

Dorset Council

Dynamic Purchasing System for Road Surface Treatments

DPS Ref: DN318931

Additional Sub Specification for Premium Surface Dressing and Micro Asphaltting and Footway Surface Treatments

This document is to be used in conjunction with **02 Sub Specification for Premium Surface Dressing** and **03 Sub Specification for Micro Asphaltting and Footway Surface Treatments**.

1. Use of Roadside Landings

- 1.1 There are a number of roadside landings located throughout the Council areas which, subject to the approval of the Council, and where available and not in use by others, may be made available to the Contractor for the storage of materials when undertaking work for the Council in connection with this Contract. The Contractor shall have the right to use the landings for the duration of the Contract only in connection with the performance of this Contract. Specific terms and conditions for the use of the roadside landings will be provided with proposed packages of work sent to those Contractors successfully awarded to the Lot/s.
- 1.2 Those Roadside Landings that are subject to an exemption under the Environmental Permitting Regulations 2007, will be provided with proposed packages of work sent to those Contractors successfully awarded to the Lot/s. The *Contractor* shall comply in all respects with the conditions of the exemption and should note that it may be withdrawn at any time.

2. Communications between the Contractor and the Council

- 2.1 For all works, the Contractor shall work closely with the Council. A joint discussion shall be held prior to the start date of the works. This will take place in sufficient time before the start date for the works to enable any changes and notifications necessary to take place.

3. Standards

Standards to be as detailed within the specification. Any proposed variation to standards to be approved by the Council prior to commencement of work.

4. Quality Assurance

The Contractor shall institute a Quality Management System complying with BS EN ISO 9001 and describe this in a Quality Plan. The Quality Plan shall be submitted to the Council for acceptance, before any related work is commenced. The Contractor shall allow adequate time for written acceptance to be obtained.

5. Type Approval/Registration

5.1 Where work, goods or materials are required to have type approval/ registration only work, goods or materials so approved/ registered shall be used and the Contractor shall in each case submit to the Council a copy of the type approval/registration certificate.

5.2 Where there is a requirement for work, goods or materials required to have type approval/registration this will be granted by the Council where the work, goods or materials have an equivalent approval/registration of the national highway authority of any state of the European Economic Area, provided that such approval/registration offers in use levels of safety, suitability and fitness for purpose equivalent to those incorporated in the type approval/registration.

6. Provision of Information

6.1 Unless otherwise specified, two copies of all information, including designs and valid certificates, in respect of work, goods or materials proposed by the Contractor shall be supplied to the Council. Where the original documentation is in a language other than English, it shall be accompanied by an English translation. Information and certificates shall be supplied at least 8 (eight) weeks prior to the use of the work, goods or materials in the works.

6.2 When the Contractor proposes to use a different standard, quality management scheme, product certification scheme, Agrément Certificate or type approval/ registration from that specified the Contractor shall provide all the relevant information to enable the Council to ascertain whether or not the proposal is equivalent to the specified requirement. The information shall be supplied at least 8 (eight) weeks prior to commencing the related works, to enable the evaluation of equivalence to be made, taking into account the programme for the works.

7. Goods, Materials, Sampling and Testing Goods and Materials

7.1 The Contractor shall maintain a record of the suppliers from whom he proposes to purchase the goods and materials necessary for the execution of the works. Where a choice of goods or materials is listed in the Contract, the Contractor shall inform the Council of the goods or materials he proposes to use. Any subsequent change of suppliers, goods or materials shall also be recorded.

8. Sampling and Testing

8.1 The testing scheduled in Table 1/1, including provision of the associated samples, shall be undertaken by the Contractor who shall supply to the Council, when requested, within 24 hours of the completion of each test, a copy of the results. Where UKAS laboratory accreditation is required, the results shall be reported on an official UKAS/NAMAS test report or certificate.

8.2 The following operations are not included in Table 1/1:

- (i) Checking, inspecting, examining, measuring (except in connection with testing);
- (ii) Trials and demonstrations;
- (iii) Routine testing carried out by manufacturers and suppliers in compliance with a specified standard or specification;
- (iv) Testing of plant.

8.3 Where required in Table 1/1 a test certificate, complying with the provisions of the relevant standard or specification where applicable and certifying that the goods or materials have been tested and meet the specified requirements, shall be supplied to the Council by the Contractor at least four weeks prior to the incorporation of the goods or materials in the works.

8.4 Where required in Table 1/1 tests and associated sampling shall, except as allowed in sub-Clause 5 of this Clause, be undertaken only by testing laboratories accredited in accordance with BS EN ISO/IEC 17025 by the United Kingdom Accreditation Service for such tests and sampling.

