Public Works and Government Services Canada | Travaux publics et Services gouvernementaux Canada

**RETURN BIDS TO:**
**RETOURNER LES SOUMISSIONS À:**

**Travaux publics et Services gouvernementaux Canada**
**Place Bonaventure, portail Sud-Est**
**800, rue de La Gauchetière Ouest**
**7 ième étage**
**Montréal**
**Québec**
**H5A 1L6**

# SOLICITATION AMENDMENT
# MODIFICATION DE L'INVITATION

The referenced document is hereby revised; unless otherwise indicated, all other terms and conditions of the Solicitation remain the same.

Ce document est par la présente révisé; sauf indication contraire, les modalités de l'invitation demeurent les mêmes.

**Comments - Commentaires**

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

**Issuing Office - Bureau de distribution**

Travaux publics et Services gouvernementaux Canada
Place Bonaventure, portail Sud-Est
800, rue de La Gauchetière Ouest
7 ième étage
Montréal
Québec
H5A 1L6

| | |
|---|---|
| **Title - Sujet**<br>Const-Compensation Hab.Poisson NPSL | |
| **Solicitation No. - N° de l'invitation**<br>EE520-171109/A | **Amendment No. - N° modif.**<br>002 |
| **Client Reference No. - N° de référence du client**<br>R.071652.972 | **Date**<br>2016-09-28 |
| **GETS Reference No. - N° de référence de SEAG**<br>PW-$MTC-405-14026 | |
| **File No. - N° de dossier**<br>MTC-6-39162 (405) | **CCC No./N° CCC - FMS No./N° VME** |
| **Solicitation Closes - L'invitation prend fin**<br>**at - à 02:00 PM**<br>**on - le 2016-10-05** | **Time Zone**<br>**Fuseau horaire**<br>Heure Avancée de l'Est HAE |
| **F.O.B. - F.A.B.**<br>**Plant-Usine:** ☐ **Destination:** ☑ **Other-Autre:** ☐ | |
| **Address Enquiries to: - Adresser toutes questions à:**<br>Séguin, Caroline | **Buyer Id - Id de l'acheteur**<br>mtc405 |
| **Telephone No. - N° de téléphone**<br>(514) 496-3734 ( ) | **FAX No. - N° de FAX**<br>(514) 496-3822 |
| **Destination - of Goods, Services, and Construction:**<br>**Destination - des biens, services et construction:** | |

**Instructions: See Herein**

**Instructions: Voir aux présentes**

| | |
|---|---|
| **Delivery Required - Livraison exigée** | **Delivery Offered - Livraison proposée** |
| **Vendor/Firm Name and Address**<br>**Raison sociale et adresse du fournisseur/de l'entrepreneur**<br><br>**Telephone No. - N° de téléphone**<br>**Facsimile No. - N° de télécopieur** | |
| **Name and title of person authorized to sign on behalf of Vendor/Firm (type or print)**<br>**Nom et titre de la personne autorisée à signer au nom du fournisseur/ de l'entrepreneur (taper ou écrire en caractères d'imprimerie)**<br><br>**Signature** **Date** | |

Canada

**THE INVITATION TO TENDER IS MODIFIED AS MENTIONED BELOW:**

**Addendum 002**

The purpose of this amendment is to modify the technical specifications (Addendum 1 of Specifications attached hereunder), as well as the appropriate drawings, to issue a revised version of the bid form and to publish Questions and Answers regarding the technical specifications.

**A) Modification to the technical specifications, drawings and bid form**

Please find enclosed herewith the above-mentioned addendum which forms part of the tender documents.

The previous drawings are replaced partially by the drawings included in this amendment.

**B) Questions and Answers**

QUESTION 1

We would like to have more details regarding the modification of beam supports (it is mentioned slot oblong in the specifications, on the drawing are shown anchor, construction joint, reinforcement). Indicate the exact scope of these works.

ANSWER 1

Details for the support beams to axes 2 and 3 are added to the drawing 60447701-SHT-S-1006 rev.04.

QUESTION 2

Regarding item 2.4 (clearing and grubbing) of the bid form, can you give us an order of magnitude of the scope of work (example in m² or ft²)?

ANSWER 2

Clearing and grubbing are required within the limits of the work, as shown on the drawings.

QUESTION 3

Several steel grades are mentioned. Please confirm the desired grade.

- Steel bracing for Use (angle plate - wt) what grade of steel?
- 300 and 350W or 350WT cat 2?
- Steel Finish? Galvanized?

ANSWER 3

Clause 2.1 of section 05 12 23 Structural steel for bridges is modified in this Addendum and mentions that steel plates, angles and profiles are galvanised grade 350W.

QUESTION 4

ROAD CROSS SECTION, section BB
There is no section in the bid form for this work. Where should we account for the cost of the mud recovery bed, truck waiting areas, access road, reserved areas for construction trailer and fossils stockpiling.

ANSWER 4

The cost of these items should be included in the lump-sum price of item *1.1-Organization of work site* of the bid form.

QUESTION 5

Section 31 00 99 Section 3.8
The following statement reads:
.1 Removal and elimination of waste
Transport off-site debris from land clearing and grubbing to landfill **indicated by the Department Representative** and in accordance with the separation of waste at source program (PTDS).

Does the Department have a site area? Is there a cost? Location to assess transport.

ANSWER 5

Replace the statement by the following:

.1 Removal and elimination of waste.
Transport off-site debris from land clearing and grubbing **to an authorized landfill** and in accordance with the separation of waste at source program (PTDS).

**All other terms and conditions remain unchanged.**

AECOM
AECOM 514 287-8500 Tél.
85, rue Sainte-Catherine Ouest 514 287-8600 Téléc.
Montréal (Québec) Canada
H2X 3P4
www.aecom.com

# ADDENDUM 1

| Project : | Compensation de l'habitat de poisson en eau calme et de milieu, Île Lapierre, Lot 1 | Project N° : 60447701 | Date : 2016-09-23 |
|---|---|---|---|
| | | | Page : 1 of 4 |

## 1.0 General

.1 This addendum presents modifications to the tender documents. Those changes shall be executed in accordance with contractual documents.

.2 The contractor must include all changes described below in his bid and adjust the price and the schedule if necessary.

.3 This addendum follows documents issued on August 26th, 2016, Revision 1

.4 Documents included:

- Drawing SHT-S-1004 rev 04
- Drawing SHT-S-1006 rev 04
- D1: Table mitigation measures

## 2.0 Revisions

### .1 Modifications to drawings

.1 Drawing SHT-S-1004 rev 03 – *Is modified by drawing SHT-S-1004 rev.04*

.2 Drawing SHT-S-1006 rev 03 – *Is modified by drawing SHT-S-1006 rev.04*

### .2 Modifications to the specification

.1 Section 01 11 00

**item 1.4 Work sequence, *sub-item .2 is modified to read* :**

- Contractor has 130 working days to complete the work following the award of the contract;
- Mobilization on site will be authorized from 28 November 2016, any mobilization before that date must be authorized in advance by the Representative.

**item 1.3 Construction method, *is deleted***

.2 Section 01 29 00

**Item 1.4 Presented items in the tender documents, *the title of sub-item .4.4, is modified to read:***

.4.4 Adding a coating layer

**Item 1.4 Presented items in the tender documents, *sub-item .4.5, is added:***

.4.5 Adding a sealing membrane multilayer bituminous membrane

.1 The Contractor shall submit an area price per square meter. The price covers the purchase, installation and includes any incidental expense.

.3 Section 05 12 33

**Item 1.1 Related sections, is modified to read :**

.1 Section 01 33 00 – Submittal procedures

AECOM
AECOM 514 287-8500 Tél.
85, rue Sainte-Catherine Ouest 514 287-8600 Téléc.
Montréal (Québec) Canada
H2X 3P4
www.aecom.com

# ADDENDUM 1

| Project : | Compensation de l'habitat de poisson en eau calme et de milieu, Île Lapierre, Lot 1 | Project N° : 60447701 | Date : 2016-09-23 |
|---|---|---|---|

.2 Payment

.1 The Contractor shall submit a global price for adding and reinforcement of the steel bracing incorporated into work.

.2 Ensure lump sum price includes radiographic examination of shop splices.

.3 Bearings will be paid for on lump sum basis. The price includes slotted holes and additional field splices.

**Item 2.1 Materials, *sub-items .1, .2 and .4 are modified to read :***

.1 Structural steel : Conform to CSA G40.20/G40.21

.1 of this item has been cancelled

.2 For this project the steel grade used for plates, angles and profiles is grade 350W.

.3 Anchor bolts, washers and nuts : to CSA G40.20/G40.21, grade 350W galvanized.

**Item 3.3 Installation, *sub-item 3.3.1 is modified to read :***

.1 For CSA G40.20/G40.21, grade 350W steel, deposited weld metal to have Charpy V-Notch value not lower than that of steel.

