Parks Canada Parcs Canada

RETURN BIDS TO:

RETOURNER LES SOUMISSIONS Á:

Parks Canada Agency
1300 - 635 8 Ave SW
Calgary, AB T2P3M3
Bid Fax: 1-866-246-6893

AMENDMENT / MODIFICATION

002

Tender To: Parks Canada Agency
We hereby offer to sell to Her Majesty the Queen in right of Canada, in accordance with the terms and conditions set out herein, referred to herein or attached hereto, the goods, services, and construction listed herein and on any attached sheets at the price(s) set out therefor.

Soumission aux: l'Agence Parcs Canada
Nous offrons par la présente de vendre à Sa Majesté la Reine du Chef du Canada, aux conditions énoncées ou incluses par référence dans la présente at aux annexes ci-jointes, les biens, services et construction énumérés ici et sur toute feuille ci-annexée, au(x) prix indiqué(s).

Comments - Commentaries

Vendor/Firm Name and Address
Raison sociale et adresse du fournisseur/de l'entrepreneur

Issuing Office - Bureau de distribution

Parks Canada Agency
Suite 1300
635 – 8 Ave SW
Calgary, AB T2P3M3

Title-Sujet
Logan Creek Bridge Construction – Pacific Rim National Park

Solicitation No. - No. de l'invitation	**Date:**
5P420-17-5450/A	January 22, 2018
GETS Reference No. – No de reference de SEAG	**Amendment No. - N° de la modif.**
PW-18-00810188	PR00005

Solicitation Closes:

at – á	**on – le**	**Time Zone - Fuseau horaire**
02:00 PM	January 30, 2018	MST - HNR

F.O.B. - F.A.B.
Plant-Usine: ☐ **Destination:** ☑ **Other-Autre:** ☐

Address Inquiries to: - Adresser toute demande de renseignements à :
Rebecca Chen

Telephone No. - No de téléphone	**Fax No. – No de FAX:**
(403) 292-8509	1-866-246-6893

Destination of Goods, Services, and Construction:
Destinations des biens, services et construction:

See Herein – Voir ici

TO BE COMPLETED BY THE BIDDER (type or print)

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Vendor/Firm Name

_____
Address - Adresse

_____
Name of person authorized to sign on behalf of the Vendor/Firm
Nom de la personne autorisée a signer au nom du fournisseur/ de l'entrepreneur

_____
Titale - Titre

Telephone No. - N° de telephone: _____

Facsimile No. - N° de télécopieur: _____

_____ _____
Signature **Date**

Canada

Amendment 02

This amendment is being raised to amend the drawings, specification document, and to distribute questions and answers submitted via email.

Please note: Any contractors wanting to visit the job site must contact the contracting officer to obtain a permit prior to entering the Park.

A) STRUCTURAL

1. **Drawing S301**

   Clarify Grade of material for Structural Steel WT Sections to be 350W.

2. **Drawing S302**

   Add Deconstruction notes for removal of existing bridge and photos as per attached addendum sketch AD-S01.

3. **Drawing S303**

   Revise side guy cable anchors as per attached drawing S303 issued for addendum No. 1.

4. **Drawing S305**

   Clarify aluminium plank for bridge deck as per attached addendum sketch AD-S02.

   Revise New Bridge Installation Requirements as per attached addendum sketch AD-S03.

   Revise Detail X, Y & Z as per attached addendum sketch AD-S04.

   Revise Detail C as per attached addendum sketch AD-S05.

   Revise Note 3 to be "3. U.N.O., ALL STRUCTURAL STEEL MEMBERS INCLUDING CONNECTION PLATES, CABLE CLAMPS, BOLTS, WASHERS, NUTS, ETC. TO BE HOT DIPPED GALVANIZED."

   Add Note 6: "6. THE ALUMINUM BEAM DESIGNATION SHOWN IS BASED ON IMPERIAL UNITS."

