
Project n° : R.079763.001 (TPSGC)
Project: Restauration of Bastion des Ursulines Left Flank
Date : 2018-03-12

The following information supplements, modifies and/or supersedes the bid documents issued on February 2018.

STRUCTURE

Specifications

01 14 00 Update of paragraph 1.5.18 (page 3).
Addition paragraph 1.5.22 (page 3).

01 29 00 Update of paragraph items 1 and 2 part A (page 1).

01 32 16.07 Update of paragraphs 1.7.3, 1.7.4 and 1.7.5 (page 2).
Annex update (appendix).

01 35 13.43 Addition paragraph 2.1.2.2 and 2.5.3 (pages 7 et 9).

01 56 00 Update of paragraph 1.3.3 (page 1).

04 03 07 Update of paragraph 1.3.1.6 (page 1).

31 22 13 Addition paragraph 3.4 (page 2).

Drawings:

S-01 Update sheet S-01.

S-08 Modification to the transition of gravel structures with ground lighting base. The transition is 1 in 1 minimum rather than 1 in 1 maximum.

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END OF ADDENDUM No. 1 – S01

12. When needed, the Contractor may use a maximum of two (2) parking spaces for his own needs.
 13. Parking spaces will not be assigned for the Contractor's employees other than for the parties mentioned above.
 14. Before and after the demolition of the concrete and core inside the masonry walls, a volume calculation will be agreed between the Ministry Representative and the Contractor's foreman. This work will be done monthly as well as after the excavation of the walls, before the start of deconstruction work.
 15. Prior to construction, the Contractor will submit his working methods and his environmental plan to the Departmental Representative for comments and approval.
 16. Regarding wall stabilization methods, refer to section 02 41 16.
 17. The Contractor shall keep the projectors located outside the construction zone in operation (except those in front of the "Courtine de L'Esplanade" which must be protected during the works).
 18. Parks Canada will explain the work to the tourists via an observation platform located at the top of the "Courtine de L'Esplanade. This walkway, designed, manufactured and maintained by the Contractor must be a "Stage or Event Scaffolding aluminum or galvanised steel " type (no 4'x8' plywood flooring). It should be able to accommodate 30 people and designed to support a load of 4.8kPa. Dimensions: 6m x 6m. Guardrails meeting the requirements of the NBC 2010 must be installed and protected by a "frost" type fence on the inside. Padlocked gates must be installed at the entrance of the platform. The Contractor shall provide plans signed and sealed by an engineer for the entire structure. 
 19. Provide two 600mmx900mm warning signs to be placed on the construction fence at the top of the walls. Location and exact graphics are to be determined at the site with the Ministry Representative.
 20. All public communications referring to Parks Canada sites, including construction sites on them, are prohibited or must be pre-approved by Parks Canada. This includes social media, advertising, photo sharing as well as job offers and portfolio.
 21. The General Contractor shall make a survey of the levels of the existing stone dust site on the entire site, and outside the construction zone to St. Louis Street. This survey will be used to profile the ground exactly at the same level once the stone dust has been repaired. The survey must be submitted to the Departmental Representative.
 22. Allow five consecutive days when the site will not be accessible due to the installation of the crane. The position of the fence must also be modified during this intervention and returned to its initial condition after. 
2. This list of special requirements is non-exhaustive and the General Contractor must comply with all the requirements stated in the specifications.

1.6 CONSTRAINTS FOR THE OCCUPATION OF TRAFFIC LANES AND SIDEWALKS

1. Before work begins, the General Contractor is responsible for making all of the necessary arrangements and to coordinate the closure of streets and sidewalks with the authorities concerned by the project work.
2. Install all of the work signage and maintain road traffic and pedestrian flow in accordance with section 01 56 00 - *Temporary Barriers and Enclosures*.
3. The General Contractor must refer to section 01 52 00 - *Construction Facilities* for the site boundaries to be respected.
4. Also refer to item 1.2 of this section regarding traffic requirements.

