

Canada Parks Agency
REHABILITATION LACHINE CANAL WALLS
CROWNING WALL REPAIRS AND REPLACEMENT
(SECTORS 5.2; 6 & E – BASIN N°3)
Project N° CLAC-1455-06
Addendum n° 02

THIS ADDENDUM COMPLETES, MODIFIES OR ELIMINATES CERTAIN ELEMENTS OF THE TENDER DOCUMENTS, WHICH THE ADDENDUM REFERS TO. IT IS AN INTEGRAL PART OF THE TENDER DOCUMENTS.

MODIFICATIONS ON PLANS AND SPECIFICATIONS

The current precisions are provided, following questions received from contractors during the site visit, and other written questions received.

1. PLANS

1.1 Modifications on plans, sheet 01 revision 01 is cancelled and replaced by sheet 01 revision 02:

Added to the list of drawings and modification of the total page number of the drawings. See plans in annex.

1.2 Modifications on plans, Adding sheets 29 and 30 – Annex Bathymetry:

Addition of the bathymetry of the Canal-de-Lachine. See plan in annex of this addenda.

2. SPECIFICATIONS

2.1 Modification of the article 2.2.11 of section 01 29 00 payment procedures:

Replace article 2.2.11« *Item 2.11 - Perforated drain 150 mm and geotextile, PVC (type 1) or PVC COEX (type 1) or PE (type 2), 180 kPa min.*

.1The price at item 2.11 of the Schedule of Prices is priced per linear meter for the perforated drain in accordance with the requirements of the plans and specifications.

.2Price includes, but is not limited to, the following:

1. The supply of materials, the installation of drains including the installation of the geotextile, the preparation of the foundation, the clear stone support cushion, the connection of the elements and all accessories required for the installation Such as joints between the various sections;

.2 Cleaning of premises;

.3 Any incidental expenses. »

By the following, « *Item 2.11 - Perforated drain 200 mm and geotextile, PVC (type 1) or PVC COEX (type 1) or PE (type 2), 180 kPa min.*

.1 The price at item 2.11 of the Schedule of Prices is priced per linear meter for the perforated drain in accordance with the requirements of the plans and specifications.

.2 The drainage system to be place behind the wall must be 200mm.

Canada Parks Agency
REHABILITATION LACHINE CANAL WALLS
CROWNING WALL REPAIRS AND REPLACEMENT
(SECTORS 5.2; 6 & E – BASIN N°3)
Project N° CLAC-1455-06
Addendum n° 02

.3 Price includes, but is not limited to, the following:

- 1. The supply of materials, the installation of drains including the installation of the geotextile, the preparation of the foundation, the clear stone support cushion, the connection of the elements and all accessories required for the installation Such as joints between the various sections;*
- .2 Cleaning of premises;*
- .3 Any incidental expenses. »*

2.2 Addition of Annex III - General arrangement:

Addition of the site plan of C2 Montreal 2017 indicating the location of the containers of C2 Montréal. See plan in annex of this addenda.

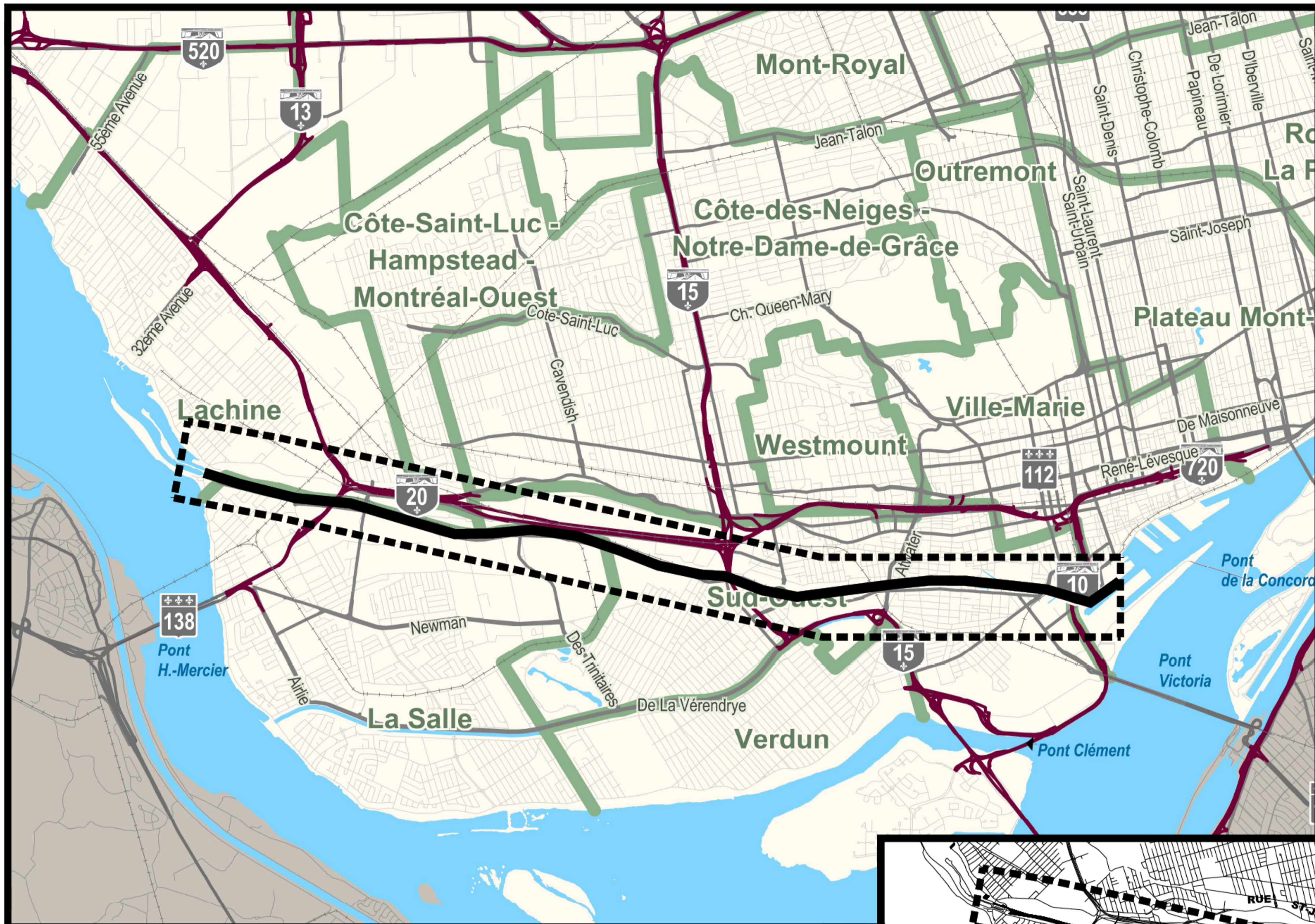
3. TENDER FORM

3.1 Replacement of tender form:

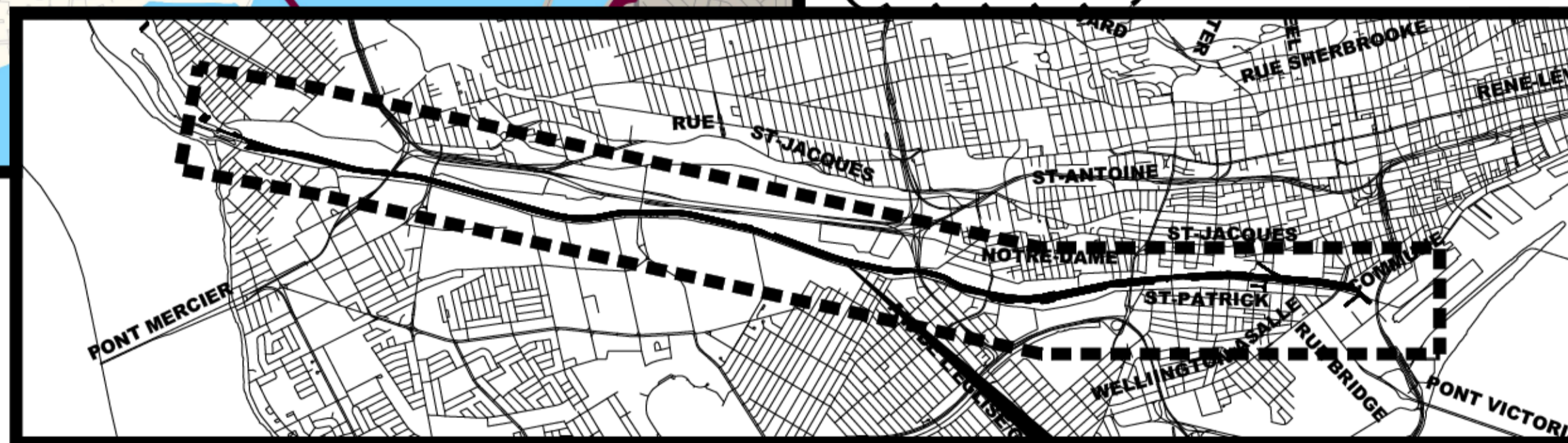
No modifications

Canada Parks Agency
REHABILITATION LACHINE CANAL WALLS
CROWNING WALL REPAIRS AND REPLACEMENT
(SECTORS 5.2; 6 & E – BASIN N°3)
Project N° CLAC-1455-06
Addendum n° 02

