



Project: R.077223.220

Rehabilitation of the Lachine Canal walls, Reach 4 – Sectors 14 to 17 Lachine Canal national historic site

Object: ADDENDA # 1

August 15th, 2018

Part 1 Technical specification

1.1 Section « 01 29 00 – Payment procedures »

.1 *The article 1.4.2.5.2.2 is modified as follows:*

Tree cutting and grubbing required for site facilities

.2 *The article 1.4.5.5.6 is modified as follows:*

Maintenance of existing fencing and existing snake hibernacula, fencing removal and delivery to a supplier on the island of Montreal and the construction of a new hibernacula according to details of the plans.

.3 *The article 1.4.2.10.1 is modified as follows:*

Construction of all accesses to perform the work, including all grubbing required.

.4 *The article 1.9.1.2 is modified as follows:*

This price remunerates, by square meter (m²), all necessary measures, actions and supplies such as, but not limited to, management, labor, tools and machinery, equipment, materials, surveys, permits, professional services and construction engineering for the excavation, preparation, clearing and deforestation of shrubs whose diameter (at 1.2m from the ground) is smaller than 150mm, grubbing, transportation, storage and handling, cleaning and any activity necessary to complete the work, including expenditures to perform work not specifically described, either on the drawings, specifications or other tender documents, but deemed necessary to bring them into compliance to the rules of art. The clearing/grubbing item is included inside the intervention zone.

.5 *The article 1.9.4.4 is modified as follows:*

In addition to the treatment of the materials to be disposed of in article 1.9.5 of this section, a quantity of 1340m³ (Sector 14 :40m³, Sector 15 :130m³, Sector 16 :70m³, Sector 17 :1110m³) of soils with a contamination level <A are intended to be excavated, stored (if required) and reused or excavated and disposed. If the Contractor prefers to dispose of these materials and replace them with non-freezing, compactable materials

(Class B), the Contractor must include the costs of these new materials in the price of this article.

.6 *The article 1.10.1.1 is modified as follows:*

.1 The description of this item applies to items 14.10.1, 15.10.1 and 17.10.1 of the pricing schedule.

.7 *The article 1.10.1.2 is modified as follows:*

.1 This price remunerates all necessary measures, actions and supplies such as, but not limited to, labor, equipment, tools and machinery, materials, professional services and land surveys for the removal of existing equipment (lamppost, sewer pipes, existing manholes, ancestral grid, curbs, retaining wall, etc.) according to the requirements and indications in the plans and specifications including their transport to the temporary storage site secured and proposed by the Contractor. The Contractor is responsible for the restoration of these elements as well as the relocation or the provision and installation of new equipment as indicated in the plans.

.8 *The article 1.10.2.2 is modified as follows:*

.1 This lump-sum price remunerates all necessary measures, actions and supplies such as, but not limited to, labor, equipment, tools and machinery, materials, professional services and land surveys. moving the materials and containers (full ± 10 metric tons each) present on the lots of the adjacent owners as indicated in the plans and specifications to allow the completion of the work.

1.2 Section « 03 15 00 – Accessories for concrete »

.1 *The article 2.11.1 is modified as follows:*

Non-shrink group: premixed product in accordance with ASTM C 1107/C 1107M Type C with a minimum compressive strength of 50MPa at 28 days, such as:

- .1 SikaGrout 212 by Sika;
- .2 Dry Pact Grout by Euclid;
- .3 In-Pakt Construction Grout or In-Pakt Construction Grout CT by KING according to weather conditions;
- .4 Planigrout 755 by MAPEI.
- .5 V1 or V3-10K Grout by W.R MEADOWS.

.2 *The article 3.7 is modified as follows:*

The article is cancelled.

1.3 Section « 32 92 19.13 – Topsoil placement and grading »

.1 *The article 2.1.3 is modified as follows:*

Mixture type 1, topsoil (for surfaces to be seeded)

- .1 Composition :
 - .1 one part of black earth
 - .2 one part of coarse sand
 - .3 two part of loam
- .2 Mixtures characteristics:
 - .1 Organic matter between 4 % and 7 %.

- .2 Degree of acidity (water pH) between 6 and 7
- .3 Cation exchange capacity (C.E.C.) is between 10 and 20 meq / 100 gr of soil
- .4 Water retention capacity : maximum 20%
- .5 Phosphorus (P) : 200 kg/ha.
- .6 Potassium (K): 400 kg/ha.
- .7 Calcium (CA): 4 500 kg/ha.
- .8 Magnésium (Mg) : 640 kg/ha.

.2 *The article 2.1.4 is modified as follows:*

Mixture type 2, potting mix (for planting) the mixture must have:

- .1 Composition :
 - .1 Three part of black earth
 - .2 one part of coarse sand
 - .3 two part of loam
 - .4 One part of manure and/or compost fully decomposed
- .2 Mixtures characteristics:
 - .1 Organic matter between 10 % and 15 %.
 - .2 Degree of acidity (water pH) between 6 and 7
 - .3 Cation exchange capacity (C.E.C.) is between 10 and 20 meq / 100 gr of soil
 - .4 Water retention capacity : maximum 20%
 - .5 Phosphorus (P) :200 kg/ha.
 - .6 Potassium (K) :400 kg/ha.
 - .7 Calcium (CA): 4 500 kg/ha.
 - .8 Magnesium (Mg): 640 kg/ha.

.3 *The article 2.3.1 is modified as follows:*

Advise Departmental Representative of sources of topsoil, manufactured topsoil and potting soil to be utilized with sufficient lead time for testing

1.4 Section « 32 92 19.16 – Hydroseeding »

.1 *The article 3.1.2 is modified as follows:*

Do not perform work under adverse field conditions such as frozen soil, excessively wet soil or soil covered with snow, ice, or standing water, or when the winds speed exceeds 10 km/h.

.2 *The article 3.1.8 is modified as follows:*

No subject

Part 2 Plans

2.1 Modification to sheet S02 – Organization of the site

- .1 The general note 1 has been modified:

« *Intervention zone: This zone includes the clearing/grubbing to position the temporary support, to allow the creation of a circulation path for the wall access and an excavation, backfilling zone.* »

2.2 Modification to sheet S04 – Organization of the site

- .1 Easement limit has been added in the legend, see AD-01 in the appendix of this document.

2.3 Modification to sheet S05 – demolition plan

- .1 Additional information has been added regarding the temporary support, see AD-02 in the appendix of this document.
- .2 An additional general note has been added:
« *Intervention zone: This zone includes the clearing/grubbing to position the temporary support, to allow the creation of a circulation path for the wall access and an excavation, backfilling zone.* »

2.4 Modification to sheet S06 – demolition plan

- .1 Une cote de 4500mm a été ajoutée entre le soutènement temporaire et le derrière du couronnement.
- .2 Between chaining 1+713 and 1+735, section 9/S43 has been added.

2.5 Modification to sheet S11 – demolition plan

- .1 Additional information has been added regarding the soil profile as well as the temporary support, see AD-03 in the appendix of this document.

2.6 Modification to sheet S12 – demolition plan

- .1 The plan in appendix of this document replaces the plan issued for tender.

2.7 Modification to sheet S13 – demolition plan

- .1 Near chain 1+020 replace the section 2/S41 by 10/S43.
- .2 Near chain 0+990, replace the section 1/S41 by 8/S42.

2.8 Modification to sheet S14 – demolition plan

- .1 The plan in appendix of this document replaces the plan issued for tender.

2.9 Modification to sheet S19 – demolition plan

- .1 The intervention limit is represented by a continuous dash in the plan view. The marker has been changed to point this line.

2.10 Modification to sheet S20 – demolition plan

- .1 The intervention limit is represented by a continuous dash in the plan view. The marker has been changed to point this line.

.2 Section 3/S41 is been added between chaining 0+202 @ 0+214

2.11 Modification to sheet S21 – demolition plan

.1 Remplacer la note « enlever la clôture existante pendant les travaux entre chainage 0+070 et 0+150 » par. Replace the note « remove the existing fence during work between chaining 0+070 and 0+150 » by « remove and store the existing fence during work between chaining 0+070 et 0+150 »

2.12 Modification to sheet S23 – reconstruction plan

.1 Une cote de 2000mm a été ajouté entre le derrière du couronnement et le bas du talus. Cette dimension s'applique du chainage 0+920 @ 1+145 et 1+165 @ 1+775.

2.13 Modification to sheet S23 to S40 – reconstruction plan

.1 New crowning wall symbol has been added to the legend, see AD-04 in the appendix of this document.

.2 Winter navigation water level ± 17.460 mm was added on plans S23 @ S40.

.3 Autumn navigation water level ± 17.860 mm was added on plans S23 @ S40.

2.14 Modification to sheet S24 to S40 – reconstruction plan

.1 The issuance of plans S24 @ S40 has been modified for «issued for tender» dated 2018-08-04.

2.15 Modification to sheet S28 – reconstruction plan

.1 Slope transition start chaining changed from 1+255 pour 1+240.

2.16 Modification to sheet S30 – reconstruction plan

.1 Slope transition start chaining changed from 1+090 pour 1+080.

2.17 Modification to sheet S31 – reconstruction plan

.1 Chain 1+020, the difference of the tablets thickness has been removed, see AD-05 in the appendix of this document.

.2 Section located on chain 1+035 has been changed section 22/S47, see AD-05 in the appendix of this document.

2.18 Modification to sheet S32 – reconstruction plan

.1 The plan in appendix of this document replaces the plan issued for tender.

2.19 Modification to sheet S37 –reconstruction plan

.1 Between chains 0+335 @ 0+340, new crowning wall has been added, see AD-06 in the appendix of this document.

2.20 Modification to sheet S41 – demolition sections

- .1 Existing slab 300mm thick by 900mm width resting on the masonry base behind the crowning wall has been had on section 01.

2.21 Modification to sheet S42 – demolition sections

- .1 The plan in appendix of this document replaces the plan issued for tender.

2.22 Modification to sheet S43 – demolition sections

- .1 Modification of section 9, see D-07 in the appendix of this document.

2.23 Modification to sheet S44 – demolition sections

- .1 Existing slab 300mm thick by 900mm width resting on the masonry base behind the crowning wall has been had on section 11.
- .2 Additional generals notes have been added:
 - 5- *When the projected profile is behind the existing profile, the contractor must predict demolition greater than 125mm. When the projected profile is in front of the existing profile, the contractor should demolish a thickness smaller than 125mm.*
 - 6- *See technical specification for granulometry (% passing) of the MG-112.*
- .3 A table showing the chaining of the start and the end of the demolition and reconstruction sections has been added, see AD-08 in the appendix of this document.

2.24 Modification to sheet S45 – reconstruction sections

- .1 Modification of section 12, see AD-09 in the appendix of this document.
- .2 In sections 13, 14, 15, the reference of the reinforcement detail has been changed to U/S51.

2.25 Modification to sheet S46 – reconstruction sections

- .1 The plan in appendix of this document replaces the plan issued for tender.

2.26 Modification to sheet S47 – reconstruction sections

- .1 The plan in appendix of this document replaces the plan issued for tender.

2.27 Modification to sheet S48 – typical details

- .1 In the detail B, change the MG20 for MG20B.

2.28 Modification to sheet S49 – typical details

- .1 Modification of the detail H, see AD-10 in the appendix of this document.

2.29 Modification to sheet S51 – typical details

- .1 Modification of the detail W, see AD-11 in the appendix of this document.

Part 3 Reconstruction profile – appendix D on the technical specification

- .1 The following sections have been modified:
- .1 1+080: Change in slope transition has been made, see cross section in appendix of this document.
 - .2 1+090: Change in slope transition has been made, see cross section in appendix of this document.
 - .3 1+100 : Change in slope transition has been made, see cross section in appendix of this document.
 - .4 1+240: Change in slope transition has been made, see cross section in appendix of this document.
 - .5 1+250: Change in slope transition has been made, see cross section in appendix of this document.
 - .6 1+260: Change in slope transition has been made, see cross section in appendix of this document.
 - .7 1+490: Change in proposed slope has been made, see cross section in appendix of this document.
 - .8 1+510: Change in tablet width has been made, see cross section in appendix of this document.
 - .9 1+580: The existing connection of the proposed profile has been added, see cross section in the appendix of this document.
 - .10 1+620: Additional information has been added to the slope transition note, see cross section in the appendix of this document.
 - .11 1+690: The existing connection of the proposed profile has been added, see cross section in the appendix of this document.

Part 4 Pricing schedule

Modifications have been made in the Pricing Schedule, see schedule in the appendix of this document. This document replaces the pricing schedule issued for tender.



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















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Légende / Legend

-  CHEMIN DE CIRCULATION
TRAFFIC PATH
-  ZONE DE DÉFRICHAGE / VOIR NOTE #1
CLEARING AREA / SEE NOTE #1
-  ZONE D'OBSERVATION DE COULEUVRES
SNAKES OBSERVATORY AREA
-  ZONE D'OBSERVATION DE RENARD
FOX OBSERVATORY AREA
-  LIMITE DE PROPRIÉTÉ /
PROPERTY LIMIT
-  VOIE FERRÉE PATRIMONIALE/
HERITAGE ROAD PATRIMONIAL
-  BARRIÈRE D'EXCLUSION/
EXCLUSION FENCE
-  LIMITE DE SERVITUDE/
EASEMENT LIMIT
-  HIBERNACLES EXISTANTS
EXISTING HIBERNACLES 
-  NOUVEL HIBERNACLE
NEW HIBERNACLE
-  ZONE DE STATIONNEMENT & ENTREPOSAGE
PARKING AND STORAGE ZONE
-  TALUS PATRIMONIAL
HISTORIC EMBANKMENT
-  ACCÈS
ACCESS
-  CLÔTURE DE CHANTIER /
WORKSITE FENCE
-  ORIENTATION APPROXIMATIVE
DE LA CAMERA
CAMERA'S APPROXIMATIVE
ORIENTATION
-  # PHOTO



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Projet/Project

RÉFÉCTION DES MURS DU CANAL-DE-LACHINE
BIEF 4-SECTION 14 À 17
REHABILITATION OF THE LACHINE CANAL
WALLS REACH 4, SECTORS 14 TO 17

Titre du
dessin/
Drawing
title:

EXTRAIT PLAN SO4
EXTRACT PLAN SO4

conçu designed

par/ by:

B. Larivière, Ing.

date:

approuvé approved

par/ by:

P. Béliveau, Ing.

dessiné drawn

par/ by:

A. Restrepo.

date:

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révisions:

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échelle/ scale:

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AD-01

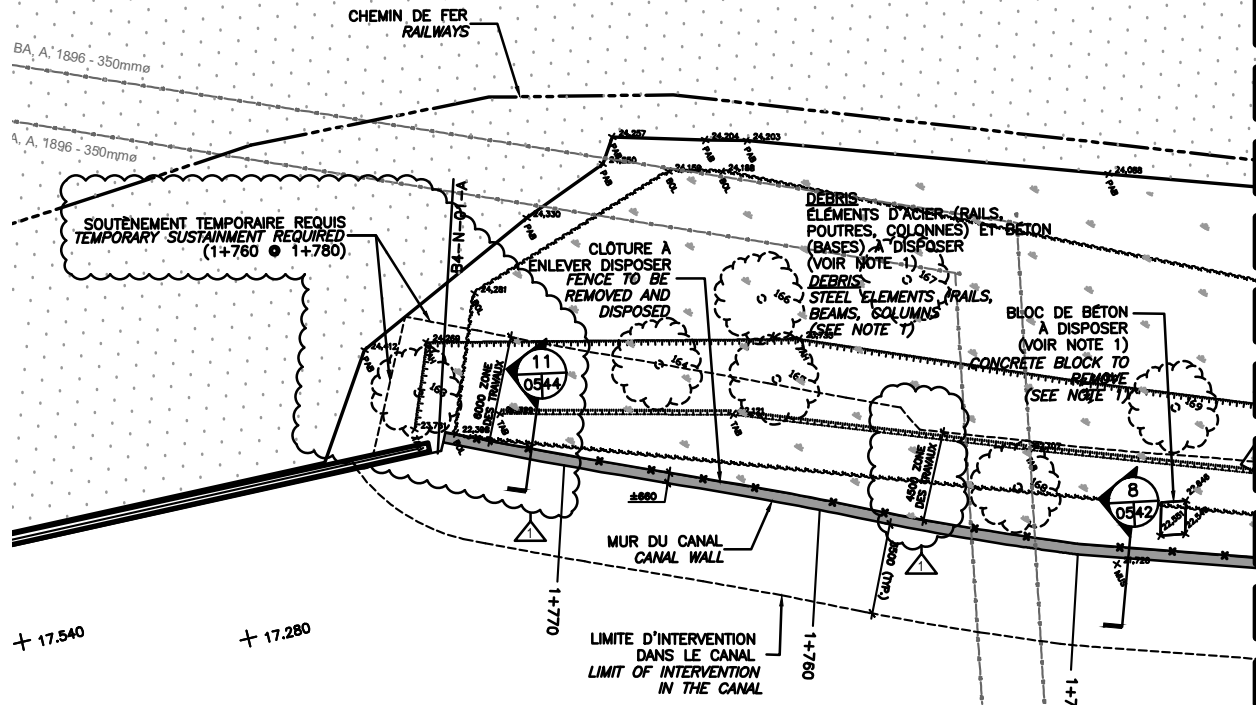
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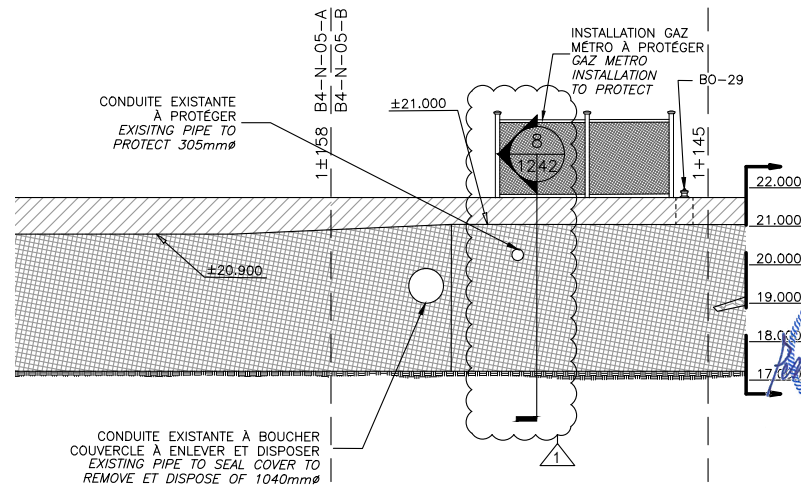
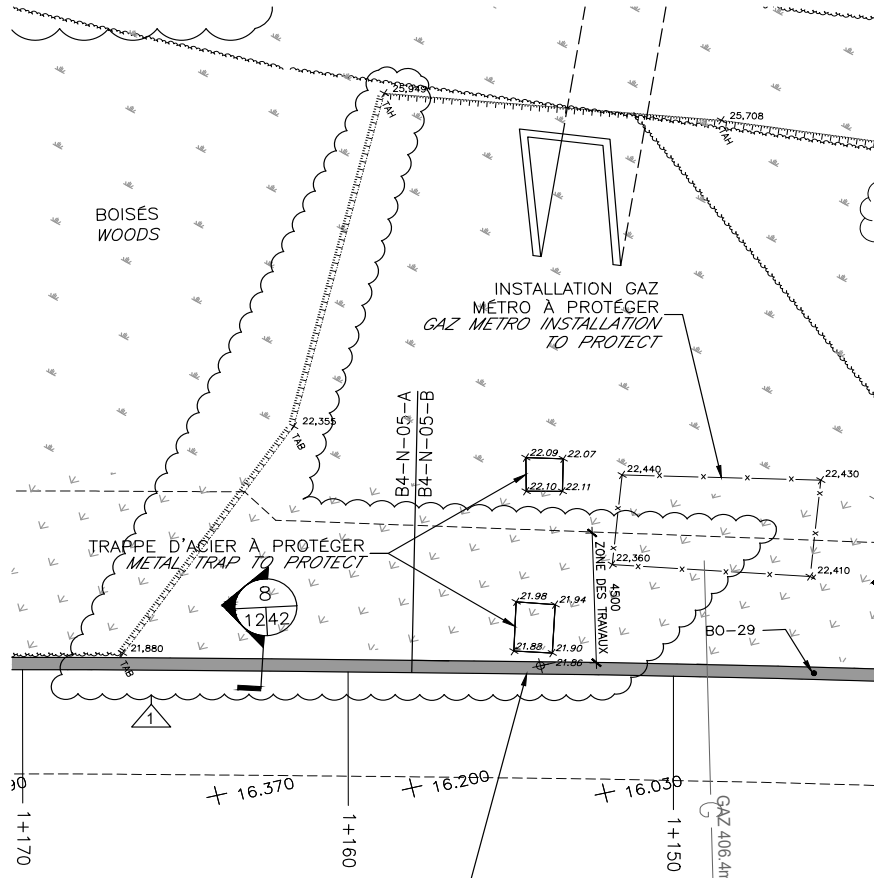
<p>Travaux publics et Services gouvernementaux Canada Direction générale des biens immobiliers Région du Québec</p>	<p>Public Works and Government Services Canada Real Property branch Quebec region</p>	<p>Projet/Project RÉFÉCTION DES MURS DU CANAL-DE-LACHINE BIEF 4-SECTION 14 À 17 REHABILITATION OF THE LACHINE CANAL WALLS REACH 4, SECTORS 14 TO 17</p>		<p>Titre du dessin/ Drawing title: EXTRAIT PLAN S05 EXTRACT PLAN S05</p>	
		<p>conçu designed par/ by: B. Larivière, Ing. date:</p>		<p>approuvé approved par/ by: P. Béliveau, Ing. date:</p>	
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REHABILITATION OF THE LACHINE CANAL
WALLS REACH 4, SECTORS 14 TO 17

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Légende / Legend

	NIVEAU D'EAU NAVIGATION LEVEL
	COURONNEMENT: RESURFAÇAGE CROWNING: SURFACING
	AMONCELLEMENT DE SÉDIMENTS AMONCELLEMENT SEDIMENTS
	NOUVEAU COURONNEMENT NEW CROWNING
	MUR: RESURFAÇAGE WALL : RESURFACING
	FOND DU CANAL CANAL BED
	MUR DU CANAL CANAL WALL
	SYMBOLE D'ARBRE EXISTANT EXISTING TREE SYMBOL
	NOUVEAUX ARBRES NEW TREES
	VOIE FERRÉE PATRIMONIALE/ HERITAGE ROAD PATRIMONIAL
	LIMITE DE PROPRIÉTÉ PROPERTY LIMIT
	LIMITES D'INTERVENTION INTERVENTION LIMITS
	CLÔTURES EXISTANTE EXISTING FENCES
	CONDUIT AQUEDUC EXISTANT EXISTING WATER PIPE
	CONDUIT GAZ EXISTANT EXISTING GAS PIPE
	XX.XXX NIVEAU FOND CANAL (RELEVÉ BATHYMETRIQUE) LEVEL CANAL BED (BATHYMETRIC SURVEY)
	XX.XXX NIVEAUX ARPENTAGE #1 LEVELS SURVEY #1
	XX.XXX NIVEAUX ARPENTAGE #2 LEVELS SURVEY #2
	GAZON GRASS
	CONCRETE PAVEMENT PAVAGE DE BÉTON
	CONCRETE WALL MUR DE BÉTON



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 BIEF 4-SECTION 14 À 17
 REHABILITATION OF THE LACHINE CANAL
 WALLS REACH 4, SECTORS 14 TO 17

Titre du dessin/
Drawing title:

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P. Béliveau, Ing.

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A. Restrepo.

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AD-04

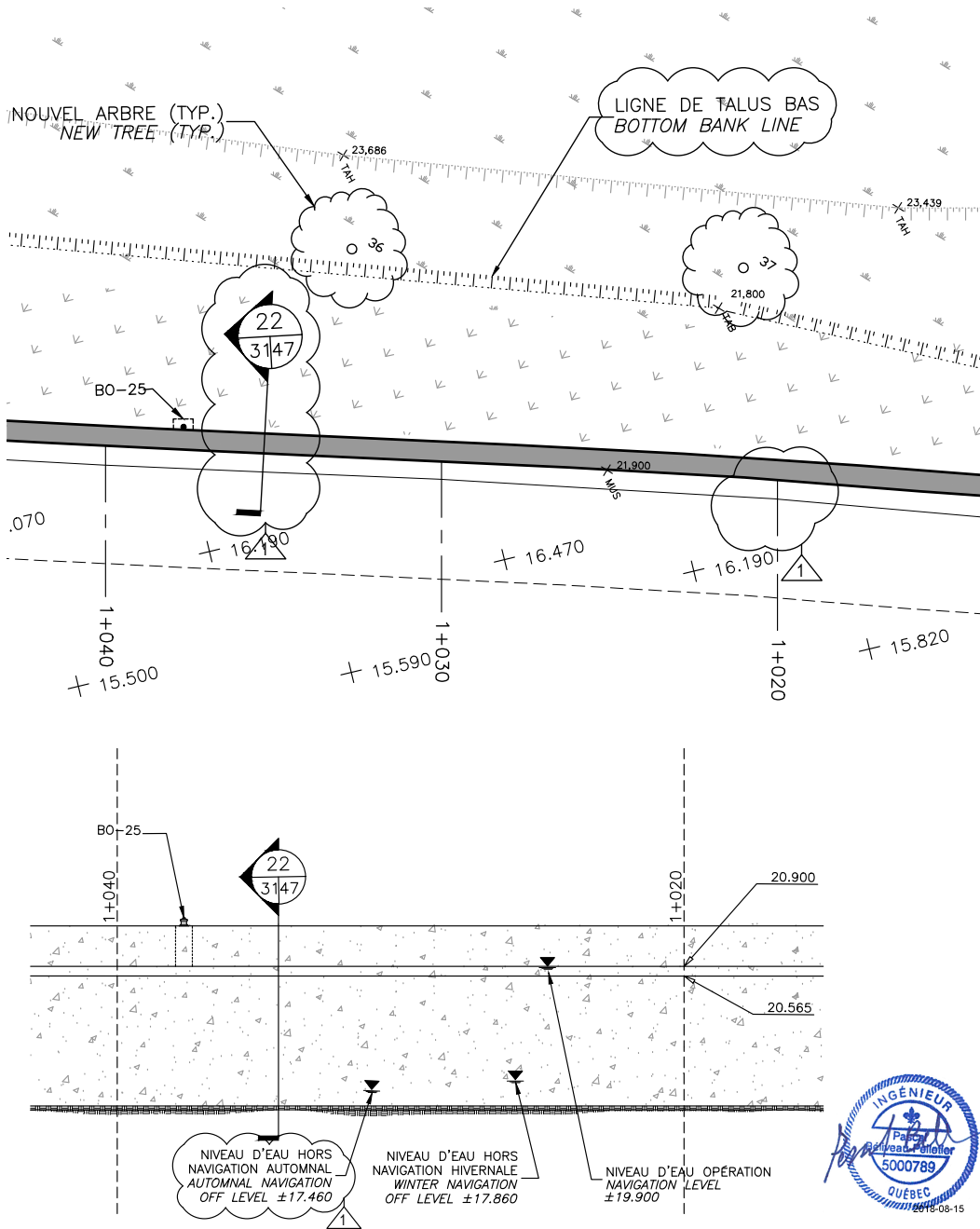
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WALLS REACH 4, SECTORS 14 TO 17

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par/ by: B. Larivière, Ing. date:

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par/ by: A. Restrepo. date:

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EXTRACT PLAN S31

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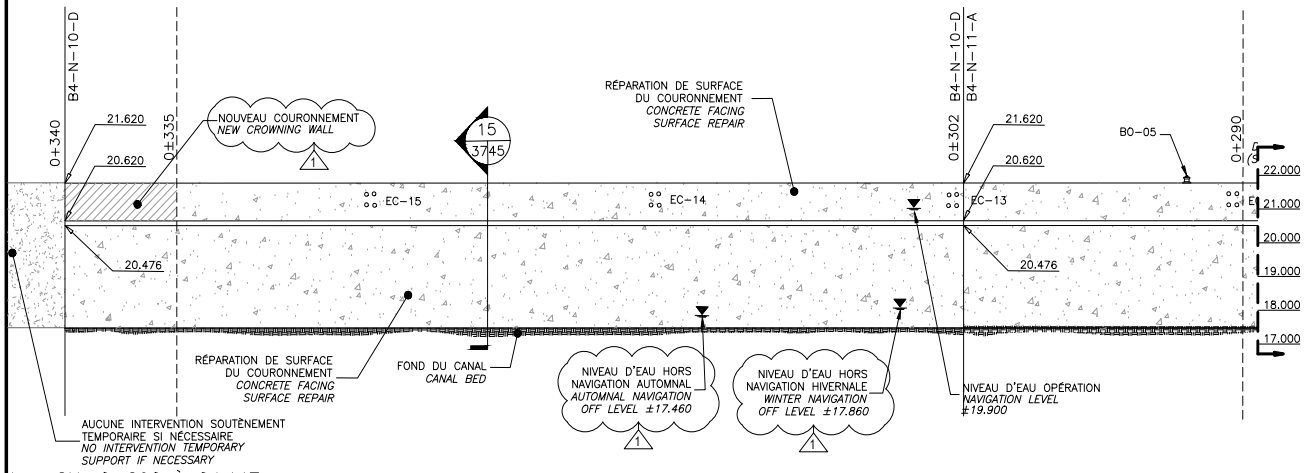




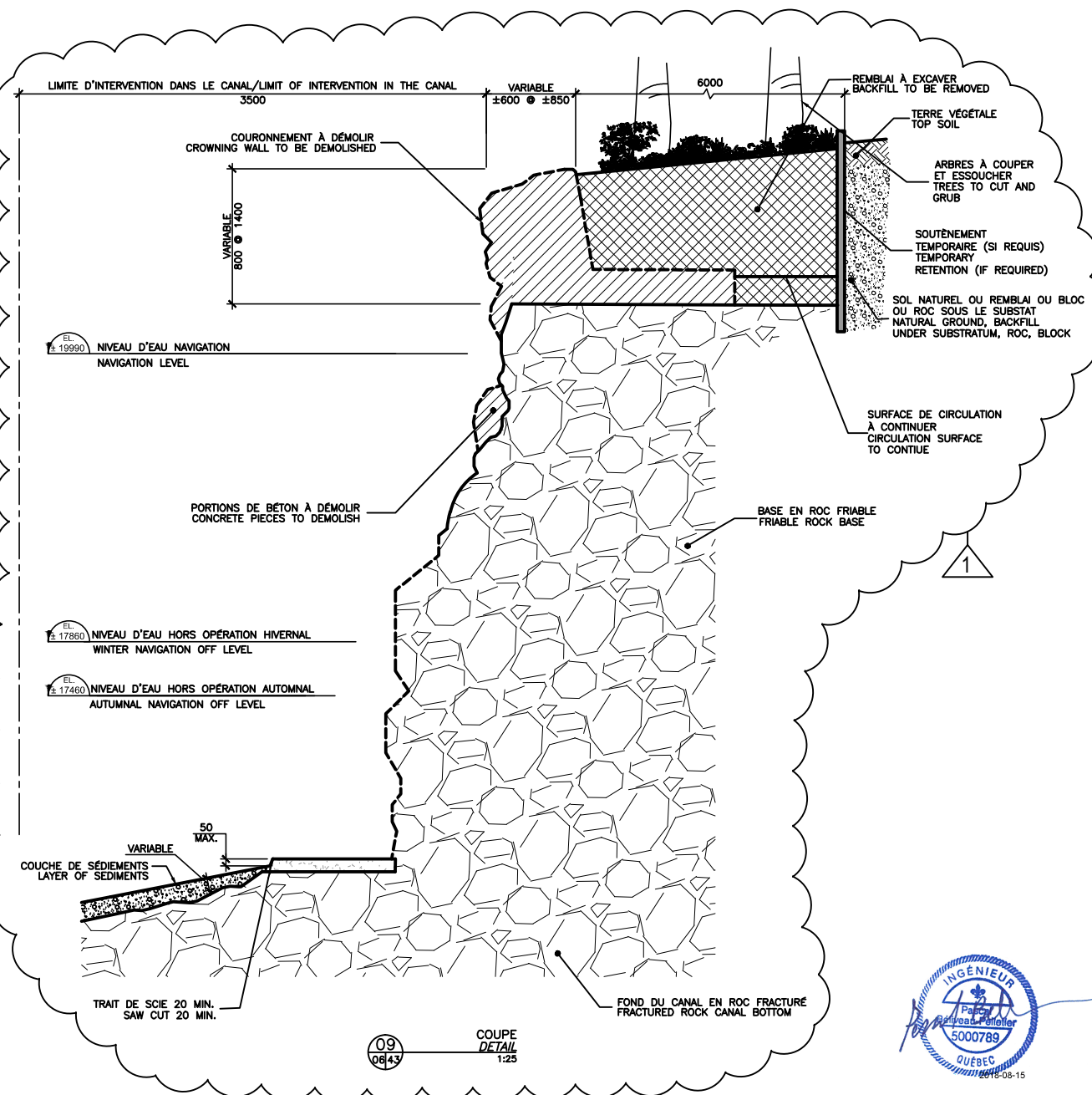
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AGENCE PARCS CANADA (APC) PARKS CANADA AGENCY (PCA)		dessiné drawn par/ by: A. Restrepo.	date:	no. de projet projet/ no. R.077223.220	date:
		révisions: 01	échelle/ scale:	nom du file fichier/ name	AD-06



<p>Travaux publics et Services gouvernementaux Canada Direction générale des biens immobiliers Région du Québec</p>	<p>Public Works and Government Services Canada Real Property branch Quebec region</p>	<p>Projet/Project RÉFÉCTION DES MURS DU CANAL-DELACHINE BIEF 4 - SECTION 14 À 17 REHABILITATION OF THE LACHINE CANAL WALLS REACH 4 - SECTORS 14 TO 17</p>		<p>Titre du dessin/Drawing title: EXTRAIT PLAN S43 EXTRACT PLAN S43</p>	
		<p>conçu par/designed by: B. LARIVIÈRE, Ing.</p>	<p>date:</p>	<p>approuvé par/approved by: P. BÉLIVEAU, Ing.</p>	<p>date:</p>
<p>AGENCE PARCS CANADA (APC) PARKS CANADA AGENCY (PCA)</p>		<p>dessiné par/drawn by: M. VINCENT</p>	<p>date:</p>	<p>no. de projet/project no. R.077223.220</p>	<p>date:</p>
		<p>révisions: 01</p>	<p>échelle/scale:</p>	<p>nom du fichier/file name</p>	<p>AD-07</p>

