

295-2025 ADDENDUM 5

LAGIMODIERE TWIN OVERPASSES OVER CPKC KEEWATIN REHABILITATION AND RELATED WORKS: CONTRACT 2 – BRIDGE STRUCTURES, ROADWORKS, AND LAND DRAINAGE

URGENT

**PLEASE FORWARD THIS DOCUMENT TO
WHOEVER IS IN POSSESSION OF THE
BID/PROPOSAL**

ISSUED: September 26, 2025
BY: Jeff Crang, P.Eng., PTOE
TELEPHONE NO. 431 554-5718

**THIS ADDENDUM SHALL BE INCORPORATED
INTO THE BID/PROPOSAL AND SHALL FORM
A PART OF THE CONTRACT DOCUMENTS**

Template Version: Add 2021-03-05

Please note the following and attached changes, corrections, additions, deletions, information and/or instructions in connection with the Bid/Proposal, and be governed accordingly. Failure to acknowledge receipt of this Addendum in Paragraph 10 of Form A: Bid/Proposal may render your Bid/Proposal non-responsive.

FORM B: PRICES

Replace: 295-2025_Addendum_2_Form_B-Prices(R1) with 295-2025_Addendum_5_Form_B-Prices(R2). The following is a summary of changes incorporated in the replacement Bid/Proposal Submission:

- Form B(R2): Add A.30 Concrete Crack Injection
- Form B(R2): Add E.30 Concrete Crack Injection
- Form B(R2): Revise L.43 (i) to L.39 (i) and change Unit to Each and Approx. Quantity to 1.
- Form B(R2): Revise L.44 to L.40 and delete Unit and Approx. Quantity.
- Form B(R2): Revise L.44 (i) to L.40 (i) and change Unit to Each and Approx. Quantity to 1.
- Form B(R2): Revise H.42 (iv) to change Description to Pipe Anchors.
- Form B(R2): Revise D.22 (i) to change Unit to m².
- Form B(R2): Revise H.17 (i) to change Unit to m.
- Form B(R2): Revise B.1 to change properties in the Unit Price cell G70 and remove the restriction to 15% of Total Bid Price.
- Form B(R2): Revise N.1 to change properties in the Unit Price cell G742 and remove the restriction to 15% of Total Bid Price.
- Form B(R2): Add J.41 Wood Bollards.
- Form B(R2): Add J.42 Removal of Existing Bollards, Fence and Wall – Almey Avenue.
- Form B(R2): Revise K.16 (iv) to change Description to 1500 mm Diam MH.
- Form B(R2): Revise C.23 to change Quantity to 2751.
- Form B(R2): Revise C.24 to change Quantity to 1690.
- Form B(R2): Revise D.24 to change Quantity to 903.

Form B(R2):	Revise G.22 to change Quantity to 1766.
Form B(R2):	Revise G.23 to change Quantity to 292.
Form B(R2):	Revise H.21 to change Quantity to 1729.
Form B(R2):	Revise H.22 to change Quantity to 1110.
Form B(R2):	Revise I.16 to change Quantity to 256.
Form B(R2):	Revise K.1 to change Quantity to 10920.
Form B(R2):	Add K.1b. Topsoil Excavation.
Form B(R2):	Revise K.3 iv) a) to change Quantity to 156.
Form B(R2):	Revise K.3 iv) b) to change Quantity to 25.
Form B(R2):	Revise L.16 i) to change Quantity to 298.
Form B(R2):	Remove L.18.
Form B(R2):	Revise L.27 i) to change Quantity to 5570.
Form B(R2):	Revise L.28 to change Quantity to 12380.
Form B(R2):	Revise L.29 to change Quantity to 12380.
Form B(R2):	Revise J.23 through J.28 and associated quantities
Form B(R2):	Revise J.29 through J.34 to J.29 to J.33 and associated quantities
Form B(R2):	Revise J.35 through J.41 to J.34 through J.40
Form B(R2):	Revise L.34 through L.41 to L.34 through L.37 and associated quantities
Form B(R2):	Revise L.42 through L.44 to L.38 through L.40

Page numbering on some forms may be changed as a result.

PART B – BIDDING PROCEDURES

Revise: B1.1 to read: The Submission Deadline is 12:00 noon Winnipeg time, October 8, 2025.