8.5 Where testing is carried out in another state of the European Economic Area such tests shall be undertaken by an appropriate organisation offering suitable and satisfactory evidence of technical and professional competence and independence. This condition shall be satisfied if the organisation is accredited in a state of the European Economic Area in accordance with sub-Clause 8.4 above.

8.6 Where goods or materials are accepted on the basis of an equivalent standard, code of practice, specification, technical description, quality management scheme, product certification scheme or Agrément certificate as provided for in Clause 7 and 8, testing and sampling as specified in or applicable to such an equivalent standard, code of

practice, specification, technical description, quality management scheme, product certification scheme or Agrément certificate is accepted and shall be substituted for those specified in Table1/1.d. Where testing is undertaken by a supplier or manufacturer in accordance with the Contract the Contractor shall ensure that each supplier and manufacturer will admit the Council's representative to his premises during normal working hours for the purposes of inspecting, selecting the samples and witnessing the testing.

- 8.7 All testing of materials considered necessary by the Council will be carried out by the Council's appointed UKAS accredited laboratory.
- 8.8 The Contractor shall supply all samples of material for testing. He shall render such assistance as may from time to time be required by the Council in packing them into containers provided by the Contractor.
The Contractor shall transport samples for testing to the Council's appointed UKAS accredited laboratory, as and when directed by the Council.
Testing of surface regularity, texture depth and compaction will be carried out by the Council.

9. Site Extent and Limitations on Use

- 9.1 A Site is a portion or portions of the Network as are given into the possession of the Contractor to execute the works, for such time as stipulated in the Contract or such extended time as may be allowed under the Contract.
- 9.2 Included in limitations on use will be any relevant embargo periods required by the Council for that item of work.
- 9.3 Full contact details of the Council will be provided to those Contractors successfully awarded to the Lot/s.

TABLE 1/1: Testing to be Carried Out by the Contractor

Clause	Work, Goods or Material	Test	Frequency of Testing	Test Certificate	Comments
Series 900					
912	Surface Dressing Binder	Transverse Distribution Test (Depot Tray Test and 3 minute output test) (U)	Annually	Required	Rectification will be required following major maintenance of the distribution system.
Series 1200					
1202	Permanent traffic signs			Required	Certification that the traffic sign is capable of passing the tests in BS 873: Part 1 is required
1221	Permanent traffic cones and traffic cylinders			Required	Certification that permanent traffic cones and cylinders have been tested and comply with BS 873: Part 8 is required
		Tests specified in BS 873: Part 8	2 of each size and category/type		
	Other traffic delineators			Required	Certification that the delineators have been tested and comply with Clause 1221 is required
		Tests specified in Appendix 12/4			

	Temporary cones, cylinders and other delineators			Required	Certification that at least 1 in 500 of any batch of cones, cylinders and other delineators to be used in the Temporary Works have passed the tests in Clause 1221 as appropriate is required
Series 1700					
1704	Aggregates	Grading and fines content	1 per week (per source)	Required	Results of routine control tests from the factory production control system operated by the producer to be provide - see Annex H of BS EN 12620. Product certification scheme applies.
		Shell content (U)	Monthly*		
		Flakiness index (U)	Monthly*		
		Resistance to fragmentation (U)	Every 6 months		
		Drying shrinkage (U)	1 per 5 years		
		Chloride content (U)	1 per week or as otherwise agreed		
		Sulphate content (U)	Yearly		

TABLE 1/1 (continued): Testing to be Carried Out by the Contractor, continued

Clause	Work, Goods or Material	Test	Frequency of Testing	Test Certificate	Comments
Series 1700 continued					
	Blast-furnace slag	Bulk density (U)	Every 6 months	Required	
		Stability (U)	Every 6 months		
		Sulphur content (U)	Every 6 months		

Water	Tests specified in BS 3148			
	Chloride content	Monthly		
	Sulphate content	Monthly		
	Acid-soluble alkali content	Weekly		
Admixtures	Chloride content	1 per consignment	Required (BS 5075)	Product certification scheme applies
	Sulphate content	1 per consignment		
	Acid-soluble alkali content	1 per consignment		

Notes:

1. Tests comparable to those specified in this Appendix will be necessary for any equivalent work, goods or materials proposed by the Contractor (See sub-Clause 8.6).
2. (U) indicates that a UKAS test report or certificate is required.
3. Unless otherwise shown in this Appendix tests for work, goods or materials as scheduled under any one Clause are required for all such work, goods or materials in the Works.
4. Unless otherwise shown in this Appendix test certificates for work, goods or materials as scheduled under any one Clause are required for all such work, goods or materials in the Works.
5. Site testing shall be carried out by staff suitably qualified for the task, using calibrated equipment, and the Contractor shall supply confirmatory evidence in writing.
6. Off-site testing shall be carried out by laboratories qualified to do so by compliance with UKAS requirements for the test.