1.7 SECURITY

1. Where security has been reduced by Work of Contract, provide temporary means to maintain security.
2. Security clearances:
 1. Not used.

PART 1 - GENERAL

1.1 UNIT OR OVERALL PRICES

1. Each unit or overall price in the contract is a lump sum; the Contractor commits to executing the work at this unit price, regardless of profit or loss. The unit or overall price for a structure or construction package must include all expenses, work, disbursements, payments, direct and indirect expenses, mobilizations, demobilizations, as well as any acts, facts, responsibilities, obligations, omissions and errors associated with the construction of this structure that may be incurred by the Contractor.
2. Unless otherwise indicated on the drawings and specifications, the Contractor will provide, for this unit or overall price, the materials, labour, equipment and accessories necessary to build the structure.
3. The unit or overall price must also include the transportation and application of materials, as well as all general company expenses including administration, insurance, contributions, interest, rentals, taxes and any incidental expenses. It must also include losses and damages that may occur due to the nature of the work, fluctuations in prices and salaries, business risks, strikes, delays not attributable to the Departmental Representative, restrictions relating to transportation, accidents and acts of nature.

1.2 OVERALL PRICE: DEFINITION

1. When work has been identified in a precise and detailed manner, and a price has been agreed upon and accepted by both parties for everything.

1.3 UNIT PRICE: DEFINITION

1. When specifications relating to the work have been determined in a precise and detailed manner, and all the quantities or certain quantities indicated on the bid sheet have been provided as estimates.

1.4 DESCRIPTION OF THE ITEMS ON THE PRICES SCHEDULE

PART A – UNIT PRICES

1. SANDSTONE TO BE REPLACED ON THE EXTERIOR SIDING

The sandstone for the exterior siding will be paid per square meter of exposed face. The price covers only the delivery at the construction site of embossed sandstone with a pattern identical to the original stone, as indicated in relevant sections of these specifications and/or shown on the plans. ~~The stones for the stringcourse will not be paid under this item.~~ 

2. SANDSTONES TO BE REPLACED ON THE INTERIOR SIDING

The sandstone for the interior siding will be paid per square meter of apparent of filled face. The price only covers the delivery at the construction site of squared sandstone with a pattern identical to the original stone, as indicated in relevant sections of these specifications and/or shown on the plans. ~~The stones for the stringcourse will be paid under this item.~~ 

3. MASONRY CORE

The masonry core corresponds to the volume of masonry core that is to be demolished and rebuilt during the works. The price includes both the demolition of the masonry and concrete core and the installation of new materials. The core includes both the new materials and that recovered from: non-reusable facing stones in the siding, limestone stones from the cord to be replaced and reusable stone from the existing core. The calculation of the core volume will be carried out considering that the stones of the outer and inner facings are 250mm thick and this, regardless of the actual thickness of the stones. The price submitted, billed per cubic meter of masonry core demolished and rebuilt (1 m³ in the slip corresponds to 1 m³ demolished and rebuilt), includes, but is not limited to: the evacuation of demolition materials, the provision

6. The project's critical path will be indicated clearly.
7. The execution schedule will take the execution deadlines listed in section 01 11 00 into consideration, as well as the work restriction dates listed in section 01 14 00.

1.4 ACTION AND INFORMATIONAL SUBMITTALS

1. Provide submittals in accordance with Section 01 33 00 - *Submittal Procedures*.
2. Submit to Departmental Representative within 10 working days of Award of Contract Bar (GANTT) Chart as Master Plan for planning, monitoring and reporting of project progress.
3. Submit Project Schedule to Departmental Representative within 5 working days of receipt of acceptance of Master Plan.

1.5 PROJECT MILESTONES

1. Not used.

1.6 MASTER PLAN

1. Structure schedule to allow orderly planning, organizing and execution of Work as Bar Chart (GANTT).
2. Departmental Representative will review and return revised schedules within 5 working days.
3. Revise impractical schedule and resubmit within 5 working days.
4. Accepted revised schedule will become Master Plan and be used as baseline for updates.