PART E – SPECIFICATIONS

- Revise: E23.13(a) to read: Working base concrete shall be placed in the locations as shown on the Drawings and shall be incidental to the supply and placement of concrete.
- Revise: E23.54(a)(i): Concrete shall be removed to sound concrete or to the limits as shown on the Drawings, whichever is greater. The resulting surface shall be roughened to remove latent cement and miscellaneous debris. Where existing piers or girder ends have been treated with zinc arc activated spray or anti-graffiti spray, it shall be removed to provide a clean concrete substrate for proper bonding.
- Add: E30.3.2 Notwithstanding the Drawings, FRP strengthening will not be completed on any girder directly above the CPKC Rail lines, limited to the 5m long section of FRP strengthening directly to the north of Piers S-1 and N-1 for both Northbound and Southbound bridges. All other locations as shown on the Drawings shall be included.
- Revise: E30.5.4(c) to read: The color of the coating shall be concrete grey or equivalent approved in accordance with B6 "Substitutes"
- (i) Dulux, BX 9Y +35 ½, CX 3Y +31, FX 8 ¾
- Revise: E30.5.4(d) to read: The exterior faces of the exterior girders shall be coated with Dulux Weatherguard Exterior Matt N1530 or equivalent approved in accordance with B6 "Substitutes".
- Revise: E30.7.4(c) to read: Some of the existing girder ends have been treated with a zinc arc activated spray. Where this existing zinc spray extends into the zone of required FRP strengthening, it shall be removed as required by the FRP supplier for proper bonding of FRP materials to concrete substrate.
- Add: E48.24.2(a)(v) If a cold longitudinal joint results between adjacent mats in which the previously laid mat has a temperature lower than 90 °C for HMA and 75 °C for WMA, the edge of the existing mat shall be sawcut 150 mm from the edge and asphalt removed to facilitate good joint density, bonding and sealing of the joint. Any areas not conforming to line and grade shall be cut out full depth to a minimum width of 150 mm and replaced with fresh material and compacted when laying the new mat. Additionally, any areas not conforming to line and grade or with a rounded corner shall be cut back to the full depth of the lift to form a vertical face. Joints against existing asphalt pavements shall be prepared by saw cutting, cold planning or other method(s) approved by the Contract Administrator, such that the face of the existing pavement is vertical with a square corner.
- Revise: E73.16 Measurement and Payment
- (a) Supplying and Installing Wires and Cables shall be measured on a length basis and paid for at the Contract Unit Price per metre for "Supply and Install wires and Cables", which price shall be paid in full for supplying all materials and for performing all operations herein described and all other items incidental to the Work included in this Specification, accepted and measured by the Contract Administrator.
- (i) Two #4 RW90 Power Conductors
(ii) Two #8 RW90 Power Conductors
(iii) Two #10 RW90 Power Conductors
- Revise: E74.13 Measurement and Payment
- (a) Supplying and Installing Grounding Conductors shall be measured on a length basis and paid for at the Contract Unit Price per metre for "Supply and Install Grounding

Conductors”, which price shall be paid in full for supplying all materials and for performing all operations herein described and all other items incidental to the Work included in this Specification, accepted and measured by the Contract Administrator.

- (i) One #8 Grounding Cable
- (ii) One #10 Grounding Cable
- (iii) One #12 Grounding Cable

Revise	E76.8(a)	Measurement and Payment	(a) Supplying and Installing Junction Boxes complete with fastening and connectors will not be measured and paid for directly but will be considered incidental to the Work. This will include all materials and work for performing all operations herein described and all other items incidental to the Work included in this Specification, accepted and measured by the Contract Administrator.
Add:	E77.11(t)	All spare 53mm underground conduits to be terminated and capped at the last lighting standard approximately 1.0m below grade.	
Revise	E77.15(b)(i)	Measurement and Payment	(a) Conduits <ul style="list-style-type: none"> (i) Supplying and Installing Conduits shall not be measured and paid for directly but will be considered incidental to the Contract Unit Price per metre for “Buried Underground Conduits” (Open Cut Trenching and Trenchless HDD), which price shall be paid in full for supplying all materials and for performing all operations herein described and all other items incidental to the Work included in this Specification, accepted and measured by the Contract Administrator. Measurement of conduit shall be between pole concrete pile foundations.
Revise	E78.17(a)	Measurement and Payment	(a) Installing Conduits by Horizontal Directional Drilling (HDD) shall be measured on a length basis and paid for at the Contract Unit Price per metre for “Trenchless HDD – Two 53 mm PVC Conduits” or “Trenchless HDD – Four 53 mm PVC Conduits”, as applicable, which price shall be paid in full for supplying all materials and for performing all operations herein described and all other items incidental to the Work included in this Specification, accepted and measured by the Contract Administrator.
Revise	E79.12(a)	Measurement and Payment	(a) Installing Conduits by open cut trench shall be measured on a length basis and paid for at the Contract Unit Price per metre for “Open Cut Trenching – Two 53 mm Conduits”, which price shall be paid in full for supplying all materials and for performing all operations herein described and all other items incidental to the Work included in this Specification, accepted and measured by the Contract Administrator.
Delete	E79.13		
Revise:	E84.10.3(c)(ii)	53mm diameter;	
Revise:	E84.11	Lighting circuits power connections to follow wiring diagrams as outlined on the Drawings. Provide junction boxes and individual wiring to each light fixture.	

