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Date:	November 9, 2017	**File:**	20142670.020.C.01.00
Owner:	Town of Lake Cowichan		
AE Rep.:	Ann Stephenson, P.Eng.		
Project:	Water Main River Crossings		
Subject:	Addendum #1		

ADDENDUM

The following revisions supersede the information contained in the original drawings and specifications issued for the above-named project to the extent referenced and shall become a part thereof. No consideration will be allowed for extras due to the contractor or any subcontractor not being familiar with this addendum.

1. **Information:** Please see the attached revised Scope of Work, Form of Tender and Form of Tender Appendix 1. Note that a "Summary by Location" has been added to the Summary Sheet. The Town of Lake Cowichan reserves the right to award either portion of the project (Greendale or Ohtaki) without awarding the other. However, pricing must be received for both locations for any bid to be considered.

2. **Question:** When is the anticipated award date of this contract?

   Answer: November 22, 2017.

3. **Question:** The tender document has substantial performance listed as February 16, 2018. This type of work is not well suited to being completed in the winter. Could substantial completion be moved to May/June?

   Answer: The preference is to achieve substantial completion for the project by February 16, 2018 as funding is contingent on this date. Although there are challenges associated with winter work, it is also extremely difficult to work on these bridges during the spring and summer months due to high recreational traffic on the river. The date has been removed from the form of tender to allow bidders to provide a date they consider achievable. Bidders must be aware that this date will be part of the consideration (along with the bid amount) in the tender selection process. In addition, separate completion dates are requested for in the Form of Tender Greendale and Ohtaki sites, in the event that the Town elects to award a partial of the contract. All three dates must be provided and preference will be given to the earliest possible date.

4. **Question:** What is the weight rating of each bridge?

   Answer: Some information on the weight rating is available. Per Herold Engineering:

   > *… our report confirmed that the Greendale bridge is suitable for CL-625 truck loading (standard highway vehicles). The report also proposed modifications to the centre span of the Ohtaki bridge that would have reduced the capacity to not less than 4 kPa. As such it is reasonable to proceed on the assumption that the current capacity of this span is at least 4 kPa. There was no mention of capacity on the timber approach spans.*

   If additional capacity information is required, it will be up to the contractor to obtain that assessment from a structural engineer as part of the work.

5. **Question:** What is the walkway width of each bridge?

   Answer: The walkway on Greendale trestle is 2.5m wide. The walkway on Ohtaki bridge is 1.3m at the south entrance and 1.5m at the north entrance. The walkways were surveyed and are shown to scale on the civil drawings.

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6. **Question:** Can we change the pipe from ductile iron to grooved stainless steel either sch 10 or sch 40 for ease of installation?

   Answer: The insulated pipe can be changed to a schedule 10 grooved stainless steel with Victaulic (or approved equal) couplings. The Contractor would be responsible for all restraint details to manufacturer's specifications. If this alternate is selected, the uninsulated portion of the piping must be changed to PVC DR-18 (blue brute or approved equal) pipe. The Scope of Work and the Schedule of Quantities and Prices (Form of Tender, Appendix 1) has been modified to show this alternate.

7. **Question:** Can we change the pipe from the XPS PIB insulation with aluminum jacketing to Urecon pre-insulated pipe with HDPE jacket for ease of installation?

   Answer: Urecon insulation with HDPE jacket is an acceptable alternate to XPS, but the Urecon half-shell system should be used instead. The pre-insulated is a good product, but is very expensive and time consuming due to the shipping requirements.

8. **Question:** Can each bridge be shut down to perform this work or are they to remain open?

   Answer: Bridges can be shut down to perform the work. The contractor will be responsible for posting signage to manage pedestrian and bicycle traffic and notifying the public of closures.

9. **Question:** What is the budget for this project?

   Answer: The budget is not being made public.

10. **Question:** The specification calls for Associated Engineering (AE) to provide all surveys and Contractor need to employ AE for the layout and as-built surveys. Can AE provide the costs for this undertaking?

    Answer: The contractor will be responsible to layout of the above ground portion of piping and works on the bridge. AE will provide survey layout for the "off-bridge" portion of the work as well as on-site control for the contractors use. This will be provided for a fee of $2,900 plus applicable taxes and includes an initial set up of control and layout of connection points on each side of the bridge, followed by complete layout for the remaining civil work on a separate visit.