.4 Section 07 12 13

**Item 1.1 Related requirements, *a new item .2 is added***

.1 Payment

.1 Contractor shall submit an area price per square meter. The price includes the purchase, installation and all incidental expenses.

**Item 1.3.3 Shop Drawings, *sub-item .2.1 Flashing has been cancelled*.**

**Item 1.5.1 Fire extinguishers, *sub-item .3 is modified to read :***

.1 Size 14 kg per torch applicator.

**Item 1.7.2 Ventilation – *Is cancelled***

**Item 2.1 Plant and Equipment, *sub-item 2.1.3 is modified to read :***

.1 Locate kettles in safe place or, if approved by Departmental Representative, on non-combustible substrate at location to avoid danger of igniting combustible material below.

.1 When locating kettles, give consideration to direction of prevailing winds.

.2 *Stays the same – no modification*

**Item 2.2 System Description *is modified to read :***

.1 Built-up membrane : 4 ply asphalt and felt built-up waterproofing system.

**Item 3.1 Quality of work, *sub-item .1 is modified to read :***

.1 Do examination, preparation and waterproofing work in accordance with CRCA Roofing Specification Manual, particularly for fire safety precautions, and to ULC Design.

**Item 3.6.2 Flashing application, *is cancelled***

**Item 3.6.4 Filter fabric application : protected membrane system only – *sub-item .3 Flashing application is cancelled.***

AECOM
AECOM 514 287-8500 Tél.
85, rue Sainte-Catherine Ouest 514 287-8600 Téléc.
Montréal (Québec) Canada
H2X 3P4
www.aecom.com

# ADDENDUM 1

| Project : | Compensation de l'habitat de poisson en eau calme et de milieu, Île Lapierre, Lot 1 | Project N° : 60447701 | Date : 2016-09-23 |
|---|---|---|---|

**Item 3.8 Field quality control, *is modified to read :***

.1 Inspection

.1 Inspection and testing of BUR application will be carried out by testing laboratory designated by Departmental Representative.

.2 Departmental Representative will pay for tests.

.3 After installation, the waterproofing must be visually inspected by the Ministry's representative to ensure that is adheres well to the entire surface of the slab.

,4 The Contractor shall correct all the shortcomings identified by the Engineer. Air pockets and folds must be punctured and covered with a membrane part exceeding at least 100 mm around the perimeter of the repair area. Poorly executed joints in the membrane must be repeated again.

.2 Testing - ***is cancelled***

.5 Section 31 00 99

**Item 3.8 Removal and elimination of waste, sub-item .1 is modified to read:**

.1 Transport off-site debris from land clearing and grubbing to an authorized landfill and in accordance with the separation of waste at source program (PTDS).

.6 Section 32 12 16.01

**Item 1.1 Related sections, *is modified to read* :**

.1 Section 01 74 11 – Cleaning

.2 Section 07 12 13 Asphalt waterproofing

.3 Payment

.1 The Contractor shall submit a price in metric ton for adding a layer of asphalt pavement on the bridge. The price must include the supply of asphalt binder and slaked lime.

**Item 1.3 Measure for payment, i*s cancelled***

**Item 1.4 References, *sub-items .5** Ontario Provincial Stand Specifications (OPSS) and **.6** The Master Painters Institute (MPI)* ***are cancelled***

**Item 3.2 Fondations, *is cancelled***

**Item 3.4 Pavement construction, *is modified to read* :**

.1 Surface preparation : according to CCDG

.2 Application of price coat and tack coat : according to CCDG.

.3 Construction of asphalt concrete : according to CCDG.

**Item 3.5 Traffic markings, *is cancelled***

.7 Section D: Mitigation Measures

**The table D1 – Mitigation Measures *has been replaced by the table D1 – Mitigation measures table revised***

AECOM
AECOM 514 287-8500 Tél.
85, rue Sainte-Catherine Ouest 514 287-8600 Téléc.
Montréal (Québec) Canada
H2X 3P4
www.aecom.com

# ADDENDUM 1

| Project : | Project N° : 60447701 | Date : |
|---|---|---|
| Compensation de l'habitat de poisson en eau calme et de milieu, Île Lapierre, Lot 1 | | 2016-09-23 |

## 3.0 Bid form

**.1 The title of item 4.4, *is modified to read*:**

Adding an asphalt coating layer

**.2 Item 4.5 Adding a layer of bituminous membrane sealing coating, *is added and to read*:**

| | Section 01 29 00<br>Réf. Item | Description | *Description* | Type d'unité<br>*Unit type* | Nombre d'unités<br>*Mesuring unit* | Prix unitaire<br>*Unit price* |
|---|---|---|---|---|---|---|
| 4.5 | 1.4C-4.5 | Ajout d'une membrane d'étanchéité à membrane bitumineuse multicouche | Adding a sealing membrane multilayer bituminous membrane | m²/m² | 220 | |

## 1.1 Mitigation measures revised

### 1.1.1 Water quality

Several mitigation measures may be applied to reduce the consequences of machinery use during the work as a whole, the effects of excavation work, the management of seepage water, the potential effects of excavated material management, and the consequences the bridge refection work has on the water quality.

| N° | Mitigation measures |
|---|---|
| **Potential accidents** | |
| 1 | Inspect the equipment and machinery before they're introduced on the site and in case of a leak, repair immediately or exclude from site. |
| 2 | Perform a general maintenance and fuel supply of the machinery in identified areas by site supervisor, at least 60m away from a watercourse. |
| 3 | Provide, on site, airtight containers well identified intended for petroleum products. |
| 4 | Use biodegradable oil in machinery that will be in contact with water.<br>All machinery and equipment used on or within 20 m of the high water line shall use hydraulic oil with:<br>biobased content of at least 80%, and biodegradability according to OECD certified B301 or equivalent standard (≥ 60% biodegradability in 28 days).<br>The Contractor will take the necessary measures to fully drain the machinery before filling with vegetable oil or biodegradable; a maximum of 5% of residual oil will be tolerated. The Contractor shall submit documentation proving that the machinery complies. |
| 5 | Place recipients containing petroleum products and other dangerous products in receptacles or between berms that can receive up to 110% of the stored reserve. |
| 6 | Provide on site, at all times, an environmental emergency intervention kit, in case of oil spill. |
| 7 | Put in place a prevention and intervention plan in case of spill and identify responsible people and organisms as well as the procedures to follow in case of environmental emergency. The Contractor must also provide an environmental protection plan, as indicated in specifications. |
| 8 | Report all spills with environmental consequences to the following authorities :<br>Emergency service at Environment Canada (1-866-283-2333) and et Urgence Environnement du Québec (1-866-694-5454); recuperate contaminated materials, and dispose of in certified MDDELCC company. |
| **Wildlife management construction work** | |
| 9 | During the excavation of the channels, it is recommended to reduce the speed of the bucket going up and down in the river and to avoid dragging the bucket on the bottom to level the surfaces. |
| 10 | If an important plume of total suspended solids (TSS) appears outside the working area, excavation activities should be slowed down or excavation should be staggered in time. |
| 11 | Workers must be informed to minimise TSS by avoiding sudden movements or by leveling the bottom with the bucket during the excavation |
| 12 | The Contractor must make sure that there is no fine sediments dispersion in the aquatic environment during their transportation (between excavation, temporary storage and their transportation outside the site). |
| 13 | The Contractor must make sure the temporary storage of sediments on site doesn't cause dispersion of fine sediments (and sediment water) outside (aquatic environment). Sediment barriers (silt fences) must be installed at the edge of the Rivière des Prairies where there is exposed ground or any other technique approved by the MDDELCC. This barrier must be periodically checked to ensure its proper functioning and avoid any increase of total suspended solids (TSS) more than 25 mg/L over background levels in the Rivière des Prairies. |

| N° | Mitigation measures |
|---|---|
| 14 | The machinery that will be working in the water or over water must function to biodegradable oil. The Contractor must present documentation ensuring the machinery is compliant with requirements.<br>All machinery and equipment used on or within 20 m of the high water line shall use hydraulic oil with:<br>biobased content of at least 80%, and biodegradability according to OECD certified B301 or equivalent standard (≥ 60% biodegradability in 28 days).<br>The Contractor will take the necessary measures to fully drain the machinery before filling with vegetable oil or biodegradable; a maximum of 5% of residual oil will be tolerated. The Contractor shall submit documentation proving that the machinery complies. |
| 15 | Snow deposit will not be allowed in area of work or in excavation area. The Contractor must use an elimination site authorised by the MDDELCC. |
| 16 | The Contractor must present a management strategy for the umped water so that it is not returned to the river with suspended material with a concentration superior to 25mg/l higher than the background level of the Rivière des Prairies. Water quality surveillance will be performed during work and of the sedimentation pound before they are rejected will be necessary. |
| 17 | Do not use road salt on bridge. |
| 18 | Silt fences must be installed in the Rivière des Prairies around the excavation area to avoid TSS dispersion outside the working zone |
| 19 | 1) For water works:<br>The performance target for suspended solids is a concentration not exceeding 25mg / L above existing levels. The turbidity should be measured at 100 m downstream of the work from the place of work and 25 meters upstream of the same activities in order to obtain the concentration of the non-affected water. Measures will be taken to a single depth only once a day during the work or up to 4 hours depending on field observations, previous results, the intensity of the work, etc.<br>The Contractor may also measure the turbidity (measured in situ) in place of suspended solids (calibrated only in laboratory). If this option is chosen, the Contractor shall establish a standard curve of turbidity based on the suspended solids before the work begins. The results will be compiled and forwarded to the person responsible for the site.<br><br>2) discharge into the river:<br>The performance target is to respect a concentration that does not exceed 25mg / L above existing levels. The turbidity should be measured directly in the effluent. |
| **Refection work on bridge** | |
| 20 | Imported material for refection work on bridge deposited under high water mark must be clean when they arrive on site. |
| 21 | In the case of an accidental reject of materials or debris in the aquatic environment, they must be quickly recovered and disposed in authorised disposal sites. |
| 22 | The pumped water during the dewatering must respect suspended materials criteria when rejected in the river. Make sure not to pump sediments at the bottom of the river during dewatering of cofferdam. |

