnivals, Football matches, etc.

7 Highways, Private Roads, and Other Ways Affected by the Works

7.1 Figures will be supplied for each Work Order where appropriate as follows:



Description Predicted Ave 24h AADT	Speed of Cars (mph)	Speed Limit (mph)	Types of Traffic Control	Special Facilities /Remarks

8 Driver Information Signs at Roadworks

8.1 The Supplier shall erect signs which meet the provision of Appendix 1/21 and in addition these signs will:

- State they are "Working for RBWM Council"
- display an agreed emergency telephone number and
- display the Permit Reference Number for the works,

within the work area when traffic safety and management measures are in place on the public highway. The type and wording on the sign must be agreed before use with the Service Manager.

9 Temporary Traffic Signals

9.1 Generators used to power temporary traffic signals will only be permitted if they are at least 200m away from a residential property or unless otherwise agreed by the Service Manager. Generators must also comply with the requirements of Appendix 1/9.

10 Definitions

- 1) Routine Maintenance Works:
These are works such as gully emptying, street cleaning and verge maintenance where the task is routine, the work being carried out regularly, at the same locations, using the same tools and labour.
- 2) Works Substantially off the Highway:
Works substantially off the highway are for example drainage works in an area of open space where minor traffic management may be required at the access to the site.

11 Works Type Information

The following information is given to assist Suppliers in an appreciation of the existing traffic conditions and previous relative amounts of each works type.

12 Noticing and Streetworks Permits

RBWM expects all Suppliers and organisations working on the highway to be fully licenced with permits in-place to deliver works, in accordance with the New Roads and Street Works Act (NRSWA) and Clause 192AR. RBWM would like to be an exemplary partner in the scheme and feels that it needs to fully comply with the requirements of any permit scheme.

Therefore, RBWM requires **ALL** works under this contract, including highway maintenance reactive and routine works, to be fully permitted by the Supplier. The Supplier will adhere to the Regulations and should make any suitable allowance during pre-scheme planning, or pre-construction phases.

Appendix 1/18 : Temporary Diversions for Traffic

General Provisions

The existing public or private roads or other ways in this specification may be assumed to be any and all public and private foot or vehicular access on to the highway network and will vary in number and frequency for each Work Order.

Existing Rights of Way Intersecting or Entering the Site either vehicular or pedestrian shall be maintained at all times if practical. Gate accesses and farm crossing shall be kept unobstructed if possible all rights of ways shall be detailed for each Work Order.

The Supplier shall be responsible for designing temporary diversion for all forms of traffic using the highway. The Suppliers proposals shall be submitting to the Service Manager for approval. The Service Manager will approve, amend or reject the proposal and organise within fourteen days any requested legal traffic orders. The Supplier shall allow the following period to elapse before receiving approval and the commencement of works on site if a traffic order is required:-

- (i) Road Closures affecting Employer's highways = **3 months**
- (ii) Road Closures or diversion routes affecting
Highways England network (Motorways and Trunk Roads) = **3 months**

The Supplier shall not commence any work which affects the public highway until all the approved traffic safety and management measures necessitated by the works are fully in place.

The erection, maintenance and removal of signed diversion routes measured using the Schedule of Rates.

Temporary Diversions Specified by the Supplier or Service Manager

Works Orders issued to the Supplier by the Service Manager may identify the need for Temporary Road Closures. The Service Manager will provide sufficient information regarding suitable diversion routes and any known restrictions, planned works or bus service operations. The Supplier will be required to provide the following:

- **Scheme Layout drawings**
- **Diversion Route drawings including details of the Signs required and Locations.**
- **CDM Regulations, Health and Safety Plan**

The need for a Temporary Road Closure will be identified as being essential to the safe construction of the works on the basis of :-

- **Chapter 8 requirements, insufficient safety zones and working space adjacent to live traffic.**
- **Health and Safety Legislation, Safety of the Public**
- **Physical works constraints which necessitate a temporary road closure**

The Suppliers detailed method statement shall also identify for each Works Order, the need for any essential Temporary Road Closures and any other special requirements relating to the execution of the works.

Access to properties must be maintained at all times unless the Service Manager has agreed otherwise. Special arrangements may be required on the instructions of the Service Manager.

Safe access through the site must be maintained at all times for Pedestrians unless the Service Manager has agreed otherwise.

Temporary Diversions Proposed by the Supplier

If the Supplier requests a temporary road closure, which in the opinion of the Service Manager is not essential, but the Supplier wishes to pursue entirely to expedite the completion of the works, then the Service Manager shall consider the request. In the event that the request is approved, all costs relating to the temporary road closure will be borne by the Supplier. i.e. Preparation and publication of Orders, diversion route drawings which require approval by the Service Manager and the setting up and maintenance of diversion routes.

The Supplier shall give 7days notice in addition to the periods specified in Appendix 1/17. The Supplier shall be responsible for all TM layouts to be approved by the Service Manager.

Appendix 1/19 : Routeing of Vehicles

Permitted Access Routes

Without prejudice to other provisions in the Contract there are no restrictions on the use of public roads by the Supplier. Access will not be permitted along any privately maintained roads in the area unless approved by the Service Manager. The Service Manager may at any time withdraw his approval to the use of any route until such strengthening or repair work as he considers necessary has been carried out on that route.

The Supplier will however adhere to RBWM's resilience network, any traffic sensitive routes and scheme specific requirements. The Supplier shall also provide a "Lorry Routing Plan" for all works involving supplies or arisings transported to and from a working site, including machinery. The plan will be agreed with the Service Manager and will aim to avoid unsuitable routes, schools, hospitals, villages, weight restrictions, residential areas after 8pm and before 0630am. The plan will form part of all traffic management proposals unless otherwise instructed.

Appendix 1/21: Information Boards and Notifying Works

- 1 The Supplier shall display at every site, except for mobile works an information board as described in the "Safety at Street Works and Road Works" a code of practice and specified in the Traffic Signs Regulation and General Directions 2016 Diag. No. 7006.1, 7007 or 7008.
- 2 The Supplier is to supply and keep a stock of Information board signs Types A, B, C. as detailed in the Standard Detail Drawings. On the Service Manager's instruction transport these sign to site and erect them within the working area as follows:-
 - (i) 1 No Information Board sign Type A shall be erected at each end of the working area when work commences on site
 - (ii) 1 No Information Board sign Type B "The Advance Notice Sign" shall be erected on the approaches to the site one week prior to the commencement of works when instructed.
 - (iii) 1 No Information Board sign Type C shall be erected at each end of the working

area when work commences on site.

- (iv) When specified in the works order Information Boards Types E and F shall be erected on commencement of the works and removed upon completion.

All Information Boards will be column mounted unless otherwise agreed at a minimum height of 2.1m. Once works have started the "Advance Notice" Information Board sign Type B shall be removed. On completion of the works the Supplier is to remove the information board signs from site. The Supplier is reminded of his obligation to provide a sign board in accordance with the New Road and Street Works Code of Practice.

The Supplier will be responsible for notifying all residents and affected properties and businesses – in advance of any works commencing. Any wording or lettering for letters, notices or social media information shall be agreed with the Service Manager. which the Supplier and their comms team may be asked to be part of dependant on the scheme. See also provisions within Clause 184AR and the information detailed in Schedule 2 Service Requirements.

Appendix 1/22 : Progress Photographs

- 1 The will ensure progress digital photographs are taken for each Work Order by a competent, but not necessarily formally qualified operative/photographer. The digital photographs will record the location of work before commencement and after completion of the works. Additional digital photographs will be taken to record unforeseen conditions or other site difficulties. These photographs should be date and time stamped.
- 2 These digital photographs, with details of the Work Order / job number date and time, shall be submitted to the Service Manager within one week of the completion of work instructed on a Work Order. The use of digital photography is mandatory.
- 3 Photographs will be linked and uploaded to the Asset Management data capture system (Confirm or equivalent) and accessible to the Service Manager. This approach will be developed as part of this contract. The Service Manager will undertake periodic checks that this data is updated and non-conformance will be reflected in the Key Performance Indicators.

Appendix 1/23 : Risk to Health and Safety From Materials or Substances

- 1 **Restrictions in relation to traffic management measures**
 - 1.1 Where site operations are carried out adjacent to or near to lanes open to traffic care should be taken to ensure that no dust, spray or other material is transferred to the lanes open to traffic by any means.
 - 1.2 Additional safety zones may be required locally if the above is likely to occur.
- 2 **Restrictions in relation to working practices**
 - 2.1 As an alternative to the provision of additional safety zones where any dust, spray or other material could be deposited onto lanes open to traffic the Supplier may so arrange his operation, or stop his operations for short periods, when:
 - a) the wind direction would propel material onto traffic in the lanes open to traffic;
 - b) slow moving or standing traffic would be contaminated by site operations.

(Note:- for the purpose of this appendix only, "slow moving traffic" is defined as traffic travelling at less than 20 mph)

Waterproofing and Surface Impregnation of Concrete Structures

The "area of spray application" shall be defined as an ellipsoidal area 6 m up-wind, 6 m to each side and 16 m downwind of the spray gun.

If the area of spray application extends over adjacent trafficked carriageway special precautions will be required. If traffic within the area of spray application comes to a standstill or is travelling at a speed lower than 20 mph then spraying of materials containing isocyanates shall stop.

- 3.1 During bridgework operations temporary screening is required to verges and centre reserves, and between working areas and lanes open to traffic.
- 3.2 Materials for use in temporary screening shall be fixed to parapets and safety barriers, or be self-supporting where there is no such readily available means of fixing, and shall be sound and suitable for the intended purpose.
- 3.3 The temporary screening must be capable of withstanding high winds.
- 3.4 The Supplier is to provide the *Service Manager* with details of his temporary screening proposals, and method of fixing not less than one week prior to their erection.

3 Measures to be taken to protect members of the public

- 3.5 To avoid danger to the public or visitors to the application of spray applied waterproofing membranes may have to be curtailed or restricted in periods of strong winds.
- 3.6 Tented enclosures will be considered as an alternative to 3.5 above by the *Service Manager* if the Supplier wishes to ensure work continuity in all weather conditions. Where tented enclosures are used they should be strong enough to cope with the wind conditions likely to occur, and must not be allowed to become a traffic or site hazard themselves.
- 3.7 Nothing in this appendix shall relieve the Supplier of his obligations under the Control of Substances Hazardous to Health Regulations 1988 (COSHH) and his responsibility for the development of safe working practices.
- 3.8 During road works and bridgeworks operations care should be taken to protect members of the public from their effects, particularly during:
 - a) Milling of bituminous pavement;
 - b) Application of bituminous emulsion spray (tack coat);
 - c) Grit blasting operations to bridge decks;
 - d) Removal of lining and road markings, high friction dressing or in surface dressing activities
 - e) Any other operation likely to generate dust, or result in hazardous or unhealthy substances being released.

4. Monitoring to be undertaken by Supplier

- 4.1 No specific monitoring will be required but the Supplier should consider Section 3. above and his general obligation under the COSHH Regulations and take action to eliminate or reduce problems that occur due to his site operations.
- 1.2 The Supplier is required to keep records of all materials taken from the site and must record the location of the tips and the nature of the material deposited in them from the site. These records shall be available for inspection by the *Service Manager* on demand.

Appendix 1/24 : Quality Management System

- 1 The Supplier will propose a suitable Quality Management System for the delivery of works and professional services in accordance with the Service Information. This will be jointly agreed between the Supplier and the Service Manager, taking best practice and requirements from both organisations.
- 2 The system will be at least of ISO9001:2000 - standard and will detail all the transactional procedures and processes required to deliver and manage the contract. A "Process Manual" will be produced jointly that will support design and scheme development and link to the Strategic Asset Management approach and systems currently being developed by RBWM
- 3 The Suppliers Quality Management system and processes shall be in accordance with Schedule 2 Service Requirements and the Business Management, Quality Management, Corporate and Strategic Objectives detailed.
- 4 A Quality Plan will be developed for the Contract which will cover the following items:
 - (i) Supplier's organisation and management
 - (ii) Supplier's method statements and construction procedures
 - (iii) Supplier's construction quality control
 - (iv) Supplier's Quality Plans

Quality Plans shall conform with the following requirements :

SUPPLIER'S ORGANISATION AND MANAGEMENT

This section of the Quality Plan shall include:

- i. Definition of the Contract and its documentation.
- ii. The organisation of the Contract, including the line of command and communication between parties involved in the Contract.
- iii. Names, roles, responsibilities and authority of principals and key personnel.
- iv. Control of liaison and meetings with third parties.
- v. Identification of the Supplier's own staff responsible for overseeing each major activity.
- vi. The main Supplier's control of sub-contracts.
- vii. Document control.
- viii. Programme for submission of method statements and Suppliers' Quality Plans.

The Quality Plan shall identify procedures (which may be a part of the Supplier's general procedures) that cover the topics listed below. Copies of these procedures shall be made available to the Service Manager on request.

- i. The quality of plans for sub-Suppliers and suppliers of work, goods and materials which are the subject of quality management schemes.
- ii. Procedure for the preparation, review and adjustment of programmes for the effective progression of the Works and the recording of this.
- iii. Control and approval of purchases of materials.
- iv. Control of off-site activities (where appropriate).
- v. Procedures for the regular review and recording by the Supplier of the quality of the Works.
- vi. Control of personnel selection, based on their care, skill and experience.
- vii. Management review/audits to monitor and exercise adequate control over the implementation of the quality plan.
- viii. Any other relevant item.

SUPPLIER'S METHOD STATEMENTS AND CONSTRUCTION PROCEDURES

This section of the Quality Plan shall include:

- i. Detailed method statements for each major activity whether directly controlled or subcontracted.

The method statements shall identify hold points and invoke:

- works instructions
 - quality control procedures
 - compliance testing/inspection requirements
 - and work acceptance procedures
- for all activities that might affect the quality of the permanent and temporary works.
- ii. Identify the relevant construction procedures in the Supplier's own Quality Management System (and provide copies on request).

SUPPLIERS'S CONSTRUCTION QUALITY CONTROL

This section of the Quality Plan shall include:

- i. Statement of the Supplier's organisation for quality control.
The quality plan shall identify procedures (which may be a part of the Supplier's general procedures) that cover the topics listed below. Copies of these procedures shall be made available to the Service Manager on request.
- ii. Arrangements for "receiving" and "in-process" testing.
- iii. Control of test laboratories.
- iv. Control of test, measuring and inspection equipment.
- v. Document control.
- vi. Procedure for monitoring and recording the inspection, test and approval status of the constructed/installed work.
- vii. Procedures for tests and inspections for the purpose of the Supplier certifying that prior to covering up, each part of the Works are complete and conform to the Contract.
- viii. Procedure for the review of work submitted for review but not accepted as conforming to the Contract.

- ix. Procedure for the collation of quality records as identified in BS EN ISO 9002, and provision or copies when requested by the Service Manager.

SUPPLY CHAIN QUALITY PLANS

The Quality Plan shall include:

- i. Definition of the product or service to be provided.
 - ii. The organisation of the Supplier describing the line of command and stating the name of the senior manager responsible for the contracted Work and the name of the Supplier's on-site management representative. Contact addresses, telephone numbers, etc, shall be provided.
 - iii. Identification of the relevant parts of the Supplier's quality system relevant to the product or service being provided. (Copies to be provided to the Service Manager on request.)
 - iv. The control of personnel selection (at works and on site), including special requirements for skilled personnel e.g. certification of welders, training of operatives, experience requirements etc.
 - v. Specific procedures for the following:
 - Receipt and examination of certificates of conformity and test results for purchased products.
 - Product identification and traceability.
 - Handling, storage, packaging and delivery to Site and storage and handling on Site.
 - Quality records.
- 4 Items i) and iii) of the Quality Plan shall be submitted to the Service Manager for its acceptance not later than 1 month after award of the Contract.
- The Supplier shall submit other parts of the Quality Plan prior to the commencement of any related work or activity and to a timetable included in item i).
- 5 Individual "mini" Method statements may be required from time-to-time for specific work items, which will be listed within any Work Order.

Appendix 1/70 : Disposal of Materials

All unacceptable and surplus materials (other than those classified as Class U2 materials as defined in Clause 601.3 of the Specification) to be removed from the site shall be recycled where practicable by the Supplier (See Appendix 2/3). All other materials shall be classified as controlled waste and the Supplier will be required to dispose of such materials in accordance with the Environmental Protection Act 1990. the Duty of Care imposed by the Act shall apply to the Supplier as producer of the waste. This shall also apply to any sub-Supplier employed by the Supplier.

All waste material haulage must be undertaken by a carrier registered to transport Controlled Waste and each load must be accompanied by a transfer note.

All waste must be disposed of at an approved or licensed site capable of taking the waste in question. the Supplier should contact the Waste Regulation Authority and The Environment Agency's Tactical Planning and Information to check the availability and location of appropriate waste disposal facilities or to seek approval to any alternative proposals for the disposal of waste materials.

The burning of any materials on site or in depots will not be permitted.

SERIES 200 SITE CLEARANCE

Appendix 2/3 : Retention of Material Arising from Site Clearance

1. The following materials shall be carefully dismantled: brickwork, blockwork or stonework to structures. The Supplier shall sort through the carefully dismantled materials to identify in conjunction with the Service Manager which individual bricks, blocks or stones are re-useable and which are not. All materials which are to be re-used shall be cleaned of mortar and other debris and stored in a safe place until they are to be re-used. Depending on the material type being removed from site, it might be necessary that the Service Manager requests that the materials being removed are taken to one of the storage units to make the materials re useable on other schemes in the future.
2. The use of mechanical equipment such as angle grinders and circular saws, for the purpose of taking up or down brickwork, blockwork or stonework in historic structures shall not be permitted.
3. The Supplier will comply with the Additional Requirements for recycling contained in 199-03AR and 270AR.

SERIES 300 FENCING

Appendix 3/1: Fencing

1. All fencing shall be specified in the Works Order and design and construction details can be found in the RBWM standard detail drawings. Any specific design or construction requirements will be undertaken in line with RBWM Standard Details or the Standards for Highways or by specific instruction by the Service Manager.

SERIES 400 ROAD RESTRAINT SYSTEMS

Appendix 4/1 : Road Restraint Systems (Vehicle And Pedestrian)

1 Location:

1.1 Vehicle Restraint Systems:

- (i) The location, Containment Level, Impact Severity Level (ISL), Working Width Class, maximum height that allows the required visibility, and the Length of Need requirements for safety barriers and transitions will be detailed in a Work Order issued by the *Service Manager*.
- (ii) The location, Containment Level, Impact Severity Level (ISL), Working Width Class for vehicle parapets will be detailed in a Work Order issued by the *Service Manager*.
- (iii) The location, Performance Class, Impact Severity Level (ISL), Permanent Lateral Displacement Zone (PLDZ) Characteristic, Exit Box Class (D), and maximum height that allows the required visibility requirements for terminals will be detailed in a Work Order issued by the *Service Manager*.
- (iv) The location, Performance Level (R or NR), Impact Severity Level (ISL), Redirection Zone Class (Z), Permanent Lateral Displacement Zone Class (D), and maximum height that allows the required visibility requirements for crash cushions will be detailed in a Work Order issued by the *Service Manager*.

1.2 Pedestrian Restraint Systems

- (i) The location for pedestrian parapets and pedestrian guardrails will be detailed in a Work Order issued by the *Service Manager*.

1.3 Anti-glare Screens

- (i) The location for anti-glare screens will be scheduled in a Work Order issued by the *Service Manager*.

2 Other Details:

Safety Barriers, Terminals, Transitions and Crash Cushions

- 2.1 Repair and renewal of existing safety barriers, terminals and transitions shall comply with Clause 470AR of the Specification.
- 2.2 Repair and renewal of existing crash cushions shall comply with Clause 470AR of the Specification.
- 2.3 Specific requirements for the connection or re-connection of any Road Restraint System to an existing safety barrier, vehicle parapet or other structure will be detailed in a Work Order issued by the *Service Manager*.

Vehicle Parapets Including Anchorages and Attachment Systems

- 2.4 Repair and renewal of existing vehicle parapets shall comply with Clause 470AR of the Specification.
- 2.5 Corrosion protection required for new vehicle parapet components being installed to repair or renew components in existing vehicle parapets shall comply with Table 19/2B Type 4 and Series 1900 of the Specification.
- 2.6 Maintenance to the corrosion protection system of existing parapets will be detailed in a Work Order issued by the *Service Manager* and comply with Series 5000 of the Specification.
- 2.7 Any additional corrosion protection system for new parapets will be detailed in a Work Order issued by the *Service Manager* and shall comply with Series 1900 of the Specification.
- 2.8 Any aesthetic requirements for vehicle parapets will be detailed in a Work Order

issued by the *Service Manager*.

- 2.9 Any special requirements for anchorages or attachment systems will be detailed in a Work Order issued by the *Service Manager*.

Pedestrian Restraint Systems

- 2.10 Repair and renewal of existing pedestrian restraint systems shall comply with Clause 470AR of the Specification.
- 2.11 Corrosion protection required for new pedestrian restraint systems components being installed to repair or renew components in existing pedestrian restraint systems shall comply with Table 19/2B Type 4 and Series 1900 of the Specification.
- 2.12 Maintenance to the corrosion protection system of existing pedestrian restraint systems will be detailed in a Work Order issued by the *Service Manager* and shall comply Table 50/2 Type III and Series 5000 of the Specification.
- 2.13 Requirements for new pedestrian restraint systems will be detailed in a Work Order issued by the *Service Manager*.
- 2.14 Any additional corrosion protection system for new pedestrian restraint systems will be detailed in a Work Order issued by the *Service Manager* and shall comply with Series 1900 of the Specification.

Anti-glare screens

- 2.15 Repair and renewal of existing anti-glare screens shall comply with Clause 470AR of the Specification.
- 2.16 Requirements for new anti-glare screens will be detailed in a Work Order issued by the *Service Manager*

3 Testing

Destructive Testing

- 3.1 Destructive testing of any safety barrier components will be detailed in a Work Order issued by the *Service Manager* and shall comply with Series 400 of the Specification.

Site Testing on Post Foundations

- 3.2 Requirements for site load tests on safety barriers, terminals, transitions and crash cushion post foundations will be detailed in a Work Order issued by the *Service Manager* and shall comply with Series 400 of the Specification. Test equipment will be supplied by the *Supplier*.

4 Temporary Safety Barriers

- (i) The Supplier shall provide temporary safety barriers at the location detailed in a Work Order issued by the *Service Manager* and shall remove the barriers off the Network or to another location as directed by the *Service Manager* on completion of the Task.
- (ii) The Containment Level, Impact Severity Level, Working Width Class to be provided will be detailed in a Work Order issued by the *Service Manager*.

5 Schedule of Road Restraint Systems (Vehicle and Pedestrian)

Road Restraint System requirements will be detailed in the following Schedule which will issued in a Work Order by the *Service Manager*.

SERIES 500 DRAINAGE AND DUCTING

Appendix 5/1 : Drainage Requirements

Note: Work Orders shall specify details such as position, orientation, diameter, chamber size, levels.

1. Detailed Schedules and Tables 5/1SR, 5/2SR, 5/3SR, 5/4SR and 5/5SR from the HMEP Appendix 1 Specification as published November 2012 will be deemed to apply for all technical pipe, duct and manhole, bedding, grading, surrounds requirements – as defined within each Work Order. These tables are not re-produced in this Appendix. General requirements are provided as follows.
2. Pipes for drainage shall be selected from the alternatives on Standard Drawings series 500 for pipes between 150mm and 600mm diameter. Refer to the Work Order for details.
3. All surface water pipe choices should be based on $K_s = 0.6\text{mm}$.
4. All foul water pipe choices should be based on $K_s = 1.5\text{mm}$.
5. All pipes beneath carriageways are to be backfilled with either Type 1 sub-base or foamed concrete (to be installed in accordance with SHW CI.1043). Foamed concrete must not contain Incinerator Bottom Ash.
6. Filter drain backfill material to be Type B
7. All pipe joints to be watertight. To be confirmed by air test where requested by the Service Manager.
8. Connections to existing Drains Chambers and Channels - refer to Work Order for details.
9. All drains and service ducts no longer required are to be removed and the void replaced with general fill material in accordance with SHW CI 506(3).
10. Chamber construction to comply with Standard Detail Drawings. Refer to the Work Order for details.
11. All chambers for foul drains are to be tested for water tightness.
12. All chamber covers, gratings and frames are to be 150mm deep ductile iron complying with the Specification.
13. Polished Skid Resistance Value (PSV) shall be 60 for all chamber covers.
14. Adjustment or replacement of existing frames and covers or gratings – if required by the Work Order a proprietary quick setting high strength mortar should be used.
15. In appropriate circumstances the Supplier may be permitted to use saddles to form junctions.
16. Porous NO FINES Concrete – Reference NF
Porous no fines concrete shall comply with Clause 2603SR.

Appendix 5/2 : Service Duct Requirements

Service Duct Requirements - Highways

- 1 Service ducts to be installed in accordance with Standard Detail Drawings series 500, 1300 and Traffic Signals, unless stated otherwise, or within the Work Order.
- 2 Duct diameters to be as stated within the Work Order.

Service Duct Requirements - Structures

- 4.1 Ducts over bridge decks shall be non-coilable steel supplied in straight length. Steel ducts to be CHS (circular hollow section) and comply with BS 5950-1: 2000 and BS EN 10210-2: 2006 with a minimum wall thickness of 3.2mm.
- 4.2 They shall be placed on top of any waterproofing or red sand asphalt protection.
- 4.3 Ducts shall be sleeved over movement joints.
- 4.4 All duct runs shall terminate with marker posts or as per Standard Detail Drawing and/or design.
- 4.5 Each duct shall be fitted with a pigmented, stranded polypropylene or equivalent rot-proof material draw rope of 5kN breaking load.

Appendix 5/5 : Combined Drainage and Kerb Systems

1. Limiting dimensions:
 - i) Maximum width and depth of units:-
Kerbs
 W = 150mm external (100mm internal flow width)
 D = 480mm with 380mm centre stones & 305mm with 205mm centre stones
 L = 500mm, 1000mm & 1500mm
 - ii) Kerb upstands = 125mm standard, 25mm at vehicle crossings and flush/6mm at pedestrian crossings.
 - iii) Kerb profile - kerb drain units matching standard PCC HB kerbstone. One piece manufacture for all units.
2. Strength requirements D400 and CE marked to EN 1433 & conforms to HA Specification IAN 117/08 (Revision 1)
3. Concrete surround - all concrete shall be class ST4 and the backing shall be placed within 4 hrs of foundation concrete.
4. General:-
 - i) The kerb drains shall be to Standard Detail Drawings Series 1100 as specified on the Work Order or equivalent.
 - ii) The standard units shall be installed with the manufacturer's accessories as required for the scheme.
 - iii) The system shall be installed in accordance with the manufacturer's printed recommendations.
 - iv) The drainage outfalls will be connected to the adjacent existing/proposed gullies/chambers, drains or kerb drains utilising 150mm dia. drains with Type Z bed and surround and shall be measured separately.

SERIES 600 EARTHWORKS

Appendix 6/1 : Requirements for Acceptability and Testing Etc., Of Earthworks Materials

- 1.1 Appropriate materials requirements will be made for each Work Order, for materials 1A, 1B, 6F2, 6N, 6B
- 1.2 Class 1A material, Moisture Content shall have an acceptable lower limit of Opt -2 and an acceptable upper limit of Opt +2 tested in accordance with BS1377:Part 2.
- 1.3 Class 1B material, Moisture Content shall have an acceptable lower limit of 8% and acceptable upper limit of 15% tested in accordance with BS 1377:Part 2.
- 1.4 Class 6F2 material, 10% fines property shall have an acceptable lower limit of 75KN defined and tested in accordance with Clause 635.
- 1.5 Class 6N material, Moisture Content shall have an acceptable lower limit of Opt -2 and an acceptable upper limit of Opt +2 tested in accordance with BS1377:Part 2.
- 1.6 Class 6B material, 10% fines property shall have an acceptable lower limit of 100KN defined and tested in accordance with Clause 635.

2. Class 6N material – Fill to structures

- 2.1 Class 6N material to comply with the following requirements –

Size	% passing
75mm	100
63 microns	<15

- 2.2 The permitted constituents of Class 6N material shall be restricted to natural gravel, crushed gravel, crushed rock and crushed concrete.
- 2.3 The acceptable moisture content limits for materials are to be those capable of achieving the 95% of maximum dry density compaction requirements.
- 2.4 The effective angle of internal friction (ϕ') of the Class 6N materials shall have a minimum value of 35°. The effective cohesion shall be zero.

3. Class 6B1 material

- 3.1 Class 6B1 material shall comply with the following requirements –

Size	% passing
500mm	100
300mm	0-10

- 3.2 The permitted constituent of Class 6B1 material is natural igneous rock.

4. Class 6B2 material

- 4 Class 6B2 material shall comply with the following requirements –

Size	% passing
1000mm	100
500mm	0-10

4.2 The permitted constituent of Class 6B2 material is natural igneous rock.

Appendix 6/2 : Requirements For Dealing With Class U1B And U2 Unacceptable Material

1 Disposal of Surplus Material

- 1.1 Bituminous surfacing materials with tar content are classified as unacceptable material Class U1B.
- 1.2 Surplus acceptable and unacceptable material is to be disposed of in tips off site. Such tipping sites and sites for disposal of topsoil provided by the Supplier will require both planning permission and a site licence.

Appendix 6/3 : Requirements for Excavation, Deposition, Compaction (Other than Dynamic Compaction)

Unless specified otherwise in the Work Order the following shall apply:

1. Excavation

- 1.1 Excavations shall be excavated to the lines and levels stated on the relevant Work Order drawing(s).
- 1.2 Cutting slopes and toes of cuttings shall only be undercut for the purposes of installation of drainage works, the extent of such excavations shall not exceed 20 metres in length or remain open for a period in excess of 24 hours and must be backfilled with well compacted materials as soon as is practical after temporary works, unless stated otherwise in the Work Order Site Information.
- 1.3 All topsoil shall be completely removed prior to the excavation of acceptable material.
- 1.4 Explosives and blasting for excavation shall not be permitted.
- 1.5 The definition of "Hard Material" is a material that is unable to be excavated by a mechanical excavator such as a "JCB" or equivalent without prior breaking out with hydraulic/pneumatic breaker equipment.
- 1.6 Treatment of cutting faces that are not to receive topsoil shall be as described in Clauses 603.5 and .6. The locations and extent of these faces are on the relevant Work Order drawing(s).
- 1.7 Cutting faces which are to receive topsoil shall, where required to be made secure, be dealt with in accordance with Clause 603.8. The locations and extent of these faces are on the relevant Work Order drawing(s).
- 1.8 Excavations for the clearance of redundant watercourses will be described in the Work Order Site Information.
- 1.9 Excavations for new and enlarged watercourses will be described in the Work Order Site Information

2. **Depositions and Fills**

- 2.1 Fills, including embankments, shall be constructed to the lines and levels stated on the relevant Work Order drawing(s).
- 2.2 Requirements for starter layers are shown on the relevant Work Order drawing(s).
- 2.3 All topsoil shall be completely removed prior to the deposition of acceptable material.

3. **Embankments**

- 3.1 No over steepening of embankment slopes will be permitted, except, with the prior permission of the Service Manager. Trenches for drainage or other works at the toe of the embankment slopes must be adequately supported to prevent failure of the slopes. Such trenches must not exceed 20 metres in length or remain open for a period in excess of 24 hours and must be backfilled with well compacted materials as soon as is practical after temporary works, unless stated otherwise in the Work Order Site Information.
- 3.2 Unless specifically provided for within the contract no trenches or other excavations will be permitted within completed embankment slopes.
- 3.3 Embankments shall be constructed in such a way as to ensure unrestricted drainage of water from the earthworks. Granular materials placed in composite embankments must be placed beneath cohesive soils in order to prevent perched water tables within the embankments and any associated softening and/or instabilities. No stockpiling of fill to a height greater than the final embankment height will be permitted.
- 3.4 In addition, embankments up to 5m height and containing cohesive fill materials shall be compacted with a tamping roller, for a minimum distance of 5 metres from the edges of the embankment. Smooth wheeled rollers shall only be used to seal these surfaces at the end of working periods. Such surfaces shall be scarified and re-compacted with a tamping roller before placing the next lift. As soon as possible after completion of embankment, the side slopes shall be topsoiled and seeded, as indicated in Appendices 6/8 and 30/5, to prevent subsequent erosion of the slopes

4. **Benching**

- 4.1 Benching shall be carried out as described below unless stated otherwise in the Work Order Site Information.
- 4.2 Where the existing ground is shown to be benched on the Work Order drawing(s) then;
 - (i) loose surface materials are to be excavated up to a depth of 200mm below existing ground levels over the area indicated on the drawings and,
 - (ii) the area of the existing slope of gradient greater than 1v:6h is to be benched in 0.5m vertical steps unless otherwise directed on the drawings.
- 4.3 Temporary slopes in existing ground or fill areas shall be benched as part of the temporary works.
- 4.4 Interfaces between different classes of fill (except topsoil) or fill placed at different times shall be benched as follows unless otherwise shown on the drawings.
- 4.5 The interface shall be benched in 0.5m to 1.0m vertical steps so as to maintain the average slope/interface line shown on the drawings. Vertical interfaces or interfaces sloping at less than 1v:6h do not required benching

5. **Cuttings**

- 5.1 No over steepening of cutting slopes will be permitted. Trenches for drainage or other works at the toe of the embankment slopes must be adequately supported to prevent failure of the slopes. Such trenches must not exceed 20 metres in length or remain open for a period in excess of 24 hours and must be backfilled with well compacted materials as soon as is practical after temporary works, unless stated otherwise in the Work Order Site Information.
- 5.2 Progressive excavation in cuttings must at all times ensure unrestricted drainage of ground water or surface water from the excavations particularly where the formation or sub-formation is uncovered or where, in the process of excavation, materials which are susceptible to weathering are exposed to the elements. Any materials rendered unacceptable by the Supplier's failure to keep earthworks free of water shall be removed by him and replaced with acceptable material at his expense.
- 5.3 As soon as possible after completion of cuttings and any associated permanent drainage works, the side slopes shall be topsoiled.
6. **Compaction**
 - 6.1 The Supplier's attention is drawn to Clause 612 and Table 6/4 of the Specification for Highway Works which gives the approved methods of compaction for the highway embankments.
 - 6.2 The Supplier shall ensure that the plant used and method of compaction employed for the compaction of layers of material overlying geotextile materials shall not cause harm to, or reduce the properties of, the geotextile material.
7. **Disposals of materials**
 - 7.1 The Supplier will have title to materials from site clearance, excavations and demolitions, unless described in the Work Order
 - 7.2 Subject and without prejudice to the provisions of the Conditions of Contract, expressions 'run to spoil in tips provided by the Supplier', 'haulage and deposition in tips off Site provided by the Supplier', 'disposal of material' and the like, both in this Series and in any other Series of the Specification shall be deemed to have the meanings of requiring the use of waste carriers registered and tipping sites licensed under the Control of Pollution Acts and in compliance with the Environmental Protection Act.

The Supplier shall, before commencing any part of the Works, submit to the Service Manager a list of locations of tips off Site that he proposes to use for the disposal of materials arising from the temporary and permanent works. The list shall be updated to represent actual practice until issue of the Maintenance Certificate.
 - 7.3 The Supplier shall whenever required produce to the Service Manager information to show that the disposal sites have current licences or planning consents as appropriate together with details of any conditions or constraints upon their use and that the nature of materials for disposal together with the manner rates and timings of the disposals are acceptable to the waste regulation and disposal authorities, the licensed waste managers, and the local planning authorities, as appropriate.
 - 7.4 The Supplier will be required to provide copies of all Controlled Waste Transfer Notes relating to the disposal of materials arising from the temporary and permanent works.
8. **Soft Spots and Other Voids**
 - 8.1 Except for areas requiring subsequent ground treatment, soft spots below embankments shall be replaced with SHW Class 6C material unless otherwise advised

in the Works Order. Where subsequent ground treatment is to take place with stone columns or band drains, the Supplier shall use SHW Class 1 or 6 material as replacement, except that the grading of the product shall be controlled within the SHW Class 1 or 6 limits to ensure that the subsequent treatment works are not impeded.

Appendix 6/6 : Fill to Structures and Fill Above Structural Foundations

1. Unless specifically stated otherwise, fill to structures and fill above structural foundations shall be class 6N material.
2. The full scale testing of stable slopes for class 6N material is not required.

Appendix 6/7 : Sub-Formation and Capping and Preparation and Surface Treatment of Formation

- (i) A capping layer or increased sub-base will be requested by the Service Manager should the CBR on formation level be less than 15%. :-
- (ii) For details of capping layers and starter layer required see Drawing provided where necessary for each Work Package.
- (iii) Permitted classes of capping layers:- 6F2 see Appendix 6/1.
Permitted class of starter layer:- 6B.
- (iv) Permitted procedures to be adopted for construction of capping to be in accordance with Clause 613, 11(i) and Clause 613, 12(i).

Appendix 6/8 : Topsoiling

Unless specified otherwise in the Work Order the following shall apply:

- 1.1 Topsoil is required to be stripped in the locations shown on and to the depths stated on the relevant Work Order drawing(s).
 - 1.2 Topsoil and turf to be designated as Class 5A material is described in Appendix 6/1.
 - 1.3 Stockpiling of stripped and imported topsoil shall not exceed 1.0m high and shall be treated with a suitable herbicide at appropriate intervals to prevent the seeding of weeds.
 - 1.4 Class 5A material in excess of requirements for top soiling shall be disposed of off site.
-
- 1.5 Imported topsoil Class 5B is required where stated in the Work Order.
 - 1.6 Constraints on excavating topsoil from stockpiles are those stated in Clause 618.3 and any additional constraints stated in the Work Order Site Information.

Appendix 6/9 : Earthwork Environmental Bunds, Landscape Areas, Strengthened Embankments

Unless specified otherwise in the Work Order the following shall apply:

1. Earthwork Environmental Bunds

- 1.1 Earthwork environmental bunds shall be constructed at the locations shown on the relevant Work Order drawing(s) with the fill materials and compaction requirements stated in the Works Order Site Information.
- 1.2 Unless stated otherwise in the Work Order Site Information all earthwork environmental bunds shall be topsoiled to the requirements of Appendix 6/8 and grass seeded to the requirements of Appendix 30/5.

2. Landscape Areas

- 2.1 Landscape areas are designated on the relevant Work Order drawing(s) with Class 4 fill materials and compaction to the requirements of Clause 620.2, unless stated otherwise in the Works Order Site Information.
- 2.2 Unless stated otherwise in the Work Order Site Information all landscape areas shall be topsoiled to the requirements of Appendix 6/8 and grass seeded to the requirements of Appendix 30/5.

3. Strengthened Embankments

- 3.1 Strengthened embankment shall be constructed at the locations shown on the relevant Work Order drawing(s) with the fill and strengthening materials and compaction requirements stated in the Work Order Site Information.
- 3.2 Unless stated otherwise in the Work Order Site Information all strengthened embankments shall be topsoiled to the requirements of Appendix 6/8 and grass seeded to the requirements of Appendix 30/5.

Appendix 6/10 : Ground Anchorages, Crib Walling and Gabions

Gabions

- 6.10.1 Gabion Units shall be assembled in accordance with the manufacturer's instructions and filled with class 6G material in a manner that avoids the distortion of the gabion units during construction.
- 6.10.2 All exposed gabion faces shall be filled with class 6G material placed by hand to Clause 2413.10 to achieve a dry stone wall type appearance. The minimum length of the facing material shall be 200mm unless a smaller piece is required to complete a gabion.
- 6.10.3 Gabion baskets shall be maintained square with vertical sides during filling. Internal tie wires shall be inserted and tensioned in accordance with the manufacturers instructions.
- 6.10.4 With the exception of material hand placed in exposed gabion faces, class 6G stone shall comply with the following:
 - The size of the rock fill shall not exceed two thirds the minimum size of the gabion basket or 300mm whichever is smaller.
 - None of the stone shall pass a 125mm sieve.

- 6.10.5 Gabion baskets shall be manufactured from wire complying with BS1052 having a minimum core diameter of 5.00mm and be galvanised in compliance with BS EN 10244-2. The mesh openings shall not be greater than 75mm x 75mm.
- 6.10.6 Gabion baskets shall be of a weld-mesh type. Woven wire gabions are not permitted.
- 6.10.7 The Class 6G material used for gabion infilling shall be a durable, natural stone. Argillaceous materials or crushed concrete shall not be used.

SERIES 700: ROAD PAVEMENTS – GENERAL

Appendix 7/1 : Permitted Pavement Options (Schedules 1, 2 3, 4 and 5)

1 PERMITTED PAVEMENT OPTIONS - SCHEDULE 1

Materials shall be laid in accordance with the requirements of Clause 903 of the Specification (with particular reference to sub clauses 7-10). The only exception will be for Carriageway Patching works, the requirements for which are given in Clause 972 AR.

Schedule 1: Permitted Pavement Options

Location	Area	General Requirements	Permitted Pavement Option
To be Supplied with each Work Order	All areas	See Schedule 2	A1

A1 is for the main carriageway, lay-bys, hard shoulders and traffic calming measures.

The locations of other permitted necessary in the Work Order.

2 GENERAL REQUIREMENTS - SCHEDULE 2

SCHEDULE 2 - General Requirements – Options A1		
Grid for checking surface levels of pavement courses [702.4]:	Longitudinal dimension:	10 m
	Transverse dimension:	2 m
Surface regularity [702.5, Table 7/2]	Category of Road:	Type A for classified Roads, Type B for unclassified Roads unless specified in the Work Order
Interval for measurement of longitudinal regularity [702.7]:	Continuous 300 m lengths along any line parallel to the centre line	
Interval for measurement of transverse regularity [702.8]:	20 m	
Whether surface texture is required for materials other than high stone content asphalt [921.2]	Required, in accordance with Clause 921. See Schedule 5	
Whether surface texture is required for materials other than high stone content asphalt [921.2] texture depth.	Required, by the method described in Clause 921. Average texture depth per 1000m section: Not less than 1.2 mm. Average of each set of ten: Not less than 1.0	
Whether surface texture is required for circulatory sections of roundabouts or at locations with concentrated HGV turning movements.	Required, by the method described in Clause 921. Average texture depth per 1000m section: Not less than 1.2 mm. Average of each set of ten: Not less than 1.0	

3 PERMITTED CONSTRUCTION MATERIALS - SCHEDULE 3

Pavement Option A1		
Pavement Layer	Material Ref.	Thickness (mm)
Surface course	911/SURF 1	50
Surface course	910/SURF 2	40
Surface course	911/SURF 3	45
Surface course	912/SURF 4	40
Surface course	912/SURF 5	40
Surface course	942/SURF 6	40
Surface course	942/SURF 7	40
Binder course	906/BIN 1	60
Binder course	929/BIN 2	60
Binder course	905/BIN 3	60
Binder course	905a/BIN4	60
Base	906/BASE 1	80 +-10mm
Base	906/BASE 2	80 +-10mm
Base	904/BASE 3	80 +-10mm
Sub-base	803/TYPE 1	As required
Sub-base & Base	TYPE ST1	As required
Sub-base & Base	TYPE ST2	As required
Clauses for Regulating course	904, 905, 906, 910, 911, 912, 929, 942	As required
Coated Chippings	915/A1	
High Friction Surfacing	924	
Coloured Surfacing	971AR	

4 GENERAL REQUIREMENTS FOR CONSTRUCTION MATERIALS - SCHEDULE 4

Schedule 4: General Requirements for Construction Materials	
Clause	Requirement
802.4	Unbound materials up to 225 mm compacted thickness in sub-base can be spread in more than one layer.
903.18	Vibratory rollers shall not be used in vibratory mode in urban residential areas. (See Appendix 0/2)
903.27	The requirements for PSV of temporary running surfaces are as given in sub-Clause 903.27 (ii) except as follows: <i>Where the Supplier proposes to run traffic on new Binder course material then such material shall incorporate a hardstone aggregate with a minimum PSV of 60 in areas where it is likely that the period of temporary use will exceed seven cumulative days.</i>
901 & 903	<i>All asphalt materials conforming to BS EN 13108 and PD 6691 shall be transported laid, compacted and tested in accordance with BS 594987:2007.</i>

907.2	The materials listed within Schedule 3 of this Appendix may be used for a Regulating course. The actual material to be used for each scheme will be stated on the Work Order.

Conversion Factor for Regulating material shall be 0.43m³/t.

5 REQUIREMENTS FOR CONSTRUCTION MATERIALS - SCHEDULE 5

Schedule 5: Requirements for Construction Materials

Material Ref.	CI No.	Description	Requirement
SURF 1	911	Hot rolled asphalt surface course with 55% 14mm aggregate (design mix)	Mixture Designation: HRA 55/14F Surf 40/60 des PSV60 BS EN 13108-4 and PD6691:2007 Clause C.2.5 Table C.2A, Column 12. Coarse aggregate: Types (a), (c) or (d) to Clause C.2.3.1.1 of PD6691. Fine aggregate: Type (a) to Clause 2.3.2.1 of BS PD6691 or crushed coarse aggregate material as permitted above or mixtures of both. Minimum PSV of coarse aggregate: 60, 65 or 68 as stated on the Work Order. Maximum AAV of coarse aggregate: 10 Average Texture Depth of 1.0mm
SURF 2	911	Hot rolled asphalt surface course with 55% 10mm aggregate (design mix)	Mixture Designation: HRA 55/10F Surf 40/60 des PSV60 BS EN 13108-4 and PD6691:2007 Clause C.2.5 Table C.2A, Column 6. Coarse aggregate: Types (a), (c) or (d) to Clause C.2.3.1.1 of BS PD6691. Fine aggregate: Type (a) to Clause 2.3.2.1 of BS PD6691 or crushed coarse aggregate material as permitted above or mixtures of both. Minimum PSV of coarse aggregate: 60, 65 or 68 as stated on the Work Order. Maximum AAV of coarse aggregate: 10 Average Texture Depth of 1.0mm
SURF 3	911	Hot rolled asphalt surface course with 35% 14mm aggregate (design mix) with 14/20 mm coated chippings	Mixture Designation: HRA 35/14F Surf 40/60 des Or HRA 30/10 surf 40/60 des BS EN 13108-4 and PD 6691: 2007 Clause C.2.5 Table C.2A, Column 10. Coated chippings size: 14/20 mm. Minimum PSV of coated chippings: 60, 65 or 68 as stated on the Work Order. (See also ref. 915/A1 below) Maximum AAV of coated chippings: 12

RBWM Highway Services Contract 2024
Highway Maintenance and Capital Works Contract



Macrotexture measurements are required and shall be in accordance with Cl. 921.
Average Texture Depth shall be 1.2mm.
Coarse aggregate: Types (a), (c) or (d) to Clause C.2.3.1.1 of PD 6691
Fine aggregate: Type (a) to Clause C.2.3.2.1 of PD 6691 or crushed coarse aggregate material as permitted above or mixtures of both.

Schedule 5: Continued

Material Ref.	CI No.	Description	Requirement
SURF 4	912	Close graded asphalt concrete surface course	Mixture Designation: AC10 Close Surf 70/100 rec PSV60 for roads and parking areas. Or; AC 10 Close Surf 100/150 rec PSV60 for small patching areas. BS EN 13108-1 and PD6691:2007 Clause B.3.5.2 Table B.14, Column 2 Nominal aggregate size: 10 mm Minimum PSV of coarse aggregate: 60, 65 or 68 as stated on the Work Order. Maximum AAV of coarse aggregate: 12 Coarse aggregate: Types (a), (c) or (d) to Clause C.2.3.1.1 of PD 6691 Fine aggregate: Type (a) to Clause C.2.3.2.1 of PD 6691 or crushed coarse aggregate material as permitted above or mixtures of both. Average texture depth 1.0mm
SURF 5	912	Close graded asphalt concrete surface course	Mixture Designation: AC 14 Close Surf 100/150 rec PSV60 BS EN 13108-1 and PD6691:2007 Clause B.3.5.2 Table B.14, Column 1 Nominal aggregate size: 14 mm Minimum PSV of coarse aggregate: 60, 65 or 68 as stated on the Work Order. Maximum AAV of coarse aggregate: 12 Coarse aggregate: Types (a), (c) or (d) to Clause C.2.3.1.1 of PD 6691 Fine aggregate: Type (a) to Clause C.2.3.2.1 of PD 6691 or crushed coarse aggregate material as permitted above or mixtures of both. Average texture depth 1.0mm
SURF 6	942	Thin surface course system (10mm	Mixture Designation: TSCS 10 Material must be HAPAS approved or suitable

RBWM Highway Services Contract 2024
Highway Maintenance and Capital Works Contract



ROYAL BOROUGH OF
**WINDSOR &
MAIDENHEAD**
WWW.RBWM.GOV.UK

		aggregate) (for Posted Speed of 40mph or less)	alternative to be agreed by the Service Manager Traffic count: up to 600 CVD per lane Site definition and stress level: 2 (NG 9/27) Nominal size of coarse aggregate: 10mm Minimum PSV of coarse aggregate: 60, 65 or 68 as stated on the Work Order. Maximum AAV of coarse aggregate: 12 Average texture depth: 1.0 mm (Table 9/3 of CI 921) Surface Integrity Guarantee period: 5 years (Clause 942.15 &16) Surface texture Guarantee: In accordance with Clause 942.14 Limestone aggregate shall not be used.

Schedule 5: Continued

Material Ref.	CI No.	Description	Requirement
SURF 7	942	Thin surface course system (14mm aggregate) (for Posted Speed of 50mph or more)	Mixture Designation: TSCS 14 <i>Material shall be HAPAS approved or a suitable alternative material to be agreed by the service manager</i> Traffic count: up to 600 CVD per lane Site definition and stress level: 2 (NG 9/27) Nominal size of coarse aggregate: 14mm Minimum PSV of coarse aggregate: 60, 65 or 68 as stated on the Work Order. Maximum AAV of coarse aggregate: 12 Average texture depth: 1.3 mm (Table 9/3 of CI 921) Surface Integrity Guarantee period: 5 years (Clause 942.15 &16) Surface texture Guarantee: In accordance with Clause 942.14 Limestone aggregate shall not be used.
SURF 8	942	Stone Mastic Asphalt	Mixture Designation: Unless stated below, asphalt mixtures and their constituent materials shall comply with the current editions of BS EN 13108 and P0 6691. Material shall be HAPAS approved or a suitable alternative material to be agreed by the service

RBWM Highway Services Contract 2024
Highway Maintenance and Capital Works Contract



			manager. Binder; Type Premium Grade PMB Proprietary Name Dependent on supplier, to be Grade Nominally 40/60 Coarse Aggregate; Nominal size 0 {mm) 10 Type Crushed rock Min. Polished Stone Value Dependent on Risk Generally 50 to 60 Additives; Cellulose fibres. Others with the approval of Service Manager Skidding resistance Mechanically apply washed 1 to 3mm crushed rock from a roller mounted hopper at 1 to 2kg/m2. Apply it to hot asphalt immediately behind the paver
BIN 1	906	Dense asphalt concrete binder course. (Recipe Mixture)	Mixture Designation: AC 20 dense bin 40/60 rec BS EN 13108-1 and PD6691:2007 Clause B.3.4.8 Void content at refusal shall be monitored in the permanent works Resistance to permanent deformation classification: 1 Coarse aggregate: Types (a), (c) or (d) to Clause B.2.4.1.1. of BS PD 6691 Fine aggregate: Crushed coarse aggregate material as permitted above or type (b) or a mixture of both to Clause B.2.4.2.1 of BS PD 6691 Limestone aggregate shall not be used.
BIN 2	929	Heavy duty asphalt concrete binder course (Design Mixture)	Mixture Designation: AC 20 HDM bin 40/60 des BS EN 13108-1 and PD6691:2007 Clause B.3.3. Void content at refusal shall be monitored in the permanent works Resistance to permanent deformation classification: 1 Coarse aggregate: Types (a), (c) or (d) to Clause B.2.4.1.1. of BS PD 6691 Fine aggregate: Crushed coarse aggregate material as permitted above or type (b) or a mixture of both to Clause B.2.4.2.1 of BS PD 6691 Limestone aggregate shall not be used.

Schedule 5: Continued

Material Ref.	CI No.	Description	Requirement
BIN 3	905	Hot rolled asphalt binder course. (Recipe Mixture)	Mixture Designation: HRA 60/20 bin 40/60 rec BS EN 13108-4 and PD6691:2007 Clause C.2.4 Coarse aggregate: Types (a), (c) or (d) to Clause C.2.3.1.1 of BS PD 6691 Fine aggregate: Type (a) to Clause C.2.3.2.1 of BS PD 6691 or crushed coarse aggregate material as permitted above or mixtures of both. Limestone aggregate shall not be used.
BIN 4	905A	Hot Rolled asphalt binder course (Recipe Mixture) PMB	Mixture Designation: HRA 50/20 bin PMB BS EN 13108-4 and PD6691:2007 Clause C.2.4 Coarse aggregate: Types (a), (c) or (d) to Clause C.2 Fine aggregate: Type (a) to Clause C.2.3.2.1 of BS P 6691 or crushed coarse aggregate material as permit above or mixtures of both. Limestone aggregate shall 5) Binder = Proprietary SBS modified bitumen Proprietary SBS modified bitumen that delays the onset of reflection cracking
BASE 1	929	Heavy duty asphalt concrete base (Design Mixture)	Mixture Designation: AC 32 HDM base 100/150 des BS EN 13108-1 and PD 6691: 2007 Clause B.3.3 Void content at refusal shall be monitored in the permanent works Resistance to permanent deformation classification: 1 Coarse aggregate: Types (a), (c) or (d) to Clause B.2.4.1.1. of BS PD 6691 Fine aggregate: Crushed coarse aggregate material as permitted above or type (b) or a mixture of both to Clause B.2.4.2.1 of BS PD 6691 Limestone aggregate shall not be used.
BASE 2	929	Heavy duty asphalt concrete base (Design Mixture)	Mixture Designation: AC 32 HDM base 40/60 des

RBWM Highway Services Contract 2024
Highway Maintenance and Capital Works Contract



ROYAL BOROUGH OF
**WINDSOR &
MAIDENHEAD**
WWW.RBWM.GOV.UK

			BS EN 13108-1 and PD 6691: 2007 Clause B.3.3 Void content at refusal shall be monitored in the permanent works Resistance to permanent deformation classification: 1 Coarse aggregate: Types (a), (c) or (d) to Clause B.2.4.1.1. of BS PD 6691 Fine aggregate: Crushed coarse aggregate material as permitted above or type (b) or a mixture of both to Clause B.2.4.2.1 of BS PD 6691 Limestone aggregate shall not be used.
BASE 3	904	Hot rolled asphalt base (Recipe Mixture)	Mixture Designation: HRA 60/32 base 40/60 rec BS EN 13108-4 and PD6691:2007 Clause C.2.4. Coarse aggregate: Types (a), (c) or (d) to Clause C.2.3.1.1 of BS PD 6691 Fine aggregate: Type (a) to Clause C.2.3.2.1 of BS PD 6691 or crushed coarse aggregate material as permitted above or mixtures of both. Limestone aggregate shall not be used.

Schedule 5: Continued

Material	CI	Description	Requirement
Ref.	No.		
915/A1	915	Coated Chippings	Flakiness Index: Not exceeding 20 when tested in accordance with BS EN 933-3: 1997. Minimum PSV 60, 65 or 68 as stated on the Task Order. Maximum AAV 12 Appearance: The coated chippings shall be clean and bright, detached, free flowing and free from coking. Application: Unchipped channels not less than 250 ±10 mm wide shall be left alongside the kerb and gully frames to allow surface water to flow to the gully's. Other ironwork shall have a 50 ± 10 mm unchipped border.
924	924	High Friction Surfaces	Type Classification: Type 1 Minimum PSV: 70 Maximum AAV: 10 Type Classification: Type 2 Minimum PSV: 65 Maximum AAV: 10 Material shall be HAPAS approved Type 1 & 2 Colour: 'aircraft grey' (colour 693) for

			normal uses or 'light buff' (colour 358) for approaches to signals etc where the brighter colour will enforce the existing signs. Standard colours from BS 381C. The colour will be specified in each Work Order. Hot Laid binder only to be used unless specifically approved by the Service Manager.
971	971 AR	Coloured Surfacing	Type Classification: Type 1, Type 2 & Type 3 Colour Red as Specified in the Work Order PSV and AAV requirements stated in Clause 971AR
Type 1	803	Type 1 Granular Sub-base	Modulus of Sub grade Reaction:- (K ₇₆₂) shall not be less than 103 MN/m ² /m; or (K ₃₀) shall not be less than 380 lb/in ² /in Crushed Gravel not to be used
Type ST1	2602	Type ST1 (Concrete for Ancillary Purposes) in carriageway widths less than 1.5m	As Clause 2602 of the Specification
Type ST2	2602	Type ST2 (Concrete for Ancillary Purposes) in carriageway widths less than 1.5m	As Clause 2602 of the Specification

6 General Requirements

Carriageway Patching shall be undertaken as specified in Clause 972 AR.

- a. The materials shall comply with the Specifications as stated in Schedule 5 of this Appendix.
- b. The PSV of the aggregate required will be stated on the Work Order as an "extra over" item.

7. PERMITTED PAVEMENT OPTIONS - FLAT TOP ROAD HUMPS

Traffic calming measures

Traffic calming measures will be constructed in accordance with the requirements given in Clause AR750, AR751 and the Standard Detailed Drawings for the following:

Rounded Speed Hump – refer to Drawing No. LBC/0900/003

Full Width Flat Topped Speed Table – refer to Drawing No. LBC/0900/004

Flat Topped Speed Table with Tapered Ends – refer to Drawing No. STD/0900/006

Speed Cushion – refer to Drawing No. LBC/0900/005

Flat Top Road Hump – Pavement Options

Surface Course – As Permitted Pavement Options – SURF2

(Note : Variant on SURF2 for Road Humps and Cushions could include a 6mm aggregate size – which will be instructed through the Work Order)

Regulating Binder Course – As Permitted Pavement Options – BIN3 OR BIN 1

Base Course (where existing base construction is inadequate) – As Permitted Pavement Options – BASE3 (depth required as specified in the Work Order min 100mm).

Appendix 7/2 : Excavation, Trimming and Reinstatement of Existing Surfaces

Excavation, trimming and reinstatement of existing surfaces shall be carried out in accordance with Clause 706 of the Specification and with the special requirements of this Appendix. Carriageway and Footway reinstatement types are included in the schedule of rates for the reinstatement of carriageway or footway following the installation, repair or adjustment of kerbing, ironwork, drainage, street lighting columns, road signs and ducts.

Joints for reinstatements in carriageway that require binder and surface course shall be stepped so that the surface course joint is 100mm outside the binder course joint. For measurement purposes the area of each reinstatement shall be the area of new surface course. Joints shall be treated in accordance with Clause 903.22 i) or ii) only.

Trenches and Pits

Excavation and reinstatement of trenches and pits in existing carriageways for proposed drainage and ducting is given when necessary for each Work Order. Reinstatement of trenches in Paved Areas, Footpaths and Access Tracks shall be in accordance with the details given when necessary for each Work Order. The reinstatement type will be selected from one of the Types below.

Tie-ins

Locations of existing carriageways which require trimming, regulated and reinstated to match levels where new and existing pavements abut are given when necessary for each Work Order.

Carriageway Reinstatement types

The replacement of existing carriageway materials to various depths shall be as Schedule of rate items.

Appendix 7/4 : Bond Coats, Tack Coats & Other Bituminous Sprays (Sheets 1, 2 and Binder Data Sheets)

General

1. Location: On planed and existing carriageway surfaces prior to laying new material as Clause 903.4
2. Type of Tack Coats and Bond Coats: to BS594987:2013 Clause 5.5
3. Rate of Spread: Clause 5.5.2 in BS594987:2013

4. A bond coat **shall** be applied below all surface courses. Recommended Binder Grade and rate of spread for Clause 942 material shall be to the HAPAS certificate
5. Existing ironwork, kerbs and street furniture shall be masked. (Clause 920.6)
6. Surface preparation shall be carried out in accordance with BS 594987: 2013 or for certified products in accordance with the HAPAS Certificate.
7. The Supplier shall take utmost care that tack coats & bond coats are not traversed onto adjacent carriageways by any of its vehicles. The Supplier may be instructed to remove excessive bitumen off the adjacent carriageway by an agreed method at the Suppliers expense.

Information to be provided by the Supplier

The Supplier shall provide the following information prior to the commencement of the Work Order;

- 1 The product or products he proposes to use together with their data sheets, product identification data, cohesively data as specified. Clause 920.2, 920.3, 920.4 and 920.5
- 2 For each product, a copy of the BS EN ISO 9001 Certificate shows the name of the manufacturer, the name of the certification body and the reference number and date of the certificate. Clause 920.5
- 3 The spray equipment proposed and a test certificate. Clause 920.7, 920.9
- 4 The source or sources of binding material proposed.
- 5 Contingency plans in the event of any breakdown
- 6 The results of any other tests or other data the specialist Supplier considers would assist the Service Manager in assessing the technical merit of the treatment such as:
 - (i) Tackiness test and/or trafficability time and method of test
 - (ii) Breaking time test results for different weather conditions and substrates

Binder Data Sheet – Appendix 7/4		Bond coats, tack coats and other bituminous sprays	
Manufacturer of Binder:		Product name:	
Binder type:		Batch no:	
Binder Grade (highlight as required)			
Conventional	Intermediate	Premium	Super-premium Non-tack Other
Binder	Source	Recovered binder	Recovered Binder After Ageing Test
Test		Recovered in accordance with	Aged in according with Clause 955

3.	4.	5.	Clause 955	
Penetration at 25°C 0.1mm (100g and 5 sec)				
Penetration at 5°C 0.1mm (200g and 60 secs)				
Vilalit pendulum cohesion see Clause 957 maximum peak value J/cm ² .			The Supplier shall attach a Report and graphical output to this schedule.	The Supplier shall attach a Report and graphical output to this schedule
Product identification test. The provision of data for identification and ageing is optional for unmodified bituminous emulsions to BS EN 13808 and for bitumen to BS EN 12591 and cutback bitumen to BS 3690-1. Complex shear (stiffness) modulus (G*) and phase angle (δ) data. See Clause 956.			The Supplier shall attach a report and graphical output to this schedule	The Supplier shall attach a Report and graphical output to this schedule
Other properties the Supplier considers useful: Minimum Binder Content Binder temperature range for spray application Emulsion Properties and Viscosity Break time Breaking Agent Type Weather limits - information from binder manufacturer: road or air temperatures; humidity; wind chill adjustment; tolerance of surface dampness; etc. Temperature max: Temperature min: Other:				

Appendix 7/6: Breaking Up or Perforation of Existing Pavement

1 General

- 1.1 The locations of areas of existing pavement to be broken up or perforated will be specified in each Work Order.
- 1.2 Details of treatment required: Shall be break up (excavation) and removal of all hard materials or by perforation of the pavement with holes between 100mm and 300mm in diameter at one metre centres. Measurement: Both of the above treatments will be paid for using Series 600 items from the Schedule of Rates.

2 Removal of surfacing from concrete bridge decks

- 2.1 Existing surfacing shall be removed by milling, scraping or breaking or any combination of all three methods, without causing damage to the surface of the concrete bridge deck. Trial areas shall be prepared using the proposed method or combination of methods to determine a satisfactory solution which shall be subject to the approval of the Service Manager. Any damage to the bridge deck surface shall be made good in accordance with Series 2608 AR (concrete repairs) of the Specification and shall be at the expense of the *Supplier*.
Measurement: The treatments selected will be paid through 700 in the Schedule of Rates.

Use of Milling

- 2.2 Trial holes shall be excavated to determine the thickness of existing surfacing. Milling shall be used to remove well bonded asphalt without causing damage to the waterproofing membrane or to the concrete deck. Milling shall be done by a specialised piece of Equipment, a cold miller or mini miller with rotating toothed drum set to the correct depth of excavation. Milling must cease immediately if the depth of milling causes removal of the waterproofing membrane or damage to the concrete deck, due to local variations in the level of the concrete deck.

Use of Breaking Tools

- 2.3 Only vibrating percussive tools shall be used which shall be controlled so as not to cause damage to the concrete surface.

Appendix 7/7 : Slurry Surfacing Incorporating Microsurfacing (Sheets 1, 2 and 3)

SHEET 1a: Information to be provided with each Work Order.

Typical Road Type 1 (Urban)

1	Location	
2	Traffic count	tba
3	Traffic speed, 85 percentiles and site speed limit	25mph =85%, 30mph speed limit
4	Category of site (<i>category from HD 36</i>)	S1/S2

5	Description of existing surface (918.2 and 918.4 - Macrotexture, existing defects, variability, etc.)	Provided with Work Order
6	Thickness of Slurry Surfacing	Not required. (15 mm nominal for microsurfacing)
7	Guarantee period	2 years
8	Minimum declared PSV of coarse aggregate	60
9	Maximum AAV of coarse aggregate	10
10	Preparation and masking requirements	Masking required for kerbing, adjacent walls and street furniture
11	Definition of colour required	Grey
12	Surface finish required for footways	As CI 918.21

Typical Road Type 1 (Urban) cont...		
13	Minimum macrotexture depth at end of guarantee period	No requirement
14	Maximum texture depth after 4 weeks trafficking	No requirement
15	Maximum percentage decrease in macrotexture initially measured and at the end of the guarantee	N/A.

RBWM Highway Services Contract 2024
Highway Maintenance and Capital Works Contract



	period	
16	Category of area defects (% area affected) acceptable	Table NG 9/2 – Cat 1
17	Category of linear defects (m per 100 m) acceptable	Table NG 9/3 – Class 2
18	Class of transverse regularity	Table NG 9/5 - Class 0
19	Class of longitudinal regularity	Table NG 9/7 - Class 0
20	Special restrictions	Minimum road surface temperature at which working permitted is 4°C and maximum is 40°C

SHEET 1b: Information to be provided with each Work Order.

Typical Road Type 2 (Semi - Urban)

1	Location	Provided with Work Order
2	Traffic count	tba
3	Traffic speed, 85 percentile and site speed limit	45mph =85%, 50mph speed limit
4	Category of site (<i>category from HD 36</i>)	S1/S2
5	Description of existing surface (<i>918.2 and 918.4 - Macrotexture, existing defects, variability, etc.</i>)	Provided with Work Order
6	Thickness of Slurry Surfacing	Not required. (15 mm nominal for microsurfacing)
7	Guarantee period	2 years
8	Minimum declared PSV of coarse aggregate	60

9	Maximum AAV of coarse aggregate	10
10	Preparation and masking requirements	Masking required for kerbing, adjacent walls and street furniture
11	Definition of colour required	Grey
12	Surface finish required for footways	As CI 918.21
13	Minimum macrotexture depth at end of guarantee period	1.5 (Table 9/3 CI 921)
14	Maximum texture depth after 4 weeks trafficking	1.5 (Table 9/3 CI 921)
15	Maximum percentage decrease in macrotexture initially measured and at the end of the guarantee period	N/A.
16	Category of area defects (% area affected) acceptable	Table NG 9/2 – Cat 1
17	Category of linear defects (m per 100 m) acceptable	Table NG 9/3 – Class 2
18	Class of transverse regularity	Table NG 9/5 - Class 0
19	Class of longitudinal regularity	Table NG 9/7 - Class 0
20	Special restrictions	Minimum road surface temperature at which working permitted is 4°C and maximum is 40°C

Appendix 7/7 : Slurry Surfacing Incorporating Microsurfacing (Continued)

SHEET 2: Information to be provided by the Supplier for each Work Order:

- 1 A copy of BS EN ISO 9001 certificate showing at least the name of the Company, the name of the certification body and the reference number and date of the certificate. A copy of the relevant part of the company Quality Assurance (QA) document showing the appropriate scope (Slurry Surfacing and Sector Scheme) and limitations of the certification. The Service Manager may wish to inspect all or any of the Company's QA documentation as part of the vendor assessment system and may wish to satisfy himself on the nature of the QA systems of the Company's material suppliers.
- 2 Design Proposal for Slurry Surfacing for each location and target binder content with tolerances.
- 3 Estimated Design Life of the Slurry Surfacing for each location.
- 4 A copy of the TAIT Certificate within the Sector Scheme for Slurry Surfacing , as BS EN 12273 for the proposed system together with its supporting data. In the event of no certificates being issued a statement of any previous applications on roads similar in site type to the Work Order site containing the same data as listed in NG Sample Appendix Sheet 3.
- 5 A method statement for each site or group of similar sites showing how it is proposed to carry out the works in conformance with the specification. (*Suppliers will be expected to commit enough resources to carry out the proposed design; the type and age of the Slurry Surfacing Machine should be detailed*).
- 6 Proposed source or sources of coarse aggregate together with statements of properties including target grading, declared PSV and AAV.
- 7 Proposed source or sources of fine aggregate including target grading and other constituents together with statements of properties.
- 8 Proposed binder together with data sheets and cohesivity data to comply with BBA HAPAS Roads and Bridges Certificate, CE Marking. A copy of all the data should be handed to the Service Manager to be forwarded to the Service Manager. The Supplier shall provide rheological product identification data for modified binders in accordance with Clause 956. (*Note to Supplier: a suitable form for the provision of data is attached to this Appendix, other layouts are permitted but all the required data should be supplied*)
- 9 Proposals for traffic control and aftercare for each site, and reaction times for: carrying out remedial measures; sweeping; and site visits with the Service Manager.
- 10 Contingency plans in the event of any breakdown of plant or failure of the Slurry Surfacing.
- 11 An 'As Built Manual' as specified.
- 12 If available, the following information should be provided in order to assist the Service Manager to assess the technical merits of the Design Proposal:
 - (i) Test method for binder content.
 - (ii) Test for thickness of Slurry Surfacing.
 - (iii) Trafficability time, including method of test.

- (iv) Permeability test carried out on the system, if it is claimed that the process seals the existing surface together with the method of test.
- (v) Accelerated ageing test results in accordance with the appropriate BBA/HAPAS test.
- (vi) Bond test results using the BBA/HAPAS test on either a bituminous or a concrete substrate as appropriate to the site or Bond Coat binder BBA/HAPAS certificate.
- (vii) Shaking Abrasion test results.
- (viii) Slurry surfacing mix cohesion.
- (ix) The results of any other tests or other data the Supplier considers would assist the Service Manager in assessing the technical merit of the Design Proposal.

<u>Binder Data Sheet - Appendix 7/7</u>		<u>Slurry Surfacing Incorporating Microsurfacing</u>	
Manufacturer of Binder:	Product name:		
Binder type:	Batch no:		
Binder source:			
Test	Binder as supplied to site	Recovered binder in accordance with Clause 955	Aged binder in accordance with Clause 955
Penetration at 25°C 0,1 mm (100g and 5 secs)			
Penetration at 5°C 0,1 mm (200g and 60 secs)			
Vialit pendulum cohesion see Clause 957 maximum peak value J/cm2		#	#
Product identification test sub-Clause 918.7. Complex shear		#	#

v)	Product Pouring Temperature	170 ± 10°C
vi)	maximum Safe Heating Temperature	200°C
vii)	Penetration Value BS2499:1993	10-30 dmm
viii)	Flow Resistance BS2499:1993	< 5mm
ix)	Softening Point BS2499:1993	100 ± 15°C
- 3 For inlaid crack repairs the crack shall be milled out to 20mm depth. The width is determined by the defective area.
 - 4 The cracks/joints together with an adjacent 300mm strip either side shall be cleaned free from loose material and dried by hot compressed air blasting.
 - 5 The PSV of the chippings to be applied to the overband and inlay crack repair shall be 60 if the repair is to be trafficked.

Crack Sealing

- 1 The cracks shall be cleaned free from loose material and dried by hot compressed air blasting.
- 2 The cracks shall be sealed with grade 200 bitumen or thixotropic bitumen compound as defined in the Work Order.

Appendix 7/22 : Repair To Potholes

The requirements below are for Temporary repairs to potholes in carriageways, footways, paved areas and the like and road stud holes.

1 General

- 1.1 All loose material shall be removed before filling hole.
- 1.2 All standing water shall be removed before filling hole.
- 1.3 All cavities and edges should be painted with cold applied tack coat
- 1.4 Holes shall be backfilled with materials compacted to refusal with a circular headed vibrating hammer in layers not exceeding 50 mm thick
- 1.5 The surface of the compacted material shall be level with the adjacent road.

2 Road Stud Holes

- 2.1 Fill road stud socket with 6mm aggregate bituminous instant repair material or similar.

3 Holes in Paved Areas

- 3.1 For holes less than 0.5 sqm fill with 6mm aggregate bituminous instant road repair material or similar.
- 3.2 For potholes greater than 0.5 sqm fill with AC 6 Dense surf 100/150 material up to



50mm in depth

- 3.3 For potholes greater than 0.5 sqm and > 50mm - <100mm fill with AC 10 surf 100/150

Appendix 7/70 : (Sheet 1) Carriageway Surface Dressing Design Sheet

DESIGN GUIDE FOR ROAD SURFACE DRESSING

Design of road surface dressing to Road Note 39 (Sixth Edition)

Road number:			Region / Area:		
Section location:					
Length:		m	Width:		m
No. of lanes:		Area:			
Lane(s):		Medium/Heavy traffic:		cv//d	NRSWA road type:
Traffic speed limit: *					
Traffic category: *	A	B	C	D	E
Latitude: *	South	Central	North	Temperature category: *	A
Road hardness probe depth:		mm	at		°C
Minimum PSV:		Max. AAV:			
Category: *	Very hard	Hard	Normal	Soft	Very soft
Existing surface characteristics: *					
General surface condition: *	Very binder rich	Normal	Very binder lean		
Radius of curvature: *	Under 100 m	100 – 250 m	Over 250 m	Expected month on site:	
Junction or crossing: *	Approach	Non-approach			
Overall gradient: *	Up to 5 %	5 – 10 %	Over 10 %	Uphill	Downhill
Type of dressing: *	Single	Racked-in	Double	Inverted double	Sandwich
Chipping size: *	8/14 mm	6.3/10 mm	2.8/6.3 mm	Other:	
Aggregate type: *	Crushed rock	Blast furnace slag	Steel slag	Gravel	
Flakiness index: *	Less than 10%	10 to 25%	15 to 20%	More than 20%	
Bitumen emulsion binder: *	Unmodified	Intermediate	Premium grade	Super premium grade	
Seasonal risk category: *	High	Significant	Low		
Binder spread category:	First layer		L/m ²	Second layer	
			L/m ²		

Location	Season	Aggregate type	Flakiness	Increase of chipping size	Shade	Surface condition	Gradient	Speed of traffic	Untrafficked area	Sum of factors	Rate of spread of binder
											L/m ²
											L/m ²
											L/m ²
											L/m ²

Designer: Initials: Date: / /

* Highlight or delete as appropriate. Shaded box indicates data that a client should provide when seeking tenders.

Figure 6.1 Suitable proforma for recording designs

Appendix 7/70 : (Sheet 2) Carriageway Surface Dressing

Construction Record Proforma**DESIGN GUIDE FOR ROAD SURFACE DRESSING****Construction Record Proforma**

Road number: Location

Date of Construction / / Time Start: Time Finish:

Weather:* ☐ Sunny ☐ Cloudy ☐ Showers ☐ Drizzle Air Temp: °C Humidity: %

Road Condition:* ☐ Dry ☐ Damp RoadTemp: °C

Chippings

Supplier: Quarry: Depot:

1st Layer

Size: PSV: AAV: LAV:

Condition:* ☐ Dry ☐ Damp Sample Ref. No.:

Tonnage: T Area: m² Ave. rate of speed: kg/m²

Spot check (box) results: kg/m² kg/m² kg/m² kg/m² kg/m²

2nd Layer

Size: PSV: AAV: LAV:

Condition:* ☐ Dry ☐ Damp Sample Ref. No.:

Tonnage: T Area: m² Ave. rate of speed: kg/m²

Spot check (box) results: kg/m² kg/m² kg/m² kg/m² kg/m²

Binder

Supplier: Binder Type: Sample Ref. No.:

1st Layer

Quantity used: L Area: m² Ave. rate of speed: L/m²

Spot check (carpet tile) results: L/m² L/m² L/m² L/m² L/m²

2nd Layer

Quantity used: L Area: m² Ave. rate of speed: L/m²

Spot check (carpet tile) results: L/m² L/m² L/m² L/m² L/m²

Plant

Sprayer Reg. Number: Sprayer Type: Cone test:* ☐ Yes ☐ No

Spray bar height: mm Pressure: bar/psi Temp: °C

Gritter type:* ☐ Tailgate ☐ Self propelled ☐ Expanding Roller type:* ☐ Pneumatic ☐ Steel (vibrate) ☐ Steel (static)

Sweeper type: ☐ Suction ☐ Brush Before:* ☐ Yes ☐ No After:* ☐ Yes ☐ No How soon? h

Traffic control:* ☐ Speed control vehicle ☐ Stop/Go boards ☐ Traffic lights

Signing

Before: Attach sketches for signing during and after

After:

How long were the signs left in place after surface dressing?

Signing

Weather after surface dressing: Overnight temp.: °C

Traffic control following surface dressing:* ☐ Yes ☐ No Time maintained: h

Inspections

Date	Texture	Comments
/ /	mm	
/ /	mm	
/ /	mm	
/ /	mm	

Signature: Name: Date: / /

* Highlight or delete as appropriate.

Figure 13.4.3 Construction record proforma (based on form in IAT guidelines for surface dressing in Ireland)

Appendix 7/70 : (Sheet 3) Carriageway Surface Dressing

Schedule Of Materials 1
Binder And Adhesion Agent For: *Normal Roads*

The Supplier shall provide the following information in respect of the material he proposes to use.

1 BINDER (SUPPLIER)

Material	British Standard	Product Name	Supplier	Manufacturer and Source
(Polymer Modified Bitumen Emulsion Intermediate Grade)				

The Tenderer shall enter the following technical parameters.