10. Advance Notification Signs, Site Information Signs and Advertisement Boards

10.1 Advance Notification Signs shall be erected a minimum of two weeks prior to the commencement of work.

11. Programme of Works, Working Hours & Noticing Programmes

11.1 The Contractor shall provide a Programme of Works for the works, which shall be in the form of a Gantt Chart (project timetable). It must abide by the schedule of constraints detailed in the Contract, which will be extracted from the following constraints:

- (i) Some sites will have restricted working hours or restricted periods imposed on them to avoid work during sensitive times.

These restrictions will generally be to comply with the Special Requirements in relation to the Council (as the Highway Authority) as given in the conditions of contract and the Traffic Management Act, 2002 and any subsequent amendment.

12. Working Hours

- 12.1 The Contractor may programme his normal working week at any time between 0700 and 1900 Monday to Friday, excluding Bank and Public Holidays.
- 12.2 The Contractor will only be permitted to work outside of the hours defined in sub-clause 12.1 when approved by the Council.
- 12.3 When there is a restriction to the working hours at a site then all traffic lanes shall be in a fit state and available for use by traffic during the restricted hours.

13. Noticing

- 13.1 The programming and execution of all works within the adopted highway must comply with the requirements of the Traffic Management Act 2004. The Council will issue Works Orders for works within the adopted highway to comply with the Notice Period requirements of the Traffic Management Act 2004 (TMA) being:

	Notice Period		Validity Period	
	Advance Notification	Notification	Advance Notification	Notification
Major	3 months	10 days	15 days	5 days
Standard	N/A	10 days	N/A	5 days
Minor	N/A	3 days	N/A	2 days
Emergency	N/A	2 hours after	N/A	N/A

- 13.2 The Contractor is to give the Notice Period (which excludes the day the Notice is given) required which is dependent on the category of Works as defined by the TMA.

Major - works of 10 or more working days duration.

Standard - works of 4 or more but less than 10 working days duration.

Minor - works of up to and including 3 working days duration.

Immediate - the duration of the emergency and its associated works.

- 13.3 If works have not started in the validity period of the notice then a further Notice must be sent by the Contractor.

13.4 Notice forms and further information about issuing these can be obtained from the Council.

13.5 In accordance with the TMA, the Council intends to provide as much advance notice of impending works to the Contractor as possible. Instructions issued by the Council will generally be issued no later than 14 days prior to the required commencement date of the works to enable the Contractor to provide the correct Notification to the Traffic Manager. The exceptions to this are:-

(a) For Emergency Works:

Immediate:	1 hour from receipt of instruction.
Urgent:	24 hours from receipt of instruction.

(b) For work in relation to which a road closure has been or has to be made, the commencement of work shall be coincident with the date of the road closure.

13.6 General

The Contractor shall:

(i) Provide the Council by the Thursday of each week of the Contract with a programme in electronic format of works detailing the location of all works intended to be carried out during the following week and include an outline programme for the second week.

14. Monthly Statements

14.1 The Contractor will be required to programme the works and to notify the Council's Traffic Manager of his intended start date and later his works commencement date as required by the Traffic Management Act, 2002 and any subsequent amendment. Upon completion the Contractor shall issue his Completion Notice to the Employer's Traffic Manager.

14.2 The re-measurement of the works shall be undertaken jointly between the Council's and the Contractor's Agent.

14.3 The Contractor shall submit his application for payment as a final for each complete site for approval or otherwise by the Council. An application for payment shall state the amount which the Contractor considers will be due and the basis on which that amount has been calculated. The basis shall include the re-measured Bills of Quantities, any daywork sheets applicable and a summary of the materials in support of the claimed quantities e.g. delivery tickets for materials used in the works, to the Council.

15. Work on Highways Open to Traffic

- 15.1 When planning and undertaking work on highways open to traffic, the Contractor shall take account of the recommendations contained in "Safety at Roadworks: Notes for Guidance (Third Edition 1994)", as amended, issued jointly by the Department of Transport and ADEPT.