11. **Question:** Current timber piles on OHTAKI Bridge are soaked in product deemed to be hazardous substance by WorkSafeBC. Does contractor need to undertake specific precautions when drilling these timber piles?

    Answer: The contractor is responsible for all necessary safety precautions for the protection of workers, the public and the environment. It is the contractor's responsibility to determine the details and extent of those precautions. The contractor is required to submit a detail safety plan prior to commencement of construction. Please note that the contractor is also responsible for off-site disposal, at an approved location, of timbers and piles removed from the bridge as part of the works.

12. **Question:** Field welding is not feasible due to fire danger. Can Associated Engineering confirm the Town will carry the insurance for this work?

    Answer: Insurance is to be carried by the contractor as indicated in the contract documents. Welding on the bridge deck is not strictly necessary to complete the work, but can be done with appropriate precautions.

13. **Question:** To maintain access for workers during the construction, can the bridge be shut down during to pedestrian traffic?

    Answer: See #7 above

14. **Question:** Will the Town provide a letter indicating the structural load for equipment on each of the bridge decks?

    Answer: See #3 above

15. **Question:** Can Associated Engineering provide details for the service platform for the air valves?

    Answer: The service platform for Ohtaki is to be design-build in accordance with sketch S104-SK01 provided with this Addendum. Greendale does not require a service platform, but does require the addition of a lockable access gate to access the air valve, to the specification indicated on the sketch.

16. **Question:** Drawings S103 & S106 show details of welding to the D.I. pipes. As this will impact the internal lining of the DI pipe, please confirm that this is acceptable?

    Answer: Welding is to be undertaken to manufacturer's specification for the given pipe type. All due care is to be taken during welding procedures (i.e. no overheating of pipe).

17. **Question:** Can Associated Engineering provide specs & details of restraints required for each joint and bends?

    Answer: For above ground installation: All mechanical restraint is to be per manufacturer's specifications and details. The entire length of pipe is to be restrained as required for the given pipe material. For below ground installation: Details and specifications are provided on sheet C-501.

18. **Question:** Can Contractor proposed alternate piping to replace Ductile Iron?

    Answer: See #5 above

19. **Clarification:** Drawing 2670-02-S-103 has been revised to reflect the dimensions of the existing plate on the Greendale Trestle. See attached.

4 Scope of Work

Watermain River Crossings
Greendale and Ohtaki

The work consists of, but is not necessarily limited to, construction of new watermain installation on Greendale Trestle and Ohtaki Bridge. Includes installation of insulated and restrained watermain over two pedestrian bridges as well as underground tie-ins to existing mains. Will include supply and installation of material, excavation and backfill, grading, compacting, testing, clean-up and all other necessary items to complete the work as indicated on the Contract Drawings.

Note: All existing service locations must be confirmed before construction, with any conflicts reported to the engineer. The methods of payment in this Scope of Work supersede the methods of payment in MMCD.

1	**GENERAL REQUIREMENTS**
1.00	Mobilization & De-Mobilization: Includes the contractor's cost of mobilizing all equipment, labour and materials to and from the site and the cost of the contractor's bonding. Payment will be by Lump Sum paid 50% following award of Contract and 50% following Substantial Completion. Site office location to be approved by Municipality.
1.01	Environmental Protection: Includes the installation and maintenance of Environmental Protection methods as per MMCD Section 01 57 01. Includes the cost of all protection required to prevent construction debris or pollutants from falling into the river. Also includes the costs for ongoing dust control and street cleaning. Payment will be by Lump Sum.
1.02	Traffic Control: Includes the supply of trained traffic control personnel and installation and maintenance of signage all as per MMCD Section 01 55 00 and the Traffic Control manual for Work on Roadways. Also includes the project signage as per MMCD Section 01 58 01. Prior to commencing work a traffic control plan, which includes pedestrian, bicycle and other non-vehicular traffic, is to be submitted to the Contract Administrator and the municipality for approval. The plan is to be updated as construction proceeds. Payment will be by lump sum and paid on a pro rata basis.
2	**WATERWORKS**
2.00	Insulated 250Ø DI or Grooved Stainless Steel Water Main: Includes the supply and installation of the insulated portion of water main on the Greendale Trestle crossing to the sizes shown on the drawings and as per MMCD Section 33 11 01 and Drawings 2670-02-C-101, 2670-02-S-101 -103. Includes pipe, insulation, cladding, fittings, restrainers, cleaning and flushing, pressure testing, testing of valves and chlorinating. Stainless Steel Alternate to include Victaulic couplings or approved equal. Also includes all structural elements such as hangers, pipe supports and appurtenances as shown on Drawings 2670-02-S-101-103 and removal of existing vegetation as required. Payment will be per lineal metre of pipe installed.