B) SPECIFICATIONS

1. **Delete the following folder in its entirety:** *05 14 00 ALUMINUM STRUCTURAL FRAMING November 2017*

   Replace with: *05 14 00 ALUMINUM STRUCTURAL FRAMING January 2018 (See attachment)*

2. **03 30 00 – Cast In Place Concrete**

   Add: mix design for CDF under Item 2.2.1 as follows:
   - Minimum compressive strength of 10MPa at 7 days and 25 MPa at 28 days.
   - Maximum aggregate = 10mm rounded (no crushed aggregate).
   - Pre plasticizer slump = 80± 20 mm.
   - Post plasticizer flow = 550 – 650 mm.
   - Exposure Class = F2.

C) QUESTION AND ANSWERS SUBMITTED VIA EMAIL

Q1 Is chain Link fencing required?
A1 Temporary Chain link fence, hoarding & tree protection barrier must be completed prior to commencement of the construction work as required.

Q2 Staging Area-is this the best location to place the excavated materials?
A2 The staging areas are the best place for temporary staging of excavated materials as it will not impact the adjacent undisturbed areas. The excavated materials are to be placed on flat ground (away from the top of bank) and covered (e.g., with polyethylene sheets) to prevent erosion (e.g., from rain/winds). Any non-native materials used for stabilization will need to be removed by the contractor following construction.

Q3 What will be required to leave the materials there at the completion?
A3 Soils must be stabilized to prevent erosion. What this entails would depend on the site-specific conditions of the disturbed areas. Flat/depressed areas may pose minimal risks to erosion and could be left depending on the instruction from the EM. Placing some vegetation/wood (salvaged during the clearing phase) on exposed soils could also be effective given the small disturbance area and would limit waste generation (e.g., you wouldn't want to leave foreign materials including polyethylene sheets, sediment fence etc. at the site after construction).

Q4 What do you envision the size of this area will be?
A4 The size of the stage area at each abutment end is approximate 5m x 8m.

Q5 Do you have photos of the proposed staging areas?
A5 Please see the following site photos of the proposed staging areas:

Photo for the staging area at east abutment

Photo for the staging area at west abutment

Q6 Is it a possibly to get a plan view with dimensions of the foot print of the CDF?
A6 Please refer to the addendum sketch AD-S06 for expected outline for the Controlled Density Fill (CDF).
Q7 Can more information be provided for CDF? Flow ability, Strength, Mix design.
A7 Please see the revision/addition to the specification 03 30 00 in this addendum.

Q8 May we use the water from Logan Creek to mix the concrete and is a water draw permit required?
A8 Dependent upon the contactor's required quantity of water, a water draw permit may be required. Any containers used for withdrawal would also have to be clean and free of potential contaminants (e.g., concrete leachate). The contractor will be issued a restricted use permit for using small volumes of water from Logan Creek to mix concrete.

Q9 Can you identify any trees that the ball root system that you think will have to be removed?
A9 Any trees located directly within the footprint of the abutments and staging areas would require removal of roots. However, the trunks/ball root systems of all trees outside this area should be retained.

Q10 Are there designated camp sites for crews?
A10 There are not specific camp sites designated at the camping areas on the WCT.

Q11 Can one abutment be completed before starting the other? Are there any staging or sequencing requirements?
A11 It is up to the contractor to determine their staging or sequencing requirements to suit their own construction schedule.

Q12 Can we get water flows of the unnamed water course 6 meters from the west abutment?
A12 We did not calculate water flows. However, based on field observations the volume is very low.

Q13 Is it possibly to have a condensed/site specific environmental training session to point out danged species that maybe encounter within the work area?
A13 Yes – A preconstruction meeting and environmental tailgates will be held as part of the project.

Q14 Can this be done when your E.M. is on site at the start of the project?
A14 Yes.

Q15 Please confirm that all work is within this specification?

- Install ESC measures prior to onset of work, especially within 30 m of a watercourse.