Revise: E84.14

Items of Work:

- (a) Supply and Installation of Pathway Lighting Fixtures
 - (i) Pole Mount Fixtures
 - (ii) Concrete Pole Foundations
- (b) Supply of Pathway Lighting Fixtures
 - (i) Spare Pole Mount Fixtures (Supply Only)

Add: E86

E86. Wood Bollards

E86.1 Description

- (a) This Specification covers the supply and installation of wood bollards along the Active Transportation (AT) Path at Almey Avenue and Ravelston Avenue West, as shown on the Drawings.

E86.2 Materials

- (a) Wood bollards shall conform to the City of Winnipeg Standard Construction Drawing SCD-105B – Post Bollard.
- (b) The City's Standard Construction Details are available at the following link:
<https://legacy.winnipeg.ca/ppd/Documents/CityPlanning/Parks/StandardConstructionDetails/100ParkEquipment/SCD-105B-Post-Bollard.pdf>
- (c) Notwithstanding the reference on SCD-105B to 19 mm down limestone, backfill material shall be Granular B Base Course.

E86.3 Construction Methods

- (a) The Contractor shall install wood bollards at the locations shown on the Drawings and as specified below:
 - (i) Bollards shall be spaced at 1.5 metres centre-to-centre, unless otherwise directed by the Contract Administrator.
 - (ii) A minimum lateral clearance of 0.6 metres shall be provided from the edge of the AT path to the nearest face of the bollard.
 - (iii) Bollards shall be installed plumb, secure, and to the full embedment depth specified on SCD-105B.
 - (iv) The annular space around the bollards shall be backfilled and compacted in accordance with City of Winnipeg requirements.

E86.4 Measurement and Payment

- (a) Wood bollards will be measured on a unit basis and paid for at the Contract Unit Price per each bollard for "Wood Bollards". The price will include supply of bollards and backfill materials, and all installation, removals, backfill, compaction and other incidental items required to complete the Work as described in this Specification.

Add: E87

E87 Removal of Existing Fence and Wall – Almey Avenue

E87.1 Description

- (a) This Specification covers the complete removal of existing bollards and the existing wall and fence system located at Almey Avenue and Ravelston Avenue West.

E87.2 Construction Methods

- (a) The Contractor shall remove the existing fence and wall as specified below:
 - (i) Remove existing bollards identified on the Drawings.
 - (ii) Remove all wood fence panels and rails.

- (iii) Remove existing wood fence posts.
- (iv) Remove masonry posts, including concrete bases, to a depth of 1.0 metres below existing grade.
- (v) Backfill voids with suitable material to finished grade and compact to prevent future settlement.
- (vi) Strip, add topsoil and sod disturbed areas to match adjacent conditions as directed by the Contract Administrator.
- (vii) Final conditions shall be subject to review and acceptance by the Contract Administrator.

E87.3 Measurement and Payment

- (a) Removal of the existing bollards, fence and wall will be measured on a Lump Sum basis and paid for at the Contract Lump Sum Price for "Removal of Existing Bollards, Fence and Wall – Almey Avenue". The price shall include all demolition, removals, disposal, excavation, backfilling, grading, topsoiling, sodding, and other items incidental to the Work as described in this Specification.

Add: E88

E88 Concrete Crack Injection

E88.1 Description

E88.1.1 General

- (a) This Specification shall cover all operations relating to the epoxy injection of concrete cracks located on the existing concrete pier surfaces as shown on the Drawings and as directed by the Contract Administrator.
- (b) The Work to be done by the Contractor under this Specification shall include the furnishing of all superintendence, overhead, labour, materials, equipment, tolls, supplies, and all things necessary for and incidental to the satisfactory performance, and completion of all Works as herein specified.

E88.1.2 References

- (a) All related Specifications and reference Standards are in accordance with the most current issue or latest revision:
 - (i) Specification E25, Self Consolidating Concrete Repairs

E88.1.3 Scope of Work

- (a) The Work under this Specification shall include surface preparation and epoxy injection of concrete cracks located on the existing bridge pier surfaces, as shown on the Drawings and as identified by the Contract Administrator.

E88.1.4 Submittals

- (a) Four copies of the crack repair work plan shall be submitted to the Contract Administrator at least 3 weeks prior to the commencement of the work.
- (b) The crack repair work plan shall bear the seal and signature of an Engineer and include at least the following information.
- (c) A description of the method of repair, including the following minimum information:
 - (i) Basis of selection.
 - (ii) Proposed effective pressure.
 - (iii) Surface finishing.