### 1.1.2 Air quality

The application of current mitigation measures will help minimize the deterioration of ambient air.

| N° | Mitigation measures |
|---|---|
| 23 | Use well maintained and in good condition machinery and heavy equipment, in accordance with operations characteristics by proceeding to an inspection before they're introduced on site. |
| 24 | Use air-tight dump trucks or standard according to the needs, covered with a tarp, so as to limit the dispersion of fine particles in the air. |
| 25 | Limit the number of trucks present on site at the same time, especially close to residences. |

| N° | Mitigation measures |
|---|---|
| 26 | Dust suppressants made of hygroscopic chloride sodium cannot be used on site less than 50m away from the Rivière des Prairies (BNQ 2410-300). The surfaces inside that zone can only be treated with water. In the case of the excavation work during summertime, the Contractor must spray water regularly on bare surfaces (path, work area). |
| 27 | Equip vehicles with a functioning anti-pollution exhaust system. |
| 28 | Put in place reverse drive alarm of variable intensity. |
| 29 | Turn off all mechanical or electrical equipment when not in use. |
| 30 | Turn off motors of vehicles and gasoline equipment when not in use, if possible. |
| 31 | Clean Gouin boulevard when needed |
| 32 | If earth piles are kept more than 24 hours, they will need to be covered or sprayed with water. |
| 33 | An area to clean up the wheels of the truck will be planned near the exit of the work area to avoid getting the road network dirty. The Contractor will also have the responsibility to make sure the roads stay clean for the duration of the work. |
| 34 | The criteria for fines and total particulates emission shall meet:<br>**Fine particles (2.5 microns)**: 3 hours (35 mg / m³; Environment Canada), 24 hours (30µg / m³; Appendix K of Regulations sanitation of the atmosphere)<br>**Total Particulate**: 1 hour (300 mg / m³; Regulation on clean air and replacing regulations 44 and 44-1 of the Community), 8 hours (190 mg / m³ Regulations on sanitation air and replacing regulations 44 and 44-1 of the Community) |

### 1.1.3 Quality of sediments and soil

The mitigation measures on soil quality must be applied, on top of the following mitigation measures.

| N° | Mitigation measures |
|---|---|
| 35 | Excavated contaminated soils (A-B, B-C and > C) will be immediately charged in the trucks, so they can be eliminated off-site, in a disposal site authorised by the MDDELCC, according to their level of contamination if they aren't too wet. Soils <A can be managed according to the Contractor's needs, outside the site. |
| 36 | If they cannot immediately be transported off-site, the contaminated excavated soils will be stored on site, and separated in distinctive piles, according to their level of contamination. An impermeable membrane will be placed underneath and over piles of contaminated soils of type >B according to the policy. Also, the storage area will be arranged so as to contain any liquid seeping out of the soil. |
| 37 | Any water in contact with the stored soil or any liquid that seeps out of it will be caught and stored in a tank or airtight basin. In the case of the basin, the bottom and sides will be made of an impermeable membrane and the perimeter will be equipped with airtight berms high enough to keep runoff water from penetrating. |
| 38 | At the request of the supervisor, a sample of the soil in the piles can be requested to confirm the level of contamination, in case of doubt. |
| 39 | The chemical analysis of the soil or water seeping from the contaminated piles of soil will be entrusted to a laboratory with accreditations from the Centre d'expertise en analyse environnementale du Québec for the parameters to analyse. A characterization report prepared by a professional with at least three (3) years of experience in environmental characterizations will be supplied to the site supervisor before the final management of the soil or water takes place. The report of characterisation will include, but is not limited to, the description of the employed methodology, the compilation of the analytical results compared to the applicable criteria and norms, the analytical certificates signed by a chemist member of the Ordre des chimistes du Québec, as well as his recommendations on the management to employ for the soils and water. |

| N° | Mitigation measures |
|---|---|
| 40 | The transportation of the contaminated soils will take place in accordance with the Transportation of Dangerous Goods Regulations. In accordance with these regulations, the contaminated soils ≥ B from the policy will be moved in a tipper vehicle covered with an impermeable tarp so as to keep the soil inside the dumpster. The soils of type ≥ C according to the policy will be moved in a truck with the top of its dumpster completely covered to keep the rain and snow from going in, and the contaminants from going out. In all cases, if a liquid can escape from the contaminated soils, the container or dumpster will be air-tight. |
| 41 | Once the cargo delivered, the Contractor must give the site supervisor all documents attesting that the owner of the authorised delivery disposal site takes charge of the contaminated soil (transport manifest, proof of electronic weighing, explaining their nature, the level of contamination and quantity) at the end of every work day. |

### 1.1.4 Coastal vegetation and wetlands

Specific mitigation measures may be applied to reduce the effect of work on aquatic and riparian vegetation.

| N° | Mitigation measures |
|---|---|
| 42 | The Contractor must limit circulation of material to paths and work areas indicated in the contract to avoid disruptions in zones exterior to work. |
| 43 | If disruption of the wetlands takes place (Riparian strip) outside of what was expected, the Contractor must submit a plan of rehabilitation of the site to PWGSC for approval. |

### 1.1.5 Terrestrial vegetation

The following mitigation measures must be applied to reduce the impact of work on terrestrial vegetation.

| N° | Mitigation measures |
|---|---|
| 44 | Rehabilitation and extension of the riparian strip in the area of the bridge, by elimination of the buckthorn population. |
| 45 | The Contractor must limit circulation of material to paths and work areas indicated in the contract. |
| 46 | The Contractor must avoid soil compaction, backfilling or storage of heavy material in the dripline of the trees. |
| 47 | Woody debris will not be buried on the island Lapierre. Woody debris will be disposed of on a site authorised by the MDDELCC, while wood logs must be valorised. |
| 48 | Considering the work is taking place in an area regulated in concerns to emerald ash borer by the Canadian Food Inspection Agency, it is forbidden to move cut down ash trees or sections of trees outside the restricted area. The Contractor will need to verify where the disposal sites are situated with the city of Montreal. |

### 1.1.6 Invasive floristic species

To counter the introduction of invasive species in the work area, the following mitigation measures are mandatory.

| N° | Mitigation measures |
|---|---|
| 49 | The stripped top soil containing the seeds from invasive species will be moved to a disposal site authorised by the MDDELCC. |
| 50 | All components of machinery must be exempt of any mud or fragment of common reed and Japanese knotweed before being brought to work site. |

### 1.1.7 Ichtyofauna and its habitat

Several mitigation measures may be applied to reduce the effects of work on fish and fish habitats.

| N° | Mitigation measures |
|---|---|
| 51 | Apply all of the mitigation measures aiming to avoid deterioration of the water quality. |
| 52 | Machinery cannot circulate in the water. |
| 53 | The excavation work or bridge refection work in the Rivière des Prairies will happen outside of these restricted periods :<br>Do not carry out excavation work on the river or pumping of the river between April 1st and September 1st (which is an acceptable period for DFO and MFFP). |
| 54 | The imported material used for the stabilization work of the bridge must be clean and exempt of contaminants. |
| 55 | The excavation of the aquatic berm (identified zone D on plans) must be done in dry conditions. The Contractor will have to present its excavation plan and proposed techniques to work in dry conditions. |

### 1.1.8 Avian fauna and its habitat

Several mitigation measures must be applied to reduce the effects of work on avian fauna and its habitats.

| N° | Mitigation measures |
|---|---|
| 56 | Carry out forest clearing work outside nesting period, which is between mid-April and end of August. |
| 57 | If the area is cleared, the Contractor is allowed to carry on his work. |
| 58 | Apply mitigation measures on water quality. |