A15 Refer to the EMP in Appendix A for the required work.

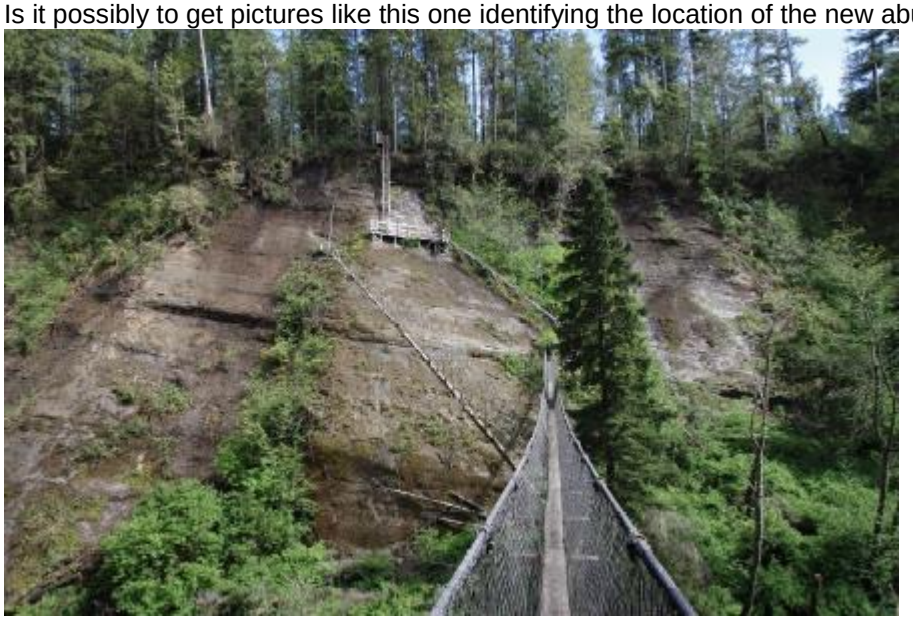
Q16 Can you estimate how many trees may require “mitigation Techniques”? All 9 require falling on the east bank-what about the other side?

- For danger trees (see **Appendix B**), removal of full tree trunks is recommended only when required for safety purposes. Where felling is avoidable, mitigation techniques including topping the trunk at the defect and removal of large and dead branches over the trail, should be implemented instead.

A16 There are 17 danger trees in total that are required to be removed as shown on the Site Plan on drawing S302. Please also refer to EMP in Appendix A for information on danger trees.

Q17 Is there any info available identifying sizes of trunks and heights of trees?
A17 Information on tree height and tree class is provided in the arborist report as part of the Appendices of the EMP.

Q18 Is it possibly to get pictures like this one identifying the location of the new abutments?



A18 We do not have the picture like the above one identifying the location of the new abutments. The abutment locations relative to the existing bridge were shown on drawing S302 and please refer to drawings S304 for existing condition at proposed abutment locations.

Q19 Is it possible to separate unit pricing for excavations and installation of the CDF by the M/3 based on your approximate volumes? Can you also include an over/under unit rate provision? Estimating the amount of excavation and CDF is a large risk?

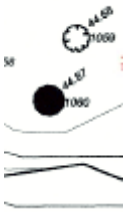
4.3 ABUTMENT DESIGN

The geotechnical preference is that abutments would be founded on competent, intact bedrock thoroughly cleaned of soil and weathered or broken rock. However, given the remote site location and potential difficulties in hand excavating hard till, consideration could be given to supporting the abutments on hard, till-like, natural silt and sand deposits or a combination of till and bedrock. The depth to bedrock is variable and based on hand test pits, probing and soil exposures in the slope is anticipated to be in the order of 1 to 2 m depth in the vicinity of the proposed abutments. Locally shallower bedrock is also present (i.e. 0.3 to 0.6 m depth).

