

THE FOLLOWING ADDENDUM SUPERCEDES INFORMATION CONTAINED IN DRAWINGS AND SPECIFICATIONS ISSUED FOR THE PROJECT TO THE EXTENT REFERENCED. THE FOLLOWING CHANGES IN THE TENDER DOCUMENTS ARE EFFECTIVE IMMEDIATELY. THIS ADDENDUM WILL FORM PART OF THE CONTRACT DOCUMENTS.

Clarification to Bidders

Changes to the Scope of Work generally include, but are not limited to, the following:

- The highway shoulders shall be 1.5m wide and paved for the entire length of the project
- To accommodate the wider shoulders from km 501-520 without widening the existing embankment, the existing cross section will be cut 100-120mm (60mm Km 519-520) and the gravels bladed to the right side to provide materials for nominal shaping and support of the shoulder, as indicated on the drawings and typical cross sections.
- Superelevation corrections have been modified as indicated on the drawings to avoid widening of the roadway embankment.
- The existing roadside pullout at Km 509 is to be removed and a new paved pullout is to be constructed at Km 511.
- The culvert extension has been increased to 5m and materials for the culvert and coupler will be supplied by PSPC with Contractor pick-up in Fort Nelson; embankment slopes will be modified as indicated on the drawings to retain other culverts.
- KM 509-520 is now part of the base bid instead of optional works, although it is still separated in the revised Tender Form; Bid quantities have been revised to reflect the current design.
- Specifications have been modified to reflect the current scope of work; sealing of the centreline joint has been added to the scope of work.
- The locations for non-woven geotextile has been reduced and the geotextile is now incidental under the items for Load, Haul, Place and Compact Crushed Base Course
The contract completion date is revised to October 15, 2022; the Substantial Completion date has been deleted.

Revisions to Specifications

Delete in its entirety Paragraph 1.6.1 of Section 01 11 55 General Instructions and replace with the following:

“All work under this Contract shall be complete by October 15, 2022.”

Delete in its entirety Paragraph 1.6.2 of Section 01 11 55 General Instructions and replace with the following:

“This contract has an operational constraint requiring the Contractor to begin works starting at the southern limit of KM 485 with all work progressing northwards from KM 485. All work including surface pavement within KM 485 to KM 500 shall be complete prior to starting work within KM 501 to KM 520. The Contractor is also advised that there will be other active Contracts within KM 485 to KM 520 during the duration of this Contract and coordination between these Contracts is required of the Contractor. Delays in hauling materials shall be anticipated as a result of these other Contracts and any additional costs resulting from delays due to traffic staging and single lane alternating traffic on other Contracts shall be worked into the tender items.”

Delete in its entirety Paragraph 1.6.2 of Section 32 92 19.16 Hydraulic Seeding and replace with the following:

“Measurement and Payment for completion of Hydraulic Seeding – Supply and Application will be made using the Price per Unit Bid. The Price per Unit Bid shall include all costs for items necessary for successful completion of the work. Measurement will be the surveyed area of Hydraulic Seeding in accordance with the locations as shown on the drawings. Hydraulic Seeding performed outside of the areas shown on the drawings will not be approved for payment unless prior written approval is obtained by the Departmental Representative.”

Delete in its entirety Paragraph 1.4.1 of Section 31 24 14 Excavation, Embankment and Compaction and replace with the following:

“Payment for stripping of topsoil will be made on the basis of the Price per Unit Bid for Stripping (100mm Depth) in the Tender Form. The Price per Unit Bid shall include all costs for the stripping of organic materials, loading, hauling, and stockpiling at an approved stockpiling area, and all other items necessary for successful completion of the work. Measurement of stripping will be the surveyed stripped area of organic material removed. Stripping performed outside of the areas shown on the drawings will not be approved for payment unless prior written approval is obtained by the Departmental Representative.”