- (iv) Location and size of injection ports.
 - (v) Surface treatment of the concrete prior to surface sealing.
 - (vi) Method of storing and handling grouts, cleaning solvents, and waste materials.
- (d) A list of the materials to be used for crack preparation and repair, including the following minimum information:
- (i) Material specifications.
 - (ii) Product data sheets with test data.
 - (iii) Material safety data sheets.
 - (iv) Pot life of the components to be used based on a sample size of 200 ml at 5°C and 20°C.
- (e) A certificate from the material supplier shall be submitted stating the material is suitable for the intended use in this Contract.
- (f) A list of the materials to be used for crack preparation and repair, including the following minimum information:
- (i) The operating pressure of each component
 - (ii) The type of injection port and means of closure.

E88.2 Materials

E88.2.1 Epoxy Resin

- (a) Material used for crack injection shall be epoxy resins for passive cracks.
- (b) Epoxy grout shall prevent the penetration of water and shall have sufficient flowability to fill the crack at least 80% of the depth of the crack using the proposed equipment and method of repair at the ambient and substrate temperatures existing at the time of grouting.
- (c) Epoxy resin shall be moisture insensitive and 100% solids.

E88.2.2 Equipment

- (a) All equipment shall be of a type acceptable to the Contract Administrator and shall be kept in good working order.

E88.2.3 Gauges

- (a) In addition to the calibrated gauges required for use with the pumps and with the injection hose, additional gauges shall be available on site to replace those that malfunction.
- (b) Certificates of calibration, from an organization accredited by the Standards Council of Canada shall be supplied for each gauge certifying that the gauges are capable of measuring the pressure within a tolerance of ± 5 kPa.

E88.2.4 Pumps

- (a) Equipment used for pressure injection shall be suitable for the intended use and compatible with the grout.
- (b) Pumps shall be positive displacement type and shall be capable of delivering a minimum of two litres of grout per minute.

- (c) Pumps shall be capable of developing a maximum regulated operating pressure at least equal to twice the effective pressure.
- (d) Pumps shall be equipped with a calibrated gauge and shall be capable of accurately maintaining an effective operating pressure of 50 kPa or less.
- (e) Plural component pumps shall be used when multicomponent solution grouts are used.
- (f) Hand cartridge pumps shall not be used unless the volume of crack repair is less than one litre of resin for 100 m² of gross repair area.

E88.2.5 Static In-Line Mixers

- (a) Static in-line mixers shall produce a homogeneous grout and shall be sized to accommodate the minimum and maximum anticipated flow rates.
- (b) Static mixers shall have the manufacturer's plate attached showing the following mixer information:
 - (i) Size.
 - (ii) Type.
 - (iii) Maximum operating pressure.

E88.2.6 Agitating Mixers

- (a) Agitating mixers shall have a power driven paddle mixing head and produce a homogeneous component. The speed of the mixers shall be variable to a maximum of 500 rpm.

E88.2.7 Injection Hoses

- (a) Injection hoses shall have a rated working pressure equal to or greater than the maximum pump operating pressure and shall be equipped with a calibrated gauge at the injection port end.

E88.2.8 Injection Ports

- (a) Injection ports shall be removable or non-metallic insert type units. The pressure capacity of the injection ports shall be at least equal to the maximum operating pressure of the pump. All injection ports shall be equipped with a shut-off valve or other mechanical means of closure under pressure.
- (b) Surface mounted injection ports shall not be used.

E88.2.9 Air Compressor

- (a) Compressed air shall be free from oil and water when tested according to ASTM D 4285.

E88.2.10 Drills

- (a) Drilling of the injection holes shall be performed using a rotary percussion or rotary diamond type drill.
- (b) Percussion drilling equipment shall not be used for drilling holes greater than 26 mm diameter and holes within 150 mm of any edge of concrete.
- (c) Only holes 26 mm or less in diameter shall be drilled within 50 mm of any free edge of concrete.

E88.2.11 Concrete Router

- (a) Hand-held grinding wheel or a multi-bladed cut-off saw equipped with abrasive or diamond blades.
- (b) Multi-bladed floor saw cutting equipment equipped with diamond blades.

E88.3 Construction Methods

E88.3.1 General

- (a) Installation of all accessories and material shall be according to the manufacturer's recommendations and as specified in the submitted work plan.
- (b) Work shall only proceed when the temperature of the concrete is 5 °C or greater.
- (c) Prior to commencement of the work, the cracks requiring repair, as identified by the Contract Administrator, shall be numbered, physically marked as to their extent, and measured in the presence of the Contract Administrator.
- (d) This information shall be recorded and a copy submitted to the Contract Administrator.