A19 The excavation is assumed to be 1.2m deep to 1.4m deep as shown on the Section X-X on drawing S306. The expected outline for CDF is added on the addendum sketch AD-S06. The price will be based on the above information. Any site condition resulting in the volume of excavation and/or CDF deviates from the above assumptions will be dealt with Change Orders.

Q20 Do the existing main cable stay along with anchors or not?
A20 The Main Cables of the existing bridge will be removed.

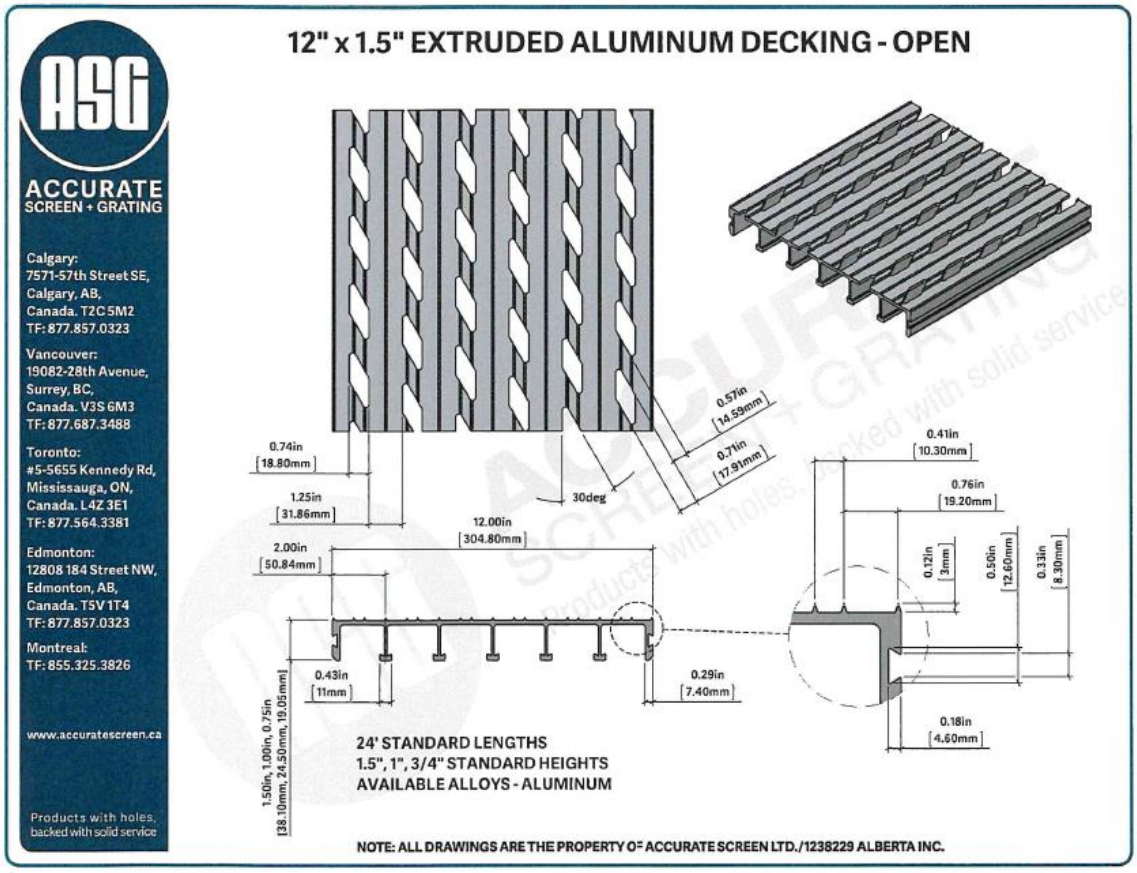
Q21 What is the difference of these two symbols?



A21 The symbols are for different types of trees. Please refer to the Survey Drawing – Topographic Plan of Part of Pacific Rim National Park West Coast Trail KM56 Logan Creek in Appendix D for tree types.