2.01	250Ø DI or PVC DR-18 Water Main: Includes the excavation for, supply and installation of the uninsulated portion of water main on the Greendale Trestle crossing to the sizes shown on the drawings and as per MMCD Section 33 11 01 and Drawing 2670-02-C-101. Includes pipe bedding and backfill, bends, tees, crosses, thrust blocks, restrainers, detectable warning tape, cleaning and flushing, pressure testing, testing of valves, and chlorinating. Excess excavated material to be hauled off site. Payment will be per lineal metre of pipe installed.
2.02	Tie-Ins: Includes the supply and installation of materials to perform water main tie-ins to the existing main on the Greendale Trestle crossing as per Drawing 2670-02-C-101. Payment to be per tie-in completed.
2.03	Combination Air Valve and Enclosure: Includes the supply and installation of the air valve and insulated protective polyethylene valve enclosure (Pipeline Products Advantage Series – Granite, or approved equal) on the Greendale Trestle crossing as shown on the drawings. Also includes fabrication and installation of service platform. Payment will be by Lump Sum.
2.04	Insulated 350Ø DI or Grooved Stainless Steel Watermain: Includes the supply and installation of the insulated portion of water main on the Ohtaki Footbridge crossing to the sizes shown on the drawings and as per MMCD Section 33 11 01 and Drawings 2670-02-C-102, 2670-02-S-104-108. Includes pipe, insulation, cladding, fittings, restrainers, cleaning and flushing, pressure testing, testing of valves and chlorinating. Stainless Steel Alternate to include Victaulic couplings or approved equal. Also includes all structural modifications and structural elements such as hangers, pipe supports and appurtenances as shown on Drawings 2670-02-S-104-108. Includes removal and off-site disposal of existing structural members and pieces as shown on the drawings and removal of existing vegetation as required for water main installation. Payment will be per lineal metre of pipe installed.
2.05	350Ø DI or PVC DR-18 Water Main: Includes the excavation for, supply and installation of the uninsulated portion of water main on the Ohtaki Footbridge crossing to the sizes shown on the drawings and as per MMCD Section 33 11 01 and Drawing 2670-02-C-102. Includes pipe bedding and backfill, bends, tees, crosses, thrust blocks, restrainers, detectable warning tape, cleaning and flushing, pressure testing, testing of valves, and chlorinating. Excess excavated material to be hauled off site. Payment will be per lineal metre of pipe installed.
2.06	Tie-Ins: Includes the supply and installation of materials to perform water main tie-ins to the existing main on the Ohtaki Footbridge crossing as per Drawing 2670-02-C-102. Payment to be per tie-in completed.

2.07	Combination Air Valve and Enclosure: Includes the supply and installation of the air valve and insulated protective polyethylene valve enclosure (Pipeline Products Advantage Series – Granite, or approved equal) on the Greendale Trestle crossing as shown on the drawings. Also includes fabrication and installation of service platform, including all labour and materials. Payment will be by Lump Sum.
3	**RESTORATIONS**
3.00	Concrete Restoration – Ohtaki North: Includes the dismantling, modification and re-installation of the concrete lock block wall on the north end of the Ohtaki Footbridge. Includes any cost to replace blocks or dispose of concrete pieces off-site. Payment will be by Lump Sum.
3.01	Ohtaki General Surface Restorations: Includes the restoration of disturbed gravel pathways, asphalt and grassed areas to pre-construction condition for buried sections at both ends of the Ohtaki Footbridge. Gravel pathway surface treatment to consist of 12.5mm minus top course. Disturbed grassed areas to be dressed with 100mm of topsoil and seeded. Includes saw cutting, excavating, loading, hauling and off-site disposal of asphalt. Includes the supply, placement and compaction of Upper Course #2 asphalt concrete paving as per MMCD 32 12 16 in a single 75mm thick lift. Includes finished grading of both topsoil and granular materials to match existing grades or as directed by the Contract Administrator for positive drainage. Payment will be by Lump Sum.
3.02	Ohtaki Park Restorations: Includes the restoration of the landscaped park area on the south end of Ohtaki Bridge to pre-construction condition. Includes removal and replacement of landscape furniture, rocks and plant material as required. Payment will be by Lump Sum.
3.03	Greendale General Surface Restorations: Includes the restoration of disturbed gravel pathways, asphalt and grassed areas to pre-construction condition for buried sections at both ends of the Greendale Trestle. Gravel pathway surface treatment to consist of 12.5mm minus top course. Disturbed grassed areas to be dressed with 100mm of topsoil and seeded. Includes saw cutting, excavating, loading, hauling and off-site disposal of asphalt. Includes the supply, placement and compaction of Upper Course #2 asphalt concrete paving as per MMCD 32 12 16 in a single 75mm thick lift. Includes finished grading of both topsoil and granular materials to match existing grades or as directed by the Contract Administrator for positive drainage. Payment will be by Lump Sum.