Plans



PLAN DE LOCALISATION / LOCATION PLAN



LISTE DES DESSINS:

- 01 PAGE FRONTISPICE
- 02 NOTES GÉNÉRALES
- 03 LÉGENDE ET PLAN CLÉ
- 04 PLAN DE LOCALISATION DES DIFFÉRENTES INTERVENTIONS BIEF 3
- 05 BIEF 3 - VUE EN PLAN AGRANDIE 1/2
- 06 BIEF 3 - VUE EN PLAN AGRANDIE 2/2
- 07 BIEF 3 - PHOTOS
- 08 ORTHOPHOTO, ZONES DE TRAVAUX
- 09 TABLEAUX
- 10 RÉPARATION TYPE 2 - SECTEUR 6 ET E - DÉMOLITION
- 11 RÉPARATION TYPE 2 - SECTEUR 6 ET E - CONSTRUCTION
- 12 RÉPARATION TYPE 2A - SECTEUR E - DÉMOLITION
- 13 RÉPARATION TYPE 2A - SECTEUR E - CONSTRUCTION
- 14 RÉPARATION TYPE 2A - SECTEUR 5.2 - DÉMOLITION
- 15 RÉPARATION TYPE 2A - SECTEUR 5.2 - CONSTRUCTION
- 16 RÉPARATION TYPE 2B - SECTEUR E - DÉMOLITION
- 17 RÉPARATION TYPE 2B - SECTEUR E - CONSTRUCTION
- 18 DÉTAILS TYPIQUES - CONDUIT, CHASSE-ROUE ET JOINT
- 19 DÉTAILS TYPIQUES - DRAIN
- 20 DÉTAILS TYPIQUES - CLÉ ET BOLLARD
- 21 DÉTAILS TYPIQUES - ÉCHELONS ET GARDE CORPS
- 22 DÉTAILS TYPIQUES - JOINT DE CONTRÔLE
- 23 MAINTIEN DE LA CIRCULATION - PIÉTONNIÈRE ET CYCLABLE
- 24 DÉVIATION TEMPORAIRE DE LA VOIE CYCLABLE

ANNEXE

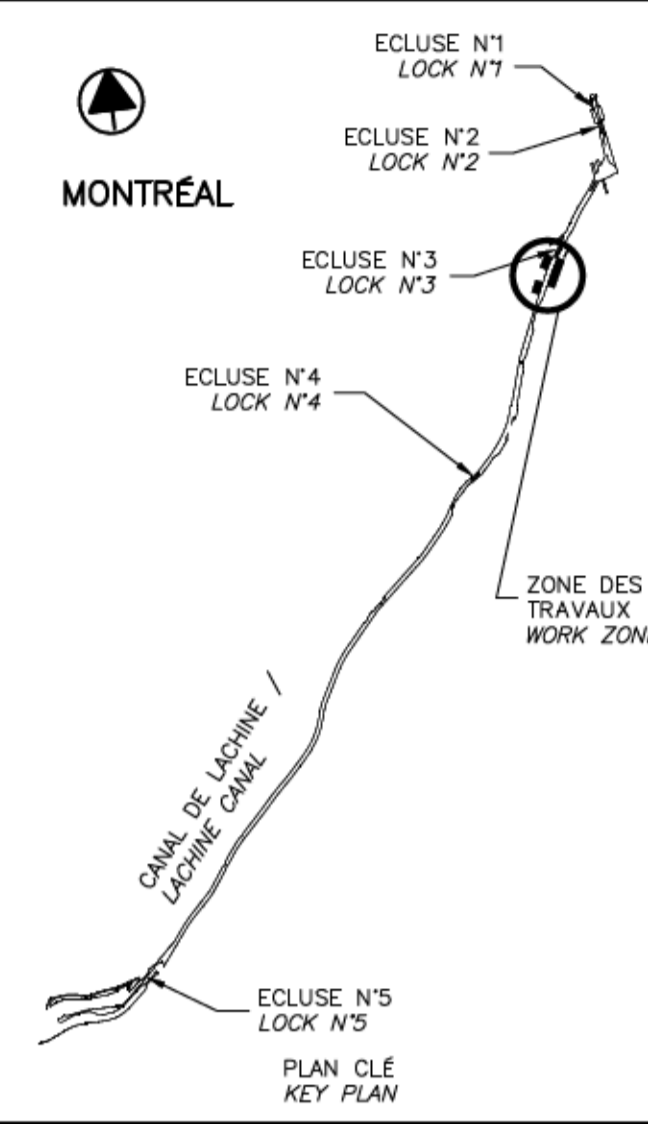
- 25 NIVEAUX D'EAU ET TIRANTS D'AIR
- 26 RELEVÉ 3D - 1/3
- 27 RELEVÉ 3D - 2/3
- 28 RELEVÉ 3D - 3/3
- 29 BATHYMETRIE - 1/2
- 30 BATHYMETRIE - 2/2

DRAWING LIST:

- 01 FRONT PAGE
- 02 GENERAL NOTES
- 03 LEGEND AND KEY PLAN
- 04 LOCATION PLAN FOR THE DIFFERENT INTERVENTIONS REACH 3
- 05 REACH 3 - ENLARGED PLAN VIEW 1/2
- 06 REACH 3 - ENLARGED PLAN VIEW 2/2
- 07 REACH 3 - PICTURES
- 08 ORTHOPHOTO, WORKING ZONES
- 09 TABLES
- 10 TYPE 2 REPAIR - AREA 6 AND E - DEMOLITION
- 11 TYPE 2 REPAIR - AREA 6 AND E - CONSTRUCTION
- 12 TYPE 2A REPAIR - AREA E - DEMOLITION
- 13 TYPE 2A REPAIR - AREA E - CONSTRUCTION
- 14 TYPE 2A REPAIR - AREA 5.2 - DEMOLITION
- 15 TYPE 2A REPAIR - AREA 5.2 - CONSTRUCTION
- 16 TYPE 2B REPAIR - AREA E - DEMOLITION
- 17 TYPE 2B REPAIR - AREA E - CONSTRUCTION
- 18 TYPICAL DETAILS - CONDUIT, CURB AND JOINT
- 19 TYPICAL DETAILS - DRAIN
- 20 TYPICAL DETAILS - KEY AND BOLLARD
- 21 TYPICAL DETAILS - GRAB BARS AND GUARD RAIL
- 22 TYPICAL DETAILS - CONTROL JOINT
- 23 MAINTENANCE OF PEDESTRIAN AND CYCLING TRAFFIC
- 24 TEMPORARY DETOUR BIKE PATH

ANNEX

- 25 WATER LEVEL AND VERTICAL CLEARANCES
- 26 3D SURVEY - 1/3
- 27 3D SURVEY - 2/3
- 28 3D SURVEY - 3/3
- 29 BATHYMETRY - 1/2
- 30 BATHYMETRY - 2/2



SCEAUX SEALS

02	EMIS POUR ADDENDA #2 ISSUED FOR ADDENDUM #2	2017-06-27
01	EMIS POUR ADDENDA #1 ISSUED FOR ADDENDUM #1	2017-06-20
00	EMIS POUR SOUMISSION ISSUED FOR SUBMISSION	2017-06-02

révisions revisions		date
------------------------	--	------

Projet Project

PARCS CANADA
 PARKS CANADA
 RÉPARATION ET REMPLACEMENT
 DE MURS DE COURONNEMENT
 (SECTEURS 5.2, 6 ET E - BASSIN No 3)
 REPAIR AND REPLACEMENT
 OF THE CROWNING WALLS
 (AREAS 5.2, 6 AND E - REACH No 3)