Delete in its entirety Paragraph 1.4.5 of Section 31 24 14 Excavation, Embankment and Compaction and replace with the following:

“Payment for Excavation to Waste for Embankment and Ditch Excavation - Haul to Waste from the Embankment and Ditch Excavation will be made on the basis of the Price per Unit Bid for Common Excavation in the Tender Form. The Price per Unit Bid Shall include all costs for loading of Ditch or Embankment Excavation, hauling and disposing the material at an approved disposal site or area, and all other items necessary for the successful completion of the work. The Contractor shall undertake and submit to the Departmental Representative before and after surveys of the Embankment and Ditch excavations to confirm the quantity of excavation.”

Delete in its entirety Paragraph 1.4.6 of Section 31 24 14 Excavation, Embankment and Compaction and replace with the following:

“Supply, transportation and placement of the non-woven Geotextile will be incidental to the tender items for Load, Haul, Place and Compact Crushed Base Course and no additional payment will be made for non-woven Geotextile.”

Delete in its entirety Paragraph 1.4.7 of Section 31 24 14 Excavation, Embankment and Compaction and replace with the following:

“There will be no measurement for non-woven Geotextile as it is included as incidental under the tender items for Load, Haul, Place and Compact Crushed Base Course.”

Delete in its entirety Paragraph 1.4.8 of Section 31 24 14 Excavation, Embankment and Compaction and replace with the following:

“Payment for placement of Topsoil will be made on the basis of the Price per Unit Bid for Topsoil Transport and Placement (100mm) in the Bid and Acceptance Form. The Price per Unit Bid shall include all costs included with the loading, transport, spreading, racking, and grooming of the previously stripped material being reused as topsoil, and all other items necessary for successful completion of the work. Measurement for Topsoil Transport and Placement (100mm) will be the surveyed area of topsoil. Topsoil placed outside of the areas shown on the drawings will not be approved for payment unless prior written approval is obtained by the Departmental Representative.”

Delete in its entirety Paragraph 1.4.9 of Section 31 24 14 Excavation, Embankment and Compaction and replace with the following:

“Measurement for Payment for completion of Topsoil Transport and Placement (100mm) will be made on the area of material surveyed in square metres, incorporated in the works and accepted by the Departmental Representative. Areas of spread wasted excess stripping will not be measured for payment. No separate measurement or payment for hauling of Topsoil will be made.”

Add new Paragraph 1.4.10 to Section 31 24 14 Excavation, Embankment and Compaction as follows:

“Installation of 100mm dia. steel perforated pipe shall be considered incidental to the tender items for Load, Haul, Place and Compact Granular Sub-Base Course and no additional payment will be made for installation of the perforated pipe. PSPC will supply the 100mm dia. steel perforated pipe with pick up of the pipe by the Contractor from PSPC in Fort Nelson. The Contractor shall coordinate access for pick up with the Departmental Representative.”

Add new Section 32 01 11.02 Pavement Centreline Sealing as attached to this addendum.

Delete the Unit Price Tender Form in its entirety and replace with revised Unit Price Tender Form attached to this addendum.

List of Revised Specifications

Section 01 11 55 General Instructions as noted above

Section 32 01 11.02 Pavement Centreline Sealing

List of Revised Drawings

Delete all drawings

Replace with Addendum 1 drawing package – see following table for a list of revised drawings.