5 Form of Tender

(FOR USE WHEN UNIT PRICES FORM THE BASIS OF PAYMENT - TO BE USED ONLY WITH THE GENERAL CONDITIONS AND OTHER STANDARD DOCUMENTS OF THE UNIT PRICE MASTER MUNICIPAL CONSTRUCTION DOCUMENTS.)

Town of Lake Cowichan

Contract: Watermain River Crossings
Greendale and Ohtaki

Reference No. 2014.2670.020

TO OWNER:

1 WE, THE UNDERSIGNED:

1.1 have received and carefully reviewed all of the Contract Documents, including the Instructions to Tenderers, the specified edition of the "Master Municipal Construction Documents - General Conditions, Specifications and Standard Detail Drawings" and the following Addenda:

_____

_____

_____

(ADDENDA, IF ANY)

1.2 have full knowledge of the Place of the Work, and the Work required; and

1.3 have complied with the Instructions to Tenderers; and

2 ACCORDINGLY WE HEREBY OFFER:

2.1 to perform and complete all of the Work and to provide all the labour, equipment and material all as set out in the Contract Documents, in strict compliance with the Contract Documents; and

2.2 to achieve Substantial Performance of the Work on or before:

_____ ; and
(COMPLETION DATE)

2.2.1 the achieve substantial Performance of the Work (were the work is limited to the **Ohtaki Footbridge** Site ONLY as outlined in Appendix 1 – Schedule of Quantities and Prices, Summary by Location) on or before:

_____ ; and
(OHTAKI COMPLETION DATE)

2.2.1 the achieve substantial Performance of the Work (were the work is limited to the **Greendale Trestle** Site ONLY as outlined in Appendix 1 – Schedule of Quantities and Prices, Summary by Location) on or before:

_____ ; and
(GREENDALE COMPLETION DATE)

2.3 to do the Work for the price, which is the sum of the products of the actual quantities incorporated into the Work and the appropriate unit prices set out in Appendix 1, the "Schedule of Quantities and Prices", plus any lump sums or specific prices and adjustment amounts as provided by the Contract Documents. For the purposes of tender comparison, our offer is to complete the Work for the "Tender Price" as set out on Appendix 1 of this Form of Tender. Our Tender Price is based on the estimated quantities listed in the Schedule of Quantities and Prices, and excludes GST.

3 WE CONFIRM:

3.1 that we understand and agree that the quantities as listed in the Schedule of Quantities and Prices are estimated, and that the actual quantities will vary.

4 WE CONFIRM:

4.1 that the following appendices are attached to and form a part of this tender:

4.1.1 the appendices as required by paragraph 5.3 of the Instructions to Tenderers - Part II; and

4.1.2 the Bid Security as required by paragraph 5.2 of the Instructions to Tenderers - Part II.