### 1.1.9 Herpetofauna and its habitats

Several mitigation measures must be applied to reduce the effects of work on herpetofauna and its habitats. Many of these mitigation measures are extracted from the management plan of the brown snake that was established as part of the wildlife project for the island Lapierre (Rouleau, 2016).

| N° | Mitigation measures |
|---|---|
| 59 | If a turtle is seen on the work site, the Contractor must inform the site supervisor so it can be moved outside the area of work by the environmental representative of the ministry. All work in the area where the turtle is seen must be suspended until it is moved. |
| 60 | Before the work, there will be the installation of exclusion fences at the perimeter of the work area. There will also be the capture and intensive resettlement of brown snakes on site, towards an adjacent, non-perturbed habitat on the island Lapierre. |
| 61 | During the construction work, all exclusion fences must keep their integrity and their functionality. The brown snakes observed in the work area must be captured and relocated. The exclusion fences must be inspected every second week for the duration of work, and if it appears to be broken, it must be repaired immediately. The inspection must happen more often in case of heavy rains and before the construction work starts. |

| N° | Mitigation measures |
|---|---|
| 62 | The Contractor will be responsible of capturing and resettling the brown snakes seen in the work area after the start of work. To do so, the Contractor will need a permit SEG from the MFFP. The Contractor must produce a report on the activities of capturing and resettling brown snakes annually. If any live snakes are seen in the work area, during hibernation season, the Contractor will need to capture them by hand and move them immediately in a heated place. (Ex: construction trailer) where they will be kept in a plastic container, provided for that specific use. The container will be supplied to the Contractor. The snakes must be kept at a temperature higher than 10 °C but lower than 30 °C at all times, until a specialist comes to retrieve them, or advises the Contractor on the steps to take. The specialist must be immediately notified when or more than one snake is captures so he can follow the necessary protocol. It is possible for the specialist to recommend the Contractor to move the snakes to one of the protected hibernacula on the island. |
| 63 | After the work, there will be a naturalisation of the temporary work areas to recreate habitats favourable to the brown snake (herbaceous vegetation). |
| 64 | During the fall/winter seasons of 2016-2017 prune the tree stratum and cut trees in the zones identified 'Selective cutting areas' in the drawings. |

### 1.1.10 Quality of life (sound environment and traffic management)

The application of mitigation measures will minimize the deterioration of the quality of life of the residents. The mitigation measures relative to dust are presented at section 4.4.2.

| N° | Mitigation measures |
|---|---|
| **Sound environnement** | |
| 65 | Plan work schedule with the borough (Rivière-des-Prairies-Pointe-aux-Trembles) to take into account busiest period (rush hour, touristic period). The work will take place between 7am and 7pm, and not during the weekends. |
| 66 | Comply with regulation B-3 and its addenda specific to the borough RCA06-30015 regarding noise. |
| 67 | Use well maintained and in good condition machinery and heavy equipment, in accordance with operations characteristics by proceeding to an inspection before they're introduced on site. |
| 68 | Avoid work on holidays. |
| 69 | Make sure the equipment is equipped with a good quality and well-functioning silencer. |
| 70 | Plan work so as to use as little loud equipment at the same time as possible. |
| 71 | Place loud equipment far away from sensitive zones (residences) when possible, as in the case of the shredding. |
| 72 | Put in place reverse drive alarm of variable intensity. |
| 73 | Avoid impact noise with back panels of dump trucks. |
| 74 | Limit the use of engine brake to emergency situations. |
| 75 | Turn off all mechanical or electrical equipment when not in use. |
| 76 | Adopt methods of discharge materials to limit impact noise. |
| 77 | Limit the number of chainsaws working at the same time on the side of the residences (south-east part of the island). The cutting work must happen inside a period of three (3) weeks and cannot exceed the sound criteria mentioned in section 4.1.12. |
| 78 | Minimize vehicle and gasoline equipment idling. Respect regulation RCA06-30011. |
| 79 | The Contractor must indicate on a sign, the length of work for each phase of the project. |
| 80 | The surrounding noise will be evaluated before the work starts. If any complaints are made about the noise, noise reduction measures will be taken. If noise measures indicate that the criteria are exceeded the work will be suspended to adjust the work methods to reduce sources of noise. |

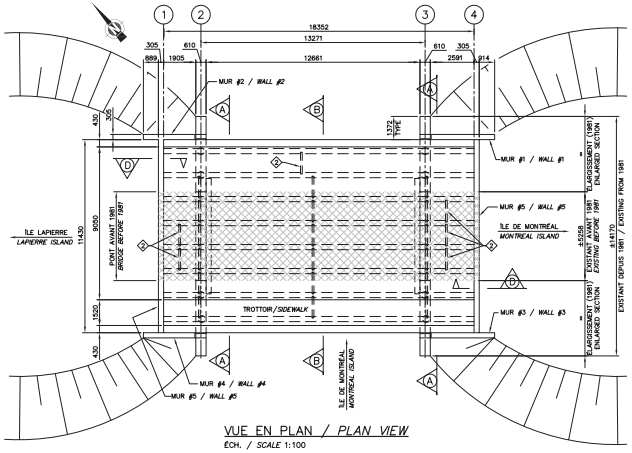
| N° | Mitigation measures |
|---|---|
| | <table><tr><th rowspan="3">Zone et utilisation du sol</th><th colspan="6">Niveaux sonores à ne pas dépasser (dBA)<br>(bruit ambiant et chantier combiné)</th></tr><tr><th colspan="2">Jour (de 7h à 19h)</th><th colspan="2">Soir (de 19h à 23h)</th><th colspan="2">Nuit (de 23h à 7h)</th></tr><tr><th>L10 (4)</th><th>Lmax (5)</th><th>L10 (4)</th><th>Lmax (5)</th><th>L10 (4)</th><th>Lmax (5)</th></tr><tr><td>Zones sensibles au bruit : habitations, établissements hospitaliers et scolaires, parcs, hôtels, etc.</td><td>75 ou bruit ambiant + 5 (1)</td><td>85 ou 90 pour un bruit d'impact (2)</td><td>Bruit ambiant + 5</td><td>85</td><td>Bruit ambiant + 5 (si bruit ambiant < 70)<br>Bruit ambiant + 3 (si bruit ambiant >= 70)</td><td>80</td></tr><tr><td>Zones commerciales : immeubles de bureaux, commerces, etc.</td><td>80 ou bruit ambiant + 5 (1)</td><td>Aucun</td><td>Bruit ambiant + 5 (3)</td><td>Aucun</td><td>Aucun</td><td>Aucun</td></tr><tr><td>Zones industrielles : usines, ateliers, etc.</td><td>85 ou bruit ambiant + 5 (1)</td><td>Aucun</td><td>Aucun</td><td>Aucun</td><td>Aucun</td><td>Aucun</td></tr></table><br>(1). The highest between the two becomes the level not to be exceeded.<br>(2) The impact noise is an intermittent noise whose intensity rises rapidly.<br>(3) If applicable, during commercial opening hours.<br>(4) Measured L 10 is the mean over a 30 minuts period.<br>(5) Measured L max represent the maximal value of a sound. The measure time is generally of one second. |
| **Traffic management** | |
| 81 | The Contractor must establish a circulation plan for the trucks with the borough Rivière-des-Prairies-Pointe-aux-Trembles. The resource person at the borough is head of division Mr. Bernard Donato, who can be reached at (514)868-4283. As part of this circulation plan, it should be mentioned how many trucks are authorised on site at the same time, especially closer to the residences. |
| 82 | Confine machinery circulation on the preferred route inside the intervention area and prohibit heavy machinery circulation outside the designed areas. |
| 83 | Respect the speed limit as well as the permitted charges to maintain the quality of the road network, and to reduce noise and dust emission. |

### 1.1.11 Public safety

Public safety could be affected by work, which will require the application of the following mitigation methods.