16. Traffic Safety Measures and Control

- (a) Traffic safety measures and control for roadworks shall conform to Safety at Street Works and Road Works, a Code of Practice published by the DoT, and Chapter 8 of the Traffic Signs Manual published by HMSO or any amendment thereof for the time being in force and to the requirements of the Council's representative on site.
 - (b) All traffic signs, (including cones and cylinders), shall conform to BS 873 and shall also be in accordance with the Traffic Signs Regulations and General Directions 1994, (and subsequent amendments), and also be in accordance with the relevant chapter of the Traffic Signs Manual 1991 (and subsequent amendments).
 - (c) All signs, (including cones and cylinders), shall be reflectorised with approved reflective material complying with the requirements set out in Tables 1 and 2 to Part 6 of BS 873 (1993).
 - (d) All cones and cylinders shall comply with the requirements of BS 873 Part 8 1985 and traffic cones shall be category A, designation 1 or 2.
- 16.1 The Contractor shall provide, erect, reposition, cover or remove signs, cones, barriers etc., as required during the progress of the works. No additional payment will be made for this work. All signs shall be securely weighted down in position with sandbags or by another method approved by the Council.
- 16.2 Single line traffic operation will be required when the undivided clear width of carriageway available is less than 5.5 metres or when directed by the Council. When single line traffic operation is required, the Contractor shall provide a width of at least 3 metres, or wider as necessary, at curves and junctions.
- 16.3 In addition to Advance Warning Signs (WM 564), Road narrows (WM 517) and Traffic Control Ahead (WM 565.2) the following signs shall be placed in position before treatment commences on roads where road markings will be erased by the application of the treatment:
"NO ROAD MARKINGS FOR X MILES" (WM 565.4)
on all approaches.
"GIVE WAY MARKINGS ERASED" or "STOP MARKINGS ERASED", (similar to WM 565.2) as

appropriate, on all junctions, or as directed by the Council.

- 16.4 All “NO ROAD MARKING” and “MARKINGS ERASED” signs shall remain in position for a maximum of 2 week or until the permanent markings have been reinstated, whichever period is the shorter.
- 16.5 All reasonable precautions shall be taken to control the speed and movement of traffic in order to avoid damage to the new surface and to obviate the danger to road users.
- 16.6 The work shall be phased in a manner acceptable to the Council for the operation of traffic.
- 16.7 The Contractor will be responsible for informing the public of the work and ensuring possession of the carriageway to carry out the works. The Contractor shall:
- (a) where appropriate, supply and place in position approved notices on boards approximately. 800 mm × 600 mm bearing the legend in black letters on yellow background “NO PARKING – HIGHWAY MAINTENANCE TO TAKE PLACE ON” with provision for inserting days of the week. Such notices shall be placed in each street or road not less than 48 hours before it is intended to commence work;
 - (b) distribute to all affected properties a notice, the wording of which is to be agreed with the Council before the works commence, informing the public of the proposed work, the dates the work is to be undertaken and giving the name and telephone number of a person that they can contact with any problems concerning the works;
 - (c) carry out some other methods of informing the public of the proposed works as approved by the Council in lieu of (b) above;
 - (d) where work is to be undertaken within 800 metres of a railway level crossing the Contractor shall notify the Council at least seven days before commencing work of his intention to do so.
- 16.7 All vehicles used by the Contractor shall display at the rear in a conspicuous place signs reading ‘HIGHWAY MAINTENANCE’ in black letters on yellow background. The lettering shall be 150 mm standard type for lorries and 50 mm high standard type for other vehicles. All vehicles shall in addition be equipped with and use amber rotating beacons of the requirements set out in Chapter 8 of the Traffic Signs Manual published by HMSO or any amendment thereof for the time being in force.
- 16.8 The Contractor’s employees, whilst on the public highway, shall wear retro-reflective clothing in accordance with the recommendations of

Chapter 8 of the Traffic Signs Manual published by HMSO or any amendment thereof for the time being in force and BS 6629 or any amendment thereof for the time being in force.

17. Single Lane Closure

- 17.1 All traffic control for single line operation shall be carried out by the Contractor using manually operated "Stop/Go" signs or portable traffic signals as agreed with the Council and supplied by the Contractor. Such signs shall conform to the requirements of Chapter 8 of the Traffic Signs Manual published by HMSO or any amendment thereof for the time being in force. The maximum length of single line traffic operation at any one time shall be dependent on traffic flow and shall not exceed the appropriate value given in Table 4.3 of Chapter 8 of the Traffic Signs Manual (1991) or any amendment thereof for the time being in force.
- 17.2 The price inserted in the Pricing Schedule shall cover all the Contractor's obligations in this respect. Where more than one Stop/Go board is required at any location and the operators are not in visual contact, a two-way radio system shall be provided and operated by the Contractor.

18. Road Closure

- 18.1 Where so detailed in the Schedule of Works, or as agreed with the Council, the road may be closed to traffic. The Contractor shall give the Council 3 months' notice to allow the Council to carry out the legal formalities to enable the road closure to be implemented.
- 18.2 Where the Contractor is required to carry out the physical road closure he must:
- (a) put out, seven days in advance, suitable signs warning of the road closure and, if appropriate, provide a written notice to properties that may be affected;
 - (b) put out sufficient suitable signs to redirect traffic around the closed road, maintain and after the road is reopened, remove such signs. The Contractor must liaise with the Council concerning the location and wording of such signs.
- 18.3 Where the Council will carry out the physical road closure, the Contractor must:
- (a) liaise with the Council's staff in putting out, maintaining and removing the signs for the road closure and traffic diversion;
 - (b) not start work on site until the Council confirms that the road closure and traffic diversion are in operation;
 - (c) take all necessary action to maintain the safety of the site and the public.