DÉLIMITATION DES COUPES/SECTIONS DELIMITATION

CHAINAGE/CHAINING	COUPES DE DÉMOLITION /DEMOLITION SECTIONS	COUPES DE RECONSTRUCTION/ RECONSTRUCTION SECTIONS
0±000 @ 0±027	1/S41	12/S45
0±027 @ 0±047	2/S41	13/S45
0±047 @ 0±087	3/S41	14/S45
0±087 @ 0±102	4/S41	15/S45
0±102 @ 0±168	3/S41	14/S45
0±168 @ 0±171	5/S42	16/S46
0±171 @ 0±199	3/S41	14/S45
0±199 @ 0±202	5/S42	16/S46
0±202 @ 0±214	3/S41	14/S45
0±214 @ 0±335	4/S41	15/S45
0±335 @ 0±339	1/S41 (SIM)	15/S45 (SIM)
0±405 @ 0±655	4/S41	15/S45
0±655 @ 0±663	6/S42 (SIM)	17/S46 (SIM)
0±663 @ 0±822	4/S41	15/S45
0±822 @ 0±847	6/S42	17/S46
0±847 @ 0±865	4/S41	15/S45
0±865 @ 0±905	7/S42	18/S46
0±905 @ 0±923	11/S44	19/S46
0±923 @ 0±985	8/S42	20/S47
0±985 @ 1±140	10/S43	22/S47
1±140 @ 1±170	8/S42	20/S47
1±170 @ 1±605	10/S43	22/S47
1±605 @ 1±710	8/S42	20/S47
1±710 @ 1±715	9/S43	21/S47
1±715 @ 1±752	8/S42	20/S47
1±752 @ 1±760	6/S42 (SIM)	17/S46 (SIM)
1±760 @ 1±775	11/S44	19/S46



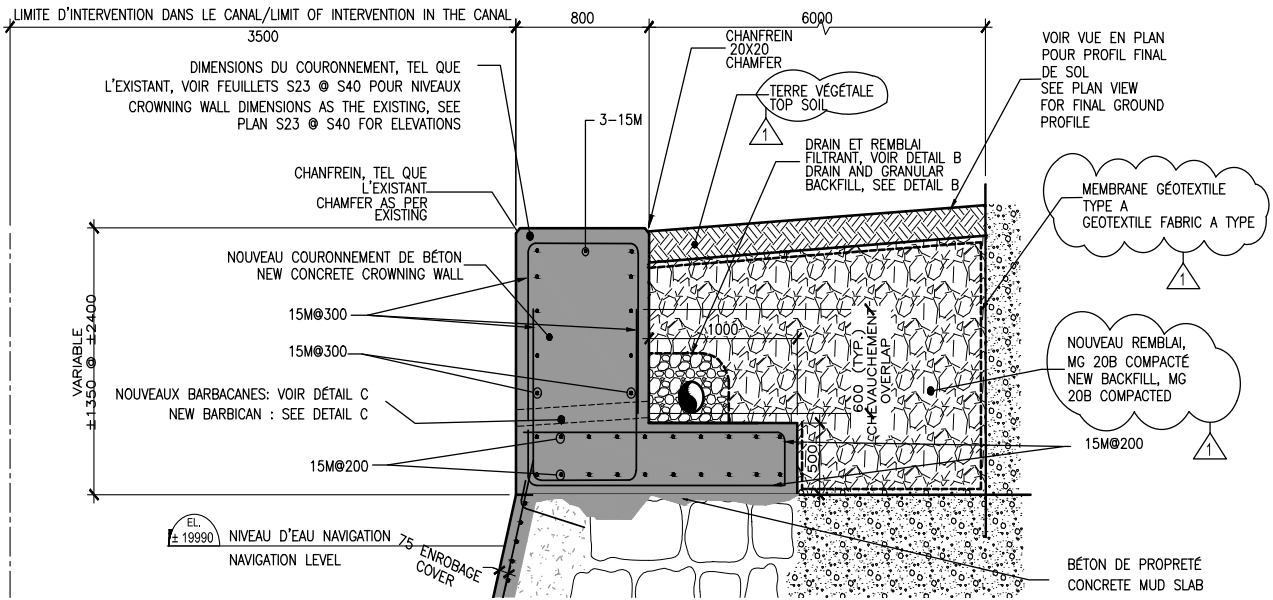
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Travaux publics et Services gouvernementaux Canada Direction générale des biens immobiliers Région du Québec	Public Works and Government Services Canada Real Property branch Quebec region	Projet/Project RÉFECTION DES MURS DU CANAL-DELACHINE BIEF 4 - SECTION 14 À 17 REHABILITATION OF THE LACHINE CANAL WALLS REACH 4 - SECTORS 14 TO 17		Titre du dessin/Drawing title: EXTRAIT PLAN S44 EXTRACT PLAN S44	
		conçu par/designed by: B. LARIVIÈRE, Ing.		date:	
AGENCE PARCS CANADA (APC) PARKS CANADA AGENCY (PCA)		dessiné par/drawn by: M. VINCENT		date:	
		révisions: 01		échelle/scale:	

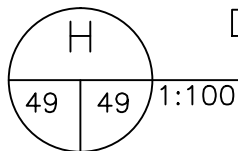
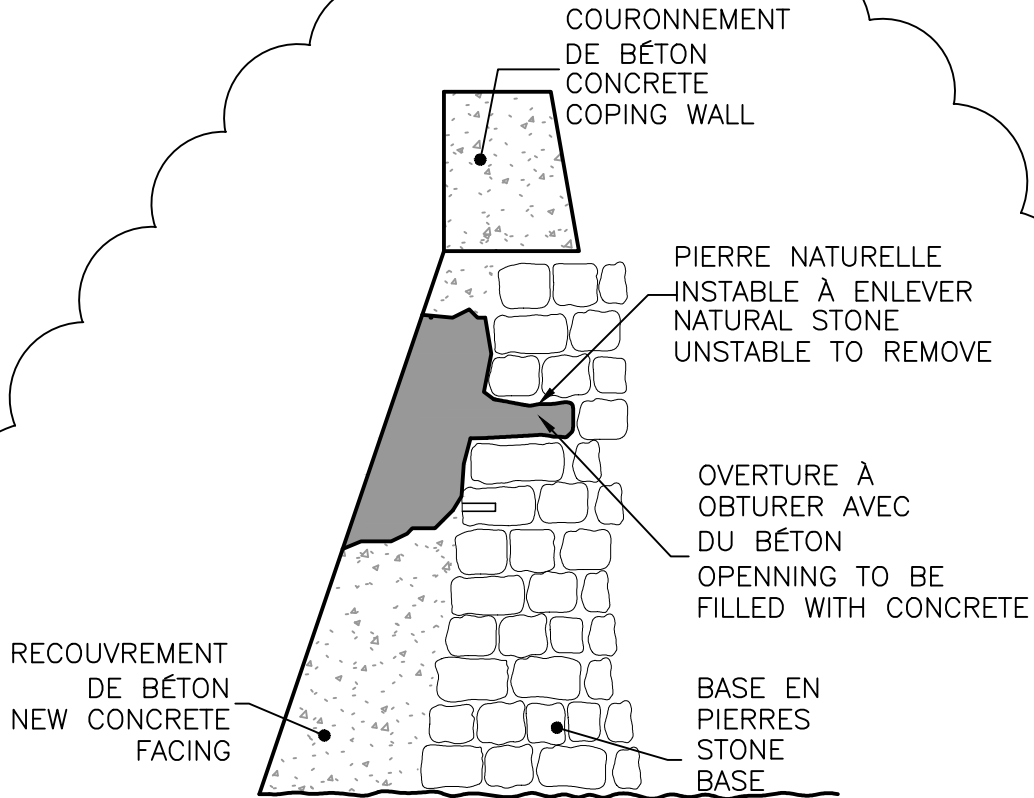


Partenaire de génie

M04068G
 740, rue Notre-Dame Ouest, bureau 900
 Montréal (Québec) H3C 3X6
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Travaux publics et Services gouvernementaux Canada Direction générale des biens immobiliers Région du Québec	Public Works and Government Services Canada Real Property branch Quebec region	Projet/Project RÉFÉCTION DES MURS DU CANAL-DE-LACHINE BIEF 4-SECTION 14 À 17 REHABILITATION OF THE LACHINE CANAL WALLS REACH 4, SECTORS 14 TO 17		Titre du dessin/ Drawing title: EXTRAIT PLAN S 45 EXTRACT PLAN S 45	
		conçu/ designed par/ by: B. Larivière, Ing.	date:	approuvé/ approved par/ by: P. Béliveau, Ing.	date:
AGENCE PARCS CANADA (APC) PARKS CANADA AGENCY (PCA)		dessiné/ drawn par/ by: A. Restrepo.	date:	no. de projet/ projet/ no. R.077223.220	date:
		révisions: 01	échelle/ scale:	nom du file/ fichier/ name	AD-09



DÉTAIL DE MAÇONNERIE
 MASONRY DETAIL
 DÉTAIL / DETAIL



Travaux publics et Services gouvernementaux Canada Direction générale des biens immobiliers Région du Québec	Public Works and Government Services Canada Real Property branch Quebec region 	Projet/Project RÉFECTION DES MURS DU CANAL-DELACHINE BIEF 4 - SECTION 14 À 17 REHABILITATION OF THE LACHINE CANAL WALLS REACH 4 - SECTORS 14 TO 17		Titre du dessin/Drawing title: EXTRAIT PLAN S49 EXTRACT PLAN S49		
		conçu par/ <i>designed by:</i> B. LARIVIÈRE, Ing.	date:	approuvé par/ <i>approved by:</i> P. BÉLIVEAU, Ing.	date:	no. de projet/ <i>project no.</i> R.077223.220
AGENCE PARCS CANADA (APC) PARKS CANADA AGENCY (PCA)		dessiné par/ <i>drawn by:</i> M. VINCENT	date:	révisions: 01	échelle/ <i>scale:</i>	nom du fichier/ <i>file name</i> AD-10



Partenaire de génie

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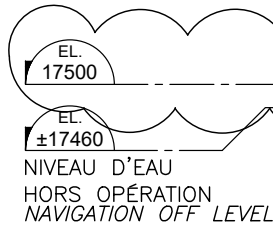
740, rue Notre-Dame Ouest, bureau 900
Montréal (Québec) H3C 3X6
Téléphone : (514) 337-2462
Télécopieur : (514) 281-1632
www.cima.ca

LA MISE EN PLACE D'UNE SEMELLE D'ASSISE EST NÉCESSAIRE LORSQUE LE RECOUVREMENT À LA BASE EST DÉSAGRÉGÉ OU INEXISTANT
THE CONSTRUCTION OF THE SEAT FOOTING IS NECESSARY WHEN THERE'S NO CONCRETE FACING IN THE BOTTOM OF THE WALL OR WHEN IT'S DESAGRREGATED

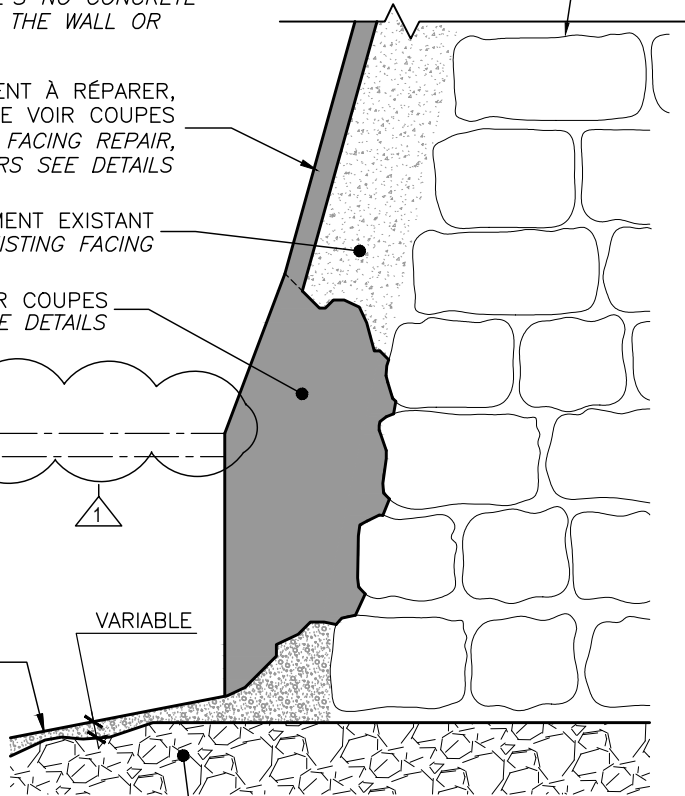
RECOUVREMENT À RÉPARER, POUR ARMATURE VOIR COUPES
CONCRETE FACING REPAIR, FOR REBARS SEE DETAILS

RECOUVREMENT EXISTANT
EXISTING FACING

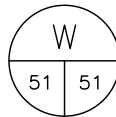
POUR ARMATURE VOIR COUPES
FOR REBARS SEE DETAILS



BASE EN PIERRES OU EN ROC
STONE OR ROCK BASE



FOND DU CANAL EN ROC FRACTURÉ
FRACTURED ROCK CANAL BOTTOM



COUPE
DETAIL
1:20

* TEL QUE L'EXISTANT
AS EXISTING



Travaux publics et Services gouvernementaux Canada
Direction générale des biens immobiliers

Région du Québec

Public Works and Government Services Canada
Real Property branch

Quebec region

Projet/Project
RÉFECTION DES MURS DU CANAL-DE-LACHINE
BIEF 4-SECTION 14 À 17
REHABILITATION OF THE LACHINE CANAL
WALLS REACH 4, SECTORS 14 TO 17

conçu designed par/ by: B. Larivière, Ing. date:

dessiné drawn par/ by: A. Restrepo. date:

révisions: 01

Titre du dessin/ Drawing title:
EXTRAIT PLAN S 51
EXTRACT PLAN S51

approuvé approved par/ by: P. Béliveau, Ing. date:

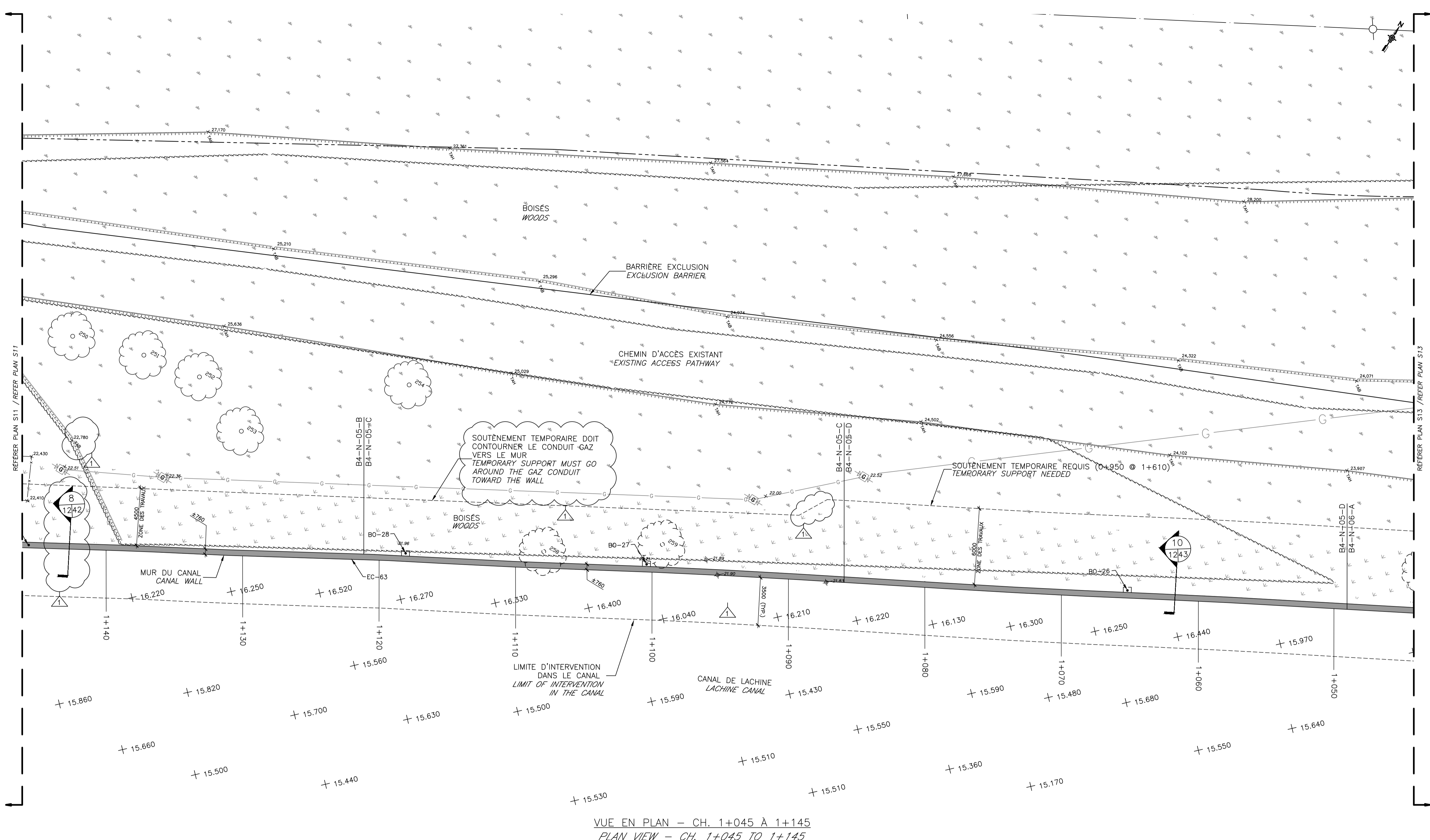
no. de projet projet/ no. R.077223.220 date:

nom du file fichier/ name AD-11

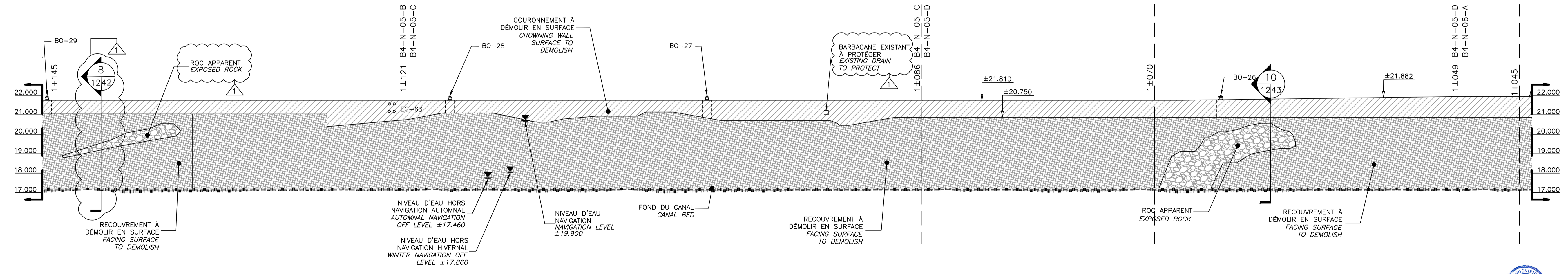
échelle/ scale:

Légende / Legend

- NIVEAU D'EAU / NAVIGATION LEVEL
- COURONNEMENT: RÉFECTION COMPLÈTE / CROWNING: COMPLETE REFURBISHMENT
- COURONNEMENT: RESURFAÇAGE / CROWNING: SURFACING
- RECOURVEMENT: RESURFAÇAGE / COVERING: SURFACING
- AMONCELLEMENT DE SÉDIMENTS / AMONCELLEMENT SEDIMENTS
- FOND DU CANAL / CANAL BED
- MUR DU CANAL / CANAL WALL
- ROC APPARENT / ROCK LIKE
- MAÇONNERIE / MASONRY
- CHEMIN DE FER / RAILWAY
- LIMITE DE PROPRIÉTÉ / PROPERTY LIMIT
- LIMITES D'INTERVENTION / INTERVENTION LIMITS
- CLÔTURES EXISTANTE / EXISTING FENCES
- CONDUIT AQUEDUC EXISTANT / EXISTING WATER PIPE
- CONDUIT GAZ EXISTANT / EXISTING GAS PIPE
- BARRIÈRE D'EXCLUSION / EXCLUSION BARRIER
- NIVEAU FOND CANAL (RELEVÉ BATHYMETRIQUE) / LEVEL CANAL BED (BATHYMETRIC SURVEY)
- NIVEAUX ARPENTAGE #1 / LEVELS SURVEY #1
- NIVEAUX ARPENTAGE #2 / LEVELS SURVEY #2
- GAZON / GRASS
- PAVAGE DE BÉTON / CONCRÈTE PAVEMENT
- ARBRES À DÉMOLIR / TREES TO DEMOLISH
- ARBRES À CONSERVER / TREES TO PRESERVE



VUE EN PLAN – CH. 1+045 À 1+145
 PLAN VIEW – CH. 1+045 TO 1+145



VUE EN ÉLÉVATION – CH. 1+045 À 1+145
 ELEVATION VIEW – CH. 1+045 TO 1+145

01	ADDENDA	15/08/18
00	EMIS POUR APPEL D'OFFRES ISSUED FOR TENDER	04/07/18
révisions / revisions		date

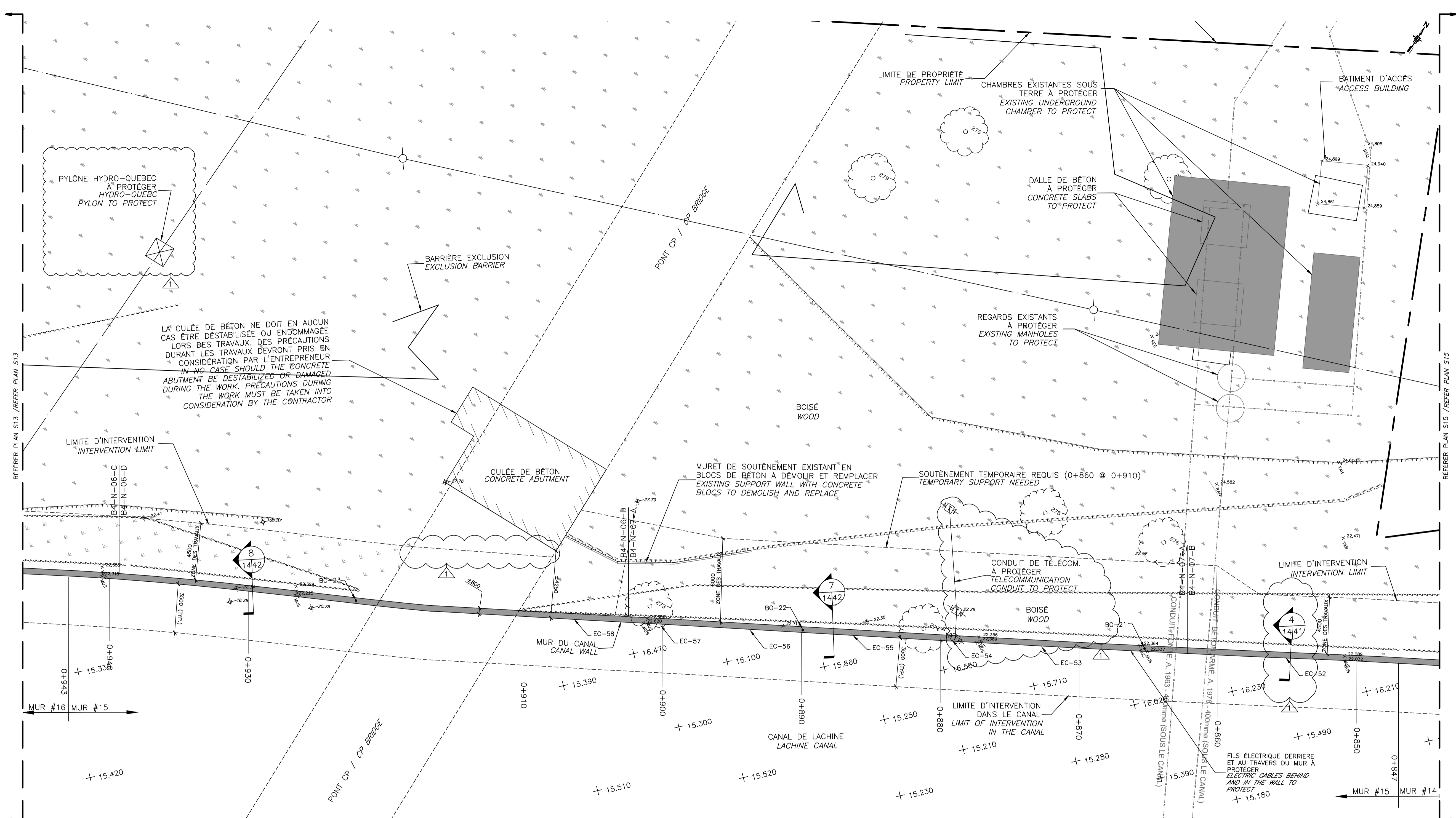
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B	no. de la feuille-où détail exigé / sheet no. - where detail required
C	no. de la feuille-où détaillé / sheet no. - where detailed

Projet / Project
AGENCE PARCS CANADA (APC)
PARKS CANADA AGENCY (PCA)
 RÉFECTION DES MURS DU CANAL-
 DE-LACHINE BIEF 4 - SECTEURS 14 À 17
 B4-N-01-A À B4-N-12-D
 REHABILITATION OF THE LACHINE
 CANAL WALLS REACH 4 -
 SECTORS 14 TO 17
 B4-N-01-A TO B4-N-12-D

Dessin / Drawing
STRUCTURE
STRUCTURE
PLAN DE DÉMOLITION
CH. 1+045 À 1+145
DEMOLITION PLAN
CH. 1+045 TO 1+145

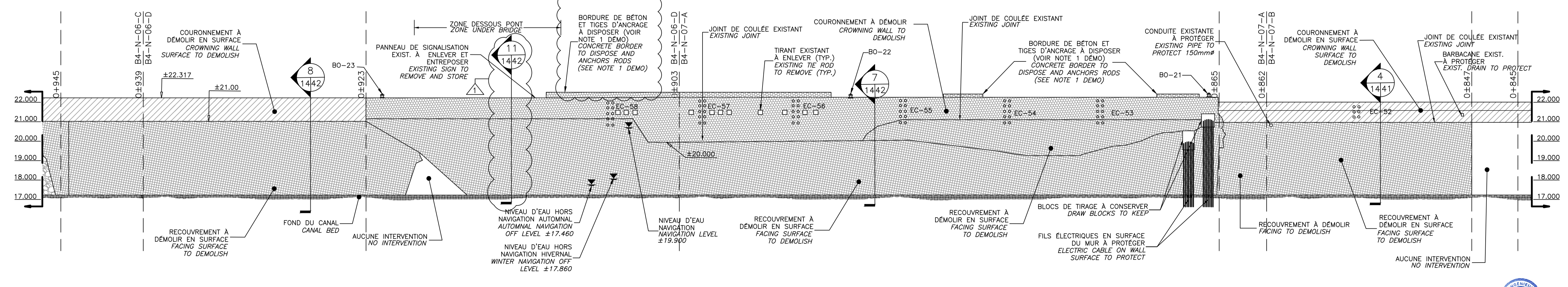
Conçu par / Designed by	Benoît Larivière, Ing.	Date / Date	
Dessiné par / Drawn by	Mishnel Vincent, Benoît Larivière, Ing.	Date / Date	
Approuvé par / Approved by	Pascal Béliveau, Ing.	Date / Date	
Soumission / Submission	Gestionnaire de projet / Project Manager	Marcel Thum, Ing.	
Tender	PWGSC	PWGSC	Client / Client
No de projet / Project number	R.077223.220	No de projet / Project number	1456-04
Norm du fichier / File name	CL-32-137.12_S12.dwg	No de classement / Classification	
No de plan ou dessin / File name	CL-32-137.12	No feuille / Sheet no	S12/S1





LA CULÉE DE BÉTON NE DOIT EN AUCUN CAS ÊTRE DÉSTABILISÉE OU ENDOMMAGÉE LORS DES TRAVAUX. DES PRÉCAUTIONS DURANT LES TRAVAUX DEVONT ÊTRE EN CONSIDÉRATION PAR L'ENTREPRENEUR. **IN NO CASE SHOULD THE CONCRETE ABUTMENT BE DESTABILIZED OR DAMAGED DURING THE WORK. PRECAUTIONS DURING THE WORK MUST BE TAKEN INTO CONSIDERATION BY THE CONTRACTOR.**

VUE EN PLAN - CH. 0+845 À 0+945
 PLAN VIEW - CH. 0+845 TO 0+945



VUE EN ÉLÉVATION - CH. 0+845 À 0+945
 ELEVATION VIEW - CH. 0+845 TO 0+945

Légende / Legend

- NIVEAU D'EAU / NAVIGATION LEVEL
- COURONNEMENT: RÉFECTION COMPLÈTE / CROWNING: COMPLETE REFURBISHMENT
- COURONNEMENT: RESURFAÇAGE / CROWNING: SURFACING
- RECŪVREMENT: RESURFAÇAGE / COVERING: SURFACING
- AMONCELLEMENT DE SÉDIMENTS / AMONCELLEMENT SEDIMENTS
- FOND DU CANAL / CANAL BED
- MUR DU CANAL / CANAL WALL
- ROC APPARENT / ROCK LIKE
- MAÇONNERIE / MASONRY
- CHEMIN DE FER / RAILWAY
- LIMITE DE PROPRIÉTÉ / PROPERTY LIMIT
- LIMITES D'INTERVENTION / INTERVENTION LIMITS
- CLÔTURES EXISTANTE / EXISTING FENCES
- CONDUIT AQUEUC EXISTANT / EXISTING WATER PIPE
- CONDUIT GAZ EXISTANT / EXISTING GAS PIPE
- BARRIÈRE D'EXCLUSION / EXCLUSION BARRIER
- NIVEAU FOND CANAL (RELÈVE BATHYMETRIQUE) / LEVEL CANAL BED (BATHYMETRIC SURVEY)
- NIVEAUX ARPERTAGE #1 / LEVELS SURVEY #1
- NIVEAUX ARPERTAGE #2 / LEVELS SURVEY #2
- GAZON / GRASS
- PAVAGE DE BÉTON / CONCRETE PAVEMENT
- ARBRES À DÉMOLIR / TREES TO DEMOLISH
- ARBRES À CONSERVER / TREES TO PRESERVE

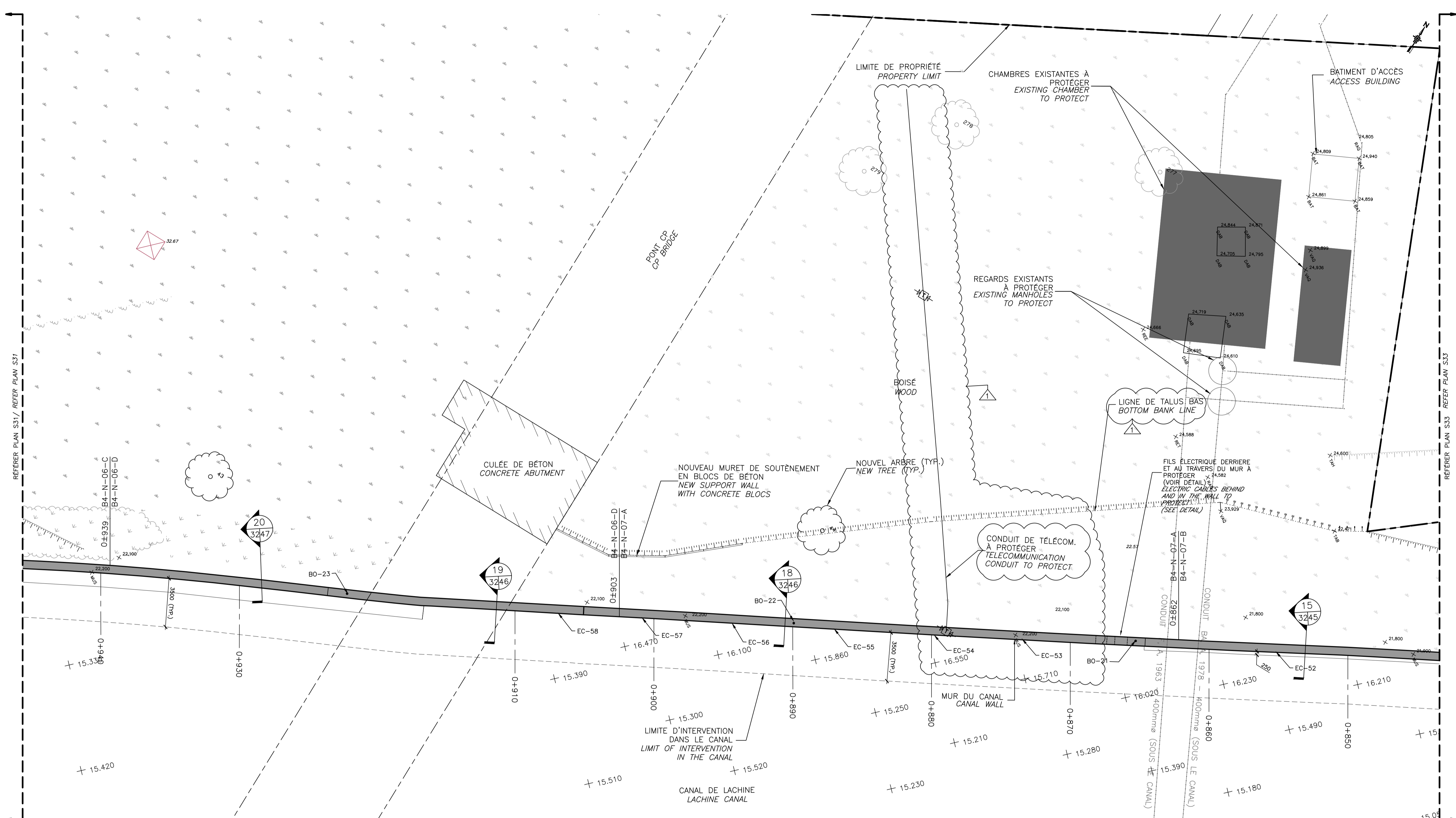
01	ADDENDA	15/08/18
00	EMIS POUR APPEL D'OFFRES ISSUED FOR TENDER	04/07/18
révisions / revisions		date

A	no. du détail / detail no.
B	no. de la feuille-où détail exigé / sheet no. - where detail required
C	no. de la feuille-où détaillé / sheet no. - where detailed

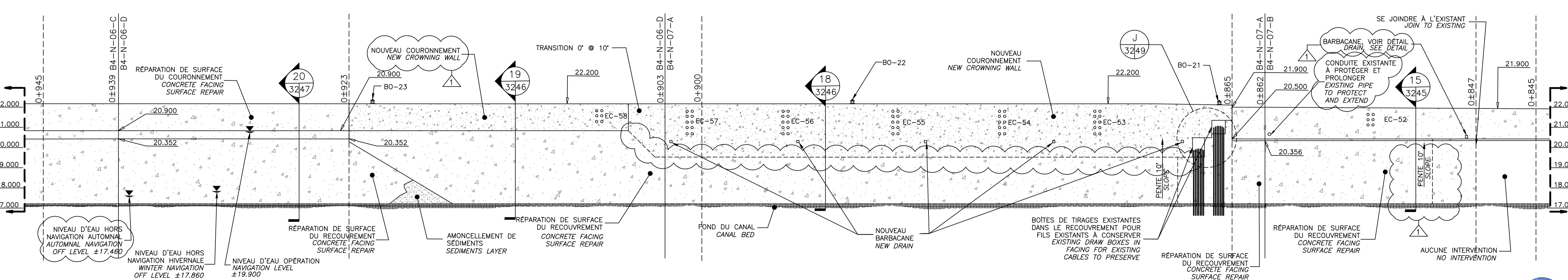
Projet / Project
AGENCE PARCS CANADA (APC) / PARKS CANADA AGENCY (PCA)
 RÉFECTION DES MURS DU CANAL-DE-LACHINE BIEF 4 - SECTEURS 14 À 17
 B4-N-01-A À B4-N-12-D
 REHABILITATION OF THE LACHINE CANAL WALLS REACH 4 - SECTORS 14 TO 17
 B4-N-01-A TO B4-N-12-D