E88.3.2 Crack Injection

- (a) Drilling for Injection Points
 - (i) Injection holes shall be drilled, on each side of the crack, at a 45° angle to the surface of the concrete. The holes shall be located such that they intersect the crack section at approximately the midpoint and they shall extend through the crack section. The holes shall be sized to accommodate the injection ports. The spacing of the holes shall not exceed the depth of the crack or 200 mm, and the holes shall be alternated from one side of the crack to the other.
 - (ii) Prior to installation of the injection ports each hole shall be individually cleaned of all deleterious material by an air-water blast to completely remove all drill cuttings from the hole.
 - (iii) Injection ports shall be inserted into the holes and sealed. The inserted end of the injection port shall not extend beyond the point at which the drilled hole intersects the crack.
- (b) Cleaning and Flushing
 - (i) After the injection ports have been inserted, cracks shall be flushed with an air-water mixture or an alternating water and air flush to remove all deleterious material prior to the injection of grout. The flushing material shall be injected through the injection port and continued until it exudes from the adjacent injection port and the crack is thoroughly cleaned. This flushing shall proceed from one end of the crack to the other.
 - (ii) A final flush shall be made with air only to remove all of the free water.
- (c) Surface Preparation and Sealing
 - (i) Surface opening of the cracks shall be sealed prior to injection.
 - (ii) The surface of the concrete shall be mechanically cleaned for a distance of 25 mm each side of the crack sections to prepare a clean substrate for bonding of the surface sealing compound. The surface

preparation and sealing shall be as recommended by the manufacturer of the surface sealing material.

- (iii) The surface sealing material shall completely confine the injection grout to the crack section with only the injection ports providing access. The surface sealing material shall withstand the maximum injection pressure without developing leakage along the crack section.
- (iv) Surface sealing of passive cracks shall not commence until at least one hour after the final air flush.

E88.3.3 Injection of Epoxy

- (a) Injection of epoxy shall proceed from the injection port at the lowest elevation of the crack and continue upwards along the crack on an injection port to injection port basis without interruption to the other end of the crack. The injection nozzle shall not be moved to the adjacent injection port until epoxy is showing at the next higher adjacent injection port or refusal criteria is developed.
- (b) While under pressure, each injection port shall be sealed immediately after completion of injection at that injection port.
- (c) When a maximum operating pressure greater than 3 MPa is required to inject the epoxy, the injection operation shall cease until the Contractor determines why this operating pressure is required.

E88.3.4 Monitoring

- (a) The volume of grout used within each five metres of crack length shall be recorded. The pump gauge pressure shall be recorded every 10 minutes. The volume of grout and pump pressure shall be related to the crack location.
- (b) The records shall indicate crack location and number, injection port spacing and confirmation of grout showing or refusal. A copy of the recorded information shall be submitted to the Contract Administrator at the end of each Day.

E88.3.5 Effective Pressure

- (a) When calculating the effective pressure, the head losses shall be determined prior to commencement of injection.
- (b) Head losses shall be determined in the presence of the Contract Administrator by performing a pressure flow test, through the equipment, for each equipment configuration used.

E88.3.6 Ratio Test

- (a) Plural component injection equipment proportioning shall be verified in the presence of the Contract Administrator by measuring the volume output of material in the pressure lines at least once for each two hours of operation.
- (b) When deviation from the manufacturer's specified proportioning ratio exceeds 5%, immediate adjustment or replacement of the equipment is required.

E88.3.7 Pot Life Determination

- (a) Prior to commencing the grouting operation, a sample shall be taken from the material containers on site and manually proportioned to the specified component ratio in the presence of the Contract Administrator. The total

sample size shall be 200 ml, and the same size container shall be used for each sample taken.

- (b) The temperature of the material at the time of mixing and the pot life of the mixed material shall be recorded.
- (c) The proportions of materials and pot life shall conform to those specified in the original submissions.
- (d) An additional sample shall be taken from the end of the injection hose and a further pot life determination performed.
- (e) During grouting material samples shall be taken on a frequency of at least one per hour of operation and the pot life recorded.
- (f) Deviation from the proportions and pot life specified shall result in immediate discontinuance of use of the material.
- (g) All records shall be submitted to the Contract Administrator at the end of each working day.

E88.3.8 Surface Finishing

- (a) Surface finishing shall not proceed until the curing period, as specified by the material supplier, has elapsed. Surface finishing shall consist of removal of the injection ports and the surface sealant flush with the original concrete surface. Core holes and holes left after the removal of injection ports shall be filled with a cement-based non-shrink grout after the surface sealant has been removed.
- (b) Where the crack is not completely filled to the injection surface, the crack shall be filled with a compatible material acceptable to the Contract Administrator. The material shall be applied according to the manufacturer's recommendations.

E88.4 Quality Control and Assurance

E88.4.1 Quality Control

- (a) The Contractor shall be wholly responsible for the control of all operations incidental thereto, notwithstanding any inspection or acceptance that may have been previously given. The Contract Administrator reserves the right to reject any materials or Works, which are not in accordance with the requirements of this Specification.
- (b) Quality Assurance testing shall be undertaken by the Contract Administrator. Quality Control testing shall be undertaken by the Contractor.