2 BINDER (TECHNICAL PARAMETER)

Material	Minimum Peak Binder Cohesion Joules/cm sq (Vialit Pendulum Test)	Viscosity and how measured	Conversion Rate at spraying Litres/tonne		
(Polymer Modified Bitumen Emulsion Intermediate Grade)					

3 ADHESION AGENT

Type	Liquid Solid Pellets

Appendix 7/70 : (Sheet 4) Carriageway Surface Dressing

SCHEDULE OF MATERIALS 1
BINDER AND ADHESION AGENT FOR: MAJOR ROADS

The Supplier shall provide the following information in respect of the material he proposes to use.

1 BINDER (SUPPLIER)

Material	British Standard	Product Name	Supplier	Manufacturer and Source
(Polymer Modified Bitumen Emulsion Premium Grade)				

The Tenderer shall enter the following technical parameters.

2 BINDER (TECHNICAL PARAMETER)

Material	Minimum Peak Binder Cohesion Joules/cm sq (Vialit Pendulum Test)	Viscosity and how measured	Conversion Rate at spraying Litres/tonne		
(Polymer Modified Bitumen Emulsion Premium Grade)					

3 ADHESION AGENT

Type	Liquid Solid Pellets

Appendix 7/70 : (Sheet 5) Carriageway Surface Dressing

SCHEDULE OF MATERIALS 2
CHIPPINGS FOR: *NORMAL ROADS*

- 1 The Supplier shall provide the following information in respect of the material he proposes to use. Three PSV's shall be provided to be representative of most recent production over a six-month period. Minimum PSV on Normal Roads will be 55 PSV.

CHIPPINGS (Supplier and Technical Parameters)

	CHIPPINGS		
SUPPLIER			
SOURCE			
AGGREGATE TYPE			
AGGREGATE RESISTANCE TO ABRASION (AAV)			
FLAKINESS INDEX			
ESISTANCE TO FRAGMENTATION			
MAGNESIUM SULPHATE SOUNDNESS VALUE			
RESISTANCE TO POLISHING			
MINIMUM PSV			

Appendix 7/70 : (Sheet 6) Carriageway Surface Dressing

Schedule Of Materials 2
Chippings For: *Major Roads*

- 1 The Supplier shall provide the following information in respect of the material he proposes to use. Three PSV's shall be provided to be representative of most recent production over a six month period. The Supplier is to complete this schedule for chippings of minimum 60 PSV and minimum 65 PSV.

CHIPPINGS (Supplier and Technical Parameters)

	CHIPPINGS		
SUPPLIER			
SOURCE			
AGGREGATE TYPE			
AGGREGATE RESISTANCE TO ABRASION (AAV)			
FLAKINESS INDEX			
ESISTANCE TO FRAGMENTATION			
MAGNESIUM SULPHATE SOUNDNESS VALUE			
RESISTANCE TO POLISHING MINIMUM 60 PSV			
RESISTANCE TO POLISHING MINIMUM 65 PSV			

Appendix 7/70 : (Sheet 7) Carriageway Surface Dressing

Schedule Of Equipment For: *Normal Roads*

1. Supplier to complete in respect of the Equipment types he proposes to use on undertaking carriageway surface dressing on NORMAL roads..

	1	2	3	4
INTERMEDIATE GRADE BINDER DISTRIBUTOR Distributor identification Make and type of spray bar Expandable or Extensible Minimum bar width (metres) Capacity binder tank (litres)				
SWEEPERS For preparatory work - Type For surplus chippings – Type				
ROLLERS Vibratory rubber drum Type and Make Pneumatic Type and Make Steel Wheel Type and Make				
CHIPPING SPREADERS Normal lorry mounted Type Special controlled metering Type				

Appendix 7/70 : (Sheet 8) Carriageway Surface Dressing

SCHEDULE OF EQUIPMENT FOR: MAJOR ROADS

1. Supplier to complete in respect of the Equipment types he proposes to use on undertaking carriageway surface dressing on MAJOR roads.

PREMIUM GRADE BINDER DISTRIBUTOR

Distributor identification
Make and type of spray bar
Expandable or Extensible
Minimum bar width (metres)
Capacity binder tank (litres)

SWEEPERS

For preparatory work - Type
For surplus chippings – Type

ROLLERS

Vibratory rubber drum Type and Make
Pneumatic Type and Make
Steel Wheel Type and Make

CHIPPING SPREADERS

Normal lorry mounted Type
Special controlled metering Type

Appendix 7/70 : (Sheet 9) Carriageway Surface Dressing

METHOD FOR EVALUATION OF MODIFIED BINDER MIXTURES BY THE VIALIT COHESION TEST.

- 1 Modified Binders are generally proprietary products made by the addition of polymers or other materials to bitumen. These products should be permitted for use in surface dressing under the conditions pertaining to the Highway Authorities Product Approval Scheme (HAPAS) run through the British Board of Agreement.
- 2 The *Supplier* must provide test results for the binder that he wishes to use based on the Vialit Cohesion Test as described in Clause 957 of the Specification of Highway Works. The minimum binder cohesion at peak measured using the Vialit Pendulum for three grades of binder are given in Table NG 9/8 of the Notes for Guidance for the SHW.
- 3 The *Supplier* is to present the *Service Manager* with the Vialit test results in December of every year for all binders that he wishes to use in the following surface dressing season.

Appendix 7/70 : (Sheet 10) Carriageway Surface Dressing

SCHEDULES OF CHIPPING STORAGE AREAS

Chipping storage areas will be instructed by the service managed during mobilisation and agreed with the Supplier.

RBWM Highway Services Contract 2024
Lot 1 Highway Maintenance and Capital Works Contract



ROYAL BOROUGH OF
**WINDSOR &
MAIDENHEAD**
WWW.RBWM.GOV.UK

Royal Borough of Windsor and
Maidenhead

Highway Services Contract

Highway Maintenance and Capital Works
Contract

Schedule 3

Appendix 03 to the Lot 1 Service
Specification

Series 1100 to 6000

Appendix 03

SERIES 1100 FOOTWAYS AND PAVED AREAS

Appendix 11/1: Kerbs, Footways and Paved Areas

Unless specified otherwise in the Works Order the following shall apply:

Kerbs, Channels, Edgings, Footways and Paved Areas shall be as described below and shown in Standard Detail Drawings 1100 series.

All concrete used for foundations, bedding, backing, and additional concrete, in the installation of kerbs, edgings, channels blocks, combined drainage and units kerb blocks or other proprietary pre-cast concrete units shall be minimum Class ST3.

1. Kerbing

Note: - Profile reference is that from BS EN 1340

- 1.1 The kerbing layout, showing the types/groups and the locations of quadrants, dropper kerbs and other special kerb units, are shown on the Works Order Drawing(s).

Type/ Group	Construction	Profile	Foundation (mm thick)	Pavement Ref. (Appendix 7/1)
K1	Pre-cast concrete	HB2	150mm	As described in the Works Order
K2	Pre-cast concrete	SP	150mm	
K3	Pre-cast concrete	BN	180mm	
K4	Pre-cast concrete	'Bus Docking'	250mm	
K5	Pre-cast concrete	'High Containment'	200 mm	
K6	Pre-cast concrete	HB2	150mm	
K7	Pre-cast concrete	BN	150mm	
T1	Pre-cast concrete	TL	150mm	
T2	Pre-cast concrete	TR	150mm	
T3	Pre-cast concrete	DL1	150mm	
T4	Pre-cast concrete	DR1	150mm	
T5	Pre-cast concrete	DL2	150mm	
T6	Pre-cast concrete	DR2	150 mm	

T7	Pre-cast concrete	Proprietary products (*)	250 mm	

Transitions Types T1 and T2 shall be used at the junction between kerb Types K1 and K2 handed as necessary.

Transitions Types T3 and T4 shall be used at the junction between kerb Types K1 and K3 handed as necessary.

Transitions Types T5 and T6 shall be used at the junction between kerb Types K2 and K3 handed as necessary.

Transitions Type T7 shall be used at all junctions between kerb Type K5 and all other kerbs types (including existing kerbs). They shall be proprietary units from the same manufacturer as the 'Bus Docking Kerbs' used.

1.2 Where proposed kerbs are laid within existing carriageway limits the existing pavement shall be excavated so that the bottom of the kerb foundation is a minimum of 150mm below existing carriageway levels, excavation into existing pavement materials shall be 300 mm wide between vertical saw cuts.

1.3 The minimum length of cut kerbs shall be 50% of their original manufactured length.

Kerb upstand shall be:

Kerb Types K1, K2, K6 and K7	125mm
Kerb Type K3	25mm at vehicular crossing points 0 - 6 mm at pedestrian crossing points.
Kerb Type K5	160mm
Transitions T1 and T2	125mm
Transitions T3, T4, T5 and T6	Varies 125 to 25/0 (to match adjacent Kerb Type K3).

(*) It should be noted that lightweight or "environmental" kerbs can be permitted upon approval from the Service Manager.

Bus docking kerbs shall be approved by the Service Manager to match existing and agreed materials currently used across RBWM. These are currently "Kassel" type products.

2. Channels

2.1 Note: Profile reference is that from BS EN 1340.

2.2 The channel layout, showing the groups and the locations of special units, is shown on the Works Order Drawing(s).

Type/Group	Channel Type	Construction
CS1	CS1	Pre-cast concrete
CS2	CS2	Pre-cast concrete
CD1	CD 90 x 305	Pre-cast concrete
CD2	CD 125 x 255	Pre-cast concrete
CD3	Fluted channel	Pre-cast concrete

2.3 The minimum length of cut channels shall be 50% of their original manufactured length.

2.4 Any particular requirements will be specified in the Works Order.

3. Edgings

3.1 Note: Profile reference is that from BS EN 1340.

3.2 The edging layout, showing the types/groups is shown on the Works Order Drawing(s).

Type/ Group	Construction	Profile/ Dimension	Foundation	Footway/ Paved Area
E1	Pre-cast concrete	EBN 150 x 50 200 x 50	HWD 11.11	As described in the Works Order
E2	Pre-cast concrete	EF 150 x 50 200 x 50	HWD 11.11	
E3	Pre-cast concrete	ER 150 x 50 200 x 50	N/A	
	Timber	100 x 37	N/A	
		150 x 37	N/A	
		200 x 37	N/A	

Particular requirements:

- i) Edging Types E1 and E3 shall have an up stand of 15mm above adjacent footway/paved area.
- ii) Edging Type E2 shall be laid flush with adjacent footway/paved area.
- iii) Edging Type E1 shall have a radius edge to footway/paved areas

4. Combined drainage and kerb blocks

4.1 Combined drainage and kerb systems are scheduled to be designed by the Supplier under Appendix 1/11 with the design requirements being in Appendix 5/5.

4.2 Any particular requirements will be specified in the Works Order.

4.3 Re-use of previously set-aside kerbs, channels, edgings and combined drainage and kerb blocks shall be as described in the Works Order at the locations shown on the relevant Works Order drawing(s).

5. Footways and Paved Areas

5.1 The footway and paved area layout, showing the types are shown on the Works Order Drawing(s).

5.2 Unless stated otherwise in the Works Order, surface course materials shall be black in colour.

5.3 The formation shall be sprayed with a total weed killer in accordance with the manufacturer's instructions prior to laying the sub-base layer.

Footway Type 1 : (Flexible footway and/or cycleway)					
Material Course	Clause	Material	Grade of Binder	Minimum Thickness (mm)	Special Requirements
Surface Course	1105	AC 6 dense surf	100/150	25	PD 6691 Table B.16 PSV coarse aggregate 50 min.
Binder Course	1105	AC 20 dense bin or AC 14 close surf	100/150	60	PD 6691 Table B.11 or Table B.14
Sub-base	803 / Design Guide	Granular Type 1	-	100	
				185	Total thickness

Footway Type 2 : (Residential Vehicular Dropped Access crossings)					
Material Course	Clause	Material	Grade of Binder	Minimum Thickness (mm)	Special Requirements
Surface Course	1105	AC 6 dense surf	100/150	25	PD 6691 Table B.16 PSV coarse aggregate 50 min.
Binder Course	1105	AC 20 dense bin or AC 14 close surf	100/150	60	PD 6691 Table B.11 or Table B.14
Sub-base	803 / Design Guide	Granular Type 1	-	150	
				235	Total thickness

Footway Type 3 : (Overlay and regulating to existing flexible footway and/or cycleway)					
Material Course	Clause	Material	Grade of Binder	Thickness (mm)	Special Requirements
Surface Course	1105	AC 6 dense surf	100/150	25	PD 6691 Table B.16 PSV coarse aggregate 50 min.
Surface Course Regulating	1105	HRA 0/2 F surf	40/60 or 100/150	Varies 0 – 20	PD 6691 Table C.2A
Surface Course Regulating	1105	AC 6 dense surf	100/150	Varies 20 - 30	PD 6691 Table B.16
Binder Course Regulating	1105	AC 10 close surf	100/150	Varies 30 - 60	PD 6691 Table B.14
				Varies	See Works Order

	20 - 80	for total thickness

Footway Type 4 : (Pre-cast concrete flags footway)					
Material Course	Clause	Material	Grade of Binder	Thickness (mm)	Special Requirements
Pre-cast concrete flag	1104	Pre-cast concrete	Not applicable	50, 60, 63, 65 or 70	See Works Order for size of flags.
Bedding	1104	Sharp sand – BS7533 Category III	Not applicable	10 min 40 max	
Sub-base	803	Granular Type 1	Not applicable	175	
				Varies 235 - 285	Total thickness

Footway Type 5 : (Pre-cast concrete flags footway) (Alternative for flags 450 mm square or smaller).					
Material Course	Clause	Material	Grade of Binder	Thickness (mm)	Special Requirements
Pre-cast concrete flag	1104	Pre-cast concrete	Not applicable	50,60, 65 or 70	See Works Order for size of flags.
Bedding	1104	Class 1 Cement mortar		25 ± 10	
Sub-base	803 / Design Guide	Granular Type 1		175	
				Varies 240 – 280	Total thickness

Footway Type 6 : (Precast Concrete Tactile Paving and for 1m overrun areas)					
Material Course	Clause	Material	Grade of Binder	Thickness (mm)	Special Requirements
Pre-cast concrete flag	1104	Pre-cast concrete	Not applicable	50 or 65	See Works Order for colour and type of paving
Bedding	1104	Class 1 Cement mortar		25 ± 10	
Sub-base	803 / Design Guide	Granular Type 1		150	
				225 min	Total thickness

Footway Type 7 : (Block paving – Pedestrian only Areas)					
Material Course	Clause	Material	Grade of Binder	Thickness (mm)	Special Requirements
Block Paving	1107 or 1108	Pre-cast concrete or Clay	Not applicable	50 or 65	See Works Order for material and dimensions of blocks.
Bedding	1107 or 1108	Sharp sand – BS7533 Category III		30 - 50	
Sub-base	803	Granular Type 1		100	Sub base shall be increased to 150mm

					thick if area is used by light traffic.
				Varies 180 – 215	Total thickness

Footway Type 8 : (Grass/Concrete paving)					
Material Course	Clause	Material	Grade of Binder	Thickness (mm)	Special Requirements
Pre-cast or in-situ concrete	1109	Pre-cast or In-situ concrete	Not applicable	100	Pre-cast or In-Situ units as stated in the Works Order. Cavities within concrete units shall be filled with friable topsoil and grass seeded as described in Clause 1109.
Bedding	1109	Sharp sand – BS7533 Category III		50	
Sub-base	803	Granular Type 1		100	Sub base shall be increased to 150mm thick if area is open to light traffic.
				250	Total thickness

Footway Type 9 : (Commercial Vehicular Dropped Access Crossings)					
Material Course	Clause	Material	Grade of Binder	Minimum Thickness (mm)	Special Requirements
Surface course	960AR	SMA 10 surf	40/60	40	
Binder Course	929	AC 20 dense bin	40/60	65	PD 6691 Table B.11
Base	929	AC 32 dense base	40/60	125	PD 6691 Table B.11
Sub-base	803	Granular Type 1		220	
				450	Total thickness

Footway Type 10 : (Granite and Heritage / Pedestrian Area Paving)					
Material Course	Clause	Material	Grade of Binder	Minimum Thickness (mm)	Special Requirements
Surface course		Granite / Heritage Paving	na	Block Varies	As Works Order
Binder Course	1104	Epoxy Mortar of Fines Concrete	ST4	25 bedding	Epoxy Liquid Mortar Jointing
Base		ST4 Concrete Raft	Varies min125mm	min125	Raft or as agreed
Sub-base	929	AC 32 dense base	Min 100mm	min100	Existing carriageway
				min450	Total thickness

5.4 Re-use of previously set-aside paving flags and blocks shall be as described in the Works Order at the locations shown on the relevant Works Order drawing(s).

RBWM Highway Services Contract 2024
Lot 1 Highway Maintenance and Capital Works Contract



SERIES 1200 TRAFFIC SIGNS AND MARKINGS

Appendix 12/1 : Traffic Signs General

1. General

- 1.1 Unless specified otherwise in the Works Order the following requirements will apply and Traffic Signs will comply with TSGDR and RBWM Standard Detail Drawings 1200 series.

2. Temporary Traffic Signs

- 2.1 All plate signs and internally illuminated signs shall be constructed to a similar standard as a permanent sign.
- 2.2 Unless otherwise directed by the Service Manager representative all signs shall be mounted with a clearance of 600mm from the kerb and 2.1m head height.
- 2.3 Precise locations of signs are to be agreed on site with the Service Manager representative.

3. Permanent Traffic Signs

- 3.1 The locations of 'Directional', 'Information', 'Warning', 'Regulatory', and other traffic signs are contained in the Works Order and Drawing(s).
- 3.2 Legend and symbol layouts for sign faces are detailed on Works Order Drawing(s).
- 3.3 The Supplier shall submit information relating to traffic signs to be designed by the Supplier for the Service Manager approval at least four weeks prior to commencing the related works.
- 3.4 Luminaires shall be as described in the Works Order, for the types described in the Schedules of traffic signs.
- 3.5 Requirements for stub-posts described in the Schedules shall be determined by the Supplier in consideration of sign plate fixings, lit sign unit mountings, conduit fixings and the like, and to not project below the sign plate. Stub-posts shall be capped top and bottom.

4. Sign Posts

- 4.1 The fabrication and erection details of individual traffic signs are shown on the Traffic Sign Schedule sheets attached to the Works Order document, issued separately for the Works Order drawings.
- 4.2 Posts for Permanent Traffic Signs shall be tubular steel posts, or "D" Posts unless otherwise specified by the Service Manager.
- 4.3 Tubular steel posts shall comply with BS 6323 and shall be manufactured from steel complying with the requirements of BS 5360 Grade 43A. They shall also comply with the requirements of BS 873 Part 7, Section 2. Large based posts shall also be to this

specification. The minimum base section diameter for a large based post is 114mm.

- 4.4 Each sign post shall be indelibly marked with the name or trade mark of the manufacturer, together with the sign schedule number given in the schedule sheets. Identification marking shall be Black Numbering on a white background. Self-adhesive stickers will not be acceptable.
- 4.5 Base plates shall be welded to each embedded tubular post, where specified in the Works Order.
- 4.6 The base plate and the bottom portion of the post shall be coated internally and externally with bitumen coating as shown on the relevant details specified in the Works Order
- 4.7 Plastic post caps of the appropriate size shall be fitted to the exposed ends of all tubular steel posts. Finials shall be used in the case of Finger Post Signs.
- 4.8 Types of lock to traffic sign housings shall be agreed by Service Manager and shall be supplied with six (6 No.) keys of any one type.
- 4.9 Prior to galvanising, posts shall be cleansed of grease, scale, and rust and shot blasted.
- 4.10 Galvanising shall be by an approved hot-dip process at the rate of 610g per m² and in accordance with BS EN ISO 1461. When finished the galvanising shall be smooth, reasonably bright, continuous and free from imperfections such as flux, ash, and dross inclusions. If bare patches or spots due to inefficient pickling or persistent types of scale etc. are apparent, the work shall be completely stripped and re-galvanised.
- 4.11 Foundations for posts shall be constructed as detailed on the Standard Detail Drawings. Any drains or services which run through, or are adjacent to, the foundation shall be supported and protected from contamination with concrete etc. Services which lie within the foundation shall be split ducted before placing of concrete. The excavation for foundations shall be cleared of any debris and loose material before placing of concrete and backfilling. All large foundations shall have sockets.
- 4.12 All posts shall be erected plumb and where three or more posts are provided for any one sign, the faces of the posts shall be lined up.
- 4.13 The sign plates or planks shall not be fixed until three days after concreting of the posts.

5. Installation of Permanent Traffic Signs

- 5.1 Where signs are illuminated provision shall be made for cable entry through the concrete base by means of a 76mm diameter flexible PVC duct.
- 5.2 During sign erection, measures shall be taken to ensure that signs are not abraded, impacted or otherwise marked.

Traffic signs mounted on posts shall be erected to have their face plumb, and be orientated in relation to the carriageway in accordance with Chapter 1 of the Traffic Signs Manual.

- 5.3 Tape shall not be applied to sign faces.
- 5.4 Where it is indicated in the Contract that an existing sign face is to be replaced with a new

sign face of greater height, additional lengths of post are specified. These additional posts shall be fixed to planks, which have already been fixed to the existing posts, such that the additional planks can in turn be fixed to the projected lengths of the additional posts. Each plank, which is in contact with the additional posts, shall be fixed to each post by at least two clips.

6. Erection of Bollards

- 6.1 TMP Bollards fitted to bases which shall be constructed in accordance with the manufacturer's details or as specified in the Works order

7. Temporary Covering of Signs (including Temporary Signs)

- 7.1 The Supplier shall cover, to the approval of the Service Manager, the areas of the signs in whole or in part as stated in the Contract and shall maintain such covering until the Service Manager instructs its removal. The material used for this purpose shall be optically opaque and the method of its fixing shall be such that the sign manufacturer's warranty is not invalidated.

8. Cleaning of Signs

- 8.1 Signs shall be cleaned immediately prior to commissioning. The cleaning shall be carried out in the manner described in Chapter 12(3) of the Traffic Signs Manual. The type of detergent used shall be to the approval of the Service Manager. The inside of translucent panels of all internally illuminated signs shall be polished using anti-static fluid.

9. Location of Identification Markings

- 9.1 All sign plates shall be clearly and durably marked on the back with the following information (not exceeding 100mm x 150mm). Self-adhesive stickers will not be accepted,
- a. Sign manufacturer's name or trade mark;
 - b. Allocated sign number in the order or schedule;
 - c. Date of erection;
- 9.2 Where "Diamond" grade is used, the back of the sign plate should clearly be marked "Diam". Location of identification markings shall be in accordance with Clause 1304 for lighting columns and Standard Detail Drawings. One set of numerals shall be fixed to each sign post below the lower edge of the sign. The numerals shall be prefixed by the letter S, e.g. S22, commencing at the post most adjacent to the carriageway.
- 9.3 Location identification markings for deformable bollards shall be on a number plate as detailed in the Works Order.

10. Foundations

- 10.1 Foundations described in the Schedules of traffic signs by type references have the following meanings:
- Type A - mix ST2 concrete installation as described in sub-Clause 1203.3 (non-illuminated signs only);
- Type B - designed foundation mix ST4 concrete to Clause 2602 to dimensions stated in the Schedules;

Type C - designed foundation ST5 concrete for reinforced or unreinforced concrete to sign-specific detail drawings.

Foundation concrete for Types B and C shall be compacted by vibration unless described otherwise in the Works Order or shown otherwise on the Works Order Drawing(s), a minimum of 50mm thick concrete shall be placed and compacted under the bearing areas of the posts prior to placing and aligning the posts. Unless described otherwise in the Works Order or shown otherwise on the Works Order Drawing(s), concrete to Types B and C shall be placed to within 150mm of the ground surface. The type and size of foundation shall be as Works Order drawings

10.2 Foundations for lit signs shall contain a preformed duct of minimum 50mm internal diameter, capable of retaining its cross-sectional shape and position during the compaction of the concrete, secured at the cable entry of the post. The Supplier shall take measures to prevent ingress of concrete and soil that would impede cable installation to the ducts and post bases.

10.3 Reinforcement Schedules for foundations are in the Works Order.

11. Location and Erection

11.1 Approximate locations of each installation are given in the Works Order Sign Schedules.

11.2 Precise locations of signs are to be agreed on site with the Service Manager representative.

11.3 Particular requirements for set-back of posts from kerb faces, post spacing, post alignments necessary for aligning the sign plates to avoid specular reflection, post positions relative to foundation dimensions, mounting heights, are shown on Works Order Sign Schedules.

11.4 Single-post signs having posts not centrally assembled are shown on Works Order Sign Schedules.

11.5 Projection of sign plates beyond post centres for two post signs should be to Clause 1208.3 unless stated otherwise shown on Works Order Sign Schedules.

11.6 Projection of sign plates beyond post-centres for installations using more than two posts are shown on Works Order Sign Schedules.

11.7 Multi-post signs requiring base compartments on one or more of the posts are identified shown on Works Order Sign Schedules, including exclusions from the requirements of Clause 1204.

11.8 Mounting heights stated in the Works Order Sign Schedules refer to the vertical distance at the stated position measured between the finished ground level and the underside of the lowest sign plate or bottom light spill screen, as appropriate to that installation.

11.9 The fixing for signs on single posts shall be of a type that prevents rotation of the sign about the post.

12. Operational Requirements

12.1 Cover plates over part or whole of sign plate legends and symbols shall be to the requirements stated in the Works Order Sign Schedules. They shall be coloured, display legends, symbols and borders as required by the Schedules and detail drawings of sign faces and shall be compatible with the manufactured sign plates to which they are to be affixed.

13. Non-Illuminated Bollards

13.1 Non-illuminated bollards are scheduled on the Works Order Sign Schedules.

13.2 The authorisation permits the use of non-illuminated bollards in three circumstances only:

- a) When the bollard is mounted on a central refuge or in the mouth of a side road. The bollard must be supplemented by a conventional sign to Diagram 610 or 611 (as appropriate) mounted on a post. This sign must be illuminated in accordance with Schedule 17, item 1 of the Traffic Signs Regulations and General Directions 2016.
- b) When the bollard is mounted on a refuge on which there are traffic signals facing in the same direction as the bollard (a separate sign to Diagram 610 or 611 is not required).
- c) When the bollard is mounted on a central refuge at a zebra crossing. It must be used in combination with two belisha beacons globes mounted on a centre island column or on separate posts in accordance with the Zebra, Pelican and Puffin Pedestrian Crossing Regulations 1997.

14. Remove from Store and Re-Erect Traffic Signs

14.1 Signs set-aside for re-use is identified in Works Order.

15. Vehicle Activated Signs, Speed Indication Devices etc

15.1 Where there is a requirement in the scheme for the provision of Vehicle Activated Signs, Speed Indication Devices etc, then the Supplier shall liaise with the Service Manager's Street Lighting Section to verify the required design and installation requirements.

16. Street Name Plates

16.1 The supplier will be required to purchase, supply and install street name plate signage as per the RBWM Signway Supplies Street Nameplate Specification. The Service Manager will instruct the Supplier via a Works Order for any Street name Plates replacement, installation, repair and supply.

Appendix 12/2 Traffic Signs: Marker Posts

1. The location of hazard marker posts will be specified when applicable in the Work Order.
2. Removable marker post/bollards shall be of a design approved by the Highway Manager, complete with Socket, Lock and Key. Black Colour with Class 1, 1x150mm type D retro-reflective yellow band.
3. Socket base unit shall be installed in accordance with the manufacturers' installation document for correct operation of the unit.
4. Typical foundation details are shown on Standard Detail Drawings.

Appendix 12/3 Traffic Signs: Road Markings and Studs

Road Marking Performance Requirements

1. General

- 1.1 The location and types of carriageway marking will be specified in the Work Order.
- 1.2 All white road markings shall be reflective thermoplastic screed material with solid Glass beads incorporated into the mixture, complying with BS EN 1436, 1423, 1424, 1790, 1824 & 1871.
- 1.3 All yellow road markings shall be non-reflective thermoplastic screed material complying with BS EN 1436.
- 1.4 Unless otherwise directed by the Service Manager all markings shall conform to the requirements of the Traffic Signs Regulations and General Directions 2002 and any subsequent amendments thereof.
- 1.5 All screed thermoplastic, extruded thermoplastic and solid glass bead materials shall have a currently valid Product Certificate issued under the KITEMARK SCHEME.
- 1.6 Where a marking, but especially one which has a mandatory significance, is laid on top of an existing marking, the Supplier shall be responsible to the Service Manager for ensuring that the resulting combined marking complies with the current Traffic Signs Regulations and General Directions, as amended.
- 1.7 If any yellow edge of carriageway markings (diagram 1017, 1018.1, 1019, 1020.1, 1025.1, 1025.3 and 1027.1 are removed by the Supplier. The Tenderer shall include in his rates for providing No waiting cones positioning them at 20m intervals and removing them once the

1.8 road markings have been re-laid.

1.9 Appropriate Warning signs (to TSRGD 2016, Diagram 7012), indicating an absence of road markings shall be provided immediately when any road markings have been removed and shall remain in place until all the road markings have been reinstated.

1.10 MMA markings shall be min 55 PSV and HAPAS approved. Details of any proprietary product or supplier to be agreed by the Service Manager.

2. Preparation of Road Surfaces

2.1 The Work Order will specify preparation requirements.

2.2 The Supplier shall protect newly laid markings from being trafficked by vehicles or pedestrians until it has cooled sufficiently to prevent damage to the marking or injury to the public.

3. Setting Out

3.1 Except for alterations to the existing line systems, the Supplier shall be responsible for the correct setting out of all lines, words, arrows, stripes and symbols.

4. Reinstatement of Road Markings

4.1 Road markings will be reinstated according to the following guidelines:

4.2 Stop Junctions, Give way Junctions, mini roundabout markings, Double white lines and their associated warning arrows within 48 hours

4.3 All other markings should be laid within 7 days (for Maintenance purposes) or before the site re-opens to vehicular traffic.

4.4 Where possible all line markings following a resurfacing scheme/or where a closure was in place should be carried out as part of the scheme and before the road opens, not waiting 48hrs. If there are instances where this is not possible the client should be informed as soon as is practicable

5. Daily Record of Work

5.1 The Supplier shall submit to the Service Manager within 7 days a daily record of work carried out.

6. White Raised Rib Edge Markings

6.1 Where specified drainage gaps shall be provided at appropriate intervals to promote free surface water drainage.

6.2 Rib spacing shall be at 500mm centres, except slip roads, which will require 250mm

spacing.

6.3 The Geometry of Rib Dimensions are as follows:

The width shall be a minimum of 80% of the line width.

The length shall be between 40mm and 50mm.

The height (above the upper surface of the edge line) shall be between 8mm and 10mm.

7. Colour Stability

7.1 The yellow Index shall be less than 15 when measured in accordance with BS EN 1871.

8. Testing

8.1 Testing may be carried out any point during the 24-month performance term, as required by the Service Manager. Ideally tests should be carried out initially and towards the latter end of the performance term (e.g. 20 months)

8.2 The locations for testing and the approved method of testing of retro-reflectance will be selected by the Service Manager.

8.3 Testing of skid resistance to determine the SRV value shall be by means of a portable pendulum tester, or other method accepted by the Service Manager.

9. Arrangements for Sampling

9.1 The Service Manager may visit any site during the works and take representative samples for the purpose of checking material compliance with the initial Performance Standards. A certificate of sampling shall be completed on site for every sample taken.

10. Measurement

10.1 New screed thermoplastic road markings will be on surfaces of different texture depths and payment will be made for the three classes as follows:

- i) First applications on sections of road which have been surface dressed during the current year with 10mm nominal size chippings or 14mm chippings "racked in" with 6mm chippings
- ii) First applications on sections of road which have been surfaced dressed during the current year with 14mm nominal (single size) chippings
- iii) All other surfaces.

11. Quality Assurance Scheme Materials

11.1 A copy of the manufacturers current Road Trial Reports to BSEN 1824 shall be submitted with the Tender.

Road Studs

1. General

- 1.1 Reflecting road studs shall be to BS EN 1463 parts 1 & 2.
- 1.2 Road studs should be of a compatible type to the existing road studs, in the immediate vicinity of the works, unless the Service Manager accepts the use of different studs. The majority of road studs on the highway network are the inset type.
- 1.3 The colour of retro reflecting road studs shall comply with Regulation 31, clause 7 of the Traffic Signs Regulations & General Directions 2002 and any amendments thereof.
- 1.4 Retro reflecting road studs should be reinstated according to the following guidelines:
 - i) Road Studs required to maintain the legality of Double white lines systems within 48hrs.
 - ii) All other road studs within 21days

2. Surface Mounted Road Studs

- 2.1 Where required, all permanent surface mounted, non-depressible road studs shall be 114mm x 70mm x 16mm rectangular, high visibility reflectors, with individual cell units, with glass covered prismatic reflective faces recessed within the shell's outer surface complying with BS EN 1463: Type P3A, Classes R1 and S1, or similar type accepted by the Service Manager.

3. Inset Road Studs

- 3.1 Where required, permanent inset studs shall be 254 x 140 x 55mm long type castings with black rubber, self-wiping inset pads, with two 13mm convex lens reflectors made from toughened abrasion resistant glass complying with BS EN 1463: Type P1B, Classes R2 and S1 or similar type accepted by the Service Manager.
- 3.2 All inset studs shall be cut by mechanical milling or other method d by the Service Manager.
- 3.3 Inset studs to be removed shall be lifted by cutting around the perimeter of the stud. Levering out of position will not be permitted. The carriageway cavity shall be immediately made good with 6mm medium graded wearing course or 10mm close graded bitumen macadam as directed, fully compacted and finished level with the adjoining surface.
- 3.4 Where fitting a new reflector pad into the existing road stud housing is required, all detritus material shall be removed before fixing the new pad in accordance with the manufacturer's instructions.

4. Non retro reflecting Road Studs

- 4.1 Non retro reflective road studs shall be stainless steel.

Appendix 12/91 Cleaning Solutions

1. Cleaning solutions shall be non-toxic and shall cause no harmful effects to personnel, the materials to be cleaned or the environment. The Supplier shall advise the Service Manager of the type of detergent proposed to be used.
2. The solution shall be effective against greasy surface deposits, be fast acting and be suitable for use in cold water in both hard and soft water areas.
3. The solution shall not give rise to smearing and it should not be necessary to carry out rinsing after cleaning.
4. The solution shall not cause persistent foaming in use and shall not promote the formation of static charges on the equipment.

SERIES 1700 STRUCTURAL CONCRETE

Appendix 17/1 : Schedule for the Specification Designed Concrete

1. General

1.1 All concrete shall comply with BS 8500 – 1 and 2: 2006

2. Designed Concrete:

Requirements	Schedule		
	C32/40	C40/50	Foam Concrete
*Intended Working Life of Structure	120 years	120 Years	120 years
*Nominal Cover to Reinforcement	55mm plus allowable deviation	60mm plus allowable deviation	N/A
*Applicable Exposures Classes (Excluding DC-Class)	XD3	XD3	X0
DC -Class (Where applicable)	DC-1	DC-1	DC-1
Compressive Strength Class of Concrete	C32/40	C40/50	C4
Minimum Cement Content (kg/m ³)	360	380	120
Maximum Free Water/ Cement Ratio	0.45	0.40	-
Required Group or Type and Class of Cement or Combination (Where a DC – Class has not been specified)	IIB-V, IIIA	CEM I, IIA, IIB-SRPC	CEM I, IIB, IIIA, IIIB
Maximum Aggregate Size, mm	20	20	5

Chloride Content Class	CI0, 10	CI0, 10	CI0, 10
For Lightweight Concrete, the Density Class of Target Density	-	-	1250-1500
For Heavyweight Concrete, the Target Density	-	-	-
*Consistence Class, Special Type or Class of Cement or Combination	-	-	-
Required Source/Special Type of Aggregate	All constituent materials are to be obtained from a single consistent source.		
Maximum Cement Content (kg/m3)	550	550	550
Required Admixture	-	-	Foaming additive if required
Air Entrainment Required	No	No	No
Sampling and Testing	See Appendix 1/5		
Other Requirements	-	-	-

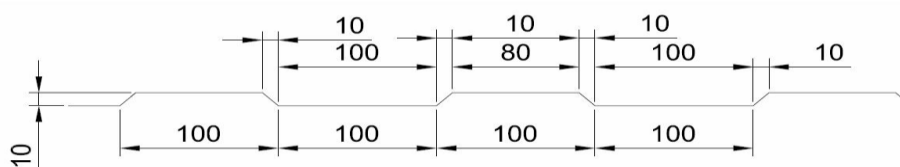
3. Designated Concrete

3.1 The designated concrete options used in the contract shall be GEN1, RC25/30, RC32/40 and RC40/50.

Appendix 17/3 : Concrete - Surface Finishes

1. Formed Finishes

1.1 Class F6 Finishes. The resulting finish shall be as per Class F3 and have the following stepped profile:



Detail of Vertical Step Board Finish
Ref Class F6

1.2 All formwork used to achieve a F3 finish shall be a proprietary brand which incorporates a

phenolic finish, minimum 240g/ m³.

2. Unformed Finishes

2.1 Unformed finishes are to be provided as follows:

Class of finish	Locations required
U1	The top surface of all buried concrete apart from those areas which are to receive a proprietary waterproofing system to clause 2003.
U2	Abutment bearing shelves and the top of wing walls, training walls, bearing plinths and other concrete elements of similar limited exposure..
U3	The top surfaces of parapet coping beams, parapets, and similarly exposed concrete elements.
U4	Concrete surfaces to receive a proprietary waterproofing system to clause 2003.

Appendix 17/4 : Concrete – General

1. General

1.2 All high yield steel reinforcing bars used in the contract shall conform to BS 4449:2005.
1.2mm diameter stainless steel tying wire shall be used at all times.

1.3 Construction joints shall be formed at the positions indicated. If the Supplier proposes additional or alternative positions, details of these shall be submitted to the Service Manager for acceptance. All construction joints shall incorporate grout checks to produce clean straight joints.

1.4 Welding of reinforcement is not permitted.

1.5 Testing shall be undertaken as indicated in Appendix 1/5. This applies to both designated and designed concrete mixes.

1.6 The concrete supply to any structure shall all come from a common source unless agreed otherwise by the Service Manager.

1.7 No-fines concrete shall comply with Appendix 5/1.

2. Underwater concrete

2.1 Concrete for the filling of voids below water level shall be a shrinkage compensated cementitious factory blended product. The product should have a BBA technical approval certificate for the application it is being used for and be resistant to washout (i.e. Tarmac

Toproc UW or equivalent – see attached data sheet).

- 2.2 The concrete product should not be placed where the temperature of the air or concrete is 5°C or below. All plant and equipment used in the transporting and placing of the concrete shall be free of ice that could enter the concrete.

**SERIES 1900 PROTECTION OF STEELWORK AGAINST CORROSION****Appendix 19/5 : General Requirements****FORM HA/P1 (NEW WORKS) PAINT SYSTEM SHEET**

Sheet No.

**(SPECIFICATION FOR HIGHWAY WORKS)
(NEW WORKS) PAINT SYSTEM SHEET**

Contract Title				
Structure No.:				
Grid Ref:				
Date of Issue:				
Environment And Accessibility:	G2a protective system			
Required Durability of System:	Colour of Finish			
No Maintenance: Up to 8 years	To be instructed on the work order			
Minor Maintenance: After 8 years				
Major Maintenance: After 15 years				
Paint System to Be Applied Over:				
Area Ref:	Area Description:			
Protective System Type: (i.e. I, II, etc.)				
Details	1st Coat	2nd Coat	3rd Coat	4th Coat
Registered Description Item No. and Colour BBA HAPAS Roads and Bridges Certificate reference and date Brand Name and Manufacturer's Ref. No. Manufacturers Data Sheet No. Where applied How applied Min. dry film thickness (mdft) Max. local dft (See Cl. 1914.7) Estimated total volume of paint likely to be used (litres) 'A' type testing required? (YES/NO) (See Cl. 1912.3) 'B' type testing required? (YES/NO) (See Cl. 1912.9)				
Stripe Coat Description (including Item No. and Colour) Workshop: Site:	Paint Manufacturer's official Stamp:			
Mdft (µm) Note: The minimum total dry film thickness of the paint system, neglecting primers and sealers under 30microns, shall be 15% greater (to the nearest 25 microns) than the sum of the mdfts of the individual paint coats.	Approved By: Date:			

FORM HA/P2 PAINT DATA SHEET
(Specification for Highway Works)
Form HA/P2 Paint Data Sheet:.....

BBA HAPAS Road and Bridges Certificate Reference and Date:			
Manufacturer			
Item No.			
Registered Description			
Brand Name and Reference No.			
Consistency and Method of Application			
Weight per 5 litres (kg)			
Specific Gravity		Colour	

For two pack paints		
Base	Activator	Mixed Components

Volume Solids%	
For two pack paints volume solids % for mixed paint :	
VOC content g/l (mixed)	
Manufacturer's Minimum Dry Film Thickness Range	
Recommended lower mdft	
Recommended upper mdft	
Full Application Instructions	
Mix ratio	
Flash Point	

		5 C	10 C	20 C	30 C
Drying Times (hours)	Surface Dry				
	Hard Dry				
Overcoating Times (hours)	Minimum				
	Maximum				
Pot Life (Hours)					

Cleaning Solvent	
State effects on Drying Times of Temperatures below 20 C	
Manufacturer's Application Restrictions e.g., for Temperatures or Humidity	
Manufacturer's General Recommendations	

FORM HA/P3 PAINT SAMPLE DESPATCH LIST: SHEET 1

Contract Title			
Structure Name:		Structure No.	

Client Name:			
Supervising Firm:			
Supervising Firm's Representative Name:			
Telephone No.		Email:	
Address:			

Paint Inspection Firm			
Samples Dispatched From: (Note 1)		Date Dispatched:	
Inspector's Name:		Telephone No	
Inspector's Signature			

Samples: (numbered A1, A2 etc. or B1, B2 etc) (Note 2)					
Sample No.	Item No.	Manufacturer Reference No.	Batch No.	BS 4800 Reference (Note 3)	Sp.G. (Notes 4 & 5)

Paint Manufacturer:_____

FORM HA/P3 PAINT SAMPLE DESPATCH LIST

(SPECIFICATION FOR HIGHWAY WORKS) PAINT SAMPLE DESPATCH LIST: SHEET 2

INSPECTOR to complete form HA/P3 and to forward single copies to each of the following within 24 hours of despatch of samples by the Supplier to:

1. To be advised 2. RBWM or *** Council**

INSPECTOR to forward Form(s) HA/P1 Paint System Sheet(s) with the first Form HA/P3 to both addresses.

INSPECTOR to select 'A' samples and to ensure that manufacturer's labels on tins comply with the Specification.

INSPECTOR to take and mark each 'B' sample tin with Item No., manufacturer's name and brand reference No., batch No., sample No. and colour (Note 2)

SUPPLIER to CLIP DOWN LIDS of all tins and to pack, address and despatch samples. In addition to address, SUPPLIER to label each case (or tin sent loose): "SCC (State contract title & structure name) and DATE (date of despatch as noted above)".

Notes.

1. State whether from workshop or site (give name and address).
2. Batch samples comprising unopened tins to be marked A1, A2, etc. Control samples in 0.5 litre tins to be marked B1, B2 etc. Samples No. to run consecutively, i.e. A1 and B1 onwards.
3. Colour reference to BS 4800 to be given, as stated on Form HA/P1 (New Works) Paint System Sheet, e.g. 18 B 25.
4. For 'A' samples specific gravity (Sp.G.) to be measured by Inspector from separate tins of the same batch. For 'B' samples Sp.G. to be measured by Inspector when taking samples. Samples will be rejected unless Sp.G. is filled in above by Inspector.
5. If Sp.G. differs appreciably from data sheet do not despatch 'A' or 'B' samples.

SERIES 2000 WATERPROOFING FOR CONCRETE STRUCTURES

Appendix 20/1 : Waterproofing For Concrete Structure

(Specification For Highway Works) Form Pws Proprietary Waterproofing System Data Sheet 1993

ANNEX 'A'

Manufacturer or Marketing Group:
Product:

BBA Certificate No:
Preamble

This waterproofing system is to be installed in accordance with this Annex and the Specification. Should there be any contradiction between the requirements of this Annex and the Specification; the Specification requirement shall take precedence unless otherwise agreed through the *Service Manager* with the overseeing Department.

All materials of the waterproofing system are to be as stated on the PWS (Proprietary Waterproofing System) Data Sheet.

No substitution of any of the stated materials is permitted.

General Requirements

Immediately before the application of the primer or laying of the waterproofing system or protective layer, the concrete surface or primed surface shall be clean, dry and free from ice, frost, laitance, loose aggregate, dust and other debris and also where the adhesion to the concrete would be impaired, free from curing liquids, compounds and membranes.

On any structure, providing no damage results, equipment all fitted only with rubber tyres may stand or travel on the waterproofing system solely for the purposes of laying an additional protective layer or surfacing material on that structure. All such Equipment and equipment shall have its tyre treads regularly inspected and any embedded stones removed.

The permission of the *Service Manager* shall be obtained before the equipment, and traffic is permitted onto the waterproofing system.

Rollers shall not be permitted to stand or travel directly on the waterproofing system.

Where it is necessary for equipment or traffic to stand or travel on the waterproofing system, suitable temporary protection is to be provided to the satisfaction of the *Service Manager*.

Particular Requirements

Date of Registration:

(SPECIFICATION FOR HIGHWAY WORKS)

FORM PWS PROPRIETARY WATERPROOFING SYSTEM DATA SHEET 1993				
1.	Manufacturer or Marketing Group			
2.	Product			
3	British Board of Agreement Roads and Bridges Certificate	No		
		Date		
4.	Concrete Deck Surface Finish	Class U4		
5.	Minimum Installation Temperature			
6.	Application Temp of Bonding Agent	To comply with Clause 2005		
7.	Life of Mixed Liquid Materials			
8.	Overseeing Department's Recommended Minimum Depth of Flexible Surfacing and Waterproofing	120 mm		
9.	Manufacturer's Recommended Minimum Depth of Flexible Surfacing and Waterproofing			
10.	Preparation and Installation	See Annex A		
11.	Form PWS with Annex A Registered with Overseeing Department	Date		
12.	Description of Materials	Thickness mm	Weight kg/m ²	Nominal Width
				Nominal Length

RBWM Highway Services Contract 2024
Highway Maintenance and Capital Works Contract



SERIES 2400 BRICKWORK, BLOCKWORK AND STONEWORK

Appendix 24/1: Brickwork, Blockwork and Stonework

1. General

- 1.1 A trial panel of minimum area 1.0m x 1.0m shall be prepared for acceptance by the Service Manager in advance of all brickwork, blockwork and stonework.
- 1.2 Unless specifically instructed otherwise, when the Supplier is required to source bricks, stone or blocks for incorporation into the works, he shall first source samples for the approval of the Service Manager. When working on historic structures, the approval of the appropriate Conservation Officer and/or English Heritage may also be required.
- 1.3 When working with lime mortar, the Supplier shall protect new work in all weathers for whatever period is necessary to ensure the proper setting and long term durability of the mortar. Whilst the minimum period of protection is to be 3 days, it may be necessary to protect for longer.
- 1.4 No overhand work shall be undertaken.

2. Mortar

2.1 Mortar designations shall be as follows:

Mortar Ref	Mortar Proportions by Volume
A	As per mortar designation (ii) in clause no 2404.
B	One part hydraulic lime NHL3.5 to three parts of sand.
C	One part of hydraulic lime NHL5 to three parts of sand.
D	Two parts of hydraulic lime NHL3.5; one part of fast setting natural (roman) cement, eg Prompt by VICAT Group, and nine parts of sand.

- 2.2 The sands used in repair or reconstruction mortars shall be sourced and blended to achieve a good match with the original.
- 2.3 Mortars ref B and C shall not be laid when the temperature is 5°C and falling or when daytime temperatures of less than 5°C can reasonably be expected within 6 weeks of the mortar being placed.
- 2.4 Although mortar ref D is better suited for winter working than mortars ref B and C, it shall not be used when the temperature is 3°C and falling or when daytime temperatures of less than 3°C can reasonably be expected within 4 weeks of the mortar being placed.
- 2.5 A tarpaulin or similar waterproof membrane must be part of the cold weather protection to all mortars. Other insulating layers may be included beneath this if considered necessary. For lime based mortars the base layer shall be hessian or similar to aid the carbonation of the mortar.
- 2.6 For all lime based mortars (mortar refs B, C and D), the cold weather protection system shall

be removed on warm, dry days to aid the carbonation of the mortar.

2.7 Cement or admixtures shall not be added to lime mortars (mortar refs B, C and D) unless otherwise agreed by the Service Manager.

2.8 Unless instructed otherwise by the Service Manager, on new build works, finished mortar joints are to be recessed from the face of the brickwork, blockwork or stonework by approximately 2mm. When carrying out repair or repointing works, the mortar should be recessed to match the original joints.

2.9 Raised (strap) pointing shall not be undertaken unless specifically agreed by the Service Manager.

2.10 Prior to carrying out repointing works, the raked out joints shall be flushed out with clean water. The mortar shall then be placed when the joints are still damp, not wet, and ironed into the recess with a pointing iron.

3. Historic Bridges

3.1 Mechanical equipment, e.g. angle grinders or similar, shall not be used for the purpose of raking out mortar joints on historic structures. On such structures, all raking out shall be carried out in a manner that causes no damage to the adjacent brick, stone or block units.

SERIES 2600 MISCELLANEOUS

Appendix 26/1: Ancillary Concrete

- 1. Unless specified otherwise in the Works Order the following shall apply.
- 2. Concretes for Ancillary Purposes shall be to the following requirements, with purposes of Table 26/1 being substituted and additional purposes being added.
- 3. Where stated in the Works Order, sulphate resistant concrete shall be used.

Purpose/Location	Mix	Other Requirements
1. Blinding concrete, backfill to structural foundations, overdig to post holes and planted lighting columns.	ST1	As Instructed through Works Orders
2. Footings for fence posts and augured foundations to traffic signs. Foundations for pedestrian guardrails.	ST2	
3. Bed, haunch and surround to drains other than Type A. Surround to pre-cast concrete chambers and gullies.	ST2	
4. Filling redundant gullies.	ST2	
5. Bedding and backing to precast concrete kerbs, edgings, channels and quadrants.	ST3	
6. Bed to drains Type A. Foundations, channels and benching to chambers. Surround to plastic gullies.	ST4	
7. Footings for Regulatory and Warning Sign posts, scheme signboard posts and temporary sign posts.	ST4	
8. Bedding and backing to precast concrete 'Bus Docking' kerbs.	ST4	
9. Foundations for safety barrier posts, environmental barrier posts and planted lighting columns.	ST5	
10. Anchor blocks for safety barrier.	ST5	

Appendix 26/2: Bedding Mortar

- 1. Unless specified otherwise in the Works Order the following shall apply:
Mortars shall comply with the requirements of clause 2601 of the Specification.
- 2. **Resinous mortars**
 - 2.1 Resinous mortars shall have the following additional properties:

- compressive strength after 3 hours to be greater than 40 Mpa
- tensile strength after 3 hours to be greater than 8 Mpa
- low shrinkage after 28 days

3. Quick setting mortar

3.1 Quick setting mortar shall contain quick setting cement or approved additive to obtain early mortar hardening and strength.

4. Compressive Strength Requirements

4.1 Bedding mortar shall have the following minimum compressive strength requirements in addition to the requirements of Clause 2601.1(i):-

- 10 N/mm² at 24 hours at 5°C;
- 40 N/mm² at 72 hours at 20°C.
- The laboratory approval tests for compressive strength shall be extended to include the production and testing of a total of twelve further cubes in accordance with Clause 2601.4(iv) to prove compliance with the requirements stated in paragraph (i) above.

5. Early Loading Requirements

5.1 The material may be loaded once it has achieved a compressive strength of 40 N/mm².

5.2 The gain in strength of the cementitious mortar shall be monitored by testing cubes cured alongside the work area at ambient temperature. For each pour of mortar four cubes shall be made as specified in Clause 2601.4(iv). The cubes shall be cured for 24 hours in the moulds with the top surfaces covered by polythene sheets. After 24 hours the cubes shall be stripped and either placed in polythene bags which shall be sealed or protected as specified in Clause 2601.3. The cubes shall continue to be stored alongside the work area until required for testing. The cubes shall be crushed in sets of two, at times determined by the Supplier until the compressive strength of both cubes in a set is not less than 40 N/mm².

SERIES 3000 LANDSCAPE AND ECOLOGY

Appendix 30/1: Landscape and Ecology

1. General

- 1.1 The Supplier is to give the Overseeing Organisations the Notices listed. Any Notice requirements not listed in sub-Clause 3001.2 may be instructed as required by the Overseeing Organisation. [3001.2]
- 1.2 Any sites of nature conservation that may be affected by the Works shall be notified to the Supplier by the Overseeing Organisation before the commencement of any works which may affect such sites. Any sites of archaeological interest that may be affected by the Works or archaeological sites for which a watching brief is required shall be notified to the Supplier by the Overseeing Organisation before the commencement of any works which may affect such sites. [3001.2]
- 1.3 The Supplier shall liaise directly with the landowner to give notice and arrange precise access dates for works outside the highway boundary for the operations and in the locations instructed by the Overseeing Organisation. [3001.2]
- 1.4 Peat may not be used. [3001.3]
- 1.5 Forms noting the use of pesticides are to be submitted to the Overseeing Organisation at three monthly intervals. [3001.13]. The pro-forma to be used for such records is shown overleaf.
- The application of herbicides is subject to regulations which must be observed when using these products. These are summarised in The Code of Practice for the Safe Use of Pesticides on Farms and Holdings [PB3528]. This Code is available from Defra Publications. Note: This document [PB3528] is kept under review as the continuing validity of the herbicide recommendations could change. Please check the Defra website to ensure that you have the most up to date version.
- 1.6 The bird-nesting season to apply for this Contract is March to July inclusive. [3001.14]
- 1.7 When instructed by the Overseeing Organisation, the Supplier is to provide Inspection Reports. The intervals of time at which they are required shall be as instructed by the Overseeing Organisation. [3001.15]. The pro-forma to be used for such records is shown overleaf.



LANDSCAPE WORKS – INSPECTION REPORT

Date of visit:

Location:

Name of Supplier:.....

Operations carried out	Locations of Operations

Names of operatives of site:

.....
.....
.....

Suppliers Observations on damage by others, additional work required or general condition of the works:

.....
.....

Observations of Overseeing Organisation on standard of workmanship, additional work required or general condition of the works:

.....
.....

This maintenance visit has been satisfactorily completed.

Signed (for Supplier).....

Name..... Date.....

Signed for Overseeing Organisation)

Name..... Date.....

Appendix 30/5 : Grass Seeding, Wildflower Seeding and Turfing

1. Grass seed and wildflower seed are to be sown during the periods instructed by the Overseeing Organisation [3005.1].
2. The upper 50 mm of soil shall be reduced to a fine tilth in the locations instructed by the Overseeing Organisation. [3005.2].
3. Granular fertiliser and/or other soil ameliorates of types to be agreed by the Overseeing Organisation are to be incorporated into the soil during final cultivation at the rates recommended by the manufacturers unless instructed by the Overseeing Organisation. [3005.3].
4. The composition of seed mixture(s) to be sown shall be:

4.1 Low growing grass seed mixtures shall be used as follows:

All Purpose Mixes:

10%	Brown Top Bentgrass (<i>Agrostis Tenius</i>)
15%	Dwarf Creeping Red Fescue (<i>Festuca Rubra</i> SSP <i>Litoralis</i>)
15%	Dwarf Creeping Red Fescue (<i>Festuca Rubra</i> SSP <i>Trichophylla</i>)
25%	Creeping Red Fescue (<i>Festuca Rubra</i> SSP <i>Rubra</i>)
20%	Hard Fescue (<i>Festuca Longifolia</i>)
15%	Smooth Stalked Meadowgrass (<i>Poa Pratensis</i>)

One of the following cultivars/types shall be included in this mixture: Highland Boreal, Danish Rubina/Danish Hard Fescue/Creeping Red Fescue, Erte/Danish.

5. Unless instructed otherwise by the Overseeing Organisation. [3005.4].
6. All seed and seeding operations shall conform to BS 4428. Seed shall be obtained from an approved source, conforming in all respects to the Fodder Plant Seeds Regulations 1976 and the Seeds (National List of Varieties) Regulations 1973. Fresh seed must be purchased each season throughout the Contract period.
7. Provenance requirements shall be as instructed by the Overseeing Organisation. [3005.7]. If required, evidence of Provenance shall be provided using the Provenance Certificate pro-forma included at Appendix 30/6.
8. All grass seed shall be stored in dry watertight conditions and shall be protected from damp and vermin until required.
9. Sowing rates are as follows:
 - Seeding on topsoil areas shall be at a rate of not less than 25g/m².
 - Seeding on subsoil areas shall be at a rate of not less than 35g/m².
 - Seeding wild flora areas shall be at a rate of 5.0g/m²
10. Unless instructed otherwise by the Overseeing Organisation. [3005.8].
11. Hydraulic seeding shall take place in locations as instructed by the Overseeing Organisation. The contents of the hydraulic seeding mixture, any particular hydraulic

seeding process requirements and the rate of application shall be as instructed by the Overseeing Organisation. [3005.10].

12. Turf arising on Site shall be re-used in the locations instructed by the Overseeing Organisation. If turf is to be re-used, the locations where turf shall be stripped and the thickness of turf shall be as instructed by the Overseeing Organisation. [3005.13].
13. Any alternative preparation requirements and / or range of thickness of soil for turf to be stripped from Site in any locations instructed by the Overseeing Organisation shall be as instructed by the Overseeing Organisation. [3005.13 (iv)].
14. Imported turf shall be used in the locations instructed by the Overseeing Organisation. Grass and/or herb mixture requirements for imported turf shall be as instructed by the Overseeing Organisation [3005.14].
15. The Supplier is required to secure turf in position in the locations instructed by the Overseeing Organisation. Pegs or pins shall be used as instructed by the Overseeing Organisation [3005.25].
16. Turfed areas shall be watered after laying in the locations instructed by the Overseeing Organisation [3005.26].
17. The number of establishment cuts required for newly-sown grass before it is accepted as completed shall be as instructed by the Overseeing Organisation. [3005.29].
18. Any special requirements for Equipment used for mowing shall be as instructed by the Overseeing Organisation. [3005.29].
19. Grass cuttings do not need to be cleared at any locations unless instructed by the Overseeing Organisation [3005.30].

Appendix 30/6 : Planting

1. Plants shall be of the species, sizes, whether bare-root, root-balled, cell-grown or container-grown and cell/container requirement as instructed by the Overseeing Organisation. Wildflower plants shall be grown for at least six months prior to delivery in P9 pots. Any variations from BS or the National Plant Specification or additional requirements for the specification of plants shall be as instructed by the Overseeing Organisation. Planting shall be carried out in the locations instructed by the Overseeing Organisation. [3006.3].
2. Grafted stock may not be used unless specifically agreed by the Overseeing Organisation [3006.4].
3. Any requirements for mycorrhiza in rooting medium of planting stock shall be as instructed by the Overseeing Organisation [3006.5].
4. Any special plant provenance requirements for planting stock shall be as instructed by the Overseeing Organisation [3006.6]. Plant Provenance Certificates shall be provided unless otherwise stated, in compliance with sub-Clause 3006.6.

5. Any requirements for the Overseeing Organisation to individually select trees at the nursery and other requirements for evidence of plant sources shall be as instructed by the Overseeing Organisation [3006. 7].
6. Labels, canes and ties shall only be removed after planting in the locations instructed by the Overseeing Organisation [3006.10]
7. Any alternative topsoil requirements for tree pits shall be as instructed by the Overseeing Organisation. [3006.12]
8. Locations where compost or fertiliser shall be deposited over planting areas for incorporation into the soil shall be as instructed by the Overseeing Organisation [3006.13].
9. Composition requirements for compost are: pH 6-7.5, electrical conductivity (600-3000ms/cm and available nitrogen, phosphorous, potassium and magnesium in kg/m³ amounts of N:0.7, P2O₅:0.6, K₂O: 0.8, Mg 0.06, readily available trace elements and a reserve of nutrients in the form of slow release fertilisers or organic matter [3006.14]. For surface mulching a coarser material with a lower N:P:K:Mg nutrient status will be acceptable, subject to the approval of a sample by the Overseeing Organisation.
10. When the use of slow-release fertiliser is instructed by the Overseeing Organisation it shall comply with the following: nutrient status in terms of N4: P18: K10: Mg5 or N4: P19: K10: Mg7.5. Slow –release fertiliser shall be applied in the locations instructed by the Overseeing Organisation. The rate of application at time of planting shall be:
 - (a) 35gm per square metre to planting beds.
 - (b) 35gm per whip, transplant, shrub, climber or one slow-release fertiliser tablet per whip, transplant, shrub, climber pit.
 - (c) 60gm per feathered or standard tree
 - (d) 150gm per extra heavy standard or larger tree [3006.15].
11. Any requirements for anti-transpiration sprays, root dips, anti-desiccant soil additives or other forms of anti-desiccant shall be as instructed by the Overseeing Organisation [3006.16].
12. The planting season for bare-rooted, root-balled or cell-grown plants that is to apply for the Contract is from the first week in November to the first week in April, inclusive. The planting time may be extended beyond the specified period for bare-rooted, root-balled and cell-grown plants with the written approval of the Overseeing Organisation [3006.17].
13. Pits for planting whips, transplants or shrubs or trenches for hedges shall be provided in the locations instructed by the Overseeing Organisation. The bases of pits larger than 1000mm x 1000mm shall be broken up to a depth of 450mm. The sides of all pits shall be scarified before backfilling. Arisings from pits and trenches shall be removed off-Site [3006.24].
14. Locations where gravel drainage layer is not required in planting pits shall be as instructed by the Overseeing Organisation [3006. 27].
15. Locations where trenches for hedges are to be backfilled before planting and composition of backfill shall be as instructed by the Overseeing Organisation [3006. 28].

16. Locations where cultivations are required for planting beds or along hedge lines shall be as instructed by the Overseeing Organisation [3006.29, 3006.30]. Shrubs, groundcover and hedge plants are to be watered-in after planting in the locations instructed by the Overseeing Organisation. The quantity of water to be applied (in l/m² or other method of measuring application) shall be as instructed by the Overseeing Organisation [3006.33].
17. Locations where plants are to be planted into hedge-trenches that are to be backfilled as planting progresses shall be as instructed by the Overseeing Organisation [3006.34]. (For reference, locations for pit-planting are stated under 3006. 24 and for backfilling trenches before planting in 3006. 28)
18. Any alternative requirements for backfill mixture used in planting pits for whips, transplants, and shrubs or in trenches for hedges shall be as instructed by the Overseeing Organisation [3006. 35].
19. Any alternative requirements for stakes shall be as instructed by the Overseeing Organisation [3006.36].
20. There are no alternative requirements for tree ties [3006. 37].
21. Any requirements for root barriers: their location, type and method of installation shall be as instructed by the Overseeing Organisation [3006.38].
22. Any alternative requirements for staking or underground guying of extra heavy standard trees and heavy standard trees shall be as instructed by the Overseeing Organisation in the locations instructed by the Overseeing Organisation [3006.43].
23. The location of any trees to be watered-in after planting and quantity of water to be applied (in l/m² or other method of measuring application) shall be as instructed by the Overseeing Organisation. [3006.49]
24. Trees planted in paved areas and trees in other locations as instructed by the Overseeing Organisation shall be provided with an irrigation pipe [3006. 50].
25. Plant protectors of one or more of the following types, as instructed by the Overseeing Organisation, shall be provided in the locations instructed by the Overseeing Organisation.
 - (a) Type 2: Polythene Mesh Guard for Trees Circular brown or black extruded PVC with a mesh of 15 mm square, a height of 600 mm and a diameter of 75 mm, fixed with two releasable ratchet ties to a treated softwood stake 25 mm x 25 mm x 800 mm (pointed to one end) within the guard.
 - (b) Type 3: Polythene Mesh Guard for Shrubs Circular brown or black extruded PVC with a mesh of 25 mm x 35 mm, a height of 600 mm and a diameter of 200 mm, fixed with four releasable ratchet ties to a treated softwood stake 25 mm x 25 mm x 800 mm (pointed to one end) within the guard.
 - (c) Type 4: Tubular Shelter for Trees Circular brown or green polypropylene (twin walled) with a perforated vertical line (to allow the shelter to burst). Shelters shall be 600 mm in height with a diameter of 120 mm, fixed with two releasable ratchet ties to a treated softwood stake 25 mm x 25 mm x 800 mm (pointed to one end) outside the shelter.

- (d) Type 5: Tubular Shelter for Shrubs Circular brown or green polypropylene (twin walled) with a perforated vertical line (to allow the shelter to burst). Shelters shall be 600 mm in height with a diameter of 200 mm, fixed with four releasable ratchet ties to two treated softwood stakes 25 mm x 25 mm x 800 mm (pointed to one end), positioned opposite each other within the shelter [3006.52].
26. The Supplier shall replace defective plants for a period of 60 months from the date of completion of any planting works carried out under this Contract and in other locations as instructed by the Overseeing Organisation [3006.87].
27. Any variation from the requirement to supply replacement plants in accordance with sub-Clause 3006.89 shall be as instructed by the Overseeing Organisation [3006.89].
28. Plants are to be watered-in after replacement planting as necessary to return the rooting zone to field capacity in the locations instructed by the Overseeing Organisation [3006.91].
29. The Supplier shall carry out maintenance of any new planting carried out under this Contract for a period of 60 months from the date of Completion unless agreed otherwise with the Service Manager [3006.92].

LANDSCAPE WORKS – PROVENANCE CERTIFICATE

Certificate Number:

- 1. We hereby certify that the origins of the plant stock incorporated in the Works are as identified in the Plant Schedule contained in Annex 1 of this Certificate.
- 2. The words and phrases herein, unless otherwise stated, have the same meaning as attributed to them in the Forestry Commission Practice Note 8: 'Using Local Stock for Planting Native Trees and Shrubs'.

Supplier	
Firm	
Name	
Position	
Signed	
Date	

- 3. Receipt of this certificate is acknowledged by the Overseeing Organisation.

Overseeing Organisation	
Firm	
Name	
Position	
Signed	
Date	

LANDSCAPE WORKS – PROVENANCE CERTIFICATE

ANNEX 1: Plant Schedule

Certificate Number:

Botanical Name	Quantity	Form/Age	Height (cm)	Zone of Provenance and Location	Forestry Commission Local Provenance Certificate No. (if available)	Approx. Date Propagation Material Collected	Nursery(s) where the Plants have been Grown

SERIES 5000 : MAINTENANCE PAINTING OF STEELWORK
Appendix 50/1 : Form HA/P1 Paint System Sheet

(SPECIFICATION FOR HIGHWAYS WORK)
(MAINTENANCE) PAINT SYSTEM SHEET

Sheet No.

Contract Title										
Structure No.:										
Grid Ref:										
Date of Issue:										
Environment And Accessibility:		G2a protective system								
Existing Protective System(s)										
Metal Coatings										
Paint Coatings										
Average total thickness (microns)										
Required Durability of System:				Colour of Finish						
No Maintenance: Up to 8 years				To be instructed on the work order						
Minor Maintenance: After 8 years										
Major Maintenance: After 15 years										
Billed Area										
Area Ref:		Area Description:		Surface Preparation method						
Protective System Type: (i.e. I, II, etc.)										
Paint coat Summary		Condition of Surfaces of Existing System after surface preparation								
Coat & Item No		Condition:		Condition:		Condition:		Condition:		
		Area Ref:		Area Ref:		Area Ref:		Area Ref:		
1 st Coat		Item	Mdft	B or AS	Mdft	B or AS	Mdft	B or AS	Mdft	B or AS
2 nd Coat		Item								
3 rd Coat		Item								
4 th Coat		Item								
Min Total Dft to be obtained										

RBWM Highway Services Contract 2024
Highway Maintenance and Capital Works Contract



Details	1 st Coat	2 nd Coat	3 rd Coat	4 th Coat
Registered Description Item No. and Colour BBA HAPAS Roads and Bridges Certificate reference and date Brand Name and Manufacturer's Ref. No. Ref No. Manufacturers Data Sheet No. Min. dry film thickness (mdft) Max. dry film thickness (See Cl. 5012.6 (µm)) Estimated total volume of paint likely to be used (litres) 'A' type testing required? (YES/NO) (See Cl. 1912.3) 'B' type testing required? (YES/NO) (See Cl. 1912.9)				
Stripe Coat Description (including Item No. and Colour) Workshop: Site: . . .	Paint Manufacturer's official Stamp: . . .			
Patch Coat (s) Description (including Item No. and Colour) . . .	Additional Information (By paint manufacturer) .			
Mdft (µm) Note: The minimum total dry film thickness of the paint system, neglecting primers and sealers under 30microns, shall be 15% greater (to the nearest 25 microns) than the sum of the mdfts of the individual paint coats.	Approved By: Date: . . .			

SERIES 6000: WINTER MAINTENANCE

Appendix 60/1: Winter Service

The Winter Service is considered an excellent service by the Members and residents of RBWM. The service is defined within the “Winter Service Policy 24-25 and Operational Plan” which is produced for RBWM on an annual basis. This sets out strategic considerations, operational requirements and provides details of all the routes around RBWM. This will be considered the service requirements and will be developed annually by the Supplier in conjunction with the Service Manager and interested stakeholders. Additionally, information on Salt and Gritters is contained in the Conditions of Contract and the Service Information.

1. General Requirements

1.1 In addition to the Operational Plan the Supplier will be required to comply with the following key requirements;

- Supply all vehicles, operatives and salt to undertake the winter service operation

1.2 The Supplier shall bear all the cost of the following:

- All maintenance and repair requirements of the vehicles used in the winter maintenance contract.
- Washing down of the vehicles used in any operation.
- All repairs, breakdown, recovery or accident damage.
- The supply of salt and ensuring the salt barn is stocked at 750T at all times.

1.3 The Supplier shall provide the Service Manager with all details of drivers, drivers’ records and licences held, and any other particulars as required by the Client’s Insurers and shall ensure that all drivers are approved by the Service Manager before undertaking such duties.

1.4 All vehicles provided shall comply in all aspects with all legislative requirements, environmental standards and have “intelligent” mapping, routeing and GPS systems.

1.5 The Supplier shall immediately report to the Service Manager any accident and shall complete without undue delay an accident report in accordance with insurers requirement.

1.6 The Supplier shall ensure that checks are made to oil, water and fluid levels and air and tyre pressures and that immediate corrective action is taken where necessary, on each occasion the vehicle is used.

1.7 The Supplier shall ensure the presence of all logos and other official markings and ensure that no unauthorised signs, markings or adornments are present.

1.8 All vehicles shall be operated in a reasonable and workmanlike manner and shall not cause obstruction or annoyance to the public. Drivers shall be trained and thoroughly competent in the safe use of vehicles at all times, shall drive safely and correctly at all times in accordance with statutory regulations and speed limits, shall only reverse under the guidance of another employee.

1.9 The Supplier will provide a loading shovel at the Depot and there are 4 No Snow Plough attachments available for the Suppliers use already in the Stafferton Way Depot provided

by the Employer. In addition, there are a number of demountable bodies for 5T and 7.5T vehicles.

NB. Details of the Employer's Winter Service Vehicles and Equipment are contained within the Appendices and Winter Service Policy.

2. Gritting and Route Priorities

2.1 RBWM aim to reduce, as far as reasonably practicable, the effects of adverse weather conditions comprising forecast or actual ice or snow on the movement of people and vehicles, to permit safe travel on the strategically more important highways within the boundaries of the Borough.

3. PRIORITY ONE NETWORK (ROUTES 1 to 4)

3.1 The Priority One Network comprises all principal and strategic corridors and some essential local distributor roads.

3.2 The full definition of the category of roads is explained in the Code of Practice for Maintenance Management. For unplanned operations Gritting on the priority one network shall commence within one hour of call out.

3.3 The priority one network should be completed within 2.5 hrs of the gritters leaving the depot. However, it is accepted that congestion may significantly extend treatment times beyond this and that this is outside the Council's control.

3.4 The Priority One Network is listed in the Policy document.

4. PRIORITY TWO NETWORK (ROUTES 5 to 8)

4.1 Comprises busy commuter routes, main bus routes, routes from fire stations, ambulance stations, hospitals, schools and cemeteries.

4.2 The priority 2 network should be commenced within 60 minutes of completion of the priority one network. The priority 2 network should be completed within 4 hours of the gritters leaving the depot.

4.3 The Priority Two Network is listed in the Policy document.

5. SUPPLEMENTARY NETWORK

5.1 Comprises residential areas where, due to the geographical conditions, experience has shown a need for treatment during prolonged freezing conditions.

5.2 The Supplementary Network is listed in the Policy document.

6. Definitions

6.1 Treatments include salting, gritting, and snow-ploughing, the application of any salt or equivalent solution, or any other process or activity that the Borough use in carrying out this

function. This treatment may be carried out either before the onset of ice or snow, "**pre-treatment**"; or after the formation of ice or snow has fallen, "**post-treatment**".

7. Footways/Footpaths and Cycleways

7.1 Footways/footpaths and cycleways will NOT receive pre-treatment. They would only receive attention when snow or ice is present and is likely to persist and as resources are available. The Priority with regards footways and footpaths is that precedence will be given to those in the Borough that carry the greatest number of pedestrians, that is in the main shopping and other commercial areas, outside Hospitals, schools, homes for the blind and other similar facilities. In addition, priority will also be given where there are areas with gradients greater than 10%.

7.2 In times of prolonged severe weather town centre surface carparks and multi storey carparks are treated by the supplier. List of car parks are provided in the data room.

8. Salt Bins

8.1 All salt bins are to be refilled at the start of each winter service season by the supplier. Refills will be required throughout the season to be undertaken by the supplier as directed by the service manager. All salt bin locations are noted in the winter service plan. Any damaged salt bins are to be replaced by the supplier at no additional cost.

Appendix 60/2 : Winter Service Vehicles Provided by The Supplier

1. The Supplier shall provide when instructed by the Service Manager the following:
 - i) Winter Service Vehicle Type B. 6m³ salting body with a 'low throw' salting mechanism on a 17/18 Tonne 4 x 2 or 4 x 4 chassis.
 - ii) Winter Service Vehicle Type C. 4m³ salting body with a 'low throw' salting mechanism on a 12 Tonne GVM 4 x 2 chassis.
2. All chassis to conform to current Construction and Use and European Regulations. Salting bodies to conform to BS1622 Class A1, calibrated to BS3247.
3. The Supplier shall at all times keep the Winter Service Vehicles in a roadworthy condition and in conformity with the vehicle manufacturer's recommendations.
4. The Supplier's Winter Service Vehicles shall be kept clean inside and out. They shall be fitted with a communication system as set out in Clause 6001AR of the specification and be fitted with a Global Positioning System which is compatible with and has the same features as the Employer's. The Employer's system records and downloads to the central database the following information:
 - i. GPS location
 - ii. Date and time
 - iii. Vehicle speed
 - iv. Spread rate
 - v. Spread width
 - vi. Salt sensor data
5. Should a Winter Service Vehicle not be operational for any reason then a replacement shall be provided within 24 hours.

6. Need to include some wording in regards to the sensor (not going to Wokingham until the 13th February, when more details can be provided)

Appendix 60/3 : Winter Service: Routine Driver Maintenance of The Employer's Winter Service Vehicles And Equipment

- A. *Before use on every occasion
 B. *After use on every occasion
 C. * On *Service Manager's* instruction

Tasks: Check/Top Up	A	B	C
Engine oil level	*		
Coolant level	*		
Fuel level	*		
Hydraulic oil level (Gritter tank)	*		
Steering	*		
Foot and Parking brake	*		
Condition of tyres	*		
Wheel nut security	*		
Window glass and mirrors	*		
Windscreen wipers and screen wash bottle	*		
Correct function of warning devices-horn	*		
All lights, indicators, reflectors, beacons	*		
Water, fuel, air, oil, hydraulic leaks	*		
Wash vehicle and clean inside of cab		*	
Lubricate all grease points marked in red		*	
Complete driver's vehicle report form for any defects or a nil return	*	*	
Report and log any accident damage	*	*	
Road test			*

When the vehicle is not used for more than eight consecutive days in the winter season the *Service Manager* may order a Road Test which shall include the tasks listed in columns A and B of the Routine driver maintenance table. The Road Test shall be run over a distance of 15 km with all systems working.



The Driver Operators' record book shall be completed each time the vehicle is used or road tested.

Appendix 60/4 : Winter Service: Employer's Salt Stores

Salt Store	Salt Barn Tonnes	External Store Tonnes

Appendix 60/5 : Winter Service: Salting Route Information

Salting Route Kilometres Total distance is from salt store back to salt store and does not include return visits for reloading.