19. Safety Zone at Road Works

- (a) The safety zone required by Safety at Street Works and Road Works, a Code of Practice published by the DoT and Chapter 8 of the Traffic Signs Manual published by HMSO or any amendment thereof for the time being in force shall be delineated by a continuous barrier consisting of a light conspicuous coloured braided rope, 4 mm minimum diameter and in lengths not exceeding 46 metres. The rope shall be no higher than 1.4 metres, and no lower than 1 metre above the carriageway surface at any point along its length and shall not sag more than 150 mm. It shall be supported by posts set at a maximum spacing of 9 metres and shall be capable of becoming instantly detached from them in the event of entanglement with passing traffic.
- (b) The posts shall be conspicuously coloured hollow plastic tubes, 40 mm to 50 mm diameter, centrally mounted in bases. They shall be a tight push fit and stable.
- (c) The bases shall be manufactured from a rubber/plastic compound with a minimum bottom surface area of 0.27 square metres, a maximum transverse dimension of 400 mm, approach edges bevelled to not exceeding 30° to the horizontal and a minimum weight of 20 kilogrammes. No fixing shall be driven into or fixed onto the surfacing of the carriageway and the base shall provide a non-slip interface with the carriageway.
- (d) This zone shall be kept clear of plant, materials, equipment and personnel at all times. Where the work activity or width of carriageway prevents provision of the relevant width safety zone, the Contractor shall submit details of the proposed alternative guarding arrangements with his submission.

19.1 Where no safety zone is possible, the Contractor must take precautions to ensure that the speed of passing traffic is 10 miles per hour or less. The Contractor must use some form of active control (i.e. a speed control vehicle) as well as providing signs stating the speed limit.

19.2 The speed control vehicle must have a working speedometer, wing mirror and head, rear and stop lights. It should be taxed as a minimum as a works vehicle. It must be capable of turning in one movement at each end of the traffic control section and be fitted with a sign at the rear bearing the legend "SPEED CONTROL VEHICLE" together with one or more amber flashing warning beacons mounted above the sign.

19.3 Irrespective of the above, the vehicle must comply with all current Acts and Regulations.

20 Traffic Safety and Control Officer

- 20.1. The Contractor shall appoint a Traffic Safety and Control Officer who shall make all arrangements necessary for traffic safety and control. The Traffic Safety and Control Officer shall have one or more nominated deputies. The Contractor shall supply the Council with the names of this officer and his deputies and with telephone numbers or details of other means by which they or one of them can be contacted at any time. The Traffic Safety and Control Officer or his nominated deputy shall be on site at all times when work is proceeding and shall be readily available to deal with matters relating to traffic safety and control.

21. Materials and Workmanship

- 21.1 The appropriate British Standard, nominated Sector Schemes and Codes of Practice will be adopted, where applicable, for all materials and workmanship, subject to any variations given in the Specification. The omission of any such reference will not relieve the Contractor of his obligations to conform to the appropriate Standard or Code of Practice.

22. Roads to be Kept Clean

- 22.1 Existing roads, accesses to adjacent houses, buildings etc. and any new roads, whether part of this work or not and which are being used by construction traffic, must be kept clear of all dirt, mud and materials dropped from vehicles or from tyres. The Contractor must provide, maintain and use as directed by the Council in the relevant works centre, suitable equipment including mechanical road sweepers solely for this purpose throughout the course of the works.

23. Use of Mains Water

- 23.1 The Contractor shall be responsible for making his own arrangements with the Water Authority for obtaining mains water for the works and he shall comply with all the local conditions regarding the use of water. The Contractor shall agree with the Water Authority the location of all hydrants from which mains water can be abstracted for the works, together with abstraction methods, receiving apparatus, draw off rates, times, and the Contractor shall provide constant attendance when water is being drawn off any hydrant.
- 23.2 Water shall not be abstracted from rivers, stream or watercourses, unless the appropriate licence has been obtained by the Contractor from the Environment Agency.

24. Communications with the Contractor

- 24.1 The Contractor shall supply his site supervisor with a mobile phone with answer phone facility, so that there can be communication between him and the Council.