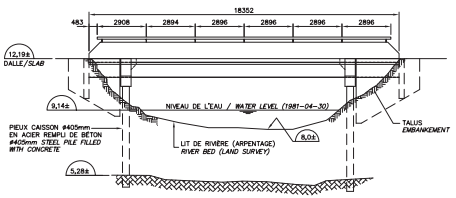
| N° | Mitigation methods |
|---|---|
| 84 | Ensure the protection of the population at the outskirts of the construction site, by using protection fences, signalling, and adequate surveillance. |
| 85 | Delineate a security perimeter to restrict access to the site to non-authorised people. |
| 86 | Issue a notice to the population through the municipality on the nature of the work and length of duration. |
| 87 | Respect schedules and periods of work prescribed by the City. |
| 88 | Respect codes, norms, and general regulations relative to the health and security of the workers and the public. |
| 89 | Adopt preventive measures when heavy machinery is moved or driven on the dock, such as the ones presented by the Association paritaire pour la santé et sécurité du travail du secteur de la construction (ASP construction) |
| 90 | To make sure navigation is secure during work period, put in place the recommendations issued in their licence by the navigable waters protection division from Transport Canada. |
| 91 | Put in place signage informing road users of the presence of heavy vehicles. |
| 92 | Respect the speed limit as well as the permitted charges to reduce the risk of accidents happening. |

| | Section 01 29 00<br>Réf. Item | Description | *Description* | Type d'unité<br>*Unit type* | Nombre d'unités<br>*Mesuring unit* | Prix unitaire<br>*Unit price* | Coût d'estimé<br>*Estimated cost* |
|---|---|---|---|---|---|---|---|
| **A** | | **ORGANISATION DE CHANTIER** | ***WORK ORGANISATION*** | | | | |
| **1.** | | **Organisation de chantier, mesures de sécurité et de protectio** | ***Organization of work site, safety and environmental protection measures*** | | | | |
| 1.1 | 1.4 A-1.1 | Organisation de chantier | *Organization of work site* | forfait/global | 1 | | |
| 1.2 | 1.4 A-1.2 | Nouvelle clôture et barrière à deux battants | *New fence and barrier with double gates* | forfait/global | 1 | | |
| 1.3 | 1.4 A-1.3 | Maintien de la circulation | *Traffic control measures* | forfait/global | 1 | | |
| 1.4 | 1.4 A-1.4 | Mesures de protection environnementale | *Environmental measures* | forfait/global | 1 | | |
| | | | | **Total A - Organisation de chantier / Total A- Work organisation:** | | | |
| **B** | | **DÉMOLITION SÉLECTIVE ET PRÉPARATION DES SITES** | ***SELECTIVE DEMOLITION AND SITE PREPARATION*** | | | | |
| **2.** | | **Préparation du site** | ***Site Preperation*** | | | | |
| 2.1 | 1.4 B-.2.1 | Coupe d'arbres et essouchement (DHP moins de 150 mm) | *Tree cutting and stump removal (DBH less than 150 mm)* | unité/unit | 383 | | |
| 2.2 | 1.4 B-.2.2 | Coupe d'arbres et essouchement (DHP plus de 150 mm) | *Tree cutting and stump removal (DBH greater than 150 mm)* | unité/unit | 132 | | |
| 2.3 | 1.4 B-.2.3 | Coupe sélective d'arbres (DHP variable) | *Selective tree cutting (variable DBH)* | unité/unit | 48 | | |
| 2.4 | 1.4 B-.2.4 | Déboisement | *Clearing and grubbing* | forfait/global | 1 | | |
| 2.5 | 1.4 B-.2.5 | Taille des arbres (20 hr) | *Tree pruning* | heure/hour | 20 | | |
| 2.6 | 1.4 B-.2.6 | Excavation, transport et disposition de déblais de type < A | *Excavation, transport and disposal of excavation soil type < A* | tonne métirique | 39 600 | | |
| 2.7 | 1.4 B-.2.7 | Excavation, transport et disposition de déblais de type AB | *Excavation, transport and disposal of excavation soil type AB* | tonne métirique | 23 700 | | |
| 2.8 | 1.4 B-.2.8 | Excavation, transport et disposition de déblais de type BC | *Excavation, transport and disposal of excavation soil type BC* | tonne métirique | 2 500 | | |
| 2.9 | 1.4 B-.2.9 | Excavation, transport et disposition de déblais de type > C | *Excavation, transport and disposal of excavation soil type > C* | tonne métirique | 1 000 | | |
| 2.10 | 1.4 B-.2.10 | Excavation et gestion hors site des matières résiduelles | *Excavation and off-site management of residual materials* | tonne métirique | 6 350 | | |
| 2.11 | 1.4 B-.2.11 | Gestion des eaux | *Water management* | forfait/global | 1 | | |
| 2.12 | 1.4 B-.2.12 | Pelle mécanique | *Excavator* | heure/hour | 40 | | |
| | | | | **Total B- Démolition sélective et préparation des sites / Total B- Selective demolition and site preparation** | | | |
| **C** | | **CONSOLIDATION ET RÉFECTION DU PONT** | ***BRIDGE REINFORCEMENT AND REPAIR*** | | | | |
| **3.** | | **Renforcement de la structure d'acier** | ***Steel structure reinforcement*** | | | | |
| 3.1 | 1.4 C-.3.1 | Ajout des contreventements L102x102x6.4 en X | *Adding bracing L102x102x6.4 in X* | forfait/global | 1 | | |
| 3.2 | 1.4 C-.3.2 | Modification des appuis des poutres | *Modification of beam support* | unité/unit | 32 | | |
| | | | | ***Sous-total - Renforcement de la structure d'acier/Sub-total - Steel structure reinforcement*** | | | |
| **4.** | | **Aménagement du pont** | ***Bridge works*** | | | | |
| 4.1 | 1.4 C-.4.1 | Installation des nouvelles glissières de type jersey sur le pont | *New jersey type guardrail installation on bridge* | m/m | 36 | | |
| 4.2 | 1.4 C-.4.2 | Fermeture des ouvertures sur le pont | *Closing of the bridge openings* | unité/unit | 2 | | |
| 4.3 | 1.4 C-.4.3 | Obturation de l'ouverture dans le mur du garde-grève | *Closing of the opening in the wing walls* | m²/m² | 2,5 | | |
| 4.4 | 1.4 C-.4.4 | **Ajout d'une couche de revêtement d'enrobé** | ***Adding a coated layer*** | Tonne | 40 | | |
| **4.5** | **1.4C-4.5** | **Ajout d'une membrane d'étanchéité à membrane bitumineuse multicouche** | **Adding a sealing membrane multilayer bituminous membrane** | **m²/m²** | **220** | | |
| | | | | ***Sous-total - Aménagement du pont/Sub-total - Bridge works*** | | | |
| **5.** | | **Remblai aux culées et approches** | ***Backfill at abutments and approaches*** | | | | |
| 5.1 | 1.4 C-.5.1 | Déblai 2ème classe | *Common excavation* | m³/m³ | 300 | | |
| 5.2 | 1.4 C-.5.3 | Remblai pierre concassée MG-56 | *Crushed stone backfill MG-56* | m³/m³ | 300 | | |
| 5.3 | 1.4 C-.5.2 | Remblai pierre concassée MG-20 | *Crushed stone backfill MG-20* | m³/m³ | 200 | | |
| 5.4 | 1.4 C-.5.5 | Remblai pierre concassée MG-112 | *Crushed stone backfill MG-112 avec géotextile* | m²/m² | 110 | | |
| 5.5 | 1.4 C-.5.4 | Revêtement de protection en pierres calibres 300-500 mm | *Stone protective coating of 300-500 mm* | m³/m³ | 85 | | |
| | | | | ***Sous-total - Remblai aux culées et approches/Sub-total - Backfill at abutments and approaches*** | | | |
| **6.** | | **Murs gabions** | ***Gabion Wall*** | | | | |
| 6.1 | 1.4 C-.6.1 | Partie gabion non végétalisée | *Non vegetated gabion section* | m³/m³ | 225 | | |
| 6.2 | 1.4 C-.6.2 | Partie gabion végétalisée | *Vegetated gabion section* | m²/m² | 115 | | |
| 6,3 | 1.4 C-.6.3 | Ensemencement des pentes et replat en bordure du pont | *Seeding of the slopes and flat area next to th bridge* | m²/m² | 75 | | |
| | | | | ***Sous-total - Murs gabions/Sub-total - Gabion Wall*** | | | |
| | | | | **Total C-Consolidation et réfection du pont / Bridge reinforcement and repair** | | | |
| | | | | **SOUS-TOTAL - TRAVAUX LOT 1/SUB-TOTAL - LOT 1 CONSTRUCTION (sans les contingences/without contingencies)** | | | **0,00 $** |
| | | | | **Contingences/contingencies 10%** | | | **0,00 $** |
| | | | | **TOTAL - TRAVAUX LOT 1 / TOTAL - LOT 1 CONSTRUCTION (incluant les contingences/with contingencies)** | | | **0,00 $** |



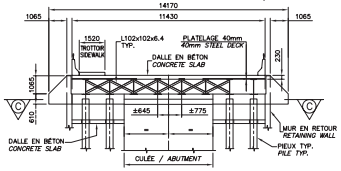

VUE EN PLAN / *PLAN VIEW*

ÉCH. / *SCALE* 1:100




ÉLÉVATION / *ELEVATION*

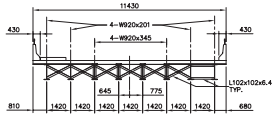
ÉCH./*SCALE* 1:100




COUPE A–A / *SECTION A–A*

ÉCH./*SCALE* 1:100

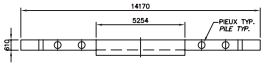
STRUCTURE EXISTANTE / *EXISTING STRUCTURE*