Dessin / Drawing
STRUCTURE / STRUCTURE
PLAN DE DÉMOLITION / DEMOLITION PLAN
 CH. 0+845 À 0+945
 CH. 0+845 TO 0+945

Conçu par / Designed by	Benoît Larivière, Ing.	Date / Date	
Dessiné par / Drawn by	Mishnel Vincent, Benoît Larivière, Ing.	Date / Date	
Approuvé par / Approved by	Pascal Béliveau, Ing.	Date / Date	
Soumission / Submission	Gestionnaire de projet / Project Manager		
Tender	PWGSC Client		
No de projet / Project number	R.07723.220	No de projet / Project number	1456-04
TS/SC	PWGSC Client		
Nom du fichier / File name	CL-32-137.14_S14.dwg	No de classement / Classification	
No de plan ou dessin / File name	CL-32-137.14	No de feuille / Sheet no	S14/S1



VUE EN PLAN - CH. 0±845 À 0±945
PLAN VIEW - CH. 0±845 TO 0±945



VUE EN ÉLÉVATION - CH. 0±845 À 0±945
ELEVATION VIEW - CH. 0±845 TO 0±945

Légende / Legend

NIVEAU D'EAU / NAVIGATION LEVEL

COURONNEMENT: RESURFAÇAGE / CROWNING: SURFACING

AMONCELLEMENT DE SÉDIMENTS / AMONCELLEMENT SEDIMENTS

NOUVEAU COURONNEMENT / NEW CROWNING

MUR: RESURFAÇAGE / WALL: RESURFACING

FOND DU CANAL / CANAL BED

MUR DU CANAL / CANAL WALL

SYMBOLE D'ARBRE EXISTANT / EXISTING TREE SYMBOL

NOUVEAUX ARBRES / NEW TREES

VOIE FERRÉE PATRIMONIALE / HERITAGE ROAD PATRIMONIAL

LIMITE DE PROPRIÉTÉ / PROPERTY LIMIT

LIMITES D'INTERVENTION / INTERVENTION LIMITS

CLOTURES EXISTANTE / EXISTING FENCES

CONDUIT AQUEUDUC EXISTANT / EXISTING WATER PIPE

CONDUIT GAZ EXISTANT / EXISTING GAS PIPE

XX.XXX NIVEAU FOND CANAL (RELEVÉ BATHYMETRIQUE) / LEVEL CANAL BED (BATHYMETRIC SURVEY)

XX.XXX NIVEAUX ARPENTAGE #1 / LEVELS SURVEY #1

XX.XXX NIVEAUX ARPENTAGE #2 / LEVELS SURVEY #2

GAZON / GRASS

CONCRETE PAVEMENT / PAVAGE DE BETON

CONCRETE WALL / MUR DE BETON

01	ADDENDA	15/08/18
00	EMIS POUR APPEL D'OFFRES ISSUED FOR TENDER	04/07/18
révisions / revisions		date

A no. du détail / detail no.	
B no. de la feuille-où détail exigé / sheet no. - where detail required	
C no. de la feuille-où détaillé / sheet no. - where detailed	

Projet / Project

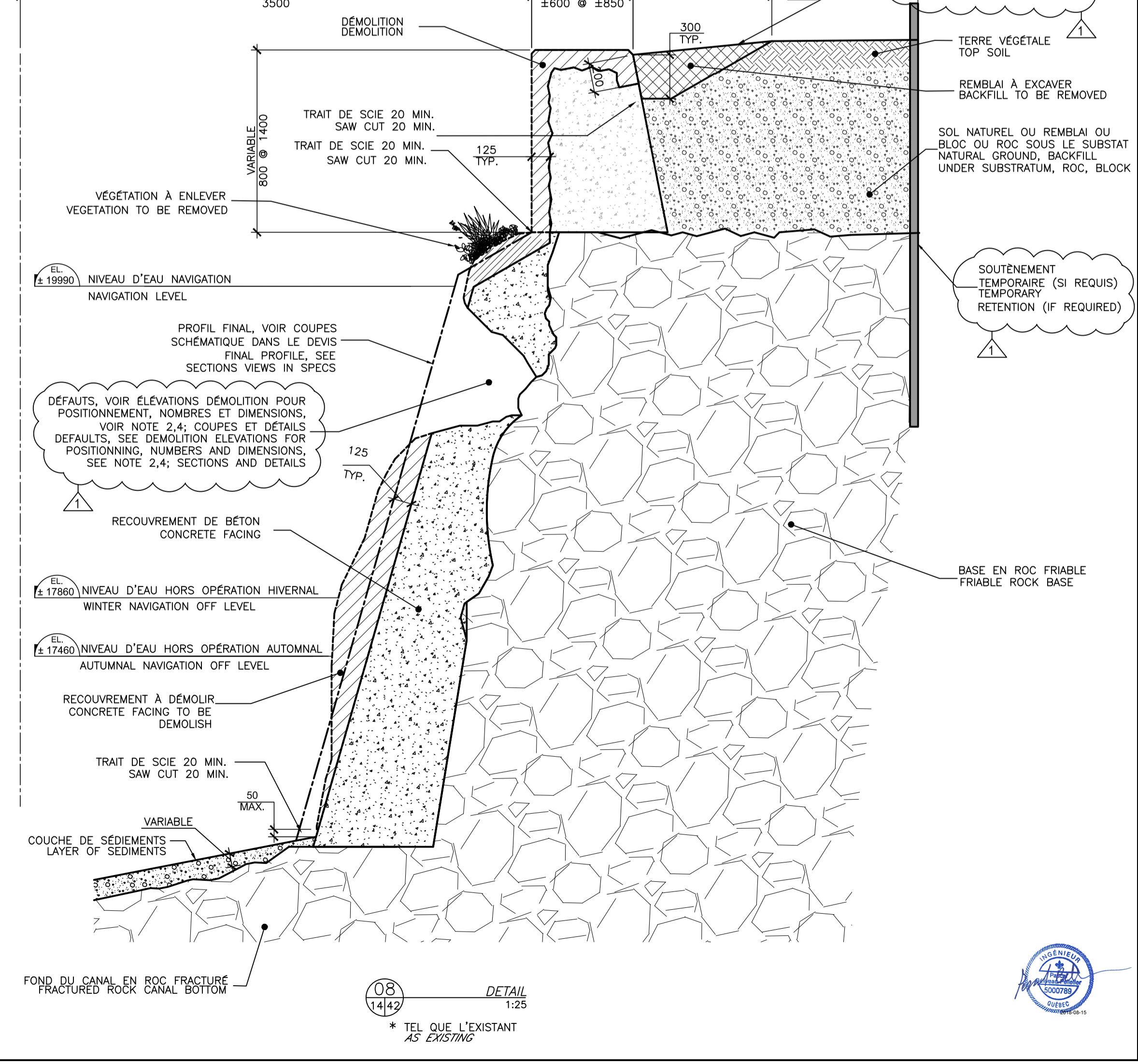
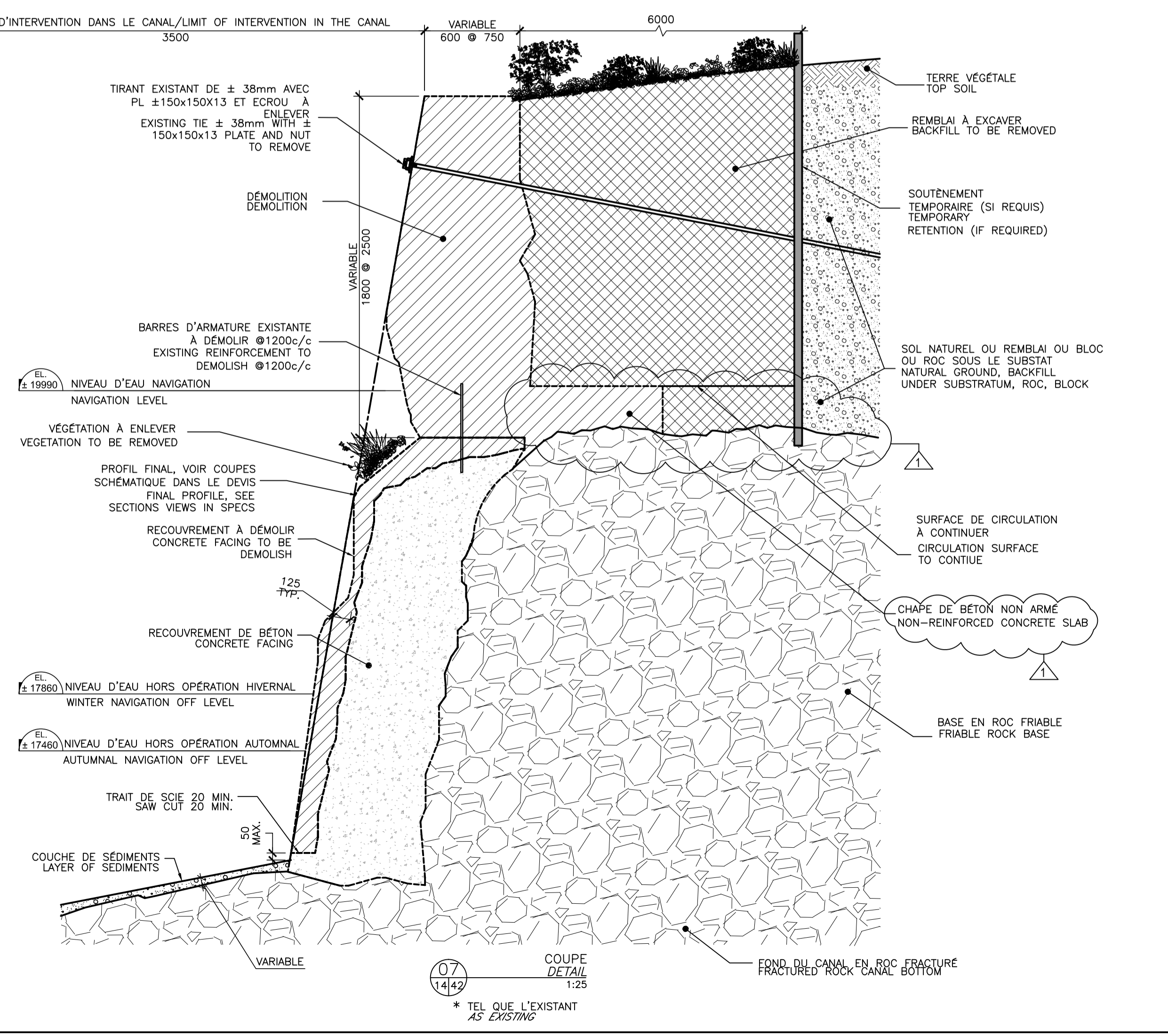
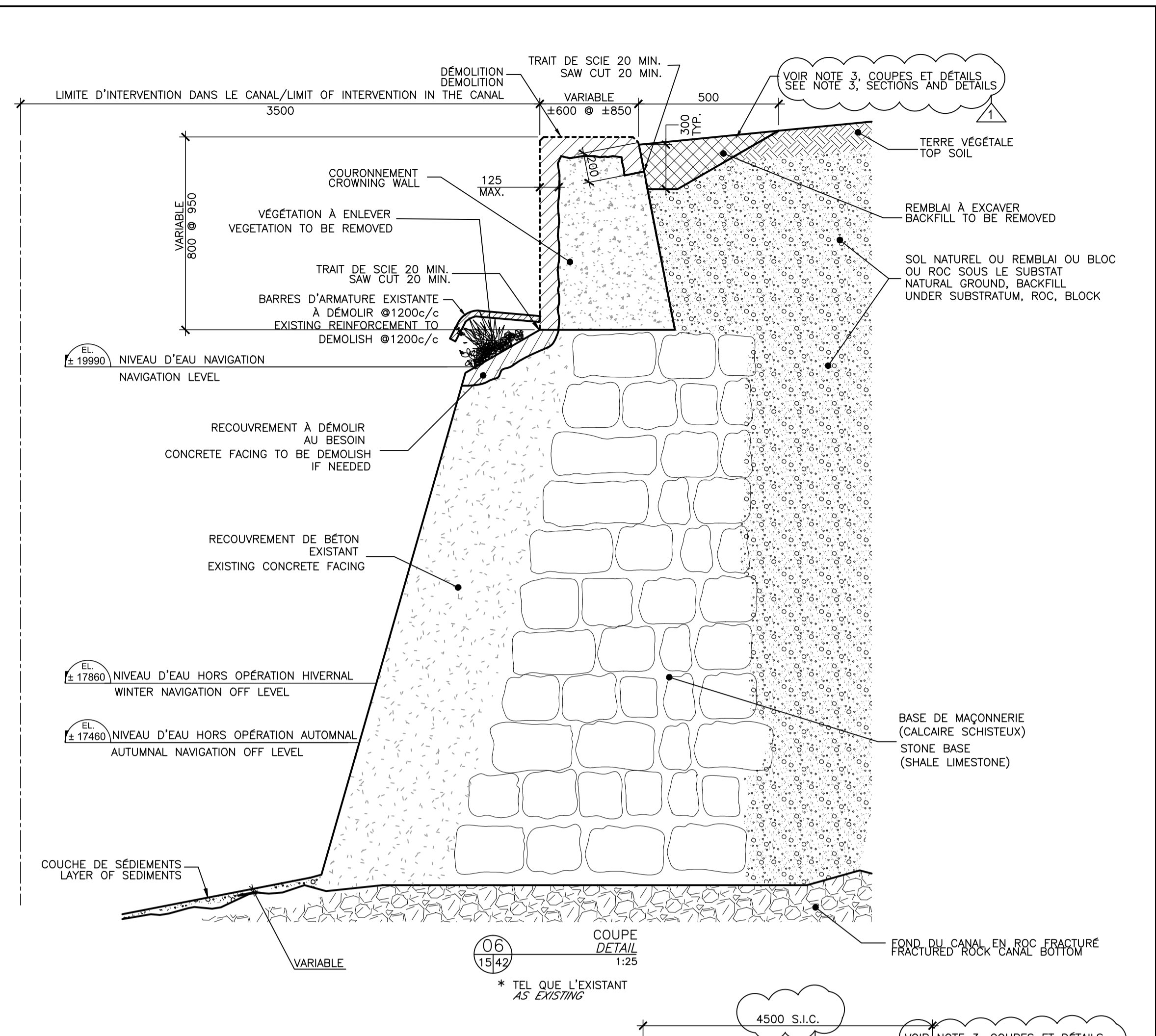
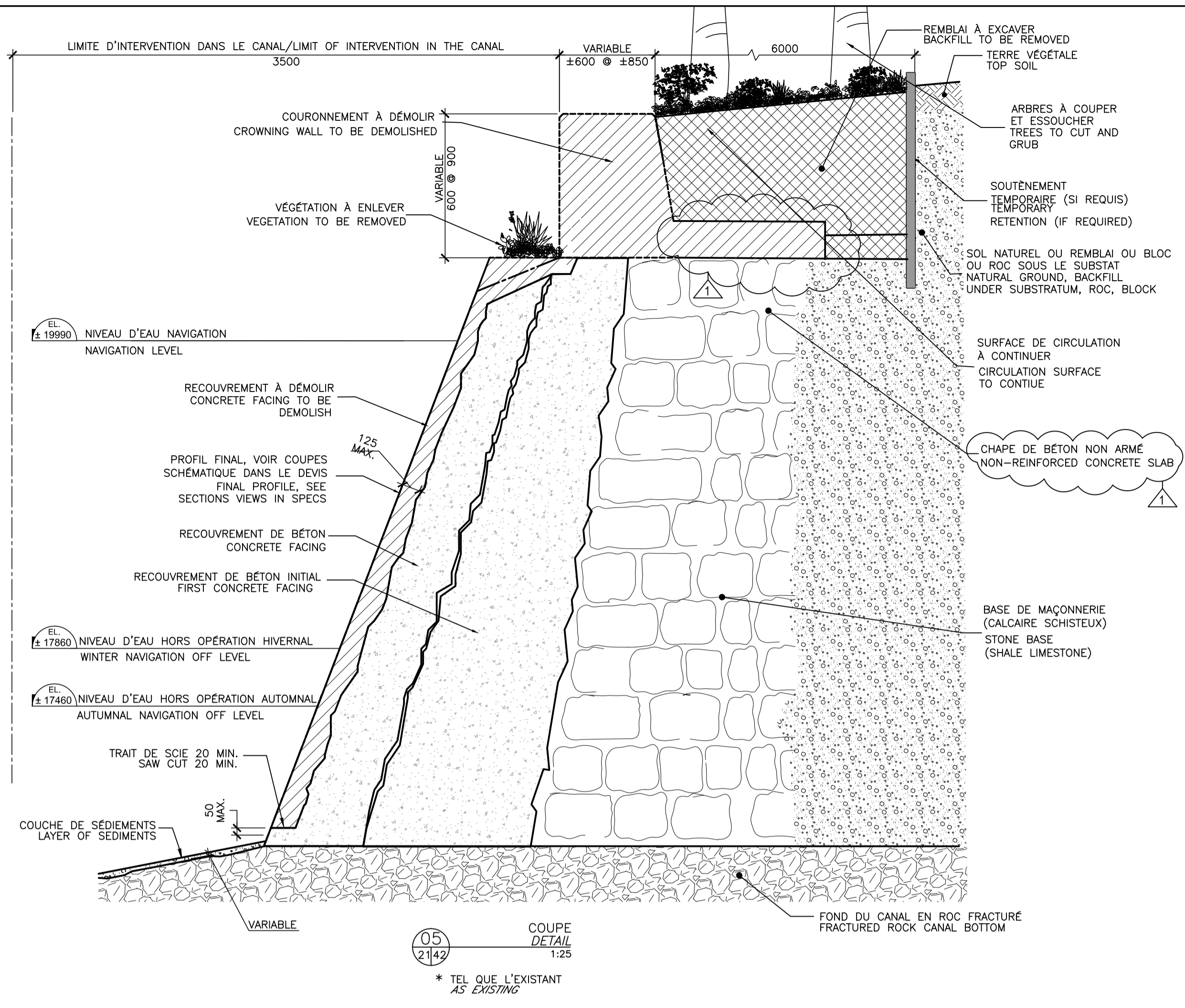
AGENCE PARCS CANADA (APC)
PARKS CANADA AGENCY (PCA)
RÉFECTION DES MURS DU CANAL-DE-LACHINE BIEF 4 - SECTEURS 14 À 17
B4-N-01-A À B4-N-12-D
REHABILITATION OF THE LACHINE CANAL WALLS REACH 4 - SECTORS 14 TO 17
B4-N-01-A TO B4-N-12-D