Dessin Drawing

STRUCTURE
 STRUCTURE
 PAGE FRONTISPICE
 FRONT PAGE

Conçu par Designed by
 Martin Champagne, ing. 2017-05-26
 Date

Dessiné par Drawn by
 2017-05-26
 Date

Approuvé par Approved by
 Jérôme Aubin, ing. 2017-05-26
 Date

Soumission Tender
 Dominic Pierre, ing. 2017-05-26
 Administrateur de projets APC PCA Project Manager

No de projet Project number No de contrat Contract number
 1455-06 APC PCA

Nom du fichier File name No de classement
 CLAC-(1455-06) File no

No de plan ou dessin File name No feuillet Drawing no
 CL-32-122.01 01/30

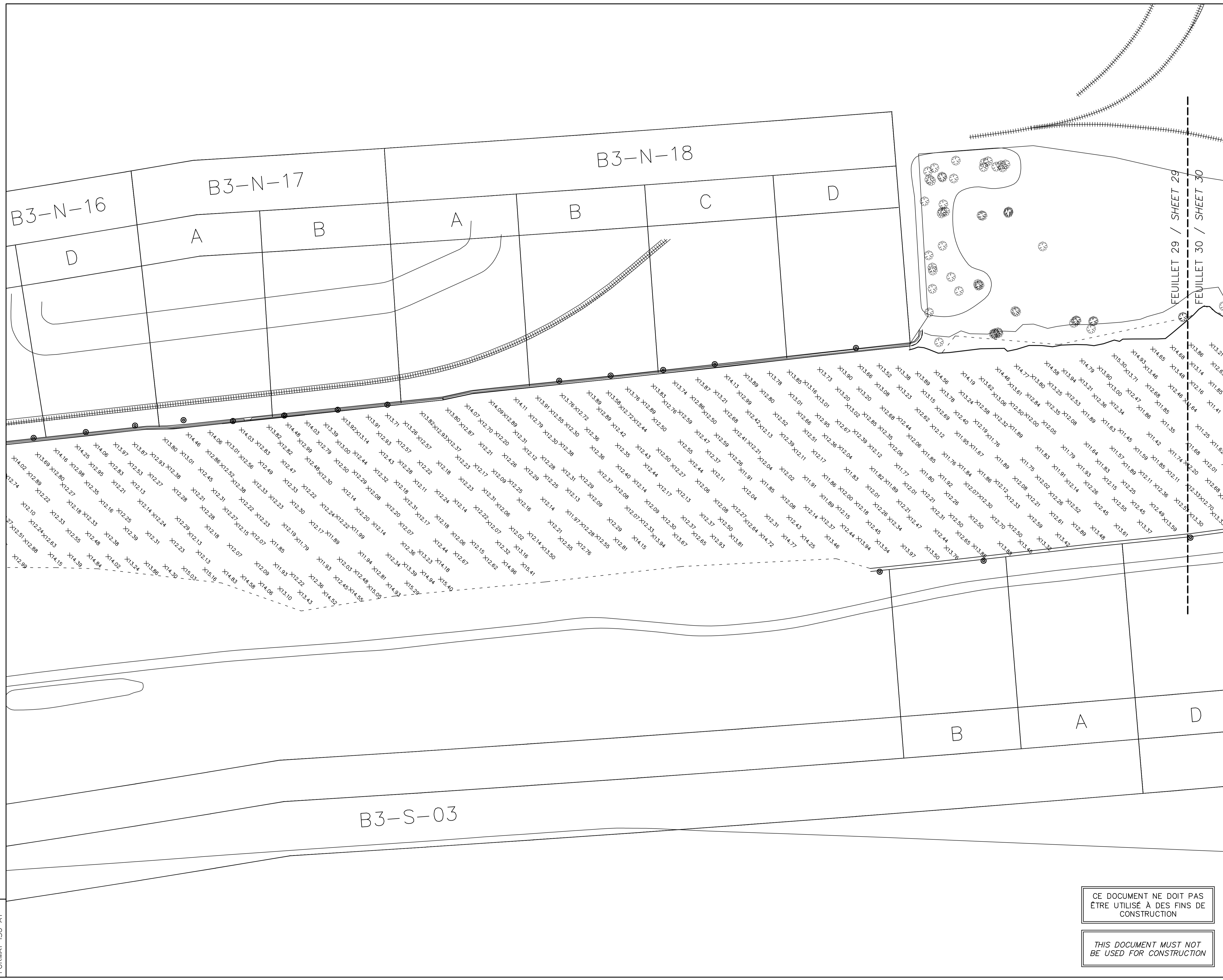
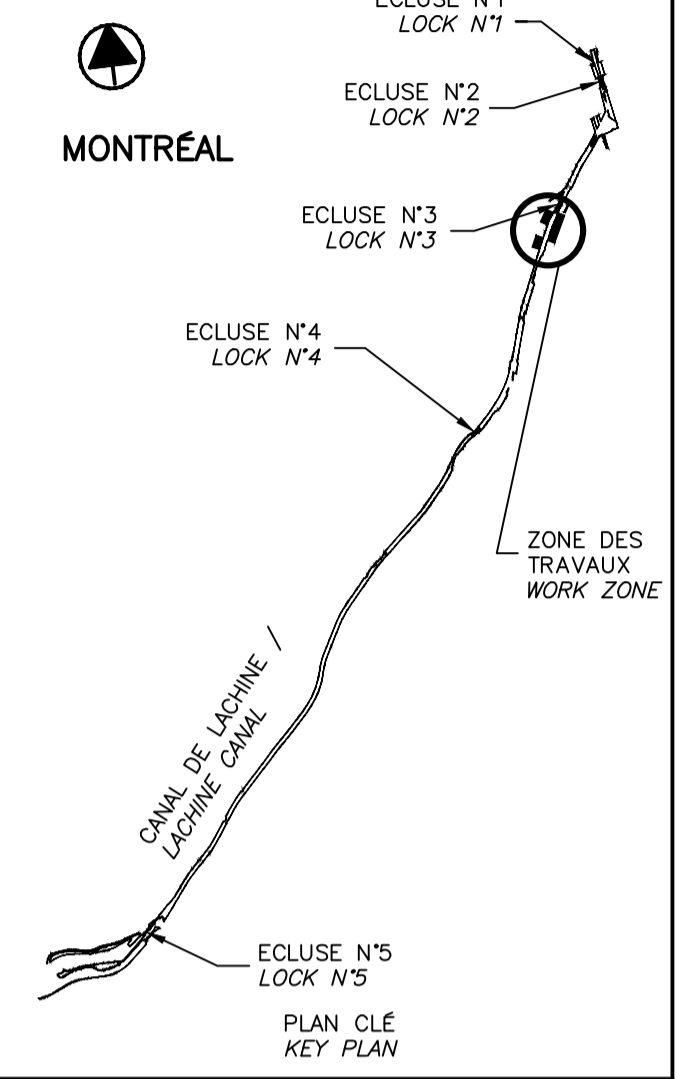
RÉPARATION ET REMPLACEMENT DE MURS DE COURONNEMENT (SECTEURS 5.2, 6 ET E - BASSIN No 3)

REPAIR AND REPLACEMENT OF THE CROWNING WALLS (AREAS 5.2, 6 AND E - REACH No 3)

CANAL DE LACHINE
 LACHINE CANAL

CE DOCUMENT NE DOIT PAS
 ÊTRE UTILISÉ À DES FINS DE
 CONSTRUCTION

THIS DOCUMENT MUST NOT
 BE USED FOR CONSTRUCTION



02	EMIS POUR ADDENDA #2 ISSUED FOR ADDENDUM #2	2017-06-27
révisions revisions		date

DERNIÈRE VERSION DISPONIBLE

Projet **PARCS CANADA
PARKS CANADA**
 RÉPARATION ET REMPLACEMENT
 DE MURS DE COURONNEMENT
 (SECTEURS 5.2, 6 ET E - BASSIN No 3)
 REPAIR AND REPLACEMENT
 OF THE CROWNING WALLS
 (AREAS 5.2, 6 AND E - REACH No 3)