COUPE A–A / *SECTION B–B*

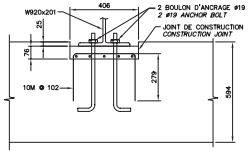
ÉCH./*SCALE* 1:100

STRUCTURE EXISTANTE / *EXISTING STRUCTURE*



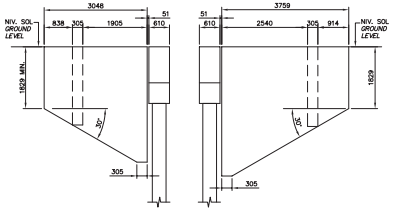

COUPE A–A / *SECTION C–C*

ÉCH./*SCALE* 1:100




DÉTAIL D'ANCRAGE / *ANCHORING DETAIL*

ÉCH. / *SCALE* 1:10

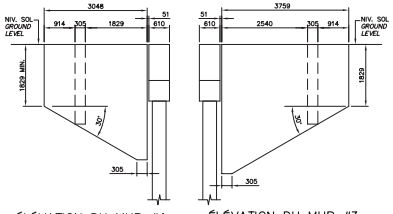



ÉLÉVATION DU MUR #2 / *WALL #2 ELEVATION*

ÉCH./*SCALE* 1:50

ÉLÉVATION DU MUR #1 / *WALL #1 ELEVATION*

ÉCH./*SCALE* 1:50

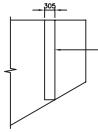



ÉLÉVATION DU MUR #4 / *WALL #4 ELEVATION*

ÉCH./*SCALE* 1:50

ÉLÉVATION DU MUR #3 / *WALL #3 ELEVATION*

ÉCH./*SCALE* 1:50




COUPE D–D (MUR #5)

*SECTION D–D (WALL #5)*

ÉCH./*SCALE* 1:50

NOTES GÉNÉRALES: / GENERAL NOTES:

- LES MURS GABIONS DOIVENT ÊTRE CONÇUS EN CONFORMITÉ AVEC LA NORME S6-14 LA PLUS RÉCENTE. THE GABIONS SHOULD BE DESIGNED IN ACCORDANCE WITH THE LATEST STANDARD S6-14.
- LES TRAVAUX D'INSTALLATION DES MURS GABIONS DOIVENT ÊTRE EFFECTUÉS À SEC. L'ENTREPRENEUR DOIT PRÉVOIR D'INSTALLER UN BATARDEAU AVANT LE DÉBUT DES TRAVAUX. THE GABIONS SHOULD BE INSTALLED AT DRY. THE CONTRACTOR MUST PLAN TO INSTALL A COFFERDAM BEFORE THE WORK STARTS.
- CHARGEMENT / LOADING: CL-625
- BÉTON / CONCRETE: 35 MPa
- ACIER D'ARMATURE / STEEL REBAR: Fy=400 MPa.
- BOULONS / BOLTS: ASTM A325 GALVANISÉ / GALVANISED
- ENROBAGE / CONCRETE COVER: 30mm
- ACIER DE CONSTRUCTION CONFORME À LA NORME CSA G20.2/G40.21
- STEEL CONSTRUCTION CONFORM TO CSA G20.2/G40.21 STANDARD
  - PLAQUES ET PROFILÉS: Fy=350MPa
  - PLATES AND PROFILES: Fy=350MPa
- LES DIMENSIONS DE LA STRUCTURE EXISTANTE SONT DONNÉES À TITRE INDICATIF ET DEVRONT ÊTRE MÉSURÉES SUR PLACE PAR L'ENTREPRENEUR, ELLES DOIVENT SERVIR À LA PRODUCTION DES DESSINS DE FABRICATION. THE DIMENSIONS OF THE EXISTING STRUCTURE ARE PURELY INDICATED AND SHOULD BE MEASURED ON SITE BY THE CONTRACTOR. THEY MUST BE USED TO PRODUCE THE SHOP DRAWINGS.

LÉGENDE: / LEGEND: (CHARPENTE D'ACIER / STEEL STRUCTURE)

① TRAVAUX ENTRE 2 POUTRES ADJACENTES / WORKS BETWEEN 2 ADJACENT BEAMS:
- ENLEVER LES CONTREVENTEMENTS EXISTANTS (L102x102) SOUDÉS AUX POUTRES EXISTANTES W920. REMOVE EXISTING BRACINGS (L102x102) WELDED TO THE EXISTING BEAMS W920.
- MEULER LES SOUDURES SUR LES POUTRES, RENDRE LES SURFACES PLANES ET LISSES POUR INSTALLATION DES WT. GRINDING WELDS ON BEAMS, MAKING FLAT AND SMOOTH SURFACES FOR WT INSTALLATION.

② TRAVAUX ENTRE 2 POUTRES ADJACENTES / WORKS BETWEEN 2 ADJACENT BEAMS:
- CONSERVER LES MEMBRURES EXISTANTES (L102x102). KEEP IN PLACE THE EXISTING STEEL SECTIONS.

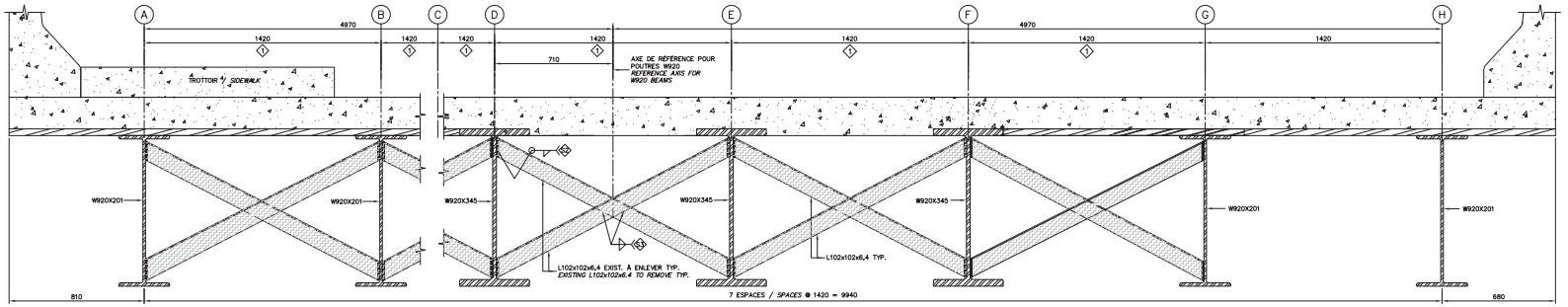
③ TRAVAUX ENTRE 2 POUTRES ADJACENTES / WORKS BETWEEN 2 ADJACENT BEAMS:
- ENLEVER LES CONTREVENTEMENTS EXISTANTS (L102x102) SOUDÉS AUX RAIDISSEURS DES POUTRES EXISTANTES W920. REMOVE THE EXISTING BRACINGS (L102x102) WELDED TO THE W920 STIFFENERS BEAMS.
- MEULER LES SOUDURES SUR LES RAIDISSEURS, RENDRE LES SURFACES PLANES ET LISSES POUR INSTALLATION DES PLAQUES GOUSSETS. GRINDING WELDS ON STIFFENERS, MAKING FLAT AND SMOOTH SURFACES FOR GUSSETS INSTALLATION.
- PERCER LES 4 TROUS #24 POUR LES NOUVEAUX BOULONS. DRILLING 4 #24 HOLES FOR NEW BOLTS.

S1 SOUDURE EXISTANTE (4 CÔTÉS) À ENLEVER AUX EXTRÉMITÉS DES L102x102 TYP. EXISTING WELD (4 SIDES) TO BE REMOVED AT EACH L102x102 END TYP.

S2 SOUDURE EXISTANTE (TOUT AUTOUR) À ENLEVER AUX EXTRÉMITÉS DES L102x102 TYP. EXISTING WELD (ALL AROUND) TO BE REMOVED AT EACH L102x102 END TYP.

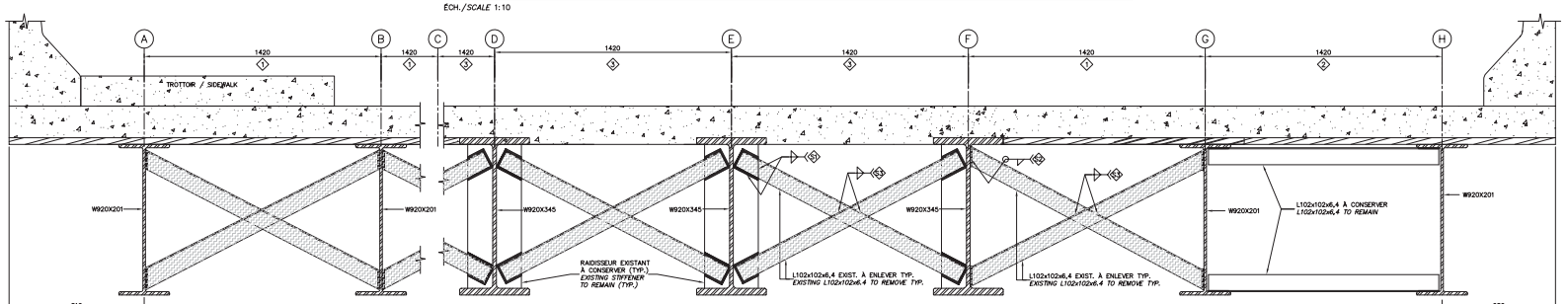
S3 SOUDURE EXISTANTE (4 CÔTÉS) À ENLEVER TYP. ÉTAPE FACULTATIVE SELON LA MÉTODE DE DÉMOLITION UTILISÉE PAR L'ENTREPRENEUR. EXISTING WELD (4 SIDES) TO BE REMOVED TYP. THIS WORK IS OPTIONAL AND DEPENDS ON THE DEMOLITION METHOD.