E88.4.2 Quality Assurance

- (a) All materials will be subject to physical inspection by the Contract Administrator and will be subject to rejection during the course of the Work and for the length of time as specified in the General Conditions, if, in the opinion of the Contract Administrator, the materials involved do not meet the requirements of the Drawings and this Specification.
- (b) All materials shall be subject to testing by the Contract Administrator and will be approved only if the requirements of the Drawings, Standards and this Specification are met. The Contractor shall supply the specimens for testing in accordance with the requests of the Contract Administrator.
- (c) The Contractor shall furnish facilities for the inspection of material and workmanship in the mill, shop and field, and the Contract Administrator shall be allowed free access to the necessary parts of the Works. The Contractor shall supply samples to the Contract Administrator or his

inspector for testing purposes as required. There will be no charge to the City for samples taken.

E88.5 Measurement and Payment

E88.5.1 General

- (a) Concrete crack injection will be measured on a length basis and paid for at the Contract Unit Price per lineal metre for "Concrete Crack Injection", which price shall be paid in full for supplying all materials and for performing all operations herein described and all other items incidental to the Work. Included in this Specification, accepted and measured by the Contract Administrator.

DRAWINGS

Replace: 295-2025_Drawing_B123-25-2118-R0 with 295-2025_Addendum_5 Drawing_B123-25-2118-R1

Replace: 295-2025_Addendum_3_Drawing_B123-25-2120-R1 with 295-2025_Addendum_5 Drawing_B123-25-2120-R2

Replace: 295-2025_Drawing_B123-25-2218-R0 with 295-2025_Addendum_5 Drawing_B123-25-2218-R1

Replace: 295-2025_Addendum_3_Drawing_B123-25-2220-R1 with 295-2025_Addendum_5 Drawing_B123-25-2220-R2

Replace: 295-2025_Drawing_P123-25-1005-R0 with 295-2025_Addendum_5_Drawing_P123-25-1005-R1

Replace: 295-2025_Drawing_P123-25-1006-R0 with 295-2025_Addendum_5_Drawing_P123-25-1006-R1

Replace: 295-2025_Drawing_P123-25-1020-R0 with 295-2025_Addendum_5_Drawing_P123-25-1020-R1

Replace: 295-2025_Drawing_P123-25-1023-R0 with 295-2025_Addendum_5_Drawing_P123-25-1023-R1

Replace: 295-2025_Drawing_P123-25-3007-R0 with 295-2025_Addendum_5_Drawing_P123-25-3007-R1

Replace: 295-2025_Drawing_P123-25-3008-R0 with 295-2025_Addendum_5_Drawing_P123-25-3008-R1

Replace: 295-2025_Drawing_P123-25-4104-R0 with 295-2025_Addendum_5_Drawing_P123-25-4104-R1

Replace: 295-2025_Drawing_P123-25-4106-R0 with 295-2025_Addendum_5_Drawing_P123-25-4106-R1

Replace: 295-2025_Drawing_P123-25-4107-R0 with 295-2025_Addendum_5_Drawing_P123-25-4107-R1

Replace: 295-2025_Drawing_P123-25-4108-R0 with 295-2025_Addendum_5_Drawing_P123-25-4108-R1

Replace: 295-2025_Drawing_P123-25-4109-R0 with 295-2025_Addendum_5_Drawing_P123-25-4109-R1

Replace: 295-2025_Drawing_P123-25-4203-R0 with 295-2025_Addendum_5_Drawing_P123-25-4203-R1

Replace: 295-2025_Drawing_P123-25-4207-R0 with 295-2025_Addendum_5_Drawing_P123-25-4207-R1

Replace: 295-2025_Drawing_P123-25-4209-R0 with 295-2025_Addendum_5_Drawing_P123-25-4209-R1

Replace: 295-2025_Drawing_P123-25-4211-R0 with 295-2025_Addendum_5_Drawing_P123-25-4211-R1

Replace: 295-2025_Drawing_P123-25-4213-R0 with 295-2025_Addendum_5_Drawing_P123-25-4213-R1

Replace: 295-2025_Drawing_P123-25-4215-R0 with 295-2025_Addendum_5_Drawing_P123-25-4215-R1

Replace: 295-2025_Drawing_P123-25-4217-R0 with 295-2025_Addendum_5_Drawing_P123-25-4217-R1

Replace: 295-2025_Drawing_P123-25-4219-R0 with 295-2025_Addendum_5_Drawing_P123-25-4219-R1

Replace: 295-2025_Drawing_P123-25-4225-R0 with 295-2025_Addendum_5_Drawing_P123-25-4225-R1

Replace: 295-2025_Drawing_P123-25-4229-R0 with 295-2025_Addendum_5_Drawing_P123-25-4229-R1