Dessin / Drawing

STRUCTURE
STRUCTURE
PLAN DE RECONSTRUCTION
CH. 0±845 À 0±945
RECONSTRUCTION PLAN
CH. 0±845 À 0±945

Conçu par / Designed by Patrick Chartray, Ing.	Date / Date 19/03/18
Dessiné par / Drawn by Mishnel Vincent	Date / Date 19/03/18
Approuvé par / Approved by Pascal Béliveau, Ing.	Date / Date 19/03/18
Soumission / Submission Gestionnaire de projet TPSCC / Project Manager Marcel Thum, Ing.	
Tender / PWGSC R.077223.220	Project number / No de projet 1456-04
TS/SC / Client Nom du fichier / File name CL-32-137.32_S32.dwg	No de classement / Sheet no CL-32-137.32
	File no / Sheet no S32/51

Légende / Legend



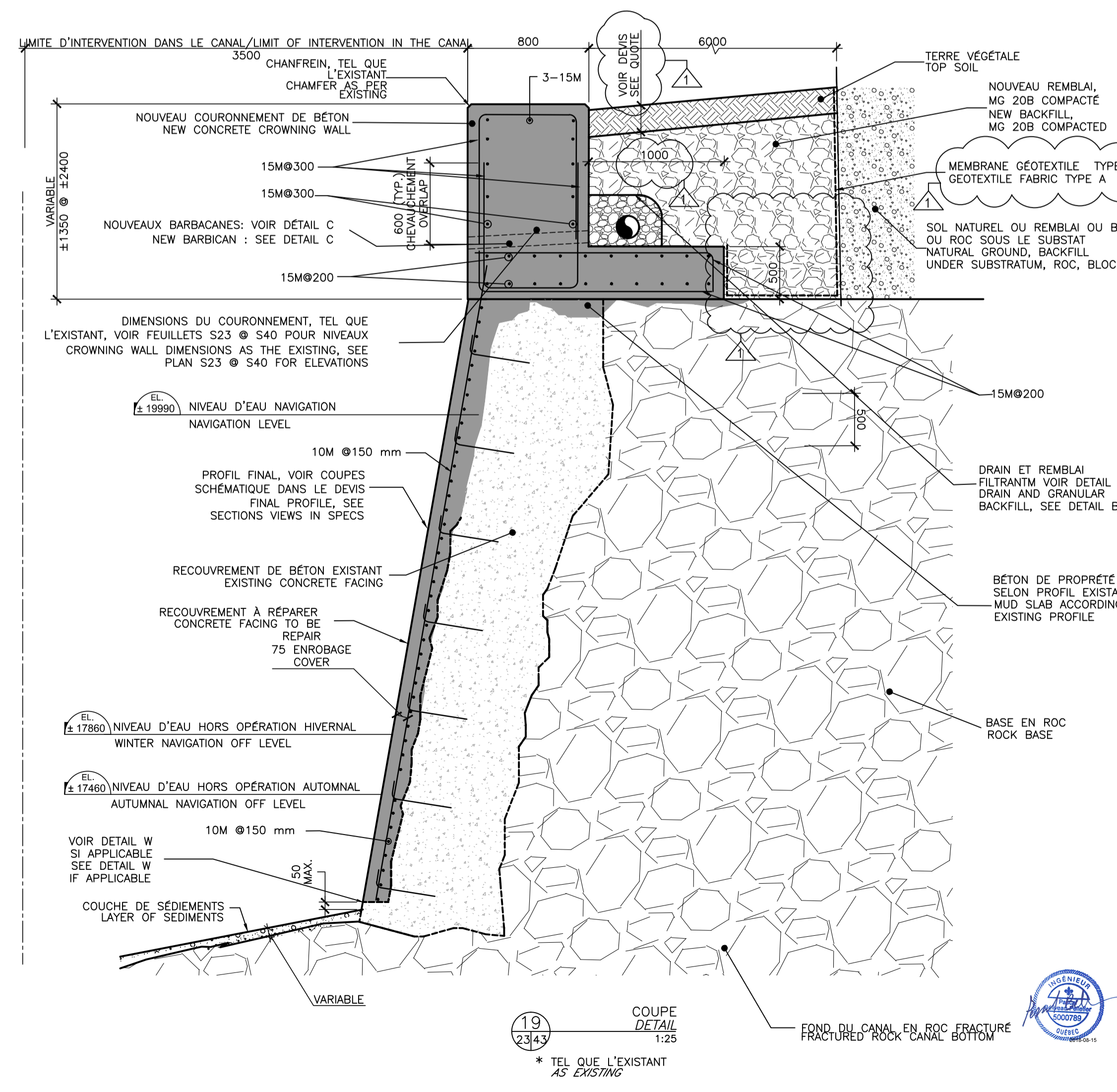
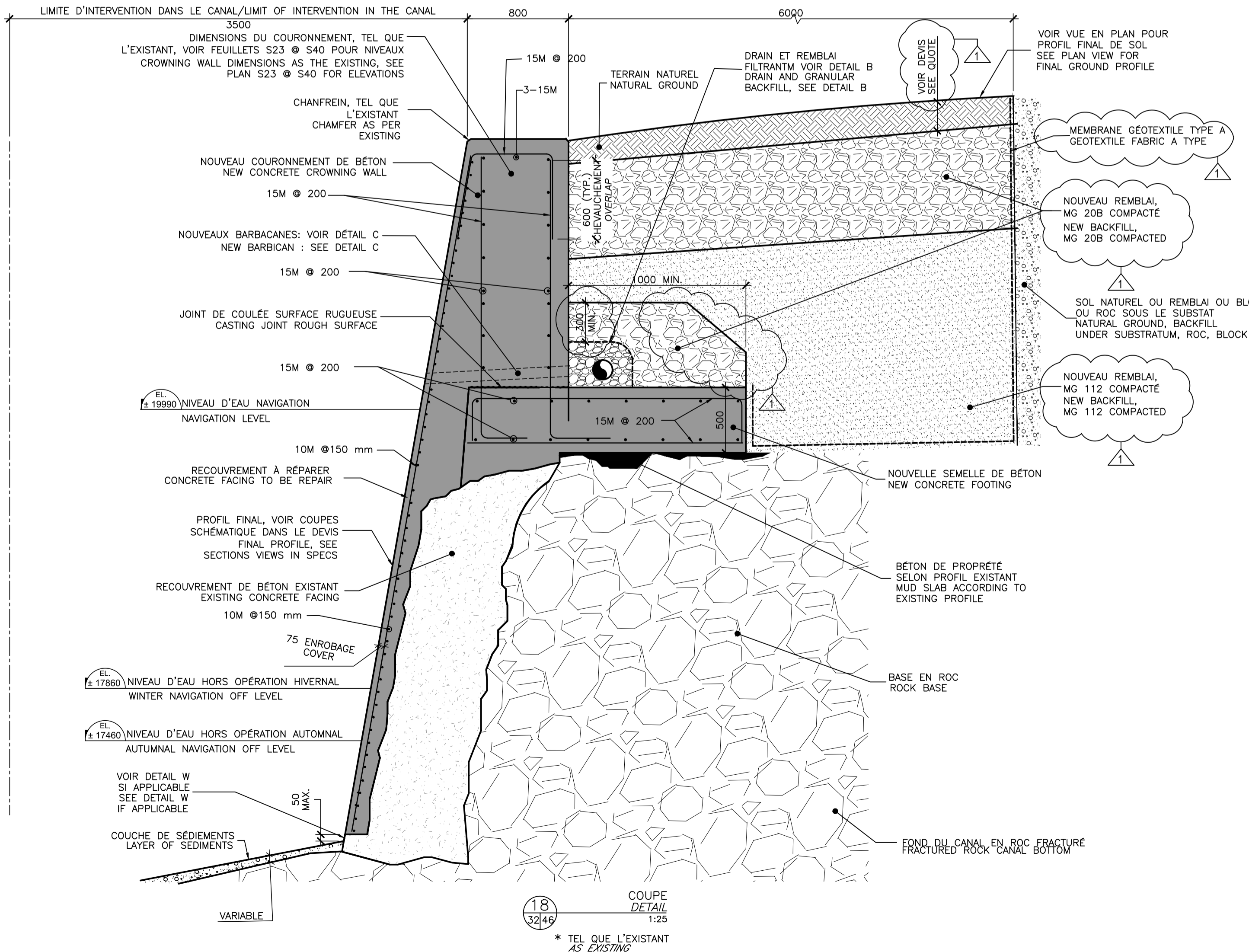
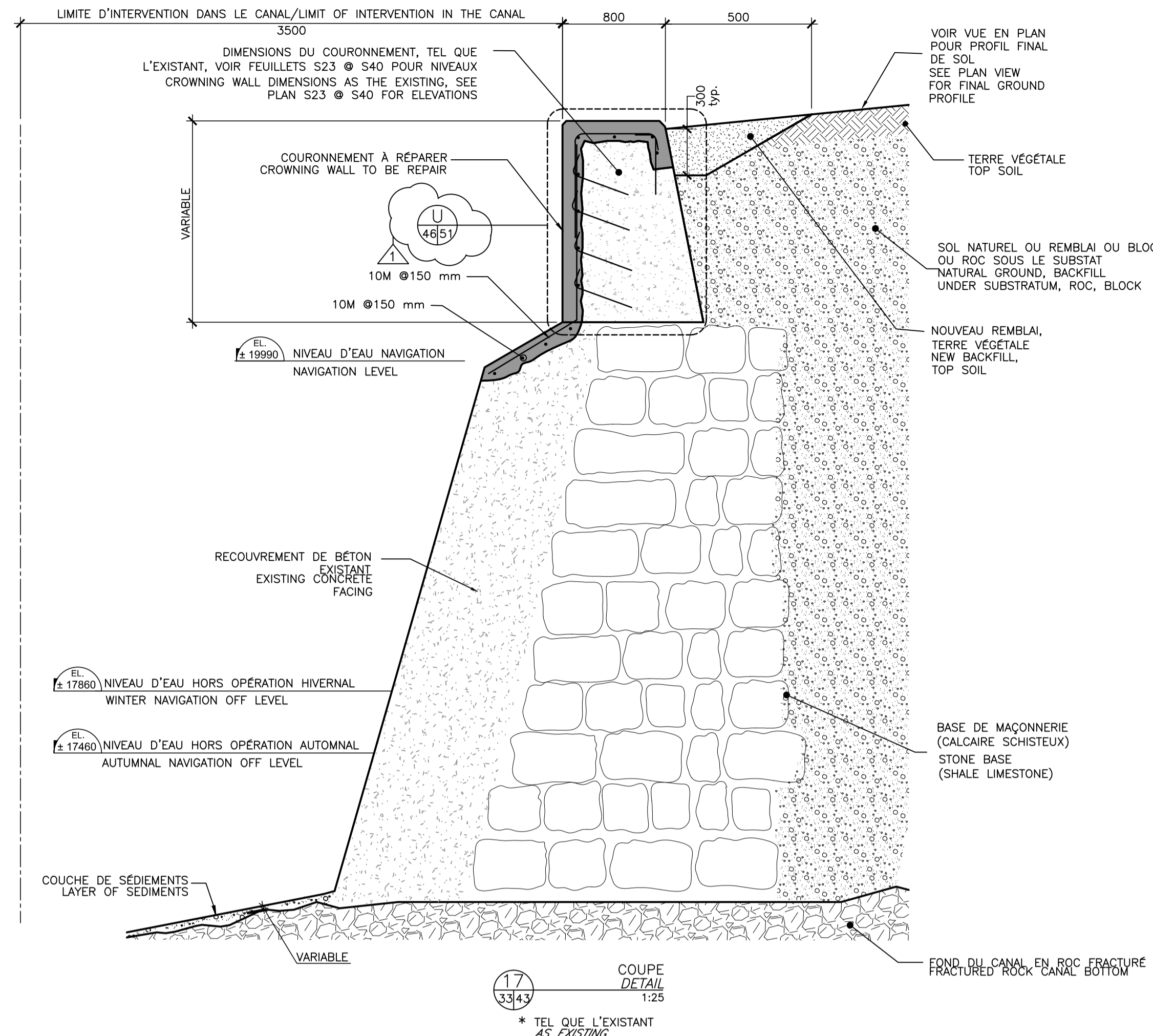
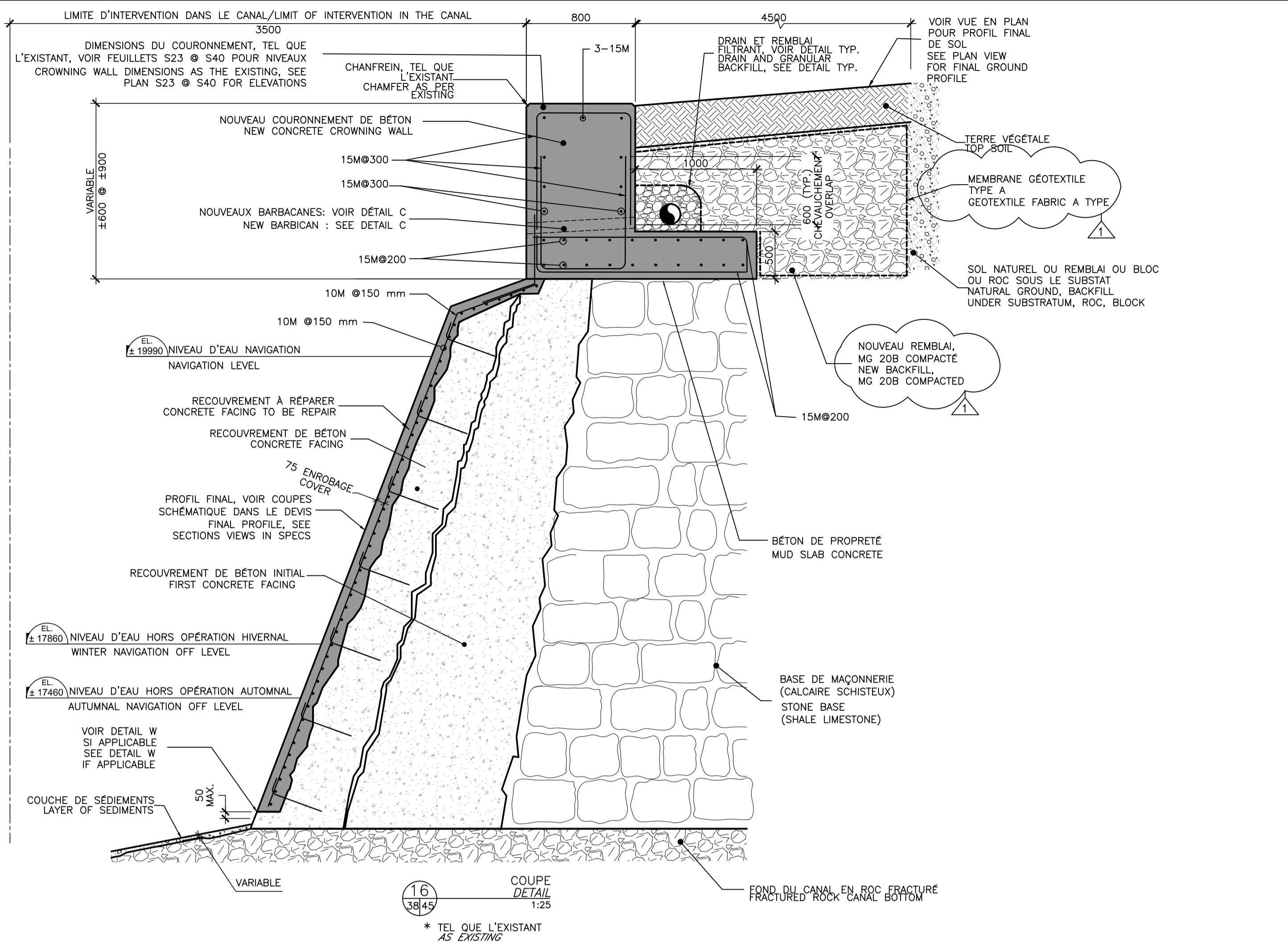
01	ADDENDA	15/08/18
00	EMIS POUR APPEL D'OFFRES ISSUED FOR TENDER	04/07/18
révisions / revisions		date

A no. du détail / detail no.	
B no. de la feuille - où détail exigé / sheet no. - where detail required	
C no. de la feuille - où détaillé / sheet no. - where detailed	

Projet / Project
AGENCE PARCS CANADA (APC) / PARKS CANADA AGENCY (PCA)
RÉFECTION DES MURS DU CANAL-DE-LACHINE BIEF 4 - SECTEURS 14 À 17 / B4-N-01-A À B4-N-12-D
REHABILITATION OF THE LACHINE CANAL WALLS REACH 4 - SECTORS 14 TO 17 / B4-N-01-A TO B4-N-12-D