MEMBRURE EXISTANTE À ENLEVER. EXISTING STEEL MEMBER TO BE REMOVED.



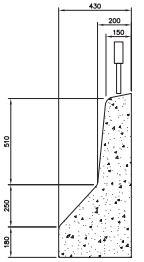

COUPE A–A (DÉMOLITION TYP. AUX AXES 2 ET 3) / *SECTION A–A (TYP. DEMOLITION AT AXIS 2 AND 3)*

ÉCH./*SCALE* 1:10




COUPE B–B (DÉMOLITION DES CONTREVENTEMENTS INTERMEDIAIRES) / *SECTION B–B (INTERMEDIATE BRACINGS DEMOLITION)*

ÉCH./*SCALE* 1:10




GLISSIÈRE EXISTANTE

*EXISTING BARRIER*

ÉCH./*SCALE* 1:10

Canada

Travaux publics et Services gouvernementaux Canada / Public Works and Government Services Canada

AECOM

| no | description | date |
|---|---|---|
| 04 | ÉMIS POUR ADDENDA 01 / ISSUED FOR ADDENDUM 01 | 19/09/23 |
| 03 | ÉMIS POUR SOUMISSION / ISSUED FOR SUBMISSION | 19/09/04 |
| 02 | ÉMIS POUR 95% + LOT 1 / ISSUED FOR 95% + LOT 1 | 16/07/08 |
| 01 | ÉMIS POUR PLANS ET DEVIS (75%) / PRELIMINARY (DRAFT) (75%) | 15/04/07 |

Projet / Project

TPSGC
*PWGSC*

ÎLE LAPIERRE, MONTRÉAL, QUÉBEC
COMPENSATION POUR LA PERTE DE L'HABITAT DU POISSON EN EAU CALME ET DE MILIEUX HUMIDES - ÎLE LAPIERRE
LOT1, CONSOLIDATION DU PONT, DÉBOISEMENT ET EXCAVATION À SEC
*COMPENSATION FOR LOST FISH HABITAT CALM WATER AND WETLAND - ÎLE LAPIERRE*
*LOT1, BRIDGE REINFORCEMENT, CLEARING AND DEMOLITION, DRY EXCAVATION*

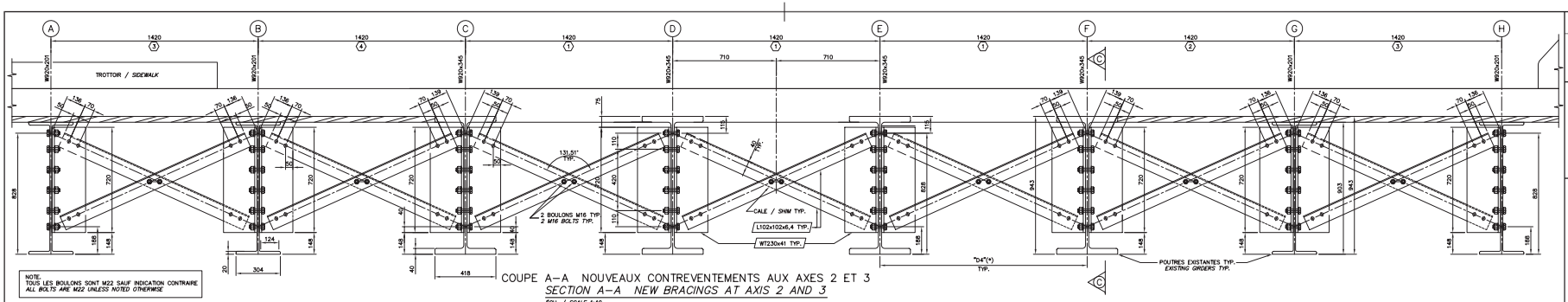
Design / Drawing

STRUCTURE
*STRUCTURE*
CONSOLIDATION DU PONT
STRUCTURE EXISTANTE
ET DÉMOLITION
*BRIDGE REINFORCEMENT EXISTING STRUCTURE AND DEMOLITION*

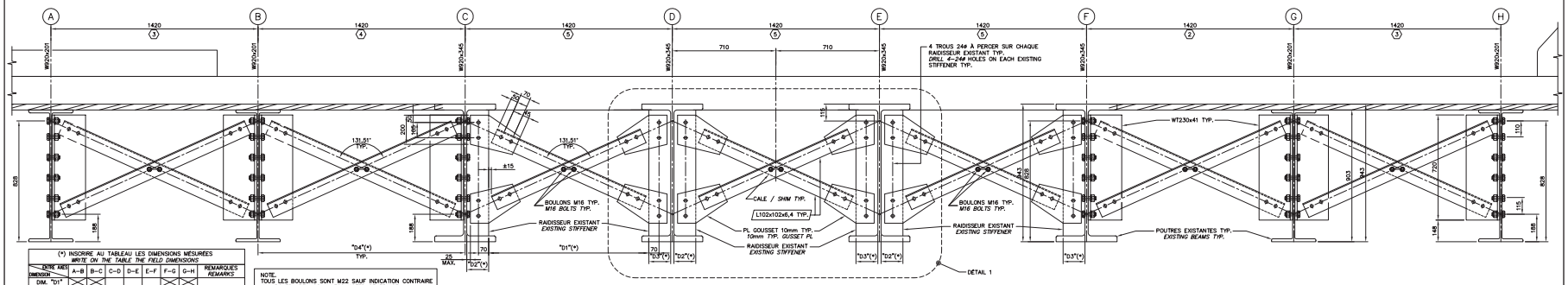
| | |
|---|---|
| Compiled by | D. DAYEM, Ing. |
| Date | 2016/09/23 |
| Designed by | (aaaa/mm/dd) |
| Drawn by | F. HUDON et S.SAENZ tech. |
| Date | 2016/09/23 (aaaa/mm/dd) |
| Approved by | S. GOUDIER |
| Date | 2016/09/23 (aaaa/mm/dd) |
| Submitted by | CHARLOTTE SÉMARD, |
| Project Manager | |
| No. du projet / Project no. | R.071652.972 |
| No. du projet / Project no. | |
| TPSGC / Client | PWGSC / Client |
| Nom du fichier / File name | 60447701-SHT-S-1004_RV.DWG |
| No de classement / File no. | |
| No de plan du conseil / Drawing or plan no. | |
| No de la feuille / Sheet no. | 60447701-SHT-S-1004 |

TPSGC_PWGSC A0 (1189x841)

2016/09/23

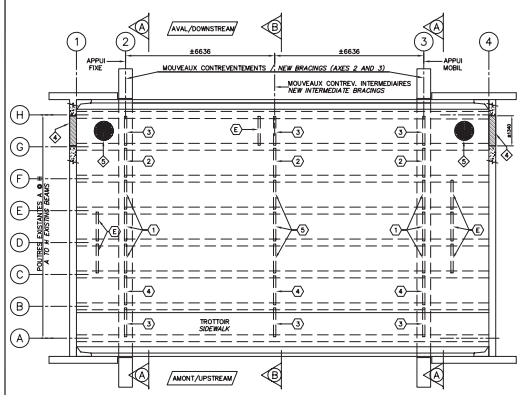



COUPE A–A NOUVEAUX CONTREVENTEMENTS AUX AXES 2 ET 3
*SECTION A–A NEW BRACINGS AT AXIS 2 AND 3*
ECH. / *SCALE 1:10*

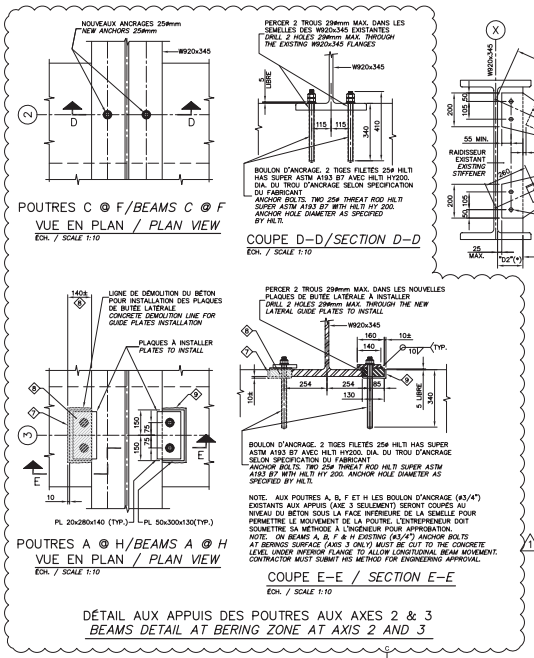


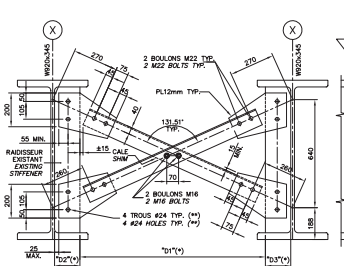

| ENTRE AXES / BETWEEN AXES DIMENSION | A–B | B–C | C–D | D–E | E–F | F–G | G–H | REMARQUES / REMARKS |
|---|---|---|---|---|---|---|---|---|
| DIM. "D1" | | | | | | | | |
| DIM. "D2" | | | | | | | | |
| DIM. "D3" | | | | | | | | |
| DIM. "D4" | | | | | | | | |