Depot	Route No	Vehicle Capacity m ³	Salted Distance km	Total Distance km

RBWM Highway Services Contract 2024
Highway Maintenance and Capital Works Contract



Appendix 60/6 : Winter Service: Gritting Record Sheet

Instruction given By			
Time Given		Date Given	
Instruction given to		Order Number	

Date	Spread rate	Driver / Mate	Gritter No	Route No	Time Start in depot	Time Start Treatment	Time Finish Treatment	Time finish in Depot	Hrs	Defects



ROYAL BOROUGH OF
**WINDSOR &
MAIDENHEAD**
WWW.RBWM.GOV.UK

Royal Borough of Windsor and Maidenhead
Highway Services Contract

Highway Maintenance and Capital Works
Contract

Schedule 3
Lot 1 Service Specification



Table of Contents

Preamble to the Lot 1 Service Specification 5

Specification for Highway Works Lot 1 7

Schedule of Pages and Relevant Publication Dates 7

Appendix 0/1: Contract-Specific Additional, Substitute And Cancelled Clauses, Tables And Figures Included In The Contract..... 9

 Series 100 Preliminaries 13

170AR Contract Management and Administration 13

171AR Temporary accommodation on the Public Highway 13

172AR Care of Public Highways..... 13

173AR Accident Reporting 14

174AR Licensed or Easement Areas 14

175AR Protective Screening..... 14

176AR Disposal of Materials 14

177AR Condition Surveys Pre-Works 14

178AR Dimensional Accuracy 15

179AR As-Built Records..... 15

180AR Asset Management Requirements and Data Inventory 15

181AR Reference Publications 17

182AR Communications..... 17

183AR Supplier to be Courteous 17

184AR Customer Services 17

185AR Depot arrangements 18

186AR Other Works on the Network..... 18

187AR Receipt of Works Orders..... 18

188AR Access Platforms 19

189AR Abatement of Nuisance 19

190AR Protective Working Scaffold..... 20

191AR Restricted Working Hours 21

192AR Street Works Permitting 22

193AR Maintenance Teams 22

194AR Specification for Electronic Supplier Interface 29

195AR Vehicle and Clothing Branding..... 34

197AR Dealing with Claims from the public 34

198AR Audits 36

199-01AR Qualifications of Supervisors and Operatives 36



199-02AR Contract Management Information..... 36

199-03AR Sustainability, Biodiversity, and Environmental Requirements. 37

199-04AR Construction (Design and Management) Regulations 2015 42

199-06AR Special Provisions in relation to (RBWM Special provisions) 42

199-07AR Residual Liability for Claims and the Suppliers Responsibility 42

199-08AR Maintenance and Defects Liability Periods 43

 Series 200 Site Clearance 44

270AR Retention of Existing Surface Water Drains 44

272AR Property of Statutory Bodies 44

 Series 400 Road Restraint Systems (Vehicle And Pedestrian) 45

470AR Repairs and Renewals to Existing Road Restraint Systems 45

 Series 500 Drainage And Service Ducts 46

570AR Drainage Cleaning Schedules and Programming 46

571AR Position of Manholes, Gullies and Pipes 53

572AR Connections to Public Sewers 53

573AR Public Space Fountains in Town Centre. 574 AR Maintenance of Subway
Pumping Equipment 53

 Series 600 Earthworks 54

650AR Disposal of Materials 54

670AR Clearing of Existing Ditches 54

671AR Drainage Grips 54

672AR Backfilling to Disused Chambers and Cellars, Gully Pots and Service Boxes 54

673AR Excavation of Carriageway above Existing Structures 55

680AR Procedure for Evaluation of Carriageway Construction by Coring 55

681AR Procedure for Evaluation of Carriageway Construction by Trial Pitting 56

682AR Procedure for Evaluation of Ground Conditions by Trial Pitting 57

 Series 700: Road Pavements – General and Bituminous Bound Materials 60

770 AR Coloured Surfacing 60

771AR Surface Dressing 66

772 AR Carriageway Patching 76

773AR: Cold Applied Ultra-Thin Surfacing System (CAUTS) 77

 Series 1100: Kerbs, Footways and Paved Areas 81

1171AR: Timber Edgings 81

1172AR Preparation of Formation in Footways and Paved Areas 81

1173AR Footways and Paved Areas Overall Requirements 81

1174AR Resin Based Surface Treatment 82

RBWM Highway Services Contract 2024
Highway Maintenance and Capital Works Contract



1175AR Slurry Sealing	82
Series 1200: Traffic Signs	83
1212SR Road Markings	83
1270 AR Vertical Realignment of Traffic Signs	86
1271AR Cleaning of Traffic Signs	86
1272AR Vehicle Activated Signs (VAS)	87
Series 2000: Waterproofing for Concrete Structures	88
2001SR Waterproofing for Structures	88
2005SR Workmanship for Waterproofing Concrete Bridge Decks	89
2007AR Removal of Existing Waterproofing	91
2008AR Repairs to Damaged Waterproofing	92
2009AR Jointing to Existing Waterproofing	92
2010AR Anti-Graffiti Coating	92
Series 2600: Miscellaneous	93
2603SR Porous No Fines Concrete	93
2608AR Concrete Repairs	93
Series 2700 Accommodation Works and Works for Statutory Undertakers	96
2770AR The Re-Levelling of Utility And 3 rd Party Frames and Covers	96
Series 3000 Landscape and Ecology	99
3077AR Tree and Shrub Planting	99
3078AR Care of Roadside Planting	100
3079AR: Working Within a Site of Special Scientific Interest or Conservation Area	101
3080AR Chipping, Shredding and Composting of Organic Waste	101
Series 5000: Maintenance Painting of Steelwork (Highway Structures)	102
5070AR General	102
5071AR Surface Preparation - General Requirements, Methods, Standards and	102
5072AR Paint and Similar Protective Coatings	107
5073AR Testing of Paints	108
5074AR Metal Coatings	109
5075AR Testing of Metal Spray Coatings	111
5076AR Storage Requirements and Keeping Periods for Paints	111
5077AR Application of Paint	112
5078AR Procedure Trials	115
5079AR Access, Containment and Lighting	115
5080AR Painting of Metal Fences and Gates	117
5081AR Painting of Metal Fencing and Pedestrian Guardrail	118



Series 6000: Winter Maintenance 119

6001AR: Routine Winter Maintenance 119

Series 6100: Emergency Response..... 122

6101AR; Standby for Emergency Work 122

Series 6200: Composite Rates 124

6201AR Composite Rates 124

6202AR Reactive Maintenance Civil Works..... 129

Series 6300: Reactive Maintenance **Error! Bookmark not defined.**

6301AR Bituminous Material for Reactive Maintenance Repair**Error! Bookmark not defined.**

Series 8000 Time Charge 131

Series 9000 Restricted Working..... 136

Preamble to the Lot 1 Service Specification

The Specification in this contract will be separated into service lot specifications relevant to the individual Lot services, described in Schedule 2 Service Requirements and Schedule 3 Service Specification and in the suite of documents provided for this contract, and will be titled with reference to the specific Lots to ensure the documentation remains clear and consistent.

The Specification referred to shall be the 'Specification for Highway Works', published by the Stationery Office (formerly HMSO) as Volume 1 of the Manual of Contract Documents for Highway Works, as modified and extended by the following:

- (i) Appendix 0/1: Contract-specific Additional, Substitute and Cancelled Clauses, Tables and Figures;
- (ii) Appendix 0/2: Contract-specific minor alterations to existing Clauses, Tables and Figures;
- (iii) The Numbered Appendices listed in Appendix 0/3;
- (iv) Appendix 0/4 contains a list of the Drawings.

The relevant publication date of each page of the Specification for Highway Works is given in the Schedule of Pages and Relevant Publication Dates.

An Additional Clause as indicated by a suffix 'A' in Appendix 0/5 is an alteration originating from the Overseeing Organisation of Scotland, Wales or Northern Ireland. An Additional Clause as indicated by a suffix 'AR' in Appendix 0/1 is a Contract-specific alteration.

A Substitute Clause, as indicated by the suffix 'S' in Appendix 0/5 is an alteration originating from the Overseeing Organisation of Scotland, Wales or Northern Ireland. A Substitute Clause as indicated by a suffix 'SR' in Appendix 0/1 is a Contract-specific alteration.

A Cancelled Clause as indicated by a suffix 'C' in Appendix 0/5 is an alteration originating from the Overseeing Organisation of Scotland, Wales or Northern Ireland. A Cancelled Clause indicated by a suffix 'CR' in Appendix 0/1 is a Contract-specific alteration.

Insofar as any of the Numbered Appendices may conflict or be inconsistent with any provision of the Specification for Highway Works the Numbered Appendices shall always prevail. Additionally, Numbered Appendices 0/1 and 0/2 shall take precedence over Numbered Appendix 0/5.

Any reference in the Contract to a Clause number or Appendix shall be deemed to refer to the corresponding Substitute Clause number or Appendix listed in Appendix 0/1, 0/2 or 0/5.

Where a Clause is altered any original Table/Figure referred to in the Clause shall apply unless the Table/ Figure is also altered. Where a Table/Figure is altered any reference in a Clause to the original Table/Figure shall apply to the altered Table/Figure.

Where a Clause in the Specification relates to work goods or materials which are not required for the Works it shall be deemed not to apply.

Any Appendix referred to in the Specification which is not used shall be deemed not to apply.

Where a Clause in the Specification is prefixed by an # this indicates that this particular Clause has a substitute National Alteration for one or more of the Overseeing Organisations of Scotland, Wales or Northern Ireland. Substitute or additional National Clauses shall be used within countries to which they specifically apply and they are deemed to replace corresponding Clauses in the main text of the Specification as appropriate. The substitute National Clauses are located at the end of the relevant Series together with the additional National Clauses of the Overseeing Organisations.

Other than where references to the Overseeing Organisation are made in the context of the Overseeing Organisation granting statutory or type approvals, the roles and functions of the Overseeing Organisation shall be undertaken by Royal Borough of Windsor and Maidenhead Council (RBWM).

Where the Specification requires the provision of documentation to the Overseeing Organisation for statutory or type approval such documentation shall be provided to:

**Royal Borough of Windsor and
Maidenhead**
Town Hall, St Ives Rd, Maidenhead
SL6 1RF

If the Specification is used in conjunction with a Contract under which the *Supplier* is responsible for the design of any part of the Permanent Works, the delegation of the roles and functions of the Overseeing Organisation as stated in paragraph 12 above shall be amended as follows:

- i) If any agreement, consent or approval required to be obtained from the Overseeing Organisation impacts on the health and safety of the general public, the environment or any property or equipment not owned or operated by the *Supplier* or the Design Build Finance and Operate concessionaire, such agreement, consent, approval shall be obtained from RBWM.
- ii) Where the Specification provides for the Overseeing Organisation to require a test, waive the requirement for a test or alter testing frequency, the party to whom the Overseeing Organisation's roles and functions have been ascribed by paragraph 12 above shall exercise such decisions in accordance with the requirements stated in the Contract.

Specification for Highway Works Lot 1**Schedule of Pages and Relevant Publication Dates**

SPECIFICATION FOR HIGHWAY WORKS
Schedule of Pages And Relevant Publication Dates (Nov 09)

Series/Appendix	Page Number	Publication Date
000	1 to 3	May 2014
000	4 to 7F	February 2016
100	1 to 2, 4 to 9, 12 to 27F, WF1, N2 TO N11F	May 2014
100	3, 10 to 11, N1	December 2014
200	1 to 3F	February 2016
300	1	May 2001
300	4	November 2002
300	2 to 3, 5 to 6F	May 2008
400	1 to 6, 8, 10 to 13F	November 2007
400	7, 9	November 2008
500	23 to 24, 26	November 2004
500	28F	May 2005
500	2, 5, 27	November 2006
500	6, 25	November 2007
500	1, 4, 7 to 21	November 2009
600	1 to 77F, S1 to S4F, W1 to W4F, N1 to N5F	February 2016
700	1 to 36F, N1 to N6F	February 2016
800	1 to 31F	February 2016
900	2 to 5, 9 to 22, 24 to 26, 28 to 67F	August 2008
900	1, 6 to 8, S1F	November 2008
900	23, 27	May 2009
1000	1 to 45F	February 2016
1100	1, 4F	November 2004
1100	2, N1F	November 2006
1100	3	August 2008
1200	5	May 2001
1200	2 to 3, W1F	August 2003
1200	1, 14 to 16F	May 2004
1200	4, 9 to 11, 13	May 2005
1200	12	November 2006
1200	6 to 7, N1 to N4F	November 2007
1200	8	May 2008
1300	N2F	November 2003
1300	3 to 4	November 2004
1300	1, 5 to 10, 12F	November 2005
1300	2, 11 and N1	May 2006
1400	2, N1F	May 2001
1400	1, 3 to 9F	May 2006
1500	7	May 2001
1500	2	February 2003
1500	3 to 4, 8 to 11, 13	November 2004
1500	1, 5 to 6, 12, 14 to 17F	November 2006

RBWM Highway Services Contract 2024
Highway Maintenance and Capital Works Contract



ROYAL BOROUGH OF
**WINDSOR &
MAIDENHEAD**
WWW.RBWM.GOV.UK

Series/Appendix	Page Number	Publication Date
1600	1, 4 to 5, 9, 15, 17 to 18, 24 to 26, 29 to 31, 35, 38, 49F	March 1998
1600	2, 6 to 8, 10 to 14, 16, 19, 27 to 28, 32 to 34, 36 to 37, 39 to 42, 44 to 48	November 2003
1600	3, 20 to 23, 43	November 2005
1700	1 to 27F	December 2014
1800	1 to 35F	August 2014
1900	1 to 35F, S1 to S2F	August 2014
2000	1, 3 to 4F	May 2001
2000	2	November 2004
2100	1 to 2F	February 2016
2300	1	March 1998
2300	2 to 3F	May 2001
2400	1, 4, 7F	May 2005
2400	2	May 2006
2400	3, 5 to 6	May 2008
2500	1	May 2001
2500	2, 8, 11F	November 2003
2500	10	November 2004
2500	6 to 7, 9	May 2005
2500	5	May 2006
2500	3 to 4	November 2006
2600	1	March 1998
2600	2 to 4	November 2003
2600	5	November 2004
2600	6	May 2005
2600	7F	November 2006
3000	1, 4 to 7, 10, 12 to 17, 19, 22 to 27F	May 2001
3000	20	November 2004
3000	2 to 3	May 2006
3000	8 to 9, 11, 18, 21	May 2008
5000	1, 4 to 19F, S1F	May 2005
5000	2 to 3	November 2008
Appendix A	1 to 4F	May 2014
Appendix B	1 to 3F	May 2014
Appendix C	1 to 2F	May 2014
Appendix D	1F	May 2014
Appendix D (NI)	N1F	May 2014
Appendix E	1F	May 2014
Appendix F	1 to 52F	February 2016
Appendix G	Not used	
Appendix H	1	May 2004
Appendix H	2	November 2005
Appendix H	3	November 2006
Appendix H	4 to 9F	November 2008

Appendix 0/1: Contract-Specific Additional, Substitute And Cancelled Clauses, Tables And Figures Included In The Contract

List of Additional Clauses, Tables and Figures

Clause No Title

SERIES 100: PRELIMINARIES

170AR	Contract Management and Administration
171AR	Temporary Accommodation on the Public Highway
172AR	Care of Public Highways
173AR	Accident Reporting
174AR	Licensed or Easement Areas
175AR	Protective Screening
176AR	Disposal of Materials
177AR	Condition Surveys Pre-Works
178AR	Dimensional Accuracy
179AR	As-Built Records
180AR	Asset Management Requirements and Data Inventory
181AR	Reference Publications
182AR	Communications
183AR	Supplier to be Courteous
184AR	Customer Services
185AR	Depots Arrangements
186AR	Other Works on the Network
187AR	Receipt of Works Orders
188AR	Access Platforms
189AR	Abatement of Nuisance
190AR	Protective Working Scaffold
191AR	Restricted Working Hours
192AR	Street Works Permitting
193AR	Maintenance Teams
194AR	Specification for Electronic Supplier Interface
195AR	Vehicle and Clothing Branding
197AR	Dealing with Claims from the Public
198AR	Audits
199-01AR	Qualifications of Supervisors and Operatives
199-02AR	Contract Management Information
199-03AR	Sustainability, Biodiversity and Environmental Requirements
199-04AR	Construction (Design and Management) Regulations 2015
199-06AR	RBWM Special Provisions
199-07AR	Residual Liability for Claims and the Suppliers Responsibility
199-08AR	Maintenance Periods and Defects Liabilities

SERIES 200 SITE CLEARANCE

270AR	Retention of Existing Surface Water Drains
272AR	Property of Statutory Bodies

SERIES 400 SAFETY FENCES, SAFETY BARRIERS AND PEDESTRIAN BARRIERS

470AR Repairs and Renewals to Existing Road Restraints Systems

SERIES 500 DRAINAGE AND SERVICE DUCTS

570AR Drainage Cleaning Schedules and Programming

571AR Position of Manholes Gullies and Pipes

572AR Connection to Public Sewer

573AR Public Space Fountains in Town Centre

574AR Maintenance of Subway Pumping Equipment

The Supplier shall be responsible for maintaining subway pumping equipment for use during severe weather and flooding events. Subway pumping equipment is used to keep pedestrian walkways clear of flooding.

SERIES 600 EARTHWORKS

650AR Disposal of Materials

670AR Clearing of Existing Ditches

671AR Drainage Grips

672AR Backfilling to Disused Chambers and Cellars, Gully Pots and Service Boxes

673AR Excavation of Carriageway above Existing Structures

680AR Procedure for Evaluation of Carriageway Construction by Coring

681AR Procedure for Evaluation of Carriageway Construction by Trial Pitting

682AR Procedure for Evaluation of Ground Conditions by Trial Pitting

SERIES 700 ROAD PAVEMENTS – GENERAL AND BITUMINOUS BOUND MATERIALS

970AR Coloured Surfacing

971AR Surface Dressing

972AR Carriageway Patching

973AR Cold Applied Ultra-Thin Surfacing System (CAUTS)

SERIES 1100: KERBS, FOOTWAYS AND PAVED AREAS

1171AR Timber Edgings

1172AR Preparation of Formation in Footways and Paved Areas

1173AR Footways and Paved Areas Overall

1174AR Resin Based Surface Treatment

1175AR Slurry Sealing

SERIES 1200: TRAFFIC SIGNS

1212SR Road Markings

1270AR Vertical Realignment of Traffic Signs

1271AR Cleaning of Traffic Signs

1272AR Vehicle Activated Signs (VAS)

SERIES 2000: WATERPROOFING FOR CONCRETE STRUCTURES

2001SR Waterproofing for Structures

2005SR Workmanship for Waterproofing Concrete Bridge Decks

RBWM Highway Services Contract 2024
Highway Maintenance and Capital Works Contract



2007AR	Removal of Existing Waterproofing
2008AR	Repairs to Damaged Waterproofing
2009AR	Jointing to Existing Waterproofing
2010AR	Anti – Graffiti Coating

RBWM Highway Services Contract 2024
Highway Maintenance and Capital Works Contract



SERIES 2600: MISCELLANEOUS

2603SR Porous No Fines Concrete
2608AR Concrete Repairs

SERIES 2700: ACCOMODATION WORKS AND WORKS FOR STATURORY UNDERTAKERS

2770AR Re-Levelling of utility and 3rd party frames and covers

SERIES 3000: LANDSCAPE AND ECOLOGY

3077AR Tree and Shrub Planting
3078AR Care of Roadside Planting
3079AR Working Within a Site of Special Scientific Interest or Conservation Area
3080AR Chipping, Shredding and Composting of Organic Waste

SERIES 5000: MAINTENANCE PAINTING OF STEELWORK (HIGHWAY STRUCTURES)

5070AR General
5071AR Surface Preparation - General Requirements, Methods, Standards and Definitions
5072AR Paint and Similar Protective Coatings
5073AR Testing of Paints
5074AR Metal Coatings
5075AR Testing of Metal Spray Coatings
5076AR Storage Requirements and Keeping Periods for Paints
5077AR Application of Paint
5078AR Procedure Trials
5079AR Access, Containment and Lighting
5080AR Painting of Metal Fences and Gates
5081AR Painting of Metal Fencing and Pedestrian Guardrail

SERIES 6000: WINTER SERVICE

6001AR Routine Winter Service

SERIES 6100: EMERGENCY RESPONSE

6101AR Standby for Emergency Work

SERIES 6200: COMPOSITE RATES

6201AR Composite Rates
6202AR Reactive Maintenance Civil Works

SERIES 6300: REACTIVE MAINTENANCE

6301AR Bituminous Material for Reactive Maintenance Repair

SERIES 8000: TIME CHARGE

SERIES 9000: RESTRICTED WORKING

Series 100 Preliminaries

170AR Contract Management and Administration

This is as detailed in the Service Information and shall be developed as part of the Suppliers Annual Plan, the Service Plan and the Mobilisation Plan

171AR Temporary accommodation on the Public Highway

The Supplier shall not site any temporary offices, workshops, mixing plants or depots for the storage of plant or materials within 100 metres of any habitable property.

The Supplier shall obtain the written approval of the Service Manager to the siting of any offices, workshops, mixing plants, depots for the storage of plant or materials within the Work Area. Approval will not be unreasonably refused provided that the proposed location:-

- (i) does not interfere with or limit the existing Highway sight lines;
- (ii) is over 3 metres from the nearest traffic lane;
- (iii) does not pose a hazard to any existing highway structure;
- (iv) if within 4.5 metres of the nearest traffic lane, is protected by a safety fence which shall be erected in accordance with the 400 series of the Specification for Highway Works;
- (v) is not within the clearance zone of a safety fence.
- (iv) on, under or within 10 metres in plan of any part of any bridge or similar structure

Any waste materials to be recovered from any site shall be removed as soon as reasonably practicable. The Supplier shall ensure that each site is cleared of all Task related matter, clean and tidy upon Task completion.

The Supplier must allow for use of the Site by the Client and others at all times, ensuring all health and safety, site rules are adhered too by all site users.

The Supplier shall make all necessary arrangements with the Local Authority, including planning permission etc., for the provision of site compounds and materials storage areas, which shall be to the approval of the Service Manager.

Where the Supplier sites his compound on private land he shall provide the Service Manager with a copy of the written consent of the legal landowner.

The supplier shall seek approval from the Network management team before any work commenced or items placed on the highway.

172AR Care of Public Highways

Subject and without prejudice to the Conditions of Contract the Supplier shall:-

- i) take all reasonable measures necessary to avoid damage to the public highway;
- ii) be responsible for all repairs necessary as a consequence of his failure to comply with sub-clause (i) of this Clause and shall submit to the Service Manager for approval his proposed method of repair.

Sections of carriageway closed during the course of the works shall be cleaned of all deposits which have built up since the closure before they are re-opened to traffic.

173AR Accident Reporting

The Supplier must keep records of all reportable accidents, diseases and dangerous occurrences as required by Regulation 7 of the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013 (RIDDOR 13).

The Supplier shall provide to the Service Manager monthly, full details of all such reportable accidents, diseases and dangerous occurrences recorded.

In order to provide consistent records of Suppliers performance in terms of accident frequency rates per 100,000 hours worked, the Supplier shall provide to the Service Manager monthly, the total hours worked by his employees during the course of the contract and within the Defect Date as appropriate. Further information on this method of calculating accident frequency rates can be found in HSG65 'Successful Health and Safety Management' published by the Health and Safety Executive.

174AR Licensed or Easement Areas

The Supplier shall occupy the licensed or easement areas, for the minimum period of time necessary to carry out the required work in these areas and shall not use the areas for any other purposes without the prior written permission of the Service Manager.

Immediately upon completion of the works within these areas, the Supplier shall remove all debris, temporary fencing, hard-standing and surplus material. Field areas shall then be deep rooted, ploughed and disc harrowed in preparation for cultivation.

Any land drains disturbed shall be replaced and any fences, hedges and gates damaged or removed shall be repaired or replaced. Should any topsoil have been rendered unsuitable for cultivation this shall be replaced from an approved source.

175AR Protective Screening

1.5 metre high protective screens shall be provided when working at bridge locations to prevent debris falling from the bridge. The screens are to be securely fixed and stiffened such that they are not affected by wind.

176AR Disposal of Materials

In disposing of all unacceptable and surplus materials (other than those classified as Class U2 as defined in Clause 601.3 of the Specification from the site, the Supplier shall comply with the specific requirements for disposal described in Appendix 1/70.

In disposing of all unacceptable and surplus materials classified as Class U2 (as defined in Clause 601.3 of the Specification) from the site, the Supplier shall comply with the specific requirements for disposal as detailed in the Works order and supporting method statement and risk assessment.

177AR Condition Surveys Pre-Works

The Supplier is responsible in advance of all works on site, other than emergency maintenance and pothole filling, to undertake a suitable and thorough condition survey of the existing asset within the immediate surroundings and vicinity of the works. The Condition Survey will be sufficiently detailed and have suitable records in order to defend

any future claims arising through potential damage or trespass on any adjacent property or land. The cost of any such survey shall be deemed to be included within the Supplier's pricing schedule and overhead. Methodology shall be detailed in the Supplier's Service Delivery Plan for approval and acceptance by the Client.

178AR Dimensional Accuracy

Before commencing any part of the Works, the Supplier shall check that all co-ordinates, levels and dimensions shown in the Works order are consistent. He shall check and satisfy himself that the various parts fit satisfactorily together and in relation to existing physical features. Checking shall be commenced sufficiently in advance of construction to allow for corrections and approvals. The Supplier shall be fully responsible for correctness and neither the Client nor the Service Manager accepts any liability whatsoever for any errors therein.

179AR As-Built Records

In order to comply with the Construction (Design and Management) Regulations 2015, the Supplier shall provide a set of marked up working drawings, indicating the changes incorporated in the Works. Where project design information does not include drawings, an updated description and details of any changes made during the works will be required for recording purposes. Examples of changes to be indicated: diversion of services (including work by statutory undertakers), amendments to surfacing thickness, changes of materials, and anything which may affect the future maintenance or demolition of any part of the Works.

180AR Asset Management Requirements and Data Inventory

General Requirements

The Supplier will support the Client in capturing and recording data in support with Lot 3 and the Client Highway Asset Management Plan. The objective of these requirements is to allow the Client to maintain records required for asset management in the most efficient method. For example, the Supplier makes amendments to the inventory using an electronic interface that automatically updates the asset management system.

The Supplier will be responsible within the first 6 months of the contract to collect all the existing Asset Inventory information for all aspects of the Highway network. The Supplier will work jointly with RBWM and suppliers to agree the most effective means to collect this asset information and the format and outputs required by all parties.

All asset data collected needs to be uploaded by the supplier into the RBWM's asset management system.

When a scheme is completed on site, the supplier is required to update the asset management system to reflect this. All complete scheme designs are to be uploaded on to the Borough's Asset management system by the supplier.

The Supplier is invited to propose efficient methods of achieving the objectives.

Activity-Specific Requirements (this list is not inclusive and final)

RBWM Highway Services Contract 2024
Highway Maintenance and Capital Works Contract



Activity	Objective	Example
Resurfacing	The Supplier shall provide sufficient information to locate and record the material used	Material used Start and finish chainage. Cross sectional position. Temperatures. Batching location. Weather
Surface Dressing	The Supplier shall provide sufficient information to locate and record the material used.	• Works Order Job Number • Material used. • Start and finish chainage • Temperatures.
Lining	The Supplier shall provide sufficient information to confirm successful installation.	• Works Order Job Number • Start and finish chainage • Photograph confirming • Successful positioning
Signage	The Supplier shall provide sufficient information to confirm successful installation or removal.	• Works Order Job Number • Easting and Northing • Photograph confirming • Successful positioning
Drainage cleaning	Supplier shall provide information and GPS location information on the cleansing of the gullies etc, and report back if there are any blockages etc or dig outs required or cleaned successfully.	• Date of visit • Easting and Northing • Issues including Blockages or Dig Outs • Duration of clean
Safety barriers and Fencing	Confirm where and where activity has occurred	• Works Order Job number. • Shape file of the position. • Type • Activity – Install / Remove / Replace Tensioning
Safety defect repair	Records of repair due to safety inspections are Robust	Date, Type of Asset replaced.
Vehicle maintenance	Client's vehicle records are maintained	Update of current vehicle records using job cards
Winter Service	Supplier shall provide information and GPS. location information on the winter service vehicles and report back if there are routes that have not been treated. Plot all gritting routes on map so it can be uploaded onto the borough website. Produce the annual winter maintenance plan	• Date of visit • Easting • Northing • Issues: roads not treated on route. • Duration of operation. • The annual plan is to be on the RBWM website before the start of each winter service period.

These requirements will also support a BIM enabled environment and allow future decision making and investment choices through a Strategic Asset Management Framework

In addition, the asset inventory will be updated with attributes that reflect best practice as provided under HMEP approach to Asset Management guidance.

181AR Reference Publications

The reference publications referred to in Appendix D of the Specification for Highway Works and amended by or extended in Appendix F shall be deemed to be the latest publications applicable at the date of tender invitation unless described otherwise in the Contract.

182AR Communications

The Supplier shall have a computer software system compatible with the 's Asset Management software system to comply with Clause 194AR. The Supplier shall also provide and maintain all software and hardware appropriate to manage the receipt of Works Orders and the transfer of Data, as detailed in the Service Information.

The Supplier shall lease or own a communication system capable of immediately contacting all their staff, including site operatives if instructed by the Service Manager.

All Fleet shall carry a means of communication and Gritting Vehicles and Gully cleansing fleet shall as a minimum carry GPS and Satellite tracking systems.

183AR Supplier to be Courteous

The Supplier will be deemed to be representing the Client whilst carrying out works in connection with this Contract and shall therefore ensure that all staff and operatives are courteous to members of the public and always demonstrate a high standard of conduct.

184AR Customer Services

The Supplier will be responsible for communicating and distributing notification to household and/or business premises in relation to Term Programme of Works Order Highway Works that has a potential to cause disruption and inconvenience. This could be through face-to-face discussion, letters or emails. All correspondence relating to the works from residents, or third parties will be dealt with by the supplier. The service manager to check these before circulation. This will be detailed in a Communication Plan ensuring efficient and cohesive processes and procedures with Client and other service providers.

Advance warning signs will be used for large projects. Wording to be agreed with network management team.

The Supplier will be responsible for all service requests related to activities that have been delegated by the Service Manager. These could include road closures, event management, and or customer complaints, as well as ceremonial events.

Notwithstanding the requirements of the service, the Supplier will conduct his engagement as if part of the Borough, providing integrity and courtesy, including all supply chain partners.

The Supplier will engage with the Client in consideration of any Policy and or Statutory function-based enquiries, which the Client would not expect the Supplier to deal with as of right.

A Communications Plan will be developed jointly between both parties before the Contract commences, which will be updated annually unless agreed otherwise. The Communication Plan will be reviewed during Operational and Strategic Board Group meetings to develop greater efficiencies as the contract develops.

185AR Depot arrangements

The Client owns the depots listed in the Service Information.

The Supplier must use the depot area rented/leased to them in accordance with the conditions detailed in both the Agreement of Depot use and as detailed in the Schedule 2 Service Requirements under Schedule 10 Property Provision.

The Supplier shall undertake the security duties described in Service Information, Terms and Conditions and the Heads of Terms.

In order to receive the Service Manager's orders/instructions and to discuss the programme of work a Supplier's shall be in attendance at the depot each day between 0730 and 1800 hours (unless otherwise agreed by the Service Manager) Monday to Friday inclusive.

Outside normal working hours the Supplier shall ensure an effective means of providing emergency cover is provided to the satisfaction of the Service Manager. Outside normal working hours the Supplier shall respond to the standby officer or other authorised personnel for emergency works.

The Supplier shall coordinate and communicate effectively with other Client service providers who also have use of the above-mentioned Depots. Depot management responsibilities are detailed in the Property Provisions and Lease Agreements will be required prior to use, management, and occupation of Client facility.

186AR Other Works on the Network

The Supplier is advised that there will be other Suppliers working for the Highway Authority on the network during the period of the contract. The Utility services also employ Suppliers to carry out work on the network and these works need to be co-ordinated. Street works co-ordination meetings are held once a week to discuss the various programmes of works, which the Supplier must attend or provide any relevant information. There will also be a Network Management meeting held at the start of each project or works programme that the Supplier will be expected to attend with the Client.

187AR Receipt of Works Orders

The Works Orders will have a date for Commencement and time for Completion. The Supplier shall acknowledge the time and date that the Order was received.

The date and time on the Works order generated by the Clients asset management software shall be deemed as the time an Order was received by the Supplier. A works programme will be provided and managed by the Supplier as detailed in Schedule 2, Specification Requirements.

When the risk assessment, safety plan, traffic management, streetworks permit, start date and period for completion are confirmed, the work must be started within the timeframe stipulated by the Works order and Client HSIM and HMMP, unless otherwise instructed by the Service Manager.

188AR Access Platforms

Access platforms shall be portable, mobile, prefabricated tubular scaffold systems capable of being erected to various heights. They shall comply with BS1139 and be fitted with full width boards, toe boards, access ladders, trap doors, handrails, stabilisers and brakes if fitted with wheels.

Access points shall be secured at all times to prevent unauthorised access.

Mobile elevated work platforms may also be used in accordance with PUWER 1998 and LOLER 1998 regulations. The Supplier must obtain all relevant licences and permit authorisation from the Network management team.

Any Operative using access platforms must be suitably qualified and trained and a full method statement detailing approach and safety precautions will be provided to the Service Manager in advance of any works starting.

All access mobile platforms shall be under licence and subject to permitting under the TMA requirements and Local Authority licencing rules. Before any scaffolding is erected, an agreement must be entered with RBWM through their permitting team.

189AR Abatement of Nuisance

Subject and without prejudice to the Terms and Conditions the Supplier shall:-

- (i) Advise the Service Manager of the measures he proposes to take to minimise disturbance to the general public and to the owners and occupiers of property adjacent to the works.
- (ii) Take measures to minimise airborne nuisance from fine material particles during construction of the Works. Such measures may include :-
 - (a) Dampening of surfaces at the source of such nuisance to prevent its formation
 - (b) Protection of the surface by the placing of a protective layer of surface dressing to Clause 919 or bituminous spray to Clause 920
 - (c) Provision of a protective layer of acceptable material which meets the requirements of Class 2A or 2B.
 - (d) Provision of screens where the source of the nuisance is a consequence of the Supplier's grit/sand blasting or water jetting operations.
- (iii) Ensure that existing highways used by the Supplier or any sub-Suppliers or suppliers of materials or plant, and any new diversion ways which are part of the Works or in the vicinity of the Works are kept clear of all dust, mud, dirt and other debris which emanate from the Works.

- (iv) Cleaning of highways (including footways) shall be affected immediately by manual sweeping and removal of debris, or, if so directed, by the Service Manager, by mechanical sweeping and cleaning equipment, and all dust, mud and other debris shall be removed entirely from the road surface. Additionally, if so directed by the Service Manager, the road/footway surface shall be hosed or watered using suitable equipment and no further construction operations will be permitted until the cleansing is completed to the satisfaction of the Service Manager.
- (v) The Supplier shall take appropriate measures to ensure that no material arisings from highway works is allowed to enter any gully, drain or sewer.
- (vi) The Supplier shall take all steps necessary to limit vibration caused by plant and machinery used on site.
- (vii) No machine will be permitted which uses a system of dropping a heavy weight, whether power-assisted or by gravity, for the purpose of breaking up paving or structures.
- (viii) Sites of Special Scientific Interest, or other Designations, including Heritage Sites:
 - (a) The Supplier shall exercise all care and diligence when carrying out contract works to avoid any pollution occurring to the land adjacent to the sites.
 - (b) The Supplier shall ensure that no unnecessary damage occurs to the land adjacent to the site because of the movement of plant and personnel around the site. No litter or surplus materials may be deposited temporarily or permanently on or adjacent to the site.

190AR Protective Working Scaffold

Protective Working Scaffolds shall be provided along the edges of bridge decks to provide protection to areas below and to provide working areas at deck level to allow safe working areas for the modifications to the deck.

The design of the scaffolds shall be carried out by the Supplier and in this connection the Supplier shall submit to the Service Manager the certification required under the Conditions of Contract. The design shall include provision for the scaffold loading upon the component parts of the bridge decks.

Scaffolds shall be cantilever scaffolds supported entirely from the bridge deck. No part of the scaffold shall project below the level of the deck soffit.

The requirement of Clause 117 of the Specification relating to traffic safety and management shall be complied with when considering all aspects of the provision of the scaffold. Attention is drawn to the requirements of Clause 117, Appendix 1/17 where it concerns the requirements for erection mobility, required extent and movement of the scaffold and for the provision of a Temporary Safety Fence Barrier and other measures.

All tube scaffolding provided for the works shall comply with the requirements of BS 5973: 1993 and shall be adequate in all respects for the purpose intended as set out in Clause 117, Appendix 1/17 and in this Clause.



All tube scaffolding work is to be carried out by a recognised scaffolding company which is to be accepted by the Service Manager, under the immediate supervision of a competent person with adequate experience of this type of work.

The safe working load of the scaffold shall where applicable be displayed on a notice attached to the scaffold, clearly visible to all operatives. The working load required shall be determined by the Supplier to suit the working method, material handling and any approved scaffold design.

Repairs to the membrane shall be by patching with an approved compatible membrane applied in accordance with Specification Series 2000.

Scaffolds shall be fully decked in close boarding and the decking shall be sealed to the face of the edge beam. The outer edge of the decking, including end returns, shall be fully close boarded to a height of 1.0m above the decking with a further 1.0m of opaque screening. All boarding and screening shall be securely fixed and the screening shall be stiffened to prevent it being affected by wind.

Scaffolds shall be completely sealed so as to contain ALL debris in the scaffold. The profile of the scaffold shall be such that ALL debris is easily accessible for debris clearing operations.

Debris shall not be allowed to accumulate on scaffold and shall be cleared daily or more frequently as required.

Scaffolds and ancillaries spans shall be inspected daily to ensure full security of all components. No work shall take place until any remedial work necessary has been carried out.

Details of scaffolding system and screening, including calculations, shall be submitted to the Service Manager for his approval at least 21 days before work commences.

Work may proceed unhindered once the scaffolding and screening has been erected to the satisfaction of the Service Manager.

All scaffolding shall be under licence and subject to permitting under the TMA requirements and Local Authority licencing rules. Before any scaffolding is erected, an agreement must be entered with RBWM through their permitting team.

191AR Restricted Working Hours

For the avoidance of doubt and notwithstanding all other programme and traffic management requirements contained within this Contract Specification and suite of documents, the following shall be the agreed restricted hours applied to this contract unless otherwise agreed by the Service Manager and accepted by the Supplier;

1. Monday to Friday	09:00 to 15:30
2. Monday to Friday	20.00 to 06:00
3. Saturday	07:30 to 16:00
4. Saturday	20:00 to Sunday 06:00
5. Sunday	09:00 to 15:00
6. Sunday	20.00 to Monday 06.00
7. Statutory Holiday	

Restricted Hours will apply to any routes detailed in the RBWM Traffic Sensitive Routes document (reviewed and updated annually) and anything described in individual Works Orders by the Service Manager – i.e. works outside schools.

For all Works Orders instructed under this contract the Supplier shall take every opportunity to minimise the impact that any restricted hours have on the delivery programme. This should include innovative phasing of works, working off-site / off-site fabrication, etc.

192AR Street Works Permitting

RBWM is a Permit Authority coordinating and managing all highway activity under the New Roads and Street Works Act 1991 (NRSWA).

The Supplier will be wholly responsible and be required to submit permit applications for ALL works in line with the requirements of this contract, without exception through the permitting system. The Client will support these applications, but the Supplier will demonstrate an independent approach and be considered like any other organisation requiring road space and openings. The Supplier shall be responsible for the costs associated with managing and implementing this. All permits must be submitted in accordance with NRSWA requirements and for works requiring multi way signals TM drawings must be submitted with the permit application.

The Supplier will be required to maintain a system complying with the latest Electronic Transfer of Notices EToN specification as published by the Department for Transport, compatible with the systems used by RBWM for the management of permit applications. RBWM uses Confirm for Permitting and the Supplier will need an effective interface that will be agreed by the Service Manager if he proposes to use an alternative system.

All road closures (unless emergencies) require a lead in time of 3 months. The supplier is required to submit all closures including supporting information and diversions through the RBWM website which will be agreed by the RBWM network management team.

The Supplier shall, under instruction from the Service Manager, collect abandoned traffic management cones, barriers and remove from the highway.

193AR Maintenance Teams

Introduction

The Supplier will provide Maintenance Teams (MTs) when ordered by the Service Manager. They will consist of labour, vehicle, plant, tools, equipment, traffic management and materials to attend to various reactive and planned highway and bridge routine maintenance activities including emergency repair or make safe. Maintenance Teams will not be given jobs that will take longer than two working days to complete.

Any MT will be considered over and above the core service reactive maintenance requirements and will be provided by the Supplier on request and receipt of a Works Order from the Service Manager. This includes any traffic management or equipment to support other suppliers or stakeholders in carrying out activities. This will be provided by the Supplier on request and receipt of a Works Order from the Service Manager and will be rechargeable under Option E or C.

Response

MT's are to be part of the Supplier's rapid response to highway repairs and will carry out regular clearing and cleaning activities on all bridges. Out of hours Emergency Response by the Supplier is detailed within Series 6100 within the Contract. MT's will be managed by the Supplier and be instructed accordingly.

The Supplier must ensure that all work to be carried out by MT's is covered by the Supplier's Health and Safety Procedures set out in the Supplier's Plan. Where MT's are instructed to do planned, or reactive work which involves excavation, the Supplier will provide STAT packs (Statutory Undertakers Records) including all buried services, local authority asset and utility searches.

No work is to be carried out unless covered by the Supplier's developed Health and Safety Procedures set out in the Supplier's Plan.

In an emergency and when instructed to carry out safety defect repairs the Supplier will; provide the relevant Utilities service drawings, undertake the work after assessing on site the hazards and risks involved and will implement a Safe System of Work.

The Supplier must use cat and genny scanning equipment to locate buried services and where necessary, ground radar scanning can be used.

Labour

All operatives, supervisors and staff shall be trained in safe excavation and traffic management to at least the following standards:

- (i) HAUC (NRSWA) Certificates for Operatives:
- (ii) Unit 001 - Location and avoidance of underground services
- (iii) Unit 002 - Signing, lighting and guarding
- (iv) Unit 003 - Excavation in the highway
- (v) HAUC (NRSWA) Certificates for Supervisors:
- (vi) Unit 010 - Monitoring signing, lighting and guarding
- (vii) Unit 011 – Monitoring excavation in the highway

Each MT is to consist of one lead operative and one general operative unless otherwise specified. At least one member of each MT is to hold the relevant driving

license to drive/operate the combinations of vehicles and equipment required to carry out instructed from the *Service Manager*.

a) *Lead Operative*

- (i) Must have "considerable technical experience" and capable of working on own initiative.
- (ii) In possession of an Operative's Registration Card issued by SWQR (Street Works Qualifications Register).
- (iii) Trained and certified to use all the tools, plant and Equipment routinely used by the specified Service Manager.



- (iv) Capable of carrying out risk assessments.
- (v) Capable of setting out traffic management and making assessment of sites, etc

b) *General Operative*

- (i) Experience of the Civil Engineering industry,
- (ii) Trained and certified to use all the tools and Equipment routinely used by the specified Service Manager.

Typical Composition of Maintenance Teams

Maintenance Teams shall be agreed by the *Service Manager*, but typically should be made up as follows to meet the requirements of the Service information and the services (and volume of services) to be provided under the contract:

(i) MT Type 0 (Fix and Repair for Minor Highways patching and similar – seasonal i.e., Winter months – Nov to Feb)

Two operatives, upto 5T GVW vehicle with hydraulic crane, tail lift, tipping body and towing attachment.

750mm signs/cones for single lane working as layout SC3 priority system of the Traffic Signs Manual Chapter 8.

Pedestrian barrier	12 metres
Plate compactor or small roller up to 110 kg	1 No
Concrete saw hand held including blades and dust suppression	1 No
Power Pack (compressor) including 15 m of hose with Breaker and tools	1 No
Cable Locator (CAT&GENNY)	1 No
Weed strimmer	1 No
Small Hot box, and or containment for Bituminous Materials	1 No

(ii) MT Type 1 (Minor Highways and Repairs)

Two operatives, (upto 3.5T, upto 5T and upto 7.5T GVW) vehicle with hydraulic crane, tail lift, tipping body and towing attachment.

750mm signs/cones for single lane working as layout SC3 “Give and take” system of the Traffic Signs Manual Chapter 8.

Pedestrian barrier	12 metres
Plate compactor or small roller up to 110 kg	1 No
Concrete saw hand held including blades and dust suppression	1 No
Power Pack (compressor) including 15 m of hose with Breaker and tools	1 No
Cable Locator (CAT&GENNY)	1 No
Weed strimmer	1 No

(iii) MT Type 2 (Major Highways and or Street Lighting)

Two operatives, (upto 7.5T, or 17T GVW) vehicle with part tipping body, hydraulic crane lift, tail lift, 2m3 twin chamber, gas heated material container and towing attachment.

750mm signs/cones for single lane working as layout SC3 "Give and take" system of the Traffic Signs Manual Chapter 8.

Pedestrian barrier	12 metres
Plate compactor up to 110 kg	1 No
Concrete saw hand held including blades	1 No
Power Pack (compressor) including 15 m of hose with breaker and tools	1 No
Cable Locator (CAT&GENNY)	1 No

(iv) MT Type 3 (Structures and Bridges)

Two operatives 7.5T tipper vehicle with towing attachment.
750mm signs/cones for single lane working as layout SC3 "Give and take" system of the Traffic Signs Manual Chapter 8.

Weed strimmer's	2 No
Chainsaw 25" bar	1 No
Man-mounted weed killer spraying device	1 No
5 gallon water container filled with water	1 No
Small axe	1 No
Bow saw	1 No
10" adjustable wrench	2 No
Pair long handled lopping shears	1 No
Pedestrian barriers	12 Metres
Flashing traffic warning lamp unit including batteries	10 No
Simple access platform 0-3 metre height, 3m2 working area	1 No
110v portable jet washer, 360l/hour including suitable generator and water bowser	1 No

(v) MT Type 4 (Road Marking Hand Lining Team)

Two operatives, upto 15 tonnes GVW Screed Vehicle.
750mm signs/cones for single lane working as layout SC3 "Give and take" system of the Traffic Signs Manual Chapter 8.
Screed Shoes, 50mm, 100mm, 150mm and 200mm.

MT's types 0, 1, 2, and 3 will be provided with hand tools – to include:

Wheelbarrow, hand punner, spades, shovels, pick axes, saws, chisels, trowels, sledge hammer, lump hammer, buckets, drain rods, brushes, spanners, wire cutters, hand drill (rechargeable) and bits, pop rivet set, spanners, screwdrivers, pliers etc, socket sets, adjustables, manhole keys/lifter, spirit level, kerb line, tape measure, measuring wheel, bunting, lopping shears, grass cutting shears, hook, bow saw, kerb lifting tools, scissor shovel, drain tracing dye, electrical testing equipment and associated tools.

Type 4 Teams will be provided with hand tools – to include; Tape, measuring wheel, buckets, 3m straight edge, chalk.

Work to be Carried Out

The types of work to be undertaken by Maintenance Teams may include, but not be restricted to, the following:

MT Type 0 (Fix and Repair)

- Minor carriageway patching and pothole filling
- Minor renewal works ie kerbs, gullies etc
- Repairing damaged street furniture, traffic signs and erecting new ones
- Generally making safe in-advance of MT Teams Type 1, 2 and 3

MT Type 1 and 2 (Highways and Street Lighting)

- Minor carriageway and footway repairs including minor patching, kerbing, paving and ironwork.
- Clearance operations following road traffic accidents and spillages (non hazardous).
- Repairing damaged street furniture, traffic signs and erecting new ones.
- Cleaning signs and bollards, etc.
- Replacing faulty street lights
- Installation and replacement of new street lights, columns and connections
- Drainage investigations and repairs and clearing floods.
- Removal of unauthorised signs on the highway.
- Emergency road closures and diversions.
- Siding out footways and carriageways.
- Cutting back and removing dangerous vegetation covering traffic signs/signals and branches, vegetation overhanging/obstructing the highway which is non core.
- Highway Defect to be made safe by repair or protection.
- Assisting with Winter Maintenance operations using the Client's specialist road gritting vehicles where necessary.
- Fencing and barriers.
- Event Management and special events support

MT Type 3 (Structures and Bridges)

- Establishment of a clear area within a distance of 3m from the faces of all elements of structures to establish a maintenance zone as in (a) to (h) below as instructed and where not covered under existing Luton BC Parks and Environment contract delivered by in-house DLO resource.
 - Strimming of long grasses, nettles and weeds within the maintenance zone
 - Cutting down saplings, small trees up to 450mm girth, shrubs, gorse brambles and bushes and roots removed within the maintenance zone.
 - Cutting back to the face of the structure all trees, saplings, shrubs, gorse brambles, ivy and bushes growing from any structural element or revetment. If so instructed the roots are to be dug out and damage made good.
 - Trimming foliage in boundary hedges/ fences within 3m of the structure.
 - Lopping of tree branches overhanging the structure.
 - Felling of trees within the maintenance zone as instructed.
 - Removal of vegetation and accumulated dirt and debris from paved revetments, verges, channels, plinths and footways associated with the structure.
 - Repair pointing, paving, pitching, bituminous or concrete surfaces damaged during the course of vegetation removal.
- General minor repair or make good/re-bed blockwork &/or brickwork and minor concrete or brickwork repairs, replacing individual bricks as required.
- Replace missing or broken timber post/ rail if and when required/ instructed.
- Generally complying with good practice for management of the Countryside e.g. Countryside and Rights of Way Act 2000 unless directed otherwise by the Service Manager.
- Removal of debris from structure inverts, aprons and in watercourses immediately upstream and downstream of the structure.
- Application of weed killer when instructed by the Service Manager (meeting the approval of the Environment Agency for use in and around natural watercourses)
- within the maintenance zone taking care to avoid direct contamination of watercourses and canals (refer to 3002 of the Specification).
- Checking and tightening of nuts/bolts in metal parapet systems as clause 2209AR.
- Cleaning out of structure weep pipes and drainage outfalls, including bearing shelves if accessible. All gullies within 6 metres of each corner of the structure. Bridge aqua-drain units to be cleaned out (by hand/small raking tools and accumulated debris removed and disposed off site) and jetted with clean water; in accordance with clause 521 of the specification.
- Safety inspection as instructed by the Service Manager. Serious defects are to be reported to the Service Manager immediately. All significant defects are to be reported to the Service Manager at the end of each working day.

MT Type 4 (Road Marking Hand Lining Team)

Retrace and renewal of hand screed road markings and lines, lay new installations of road markings and lines, replace or re-rubber reflective studs.

Disposal of Arisings

The Supplier shall provide skips at the depot in which only arisings from Maintenance Team activities shall be placed. When full the contents of the skip shall be disposed to a licensed tip in accordance with the Method of Measurement (series 600 paragraph 39).

Working Hours

MT's shall work Monday to Friday 0800 hours to 1800 hours. Where teams are instructed to work additional hours then the rates will be subject to a percentage enhancement as per details pricing details in Schedule 4 of this document suite. MTs are not to work more than the standard week without the Service Managers prior approval.

On call arrangements will only be used when instructed by the Service Manager. On these occasions the MT will be required to supplement the arrangements for standby for emergency works. A workforce rota may be required to effectively manage working time factors.

Communications

MT's will be equipped with at least as a minimum a device to enable them to receive instructions from and report and upload information to the Suppliers representative and Service Manager. Vehicles are to be fitted with a GPS based system allowing tracking and display on a map-based web page, in real time. The Supplier's representative and the Service Manager will be able to see the location of any vehicle while it is at work.

Reporting

Information about each job is to be recorded as soon as the job is complete via a remote access system using a mobile electronic device that is compatible with the Clients Asset Management System page and show the job number, geographical position, start/finish date/time, additional plant, materials, team identification, structure safety inspection report and progress. The teams will also make a digital photographic record of the works and transfer these images onto the Boroughs Asset management and job ordering system and respond and close all enquires as necessary once the job is complete. The information is to be accessible by the Supplier and the Service Manager and in a format acceptable to the Service Manager.

Additional Plant or Equipment

Any additional plant or equipment instructed for use by the MT will be valued in accordance with the contract price list.

Clients Materials

Where MTs are issued with Client's materials these will be issued free of charge and are not to be subject to any overhead or other charge by the Supplier.

Cleanliness Image

MT's vehicles are to be kept clean and tidy inside and out. Operatives' overalls are to be clean and tidy.

Initial Numbers of MT Teams

Initially the Supplier is to supply the following number of MT's (to be agreed with the Service Manager) and to be validated against work programme delivery.

- 1x Type 0 (seasonal)
- 4x Type 1, 2
- 1x Type 3
- 1x Type 4

Numbers and types of Maintenance Teams may change during the contract as the quality of the network changes and the demand for small works varies accordingly. The Supplier will make his own assessment of the need and size of Gangs, based on the annual programme and service plan.

194AR Specification for Electronic Supplier Interface

These provisions are described in the Service 2 Service Requirements and are supplemented with the works ordering methodology at the end of Clause 194AR.

General Provisions

The key requirements of any ICT and Software interface are to enable the efficient management of the contract. All systems must support RBWM's overarching Highways Asset Management Strategy and Framework;

Supporting a robust asset inventory and providing easily accessible data that can be represented in a number of formats. All software and ICT must provide a seamless link between RBWM management and financial systems and be suitable for ongoing development and improvement through a future integrated asset management system that enables investment decision making.

Summary of System Requirements

RBWM Asset Management System

- Confirm asset management software
- Confirm Street lighting
- Confirm Web Based Mobile Software
- Agresso
- RingGo
- QGIS – GIS
- Map16
- Street Manager
- AutoCAD

RBWM Interface Requirements

RBWM Highway Services Contract 2024
Highway Maintenance and Capital Works Contract



- Email
- Broadband and Fibre
- Telephony
- Microsoft Teams and Video Conference facilities
- Confirm software
- Agresso

Financial Management

- RBWM finance management system – Agresso
- Providers finance system
- Works ordering system – Confirm (See note at end of Clause 194AR)

Operational Systems

- Weather forecasting using Vaisala & Meteo Group and or similar systems as detailed in the Winter Policy.

Performance monitoring and reporting

- Web based reporting tools
- Dashboard reporting using Office 365 and Microsoft systems (via Open Database)

Other Systems

- Autodesk
- AutoCAD Maps / Civils 3D and BIM
- Collaboration tools
- Quality management systems

General Software and Hardware requirements:

- ICT facilities, including all hardware and software to enable the ongoing and day to day management and delivery of the Highways Maintenance Contract.
- Lifecycle Planning Software linked to and interfacing with Confirm, Map16 or equivalent
- Software for Highways Management, Streetworks, and Bridges Management is Confirm
- The system will be used by both the Client and the Provider.
- RBWM will have systems admin control over shared systems where RBWM retains the licence or software responsibility.
- Remote access will be provided to the Supplier to the areas of the systems that they require.
- The Supplier may electronically link their own management system to Confirm in order to reduce/negate "double keying", but all costs will be met by the Supplier.

- Mobile handheld devices will be used to capture / update data whilst on site and transfer back to the system. This could include inspections, defects, job updates, asset data capture etc.
- A workflow management system will be introduced that enables electronic works orders to be generated – currently this is provided through Confirm Works Management module accessed remotely via Terminal Services.
- The Supplier will budget for 10 training or consultancy days per year for the systems. These are for the use by both parties to the contract.
- The Supplier should consider as part of efficiency savings or investment, a business case to move towards an all-encompassing Asset Management System providing intelligent investment decision making and being able to capture and display asset inventory in a GIS basis. It would be expected that the majority of the costs for this would be covered through future efficiency savings.

Confirm Asset Management System as adopted by RBWM.

The Supplier shall have remote access to and use the Clients' Asset Management System however access rights will be restricted. The Client will also be using the same system including for Streetworks Co-ordination and Asset Data Capture.

The Supplier shall provide all appropriate ICT hardware, software and consumables that it requires within its own premises. The Supplier shall protect their ICT network and hardware so as not to place the Borough network at risk.

This shall consist of:

- PCs either standalone or as part of a network;
- Laptop's and or tablet devices
- Printers;
- Broadband connection

The Supplier shall not make any unauthorised copies of the data held within the Confirm Asset Management System. The Supplier will comply strictly with the terms of licence agreement together with the RBWM system security procedures. The Supplier shall maintain confidentiality of all usernames and passwords supplied to the Supplier by RBWM and shall report any suspected security breaches to RBWM System Administrator.

Prior to the commencement of the Contract period the Supplier's computer hardware software and telecommunications proposals shall be subject to agreement by the ICT and Service Manager at RBWM to ensure that full compatibility and security measures are in place. The Supplier shall be responsible for maintenance, including any maintenance contracts with third-party companies and all associated costs required for the operation of the ICT hardware and telecommunication connections.

Where the Supplier's PCs are running remote access software (Cisco etc) connected to the Internet the Supplier shall provide a hardware or software firewall for protection from unauthorised access from the Internet. The Supplier shall also be satisfied that the telecommunications solution provides adequate protection to their own network from unauthorised access from the RBWM network. This will be at the Supplier's own expense.

The Supplier shall supply all computer consumables and ancillary supplies as required to support the Highway Maintenance computer system software. This will be at the Supplier's own expense.

Confirm System Requirements

The Supplier's ICT hardware will be capable of accessing the Confirm system through RBWM remote portal using Cisco VPN, or similar remote access. The Client shall provide the Supplier with access to the required network area in order for them to use the system functionality for maps and linked documents.

Reports

The majority of the printed output from Confirm are generated using agreed report files. User content, for example; works tickets, standard letters and local performance indicators can be added and modified at any time. All reports files have the extension .RPT.

Pictures

Confirm has the ability to hyperlink to any external file; these are normally stored centrally to provide visibility from all Employers. The Client would like to see innovative approaches regarding data capture and "before/after" photographic evidence during routine, reactive and cyclic works.

Network

A system will be agreed to facilitate automatic updating of files and software by the Clients Admin team, which may require agreed file formats and structure.

Asset Inventory, Data Collection and Management

The Supplier shall provide support to RBWM by assisting with data capture in relation to any asset management. This will include photographic evidence to support any asset observations made.

System Preparation and Links

The Supplier is expected to provide a statement of their proposed hardware and telecommunications link solution at the time of tender. This will form part of the tender evaluation process. If the Supplier is proposing to link the Confirm system to their own proprietary system, then they should also provide a detailed outline case supporting this proposal.

ICT Staffing, Training and Competency

The Supplier shall have in place a competent and computer literate ICT representative who shall be responsible for the day-to-day operation of the Supplier's own computer systems. The ICT representative shall provide front-line support for Supplier's staff and be able to liaise with ICT staff from RBWM and its ICT providers. At the Suppliers expense, a competent workforce shall be maintained for the duration of the Contract.

Loss of Continuity

Prior to the commencement of the Contract, contingency arrangements shall be agreed between the Supplier and RBWM. This is to ensure the continuity of the Highways Maintenance Service in the event of failure of the computer system. Any failure or breakdown in the Supplier's ICT hardware and telecommunications that results in a loss of access to the computer system for whatever reason shall be reported to RBWM immediately. Similarly, any failure of breakdown in RBWM computer hardware and software that results in loss of access to the computer system will be reported to the Supplier.

Electronic Mail

The Supplier will be provided e-mail accounts on the RBWM internal e-mail system but is also required to provide an e-mail facility to communicate with RBWM and residents. All costs incurred in this process by the Supplier shall be deemed to be included in the Supplier's tendered office and overhead rates.

Mobilisation

During the contract mobilisation period, the Supplier shall submit the following proposed solutions to the relevant Clients team:

- Proposed remote access to Confirm software system
- Proposed remote access to Map16
- Proposed link between Confirm and Suppliers proprietary software
- Proposal for Site Asset Mobile system during the lifetime of the contract and handheld device replacement / integration
- Support for Lifecycle Asset Planning Software
- Proposals for improving programme efficiency for maintaining Assets such as Drainage within the first 12 months of the contract
- Supplier's proposed contingency plan for maintaining the services in the event of loss of access to the computer system

RBWM will;

- Provide advice and assistance to the Supplier for the setting up and configuration of the telecommunications link and remote access solution both before and during installation
- Operate, administrate and maintain the Maintenance computer system asset management system.
- Operate, administer and maintain the Citrix Terminal Server and associated IIS server
- Configure, test and verify connectivity to the Maintenance computer system in conjunction with the Supplier's IT representative staff once the telecommunications link has been installed
- Administer the Confirm software acting as Systems Administrator for all parties

Works ordering system – Confirm

The following is an outline of the current requirement for Works Ordering – this approach and system will be developed jointly between RBWM and the Supplier at the commencement of the contract and continually improved during the deliver stages. The following is provided as a guide to the approach that RBWM has previously agreed and works efficiently.

The claims are approved for payment by the Service Manager and a payment certificate is generated. This lists each claim and also contains a summary by expenditure code. The payment certificates are submitted automatically via e-system. A VAT invoice is raised to cover the payment certificate (or a number of payment certificates). The Service Manager signs the payment certificates and a summary by expenditure is entered into the Creditors system and payment is made by BACS. The details are automatically transferred from the Creditors system to the General Ledger. Creditors and the General Ledger are part of RBWM's Financials software suite.

The Supplier will develop and implement a system that delivers the above as at least a minimum, in agreement with the Service Manager

The Supplier shall attend joint meetings to discuss Target Cost developments for Yr 2 Routine Maintenance activities following the initial asset validation period to ensure efficiency and accurate programming for Yr 2 onwards. This will include annual drainage cleansing and winter maintenance.

195AR Vehicle and Clothing Branding

The Supplier's works vehicles must be liveried indicating that they are employed by RBWM, the precise details will be agreed at the inaugural meeting. All vehicles must be kept clean.

All vehicles employed by the Supplier for the execution of the works shall be equipped with a GPS having the facility for the Service Manager to request records at any time as circumstances may require.

The Supplier's employee's and sub-Supplier's personal protective equipment and clothing, e.g. jackets and shirts; must be 'badged' indicating that they are working for RBWM, the precise details will be agreed at the inaugural meeting. All employees' personnel protective equipment must be kept clean and in good repair.

197AR Dealing with Claims ~~from the public~~

Insurance/claims matters

~~On occasion, RBWM will request the Supplier to supply information to enable RBWM to investigate and defend claims made by members of the public. Such information may include:~~

On receipt of a claim RBWM will request from the Supplier the information required to enable RBWM to investigate and defend claims made by members of the public.

Within ten (10) working days of the request the Supplier will provide, via the provided insurance claim template an audit trail to evidence actions/chronology for claims e.g. before and after photos of all repairs, Confirm reports and dates/times and nature of any responses to customer enquiries.

The Supplier will then respond within five (5) working days to any subsequent clarification questions to be addressed.

The Supplier will have access to our system to ensure their actions on the highway are recorded.

The Supplier shall nominate a lead contact for claims matters and scheduled insurance claims meetings.

RBWM as highway authority remains in control of handling third party claims. The Supplier shall provide all requisite information as set out above to enable RBWM to do this but will be liable for any compensation or payments awarded if the following situations occur (this list is not exhaustive):

- Maintenance or repair not completed within the agreed standard timescales or works order instruction. E.g., Seven (7) day, 28-day, three (3) month orders;
- Integrity of repair not completed to the standards stipulated in this specification;
- Repairs undertaken do not withstand the guaranteed maintenance period.

Negligent working or control of a site on highway including traffic management, barriers and safeguarding.

Cost Recovery

The Supplier shall support the Client in gathering the required information following 3rd party damage to Highway Assets. The information requirements listed below will be provided by the Maintenance Team attending the incident and making safe. Information includes:

Currently ten working days from request to provision of full details of actions taken, chronology of events and before and after photos to evidence damage and repair.

Vehicle information such as Registration, recovery company.

The Supplier shall also provide costs for repair works, to include items such as traffic management and a breakdown of costs including timesheets, materials, labour, invoices for specific items. Any Sub-contractor or specialist contractor works will also require a full breakdown of costs.

The Supplier shall nominate a lead contact for claims matters and scheduled insurance claims meetings.

198AR Audits

In order to satisfy the Client's Audit process, the Supplier will be required to include before and after photographs of the works, and in addition the Client will arrange for annual coring in line with clause 680AR to spot check 5% of the self-certified works. The Supplier will be required to make good any defects found during these audits at his own expense.

The Supplier will be required to have in place a Quality Assurance scheme that ensures that works are regularly audited, by an independent auditor, of all elements of the Supplier's processes.

Regular internal and external audits will be carried out by RBWM through the course of the contract. The Supplier will be expected to provide all appropriate information to support the client. This will be provided within the agreed timescales.

199-01AR Qualifications of Supervisors and Operatives

The Supplier shall provide evidence that all operatives and supervisors are competent persons, or that he is working towards ensuring that operatives and supervisor are competent.

Copies of certificates held by all operatives and supervisors employed on the contract in compliance with this clause shall be made available at the commencement of the contract and at other times when new operatives and supervisors are employed and when renewed.

For any site where traffic management is required, there must be at least one person on site competent in the operation and adjustment of temporary traffic management apparatus in line with Traffic Signs Manual Chapter 8 of the Traffic Signs Regulations and General Directions 2016 (TSRGD) and NRSWA. The name of the person identified as being the competent person shall be made available prior to the commencement of the work.

The Supplier will be required to ensure that sufficient and suitably qualified supervisors are employed to ensure that works are accurately set out to line and level. The Service Manager may arrange for auditing of the accuracy of the setting out at any time. Any discrepancies discovered will be corrected at the Supplier's expense.

199-02AR Contract Management Information

The Supplier will be required to provide the Service Manager with sufficient information regarding the operation of the contract to enable the Service Manager to ensure that the Supplier's performance is meeting the specification and to report progress to the Client.

The information required will be subject to regular review and revision during the term of the contract.

The Supplier will record the information monthly to the operation group and provide a written report quarterly to the Service Manager and the management board, including a summary report (2pg) or dashboard for the monthly Operations meeting. All reporting and information requirements will be detailed in the Suppliers **Service Delivery Plan**.

The information required will include:

- i) Key Performance Indicators – as specified in the Service Information for each area of the service provision.
- ii) Health & Safety – a summary of issues and accident statistics relating to incidents recorded during the works on the contract.
- iii) Environmental – a summary of audit initiatives and innovations; details of incidents recorded during the works on the contract.
- iv) Quality – a summary of quality audits, initiatives and innovations.
- v) Works Information – a summary of the number of Works Orders completed, and Works Orders outstanding during the period.
- vi) Continuous Improvement – a summary of initiatives and examples to demonstrate continuous improvement.
- vii) Customer Enquiries
- viii) Escalation log – with focus on behaviours and interpersonal issues to be resolved
- ix) Updated Contract Risk Register
- x) Business continuity plan.

199-03AR Sustainability, Biodiversity, and Environmental Requirements.

In response to National Government and European legislation, RBWM have developed procedures and policies which are committed to reducing the impact of providing their services on the Environment.

The Supplier will be expected to contribute to assisting the Client in meeting any targets that have been set for;

- i) reducing waste to landfill
- ii) helping make roads safer and give communities better access to services and jobs
- iii) value and improve the environment
- iv) reducing and adapting to the impacts associated with climate change

General Sustainability Specifications

The Supplier shall develop a Sustainability Action Plan in its performance of the service, to ensure it uses working methods, equipment and materials that will improve the sustainability of delivering the contract requirements, with particular emphasis on the following sustainability objectives:

- i) reduced energy use and CO2 emissions
- ii) reduced transport distances
- iii) waste reduction
- iv) increased recycled content
- v) whole life cost consideration, including preparing for the change in the climate and the associated changes to the natural environment.
- vi) reducing the impact on the community i.e. noise and disruption
- vii) value and improve the environment to enhance biodiversity, trees etc and the wider landscape
- viii) conserve / protect and enhance the historic environment

The Supplier shall work with the service manager to identify innovative methods and materials and actively encourage their use in schemes that will lead to improved delivery of the sustainability objectives of the contract.

The Supplier shall encourage their own supply chain to help them meet the sustainability objectives of this contract.

The Supplier shall produce a materials sourcing plan for the items covered under the Schedule of Rates.

The Supplier shall comply with the Clients procedures and guidelines for working with protected species. (The Client will provide details to the successful Supplier).

The Supplier shall be required to attend and provide training on sustainability issues including; carbon management reporting, actions to reduce carbon footprint e.g. greener driving, sustainable procurement, biodiversity enhancement, site protection etc.

Before work commences it is the responsibility of the Supplier to ensure all personnel are aware of all protected sites, sensitive habitats or species of biodiversity interest, the measures that are being adopted to protect these and that suitable temporary barriers have been put in place before work starts, to restrict the working area. (Details of sites will be provided to the successful Supplier).

The Supplier will comply with any instructions issued by the Client for works in or adjacent to European or nationally designated sites (SACs, Ramsar Sites, SSSIs etc.), unless totally in the carriageway (including working area, vehicle access/parking and storage of soil or materials), the Clients Natural Environment Team should be contacted for advice at least 6 weeks in advance of the programmed start date, or as soon as possible if works are unplanned.

For works in or adjacent to local sites (Wildlife Sites, Regionally Important Geological Sites), unless totally in the carriage way (including working area, vehicle access/parking and storage of soil or materials), the Clients Natural Environment Team should be contacted for advice as soon as possible in advance of the programmed start date. The Supplier will ensure that habitats / species are protected and that any licences for works are obtained before work commences. (Details of sites will be provided to the successful Supplier).

In emergencies that threaten the safety of people necessary works should be dealt with immediately and in the most appropriate manner. If an SSSI is involved then Natural England must be informed as soon as it is practicable to do so.

Minimise all damage caused by the movement and storage of vehicles, plant and materials. Any spillages including dressing materials or spoil onto roadside vegetation should be carefully removed.

Seeds plants and trees of native species of local provenance, suited to the location, should always be used in preference to exotic species or garden varieties of native species. If local material cannot be sourced, then the nearest suitable native stock may be acceptable. Mixtures should be based on natural plant communities if possible and should come from local and British sources only. For wildflower grasslands, avoid importing topsoil but if this cannot be avoided make sure it is of low nutrient status and does not contain injurious weeds or non-native species. More robust mixes may be needed in the first metre of major routes where there is a high risk of damage by salt. No tree, daffodil or other inappropriate (non-native) planting on flower-rich grassland verges. Newly created visibility splays in rural settings should be sown with an appropriate conservation meadow mix rather than an amenity seed mix. Amenity seed

should never be used, except in urban areas. Verges should be re-seeded with the agreed seed mix.

Rather than using a flail to trim hedges, consideration should be given to using a circular or other appropriate saw, especially for older thicker material. Bird nesting season is March to August inclusive, but birds can nest outside these months, so even between September to February, it is important to check for active nests prior to cutting. If works necessary for public safety in nesting season, check for nests if possible and leave area around nest uncut if safety allows. Uncut vegetation can then be trimmed when the birds have fledged. Native species of local provenance, suited to the location, should always be used in preference to exotic species or garden varieties of native species. If local material cannot be sourced then the nearest suitable native stock may be acceptable. Exotic species may be used in exceptional circumstances, e.g., a restoration of a long-established ornamental hedge or certain urban situations amidst hard landscaping. Advice on appropriate species should be sought from the Client if not already specified. Do not attach signs, waymarks or fence cross members or wires on to trees (if this can be avoided). Use posts instead or attach to other structures such as walls, fences, gates, or stiles.

Troublesome common ragwort concentrations should normally be cut. This is best carried out before it flowers (i.e. from June onwards). Regular cutting each year should inhibit ragwort within 5 years. If the number of plants is not too great it may be pulled out by hand. In extreme cases herbicide applications may be the only option and should be done with handheld back pack units which can be used to spot or area treat. If herbicide is to be used, it will need to be agreed in advance with the tree department. The Supplier is responsible for ensuring personnel carrying out ragwort and other injurious weeds control (e.g. Japanese Knotweed and Himalayan Balsam) are fully trained to identify the weeds as opposed to similar beneficial wild plants. (The Clients Natural Environment Team can provide training.). If identified, please notify the tree team before work is carried out. All works relating to noxious weeds should only be undertaken by competent personnel and in accordance with DEFRA approved codes of practice.

Ditches, Grips, trenches, and similar excavations will be dug by hand where trees and hedge roots might be damaged. Install temporary protective fencing for sensitive wildlife verges and other sensitive biodiversity features. Existing ditches with good aquatic flora or fauna, will be cleared out in the winter months, ideally gradually in small sections over 2 to 6 years. Silt should not be dumped on (conservation road verge) species-rich grassland. Reinstatement should restore the natural soil profile and surface levels existing prior to work commencing. Uneven surfaces can create hazards for walkers and horse riders.

All schemes that may impact on the localised water cycle will refer to flooding prevention plans and consult flood risk management (FRM) at the design stage and incorporate adaptation to extreme events.

The Supplier will ensure that maintenance works do not affect historical / archaeological features / sites, through repairs, salt spreading, signage etc.

Reduce Energy Use and CO2 Emissions

Machinery

The Client has a duty to reduce energy use and CO2 Emissions and therefore needs to ensure that vigorous measures are taken to deliver these reductions. These measures include the implementation of stringent improvements in the utilisation of cleaner, more fuel efficient vehicles and machinery used in operating this contract. This involves setting minimum emissions standards and regular performance monitoring to ensure compliance with contractual requirements.

Using vehicles and machinery which are more energy efficient and powered by alternative fuels or hybrid and EV technology contributes to reducing the impacts of climate change and will assist in the implementation of any action plans.

From the commencement of the contract, it is a requirement that the Supplier (or sub-Supplier) ensures that all non-road mobile machinery (NRMM) powered by engines used in the provision of the service are both CE certified and marked to comply with a minimum of Tier 3A Emissions regulations as delayed in Directive (2004/26EC).

Thereafter, the Supplier must undertake to replace NRMM as and when necessary to meet the more stringent emissions standards required by Tier 3B regulations. All NRMM owned, hired or operated by the Supplier (or sub-Supplier) in the provision of the Service meet this minimum standard by 31 March 2017.

In addition to the requirements in 1, 2 and 3 the following minimum emissions standards must be met by 31 March each year. The Client requires that the Supplier adheres to and monitors the following profile and provides a report providing evidence of compliance each year and for subsequent years against any new legislation.

2017 – 2018 30% Tier 3B/70% Tier 4

2018 – 2019 100% Tier 4

Vehicles

All vehicles (including sub-Suppliers) used in the provision of the Service must comply with Euro V Standard. Any new vehicles (including sub-Supplier vehicles) as part of the fleet manufactured after 2014 must be Euro V Standard, and after 2018 Euro VI. Performance against this schedule will be monitored as a Key Performance Indicator.

Monitoring Performance

The Client requires the Supplier to submit a report annually by the end of April for each vehicle used the following data:

For Vehicles;

- i) Vehicle type
- ii) Registration number / Fleet Number
- iii) Euro classification
- iv) Fuel type
- v) Mileage/Kilometres
- vi) Litres fuel used

For machinery;

- i) Machinery Type
- ii) Plant Number
- iii) Fuel Type

RBWM Highway Services Contract 2024
Highway Maintenance and Capital Works Contract



- iv) Hours of operation
- v) Tier rating
- vi) Litres fuel used

The Supplier will provide an annual CO2 emissions statement outlining savings made and how they have been achieved.

Reduced Transport Distances

The Client wishes to reduce energy use and vehicle journeys related to the provision of the Service. The Supplier is expected to work with the Client to find methods to reduce the volume of transport required in the provision of the Service, for example, optimising winter service route treatment and working collaboratively to reduce distance travelled over winter service periods.

Waste Reduction

The Supplier shall:

Work with the Borough's existing waste management partners to consider options for sustainable waste management and reducing the amount of waste to landfill. This should also include schemes to recycle or re-sell waste arisings and surplus materials from sites, including supporting local community projects.

Implement Site Waste Management Plans throughout the contract period that comply with regulatory requirements (where applicable) and include in such Plans, project-specific targets for waste recovery and reused and recycled content (see Increased Recycled Content below) and for waste reduction;

A reduction in the overall amount of waste sent to landfill by recovering / reusing material arising from demolition, construction and excavation materials in the first year of the contract and subsequent years will be a Key Performance Indicator. The Supplier and the Client will agree a stretching target for Year 5 and subsequent years.

Keep all horticultural waste out of landfill, treating it via existing networks of composting sites. Exceptions to this rule are if pernicious weeds, such as Ragwort, cannot be treated in hot composting, then they should be sent to landfill or anaerobic digestion associated with energy creation.

Shall provide a proposal and implement a facility for recycling gully waste through a sustainable method, rather than sending to landfill by 1 April 2026

Increased Recycled Content

The Supplier will be expected to focus on reducing the use of virgin aggregates primarily through increasing the use of secondary and recycled aggregates.

Wherever possible at least 15% of the total value of materials used should derive from recycled and reused content in the products and materials selected. Where 15% is not appropriate an alternative figure will be agreed at the pre-contract meeting and detailed on the Sustainability and Innovation Form.

Whole Life Considerations

The Client wishes to design schemes on the basis of whole life cost considerations and encourages the Supplier to consider whole life cost measures and the use of alternative materials and processes in the contract. Whole life cost comparisons should include the cost of acquisition, operation and disposal for reactive, routine and minor planned works.

The Supplier should advise the Client and collaborating/partnering service providers of alternative materials to those listed in the Schedule of Rates that will meet performance specifications and lower whole life costs. Where the use of alternative materials are agreed, details should be recorded on the Sustainability and Innovation Form for the scheme.

The Supplier will advise the Client of whole life cost savings, innovation and sustainability opportunities that will improve the contract sustainability objectives. Details should be recorded on the Sustainability and Innovation Form, listing any variations that have been agreed by both parties to improve the sustainability objectives.

The Supplier should take into account the longevity of materials based on the changes anticipated to the natural environment as a result of the impacts of climate change. This includes but not limited to, hotter drier summers with temperature peaks and warmer wetter winters but with periods of extreme cold.

Reducing Impact on the Community

Reducing the disruption to traffic using the highway network is a high priority. The Supplier shall take adequate steps to avoid unnecessary delays to motor vehicles, buses, cyclists and pedestrians to ensure compliance with the Traffic Management Act 2004.

The Supplier is encouraged to work with the Client to identify work methods and materials that will reduce impact on the community through disruption, noise and vibration.

199-04AR Construction (Design and Management) Regulations 2015

The Supplier will take on the role of Principal Contractor. The Supplier shall demonstrate and detail how the organisation will discharge the duties and responsibilities required to comply with CDM 2015 regulations. The Supplier must have access to competent advice, expertise and experience to ensure all duties are undertaken adequately and successfully.

199-06AR Special Provisions in relation to (RBWM Special provisions)

The Supplier will be aware of the provisions under Appendices 1/16 and 1/17 for the restrictions and requirements relating to works in and around Windsor and Maidenhead such as Events. The Supplier will programme his works such as to avoid any conflict or restrictions in conjunction with the Emergency Services, planning and Streetworks co-ordination.

199-07AR Residual Liability for Claims and the Suppliers Responsibility

██
██
██

For the avoidance of doubt the Supplier will be liable for any compensation or payments awarded if the following situations occur (this list is not exhaustive):

- Maintenance or repair not completed within the agreed standard timescales or works order instruction. E.g., Seven (7) day, 28-day, three (3) month orders;
- Integrity of repair not completed to the standards stipulated in this specification;
- Repairs undertaken do not withstand the guaranteed maintenance period;
- Negligent working or control of a site on highway including traffic management, barriers and safeguarding.