25. Protection of the Environment and Other Road Users

- 25.1 The Contractor shall take all necessary precautions to prevent danger, nuisance or inconvenience to the owners, tenants or occupiers of adjacent properties and to the public generally. The Contractor shall at all times ensure that his operation does not render unsafe, contaminate or make impassable roads, streets, private entrances, verges, paths, footways, drains, sewers and watercourses in the area of the works and any method of working shall be carried out in a manner consistent with the safe passage of all users of the highway.
- 25.2 Where road surface temperatures fall to + 2°C or road surface temperatures are forecast to fall to 0°C or below within the next 24 hours, the Contractor shall ensure that no water or waste material from his operations comes into contact with carriageways or footways. All waste or surplus materials shall be cleared away by the Contractor without delay.
- 25.3 All operations shall be carried out with due regard for the varied wildlife habitat within the highway.

26. Damage to the Highway

- 26.1 During the undertaking of the works the Contractor shall take all reasonable precautions to avoid damaging any material part or element of the highway. In particular, care should be taken not to damage flagging and all footway and carriageway surfaces, street furniture, turf, trees, shrubs and any other highway fitting and fixture. Prior to the commencement of works at a specific location the Contractor shall report to the Council any apparent damage on the site. Should any damage be caused as a result of undertaking the works the Contractor shall rectify it as soon as possible at his expense.

27. Removal of Road Studs

- (i) On carriageways to be surface dressed, the Contractor shall remove both inlaid and surface mounted road studs as detailed in the works information.
- (ii) Where inlaid road studs have been removed from the carriageway, the resulting void shall be immediately filled and

compacted with dense asphalt concrete 6mm surface course (AC6 dense surf 100/150 EN13108-1).

- (ii) All debris shall be swept up and all waste shall be disposed of at the Contractor's expense.

28. Surface Dressing: Design, Application and End Product Performance

28.1 The Contractor shall be responsible for the design of the Surface Dressing, choice of materials, techniques and processes based on site and traffic data specified in the Works Information as well as any site-specific requirements, e.g., aggregate source, colour etc., also set out in this clause and the Surface Dressing Performance Table 9/1 .
The Contractor shall:

- (i) Provide a Design Proposal to achieve the performance requirements in terms of macrotexture and maximum levels of defects as set out in this Clause ensuring that the Surface Dressing has an initial stability such that it is capable of withstanding the normal traffic for the site when first opened.

- (ii) State the Estimated Design Life of the Surface Dressing in the Design Proposal.

- (iii) Be certificated to the BS EN ISO 9001 'Sector Scheme 13 - The Supply and Application of Surface Treatments to Road Surfaces', described in Appendix A of the Specification for Highway Works (SHW).

- (iv) Provide a Quality Plan containing at least the information required by 'Sector Scheme 13 - The Supply and Application of Surface Treatments to Road Surfaces' described in Appendix A of the SHW.

- (v) Carry out the Surface Dressing in accordance with BS EN 12271 and the Design Proposal to the tolerances specified in this clause and Table 9/1.

28.2 The Contractor shall guarantee the design, materials and workmanship against defects and against failure to meet the end product performance requirements for a period of two years on Maintenance Category 7 – 10 roads and three years on Maintenance Category 2 – 6 roads from the date of completion of the work.

28.3 The Council will monitor the performance levels of the surface dressing during the guarantee period, and bring any defects to the attention of the Contractor.

29. The System

- 29.1 Each of the proposed Surface Dressing systems shall have been subject to a Type Approval Installation Trial (TAIT) in accordance with BS EN 12271, which shall be self-certified within the quality management scheme described in 2 (iv). The TAIT shall have been carried out on a site with similar characteristics and traffic category to that to be treated in the Contract. The Contractor shall provide, with his Design Proposal, a Data Sheet giving details of the properties of each system proposed, including the data specified in this Clause.

30. Materials and Equipment – The Binder

- 30.1 Modified binders shall be Intermediate, Premium or Super-premium Grade, having a British Board of Agrément HAPAS Roads and Bridges Certificate. Conventional binder shall be bitumen emulsion complying with BS EN 13808 and be CE marked .
- 30.2 The Contractor shall provide, with his Design Proposal, a Binder Data Sheet giving details of the properties of each binder proposed. The recovery of the binder shall be carried out in accordance with Clause 955 of Volume 1 of the Highways Agency's SHW.
- 30.3 The test to determine Vialit Pendulum Cohesion shall also be carried out in accordance with Clause 957 of that standard. The Contractor shall provide rheological product identification data for modified binders in accordance with Clause 956 of Volume 1 of the Highways Agency's SHW. The data provided shall be not more than 6 months old and obtained on samples of binder representative of binder manufactured and supplied using the same source and processes as the proposed binder.
- 30.4 Health and Safety information and a safe handling guide from the manufacturer shall be provided together with details of any weather restrictions placed upon use of the binder.
- 30.5 The binder application shall be uniform and on two or more lane carriageways, shall be of sufficient width to allow a full lane to be dressed in a single pass. Before spraying begins, the Contractor shall provide the Council with a test certificate showing test results for rate of spread and accuracy of spread of binder carried out in accordance with the test methods in BS EN 12272-1 and issued by, an appropriate organisation, accredited by UKAS for those tests, demonstrating that the binder sprayer has been tested, using the binder to be used in the Contract, not more than six weeks before the commencement of the work.