1.7 PROJECT SCHEDULE

1. Several major events will take place in the area during the works ("Comédie A" festival, Quebec Cinema Festival, FEQ, "Grand Prix Cycliste", Quebec Day, Remembrance Day, etc.).
2. The City of Quebec will carry out archaeological excavations with interpretation and animation on the site of the children's playground of the Esplanade Park.
3. Anticipate that the accesses to the construction sites will not be available at least seven (7) separate days throughout the year (various week days between the months of April and December). 
4. Anticipate that the construction site will be closed during at least seven (7) separate days throughout the year due to special events taking place in the area. The days during which the construction site will be closed are project-specific and they exclude week-ends and other statutory holidays included in collective labour agreements applicable to the construction industry, such as the two weeks of construction holidays. 
5. Plan for construction site surveillance during the special events (services of a security guard during at least ten (10) separate days throughout the year, between the months of April and December). 
6. Develop detailed Project Schedule derived from Master Plan.
7. The work must take place between April 30, 2018 and November 2, 2018. However, the installation of the sod shall be made no later than October 19, 2018. By taking these deadlines, removing the different days holidays, the construction holidays and the 10 days during which the General Contractor will not be able to work (see points 3 and 4 listed above), the General Contractor must consider establishing his work schedule for a maximum of 110 working days.

ÉVÉNEMENTS BGÉ - 2018

Événement	Type.	Secteur	Date de début	Date de fin
Carnaval de Québec 2018	Spectacle / animation		2018-01-26	2018-02-11
Défilé Carnaval - Québec		Grande Allée	2018-02-10	2018-02-10
Pentathlon des neiges	Compétition sportive	Plaines	2018-02-23	2018-03-04
Jamboree - coupe du monde de surf et de ski	Compétition sportive	Ilot Fleury	2018-03-23	2018-03-25
Défilé St-Patrick		Grande Allée	2018-03-24	2018-03-24
La course au secondaire (Pierre Lavoie)	Marche / course	Grande Allée	2018-05-12	2018-05-12
Où tu vas quand tu dors en marchant... ?	Spectacle / animation	Coline Parlementaire	2018-05-24	2018-06-09
Ouverture des terrasses de la Grande Allée	Spectacle / animation	Grande Allée	2018-06-13	2018-06-13
Tour de Beauce		Coline Parlementaire	2018-06-16	2018-06-16
Fête nationale dans la Capitale (site principal)		Grande Allée + Plaines	2018-06-23	2018-06-24
Canada en Fête		Plaines	2018-07-01	2018-07-01
Festival International d'été de Québec 2017	Spectacle / animation	idem 2017	2018-07-05	2018-07-15
Festival des Journées d'Afrique		Place D'youville	2018-07-26	2018-07-29
Fêtes de la Nouvelle-France 2018		Petit Champlain	2018-08-01	2018-08-05
Défilé Fêtes Nouvelle-France		Grande Allée	2018-08-01	2018-08-01
Grands Feux Loto Québec 1/6	Spectacle / animation		2018-08-01	2018-08-01
ComediHa! Fest 2018	Spectacle / animation		2018-08-08	2018-08-19
Grands Feux Loto Québec 2/6	Spectacle / animation		2018-08-08	2018-08-08
Grands Feux Loto Québec 3/6	Spectacle / animation		2018-08-11	2018-08-11
Grands Feux Loto Québec 4/6	Spectacle / animation		2018-08-15	2018-08-15
Grands Feux Loto Québec 5/6	Spectacle / animation		2018-08-18	2018-08-18
Grands Feux Loto Québec 6/6	Spectacle / animation		2018-08-22	2018-08-22
Fête Arc-en-ciel		Place D'youville	2018-08-30	2018-09-02
Grand prix cycliste de Québec		idem 2017	2018-09-07	2018-09-07
Festival de cinéma de la ville de Québec 2018 (FCVQ)	Spectacle / animation	Place D'youville	2018-09-12	2018-09-22
Course à la vie CIBC 2018	Marche / course	Grande Allée	2018-09-30	2018-09-30
Course des étoiles (Marathon)		Fontaine + Grande Allée	2018-10-12	2018-08-24
5 km de la santé (Marathon)		Fontaine + Grande Allée	2018-10-13	
Marathon SSQ de Québec			2018-10-14	2018-10-14
La grande Marche (Pierre Lavoie)	Marche / course	Vieux Québec + G Allée	2018-10-20	2018-10-20
Le chemin de Noël 2018	Spectacle / animation	Place D'youville	2018-12-23	2018-12-23
Jour de l'An à Québec	Spectacle / animation	Fontaine + Grande Allée	2018-12-15	2018-12-15
G7		Colline Parlementaire	201-06-06	2018-06-10