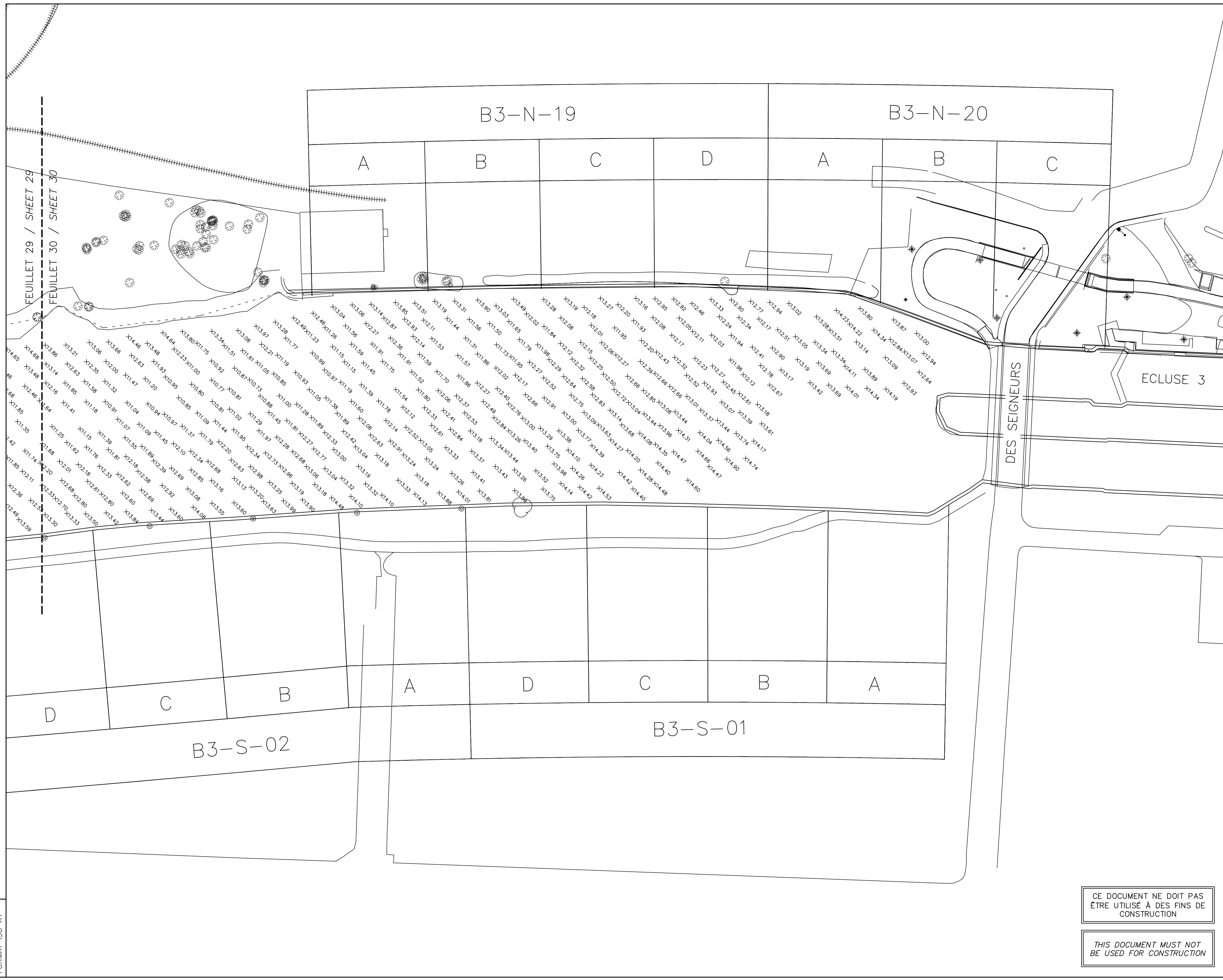
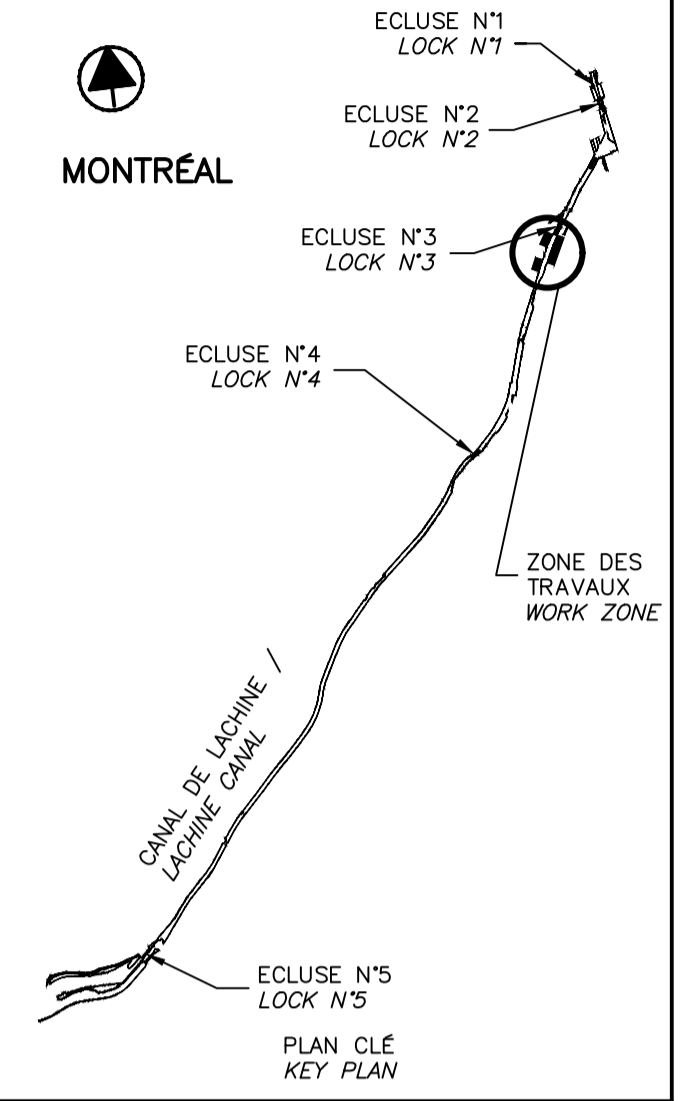
Dessin **ANNEXE
ANNEX**

BATHYMÉTRIE - 1/2
 BATHYMETRY - 1/2

Conçu par	Designed by	
Date	Date	
Dessiné par	Drawn by	
Date	Date	
Approuvé par	Approved by	
Date	Date	
Soumission	Tender	
Administrateur de projets APC	PCA Project Manager	
No de projet 1455-06	Project number 1455-06	No de contrat Contract number
APC	PCA	
Nom du fichier CLAC-(1455-06)	File name	No de classement File no
No de plan ou dessin CL-32-122.29	File name	No feuillet Drawing no 29/30

CE DOCUMENT NE DOIT PAS
ÊTRE UTILISÉ À DES FINS DE
CONSTRUCTION

THIS DOCUMENT MUST NOT
BE USED FOR CONSTRUCTION



02	EMIS POUR ADDENDA #2 ISSUED FOR ADDENDUM #2	2017-06-27
révisions revisions		date

DERNIÈRE VERSION DISPONIBLE

Projet **PARCS CANADA
PARKS CANADA**
**RÉPARATION ET REMPLACEMENT
DE MURS DE COURONNEMENT
(SECTEURS 5.2, 6 ET E - BASSIN No 3)**
**REPAIR AND REPLACEMENT
OF THE CROWNING WALLS
(AREAS 5.2, 6 AND E - REACH No 3)**

Dessin **ANNEXE
ANNEX**
 BATHYMÉTRIE - 2/2
 BATHYMETRY - 2/2

Conçu par	Designed by
Dessiné par	Drawn by
Approuvé par	Approved by
Soumission	Tender
Administrateur de projets APC	PCA Project Manager
No de projet 1455-06	No de contrat 1455-06
Nom du fichier CLAC-(1455-06)	No de classement
No de plan ou dessin CL-32-122.30	No de feuille 30/30

CE DOCUMENT NE DOIT PAS
ÊTRE UTILISÉ À DES FINS DE
CONSTRUCTION

THIS DOCUMENT MUST NOT
BE USED FOR CONSTRUCTION

Canada Parks Agency
REHABILITATION LACHINE CANAL WALLS
CROWNING WALL REPAIRS AND REPLACEMENT
(SECTORS 5.2; 6 & E – BASIN N°3)
Project N° CLAC-1455-06
Addendum n° 02

Specifications

Part 1 General

1.1 REFERENCES

- .1 Not used.