5 WE AGREE:

5.1 that this tender will be irrevocable and open for acceptance by the Owner for a period of 60 calendar days from the day following the Tender Closing Date and Time, even if the tender of another tenderer is accepted by the Owner. If within this period, the Owner delivers a written notice ("Notice of Award") by which the Owner accepts our tender we will:

5.1.1 within 15 Days of receipt of the written Notice of Award deliver to the Owner:

a) a Performance Bond and a Labour and Material Payment Bond, each in the amount of 50% of the Contract Price, covering the performance of the Work including the Contractor's obligations during the Maintenance Period, issued by a surety licensed to carry on the business of suretyship in the province of British Columbia, and in a form acceptable to the Owner;

b) a Construction Schedule, as provided by GC 4.6.1;

c) a "clearance letter" indicating that the tenderer is in WCB compliance; and

d) a copy of the insurance policies as specified in GC 24 indicating that all such insurance coverage is in place and;

5.1.2 within 2 Days of receipt of written "Notice to Proceed", or such longer time as may be otherwise specified in the Notice to Proceed, commence the Work; and

5.1.3 sign the Contract Documents as required by GC 2.1.2.

6 WE AGREE:

6.1 that, if we receive written Notice of Award of this Contract and, contrary to paragraph 5 of this Form of Tender, we:

6.1.1 fail or refuse to deliver the documents as specified by paragraph 5.1.1 of this Form of Tender; or

6.1.2 fail or refuse to commence the Work as required by the Notice to Proceed, then such failure or refusal will be deemed to be a refusal by us to enter into the Contract and the Owner may, on written notice to us, award the Contract to another party. We further agree that, as full compensation on

account of damages suffered by the Owner because of such failure or refusal, the Bid Security shall be forfeited to the Owner, in an amount equal to the lesser of:

6.1.3 the face value of the Bid Security; and

6.1.4 the amount by which our Tender Price is less than the amount for which the Owner contracts with another party to perform the Work.

7 OUR ADDRESS is as follows:

Address: _____

_____

Phone: _____

Fax: _____

Attention: _____

This Tender is executed this _____ day of _____ 20__.

Contractor:

_____

(FULL LEGAL NAME OF CORPORATION, PARTNERSHIP OR INDIVIDUAL)

_____

(AUTHORIZED SIGNATORY)

_____

(AUTHORIZED SIGNATORY)

6 Form of Tender – Appendices

Appendix 1

SCHEDULE OF QUANTITIES AND PRICES

(SEE PARAGRAPH 5.3.1 OF THE INSTRUCTIONS TO TENDERERS - PART II)

(All prices and *Quotations* including the *Contract Price* shall include all *Taxes*, but shall not include *GST*. *GST* shall be shown separately.)

SUMMARY SHEET

SECTION 1:	General Requirements	$	
SECTION 2:	Water Distribution	$	
SECTION 3:	Restorations	$	
	TENDER PRICE:	$	
	(5%) GST:	$	
	TENDER PRICE PLUS GST:	$	

SUMMARY BY LOCATION:

GREENDALE TRESTLE			OHTAKI FOOTBRIDGE		
SECTION1: Portion of 1.00, 1.01 & 1.02	$		SECTION1: Portion of 1.00, 1.01 & 1.02	$	
SECTION 2: 2.00, 2.01, 2.02 & 2.03	$		SECTION 2: 2.04, 2.05, 2.06 & 2.07	$	
SECTION 3: 3.03	$		SECTION 3: 3.00, 3.01 & 3.02	$	
TENDER PRICE:	$		TENDER PRICE:	$	
(5%) GST:	$		(5%) GST:	$	
TENDER PRICE PLUS GST:	$		TENDER PRICE PLUS GST:	$	

Appendix 1

SCHEDULE OF QUANTITIES AND PRICES

(SEE PARAGRAPH 5.3.1 OF THE INSTRUCTIONS TO TENDERERS - PART II)

(All prices and *Quotations* including the *Contract Price* shall include all *Taxes*, but shall not include *GST*. *GST* shall be shown separately.)

SECTION 1.0 – GENERAL REQUIREMENTS

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
1.00	Mobilization & De-Mobilization	LS	1		
1.01	Environmental Protection	LS	1		
1.02	Traffic Control	LS	1		

Section 1.0 Total _____

SECTION 2.0 – WATER DISTRIBUTION

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
GREENDALE TRESTLE					
2.00	Insulated 250Ø DI or Grooved Stainless Steel Water Main	m	70		
2.01	250Ø DI or PVC DR-18 Water Main	m	50		
2.02	Tie-Ins	LS	2		
2.03	Combination Air Valve and enclosure	LS	1		
OHTAKI FOOTBRIDGE					
2.04	Insulated 350Ø DI or Grooved Stainless Steel Water Main	m	102		
2.05	350Ø DI or PVC DR-18 Watermain	m	47		
2.06	Tie-Ins	LS	2		
2.07	Combination Air Valve and enclosure	LS	1		