DRAWING INDEX	
DRAWING NO.	DRAWING TITLE
C000	COVER SHEET
C001	DRAWING INDEX
C002	LOCATION PLAN
C101	PLAN AND PROFILE - STA. 484+485 TO STA. 485+100
C102	PLAN AND PROFILE - STA. 485+100 TO STA. 485+760
C103	PLAN AND PROFILE - STA. 485+760 TO STA. 486+420
C104	PLAN AND PROFILE - STA. 486+420 TO STA. 487+060
C105	PLAN AND PROFILE - STA. 487+060 TO STA. 487+700
C106	PLAN AND PROFILE - STA. 487+700 TO STA. 488+340
C107	PLAN AND PROFILE - STA. 488+340 TO STA. 488+980
C108	PLAN AND PROFILE - STA. 488+980 TO STA. 489+620
C109	PLAN AND PROFILE - STA. 489+620 TO STA. 490+260
C110	PLAN AND PROFILE - STA. 490+260 TO STA. 490+900
C111	PLAN AND PROFILE - STA. 490+900 TO STA. 491+540
C112	PLAN AND PROFILE - STA. 491+540 TO STA. 492+180
C113	PLAN AND PROFILE - STA. 492+180 TO STA. 492+820
C114	PLAN AND PROFILE - STA. 492+820 TO STA. 493+460
C115	PLAN AND PROFILE - STA. 493+460 TO STA. 494+100
C116	PLAN AND PROFILE - STA. 494+100 TO STA. 494+740
C117	PLAN AND PROFILE - STA. 494+740 TO STA. 495+380
C118	PLAN AND PROFILE - STA. 495+380 TO STA. 496+020
C119	PLAN AND PROFILE - STA. 496+020 TO STA. 496+660
C120	PLAN AND PROFILE - STA. 496+660 TO STA. 497+300
C121	PLAN AND PROFILE - STA. 497+300 TO STA. 497+940
C122	PLAN AND PROFILE - STA. 497+940 TO STA. 498+580
C123	PLAN AND PROFILE - STA. 498+580 TO STA. 499+220
C124	PLAN AND PROFILE - STA. 499+220 TO STA. 499+860
C125	PLAN AND PROFILE - STA. 499+860 TO STA. 500+500
C126	PLAN AND PROFILE - STA. 500+500 TO STA. 501+140
C127	PLAN AND PROFILE - STA. 501+140 TO STA. 501+780
C128	PLAN AND PROFILE - STA. 501+780 TO STA. 502+420
C129	PLAN AND PROFILE - STA. 502+420 TO STA. 503+060
C130	PLAN AND PROFILE - STA. 503+060 TO STA. 503+700
C131	PLAN AND PROFILE - STA. 503+700 TO STA. 504+340
C132	PLAN AND PROFILE - STA. 504+340 TO STA. 504+980
C133	PLAN AND PROFILE - STA. 504+980 TO STA. 505+620
C134	PLAN AND PROFILE - STA. 505+620 TO STA. 506+260
C135	PLAN AND PROFILE - STA. 506+260 TO STA. 506+900
C136	PLAN AND PROFILE - STA. 506+900 TO STA. 507+540
C137	PLAN AND PROFILE - STA. 507+540 TO STA. 508+180
C138	PLAN AND PROFILE - STA. 508+180 TO STA. 508+820
C139	PLAN AND PROFILE - STA. 508+820 TO STA. 509+460
C140	PLAN AND PROFILE - STA. 509+460 TO STA. 510+100
C141	PLAN AND PROFILE - STA. 510+100 TO STA. 510+740
C142	PLAN AND PROFILE - STA. 510+740 TO STA. 511+380
C143	PLAN AND PROFILE - STA. 511+380 TO STA. 512+020
C144	PLAN AND PROFILE - STA. 512+020 TO STA. 512+660
C145	PLAN AND PROFILE - STA. 512+660 TO STA. 513+300
C146	PLAN AND PROFILE - STA. 513+300 TO STA. 513+940
C147	PLAN AND PROFILE - STA. 513+940 TO STA. 514+580
C148	PLAN AND PROFILE - STA. 514+580 TO STA. 515+220
C149	PLAN AND PROFILE - STA. 515+220 TO STA. 515+860
C150	PLAN AND PROFILE - STA. 515+860 TO STA. 516+500
C151	PLAN AND PROFILE - STA. 516+500 TO STA. 517+140
C152	PLAN AND PROFILE - STA. 517+140 TO STA. 517+780
C153	PLAN AND PROFILE - STA. 517+780 TO STA. 518+420
C154	PLAN AND PROFILE - STA. 518+420 TO STA. 519+060
C155	PLAN AND PROFILE - STA. 519+060 TO STA. 519+700
C156	PLAN AND PROFILE - STA. 519+700 TO STA. 520+340
C201	TYPICAL SECTIONS - SHEET 1
C202	TYPICAL SECTIONS - SHEET 2
C203	TYPICAL SECTIONS - SHEET 3
C204	CULVERT DETAILS AND TABLE