Dessin / Drawing
STRUCTURE / STRUCTURE
COUPES DE DÉMOLITION / DEMOLITION SECTION

Conçu par / Designed by	Benoît Larivière, Ing.	Date / Date	19/03/18
Dessiné par / Drawn by	Benoît Larivière, Ing. M. Vincent, dess.	Date / Date	19/03/18
Approuvé par / Approved by	Pascal Béliveau, Ing.	Date / Date	19/03/18
Soumission / Submission	Gestionnaire de projet TPSCC / Marcel Thum, Ing. / PWGSC Project Manager		
Tender			
No de projet / Project number	R.077223.220	No de projet / Project number	1456-04
TPSCC / PWGSC	Client / Client	Client / Client	
Nom du fichier / File name	CL-32-137.42_S42.dwg	No de classement / File no	
No de plan ou dessin / File name	CL-32-137.42	No feuille / Sheet no	S42/51



Légende / Legend

01	ADDENDA	15/08/18
00	EMIS POUR APPEL D'OFFRES ISSUED FOR TENDER	04/07/18
révisions / revisions		date

A no. du détail / detail no.
 B no. de la feuille-où détail exigé / sheet no. - where detail required
 C no. de la feuille-où détaillé / sheet no. - where detailed

Projet / Project
AGENCE PARCS CANADA (APC) / PARKS CANADA AGENCY (PCA)
RÉFECTION DES MURS DU CANAL-DE-LACHINE BIEF 4 - SECTEURS 14 À 17 / B4-N-01-A À B4-N-12-D
REHABILITATION OF THE LACHINE CANAL WALLS REACH 4 - SECTORS 14 TO 17 / B4-N-01-A TO B4-N-12-D

Dessin / Drawing
STRUCTURE / STRUCTURE
COUPES DE RECONSTRUCTION / RECONSTRUCTION SECTIONS

Conçu par / Designed by
 Benoît Larivière, Ing. / 19/03/18 / Date

Dessiné par / Drawn by
 Benoît Larivière, Ing. M. Vincent, dess. / 19/03/18 / Date

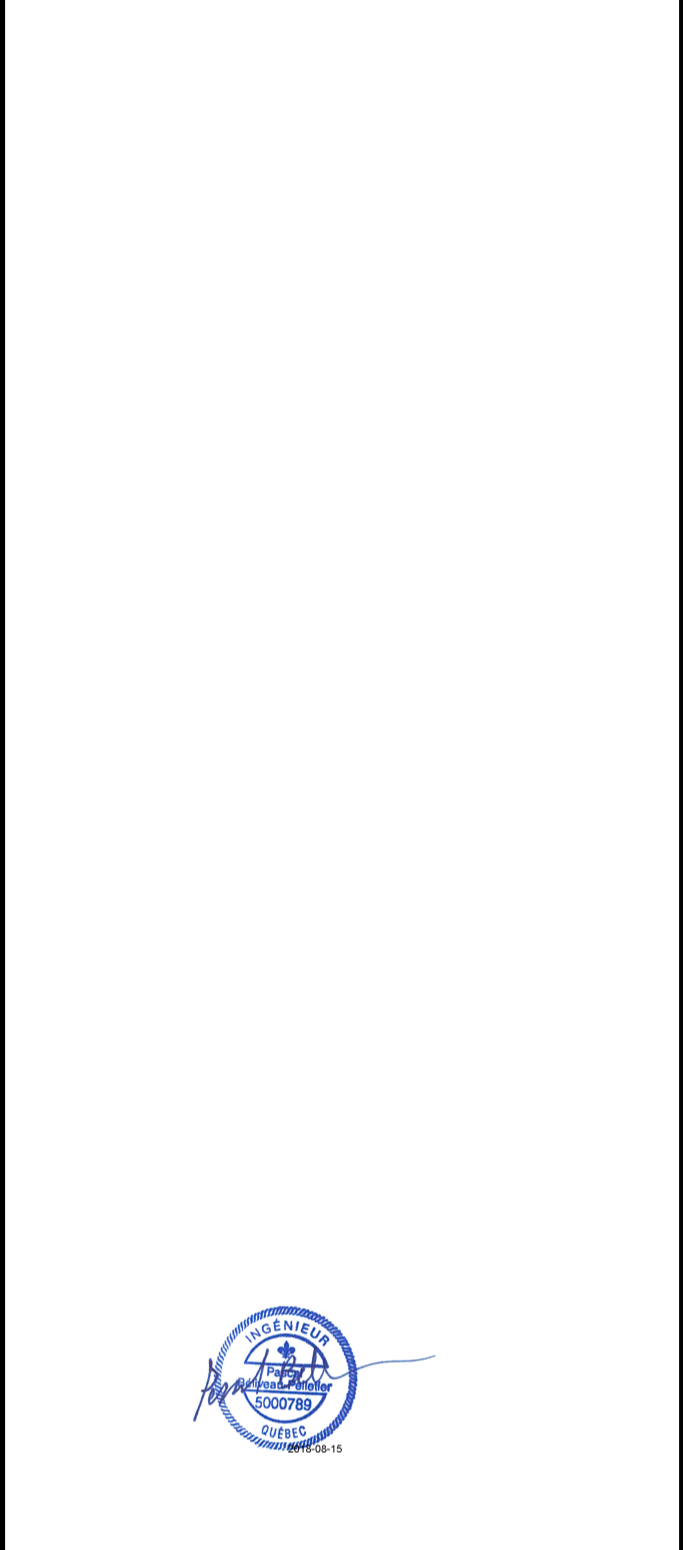
Approuvé par / Approved by
 Pascal Béliveau, Ing. / 19/03/18 / Date

Soumission / Submission
 Gestionnaire de projet TPSCC / Marcel Thum, Ing. / 19/03/18 / Date
 Tender / PWGSC Project Manager

No de projet / Project number
 R.077223.220 / 1456-04

TS/SC / Client / Client
 Nom du fichier / File name / No de classement / CL-32-137.46_S46.dwg / File no

No de plan ou dessin / File name / No feuille / Sheet no
 CL-32-137.46 / S46/51



01	ADDENDA	15/08/18
00	EMIS POUR APPEL D'OFFRES ISSUED FOR TENDER	04/07/18
révisions revisions		date

A	no. du détail detail no.
B	no. de la feuille—où détail exigé sheet no. — where detail required
C	no. de la feuille—où détaillé sheet no. — where detailed

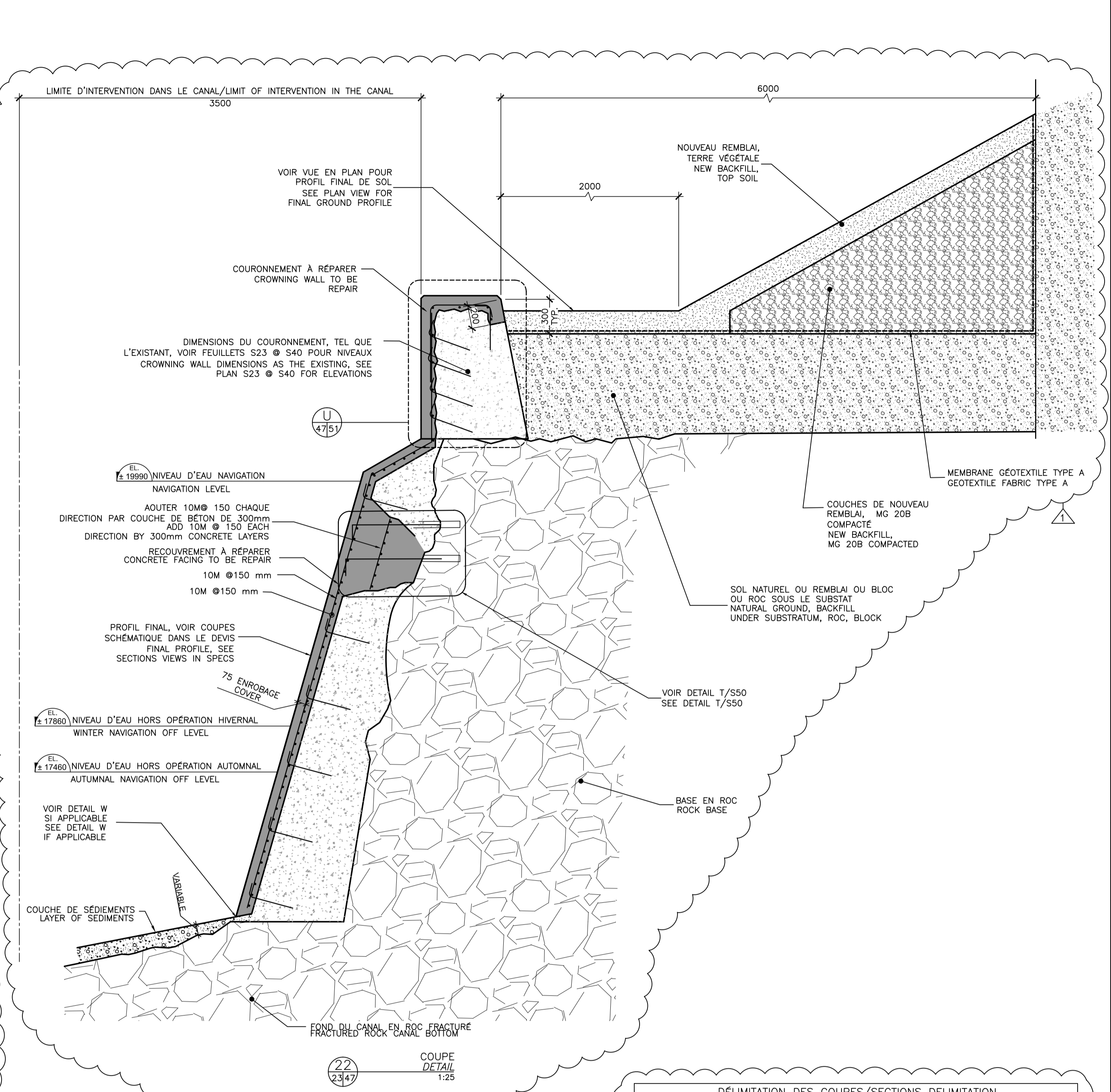
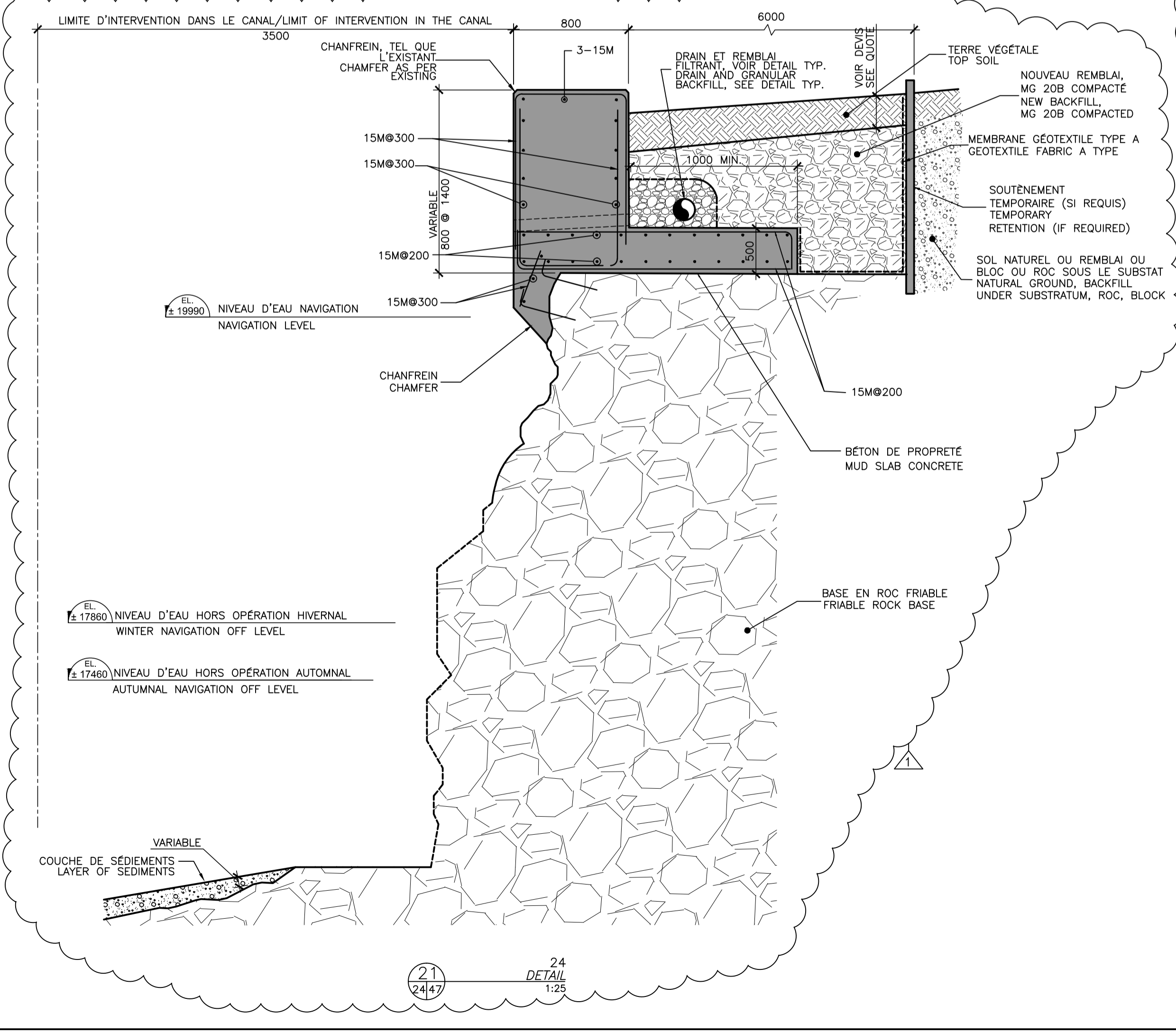
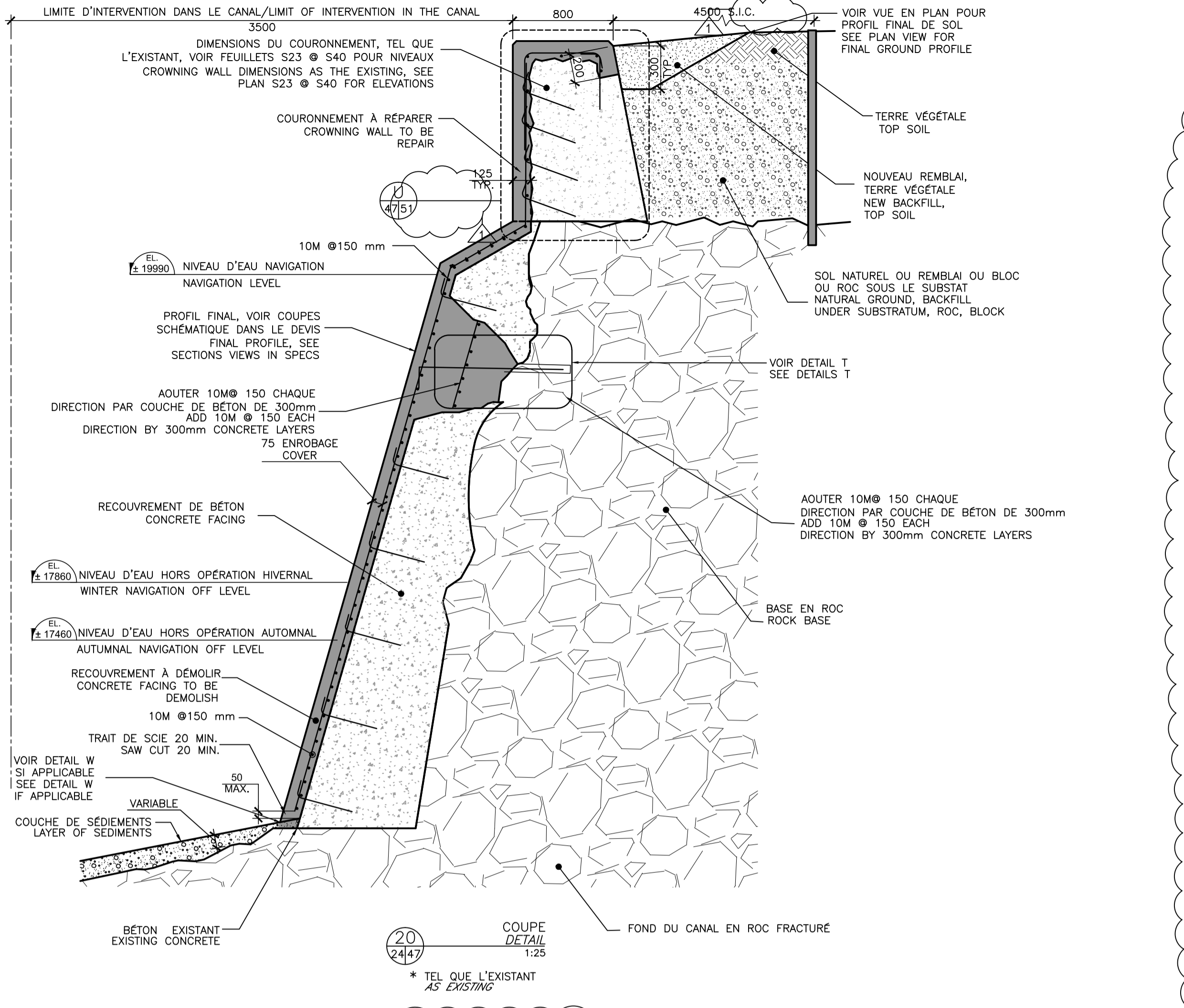
Projet
**AGENCE PARCS CANADA (APC)
PARKS CANADA AGENCY (PCA)**
RÉFECTION DES MURS DU CANAL-
DE-LACHINE BIEF 4 - SECTEURS 14 À 17
B4-N-01-A À B4-N-12-D
REHABILITATION OF THE LACHINE
CANAL WALLS REACH 4 -
SECTORS 14 TO 17
B4-N-01-A TO B4-N-12-D

Dessin
**STRUCTURE
STRUCTURE**
COUPES DE RECONSTRUCTION
RECONSTRUCTION SECTIONS

Conçu par
Benoit Larivière, Ing.
Dessiné par
Benoit Larivière, Ing. M. Vincent, dess.
Approuvé par
Pascal Béliveau, Ing.