The Service Manager may ask for evidence that any claim has been managed and resolved equitably for all parties. Resolution of claims will feature as part of the Contract Risk Register and the Performance Management framework.

199-08AR Maintenance and Defects Liability Periods

Notwithstanding the provisions and clauses in the Conditions of Contract, this Specification, and the Service Information; including product warranties and guarantees, the Supplier will be responsible for maintaining all projects and schemes post completion date for a minimum period of at least 12 months – which shall constitute the “Maintenance Period”. Additionally, the Service Manager may instruct through individual Works Orders, any variance on the maintenance period (longer / shorter) – these are expected to be the exception.

The Supplier will also be expected to deliver a right first-time approach to all works, but in all cases will be expected to complete any remedial works, agreed snagging lists and any defects within a period of 1 month from the agreed completion date. Payment of final accounts may be affected if outstanding works and defects are not completed within the agreed timescales, and the Service Manager may withhold payment as necessary until works are completed.

Series 200 Site Clearance

270AR Retention of Existing Surface Water Drains

Except where shown on the Drawings, or where directed by the Overseeing Organisation, the existing surface water drainage, gullies and manholes shall be left undisturbed and undamaged.

Where existing surface water drains, gullies and manholes are to be abandoned, the Supplier shall maintain these until such time as the complete system is superseded. If temporary diversions are necessary to accommodate the Supplier's method of working or programming, these shall be approved by the Overseeing Organisation and carried out at the Supplier's expense.

272AR Property of Statutory Bodies

All Statutory Bodies' apparatus which becomes redundant, shall, unless the Service Manager notifies the Supplier to the contrary, remain the property of the respective Bodies and shall not under any circumstances become the property of the Supplier or of any of his employees or supply chain.

Series 400 Road Restraint Systems (Vehicle And Pedestrian)

470AR Repairs and Renewals to Existing Road Restraint Systems

Repairs and renewals to existing restraint systems shall comply with the following:

- i) Series 400 of the Specification.
- ii) For Proprietary Systems – the manufacturer's recommendations.
- iii) Non-Proprietary System types - Tensioned Corrugated Beam, Un-tensioned Corrugated Beam, Open Box Beam, Rectangular Section Hollow Beam shall comply with the Highways Agency's Highway Construction Details/Non Proprietary Safety Barrier Systems Drawings Revision 1 July 2005 (NPSBS) and the manufacturer's recommendations.
- iv) Non-Proprietary Systems shall also comply with the guidance given in BS 7669-3: 1994 (Vehicle Restraint Systems Part 3 – Guide to the installation inspection and repair of safety fences) subject to the following:
 - a) Reference to the Engineer shall be replaced by the Service Manager.
 - b) Reference to bolts, screws, nuts, and washers shall be as detailed in the NPSBS.
- i) The Service Manager or Client Representatives will confirm by Works Order the repairs and renewals to be carried out to any restraint system. The Works Order will detail:
 - i) The location of the system and the extent of the repairs and renewals to the system.
 - ii) The components to be removed and disposed of, in line with the Supplier's waste management plan and disposed off the Network.
 - iii) Components to be taken down and set aside or taken to a secure store by the Supplier for re-use.
 - iv) Components to be taken up or removed from the Supplier's store and re-used in the repair.
 - v) New components to be supplied and installed in the repair. New bolts, screws, nuts and washers shall be supplied and installed by the Supplier for the new components.

The Supplier shall cut down grass and other vegetation from and around the restraint system and move the arising off site before carrying out any repairs and renewals.

Series 500 Drainage and Service Ducts

570AR Drainage Cleaning Schedules and Programming

Requirements for Highway, Public Space and Road Gully Maintenance.

The Supplier will be responsible for maintaining the Highway network free from flooding and ensure that routes are passable during severe weather events. In Town Centre areas the Supplier will prioritise areas with heavy footfall and ensure that routine cyclical works are effectively and efficiently programmed and managed.

The Supplier is responsible for maintaining the 26,000 approximate highway gullies, associated connections and associated structures such as Toad Ladders. The Supplier is also responsible for clearing drainage surface water drainage ditches, culverts and waterways that are owned by the Borough and directly associated or could directly impact on the Highway Network.

All gullies defined within the service information should be kept to a condition up to the connection of the local water authorities main surface water system, to ensure the necessary performance target is achieved, to enable the draining of the highway to a condition where there is not standing water on the highway.

The Supplier will be required to record all cleans and collect asset data on behalf of the Client, logging or recording any drainage infrastructure defects, condition, status, utilising intelligent sensors on the boom, that links directly to Map 16 database that will display, inventory data – including adding data such as drainage ducts are mapped to map 16 whenever work is carried out, date of clean, and the condition of drain This should include photos. The asset information will be shared with Client systems to allow asset management database to be updated daily or as per the RBWM HAMP.

The Supplier will be expected to respond to emergency requests to clear gullies where there has been a reported issue with this gully within a 2hr and 24hr timescale as provided within any instruction from the Service Manager. The supplier will be expected to respond to general enquiries within 10 working days.

Service Standards

The Supplier shall at each Gully to be emptied, first remove all mud and vegetation in the vicinity of the Gully likely to impede the flow of water, then lift the grating or cover, clear the gully of all detritus and other arising including silt to reveal the whole of the sump and refill with clean or filtered water to the outlet level. Clean out the seating frame and grating and reseal the grating or cover to conform to its original accepted level. Before leaving the location the Supplier shall check that water escapes freely from the outlet by back flushing and shall leave the area surrounding the Gully clean and tidy. If the gully outlet is blocked, the Supplier shall; clean by higher powered jet - rodding or other means so that the outlet is cleared to the local authority water surface water sewer main.



GULLY CLEANING SCHEDULE

RBWM council has approximately 26,000 gullies within network. Work is being undertaken at the moment to prioritise this work, in line with the Wokingham gully changes.

Gullies, weir gullies, and kerb off let pipes will be cleaned in accordance with the following schedule.

Four times per year

Windsor Road (between A330 Ascot Road and Ruddles Way), 318,

Total = 4 x 318 =1272

Twice per year, ,

Bath Road, 338,

Ascot Road, 246,

Boyn Hill Road, 23,

Clare Road, 29,

Boyn Valley Road, 30,

Grenfell Road, 48,

Castle Hill , 20,

Burchetts Green Road, 70,

Henley Road, 207,

Marlow Road, Bisham, 30,

Bisham Road, 34,

Dean Lane, 33,

Kings Lane, 28,

Bigfrith Lane, 7,

Spring Lane, 28,

High Road, 16,

Lower Road, 39,

The Pound, 20,

Station Hill, 4,

High Street, Cookham, 16,

Lower Cookham Road, 86,

RBWM Highway Services Contract 2024
Highway Maintenance and Capital Works Contract



Cookham Road, 100,
Maidenhead Road, 78,
Forlease Road, 36,
Bridge Street, 4,
High Street, Maidenhead, 33,
York Road, 20,
Queens St, 21,
Forest Green Road, 25,
Oakley Green Road, 111,
Dedworth Road, 144,
St. Leonards Road, 60,
Kings Road, 79,
Clarence Road, 46,
Goslar Way, 32,
Barry Avenue, 25,
Datchet Road, Windsor, 28,
King Edward VII Avenue , 62,
Windsor Road, Datchet, 98,
Southlea Road, 71,
Datchet Road, Old Windsor, 56,
Slough Road, Datchet, 80,
Eton Road, 29,
Pococks Lane, 11,
Slough Road, Eton, 52,
High Street, Eton, 28,
Keats Lane, 14,
Eton Wick Road, 122,
The Green, Datchet, 14,
London Road, Datchet, 30,
Majors Farm Road, 181,
Staines Road, 61,

RBWM Highway Services Contract 2024
Highway Maintenance and Capital Works Contract



Straight Road, 161,
Burfield Road, 54,
Albert Road, 49,
Winkfield Road, 66,
Buckhurst Road, 64,
Cheapside Road, 26,
Broomhall Lane, 42,
High Street, Sunningdale, 12,
Whitworth Lane, 12,
Bedfont Lane, 14,
Rise Road, 22,
Larch Avenue, 15,
Dry Arch Road, 9,
Sunning Avenue, 44,
Priory Road, 18,
Chobham Road, 25,
Devenish Road, 75,
Bagshot Road, 39,
High Street, Sunninghill, 17,
Sunninghill Road, 10,
St. Mary's Hill, 16,
Station Hill, 37,
High Street, Ascot, 83,
London Road, (from King's Ride to boundary), 32,
Kennel Ride, 35,
High Street, Windsor, 10,
Stanwell Road, 38,
Mounts Hill, 23,
A30 London Road, 88,
A320 London Road, 149,
A322 Windsor Road, 83,



Total = 2 x 4471 = 8942, Annually.

All roads on public highway network, other than those listed above. Total = 15934,

A total of approximately 26,148 gully cleanings are therefore currently required per year. The Client however reserves the right to amend frequencies as necessary, but the Service Provider will allow for a tolerance of +/- 15% before seeking any adjustment in price, which will be reviewed and agreed on an open book basis.

Established gully cleaning routes are available and the Service Provider may adopt these routes.

Alternatively, the Service Provider may plan and put forward gully cleaning routes for the approval of the Client Service Manager. In planning gully cleaning routes, the Service Provider will take into consideration the date that the gullies were last cleaned to ensure that cleansing is not undertaken significantly in advance or beyond the required frequency.

Gulley cleans should not be more than 2 months beyond the scheduled date e.g if a gulley requires an annual clean and was last cleaned in April 2024 the next clean should be by end of June 2025 at the latest.

The Service Provider will undertake routine works between 08:00 and 18:00 only, unless otherwise authorised by the Engineer. The Service Provider will be mindful of the reduced daylight hours in Winter and the restricted working hours that apply to traffic sensitive streets when planning routine works.

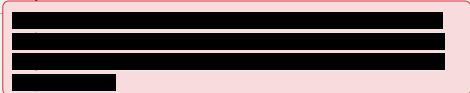
General Drainage Maintenance Requirements

Electronic schedules for the Cleaning/Emptying of Gullies, Catchpits, Soakaways, Oil Separators, channels and combined kerb and drainage systems are enclosed with this contract. In the first annual programme the Supplier shall empty/clean all drainage items contained within the schedules and all activity shall be recorded on Map16 for data management.

Every year it is anticipated the number of drainage items will increase as new housing estate roads are adopted and the highway drainage system is improved. The Service Manager will notify the Supplier of any changes to the schedule while the contract works are in progress.

The constraints for the programmed cleaning/emptying of Gullies, Catchpits, Soakaways, Oil Separators, channels and combined kerb and drainage systems are specified in appendix 1/13.

The Supplier will be responsible for coordinating parking restrictions, acquiring the correct permits and temporary traffic regulation orders, supplying no parking cones and signage, and distributing 'No Parking' advertising leaflets where it is necessary for works to progress. The wording of the leaflet is to be accepted by the Service Manager. Inability to undertake cleans due to obstruction by parked vehicles will not be a valid justification for not achieving KPI targets. It is the Suppliers responsibility to ensure all gullies are cleansed during the 2 weeks which follow



In addition to the requirements of Clause 520.5 the Supplier will remove all rubbish, debris and detritus to impede the flow of water in the vicinity of the chamber including the whole of the gully apron where necessary. Covers and gratings shall only be lifted or removed using tools accepted and supplied by the manufacturer. The Supplier shall notify the Service Manager of any covers or gratings which are damaged prior to lifting and shall make no attempt to lift these until they have been inspected by the Service Manager. This should include a photo being sent to the Service Manager and a decision about a site visit can then be made. All seating shall be thoroughly cleaned before covers and gratings are replaced or lowered.

In addition to the requirements of Clause 520.6 Where practicable, Gullies, Catchpits, Soakaways, Oil Separators, channels and combined kerb and drainage systems will be cleaned/emptied using the vehicle specified in Clause 520.6. This vehicle must be fitted with a Global Positioning Satellite (GPS) system with an accuracy of less than one metre. The operatives must be trained in the use of the GPS and supporting software system to enable them to record the type of drainage system, its position and the time/ date of the cleaning/emptying operation.

Where the Gullies, Catchpits, Soakaways, Oil Separators, channels and combined kerb and drainage systems is in a subway, alleyway or other another location where vehicular access is impracticable the cleaning/emptying operation will be undertaken manually. Rates are included in the schedule of rates for emptying gullies and chambers. Drainage systems will be cleaned by rodding when required and paid for in accordance with the contract price list time charge items.

Jetting of Drains

Low-pressure high-volume jetting of drainage systems shall be used to undertake routine maintenance drain cleansing and blockage removal works for all types of existing drainage system and pipe types. The length of existing drainage systems which is jetted shall be measured from the access point into the drainage system to the limit of the jetting operation specified within the Works Order. When the same section of a drainage system is repeatedly jetted to remove a blockage the quantity of jetting will be measured by multiplying the number of attempts by the length drain jetted. Once a drainage system is jetted three times without clearing the blockage subsequent High-Pressure jetting operations will be paid for in accordance with the contract price list time charge items.

Grip Cutting

Grip cutting shall be undertaken in accordance with relevant Series 600 standard detail drawing. It is the Suppliers responsibility to request and obtain STATs and buried services information to allow for services to be identified prior to cutting grips.

Mechanical or hand dig methods can be used depending on the site risk factors and will be agreed by the Service Manager unless instructed otherwise.

The Supplier shall log all grip cutting activity on Map 16 for data capture.

Rodding and Drawing Through with a Mandrel

Drains and connections shall be cleared using proprietary drain rods fitted with a suitable size plunger. A screw attachment may be used for the clearing of blockages if

necessary. Any blockages which cannot be removed must be reported to the Service Manager. If required the pipe or drainage block shall then be proved by drawing through with a mandrel with a diameter of 20mm less than the nominal diameter of the pipe or the nominal minimum of the "waterway area" of the drainage block. After clearing and, if required, proving the system shall be flushed with clean water to clear the pipes of any remaining deleterious material.

Testing

Where required, testing of the cleaned system shall be carried out in accordance with Clause 509 of the Specification.

After cleaning of drainage pipes and connections has been completed all solids and liquids shall be removed from chambers forming part of the system such that a maximum of 50mm depth of residual material remains in the base after cleaning.

During drainage cleansing activity, any defects, faults or blockages identified, the Supplier shall inform the Client with relevant information including location, defect details and possible solutions for repair.

Health and Safety

When working on highway drainage systems the Supplier must ensure all operatives are trained to minimise the dangers from discarded syringes, foul sewerage, and leptospirosis.

The contractor must follow the correct Health & Safety procedures including safe systems of work supported by correct method statements and risk assessments when carrying out works and make sure that they are using the correct equipment.

Suppliers Vehicles

Vehicles engaged in the cleaning of existing drainage systems shall comply with the requirements detailed in this Specification and all traffic management methods used must be compliant with Traffic Signs Regulations Chapter 8 and NRSWA.

- i) Vehicles shall be equipped with two or more rotary amber beacons which are capable of being seen from 360 degrees around the vehicle. If the cleaning equipment is mounted on a towed trailer the beacons may be affixed to the towing vehicle provided that the trailer does not restrict the visibility of the beacons.
- ii) Vehicles shall be fitted with a sign to Diagram 610 of the Traffic Signs Regulations and General Directions, up to 1500mm in diameter, fitted to the rear of the vehicle, which shall be covered when the vehicle is not stationary.
- iii) Vehicles shall travel in the same direction as the adjacent traffic flow, and be capable of a minimum speed of 20mph for travelling between sites.

571AR Position of Manholes, Gullies and Pipes

The positions and levels of manholes, gullies, pipes, etc. as shown on the Drawings may be subject to variation by the Service Manager. The Supplier shall be responsible for ensuring that all pipelines, manholes, gullies, etc. are clear of obstruction and so sited as not to damage or obstruct access to or working of Statutory Bodies' plant and services.

572AR Connections to Public Sewers

The requirements for connection to Public Sewers shall comply with Appendix 5/6.

573AR Public Space Fountains in Town Centre

The Contractor shall be responsible for the cleaning and backwashing the system used for the Fountains at the Town Centre public space areas. This will include any mechanical brushing, jetting of systems and periodic repair of components and features. The system shall be backwashed at least every 6 months. Details of these activities are to be agreed with the Service Manager.

Series 600 Earthworks

650AR Disposal of Materials

The Supplier shall exercise a duty of care to ensure that all waste material arising out of the construction work is disposed of at an authorised tip, which is in receipt of a current Waste Management Licence in accordance with both the Control of Pollution Act 1974:- Part I and the Environmental Protection Act 1990:- Part II Sections 33 & 34; and shall comply with the relevant parts of the approved Code of Practice "Waste Management - The Duty of Care". The Supplier will provide details of all such arising as requested by the Service Manager, including carrier notes, tipping and disposal notes and constitution of materials.

670AR Clearing of Existing Ditches

Ditches shall be cleared out to the depth specified by the Service Manager.

Where permitted by the Service Manager the excavated materials may be evenly spread over the adjacent verge or embankment, otherwise such materials shall be dealt with as unacceptable material.

Overhanging grass and brambles shall be cut back and the sides of the ditch trimmed.

Any debris, litter, or vegetable growth in the ditch shall be removed and taken to a tip, provided by the Supplier, off the Network.

Concrete lined ditches shall be cleared out down to the level of the lining.

671AR Drainage Grips

Drainage grips shall be formed by excavating earthwork channels in existing grassed verges, with the inverts having falls from the surface levels at the pavement edges to the points of discharge into ditches and the like.

Materials resulting from these clearances shall be dealt with as unacceptable material and disposed of in licenced tips, off the network.

672AR Backfilling to Disused Chambers and Cellars, Gully Pots and Service Boxes

Prior to sealing and filling any chamber, cellar, gully pot or service box the cover and frame shall be recovered or broken out and set aside or removed off site in accordance with Clause 201.

Gully pots and service boxes having a frame size not exceeding 0.1 square metres shall be cleared of all silt and debris which shall be removed to the Supplier's tip, drainage holes and rodding eyes sealed with wooden, metal or stoneware plugs, and the gully pot or service box backfilled with ST1 concrete to Clause 2602. The concrete shall be brought up flush with the adjacent carriageway surface and finished in a neat and tidy manner.

Chamber, cellars and service boxes having a frame size 0.1 square metre and above shall be cleared of all silt and debris which shall be removed to the Supplier's tip and pumped clear of water. Pipe openings, drainage holes and rodding eyes shall be sealed with wooden, metal or stoneware plugs and concrete slabs, masonry and brickwork shall be broken out and any unsuitable material removed to the Supplier's tip. Chambers, cellars and boxes shall be backfilled with fill material as stated in the

Contract compacted in accordance with Clause 612 and 2602 as appropriate, brought up to required levels and finished in a neat and tidy manner.

673AR Excavation of Carriageway above Existing Structures

Excavation shall be carried out in a method which ensures that no shock or vibration is transmitted, or any damage is caused to the existing structure.

The existing carriageway construction within 300 mm of the surface of the structure including any waterproofing membrane shall be excavated by hand. Excavation shall be carried out in a method which ensures that no shock or vibration is transmitted onto, or any damage is caused to the existing structure either above or adjacent to the excavation.

The length of excavation shall be restricted to a length which ensures the stability of the existing structure and in no case shall it be greater than 1 metre. During the excavation and repair operations the stability of the existing structure shall be maintained by the installation of suitable supports designed by the Supplier. The Supplier shall submit his design to the Service Manager for his approval. The Service Manager's approval will be general in nature and will not relieve the Supplier of his responsibilities under the Contract.

Loadings on existing foundations will be advised by the Service Manager upon request.

680AR Procedure for Evaluation of Carriageway Construction by Coring

Preparation

Procedure shall be as follows:

- i) A site plan showing the core locations, core numbers and extent of each site requiring coring shall be provided by the Service Manager, as will a set of service plans if these are available.
- ii) The Service Manager shall notify the Supplier of the diameter of the cores required and the anticipated depth of construction.
- iii) The Service Manager shall mark the position of each core on site using aerosol paint.

Coring work by the Supplier

The Supplier shall provide traffic management suitable to the site and road type, in line with Traffic Signs Regulation Chapter 8 and NRSWA and as detailed elsewhere in this contract specification.

The Supplier shall check each core location with a 'CAT' prior to coring. If a service is suspected the core shall be re-sited at a location free from services, as close to the original as possible and at the same distance from the edge of the highway. The new location shall be recorded by the Supplier on his log.

The Supplier is responsible for requestion and obtaining all STAT information to assist with identifying buried services.

Unless otherwise directed, coring shall continue until the bound material has been fully penetrated at which point coring shall cease.

The core shall be extracted from the barrel or from the road in such a manner as to protect its integrity as much as possible. It shall be placed in a suitable container, which will protect the core and provide rigid support. Each core shall be sturdily and indelibly labelled with the job name and core number. The container will normally be a core box.

The vertical distance from the road surface to the base of the bound material shall be measured down the core hole and this measurement, to the nearest millimetre, recorded on the Supplier's log.

A sample of the material underlying the bound layers, with a mass no less than 500g, shall be taken from each core hole, sealed in a plastic bag, and labelled in the same manner as the core.

The Supplier will occasionally be instructed to take water samples from core holes. Occasionally the Supplier will be instructed to core below the depth of the bound materials to take undisturbed 38mm samples of cohesive soil or disturbed samples of unbound material from core holes.

The Supplier shall note on his log any unusual materials, obstructions, flush behaviour, etc that he encounters. He will also note when cores have been taken from patches or reinstatements in the highway.

Reinstatement by Supplier

Excess water shall be cleared from the core holes by bailing out or other suitable method.

Type 1 granular sub-base shall be placed in layers no thicker than 75 mm and thoroughly compacted with a punner of suitable size and weight to a distance of 100 mm from the road surface. The perimeter of the core hole above the top of the sub-base shall be sprayed with bitumen cold joint sealer applied by aerosol.

An approved HAUC cold lay bituminous material shall then be used to complete the backfill. This material will be properly compacted using a punner in layers no thicker than 50mm. Core holes less than 100mm deep shall be backfilled entirely with bituminous material.

Excess water and detritus shall be cleared from the surface and removed from site.

Transport and delivery of cores by Supplier

Care should be taken in transporting the cores so that they do not slide, topple or become mixed up in any way. A means of keeping each core separate in the core box shall be provided i.e., plastic bag or spacer. The cores shall be protected from the weather, but not stored under conditions of excessive heat.

Cores shall be delivered to the laboratory as instructed by the Service Manager, or proposed by the Supplier, and accepted by the Service Manager with the Supplier's logs and location plan, on the day following the completion of the job or the following Monday if the work was completed on a Friday.

681AR Procedure for Evaluation of Carriageway Construction by Trial Pitting

Preparation

Procedure shall be as follows:

- i) A site plan showing the trial pit locations, numbers and extent of each site requiring pitting shall be provided by the Service Manager.
- ii) The Service Manager shall mark the position of each trial pit on site using aerosol paint. This will commonly be located in the nearside wheel path of the highway and be 1.5 m long (measured parallel to the edge of the highway) by 1.0 m wide.

Pitting work by the Supplier

The Supplier shall provide traffic management, commensurate with the particular site type, which complies with the requirements detailed within Series 100. A tipper wagon is used for testing purposes and space for such a vehicle shall be provided within the safe coned off area adjacent to each pit location.

The Supplier will be expected to work in conjunction with the Client's Technicians who will carry out sampling and testing on the revealed layers as the trial pit is excavated. The trial pitting procedure is generally that given in HD 30/99 Annex A – "Test Pits", modified by any job specific requirements.

The Supplier shall check each pit location with a 'CAT' prior to commencing excavation. If a service is suspected the pit shall be re-sited at a location decided by the attending Technician, who will note the new location.

The Supplier shall use a rotary saw to obtain clean-cut edges and faces to the pit, up to the maximum depth possible with the machine.

The surface of each revealed layer shall be examined before the layer is excavated with particular care being taken not to disturb the surface of the sub-base when the base is removed. The Supplier shall use an airline, or other suitable method, to clear away debris so that any cracks can be observed.

Once saw cuts have been made, excavation in bound materials will be by means of pneumatic or hydraulic breaking tools.

In most cases the trial pit will extend deep enough to investigate and allow sampling and testing of the sub grade.

Reinstatement by the Supplier

The Supplier shall backfill each trial pit with properly compacted well graded granular material in lifts not exceeding 100 mm to a depth of 150 mm below the road surface. Material excavated from the pit may be used as backfill, using lifts not exceeding 100 mm up to this level, with the better quality excavated material used in the higher layers. This shall be followed by 100 mm of thoroughly compacted Type I granular sub-base and 50 mm of properly compacted HAUC accepted cold lay bituminous material. The sides of that part of the pit to be backfilled with bituminous material shall be painted with HAUC approved bitumen cold joint sealer.

The road surface will be swept with a stiff brush and cleared of all detritus, which will be removed from site.

682AR Procedure for Evaluation of Ground Conditions by Trial Pitting

Preparation

Procedure shall be as follows:

- i) A site plan showing the trial pit locations, numbers and extent of each site requiring pitting shall be provided by the Client.
- ii) The Client shall mark the general position of each trial pit on site using aerosol paint.

Pitting work by the Supplier

The Supplier shall provide traffic management, commensurate with the particular site type, which complies with the requirements given elsewhere in the contract.

The Supplier will be expected to work in conjunction with the Client's Staff who will carry out sampling, measurement, surveying, etc of the revealed layers as the trial pit is excavated.

The Supplier shall check each pit location with a 'CAT' prior to commencing excavation. If a service is suspected the pit shall be re-sited at a location decided by the attending Technician/Service Manager, who will note the new location. If relocation is not possible then the Supplier shall provide temporary support and protection to the service whilst trial pitting operations are in progress.

The Supplier shall use a rotary saw to obtain clean-cut edges and faces to the pit, up to the maximum depth possible with the machine or to the maximum depth of surfacing, where the trial pit is located in a footway, highway or other area with a bound surface. If the surface is block paved or flagged these materials shall be carefully taken up and put aside. The pit will be excavated using hand tools only once the base of any construction has been reached.

The Supplier will be responsible for providing trench support when he judges this to be necessary. This will be adequate for the particular ground conditions and designed, when necessary, by the Supplier to withstand the loading from the ground. The support shall allow safe access into the pit for the Supplier's and Client's personnel. The Supplier shall take into account the type and amount of support likely to be required when determining the plan size of the pit at ground level.

The Supplier will be responsible for establishing, maintaining and removing any pumps required to keep the excavation dry.

The Supplier will be responsible for providing temporary fencing, fence supports, pumps and signing when it is necessary for a pit to be left open overnight. Pits may remain open overnight either as a result of the length of time taken for the excavation to full depth or as directed by the attending Service Manager, or representative to complete necessary observations.

Reinstatement by the Supplier

The Supplier shall backfill each trial pit with properly compacted arising in lifts not exceeding those given in SHW Table 6/4 for the type of fill and compaction Equipment being used. This will continue to a depth of 200 mm below the ground surface where bound materials were originally present or 100 mm where the original surface was top soiled or grassed. The better quality excavated material shall generally be used in the higher layers. Where excavated material is deemed to be unacceptable in accordance

with Appendix 6/1, imported acceptable material of a suitable type will be used for reinstatement.

Where bound materials formed the original surface, reinstatement will be completed using 150 mm of properly compacted Type I granular sub-base and 50 mm of properly compacted HAUC approved cold lay bituminous material. The sides of that part of the pit to be backfilled with bituminous material shall be painted with HAUC approved bitumen cold joint sealer. Where the original surface was top soiled or grassed 100 mm of topsoil shall be provided to ground level. When the original surface was block paved, flagged etc, the surfacing material shall be reused in the reinstatement. All surplus materials shall be taken off site. The surface shall be swept with a stiff brush and all detritus cleared away and taken off site. The surface shall be reinstated to the same shape and fall as that which existed previously.

Samples and Records

These will be the responsibility of the attending Service Manager.

Series 700: Road Pavements – General and Bituminous Bound Materials

770 AR Coloured Surfacing

Scope

This Clause covers coloured surfacing applied to carriageways.

The following sub-Clauses, where these refer to matters which are also covered by British Board of Agreement certification, should be regarded as giving guidance only as to what is required by the Service Manager. The agreed British Board of Agreement method statement shall be applied in so far as it covers actual site conditions.

Surfacing System

Generally, the areas to be treated are small and/or narrow.

The laying method, which will be suitable for hand laying, will be either a cold applied broadcasted system or a hot applied system in which the materials are pre-mixed. When larger areas are to be treated the Supplier's methods and plant shall be accepted by the Service Manager before the commencement of the work.

The coloured surfacing system shall have been assessed and be currently certified by the British Board of Agreement as a 'system component' or hold current BBA/HAPAS Road and Bridge certification.

The system shall only be applied by a Supplier who is;

- i) approved by the British Board of Agreement and
- ii) either approved by the certificate holder to install that system or, alternatively certified to install high friction surfacing to Clause 924.

The installation and quality control procedures shall be in accordance with the current method statement agreed with the British Board of Agreement, extended where appropriate to comply with the various sub-Clauses of this Clause.

Binder

The binder shall consist of an epoxy (or other approved resin compound), or thermoplastic material, to produce a flexible and flow resistant system.

The binder shall be mixed and applied in accordance with and within the temperature range recommended by the manufacturer. Additives to enable systems to be installed in cold weather or to accelerate the curing process may be used as recommended by the manufacturer.

Aggregate

The aggregate shall be manufactured from surface-pigmented coated calcined bauxite or from surface-pigmented coated natural hardstone.

The aggregate physical properties and colour shall be as given in Table 1. Aggregates shall be clean, hard and durable as defined in Clause 901. The aggregate shall be manufactured and laid in such a way as to provide a uniform colour across each separate element of the works.

Sources of coloured natural crushed rock, which the Supplier may wish to consider, are given below. These do not necessarily meet the requirements of this specification for every surfacing Type and the Supplier should provide test results, as required elsewhere in this specification, to confirm suitability.

- i) Harden Quarry, Northumberland.
- ii) Quartzite Quarry, Cromall, Gloucestershire.
- iii) Balmullo Quarry, Fife.
- iv) Cloburn Quarry, South Lanarkshire.

Texture Depth

Texture depth shall be measured by the sand patch test.

Traffic Count and Site Category

The pertinent coloured surfacing Type for each separate site or part of a site, is given in each Works Order, according to Table 2 for traffic intensity and site definition, Table 3 is included to assist in determining equivalent traffic volumes used in commonly used documents.

Surfaces to be Covered

Surfaces to be covered shall be dry, sufficiently hard to avoid penetration, sound and free from dust, oil, excess binder or other contaminants, which may result in lack of adhesion. Any excessive build-up of rubber on the surface to be covered shall be removed by an abrasive pre-treatment method accepted by the Service Manager.

When the substrate is a new negatively textured surface course or any other surface, which is difficult to cover, the Supplier shall inform the Service Manager of methods he intends to employ to overcome the perceived difficulty. These may include but not be restricted to the following: -

- i) The application and rolling in of coated grit as the surface course to receive the coloured material is compacted
- ii) Increasing the rate of spread of binder to account for additional texture depth
- iii) Allowing new surfaces to be trafficked before coloured surfacing is applied
- iv) When appropriate, seeking the approval of the Service Manager to locate coloured surfacing on existing well-trafficked surfaces rather than on newly laid material if this has not already been specified.
- v) For larger areas and where appropriate, seeking the approval of the Service Manager to use a smaller sized aggregate in the new wearing course to reduce the volume of the negative texture if this has not already been specified.

Weather and Site Conditions

It is the Supplier's responsibility to decide when weather conditions and all other site circumstances are suitable for carrying out the surfacing treatment.

Application and Protection of Street Furniture

Surface treatment shall be applied, at a rate of spread appropriate to the substrate, to the areas specified in each project. Where appropriate, it shall be applied up to the carriageway edge without overlapping on to the kerbs, channels, footways or any

structure adjoining the highway. Surface treatment shall not adversely affect the drainage of the highway.

The Supplier shall provide, fix, remove on completion and properly dispose of self-adhesive masking material, or equivalent, used to protect all road studs and cover all carriageway ironwork and similar fixtures.

Unless instructed to the contrary by the Service Manager, all existing road markings shall be removed prior to application.

Aftercare

On completion of the surfacing the system shall be allowed to set/cure. During the curing process no disturbance, by trafficking, will be allowed. Before opening the road to traffic at the end of the curing process, any excess aggregate, resulting from a cold applied system, shall be removed by vacuum sweeping or equivalent means accepted by the Service Manager.

The Supplier shall take into account the increase in curing time associated with installation of surfacing systems in colder weather and adjust his activities accordingly. The Supplier shall delay opening the road to traffic if this becomes necessary. Curing periods for work done in cold weather shall be in accordance with the binder manufacturer's recommendations.

Performance Requirements and Guarantee

The Supplier shall guarantee, in writing, the coloured surfacing system for a period of two years from the date of opening to traffic. The guarantee shall cover failure to meet the parameters laid down in Table 4 of this Clause.

Information to be Provided

For each separate-coloured surfacing project, the Supplier is required to provide the following information:

- i) Proposed binder type with associated manufacturer's data sheets, product identification data and COSHH data.
- ii) Proposed source and type of aggregate with statements of properties, including PSV and AAV, from three different UKAS accredited laboratories and dated within the last six months. A certificate stating the colour index of the aggregate to be used shall also be provided.
- iii) A full method statement explaining how the Supplier intends to carry out the works in conformity with the Specification. This must state if the Supplier deems it necessary to postpone laying the coloured surfacing until any new wearing course has been trafficked and the period of such delay. The Supplier's proposals for adequately dealing with any negatively textured surfaces and for treating large areas shall also be provided. If the British Board of Agreement method statement allows alternatives for any part of the Works, the Supplier shall state which he will adopt for the particular project. The Method Statement shall also include details of how the Supplier intends to deal with road markings.
- iv) A statement of any previous applications on roads similar in site type and road hardness, to the Contract site. The names of these projects together with dates and details of the Service Manager and contact persons shall be provided.



Table 1 - Aggregate and Surfacing Requirements At Laying

NO.	PARAMETER	TYPE 1	TYPE 2	TYPE 3	TYPE 4
1	Range of aggregate size	1 - 4 mm			
2	PSV value of aggregate	70 min	65 min	65 min	55 min
3	AAV value of aggregate	10 max	12 max	14 max	14 max
4	Texture depth on completion	>1.4 mm			
5	SRV on completion	70 min	65 min	65 min	55 min
6	Colour index on completion	Bold Red. Ref No. 564; BS 381 C:1996			

In Table 1: -

For parameters 2 and 3 the Supplier shall provide test report evidence from three different UKAS accredited laboratories dated within the last six months, which confirm the values.

For parameter 6 the Supplier shall provide test report evidence dated within the last six months.

Parameters 4 and 5 are as defined in TRL Report 176: 1997.



Table 2 - Application Type Areas

SITE REF	SITE DEFINITION	MAXIMUM TRAFFIC LEVELS (cv/lane/day)		
		Type 1	Type 2	Type 3
B	Dual carriageways (all purpose) - non event sections.	3500	1000	250
C	Single carriageways - non event sections.			
D	Dual carriageways (all purpose) - minor junctions			
E	Single carriageways - minor junctions.			
F	Approaches to and across major junctions (all limbs).			
G1	Gradient 5% to 10 % longer than 50 m (Dual - downhill only; single - uphill and downhill)			
H1	Bend (not subject to 40 mph or lower speed limit)			
L	Roundabout			
G2	Gradient greater than 10%, longer than 50m.	2500	750	175
H2	Bend (not subject to 40mph or lower speed limit) Radius less than 100m.			
J	Approaches to roundabouts.	2500	500	100
K	Approach to traffic signals, pedestrian crossings, railway level crossings or similar.			

TYPE 4 are un-trafficked or very lightly trafficked areas of carriageway.

Table 3 - Traffic Equivalents for Flexible Carriageways

Single carriageway								
Traffic (cv/lane/ day)	3500	2500	1000	750	500	250	175	100
Traffic* (m.s.a.)	110	80	22	16	9.5	3.7	2.0	< 2.0
Traffic (HAUC category) **	Type 0		Type 1		Type 2		Type 3 and 4	
Dual carriageway								
Traffic	3500	2500	1000	750	500	250	175	100



(cv/lane/day)								
Traffic* (m.s.a.)	90	70	22	16	9.0	3.3	0.8	<0.8
Traffic (HAUC category) **	Type 0		Type 1		Type 2		Type 3 and 4	

* Based on HD 26/96; Figure 2.1 for 20% HGV (OGV 2 category).
** Based on HAUC Amendment to Specification: Advice Note 4; October 1996.

Table 4 - Requirements for Trafficked Surfaces After Two Years

NO.	PARAMETER		TYPE 1	TYPE 2	TYPE 3	TYPE 4
1	Skid Resistance (Best Estimate Summer Value)		70 min	65 min	65 min	55 min
2	Erosion Index		2 max	3 max	5 max	5 max
3	Estimated fatting up (%)		10 max	20 max	30 max	30 max
4	Texture depth	Mean value	1.3 min			
		Individual value	1.2 min			
5	Cracking width (mm)		0.5 max			

6	Colour index change (E)	Not to exceed 20.

In Table 4: -

Parameter numbers 1, 2, 4 and 5 are as defined in TRL Report 176, 1997. Parameter 3 is visually estimated and photographic evidence obtained. Parameter 6 is determined by spectrophotometer in accordance with the CEILAB 1976 method as detailed in 'Colour and Colourimetry', Alain Chrisment. Published by 'Editions 3C Conseil', Paris, 1998.

771AR Surface Dressing

General

The design will be a Recipe Specification and the Supplier will be responsible for the quality of his workmanship and materials during and at the end of the defects date for all roads.

The Supplier's Schedule of Rates items for surface dressing will include for providing the work and his contract obligations for the Supplier's selection.

Information Provided by the Service Manager

A schedule of roads to be surfaced will be presented to the Supplier in March for dressing in that coming year's surface dressing season. The type of roads to be dressed may include dual carriageways, Class A, B, C and unclassified roads.

The information contained on the schedule shall include:-

- i) Site reference number.
- ii) Road number.
- iii) Road name.
- iv) Start and finish points and general description.
- v) Recommended type of binder [P for Polymer Modified Bitumen Emulsion
- vi) Intermediate Grade and PP for Polymer Modified Bitumen Emulsion Premium Grade].
- vii) Recommended traffic category [either to New Road and Street Works 1991 classification or to Table 3 Road Note 39 [sixth edition].
- viii) Recommended chipping size.
- ix) Length, width and area for each site.
- x) Recommended types of dressing where applicable.
- xi) PSV requirements.
- xii) Recommendation for provision of Pad Coat
- xiii) Locations where convoy vehicles will be required.

The 'recommended' information contained within the schedules is for information only. This is not the Service Manager's design and it does not absolve the Supplier from his responsibility to select/design the surface dressing.

The recommended surface dressing treatments are listed within the table in para 4.1 below. Additional details for these six individual treatments are contained within the Schedule of Rates with the permissible variations to the binder, spread rates and PSV of the aggregate.

If a Pad Coat is recommended on hard surfaces the treatment shall be 6mm single size chippings of 55 PSV with a binder spread rate of 1 litre per square metre.

Supplier's Selection

The Supplier is responsible for the selection of the dressing to provide the performance standard prescribed within this sub-clause during and at the end of the two year defects date for all roads. Good design guidance is given in TRL Road Note 39 (sixth edition).

The Supplier is to detail the selection methods and processes to be used in the Supplier's surface dressing selection by 31 March in any and every year through the contract period.

The Service Manager must approve all selection methods and processes in respect of the Supplier's surface dressing selection.

The Supplier's selection methods and processes must include information on the following:-

- i) General Principles.
- ii) Selection Methodology.
- iii) Forms or paperwork to be used in the selection process.
- iv) Detail or parameters used for selecting the type of surface dressing including chipping sizes.
- v) Process used in determining the designed binder spread rate and binder type, throughout the entire selection process from initial selection to final application on site.

The Supplier must also detail in December of every year, the operational procedures that the Supplier will follow in applying surface dressing. These are to include the following :-

- i) Preparatory work, prior to the application of surface dressing
- ii) Storage of binder and chippings.
- iii) Application of binder.
- iv) Sweeping operations during the application process.
- v) Sweeping operations after the application process.
- vi) Traffic Management Operations during the application of binder and chippings.
- vii) Traffic Management Operations – Aftercare and protection of the dressing.

The Supplier shall undertake all road hardness testing to the requirements laid down in Road Note 39 (sixth edition) and provide the Service Manager with a copy of the results prior to submitting the final selection for any specific site or location for approval. This information is required should the Service Manager instruct works to be carried out to the requirements of the Service Manager's design.

The Supplier is to provide the Service Manager with the Supplier's surface dressing selection for every specific site or location 21 days prior to commencing works. This selection will also detail the chippings to be used and the binder spread rate overall and any location where it varies from the overall rate of spread.

An example of a design sheet is included in Appendix 7/70 (Sheet 1)

Acceptance by the Service Manager

If the Service Manager does not accept the Supplier's selection for a specific site or location, then the Service Manager reserves the right to instruct the Supplier to carry out work to the requirements of the Service Manager's design. The Supplier will be responsible for the quality of his workmanship and materials in providing the surface dressing to the requirements stipulated within the Service Manager's design.

The Supplier quality of workmanship and materials will be monitored by the Service Manager and Supplier by undertaking the tests prescribed in Appendix 1/5 and 1/6.

Performance Standards – Supplier's Selection

The surface dressing work carried out at each site shall only be deemed acceptable if the specified minimum standards of performance are achieved and maintained until the Defect Date. Performance in this respect shall be monitored by the Service Manager and reported to the Supplier. It shall be evaluated in terms of surface texture depth, fretting and fatting up. Evaluation methods and criteria for these three properties are defined as follows.

Surface Texture Depth

The PERFORMANCE STANDARD for texture depth, after a 2 year period, shall be as follows:

Ref / Treatment [all mm]	Normal Roads	Major Roads
	All mm	All mm
SD1 / 6 mm Single Sized Chippings	1.0	-
SD2 / 10 mm Single Sized Chippings	1.0	-
SD3 / 10 mm & 6 mm Racked In	1.0	1.2
SD4 / 14 mm & 6 mm Racked In	1.5	1.5
SD6 / 10 mm & 6 mm Double Dressing	1.0	1.2
SD5 / 4 mm & 6 mm Double Dressing	1.5	1.5

When measured using the 'Sand Patch' test in accordance with BS598 Part 105: 1990

Fretting

Fretting - The extent of fretting shall be monitored by the Service Manager using a visual method of assessment which might require the use of a 0.5 m2 Perspex sheet engraved with a grid pattern.

The performance standard is that any area of one square metre or more within the works shall be regarded as having fretted if more than 15% of the chippings have been lost from the original continuous mosaic pattern. Remedial works shall be carried out to correct any such areas which do not meet this required standard.

Fatting Up

The work shall also be considered defective when binder 'fatting' to or above the surface level of the chippings occurs until the defect date on an area in excess of 15% of any area of one square metre of the work.

The Supplier shall ensure that the road markings are protected from contamination by the surface dressing binder. Where 15 % or more of any one metre length of road marking is obscured by 'blacking up' or 'fatting up' of the surface dressing binder, then the Supplier shall renew the road marking at his own expense.

Scope

The Supplier shall supply all necessary storage facilities, labour, plant and materials required to complete the surface dressing works at each of the sites. For each job the following is required:

- i) Selection of the surface dressing.
- ii) Sweeping and cleaning of site
- iii) Provision and application of binder.
- iv) Provision, stockpiling and application of chippings.
- v) Protection and aftercare of the new dressing.
- vi) Traffic Safety and Management including signage
- vii) Removal of surplus chippings.
- viii) Remedial works as necessary to attain and maintain the performance requirements as defined in this contract.

Chippings

The Supplier is to determine the suitability and size of the chippings used and shall only use chippings of size and type to meet the requirements of this specification. The chippings used by the Supplier shall be crushed rock complying with the requirements of BS EN 13043 and the following additional requirements:-

- i) Aggregate Resistance to Abrasion (AAV) - maximum 10
- ii) Flakiness Index - maximum 35
- iii) Filler Content - maximum 1%
- iv) Resistance to fragmentation – LA30 or less
- v) Minimum Magnesium Sulphate Soundness Value of MG18
- vi) Resistance to Polishing (minimum PSV) – Normal Roads 55, Major Roads 60 or 65 [as stated in the surface dressing schedules]

Quartzite or gravel chippings will not be permitted.

Where 'racked in' dressing is to be used, the PSV requirements shall apply to the larger chippings. The minimum PSV requirements of the smaller chipping shall be 55.

The Supplier shall indicate in Schedule of Materials 2 - Chippings, in Appendix 7/70 for normal roads (Sheet 5) and major roads (Sheet 6), each intended source of supply of chippings for each different chipping size.

Chipping Stockpiles

Chippings shall only be stockpiled at sites accepted by the Service Manager. Stockpiles shall be kept tidy at all times. Stockpiles are to be cleaned out and any surplus chippings removed by the Supplier immediately after the programme is completed. A list of stockpile sites is included in Appendix 7/70 (Sheet 10) and these will be made available to the successful Supplier if the Supplier wishes to use them. It is the Supplier's responsibility to determine the availability and condition of any chipping storage sites he wishes to use whether from the Borough's list or not. The Supplier must erect at each chipping stockpile site two signs in prominent positions agreed with the Service Manager in advance of operations indicating that the chipping stockpile sites are designated as Hard Hat Sites. There is no guarantee that these stockpile sites will be available throughout the length of the Contract.

Binder

Only polymer modified bitumen emulsion binder [intermediate and premium grade] will be permitted. All binders used must comply with BS434 : Part 1.

The Supplier shall 'dip' the binder tank using a measuring stick when requested by the Service Manager.

The Service Manager's approval to any particular chippings and binder spread rate does not absolve the Supplier for full responsibility for the performance of the dressing which the Supplier has designed and for any subsequent remedial works which are required.

The Supplier shall indicate in the Schedule of Materials 1 – Binder, in Appendix 7/70 for normal roads (Sheet 3) and for major roads (Sheet 4), the intended source of supply of all binder proposed for use under this contract.

The method for evaluation of binder mixtures by the Vialit Cohesion Test and details of this test are included in Appendix 7/70 (Sheet 9)

Application

The Supplier shall agree a start date and programme of works with the Service Manager 14 days prior to commencement of the works and in any event works shall not commence prior to 1 April in any year.

It is the Supplier's responsibility to decide when weather conditions and other circumstances are suitable for carrying out the work. In any event the Service Manager shall require work to stop when any of the following conditions appertain:

- i) During periods of rain or drizzle or when there is standing water on the carriageway.
- ii) When, unless the Service Manager otherwise agrees, for the various grades of binder in use, the road surface temperature is below the following values:-
 - a. Uncoated Chippings - Bitumen emulsion 10oC
 - b. Other binders - Manufacturers recommendation
- iii) When the road surface temperature exceeds 40 degrees C.
- iv) When the relative humidity exceeds 80%.
- v) Fog or poor visibility.

The Supplier shall mask off by means of applying masking tape to covers, road studs, fire hydrants, gulley gratings and similar fixtures, prior to dressing to give complete protection from the binder. The masking tape shall overlap the edge of the ironwork and extend into the adjoining carriageway by up to 10mm.

Any masking tape shall be removed immediately on completion of the dressing and disposed of in accordance with the following clause.

The use of oil, sand, turf, and similar materials will not be permitted.

The Supplier shall remove all loose material from the carriageway surface by sweeping immediately before applying the binder. All arisings shall be disposed of to licensed tips provided by the Supplier. Tips used by the Contactor must be licensed tips holding a Waste Management Licence issued by the Waste Regulation Authority. Copies of all controlled Waste Transfer Notes generated by the Contract must be supplied to the Service Manager as per 'Waste Duty of Care' - Code of Practice' Section 34(9) of the Environmental Act 1990

Binder Distributors

The binder distributor shall comply with BS1707 and with the following additional requirements:-

- i) The distribution system shall be capable of uniform application over a variable width in order that a maximum width of 3.8 metres may be dressed in a single pass. Longitudinal joints shall fall under the centre line of single carriageway roads and on the centre of the two lanes on a dual carriageway. Longitudinal joints within a lane shall only be permitted on lanes wider than 3.65 m and when so permitted shall not fall within or adjacent to the wheel tracks.

Test Certificate

The transverse distribution test shall be carried out not earlier than the 1 February of the year in which the work is undertaken. The test shall be carried out by an accepted testing house accredited under the UKAS[NAMAS] Scheme for this particular test.

The Certificate shall bear the date of test, and a copy shall be supplied to the Service Manager before surface dressing commences.

Where binder distributors are used for different binder systems, separate test certificates shall be provided for:

- i) Polymer modified bitumen emulsion – Intermediate Grade
- ii) Polymer modified bitumen emulsion – Premium Grade

Guide

The machine shall be fitted with an adjustable guide clearly visible from the driving seat and of suitable lateral rigidity so that the machine may be accurately driven to ensure uniformity of line and overlap.

Capacity and Filling Arrangements

Unless otherwise agreed by the Service Manager, the binder tank shall be capable of containing at least 5000 litres of binder and its filler manhole shall incorporate a suitable

filter through which all binder shall pass into the tank in order to exclude suspended matter which might cause partial or complete jet blockage. Suitable screwed couplings to the pipes shall be provided to ensure the safe transfer of binder from the supply taken to the distributor.

Heaters

The machine shall be fitted with heating equipment complying with the requirements of BS1676.

Warning System

The machine shall be fitted with an accepted system between driver and operator to give audible warning of commencement and conclusion of the spraying operation.

Distribution System

The binder shall be spread uniformly on the surface using either an expandable or extensible spray bar capable of spraying widths of at least 3.8m in increments of 150mm or less. Unless otherwise specified by the Service Manager, expandable or extensible spray bars shall be used. The spray from the end jets shall be regulated to give a full density of spray across the whole width of the bar. Spray bars of Imperial dimensions approximating to the metric sizes quoted above will be acceptable.

The type of jet, the spacing of the jets along the spray bar and the height of the spray bar above the road surface shall be such that the distribution of the binder over the sprayed width of the road is of the required uniformity. Jets shall be tested daily by spraying individual jets to check that a regular cone or fan shaped spray is obtained. Jets shall be cleaned or changed as necessary. After each separate application of binder, the spray bar shall be reset to the height specified by the BSI at the time of the most recent test of the binder distributor, so that the necessary uniformity of distribution is maintained. For this purpose, the binder distributor shall be fitted with an accurately calibrated and easily read means of rapidly checking the spray bar height above the road.

The binder distribution shall be equipped with a spraying lance to undertake work on irregularly shaped areas of carriageways not accessible by the machine.

The binder distributor shall be equipped with two pressure gauges and two filters. The filter apertures shall not be more than half of the diameter of the smallest aperture of the nozzles. They shall be capable of rapid detachment and cleaning, which shall be carried out daily or more frequently if required.

The Service Manager shall, if he considers that the performance of the machinery has reduced, call upon the Supplier to submit his machines for further testing during the progress of the work.

During the surface dressing works, tests may be carried out to check the longitudinal and transverse distribution of binder, and in the event of these tests being unsatisfactory, the Service Manager will require the machine to be retested before doing any further work.

The distributor shall carry a card showing the registration number, the date tested, the test pressure and temperature, height of spray bar and type, and viscosity of binder

used over the range 0.8 to 2.01/m sq so that the driver can accurately determine the speed at which the machine must be operated to give the required rate of spread.

A suitable dial type thermometer shall be installed in the spray bar to provide a check that spraying temperatures are correct.

The chipping spreader plant shall have controlled metering and be capable of variable width to match the binder distribution.

Binder shall be sprayed up to the carriageway edge without overlapping onto the kerbs, channel, footways or any structure adjoining the highway. The Service Manager may require any adjoining structure or the like to be masked if this proves necessary as a result of the Supplier's method of work.

Transverse end joints shall be made with a protective mat or paper strip not less than 1m wide at each end of the finished lane. Spraying shall then commence and finish on the protective mats or strips. Longitudinal joints shall coincide with lane markings unless otherwise agreed by the Service Manager. The 'wet edge' shall be fully protected with cones to ensure that traffic does not at any time run on unchipped binder. The maximum longitudinal overlap joint shall be no more than 150mm.

The Supplier shall ensure that chippings are not spilled on carriageways or footways. The Suppliers vehicles are not permitted to drive on footways unless the vehicle type has been accepted by the Service Manager.

Polymer Modified Binder (Premium Grade) Distributor – MAJOR ROADS

Where required by the Service Manager, the Supplier shall apply the binder using a distributor specially designed for the application of modified binders. The distributor shall feature pneumatic or hydraulic control of the vertical and lateral bar movement and operation of individual jets. The distributor shall be capable of operating accurately independently of road speed to suit site conditions and shall be suitable for the whole range of pressure, temperature and viscosity applications of all commercially available binders.

Aftercare Requirements

The recommendations of Code of Practice for Surface Dressing (RSDA 2000a) for aftercare and opening of the road to traffic shall be followed.

The Supplier shall remove surplus chippings from the carriageway before opening to unrestricted traffic use.

The Supplier shall carry out further operations to remove loose surface dressing chippings as follows:-

- i) 1st Operation- 24 hours after opening to unrestricted traffic use.
- ii) 2nd Operation 3-4 days after opening to unrestricted traffic use.
- iii) 3rd Operation 7 days after opening to unrestricted traffic use.
- iv) 4th Operation 56 days after opening to unrestricted traffic use.

The Supplier shall be responsible for and shall include in his rates for the removal of loose chippings from carriageways and footways from the date of application until the issue of the completion certificate. The Supplier shall carry out the removal of chippings within two days of the Service Manager's instructions.

All arisings, loose chippings and other detritus etc., are to be deposited in the Supplier's tip off site or reclaimed by the Supplier for recycling purposes. The arisings shall NOT be returned to the chipping stockpile sites. All tips used by the Supplier must be licensed tips holding a Waste Management Licence issued by the Waste Regulation Authority.

Copies of all controlled Waste Transfer Notes generated by the contract must be supplied to the Service Manager as per 'Waste Duty of Care' - Code of Practice' Section of the Environmental Act 2021.

The Supplier shall maintain adjacent side roads, footways, pavements, verges, and other paved areas free of loose chippings until the completion of work detailed within the Works Order.

Racked in Dressing

When undertaking racked in dressing it is recommended that two rollers are used. The larger size chippings should receive at least one pass of the roller before the smaller sized chippings are applied. It is the Suppliers responsibility to ensure adequate embedment of the chippings has taken place.

Equipment

For major roads surface dressing the Supplier must ensure that he uses an adequate method for the removal of surplus surface dressing chippings.

The Supplier shall indicate in the schedule of equipment requirement in Appendix 7/70 for normal roads (Sheet 7) and major roads (Sheet 8), details of all equipment proposed to be used in the surface dressing operation.

Records

The Supplier shall keep a daily record, as Appendix 7/70 (Sheet 2), of his work at each site and pass a copy to the Service Manager on a daily basis. The record shall include details of actual binder spread rate used at a specific site or location, site measurements (width, length etc), details of weather conditions when undertaking the dressing at each site including air temperature and relative humidity.

Traffic Safety and Management

Traffic control shall be in accordance with the Code of Practice for Traffic Safety and Control of Surface Dressing [produced jointly by CSS and RSDA] and such other special requirements as described in Appendices 1/17 and 1/18.

Where there are any points of conflict between the Code of Practice for Traffic Safety and Control of Surface Dressing [produced jointly by CSS and RSDA] and this contract then the requirements of this contract shall take precedent.

The Supplier shall take all reasonable precautions to control the speed and movement of traffic in order to avoid damage to the new dressing and to obviate danger to road users or damage to adjoining parked cars and property from flying chippings.

If the Supplier is to store surface dressing equipment on the highway overnight, he must first seek the Service Manager's approval and if granted, a clearly visible sign must be

placed within each item of equipment detailing the name of the company and the emergency contact telephone number.

Loose Chipping Signs

The Suppliers attention is specifically drawn to the requirements of Clauses D3.7, D3.18.7 and D3.29 of Chapter 8 of the Traffic Signs Manual - Traffic Safety Measures and Signs for Roadworks and Temporary Situations 2009.

The signs and supplementary plates are to be maintained until the completion of the first two sweeping operations after opening to unrestricted traffic use and only removed when the Supplier is satisfied that no further chipping loss will occur.

The Supplier must also provide, place, maintain in position and remove "loose chippings on road ahead" signs, to diagram No 7009, 100m prior to the start as well as the actual start of each surface dressing site in both directions. These signs may be printed on vertical "ribbed" corex board or similar plastic material of size 770mm by 800mm wide. A minimum of 4 signs shall be erected at each site. For sites longer than 400 m 2 extra signs (one in each direction) shall be erected for every additional 400 metre length. These signs are to be maintained and removed by the Supplier when the Supplier is satisfied that there are no loose chippings present in the surface dressing.

Remedial Works

If any defects appear in the Works until the defect date either as described above or elsewhere in the Contract, the Service Manager shall give written notice thereof and the Supplier shall make good the same at his own cost.

Testing

The Service Manager reserves the right to carry out his own tests to determine the binder and chipping spread rates.

Protection of the Dressing

The Supplier shall be responsible for and shall maintain adequate traffic control to restrict traffic speeds on newly laid surfaces to ensure that no damage occurs to the new dressing. The Supplier is reminded of the additional measures that may have to be taken during periods of high road surface temperature and other difficult weather conditions.

If the Service Manager requires, the Supplier shall apply fine aggregate to any area of the dressing which is being damaged. The aggregate used shall be clean and dry and shall be evenly graded from 3mm to dust and shall be from the same source as the chippings used at each particular site.

The supply and application of aggregate graded 3mm to dust, shall be deemed to be aftercare.

Where the Supplier or Service Manager considers a failure has occurred then the Supplier will be required to take such traffic management measures as the Service Manager shall direct at the Supplier's cost. The Supplier will also be required to carry out Public Relations work with aggrieved members of the public for damage sustained by them as a result of the failure when directed by the Service Manager. Such measures are at the Supplier's cost.

Replacement Roadmarking

The Supplier is responsible for replacing the road markings obliterated by the surface dressing in accordance with the Road Marking Drawings and Schedule supplied by the Service Manager. The Service Manager shall give a copy of the Road Marking drawings to the Supplier at least 7 days prior to Surface Dressing a particular site.

The Supplier shall complete all road marking replacement for each site listed in the Schedule of sites as follows:-

- i) 'Stop' and 'Give Way' junction markings and double white line systems shall be replaced within 2 days [not working days] of the site being surface dressed.
- ii) All other road markings are to be replaced within 3 days [not working days] of the site being surface dressed

Provision of Temporary Signing While Roadmarkings are not Present Due to Surface Dressing Operations

The Supplier shall provide, erect and maintain in position the following signs at all sites where road markings have been obliterated by the surface dressing.

- i) "No Road markings for (x) miles (diagram number 7012)
- ii) "No give Way Markings" (diagram number 7012)
- iii) "No stop markings" (diagram number 7012)

The above signs are to be reflectorised in accordance with the Traffic Signs and General Directions 2002. These signs shall remain in position until the road markings have been replaced.

772 AR Carriageway Patching

Carriageway patching is defined as works that require materials to be hand laid.

Carriageway patching shall be carried out by cold milling out the necessary material and replacing it with hot bituminous material which will be hand laid. For smaller repairs the Service Manager will permit hand cutting and removal using percussive tools, providing faces are saw cut appropriately.

Joints for patches that require binder and surface course shall be stepped so that the surface course joint is 100mm outside the binder course joint. For measurement purposes the area of each patch shall be the area of new surface course. Joints shall be treated in accordance with Clause 903.22 i) or ii) only.

In ordering patching items the Service Manager has considered that this is the most appropriate method for undertaking this work and that the use of a self-propelled surfacing machine is not practical. When repairs require the use of a self-propelled surfacing machine, the individual items for cold milling and bituminous material in Series 700 of the Schedule of Rates shall be ordered.

Items have been included in the Schedule of Rates for the hand laying of patches where instructed by the Service Manager. The removal of material for hand lay patching is to be by cold milling unless the Service Manager has relaxed this requirement for a particular Works Order. There are extra-over items for base and sub-base in the Schedule of Rates that can be used in conjunction with Patch Types 5 - 8 inclusive when required by the Service Manager.

The different carriageway patch types are as listed in Appendix 7/1: Schedule 6.

773AR: Cold Applied Ultra-Thin Surfacing System (CAUTS)

The Ultra-Thin Surfacing System should comply with BBA HAPAS Roads and Bridges Certificate or similar.

Bituminous surfacing materials shall be produced in plants that are registered to the BS EN ISO 9001: 2000 ‘Sector Scheme for the Production of Asphalt Mixes’ Proposed binders together with data sheets and cohesivity data should comply with BBA HAPAS Roads and Bridges Certificate, or similar and should have obtained a CE Marking. The Supplier must provide test results for the binder that he wishes to use based on the Vialit Cohesion Test as described in Clause 957 of the Specification of Highway Works. The minimum binder cohesion at peak measured using the Vialit Pendulum for three grades of binder are given in Table NG 9/8 of the Notes for Guidance for the SHW.

The Supplier is to present the Service Manager with the Vialit test results in December of every year for all binders that he wishes to use in the following surface dressing season.

The Cold Applied Ultra-Thin Surfacing System (CAUTS) shall only be completed between the months of March & October.

Before work starts the road surface must be dry or damp with no evidence of standing or pooling water.

Work will not start on site if rainfall is expected.

The road surface temperature must be measured & should be ►5°C on a rising thermometer & ►10°C on a falling thermometer.

Site Design Criteria will be in accordance with the following tables;

The material design will be site specific taking into account the existing surface conditions, site criteria, Client requirements & contractual specifications.

The site design aggregate specification will be based on the following tables:

Table 1: Design Options

Area of Application	Aggregate Specifications	Binder Specification
Low / Medium / High stress areas based on site specific inspection & assessment	14 / 6mm	Binder Applications 1 (Design Option 1)
	BS EN 13043 8 / 14mm Gc 85-15 2.8 / 6.3mm Gc 85-15	Binder Applications 1 & 2 (Design Option 2) CE MARKED Binder System comprising of cationic polymer



	10 / 6mm BS EN 13043 6.3 / 10mm Gc 85-20 2.8 / 6.3mm Gc 85-15	modified bitumen emulsion from approved suppliers <i>(As specified in ISO 9001:2008 Approved Suppliers List)</i> Binder Application 2 (Design Option 1) Binder Application 3 (Design Option 2)
	14 / 4-2mm BS EN 13043 8 / 14mm Gc 85-15 2 / 4mm Gc 85-20	CE Marked. Rapid breaking cationic polymer modified bitumen emulsion from approved suppliers. <i>(As specified in ISO 9001:2008 Approved Suppliers List)</i>
	10 / 4-2mm BS EN 13043 6.3 / 10mm Gc 85-20 2 / 4mm Gc 85-20	

Following a detailed site inspection the Cold Applied Ultra-Thin Surfacing System (CAUTS) design option should be specified as Design Option 1 or Design Option 2. The application procedures for each design option should be detailed in a Method Statement.

The Cold Applied Ultra-Thin Surfacing System (CAUTS) Design Option will be clearly specified at all stages of site design & treatment application. The most appropriate Design Option will be determined by a site specific inspection / review that will assess site specific conditions & circumstances including:

- The existing road surface
- Traffic categories, traffic flow & traffic count
- Site configuration, including sharp bends & inclines
- Shaded areas
- Client input - including requirements & expectations.

The selected Design Option application rates will be based around the following tables:

Design Option 1 Application Rates (10 / 6mm & 10 / 4-2mm Aggregates)

Constituent Material	Application Rate



Binder (Application 1)	1.5 – 2.6 litres / metre ²
10mm Aggregate (6.3 / 10mm Gc 85-20)	8 – 12 kilogrammes / metre ²
6mm or 4-2mm Aggregate (2.8 / 6.3mm Gc 85-15 or 2 / 4mm Gc 85-20)	3 – 4 kilogrammes / metre ²
Binder (Application 2)	0.2 – 0.5 litres / metre ²

Design Option 1 Application Rates (14 / 6mm & 14 / 4-2mm Aggregates)

Constituent Material	Application Rate
Binder (Application 1)	1.5 – 2.6 litres / metre ²
14mm Aggregate (8 / 14mm Gc 85-15)	15 – 10 kilogrammes / metre ²
6mm or 4-2mm Aggregate (2.8 / 6.3mm Gc 85-15 or 2 / 4mm Gc 85-20)	3 – 4 kilogrammes / metre ²
Binder (Application 2)	0.2 – 0.5 litres / metre ²

Design Option 2 Application Rates (10 / 6mm & 10 / 4-2mm Aggregates)

Constituent Material	Application Rate
Binder (Application 1)	1.0 – 1.3 litres / metre ²
10mm Aggregate (6.3 / 10mm Gc 85-20)	10 – 14 kilogrammes / metre ²
Binder (Application 2)	0.8 – 1.2 litres / metre ²
6mm or 4-2mm Aggregate (2.8 / 6.3mm Gc 85-15 or 2 / 4mm Gc 85-20)	7 – 9 kilogrammes / metre ²
Binder (Application 3)	0.2 – 0.5 litres / metre ²

Design Option 2 Application Rates (14 / 6mm & 14 / 4-2mm Aggregates)

Constituent Material	Application Rate
Binder (Application 1)	1.0 – 1.3 litres / metre ²
14mm Aggregate (8 / 14mm Gc 85-15)	11 – 17 kilogrammes / metre ²

RBWM Highway Services Contract 2024
Highway Maintenance and Capital Works Contract



Binder (Application 2)	0.8 – 1.2 litres / metre ²
6mm or 4-2mm Aggregate (2.8 / 6.3mm Gc 85-15 or 2 / 4mm Gc 85-20)	7 – 9 kilogrammes / metre ²
Binder (Application 3)	0.2 – 0.5 litres / metre ²

Testing requirements will be in accordance with the details contained in the following table and will need to be evidenced for the inspection of the Service Manager upon request.

Monitoring / Testing Requirement	Frequency	Monitoring / Testing Details
<u>Spray Bar</u> Full bar distribution testing to BS 1707	Minimum testing requirement – annual (Testing completed between January & April annually)	Analysis of full width of spray bar to BS 1707, completed by a UKAS approved testing laboratory. Full records of testing to be retained on file for 5 years
<u>Spray Bar</u> Binder distribution testing	Minimum testing requirement - monthly	Carpet tile test – full width distribution (To BS1707 specification)
<u>Spray Bar</u> Binder rate of spread testing	Minimum testing requirement – weekly or at any change of material type or source	Carpet tile test – individual tiles (To BS1707 specification)
<u>Spray Bar</u> Distribution – visual monitoring	Continual visual monitoring during completion of work	Visual check to ensure there are no fluttering or blocked jets.
<u>Phoenix Chipper</u> Aggregate spread rate	Minimum testing requirement – every change of aggregate size or source	Chipper tray test

Series 1100: Kerbs, Footways and Paved Areas

1171AR: Timber Edgings

Timber for use as edging shall be one of the species referred to in BS 5589 Section 3 for performance Category B. It shall be preserved in compliance with Clause 311. Only pressure creosote in accordance with Table 5 of BS 5589 shall be permitted.

Retaining pegs shall be driven at 1.5 metres centres behind the edging. The edging shall be nailed to the retaining pegs with 2 No. x 4mm x 50mm round galvanised nails.

1172AR Preparation of Formation in Footways and Paved Areas

The footway sub-grade shall be sprayed evenly over the whole area requiring treatment with total eradicator type weedkiller. The weedkiller shall be non-poisonous to human beings, animals and insects. The Supplier must obtain the approval of the Service Manager to the type of weedkiller before weedkiller is applied. The rate of spread of the weedkiller shall be in accordance with the manufacturer's instructions.

1173AR Footways and Paved Areas Overall Requirements

Footways and Paved Areas shall be constructed generally in accordance with Series 700, 800, 900 Road Pavements subject to the following overriding requirements.

The vertical depth below the true Footway or Paved Area surface of any point on the constructed surface of the formation or footway or paved area courses shall be within the appropriate tolerance given in the following Table.

The surface level of the footway or paved area at any point shall not deviate vertically from the true finished surface by more than +6mm. The combination of permitted tolerances in different footway or paved area levels shall not result in a reduction of the surface course by more than 5mm from that specified nor a reduction in the total thickness of the footway or paved area including sub-base by more than 10mm from the specified thickness.

The surface levels of footways and paved areas immediately adjacent to kerbs, channels, edgings, gullies, manholes and the like shall not deviate from the true finished level by more than +6mm or -0mm.

For checking compliance with surface levels on areas less than 10 metres wide will be taken at points selected by the Service Manager at 5m centres longitudinally and at the edges and mid-point transversely. For areas of 10m width or greater, levels will be taken on a 5 metre square grid at points selected by the Service Manager. When not more than two in any ten consecutive measurements exceeds the tolerances permitted, but these two measurements shall not exceed 5mm more than the tolerance for the layer concerned.

The surface regularity of footways and paved area shall be measured at points determined by the Service Manager and any deviation from the design profile measured under a 3m straight edge shall not exceed 10mm. Additionally, the level difference between any two adjacent precast concrete flags, paving blocks or clay pavers shall not exceed 2mm.

Rectification



Where any tolerances in this Clause are exceeded, the Supplier shall determine the full extent of the area which is out of tolerance and shall make good the surface of the pavement course or formation in the manner described below.

(i) Formation Level

If the surface is too high it shall re-trimmed and re-compacted in accordance with Clause 616. If the surface is too low the deficiency shall be corrected by the addition of suitable material of the same classification and moisture content or other approved material laid and compacted to Specification.

(ii) Sub-bases

The top 50mm shall be loosened, reshaped, with material added or removed and re-compacted all to Specification. Alternatively, for sub-bases under footways or paved area (Precast Concrete Flags) the Supplier may make up low areas to a level within the tolerances of this Clause with Class 2 or 3 mortar complying with Clause 2404 or lime mortar complying with Clause 2405 as described in the Contract.

(iii) Precast Concrete Flags, Blocks and Clay Pavers

Flags, blocks or pavers shall be lifted and re-laid to comply with the Specification.

(v) In-Situ Concrete

The method of rectification shall be agreed with the Service Manager.

Tolerances in Surface Levels of Footways and Paved Areas and the Formation

- Surface course + 6mm
- Binder course + 6mm
- Sub-base + 10mm
- Formation + 10mm to -30mm

1174AR Resin Based Surface Treatment

Refer to Clause 970AR Coloured Surface Dressing paragraphs 1 to 12 and Table 1 Type 4. Colour specified on scheme specific drawings.

1175AR Slurry Sealing

Refer to Clause 971AR Surface Dressing with 6mm single size chippings.

Series 1200: Traffic Signs

Delete existing Clause 1212 sub-clauses 3, 4, 5 and 6 and insert the following

1212SR Road Markings

This Clause replaces SHW Clause 1212 sub-clauses 3,4,5 & 6. It contains the two types of performance road marking required. The specification for each type of road marking is detailed below and states the physical properties specific to each type of road marking which must be achieved throughout its 24 month Performance Term.

- TYPE 1 - comprises of a 100mcd/m²/lux line which should be used on 'A' Roads with a speed limit of 30mph or less and on any other class of road regardless of speed limit.
- TYPE 2 - comprises of embossed line, which should be used on A class roads with a speed limit greater than 30mph or sites with a proven accident history.
- TYPE 3 - comprises MMA lining or proprietary approved line as agreed by the Service Manager

Dimensional Tolerances (General)

The width tolerances and thickness for screed, spray, preformed and extruded white or yellow lines shall be in accordance with the following criteria, with the exception of the road markings listed of the Traffic Signs Regulations and General directions 2016.

The length and width of the road marking shall be as specified with the following tolerances:

- i) Length +10% - (minus) 0%
- ii) Width + 10% - (minus) 0%

The thickness of screed thermoplastic materials excluding surface applied solid glass Beads shall not be less than 2.0mm or greater than 6.0mm (with the exception of raised rib).

The thickness of extruded thermoplastic materials excluding surface applied glass beads will have the following tolerances - 3mm extruded + 0.5mm - (minus) 0.0 mm.

The thickness shall be measured from the top of the surface course (including pre-coated chippings) to the top of the road marking. Therefore, the thickness shall not be dependent on the texture depth of the surface course material.

Permanent Road markings

Where specifically referred to, all road markings shall exhibit the following road performance requirements and physical properties as defined in BS EN 1436 & BS EN 1871 for a period of the functional life, starting from the date of application or when the road is trafficked, whichever is later. The material to be used shall be to the same mix, material quality, quantity and rate of application as used on the test site.

White Road Markings - Type 1 (100mcd/m²/lux Performance)

Luminance Factor (Day visibility)

When measured dry in accordance with Annex 'C' of BS EN 1436, the luminance factor of all white thermoplastic road markings shall not be less than 0.40, complying with Table 5, Class B3 of BS EN 1436.

Night Visibility of Road Markings

Immediately after application and throughout the period of 24 months thereafter, the retro-reflectivity (the RL Value) of all white thermoplastic road markings, shall not be less than 100mcd/m²/lux, when measured in accordance with Table 2: Class R2, of BS EN1436.

Wet Visibility

During wetness the minimum coefficient of retro-reflected (the RL Value) luminance of all white thermoplastic road markings shall not be less than 25mcd/m²/lux, conforming to Table 3: Class RW1, of BS EN 1436.

Rain Visibility

The test during rain is not intended for use with standard measuring equipment currently in general use in the UK.

Skidding Resistance

Skidding resistance shall be measured in accordance with Annex D: BS EN 1436.

The skidding resistance of all longitudinal road markings shall not be less than 45, complying with Table 7, Class S1 of BS EN1436.

The skidding resistance of Arrows, Letters, Numerals, 'Dragon's Teeth, Hatching and any large surface areas shall not be less than 55, complying with Table 7 : Class S3 of BS EN1436.

White Road markings - Type 2 (Embossed road markings)

Night Visibility of Road Markings (RL value)

All embossed road markings shall exhibit the following performance requirements for retro-reflectivity over a period of 2 years:

- i) Immediately after application the RL value of all white thermoplastic embossed road markings shall not be less than 300mcd/m²/lux
- ii) Within 14days the RL value of all white thermoplastic embossed road markings shall not be less than 250mcd/m²/lux
- iii) After a period of 24 months the RL value of all white thermoplastic embossed road markings shall not be less than 150mcd/m²/lux.

Wet Visibility

All embossed road markings shall exhibit the following minimum performance requirements for reflectivity over a period of 2 years:

- i) Immediately after application the wet RL value of all white thermoplastic embossed road markings shall not be less than 200mcd/m²/lux
- ii) Within 14 days the wet RL value of all white thermoplastic embossed road markings shall not be less than 150mcd/m²/lux

- iii) After a period of 12 months the wet RL value of all white thermoplastic embossed road markings shall not be less than 75mcd/m²/lux.
- iv) After a period of 24 months the wet RL value of all white thermoplastic embossed road markings shall not be less than 50mcd/m²/lux, conforming to Table 3: Class RW3, of BS EN 1436.

Rain Visibility

The test during rain is not intended for use with standard measuring equipment currently in general use in the UK.

Day Visibility of Road Markings (Luminance)

When measured dry in accordance with Annex 'C' of BS EN 1436, the performance requirement of the luminance factor shall not be less than 0.40, complying with Table 5, Class B3 of BS EN 1436.

Skidding Resistance

Skidding resistance shall be measured in accordance with Annex D: BS EN 1436.

The skidding resistance of all embossed longitudinal road markings shall not be less than 55, complying with Table 7, Class S3 of BS EN1436.

Yellow Road Markings

Day Visibility of Road Markings

When measured dry in accordance with Annex 'C' of BS EN 1436, the performance requirement of the luminance factor shall not be less than 0.30, complying with Table 5, Class B2 of BS EN 1436

Night Visibility of Road Markings

There is no requirement for yellow thermoplastic lines to be reflectorised, complying with Table 2: Class R0, of BS EN1436.

Wet Visibility

There is no requirement for yellow thermoplastic lines to be reflectorised, complying with Table 3: Class RW0, of BS EN 1436.

Rain Visibility

The test during rain is not intended for use with standard measuring equipment currently in general use in the UK.

Skidding Resistance

Skidding resistance shall be measured in accordance with Annex D: BS EN 1436.

Skidding resistance of all longitudinal road markings shall not be less than 45, complying with Table 7, Class S1 of BS EN1436.

Where specified, the skidding resistance of transverse yellow bar markings shall not be less than 65, complying with Table 7: class S5 of BS EN 1436, as defined in Highways Agency Internal Advice Note 1/80. Dimensional Tolerances

White Road Markings - Type 3 (MMA)

This MMA proprietary lining system shall comply at least to the requirements of Type 1 and be HAPAS approved and agreed by the Service Manager.

1270 AR Vertical Realignment of Traffic Signs

The Supplier shall support the sign post and shall carefully excavate by hand, in any material, around in the existing foundations. Care must be taken during the excavation not to damage the signs plates, luminaires or electricity supply cable or any other services that may be present. Should any damage be revealed below ground level the Service Manager's instruction shall be sought before proceeding.

After vertical realignment the hole shall be backfilled ensuring that any voids between the existing concrete foundation and the surrounding ground have been filled and compacted.

The Supplier shall be responsible for making good any damage to the post or its protective system caused during the operation.

1271AR Cleaning of Traffic Signs

Traffic sign faces including all TMP bollards shall be cleaned in accordance with a programme agreed with the Service Manager.

The sign shall be thoroughly cleaned and be left in correct adjustment after maintenance.

All graffiti shall be removed using a suitable detergent specially prepared for this task and debris shall be cleared from around the posts.

Cleaning will be carried out using water and suitable approved detergents. Solutions shall comply with Appendix 12/91 and shall cause no harmful effects to the range of materials and surfaces to be cleaned or the environment. No abrasive cleaning materials of any kind shall be used. Cleaning brushes and cloths shall be frequently changed to ensure that no scouring or abrasive action damages sign surfaces. After cleaning all surfaces shall be wiped with a clean muslin cloth to remove surplus solution.