End of Addendum 001

PART 1 - GENERAL

- 1.1 Section Includes
- .1 Related Requirements.
 - .2 Reference Standards.
 - .3 Definitions.
 - .4 Measurement and Payment.
 - .5 Materials.
 - .6 Equipment.
 - .7 General.
 - .8 Quality Control by the Contractor.
 - .9 Sampling and Testing.
 - .10 Acceptance.
- 1.2 Related Requirements
- .1 31 05 19 - Aggregate General
 - .2 32 12 10 - Asphalt Cement
 - .3 32 12 16 - Hot Mix Asphalt Concrete Pavement
- 1.3 Reference Standards
- .1 ASTM International
 - .1 ASTM C 117-04, Standard Test Method for Material Finer Than 0.075 mm (No.200) Sieve in Mineral Aggregates by Washing.
 - .2 ASTM C 136-06, Standard Method for Sieve Analysis of Fine and Coarse Aggregates.
 - .3 ASTM C 142, Standard Test Method for Clay Lumps and Friable Particles in Aggregates.
 - .4 AASHTO T 59, Standard Method of Test for Emulsified Asphalts.
 - .2 British Columbia Ministry of Transportation and Infrastructure (BC MoTI).
 - .1 Recognized Product List (latest version available at time of tender closing).
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- 1.4 Definitions
- .1 Pavement Centreline Sealing work consists of restoring the asphalt concrete pavement surface to a less permeable condition. The work includes supplying, diluting and applying a pre-mixed asphalt emulsion material for sealing the longitudinal paving mat joint along the roadway centreline on the pavement surface as applicable followed by an application of blotter sand prior to Line Painting work and opening to traffic.
 - .2 The purpose of joint sealing shall be to prevent moisture from penetrating into the road base through longitudinal paving mat joints and to extend pavement life.
- 1.5 Measurement and Payment
- .1 Measurement will be made in km based on the length of longitudinal paving mat joint acceptably sealed. Measurements will be to the nearest 0.1km.
 - .2 Payment will be made at the unit price bid per km for "Pavement Centreline Sealing" in the Tender Form. This payment will be full compensation for supplying the blotter sand blend and asphalt emulsion; diluting, hauling, applying pre-mixed emulsion; placing blotter sand; traffic accommodation and signing; and all labour, materials, equipment, tools and incidentals necessary to complete the work to the satisfaction of the Departmental Representative. No separate payment will be made for supplying of blotter sand blend or asphalt emulsion.

PART 2 - PRODUCTS

- 2.1 Materials
- .1 Emulsified asphalt: The Contractor shall use an asphalt emulsion as listed on the BC MoTI's Recognized Product List under the Proven category for Emulsified Crack Sealants. The asphalt emulsion shall have rejuvenating characteristics as indicated by a high maltene composition. A minimum two weeks prior to placement of the sealant, the Contractor shall provide to the Department the name, supplier and typical analysis of the asphalt emulsion product.
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2.1 Materials
(Cont'd)

- .2 The asphalt emulsion shall be diluted at a ratio of 2 parts emulsion to 1 part water or as recommended by the supplier. The Contractor shall provide the Consultant a copy of all the supplier's weigh bills and records of all restorative asphalt emulsion received and/or returned on a daily basis. The Contractor shall follow the supplier's recommended procedures for storing and handling of the asphalt emulsion on a daily basis. The Contractor shall follow the supplier's recommended procedures for storing and handling of the asphalt emulsion.
- .3 Blotter Sand Blend: The Contractor shall supply screened sand with a maximum topsize of 2mm necessary to prevent pick-up of an overband and prevent when tracking. The aggregate shall be clean, hard, durable, and free from coatings of clay, silt or other deleterious material and shall contain no clay balls or other aggregations of fine material. The aggregates shall not be markedly hydrophilic in character.