Part 2 Explanation of the Bid Form prices

2.1 Item 1. – Government Representative Site Office, Environment, and General Items

- .1 Item 1.1 – Construction Facilities

- .1 Payment item 1.1 of the *Schedule of Prices* is a fixed lump sum amount to compensate all necessary expenses incurred in the execution of the works as well as any other expenses not included in the other *Schedule of Prices* items, in accordance with the requirements of the specifications.

- .2 The amount includes, but is not limited to, the following:

- .1 All that is described in Section 01 52 00, *Construction Facilities*, such as:

- .1 Electricity, water, and lighting on site.

- .2 Construction site offices; Furnishings, telephone and related services (internet, pagers, fax, etc.), microwave and small refrigerator (9 cubic feet minimum), cold and hot water dispenser, including drinking water, heating and air conditioning of the site offices.

- .3 Access roads including the necessary deforestation, clearing-up, removal of scrub, vines, dead wood, trees and shrub whose trunk diameter is less than 50 mm (measured from the diameter at chest height), **removal of all scrub at the junction of the crowning walls and seat**, sanitary facilities, site fencing, warehouse, scaffolding, site signs and maintenance, in accordance with the requirements of the specifications and drawings, and as directed by the Government Representative.

- .4 The required coordination with the City of Montreal and other stakeholders, including obtaining all necessary permits to carry out the work.

- .5 The maintenance of the worksite and of its access routes.

- .6 All that is required in the following sections and is not directly attributed or related to one of the other items of the Bid Form:

Section 01 11 00 Summary of Work

Section 01 31 19 Project Meetings

Section 01 32 16.07 Construction Progress Schedule

Section 01 33 00 Submittal Procedures

Section 01 35 29.06 Health and Safety Requirements

Section 01 52 00 Construction Facilities

- | | | | |
|--|------------------|-----------------------------------|-------|
| | Section 01 52 00 | Construction Facilities | |
| | Section 01 56 00 | Temporary Barriers and Enclosures | |
| | Section 01 73 00 | Execution | |
| | Section 01 74 11 | Cleaning | |
| | Section 01 74 21 | Construction/Demolition | Waste |
| | | Management and Disposal | |
| | Section 01 77 00 | Closeout Procedures | |
| | Section 07 78 00 | Closeout Submittals | |
- .7 All costs associated with surveying and staking the works and all other site take-offs and measurements that are not allocated to any of the other items of the *Schedule of Prices* .
- .8 The costs of providing a security guard or other means of supervision for the site (if required).
- .9 Rental costs of land and/or space for the storage of materials.
- .10 The protection of existing public utilities within the work site during construction. If the Contractor damages these installations during his work, he must replace them at his expense.
- .11 All fees pertaining to the supply of water and electricity for the duration of the work.
- .12 Expenses for all means taken to minimize damage to earthworks, trees, shrubs, paving, bed of the river and its banks, etc.
- .13 The rehabilitation of the premises:
- .1 All work to restore the temporary sites used (access road, storage area, etc.) to their natural state;
 - .2 All work to restore street furniture (benches, tables, garbage cans, etc.) to their original condition;
 - .3 All work to restore vegetation by grassing of sites damaged by work;
 - .4 All work permitting the repair of all other damages and damages that the Contractor caused to the site of the works, to the public or private property affected by its works.
- .14 The Contractor shall repair all damage caused in the performance of its work to the satisfaction of the Owners concerned and that of the Government Representative. The work site must be returned in a similar or better condition to that existing before the work begins.
- .3 A portion equal to 20 % of the total amount bid for this item will be paid with the first progress claim, provided that the work has begun.
- .4 Other progress payments under this item will be paid to a percentage consistent with the general progress of work for each progress claim period except for the last payment which shall be paid to an amount up to 80% of the general progress of the work.

- .5 The last progress claim equivalent to 20% shall be paid with the payment emitted during the "*Substantial Performance of the Work*".
- .2 Item 1.2 – Environmental Protection Measures
 - .1 Payment item 1.2 of *Schedule of Prices* is a fixed lump sum amount to compensate all necessary expenses incurred for measures to protect the environment in accordance with the requirements of the specifications.
 - .2 The amount includes, but is not limited to, the following:
 - .1 All that is described in Section 01 35 43, *Environmental Procedures* such as the preparation, presentation, and implementation of the environmental protection plan;
 - .1 The preparation, presentation, and implementation of the emergency spill plan;
 - .2 The preparation, presentation, and implementation of the construction facilities location plan location;
 - .3 The preparation, presentation, and implementation of the work zone plans;
 - .4 The preparation, presentation, and implementation of the air pollution prevention plan;
 - .5 The preparation, presentation, and implementation of the contamination prevention plan;
 - .6 The preparation, presentation, and implementation of the wastewater management plan;
 - .7 The preparation, presentation, and implementation of the plan for the designation and protection of wetlands and historical, archaeological, cultural, and biological resources;
 - .8 Temporary facilities for pollution prevention;
 - .2 Plant protection measures;
 - .3 The preparation, presentation, and implementation of a plan to protect the historical and heritage character of the site.
 - .4 (BASED ON THE PROJECT)
 - .3 A portion equal to 20 % of the total amount bid for this item will be paid with the first progress claim, provided that the work has begun.
 - .4 Other progress payments under this item will be paid to a percentage consistent with the general progress of work for each progress claim period.
- .3 Item 1.3 - Sediment Barrier
 - .1 Payment item 1.3. of the *Schedule of Prices* is per linear meter for all costs incurred for the installation of sediment barrier in accordance with the requirements of the plans and specifications
 - .2 Price includes, but is not limited to, the following:
 - .1 The preparation, presentation, and correction, if required, of the Work Plan;

- .2 Mobilization of labor, tools and equipment required for the execution of the work;
 - .3 Supply including geotextile, transportation, handling, warehousing and placing;
 - .4 Servicing and maintenance of barriers for the duration of the work;
 - .5 Dismantling of the sediment barrier;
 - .6 Cleaning of the premises at the end of work;
 - .7 Any incidental expense.
- .4 Item 1.4 - Turbidity curtain (confinement)
- .1 Payment item 1.4 of the *Schedule of Prices* is per linear meter for all costs incurred for the installation of a turbidity curtain in accordance with the requirements of the plans and specifications
 - .2 Price includes, but is not limited to, the following:
 - .1 The preparation, presentation, and correction, if required, of the Work Plan and shop drawings;
 - .2 Mobilization of labor, tools and equipment required for the execution of the work;
 - .3 The supply, transportation, handling, storage, and operation;
 - .4 Maintenance and retention of the curtain for the duration of the work;
 - .5 Dismantling of the curtain;
 - .6 Cleaning of premises at the end of work;
 - .7 Any incidental expense.
- .5 Item 1.5 – Deforestation of the excavation zone
- .1 Payment items 1.5.1 to 1.5.4 – Deforestation of trees with diameters superior to 100 mm (measured from the diameter at chest height)
 - .1 Payment items 1.5.1 to 1.5.4 of the *Schedule of Prices* are priced per unit for all the costs incurred for the deforestation of trees according to their dimensions, in accordance with the requirements of the plans and specifications.
 - .2 This item applies only to trees in the excavation area.
 - .3 The price includes, but is not limited to, the following:
 - .1 Preparation, presentation, and correction, if required, of the Work Plan;
 - .2 The mobilization of labour, tools, and equipment required to carry out the work;
 - .3 Supply, transport, handling, maintenance, and removal of access required for clearing works;
 - .4 The clearing of areas identified by the Government Representative;
 - .5 Loading, transporting and disposing of debris to a site in accordance with current policies;

- .6 Cleaning at the end of the works;
- .7 Any incidental expenses.