During cyclic maintenance the Supplier shall :-

- i) carry out a visual structural inspection of metal posts, brackets, housings, luminaires and doors for any corrosion in accordance with Appendix 13/70.
- ii) check sign faces, brackets and luminaires for correct alignment with respect to the road adjusting as necessary;
- iii) examine, tighten, lubricate and replace where necessary all grub screws, screws, nuts and locking devices;

The Supplier shall electronically record the structural condition of each traffic sign and shall submit the information to the Service Manager.

The Supplier shall forward to the Service Manager any inventory data amendments together with any defects which he considers require further attention.

The contractor is to keep a database of cyclic maintenance and provide to the Service Manager once a month.

1272AR Vehicle Activated Signs (VAS)

Mains Powered Vehicle Activated Signs (VAS)

The internally illuminated VAS lighting units will be supplied to the Supplier by the Service Manager and the Contactor will remove them from store and re-erect, either mid or post top mounted to either a lighting column or a wide based post. The mounting is supplied with the VAS and consists of a bolted bracket. The VAS shall be electrically connected to the post termination unit and the sign commissioned.

The signs supplied shall be up to 750 mm in diameter and the orientation of the sign shall be as directed by the Service Manager.

Where signs are required back to back, the second sign will be bolted to the back of the first sign and the electrical connection for the second sign will be taken from the first sign via a simple plug and socket arrangement.

Solar Powered Vehicle Activated Signs (VAS)

The internally illuminated VAS lighting unit, together with the solar panel and battery pack will be supplied to the Supplier by the Service Manager and the Contactor will remove them from store and re-erect. The solar panel will be post top mounted and the VAS mid post mounted to an 89 mm diameter post. The battery pack will be either mid post mounted, or if a wide based post is specified, it will be mounted in the base compartment. The various units hook onto mountings bolted onto the posts and be electrically connected together and the sign commissioned. Each unit shall then be locked with the padlocks supplied by the Service Manager.

The VAS supplied shall be up to 750 mm in diameter and each component of the unit shall weigh no more than 10 Kg. The orientation of the sign shall be as directed by the Service Manager and the orientation of the solar panel shall be due south.

Rotation of Solar Powered Vehicle Activated Signs (VAS)

The Client has a stock of VAS which are rotated around the Parishes. The posts are already in situ and the Supplier will periodically remove one or several VAS to store and in their place erect signs with the legend, 'Speed Check Area'. The VAS removed to store will then be removed from store, cleaned and re-erected in other Parishes, in place of the 'Speed Check Area' signs already in situ, which will in turn be removed to store.

The Supplier will be supplied with a program of works by the Service Manager and will be given three working days to re-erect a VAS following its removal, to enable the work to be carried out concurrently with other works. VAS rotation will normally be between 4 and 6 weeks.

Series 2000: Waterproofing for Concrete Structures

2001SR Waterproofing for Structures

Concrete Testing

The Service Manager shall consider the results of the half cell testing. The Supplier shall obtain the approval of the Service Manager before commencing the application of the waterproofing system.

Concrete Repair

The Service Manager shall instruct the Supplier with respect to any concrete repairs that are required as indicated by the concrete testing results. All concrete repairs instructed by the Service Manager shall be completed before commencing the application of the waterproofing system.

Surface Preparation

Immediately before the application of primer or laying of the waterproofing system or protective layer, the concrete surface or primed surface shall be clean, dry and free from laitance, loose aggregate and other debris, existing waterproofing system, curing liquids, grease, oil and traces of bitumen. Grit blasting shall be performed using a vacuum blasting machine. Inaccessible surfaces may be cleaned using open blasting to the approval of the Service Manager. Alternative methods of surface preparation are to be accepted by the Service Manager.

Post Preparatory Inspection

The Supplier shall make provision for the Service Manager to undertake such visual examinations both during and after the preparation of the deck surface, removing any debris as necessary in order to identify any defects which may be apparent.

The Service Manager shall instruct any necessary remedial action to allow for the production of a surface finish acceptable for the application of the waterproofing membrane.

General

The waterproofing membrane, primer and bonding agent shall be compatible with each other.

Waterproofing shall be applied only when the ambient and concrete surface temperature is above 4°C or 4°C and rising.

Materials for waterproofing concrete bridge decks and for waterproofing below ground concrete surfaces shall be in accordance with Appendix 20/1 or for the latter, as agreed by the Service Manager.

An additional bituminous protection layer shall be applied immediately above the bridge deck waterproofing only to those areas as described in Appendix 20/1 or the Drawings referred to therein and shall comply with this Series.

A minimum adhesion value of 0.3 N/sq mm shall be achieved between the waterproofing system and the substrate.

Any permanently exposed areas of waterproofing membrane shall be non-degradable in the presence of ultraviolet light and be grey in colour.

The sprayed waterproofing membrane shall be checked for pinholes using effective High Voltage Testing equipment (eg Holliday Detection equipment) immediately upon completion of the final layer of the sprayed waterproofing membrane.

All pinhole defects shall be rectified. The method of rectification shall be recommended by the manufacturer and accepted by the Service Manager.

2005SR Workmanship for Waterproofing Concrete Bridge Decks

Permitted Waterproofing Systems

Permitted waterproofing systems shall be supplied and installed in accordance with the BBA Roads and Bridges Agrément Certificate.

The formation of defects affecting the integrity of the membrane including pin/blow holes (continuous or non-continuous) and blisters in the waterproofing shall:

- i) be made good by repair in accordance with the BBA Roads and Bridges Agrément Certificate before any subsequent layers are applied; or
- ii) require the system to be replaced.

For sheet membranes bonded with oxidized bitumen the heating and temperature of the bitumen shall comply with the manufacturer's requirements within the limits stated in BS 8000:Part 4.

A means of checking the bitumen temperature shall be provided.

Sheet membranes shall wherever possible be laid in the direction that the additional protective layer or surfacing will be laid and compacted by roller.

Unless otherwise specified in the BBA Roads and Bridges Agrément Certificate, joints between sheets shall be lapped with end laps of at least 150 mm and side laps of at least 100 mm. The joints shall be arranged so that:

- i) at no point are there more than three thicknesses of sheeting; and
- ii) water will drain away from the exposed edge.

Permitted waterproofing systems shall be laid to follow the contours of the concrete surface. Laps, ridges and ripples in waterproofing sheeting, and peaks and steps at butt joints in waterproofing boards, shall not be greater than 10 mm in height.

Additional Bituminous Protection

Bituminous protection complying with sub-Clause 2003.2 shall be laid on the clean and dry substrate, and compacted in accordance with Clause 901 to the areas and thickness shown on the Drawings.

Bond Between Additional Protective Layer or Surfacing and the Waterproofing System

Definitions

- i) General

The tack coat is an adhesive which is applied to the surface of the waterproofing membrane. The function of the tack coat is to provide a permanent bond between the waterproofing membrane and the overlying surfacing layer over the entire area of application. A tack coat may consist of more than one layer.

The initial surfacing layer is the layer of hot applied bituminous material which is applied directly to the tack coat. e.g., sand asphalt, rolled asphalt base course.

(ii) Tack coat tensile bond strength

Adhesion shall be provided at the interface between the tack coat and the membrane and at the interface between the tack coat and the initial surfacing layer. The cohesive tensile strength of the tack coat shall exceed the bond strengths at both interfaces.

Where a tack coat for the initial surfacing layer is not provided as part of the waterproofing system a satisfactory bond to the membrane shall be obtained from:

- i) a separate compatible tack coat complying with the requirements of clause 2005SR paras. 5-13; or.
- ii) the binder within the initial surfacing layer. The minimum allowable tensile adhesion shall comply with requirements for tack coats stated in clause 2005SR para. 8.

In addition, the requirements of the Specification for Highway Works, BD47 and BBA test certificates, the tack coat shall comply with the requirements of Clause 2005SR paras. 8 to 13.

The tack coat shall provide a minimum tensile bond strength between the waterproofing membrane and the overlying surfacing layer of 0.1 n/sq.mm measured using the test method described in Appendix B4 (I) of BD47 or equivalent.

Evidence of tests or trials shall be provided by the Supplier to the Service Manager to prove that the tack coat is capable of achieving a minimum tensile bond strength of 0.1 n/sq.mm after the tack coat has performed a minimum period of 6 months in normal service. Evidence shall refer to bond strengths measured in-situ. The test method for measurement of bond strengths measured in-situ shall comply with the requirements of Appendix B4 (I) of BD47 with the following exceptions:-

- i) the minimum no. of samples shall be four.
- ii) as built surfacing layers in operational carriageway surfaces shall be tested.
- iii) the test may be carried out at any temperature which shall be recorded.

Evidence which shows failure at the interfaces of overlying surfacing layers or cohesive failures within the overlying surfacing layers will only be accepted if the proven tensile strength through the thickness of the sample exceeds the minimum bond strength of 0.1 n/sq.mm.

The tack coat shall be resistant to the effects of rain within a period of 30 minutes following application.

Within a period of 1 hour following application the tack coat shall have a non-sticky surface to which contaminants will not adhere and which may be cleaned using water.

The tack coat shall be ready for overlaying with surfacing within a period of 2 hours following application. At this stage the tack coat shall be resistant to the effects of prolonged and heavy rain.

The surface of the waterproofing membrane must be free from contaminants and dry before application of the tack coat is commenced. The Service Manager shall inspect the surface of the waterproofing membrane and shall give his approval for application to proceed. The Supplier shall not commence application until such approval has been granted. Application of tack coat shall cease if rain or any other form of contamination shall occur during the application process.

Within a period of 2 hours following application the tack coat must be able to be trafficked by surfacing delivery vehicles and surfacing plant, and walked on by operators and inspectors without being damaged, stripped or disturbed.

Tack coat which is damaged following application shall be rectified in accordance with manufacturers recommendations before surfacing commences. Any minor damage which occurs during surfacing operations shall be noted by the Supplier and reported to the Service Manager with 24 hours. The report shall note the nature of the damage and the exact area and location.

If extensive damage of the tack coat should occur during surfacing operations the surfacing operation shall cease, and full repairs carried out before surfacing is re-commenced.

The surface of the tack coat must be free from contaminants and dry before surfacing operations are commenced. The Service Manager shall inspect the surface of the tack coat and shall give his approval for application to proceed. The Supplier shall not commence surfacing operations until such approval has been granted. In the event of rain or other form of contamination occurring during the laying of the initial surfacing layer, laying operations shall cease.

The rolling temperature of the initial surfacing layer shall be sufficient to ensure adhesion and shall be recorded by the Supplier at 10m intervals along the length of each rip of material being laid. The Supplier shall provide a written report to the Service Manager, detailing the rolling temperatures, within 7 days of completion of the bridge deck surfacing

2007AR Removal of Existing Waterproofing

Areas of waterproofing requiring removal shall be agreed with the Service Manager and marked out. The waterproofing and protective layer shall be cut neatly along the perimeters of these areas using disc cutters or knives without causing damage to the concrete substrate.

Protection layers, waterproofing layers and all traces of bitumen shall be removed. Horizontal and vertical surfaces shall be grit blasted. In addition, horizontal surfaces shall be vacuum blasted. Concrete surfaces shall be cleaned thoroughly to a standard ready to accept new waterproofing.

Spent grit shall be cleared away and disposed of by the Supplier. Care must be taken to prevent any grit, debris from entering any drains.

Pedestrian and vehicular traffic must be protected at all times from the effects of grit, paint spray, water. The Supplier shall observe the existing drainage systems and allow for subways to be kept dry for pedestrian traffic. Pedestrian access must be maintained at all times.

2008AR Repairs to Damaged Waterproofing

Where required by the Service Manager, damage to waterproofing shall be made good using the following method:

- i) Break out sufficient carriageway pavement over the damaged area to allow 100mm overlap to sound waterproof membrane.
- ii) Cut away damaged membrane and apply a cover patch of compatible membrane set in hot bitumen with 100mm overlap.

The existing waterproofing at the overlap is to be prepared in accordance with the requirements of Clause 2009AR.

2009AR Jointing to Existing Waterproofing

Joints between new waterproofing and existing waterproofing shall have side and end laps of at least 100mm and shall otherwise conform with the requirements of Clause 2005SR.

Prior to the making of a joint, the surface of the existing waterproofing to be lapped shall be prepared by removing all adhering cementitious material so as to provide a smooth surface with all loose material and dust removed. Only hand tools or small pneumatic tools such as chipping hammers or scalers are to be used for this work.

All damage occurring to waterproofing membranes during the above operations shall be made good at the Suppliers expense in accordance with the requirements of Clause 2008AR.

2010AR Anti-Graffiti Coating

General

Spent grit and debris shall be cleared away and disposed of by the Supplier. Care must be taken to prevent any grit or debris from entering any drains.

Pedestrian and vehicular traffic must be protected at all times from the effects of grit, paint spray, water. The Supplier shall observe the existing drainage systems and allow for subways to be kept dry for pedestrian traffic.

Surface Preparation – Existing concrete or masonry surface

All surfaces which are to receive the coating are to be cleaned by wet blasting to remove contamination and existing graffiti.

Trial panels of 1.0 square metres shall be wet blasted to enable the Service Manager to approve the standard of cleaning being achieved.

The newly cleaned surfaces shall be examined for blow holes and defects. Any concrete repairs required shall be carried out as agreed with the Service Manager using polymer modified repair mortar to Appendix 17/70.

Surface Preparation – Application of emulsion or obliteration coat

All surfaces which are to receive the coating are to be cleaned by power washing to remove contamination.

Trial panels of 1.0 square metres shall be power washed to enable the Service Manager to approve the standard of cleaning being achieved.

Anti-Graffiti Coating – Emulsion paint

High capacity water based emulsion with binders and pigments > 30% by volume applied in accordance with the manufacturer's instructions.

The colour of the coating shall be as directed by the Service Manager.

If necessary, multiple coats shall be applied to achieve complete obliteration of the substrate.

Anti-Graffiti Coating – Proprietary obliteration coat

Proprietary high opacity obliteration coat applied as a single coat in accordance with the manufacturer's instructions.

The colour of the coating shall be as directed by the Service Manager. On walls the coating may be applied in up to three horizontal bands in two different colours in which case one colour shall be applied first, followed by masking to provide a regular delineation of colour, followed by application of the second colour.

Anti-Graffiti Coating – Proprietary clear coating

Proprietary polysiloxane ester based clear coating applied as a single coat by brush or roller in accordance with the manufacturer's instructions (e.g. Graffiti Solve Easy On).

When instructed a second coat shall be applied on porous or textured surfaces.

Series 2600: Miscellaneous

2603SR Porous No Fines Concrete

No fines concrete shall consist of Portland cement CEM 1 to BS EN 197-1 and 20mm single size aggregate complying with BS EN 12620.

The ratio of aggregate to cement shall be sufficient to ensure a robust concrete when set.

The concrete shall be mixed by machine to a uniform colour and consistency before placing. The quantity of water used shall not exceed that required to coat all of the aggregates particles without forming excess grout.

The concrete shall be compacted by hand only.

2608AR Concrete Repairs

Materials

Repairs shall be carried out using a non-shrink, cementitious, proprietary mortar complying with BS EN 1504: 2005.

The performance requirements for the repair mortar shall be as follows:

RBWM Highway Services Contract 2024
Highway Maintenance and Capital Works Contract



Performance Characteristics	Reference Substrate (EN 1766)	Test Method	Requirement	
Compressive strength	None	EN 12190	$\geq 45 \text{ MPa}$	$\geq 25 \text{ MPa}$
Chloride ion content	None	EN 1015-17	$\leq 0.05\%$	$\leq 0.05\%$
Adhesive bond	MC(0.40)	EN 1542	$\geq 2.0 \text{ MPa}$	$\geq 1.5 \text{ MPa}$
Restrained shrinkage/expansion	MC(0.40)	EN 12617-4	Bond strength after test	
			$\geq 2.0 \text{ MPa}$	$\geq 1.5 \text{ MPa}$
Carbonation resistance	None	EN 13295	$d_k \leq \text{control concrete (MC(0.45))}$	
Thermal compatibility part 1, freeze/thaw	MC(0.40)	EN 13687-1	Bond strength after 50 cycles	
			$\geq 2.0 \text{ MPa}$	$\geq 1.5 \text{ MPa}$
Thermal compatibility part 2, thunder/shower	MC(0.40)	EN 13687-2	Bond strength after 30 cycles	
			$\geq 2.0 \text{ MPa}$	$\geq 1.5 \text{ MPa}$
Thermal compatibility part 4, dry cycling	MC(0.40)	EN 13687-4	Bond strength after 30 cycles	
			$\geq 2.0 \text{ MPa}$	$\geq 1.5 \text{ MPa}$
Elastic modulus	None	EN 13412	$\geq 20 \text{ GPa}$	$\geq 15 \text{ GPa}$
Capillary absorption	None	EN 13057	$\leq 0.5 \text{ kg/m}^2\text{h}^{0.5}$	

A system of attestation of conformity 2+ to BS EN 1504, Part 8: 2004 is required for all concrete repair products.

Concrete Removal

Prior to commencing the removal of concrete for repair purposes, a cover meter survey shall be undertaken to confirm the depth and location of steel reinforcing bars contained in the concrete.

The perimeter of each area of concrete to be repaired shall be saw cut perpendicular to the face of the concrete to the depth recommended by the manufacturer of the concrete repair product or 10mm, whichever is the greater.

Concrete within the repair areas shall be removed behind any steel reinforcing bars present in the concrete to the depth recommended by the manufacturer of the concrete repair product or 25mm, whichever is the greater.

Concrete shall be removed in a manner that does not damage either the reinforcement or the main concrete body.

Surface Preparation

Steel reinforcement within the repair areas shall be cleaned to Sa2 to EN ISO 8501-1 for concrete repair systems which involve painting the reinforcement with an active primer and Sa2.5 for systems which involve a two component epoxy primer. The full circumference of all reinforcing bars shall be cleaned.

The surface of the concrete exposed by the break-out shall be cleaned and pull-off tests shall be undertaken to verify the adequacy of the bond between the cleaned substrate and the proposed concrete repair system.

Repairs

The concrete repair system, including primers, shall be applied as recommended by its manufacturer.

The repair shall be carried out in a manner that ensures that whole of the area to be repaired is properly filled.

The completed repair shall have a dense, smooth surface which is in good alignment with the face of the repaired substrate.

Series 2700 Accommodation Works and Works for Statutory Undertakers

2770AR The Re-Levelling of Utility And 3rd Party Frames and Covers

General

This Clause describes the method that shall be employed whenever British Telecommunications (BT – Openreach) or other Utility Provider asset frames and covers are raised, lowered or replaced to conform to the road surface, footway or verge level. The works shall include the re-bedding or extending of the chamber/shaft of up to two courses of engineering brickwork or placement of slip bricks/quarry tiles to achieve the correct surface level.

Testing for Gas

The Supplier shall take the necessary steps to ensure that the jointing chamber is free from gas before commencing work. If gas is discovered, then the jointing chamber shall be carefully replaced and no work is to take place. The BT External Plant Maintenance Control or asset owner must immediately be informed before any works are undertaken.

Inspection of Frames and Covers

If, in the opinion of the asset owner representative, the existing frame and cover(s) is not fit for re-levelling, they shall be replaced by the appropriate standard item. Where a frame and cover(s) is unsuitable and the replacement item is larger than the existing chamber (walls or shaft), then information for recommended modifications to the chamber will be supplied by BT or the asset owner.

Re-Levelling Frames and Covers in the Footway or Verge

Once the cover(s) and cross piece(s) are removed, remove the frame from the chamber. Prepare the frame, if applicable, for reuse by removing all the old bedding material, debris and rust. Remove all existing bedding material from the uppermost surfaces of the chamber (walls or shaft) to leave a clean dry surface. All brickwork that the frame is to be bedded on must be sound and if necessary, removed, re-bedded or re-pointed if the change in level is less than 25mm then either:

Place the frame and in position level with the surface by using packing pieces under each corner of the frame. All voids under the frame shall be filled with cement mortar and any excess mortar shall be neatly trowelled and struck off in line with the inside of the frame.

A thick bed of cement mortar shall be trowelled around the uppermost surface of the chamber (walls or shaft) and the frame tamped and bedded on the mortar so the frame is level with the surface. All voids under the frame shall be filled with cement mortar and any excess mortar shall be neatly trowelled and struck off in line with the inside of the frame. If the change in level is greater than 25mm then the use of tiles/bricks as bedding to increase the chamber (walls or shaft) height shall be employed.

If the new level is less than the existing surface, then a course(s) brick may have to be removed using non percussive methods. If the chamber is of concrete construction non-percussive methods must once again be adopted. If the steel reinforcement is encountered, then the exposed steel must be cut and treated with a suitable rust inhibitor. The placing of the frame shall not take place until 12 hours have elapsed if

cement mortar is used. If a quick setting rapid hardening cementitious product is to be used then BT technical or asset owner approval shall be obtained.

On completion the cover(s) shall fit firmly in the frame and not rock. If rocking occurs, then the cover and frame shall be adjusted until the rocking ceases and the cover(s) lies firm and level. The area surrounding the frame shall then be reinstated with materials to match existing materials.

Re-Levelling Frames and Covers in the Carriageway

The work shall be carried out using quick setting materials in order to allow completion of the work and reopening of the carriageway to traffic within a working day.

- i) Materials
- ii) Resin Mortar

This is a three component, quick setting, resin compound comprising a translucent liquid resin, a white powder hardener and a sand filler. The complete pack shall be readily divisible into two half packs. Once the hardener has been added, the mortar will have a working life of 20 minutes and the initial set will take place after approximately 30 minutes.

- i) Resin Bedding

This is a three component, quick setting, resin compound comprising a translucent liquid resin, a white powder hardener and a heat absorbing filler. The complete pack shall be readily divisible into two half packs. Once the hardener has been added the mortar will have a working life of 20 minutes and the initial set will take place after approximately 30 minutes.

- i) Method

If the original frame and cover is to be reused all covers shall be marked so that when replaced they occupy the same position as they did before removal. If a new frame and cover is to be used refer to paragraph 3 above. Remove the covers and excavate an area around the frame approximately 150mm wide, and to the depth of the frame taking care not to damage the chamber (walls or shaft). Remove the cover and prepare it for reuse if applicable.

Prepare the surface of the chamber (walls or shaft) at 165mm below the carriageway surface by cutting back or building up as described in paragraph 4. If building up by engineering bricks or tiles being bonded with resin mortar the gap between the frame and the chamber to be between 12mm and 25mm. The finished surface must be free from debris and any water deposits.

Locate the frame square in the chamber (walls or shaft) and level it with the carriageway surface by supporting it in each corner with broken tiles or other suitable material. On the inside of the chamber, face off the gap under the frame and chamber with a thin bead of resin mortar, this will act as an inside shutter to contain the resin bedding.

Allow the mortar an initial set, which is indicated when it feels firm against finger pressure, then mix and pour the resin bedding around the frame until it just covers the lower frame flange (as shown in Drawing No. ER 101).

Allow a minimum of 2 hours to elapse before replacing the cover(s). It is important not to disturb the frame before this time period in any way. Check that the covers do not rock or foul the chamber (walls or shaft) or removable grids. If the covers rock take whatever corrective action is necessary and ensure that the cover is free from debris resin material.

Safety

When mixing and using resin bedding or resin mortar the following precautions must be observed:-

- a) Barrier cream shall be used for exposed hands and forearms.
- b) Disposable gloves should be worn.
- c) Mixing should be in a well ventilated, but wind shielded location.
- d) Eyeshields should be worn during mixing as the white powdered hardener contains a small proportion of peroxide.
- e) An ori-nasal type respirator, fitted with a dust and organic vapour filter should be worn.
- f) The disposal of all waste material, cans and plastic bags must be at an approved tip, the details of which can be obtained from the Local Authority.

Security

To enhance security against the unauthorised entry of BT chambers, when Lockable Frames and Covers are renewed, re-levelled or replaced, the Frame shall be bedded on the shaft or chamber, with Resin Bedding.

Reinstatement

Prior to reinstatement in a bituminous surface, the sides of the excavation shall be saw cut and the outside of the frame shall be primed with bitumen emulsion and the space surrounding the frame reinstated with Rolled Asphalt Surface course (Design Mix) to Clause 911.

Where only Resin Materials have been used, for re-levelling frames and covers, then reinstatement can commence 2 hours after the last batch of material has been placed.

Street Works and permitting

The Supplier must ensure that all works have a permit licence before commencement Failure to do so will result in removal from sit and FPN issued accordingly.

Each site must be set up in accordance with Chapter 8. Failure to do so will result in a FNP notice.

The Supplier must follow the section 81 process as set out in the data room.

Series 3000 Landscape and Ecology

General

The Supplier will consult the RBWM tree team and internal stakeholders in relation to any tree work. Any specific instructions will be detailed in the Works Order and requests for consultation with the Tree team will be notified to the Supplier by the Service Manager.

3077AR Tree and Shrub Planting

Supply of Plant Material

The Supplier shall, if the plant material is not originating from his nursery, inform the Service Manager of the source of supply so that an inspection may be carried out before lifting takes place, or approval otherwise given.

All plant material is to be supplied from reputable nurseries situated in the British Isles, but stock of imported origin will be acceptable, provided that this has been grown in the supplier's nursery for at least one season.

Trees and shrubs shall be true to name and variety and must be supplied in the quantities and sizes indicated on the plan. No substitution is to be made in place of the varieties listed without the prior written approval of the Service Manager.

All plant material shall be free from disease and insect pests, shall have a balanced root in proportion to its overall size and shall otherwise conform to the types specified below.

Delivery of Plant Material

Plant material is to be lifted from the nursery immediately prior to delivery to site and shall, during transit, be adequately protected so that no drying out of roots can occur. If planting cannot take place immediately following delivery the plant material must be heeled in, in a trench deep enough to cover all roots, or otherwise protected under wind and frost proof cover.

Planting

Planting shall be carried out only when the ground is frost free and not waterlogged. Deciduous species are to be planted between late October and early April and evergreen species during October/November or from mid-April. Outside these specified periods, planting may be carried out only with the written approval of the Service Manager.

Individual trees and shrubs are to be planted in prepared holes, of minimum sizes as follows: 600 mm (2 ft) square by 450 mm (18 in) deep for trees, 450 mm (18 in) square by 300 mm (12 in) deep for shrubs, or such larger size as may be necessary to adequately accommodate the root spread. Excavated topsoil and subsoil should be heaped separately and in all instances the bottom of the hole should be broken up to a further depth of 150 mm (6 in).

When backfilling, topsoil previously excavated (see above) or imported, if site conditions render this necessary, is to be placed around the roots and well firmed. To this must be added 0.12 kg (4 oz) bonemeal and 6.36 kg (14 lb) horticultural peat, well rotted farmyard manure or other similar bulky compost. Backfilling to be completed, using

available top soil, to ground level, taking care that no depression is formed and avoiding excessive mounding, material to be planted to a depth corresponding to that prior to lifting ex nursery.

Tree Types

Feathered: Overall height 1.2 to 2.10 m (4 to 7 ft) with a defined, straight and upright leading shoot, and a stem well furnished with lateral branches.

10Standard: With a sturdy, reasonably straight stem 1.65 to 1.80 m (5.5 to 6 ft) in height from ground level to the lowest branch and with a minimum diameter of 19 mm (0.75 in) at between 600 mm (2 ft) and 900 mm (3 ft) above ground. To have normally a well balanced branch spread giving an overall height of approximately 2.40 to 3.00 m (8 to 10 ft).

Tall Standard: With a sturdy, reasonably straight stem 1.80 to 2.10 m (6 to 7 ft) in height from ground level to the lowest branch and with a minimum diameter of 25 mm (1 in) at 600 to 900 mm (2 to 3 ft) above ground. To have normally a well balanced branch spread giving an overall height of approximately 2.70 to 3.60 m (9 to 12 ft).

Extra Large: With a sturdy, reasonably straight stem 2.40 to 3.60 m (8 to 12 ft) in height from ground level to the lowest branch and with a minimum diameter of 50 mm (2 in) at 600 to 900 mm (2 to 3 ft) above ground. To have normally a well balanced branch spread giving an overall height of approximately 3.60 to 6.00 m (12 to 20 ft).

Initial Maintenance

During periods of drought in the Spring and early Summer (June/July) following planting, trees and shrubs to be copiously watered at regular intervals.

Excessive weed growth to be removed from an area of 900 mm (3 ft) square around the base of each tree, 600 mm (2 ft) square around the base of each shrub and that immediately adjoining both sides of a single or double row hedge, for the period of the Contract. At the same time such areas to be lightly hoed.

Broken stakes and loose ties to be replaced or adjusted as may be necessary, and any instability due to wind to be remedied, during the above period.

Semi-mature Trees

This specification does not relate to semi-mature trees, the planting, supporting and maintenance of which will normally be related to the provisions of BS 4043.

Trees in Paved Areas

Where extra large trees are specified to be planted in paved areas or in areas to be paved and the use of wire stays is thereby made unsuitable, the trees shall be supported by rubber or plastic ties and pads to the two stakes at vertical intervals of 600 mm (2 ft) from the top tie which shall be at 50 mm (2 in) from the top of the stakes.

3078AR Care of Roadside Planting

Subject to and without prejudice to the conditions of contract the Supplier shall :-

- i) Take all reasonable measures necessary to avoid damage to roadside planting and grass verges

- ii) Be responsible for all repairs necessary as a consequence of his failure to comply with sub-clause (i) of this clause and shall submit to the project / manager for approval his proposed remedial works and type of turf, seed, bush, flower or tree to replace the damaged flora.
- iii) Remove from the verges all litter and detritus left as a result of his Works.

3079AR: Working Within a Site of Special Scientific Interest or Conservation Area

The Supplier shall exercise all care and diligence when carrying out contract works to avoid any pollution occurring to the land adjacent to the sites. The Supplier shall ensure that no unnecessary damage occurs to the land adjacent to the site because of the movement of plant and personnel around the site. No litter or surplus materials may be deposited temporarily or permanently on or adjacent to the site.

3080AR Chipping, Shredding and Composting of Organic Waste

No green waste, unless contaminated, shall be deposited off at landfill sites, the Supplier shall advise the Service Manager of any instances where this has not been possible.

All composted material shall remain the responsibility of the Supplier throughout the contract period.

Series 5000: Maintenance Painting of Steelwork (Highway Structures)

The following clauses form the Additional clauses for the 5000 series.

5070AR General

Maintenance painting of steel highway structures shall comply with this Series. Surface preparation and protection against corrosion of new steelwork shall comply with Series 1900.

5071AR Surface Preparation - General Requirements, Methods, Standards and

Definitions

The general requirements are specified in Clause 5071AR. The various methods are specified in Clauses 5071AR. The standards to be achieved are specified in Clause 5071AR.7. Definitions of terms used are given in Clause 5071AR. The particular requirements for surface preparation for the structure(s) included in the Contract are specified in Clause 5079AR.

General Requirements for Surface Preparation

Areas contaminated by oil or grease shall be cleaned down using a solution of water and emulsion cleaner followed by rinsing with clean cold water, prior to surface preparation by other specified methods.

The Supplier shall ensure that the grade and particle shape of abrasive used are adequate for the purpose intended; the cleanliness shall be to the approval of the Service Manager. Non-metallic abrasives shall not be recycled.

All equipment including tools, abrasive wheels, papers, discs and grinding wheels shall be of type, capacity and in a condition accepted by the Service Manager.

Only clean cold water, which does not leave any harmful residues on the surface shall be used for cleaning down or rinsing.

Only cleaning agents accepted by the Service Manager shall be used for the work.

Surface preparation shall be continued until the specified standards have been achieved.

After surface preparation of surfaces by dry abrading, blast cleaning or dry scrubbing, all dust and debris shall be removed by sweeping and vacuum cleaning before any painting is carried out in that area.

Immediately prior to painting, the Supplier shall ensure that the surfaces are:

- a) prepared to the specified standard
- b) free from dust and grit
- c) free from detrimental contamination as defined in Clause 5071AR
- d) ready for painting.

The edges of existing coatings adjacent to abraded or blast cleaned areas shall be bevelled back where practicable into sound and firmly adhering material.

Unless otherwise specified, fasteners shall be prepared and painted to the same standard as adjacent main surfaces.

After surface preparation by methods using water or when the steelwork has been exposed to the weather after surface preparation by other methods or when there are deck leaks, areas containing riveted or bolted joints or built up sections shall be freed of any water which has penetrated the plies; compressed air or other accepted methods shall be used. When drying out has been completed to the satisfaction of the Service Manager or when surfaces are dry after surface preparation, line gaps around the perimeter of joint or along plies shall be sealed effectively by successive applications of undercoat paint. All wider gaps shall be sealed with a sealant compatible with the primer and accepted by the Service Manager.

The use of an inhibitor during wet blast cleaning or cleaning down is not permitted.

Cleaning Down

Methods

- a) Wet cleaning down shall be carried out by scrubbing with a stiff bristle brush using water and a cleaning agent. Immediately after cleaning down, the surfaces shall be thoroughly rinsed using clean cold water.
- b) Dry cleaning down shall be carried out by scrubbing with a dry stiff bristled brush.

Where the existing surfaces are affected by embedded metallic grit or other abrasive particles, they shall be scraped to dislodge looser particles and then dusted off. This work shall be carried out after any final rinsing and when the surface is dry.

Abrading Aided by Scraping and Wire Brushing

Method

- a) Any encrusted rust, foreign matter or paint which may be difficult to remove by abrading alone shall be dislodged by scraping, aided by hand or power wire brushing as necessary or such other method as agreed with the Service Manager. The work shall be completed before abrading of the areas so affected.
- b) Abrading shall be carried out using abrasive paper or other material and/or flexible abrasive disc mounted on a power drive flexible pad, and/or a power driven arbour or spindle mounted flexible abrasive flap wheel. Abrading tools may be used to remove weld spatter; also, subject to the Service Manager's approval, wet abrading may be employed for finishes over sound undercoats and for unsound systems over galvanizing or galvanizing itself.

Other requirements

A burnished appearance caused by the polishing in of old paint, rust or dirt will not be acceptable.

Areas of corroded steel or unsound metal coatings, excepting galvanizing, which have been prepared by abrading down to bare steel, bright steel or bright metal coating, as appropriate, shall be protected by the primer and next two coats of paint before any cleaning down or other preparation of adjacent surfaces specified in Clause 5079AR is undertaken.

Areas of unsound galvanizing which have been prepared down to bright steel by abrading shall be protected by the application of the primer and next two coats of paint before cleaning down or other preparation of adjacent surfaces specified in Clause 5079AR is undertaken.

After surface preparation by wet abrading of galvanizing, but prior to any cleaning down of adjacent painted or galvanized surfaces specified in Clause 5079AR, any exposed areas of steel shall be dry abraded down to bright steel and protected by the primer and the next two coats of paint, including the stripe coat, before cleaning down or other preparation of adjacent surfaces specified in Clause 5079AR is undertaken.

Blast Cleaning

Methods

- a) Dry blast cleaning using dry air/abrasive system.
- b) Wet blast cleaning using low pressure air/water/abrasive system.

The air /water pressure at the nozzle shall not exceed 7.0 kgf/cm^2 (100 lbf/in^2) and shall be fully adjustable below this level. The system shall incorporate a mechanical metering device, remote controlled by the operator from the nozzle, to enable him to regulate from zero to maximum the quantity of abrasive being fed into the air/water mixture. During abrasive blast cleaning the air/water/ abrasive shall be thoroughly mixed and the mixture shall be projected onto the surface to be cleaned through a single bore nozzle/tube.

- (c) Wet blast cleaning using high pressure water/abrasive system.

The water pressure shall not exceed 562 kgf/cm^2 (8000 lbf/in^2). The system shall incorporate a mechanical metering device controlled by the operator at the nozzle, to enable him to regulate from zero to maximum the quantity of abrasive being fed into the water.

- (d) Combined wet/dry blast cleaning.

Wet blast cleaning using the low pressure air/water/abrasive system in accordance with Clause 5071AR shall be followed, at an interval accepted by the Service Manager, by dry blast cleaning in accordance with Clause 5071AR of all the previously wet blast cleaned areas.

Other requirements: All blast cleaning methods.

When surface preparation is to be carried out by dry blast cleaning and, on adjacent surfaces by wet cleaning down and/or abrading, then unless otherwise agreed or specified by the Service Manager, the wet cleaning down and any wet abrading shall be carried out first.

When surface preparation is to be carried out by wet blast cleaning, any wet cleaning down and/or wet abrading of adjacent surfaces may be carried out after the wet blast cleaning. In such cases areas to be blast cleaned and/or abraded shall be cleaned down in accordance with Clause 5071AR, and thoroughly rinsed using the blast cleaning equipment before any final preparation by dry blast cleaning or dry abrading is carried out.

Any finally prepared steel surfaces shall be protected from the effects of any further wet method of surface preparation by the application of the primer, the next two coats of paint and the stripe coat(s).

Other requirements: Wet blast cleaning and combined wet/dry blast cleaning.

Within 1 hour of wet blast cleaning, the whole of the cleaned surfaces shall be thoroughly washed down with clean cold water. Any further deposits of abrasive on already rinsed surfaces shall be removed also within 1 hour of being deposited. Any accumulated deposits of abrasive and debris on other parts of the structure shall be removed before the end of the working day. After washing down, the surfaces shall be free of all particles of dust and debris. An inspection shall be carried out after washing down to check that prepared surfaces are free from detrimental contamination.

The specified standard of surface preparation shall have been achieved in full initially by wet blast cleaning and rinsing, notwithstanding further treatment of the same area by dry blast cleaning.

Grinding

Methods

- a) Grinding wheels and discs shall be of the size, shape and grade of coarseness appropriate to the particular operation.
- b) The speed of revolution shall be that recommended by the manufacturer and agreed with the Service Manager.

Other requirements

Unless otherwise agreed by the Service Manager, grinding shall be carried out after surface preparation by other methods, including cleaning down, has been completed.

Surfaces prepared by grinding to bright steel shall be protected by the application of the primer and the next two coats of paint, including any stripe coats, before cleaning down or other preparation of adjacent surfaces specified in Clause 5079AR is undertaken.

Surface Preparation Standards

The following standards of surface preparation shall be achieved:

- i) Areas containing existing sound finishing paint shall be freed of:
 - a. with the exception of chlorinated rubber and acrylate rubber finishes, all visible gloss in order to provide a satisfactory key for the first coat of paint
 - b. contamination detrimental to existing and subsequent coatings
- ii) Areas of existing unsound paint coating(s) over a steel substrate shall be freed of:
 - a. any unsound paint
 - b. all paint down to bare steel
 - c. all paint down to clean steel
 - d. contamination detrimental to existing and subsequent coatings
- iii) Areas of existing unsound paint coating(s) over a metal coated steel substrate shall be freed of:
 - a. any unsound paint

- b. all paint and unsound metal coating down to sound metal coating or clean steel
 - c. all paint and metal coating down to clean steel.
 - d. contamination detrimental to existing and subsequent coatings
- iv) Areas of sound galvanizing exposed through a paint system during surface preparation shall be abraded to an extent necessary, as agreed by the Service Manager, to ensure effectiveness of 'T' Wash and adhesion of the primer.
- v) Areas of unsound metal coating over a steel substrate shall be freed of:
 - a. any unsound metal coating down to bright metal coating
 - b. any unsound metal coating down to sound metal coating
 - c. any unsound metal coating down to clean steel
 - d. any unsound metal coating down to bright steel
 - e. all metal coating down to clean steel
 - f. detrimental contamination
- vi) When either 'clean steel', 'bare steel' or 'bright steel' is exposed through a metal coating during surface preparation, the standard shall be as defined in Clause 5071AR) as appropriate, excepting that in the case of aluminium and zinc metal spray, and subject to the agreement of the Service Manager, remnants of soundly adhering and clean aluminium or zinc may be retained in the profile of previously blast cleaned steel surfaces.

Definitions of Terms

Definition of terms in Clause 5071AR. Describing Coatings, the Extent of Surface Preparation and Chemical Cleanliness of Surfaces

- i) 'unsound paint'. Paint showing signs of disruption, rusting through, having inadequate adhesion or covering rust scale, loose rust, loose mill scale or other detrimental products.
- ii) 'sound paint'. Paint which is sound down to a metal substrate.
- iii) 'unsound metal coating'. A metal coating showing signs of disruption, inadequate adhesion or penetration by rust or other corrosion products.
- iv) 'sound metal coating'. A metal coating which complies with Clause 5074AR, 'Metal Coatings', or a metal coating restored to these requirements by blast cleaning, but with a reduced thickness.
- v) Visual cleanliness of a steel substrate prepared to:
 - a. 'Clean steel' by blast cleaning Appearance:
There shall be a blast cleaning pattern overall. The surface profile shall be free from mill scale, rust and foreign matter when viewed by normal vision.
 - b. 'Bare steel' by blast cleaning Appearance:
The surface shall be free from all rust scale. loose rust and loose mill scale.
 - c. 'Bright steel' by abrading Appearance:
The surface shall be free from all surface rust, mill scale and defects, and shall have an overall bright appearance.
 - d. 'Bare steel' by abrading Appearance:
The surface shall be free from all rust scale, loose rust and loose mill scale.
 - e. Bright steel' by grinding Appearance:

The surface shall be free of weld spatter, shelling, laminations and other surface defects as required by the Service Manager, leaving an overall bright appearance. Rounding of sharp edges shall be to a radius of about 1mm.

- i) Visual cleanliness of a metal coating restored or prepared to:
 - a. 'Sound metal coating' by blast cleaning Appearance:
The surface, shall be free from corrosion products and embedded abrasive particles and shall have a bright appearance overall.
 - b. 'Bright metal coating' by abrading Appearance:
The surface shall be free from surface corrosion and corrosion products and shall have a bright appearance overall.
- ii) 'Freedom from detrimental contamination': Surfaces shall only be deemed to be free from 'contamination detrimental to existing or subsequent coatings' when their chemical cleanliness has been accepted by the Service Manager.

5072AR Paint and Similar Protective Coatings

The term paint in this specification shall be deemed to refer also to similar protective coatings including specialist coatings such as sealers.

Paint suppliers shall be proposed for approval.

All paints shall conform with formulations which have been registered by the manufacturer with the Highways Agency on or before the date entered by the Service Manager at Part 2 of the Form BE/P2 (Maintenance) Paint System Sheet. The procedure for registering paint formulations with the Highways Agency is detailed in Advice Note BA 27. Details of the quality assurance scheme for paints and similar protective coatings are given in BD 35 which also includes the Manual of Paints for Structural Steelwork.

Unless otherwise agreed with the Service Manager, all paints shall be supplied in sealed containers of not more than 25 litres capacity, and these shall be used in order of delivery. Each container shall be of the completely removable lid type and be clearly marked on the side. The marking shall include the name of the manufacturer, registered description of the material (including purpose e.g., whether primer, undercoat, or finish and also the colour), Item number, manufacturer's reference number, batch number and date of manufacture. Where date of manufacture is coded, the Supplier shall provide the Service Manager with the code key.

The Supplier shall ensure that all paints will be adequate in all respects for the purpose intended, including satisfactory application at the specified thicknesses and by the specified methods.

Form BE/P2 (Maintenance) Paint System Sheet Form BE/P5 Paint Data Sheet.

- i) As soon as the work is committed, the Supplier shall take further copies of the Form(s) BE/P2 (Maintenance) Paint System Sheet, update as agreed with the Service Manager the information provided with his quotation and forward a copy of the updated Form(s) to the Service Manager for approval. At the same time the Supplier shall forward to the Service Manager for his information, a copy of the paint manufacturer's Data Sheet (Form BE/P5 Paint Data Sheet) for each of the paints.

- ii) Following the Service Manager's written instructions, the approved Form(s) BE/P2 (Maintenance) Paint System Sheet shall be adopted for the Works.
- iii) On receipt of the Service Manager's approval the Supplier shall forward duplicate copies of the approved Form(s) BE/P2, together with a further two copies of the Data Sheets to the Service Manager. The Data Sheets shall not form part of the Contract.

Unless otherwise directed by the Service Manager, all paints forming any one protective system shall be obtained from the manufacturer named in the Form(s) BE/P2 (Maintenance) Paint System Sheet submitted by the successful Supplier and, unless there are reasons agreed by the Service Manager to be exceptional, the source(s) of supply shall not be changed during the course of the Contract.

5073AR Testing of Paints

Provision of Samples

Unless otherwise described in the Contract, the Supplier shall provide unopened samples, known as 'A' samples, for quality assurance purposes, of each type of paint to be used for the Works. In addition, the Supplier shall supply 500ml samples, known as 'B' samples, for application control purposes.

'A' Samples

Unless otherwise instructed by the Service Manager, 'A' samples are required.

- i) Where more than 2000 litres of paint for any one coat are supplied to a single contract designated as having 'Difficult Access' in accordance with Clause 5079AR
- or;
- ii) Where more than 3000 litres of paint for any one coat are supplied to a single contract designated as having 'Ready Access' in accordance with Clause 5079AR

The first 'A' samples shall be taken from the first batch for each coat of paint delivered to site and accepted by the Service Manager as being representative for use in the Works. First batches of paint of less than 10 tins shall be discarded as not being representative and shall not be used.

Unless otherwise instructed by the Service Manager, additional 'A' samples of paints subject to testing under sub-Clause 3 of this Clause shall be provided by the Supplier depending on the volume of paint for each coat to be used in the Contract. Additional samples shall be provided in accordance with the following:

- i) For 'Difficult Access' steelwork.
Over 2000 litres: a further set of samples for each part or whole 2000 litres.
Or
- ii) For 'Ready Access' steelwork.
Over 3000 litres: a further set of samples for each part or whole 3000 litres.
Unless otherwise instructed by the Service Manager, the Supplier shall also provide an 'A' sample:

- iii) of any replacement batch of paint subject to testing under sub-Clause 3 of this Clause
- iv) of any returned paint described in Clause 5076AR.4
for any contract when the paint, in the opinion of the Service Manager, is showing unsatisfactory application characteristics under Clause 5077AR.

Immediately after selection by the Service Manager, the 'A' samples shall be despatched by the Supplier to the testing authority in accordance with the Service Manager's instructions.

Paint shall be supplied in sufficient time to allow for sampling, delivery to the testing authority and testing before the start of application.

Unless permitted by the Service Manager, painting, except for procedure trials, shall not start until the Service Manager confirms that the first 'A' samples are satisfactory.

'B' Samples

The Supplier shall take 'B' samples when instructed by the Service Manager, and only under his supervision. The samples shall be taken from painters' kettles or from nozzles or airless spray guns directly into clean, new 500ml tins which shall be filled and then sealed and handed to the Service Manager for recording in the Form BE/P3. On return of the samples to the Supplier, the Supplier shall pack and despatch them immediately to the testing authority in accordance with the Service Manager's instructions.

Provision of 500ml Tins, Packing and Transport of 'A' and 'B' Samples

The Supplier shall provide 500ml tins with lids and lid clips for 'B' samples at the start of painting or before any procedure trials required by Clause 5078AR. The quantity of tins supplied shall be sufficient to avoid any delay in taking 'B' samples throughout the work.

The Supplier shall ensure that the lids of all tins of sample paint are securely clipped down when they are despatched for testing.

The Supplier shall be responsible for handling, packing as necessary, prompt despatch and transit of 'A' and 'B' samples.

5074AR Metal Coatings

Galvanized Coatings

Galvanized coatings shall, unless otherwise described in the Contract, comply with BS 729 and with the following:

- i) Inhibited hydrochloric acid with a strength not exceeding 18% and within a temperature range of 15°C to 25°C or inhibited sulphuric acid with a strength not exceeding 18% and within a temperature range of 60°C to 80°C shall be used for pickling
- ii) Components shall not be immersed in the pickling acid longer than is necessary for cleaning the surfaces prior to galvanizing
- iii) The surfaces of components to be galvanized shall be dried before immersion in the molten zinc
- iv) When an aqueous flux is to be used, all traces of acid shall be washed off immediately after pickling

- v) Galvanized coatings shall be virtually free from imperfections, including porosity, to the satisfaction of the Service Manager
- vi) Detrimental surface contamination of galvanized coatings which are to be painted shall be removed by wet cleaning in compliance with Clause 5071AR. The surfaces shall not receive chromate passivation treatment
- vii) Vent holes drilled in hollow sections prior to galvanizing shall be plugged to the satisfaction of the Service Manager.

Sprayed Metal Coatings

Sprayed metal coatings shall, unless otherwise described in the Contract, comply with ISO 2063 and with the following:

- i) Aluminium coating shall be of a material with minimum quality in accordance with type A1 99.5 (1050A) of ISO 209-1. Zinc coating shall have a composition in accordance with type Zn99.99 of ISO 752.
- ii) The thickness of either coating shall be not less than 100µm
- iii) The strength of adhesion of metal spray coatings shall not be less than the following:
Aluminium 50 kgf/cm²
Zinc 50 kgf/cm²
- iv) Metal spray coatings shall be applied continuously over each 0.5m² per gun or the area of the component whichever is the lesser until the specified thickness has been achieved.
The application of metal spray in separate coats is not permitted.
- v) All surfaces to be metal sprayed, including surfaces of the reference panel having equivalent hardness to that of the parent material, shall be blast cleaned with chilled cast iron grit, and the standard shall be clean steel, medium profile.

Sherardized Coatings

Sherardized coatings shall, unless otherwise described in the Contract, comply with Class 1, Table 1 of BS 4921.

Electroplated Coatings

Electroplated coatings shall, unless otherwise specified in the Contract, comply with BS 3382: Part 2. Additionally, BS 3382: Part 2 shall be deemed to cover the zinc electroplating of components up to and including 36mm in diameter.

Other Requirements

Before proceeding with the metal coating process, the Supplier shall provide full details of the surface preparation and coating methods he proposes to adopt and shall not put the work in hand until the Service Manager's permission has been received.

Such permission shall not relieve the Supplier of his responsibilities under the Contract. Metal coated surfaces which are to be painted shall not receive chromate passivation treatment.

When a metal coating is required on only part of a component it shall be applied before the rest of the component receives paint.

5075AR Testing of Metal Spray Coatings

At the start of the Contract, and later at intervals specified by the Service Manager (with the exception of coatings on steel in bearings, curved surfaces, repairs to mechanical damage, local failure of metal spray at site joints or areas restored on site), the Supplier shall demonstrate by means of a pull off test, of a type accepted by the Service Manager, that the minimum adhesion requirement is being attained. In the excepted areas, the Supplier shall demonstrate to the satisfaction of the Service Manager that the adhesion is satisfactory when tested in accordance with ISO 2063. Areas affected by the tests shall be restored.

The pull off tests shall be carried out initially on 150mm x 150mm x 6mm panels which shall simulate the surface condition of the parent material before and after blast cleaning. The panels shall be blast cleaned and metal sprayed together with the parent material to the same standard and using the same technique.

The Supplier shall make arrangements for the Service Manager to witness the preparation of the panels and all testing. When instructed by the Service Manager, the Supplier shall carry out further tests on similarly prepared and metal sprayed panels.

If the adhesion requirement on any test panel is not met, the Supplier shall carry out a further test on the parent material adjacent to the test panel position. In the case of adhesion failure on the steelwork itself by either method of test, unsound metal spray coating shall be restored and the tests repeated.

If more than two local areas of faulty adhesion occur on any one component, the whole of the metal spray coating on the component shall be considered as having failed, and it shall be restored.

5076AR Storage Requirements and Keeping Periods for Paints

On delivery to site, paint shall be unloaded directly into one or more secure paint stores. Unless otherwise agreed by the Service Manager, paint shall be stored within 100 metres of the painting area. Insulation and means of heating and ventilation shall be provided as necessary to maintain the temperature of paint stores between 5°C and 27°C.

If at any time or place, paint in tins, painters' kettles or airless spray containers is allowed to reach temperatures outside the 5°C and 27°C limits, the paint shall be discarded and not used for the Works. The Supplier shall also implement any additional storage restrictions recommended by the paint manufacturer.

Unless excepted in sub-Clause 4 of this Clause, paint which has not been used within the shelf life recommended by the manufacturer or within 18 months of the date of manufacture, whichever is the lesser, shall be discarded and not used in the Works.

Chemically cured or moisture cured paints shall not be used after the expiry of the pot life stipulated by the paint manufacturer. They shall be discarded on expiry of the pot life and at the end of each working day/night. All other paints in opened tins or open containers including painters' kettles shall be returned to store and kept in sealed containers with not more than 10% ullage.

Exceptionally, and subject to agreement by the Service Manager, Oleo-resinous undercoats and finishes, Acrylate Rubber paints and components of Polyamide cured Epoxy paints may have their keeping periods extended to 24 months from the date of manufacture provided that the Supplier returns the paints to the paint manufacturer and ascertains that the manufacturer examines the contents of each tin and reconstitutes the paints as necessary so that such paints are equal in all respects to the paints described in the Contract. The Supplier shall provide the Service Manager with a Certificate of Conformity confirming that such paints have been inspected and where necessary reconstituted and conform in all respects to the Contract.

Each tin of reconstituted paint returned to site by the manufacturer shall have an additional label affixed stating 'Extended Keeping Period to (date)'. The previous date marking shall remain and not be obscured. Agreement by the Service Manager to extended keeping periods of 24 months for certain paints does not relieve the Supplier of his responsibilities as described in Clause 5072AR. Testing in compliance with Clause 5073AR shall apply to reconstituted paints.

5077AR Application of Paint

The Supplier shall ensure that the properties of the paints he has selected cover the conditions at site, including temperature and humidity, and that he is able to apply the paints satisfactorily to all parts of the structure in these conditions.

Paint shall be supplied from the Supplier's paint store to the painters ready for application, the only adjustment of formulation permitted being as described in Clause 5078AR. Any addition of solvent shall be in the presence of the Service Manager and shall not exceed 5% by volume on the paint.

Paint shall be applied only to surfaces which have been prepared and cleaned as described in this Series. Areas of adjacent surfaces which are not to be painted shall be masked before application of paints to the prepared and cleaned surfaces. Overspray on adjacent unpainted surfaces shall be removed immediately to the satisfaction of the Service Manager.

Unless otherwise described in the Contract, a coat of paint in a system shall be applied by one of the following methods:

- i) brush (B)
- ii) airless spray (AS)
- iii) air pressure spray (S).

Paint shall not be applied under the following conditions:

- i) when the ambient temperature falls below 5°C or the relative humidity rises above 90% or, for types of paints in Clause 5077AR, outside the temperatures and humidity recommended by the paint manufacturer
- ii) during rain, snow, fog, mist or in a dust laden atmosphere
- iii) when the amount of moisture likely to be deposited on the surface by condensation or rain before or after painting, may have a harmful effect on the paint
- iv) when wind borne dust may have a harmful effect on the paint.

Before starting the procedure trials described in Clause 5078AR and as required by the Service Manager, the Supplier shall provide the Service Manager with details of the

overall wet film thickness for each coat he proposes to apply. He shall also provide information as to the total amount of paint he expects to use for each coat of each system during any contract for which procedure trials are required. The calculation of the amount of paint to be used shall be based on the volume solids plus an allowance for waste.

The following requirements on paint film thicknesses shall apply:

- v) Wet film thickness gauges shall be used where practicable to check that the wet film thickness is not less than:
- vi) min dry film thickness (mdft) X 100
- vii) volume solids %
- viii) During the application of a paint system, the Supplier shall ensure that the progressive total thickness of the applied coats will allow the specified minimum total dft of the system to be attained without exceeding, overall, the proposed wet film thickness referred to in sub-Clause 6 of this Clause by more than 20%.
- ix) In no case shall the total dry film thickness of a paint system or the mdft of the last undercoat and finish be less than that specified in Form BE/P2 (Maintenance) Paint System Sheet.
- x) The local dry film thickness for any primer shall not exceed the specified mdft by more than 30% and for other paints by more than 75%.

Each coat of paint of a specified system shall have satisfactory adhesion before the next coat in the system is applied.

The first coat of paint in Oleo-resinous or Acrylate Rubber paint applied over an existing oleo-resinous paint, shall be brushed.

Each coat of paint of a specified system, at whatever thickness applied, shall be virtually free from surface defects, particularly cratering, pin-holing, blistering, revelling, sagging, bittiness, dry spray and cissing as defined in BS 2015. The finished system shall have an even and uniform appearance. When required by the Service Manager, the finishing paint in visually sensitive areas shall be from the same batch.

When required by the Service Manager, the degree of gloss of a finishing paint shall be agreed before the procedure trials. A painted tinplate reference panel, 150mm x 100mm, shall be provided by the Supplier for this purpose.

Unless otherwise specified, patch painting described in Clause 5079AR shall only be applied over areas of an existing system which have been prepared to sound paint.

All coats in a system including the stripe coat(s) (see Clause 5077AR), but excepting repeat coats of the same patch paint, shall be in contrasting colours to aid identification. Before starting the procedure trials described in Clause 5078AR, and as required by the Service Manager, the Supplier shall provide the Service Manager with a reference panel, coated with the stepped-back paint system to indicate the contrast between each coat of paint.

Two pack chemically cured and moisture cured paints shall not be applied when the steel temperature falls below 0°C or when the steel or ambient temperatures are below those advised by the paint manufacturer, nor shall such paints be applied when the temperatures are likely to fall below the advised temperatures during the curing period.

Stripe Coat(s)

The stripe coat(s) specified in Clause 5079AR shall be applied over welds and all fasteners including washers and to all external corners except those of RHS members.

In areas prepared down to the substrate or to a metal coating, the first stripe coat shall be applied over the primer or the first undercoat; when a second stripe coat is specified it shall be separated from the first stripe coat by an undercoat.

In areas prepared down to sound paint, the stripe coat(s) shall be applied before the priming coat.

Stripe coat(s) applied on existing paint coats other than Chlorinated Rubber or Acrylate Rubber shall be applied by brush. Stripe coat(s) applied on existing Chlorinated Rubber or Acrylate Rubber paint coats or on new paint may be applied by airless spray or by brush as appropriate.

The first stripe coat on 'T' Washed fasteners shall be applied by brush.

Square solid infill bars shall be given an extra coat of the thickest undercoat in lieu of stripe coat or coats.

Exposure times for prepared steel surfaces and for metal coated surfaces:

- i) clean steel prepared by dry blast cleaning or bright steel prepared by abrading or by grinding shall be primed within 4 hours.
- ii) clean steel prepared by wet blast cleaning only, shall be primed within 4 hours of being dry, enough for painting.
- iii) clean steel prepared by combined wet/dry blast cleaning shall be primed within 4 hours of dry blast cleaning.
- iv) bare steel prepared by dry blast cleaning or abrading shall be overcoated within 48 hours.
- v) bare steel prepared by wet blast cleaning or combined wet/dry blast cleaning shall be primed within 24 hours of being dry enough for painting or within 48 hours of dry blast cleaning.
- vi) steelwork which has been metal sprayed at site shall be etch primed or sealed within 4 hours and in any case before the surfaces have been affected by moisture.
- vii) areas prepared down to bright or sound metal spray coating shall be sealed or primed within 4 hours of preparation by dry blast cleaning or abrading and in any case before the surfaces have been affected by moisture.
- viii) galvanizing which has been abraded to bright metal prior to painting shall be etch primed within 4 hours, or within 4 hours of being dry enough for treatment if wet abraded, and overcoated within 48 hours of etch priming.

Gaps at joints or plies shall be sealed in accordance with Clause 5071AR either before or after the application of the primer as appropriate.

Paint Overcoating Times

Unless otherwise specified or agreed by the Service Manager, overcoating times shall be as follows:

- i) primers on steel or sealed metal sprayed coatings or first coats on 'T' Washed or etch primed galvanizing shall be overcoated within 72 hours and the next coat applied within 14 days.
- ii) surfaces of existing paint coats which have been prepared to sound paint, cleaned down only or abraded only to remove gloss, shall be overcoated within 7 days.
- iii) coats following those referred to i and ii above, except for the last two coats of the remedial system, shall be applied within 14 days of each coat.

5078AR Procedure Trials

Surface preparation procedure trials

At the start of the Works, the Supplier shall carry out surface preparation procedure trials on areas totalling between 2m² and 10m² as designated by the Service Manager, employing the labour and equipment to be used in the Works. The Supplier shall demonstrate his ability to carry out the specified methods of surface preparation to the standard required. The remaining surface preparation shall not be started until these trials and the first stage of the painting procedure trials have been passed as satisfactory by the Service Manager.

Painting procedure trials

Immediately following the satisfactory completion of the surface preparation trials, the Supplier shall carry out painting procedure trials on the prepared surfaces employing the labour and equipment to be used in the Works. The Supplier shall demonstrate his ability to apply the paints he has selected in accordance with the specification. He shall supply sufficient paint for the trials as agreed by the Service Manager.

In order to avoid delay, the trials may be carried out in three stages:

- i) primer and first undercoat
- ii) undercoats and patch coats where appropriate
- iii) last undercoat and finish

The stripe coat(s) may be applied in stage i or stage ii. Paint application of the various coats on the remaining parts of the structure shall not be started until the relevant stage of the procedure trials has been passed by the Service Manager.

Surface preparation and painting procedure trials shall be completed within a 7-day period unless otherwise agreed by the Service Manager.

Any adjustment to the registered paint formulations shown to be required by the trials, other than an increase in the amount of solvent of up to 5% on the volume of paint (see Clause 5077AR) shall be agreed by the Service Manager and the adjustments made at the paint manufacturer's works.

Unless otherwise agreed by the Service Manager, the Supplier shall carry out further procedure trials whenever he employs replacement skilled labour or proposes to use equipment of a different type.

5079AR Access, Containment and Lighting

Without prejudice to Clause 37 of the Conditions of Contract, access for inspection by the Service Manager shall be provided and erected by the Supplier. The access shall

be agreed with the Service Manager as being adequate in all respects for inspection purposes.

Further to Clause 14 of the Conditions of Contract, details of all elevated access and containment including drawings and calculations shall be submitted to the Service Manager at least 14 days prior to the commencement of work on site.

Access Scaffold - Deck Steelwork

All scaffolding provided for the Works shall comply with the requirements of BS5973: 1993 and relevant Construction Regulations and shall be adequate, in all respects, for the purpose intended. The Supplier is reminded that a HAZOPS risk assessment MUST be carried out for the erection, adjustment and dismantling of any scaffolding.

All scaffolding work shall be carried out by a recognised company which meets with the prior approval of the Service Manager. All scaffolding erection, alteration and dismantling is to be under the full supervision of a nonworking person with adequate training and experience in this type of work. All scaffolders employed on this Contract are to hold current CITB record cards which are to be presented for inspection if required by the Service Manager.

The scaffold platforms shall be capable of carrying an imposed loading of not less than 2.0 kN/m² and a basic windspeed of 45m/s.

The Supplier shall provide all ladders necessary to gain access to the working platforms. He shall take all steps necessary to prevent unauthorised access including taking down all such access ladders at the end of each working day and their removal from site. Suitably worded notices shall be firmly attached to all scaffolds etc to prohibit such unauthorised access.

The safe working loads for all scaffolds shall be displayed on notices which are to be clearly visible to operatives.

The scaffolds/sheeting shall be inspected daily to ensure that the sealing and screening remains intact.

The Supplier's attention is drawn to the Conditions of Contract regarding the checking of temporary works designed by others. The Supplier should note that the submission of the Renewal Certificates every 14 days does not relieve him of his responsibilities under the Construction (Working Places) Regulations 1966.

Details of the scaffolding and sheeting work including calculations and drawings shall be submitted to a suitability qualified independent temporary Works Service Manager for approval and certification 7 days prior to commencement of the works. This certification should then be issued to the Service Manager.

The Supplier shall submit 14 days prior to his programmed date for the removal of the scaffold, his proposed method of dealing with the areas of deck steelwork previously masked by scaffold tubes and fittings which will only become accessible after the scaffold has been dismantled. He shall also give details of the means of access he proposes to use to reach these 'contact areas'.

No areas of the bridge shall be used for the storage of scaffolding materials without the prior approval of the Service Manager. The footways and carriageway shall not be obstructed at any time.

Alternative forms of Access

The Supplier may propose an alternative form for the painting platforms involving the use of proprietary systems. The provisions for traditional scaffolds shall apply equally to any proposed proprietary system.

Containment

Consideration necessary to ensure containment of materials, dust, spray, arisings and other items are referred to in specification clause 170AR and Appendix 1/23.

Lighting

Temporary Lighting will be required for cleaning operations, paint application and for inspection purposes. The lighting which is to be provided and installed by the Supplier shall produce a mean illumination at the work surface of 500 lux with a diversity of not less than 5:1 (maximum/minimum). The lighting equipment must comply with all current legislation and be safe to use in conjunction with wet/dry blast cleaning equipment.

Discharge lighting, preferably high pressure mercury fluorescent MFBR/V or Tungsten Halogen, shall be used and an adequate supply of spare lamps shall be available for replacement purposes.

The Supplier shall be responsible for all electrical safety relating to the lighting system.

5080AR Painting of Metal Fences and Gates

General

Where required in the Contract, painting shall be carried out in accordance with the recommendations of BS 6150.

All steel fabricated into units before delivery to the Site shall be free of mill scale, rust and foreign matter when viewed by normal vision and primed without delay with calcium plumbate primer to BS 3698, Type A.

All other surfaces of iron and steel shall be rendered clean, dry and free from grease, rust or mill scale prior to priming as described in Sub-clause 2.

Galvanised surfaces which have been exposed to atmospheric weathering for a period of 26 weeks or more shall be cleaned down and primed with calcium plumbate primer to BS 3698 Type A or B. Galvanised surfaces which have not been weathered for 26 weeks shall first be treated with an etching compound of the following composition, by volume:

- Industrial methylated spirit 60%
- Toluol 30%
- Carbon tetrachloride 5%
- Commercial hydrochloric Acid 5%

After etching and before priming, the galvanised surfaces shall be thoroughly rinsed with clean water to remove chemical residues from the treatment and allowed to dry.

Aluminium surfaces shall be cleaned and thoroughly degreased with industrial methylated spirit prior to application of a thin coat of proprietary etch primer applied in accordance with the manufacturer's instructions. The surfaces shall then be coated with a compatible zinc chromate primer containing not less than 20 per cent by mass of zinc chromate and free from graphite and from oxide or hydroxide of lead.

Undercoats and Finishing Coats.

All primed surfaces shall be painted with one coat of accepted undercoating of the colour appropriate to the colour of finishing coat as described on the Works order.

Two finishing coats of the colour and type described on the Works order shall be applied.

5081AR Painting of Metal Fencing and Pedestrian Guardrail

Before carrying out any painting or preparation work the Supplier shall cut down grass and other vegetable growth around the fence.

The loose rust and scale shall be removed by wire brushing and scraping. The fencing/guardrail shall be wiped to remove dust and fine particles.

Three coats of paint shall be applied to give complete coverage.

Precautions shall be taken before work commences to ensure that no other surfaces are damaged.



Series 6000: Winter Maintenance
6001AR: Routine Winter Maintenance

General

This specification is to be read in conjunction with the RBWM Winter Service Plan 24-25 or any subsequent updated winter policy or plan, and the Series 6000 Winter Service Method of Measurement. The Service Provider is to undertake all winter functions in line with the agreed Winter plan or policy.

Winter Risk Period

A standby service will be provided for the core winter period of Twenty-One weeks.

This will commence on the last Friday in October each year and finish on the last Friday of March each year. This may be extended into April depending on the prevailing weather conditions.

The Client will determine and instruct the Supplier when the Winter season will begin and cease operation.

CLIENT / OPERATIONS UNIT RELATIONSHIP

Local Roads and Footways

The following table indicates how the principal winter service responsibilities between the Client and its supplier are split.

The Client	Service Provider
Preparation and updating of Winter Service Plan and Policy	Operational Plans
Road Hierarchy Priorities / Approval of routes	Establish the most effective routes to cover all roads in the Policy. Routing (salting and snow clearing) with direction from the Winter Service Manager
Management of Budget	Managing expenditure within Budget
Salt Stocks Management / Overview	Salt Stocks / Purchase/ Storage/ Depot
Risk Assessments for overall winter service	Risk Assessments for salt spreading and snow clearing operations
Procurement, installation and support for ice prediction systems, weather stations and software	Duty Manager Roster / Contact details Decision Making – Duty Manager Duty Manager Roster / Contact details Daily Liaison with Customer Service Centre to advise of decision via email and feedback on customer enquiries

Performance monitoring	Operations Standby Roster / Contact details Opening of Emergency Operations Centre
Publicity and Information (Leaflet and web page)	Training & Development Hiring / Servicing and Calibration of Vehicles / Plant arrangements including GPS to track vehicles
Developing Service through undertaking research and investigation into new treatment methods	Precautionary salting, snow clearing, footways, maintenance of grit bins
	Operational co-ordination with Duty Manager
	Daily Contact with Customer Service Centre regarding calls taken out of hours Daily Liaison with Customer Service Centre to advise of decision via email and feedback on customer enquiries
	Daily returns to Client team
	City & Guilds 6159
	Website access to information on completion of gritting
	Undertake trials as necessary Proposing & testing new materials

Organisational Arrangements and Personnel

The Supplier should establish a team of Duty Managers that are rostered to be on standby for the winter period November to March inclusive and provide to details of in the form of a roster by October of each year to the service manager.

Duty Manager Responsibilities

Each *Duty Manager* is available 24 hours a day during his / her week on duty.

Outside of normal working hours, the Duty Manager can be contacted via the Emergency Control Room.

When not rostered, Duty Managers may be called on to back up the active-Duty Manager.

The supplier will be required to support with any customer enquiries relating to winter service. Routine calls regarding gritting routes etc. will be sent through to the supplier to manage and update the CSC.

Salt Management

The maximum Salt storage capacity at the Depot is 1000t.

The Supplier will be responsible for management of Salt stocks including arranging salt delivery, maintenance and use of salt. Salt stock levels shall also be reported to the Client and the salt barn stock level will have a stock level above 300t at all times of the season. The Supplier shall be accountable for the safe storage and use of Salt.

Records shall be kept of salt stock levels throughout the year and all details will be shared with the Client.

Salt shall be turned over and recycled during delivery of new stock to reduce potential for unusable and spoiled salt stocks.

Salt Bins used: Glasdon Slim Grit 160ltr capacity.

Decision Making

The Supplier will be responsible for decision making on behalf of the Client. All decision making must be undertaken in accordance with the Winter Policy and all decision will be reviewed monthly with the Service Manager to ensure consistency of decisions. This will form part of the KPI requirements for the Supplier.

End of season wash up meeting will also be required to review service activity and to highlight any efficiency and policy improvements that can be made.

New road sensors are expected to be installed during the contract term. The supplier will be expected to review route optimisation utilising the improved road condition and temperature data. The Client is looking for efficiency and improved accuracy with decision making.

Snow Clearance:

If snow clearance is required as part of the route treatment as per the winter policy, the supplier is expected to undertake this activity as part of the annual fixed price and should be included in rate items WM 03/04.

Footways are not treated as part of the winter policy (except the main pedestrian high streets, as part of the vehicle salting routes). Any treatment of the footway will be done under time charge or reimbursable item rates.

Series 6100: Emergency Response

6101AR; Standby for Emergency Work

General

All Emergency work operations shall be carried out in accordance with the Service Manager's instructions or a representative

The Supplier will make available a supervisor and 6 Operatives to man all maintenance vehicles and equipment. A minimum of three drivers are required to be trained to LGV 2 to drive gritters, gully emptiers and 3.5t lorry mounted hiab vehicles, two operatives who are trained to drive a JCB 3CX or loader. The supervisor and all operatives will be trained to set out traffic management.

When instructed as many operatives as may be needed will attend on site with all relevant equipment within 2 hours.

The Supplier is to provide a communication system in emergency maintenance vehicles which enables two-way conversations to take place, including whilst the vehicles are travelling, so that the Supplier can relay any Service Manager's instructions directly to the operatives operating the vehicles. The system will be capable of operation from all depots operations are carried out.

"On Call" means having Maintenance operatives' drivers and other operatives available to respond to an instruction from the Service Manager to commence Emergency works from operational depots and be on site within 2 hours of the instruction being issued. Instructions to carry out emergency works may be issued at any time during the year.

The Supplier will;

- i) Submit to the Service Manager a statement showing his planned deployment of manpower, the names and qualifications of personnel who will carry out and supervise emergency work and will ensure that the equipment is fuelled and ready for immediate use.
- ii) Ensure that operatives are fully trained in the proper use, handling and maintenance of equipment and at least three having a Large Goods Vehicle (LGV) Licence in accordance with the Heavy Goods Vehicles (Drivers' Licences) Regulations 1990 (SI 1990/2612) and shall hold an appropriate certificate under The City and Guilds of London Institute/Local Government Management Board Qualification Scheme 6159 Winter Service Operations.

The Supplier shall be responsible for all training needed during the term of the Contract or any extension to the Contract.

"Standby" and "On Call" Arrangements.

The Supplier shall have available on "Standby" operatives for emergency work staff for each day during the year. These operatives shall be augmented as necessary as follows:

During times when weather is forecast to be severe the Service Manager will place "On Call" sufficient staff to enable widespread Emergency works to be carried out.

When "On Call" arrangements are required the Service Manager shall issue instructions accordingly. Such instructions shall specify the number of Supplier's personnel that will be required to be "On Call" for each depot for the period(s) specified.

The Service Manager shall give preliminary notification of the number of the Supplier's maintenance personnel required to be "On Call" by 1400 hours each day which will be confirmed by 1600 hours.

"On Call" periods for the Supplier's Personnel to respond to Service Manager's Instructions are as follows:

- i) All days of the week including Saturdays, Sundays and Bank and Public holidays from 1700 hours to 0800 hours next day and additionally....
- ii) Saturdays, Sundays and Bank and Public holidays from 0800 hours to 1700 hours each day.

Series 6200: Composite Rates

6201AR Composite Rates

General

Composite rates activity schedules are inclusive of all associated materials, plant, labour and methods required to complete the construction task. The composite rates are used to simplify and streamline the minor work ordering process by generating high volume works order types.

The tables below detail the specific material combinations such as carriageway or footway construction details, and other general maintenance activities.

The Composite rates will be used for minor planned works.

Pavements

Carriageway, Cycleway and Footway Composite Schedule:

Description:

Carriageway and Footway patching will be undertaken by Inlay patching or reconstruction using the materials and depths specified by the activity type as detailed in the below tables. Each composite item is inclusive of all general series items required such as planning or milling, saw cutting, removal and disposal of material, tack or bond coat and all associated plant, equipment, labour and material.

All composite patching rates will be applicable to any patch not exceeding 150m² per patch. Any patch exceeding an area of 150m² shall be quantified as per the standards for highways series schedules listed in the pricing workbook.

All materials and methods used in composite rates shall comply with Series 900 and all relevant standards for highway clause references and standards.

Carriageway Type 1:

Carriageway Type 1: (Inlay Patching 40mm)				
Material	Clause	Material	Grade of Binder	Minimum Thickness (mm)
Surface Course	909	AC 6 dense surf	70/100 or 100/150	25
Or				
Surface Course	912	AC10 close surf	70/100 or 100/150	40

Carriageway Type 2:

Carriageway Type 2: (Inlay Patching 100mm)				
Material	Clause	Material	Grade of Binder	Minimum Thickness (mm)
Surface Course	912	AC 10 close surf	70/100 or 100/150	40
Binder Course	929	AC 20 dense bin	40/60	60

Carriageway Type 3:

Carriageway Type 3: (Patching / Haunch / Reconstruction 180mm)				
Material	Clause	Material	Grade of Binder	Minimum Thickness (mm)
Surface Course	912	AC 10 close surf	70/100 or 100/150	40
Binder Course	906 or 929	AC 20 dense bin	40/60	60
Base Course	906 or 929	AC 32 dense base	40/60	80

Carriageway Type 4:

Carriageway Type 4: (Reconstruction 330mm)				
Material	Clause	Material	Grade of Binder	Minimum Thickness (mm)
Surface Course	912	AC 10 close surf	70/100 or 100/150	40
Binder Course	906 or 929	AC 20 dense bin	40/60	60
Base Course	906 or 929	AC 32 dense base	40/60	80
Sub-base	803	Type 1 Granular Sub-Base	Granular Type 1	150

Cycleway and Footway Composite Schedule:

Footway and Cycleway Patching:

Description:

The below tables detail the material and construction depths for each composite order. These orders allow for simplified design for minor works projects and shall be applicable to patches not exceeding 150m². Any patch exceeding 150m² shall defer to the standards Series 1100 items in the priced workbook.

The below composite orders also inclusive of all general Standards for Highways series items required such as planing or milling, saw cutting, removal and disposal of material, tack or bond coat and all associated plant, equipment, labour and material.

Footway or Cycleway Type 1:

FCW1 Footway or Cycleway Patching Type 1: (Inlay Patch Surface Course 25mm)				
Material Course	Clause	Material	Grade of Binder	Minimum Thickness (mm)
Surface Course	1105	AC 6 dense surf	100/150	25

RBWM Highway Services Contract 2024
Highway Maintenance and Capital Works Contract



Footway or Cycleway Type 2:

FCW2 Footway or Cycleway Patching Type 2: (Inlay Patch 85mm)				
Material Course	Clause	Material	Grade of Binder	Minimum Thickness (mm)
Surface Course	1105	AC 6 dense surf	100/150	25
Binder Course	1105	AC 20 dense bin or AC 14 close surf	100/150	60

Footway or Cycleway Type 3:

FCW3 Footway or Cycleway Patching Type 3: (Inlay Patch 185mm)				
Material Course	Clause	Material	Grade of Binder	Minimum Thickness (mm)
Surface Course	1105	AC 6 dense surf	100/150	25
Binder Course	1105	AC 20 dense bin or AC 14 close surf	100/150	60
Sub-base	803 / Design Guide	Granular Type 1	-	100

Standard Construction Details:

The below Composite Items will include Standard Full Construction details such as vehicle crossings, modular or flexible pavement construction types. The composite rates shown below are typically supported by Standard Details however they can also be used for minor schemes or repairs. Where a standard detail is not available, the below standard construction details can apply. As per details captured in Appendix 11/1.