- 30.6 The Contractor shall, within his quality system, have a documented procedure for regular inspection & cleaning and adjustment of the spray system, additive system and associated filters.

31. Materials and Equipment – The Chippings

- 31.1 The chippings shall be crushed rock, slag or gravel complying with the general requirements of BS EN 13043. The aggregate shall have a minimum declared ePSV as specified in the Works Information, a maximum AAV of 12 and a flakiness index of 25.
- 31.2 Chipping spreaders shall have controlled metering and be capable of variable or fixed width application to match the binder sprayer. Before a spreader is used, the Contractor shall provide the Council with a test certificate showing test results for rate of spread and accuracy of spread of chippings carried out in accordance with the test methods in BS EN 12272-1, and issued by an appropriate organisation, accredited by UKAS for those tests, or tests carried out under his own Quality Assurance Scheme, demonstrating that the chipping spreader has been tested, using chippings similar to those to be used in the Contract, not more than six weeks before the commencement of the work.

32. Preparation

- 32.1 Any necessary remedial works to the road surface and structure shall be completed prior to or as part of the Contract and agreed as acceptable by the Council and the Contractor before Surface Dressing commences.
- 32.2 Before binder is applied, street furniture shall be masked using self-adhesive masking material. Oil, turf, sand or similar materials shall not be used. Any packed mud or other deposits on the road surface shall be completely removed, and the road surface shall be swept free of all loose material. In exceptional circumstances and as agreed with the Council, when the amount of surface cleaning is exceptional following a weather related incident or other issue, the Council will consider payment to the Contractor on a dayworks basis for such cleaning.

33. Traffic Safety and Management

- 33.1 Traffic Safety and Management for roads shall be in accordance with the requirements of Specification Series 0100.

34. Application

- 34.1 Restrictions to be observed in the event of adverse weather shall be as specified in this clause.

Transverse joints shall be formed with spraying starting and finishing on a protective strip not less than 1 metre wide at each end of the lane length being treated. Transverse joints shall be of binder overlap only and not wider than 100 mm. There shall be no ridges or bare strips. Longitudinal joints shall coincide with lane markings.

Longitudinal joints shall be of binder overlap only, while ensuring that the proposed rate of spread is achieved across the joint, for quartering (using a part of the spraybar) the overlap may be extended to a maximum of 300 mm. There shall be no ridges or bare strips.

- 34.2 The Contractor shall carry out the tests for rates of spread and accuracy of application of binder and chippings in accordance with the test methods in BS EN 12272-1 at a frequency of at least one per site per day and report the results verbally to the Council within twenty-four hours of carrying out the test and confirm in writing within seven days. The Contractor shall facilitate duplicate testing by the Council when required.

35. Aftercare

- 35.1 Masking shall be removed after the Surface Dressing has been applied and before opening the road to unrestricted traffic. The Contractor shall remove surplus chippings from the road by suction sweeping before it is opened to unrestricted traffic.
- 35.2 The Contractor shall monitor the Surface Dressing closely for a minimum period of 2 hours after the road is opened to traffic. The Contractor shall reinstate traffic safety and management procedures or institute other such remedial action where necessary, such as dusting, if there are signs of distress, such as turning of the chippings, in order to prevent further damage to the Surface Dressing.
- 35.3 Further operations to remove subsequently loosened chippings shall be carried out over the next 48 hours. The road, and adjacent side roads, footways and paved areas, shall be kept substantially free of loose chippings for a period of 30 days after completion of the work.

36. As Built Manual

- 36.1 Not more than 30 days after completion of the work the Contractor shall provide a record of the progress of the work in the form of an As Built Manual incorporating all relevant information, including: all test results; variations to the Design Proposal and those necessitated by localised site conditions; a record of traffic control carried out; weather information; unforeseen problems; a list of complaints, if any, from the general public or road users; and any other information that the Council may reasonably require to be included.