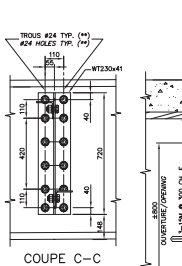
COUPE B–B NOUVEAUX CONTREVENTEMENTS INTERMEDIAIRES
*SECTION B–B NEW INTERMEDIATE BRACINGS*
ECH. / *SCALE 1:10*

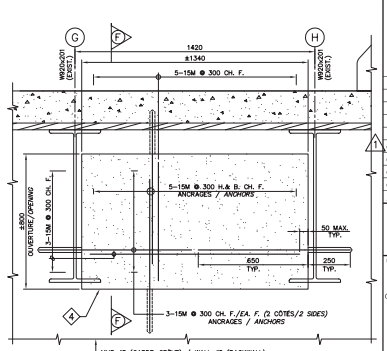



NOUVEAUX CONTREVENTEMENTS – VUE EN PLAN
*NEW BRACINGS – PLAN VIEW*
ECH. / *SCALE 1:75*

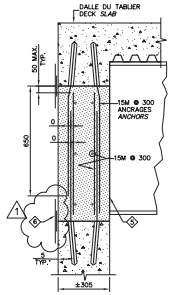



OUVERTURE EXISTANTE AUX MURS #5 À FERMER–ÉLÉVATION
*EXISTING WALL #5 OPENINGS TO BE CLOSED – ELEVATION*
ECH. / *SCALE 1:10*




COUPE F–F/*SECTION F–F*
ECH. / *SCALE 1:10*

LÉGENDE: / *LEGEND:*

(E) INDIQUE CONTREVENTEMENT À CONSERVER ENTRE DEUX POUTRES ADJACENTES.
INDICATE EXISTING BRACING TO REMAIN BETWEEN TWO ADJACENT BEAMS.

(1) NOUVEAUX CONTREVENTEMENTS ENTRE 2 POUTRES ADJACENTES W920x345.
NEW BRACINGS BETWEEN 2 ADJACENT BEAMS W920x345.

(2) NOUVEAUX CONTREVENTEMENTS ENTRE 2 POUTRES ADJACENTES W920x345 ET W920x201.
NEW BRACINGS BETWEEN 2 ADJACENT BEAMS W920x345 AND W920x201.

(3) NOUVEAUX CONTREVENTEMENTS ENTRE 2 POUTRES ADJACENTES W920x201.
NEW BRACINGS BETWEEN 2 ADJACENT BEAMS W920x201.

(4) SIMILAIRE À (2) MAIS NON IDENTIQUE À MOINS DE LES FAIRE SYMÉTRIQUES.
SIMILAR AT (2) BUT NON IDENTICAL UNLESS DOND IT SYMMETRICALS.

(5) NOUVEAUX CONTREVENTEMENTS INTERMEDIAIRES ENTRE 2 POUTRES ADJACENTES W920x345.
NEW INTERMEDIATE BRACINGS BETWEEN 2 ADJACENT BEAMS W920x345.

"DN"(*) INDIQUE DIMENSIONS D1, D2, ETC... À ÊTRE RELEVÉES AU CHANTIER PAR L'ENTREPRENEUR.
INDICATE DIMENSIONS D1, D2, ETC... TO BE MESURED ON THE FIELD BY THE CONTRACTOR.

(**) INDIQUE PERÇAGE AU CHANTIER DE TROUS ø24 (POUR BOULONS M22) DANS LES RAIDISSEURS OU POUTRES EXISTANTS.
INDICATE 24ø HOLES (FOR M22 BOLTS) TO DRILL ON EXIST. STIFFENERS OR BEAMS ON THE FIELD.

LÉGENDE: / *LEGEND:*

(A) OUVERTURE RECTANGULAIRE DANS LES MURS #5 À FERMER, VOIR DÉTAIL TYP.
DIMENSIONS À MESURER AU CHANTIER.
WALL #5 RECTANGULAR OPENINGS TO BE CLOSED, SEE TYP. DETAIL. DIMENSIONS TO CHECK ON THE FIELD.

(B) 2 GRILLES DE PUISARD DE RUE À FOURNIR ET INSTALLER AUX OUVERTURES CIRCULAIRES EXISTANTES.
2 DRAINAGE CAST–IRON COVERS TO BE SUPPLIED AND INSTALLED ON THE EXISTING CIRCULAR HOLES.

(C) 2 BANDES DE MEMBRANE D'ÉTANCHÉITÉ AUTOCOLLANTE SANS GRAVILLONS POUR JOINTS. LARGEURS 120 ET 260mm TOUT–AUTOUR DE L'OUVERTURE.
2 STRIPS OF WATERPROOFING MEMBRANE TO STICK ALL AROUND THE OPENING, 120 AND 260mm BANDWIDTH.

(1) TRAIT DE SCIE PROF. 20mm MIN.
SAW CUT 20mm MIN. DEEP.

(2) BÉTON À DÉMOLIR
CONCRETE TO DEMOLISH

(3) COULIS À HAUTE RÉSISTENCE SOUS LA PLAQUE ET 3 CÔTÉS
HIGHT STRENGHT MORTAR UNDER THE PLATE AND 3 SIDES

Canada

Travaux publics et Services gouvernementaux Canada / Public Works and Government Services Canada

AECOM

| No | description | date |
|---|---|---|
| 04 | RMB POUR ADDENDA 01 / ISSUED FOR ADDENDUM 01 | 19/09/23 |
| 03 | RMB POUR SOUMISSION / ISSUED FOR SUBMISSION | 19/09/04 |
| 02 | RMB POUR 90% + CCT 1 / ISSUED FOR 90% + CCT 1 | 19/07/08 |
| 01 | RMB POUR PRÉLIMINAIRE (70%) / PRELIMINARY (PRELIMINARY (70%)) | 19/04/07 |

A no. du détail / detail no.
B no de la feuille où est le dét. / sheet no. where detail is required
C no. de la feuille où est le dét. / sheet no. where detailed

Projet / Project

TPSGC
*PWGSC*

ÎLE LAPIERRE, MONTRÉAL QUÉBEC
COMPENSATION POUR LA PERTE DE L'HABITAT DU POISSON EN EAU CALME
ET DE MILIEUX HUMIDES – ÎLE LAPIERRE
LOT1, CONSOLIDATION DU PONT,
DÉBOISEMENT ET EXCAVATION À SEC
*COMPENSATION FOR LOST FISH HABITAT CALM WATER AND WETLAND – ÎLE LAPIERRE LOT1, BRIDGE REINFORCEMENT, CLEARING AND DEMOLITION, DRY EXCAVATION*

Design / Drawing

STRUCTURE
*STRUCTURE*
CONSOLIDATION DU PONT
RÉPARATION ET RENFORCEMENT
2 DE 2
*BRIDGE REINFORCEMENT REPAIRS AND REINFORCEMENT 2 DE 2*

| | | |
|---|---|---|
| Compiled by | D. DAYEM, Ing. | Designed by |
| Date | 2016/06/23 | (aaaa/mm/dd) |
| Checked by | S.SAENZ, tech. | Drawn by |
| Date | 2016/06/23 | (aaaa/mm/dd) |
| Approved by | S. GOUDIER | Approved by |
| Date | 2016/06/23 | (aaaa/mm/dd) |
| Submitted by | CHARLOTTE SIMARD, | Tender |
| Add'l/Addressee de projets | | Project Manager |
| No. du projet / Project no. | R.071652.972 | No du projet / Project no. |
| TPSGC | PWGSC | Client |
| Nom du fichier / File name | 60447701-SHT-S-1006_R.DWG | No de classement / File no. |
| No de dessin du conseil / Drawing or plan no. | 60447701-SHT-S-1006 | No de la feuille / Sheet no. |

TPSGC_PWGSC A0 (1189x841)