FW1 Footway Type 1 : (Flexible footway and/or cycleway)				
Material Course	Clause	Material	Grade of Binder	Minimum Thickness (mm)
Surface Course	1105	AC 6 dense surf	100/150	25
Binder Course	1105	AC 20 dense bin or AC 14 close surf	100/150	60
Sub-base	803 / Design Guide	Granular Type 1	-	100

Footway Type 2 : (Residential Vehicular Dropped Access crossings)				
Material Course	Clause	Material	Grade of Binder	Minimum Thickness (mm)
Surface Course	1105	AC 6 dense surf	100/150	25
Binder Course	1105	AC 20 dense bin or AC 14 close surf	100/150	60
Sub-base	803 / Design Guide	Granular Type 1	-	150
				235

RBWM Highway Services Contract 2024
Highway Maintenance and Capital Works Contract



Footway Type 3 : (Overlay and regulating to existing flexible footway and/or cycleway)

Material Course	Clause	Material	Grade of Binder	Thickness (mm)
Surface Course	1105	AC 6 dense surf	100/150	25
Surface Course Regulating	1105	HRA 0/2 F surf	40/60 Or 100/150	Varies 0 – 20
Surface Course Regulating	1105	AC 6 dense surf	100/150	Varies 20 - 30
Binder Course Regulating	1105	AC 10 close surf	100/150	Varies 30 - 60
				Varies 20 - 80

Footway Type 4 : (Pre-cast concrete flags footway)

Material Course	Clause	Material	Grade of Binder	Thickness (mm)	Special Requirements
Pre-cast concrete flag	1104	Pre-cast concrete	Not applicable	50, 60, 63, 65 or 70	See Works Order for size of flags.
Bedding	1104	Sharp sand – BS7533 Category III	Not applicable	10 min 40 max	
Sub-base	803	Granular Type 1	Not applicable	175	
				Varies 235 - 285	Total thickness

Footway Type 5 : (Pre-cast concrete flags footway) (Alternative for flags 450 mm square or smaller).

Material Course	Clause	Material	Grade of Binder	Thickness (mm)	Special Requirements
Pre-cast concrete flag	1104	Pre-cast concrete	Not applicable	50,60, 65 or 70	See Works Order for size of flags.
Bedding	1104	Class 1 Cement mortar		25 ± 10	
Sub-base	803 / Design Guide	Granular Type 1		175	
				Varies 240 – 280	Total thickness

Footway Type 6 : (Precast Concrete Tactile Paving and for 1m overrun areas)

Material Course	Clause	Material	Grade of Binder	Thickness (mm)	Special Requirements
Pre-cast concrete flag	1104	Pre-cast concrete	Not applicable	50 or 65	See Works Order for colour and type of paving
Bedding	1104	Class 1 Cement mortar		25 ± 10	

RBWM Highway Services Contract 2024
Highway Maintenance and Capital Works Contract



Sub-base	803 / Design Guide	Granular Type 1		150	
				225 min	Total thickness

Footway Type 7 : (Block paving – Pedestrian only Areas)					
Material Course	Clause	Material	Grade of Binder	Thickness (mm)	Special Requirements
Block Paving	1107 or 1108	Pre-cast concrete or Clay	Not applicable	50 or 65	See Works Order for material and dimensions of blocks.
Bedding	1107 or 1108	Sharp sand – BS7533 Category III		30 - 50	
Sub-base	803	Granular Type 1		100	Sub base shall be increased to 150mm thick if area is used by light traffic.
				Varies 180 – 215	Total thickness

Footway Type 8 : (Commercial Vehicular Dropped Access Crossings)					
Material Course	Clause	Material	Grade of Binder	Minimum Thickness (mm)	Special Requirements
Surface course	960AR	SMA 10 surf	40/60	40	
Binder Course	929	AC 20 dense bin	40/60	65	PD 6691 Table B.11
Base	929	AC 32 dense base	40/60	125	PD 6691 Table B.11
Sub-base	803	Granular Type 1		220	
				450	Total thickness

Footway Type 9 : (Granite and Heritage / Pedestrian Area Paving)					
Material Course	Clause	Material	Grade of Binder	Minimum Thickness (mm)	Special Requirements
Surface course		Granite / Heritage Paving	N/a	Block Varies	As Works Order
Binder Course	1104	Epoxy Mortar of Fines Concrete	ST4	25 bedding	Epoxy Liquid Mortar Jointing
Base		ST4 Concrete Raft	Varies min125mm	min125	Raft or as agreed
Sub-base	929	AC 32 dense base	Min 100mm	min100	Existing carriageway
				min450	Total thickness

6202AR Reactive Maintenance Civil Works

Composite Items:

Pre-cast Concrete

Description:

Replacement or installation of kerb, channel, blockwork, brickwork, paving or setts as detailed and covered under Standards for Highways Series 1100.

All works associated will include all relevant and required materials such as concrete (ST4 or 5), cement mortar, sub-base or bedding materials, and any setting out, levelling or enabling works. The activity rates shall also include all plant, labour and time required to undertake the work.

Any works order instruction will be quantified by a suitable metric such as linear meters or area as detailed in the Pricing Workbook.

All Pre-cast Concrete kerb, channels, edgings, blockwork, brickwork, paving or setts shall be constructed in accordance with Appendix 11/1.

Iron Work

Description:

Iron Work Composite Orders include the removal, replacement or adjustment of existing highway items including gully grates and manhole covers. The composite order includes all associated materials such as ST4 concrete, bedding, cement mortar and any backfill or surround material either flexible or rigid.

All Iron Works will be undertaken in accordance with the relevant standards for highways including Series 500.

Traffic Signs

Description:

Sign composite orders include the removal of existing sign posts, including pole foundation, and replacement or installation of new pole and foundation and attachment of relevant highway signage or street name plate as per the works order instruction.

All signage works will be inclusive of all plant, material, labour and resource to complete each task including all associated materials such as ST4 concrete or foundation postcrete, excavation and disposal of waste material and supply of standard posts as prescribed under Series 1200 of the standards for highways and any general highway signage. Any bespoke signs shall incur additional costs as detailed per quotation from signage suppliers.

Drainage

Description:

Drainage composite orders include excavation or trenching including disposal of acceptable or unacceptable material as required. Supply and installation of drainage pipe and connections (UPVC pipe diameter varies 150mm – 450mm) to the relevant fall level as indicated on the works order or 1in40.

RBWM Highway Services Contract 2024
Highway Maintenance and Capital Works Contract



The composite order also includes all associated time, resource, surveying, levelling and materials in order to complete the works order.

Drainage chambers will also require composite order to include excavation, supply and install of Pre-cast Concrete chambers or catchpits class D400 covers and frame (Chamber sizes vary 1050mm – 1800mm).

All drainage works to be undertaken inline with Series 500 standards for highways.



Series 6300: Reactive Maintenance

General

Highway reactive maintenance constitutes the reactive works in response to priority call outs or Work Orders. A Works Order will in most cases be generated from defect identification in accordance with the Highway Safety Inspection Manual (HSIM) however the Client may request Works Orders in relation to customer enquiry, client integrity, public nuisance, or strategic resilience requirements.

The HSIM details tolerance levels for each highway feature and provides a level of intervention that determines the minimum tolerance levels for unsafe conditions; however this does not determine if a defect is unsafe based on other factors and considerations. Refer to the HSIM for details regarding defect identification.

As detailed in the specification and service requirements, the Supplier is expected to respond to all Works Orders within the requested timescales.

A Works Order can be generated from customer enquiry, highway inspections or incident reports. As previously detailed, the Client will raise works orders via the Asset Management System (Confirm) and will be recorded and tracked to ensure performance targets are achieved.

Works Orders will be raised using standard item metrics as listed below and detailed in the Schedule 4 Method of Measurement.

Unit	Abbreviation	Unit	Abbreviation
millimetre	mm	number	no
metre	m	item	item
kilometre	km	month	month
square metre	m ²	week	week
cubic metre	m ³	day	day
kilogramme	kg	hour	hr
litre	l	metre per day	m/day
tonne	t	per activity	per activity
annual	annual	per treatment	per treatment

Payment and application for reactive maintenance activity will be the annual fixed price pro rata monthly. This value for reactive maintenance is based on an average activity output as per the items and averages listed below.

Reactive Maintenance Works Orders can include the following but not limited to, including average works order activity output:

Reactive Maintenance Item	Annual Activity Output Average
RM 01 Minor carriageway repairs	2113 per annum +/- 15% inclusive of 5000 potholes per year
RM 02 Minor footways and cycleways repairs	559 per annum +/- 15%
RM 03 Covers, gratings, frames and boxes	57 per annum +/- 15%

RM 04 Pedestrian guardrails, fencing, posts, bollards and VRS	31 per annum +/- 15%
RM 05 Drainage, gullies and catchpits (Civils)	120 per annum +/- 15%
RM 06 Kerbs, edging and preformed channels, block paving and flagstone.	437 per annum +/- 15%
RM 07 Road markings including studs	80 per annum +/- 15%
RM 08 Street furniture and Safety Equipment	22 per annum +/- 15%
RM 09 Signs: face, post or fixings	123 per annum +/- 15%
RM 10 Verges	5 per annum +/- 15%
RM 11 Traffic Management	3595 per annum +/- 15%
RM 12 Road Closures	75 per annum +/- 15%
Average annual works orders (activity)	3547 +/- 15%
EM2 During Normal Working Hours (2hour)	330
Total Annual Reactive Maintenance Activity	3877 +/- 15%

Where activity outputs fall below the threshold, the Client will be entitled to negotiate a reduction in annual lump sum values based on relative activity delivery. This will be raised following clear and transparent discussions and will be communicated following the contract and nec 4 governance and change control processes.

All defect repairs undertaken by the supplier shall be done so in accordance with the Standards for Highways Manual for Highways Works and this specification.

The Supplier shall ensure all staff, labour, resource, materials, plant and equipment and any subcontractor costs are included within the fixed fee for providing and undertaking all reactive maintenance activity.

A Works Order can contain multiple activity items however each RM item will have a unique reference number to allow for reporting, analysis, and data collection.

Each Works Order shall be restricted to a 1km road section or single USRN section per works order. The restriction will default to a single road section where the single section is longer than 1km.

Verges

Reactive Maintenance item verges shall also include vegetation from the highway causing obstruction to highway users and road traffic signage or visibility splays. All tolerance levels are as per the HSIM and details of the defect shall be included in the works order instruction.

Potholes

The average works order (activity output) per year shall also be inclusive of 5000 carriageway potholes beyond intervention level as determined by the tolerances detailed in the Highway Safety Inspection Manual.

Activity greater than 5000 potholes per year will result in additional charges applicable by use of the Option E reimbursable items within this contractor. Any additional chargeable work must be agreed with the Service Manager prior to the additional work being undertaken and be supported by a works order instruction.

Where activity output exceeds the 3547 +/- threshold, additional activity will be chargeable at the rates supplied at tender for each reactive maintenance item or by using the alternative series items within this contract however any additional work must be agreed with the Service Manager and be supported by a works order instruction.

Works Orders for Reactive Maintenance

Any works order will be raised per road section or no greater than 1km to ensure accessibility and safe working practices can be achieved. Any defects or works required beyond the length of a road section or up to 1km in length, (whichever comes first) then a second works order will be raised to cover the remaining defects or works.

Where multiple road sections are less than 1km in totality, or in built-up areas, junctions and towns centres, a single works order can be raised containing the required defects or works covering multiple road sections. A 1km radius will be applied to orders containing multiple road section or otherwise agreed by the Service Manager with the supplier.

Multiple defects can be raised per works order, a logical and transparent approach will be agreed and approved by the Services Manager for monitoring and reporting the quantity of defects repaired annually to ensure activity thresholds are managed.

6301AR Bituminous Material for Reactive Maintenance Repair

Carriageway, footway and cycleway pothole repairs shall be undertaken using suitable equipment as specified in clause 193AR. All temporary pothole repairs shall be undertaken as per Appendix 7/22. The supplier is also permitted to use an approved HAUC cold lay bituminous material for emergency repairs and potholes less than 0.5 sqm to allow a make safe prior to returning and completing a suitable repair with an approved warm mix bituminous material.

All permanent pavement pothole repairs shall be undertaken using approved materials as detailed in series 6200 Composite Rates and Series 700 and 900 of the standards for highways.

All potholes shall be repaired as per the Works Order instructions, this can include inlay (saw cut and milling) or key and contour patching techniques. The Supplier shall utilise inlay patching to ensure a right first-time approach to all repairs.

Where it is safe to do so, all patching work shall be machine laid unless patching widths and site factors restrict and require hand lay methods or as per Works Order instructions.

The Supplier will be required to provide and maintain all fleet vehicles, plant and equipment including a mobile or stationary hotbox for storage of warm mix materials used for reactive repair.

Civils and General Works

All waste material generated or removed from the highway by the Supplier will be the responsibility of the Supplier to ensure suitable and safe disposal. All disposal requirements shall be at full liability of the Supplier.

RBWM Highway Services Contract 2024
Highway Maintenance and Capital Works Contract



Series 8000 Time Charge

General

Time charge items are to be reimbursable under NEC 4 Option E and are often Works that do not have defined outcome or scope. Time charge rates will include labour and material items such as people, operatives, specific plant, vehicle or equipment itemised via hourly or day rates.

Time charge rates can be used in conjunction with other series items to allow for variable or undefined activities to be undertaken.

Other time charge items include the Maintenance Teams as detailed in cause 193AR,

Series 9000 Restricted Working

General

Restricted working items are percentage increase applied to an overall work order cost due to the restrictive or obstructive nature of the Works Order such like working at night or within shorter periods of time. RBWM Restricted working hours are defined in clause 191AR however permission and approval must be given by the service manager for works to be undertaken during restricted working hours. Further information can be found in Schedule 4, Method of Measurement.

RBWM Highways Services Contract 2024
Highways and Capital Works Contract



Royal Borough of Windsor and Maidenhead Highway Services Contract

Highway Maintenance and Capital Works Contract

Schedule 4 Pricing Schedule - Method of Measurement

PRINCIPLES

PREPARATION OF PRICE LIST

SECTION ONE: CORE SERIES.....

SERIES 100: PRELIMINARIES.....

SERIES 100: TRAFFIC MANAGEMENT.....

SERIES 200: SITE CLEARANCE.....

SERIES 300: FENCING

SERIES 400: VEHICLE AND PEDESTRIAN RESTRAINTS

SERIES 500: DRAINAGE AND SERVICE DUCTS

SERIES 600: EARTHWORKS.....

SERIES 700: PAVEMENTS

SERIES 1100: KERBS, FOOTWAYS AND BLOCK PAVED AREAS

SERIES 1200: TRAFFIC SIGNS AND ROAD MARKINGS

SERIES 1700: STRUCTURAL CONCRETE

SERIES 2000: WATERPROOFING FOR CONCRETE STRUCTURES

SERIES 2300: MOVEMENT JOINTS AND SEALING OF GAPS

SERIES 2400: BRICKWORK, BLOCKWORK AND STONework

SERIES 3000: LANDSCAPE AND ECOLOGY

SERIES 6000: WINTER MAINTENANCE

SERIES 6100: EMERGENCY RESPONSE

SERIES 6200: SERVICE ACTIVITY – COMPOSITE RATES AND MINOR REPAIRS.....

SERIES 6200: SERVICE ACTIVITY – DRAINAGE CLEANSING

SERIES 6300: SERVICE ACTIVITY – REACTIVE MAINTENANCE.....

SERIES 8000: TIME CHARGE

SERIES 9000: RESTRICTED WORKING

3

4

5

10

15

19

22

25

33

50

66

83

100

110

116

119

122

124

128

133

135

136

141

144

148

PRINCIPLES

Method of Measurement	1	The Method of Measurement is intended for use for highway maintenance contracts although amendments may be required for particular Contract Conditions.
Price List	2	In the Price List the sub-headings and item descriptions identify the work covered by the respective items read in conjunction with the matters listed against the relevant marginal headings for item coverage in the Method of Measurement, Preambles to Price List and amendments. The nature and extent of the work or service to be performed is to be ascertained by reference to the Service Information, Specification, Contract Drawings and Conditions of Contract.
Singular or Plural	3	In the Price List, singular and plural shall be interchanged as appropriate for each other, and no particular meaning shall be assigned with the use of each.

PREPARATION OF PRICE LIST

Sub-division of Price List	1	The Price List is to be divided into series as provided within the Method of Measurement and as appropriate to the <i>Conditions of Contract</i> , Service or Works Information and Drawings.

Quantities	2	Quantities shall be expressed in whole numbers except for units of measurement of tonnes in which case the quantities shall be to two decimal places.

Units of Measurement	3	The following abbreviations shall be used for the units of measurement:

Unit	Abbreviation	Unit	Abbreviation
millimetre	mm	number	no
metre	m	item	item
kilometre	km	month	month
square metre	m ²	week	week
cubic metre	m ³	day	day
kilogramme	kg	hour	hr
litre	l	metre per day	m/day
tonne	t	per activity	per activity
annual	annual	per treatment	per treatment

Itemisation – Group and Features	General Principles 4 Each item description is to be consistent with and be compounded from one or more of the Groups listed under the marginal headings within the Method of Measurement. An item description may contain Features from as many Groups as necessary to identify the Service required but may include only one Feature from any one Group.

Items in the Price List	5	The Price List, unless expressly stated otherwise in the Contract, is to contain all those items compounded in accordance with the foregoing paragraphs required to comprise the Service.

PREAMBLES TO HMEP PRICE LIST

- General Directions 1 The HMEP Price List has been prepared in accordance with the HMEP Method of Measurement contained within this document. The nature and extent of the Service is to be ascertained by reference to the Service Information, Specification, Contract Drawings and *Conditions of Contract*. The rates and prices entered in the Price List shall be deemed to be the full inclusive value of the Service covered by the several items including the following, unless expressly stated otherwise:
- (i) people, subcontractors, supervision and other associated activities required by the Contract;
 - (ii) materials, plant, storage and costs required by the Contract;
 - (iii) equipment required by the Contract;
 - (iv) fixing, erecting and installing or placing of materials and plant in position;
 - (v) temporary works. (excluding those required for work in series 1700, 2000, 2300 and 2400);
 - (vi) management and programming of individual works and the Service;
 - (vii) general obligations, liabilities and risks involved in the execution of the Service;
 - (viii) establishment charges;
 - (ix) direct and Sub-contract Fees;
 - (x) waste, landfill and other disposal taxes;
 - (xi) attendance and transport for sampling and testing carried out by the *Service Manager*, supplying results of tests carried out by the *Contractor* and providing test certificates;
 - (xii) complying with Quality Assurance schemes and providing certificates of conformity;
 - (xiii) preparation and supply of detailed working drawings and reports including evidence of completed work to the *Service Manager*;
 - (xiv) awaiting approvals and or consents;
 - (xv) calibration of testing equipment to Quality Assurance standards and maintaining to the required tolerances;
 - (xvi) temporary accommodation and mess facilities for the *Contractor* on individual schemes of less than five days programmed duration;
 - (xvii) setting up at each site and movement between a number of sites;
 - (xviii) communication system for the *Contractor*;

- (xix) traffic management as group A in the table in 17 below in these preambles;
- (xx) travelling to, between and from different locations on the network unless measured within Series 8000: Time Charge;
- (xxi) updating information and inventory data to the information database or system.

Summation of Quantities	2	Where applicable, items have been aggregated into lengths, areas, volumes, and weights, to cater for the varying amounts and quantities ordered by the <i>Service Manager</i> . Unless otherwise stated, the measurement of aggregated quantities for each individual Task Order shall be the summation of quantities for each itemisation feature within that Task Order within a single aggregated kilometre measured length. An aggregated length is the shortest carriageway distance travelled from first to last location via the other locations.
Pricing of Items	3	Each individual item shall have a rate or price entered against it. Rates and prices shall be expressed to two decimal places. The <i>Contractor</i> shall price elements of People (Staff and Labour), Equipment, Materials, Sub-contract, Charges (where applicable), Sub-contract and Direct Fees of each indicated operation in the Price List expressed to three decimal places.
Alternative Specified Materials, Designs and Options	4	Where in the Contract a choice of alternatives is permitted the description and the rates and prices inserted shall be deemed to cover any of the permitted alternative Services the <i>Contractor</i> may elect to use. In all cases the rates and prices inserted in the Price List shall be deemed to include for any adjustments of work content, rates, costs and the like occasioned by the choice of alternatives elected to be used or constructed by the <i>Contractor</i> .
Privately and Publicly Owned Services or Supplies	5	Where information in the Contract as to the whereabouts of existing statutory and private services is believed to be correct, the <i>Contractor</i> shall not be relieved thereby of any additional obligations under the Contract. The <i>Contractor</i> shall include in the rates and prices for locating and taking measures for the support and full protection of pipes, cables and other apparatus during the progress of the Service, obtaining the written consent of the appropriate authority to interrupt the service or supply and for keeping the <i>Service Manager</i> informed of all arrangements made with the owners of privately owned services or supplies, Statutory Undertakers and Public Authorities as appropriate.
Dealing with Flow	6	The <i>Contractor</i> shall allow in the rates and prices for taking measures to deal with the flow of surface water, sewage and the like in existing drainage systems but excludes working above, in or below water which impacts on the method of working.

Site Limitations and Constraints	7	The <i>Contractor</i> shall allow in the rates and prices for complying with any limitations and constraints contained in the Service or Works Information.
Permanent Works Designed by the <i>Contractor</i>	8	Where the Contract requires part(s) of the Permanent Works to be designed by the <i>Contractor</i> , the rates and prices in the Price List shall include for all the obligations and costs associated with the incorporation of the <i>Contractor's</i> design into the Works, including design, provision of data and drawings, certificates, awaiting approvals, resubmissions and modifications and amendments to the Works.
Variability of the Service and Quantities	9	The variable nature of maintenance services contracts is such that the items stated in the Price List represent the type of work that is likely to be encountered over the period of the Contract. The actual incidence and amount of work required to be done will be affected by many factors and in particular seasonal requirements, weather, accidents and the like. The <i>Contractor</i> shall allow in the rates and prices for this variability and the irregular and piecemeal nature of the work in order to meet the needs and demands of the Contract.
New Roads and Streetworks Act and Traffic Management Acts	10	The <i>Contractor</i> shall allow in the rates and prices for issuing the relevant notices in accordance with the New Roads and Street Works Act and the Traffic Management Acts.
Issuing of Notices and Letters	11	The <i>Contractor</i> shall allow in the rates and prices for issuing notices to others in execution of the Service.
Equivalent Products and Materials	12	Where the <i>Contractor</i> offers an equivalent product or material in place of the one identified or specified, which is accepted for incorporation into the Service by the <i>Service Manager</i> , then the rates and prices in the Price List shall be deemed to include for all the obligations and costs associated with the incorporation of the equivalent into the Works, including design, provision of data and drawings, certificates, awaiting approvals, resubmissions and modifications and amendments to the Works.
Repairs to Existing Work	13	Unless otherwise stated within the method of measurement, repairs or replacement of existing work shall be measured as site clearance within Series 200 for the removal of the existing work and the relevant series for the new work unless the repair or replacement is due to the result of neglect or negligence of the <i>Contractor</i> .
Restricted Working	14	Where the <i>Service Manager</i> requires the <i>Contractor</i> to work under restricted hours this shall be carried out in accordance with Series 9000. Percentage additions for restricted hours working shall apply to the series stated in Series 9000.

- Disposal of Contaminated, Hazardous or Tar Bound Materials 15 The rates and prices shall not include for handling and disposal of contaminated, hazardous, or tar bound materials. Additional costs for disposal of these materials shall be agreed between the *Service Manager* and the *Contractor*.
- Traffic Management 16 The *Contractor* shall allow in the rates and prices for the erection, maintaining and dismantling traffic safety and management on all highways, structures and footpaths to the layouts identified as Group A in the tables below.
- Traffic management requirements in excess of these situations will be measured separately and paid in accordance with Series 150 and 400 of the Price List identified as Group B in the tables below.
- Traffic management requirements that are not defined as Group A or Group B in the tables below shall be paid as time charge (Series 8000) and are identified as Group C.

Table 1: Traffic Management and Pedestrian Management (as set out in "Safety at Street Works and Road Works - A code of practice" June 2014)

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

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

SECTION ONE: CORE SERIES

SERIES 100: PRELIMINARIES

Contract Management										
Units	1	The unit of measurement shall be: (i) mobilisation of the Contract as defined in the <i>Contractor's</i> Mobilisation Plan item (ii) basic facility for fixed contract overhead for provision of the Service month (iii) demobilisation of the Contract as defined in the <i>Contractor's</i> Demobilisation Plan item								
Measurement	2	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. Measurement note; the measurement of contract management shall be for every whole month ordered by the <i>Service Manager</i>.								
	3	Unless specified otherwise by the Service Information, the measurement of contract management shall be twelve months for each year. Measurement note; unless specified otherwise by the Service Information, the mobilisation and demobilisation may be paid in instalments according to provisions of the Contract.								
Itemisation	4	Separate items shall be provided for contract management in accordance with General Principles and the following: <table><tr><th>Group</th><th>Feature</th></tr><tr><td>1</td><td>1 Mobilisation of the Contract as defined in the <i>Contractor's</i> Mobilisation Plan</td></tr><tr><td></td><td>2 Basic facility for fixed contract overhead for provision of the Service</td></tr><tr><td></td><td>3 Demobilisation of the Contract as defined in the <i>Contractor's</i> Demobilisation Plan</td></tr></table>	Group	Feature	1	1 Mobilisation of the Contract as defined in the <i>Contractor's</i> Mobilisation Plan		2 Basic facility for fixed contract overhead for provision of the Service		3 Demobilisation of the Contract as defined in the <i>Contractor's</i> Demobilisation Plan
Group	Feature									
1	1 Mobilisation of the Contract as defined in the <i>Contractor's</i> Mobilisation Plan									
	2 Basic facility for fixed contract overhead for provision of the Service									
	3 Demobilisation of the Contract as defined in the <i>Contractor's</i> Demobilisation Plan									

Mobilisation of the Contract	5	The items for mobilisation of the Contract 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 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.
Basic Facility	6	The items for basic facility 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 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.
Demobilisation of the Contract	7	The items for demobilisation of the Contract 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 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.

Temporary Accommodation

Units	8	The unit of measurement shall be:		
		(i)	erection and establishment	number
		(ii)	maintenance and servicing	day
		(iii)	dismantling and removing from site	number
Measurement	9	The measurement for temporary accommodation for the Contractor shall only be measured when the duration of the works exceeds five days. Temporary accommodation for the Contractor where works do not exceed 5 days duration shall be included within the rates and prices of the works.		
	10	The measurement of a day shall be deemed to mean a period of 24 hours duration		
	11	The measurement of maintenance and servicing of temporary accommodation shall not exceed five days for each week.		
Itemisation	12	Separate items shall be provided for temporary accommodation in accordance with General Principles and the following:		
		Group	Feature	
		1	1	Temporary accommodation for the client
			2	Temporary accommodation for the Contractor for works over 5 days
			3	Temporary stores for the Contractor for works over 5 days
		2	1	Erection and establishment
			2	Maintenance and servicing
			3	Dismantling and removing from site
Erection and Establishment of Temporary Accommodation	13	The items for erection and establishment of temporary accommodation 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 establish accommodation;
	(b)	communication, information technology and management systems;
	(c)	equipment;
	(d)	connections.

Maintenance and Servicing of Temporary Accommodation	14	The items for maintenance and servicing of temporary accommodation 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 service the temporary accommodation;
	(b)	communication, information technology and management systems;
	(c)	equipment;
	(d)	furnishings, fittings and charges.

Dismantling and Removal of Temporary Accommodation	15	The items for dismantling and removal of temporary accommodation 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 dismantle accommodation;
	(b)	removal of communication and management systems;
	(c)	removal of accommodation and disconnection;
	(d)	reinstatement to original condition.

Temporary Information Boards

Units	16	The unit of measurement shall be:
	(i)	erection and establishment number
	(ii)	maintenance and servicing day
	(iii)	dismantling and removing from site number

Measurement 17 The measurement of a day shall be deemed to mean a period of 24 hours duration.

Itemisation 18 Separate items shall be provided for temporary information boards in accordance with General Principles and the following:

Group	Feature
1	1 Temporary information board
2	1 Stated size or type
3	1 Erection and establishment
	2 Maintenance and servicing
	3 Dismantling and removal from site

Erection and Establishment of Temporary Information Boards 19 The items for erection and establishment of temporary information boards shall in accordance with the Preambles to the Price List General Directions include for:

Item coverage (a) supports;
(b) signs.

Maintenance and Servicing of Temporary Information Boards 20 The items for maintenance and servicing of temporary information boards shall in accordance with the Preambles to the Price List General Directions include for:

Item coverage (a) regular cleaning and inspections of signs;
(b) maintenance of signs;
(c) re-positioning.

Dismantling and Removing from Site of Temporary Information Boards 21 The items for dismantling and removal from site of temporary information boards shall in accordance with the Preambles to the Price List General Directions include for:

Item coverage (a) removal of signs and supports;
(b) reinstatement to original condition.

SERIES 100: TRAFFIC MANAGEMENT

Lane Closures on Dual Carriageways

- Units

1

The unit of measurement shall be:

(i) establish and remove lane closures number

(ii) maintain lane closure hour

- Itemisation

2

Separate items shall be provided for lane closures on dual carriageways in accordance with General Principles and the following:

Group	Feature	
1	1	Establish and remove lane closures
	2	Maintain lane closures
2	1	On a road with speed limit up to and including 40mph
	2	On a road with speed limit over 40mph
3	1	Stated lane and lengths
	2	Extra over for additional lengths, lamps or signs

- Establish and Remove Lane Closures**

3

The items for establish and remove lane closures shall in accordance with the Preambles to the Price List General Directions include for:

- Item coverage

(a)

providing all measures, equipment and traffic management resources such as cones, signs, barriers and the like;
- (b)

removal and reinstatement on completion;
- (c)

notices and communications;
- (d)

traffic safety officer;
- (e)

consulting with authorities and services;
- (f)

plans and layouts;
- (g)

traffic counts.
- Page | 15
- Schedule 4- Pricing Schedule_ Method of Measurement

	6	Pedestrian barrier
	7	Mobile closures
	8	Convoy working
2	1	On two lane single carriageway
3	1	Stated situations or resources

Group 2 Feature 1 shall only apply to Group 1 Features 1, 2, 3, and 4.

Establish and Remove Temporary Traffic Signals, Stop/Go Boards, Road Closures and Diversions, Pedestrian Barriers

- 9 The items for establish and remove temporary traffic signals, stop/go boards, road closures and diversions, pedestrian barriers shall in accordance with the Preambles to the Price List General Directions include for:

Item coverage

- (a) providing all measures, equipment and traffic & pedestrian management resources such as cones, signs, barriers, traffic lights;
- (b) removal and reinstatement on completion;
- (c) notices and communications;
- (d) communication and management systems;
- (e) equipment;
- (f) traffic safety officer;
- (g) consulting with authorities and services;
- (h) plans and layouts;
- (i) traffic counts;
- (j) gated vehicle access control points in respect of Road closures and diversions.

Maintain Temporary Traffic Signals, Stop/Go Boards, Roads Closures and Diversions, Pedestrian Barriers

- 10 The items for maintain temporary traffic signals, stop/go boards, road closures and diversions, pedestrian barriers shall in accordance with the Preambles to the Price List General Directions include for:



- Item coverage
- (a)

 maintenance and inspections;
- (b)

 maintaining all measures, equipment and resources;
- (c)

 all items for the establishment above, but for maintaining same.

Mobile Closures

11

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

- Item coverage
- (a)

 vehicles;
- (b)

 ancillary equipment;
- (c)

 operatives.

Convoy Working

12

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

- Item coverage
- (a)

 vehicles;
- (b)

 ancillary equipment;
- (c)

 operatives.

SERIES 200: SITE CLEARANCE

		Take Up or Down and Dispose off site or Set Aside for Re-use
Units	1	The unit of measurement shall be: take up or down and dispose off site or set aside for re-use; (i) paved areas and the like square metre (ii) kerbs, channels, edgings, combined drainage and kerb blocks, fencing, safety fences and the like, pedestrian guardrail, copings, string courses and the like linear metre (iv) chamber covers and frames, gully gratings and frames and the like number (v) brickwork, masonry and the like cubic metre
Measurement	2	The measurement for take up or down and dispose off site or set aside for re-use blockwork, stonework, paved areas and the like, kerbs, channels, edgings, combined drainage and kerb blocks, fencing, safety fences and the like, Pedestrian guardrail, copings, string courses and the like, traffic signs, reflecting road studs, gates, stiles, street furniture and the like; posts, brackets, signal indicators, shelves, racking, frames, chamber covers and frames, gully gratings and frames and the like; brickwork, masonry and the like shall be the volumes, areas, lengths or numbers ordered by the <i>Service Manager</i>.
	3	If disposed materials are measured as set aside for reuse and then are subsequently required to be removed to a depot or location by the <i>Service Manager</i>, the transport and resources required for movement shall be measured as Series 8000 Time Charge.
	4	For items of repair or replacement, the removal shall be measured as Site Clearance and the provision of the new replacement elements shall be measured in the relevant series.
	5	Where the foundations for signage, lighting columns, and the like, exceed 0.25m³ and are required to be removed, this shall be measured in the series 600.
Itemisation	6	Separate items shall be provided for take up or down and dispose to off site or set aside for re-use in accordance with the General Principles and the following:

Group	Feature
1	1 Take up or down and dispose off site
	2 Take up or down and set aside for reuse
2	1 Fencing and gates
	2 Road restraint systems
	3 Ironwork
	4 Kerbs and channels
	5 Footways and paved areas
	6 Traffic signs, bollards, marker posts and studs
	7 Structures
3	1 Stated types and sizes
4	1 Stated lengths and areas

**Take Up or Down
and Dispose Off
Site or Set Aside
for Re-use**

7 The items for take up or down and dispose off site or set aside for re-use 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) breaking up foundations;
- (e) de-tensioning, dismantling and extracting posts;
- (f) cleaning, stacking, protecting and labelling;
- (g) transport and handling;
- (h) sand and warning tape to cables where one or more are to remain in a shared trench;
- (i) backfilling and compaction;

- (j) making good to severed ends of existing walls, hedges and fencing;
- (k) disposal of material;
- (l) reinstatement and making good;
- (m) storage facilities;
- (n) replacing items damaged during the foregoing operations;
- (o) multiple handling of materials.

SERIES 300: FENCING

Temporary Fencing

- Units

1

The unit of measurement shall be:

(i) erect and remove temporary fencing linear metre

(ii) maintain temporary fencing linear metre per day

- Itemisation

2

Separate items shall be provided for temporary fencing in accordance with General Principles and the following:

Group	Feature	
1	1	Erect and remove temporary fencing
	2	Maintain temporary fencing
2	1	Stated types
3	1	Stated lengths

- Temporary Fencing

Item coverage

3

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

(a) earthworks, foundations and erection;
(b) maintenance and inspections;
(c) concrete, formwork and reinforcement;
(d) posts, straining posts and struts;
(e) cutting in filling to shape and bends;
(f) protective systems;
(g) removal and reinstatement on completion.

Permanent Fencing

- Units

4

The unit of measurement shall be:

(i) permanent fencing metre
(ii) extra over for concrete footings number
(iii) extra over for end or corner posts on chain link fencing
... .. number
(iv) gates number

- Itemisation

5

Separate items shall be provided for permanent fencing in accordance with General Principles and the following:

Group	Feature	
1	1	Permanent fencing
	2	Gates
2	1	Stated types
3	1	Stated lengths
4	1	Extra over for concrete footings
5	1	Extra over for end or corner posts on chain link fencing

- Permanent Fencing**

6

The items for permanent fencing shall in accordance with the Preambles to the Price List General Directions include for:
- Item coverage

(a) excavation and disposal;
(b) backfilling, compaction and trimming;
(c) protective systems;
(d) fixings and fittings;
(e) joining to existing fencing, gates, hedges and walls;
(f) inspection and maintenance;
(g) gates;
(h) maintenance during erection;

		(i)	reinstatement.				
Extra Over for Concrete Footings	7		The items for extra over for concrete footings shall in accordance with the Preambles to the Price List General Directions include for:				
Item coverage		(a)	additional excavation and disposal;				
		(b)	concrete materials, formwork and reinforcement.				
Extra Over for End or Corner Posts on Chain Link Fencing	8		The items for extra over for end or corner posts on chain link fencing shall in accordance with the Preambles to the Price List General Directions include for:				
Item coverage		(a)	additional materials and resources.				
Excavation in Hard Material							
Units	9		The unit of measurement shall be:				
		(i)	extra over for excavation in hard material in fencing works cubic metre				
<table><tr><th>Group</th><th>Feature</th></tr><tr><td>1</td><td>1 Extra over for excavation in hard material in fencing works</td></tr></table>				Group	Feature	1	1 Extra over for excavation in hard material in fencing works
Group	Feature						
1	1 Extra over for excavation in hard material in fencing works						
Extra Over for Excavation in Hard Material in Fencing Works	10		The items for extra over for excavation in hard material in fencing works 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.				

SERIES 400: VEHICLE AND PEDESTRIAN RESTRAINTS

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.

- Itemisation

7

Separate items shall be provided for permanent safety barrier in accordance with General Principles and the following:

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:

- 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:

- Itemisation

14

Separate items shall be provided for retensioning in accordance with General Principles and the following:
- (i)

retensioning linear metre
- (ii)

extra over for stated post spacing linear metre

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
- Page | 28
- Schedule 4- Pricing Schedule_ Method of Measurement

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 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:

- 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;
- (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:

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: (a) excavation in hard material; (b) any additional disposal.
Item coverage		

SERIES 500: DRAINAGE AND SERVICE DUCTS

Definition	1	The Earthworks Outline as defined in Series 600 Earthworks shall apply to this Series. Sub-soil level in this Series is defined as the level of the ground after the removal of topsoil.
		Drains
Units	2	The unit of measurement shall be: (i) drains linear metre
Measurement	3	The measurement of drains shall be the summation of individual lengths ordered by the <i>Service Manager</i> along the centre lines of the pipes between any of the following: (a) the internal faces of chambers; (b) the external faces of headwalls; (c) the intersection of the centre lines at pipe junctions; (d) the centre of gully gratings or centre of the gully.
	4	The depth of drains shall be the vertical measurement between the invert and the existing ground level except that; (a) where the Earthworks Outline is below the existing ground level the measurement shall be taken to the Earthworks Outline; (b) where the Earthworks Outline is above the existing ground level the measurement shall be taken to the Earthworks Outline; (c) notwithstanding the foregoing, where in the Contract a commencing level or a minimum level of cover is stated from which excavation shall commence, then the depth shall be taken to that stated level.

Itemisation 5 Separate items shall be provided for drains in accordance with General Principles and the following:

Group	Feature
1	1 Drains
2	1 Stated internal diameters
3	1 Stated materials
4	1 Average depth to invert not exceeding 1.0 metres
	2 Average depth to invert exceeding 1.0 metres but not exceeding 1.5 metres and so on in steps of 0.5 metres
5	1 Stated aggregated lengths

Note: For each item of drains an associated adjustment item shall be provided for each 25mm of difference of variation in excess of the average stated depth. The foregoing shall apply only to increases of the average stated depth.

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

- Item coverage
- (a) excavation of acceptable material;
 - (b) excavation of unacceptable material;
 - (c) articulated pipes and fittings;
 - (d) cutting, laying, jointing and bedding;
 - (e) earthwork support;
 - (f) temporary supports;
 - (g) bedding, haunching and surround;
 - (h) formwork;
 - (i) backfilling and compaction with selected excavated material;
 - (j) disposal of excess material;

- (k) movement joints to beds, surrounds and the like;
- (l) reinstatement of unpaved areas;
- (m) checking and cleaning;
- (n) maintaining existing flows;
- (o) in the case of ducts, fixing draw ropes, removable stoppers, marker blocks and posts;
- (p) as built records;
- (q) lubricants, packing, grouting and caulking.

Extra Over Drains

- Units 7 The unit of measurement shall be:
- (i) extra over drains for stated bed types linear metre
 - (ii) extra over drains for stated pipes linear metre

- Itemisation 8 Separate items shall be provided for extra over drains in accordance with General Principles and the following:

Group	Feature
1	1 Extra over drains for Stated bed types
	2 Extra over drains for stated pipes
2	1 Stated depths

Group 2 Feature 1 shall only be stated for Group 1 Feature 1.

- Extra Over Drains** 9 The items for extra over drains shall in accordance with the Preambles to the Price List General Directions include for:

- Item coverage
- (a) stated materials;
 - (b) additional excavation in unacceptable or acceptable materials;
 - (c) additional disposal of excess materials;
 - (d) formwork and supports.

Filter Drains

Units	10	The unit of measurement shall be: (i) filter drains linear metre
Measurement	11	The measurement of filter drains shall be the summation of individual lengths ordered by the <i>Service Manager</i> along the centre lines of the pipes.
	12	The depth of filter drains shall be the vertical measurement between the invert and the existing ground level except that where the Earthworks Outline is below the existing ground level where the measurement shall be taken to the Earthworks Outline.
	13	Notwithstanding the foregoing, where in the Contract a commencing level or a minimum level of cover is stated from which excavation shall commence, then the depth shall be taken to that stated level.
Itemisation	14	Separate items shall be provided for drains in accordance with General Principles and the following:

Group	Feature	
1	1	Filter drains
2	1	Stated internal diameters
3	1	Stated materials
4	1	Average depth to invert not exceeding 1.0 metres
	2	Average depth to invert exceeding 1.0 metres but not exceeding 1.5 metres and so on in steps of 0.5 metres

Note: For each item of drains an associated adjustment item shall be provided for each 25mm of difference of variation in excess of the average stated depth. The foregoing shall apply only to increases of the average stated depth.

Filter Drains	15	The items for drains shall in accordance with the Preambles to the Price List General Directions include for:



Item coverage	(a)	excavation of acceptable material;
	(b)	excavation of unacceptable material;
	(c)	articulated pipes and fittings;
	(d)	cutting, laying, jointing and bedding;
	(e)	earthwork support;
	(f)	temporary supports;
	(g)	bedding, haunching and surround;
	(h)	formwork;
	(i)	backfilling and compaction;
	(j)	disposal of excess material;
	(k)	movement joints to beds, surrounds and the like;
	(l)	reinstatement of unpaved areas;
	(m)	checking and cleaning;
	(n)	maintaining existing flows;
	(o)	in the case of ducts, fixing draw ropes, removable stoppers, marker blocks and posts;
	(p)	as built records.

Excavate and Replace Filter Material

Units	16	The units of the measurement shall be: (i) excavate and replace filter material cubic metre
Measurement	17	The measurement of excavate and replace filter material shall be the volume of the void directed to be excavated or filled by the <i>Service Manager</i> .
Itemisation	18	Separate items shall be provided for excavate and replace filter material in accordance with the General Principles and the following:

Group	Feature
1	1 Excavate and replace filter material

		2	1	Stated aggregated quantities
Excavate and Replace Filter Material	19	The items for excavate and replace filter material 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)	deposition of fill;	
		(e)	compaction of fill.	
Connections				
Units	20	The units of measurement shall be:		
		(i)	connections number	
Measurement	21	Connections shall only be separately measured for connection to existing drains, piped culverts or chambers.		
Itemisation	22	Separate items shall be provided for connection to existing drain, piped culvert or chamber in accordance with General Principles and the following:		
		Group	Feature	
		1	1	Connection to existing drain, piped culvert
			2	Connection to existing chamber
		2	1	Saddle connection
			2	Junction connection
		3	1	Stated diameters
		4	1	At any depth
Connections to Existing Drains, Piped	23			

**Culverts,
Chambers.**

The items for connection to existing drains, piped culverts, chambers, 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)	locating and making entry;
	(d)	backfilling and compaction;
	(e)	disposal of material;
	(f)	making entry into chambers, concrete benching and channels, and making good the benching, channels and walls;
	(g)	locating severed ends of land and mole drains;
	(h)	pipes, fittings and saddles;
	(i)	bedding, haunching and surrounding, and filter material;
	(j)	formwork;
	(k)	sealing off disused ends;
	(l)	re-laying existing pipes disturbed;
	(m)	building in pipes;
	(n)	maintaining existing flows.

Chambers, Drawpits and Gullies

Units	24	The units of measurement shall be: (i) chambers, drawpits and gullies number
Measurement	25	The measurement shall be the complete chamber, drawpit or gully ordered by the <i>Service Manager</i> .
	26	Depths of chambers or drawpit shall be the distance between the top surface of the cover and the invert of the main channel, or where no channel is required by the Contract the uppermost surface of the base slab. Where no base slab is required, the depth shall be taken to the bottom of the excavation.

Group	Feature	
1	1	Chambers or drawpit
	2	Gullies
2	1	Specified design groups or stated types
3	1	Depth to invert not exceeding 1.2 metre
	2	Depth to invert exceeding 1.2 metre but not exceeding 2.0 metres
4	1	Stated covers or gratings

Chambers or Drawpits

27

The items for chambers or drawpits 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) earthwork support;
- (d) construction of bases, walls, roof and cover slabs and shafts, surrounds and corbelling for cover;
- (e) channels, fittings, benching, building in pipes and fin drain connections;
- (f) cleaning;
- (g) steps, safety chains, ladders, handholds and the like;
- (h) covers, frames, seatings and bedding;
- (i) cover keys;
- (j) concrete;
- (k) formwork;
- (l) reinforcement;
- (m) backfilling and compaction;
- (n) disposal of material;

		(o) filling;
		(p) notices;
		(q) sealants;
		(r) brickwork;
		(s) mortar.
Gullies	28	The items for gullies 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) fittings including in situ concrete bed and surround and jointing to pipes;
		(d) gratings, frames, slabs, surrounds, aprons, seatings, liners and bedding;
		(e) formwork;
		(f) cleaning;
		(g) backfilling and compaction;
		(h) disposal of material;
		(i) brickwork;
		(j) mortar.

Service Ducts

Units	29	The unit of measurement shall be:
		(i) service ducts linear metre
Measurement	30	The measurement of service ducts shall be the summation of individual lengths ordered by the <i>Service Manager</i> along the centre lines of the pipes between the internal faces of chambers.
	31	The depth of service ducts shall be the vertical measurement between the invert and the existing ground level except that where the Earthworks Outline is below the existing ground

level where the measurement shall be taken to the Earthworks Outline.

- Itemisation
- 32

Notwithstanding the foregoing, where in the Contract a commencing level or a minimum level of cover is stated from which excavation shall commence, then the depth shall be taken to that stated level.
- 33

Separate items shall be provided for service ducts in accordance with General Principles and the following:

Group	Feature	
1	1	Service ducts
2	1	In verge or footway
	2	In carriageway
3	1	Stated bed and surround
4	1	Average depth to invert not exceeding 0.5 metres
	2	Average depth to invert exceeding 0.5 metres but not exceeding 0.75 metres
5	1	Stated size ducts
	2	Number of ducts in trench

- Service Ducts
- 34

The items for service ducts shall in accordance with the Preambles to the Price List General Directions include for:
- Item coverage
- (a)

excavation of acceptable material;
- (b)

excavation of unacceptable material;
- (c)

pipes and fittings;
- (d)

cutting, laying, jointing and bedding;
- (e)

earthwork support;
- (f)

temporary supports;
- (g)

bedding, haunching and surround;
- (h)

formwork;

- (i) backfilling and compaction;
- (j) disposal of excess material;
- (k) movement joints to beds, surrounds and the like;
- (l) reinstatement of unpaved areas;
- (m) checking and cleaning;
- (n) maintaining existing flows;
- (o) fixing draw ropes, removable stoppers, marker blocks and posts;
- (p) as built records;
- (q) lubricants, packing, grouting and caulking.

Concrete Bagwork

Units	35	The unit of measurement shall be: (i) concrete bagwork walls square metre (ii) concrete bagwork in headwall number						
Measurement	36	Measurement for concrete bagwork shall be the quantity ordered by the <i>Service Manager</i> .						
Itemisation	37	Separate items shall be provided for concrete bagwork in accordance with the General Principles and the following: <table><tr><th>Group</th><th>Feature</th></tr><tr><td>1</td><td>1 Concrete bagwork in walls</td></tr><tr><td></td><td>2 Concrete bagwork in headwall</td></tr></table>	Group	Feature	1	1 Concrete bagwork in walls		2 Concrete bagwork in headwall
Group	Feature							
1	1 Concrete bagwork in walls							
	2 Concrete bagwork in headwall							
Concrete Bagwork	38	The items for concrete bagwork shall in accordance with the Preambles to Price List General Direction include for:						
Item coverage		(a) excavation and disposal; (b) deposition, filling and compaction; (c) filling bags with concrete and making good;						

- (d) shaping, building in pipes and tying into existing work;
- (e) in situ concrete, formwork, reinforcement and dowels;
- (f) geotextiles.

Soft Spots and Voids

Units	39	The units of measurement shall be: (i) excavation of soft spots and other voids, filling of soft spots and other voids cubic metre
Measurement	40	The measurement of excavation or filling of soft spots and other voids shall be the volume of the void to be excavated or filled as ordered by the <i>Service Manager</i> .
Itemisation	41	Separate items shall be provided for excavation and filling of soft spots and other voids in accordance with the General Principles and the following:

Group	Feature	
1	1	Excavation of soft spots and other voids
	2	Filling of soft spots and other voids
2	1	In trenches chambers and gullies
3	1	Stated materials

Excavation of Soft Spots and Other Voids	42	The items for excavation of soft spots and other voids 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.
Filling of Soft Spots and Other Voids	43	The items for filling of soft spots and other voids shall in accordance with the Preambles to Price List General Directions include for:
Item coverage		(a) deposition of fill;

- (b) compaction of fill;
- (c) in situ concrete or granular materials.

Refix or adjust ironwork

Units	44	The unit of measurement shall be: (i) refix or adjust ironwork number														
Measurement	45	Measurement note; additional items shall be measured for covers or gratings set within epoxy mortar.														
	46	Measurement note; additional items shall be measured for the provision of new covers.														
Itemisation	47	Separate items shall be provided for refix or adjust ironwork in accordance with the General Principles and the following: <table><tr><th>Group</th><th>Feature</th></tr><tr><td>1</td><td>1 Refix or adjust ironwork</td></tr><tr><td>2</td><td>1 In footway or verge</td></tr><tr><td></td><td>2 In carriageway</td></tr><tr><td>3</td><td>1 Stated sizes of cover or grating</td></tr><tr><td>4</td><td>1 Not exceeding 75mm</td></tr><tr><td></td><td>2 Exceeding 75mm but not exceeding 150mm and so on in steps of 75mm</td></tr></table>	Group	Feature	1	1 Refix or adjust ironwork	2	1 In footway or verge		2 In carriageway	3	1 Stated sizes of cover or grating	4	1 Not exceeding 75mm		2 Exceeding 75mm but not exceeding 150mm and so on in steps of 75mm
Group	Feature															
1	1 Refix or adjust ironwork															
2	1 In footway or verge															
	2 In carriageway															
3	1 Stated sizes of cover or grating															
4	1 Not exceeding 75mm															
	2 Exceeding 75mm but not exceeding 150mm and so on in steps of 75mm															
Refix or Adjust Ironwork	48	The items for refix or adjust ironwork shall in accordance with the Preambles to Price List General Directions include for:														
Item coverage		(a) excavation of acceptable material; (b) excavation of unacceptable material; (c) take up existing cover or grating including frame and clean and set aside for re-use; (d) excavation in hard material; (e) demolition and preparation to receive new construction;														

- (f) construction of walls;
- (g) bedding existing cover or grating including frame;
- (h) concrete;
- (i) formwork;
- (j) backfilling and compaction;
- (k) disposal of material;
- (l) taking precautions to avoid damage to drains and sewers;
- (m) cleaning;
- (n) brickwork;
- (o) mortar.

Extra Over Refix or Adjust Cover for New

Units	49	The unit of measurement shall be: (i) extra over refix or adjust cover for new number						
Measurement	50	The measurement of disposal of redundant covers shall be measured using the appropriate site clearance item.						
	51	The measurement of additional items shall be measured for the reinstatement of paved areas using the appropriate pavement item.						
Itemisation	52	Separate items shall be provided for extra over refix or adjust cover for new in accordance with the General Principles and the following: <table><tr><th>Group</th><th>Feature</th></tr><tr><td>1</td><td>1 Extra over refix or adjust cover for new</td></tr><tr><td>2</td><td>1 Stated sizes of cover or grating</td></tr></table>	Group	Feature	1	1 Extra over refix or adjust cover for new	2	1 Stated sizes of cover or grating
Group	Feature							
1	1 Extra over refix or adjust cover for new							
2	1 Stated sizes of cover or grating							

Extra Over Refix or Adjust Cover for New 53 The items for extra over refix or adjust cover for new shall in accordance with the Preambles to Price List General Directions include for:

Item coverage (a) new covers.

Backfilling of Trenches

Units 54 The unit of measurement shall be:

(i) backfilling of trenches in lieu of selected excavated material cubic metre

Measurement 55 Measurement for backfilling of trenches in lieu of selected excavated material shall be the quantity ordered by the *Service Manager*.

Itemisation 56 Separate items shall be provided for backfilling of trenches in lieu of selected excavated material in accordance with the General Principles and the following:

Group	Feature
1	1 Backfilling of trenches in lieu of selected excavated material
2	1 Stated materials

Backfilling of Trenches in lieu of Selected Excavated Material 57 The items for backfilling of trenches in lieu of selected excavated material shall in accordance with the Preambles to Price List General Direction include for:

- Item coverage (a) the additional cost of importing materials in lieu of selected excavated material;
- (b) protection of material in transit and while awaiting tipping;
- (c) grading, measuring, mixing and depositing materials;
- (e) additional handling and loading of materials, spreading and compaction;
- (f) disposal of excavated material.

Backfilling of Disused Chambers, Gully Pots and the like

Units	58	The unit of measurement shall be: (i) backfilling of disused chambers, gully pots and the like cubic metre
Measurement	59	Measurement for backfilling of disused chambers, gully pots and the like in lieu of selected excavated material shall be the quantity ordered by the <i>Service Manager</i> .
Itemisation	60	Separate items shall be provided for backfilling of disused chambers, gully pots and the like in accordance with the General Principles and the following:

Group	Feature
1	1 Backfilling of disused chambers, gully pots and the like
2	1 Stated materials

Backfilling of Disused Chambers, Gully Pots and the like	61	The items for backfilling of disused chambers, gully pots and the like shall in accordance with the Preambles to Price List General Direction include for:
Item coverage		(a) the additional cost of importing materials in lieu of selected excavated material; (b) protection of material in transit and while awaiting tipping; (c) grading, measuring, mixing and depositing materials; (d) curing and protection; (e) additional handling and loading of materials, spreading and compaction; (f) Disposal of excavated material.

Excavation in Hard Material

Units	62	The unit of measurement shall be: (i) extra over excavation for excavation in hard material in drainage cubic metre



Measurement 63 The measurement shall be the volume of the voids formed by the removal of the hard material ordered by the *Service Manager*.

Itemisation 64 Separate items shall be provided for extra over excavation for excavation in hard material in drainage in accordance with the General Principles and the following:

Group	Feature	
1	1	Extra over excavation for excavation in hard material in drainage
2	1	Stated specification of hard material

Item coverage 65 The items for extra over excavation for excavation in hard material in drainage shall in accordance with the Preambles to Price List General Directions include for:

(a) excavation in hard material.

SERIES 600: EARTHWORKS

- Definitions

1

The Earthworks Outline, unless expressly stated otherwise, is defined as the finished earthworks levels and dimensions (prior to topsoiling) required by the Contract for the construction, where specified, of:

(a) carriageway, hard shoulder, hard strip, footway, paved area, central reserve, verge, side slope;

(b) sub-base;

(c) landscape areas, environmental bunds.
- 2

Sub-soil Level is defined as the level of the ground after the removal of topsoil.
- Measurement General

3

For the purposes of this Series it shall be assumed that one cubic metre of material excavated forms one cubic metre of compacted fill. No allowance shall be made in the measurement for bulking and shrinkage of any material.

Excavation

- Units

4

The unit of measurement shall be:

(i) excavation cubic metre
- Itemisation

5

Separate items shall be provided for excavation in accordance with General Principles and the following:

Group	Feature	
1	1	Excavation
2	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 <i>Contractor</i> may require for working space, timbering, formwork or other temporary works and its subsequent backfilling with approved materials and compaction;
	(o)	taking precautions to avoid damage to property, structures, drains, sewers, services, instrumentation and the like;
	(p)	disposal of surcharge material.

Extra Over for Excavation in Hard Material

Units	7	The unit of measurement shall be:
	(i)	extra over for excavation in hard material cubic metre

Itemisation 8 Separate items shall be provided for extra over for excavation in hard material in accordance with General Principles and the following:

Group	Feature	
1	1	Extra over for excavation in hard material
2	1	Stated materials
3	1	Stated aggregated volumes

Extra Over for Excavation in Hard Material 9 The items for extra over for excavation in hard material in accordance with the Preambles to the Price List General Directions include for:

- Item coverage
- (a) site trials for removal;
 - (b) splitting, breaking and the like;
 - (c) cutting through reinforcement;
 - (d) saw cutting and trimming;
 - (e) removal of existing paved areas by course or layer, cleaning surfaces, planing, stepping out and treatment to bottoms of foundations.

Disposal of Material

Units 10 The unit of measurement shall be:

(i) disposal of material cubic metre

Measurement 11 The measurement of disposal of acceptable material shall be the net volume of excavated material.

Itemisation 12 Separate items shall be provided for disposal of material in accordance with the General Principles and the following:

Group	Feature	
1	1	Disposal
2	1	Topsoil (Class 5A)
	2	

	3	Unacceptable non-hazardous uncontaminated material - clean
	4	Unacceptable non-hazardous uncontaminated material - rough
		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 clay ware

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 fill cubic metre

Measurement

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

- (a) acceptable material, excluding topsoil Class 5A and acceptable material of a particular Class being both surplus to the requirements of the Contract for that class of material and which does not meet the requirements for acceptability for use elsewhere within the measured volume of compacted fill, excavated from within the Site and measured in this Series;
- (b) other stated classes of imported acceptable fill excluding topsoil Class 5B.

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

Group	Feature
1	1 Imported fill
2	1 Stated classes or 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 <i>Service Manager</i> .
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:

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 <i>Service Manager</i> .
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 mattresses number
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:

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 <i>Service Manager</i> 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 pavements square 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 51 The items for breaking up and perforation of redundant pavements shall in accordance with the Preambles to Price List General Directions include for:

- Item coverage
- (a) excavation in hard material;
 - (b) taking precautions to avoid damage to property, structures, drains, sewers, services, instrumentation and the like;
 - (c) perforations.

Siding

Units 52 The unit of measurement shall be:

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

Measurement 53 The measurement of siding shall be the quantities ordered by the *Service Manager*.

Itemisation 54 Separate items shall be provided for siding in accordance with the General Principles and the following:

Group		Feature
1	1	Siding
2	1	Footway
	2	Carriageway
3	1	Not exceeding 250mm wide
	2	Exceeding 250mm wide but not exceeding 500mm wide
	3	Disposal of materials off site

Siding 55 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	56		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	57	The unit of measurement shall be:
		(i) clearing of existing ditches linear metre
		(ii) disposal of materials off site cubic metre
Measurement	58	The measurement of clearing of existing ditches shall be the quantities ordered by the <i>Service Manager</i> .
	59	The measurement of disposal of materials off site shall be the quantities ordered by the <i>Service Manager</i> .
Itemisation	60	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	61	The items for clearing of existing ditches 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	62	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.
Grips			
Units	63	The unit of measurement shall be:	
		(i)	grips linear metre
		(ii)	disposal of materials off site cubic metre
Measurement	64	The measurement of grips shall be the quantities ordered by the <i>Service Manager</i> .	
Itemisation	65	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
	2	Reshape existing grip
	3	Disposal of materials off site

Grips	66	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	67	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.

SERIES 700: PAVEMENTS

		Sub-base															
Units	1	The unit of measurement shall be: (i) sub-base cubic metre															
Measurement	2	The measurement of sub-base shall be the volume of sub-base measured to the dimensions stated or quantities ordered by the <i>Service Manager</i> .															
Itemisation	3	Separate items shall be provided for sub-base in accordance with the General Principles and the following:															
		<table><tr><th>Group</th><th>Feature</th></tr><tr><td>1</td><td>1 Each group or type of sub-base.</td></tr><tr><td>2</td><td>1 In carriageway</td></tr><tr><td>3</td><td>1 Not exceeding 10 cubic metres</td></tr><tr><td></td><td>2 Exceeding 10 but not exceeding 50 cubic metres</td></tr><tr><td></td><td>3 Exceeding 50 but not exceeding 100 cubic metres</td></tr><tr><td></td><td>4 Exceeding 100 cubic metres</td></tr></table>	Group	Feature	1	1 Each group or type of sub-base.	2	1 In carriageway	3	1 Not exceeding 10 cubic metres		2 Exceeding 10 but not exceeding 50 cubic metres		3 Exceeding 50 but not exceeding 100 cubic metres		4 Exceeding 100 cubic metres	
Group	Feature																
1	1 Each group or type of sub-base.																
2	1 In carriageway																
3	1 Not exceeding 10 cubic metres																
	2 Exceeding 10 but not exceeding 50 cubic metres																
	3 Exceeding 50 but not exceeding 100 cubic metres																
	4 Exceeding 100 cubic metres																
Sub-base	4	The items for sub-base shall in accordance with the Preambles to Price List General Directions include for:															
Item coverage		(a) trial areas and trials; (b) making good after sampling and testing; (c) protection of material in transit and while awaiting tipping; (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 subgrade, capping and sub-base from deterioration due to the ingress of water and the use of constructional plant;
- (k) taking measures to improve the subgrade, capping and sub-base from damage due to the *Contractor's* method of construction and choice of constructional plant;
- (l) shaping to cambers, falls and crowns;
- (m) provision of test certificates.

Pavement

Units	5	The unit of measurement shall be: (i) base course, binder course and surface course square metre
Measurement	6	The measurement of the base course, binder course and surface course shall be calculated using the width of the top surface of the course.
	7	The width of the top surface of the course shall be the width required by dimensions or ordered by the <i>Service Manager</i> and shall exclude sloping sides or edges.
	8	No deductions shall be made for openings of 1 square metre or less.
Itemisation	9	Separate items shall be provided for base course, binder course and surface course in accordance with the General Principles and the following:

Group	Feature	
1	1	Pavements
2	1	Base course
	2	Binder course
	3	Surface Course
	4	Coated chippings
	5	Thin surface course
3	1	Each group or type

4	1	Stated thicknesses
5	1	In contiguous areas exceeding 4,000 square metres

Note: Additional items shall be measured for additional stated thicknesses of pavement items.

**Base Course,
Binder Course
and Surface
Course**

10 The items for base course, binder and surface course shall in accordance with the Preambles to Price List General Directions include for:

Item coverage

- (a) trial areas and trials;
- (b) making good after sampling and testing;
- (c) protection of material in transit and while awaiting tipping;
- (d) designing and verifying mixes;
- (e) grading, measuring, reclaiming, mixing and depositing materials;
- (f) spreading and compacting;
- (g) cutting back, saw cutting, cleaning, preparing and working on or up to existing surfaces and features;
- (h) edge support;
- (i) waterproof and separation membranes;
- (j) chippings;
- (k) surface texturing;
- (l) making joints;
- (m) forming or sawing grooves, cleaning, grit blasting, priming, caulking, temporary and permanent sealing of joints;
- (n) shaping to cambers, falls, crowns and covers;
- (o) forming sockets, recesses, openings, and bays;
- (p) curing and protection;

Extra Over Asphalt Concrete Materials

- Units 15 The unit of measurement shall be:
- (i) extra over asphalt concrete materials square metre
- Measurement 16 The measurement of extra over asphalt concrete materials shall be the top surface area of the pavement ordered by the *Service Manager*.
- Itemisation 17 Separate items shall be provided for extra over asphalt concrete materials in accordance with the General Principles and the following:

Group	Feature	
1	1	Extra over asphalt concrete materials
2	1	For contiguous areas
3	1	Exceeding 250 but not exceeding 1,000 square metres
	2	Exceeding 1,000 square metres but not exceeding 2,000 square metres
	3	Exceeding 2,000 square metres but not exceeding 4,000 square metres

- Extra Over Asphalt Concrete Materials** 18 The items for extra over asphalt concrete materials shall in accordance with the Preambles to Price List General Directions include for:
- Item coverage (a) additional costs and resources due to stated and designated quantities.

Asphalt Reinforcement

- Units 19 The unit of measurement shall be:
- (i) asphalt reinforcement square metre
- Measurement 20 The measurement of asphalt reinforcement shall be calculated using the top surface ordered by the *Service Manager*.
- 21 No deductions shall be made for opening of 1 square metre or less.

Itemisation

22

Separate items shall be provided for asphalt reinforcement in accordance with the General Principles and the following:

Group	Feature	
1	1	Asphalt reinforcement
2	1	Stated types
3	1	Not exceeding 1,000 square metres
	2	Exceeding 1,000 square metres

Asphalt Reinforcement

23

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

- Item coverage
- (a)

trial areas and trials;
- (b)

spreading and roiling deposited materials;
- (c)

bond or tack coat;
- (d)

measures required for aftercare and opening road to traffic;
- (e)

overlaps and bonding;
- (f)

surface preparation and treatment shall include bonding coat;
- (g)

shrinkage.

Bond or Tack Coat

Units

24

The unit of measurement shall be:

- (i)

bond or tack coat square metre

Measurement

25

The measurement of bond or tack coat shall be the surface area to be coated as ordered by the *Service Manager*.

Itemisation

26

Separate items shall be provided for bond or tack coat in accordance with the General Principles and the following:

Group	Feature	
1	1	Bond or tack coat
2	1	Stated materials
3	1	Stated rates of spread

Bond or Tack Coat

27 The items for bond or tack coat shall in accordance with the Preambles to Price List General Directions include for:

Item coverage

- (a) trial area and trials;
- (b) making good after sampling and testing;
- (c) designing and verifying mixes;
- (d) grading, measuring, mixing and depositing materials;
- (e) making joints;
- (f) cleaning surfaces;
- (g) protection and masking and unmasking or kerbs, drainage, channels, chamber covers, gully gratings, expansion joints, road studs, road markings and the like and obtaining clean markings;
- (h) cutting back, preparing and working on or up to adjacent faces, surfaces and features;
- (i) admixtures and additives.

Joints

Units

28 The unit of measurement shall be:

- (i) cut back existing flexible pavement linear metre
- (ii) saw cutting flexible pavement linear metre

Measurement

29 The measurement of joints shall be the length of work ordered by the *Service Manager*.

30 Cut back existing pavement shall be for work required to existing surfaces and include for saw cutting to form a vertical face. Saw cutting pavement shall only be measured as a separate item where specifically ordered by the *Service Manager*.

- Itemisation
- 31

Cut back existing pavement shall not be used for temporary joints required in day to day operations as these are deemed to be temporary works.
- 32

Separate items shall be provided for joints in accordance with the General Principles and the following:

Group	Feature	
1	1	Joints
2	1	Cut back flexible pavement
	2	Saw cutting flexible pavement
3	1	Not exceeding 300mm wide
4	1	Not exceeding 50mm deep
	2	Exceeding 50mm but not exceeding 100mm deep

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

**Cut Back
Flexible
Pavements**

Item coverage

- 33

The items for cut back flexible pavements shall in accordance with the Preambles to Price List General Directions include for:
- (a)

loading into transport, upholding the sides and keeping the earthworks free of water;
- (b)

taking precautions to avoid damage to property, structures, existing sewers, drains and services;
- (c)

multiple handling of excavated materials;
- (d)

disposal;
- (e)

coating vertical face with bitumen;
- (f)

saw cut full depth.

**Saw Cutting
Flexible
Pavements**

Item coverage

- 34

The items for saw cutting flexible pavements shall in accordance with the Preambles to Price List General Directions include for:
- (a)

saw cutting to full depths;
- (b)

coating vertical face with bitumen.

Planing (Cold Milling)

Units	35	The unit of measurement shall be: (i) planing square metre (ii) extra over planing for each increment in depth square metre (iii) extra over planing for haulage of planings to <i>Service Manager's</i> store tonne
	36	The measurement of planing shall be the quantities ordered by the <i>Service Manager</i> . No deductions shall be made for openings of 1 square metre or less.
	37	The measurement for extra planing for each increment in depth shall be for each additional stated increment ordered by the <i>Service Manager</i> .
Measurement	38	The measurement for extra over planing for haulage of planings to <i>Service Manager's</i> store shall be the tonnage of planed material supported by certified delivery tickets.
Itemisation	39	Separate items shall be provided for planing in accordance with the General Principles and the following:

Group	Feature	
1	1	Planing flexible surfacing
2	1	Stated thicknesses or depths
3	1	Exceeding 250 square metres but not exceeding 1,000 square metres
	2	Exceeding 1,000 square metres but not exceeding 2,000 square metres
	3	Exceeding 2,000 square metres but not exceeding 4,000 square metres
	4	Metres Exceeding 4,000 square metres

Note: For each item of planing an adjustment item shall be provided for increases in depth for each variation as appropriate.

- Itemisation 40 Separate items shall be provided for extra over planing for haulage of planings to *Service Manager's* store in accordance with the General Principles and the following:

Group	Feature
1	1 Extra over planing for haulage of planings to <i>Service Manager's</i> store
2	1 Not exceeding 5 kilometres from site
	2 Exceeding 5 kilometres but not exceeding 15 kilometres from site
	3 Exceeding 15 kilometres but not exceeding 25 kilometres from site
	4 Exceeding 25 kilometres but not exceeding 35 kilometres from site

- Planing** 41 The items for planing shall in accordance with the Preambles to Price List General Directions include for:

- Item coverage
- (a) re-shaping and rolling;
 - (b) shaping to cambers, falls and crowns;
 - (c) multiple handling of material;
 - (d) loading into transport;
 - (e) working around drainage channels, covers, gully gratings, expansion joints and the like;
 - (f) ramps;
 - (g) removing road studs for re-use;
 - (h) surface preparation and cleaning.

- Extra Over Planing for Haulage of Planings to *Service Manager's* store** 42 The items for extra over planing for haulage of planings to *Service Manager's* store shall in accordance with the Preambles to Price List General Directions include for:

- Item coverage
- (a) multiple handling of material;
 - (b) loading into transport;
 - (c) deposition of material.

Surface Treatments

- Units

43

The unit of measurement shall be:

(i) establishment of equipment number

(ii) surface treatments square metre
- Measurement

44

Establishment of equipment for surface treatments shall be measured once for each site.
- 45

The measurement of surface treatment shall be the area of the top surface of the work ordered by the *Service Manager*.
- 46

No deductions shall be made for openings of 1 square metre or less.
- Itemisation

47

Separate items shall be provided for surface treatments in accordance with the General Principles and the following:

Group	Feature
1	1 Surface treatments
2	1 Stated types
3	1 Establishment
	2 Not exceeding 100 square metres
	3 Exceeding 100 square metres but not exceeding 500 square metres
	4 Exceeding 500 square metres

Note: An additional item shall be measured for different stated colours in lieu of natural colours.

- Establishment

48

The items for establishment shall in accordance with the Preambles to Price List General Directions include for:
- Item coverage

(a)

provision and setting up equipment on sites;
- (b)

maintaining equipment;
- (c)

removing equipment upon completion.

**Surface
Treatments**

- 49 The items for surface treatments shall in accordance with the Preambles to Price List General Directions include for:
- Item coverage
- (a) provision and supplying trial areas, trials, samples and site visit;
 - (b) making good after sampling;
 - (c) storing, handling or materials;
 - (d) spreading and rolling deposited materials;
 - (e) assessment of the site, designing and verifying of the surface treatment;
 - (f) measures required for aftercare and opening to traffic.

Surface Dressing

- Units 50 The unit of measurement shall be:
- (i) surface dressing square metre
- Measurement 51 The measurement of surface dressing shall be the area of the top surface of the work ordered by the *Service Manager*.
- 52 No deductions shall be made for openings of 1 square metre or less.
- 53 Surface dressing shall be carried out as an annual programme of work.
- Itemisation 54 Separate items shall be provided for surface dressing in accordance with the General Principles and the following:

Group	Feature	
1	1	Surface dressing
2	1	Stated types and specifications
	2	Extra over for surface dressing for stated rates of spread or stated PSV stone or speed limits or narrow width roads

Surface Dressing

- 55 The items for surface dressing shall in accordance with the Preambles to Price List General Directions include for:
- Item coverage
- (a) provision and supplying trial areas, trials, samples and site visit;
 - (b) making good after sampling;
 - (c) storing, handling or materials;
 - (d) spreading and rolling deposited materials;
 - (e) removal of surplus chippings;
 - (f) protection of surface dressing;
 - (g) assessment of the site, designing and verifying of the surface treatment.

Carriageway Patching

- Units
- 56 The unit of measurement shall be:
- (i) carriageway patching square metre
 - (ii) overlay patching tonne
- Measurement
- 57 Carriageway patching shall be measured for repairs to carriageways instructed by the *Service Manager*.
- 58 The measurement of carriageway patching shall be the area of the top surface ordered by the *Service Manager*
- 59 The measurement of overlay patching shall be the approved and certified tonnage of materials ordered by the *Service Manager*.
- Itemisation
- 60 Separate items shall be provided for carriageway patching and overlay patching in accordance with the General Principles and the following:

Group	Feature
1	1 Carriageway patching
2	1 Hand patching repairs
	2 Hand/planer patching repairs
	3 Machine patching repairs
	4 Extra over for stated variations

3	1	Stated materials, thicknesses or depths
4	1	Stated aggregated quantities

Carriageway Patching and Overlay Patching

61 The items for carriageway patching and overlay patching shall in accordance with the Preambles to Price List General Directions include for:

Item coverage

- (a) determination of the extent of the patching or volumes and agreement with the *Service Manager*;
- (b) base course, binder course and surface course;
- (c) excavation of unacceptable and hard material;
- (d) disposal of surplus materials;
- (e) scarifying and planing;
- (f) saw cutting and forming joints;
- (g) coating vertical faces with bitumen;
- (h) tack coat and bond coat;
- (i) bringing to correct levels and surface regularity following settlement;
- (j) removal of loose materials and water;
- (k) temporary road markings.

Carriageway Reinstatement

Units

62 The unit of measurement shall be:

- (i) carriageway reinstatement square metre
- (ii) sub-base in carriageway reinstatement cubic metres

Measurement

63 Carriageway reinstatement shall be measured for reinstatement to drainage trenches, trial holes and the like instructed by the *Service Manager*.

64 The measurement of carriageway reinstatement shall be the area of the top surface ordered by the *Service Manager*.

- Itemisation
- 65

The measurement of sub-base in carriageway reinstatement shall be the volume of sub-base measured to the dimensions stated or quantities ordered by the Service Manager.
- 66

Separate items shall be provided for carriageway reinstatement in accordance with the General Principles and the following:

Group	Feature	
1	1	Carriageway reinstatement
2	1	Sub-base in carriageway reinstatement
	2	Reinstatement of flexible carriageway
	3	Extra over for stated variations
3	1	Stated materials, thicknesses or depths
4	1	Stated aggregated quantities

Note: Aggregated quantities shall not apply for sub-base in carriageway reinstatement.

- Carriageway Reinstatement

Item coverage
- 67

The items for carriageway reinstatement shall in accordance with the Preambles to Price List General Directions include for:
- (a)

determination of the extent of the reinstatement and agreement with the *Service Manager*;
- (b)

base binder course and surface course;
- (c)

excavation of unacceptable and hard material;
- (d)

disposal of surplus materials;
- (e)

scarifying and planing;
- (f)

saw cutting and forming joints;
- (g)

coating vertical faces with bitumen;
- (h)

tack coat and bond coat;
- (i)

bringing to correct levels and surface regularity following settlement;
- (j)

removal of loose materials and water;

(k) temporary road markings.

**Sub-base in
Carriageway
Reinstatement**

68 The items for sub-base in carriageway reinstatement shall in accordance with the Preambles to Price List General Directions include for:

Item coverage

- (a) trial areas and trials;
- (b) making good after sampling and testing;
- (c) protection of material in transit and while awaiting tipping;
- (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 subgrade, capping and sub-base from deterioration due to the ingress of water and the use of constructional plant;
- (k) taking measures to improve the subgrade, capping and sub-base from damage due to the *Contractor's* method of construction and choice of constructional plant;
- (l) shaping to cambers, falls and crowns;
- (m) provision of test certificates.

Units

69 **Carriageway Haunching**

The unit of measurement shall be:

- (i) carriageway haunching square metre

Measurement

70 The measurement of carriageway haunching shall be the area of the top surface ordered by the *Service Manager*.

Itemisation

71 Separate items shall be provided for carriageway haunching in accordance with the General Principles and the following:

Group	Feature	
1	1	Haunch repairs to existing carriageway
2	1	Stated materials, thicknesses or depths
3	1	Stated aggregated quantities

**Carriageway
Haunching**

- 72
- The items for carriageway haunching shall in accordance with the Preambles to Price List General Directions include for:
- (a)

sub-base, formation and sub-formation;
- (b)

base course, binder course and surface course;
- (c)

excavation of unacceptable and hard material;
- (d)

disposal of surplus materials;
- (e)

scarifying and planing;
- (f)

saw cutting and forming joints;
- (g)

coating vertical faces with bitumen;
- (h)

tack coat and bond coat;
- (i)

bringing to correct levels and surface regularity following settlement;
- (j)

temporary road markings.