.6 Item 1.6 - Removal, Painting and Repositioning of Guardrails

- .1 Payment item 1.6 of the *Schedule of Prices* is priced per linear meter for the removal, painting and repositioning of guardrails in accordance with the requirements of the plans and specifications.
- .2 Price includes, but is not limited to, the following:
 - .1 The preparation, presentation, and correction, if required, of shop drawings, the painting procedure, samples, and technical data sheets required;
 - .2 Mobilization of labor, tools and equipment required for the execution of the work;
 - .3 Removal, transportation, handling, storage of guardrails;
 - .4 The supply, handling, transport and use of materials;
 - .5 All costs incurred in the surface preparations;
 - .6 Painting of guardrails;
 - .7 The restoration of the guardrails, including the new anchors of the same size as the existing one;
 - .8 Leveling the guardrails, if necessary, with cementitious grout;
 - .9 In the event of damage, immediately repair the affected items and at the Contractor's expense;
 - .10 Any incidental expenses.
- .3 The guardrail must be removed, completely repainted, and put back in place. The rails are made of galvanised steel and the post are made of cast-iron. The paint does not contain lead.**

01

.7 Item 1.7 - Removal and Replacement of 1.8 m mesh fence with support bar (posts at 2.0 m c / c)

- .1 Payment item 1.7 of the *Schedule of Prices* is priced per linear meter for the removal and replacement of wire mesh fences in accordance with the requirements of the plans and specifications.
- .2 This work involves the wire mesh fence at the East end of B3-N-18-D.**
- .3 Price includes, but is not limited to, the following:
 - .1 Mobilization of labor, tools and equipment required for the execution of the work;
 - .2 Removal, transportation, handling, storage of wire mesh fences;
 - .3 The supply, handling, transport and use of materials;
 - .4 Re-fastening wire mesh fences, including accessories to be re-installed such as existing ones;
 - .5 In the event of damage, immediately repair the affected items and at the Contractor's expense;

01

- .6 Any incidental expenses.
- .8 Posts 1.8 - Platforms and Access System
 - .1 Payment item 1.8 of the *Schedule of Prices* is priced per linear meter of wall intervention for the supply, installation and removal of the access platforms and system in accordance with the requirements of plans and specifications. The unit price for the gateway item (in linear meter) includes the equivalent of the intervention length, regardless of the number of vertical displacements required. Only the equivalent of the intervention length will be paid. If the Contractor puts two platforms at two different heights on the same repair section of 1 m, only one platform of 1 m will be paid and not 2 m.
 - .2 Price includes, but is not limited to, the following:
 - .1 The preparation, presentation, and correction, if required, of shop drawings and design calculations;
 - .2 Mobilization of labor, tools and equipment required for the execution of the work;
 - .3 The supply, transport, handling, installation, maintenance and removal of platforms and access systems;
 - .4 Any incidental expenses.

2.2 Item 2. – Replacement of the Crowning Walls

- .1 Item 2.1 – Excavations (2nd Class Excavated Material)
 - .1 Payment item 2.1 of the *Schedule of Prices* is priced per m³ for excavated, stored and backfilled material. The volume shall be calculated based on a joint statement of the excavations in accordance with the requirements of the plans and specifications.
 - .2 Price includes, but is not limited to, the following:
 - .1 Mobilization of labor, tools and equipment required for the execution of the work;
 - .2 Removal of stumps and roots at least 200 mm below ground level, their scrapping and re-leveling of the land;
 - .3 Complete removal of roots in excavation areas;
 - .4 Drying and drainage of the excavation bottom;
 - .5 Excavation, loading, transport and storage of cuttings;
 - .6 Loading, transport, and installation of embankments with excavated material;
 - .7 Compaction of materials;
 - .8 Cleaning of premises;
 - .9 Any incidental expenses.
- .2 Item 2.2 – Disposal of Contaminated Soil
 - .1 Payment items 2.2.1 to 2.2.4 of the *Schedule of Prices* are priced per cubic meter (m³) of evacuated soil for the disposal of different types of contaminated soils, in

accordance with the requirements of the specifications and drawings, and as directed by the Government Representative.

- .2 The amount includes, but is not limited to, the following:
 - .1 Disposal of contaminated soil contaminated soils A-B, B-C, > C, > D as directed by the Government Representative.
 - .2 Transport off site and treatment as prescribed by Section 01 74 21 *Construction / Demolition Waste Management and Disposal*;
 - .3 Stockpiling and off-site disposal
 - .4 Clean-up;
 - .5 Any incidental expenses.
- .3 Items 2.3, –Demolition and/or removal of collapsed walls
 - .1 The line item 2.3 of the Schedule of Prices are priced per cubic meter (m³) of concrete demolished, in accordance with the requirements of the specifications and drawings, and as directed by the Government Representative.
 - .2 The amount includes, but is not limited to, the following:
 - .1 Preparation, presentation, and correction, if required, of the Work Plan regarding the demolition of the wall;
 - .2 The mobilization of labour, tools, and equipment required to carry out the work;
 - .3 All required saw cuts;
 - .4 The demolition of defective and sound concrete as directed by the Government Representative;
 - .5 Removal of levels if required;
 - .6 Cleaning and surface preparation,
 - .7 Cleaning the reinforcing steel to be retained;
 - .8 Cleaning of the concrete substrate;
 - .9 The collection and treatment of demolition materials as prescribed by Section 01 74 21 *Construction / Demolition Waste Management and Disposal*;
 - .10 Any incidental expenses.
- .4 Item 2.4 - Galvanized reinforcement
 - .1 The price to the payment item 2.4, of the *Schedule of Prices* is priced per kilogram of steel according to the quantities placed in the formwork, in accordance with the requirements of the drawings and specifications.
 - .2 Price includes, but is not limited to, the following:
 - .1 The preparation, presentation and correction, if required, of the Work Plan for the Installation of Steel Bars;
 - .2 Mobilization of labor, tools and equipment required for the execution of the work;
 - .3 The preparation, presentation, and correction, if required, of the shop drawings and the slip of the frames;

- .4 The supply of reinforcing bars and the shaping thereof,
- .5 Galvanization where stipulated in the plans and specifications;
- .6 Installation of reinforcing steel required;
- .7 Any incidental expenses.

Items 2.5 - Chemical anchorage

- .1 The price to the payment item 2.5 of the Schedule of Prices is priced per chemical anchor, in accordance with the requirements of the plans and specifications.
- .2 Price includes, but is not limited to, the following:
 - .1 The preparation, presentation, and correction, if required, of shop drawings and anchor chemical technical sheet;
 - .2 Mobilization of labor, tools and equipment required for the execution of the work;
 - .3 Drilling and cleaning of holes for the installation of chemical anchors;
 - .4 The supply, handling, transport and installation of steel anchor rods and anchor chemicals;
 - .5 The execution of tests on control anchorages, in accordance with Section 03 30 03;
 - .6 Any incidental expenses.
- .3 The following items are excluded from this item:
 - .1 Anchors, used to replace the formwork tie-rods, used to hold the formwork in place, and which are required for placing concrete on existing concrete, are not covered by any item in the slip. All costs incurred by the Contractor for the construction of these works are included in the price of the formwork;

.6 Positions 2.6 – Cast-in-Place Concrete

- .1 The price in item 2.6 of the Schedule of Prices is priced per cubic meter of wall concrete, the quantities shall be calculated according to the theoretical dimensions in accordance with the requirements of the plans and specifications.
- .2 Price includes, but is not limited to, the following:
 - .1 The preparation, presentation, and correction, if required, of shop drawings, the concreting procedure, the descriptions of the mixtures and the technical data sheets required;
 - .2 Mobilization of labor, tools and equipment required for the execution of the work;
 - .3 Supply, installation and dismantling of formwork;
 - .4 Supply and installation of chamfers;
 - .5 The supply and application of mold release agent;
 - .6 Supply and installation of formwork ties;
 - .7 The supply and application of repair mortar to the location of the formwork ties;

- .8 The anchors, used to replace the formwork tie-rods, used to hold the formwork in place and required for the placement of concrete on existing concrete.
 - .9 Supply and installation of steel wire;
 - .10 The supply, transport, handling and placing of the steel components incorporated in the concrete, as shown in the drawings;
 - .11 Treatment of substrate before concreting;
 - .12 Supply, installation, vibration, finishing, wet curing of concrete;
 - .13 The execution of the saw-strokes shown in the drawings;
 - .14 Cleaning of concrete surfaces adjacent to the concreting area;
 - .15 At the end of the work, off-site evacuation of the formwork materials and correction of defective repairs;
 - .16 Concrete Finishing
 - .17 Treatment of surplus materials in accordance with Section 01 74 21, *Construction / Demolition Waste Management and Disposal*;
 - .18 Any incidental expenses.
- .7 Position 2.7 - Bollards
- .1 The price at item 2.7 of the Schedule of Prices is unit priced for the removal, painting and replacing of the bollards in accordance with the requirements of the drawings and specifications.
 - .2 Price includes, but is not limited to, the following:
 - .1 The preparation, presentation, and correction, if required, of shop drawings, the painting procedure, samples and technical data sheets required;
 - .2 Mobilization of labor, tools and equipment required for the execution of the work;
 - .3 Removal, transportation, handling, storage of bollards;
 - .4 The supply, handling, transport and use of materials;
 - .5 All costs incurred in the preparation of surfaces;
 - .6 Painting of the bollards
 - .7 Repositioning bollards, including new anchors of the same size as the existing one;
 - .8 In the event of damage, immediately repair the affected items and at the Contractor's expense;
 - .9 All costs related to the work in section 35 59 29 - Mooring equipment;
 - .10 Any incidental expenses.
- .8 Posts 2.8 - Rungs
- .1 The price at item 2.8 of the Schedule of Prices is unit priced for the establishment of a series of steps in accordance with the requirements of the plans and specifications.