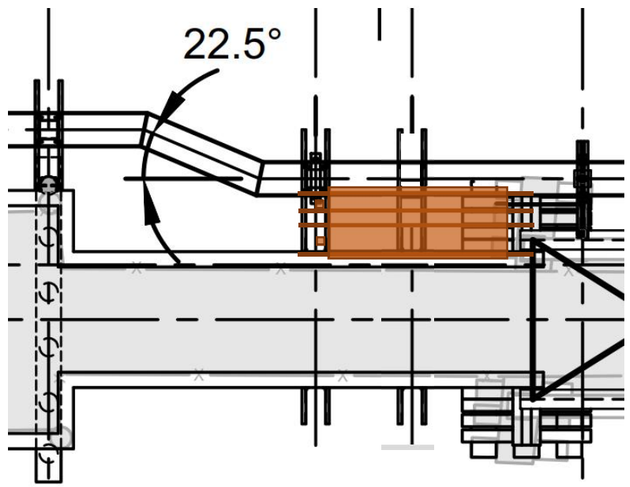
Section 2.0 Total _____

SECTION 3.0 – RESTORATIONS

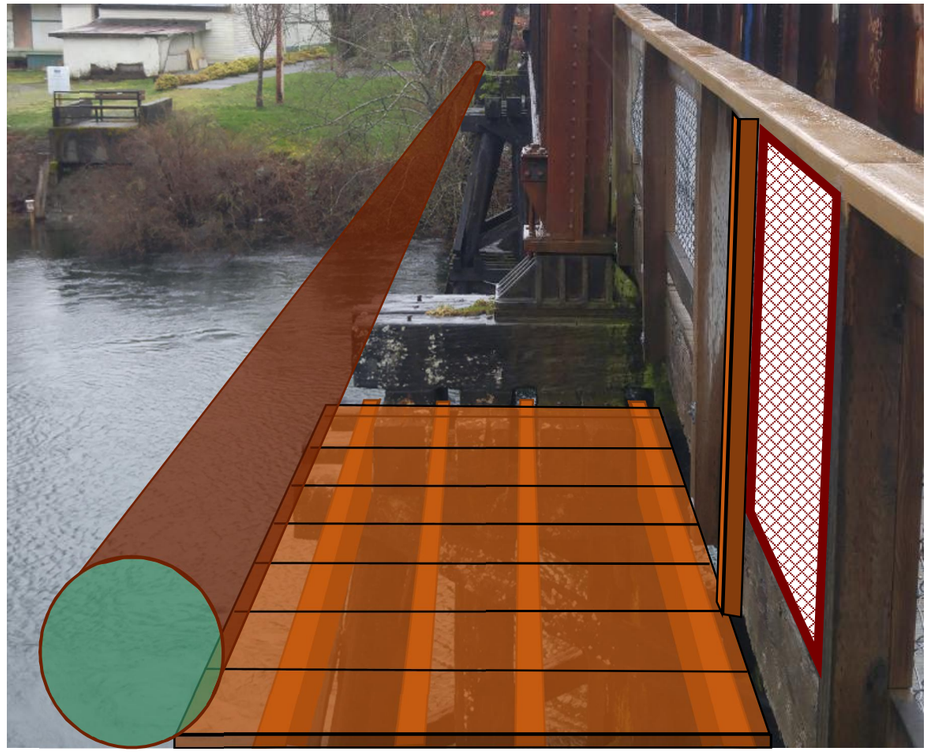
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
3.00	Concrete Restoration – Ohtaki North	LS	1		
3.01	Ohtaki General Surface Restorations	LS	1		
3.03	Ohtaki Park Restorations	LS	1		
3.04	Greendale General Surface Restorations	LS	1		