Q22 Is this a “Design Build Project”?
A22 No.

Q23 Will the attached proposed deck be acceptable?



A23 Any aluminum decks satisfying the specified requirements, i.e., width, depth, heavy duty, weight, punched, upset pattern for enhanced slip resistance as shown on the addendum sketch AD-S02 and requirements in specification section 05 14 00 are acceptable.

Q24 Drawing S-305 is it possible to make the aluminum components more identifiable?
A24 Refer to Note 5 on drawing S305 for aluminum components.

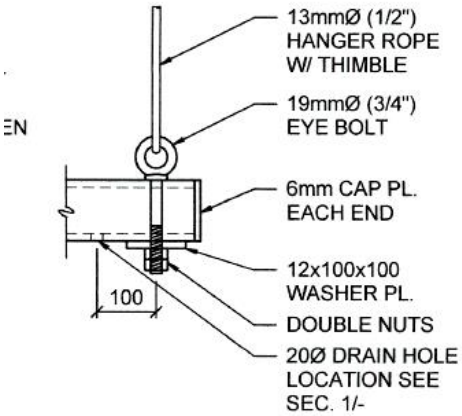
Q25 Is just a wash with clean water and a rough surface acceptable for CDF construction joints?
A25 For construction joints, only horizontal construction joints are allowed and a wash with clean water and a rough surface is acceptable for CDF horizontal construction joints. No vertical construction joints are allowed.

Q26 Are there survey pins on site that can be used to start the excavation of where you think the abutment might be located?
A26 The survey pins on site for hubs with red triangle symbols shown on the Site Plan on drawing S302, i.e., points 1364 & 1349 at east abutment, points 1923 & 1400, can be used as a reference to identify the proposed abutment locations.

Q27 If we have to camp at Culite or Walbran, how will we be able to protect our camp site when the trail is open to the public while we are at the construction site?
A27 It is up to the contractor to protect their camp site. Past experience with Parks Canada boardwalk crews do not indicate any examples of theft or damage. Protection from wildlife, in particular any food, will have to be taken into consideration.

Q28 Do to safety concerns walking to the site will the owner arrange for a helicopter site visit?
A28 The specifications specify that the contractor to arrange and pay for helicopter access for 18 site inspections. The additional trips beyond the specified 18 trips will be carried by Change Order to the contractor.

Q29 Please specify standard or heavy duty?



A29 See addendum sketch AD-S04.

Q30 s301 structural aluminum note 4.
page 05 14 00 Aluminum structural framing 1.5 quality assurance note B
"Mill test report to be certified by a metallurgists qualified to practice of BC Canada."
There are no aluminum extrusion plants in Canada anymore, and all mill certs are prepared by engineers in the country of origin of the product. Will that be satisfy this note?
A30 The mill certificate can be prepared by engineers in the country of origin of the product but the certificate needs to be certified by a metallurgists qualified to practice in BC Canada.

Q31 Page 05 14 00 Aluminum structural framing 1.5 quality assurance note D
Do we really need to go through all the testing of every piece of material on this bridge to prove that aluminum mills didn't lie on their mill certs? If we do, if the material is from the same batch do we only need to test one part, or are we testing every section of every batch?

A31 It is up to the fabricator to provide the testing requirements so that they can provide an affidavit stating that materials and products used in fabrication conform to applicable material and products standards called for by design drawings and specifications.

Q32 For aluminum Fabrication, you have used American certifications that we do not carry here in Canada, is the intent of this tender to have an American company build this bridge? Or can Canadian companies with CWB certification bid on this project as an alternate certification.

A32 The specification section 05 14 00 is revised for CWB certification as per attached updated specification dated January 2018.

Q33 Its noted the bridge may need to be adjusted in length once site clearing has started, do we need to account for this in the tender or will that be dealt with as an extra as it comes up?