Replace: 295-2025_Drawing_P123-25-4231-R0 with 295-2025_Addendum_5_Drawing_P123-25-4231-R1

Replace: 295-2025_Drawing_P123-25-4234-R0 with 295-2025_Addendum_5_Drawing_P123-25-4234-R1

Replace: 295-2025_Drawing_P123-25-4237-R0 with 295-2025_Addendum_5_Drawing_P123-25-4237-R1

Replace: 295-2025_Drawing_P123-25-4238-R0 with 295-2025_Addendum_5_Drawing_P123-25-4238-R1

Replace: 295-2025_Drawing_P123-25-4240-R0 with 295-2025_Addendum_5_Drawing_P123-25-4240-R1

Replace: 295-2025_Drawing_P123-25-4242-R0 with 295-2025_Addendum_5_Drawing_P123-25-4242-R1

Replace: 295-2025_Drawing_P123-25-4244-R0 with 295-2025_Addendum_5_Drawing_P123-25-4244-R1

Replace: 295-2025_Drawing_P123-25-4246-R0 with 295-2025_Addendum_5_Drawing_P123-25-4246-R1

Replace: 295-2025_Drawing_P123-25-4247-R0 with 295-2025_Addendum_5_Drawing_P123-25-4247-R1

Replace: 295-2025_Drawing_P123-25-4248-R0 with 295-2025_Addendum_5_Drawing_P123-25-4248-R1

Replace: 295-2025_Drawing_P123-25-4249-R0 with 295-2025_Addendum_5_Drawing_P123-25-4249-R1

Replace: 295-2025_Drawing_P123-25-4252-R0 with 295-2025_Addendum_5_Drawing_P123-25-4252-R1

Replace: 295-2025_Drawing_P123-25-4254-R0 with 295-2025_Addendum_5_Drawing_P123-25-4254-R1

Replace: 295-2025_Drawing_P123-25-4255-R0 with 295-2025_Addendum_5_Drawing_P123-25-4255-R1

Replace: 295-2025_Drawing_P123-25-4256-R0 with 295-2025_Addendum_5_Drawing_P123-25-4256-R1

Replace: 295-2025_Drawing_P123-25-4257-R0 with 295-2025_Addendum_5_Drawing_P123-25-4257-R1

Replace: 295-2025_Drawing_P123-25-4258-R0 with 295-2025_Addendum_5_Drawing_P123-25-4258-R1

Replace: 295-2025_Drawing_P123-25-4259-R0 with 295-2025_Addendum_5_Drawing_P123-25-4259-R1

Replace: 295-2025_Drawing_P123-25-4262-R0 with 295-2025_Addendum_5_Drawing_P123-25-4262-R1

Replace: 295-2025_Drawing_P123-25-4301-R0 with 295-2025_Addendum_5_Drawing_P123-25-4301-R1

Replace: 295-2025_Drawing_P123-25-4304-R0 with 295-2025_Addendum_5_Drawing_P123-25-4304-R1

Replace: 295-2025_Drawing_P123-25-4305-R0 with 295-2025_Addendum_5_Drawing_P123-25-4305-R1

Replace: 295-2025_Drawing_P123-25-4306-R0 with 295-2025_Addendum_5_Drawing_P123-25-4306-R1

Replace: 295-2025_Drawing_P123-25-4307-R0 with 295-2025_Addendum_5_Drawing_P123-25-4307-R1

Replace: 295-2025_Drawing_P123-25-4311-R0 with 295-2025_Addendum_5_Drawing_P123-25-4311-R1

Replace: 295-2025_Drawing_P123-25-4312-R0 with 295-2025_Addendum_5_Drawing_P123-25-4312-R1

Replace: 295-2025_Drawing_P123-25-4313-R0 with 295-2025_Addendum_5_Drawing_P123-25-4313-R1

Replace: 295-2025_Drawing_P123-25-4314-R0 with 295-2025_Addendum_5_Drawing_P123-25-4314-R1

Replace: 295-2025_Drawing_P123-25-4315-R0 with 295-2025_Addendum_5_Drawing_P123-25-4315-R1

Replace: 295-2025_Drawing_P123-25-4319-R0 with 295-2025_Addendum_5_Drawing_P123-25-4319-R1

Replace: 295-2025_Drawing_P123-25-4320-R0 with 295-2025_Addendum_5_Drawing_P123-25-4320-R1

Replace: 295-2025_Drawing_P123-25-4401-R0 with 295-2025_Addendum_5_Drawing_P123-25-4401-R1

Replace: 295-2025_Drawing_P123-25-4402-R0 with 295-2025_Addendum_5_Drawing_P123-25-4402-R1

Replace: 295-2025_Drawing_P123-25-4403-R0 with 295-2025_Addendum_5_Drawing_P123-25-4403-R1

Replace: 295-2025_Drawing_P123-25-4404-R0 with 295-2025_Addendum_5_Drawing_P123-25-4404-R1

Replace: 295-2025_Drawing_P123-25-4408-R0 with 295-2025_Addendum_5_Drawing_P123-25-4408-R1

QUESTIONS AND ANSWERS

Q1: Is it possible to draw power temporary power off of the existing roadway lighting surrounding the exit / entrance ramps? If these lights could be used to provide power to site trailers alone, this could offer significant savings over other methods.