- .2 The unit rungs include steps similar to the existing conditions. The sets of steps are composed with whole for the feet and galvanized reinforced steel in front and on top of the walls as described on the plans. The price also includes the support to whole the bars.
- .3 Price includes, but is not limited to, the following:
 - .1 The preparation, presentation, and correction, if required, of shop drawings, samples, and technical data sheets;
 - .2 Mobilization of labor, tools and equipment required for the execution of the work;
 - .3 The supply, transport, handling and setting of the echelons, such as the existing ones;
 - .4 Any incidental expenses.
- .9 Item 2.9- Type 1 borrowing materials, MG-20
 - .1 The price at item 2.9 of the Schedule of Prices is priced per tonne for the borrowed materials in accordance with the requirements of the plans and specifications.
 - .2 Price includes, but is not limited to, the following:
 - .1 This item covers materials that replace materials deemed unsuitable by the Government Representative.
 - .2 Transportation of loan materials to the site.
 - .3 Purchase and installation of borrowed materials in accordance with the plans, specifications, and instructions of the Government Representative.
 - .4 Compaction;
 - .5 Cleaning of premises;
 - .6 Any incidental expenses.
- .10 Item 2.10 - Concrete for Concrete Slab (Concrete 1 MPa)
 - .1 The price at item 2.10 of the Schedule of Prices is priced per cubic meter for the backfill concrete in accordance with the requirements of the plans and specifications and the instructions of the Government Representative.
 - .2 Price includes, but is not limited to, the following:
 - .1 The preparation, presentation, and correction, if required, of shop drawings, the concreting procedure, the descriptions of the mixtures and the technical data sheets required;
 - .2 Supply, installation and dismantling of formwork;
 - .3 Carrying concrete from the slab to the site.
 - .4 Purchase and installation of concrete for slab per plans and specifications.
 - .5 Treatment of surplus materials in accordance with Section 01 74 21, *Construction / Demolition Waste Management and Disposal*
 - .6 Cleaning of premises;
 - .7 Any incidental expenses.

- .11 Item 2.11 - Perforated drain **200** mm and geotextile, PVC (type 1) or PVC COEX (type 1) or PE (type 2), 180 kPa min.
- .1 The price at item 2.11 of the Schedule of Prices is priced per linear meter for the perforated drain in accordance with the requirements of the plans and specifications.
 - .2 **The drainage system to be place behind the wall must be 200mm.**
 - .3 Price includes, but is not limited to, the following:
 - .1 The supply of materials, the installation of drains including the installation of the geotextile, the preparation of the foundation, the clear stone support cushion, the connection of the elements and all accessories required for the installation Such as joints between the various sections;
 - .2 Cleaning of premises;
 - .3 Any incidental expenses.
- .12 Item 2.12- Soil
- .1 The price at item 2.12 of the Schedule of Prices is priced per square meter, based on the area covered in accordance with the requirements of the plans and specifications.
 - .2 Price includes, but is not limited to, the following:
 - .1 Stripping, loading, transport and storage of topsoil;
 - .2 The supply of the material, loading, transport, spreading, leveling, stripping, removal of woody debris and waste, and any amendments necessary to make the material conform to plans and specifications;
 - .3 The preparation of the ground for the placement of the topsoil;
 - .4 Loading, transport and use of topsoil;
 - .5 Any incidental expenses.
- .13 Item 2.13 - Hydraulic Seeding
- .1 The price at item 2.13 of the Schedule of Prices is priced per square meter for hydraulic seeding and shall be used to measure the maintenance of the seeded area during the guarantee period in square meters in accordance with the requirements of the plans and specifications.
 - .2 Measure hydraulic seeding in square meters of seeded area for each mix.
 - .3 Price includes, but is not limited to, the following:
 - .1 The supply, implementation of materials in accordance with the plans and directives of the Government Representative;
 - .2 Recovery of sodding of portions of covered surfaces by less than 75% shoot height 150 mm
 - .3 Areas where the mixture will be incorporated into the existing lawn will not be considered for payment purposes.
 - .4 Cleaning of premises;
 - .5 Any incidental expense

- .4 It is noted that only the area above the excavated trench is included in this payment item. Costs related to all other areas damaged by the work are considered miscellaneous and are included in the reclamation price.

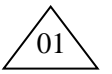
.14 Posts 2.14 - Geotextile

- .1 The price at item 2.14 of the Schedule of Prices is priced per square meter based on the actual surface area covered, without addition for overlap, for the geotextile required for the excavations, in accordance with the requirements of the plans and specifications.
- .2 Price includes, but is not limited to, the following:
 - .1 The provision of warehousing, handling, transport, laying, assembling of slicks, fixing anchorages, and the use of materials in accordance with drawings and specifications;
 - .2 Cleaning and shimming;
 - .3 Any incidental expenses.

2.3 Post 3. - Repair of the crowning wall without overlay

.1 Item 3.1 - Cast -in-Place Concrete; Type XIV-R or XIV-S (self-consolidating)

- .1 The price at item 3.1 of the Schedule of Prices is priced per square meter of demolished concrete in accordance with the requirements of the plans and specifications.
- .2 **Repairs of type 2A and 2B are repairs carried out continuously over the entire length of the sections covered by these types of repairs.**
- .3 Price includes, but is not limited to, the following:
 - .1 The preparation, presentation and correction, if required, of the Work Plan for the demolition of the wall;
 - .2 Mobilization of labor, tools and equipment required for the execution of the work;
 - .3 The demolition of defective and sound concrete, as directed by the Government Representative;
 - .4 The 300 mm excavation at the back of the wall, if applicable;
 - .5 Loading, transport and storage of excavated material;
 - .6 Loading, transport and installation of the embankment with the excavated material;
 - .7 Saw lines required;
 - .8 **The demolition of the crowning wall type 2A and 2B (located below the curb)**
 - .9 Cleaning of reinforcing steel to be retained;
 - .10 Cleaning and surface preparation,
 - .11 Supply, installation and dismantling of formwork;
 - .12 Supply and installation of chamfers;
 - .13 The supply and application of mold release agent;
 - .14 Supply and installation of formwork ties;



- .15 The supply, transport, handling and placing of the steel components incorporated in the concrete, as shown in the drawings;
- .16 Supply, installation, vibration, finishing, wet curing of concrete;
- .17 The collection of demolition materials, their disposal outside the building site and their treatment in accordance with the requirements of Section 01 74 21, *Construction/Demolition Waste Management and Disposal*;
- .18 Any incidental expenses.