37. Performance Standards during the Guarantee Period
Surface Macrotexture

- 37.1 The Contractor is responsible for maintaining the surface macrotexture requirements set out in Table 9/2 throughout the guarantee period. The Council will monitor the surface macrotexture.
- 37.2 The definitive test is the volumetric patch technique measured in accordance with BS EN 13036-1 except that 10 individual measurements shall be made on the nearside (inside) wheel-track of the most heavily trafficked lane or for low traffic category sites the track carrying the most stress. The average macrotexture depth of each lane kilometre, or the complete carriageway lane where this is less than 1,000 metres, shall be as specified in Table 9/2. The average of each set of 10 individual measurements shall be not less than 80% of the minimum permitted.
- 37.3 The Council will use the WDM SCANNER or other suitable equipment to determine the Sensor Measured Texture Depth (SMTD) for A & B roads and other significantly trafficked or highly stressed roads.
- 37.4 Measurements of SMTD shall be made in the nearside and offside wheel-tracks of all lanes. For other roads where road closure is less critical the volumetric patch technique or other measuring device such as the Mini Texture Meter may be used. The average Sensor Measured Texture Depth (SMTD) determined by the TRL Mini Texture Meter of each 1000 metre section of carriageway lane, or the complete carriageway lane where this is less than 1000 metre, shall be not less than the values in Table 9/3
- 37.5 The SMTD or results from other devices shall be calibrated for the particular Surface Dressing product design and condition against volumetric patch values to provide the Volumetric Patch Equivalent value. The macrotexture depths will be measured after 11 months and before 13 months and additionally after 20 months and before 24 months on Maintenance Category 7 – 10 roads and additionally after 30 and before 36 months on Maintenance Category 2 – 6 roads. The method of measurement in the event of a dispute shall be the sand patch method in accordance with BS 598: Part 105 as modified above.

38. Defects

- 38.1 The extent of chipping loss or other defects will be monitored by the Council using a visual method of assessment. The performance standard is that any section of the Works shall be deemed as having failed if the areas of defects do not comply with the classes specified in table 9/1. If there is a failed section, the Contractor will be invited to inspect the site in order to agree remedial measures.

38.2 In the event that the Contractor and Council are unable to reach agreement on whether a section has failed by qualitative visual assessment described in BS EN 12272-2, the level of defects shall be determined in accordance with the quantitative test methods in BS EN 12272-2. Any section failing to meet the required standard as specified in table 9/1 shall be subject to remedial action by the Contractor after agreement of the Council.

SURFACE DRESSING PERFORMANCE TABLE

Table 9/1: Surface Dressing Performance for each Road Type				
Road Type (RN39 Category)	H & G	F & E	D & C	B & A
Performance Requirement (BS EN 12271:2006, Table 2)				
Rate of spread of binder – tolerance	1 (±15%)	2 (±10%)	2 (±10%)	3 (±5%)
Accuracy of spread of binder	1 (±15%)	1 (±15%)	2 (±10%)	2 (±10%)
Rate of spread of chippings – tolerance	1 (±15%)	2 (±10%)	2 (±10%)	3 (±5%)
Accuracy of spread of chippings	1 (±15%)	1 (±15%)	2 (±10%)	2 (±10%)
Defects - Limiting Requirement (BS EN 12271:2006, Table 2)				
Fatting up, tracking and bleeding - P1	1 (G 2.5%)	2 (G 1.0%)	2 (G 1.0%)	3 (G 0.5%)
Scabbing and tearing - P2	1 (G 1.0%)	2 (G 0.5%)	2 (G 0.5%)	3 (G 0.2%)
Fretting - P3	1 (G 10%)	2 (G 6%)	3 (G 3%)	3 (G 3%)
Streaking - P4	1 (G 90 m)	2 (G 30 m)	3 (G 10 m)	3 (G 10 m)

Table 9/2

Traffic cv/lane/day	Speed limit 50 mph or higher Patch Macrotexture (mm)	Speed limit 40 mph or lower Patch Macrotexture (mm)
More than 2000	1.3*	1.3
250 to 2000	1.3*	1.0*
50 to 250	1.0*	1.0*
Less than 50	1.0*	0.8*

* For a required macrotexture of 1.3mm, 1.2mm, 1.0mm, and 0.8mm the average of each set of ten individual measurements shall be not less than 1.1mm, 1.0mm, 0.8mm, and 0.65mm respectively.

Table 9/3

Traffic cv/lane/day	Speed limit 50 mph or higher SMTD Macrotexture (mm)	Speed limit 40 mph or lower SMTD Macrotexture (mm)
More than 2000	1.1*	1.0*
250 to 2000	1.1*	0.8*
50 to 250	0.8*	0.65*
Less than 50	0.8*	0.55*

* For a required macrotexture of 1.1mm, 0.8 mm, 0.65mm, and 0.55mm the average of each set of ten individual measurements shall be not less than 0.9mm, 0.65mm, 0.52mm and 0.44mm respectively.

39. Reinstatement of Road Marking

39.1 This is to be carried out by the Council.