PART 2 - ENVIRONMENTAL REHABILITATION AND MANAGEMENT OF EXCAVATED CONTAMINATED SOILS

2.1 SCOPE AND NATURE OF WORK

- Soils contaminated with metals are present at the top of the left flank's wall (the exact location is shown on the plans). The following contamination levels have been observed:

15TE3-ES1 (2015-12-08) (0,00-0,60 m)			
PARAMÈTRES	mg/kg	CCME	MDDELCC
Hydrocarbures Pél. (C10-C50)	<100	-	●
Hydrocarbures Pél. F2: (C10-C16)	-	-	-
Hydrocarbures Pél. F3: (C16-C34)	-	-	-
Hydrocarbures Pél. F4: (C34-C50)	-	-	-
HP F1 (C6-C10)	-	-	-
HP F1 (C6-C10) - BTEX	-	-	-
HAP		●	●
MÉTAUX ET MÉTALLOÏDES		●	◆

CODE DE COULEUR EN FONCTION DES CRITÈRES DE LA POLITIQUE DU MDDELCC			
●	CRITÈRE «A»	◆	PLAGE «B-C»
▲	PLAGE «A-B»	■	CRITÈRE «>C»

CODE DE COULEUR EN FONCTION DES RECOMMANDATIONS DU CCME	
●	< CRITÈRE RÉSIDENTIEL/PARC ET LES CRITÈRES COMMERCIAL ET INDUSTRIEL
●	> CRITÈRE RÉSIDENTIEL/PARC < CRITÈRES COMMERCIAL ET INDUSTRIEL
●	> CRITÈRES RÉSIDENTIEL/PARC ET COMMERCIAL < CRITÈRE INDUSTRIEL
●	> CRITÈRES RÉSIDENTIEL/PARC, COMMERCIAL ET INDUSTRIEL

Arsenic: 20mg/kg

Barium: 554mg/kg

Selenium: 1.1mg/kg

The metal and metalloid contamination level of the soil at the top of the left flank of the “Bastion des Ursulines” is therefore classified as type B-C according to the MDDELCC and is higher than the industrial criteria of the CCME.

- Environmental rehabilitation :

- Inside the area of the future construction package shown on drawing, the Contractor will manage contaminated soils and will separate the excavated material based on the contamination level. Various materials will therefore be stockpiled at the construction site (a minimum of three stockpiles). All excavated materials must be reused during backfilling activities (unless otherwise indicated in the plans) in the area where the material was taken from. Backfilling should be done starting with the least contaminated material until more contaminated. Thus, the remaining excavation materials will be the most contaminated and must be disposed offsite, at a treatment or disposal site authorized by the MDDELCC.
- Although the 15TE3-ES1 survey shows contamination at a depth of only 0.6m, the Contractor must provide, for the management of contaminated soils, that the contamination is on the full thickness of the soil to be excavated at the top of the left Flank. 

2.2 GENERAL

- For the entire project, approximately 110 metric tons (50 m³) of excavated material contaminated with metal and / or PAH concentrations of metal exceeding CCME recommendations for commercial use will not be reused during backfilling activities. The contaminated materials that will not respect CCME recommendations for commercial use will be disposed of in a site authorized by the MDDELCC.