A33 The tender is based on the bridge span/length as per the drawings and the adjustment in length/span due to the adjustment of abutment locations, if required, will be dealt with Change Order.

Q34 We need more information on the decking call up for the bridge. It's noted as grating but details show a plank style of decking, and only notes the thickness. If it's grating we need to know the bearing bar spec and spacing, and if it's a plank we need to know which style of plank it is this was designed for. The stair treads are to be designed by the aluminium fabricator, do they need to match the bridge decking or can we go with a cheaper option that doesn't look like the bridge decking?

A34 Please refer to the attached addendum sketch AD-S02 for bridge deck plank requirements. The stair treads to be designed by the aluminium fabricator to satisfy the requirements shown on the drawings and do not need to match the bridge decking.

Q35 page s305 detail Z
#8 s/s screws to hold the c channel to the hanging hss that the bridge sits on. Getting small gauge screws inside a c channel like that will most end up with a lot of broken screws as they tend to break before they thread into thick aluminium. Would stich welds between these two members designed by our engineer work instead of using the s/s screws noted on your plans?

A35 The connection between aluminum members are designed and installed by supplier as per the contract documents. Stitch welds are acceptable.

Q36 Page s305 detail Z
"Safety guard net with hook to edge angle"
This is a little miss leading as it shows it connected to the flat bar kick rail. Is there supposed to be a separate angle the safety net attaches to that's not shown? If not is it ok to have the shackles straddling the kick rail and having the one leg on the inside of the bridge walking surface?

A36 It is clarified in the attached addendum sketch AD-S04 that the safety guard net with hook to edge upstand plate.

Q37 Aluminium I beam span, is the intent to only span from hanger to cover one bay, or can we go 2-3 bays before a connection is installed. This just changes how the sag looks a little as it will be strait connection to connection and the more bays we span the longer the strait part will be thus reducing the amount of strait sections the arc is made of.

A37 It is up to the contractor to select the length of the Aluminum I beam for one bay or more than one bay. However, the I beam will need to connect to each RT tube section as shown on the drawings.

Q38 For all the aluminium connections to be designed by the supplier on the bridge, can you provide the design loading at these points?

A38 Refer to the specification section 05 14 00 for the connection force design requirements.

Q39 Was consideration given to lowering the footing, “so that it sits on the bottom of the excavation,” and raising the up stand wall in order to illuminate the amount of the CDF?

A39 The tender is based on the footing elevation as shown on the drawings, i.e., top of the footing to be no greater than 200mm below exterior grade.

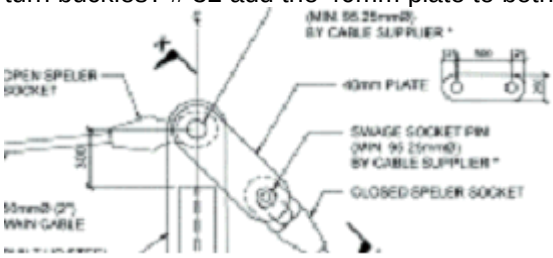
Q40 There are several notes on the drawing asking for “DESIGN” what is meant and what risk are you asking the contractor to take?

A40 This is clarified in the attached addendum sketch AD-S03. The contractor only provides the design for connections and access stair.

Q41 Backfill-can materials excavated be used for backfill around the newly placed concrete?

A41 Refer to specification section 31 23 33.01 – Excavating, Trenching and Backfilling for requirements on backfilling material.

Q42 “Redesign” will delay the project. Would you considered replacing the back cables on one end with turn buckles? # 32 add the 40mm plate to both sides of the post?



A42 We are not sure about the “redesign” noted. The bridge span/length may need to be adjusted to suit the abutment locations selected on site, which may affect the deck slope adjustment at end bays only and would not require the “redesign” of the bridge. The back cable connection should follow the intent shown on the drawings.

All other terms and conditions remain unchanged.