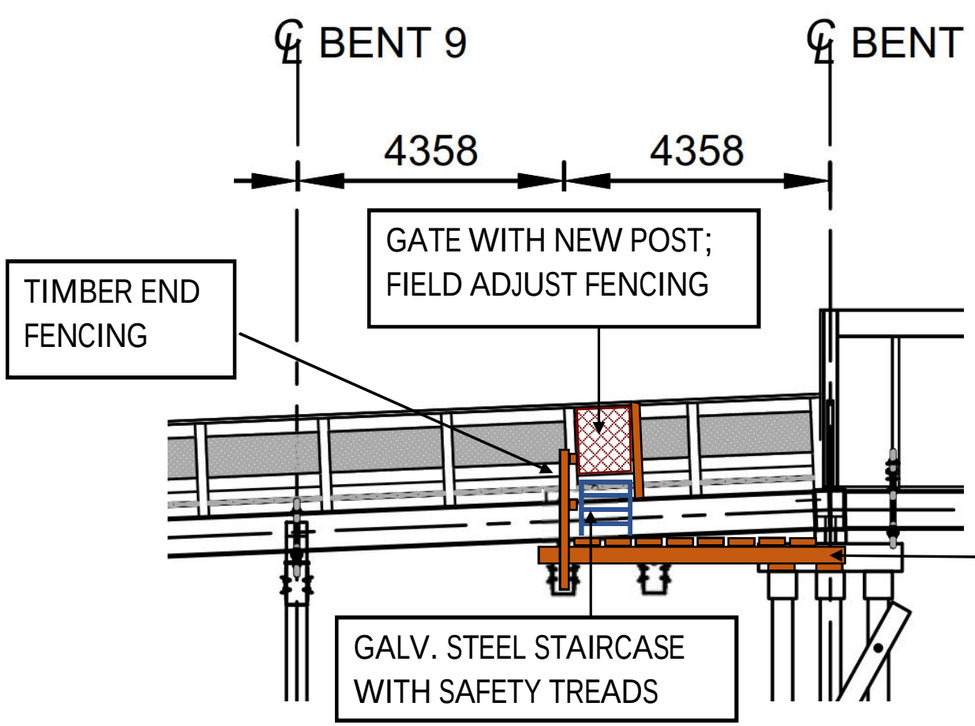
Section 3.0 Total _____

ADDITIONAL HANGER SUPPORT TYPE SEC C ON DWG S-104



FOR CLARITY, ALL NEW ELEMENTS NOT SHOWN IN RENDERING





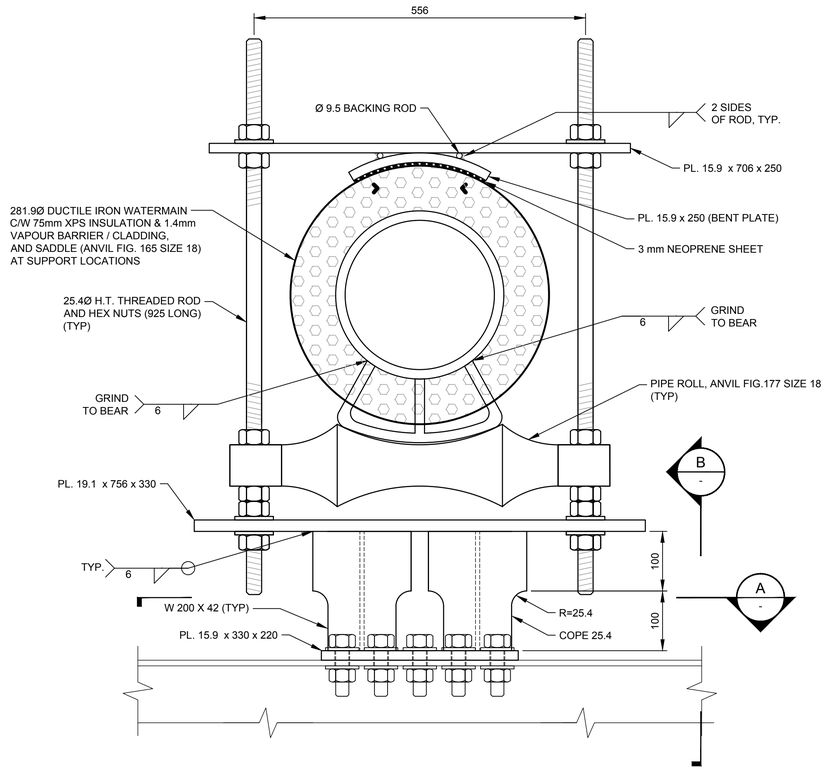
FIELD-FIT 3660 X 1400 SERVICE PLATFORM INCLUDING:

- 4no. 3”x12” TREATED DOUGLAS FIR STRINGERS, WITH 3”X10” OR 3”x8” TREATED DOUGLAS FIR DECKING; FIT TO SUIT IN FIELD BETWEEN PIER BENT AND TWO HANGER SUPPORTS.
- ADDITIONAL HANGER SUPPORT TYPE SEC C ON DWG S-104
- 915 WIDE ACCESS GATE WITH FIELD ADJUSTMENT OF EXISTING FENCING
- END SAFETY FENCING TO SERVICE PLATFORM
- GALV. STEEL STAIRCASE WITH SAFETY TREADS (915mm WIDE NOM.)

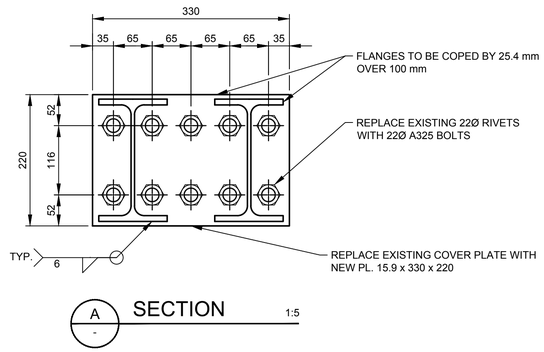
OHTAKI BRIDGE AIR-VALVE SERVICE PLATFORM

S104-SK01 AE 2017-10-30

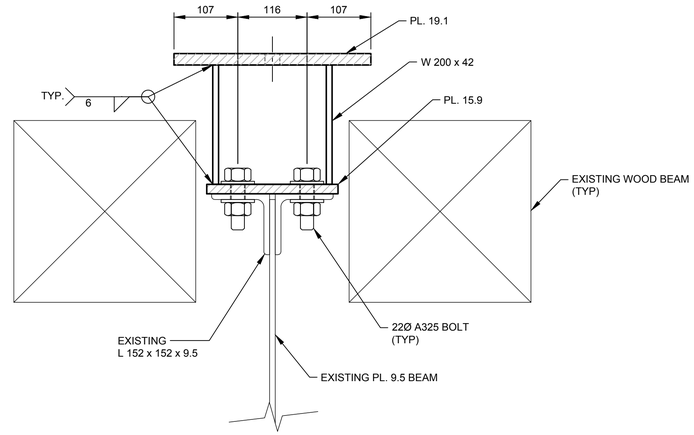
IF NOT 50 mm ADJUST SCALES
50 mm
SCALE(S) SHOWN ARE INTENDED FOR ANSI D (22X34) SIZE DRAWINGS, TABLOID (11X17) SIZE DRAWINGS ARE 1/2 OF SCALE(S) SHOWN UNLESS NOTED OTHERWISE



2 / 101 DETAIL 1:5
HANGER B



A / - SECTION 1:5



B / - SECTION 1:5

NOTES:

1. FOR ADDITIONAL NOTES SEE DWG. 2670-02-S-101.
2. CONFIRM ALL DIMENSIONS ON SITE PRIOR TO FABRICATION.

\\s-vic-fs-01\projects\20142670\02_River_Crossings\Working_Dwgs\300_Structural\2670-02-S-103.dwg
DATE: 2017-11-07, Jenny Moro

Associated Engineering
CANADA'S BEST MANAGED COMPANIES Platinum member

ORIGINAL
SIGNED & SEALED BY
CRAIG SCHAPER
P. ENG.
2017/11/07

REV	DATE	DESIGN	DRAWN	DESCRIPTION
1	2017NOV20	C. SCHAPER / J. JIAO	J. MORO / J. DU	REVISED SUPPORT
0	2017OCT20	C. SCHAPER / J. JIAO	J. MORO / J. DU	ISSUED FOR TENDER

TOWN OF LAKE COWICHAN

RIVER CROSSINGS

20142670-02

SCALE: AS SHOWN

STRUCTURAL
GREENDALE TRESTLE - WATERMAIN SUPPORT SYSTEM
STRUCTURAL DETAILS - SHEET 2

DRAWING	REVISION	SHEET
2670-02-S-103	1	8 / 13