Contractor's expense. Unless otherwise indicated on the plans, all of the excavated material will be reused in the areas where it was extracted from during backfilling activities. Backfilling should be done starting with the least contaminated material until more contaminated. Thus, the remaining excavation materials will be the most contaminated and must be disposed offsite, at a treatment or disposal site authorized by the MDDELCC.

4. Surplus materials contaminated beyond the MDDELCC "A" level and below the CCME recommendations will be transported to a site authorized by the MDDELCC only after approval by the Departmental Representative. No expense related to disposing of contaminated soil excavated above "A" level of the MDDELCC and below the CCME recommendations will be authorized to the Contractor without the prior authorization of the Departmental Representative.
5. All excavated material must be reused during backfilling operations (unless otherwise specified in the plans) in the area where it was collected. Backfilling should be done starting with the least contaminated material to the most contaminated. As a result, the remaining excavation materials will be the most contaminated and will have to be disposed off-site at a treatment center or disposal site authorized by the MDDELCC.
6. No compensation will be granted for any delay caused by such environmental rehabilitation work / management of contaminated soil excavated during construction.

2.5 ADDITIONAL ENVIRONMENTAL SOILS CHARACTERIZATIONS

1. For sectors not subjected to characterization and as requested by the Departmental Representative, the Contractor will carry out surveys down to the bottom of the theoretical excavation indicated on the plans so that the control laboratory may sample the soil.
2. At the request of the Departmental Representative and not to slow the excavation, some excavation volumes in which doubts are raised by the Laboratory on the level of soil contamination must be stored temporarily for sampling and characterization. A 72 hours is required to obtain analytical results.
3. In the area to be excavated at the top of the wall, the Contractor shall provide 2 exploration wells up to the final excavation level shown on the plans to allow the Laboratory to sample the soils encountered. 

2.6 OUT OF SITE CONTAMINATED SOIL TRANSPORTATION APPROVED BY THE MDDELCC

1. The carrier with materials having a concentration in metals and/or PAH and/or petroleum hydrocarbons C₁₀-C₅₀ above the generic criteria « A » of MDDELCC must obtain a transport manifest for each load routed off-site. Transport manifest are obtained from the Laboratory or the City's Representative. The manifest shall contain the following information:
 1. Carrier's name.
 2. Vehicle's registration.
 3. The date.
 4. Departure and arrival time.
 5. Loading source.
 6. The type of materials (« A-B », « B-C », « > C »).
 7. Destination.
 8. City or Departmental representative's signature (issuer of the coupon).
 9. Disposal center Representative's signature.
 10. Loading tonnage
2. Transport manifest copy distribution:
 1. A copy of the manifest is kept on site by the City or Departmental Representative.
 2. A copy of the manifest is kept by the disposal center Representative.

PART 1 - GENERAL

1.1 RELATED REQUIREMENTS

1. Section 01 14 00 – Work restrictions.
2. Section 01 51 00 – Temporary utilities.
3. Section 01 52 00 – Construction facilities.
4. Section 01 74 21 – Construction/demolition waste management and disposal.