.2 Item 3.2 – Demolition and reconstruction of wheelblockers (**B3-S-01-A**)

- .1 The price at item 3.2 of the Schedule of Prices is priced per linear meter of demolished concrete and reconstruction in accordance with the requirements of the plans and specifications
- .2 **This post deals exclusively of the demolition of the curb above the repair.**
- .3 Price includes, but is not limited to, the following:
 - .1 Mobilization of labor, tools and equipment required for the execution of the work;
 - .2 The demolition of defective and sound concrete, as directed by the Government Representative;
 - .3 Loading, transport and storage of excavated material;
 - .4 Cleaning of reinforcing steel to be retained;
 - .5 Supply, installation and dismantling of formwork;
 - .6 Supply, installation, vibration, finishing, wet curing of concrete;
 - .7 Saw lines required;
 - .8 The collection of demolition materials, their disposal outside the building site and their treatment in accordance with the requirements of Section 01 74 21, *Construction/Demolition Waste Management and Disposal*;
 - .9 Any incidental expenses.
- .4 **For the purposes of demolition take into consideration that the curb to be demolished is armed**

.3 Item 3.3 - Galvanized reinforcement

- .1 The price to the payment item 3.3, of the *Schedule of Prices* is priced per kilogram of steel according to the quantities placed in the formwork, in accordance with the requirements of the drawings and specifications.
- .2 Price includes, but is not limited to, the following:
 - .1 The preparation, presentation and correction, if required, of the Work Plan for the Installation of Steel Bars;
 - .2 Mobilization of labor, tools and equipment required for the execution of the work;
 - .3 The preparation, presentation, and correction, if required, of the shop drawings and the slip of the frames;
 - .4 The supply of reinforcing bars and the shaping thereof,
 - .5 Galvanization where stipulated in the plans and specifications;

- .6 Installation of reinforcing steel required;
 - .7 Any incidental expenses.
- .4 Items 3.4, - Chemical anchorage
- .1 The price to the payment item 3.4, of the Schedule of Prices is priced per chemical anchor, in accordance with the requirements of the plans and specifications.
 - .2 Price includes, but is not limited to, the following:
 - .1 The preparation, presentation, and correction, if required, of shop drawings and anchor chemical technical sheet;
 - .2 Mobilization of labor, tools and equipment required for the execution of the work;
 - .3 Drilling and cleaning of holes for the installation of chemical anchors;
 - .4 The supply, handling, transport and installation of steel anchor rods and anchor chemicals;
 - .5 The execution of tests on control anchorages, in accordance with Section 03 30 03;
 - .6 Any incidental expenses.
- .5 Item 3.5 - Bollards
- .1 The price at item 3.5 of the Schedule of Prices is priced per unit for on-site bollard painting in accordance with the requirements of the plans and specifications.
 - .2 Price includes, but is not limited to, the following:
 - .1 The preparation, presentation, and correction, if required, of shop drawings, the painting procedure, samples, and technical data sheets required;
 - .2 Mobilization of labor, tools and equipment required for the execution of the work;
 - .3 The supply, handling, transportation and use of materials;
 - .4 All costs incurred in the preparation of surfaces;
 - .5 Painting of the bollards in place;
 - .6 All costs related to the work in section 35 59 29 - Mooring equipment;
 - .7 Any incidental expenses.
- .6 Posts 3.6 - Rungs
- .1 The price at item 3.6 of the Schedule of Prices is priced per unit for the establishment of a series of steps in accordance with the requirements of the plans and specifications.
 - .2 The unit rungs include steps similar to the existing conditions. The sets of steps are composed with whole for the feet and galvanized reinforced steel in front and

on top of the walls as described on the plans. The price also includes the support to whole the bars.

- .3 Price includes, but is not limited to, the following:
 - .1 The preparation, presentation and correction, if required, of shop drawings, samples and technical data sheets;
 - .2 Mobilization of labor, tools and equipment required for the execution of the work;
 - .3 The supply, transport, handling and installation of steps including new anchorages of the same size as the existing one;
 - .4 Any incidental expenses.
- .7 Posts 3.7 - Hydraulic Seeding
 - .1 The price at item 3.7 of the Schedule of Prices is priced per square meter for hydraulic seeding for one meter of width, measure the maintenance of areas seeded during the guarantee period in square meters, in accordance with the requirements of plans and specifications.
 - .2 Measure hydraulic seeding in square meters of seeded area for each mix.
 - .3 Price includes, but is not limited to, the following:
 - .1 The supply, implementation of materials in accordance with the plans and directives of the Government Representative;
 - .2 Recovery of sodding of portions of covered surfaces by less than 75% shoot height 150 mm
 - .3 Areas where the mixture will be incorporated into the existing lawn will not be considered for payment purposes.
 - .4 Cleaning of premises;
 - .5 Any incidental expense
- .8 It is noted that only the area above the excavated trench is included in this payment item. Costs related to all other areas damaged by the work are considered miscellaneous and are included in the reclamation price.

2.4 **Item 4. - Installation of a legal survey marker**

- .1 Item 4.1 - Installation of a legal survey marker
 - .1 The price at item 4.1 of the Schedule of Prices is priced per unit in accordance with the requirements of the plans and specifications.
 - .2 Price includes, but is not limited to, the following:
 - .1 The preparation, presentation, and correction, if required, of the technical specification of the marker;
 - .2 Mobilization of labor, tools and equipment required for the execution of the work;
 - .3 The supply manutention transport and installation of the survey marker;
 - .4 Any incidental expenses.

2.5 Item 5. – traffic maintenance end temporary signage

- .1 Item 5.1- Traffic Maintenance and Temporary Signage
 - .1 The price at item 5.1 is a daily price for traffic and temporary signaling in accordance with the requirements of the plans and specifications.
 - .2 Price includes, but is not limited to, the following:
 - .1 Maintenance of traffic and temporary signaling of the cycling path as presented on the plans.
 - .2 The preparation of all signaling plans The plans must be signed by an engineer member of the “ordre des ingénieurs du Québec”;
 - .3 Mobilisation maintenance and dissembling of the temporary signaling;
 - .4 Maintenance of access to properties;
 - .5 The provision of signalers as required;
 - .6 The provision, mobilization, maintenance, replacement in the event of breakage or vandalism, the commissioning or disengagement, the displacement and demobilization of the temporary signaling required to carry out work on the entire site in accordance with the requirements of this document;
 - .7 Maintenance of signs and traffic lanes including inspections requested;
 - .8 Temporary signaling, equipment and manpower required for the complete execution of all works;
 - .9 Temporary marking of the cycling path and rehabilitation of existing signage
 - .10 Modification and rehabilitation of existing signage;
 - .11 Temporary closure of the cycling path with signalers if required
 - .12 The provision of all signaling personnel, including the signaling officer and the site manager, as well as the machinery and vehicles required for temporary signaling;
 - .13 Mobilization of access to, maintenance and dismantling of work areas;
 - .14 Any incidental expenses.
- .2 Item 5.2 – Temporary deviation of the cycling path
 - .1 The price at item 5.2 of the Schedule of Prices is a lump sum for the conformity and installation of a temporary deviation of the cycling path in accordance with the requirements of the drawings and specifications.
 - .2 Price includes, but is not limited to, the following:
 - .1 Mobilization of labor, tools and equipment required for the execution of the work;
 - .2 Loading, transport and storage of all materials;
 - .3 Implementation, preparation and compaction of materials
 - .4 Demobilization at the end of the contract and rehabilitation to it’s initial state;
 - .5 Cleaning of the premise;

- .6 The collection of demolition materials, their disposal outside the building site and their treatment in accordance with the requirements of Section 01 74 21, Construction/Demolition Waste Management and Disposal;
 - .7 Any incidental expenses.
- .3 Item 5.3 - Special Panels
- .1 The price at item 5.3 of the Schedule of Prices is priced per square meter for the conformity and installation of special panels and signs in accordance with the requirements of the drawings and specifications.
 - .2 Price includes, but is not limited to, the following:
 - .1 The preparation, presentation and correction, if necessary, of shop drawings signed and sealed by a member engineer in good standing of the Ordre des ingénieurs du Québec;
 - .2 Obtaining all required certificates;
 - .3 The supply, shaping, transportation and handling of the materials required for the application of the special panels and signs;
 - .4 Mobilization of labor, tools and equipment required for the execution of the work;
 - .5 The provision of accessories required for the installation of panels and signs such as poles, braces, hardware;
 - .6 Implementation, maintenance, replacement in case of accident, breakage or vandalism of special panel;
 - .7 Demobilization of special panels and signs at the end of the work;
 - .8 Turning the traffic sign on or off, as often as required;
 - .9 Temporary signage required during operations;
 - .10 Any incidental expenses.

END OF SECTION

Canada Parks Agency
REHABILITATION LACHINE CANAL WALLS
CROWNING WALL REPAIRS AND
REPLACEMENT (SECTORS 5.2; 6 & E – BASIN N°3)
Project N° CLAC-1455-06
Addendum n° 02

ANNEX III - Genrale arrangement C2 Montreal