Item coverage

SERIES 1100: KERBS, FOOTWAYS AND BLOCK PAVED AREAS

Kerbs and Channels

Units	1	The unit of measurement shall be: (i) kerbs, combined kerb drainage block, channels, edgings, and the like linear metre (ii) quadrants, combined kerb drainage gully units and the like number
Measurement	2	The measurement of kerbs, channels, edgings and the like shall be continuous lengths ordered by the <i>Service Manager</i> . No deduction shall be made for gaps of less than 1 linear metre.
	3	Where an item states a continuous length of kerbing exceeding 100 metres this may be for one type or several types provided that the total continuous length exceeds 100 metres. This shall not be the aggregated length noted in the general preambles
	4	The measurement of quadrants, combined kerb type gully units and the like shall be the number ordered by the <i>Service Manager</i> .
Itemisation	5	Separate items shall be provided for kerbs, channels, edgings, and quadrants in accordance with the General Principles and the following:

Group	Feature	
1	1	Kerbs
	2	Combined kerb drainage block
	3	Channels
	4	Edgings
	5	Granite kerbs
	6	Quadrants or units
2	1	Stated types
3	1	Laid in continuous lengths of over 100m
4	1	Stated bed and backing

	5	1	Straight or curved exceeding 12 metres radius
		2	Curved not exceeding 12 metres radius
Kerbs, Channels, Edgings, Granite Kerbs and Quadrants	6	The items for kerbs, channels, edgings, granite kerbs and quadrants shall in accordance with the Preambles to Price List General Directions include for:	
Item coverage		(a)	trial mixes;
		(b)	making good after sampling and testing;
		(c)	excavation of acceptable materials;
		(d)	excavation of unacceptable materials;
		(e)	disposal or material;
		(f)	concrete;
		(g)	formwork;
		(h)	reinforcement;
		(i)	maintenance of surface;
		(j)	bedding, jointing, including movement joints, filling and sealing joints;
		(k)	keying of surfaces and tack coats;
		(l)	surface finishing, curing and protecting;
		(m)	gratings, frames, bedding and seatings;
		(n)	tie bars;
		(o)	drainage holes or pipes through concrete;
		(p)	quadrants, dropper kerbs and other special kerb units;
		(q)	edge support;
		(r)	preservation of timber;
		(s)	cutting;
		(t)	drainage layer;

- (u) additional pavement material below channels;
- (v) backfilling and compaction;
- (w) special units and fitting;
- (x) connections to chambers;
- (y) epoxy mortar.

Remove from Store and Relay Granite Kerbs and Channels

Units	7	The unit of measurement shall be: (i) remove from store and relay granite kerbs and channels linear metre																		
Measurement	8	The measurement for remove from store and relay granite kerbs and channels shall be the length ordered by the <i>Service Manager</i> . No deduction shall be made for gaps of less than 1 linear metre.																		
Itemisation	9	Separate items shall be provided for remove from store and relay granite kerbs and channels in accordance with the General Principles and the following: <table><tr><th>Group</th><th>Featured</th><th></th></tr><tr><td>1</td><td>1</td><td>Remove from store and relay granite kerbs</td></tr><tr><td></td><td>2</td><td>Remove from store and relay granite channels</td></tr><tr><td>2</td><td>1</td><td>Stated sizes</td></tr><tr><td>3</td><td>1</td><td>Straight or curved exceeding 12 metres radius</td></tr><tr><td></td><td>2</td><td>Curved not exceeding 12 metres radius</td></tr></table>	Group	Featured		1	1	Remove from store and relay granite kerbs		2	Remove from store and relay granite channels	2	1	Stated sizes	3	1	Straight or curved exceeding 12 metres radius		2	Curved not exceeding 12 metres radius
Group	Featured																			
1	1	Remove from store and relay granite kerbs																		
	2	Remove from store and relay granite channels																		
2	1	Stated sizes																		
3	1	Straight or curved exceeding 12 metres radius																		
	2	Curved not exceeding 12 metres radius																		
Remove from Store and Relay Granite Kerbs and Channels	10	The items for remove from store and relay granite kerbs and channels shall in accordance with the Preambles to Price List General Directions include for: (a) loading, transporting from store, unloading and positioning for relaying;																		
Item coverage																				

- Item coverage
- (a) additional costs and resources due to small quantities;
 - (b) handling and placing;
 - (c) additional concrete for kerbs, channels, edgings, drainage and kerb blocks.

Additional Concrete for Kerbs, Channels, Edgings, Drainage and Kerb Blocks

- Units 16 The unit of measurement shall be:
- (i) additional concrete for kerbs, channels, edgings, drainage and kerb blocks cubic metre
- Measurement 17 The measurement of additional concrete for kerbs, channels, edgings, drainage and kerb blocks shall be the volume ordered by the *Service Manager* in excess of the standard requirements of the Contract for each type of kerb, channel, edging, drainage and kerb block.
- Itemisation 18 Separate items shall be provided for additional concrete for kerbs, channels, edgings, drainage and kerb block in accordance with the General Principles and the following:

Group	Feature	
1	1	Additional concrete for kerbs, channels, edgings, drainage and kerb blocks
2	1	Stated mixes or grades

- Additional Concrete for Kerbs, Channels, Edgings, Drainage and Kerb Blocks** 19 The items for additional concrete for kerbs, channels, edgings, drainage and kerb blocks 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) in situ concrete;

- (e) formwork;
- (f) forming, filling and sealing joints;
- (g) surface finishing, curing and protecting;
- (h) drainage holes or pipes through concrete;
- (i) disposal of material.

Sub-base

Units	20	The unit of measurement shall be: (i) sub-base square metre
Measurement	21	The measurement of sub-base shall be the volume of sub-base measured to the dimensions stated or quantities ordered by the Service Manager.
Itemisation	22	Separate items shall be provided for sub-base in accordance with the General Principles and the following:

Group	Feature	
1	1	Each group or type of sub-base
	2	Re-grade existing sub-base
2	1	In footway or paved area
	2	In footway reinstatement
3	1	Stated thicknesses
4	1	Not exceeding 10 square metres
	2	Exceeding 10 square metres but not exceeding 50 square metres
	3	Exceeding 50 but not exceeding 250 square metres
	4	Exceeding 250 square metres

Sub-base	23	The items for sub-base shall in accordance with the Preambles to Price List General Directions include for:
Item coverage	(a)	trial areas and trials;
	(b)	making good after sampling and testing;
	(c)	protection of material in transit and while awaiting tipping;
	(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 subgrade, capping and sub-base from deterioration due to the ingress of water and the use of constructional plant.
	(k)	taking measures to improve the subgrade, capping and sub-base from damage due to the <i>Contractor's</i> method of construction and choice of constructional plant.
	(l)	shaping to cambers, falls and crowns.
	(m)	provision of test certificates.

Block or Slab Paving

Units	24	The unit of measurement shall be:
	(i)	block or slab paving square metre
	(ii)	extra over for pointing, cutting to radius and radial cutting linear metre
Measurement	25	The measurement of footways and paved areas shall be the quantities ordered by the <i>Service Manager</i> .
	26	The description for block or slab paving shall state the thickness of paving and bedding separately.
	27	No deduction shall be made for openings of 1 square metre or less.

Itemisation 28 Separate items shall be provided for block or slab paving in accordance with the General Principles and the following:

Group	Feature
1	1 Block or slab paving
2	1 Stated types of block or slab
3	1 Stated thicknesses of bed
4	1 Not exceeding 10 square metres
	2 Exceeding 10 square metres but not exceeding 50 square metres
	3 Exceeding 50 square metres but not exceeding 250 square metres
	4 Exceeding 250 square metres
5	1 Extra over for mortar bed
	2 Extra over for pointing
	3 Extra over for cutting to radius, radial cutting

Note: An extra over item shall be included for mortar bed, pointing, cutting to radius or radial cutting.

Block or Slab Paving 29 The items for block or slab paving shall in accordance with the Preambles to Price List General Directions include for:

Item coverage

- (a) compacting;
- (b) edge support;
- (c) concrete;
- (d) formwork;
- (e) joint filler and sealant;
- (f) trial mixes;
- (g) laying to levels and falls;
- (h) bedding, jointing and pointing;

(i) straight, circular and radial cutting and fittings.

Relay Block or Slab Paving

Units	30	The unit of measurement shall be: (i) relay block or slab paving square metre (ii) extra over for pointing, cutting to radius and radial cutting linear metre																						
Measurement	31	The measurement of relay block or slab paving shall be the top surface area of the quantities ordered by the <i>Service Manager</i>																						
	32	No deductions shall be made for openings 1 square metre or less.																						
Relay Block or Slab Paving	33	Separate items shall be provided for relay block or slab paving in accordance with the General Principles and the following:																						
Itemisation		<table><tr><th>Group</th><th>Feature</th></tr><tr><td>1</td><td>1 Remove from set aside and replay in contiguous area over 250 square metres</td></tr><tr><td>2</td><td>1 Stated types of block or slab paving</td></tr><tr><td>3</td><td>1 Stated bed thicknesses</td></tr><tr><td>4</td><td>1 Not exceeding 10 square metres</td></tr><tr><td></td><td>2 Exceeding 10 square metres but not exceeding 50 square metres</td></tr><tr><td></td><td>3 Exceeding 50 square metres but not exceeding 250 square metres</td></tr><tr><td></td><td>4 Exceeding 250 square metres</td></tr><tr><td>5</td><td>1 Extra over for mortar bed</td></tr><tr><td></td><td>2 Extra over for pointing</td></tr><tr><td></td><td>3 Extra over for cutting to radius, radial cutting.</td></tr></table>	Group	Feature	1	1 Remove from set aside and replay in contiguous area over 250 square metres	2	1 Stated types of block or slab paving	3	1 Stated bed thicknesses	4	1 Not exceeding 10 square metres		2 Exceeding 10 square metres but not exceeding 50 square metres		3 Exceeding 50 square metres but not exceeding 250 square metres		4 Exceeding 250 square metres	5	1 Extra over for mortar bed		2 Extra over for pointing		3 Extra over for cutting to radius, radial cutting.
Group	Feature																							
1	1 Remove from set aside and replay in contiguous area over 250 square metres																							
2	1 Stated types of block or slab paving																							
3	1 Stated bed thicknesses																							
4	1 Not exceeding 10 square metres																							
	2 Exceeding 10 square metres but not exceeding 50 square metres																							
	3 Exceeding 50 square metres but not exceeding 250 square metres																							
	4 Exceeding 250 square metres																							
5	1 Extra over for mortar bed																							
	2 Extra over for pointing																							
	3 Extra over for cutting to radius, radial cutting.																							
		Note: An extra over item shall be included for mortar bed, pointing, cutting to radius or radial cutting.																						

Relay Block or Slab Paving	34	The items for relay block or slab paving shall in accordance with the Preambles to Price List General Directions include for:
Item coverage	(a)	loading, transporting from store unloading and positioning for relaying;
	(b)	replacing items damaged during the foregoing operations;
	(c)	modification and new materials;
	(d)	bedding, compaction and disposal of surplus materials.
	(e)	Block or slab paving (as this series paragraph 28)

Flexible Paving

Units	35	The unit of measurement shall be:
	(i)	flexible paving square metre
Measurement	36	The measurement of flexible paving shall be top surface area ordered by the <i>Service Manager</i> .
	37	No deduction shall be made for openings of 1 square metre or less.
Itemisation	38	Separate items shall be provided for flexible paving in accordance with the General Principles and the following:

Group	Feature	
1	1	Flexible paving
2	1	Binder course
	2	Surface course
3	1	Stated specifications or types
4	1	Stated thicknesses
5	1	Not exceeding 10 square metres
	2	Exceeding 10 square metres but not exceeding 50 square metres
	3	Exceeding 50 square metres but not exceeding 250 square metres
	4	Exceeding 250 square metres

Note: An item shall be provided as appropriate for additional 5mm thickness of binder or surface course irrespective of aggregated quantity.

Flexible Paving 39 The items for flexible paving shall in accordance with the Preambles to Price List General Directions include for:

- Item coverage
- (a) compaction;
 - (b) edge support;
 - (c) sampling and testing;
 - (d) cutting back, saw cutting, cleaning and preparing adjacent surfaces;
 - (e) surface textures;
 - (f) shaping to cambers, falls and covers;
 - (g) laying to levels and falls;
 - (h) forming sockets, holes and openings;
 - (i) curing and protection;
 - (j) binder course and surface course;
 - (k) maintenance of surface.

Bond Coat

- Units 40 The unit of measurement shall be:
- (i) bond coat square metre
- Measurement 41 The measurement of bond coat shall be the surface area to be coated as ordered by the *Service Manager*.
- Itemisation 42 Separate items shall be provided for bond coat in accordance with the General Principles and the following:

Group	Feature
1	1 Bond Coat
2	1 Stated materials
3	1 Stated rates of spread

4	1	Not exceeding 10 square metres
	2	Exceeding 10 square metres but not exceeding 50 square metres
	3	Exceeding 50 square metres but not exceeding 250 square metres
	4	Exceeding 250 square metres

Bond Coat 43 The items for bond coat shall in accordance with the Preambles to Price List General Directions include for:

Item coverage

- (a) trial area and trials;
- (b) making good after sampling and testing;
- (c) designing and verifying mixes;
- (d) grading, measuring, mixing and depositing materials;
- (e) making joints;
- (f) cleaning surfaces;
- (g) protection and masking and unmasking or kerbs, drainage, channels, chamber covers, gully gratings, expansion joints, road studs, road markings and the like and obtaining clean markings;
- (h) cutting back, preparing and working on or up to adjacent faces, surfaces and features;
- (i) admixtures and additives.

Planing (Cold Milling)

Units 44 The unit of measurement shall be:

- (i) planing square metre

Measurement 45 The measurement of planing shall be the quantities ordered by the *Service Manager*. No deductions shall be made for openings of 1 square metre or less.

Itemisation 46 Separate items shall be provided for planing in accordance with the General Principles and the following:

Group	Feature
1	1 Planing
2	1 Stated thicknesses or depths
3	1 Exceeding 50 square metres but not exceeding 150 square metres in area.
	2 Exceeding 150 square metres but not exceeding 500 square metres in area.
	3 Exceeding 500 square metres

Note: Where appropriate an adjustment item shall be provided for increases in depth as stated in the Price List irrespective of area.

Planing	47	The items for planing shall in accordance with the Preambles to Price List General Directions include for:
Item coverage	(a)	re-shaping and rolling;
	(b)	shaping to cambers, falls and crowns;
	(c)	multiple handling of material;
	(d)	loading into transport;
	(e)	disposal of material;
	(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.

Footway Patching

Units	48	The unit of measurement shall be:
	(i)	footway patching square metre
Measurement	49	The measurement of footway patching shall be the surface area ordered by the <i>Service Manager</i> .

Itemisation 50 Separate items shall be provided for footway patching in accordance with the General Principles and the following:

Group	Feature
1	1 Footway patching
2	1 Stated thicknesses or depths.
3	1 Stated Aggregated quantities.
4	1 Not exceeding 50 square metres
	2 Exceeding 50 square metres

Footway Patching 51 The items for footway patching shall in accordance with the Preambles to Task Order Price List General Directions include for:

- Item coverage (a) determination of the extent of the reinstatement and agreement with the *Service Manager*;
- (b) footways and paved areas;
- (c) scarifying;
- (d) planing;
- (e) drilling holes;
- (f) tack coat;
- (g) bringing to correct levels and surface regularity following settlement;
- (h) excavation of acceptable material;
- (i) excavation of unacceptable material;
- (j) excavation in hard material;
- (k) disposal of material;
- (l) saw cutting to full stated depth;
- (m) coating vertical face with bitumen.

Footway Reinstatement

Units	52	The unit of measurement shall be: (i) footway reinstatement square metre (ii) sub-base in footway reinstatement cubic metre																					
Measurement	53	Footway reinstatement shall be measured for reinstatement to drainage trenches, trial holes and the like instructed by the <i>Service Manager</i> .																					
	54	The measurement of footway reinstatement shall be the area of the top surface ordered by the <i>Service Manager</i> .																					
	55	The measurement of sub-base in footway reinstatement shall be the volume of sub-base measured to the dimensions stated or quantities ordered by the <i>Service Manager</i> .																					
Itemisation	56	Separate items shall be provided for footway reinstatement in accordance with the General Principles and the following: <table><tr><th>Group</th><th>Feature</th><th></th></tr><tr><td>1</td><td>1</td><td>Footway reinstatement</td></tr><tr><td>2</td><td>1</td><td>Sub-base in footway reinstatement</td></tr><tr><td></td><td>2</td><td>Reinstatement of flexible footway</td></tr><tr><td></td><td>3</td><td>Extra over for stated variations</td></tr><tr><td>3</td><td>1</td><td>Stated materials, thicknesses or depths</td></tr><tr><td>4</td><td>1</td><td>Stated aggregated quantities</td></tr></table> Note: Aggregated quantities shall not apply for sub-base in footway reinstatement.	Group	Feature		1	1	Footway reinstatement	2	1	Sub-base in footway reinstatement		2	Reinstatement of flexible footway		3	Extra over for stated variations	3	1	Stated materials, thicknesses or depths	4	1	Stated aggregated quantities
Group	Feature																						
1	1	Footway reinstatement																					
2	1	Sub-base in footway reinstatement																					
	2	Reinstatement of flexible footway																					
	3	Extra over for stated variations																					
3	1	Stated materials, thicknesses or depths																					
4	1	Stated aggregated quantities																					
Footway Reinstatement	57	The items for footway reinstatement shall in accordance with the Preambles to Price List General Directions include for:																					
Item coverage		(a) determination of the extent of the reinstatement and agreement with the <i>Service Manager</i> ; (b) binder course and surface course;																					

- (c) excavation of unacceptable and hard material;
- (d) disposal of surplus materials;
- (e) scarifying and planing;
- (f) saw cutting and forming joints;
- (g) coating vertical faces with bitumen;
- (h) tack coat and bond coat;
- (i) bringing to correct levels and surface regularity following settlement;
- (j) removal of loose materials and water;
- (k) temporary road markings.

**Sub-base in
footway
reinstatement**

58

The items for sub-base in footway reinstatement shall in accordance with the Preambles to Price List General Directions include for:

Item coverage

- (a) trial areas and trials;
- (b) making good after sampling and testing;
- (c) protection of material in transit and while awaiting tipping;
- (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 subgrade, capping and sub-base from deterioration due to the ingress of water and the use of constructional plant;
- (k) taking measures to improve the subgrade, capping and sub-base from damage due to the *Contractor's* method of construction and choice of constructional plant;

- (l) shaping to cambers, falls and crowns;
- (m) provision of test certificates.

SERIES 1200: TRAFFIC SIGNS AND ROAD MARKINGS

Sign Faces																				
Units	1	The unit of measurement shall be: (i) sign faces number (ii) extra over sign face for stated finishes square metre (iii) extra over sign face for clips number																		
Measurement	2	The measurement of sign faces shall be the number of sign faces ordered by the <i>Service Manager</i> .																		
	3	The measurement of extra over sign face for stated finishes shall be the surface area of the sign face ordered by the <i>Service Manager</i> .																		
Itemisation	4	Separate items shall be provided for sign faces 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>Sign faces</td></tr><tr><td>2</td><td>1</td><td>Stated types</td></tr><tr><td></td><td>2</td><td>Extra over sign face for stated finishes</td></tr><tr><td>3</td><td>1</td><td>Stated sizes</td></tr><tr><td></td><td>2</td><td>Stated clips</td></tr></table>	Group	Feature		1	1	Sign faces	2	1	Stated types		2	Extra over sign face for stated finishes	3	1	Stated sizes		2	Stated clips
Group	Feature																			
1	1	Sign faces																		
2	1	Stated types																		
	2	Extra over sign face for stated finishes																		
3	1	Stated sizes																		
	2	Stated clips																		
Sign Faces	5	The items for sign faces shall in accordance with the Preambles to Price List General Directions include for:																		
Item coverage	(a)	covering and removal of covered of signs;																		
	(b)	location lettering and marking;																		
	(c)	protective system;																		
	(d)	rivets, bolts, nuts and the like;																		
	(e)	protective treatment;																		

- (f) notices and recordings;
- (g) light spill screens;
- (h) fixing to structures and posts including attachment systems;
- (i) delivery to site.

Sign Posts

Units	6	The unit of measurement shall be: (i) sign posts number (ii) extra over for additional lengths number (iii) ancillaries and the like number
Measurement	7	The measurement of sign posts shall be the complete installation of post ordered by the <i>Service Manager</i> .
Itemisation	8	Separate items shall be provided for sign posts in accordance with the General Principles and the following:

Group	Feature	
1	1	Sign posts
2	1	Stated sizes, types and lengths
	2	Extra over for additional lengths
	3	Ancillaries and the like

Sign Posts	9	The items for sign posts shall in accordance with the Preambles to Price List General Directions include for:
Item coverage	(a)	posts;
	(b)	fixings and fittings.

Sign Post Foundations

Units	10	The unit of measurement shall be: (i) sign post foundations number (ii) extra over for stated foundations number (iii) realign existing posts number
Measurement	11	The measurement of sign post foundations shall be the number of post foundations ordered by the <i>Service Manager</i> .
Itemisation	12	Separate items shall be provided for sign post foundations in accordance with the General Principles and the following:

Group	Feature
1	1 Sign post foundations
2	1 Stated sizes and types
	2 Extra over for stated foundations
	3 Realign existing posts

Sign Post Foundations	13	The items for sign post foundations 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) backfilling and compaction; (e) in situ concrete; (f) formwork; (g) reinforcement; (h) reinstatement of surfaces; (i) disposal of material; (j) drilling or forming holes and pockets in structures or foundations and casting in bolts, sockets, base plates and anchorage assemblies;

- (k) bedding and grouting;
- (l) fixing in position and support.

Illuminated Signage

Units	18	The unit of measurement shall be: (i) illuminated signage number
Measurement	19	The measurement of illuminated signage shall be the number of units, components or assemblies ordered by the <i>Service Manager</i> .
	20	The measurement of disconnection and connection of illuminated signage and energy suppliers shall be paid for separately.
Itemisation	21	Separate items shall be provided for illuminated signage in accordance with the General Principles and the following:

Group	Feature	
1	1	Illuminated signage
	2	Illuminated bollard
2	1	Stated sizes and types
3	1	Extra over for Photo Electric Cell

Illuminated Signage	22	The items for illuminated signage 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)	backfilling and compaction;
	(e)	in situ concrete;
	(f)	formwork;
	(g)	reinforcement;
	(h)	reinstatement of surfaces;

- (i) disposal of material;
- (j) drilling or forming holes and pockets in structures or foundations and casting in bolts, sockets, base plates and anchorage assemblies;
- (k) bedding and grouting;
- (l) components, fixing in position and support.

Road Markings

Units	23	The unit of measurement shall be: (i) establishment of road marking removal gang and equipment or establishment of road marking application gang and equipment per ordered package of works number (ii) removal of existing road markings square metre (iii) permanent road markings to a specified width linear metre (iv) permanent road markings solid areas square metre (v) permanent road markings of triangles, circles with enclosing arrows, arrows, kerb markings, symbols, letters and numerals number (vi) extra over for road marking for drying of existing surface, markings applied to newly surface dressed roads and new areas of surfacing square metre
Measurement	24	The establishment of road marking removal gang and equipment or establishment of road marking application gang and equipment shall only be measured once for each package of work.
	25	A package of work is a clearly defined schedule of work and sites to be completed on a single visit.
	26	The marking and removal of solid areas shall only be measured for the solid infilling between converging lines; the enclosing lines themselves shall be measured as lines.

- 27
- In the case of intermittent lines the measurement shall be of the marks only. Double lines shall be measured as two single lines.
- 28
- Diagonal lines between double lines and short transverse lines at the ends of any longitudinal lines shall be measured with the lines of which they form part.
- 29
- Ancillary lines shall include lines forming hatched areas, chevrons, zigzag lines, boxed areas and lines enclosing boxed areas. In the case of hatched areas and chevrons the enclosing lines shall be measured as the longitudinal line of which they form part. The measurement of zigzag lines shall include any transverse or longitudinal lines at their ends.
- 30
- The measurement of circles with enclosing arrows (mini roundabouts) shall be for the complete marking, the external diameter of the circle being stated.
- 31
- Kerb markings shall be measured as a single item irrespective of the number of lines forming any one marking.
- 32
- Each letter or numeral shall be separately measured with all letters or numerals grouped together according to height.
- 33
- Symbols shall be measured separately and grouped together according to size.
- Itemisation
- 34
- Separate items shall be provided for road markings in accordance with the General Principles and the following:

Group	Feature	
1	1	Removal of existing road markings
	2	Permanent road markings
2	1	Establishment of road marking removal equipment
	2	Establishment of road marking application equipment
3	1	Stated materials, sizes or types
4	1	Extra over for road marking for drying of existing surface or markings applied to newly surface dressed roads or markings applied to new areas of surfacing

Removal of Road Markings 35 The items for the removal of road markings shall in accordance with the Preambles to Price List General Directions include for:

- Item coverage
- (a) disposal of material;
 - (b) reinstatement of existing surfaces;
 - (c) cleaning of surfaces;
 - (d) partial or complete removal of marking.

Road Markings 36 The items for road markings shall in accordance with the Preambles to Price List General Directions include for:

- Item coverage
- (a) cleaning, brushing and drying surfaces (except where drying is specifically instructed by the *Service Manager*);
 - (b) application of the marking materials including the incorporation of specified reflecting medium;
 - (c) thinners, primers and tack coats;
 - (d) apostrophes in the case of letters and numerals;
 - (e) markings down the face of kerbs;
 - (f) adhesives and two part materials;
 - (g) setting out;
 - (h) sampling and testing.

Road Studs

Units 37 The unit of measurement shall be:

- (i) establishment of road stud application equipment
... number
- (i) road studs number

Measurement 38 The establishment of road stud application equipment shall only be measured once for each package of work.

39 A package of work is a clearly defined schedule of work and sites to be completed on a single visit. The measurement of road studs shall be the numbers ordered by the *Service Manager*.

Itemisation 40 Separate items shall be provided for road studs in accordance with the General Principles and the following:

Group Feature		
1	1	Establishment of road stud application equipment
	2	Uni-directional studs
	3	Bi-directional studs
	4	Pedestrian crossing studs
2	1	Stated sizes, types.

Road Studs 41 The items for road studs shall in accordance with the Preambles to Price List General Directions include for:

- Item coverage (a) cutting or forming holes;
- (b) adhesives and grout;
- (c) reinstatement of surfaces;
- (d) disposal of material.

Street Furniture

Units 42 The unit of measurement shall be:

- (i) street furniture number

Measurement 43 The measurement shall be for the installation including materials used to fix the street furniture in position. The cost of supplying street furniture shall be paid as Series 8000 Time Charge materials.

 44 The cost of collecting street furniture and delivering to site shall be paid as Series 8000 Time Charge.

Itemisation 45 Separate items shall be provided for installation only of street furniture in accordance with the General Principles and the following:

Group	Feature	
1	1	Street furniture
2	1	Stated types, sizes

Street Furniture	46	The items for street furniture shall in accordance with the Preambles to Price List General directions include for:
Item coverage	(a)	permanent foundations;
	(b)	installation in accordance with manufacturer's instructions;
	(c)	painted finish/protective system;
	(d)	fixtures and fittings.

SERIES 1700: STRUCTURAL CONCRETE

In Situ Concrete

Units	1	The unit of measurement shall be: (i) in situ concrete cubic metre (ii) extra over for small quantities cubic metre (iii) extra over where direct discharge is not possible day															
Measurement	2	The measurement of in situ concrete shall be the net quantities stated by the drawings or ordered by the <i>Service Manager</i> . No deductions shall be made for holes, pipes, reinforcement, recesses and the like not exceeding 0.15 cubic metres in volume.															
	3	The measurement of extra over where direct discharge is not possible shall apply where direct discharge is not possible due to location of placed concrete being remote from carriageway or footway.															
Itemisation	4	Separate items shall be provided for in situ concrete 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>In situ concrete</td></tr><tr><td>2</td><td>1</td><td>Stated mixes and grades</td></tr><tr><td></td><td>2</td><td>Extra over for small quantities</td></tr><tr><td></td><td>3</td><td>Extra over where direct discharge is not possible</td></tr></table>			Group	Feature		1	1	In situ concrete	2	1	Stated mixes and grades		2	Extra over for small quantities		3	Extra over where direct discharge is not possible
Group	Feature																
1	1	In situ concrete															
2	1	Stated mixes and grades															
	2	Extra over for small quantities															
	3	Extra over where direct discharge is not possible															
In Situ Concrete	5	The items for in situ concrete shall in accordance with the Preambles to Price List General Directions include for:															
Item coverage	(a)	mix design and trial mixes;															
	(b)	placing against any surface, compaction, finishing;															
	(c)	curing and protection;															
	(d)	falls, cambers and shaped profiles;															

		(e)	construction joints;
		(f)	measures to control alkaline silica reaction;
		(g)	air entrainment;
		(h)	admixtures and additives;
		(i)	tamped finish.
Extra Over for Small Quantities	6	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.
Extra Over for Remote Discharge	7	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 location;
		(b)	changes to mixes to suit delivery methods;
		(c)	handling and placing.

Formwork

Units	8	The unit of measurement shall be:	
		(i)	formwork square metre
		(ii)	extra over for small quantities number
Measurement	9	The measurement of formwork shall be the area in contact with the finished concrete including measured over the face of openings of one square metre or less as ordered by the <i>Service Manager</i> .	
	10	The measurement of extra over for small quantities shall be measured only once for the total quantities of formwork ordered by the <i>Service Manager</i> .	
Itemisation	11	Separate items shall be provided for formwork in accordance with the General Principles and the following:	



Group	Feature	
1	1	Formwork
2	1	Stated quantities
3	1	Straight
	2	Curved
4	1	More than 300mm wide at any inclination
	2	300mm or less at any inclination
5	1	Stated finishes

Note: An item for extra over for small quantities shall be measured as described in the price list and ordered by the *Service Manager*.

Formwork	12	The items for formwork shall in accordance with the Preambles to Price List General Directions include for:
Item coverage	(a)	centring, supports, props and shaping;
	(b)	fixing into position with cambers and falls;
	(c)	linings to produce surface finishes;
	(d)	cutting and fitting around projections, pipes, reinforcement and the like;
	(e)	fillets, chamfers, splays and the like;
	(f)	maintaining in position until struck;
	(g)	striking, taking down and disposal;
	(h)	making good holes and latencies;
	(i)	working space.

Extra Over for Small Quantities	13	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 small quantities;
	(b)	additional waste;
	(c)	handling and placing.

Steel Reinforcement

Units	14	The units of steel reinforcement shall be: (i) bar and helical reinforcement tonne (ii) fabric reinforcement square metre (iii) dowels linear metre (iv) extra over for small quantities number
Measurement	15	The measurement for steel bar reinforcement or fabric reinforcement shall be the quantities ordered by the <i>Service Manager</i> . Steel bar reinforcement shall include the quantities calculated from bar schedules and other steel bar supports. No allowances shall be made for welds or mechanical connections.
	16	The measurement for fabric reinforcement shall be the net area covered with no allowances for laps.
Itemisation	17	Separate items shall be provided for steel reinforcement in accordance with the General Principles and the following:

Group	Feature	
1	1	Bar reinforcement
	2	Fabric reinforcement
	3	Dowels
2	1	Stated types
	2	Stated sizes

Note: An item for extra over for small quantities shall be measured as described in the pricelist and ordered by the Service Manager

Steel Reinforcement

18 The items for steel reinforcement shall in accordance with the Preambles to Price List General Directions include for:

Item coverage

- (a) cleaning, fabrication, cutting and bending;
- (b) binding with wire or other fixings;
- (c) supports, cover blocks and spacers;
- (d) extra fabric at laps;
- (e) welding and mechanical connections;
- (f) protective caps, sleeves and wrappings for dowels;
- (g) drilling in or forming holes, casting in and grouting for dowels.

Extra Over for Small Quantities

19 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 small quantities;
- (b) handling and placing.

Repairs to Concrete Structures

Units

20 The units of repairs to concrete structures shall be:

- (i) repair mortar kilogramme
- (ii) silane impregnation square metre

Measurement

21 The measurement for repair mortar and silane impregnation shall be the quantities ordered by the *Service Manager*.

Itemisation

22 Separate items shall be provided for repairs to concrete structures in accordance with the General Principles and the following:

Group	Feature
1	1 Repairs to concrete structures
2	1 Repair mortar



		2	Silane impregnation	
		3	1	Stated types, specification or aggregated quantities
Repair Mortar	23	The items for repair mortar shall in accordance with the Preambles to Price List General Directions include for:		
Item coverage		(a)	mix design and trial mixes;	
		(b)	placing against any surface, compaction, finishing;	
		(c)	curing and protection;	
		(d)	falls, cambers and shaped profiles;	
		(e)	preparing exposed steelwork, treating exposed steel, priming;	
		(f)	admixtures and additives.	
Silane Impregnation	24	The items for silane impregnation shall in accordance with the Preambles to Price List General Directions include for:		
Item coverage		(a)	applying according to manufacturer's instructions;	
		(b)	curing and protection.	

SERIES 2000: WATERPROOFING FOR CONCRETE STRUCTURES

Waterproofing

- Units

1

The unit of measurement shall be:

(i) removal of waterproofing square metre
(ii) mobilisation of equipment number
(iii) waterproofing square metre
- Measurement

2

The measurement of waterproofing shall be the quantities ordered by the *Service Manager*.
- 3

The measurement of mobilisation of equipment for proprietary system waterproofing shall be measured once per visit irrespective of the quantities undertaken per visit.
- Itemisation

4

Separate items shall be provided for waterproofing in accordance with the General Principles and the following:

Group		Feature
1	1	Removal
	2	Waterproofing
2	1	Stated types or specifications
3	1	Surfaces not exceeding 300mm wide
	2	Surfaces exceeding 300mm wide

Note: A separate item for mobilisation shall be provided for proprietary system waterproofing.

- Removal of
Waterproofing**

5

The items for removal of waterproofing shall in accordance with the Preambles to Price List General Directions include for:
- Item coverage

(a)

removal of waterproofing;
- (b)

preparing and cleaning;
- (c)

handling unacceptable and contaminated materials;
- (d)

disposal of contaminated and hazardous materials;

		(e)	protecting untreated areas and surfaces;
		(f)	additional welfare facilities.
Mobilisation	6	The items for mobilisation shall in accordance with the Preambles to Price List General Directions include for:	
Item coverage		(a)	mobilisation and removal of specialist equipment;
		(b)	maintaining specialist equipment.
Waterproofing	7	The items for waterproofing shall in accordance with the Preambles to Price List General Directions include for:	
Item coverage		(a)	mobilisation and removal of specialist equipment;
		(b)	preparing, cleaning and drying;
		(c)	priming, bonding agents and protective layers;
		(d)	additional materials as a result of the <i>Contractor's</i> choice of waterproofing;
		(e)	mitres and the like, making good at edges, laps and joints;
		(f)	protecting untreated areas and surfaces;
		(g)	supplying technical information and records;
		(h)	disposal of surplus materials.

Indicator Layers

Units	8	The unit of measurement shall be:	
		(i)	indicator layers square metre
Measurement	9	The measurement of indicator layers shall be the quantities ordered by the <i>Service Manager</i> .	
Itemisation	10	Separate items shall be provided for indicator layers in accordance with the General Principles and the following:	

Group	Feature
1	1 Indicator layers
2	1 Stated types or specifications

Indicator Layers	11	The items for indicator layers shall in accordance with the Preambles to Price List General Directions include for:
Item coverage	(a)	mobilisation and removal of specialist equipment;
	(b)	preparing, cleaning and drying;
	(c)	priming, bonding agents and protective layers;
	(d)	additional materials as a result of the <i>Contractor's</i> choice of specification;
	(e)	mitres and the like, making good at edges, laps and joints;
	(f)	protecting untreated areas and surfaces;
	(g)	supplying technical information and records;
	(h)	disposal of surplus materials.

SERIES 2300: MOVEMENT JOINTS AND SEALING OF GAPS

Movement Joints

- Units

1

The units of measurement shall be:

(i)

removal of existing movement joints linear metre

(ii)

installation of movement joints linear metre

(iii)

additional material to expansion joints kilogramme

- Measurement

2

The measurement of movement joints shall be the quantities ordered by the *Service Manager*.

- Itemisation

3

Separate items shall be provided for movement joints in accordance with the General Principles and the following:

Group	Feature	
1	1	Removal of movement joints
	2	Installation of movement joints
2	1	Stated sizes

Note: Additional material to the installation of movement joints shall be measured where ordered by the *Service Manager*.

- Removal of Movement Joints**

4

The items for removal of movement joints shall in accordance with the Preambles to Price List General Directions include for:

- Item coverage

(a)

removing existing joints including fixings and disposal of surplus materials;

(b)

saw cutting and cleaning existing surfaces;

(c)

preparing and priming surfaces for new joints;

(d)

protecting existing surfaces;

(e)

installing membranes;

(f)

providing textured and skid resistant surface;



	(g)	curing and joining materials;
	(h)	supplying data sheets and records to the <i>Service Manager</i> .
Installation of Movement Joints	5	The items for installation of movement joints shall in accordance with the Preambles to Price List General Directions include for:
Item coverage	(a)	preparing and priming surfaces for new joints;
	(b)	installing membranes;
	(c)	installing joints;
	(g)	curing and joining materials;
	(h)	supplying data sheets and records to the <i>Service Manager</i> .

Sealing of Gaps

Units	6	The unit of measurement shall be:
	(i)	joint filler board square metre
	(ii)	joint sealant linear metre
Measurement	7	The measurement of sealing of gaps shall be the quantities ordered by the <i>Service Manager</i> .
Itemisation	8	Separate items shall be provided for sealing of gaps in accordance with the General Principles and the following:

Group	Feature
1	1 Joint filler board
	2 Joint sealant
2	1 Stated sizes

Sealing of Gaps	9	The items for sealing of gaps shall in accordance with the Preambles to Price List General Directions include for:
Item coverage	(a)	preparing, priming and cleaning surfaces;
	(b)	compressible strips;

- (c) masking and protection of exiting surfaces;
- (d) complying with manufacturer's instructions;
- (e) providing records to the *Service Manager*.

SERIES 2400: BRICKWORK, BLOCKWORK AND STONEMWORK

Brickwork, Blockwork and Stonework

Units	1	The unit of measurement shall be: (i) brickwork, blockwork and stonework square metre (ii) copings and the like linear metre
	2	The measurement of brickwork blockwork and stonework shall be the quantities ordered by the <i>Service Manager</i> . No deductions shall be made for openings less than 0.10 square metres.
	3	The measurement for copings and the like shall be the length of work ordered by the <i>Service Manager</i> .
Itemisation	4	Separate items shall be provided for brickwork, blockwork and stonework in accordance with the General Principles and the following:

Group	Feature	
1	1	Brickwork, blockwork and stonework
	2	Copings and the like
2	1	Stated types of bricks, blocks or stone
3	1	Stated thicknesses

Note: Where a prime cost is included within an item description; this shall be adjusted by the actual net cost of bricks as appropriate.

Brickwork, Blockwork and Stonework	5	The items for brickwork, blockwork and stonework shall in accordance with the Preambles to Price List General Directions include for:
Item coverage	(a)	bedding, mortar, jointing, and pointing;
	(b)	bonding into existing work;
	(c)	cavity filling between the brickwork and backing where specified;

- (d) measures to protect joints and pointing during curing;
- (e) sample panels;
- (f) building in pipes, fixings and the like;
- (g) damp proof courses and membranes;
- (h) admixtures, wall ties and additives;
- (i) bricks, blocks and stone.

Repointing of Brickwork, Blockwork or Stonework

Units	6	The unit of measurement shall be: (i) repointing of brickwork, blockwork or stonework square metre									
Measurement	7	The measurement of repointing brickwork blockwork and stonework shall be the quantities ordered by the <i>Service Manager</i> .									
Itemisation	8	Separate items shall be provided for repointing brickwork, blockwork and stonework in accordance with the General Principles and the following: <table><tr><th>Group</th><th>Feature</th><th></th></tr><tr><td>1</td><td>1</td><td>Repointing of brickwork, blockwork and stonework</td></tr><tr><td>2</td><td>1</td><td>Stated types of mortar or pointing</td></tr></table>	Group	Feature		1	1	Repointing of brickwork, blockwork and stonework	2	1	Stated types of mortar or pointing
Group	Feature										
1	1	Repointing of brickwork, blockwork and stonework									
2	1	Stated types of mortar or pointing									
Repointing of Brickwork, Blockwork and Stonework	9	The items for repointing of brickwork, blockwork and stonework shall in accordance with the Preambles to Price List General Directions include for:									
Item coverage		(a) raking out existing mortar; (b) matching new and existing mortars; (c) finishing to match existing; (d) measures to protect joints and pointing during curing; (e) mortar.									

SERIES 3000: LANDSCAPE AND ECOLOGY

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 <i>Service Manager</i> .
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:
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 6000: WINTER MAINTENANCE

Winter Maintenance Service

Units	1	The unit of measurement shall be: (i) winter maintenance service month
Measurement	2	The measurement of winter maintenance service shall be for the whole period required by the <i>Service Manager</i> . Stated seasonal periods shall add to a sum of twelve months duration per year.
Itemisation	3	Separate items shall be provided for winter maintenance service in accordance with the General Principles and the following:

Group	Feature
1	1 Basic facility
2	1 Stated seasonal periods

Winter Maintenance Service

Item coverage	4	The items for winter maintenance service shall in accordance with the Preambles to Price List General Directions include for: (a) providing all measures, equipment, resources and arrangements necessary to ensure compliance with the specification, service plan and Service Information including design of salt routes, design of the snow clearing routes, provision and management of salt stocks and the provision of equipment at each designated loading point provided by the <i>Contractor</i> ; (b) all costs of equipment to vehicles and plant with ploughs and inserts, blowers and throwers; (c) routine maintenance operations to the <i>Employer's</i> snow ploughs, during and outside seasonal periods; (d) training of operatives with operational vehicles with relevant certification; (e) protection of <i>Employer's</i> and <i>Contractor's</i> equipment; (f) 24 hour availability of equipment to a serviceable condition;



- (g) provision of a responsible person to receive the *Service Manager's* instructions on winter maintenance and to ensure satisfactory compliance with any such instructions;
- (h) provision of facilities to Depots owned by the *Employer* and other contractors acting on instructions from the *Employer*;
- (i) provision of specified communication facilities in *Contractor's* operational vehicles;
- (j) reports to the *Service Manager* on the condition of equipment provided by the *Employer*;
- (k) arrangements to ensure operatives and equipment are available to meet specified response times;
- (l) provision of servicing arrangements with suitable facilities;
- (m) repairs, servicing, inspecting and testing of equipment in accordance with the works information;
- (n) providing consumables, replacement parts and materials for *Employer's* equipment;
- (o) calibration of spreading equipment prior to the seasonal operation period and providing a Certificate of Calibration to the *Service Manager*;
- (p) vehicle tracking and location devices;
- (q) vehicles and equipment specified within the Service Information.

Precautionary Salting

Units	5	The unit of measurement shall be: (i) precautionary salting kilometre
Measurement	6	The measurement of precautionary salting shall be the extent of salting or gritting lengths ordered by the <i>Service Manager</i> .
Itemisation	7	Separate items shall be provided for precautionary salting or gritting in accordance with the General Principles and the following:

Group	Feature	
1	1	Precautionary salting
2	1	Primary routes
	2	Secondary routes
3	1	Stated time periods

Note: Extra over items shall be provided increased spread rates for precautionary salting.

Precautionary Salting

8 The items for precautionary salting shall in accordance with the Preambles to Price List General Directions include for:

Item coverage

- (a) provision of vehicles and equipment;
- (b) provision and testing of salt or grit materials;
- (c) ploughing and spreading within specified timescales;
- (d) moisture content monitoring;
- (e) emptying vehicles of surplus materials and returning to store for re-use;
- (f) cleaning of *Contractor's* and *Employer's* vehicles and equipment upon completion of operations;
- (g) notifying the *Service Manager* of any faults with the *Contractor's* and *Employer's* vehicles and equipment;
- (h) reports to the *Service Manager* together with records of the location, timing and work carried out during the salting or gritting operations.

Extra Over Precautionary Salting for Increased Spread Rates

9 The items for extra over precautionary salting for increased spread rates shall in accordance with the Preambles to Price List General Directions include for:

Item coverage

- (a) provision of vehicles and equipment;
- (b) provision of additional salt.

Winter Service Duties

- Units 10 The unit of measurement shall be:
- (i) operatives for winter service duties hour
 - (ii) equipment for winter service hour
 - (iii) materials for winter service tonne

Measurement 11 The measurement for winter service duties shall be the quantities ordered by the *Service Manager*.

Itemisation 12 Separate items shall be provided for winter service duties in accordance with the General Principles and the following:

Group	Feature	
1	1	Operatives for winter service duties
	2	Equipment for winter service duties
	3	Materials for winter service duties
2	1	Stated resources

Operatives for Winter Maintenance Duties 13 The items for operatives for winter maintenance duties shall in accordance with the Preambles to Price List General Directions include for:

- Item coverage
- (a) wages and bonus payments;
 - (b) overtime unless specifically requested by the *Service Manager*;
 - (c) National Insurances, levies and taxes;
 - (d) holiday and statutory contributions;
 - (e) provision of small tools appropriate to each trade, protective clothing;
 - (f) travelling time, transport to the site;
 - (g) welfare facilities;
 - (h) use of suppliers and subcontractors;
 - (i) supervision and management.



Equipment for Winter Service Duties	14	The items for equipment for winter service duties shall in accordance with the Preambles to Price List General Directions include for:
Item coverage	(a)	fuel and consumables;
	(b)	repairs, servicing and maintenance;
	(c)	insurances and replacement;
	(d)	transport to site;
	(e)	use of suppliers and subcontractors;
	(f)	supervision and management.
Materials for Winter Service Duties	15	The items for materials for winter service duties shall in accordance with the Preambles to Price List General Directions include for:
Item coverage	(a)	ordering and taking delivery;
	(b)	providing materials;
	(c)	unloading, storing and protecting;
	(d)	waste and discounts;
	(e)	supervision and management.

SERIES 6100: EMERGENCY RESPONSE

Emergency Response Service

Units	1	The unit of measurement shall be: (i) emergency response service month
Measurement	2	The measurement of emergency response service shall be for the whole period required by the <i>Service Manager</i> .
	3	Unless specified otherwise by the Service Information, the measurement of emergency response service shall be twelve months for each year.
Itemisation	4	Separate items shall be provided for emergency response service in accordance with the General Principles and the following:

Group	Feature
1	1 Emergency response service
2	1 Basic facility

Emergency Response Service	5	The items for emergency response service shall in accordance with the Preambles to Price List General Directions include for:

Item coverage	(a)	all charges and payments connected with the provision and use of vehicles, materials and equipment;
	(b)	24 hour availability of operatives, vehicles, equipment and supervision together with a call centre and contact details;
	(c)	issuing to the <i>Service Manager</i> call out rosters detailing names and contact details of resources available for emergency call outs;
	(d)	provision of a responsible person to receive <i>Service Manager's</i> instructions and to ensure compliance with any such instructions;
	(e)	mobilisation and management of resources to meet designated response times;

- (f) reporting to the *Service Manager* with details of incidents and all work carried out.

Emergency Call Out Team

Units	6	The unit of measurement shall be: (i) emergency call out team number (ii) additional hours required at incident hour
Measurement	7	The measurement of emergency call out team shall be the number of call outs ordered by the <i>Service Manager</i> . The call out team shall include provision for up to two hours resource at the incident.
	8	Additional resources required in excess of two hours at the incident shall be measured separately.
Itemisation	9	Separate items shall be provided for emergency call out team in accordance with the General Principles and the following:

Group	Feature	
1	1	Emergency call out team
	2	Additional hours required at incident
2	1	Stated time periods

Emergency Call Out Team	10	The items for emergency call out team shall in accordance with the Preambles to Price List General Directions include for:
Item coverage	(a)	providing all measures, equipment and resources specified and detailed in the specification;
	(b)	mobilisation and management of resources to meet designated response times;
	(c)	continued management and deployment of resources;
	(d)	clear site of all materials and equipment after incident has closed;
	(e)	maintaining temporary barriers, cones, signs and the like for up to 48 hours until permanent repairs have been carried out or further instructions are issued by the <i>Service Manager</i> ;

- (f) reporting to the *Service Manager* with details of incidents and all work carried out.

SERIES 6200: SERVICE ACTIVITY – COMPOSITE RATES AND MINOR REPAIRS

Minor Repairs

Units	1	The unit of measurement shall be: (i) minor repairs month
Measurement	2	The measurement of minor repairs shall be for every whole month ordered by the <i>Service Manager</i> based upon the inventory included within the Service Information.
	3	Unless specified otherwise by the Service Information, the measurement of minor repairs shall be twelve months for each year.
Itemisation	4	Separate items shall be provided for minor repairs in accordance with the General Principles and the following:

Group	Feature
1	1 Minor repairs
2	1 Stated types

Minor Repairs	5	The items for minor repairs 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 Service Activity Specification;
	(b)	reports to the <i>Service Manager</i> ;
	(c)	collecting data and maintaining the inventory.
	(d)	Where Rate Adjustment items are provided for materials, the base item shall include the cost of the individual material with the Rate Adjustment percentage only covering the change to material cost.

SERIES 6200: SERVICE ACTIVITY – DRAINAGE CLEANSING

Programmed Cleansing of Surface Water Drainage

Units	1	The unit of measurement shall be:										
	(i)	programmed cleansing of surface water drainage month										
Measurement	2	The measurement of programmed cleansing of surface water drainage shall be for every whole month ordered by the <i>Service Manager</i> based upon the inventory included within the <i>Service Information</i> .										
	3	Unless specified otherwise by the Service Information, the measurement of programmed cleansing of surface water drainage shall be twelve months for each year.										
Itemisation	4	Separate items shall be provided for programmed cleansing of surface water drainage in accordance with the General Principles and the following:										
		<table><tr><th>Group</th><th>Feature</th><th></th></tr><tr><td>1</td><td>1</td><td>Programmed cleansing of surface water drainage</td></tr><tr><td>2</td><td>1</td><td>Stated types</td></tr></table>		Group	Feature		1	1	Programmed cleansing of surface water drainage	2	1	Stated types
Group	Feature											
1	1	Programmed cleansing of surface water drainage										
2	1	Stated types										
Programmed Cleansing of Surface Water Drainage	5	The items for programmed cleansing of surface water drainage 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 Service Activity Specification;										
	(b)	reports to the <i>Service Manager</i> ;										
	(c)	processing of waste and disposal;										
	(d)	collecting data and maintaining the inventory.										

Drainage Cleansing

- Units

1

The unit of measurement shall be:

(i) gulley, yard gulley, outlet, catchpit or manhole emptying number

(ii) linear drainage systems linear metre
- Measurement

2

The measurement of drainage cleansing shall be the numbers or linear metres ordered by the *Service Manager*.
- Itemisation

3

Separate items shall be provided for drainage cleansing in accordance with the General Principles and the following:

Group Feature		
1	1	Gulley emptying and the like
	2	Linear drainage systems
2	1	Stated quantities
	2	As part of a programme

- Drainage
Cleansing**

4

The items for drainage cleansing 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 *Service Manager*;

(c) processing of waste and disposal;

(d) collecting data and maintaining the inventory.

Reactive Drainage Cleansing Service

- Units

5

The unit of measurement shall be:

(i) reactive cleansing of surface water drainage hour

(ii) disposal of waste tonne



- Measurement 6 The measurement of reactive cleansing of surface water drainage shall be the hours and quantities ordered by the *Service Manager*.
- 7 The measurement of disposal of waste shall be the authorised and certified weight of materials ordered by the *Service Manager*.
- Itemisation 8 Separate items shall be provided for reactive drainage cleansing service in accordance with the General Principles and the following:

Group	Feature
1	1 Reactive drainage cleansing service
2	1 Stated resources

- Reactive Drainage Cleansing Service** 9 The items for reactive drainage cleansing service shall in accordance with the Preambles to Task Order 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 *Service Manager*;
- (c) collecting data and maintaining the inventory.
- Disposal of Material** 10 The items for disposal of material shall in accordance with the Preambles to Price List General Directions include for:
- Item coverage (a) haulage and deposition in tips off Site provided by the *Contractor*;
- (b) multiple handling of material;
- (c) additional processing on or off site;
- (d) landfill tax.



Customer Call Handling	11	Customer Call Handling shall be undertaken in accordance with the specification, service requirements and KPI contract requirements:
Item Requirements	(a)	The Supplier is expected to manage all call handling to deal with any drainage maintenance in accordance with the information contained in Schedule 3. This will primarily be a triage of enquiries and closure response.
	(b)	The Supplier will need to determine what level of resource may be required to deliver the expected volume of enquiries (which may fluctuate seasonally).

SERIES 6300: SERVICE ACTIVITY – REACTIVE MAINTENANCE

Reactive Maintenance Repairs		
Units	1	The unit of measurement for practical application shall be:
	(i)	RM 01 Minor Carriageway Repairs meter square up to 100mm depth no greater than 50 meter square or 5 cubic meter per works order activity.
	(ii)	RM 02 Minor footways and cycleways repairs meter square up to 60mm depth no greater than 30 meter square or 2 cubic meter per works order activity.
	(iii)	RM 03 Iron work covers, gratings, frames and boxes unit number. No greater than 10 items per works order activity.
	(iv)	RM 04 Pedestrian Guardrails fencing, posts, bollards and Vehicle Restraint Systems (Bespoke VRS barriers may require quote for material to be agreed with service manager) linear meter and unit number. No greater than 10 meter per works order activity or replacement like for like as required to ensure safety compliance, as far as reasonably practicable.
	(v)	RM 05 Drainage gullies and catchpits Civils unit number, linear meter and cubic meter. Unit per works order activity restricted to road section per activity. Drain blockages are to be inspected and surveyed.
		Repairs shall be no greater than 2m section replacements including all associated enabling work, excavation and backfill. Repairs greater than 2 meters from the point of blockage or damage, shall be chargeable for any work required above this item criteria using the alternative series items within this contract.
		Quantity restricted to broken or damaged items beyond intervention level as specified by the Highway Safety Inspection Manual.
		RM 06 Kerbs, edging and preformed channels, block paving and flags linear meter. No greater than 10 linear meter.
	(vi)	RM 07 Road Markings including road studs... .. Linear meter or unit number. Safety critical lining including junctions, enforcement lining, pedestrian crossings, stop lines or others safety critical lining in line with the HSM. Not including centre lining or parking bays.
	(vii)	

Lining requirements also include unit number items including arrows, triangles, speed roundels in line with the HSM.

- (viii) RM 08 Street furniture and safety equipment unit number, linear meter and meter square. Replacement like for like or as required to ensure safety compliance, as far as reasonably practicable.

Quantity restricted to broken or damaged items beyond intervention level as specified by the Highway Safety Inspection Manual.

- (ix) RM 09 Signs: face, post and fixings unit number. Replacement like for like or as required to ensure safety compliance, as far as reasonably practicable.

Quantity restricted to broken or damaged items beyond intervention level as specified by the Highway Safety Inspection Manual.

- (x) RM 10 Verges meter square, cubic meter, linear meter, kilometre. Safety critical intervention as per the HSM.

- (xi) RM 11 Traffic Management for reactive maintenance repair... .. monthly, unit number, per activity. Including passive and controlled traffic management for all road classification and speeds as required in line with Traffic Signs Manual Chapter 8.

- (xii) RM 12 Road Closures for reactive maintenance repair Monthly, unit number, per activity. Applicable to all road classification and speeds as required in line with Traffic Signs Manual Chapter 8.

Measurement	2	The unit of measurement for pricing measurement shall be:
	(i)	All reactive maintenance items shall be priced per activity. A maximum volume metric or descriptive criteria is applied to each reactive maintenance activity item as per the Highway Safety Inspection Manual and as detailed in section 1.
	(ii)	Works orders above the maximum measure or permitted safety criteria shall be chargeable using the alternative series items within this contract as agreed with the service manager.
	(iii)	All reactive maintenance repairs are undertaken in relation to the Highway Safety Inspection Manual intervention levels and defect criteria.

- (iv) Works order instruction shall contain written description and metric measurement for each activity type to allow calculation and supply of material, resource and equipment necessary.
- (v) Unless specified otherwise by the Service Information, the measurement of reactive maintenance repairs shall be twelve months for each year.
- (vi) Annual activity outputs are calculated on an average output of 3547 +/- 15% inclusive of a maximum 5000 carriageway potholes per year, beyond intervention tolerances defined in the HSM.
- (vii) Any works order may contain multiple defects as detailed in the works order description and may also contain multiple defect types.
- (viii) A single work order radius will be restricted to 1km (whichever comes first).
- (ix) Where multiple road sections are less than 1km in totality, or in built-up areas, junctions and towns centres, a single works order can be raised containing the required defects or works covering multiple road sections. A 1km radius will be applied to orders containing multiple road section

Itemisation

- 3 Separate items shall be provided for reactive maintenance repairs in accordance with the General Principles and the following:

Group	Feature
1	1 Reactive Maintenance Repair
2	1 Stated types

Reactive Maintenance Repairs

- 4 The items for reactive maintenance repairs shall in accordance with the Preambles to Price List General Directions include for:

Item coverage

- (a) providing all measures, equipment, resources and labour necessary to ensure compliance with the Service Activity Specification;
- (b) reports to the *Service Manager*;
- (c) collecting data and maintaining the inventory.

SERIES 8000: TIME CHARGE

Maintenance Teams		
Units	1	The unit of measurement shall be: (i) maintenance teams hour
Measurement	2	The measurement of maintenance teams shall be the whole number of hours ordered by the <i>Service Manager</i> .
	3	The number of hours during normal working hours shall be calculated from arrival at a depot until return to the depot excluding meal breaks, a minimum of eight hours shall be ordered by the <i>Service Manager</i> .
Itemisation	4	Separate items shall be provided for maintenance teams in accordance with the General Principles and the following:

Group	Feature	
1	1	Maintenance teams
2	1	Stated types

Maintenance Teams	5	The items for maintenance teams shall in accordance with the Preambles to Price List General Directions include for:
Item coverage	(a)	management and supervision of operatives;
	(b)	reporting and record keeping;
	(c)	maintenance of vehicles and equipment;
	(d)	vehicles and equipment;
	(e)	consumable materials;
	(f)	certification and training;
	(g)	skilled operatives.

Equipment

- Units

10

The unit of measurement shall be:

(i) equipment hour
- Measurement

11

The measurement for equipment shall be the whole number of hours ordered by the *Service Manager*.
- 12

Where equipment is required which is not incidental to other works, a minimum of four hours shall be ordered by the *Service Manager*.
- Itemisation

13

Separate items shall be provided for equipment in accordance with the General Principles and the following:

Group	Feature
1	1 Equipment
2	1 Stated equipment or resources

- Equipment**

14

The items for equipment shall in accordance with the Preambles to Price List General Directions include for:
- Item coverage

(a)

fuel and consumables;
- (b)

repairs, servicing and maintenance;
- (c)

insurances and replacement;
- (d)

transport to site;
- (e)

use of suppliers and subcontractors;
- (f)

supervision and management.



Materials

- Units

15

The unit of measurement shall be:

(i) materials percentage adjustment
- Measurement

16

Materials required for incorporation into the works by the *Service Manager* shall be those specifically ordered by the *Service Manager*.
- 17

The percentage adjustment shall be applied to the net invoiced cost of materials delivered to the site.
- Itemisation

18

Separate items shall be provided for materials in accordance with the General Principles and the following:

Group	Feature
1	1 Materials
2	1 Percentage adjustment

- Materials**

19

The items for materials shall in accordance with the Preambles to Price List General Directions include for:
- Item coverage

(a)

ordering and taking delivery;
- (b)

unloading, storing and protecting;
- (c)

waste and discounts;
- (d)

supervision and management.

SERIES 9000: RESTRICTED WORKING

Restricted Working

Units	1	The unit of measurement shall be: (i) restrictive working hours percentage (ii) commencement of works number
Measurement	2	Percentage additions shall apply to the rates and prices contained in the Task Order. The percentage additions to priced items shall only be applied to those items when work is specifically ordered by the <i>Service Manager</i> to be undertaken during the restricted hours. For the purpose of measurement Christmas Day, Boxing Day, Good Friday, Easter Monday, May Day, Spring and Summer Bank Holidays and notified public holidays shall be measured as Statutory Holidays.
	3	Commencement of works shall only apply where the <i>Contractor</i> has achieved commencement within the specified time period.
Itemisation	4	Separate items shall be provided for restrictive working hours in accordance with the General Principles and the following:

Group	Feature	
1	1	Restrictive working
2	1	Renewal and construction works landscape and ecology
	2	Traffic management, highways cleansing
	3	Pavements
	4	Traffic signs and road markings
	5	Time charge
3	1	Monday to Friday 09.30 to 15.30
	2	Monday to Friday 20.00 to 06.00
	3	Saturday 07.30 to 16.00
	4	Saturday 20.00 to Sunday 06.00
	5	Sunday 09.00 to 15.00
	6	Sunday 20.00 to Monday 06.00
	7	Statutory Holiday



Restricted Working Hours 5 The items for restrictive working hours shall in accordance with the Preambles to Price List General Directions include for:

- Item coverage (a) all additional payments and costs associated with unproductive working due to restricted hours worked;
- (b) shift working payments;
- (c) all additional equipment, labour and materials costs.

Itemisation 6 Separate items shall be provided for commencement of works in accordance with the General Principles and the following:

Group	Feature
1	1 Commencement of works
2	1 Within 24 hours of receipt of order
	2 Within 7 days of receipt of order
	3 Within 28 days of receipt of order

Commencement of Works 7 The items for commencement of works shall in accordance with the Preambles to Price List General Directions include for:

- Item coverage (a) all additional payments and costs associated with complying with the requirements of the Contract;
- (b) shift working payments;
- (c) all additional equipment, labour and materials costs.



Royal Borough of Windsor and Maidenhead Highway Services Contract

Highway Maintenance and Capital Works

Schedule 4 Pricing Information



Contents

1 Introduction and General Provisions.....3

2 Open Book Cost Management 4

3 Fixed Price Services (Option A).....6

4 Composite Rates.....7

5 Target Price Services (Option C) 7

6 Target Pricing Process 8

7 Alternative Approach to Target Pricing using Schedule of Rates 8

8 Reimbursable Price Services (Option E).....9

9 Risk Allowances 9

10 Project work over £100k 9

11 Application for Payment.....10

12 ANNEX A– Schedule of Cost Components.....13

13 Annex 2 - Schedule of Cost Components 16

14 ANNEX 3 – Cost Component Allocation Table (For Use with Shorter
schedule).....19

1 Introduction and General Provisions

- 1.1 This document describes the mechanism for the commercial and financial pricing and administration of the Royal Borough of Windsor and Maidenhead Highways (RBWM) Contract using a combination of NEC 4 Main Option A, C and E pricing mechanisms. The Pricing Information should be read in conjunction with the Priced Workbook (part of the Schedule 4) that the Supplier completes as part of their tender submission and will be used both for evaluation purposes and as part of ongoing service delivery, including in-life benchmarking of service and project delivery.
- 1.2 RBWM is keen to ensure transparency of costs throughout the life of the Contract. All prices will be provided at cost excluding Overhead and Fee, which will be applied separately. The administrative approach will be developed further with the Supplier during pre-mobilisation stage, along with the development of the Works Order processes, which are expected to be electronically supported by the Supplier adopting a “works manager” type recording and response system cohesive with RBWM’s systems to allow efficient communications.
- 1.3 The Supplier is expected to include normal pricing risk allowance within all unit rates, unless otherwise instructed to separate out. Normal risk allowance should include such items as wastage, employment costs, weather, coordination and compliance. An estimator’s level of detailed build-up for each cost item shall be available for the Service Manager to audit if requested, at any time during the operation of the Contract.
- 1.4 The same level of detail shall be available for all Sub-Contracted elements. This “Open Book Cost Management (OBCM)” approach will be maintained throughout the life of the Contract and Supplier obligations in terms of performance monitoring, compliance are further explained in Schedule 5 - Collaboration and Partnering. The Supplier shall keep detailed records of all “Defined Costs” in an Open-Book manner, that is available for audit whenever reasonably requested by the Service Manager. These records shall be kept for a period of 12 years post completion and/or or termination of the Contract All defined costs should be maintained in a fully auditable manner and made available to RBWM for the purposes of verification, audit and to benchmark service value for money from time to time.
- 1.5 The Defined Costs will be evidenced at each Application for Payment and will be agreed between the Parties in advance of the first assessment date. The Supplier will comply with any reasonable request to subsequently alter or amend the supporting information provided throughout the duration of the Contract.
- 1.6 The Supplier is required to provide a percentage for fixed price components such as Local Management Overhead and Fees. These will be itemised within the priced workbook and will be applied accordingly to the base cost of any Service area they relate to, as appropriate.
- 1.7 Where the Supplier undertakes Option C - Target Pricing, RBWM is keen to introduce an incentivisation approach providing both reward and risk. RBWM may re-invest any of its own Gainshare that may be applicable under these types of projects, back into a Contract Benefit Fund (refer to Schedule 7 - KPI Framework for further information). This fund will be administered by the Partnership Board, who will consider future investment, innovations and sustainability within the Contract, through the ring-fencing of any of its own gain-share value.
- 1.8 RBWM is keen to ensure that any financial penalty is only directly linked to the poor

performance of the Supplier, such that the Supplier should always seek to perform well at all times. RBWM therefore proposes to introduce a Performance Payment Retention approach. This will effectively reduce / withhold payment from the Supplier on a monthly basis if KPIs are missed, or not achieved. The Performance Framework and details contained in Schedule 6 – KPI Framework, which defines the performance parameters. The Performance Retention Payment approach would be applied if performance levels detailed in the KPI framework are not reached, or Performance Improvement Plans are missed or are not effective within the defined timescales. This will be monitored using the KPI framework and assessed by the Client during monthly operation meetings as set out in the Specification.

- 1.9 Capital project works or Major Works activity can be instructed on a “Call-Off” basis, against annual budgets and programmes agreed with RBWM. Individual Works Orders will be raised by RBWM for these works (or a single order for a programme of works) and these will define the works requirements. These will be delivered against the Specification requirements, and by exception, any amendment to the Specifications agreed between the parties (i.e., if the Works are of a specialist nature not covered by the core scope Specifications). The pricing schedules are used as the basis for all Call-Off Contracts. These Call-Off Contracts may adopt any of the following pricing Options in discussion with the Supplier:
 - Option A - Activity Schedule providing a fixed-price + risk allowance.
 - Option C - Target Pricing providing shared risk and gain share.
 - Option E - Cost Reimbursable.
- 1.10 A Schedule of Cost Components is provided as an Annex to this document for defined fixed price components. Items of work, plant, materials and equipment are deemed to be “delivered” when they are delivered through operational activity on 's asset. The detailed Schedule of Rates in support of the fixed price elements, will be subject to annual inflation.
- 1.11 The Supplier shall price a “basket of projects” and “basket of services” as part of the tender evaluation. This is a suite of example projects or activity schedules reflective of the typical projects likely to be undertaken during the Contract term. The “basket of projects” will auto populate /calculate a price using the series schedule of rates provided by the Supplier. The “basket of services” will be built up of selected activity schedules within the routine, cyclical and reactive pricing schedules to reflect typical service costs and potential time charge options.
- 1.12 The series of rates adopted for this Contract are derived from the Standards for Highways Specification for Highway Works. In addition to the evaluation of the prices for each project, RBWM will use these projects as the basis to benchmark any future Activity Schedule, or Target Cost build-up in support of agreeing future prices for project-based work of a similar nature.

2 Open Book Cost Management

- 2.1 An OBCM approach is to be used on all Target Price (Option C) and Cost Reimbursable (Option E) pricing mechanisms for the services. Whilst some Fixed Price (Option A) services may require review, it is not anticipated to use OBCM on all service activities unless an inherent concern is raised. The detail of information required by RBWM along with the format, will be agreed jointly between RBWM and the Supplier during the Mobilisation Period, including frequency and depth of analysis. The Client requires an

approach to fixed and target pricing that demonstrates probity and transparency (suitable to stand-up to Audit Commission probity if RBWM receives a request for audit) and expects the Supplier to work in collaboration with the Client to improve performance and incentivisation as the Contract develops over time.

2.2 An electronic system should be used that is capable of being linked with RBWMs existing ordering and financial control systems. A best practice approach to normal cost reports should show as a minimum the following information:

- Current actual cost against target and forecast to complete per activity
- Changes in the service
- Risk amounts and their expenditure
- General Borough contingency
- Cash flow forecasts
- Final account progress
- Major causes for concern
- Disallowed costs
- Early warning items

2.3 Pricing of Items and Measurement

Each individual item shall have a rate or price entered against it. Rates and prices shall be expressed to two decimal places and will provide the base cost.

The measurement of any work undertaken shall be against the units and dimensions stated in the Priced Workbook unless otherwise instructed. The rates and prices entered in the Schedule of Rates shall be deemed to be the fully inclusive value of the work including the following, unless expressly stated otherwise:

- i. Labour and associated costs.
- ii. The supply of materials, goods, storage and costs in connection therewith including delivery to Site.
- iii. Taking delivery of materials and goods supplied by others, unloading, storage, and costs in connection therewith.
- iv. Plant and costs in connection therewith.
- v. Fixing, erecting and installing or placing of materials and goods in position.
- vi. Temporary Works.
- vii. 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 the tender is based.
- viii. 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.
- ix. Establishment charges, excluding overheads and profit.
- x. General waste management requirements.
- xi. Testing carried out by the Supplier in accordance with the particular requirements of the Preliminaries to the Contract, including supplying results of tests, reports and certificates.
- xii. Supply and delivery of samples to RBWM in accordance with the requirements specified in the specification.
- xiii. Checking, inspecting, examining, measuring and verifying goods, materials and workmanship including supplying results, reports and certificates.

- xiv. Attendance and transport for sampling and testing carried out by RBWM.
- xv. Complying with Quality Assurance requirements of the Contract and providing certificates of conformity.
- xvi. Preparation and supply of detailed working drawings.
- xvii. Detailed asset management information and data capture and inputting.
- xviii. Awaiting approvals and consent.
- xix. Traffic & Pedestrian Management for all works with the exception of lane and road closures, vehicle diversions and temporary traffic lights
- xx. Supplier Welfare facilities in accordance with Schedule 2 of the CDM Regulations 2015.
- xxi. Work Within and Below Non-tidal Open Water or Tidal Water, where the Contractor shall allow in his rates and prices for taking measures required to execute work within and below non-tidal open water or tidal water. The Contractor shall include in his rates and prices for any investigations to ascertain actual boundaries, surface levels and ranges affected by non-tidal open water or tidal water.

2.4 Equivalent Products and Materials

Where the Supplier offers an equivalent product or material in place of the one identified or specified, then the rates and prices in the Schedule of Rates shall be deemed to include for all the obligations and costs associated with the incorporation of the equivalent into the Works, including design, provision of data and drawings, certificates, awaiting acceptance, resubmissions and modifications and amendments to the Works.

Unless specifically stated to the contrary in the Contract, the measurement of the Works affected by the incorporation of the equivalent products and materials shall be based on the Tender documents and not on the Works.

3 Fixed Price Services (Option A)

- 3.1 Fixed Price Services relate to the Reactive and Emergency Maintenance and Annual Cyclical services that the Supplier will provide against a fixed price fully inclusive of normal risk allowance.
- 3.2 Reactive Maintenance will include reactive response for all highway asset maintenance by response to Works Orders, customer enquiry and emergency. The fixed price will be calculated using a submitted cost for each activity type and multiplied by the estimated frequency per year, with local office management and over-head fee applied
- 3.3 The activity item frequency per year is an average of works orders undertaken per activity type annually. This is generated from reports downloaded from the asset management system. A tolerance has been included for +/- 15% for all item averages to reflect risk and data quality.
- 3.4 Cyclical and routine maintenance will include activities undertaken by routine work or programme. The fixed price will reflect the annual activity determined by a defined number of assets and inclusion of all normal risk.

4 Composite Rates

- 4.1 Some minor planned works may be priced and delivered under a fixed price arrangement by utilising Composite Rates. These are rates that are developed by the Supplier, by incorporating several individual items, into a single all-inclusive rate, that is fully inclusive of risk. Composite Rates will be an activity description in line with the Standards for Highways Method of Measurement and may consist of items from multiple Series in the Specification to create an activity. It is expected that the Supplier will adopt an Open-book approach to Composite Rate development, which will be benchmarked against existing variable costs associated and inputted for series schedule of rates.
- 4.2 The Supplier's Variable Price Services (net of Overhead and Fee Mark-up) are made up of Plant, Labour and Material Rates and are fully inclusive of all staff costs; including (where applicable) but not limited to wages for normal time working, premium rates for overtime working, bonuses and payments in respect of skill, responsibility or special agreements, Personal Protective Equipment, work wear, travelling time and expenses, lodging, holiday, sick days, private health insurance, life assurance, death benefit, national insurance contributions and tool allowances), vehicles, tools, consumables and Supplier's equipment.
- 4.3 The Supplier shall charge for plant labour and materials only where these are not already included within the Variable Priced Rates and at the same cost to the Supplier plus the fee percentage detailed in Price Schedule.
- 4.4 Variable Priced Rates shall apply irrespective of the method of delivery, i.e. self- delivery by the Supplier or Sub-Contractors / Supply Chain delivery, unless over the value of £100,000 where competitive quotations, from either supply chain or open market tendering must be sought as detailed in the table below.
- 4.5 Minor planned works up to the value of £100,000 for which a reactive response time is not required, but which are identified during the year and instructed by the Client Representative, can be undertaken as Fixed Price (Option A). All Minor and Major Planned Works will be instructed by the Client.

5 Target Price Services (Option C)

- 5.1 The approach to target pricing is designed to ensure that all Parties are encouraged to deliver Value for Money in service delivery. RBWM is keen to realise efficiency savings in minor and major works delivery and will consider future investment, innovations and sustainability within the Contract, through the ring-fencing of any of its own gain-share value. This will be held by the Supplier in a Contract Benefit Fund (CBF), and it will be agreed by the Partnership Board what activities this should be re-invested into, through a business case approach.
- 5.2 RBWM recognises the benefits of Early Contractor Involvement (ECI), and the Supplier will work in collaboration with RBWM and any appointed advisors and wider service delivery Suppliers to realise these benefits. This will be applicable to any Call-off Works Order to deliver Works elements. The Supplier will be expected to provide ECI on its core service delivery within the cost of its Local Management Overhead.
- 5.3 Where programmes of work are issued via a Works Order, then the Target Price will be broken down into anticipated monthly figures based on when individual projects, or

services complete in each month, which can then be used for pain/gain assessment on an ongoing basis – rather than just reconciling at the end of the financial year. The Suppliers cost capture system will be used to assist RBWM in agreeing Target Prices in future years.

- 5.4 Following completion of year one (1) routine and cyclical activities such as drainage cleansing and winter maintenance, the client has ambition to move some services to a target cost arrangement. This will be after the Supplier has had a period of asset validation and the revised asset information is agreed and confirmed by the Client team. The Priced Workbook includes a year two (2) workbook for some of these activities and services to be priced on a Target Price basis, in preparation for adoption or to be used for benchmarking and for tender evaluation purposes.
- 5.5 When after year one (1) the quantities used to develop these initial target prices have significantly changed due to further asset or service activity validation, the Client will consider an updated Target Price in collaboration with the Supplier, which will be benchmarked back against these initial targets.

6 Target Pricing Process

- 6.1 For Works Orders (which may include bundling of small minor works into a larger programme), a Target Price will be produced by the Supplier for the overall programme of works. This may be aggregated from individual projects to provide full cost transparency, with any pain/gain calculation applied against the overall programme.
- 6.2 In the event that there are no suitable rates or base costs, or there is a new 'item', then the rates and prices will be built up from first principles, or the forecast of defined cost. The choice of calculation is to be agreed with the Service Manager.
- 6.3 The amount of RBWM involvement will be determined by the Service Manager at the start of each annual programme of services based on, for example the complexity, value, or location of any Works Order.
- 6.4 The process of Target Price development should ideally be undertaken jointly, by both the Supplier and the Service Manager, and where appropriate with the Supply Chain. Issues of trust are eliminated when all Parties are involved. Mutual development of the Target Price allows shared reasoning and assumptions to be made when agreeing detailed costs and ultimately agreeing the overall Target Price.
- 6.5 The Target Price will be developed during the period of ECI, where applicable, for large schemes. This becomes the Target Price for the Works Order subject to variability arising from agreed changes and compensation events. When producing the Target Price the Supplier will provide the Service Manager with details of all assumptions made, including risk allowances.

7 Alternative Approach to Target Pricing using Schedule of Rates

- 7.1 The Target Price will be developed either before, or during any period of ECI, where applicable, for major schemes. This becomes the Target Price for the Works Order subject to variability arising from agreed changes and compensation events. When producing the Target Price the Supplier will provide the Service Manager with details of all of the assumptions made, including risk allowance.

- 7.2 RBWM may wish to use, at the sole discretion of the Service Manager, a simplified approach to Target Pricing. This simplified approach uses the tendered Schedule of Rates to derive the Target Price. In this case the Target Price will be the total of the Prices obtained by multiplying the quantities contained in the Call-Off information, by the rates included in the Price List, less the risk identified in individual rates.

8 Reimbursable Price Services (Option E)

- 8.1 RBWM may require specific and focused resources to be provided at different times throughout the Contract. RBWM will therefore request from time-to-time Variable Price activities under an Option E Works Order. In these situations, Works Orders will be instructed using the Schedule of Rates, or time based working, to agree a likely service or project cost. The actual costs will be agreed based on evidence provided by the Supplier showing the quantities delivered against the schedule of rates items, and any other supporting back-up provided by the Supplier.
- 8.2 The Supplier will not have the ability to deviate from Works Order instruction without approval from the Service Manager. Any Works Order envisaged to exceed the order value must be reported to the Service Manager as soon as practicable and authorisation must be granted to proceed and complete the Works Order.
- 8.3 Variable Price Services are fully inclusive of all staff costs including (where applicable) but not limited to wages for normal time working, premium rates for overtime working, bonuses and payments in respect of skill, responsibility or special agreements, Personal Protective Equipment, work wear, travelling time and expenses, lodging, holiday, sick days, private health insurance, life assurance, death benefit, national insurance contributions and equipment allowances.
- 8.4 For Emergency response items, these will be delivered under a Fixed Price approach, using Schedule of Rates items. Where an Emergency Response is greater than two (2) in duration and attendance, the additional time, material and resources incurred by the Supplier will be recovered under a Cost Reimbursable basis adopting Option E approach.