1.2 INSTALLATION AND REMOVAL

1. Provide temporary controls in order to execute Work expeditiously.
2. Remove from site all such work after use.

1.3 FENCES AND GATES

1. The construction site will be enclosed with a 2400 mm high OMEGA-type temporary construction site fence reinforced with stiffeners and concrete blocks every two (2) fence section. The Contractor will submit a drawing showing the installation method prior to construction.
2. The Contractor will validate the position of the fences and barriers with the Departmental Representative at the construction site prior to installation.
3. For the entire duration of construction, Parks Canada will carry out interpretation activities at the site via the installation of banners on all the construction fences. The postings will be provided by the Contractor, but  Parks Canada will provide the graphic design via a computer medium. The Contractor will provide the material for installation.
4. The Contractor will be responsible for the maintenance of the banners during the construction period.
5. All of the fences around the construction site will be made to display 8 ft high banners. The access doors to the construction site, as well as the openings required for the smooth operation of the site, will not need banners. Plan the installation of the banners in coordination with a representative of Parks Canada. The graphic design of the banners will be provided by Parks Canada via a computer medium.
 1. Technical specifications for the banners:
 1. MESH material displaying the printed design provided by Parks Canada.
 2. Perforations: 60% printable, 40% air circulation.
 3. Dimensions: 96 inches high X the length of the fence sections to cover. However, the maximum length of a printed section must be 96 ".
 4. Matte finish.
 5. Hemmed and double stitched.
 6. For outdoor use.
 7. Fastening system: eyelets every 12" c/c maximum. The Contractor will be responsible for choosing the type of fastener that will joint banners securely to the fences.
 8. The banners or posts will be given back to Parks Canada at the end of construction.

PART 1 - GENERAL

1.1 RELATED REQUIREMENTS

1. Section 04 03 08 – Historic - Mortaring.
2. Section 04 03 42 – Historic - Replacing Stone.
3. Section 04 05 19 – Masonry Anchorage, Connection and Reinforcing.
4. Any other relevant specification.

1.2 REFERENCES

1. Definitions
 1. Raking: removal of loose/deteriorated mortar to a depth suitable for repointing until sound mortar, and/or 4x joint thickness and/or a specified mm depth mm is reached.
 2. Repointing: filling and finishing of masonry joints from which mortar is missing has been raked out or has been omitted.
 3. Restoration of detached elements: Restoration of an isolated masonry element of the siding, which was loosened during the raking.
 4. Tooling: finishing of masonry joints using tool to provide final contour or as instructed by the Departmental Representative.
 5. Low-pressure water cleaning: water soaking of masonry using less than 350 kPa (50 psi) water pressure, measured at nozzle tip of hose.
 6. Cleaning using a mechanical tool: removal of loose particles from masonry elements and joints (splinters, cuts, flakes, etc.) using a bush hammer or any other appropriate tool.
2. CSA International
 1. CAN/CSA A23.1/A23.2-04, Concrete Materials and Methods of Concrete Construction/Methods of Test for Concrete.
 2. AN/CSA A179-F04 (C2009), Mortar and Grout for Unit Masonry.
 3. CSA-A371, Building Masonry.

1.3 DESCRIPTION OF THE WORK

1. The work required in this section includes the following, among others:
 1. The raking of indicated deteriorated joints.
 2. Masonry surface preparation, including the cleaning of the joint surfaces, the rinsing of voids and raked joints, as well as the dampening of the masonry.
 3. The repointing of masonry joints using tools adapted to the condition of the existing masonry, e.g. irregular stone profiles, variations in joint width (very narrow and very thick).
 4. The removal of loose segments on the stone surface.
 5. The curing and protection of repointed masonry.
 6. The repointing of all masonry vestiges encountered during excavation work. For the evaluation of areas to be joined, refer to plans, sections and details.



4. Compact filled and disturbed areas to the maximum dry density determined in accordance with the ASTM D698 standard, i.e.:
 1. 95% under paved and sidewalk areas.
5. Do not disturb the soil under the branches of the trees or shrubs that are to remain in place.

3.2 TESTS

1. Inspection and testing of soil compaction will be carried out by the Laboratory designated by the Departmental Representative. The expense will be paid by the Departmental Representative.

3.3 REMOVAL AND DISPOSAL OF SURPLUS MATERIALS

1. Remove surplus material and material unsuitable for filling, grading or landscaping off site, as directed by the Departmental Representative.

3.4 SURFACE REPAIR

1. Access to the top of the wall may be via the rue d'Auteuil. In the event that this access is used, the contractor will have to repair the entire grass area at these costs, at the end of the work, so as to ensure the same quality of finish as the pre-work condition. In the event that access during the work deteriorates the turf area and obstructs the use of the public, the contractor shall restore the land to the satisfaction of the Departmental Representative. 

END OF SECTION