A1: The successful Proponent may discuss the possibility of tying into existing power for construction activities with Manitoba Hydro.

Q2: Regarding E25.6 for the SCC and in reference to CSA A23.1 Cl 8.8.2 Low Shrinkage requirement, we would like to request if you can specify the required shrinkage value (range between 0.035 to 0.070%) as the cost will have a significant difference and this will help the supplier to determine the proper dosage for the admixture.

A2: The concrete shrinkage value is as noted in CSA A23.1 CL 8.8.2 and is dependant on the size of the prism used for testing: 0.04% for prisms measuring 75x75mm and 0.035% for prisms measuring 100x100mm.

Q3: Drawing 2121 shows the compression girder bracing acting on the bottom flange. Is it acceptable for the compression bracing to be located at the bottom of the web, just above where the concrete flares out?

A3: Yes. It is acceptable to brace against the web above the bottom flange. The contact point of the compression bracing should be as close to the point of contact of the overhang formwork bottom leg as possible.

Q4: Please provide additional information regarding Section E30.7.4 (c) The girder ends have been treated with a zinc arc activated spray.

a. Need clarification on how far out the spray is on each girder end and if it can be removed to apply the FRP Strengthening or apply over the zinc arc spray

b. Does any repairs or additional zinc arc spray need to be completed in the E30 work scope?

c. Drawing 2118 shows the arc spray zinc on Detail 4 but no length of zinc arc spray out from end or if the FRP Strengthening overlaps the existing zinc arc spray – better details needed

d. Is the zinc Arc Spray on every girder end?

A4: As shown on Sheet 2118/2218, the FRP is required within the last 5m of the girders starting from the edge of the proposed pier concrete diaphragms. Based on existing information, the zinc-spray is not expected to extend into the zone of the FRP. Preparation of concrete substrate is incidental to the FRP strengthening. If some zinc paint does extend into the FRP zone, cleaning and preparing the concrete substrate would be required for proper bonding as required by the FRP supplier.

No repairs to zinc activated arc spray are required. The majority of it will be removed during preparation of the girder ends for casting new concrete diaphragms, as noted in Addendum 5.

Zinc activated spray is not present on every girder end. It is generally only on exterior faces of exterior girders, but may be present in other locations.

Q5: Please confirm that, as per E41.5.h.v, if the Railway flagger is not on site from 07:30 to 17:30 if the Contractor has performed all their responsibilities as per E41 in requesting Flagging protection, that delays will be treated as Extra Work if work can not commence due to the lack of a Railway flagger.

A5: Potential delays related to flagging protection will be reviewed on a case by case basis throughout construction and addressed through Extra Work or other means if determined appropriate by the Contract Administrator

Q6: Can clarification why eRail safe certification and training is not required by any of the listed workers, however criminal background checks and security training are required?

A6: CPKC requirements. Flagging will be onsite and as such eRail safe is not a specific requirement.

Q7: We are proposing that the barrier control/cold joint as shown on details 8 & 9 of sheets 2122 & 2222 be modified to include a bond breaker along the centreline of the control joint. This change would significantly reduce the traffic barrier duration on the construction schedule.

A7: A bond break at the joint locations would not be acceptable. However, it would be permissible to place concrete for the entire barrier length continuously, provided that the concrete control joint as shown on the Drawings is properly formed into the barrier concrete surface.

Q8: Clarification for number of trains and gaps in train traffic.

A8: Track Blocks have not been currently approved by CPKC. CPKC has noted multiple 2 hour natural gaps in train traffic on a daily basis, however, on average, one to two 2 hour natural gaps in train traffic will be available on a daily basis. The Contractor may apply for Track Blocks, subject to CPKC approval.

Q9: How long in advance of an arrival of a train should bidders assume CPKC flag persons will contact the Contractor to clear the site for the train (ex: second paragraph of 5.4.1 of Appendix E Addendum 3 and A16 of Addendum 4).

A9: Typically 15-30 minutes would be anticipated, but will be confirmed by CPKC Flaggers.

Q10: Does A16 of Addendum 4, specifically suspending work and exiting the RoW, apply to slope paving on the south approach?

A10: Yes.

Q11: Does A16 of Addendum 4, specifically suspending work and exiting the RoW, apply to Pier 2 substructure works?

A11: Yes, for works to the north of the south face of pier 2.