9 Risk Allowances

- 9.1 In each activity schedule shown in the cost model, a specific risk register is contained which the Supplier will include stated risks which are considered relevant to that particular service or Activity Schedule. The risks will be identified and detailed, showing their extent, any mitigating factors and the cost allowance in each case. In addition, when the Supplier is developing individual item costs, they should include for all normal service related risks, for example, normal wastage levels, weather and travel to site, for the area within the scope.
- 9.2 The same approach to risk management is expected to be part of the target pricing approach, where a quantitative risk register will be jointly agreed before finalisation of the Target Price.

10 Project work over £100k

For works orders estimated in excess of £100k, or where the works are of a specialist nature or where the Supplier is unable to self-deliver, the Supplier is required to demonstrate value through obtaining competitive quotes for carrying out the works. The Supplier shall submit the

quotations to RBWM for approval by the Service Manager. The Supplier may include overheads and profits to the quotations at the agreed charges, but no other additional charges may be levied, without the prior approval of the Service Manager. The Supplier must ensure that any Sub-Contractors requested to quote comply with all protocols included within this Contract, meet all legislative requirements and have the necessary skills and competences to deliver the project work to the required standards ensuring there is no detrimental impact on the wider delivery of the service.

10.3 Projects exceeding £100k will be deemed a major project and will generally be included in the capital programme distributed to the Supplier each April. Major Planned Works will be delivered under a fixed cost (Option A) or target cost agreement (Option C) calculated in accordance with the schedule of rates. This will be agreed with Suppliers and confirmed by instruction and project brief.

10.4 For projects expected to be exceeding £500K (for any one off Works Order) the Client may consider an additional separate tender process before such project is awarded, The Supplier will be able to participate in such a separate tender and bid for it.

11 Application for Payment

Payment for Fixed Price Option – A for Core Services will be the annual fixed cost paid in 12 monthly installments, as agreed with the Service Manager. A normal Application for Payment process will be provided by the Supplier which will include all details of any retention applied, the Total Prices Work Done to Date (PWDD) and any other cost items necessary. The AFP will include separate line items for the Suppliers Overhead and Fee mark-up.

A retention is calculated using the activity item rates provided at tender to calculate a retention value.

Payment for Option C or E Minor Projects – up to £100k

The Supplier shall include in the AFP as a minimum:-

- i. Project name or reference;
- ii. Estimate or quotation;
- iii. Works Order number and date;
- iv. Date of quotation;
- v. Short description of project
- vi. Property where the project was delivered;
- vii. Evidence of the Service Manager having authorised the project;
- viii. Value of Estimate or quotation;
- ix. Value of all agreed variations to the price;
- x. Date of completion;
- xi. Proposed invoice amount;
- xii. Copy of the Service Manager's acceptance of Project completion;
- xiii. Borough approval status (To be completed by the Service Manager).

Payment for Reactive works

For services delivered using Variable Priced Rates along with associated materials, parts and equipment charges, the Supplier shall include in the AFP as a minimum:

- i. Helpdesk Service Request number (if applicable);
- ii. Short description of activity;
- iii. Asset to which the payment request relates;

- iv. Evidence of the Service Manager having authorised the activity (if in excess of approval thresholds);
- v. Hourly Rate band(s) applied;
- vi. No. of hours;
- vii. Cost of plant, labour and materials;
- viii. Mark up on plant, labour and materials (as set out in the Price Schedule); and
- ix. Total Price to RBWM;
- x. Relevant budget code and Asset number.

Procedure for Payment Adjustment

If a KPI related Performance Improvement Notice has been issued and Performance Retention is payable, the Supplier shall provide within the AFP a deduction calculation of the Monthly Fixed Price Payment in accordance with the formula set out below. This shall apply from the date detailed on the Performance Rectification Notice until the month in which performance improves to a Performance Standard as agreed with Borough.

The Supplier shall calculate the Monthly Fixed Price Payment as follows:

$$\text{MFPP} = (\text{MFP} + \text{PA})$$

Where:

MFPP = Monthly Fixed Price Payment

MFP = Monthly Fixed Price

PA = Payment Adjustment

Indexation

The charges and any other rates or prices will be those submitted by the Supplier in the ITT (Priced Workbook) and these will apply at the Commencement Date and shall cover the full cost of the planned services and maintenance work required for the **first 12 months** of the Contract Term. The base date for future anniversaries of the indexation review will be 01st March of each year (starting from 1st of March 2025).

In subsequent years the prices, rates and charges will be adjusted in accordance with the Indices shown in the Office of National Statistics (ONS) – CPI Index MM23; Infrastructure / Maintenance and Repairs, unless otherwise agreed by the parties.

The charges shall be varied by the application of the following formula and the charges shall be varied to take effect on the 1st April (starting from 1st April 2026) annually (which will be deemed the base month):

$$\text{NC} = \text{EC} \times \text{X}$$

Where:

NC = New charge

EC = Existing Charge

X = (% change in Index)

Consumer Price Index – The Consumer Price Index (CPI) as published by the Office as National Statistics. The measurement to be used in the variation calculation of the variable “X” shall be the percentage change in the CPI in respect of the base month. Where the published figure is stated to be a provisional figure or is subsequently amended that figure shall apply as ultimately confirmed or amended in the immediate proceeding month.

12 ANNEX A– Schedule of Cost Components

RBWM's title to Plant and Materials

The value of Plant and Materials outside the Affected Property is excluded from the Price for Services Provided to Date unless:

- a. the Plant and Materials is within the United Kingdom;
- b. the Supplier demonstrates to the satisfaction of the Service Manager that the Supplier has unencumbered title to the Plant and Materials;
- c. the Plant and Materials is stored separately and is clearly and visibly marked as for RBWM and this Contract;
- d. the Plant and Materials is adequately protected against water, theft, vandalism and other casualties;
- e. the Plant and Materials is insured against loss or damage while stored or in transit to the Affected Property for its full reinstatement value under a policy of insurance protecting the interests of the Parties in respect of the usual insured risks for the period until it is brought within the Affected Property; and

Where the value of Plant and Materials outside the Affected Property is included in the Price for Services Provided to Date

- f. the Supplier's title in the Plant and Materials passes to RBWM,
- g. the Supplier does not remove it from where it is stored except for use on the services; and
- h. the risk of loss or damage to the Plant and Materials remains with the Supplier.
- i. The value of Plant and Materials within the Affected Property is excluded from the Price for Services Provided to Date unless,
- j. title in the Plant and Materials has already passed to RBWM under clause,
- or
- k. the Supplier demonstrates to the satisfaction of the Service Manager that the Supplier has unencumbered title in the Plant and Materials.

The Supplier's title in Plant and Materials passes to RBWM when it is brought within the Affected Property, but the risk of loss or damage to the Plant and Materials remains with the Supplier.

The Supplier does not remove Plant and Materials within the Affected Property from where it is stored except for use on the works or with the Service Manager's permission.

The title to Plant and Materials passes back to the Supplier if it is removed from the Affected Property with the Service Manager's permission.

Suppliers Local Office Overheads (Affected Property Overheads)

Note: This includes all staff involved in the delivery of the Contract, excluding the direct staff and operatives involved in individual service components. Staff who are not based in the Local Office (either Co-Located or Suppliers own Local office serving the Contract) will be priced within the Fee.

A charge for Local Office Overheads costs incurred by the Supplier when people (as defined in cost component People 1 below) are employed to carry out work directly to Provide the Service in a place of work is not:

1. Provided by RBWM for the Supplier's use, or otherwise arranged, by RBWM,
2. the Affected Property, or
3. in the case of a Works Order the Working Area for that Works Order.

The following costs will be included in the Suppliers Local Office Overheads. Annually, a review of the actual costs will be compared to the tendered costs and any adjustment may be considered.

This charge includes for all office overheads incurred by the Supplier in employing people otherwise than in the places of work listed, including but not limited to the costs of:

- l. Supervisory, administrative, financial or secretarial role.
- m. Local IT network charges, equipment, software and licenses.
- n. Local office computers & computer consumables.
- o. Telephone, fax for the Contract.
- p. Postage.
- q. External printing for the Contract.
- r. Local printing, copying, stationery and office supplies for the Contract.
- s. Non-specialist equipment for the running of the Local Office.
- t. Archiving and storage (*Supplier* not client).
- u. Company subscription to trade and professional bodies.
- v. Non-personal vehicles, maintenance and insurance.
- w. Staff recruitment and relocation costs.
- x. Local Management, QS, Buying, Programming and other centralised support functions.
- y. Local health and safety.
- z. PPE.
- aa. Other insurance required for the local office (excluding Professional Indemnity and insurance covered below).

Co-Located Office

RBWM may provide the following in the Tinkers Lane depot and or at its head offices at Maidenhead Town Hall upon request for management staff:

- a. Hot desk Office space,
- b. All mains services,
- c. Utility charge,
- d. Access to stationary,
- e. Access to telephone systems and computers & charges for the purpose of interfacing with the Clients systems,
- f. Internal Client data connections,

- g. Welfare facilities,
- h. ICT Licences for the Supplier in accordance with the Service Information.

The Supplier will provide all other facilities in compliance with the Specifications, Service Information and Collaboration and Partnering information and allow for them in the Suppliers Local Office Overhead activities.

Sub-Contractors

The following components of the cost of work or services that is -sub-contracted;

- The amount of payment due to the Sub-Contractor, or
- The defined costs as stated in the Schedule of Cost Components, applicable to those declared as key Sub-Contractors.

13 Annex 2 - Schedule of Cost Components

General

This Schedule of Cost Components is part of the conditions of Contract only when one of Options A, C or E is used.

When one of Options C or E is used, the Shorter Schedule of Cost Components is used by agreement for assessing compensation events.

In this Shorter Schedule of Cost Components:

- 1.1. When one of Options C or E is used, in this schedule the Supplier means the Supplier and not his Sub-Contractors.
- 1.2. An amount is included only in one cost component as provided in the cost component allocation table¹ in Annex 2 and only if it is incurred in order to Provide the Service.

Notes:

In the following:

People

The following components of the cost of:

- People who are directly employed by the Supplier and whose normal place of work is within the Affected Property
- People who are directly employed by the Supplier and whose normal place of work is not within the Affected Property but who are working in the Affected Property.

The following components of the Cost of:

- People who are not directly employed by the Supplier but are paid for by him according to the time worked while they are in the Affected Property.

Amounts paid by the Supplier provided that the times for people are properly recorded on timesheets and the Supplier submits timesheets on a monthly basis to the Service Manager for acceptance

Equipment

The following components of the Cost of Equipment which is used within the Affected Property (including the cost of Accommodation but excluding Equipment cost covered Suppliers Local Office Overhead.

¹ The cost component allocation table is completed by RBWM setting out what is included under each component for example, People may include bonus and incentives, overtime, special allowances, statutory holiday, pensions, sickness and redundancy.

Amounts for Equipment listed in the Contract Data which is stated in the Contract Data. These amounts are the rates stated in the Contract Data multiplied by the time for which the Equipment is required.

The time required is expressed in hours, days, weeks or months consistently with the list of items of Equipment in the Contract Data

Unless the item is in the published list and the rate includes the cost component, payments for

- Transporting Equipment to and from the Affected Property other than for repair and maintenance,
- Erecting and dismantling Equipment, and
- Constructing, fabricating or modifying Equipment as a result of a compensation event.

Unless included in the hire rates, the cost of operatives is included in the cost of people.

Amounts for Equipment which is not stated in the Contract Data-at competitively tendered or open market rates, multiplied by the time for which the Equipment is required.

Plant and Materials

The following components of the cost of Plant and Materials used in the Affected Property

Payments for

- purchasing Plant and Materials,
- delivery to and removal from the Affected Property,
- providing and removing packaging, and
- samples and tests.

Cost is credited with payments received for disposal of Plant and Materials unless the cost is disallowed

Charges

The following components of the cost of charges paid by the Supplier

Payments for provision and use in the Affected Property of

- water,
- gas, and
- electricity.

Payments for cancellation charges arising from compensation events

Payments to public authorities and other properly constituted authorities of charges which they are authorised to make in respect of the Service

Consumables and equipment provided by the Supplier for the Service Manager's offices but excluding Equipment cost covered by the Suppliers Local Office Overheads.

Specialist services,

Manufacture and Fabrication

The following components of the cost of manufacture and fabrication of Plant and materials which are

- Wholly or partly designed specifically for service, and
- Manufactured or fabricated outside the Affected Property.

5.1 Amounts paid by the Supplier

Design

The following components of the cost of design of the Service and Equipment done outside the Affected Property.

6.1 The total of the hours worked by employees multiplied by the hourly rates stated in the Contract Data for the categories of employees listed.

Insurance and other Credits

The following are deducted from the cost:

- the cost of events for which this Contract requires the Supplier to insure and other costs paid to the Supplier by insurers the open market sale price of items included in cost at the end of the period for which the item is required.

14 ANNEX 3 – Cost Component Allocation Table (For Use with Shorter schedule)

The Fee is the percentage stated in the pricing Schedule and includes profit and head office and regional office overheads.

Cost Component	Disallowed Cost ²	Defined Cost	Suppliers Local Office Overhead	Fee
Suppliers				
1.Head Office and Corporate Overhead				
Franchises, Royalties Licenses				✓
Taxes				✓
Interest/Financing, charges/Bank charges				✓
Company Accounting and Auditing				✓
Research & Development				✓
Tendering of supply & Sub-Contracts				✓
Business risks not covered by compensation events under the Contract				✓
"Office" Stationery				✓
Marketing, Sales, Exhibitions	✓			
General fees paid on a regular basis	✓			
Legal fees for general legal advice and services				✓
Supplier's Staff (as defined above)				✓
Payroll Burden (as defined above)				✓
Employee Benefit (as defined above)				✓
Travel, accommodation and subsistence costs for 'head office' based personnel				✓
Company Cars including all costs & expenses				✓
Management, project management				✓
Technical Staff				✓
"Office" rents, rates, local taxes, heating, lighting and cleaning, and any other non-Service Contract related office accommodation and administration				✓
Main frame PC, WP, CAD and other IT systems				✓
Recruitment costs				✓
Redundancy costs/payments				✓
Laboratory work				✓
Performance Bond (if required)		✓		
Parent Body Guarantee				✓

² Components of cost which are not to be paid by RBWM are treated as in the Fee if not listed in this table or stated specifically as Disallowed Cost with the same meaning for example, union subscriptions, advertising or agency fees, medicals or examinations, private travel, relocation, penalties and fines, bonus and or incentives, other amounts deducted in accordance with this Contract.

RBWM Highway Services Contract 2024
Highway Maintenance and Capital Works



Head Office communication telephones etc.				✓
Staff Training				✓
Office photocopying, drawing, reproduction, etc., including all consumables				✓
Other Staff or general costs not associated with providing the service				✓
2.Supplier's Local Office Overhead – People & Site Based Overhead - People				
2.1 People				
Supplier's staff			✓	
Secretarial/Clerical Personnel			✓	
Staff Payroll Burden			✓	
Staff Employee Benefits			✓	
Travel, accommodation and subsistence costs for 'Site' based personnel			✓	
Travel, accommodation and subsistence costs for Site personnel attending non-Site location			✓	
Subsistence for staff from outside 50 mile radius	✓			
Recruitment costs			✓	
Company Cars including all costs & expenses			✓	
Redundancy costs/payments			✓	
Holidays			✓	
Sickness less than a period of four (4) consecutive weeks any one (1) occasion			✓	
Long term sickness more than a period of four (4) consecutive weeks any one (1) occasion			✓	
Maternity / Paternity leave			✓	
Jury service payments			✓	
Attending Borough / Joint training Contract specific			✓	
Attending service specific meetings with the Client			✓	
Supplier's Local Office Overhead – Equipment and charges & Site Establishment Equipment and charges (*Note where the Supplier has Individual Site Establishments & Charges then these will be costed under the Defined Cost. Otherwise, they will be included in the Suppliers Local Office Overhead)		Where items are in the Specific site Office		
Office, Stores, Workshop etc.		✓*	✓	

RBWM Highway Services Contract 2024
Highway Maintenance and Capital Works



Partitioning, racking and fitting out		✓*	✓	
Temporary Foundations Drainage		✓		
Temporary Utilities		✓		
Electricity, Water, Heating		✓*	✓	
Drawings, print and reproduction		✓*	✓	
All computer, WP systems, CAD system including software, printers etc.		✓*	✓	
Hand held IT devices including data capture devices, GPOS etc.		✓		
Cleaning and other miscellaneous running costs		✓*	✓	
Security		✓*	✓	
Communication telephones etc. and all rental/call charges		✓*	✓	
Consumables, tea, coffee, cutlery, paper etc.		✓*	✓	
Furniture, fixtures and fittings, including office and technical equipment		✓*	✓	
Photocopiers etc. including paper and all consumables		✓*	✓	
Temporary roads and hard standings		✓		
Site communication systems		✓		
Temporary fencing/hoardings etc.		✓		
Safety, first aid provision (excluding labour)		✓*	✓	
Road sweeper		✓		
Waste disposal skip		✓		
Surveying and testing equipment		✓*	✓	
Local and Statutory Authority charges		✓*	✓	
Rents		✓*	✓	
2.3 Insurances				
RBWMs liability, Public liability, Insurance				✓
Insurance of the Affected Property			✓	
Suppliers professional indemnity insurance			✓	
Insurance Excess			✓	
3.Supplier's Site Labour				
Labour Rates (PAYE) including labour payroll burden		✓		
Labour wages (714) including payroll burden		✓		
Labour only Sub-Contract		✓		
Recruitment costs			✓	
Redundancy costs/payments			✓	
Holidays		✓		
Sickness less than a period of four (4) consecutive weeks any one (1) occasion		✓		

RBWM Highway Services Contract 2024
Highway Maintenance and Capital Works



Long term sickness more than a period of four (4) consecutive weeks any one occasion			✓	
Maternity / Paternity leave			✓	
Jury service payments			✓	
Attending Borough / Joint training Contract specific			✓	
Attending service safety training			✓	
Other training			✓	
4. Supplier's Site Equipment				
Own equipment (including HGV)		✓		
Hired equipment (including HGV)		✓		
Equipment modification		✓		
Repairs and losses excluding wear and tear	✓			
Special equipment (1 own Plant)		✓		
Special equipment (2 hired Plant)		✓		
Fuels, oils and greases		✓		
Site vehicles for <i>Supplier</i>		✓		
5. Material				
All Materials for incorporation as part of the Plant including transportation of Materials insurance in storage and transit		✓		
Sub-Contract Materials let on lump sum basis		✓		
All material for temporary Works construction including incidental Protection of the Works		✓		
6. Miscellaneous				
Small tools		✓		
Tipping/Haulage		✓		
Consumables		✓		
Protective clothing		✓		
7. Cost Payable to the <i>Supplier</i> for Construction Sub-Contractors				
Design and construct		✓		
Design only		✓		
Construct only		✓		
8. Mobilisation and De-mobilisation				
Mobilise		✓		
Demobilise		✓		



ROYAL BOROUGH OF
**WINDSOR &
MAIDENHEAD**
WWW.RBWM.GOV.UK

Royal Client of Windsor and Maidenhead
Highway Services Contract

Highway Maintenance and Capital Works
Contract

Schedule 5
Collaboration and Partnering



Contents

1 Purpose..... 2

2 Ambassador for the Borough 2

3 Collaborative Behaviours..... 2

4 Culture 3

5 Safety And Wellbeing..... 4

6 Supply Chain Relationships 4

7 Social Value 5

8 Environment And Sustainability 5

9 Contract Governance..... 7

10 Performance Management Framework 7

11 Continuous Improvement and Innovation 8

12 Value For Money 8

13 Collaborative Planning..... 8

14 Customer Care and Stakeholder Management..... 9

15 Interaction with Local ICT Systems 9

16 Risk Management Procedures..... 9

1 Purpose

- 1.1 The purpose of this Schedule is to describe how the Borough and Supplier will work collaboratively in a spirit of mutual trust and cooperation to provide the Services. This will be in accordance with the Contract requirements, Specification and Pricing Schedules, but should also be delivered in consideration of the mutual goals and ambitions of both parties at a strategic level.
- 1.2 This Schedule is not intended to replace any of the individual Service Requirements in the Contract but helps to establish and explain the expected “ways of working” between the Supplier, and the Borough as the Service Manager. This Schedule places obligations on each party to create a delivery framework that is agreeable, mutual and that the parties abide by and work towards.

2 Ambassador for the Borough

- 2.1 In providing the Services, the Supplier agrees to deliver the works in such a way as to not cause unreasonable disruption, noise, disturbance or other pollution and minimise interference to users, residents and local communities. The Supplier is seen as the ambassador for the Borough and these front-facing activities are often the residents and communities public face of the Borough.
- 2.2 The Supplier develops a ‘Best Value Culture’ within its own organisation and throughout its Supply Chain to ensure continuous improvement in providing the Service. The Supplier has a key role to play in providing the Services working with the Borough to ensure that the Service continues to be delivered to the required quality, remains affordable, is undertaken safely and delivers high levels of customer satisfaction.

3 Collaborative Behaviours

- 3.1 The Borough believes that team working, co-location, partnership, collaboration, continual improvement, costs transparency and a trusting long-term relationship are the key principles for effective Service delivery. Any partnership is based on cooperation and collaboration throughout the entire Supply Chain.
- 3.2 The Borough and the Supplier, including key Supply Chain members, will work together to deliver a high quality and continuously improving Service. The parties should seek to achieve the following:
 - Delivering an affordable Service;
 - Effectively managing the Service;
 - Delivering continuous improvement and Added Value;
 - Delivering efficiency savings in its approach;
 - Providing the Service in a safe manner;
 - Developing a unified team between the Borough in-house teams such as Parks and Landscapes, Estates and Facilities, etc;
 - Utilising local services and Supply Chain wherever possible;
 - Providing the Service in a sustainable manner;
 - Delivering the Service with minimum disruption to the public;
 - Supporting the Borough with Social Value ambitions;
 - Delivering sustainability and a clear direction to net-zero;
 - Delivering asset management principles and whole life considerations;
 - Providing a flexible and reliable Service;
 - Providing cost certainty through effective forward programming;
 - Identifying, minimising and allocating ownership of risk;

- Providing incentives for good performance;
- Mitigating risks and disputes through a collaborative working approach and early warnings;
- Working together to reach mutual decisions between both Parties;
- Creating a positive culture of teamwork focused on providing excellent customer satisfaction;
- Being transparent in its commercial transactions through adopting Open Book Cost Management.

4 Culture

- 4.1 Developing a collaborative ethos and an integrated team is not merely the establishment of processes and procedures, but requires a mutual respect between Stakeholders (Borough, Supplier, Supply Chain and local communities), and a willingness to trust and learn. To take advantage of the opportunities offered by collaborative working the Borough intends to develop a culture in which the prejudices arising from the previous use of adversarial contracts are eliminated.
- 4.2 The Borough encourages the Supplier to work towards the principles of ISO44001 in working together and building trust and value.
- 4.3 The Borough fully understands that for the Contract to be successful, the culture adopted by all Stakeholders will need to converge towards common goals and recognises that this convergence will take time to develop. This Contract will require all Stakeholders to develop a relationship which is:
- Proactive rather than reactive;
 - Open and transparent;
 - Respectful of differences;
 - Supportive;
 - Striving for continuous improvement and;
 - Delivers continual improvement and efficiency.
- 4.4 The Borough believes that everyone must work towards a fully integrated delivery team to achieve continuous improvement.
- 4.5 Such a partnership will need to grow quickly and develop over-time but the principle is that all Stakeholders will approach this with a spirit of openness and trust such that each keeps the other fully informed of developments (both good and bad) at all times. Such openness is to apply in all areas of operation, management and accounting, with problems identified at an early stage.
- 4.6 The priority for all Stakeholders will be to secure best value for money and to strive for improvement in Service delivery at every opportunity whilst recognising that all parties should benefit (financially or otherwise) from such improvements and developments.
- 4.7 Prime Ideals are:
- all Stakeholders will act in a spirit of openness and trust;
 - all Stakeholders will act to secure best value for money and continuous improvement are continually demonstrated;
 - no one party will have a monopoly on best practice, initiative, or solution;
 - objectives are shared with long term commitment from all Stakeholders by establishing an effective joint management and decision making structure;

- joint working and transparency between Stakeholders and their Supply Chain;
- trading opportunities are developed and funding stream opportunities are maximised;
- investment in mutual staff training and development programmes;
- meaningful engagement with all stakeholders, the local community, and wider Borough teams;
- achievement of national and local performance indicators;
- innovate and implement change quickly and effectively; and;
- all Stakeholders will, so far as possible, avoid conflicts or disagreements and, should they arise, will resolve them promptly together.

4.8 The Borough, Supplier and key Supply Chain will jointly develop and complete the quarterly cultural framework questionnaire (See Schedule 6 – KPI Framework) that assesses the degree of collaboration and trust that exists within the integrated team. A jointly agreed action plan will be developed and implemented to address any improvement opportunities highlighted by the survey to ensure continuous improvement.

5 Safety And Wellbeing

- 5.1 The Borough is keen that this Contract is accident and incident free. This includes a focus on minimising lost time working whether physical or mental and hence expects a full health and wellbeing approach to be adopted by the Supplier. The Supplier shall provide the Borough with details of any serious accident or harm to any person employed by or contracted to him on the Affected Property as soon as possible after an accident occurs.
- 5.2 The Supplier will provide relevant statutory H&S and wellbeing reports to the Borough which will detail any notifiable incident that occur; and looks to establish a regular cycle of nr-miss reporting that together the Borough and Supplier can review and discuss.

6 Supply Chain Relationships

- 6.1 The Supply Chain consists of those key-Suppliers and sub-Contractors who will play an important part in enabling the Supplier to deliver the objectives of the Borough. The management of the Supply Chain is therefore a critical part of a strategy to reduce costs and improve quality. It is especially important that the Supply Chain:
- is committed to safety;
 - never jeopardises or compromises quality;
 - makes a fair and predictable profit;
 - is engaged on 'back to back' terms;
 - is paid in accordance with the UK Prompt Payment Code;
 - adopts Open Book Cost Management for key sub-Contractor.
- 6.2 The Borough is committed to supporting the local Supply Chain and will jointly review with the Supplier the annual throughput, as a percentage of total Services, carried out by local Suppliers and providers. The joint review will draw out proposals to increase that percentage. The Borough is expecting an upward trend in the use of the RBWM Supply Chain over the duration of this Contract. The Borough expects the Supplier to provide a reporting approach that aligns to National TOM's and be easily reviewed, with readily accessible information, around items such as SME spend, employment, skills, training etc.

- 6.3 The Supplier is expected to identify and form collaborative relationships with those key Suppliers in their Supply Chain. Underpinning this requirement is the belief that longer-term relationships with the Supply Chain can improve the overall Service through:
- the establishment of better and more collaborative ways of working;
 - early and constant involvement in the planning of the work;
 - optimal selection and specification of equipment and materials;
 - ensuring the Supply Chain is fully involved in the development of cost calculations and the associated management of risk.

7 Social Value

- 7.1 The Supplier will be expected to embrace sustainable development and community benefit through the life of the Contract. The Supplier will work with the Borough, to deliver employment and training opportunities plus other community benefits. The Supplier is required to take all reasonable steps to engage Local Supply Chain partners, SMEs and sub-Contractors. The Supplier will always deliver the requirements against those outlined in the Borough's "**Corporate Plan (2021-2026)**" and any subsequent updates; and the Borough's "**Economic Development Strategy (2016-onwards)**" and delivers its commitments contained in its Minimum Service Delivery Schedule commitments.
- 7.2 The main objective of the Corporate Plan reflects the Borough's definition of Social Value, and are as follows:
- Thriving Communities: where families and individuals are empowered to achieve their ambitions and fulfil their potential.
 - Inspiring Places: supporting the Borough's future prosperity and sustainability.
 - A Council trusted to deliver its promises.

With Economic drivers as follows:

- promote employment and economic sustainability – tackle unemployment and facilitate the development of skills;
 - raise the living standards of residents – working towards living wage, maximise employee access to entitlements such as childcare and encourage Suppliers to source labour from within RBWM;
 - promote participation and citizen engagement – encourage resident participation and promote active citizenship;
 - build the capacity and sustainability of the voluntary and community sector – practical support for local voluntary and community groups;
 - promote equity and fairness – target effort towards those in the greatest need or facing disadvantage and tackle deprivation across the Borough;
 - promote environmental sustainability – reduce wastage, limit energy consumption and procure materials from sustainable source.
- 7.3 The Supplier is required to report the expenditure of the Services generated within 12.5 miles beyond the boundary of the Borough in compliance with the performance model. The reporting remains at the discretion of the Supplier, but it is recommended that the Social Value Portal could be considered as a means of easily capturing and reporting information. Additionally, the Supplier is required to complete the Minimum Service Delivery Commitments – Social Value table contained within the Contract which will outline commitments over the lifetime of the Contract.

- 7.4 The Supplier is to ensure that the terms and conditions used to engage sub-Contractors are no less favourable than those of this contract. The Service Manager may not accept subcontract conditions proposed by the Supplier if they are unduly disadvantageous to the Supplier. The Borough expects that in accordance with its social value requirements, that Suppliers will have payment terms of not less than 28days with Supply Chain partners.
- 7.5 The Supplier is required to take all reasonable steps to employ apprentices and report the number of apprentices to the Borough, in accordance with the Performance model. The progress of the apprentices is to be reported in the governance meetings. Additionally, the Supplier is directed towards other national initiatives being developed by Government departments in-terms of skills academies, training and development opportunities.
- 7.6 The Supplier will work with the Borough to encourage community wealth building and growth across RBWM by:
- Advertising and offering jobs to individuals in the local area;
 - Sub-contracting or employing businesses within the community;
 - Providing support in other regeneration projects within the community;
 - Supporting any of the apprenticeships via any direct apprenticeship scheme or colleges locally;
 - Supporting skilled development locally;
 - Supporting educational attainment levels within the areas of operation and supporting any volunteer schemes;
 - Supporting gender equality and workplace diversity.
- 7.7 The Supplier will report on other training and skills development being undertaken by employees in relation to this contract, including:
- Work experience placements for 16 to 18year olds;
 - Work experience and work trial placements for other ages;
 - Student sandwich or gap year placements;
 - Graduate placements;
 - Vocational training;
 - Basic skills training; and
 - On-site training provision and facilities.
- 7.8 The Borough encourages the Supplier and Supply Chain to adopt the principles of the Armed Forces Covenant – in employing ex-Servicemen/women into fulltime employment; and ‘The 5% Club’ which is focused on creating momentum behind the recruitment of apprentices, and graduates into the workforce.

8 Environment And Sustainability

- 8.1 The Borough reinforced its commitment to sustainability within its Corporate Plan, which describes its commitments and ambition through to 2026. In a spirit of partnership and collaboration, the Borough expects the Supplier to help achieve those commitments through its approach to delivery in the contract.
- 8.2 If the Supplier operates an ISO 14001: 2015 certified system the Borough would expect to see how the Services delivered through this Contract are directly supported by the Supplier’s Environmental Management System.

- 8.3 The Borough requires the Supplier and Supply Chain to comply with the reporting requirements as laid-out in the Performance Management Framework and the Contract Conditions.

9 Contract Governance

- 9.1 The Highways Contract will operate in accordance with the principles set out in Schedule 2 – Highway Service Requirements.
- 9.2 Nothing in the governance arrangements provided in this Schedule or their operation, shall be construed as prejudicing or varying either Party's obligations and/or rights under this Contract (unless agreed by the Parties in accordance with the Change Control Procedure).
- 9.3 Subject to the extent this constitutes part of the Supplier's obligations under this contract, there shall be no charge levied by the Supplier (including its Sub-Contractors) for attendance and/or participation in the governance arrangements described.
- 9.4 The Parties shall hold the meetings specified in the Contract and in respect of those meetings shall ensure they are fully attended by appropriate, empowered individuals. Information shall be circulated in-advance and timely as agreed between the Stakeholders. From time to time the Parties may agree to expand attendance at meetings where it adds value – ie bringing technical experts along, or subject matter experts.
- 9.5 The Parties shall endeavour to operate in full transparency including reporting immediate issues no later than 24hrs, which include:
- i) Health and Safety incidents
 - ii) Delays, or potential delays
 - iii) Payment Disputes
 - iv) Performance Issues
 - v) Staffing Issues
 - vi) 3rd party damage or incident

10 Performance Management Framework

- 10.1 The Parties shall measure delivery performance to evidence and demonstrate that the Objectives of the Contract are being achieved. At the commencement of the contract, and as required thereafter, the Supplier will appoint a nominated individual who will be accountable for collating performance data and reporting at the agreed intervals. The Borough is keen to incentivise the Supplier to maintain performance throughout the Contract but also compelled to introduce penalties when performance drops below standard. This is driven by the Borough requirements to deliver excellent services to its communities and to mitigate the impact of poor performance on the Borough if this is not achieved.
- 10.2 The table of Key Performance Indicators is provided in Schedule 6 – KPI Framework and sets out the 5 Strategic Performance Indicators that the Borough deems to be the most important in terms of helping to monitor the achievement of excellent delivery performance. These are:
- 1. Service
 - 2. Asset Management
 - 3. Customer and Social Value

4. Financial Assurance
5. Sustainability and Wellbeing

10.3 The Performance Table and the KPI Score Cards contained in Schedule 6 - KPI Framework, describe items of measurement and the frequency of measurement, relevance to incentivisation/ penalty and the target performance. These measures will be agreed during mobilisation and will remain unchanged unless otherwise agreed by the Quarterly Management Board, in accordance with the contract provisions.

11 Continuous Improvement and Innovation

11.1 Continuous improvement places an obligation on the Parties and the Supply Chain to achieve more efficient ways of working together to deliver improvement when Providing the Services. It also encourages the ideals of “right first time”.

11.2 Performance management is used to assess continuous improvement by setting realistic and achievable targets and measuring actual performance against those targets and the Borough will be looking for evidence of continuous improvement throughout the contract period.

11.3 The Supplier is required to develop number of Management and Operational Plans in conjunction with the Borough as part of its mobilisation approach. These plans will be updated and reviewed annually at the Quarterly Management Board meetings.

12 Value For Money

12.1 Value for money is the cashable gains from efficiencies that result if the Service is provided to the same level of quality for a reduced cost whilst continuing to meet the Objectives. Examples of value for money include changes that reduce waste, improve the quality of the service, or reduce the cost of providing the Service. The Supplier will keep a savings report (cashable and non-cashable) in a form acceptable to the Borough. This could also be included within the Annual Plan, if agreed.

12.2 The Parties agree to work together to keep within the Service Budget for each Financial Year, and optimise expenditure on planned revenue or cyclical maintenance, to reduce any requirements for emergency or responsive maintenance.

12.3 The Parties will agree a methodology during the Mobilisation to be used that can demonstrate customer satisfaction, quality of the Service and value for money.

12.4 The basic principles of Cost, Quality, Customers (CQC) should help identify examples of efficient practice that help to evaluate the impact of adopting alternate practices and processes. Importantly any analysis should recognise the interplay between the Cost of work done, the Quality of the work and the Customer perception of the public realm services delivered.

13 Collaborative Planning

13.1 The Borough is keen to adopt Collaborative planning on the Contract to ensure that the delivery is on time and within budget. It will include but not be limited to the following activities:

- Initial planning with all Stakeholders;

- Weekly schedules produced on a rolling basis covering the 'actual to programmed' for the previous week, the week ahead, and the forecast for the second week ahead. Identification of the reasons for failure to achieve are to be logged;
- The Supplier, Borough and the Service Manager will collaborate in a proactive way to reduce or minimise unexpected changes, or poor performance; and
- Visual Management is to be deployed using, for example, weekly achievement dashboards.
- Regular attendance and information sharing at Borough wide coordination meetings with wider service delivery team as required.

14 Customer Care and Stakeholder Management

- 14.1 The Borough is committed to achieving good customer satisfaction during the delivery phase for any project. Customer satisfaction for residents and businesses where Services are carried out will be measured through the Performance Framework, with the details of measurement agreed during the Mobilisation period. The Supplier will be expected to work willingly and proactively with the Borough and its Customer Contact Centre, to manage and improve standards in this area of Service delivery.

15 Interaction with Local ICT Systems

- 15.1 The Borough and the Supplier will work together, in a spirit of partnership, to agree and implement a comprehensive "e-reporting" regime. The Monthly Cost Reports, Programme, Performance Data and Planning information will be in a format agreed between the Parties suitable for ease of access to the data. The reporting intervals are expected to be monthly, quarterly, and annual – subject to the information required at each interval described in the Schedule 2 – Service Requirements
- 15.2 The Supplier will maintain a central SharePoint / Office 365 or similar system that will enable access by all Borough Representatives simultaneously, and with multiple users. The Supplier will establish access protocols and will maintain and manage such systems, as agreed by the Borough. Additionally, the Supplier will make available tele and web conferencing facilities specific for the Contract.
- 15.3 The Supplier shall become familiar with, and work with each Borough ICT systems and Suppliers in terms of WAN and Service layer provision; to ensure seamless interfacing during network connections, testing and commissioning.

16 Risk Management Procedures

- 16.1 Sharing risk underpins the whole process of collaboration for mutual benefit and will be defined with the Supplier. The Supplier must recognise that passing all risk to the Supply Chain often does not lead to the best delivery.
- 16.2 The Supplier is responsible for carrying out an initial risk assessment to identify:
- Potential risks relating to the performance or delivery of the Service or Scheme the occurrence of which are capable of adversely affecting the time for completion, cost or quality of the Service;
 - The probability, impact, consequence and frequency of these risks occurring;
 - A financial estimate of the most likely consequences of each risk occurring (the "risk allowance") for Services;
 - Those risks that are within the control of, or are best managed by, the Stakeholders (the risk owner); and

RBWM Highway Services Contract 2024
Highway Maintenance and Capital Works Contract



- The amounts (if any) both in time and money of the identified risks for which the Supplier will be responsible and which are included in the Supplier's price for the Services.

The results of this risk assessment will be set out and managed in the Contract Risk Register.



ROYAL BOROUGH OF
**WINDSOR &
MAIDENHEAD**
WWW.RBWM.GOV.UK

Royal Borough of Windsor and Maidenhead
Highway Services Contract

Lot 1 Highway Maintenance
and Capital Works Contract

Schedule 6
KPI Framework Guidance



Contents

Document Control Sheet**Error! Bookmark not defined.**

1 General Approach 3

2 Performance Model Operation..... 4

3 Setting Targets 5

4 Remedy and Achievement 6

5 Employers Contract Benefit Fund (CBF) 7

6 Performance Measurement 8

7 Service Credits for KPI’s..... 8

1 General Approach

- 1.1 The Royal Borough of Windsor and Maidenhead (RBWM) is looking to demonstrate efficient provision of all the services under its Highway Services Contracts and is seeking continuous improvement in service planning, delivery and whole life considerations. RBWM would also like to demonstrate that the contract is a key contributor to its social and economic value objectives, its environment commitments and supports the local economy. The Contract will also ensure that performance is efficient and effective, delivering improvements to the existing highway asset. These are all considered as important components of best value. The Supplier is required to ensure that the outputs from any actions and the proposed overall approach over time will achieve these objectives.
- 1.2 To support this, RBWM will operate a Performance Management framework within the Highways Services Contract Lots, which defines how performance and continuous improvement will be implemented, measured and delivered over the period of the Contract against the agreed Specification for Service Activity. The principle of the framework is a tiered approach that will enable the overall performance against the specification to be assessed using Strategic Performance Indicators (SPIs), with Key Performance Indicators (KPIs) to measure the effectiveness of day-to-day operational delivery. A series of Performance Indicators (PIs) will also measure the overall wellbeing of the Contract, Partnership and Collaboration.
- 1.3 A series of KPIs will contribute to the overall measure and success of an SPI. KPIs will be measured and reported monthly and SPIs will be measured and reported quarterly and reconciled annually to provide an overall annual performance score for the Supplier. SPIs will be weighted in consideration to the overall contract performance as detailed in the table below and will be used to determine if any extension period should be granted.
- 1.4 A set of measures and indicators are provided in the KPI Framework document, which will be further developed with the Supplier during mobilisation – in terms of data, measurement and principles. The KPIs will be subject to benchmarking and validation during the first 6 months of the Contract from commencement, followed by embedment and then measured contractually from Year two (2) onwards. RBWM will monitor the effectiveness of the performance management framework and all SPIs and KPIs will be considered for their suitability on an annual basis. This will be a key responsibility of the Partnership Board, and will reflect future year workload and budgets, as well as delivering continual improvement, innovation and Contract efficiencies.
- 1.5 The optional extensions for the Contract will be influenced by the extent to which the Supplier can demonstrate improvement and value in service delivery. The Contract Term is proposed as an initial seven (7) years, with a potential to award an optional additional four (4) years; and then a further three (3) years on the basis that performance is high and is expected to exceed expectations.
- 1.6 The performance measures are designed to facilitate continual improvement and are set against industry comparatives, such that results can be compared with other organisations and similar contracts that both RBWM and the Supplier may be involved in delivering. This will support the annual review of indicators and their

appropriateness at any stage. The Supplier will produce a benchmarking report on such comparisons at the end of Year two (2), Year four (4) and Year six (6).

1.7 The Strategic Partnership Board will agree if any changes are to be made to the annual targets for each of the performance measures, during the annual review. A set of targets is provided to the Supplier, which are achievable and realistic, but will be validated during the first 6 months of the Contract from commencement. For the second and subsequent years of the Contract, these targets will be set before the 1st March of each year for each of the following fiscal years (1st April to 31st March). The Contract will operate annually, aligned to the Borough's financial years and the Initial Term available will complete on the 31st March 2031. The Supplier will monitor these targets, and report on the results, at agreed intervals. RBWM will also play its part in supporting the effective monitoring of the agreed performance measures.

1.8 RBWMs Highway Services Manager will chair the Strategic Partnership Board, and the Supplier's Contract Director and Contract Manager, accompanied by other relevant personnel will attend. The Supplier's costs in preparing for and participating in this quarterly meeting will be expected to be covered in the overhead charges.

2 Performance Model Operation

2.1 The following SPIs and KPIs will apply for the Contract:

Strategic Performance Indicators

ref	Area	Outcomes	No of KPI's Measured	Weighting
SPI 1	Service	Delivery focused, Predictability, Process, Reduced Risk, Culture and Relationship	7	30%
SPI 2	Asset Management	Reliability, Accuracy, Responsiveness, Efficiency, Timeliness and Forward planning	2	30%
SPI 3	Customer and Social Value	Innovation, Engagement, Local Enterprise, Reduced complaints, Increased compliments	4	20%
SPI 4	Financial Assurance	Cost Management, Efficiency Savings, Investment approach, Cost Predictability	3	10%
SPI 5	Sustainability and Wellbeing	Compliance and Checks, Accident prevention, Nr miss reporting, training and Inspections, Sustainability,	3	10%

2.2 The SPIs and KPIs will play a key role in the on-going monitoring of the Contract by both parties. The objective is to drive sustained annual continual improvement in the delivery of the Contract and to always achieve at least the minimum service standard.

2.3 RBWM wishes to encourage, support and reward performance achievement including recovery of any underperformance in the early stages of the Contract.

This will be agreed through a series of reviews and using a monthly “Service Credit” approach. These monthly Service Credits will be used to “gain-back” any underperformance in year. A Service Credit can only be used and redeemed in the following month that it is secured. i.e. Over-performance in month two (2) = one (1) Service Credit. Underperformance in month three (3) = offset by using the month two (2) Service Credit. Service Credits cannot be banked for future months. i.e. they drop away after the following month period. The Service Credits are not a remedy to prevent intermediary performance improvements being put in place to improve monthly service performance.

- 2.4 Where three (3) or more Service Credits are used in any one (1) Contract year an Early Warning will be issued as described in Section 5.
- 2.5 RBWM will aim to recognise exceptional and over-performance in a number of ways. The contract will be reviewed at the end of year five (5) when the Suppliers performance will be assessed in view of the optional extension period.
- 2.6 If performance has been exceeded (not just achieved) within the initial contract term, RBWM may at its discretion consider awarding the additional four (4) year extension at the end of year seven (7). This review will take place at the end of year five (5). Any extension will also be subject to ongoing satisfactory performance in the remaining original Initial Term. A further review will be undertaken at the end of Year ten (10) of the Contract to consider the further three (3) year extension to the full contract term of 14 years.
- 2.7 RBWM will require that the Supplier establishes a robust performance monitoring regime against which performance can be measured accurately and concisely without contention, and one that reflects the day to day service delivery. Agreed KPI data must be readily available, presented in a business intelligence (i.e. Power BI) type dashboard format, and easy to obtain, allowing simple reporting that is accessible to all parties. The targets and measures will be reviewed jointly on an annual basis and those initially proposed by RBWM will be the basis of the Framework for Year one (1).
- 2.8 In addition to the performance framework, the Supplier has the ability to generate Gainshare in the delivery of Option C – Target Cost deliverables. This includes routine and planned works and capital project delivery from Year two (2) onwards. This is further described later in this schedule.
- 2.9 The Performance Framework aims to include contributions from RBWM, the Supplier and the supply chain, to create a barometer of health for the overall Contract performance. Client and Supplier individual achievement will be tracked in parallel. Under achievement by any one party will not adversely influence the anticipated outcomes for the other party i.e. poor Client performance will not be taken into account when considering contract extensions, or reductions.
- 2.10 The performance of both parties will also be benchmarked regularly through Monitoring Indicators; and surveys such as APSE, ADEPT and LCRIG, to ensure pro-active management of service delivery functions and identification of strengths and improvement areas, from both organisations is happening on a regular basis.
- 2.11 The list of individual KPIs that support the SPIs are included in Appendix A.

3 Setting Targets

- 3.1 A performance target has been developed for each KPI and these will be reviewed on an annual basis to ensure it is stretching and can drive continuous improvement.

These targets will be validated during mobilisation and the initial six (6) month monitoring period will start from the Contract commencement. These will be incrementally adjusted for subsequent years to maximise the potential for continuous improvement if necessary and only by agreement at the Strategic Partnership Board. Where KPI targets are regularly being outperformed by the Supplier and in the opinion of the Partnership Board will never fall below target, these will be adjusted appropriately to provide a “healthy” stretch target.

- 3.2 The SPIs will remain fixed from the start of the Contract unless the Strategic Partnership Board believe a fundamental change is required, influenced by external changes in delivery requirements, or political, or environmental changes, etc.
- 3.3 Achievement tolerances will be identified for each KPI. These will be a percentage or number under target. (i.e. if a KPI has an achievement target of 95%, the tolerance may be 5%, hence meaning that a measured score of 93% would be below target, but within tolerance). These are described in the respective KPI schedules which define the tolerances. Where a KPI is measured within tolerance but under performance, the Supplier has the ability to correct performance before the KPI is deemed to have failed. KPIs that remain under performance but within tolerance for a period of more than three (3) months will be deemed to have missed target and will have failed, hence resulting in an **Early Warning** being issued.

4 Remedy and Achievement

- 4.1 When the monthly monitoring reveals that one or more KPI has not been achieved the Supplier shall prepare proposals for remedying the position and agree an action plan with RBWM. If subsequent monitoring over the following **three (3) month period** shows that the targets for one or more KPIs are still not being met, then the Supplier will be required to provide a summary report on the reasons and whether any further action can be taken to improve performance.
- 4.2 In the event that performance does not improve against KPI targets measured in any **three (3) month period**, RBWM will issue an **Early Warning (EW)** to the Supplier under the contract. This will require the Supplier to set-out a clear **Remedial Plan (RP)** to bring performance back in-line. Where performance continues to be low and the same KPI target is missed again in any month one (1) for a subsequent period of three (3) months, then RBWM will issue a **Performance Improvement Notice (PIN)** to the Supplier instructing the changes that are necessary to bring performance back to standard. The Supplier will make immediate changes and will also provide a **Service Improvement Plan (SIP)** to RBWM for approval. Performance in this instance will be deemed a failure for the whole year, when performance is assessed annually against the overall Framework.
- 4.3 Where a PIN is issued, RBWM will retain **5%** of any costs due payable to the Supplier in that assessment period (monthly), and this retention will be applied ongoing monthly, until such a point when performance is back to the expected level. **Retention** will be released back to the Supplier in the next monthly application for payment after the month when performance has improved. RBWM will also deduct any costs it may have incurred in rectifying the non-performance – such as 3rd party intervention, additional staff time, or general rectification costs.
- 4.4 Where RBWM have itself incurred costs (that are able to be substantiated) to rectify any failure of the Supplier in not delivering any KPI to the required level of performance, these costs will be deducted from the Retention released back to the

Supplier. The Supplier will be notified of any costs likely to be incurred in the Early Warning.

- 4.5 Low Performance damages under the Contract will apply to any service area if continued failure of KPIs associated with that service area is measured after a six (6) month period of failed performance. The level of low performance damages will be a percentage of the overall service charge for any one (1) year of operation and is designed to cover such items as reprocurring a new service in the event of catastrophic failure, bringing-in 3rd party suppliers and RBWM staff time. The details related to each service area are shown in the Contract Data under Clause X17 Low Service Damages.

5 Employers Contract Benefit Fund (CBF)

- 5.1 RBWM would like to create an incentive mechanism for the Supplier to help recognise outstanding service delivery, across both cyclical and planned works. For Year One (1) of the Contract, the annual programme of works will be delivered under an Option A – Priced Activity Schedule, where Supplier risk is built into the pricing, as described in the Pricing Information.
- 5.2 At the commencement of Year Two (2) of the Contract, RBWM may consider moving some of these services, such as cyclical and planned activities to an **Option C – Target Cost** arrangement. Under the Option C arrangement, the Supplier and RBWM will have the ability to generate gainshare. Where an activity is delivered under the agreed Target Cost and; performance is achieved at or above the agreed KPI target, then RBWM may consider releasing 100% of its gainshare entitlement for each service area, or capital project delivered.
- 5.3 Any gainshare release will be held by RBWM in a **Contract Benefit Fund (CBF)**. This Gainshare will be auditable and ringfenced, and can only be used for service re-design, service improvement and environmental and social benefits relating to the contract. The Strategic Board will review the value of the fund annually and propose a programme of interventions that the CBF could be used to fund. The CBF is not permitted to be used to cover any operational delivery, overheads and or margin. RBWM at times may not always be able to agree that any gainshare can contribute to the CBF, typically due to financial pressures, or corporate finance demands. In these instances the Strategic Board will discuss how any funds within the CBF are more effectively used.
- 5.4 The gainshare adjustment proposed for Option C works is shown below and incentives accuracy in the Target Cost development.

Actual performance level	Gainshare calculated for the Supplier	Gainshare calculated for the Client
Above 100%	100% (Gainshare)	0% (Painshare)
Target = 100%	0%	0%
Above 95% Target but less than 100%	100% (Gainshare)	0%
Above 90% Target but less than 95%	50%	50%

Above 85% but less than 90% Target	25%	75%
Below 85% Target	0%	100% (Gainshare)

5.5 Each month in respect to Task Orders for individual schemes delivered using the Target pricing method; and upon agreement of the final account and completion of the works; the Task Order Pain/Gain calculation will be undertaken.

5.6 The results of these monthly calculations will be grouped quarterly to aid in the end of year reconciliation calculation. Individual Pain/Gain calculations are then also made at the end of each financial quarter for cyclical service Task Orders (i.e. where there is an annual Task Order). At the end of the financial year, Gain calculations will be reconciled, and an agreed value will be determined in the CBF.

6 Performance Measurement

6.1 The Supplier will prepare and provide written or electronic reports in a form to be agreed with the Strategic Partnership Board at the start of the Contract for discussion and review at the Operational Management Board and the Strategic Partnership Board meetings. The report will be retrieved from the Supplier's and RBWMs systems, ideally without the necessity to recreate data, or manually input multiple information sources.

6.2 In addition, RBWM and the Supplier will develop a number of General Monitoring Indicators (GMIs) that cover the following overall contract performance hygiene factors, such as;

- a) Health, Safety and Wellbeing;
- b) RBWM achieving NHT indicators;
- c) Specification Improvement;
- d) Asset Improvement;
- e) Customer and Stakeholder management (enquiries);
- f) Collaborative working initiatives;
- g) Sustainability and Social Value initiatives.

6.3 The expectation is that these GMIs are not contractual measurements but will enable the parties to jointly develop and measure each other's effectiveness. This will be against several strategic areas that are considered as a good indication of the overall health check of the Contract.

7 Service Credits for KPIs

7.1 Service Credits will be gained for good performance against KPIs. Credits will be issued monthly and will remain available for the Supplier to use in any specific Contract year to offset against poor performance in any month during that year. At the start of each new Contract year all Service Credits will be annulled. KPI Service Credits will contribute to the overall SPI Service Credit.

7.2 When performance falls below the expected standard a Service Credit can be redeemed. The Supplier can request redeeming a Service Credit that has been earned, for any KPI where in month performance does not meet the minimum level (as per the KPI matrix). This will be done via the Operational Management Board.



ROYAL BOROUGH OF
**WINDSOR &
MAIDENHEAD**
WWW.RBWM.GOV.UK

Royal Borough of Windsor and Maidenhead Highway Services Contract

Highways Maintenance and Capital Works Contract

Schedule 6 - Key Performance Indicators

Key Performance Indicators (including measurement methodologies)

SPI 1 – Services

KPI 1.1		
Key Performance Indicator	Percentage gully cleansing activities delivered to agreed cyclic plan for each activity within the reporting period.	
Purpose of KPI	To ensure drainage cleansing programme is undertaken in line with approved programmes.	
Metric Description & Definition	The number of gullies cleansed (according to Specification), expressed as a percentage of the total number of gullies programmed for the year.	
KPI Measurement Type	Percentage %	
Formula	Gullies Cleaned / Total No. Programmed Gullies x 100	
Data Source	Monthly Reporting – Asset Management System (Map 16)	
Measurement Description	Reported monthly but performance target measured annually	
Reporting Frequency	Monthly but performance target measured annually	
KPI Target	Yr 1 - Target – 90% Tolerance - 85% Under Performance <85 %	Post Yr 1 – Target – 95% Tolerance - 90% Under Performance <90%
Definition of KPI Event Failure	A KPI Event Failure will occur for each instance where: - The Contractor did not carry out the Planned Activity within the timescales. - The Contractor did not carry out the Planned Activity in accordance with the Specification. - Failure to notify Client of delays or obstruction. - Insufficient record of activity. Identified through either: - - Customer enquiry or complaint. - Client Inspection and Observations. - Performance against programme.	

KPI 1.2	
Key Performance Indicator	Percentage of activities completed within the Specified timescales for 2 hours reactive response.
Purpose of KPI	To ensure compliance with reactive order timeframes to plan, manage and monitor highway maintenance in line with statutory requirements in order to minimise any adverse impact on the Council staff, visitors or business interests.
Metric Description & definitions	The number of 2hr reactive response activities completed in accordance with specification, expressed as percentage of the number of activities due a 2hr reactive response in the month. Each reactive activity denoted as a Statutory Obligation under the contract.
KPI Measurement Type	Percentage
Formula	Number of 2hr reactive response activities completed in accordance with specification / Number of activities due a 2hr reactive response in the month * 100
Data Source	Monthly Reporting – Asset Management System (Confirm)
Reporting Frequency	Monthly
KPI Target	Target – 98% Tolerance – 95% Under Performance < 95%
Definition of KPI Event	Each reactive activity denoted as a Statutory Obligation under the contract.
Definition of KPI Event Failure	A KPI Event Failure will occur for each instance where: • Failure to efficiently programme works orders. • The Contractor did not carry out the Reactive Activity in accordance with the Specification; • The Contractor did not carry out the Reactive Activity within the timescales. • Failure to notify Client of delays or obstruction. Identified through either: - • Progress reports and term programme scheduling • The Contractors own investigation following a complaint; or • The Council audit or investigation following a complaint

KPI 1.3	
Key Performance Indicator	Percentage of activities completed within the specified timescales for 24 hours reactive response.
Purpose of KPI	To ensure compliance with reactive order timeframes to plan, manage and monitor highway maintenance in line with statutory requirements in order to minimise any adverse impact on the Council staff, visitors or business interests.
Metric Description & Definition	Number of 24hr reactive response activities completed in accordance with specification, expressed as a percentage of the number of activities due a 24hr reactive response in the month.
KPI Measurement Type	Percentage %
Formula	Number of 24hr reactive response activities completed in accordance with specification / Number of activities due in a month * 100
Data Source	Monthly Reporting – Asset Management System (Confirm)
Reporting Frequency	Monthly
KPI Target	Target – 98% Tolerance – 95% Under Performance < 95%
Definition of KPI Event Failure	A KPI Event Failure will occur for each instance where: • Failure to efficiently programme task orders • The contractor did not carry out the reactive activity in accordance with the specification; • The contractor did not carry out the reactive activity within the timescales. • Failure to notify Client of delays or obstruction. Identified through either: - • Progress reports and term programme scheduling • The contractors own investigation following a complaint; or • The council audit or investigation following a complaint

KPI 1.4	
Key Performance Indicator	Percentage of activities completed within the Specified timescales for 7 calendar days reactive response
Purpose of KPI	To ensure compliance with reactive order timeframes to plan, manage and monitor highway maintenance in line with statutory requirements in order to minimise any adverse impact on the Council staff, visitors or business interests.
KPI Measurement Type	Percentage
Metric Description & Definitions	The number of 7-day reactive response activities completed in accordance with specification, expressed as a percentage of the number of activities due a 7-day reactive response in the month. Each reactive activity denoted as a Statutory Obligation under the contract.
Formula	Number of 7 day reactive response activities completed / Number of activities due in a month * 100
Data Source	Monthly Reporting – Asset Management System (Confirm)
Reporting Frequency	Monthly
KPI Target	Target – 90% Tolerance – 85% Under Performance < 85%
Definition of KPI Event	Each reactive activity denoted as a Statutory Obligation under the contract.
Definition of KPI Event Failure	A KPI Event Failure will occur for each instance where: • Failure to efficiently programme Works Orders • The contractor did not carry out the reactive activity in accordance with the specification; • The contractor did not carry out the reactive activity within the timescales. • Failure to notify Client of delays or obstruction. Identified through either: - • Progress reports and term programme scheduling • The contractors own investigation following a complaint; or • The council audit or investigation following a complaint

KPI 1.5	
Key Performance Indicator	Percentage of activities completed within the Specified timescales for 28 days.
Purpose of KPI	To ensure compliance with reactive order timeframes to plan, manage and monitor highway maintenance in line with statutory requirements in order to minimise any adverse impact on the Council staff, visitors or business interests.
Metric Description & Definitions	The number of 28-day reactive response activities completed in accordance with specification, expressed as a percentage of the number of activities due a 28-day response in the month. Each reactive activity denoted as a Statutory Obligation under the contract.
KPI Measurement Type	Percentage %
Data Source	Monthly Reporting – Asset Management System (Confirm)
Reporting Frequency	Monthly
Formula	Number of 28 day response activities completed in accordance with specification / Number of activities due in a month * 100
KPI Target	Performance Level 1 Target – 90% Tolerance – 85% Under Performance < 85%
Definition of KPI Event Failure	A KPI Event Failure will occur for each instance where: • Failure to efficiently programme task orders • The contractor did not carry out the reactive activity in accordance with the Specification; • The contractor did not carry out the reactive activity within the timescales. • Failure to notify client of delays or obstruction. Identified through either: - • Progress reports and term programme scheduling • The contractors own investigation following a complaint; or • The Council audit or investigation following a complaint

KPI 1.6	
Key Performance Indicator	Percentage of precautionary salting treatments started and completed within time as instructed within the reporting period
Purpose of KPI	To allow the client to assess whether the winter service activities are being delivered within the timeframe instructed.
Metric description & definitions	The number of precautionary salting treatments started and completed within instructed timeframe, expressed as a percentage of the number of precautionary salting treatments identified as required and due in the month.
KPI Measurement Type	Percentage %
Data Source	Meteor Group (Weather Forecaster) Reports and GPS information.
Reporting Frequency	Monthly review during the agreed winter period
Formula	Number of precautionary salting treatments started and completed within instructed timeframe. / Number of precautionary salting treatments identified as required and due in the month. x100
KPI Target	Target – 98% Tolerance – 93% Under Performance < 93%
Definition of KPI Event Failure	A KPI Event Failure will occur for each instance: Where: - - The Contractor did not complete the treatment activity to within the timeframes specified in the winter service policy. - The Contractor did not complete the activity. - Treatment undertaken late as a result of poor decision making. Identified through either: - - The Contractors own self-monitoring & audit as part of the Quality Management Plan; - Seasonal review (Monthly and Seasonal)

KPI 1.7		
Key Performance Indicator	Accident Frequency Rate (AFR)	
Purpose of KPI	To ensure that the Contractor is measuring and monitoring key health and safety markers as part of the contract in order to ensure that all stakeholders are safe.	
Metric Description & Definitions	The number of reportable accidents per 100,000 person hours worked. Definitions: Reportable accidents are those as defined in RIDDOR regulations prepared by the Health and Safety Executive (HSE).	
KPI Measurement Type	No. of accidents reported	
Formula	As per HSE RIDDOR Injury Frequency Rates guidance note.	
Data Source	Health and Safety records	
Reporting Frequency	Reported monthly but measured annually	
KPI Target	Yr 1 - Target – <0.5	Post Yr 1- Target - <0.1
Definition of KPI Event Failure	A KPI Event Failure will occur when the AFR meets or exceeds those expectations set out within the KPI target. Identified through either: - • The Contractors own self-monitoring & audit as part of the Quality Management Plan; • The Contractor or Client requesting to see these records as part of an investigation. • Poor records or insufficient RIDDOR details. • RIDDOR events over the tolerance or allowance.	

SPI 2 – Asset Management

KPI 2.1	
Key Performance Indicator	Percentage of capital programme including surfacing schemes delivered annually in accordance with the agreed capital programme
Purpose of KPI	To review project and programme delivery performance.
Metric description & definitions	The number of capital schemes (including surfacing schemes) delivered annually, expressed as a percentage of the total number of agreed capital schemes to be delivered in the year measured at the point when the initial capital programme is signed off.
KPI Measurement Type	Percentage %
Formula	Total number of projects delivered / Total number of projects on the programme x100
Data Source	Monthly and weekly Capital Programme reporting and whereabouts programmes.
Reporting Frequency	Reported Monthly, but performance is measured Annually
KPI Target	Target – 90% Tolerance – 85% Under Performance < 85%
Definition of KPI Event Failure	A KPI Event Failure will occur for each instance: Where: - • The Contractor did not complete the programmed activity to within the pre-defined budget. • The Contractor did not complete the programmed activity to within the pre-defined timescale. • The Contractor completed the activity within budget but not to the defined scope/quality required. • The Contractor completed the activity within the timescale but not to the defined scope/quality required. • The Contractor did not complete the programmed activity. • The Contractor did not notify the Client regarding programme delays or changes. Mitigation factors due to 3rd party works and Streetworks permitting. Identified through either: - • The Contractors own self-monitoring & audit as part of the Quality Management Plan; • The Contractors own investigation of budget vs. Actual. • The Contractors own investigation on delivering to defined timescales. • The Clients audit or investigation a review of budget vs. Actual. The Clients own investigation into delivering to defined timescales.

KPI 2.2	
Key Performance Indicator	Percentage of projects compliant with agreed standards for roads and footways.
Purpose of KPI	To allow the client to assess whether the work undertaken is completed to the specified standards detailed in the project design or service specification.
Metric description & definitions	The number of projects found to be compliant with agreed standards for roads and footways, expressed as a percentage of the number of tested projects.
KPI Measurement Type	Percentage %
Data Source	Core sample reporting
Reporting Frequency	Reported monthly but measured annually against target
Formula	Number of compliant projects / Number of tested projects *100
KPI Target	Target – 100%
Definition of KPI Event Failure	A KPI Event Failure will occur for each instance: Where: - - the Contractor did not complete the work to the required standard on review of core samples. - Poor material quality. - Material or works not in line with Standards for Highways and Service Specification. Identified through either: - - the Contractors own self-monitoring & audit as part of the Quality Management Plan; - Core Sample review. - the Contractors

SPI 3 Customer and Social Value

KPI 3.1	
Key Performance Indicator	Percentage of response to drainage customer enquiries and RBWM information requests relating to reactive maintenance activity within 10 working days (non-emergencies)
Purpose of KPI	To ensure that the Contractor is managing communication to stakeholders within the community effectively, to ensure that the public of RBWM is satisfied with the works being carried out on behalf of the client and upkeep a positive reputation.
Metric description & definitions	The number of drainage-related customer enquiries and RBWM information requests relating to reactive maintenance activity and responded to within 10 working days, expressed as a percentage of the number of drainage customer enquiries and RBWM information requests relating to reactive maintenance activity raised and due a response in the quarter.
KPI Measurement Type	Percentage %
Data Source	Asset Management System / DRUPEL
Reporting Frequency	Quarterly
Formula	Number of responses to drainage customer enquiries and RBWM information requests relating to reactive maintenance activity responded to within 10 working days / Number of drainage customer enquiries and RBWM information requests relating to reactive maintenance activity raised and due a response in the quarter *100
KPI Target	Target – 90% Tolerance – 85% Under Performance < 85%
Definition of KPI Event	Customer service enquiry response
Definition of KPI Event Failure	A KPI Event Failure will occur for each instance where: • The contractor does not resolve the enquiry. • The contractor resolves the enquiry outside of the desired timescale. • The contractor resolve the enquiry but it is not right first time. • The contractor does not respond to the enquiry within timescales. Identified through either: - • The contractors own self-monitoring & audit as part of the quality management plan; • The contractors own investigation and client audit following a complaint; or • The council audit or investigation following an enquiry.

KPI 3.2	
Key Performance Indicator	Percentage of responses to RBWM information requests relating to 3rd party claims and FOI requests responded to correctly within 10 working days or other agreed timelines.
Purpose of KPI	To monitor the customer service enquiry response, ensuring that key information is communicated and available in a timely manner to allow RBWM to process any claims or FOI requests.
Metric description & definitions	The number of responses to RBWM information requests relating to 3rd party claims and FOI requests responded to correctly within 10 working days or other agreed timelines, expressed as a percentage of the number of Information requests related to 3rd party information and FOI requests made. Definitions: 3rd party claims = [insert] FOI requests = Freedom of Information Requests
KPI Measurement Type	Percentage %
Data Source	Asset Management System / CRM System
Reporting Frequency	Quarterly
Formula	$\frac{\text{Number of responses to RBWM information requests relating to 3rd party claims and FOI requests responded to correctly within x working days in the quarter}}{\text{Number of requests Information requests related to 3rd party information and FOI requests made in the quarter}} \times 100$
KPI Target	Target – 90% Tolerance – 85% Under Performance < 85%
Definition of KPI Event Failure	A KPI Event Failure will occur for each instance where: • The Contractor does not provide the information. • The Contractor resolves the request outside of the desired timescale. • The Contractor resolves the complaint but it is not right first time. • The Contractor does not respond to the enquiry within timescales. Identified through either: - • The Contractors own self-monitoring & audit as part of the Quality Management Plan; • The Contractors own investigation and Client Audit following a complaint; or • The Council audit or investigation following a complaint.

KPI 3.3	
Key Performance Indicator	No of Apprenticeships achieved per annum.
Purpose of KPI	To ensure that the Client and Contractor are delivering added value within the RBWM communities and reducing barriers to employment for the residents of RBWM.
Metric description & definitions	The number of apprenticeships achieved per annum. Any employment, apprenticeship or otherwise, which is sourced from within RBWM. 'Apprenticeships achieved' = the number of apprenticeships
KPI Measurement Type	Number
Data Source	Annual Review
Reporting Frequency	Annual
KPI Target	Meets or Exceeds Contract Expectations as set out in the tender response.
Definition of KPI Event Failure	A KPI Event Failure will occur when the apprenticeship undertaken within 1 year to not meet the minimum requirement set out within the KPI Target. Identified through annual review of the Contractors employment records for within the RBWM area.

KPI 3.4	
Key Performance Indicator	Percentage of spend on local supply chain
Purpose of KPI	To ensure that the Client and Contractor are delivering economic value by supporting the local economy in terms of both contract expenditure and employment.
Metric description & definitions	The value of local SME supply chain, expressed as a percentage of the overall value of the contract's turnover(?) SME = small to medium-sized enterprise – within 25 km radius of borough boundary.
KPI Measurement Type	Percentage based on tender evaluation and turnover reports.
Data Source	Annual Open Book Cost Management.
Reporting Frequency	Monthly reporting – Annual measure.
Formula	$\frac{\text{Value of spend with local SME supply chain}}{\text{Overall contract turnover}} \times 100$
KPI Target	Min 85% of the Total Contract Value
Definition of KPI Event	The percentage of key suppliers who are SME and local providers.
Definition of KPI Event Failure	A KPI Event Failure will occur when the value of the local supply chain as part of the contract does not meet the minimum requirement set out within the KPI Target. Identified through annual review of the Contractors Key Supplier Matrix.

SPI 4 Financial Assurance

KPI 4.1	
Key Performance Indicator	Percentage of works orders where the Final Account is submitted within 4 weeks after issue of Completion Certificate of works.
Purpose of KPI	To ensure that the Contractor is practicing effective management of costs to improve efficiency and value for money.
Metric description & definitions	The number of works orders with a final account submitted within 4 weeks after a completion certificate of works, expressed as a percentage of the number of Works Orders where the 4-week period post-completion ends in the month
KPI Measurement Type	Percentage %
Data Source	Confirm
Reporting Frequency	Monthly
Formula	Number of works orders with a final account submitted within 4 weeks after a completion certificate of works / number of works orders where the 4-week period post-completion ends in the month x 100
KPI Target	Target – 98% Tolerance – 93% Under Performance < 93%
Definition of KPI Event	Any event where a final account is required following completion of works.
Definition of KPI Event Failure	A KPI Event Failure will occur when final account for works complete by the Contractor is not submitted to the Client within 4 weeks.

KPI 4.2	
Key Performance Indicator	Percentage of failed accounts
Purpose of KPI	To ensure that the Contractor is accurately reporting on financial accounts which relate to the contract.
KPI Measurement Type	Percentage %
Metric Description & Definitions	The number of accounts identified as failed, expressed as a percentage of the number of accounts reviewed as part of an Open Book Audit of Accounts in any one year. Definitions: Failed = the account contains more than 2 anomalies and or errors
Data Source	Open Book Account
Reporting Frequency	Annual
Formula	$\frac{\text{Number of failed accounts}}{\text{Number of accounts reviewed.}} \times 100$
KPI Target	Less than 5% of accounts reviewed include anomalies and errors.
Definition of KPI Event Failure	A KPI Event Failure will occur when the volume of anomalies / errors identified within the accounts does not meet or exceed those expectations set out with the KPI target. Identified through either: - • The Contractors own self-monitoring & audit as part of the Quality Management Plan; • The Clients Open Book Audit or investigation into the Contractors Accounts

KPI 4.3	
Key Performance Indicator	Number of Fixed Penalty Notices received for non-compliance
Purpose of KPI	To ensure contractor compliance with New Roads and Streetworks Act regulations and efficient programme planning.
Metric description & definitions	The number of Fixed Penalty Notices received by the supplier for non-compliance with Streetworks requirements.
KPI Measurement Type	Number
Data Source	Asset Management System and Street works Manager
Reporting Frequency	Monthly
Formula	Number of FPNs received by supplier
KPI Target	Does not exceed 0.
Definition of KPI Event Failure	A KPI Event Failure will occur when Identified through either: - • Client inspection • Incorrect permitting • Lack of relevant Client permissions or exemptions. • Expired permits.

SPI5 Sustainability and Wellbeing

KPI 5.1	
Key Performance Indicator	NT31 - Production of an annual Carbon Reduction Plan and delivery against the submitted Plan
Purpose of KPI	To ensure that the Contractor is measuring and monitoring key environmental markers from the impacts of the project, which will allow them to measure, monitor and produce a plan to ultimately reduce the environmental impact of works carried out.
Metric description & definitions	KPI around the existence of a Carbon Reduction Plan in line with RBWM corporate objectives, NT31, (PPN06/21) and delivery of the commitments within the Carbon Reduction Plan agreed with the Client.
KPI Measurement Type	Pass or fail
Data Source	Suppliers Carbon Reduction Plan
Reporting Frequency	Annual
Formula	Production of Carbon Reduction plan in line with RBWM corporate objectives NT31, (PPN06/21) and delivery of the commitments within the Carbon Reduction Plan agreed with the Client
KPI Target	Pass or fail
Definition of KPI Event	Carbon reduction in line with corporate objectives.
Definition of KPI Event Failure	A KPI Event Failure will occur when the Contractor does not submit an annual Carbon Reduction Plan Or Fail to meet the commitments detailed within the Carbon Reduction Plan.



KPI 5.2		
Key Performance Indicator	NT50 - Skills and Growth Innovation in relation to Carbon Reduction	
Purpose of KPI	To demonstrate social innovation to create local skills and employment.	
KPI Measurement Type	Percentage	
Data Source	Annual sustainability report	
Reporting Frequency	Annual	
Formula	tbc	
KPI Target	Yr 1 - Target – 30%	Post Yr 1 – Target – 60%
Definition of KPI Event	Any event where the Contractor produces an annual Carbon Reduction plan, detailing how they intend to reduce their environmental impacts.	
Definition of KPI Event Failure	A KPI Event Failure will occur when the Contractor does not submit an annual Carbon Reduction Plan.	

KPI 5.3		
Key Performance Indicator	NT53 - with focus on diversion of waste (reduce, reuse and recycle)	
Purpose of KPI	To demonstrate social innovation to safeguard the environment and respond to the climate emergency.	
Metric Description & Definitions	Annual progression of sustainable practices.	
KPI Measurement Type	Percentage %	
Data Source	Sustainability plan	
Reporting Frequency	Annual	
Formula	Total Tonnes of materials recycled / Total amount of material taken off-site x100	
KPI Target		
	Yr 1 - Target – 80% recycling achieved Tolerance - 5% Under Performance <75%	Post Yr 1 – Target – 95% recycling achieved Tolerance - 3% Under Performance <90%
Definition of KPI Event Failure	A KPI event failure will occur when the Contractor does not submit a Carbon Reduction Plan or Service Delivery Plan detailing the measurable proposed and achieved annual innovation and environmental benefits.	



ROYAL BOROUGH OF
**WINDSOR &
MAIDENHEAD**
WWW.RBWM.GOV.UK

Royal Borough of Windsor and Maidenhead
Highway Services Contract

Highway Maintenance and Capital Works
Contract

Schedule 6 - SPI and KPI Summary

1 Strategic Performance Indicators

ref	Area	Outcomes	No of KPI's Measured	Weighting
SPI 1	Service	Delivery focused, Predictability, Process, Reduced Risk, Culture and Relationship	7	30%
SPI 2	Asset Management	Reliability, Accuracy, Responsiveness, Efficiency, Timeliness and Forward planning	2	30%
SPI 3	Customer and Social Value	Innovation, Engagement, Local Enterprise, Reduced complaints, Increased compliments	4	20%
SPI 4	Financial Assurance	Cost Management, Efficiency Savings, Investment approach, Cost Predictability	3	10%
SPI 5	Sustainability and Wellbeing	Compliance and Checks, Accident prevention, Nr miss reporting, training and Inspections, Sustainability,	3	10%

2 Key Performance Indicators

ref	Focus	Area	KPI	Year 1 Target	Target post Yr 1
KPI 1.1	Operations	Routine Maintenance	% gully cleansing activities delivered to agreed cyclic plan for each activity within the reporting period	90%	95%
KPI 1.2	Operations	Emergency Response	% of activities completed within the Specified timescales for 2 hours reactive response	98%	98%
KPI 1.3	Operations	Reactive Maintenance	% of activities completed within the Specified timescales for 24 hours reactive response	98%	98%
KPI 1.4	Operations	Reactive Maintenance	% of activities completed within the Specified timescales for 7 days reactive response	90%	90%
KPI 1.5	Operations	Reactive Maintenance	% of activities completed within the Specified timescales for 28 days	90%	90%
KPI 1.6	Operations	Winter Maintenance	% of precautionary salting treatments started and completed within time as instructed within the reporting period	98%	98%
KPI 1.7	Operations	Safety	Accident Frequency Rate (AFR)	<0.5	<0.1
KPI 2.1	Operations	Maintenance and Projects	% of capital programme including surfacing schemes delivered annually in accordance with the agreed capital programme	90%	90%
KPI 2.2	Operations	Planned	% of core samples compliant with agreed standards for roads and footways	100%	100%

RBWM Highway Services Contract 2024
Lot 1 Highway Maintenance and Capital Works Contract



KPI 3.1	Customer	Customer	Response to drainage customer enquiries and RBWM information requests relating to reactive maintenance activity within 10 working days (non-emergencies)	90%	90%
KPI 3.2	Customer	Customer	Response to RBWM information requests relating to 3rd party claims and FOI requests within 10 working days or within agreed timelines	90%	90%
KPI 3.3	Customer	Social Value	No of Apprenticeships achieved per annum	<i>Meets or Exceeds Contract Expectations as set out in the tender response.</i>	<i>Meets or Exceeds Contract Expectations as set out in the tender response.</i>
KPI 3.4	Customer	Social Value	Percentage of spend on local supply chain.	85%	85%
KPI 4.1	Governance	Timeliness	% of works orders where the Final Account is submitted within 4 weeks after issue of Completion Certificate of works	98%	98%
KPI 4.2	Governance	Payment	% of anomalies and errors identified when undertaking an Open Book Audit of Accounts	<i>Less than 5% of accounts reviewed</i>	<i>Less than 5% of accounts reviewed</i>

RBWM Highway Services Contract 2024
Lot 1 Highway Maintenance and Capital Works Contract



KPI 4.3	Governance	Compliance	Number of FPN notices	<i>Does not exceed 0</i>	<i>Does not exceed 0</i>
KPI 5.1	Operations	Environment	NT31 - Production of an annual Carbon Reduction Plan	<i>N/A</i>	<i>100%</i>
KPI 5.2	Operations	Skills	NT50 - Skills and Growth Innovation in relation to Carbon Reduction	<i>30%</i>	<i>60%</i>
KPI 5.3	Operations	Environment	NT53 - with focus on diversion of waste (reduce, reuse and recycle)	<i>80%</i>	<i>95%</i>