2.2 Equipment

- .1 The asphalt emulsion shall be applied using a self-powered pressure distributor meeting the requirements contained in Section 32 12 13.16 - Asphalt Tack Coat or Section 32 12 13.23 - Asphalt Prime Coat and in accordance with the asphalt emulsion supplier's recommended procedures. The nozzles shall uniformly distribute asphalt emulsion mixture to a width of 30 - 45 centimetres, centering at the longitudinal joint.
- .2 Prior to the commencement of the work, the Contractor shall provide the Consultant with calibration data indicating that the distributor has been calibrated to operate at the target application rate. The Contractor is advised that smaller size nozzles may need to be installed in order for the distributor to be properly calibrated.

PART 3 - EXECUTION

3.1 General

- .1 Centreline sealing shall only be performed when the pavement surfaces are dry or nearly dry (no visible moisture), and the pavement surface temperature shall not be lower than 10°C.
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3.1 General
(Cont'd)

- .2 The longitudinal paving mat joint and surrounding surface on which the sealant material to be placed shall be free of dirt, sand, foreign matter, and loose material.
- .3 The centreline joint shall be sprayed with the asphalt emulsion mixture producing a level surface, free of excess asphalt. Following spraying, blotter sand materials shall be spread to provide complete and uniform coverage to prevent tracking of the emulsion mixture.
- .4 The sealed centreline joint may be opened to traffic after the emulsion has cured. The sealed surface shall be broomed by the Contractor after the sealant has sufficiently cured as determined by the Consultant. Generally, the debris may be swept or blown evenly over the sideslopes however, in some cases as determined by the Department Representative, the Contractor shall pick up, haul and dispose of it in an approved site, as directed by the Departmental Representative
- .5 To achieve the restorative effects of the emulsion the blotter sand material shall not be applied until after the emulsion has cured. The sand shall be spread to provide complete and uniform coverage within an estimated range of 2kg/m² to 3kg/m².
- .6 The sealed pavement may be opened to traffic after rolling. The sealed surface shall be broomed by the Contractor after the Sand Seal has sufficiently cured as determined by the Departmental Representative.

PART 4 - QUALITY
CONTROL AND QUALITY
ASSURANCE

3.2 Quality Control
by The Contractor

- .1 The Contractor shall be responsible for providing all resources required to carry out the quality control on all the constituent materials, processes and products, their testing and inspection, within the construction of the sealant and the quality of the end product.
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3.3 Sampling and Testing

- .1 The Department and/or its Representative may request the Contractor to provide test results showing that the materials used for centreline sealing meet the requirements of this specification as determined by the applicable tests.
- .2 The Contractor shall be responsible to provide representative samples for the blotter sand blend and emulsion as required when requested by the Department. These samples shall be taken in presence of the Departmental Representative.
- .3 The above samples may be tested by the Department to ensure that they meet the requirements of this specification.

3.4 Acceptance

- .1 Centreline Sealing shall be accepted based on the following.
 - .1 visual observation of the sealant material,
 - .2 surface appearance of the patch at the time of patching,
 - .3 continuity with adjacent surfaces, and
 - .4 conformance of the sealant materials to the requirements of this specification.
- .2 At the request of the Contractor, the Department Representative will attend on-site to observe the initial joint sealing and advise on its acceptability, before the Contractor proceeds with the balance of the Work.
- .3 Prior to issuance of the Certificate of Final Completion, all finished sealants shall be free of defective areas, as determined by the Departmental Representative, including but not limited to, wheel track marking, ravelling, uneven surface, and fat spots.
- .4 Areas showing defects shall be deemed Unacceptable Work and shall be repaired by the Contractor at no cost to the Department.