Soumission
Tender
No de projet
R.077223.220
Nom du fichier
CL-32-137.47_S47.dwg
No de plan ou dessin
CL-32-137.47

Gestionnaire de projet TPSC
Marcel Thum, Ing.
PWGSC Project Manager
No de projet
1456-04
Client
No de classement
S47/51



DÉLIMITATION DES COUPES/SECTIONS DELIMITATION			
CHAINAGE/CHAINING	COUPES DE DÉMOLITION /DEMOLITION SECTIONS	COUPES DE RECONSTRUCTION/ RECONSTRUCTION SECTIONS	
0±000 @ 0±027	1/S41	12/S45	
0±027 @ 0±047	2/S41	13/S45	
0±047 @ 0±087	3/S41	14/S45	
0±087 @ 0±102	4/S41	15/S45	
0±102 @ 0±168	3/S41	14/S45	
0±168 @ 0±171	5/S42	16/S46	
0±171 @ 0±199	3/S41	14/S45	
0±199 @ 0±202	5/S42	16/S46	
0±202 @ 0±214	3/S41	14/S45	
0±214 @ 0±335	4/S41	15/S45	
0±335 @ 0±339	1/S41 (SIM)	15/S45 (SIM)	
0±405 @ 0±655	4/S41	15/S45	
0±655 @ 0±663	6/S42 (SIM)	17/S46 (SIM)	
0±663 @ 0±822	4/S41	15/S45	
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0±905 @ 0±923	11/S44	19/S46	
0±923 @ 0±985	8/S42	20/S47	
0±985 @ 1±140	10/S43	22/S47	
1±140 @ 1±170	8/S42	20/S47	
1±170 @ 1±605	10/S43	22/S47	
1±605 @ 1±710	8/S42	20/S47	
1±710 @ 1±715	9/S43	21/S47	
1±715 @ 1±752	8/S42	20/S47	
1±752 @ 1±760	6/S42 (SIM)	17/S46 (SIM)	
1±760 @ 1±775	11/S44	19/S46	



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01

TRANSITION DE PENTE/
SLOPE TRANSITION

1+080: 7°
1+100: 12°

EL. 20000

EL. 19000

EL. 18000

EL. 17000

EL. 23000

EL. 22000

EL. 21000

EL. 20000

EL. 19000

EL. 18000

EL. 17000

ÉL. 21900

800

ÉL. 20900

120.00°

575

6.00°

7.00°

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Travaux publics et
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Projet/Project
RÉFECTION DES MURS DU CANAL-DE-LACHINE
BIEF 4-SECTION 14 À 17
REHABILITATION OF THE LACHINE CANAL
WALLS REACH 4, SECTORS 14 TO 17

conçu designed
par/ by: B. Lariviere, Ing. date: 2018-08-15

dessiné drawn
par/ by: M. Vincent date: 2018-08-15

révisions:
01

échelle/ scale:
1 : 50

Titre du Drawing
dessin/ title:
COUPES TRANSVERSALES
CROSS SECTIONS

approuvé approved
par/ by: P. Béliveau, Ing. date: 2018-08-15

no. de project
projet/ no. R.077223.200 date: 2018-08-15

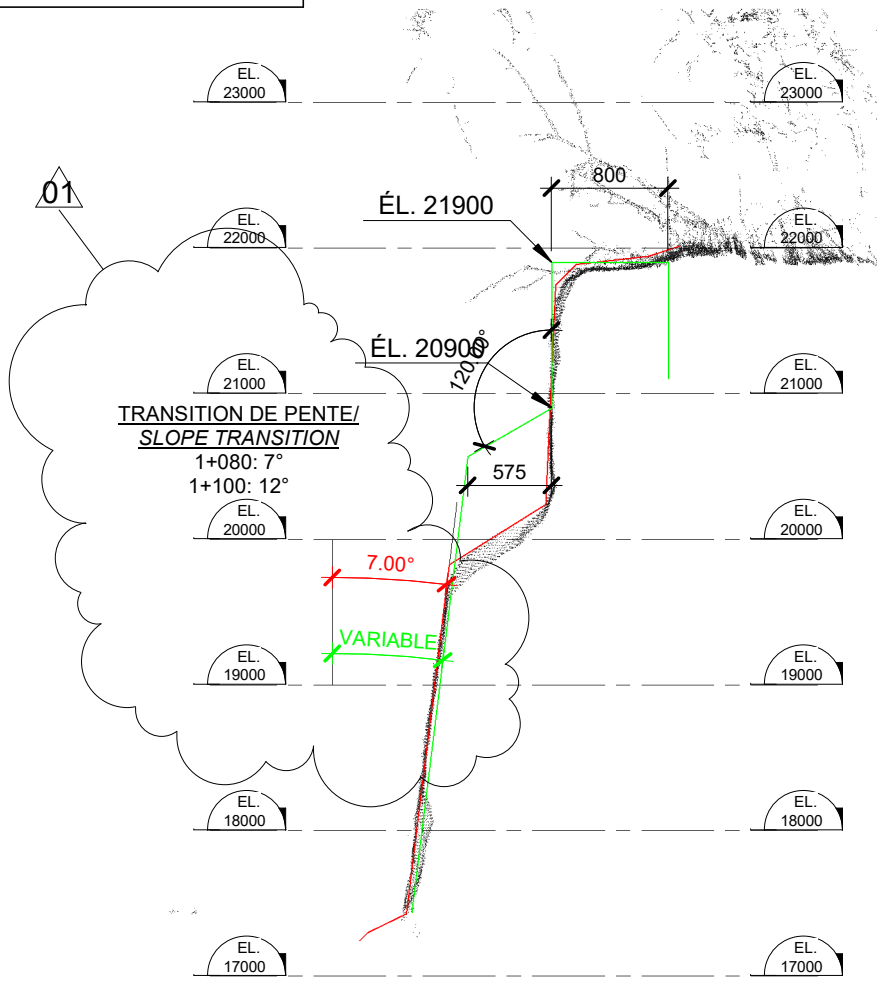
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fichier/ name 1+080

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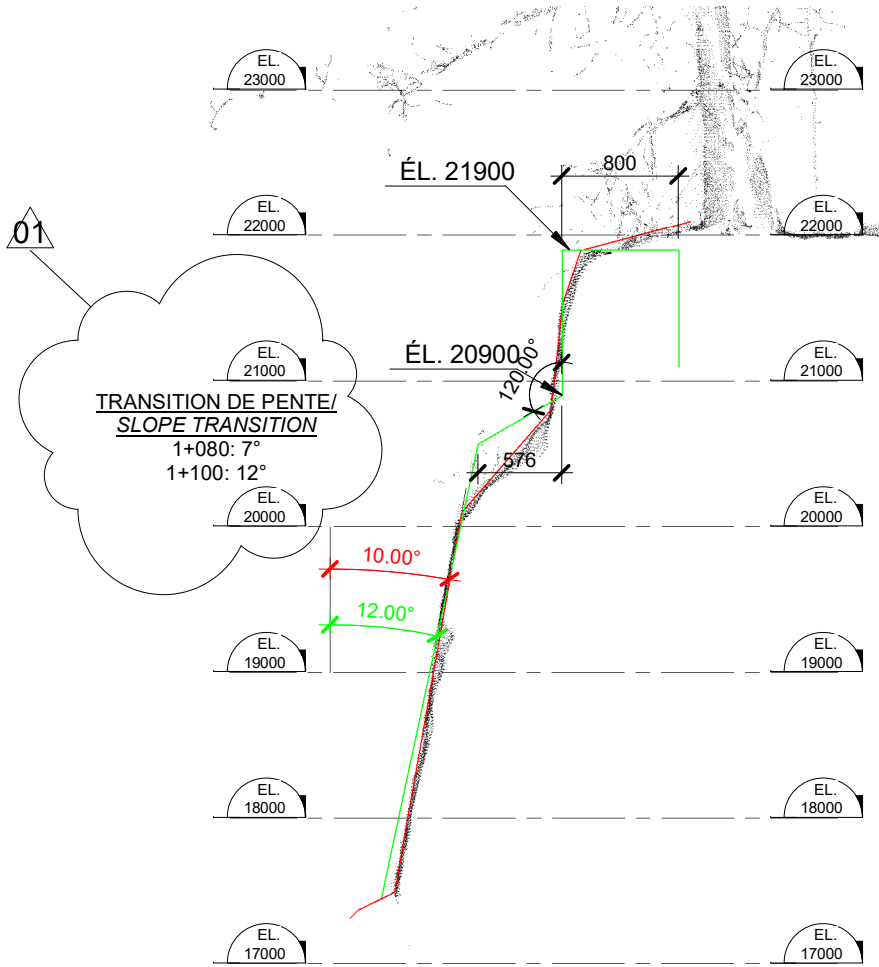
Travaux publics et Services gouvernementaux Canada Direction générale des biens immobiliers Région du Québec	Public Works and Government Services Canada Real Property branch Quebec region	Projet/Project RÉFECTION DES MURS DU CANAL-DE-LACHINE BIEF 4-SECTION 14 À 17 REHABILITATION OF THE LACHINE CANAL WALLS REACH 4, SECTORS 14 TO 17		Titre du Drawing dessin/ title: COUPES TRANSVERSALES CROSS SECTIONS	
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AGENCE PARCS CANADA (APC) PARKS CANADA AGENCY (PCA)		dessiné drawn par/ by: M. Vincent date: 2018-08-15		no. de project projet/ no. R.077223.200 date: 2018-08-15	
		révisions: 01	échelle/ scale: 1 : 50		nom du file fichier/ name 1+090



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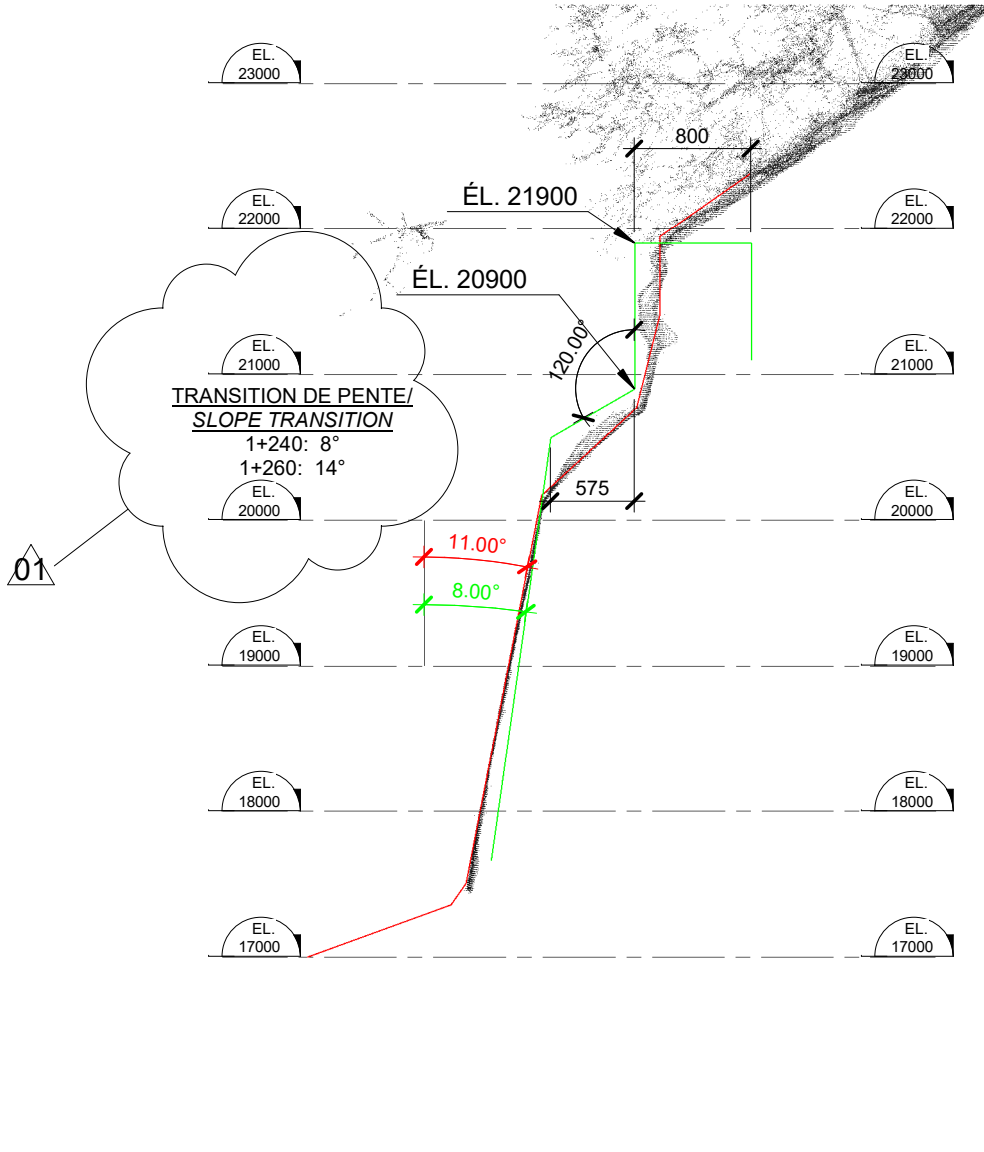
— PROFIL PROPOSÉ
PROPOSED PROFIL

Travaux publics et Services gouvernementaux Canada Direction générale des biens immobiliers Région du Québec	Public Works and Government Services Canada Real Property branch Quebec region	Projet/Project RÉFECTION DES MURS DU CANAL-DE-LACHINE BIEF 4-SECTION 14 À 17 REHABILITATION OF THE LACHINE CANAL WALLS REACH 4, SECTORS 14 TO 17		Titre du dessin/ Drawing title: COUPES TRANSVERSALES CROSS SECTIONS	
		conçu designed par/ by: B. Larivière, Ing.	date: 2018-08-15	approuvé approved par/ by: P. Béliveau, Ing.	date: 2018-08-15
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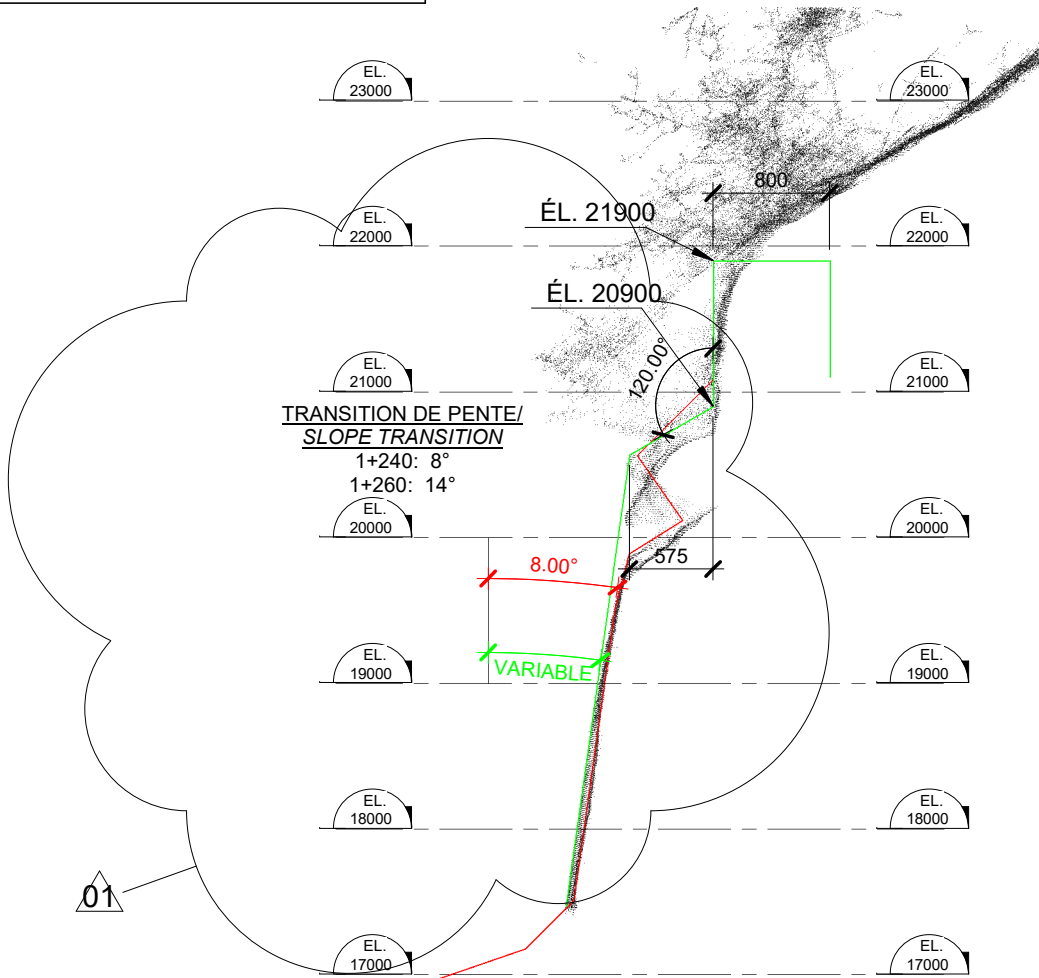
— PROFIL EXISTANT
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Travaux publics et Services gouvernementaux Canada Direction générale des biens immobiliers Région du Québec	Public Works and Government Services Canada Real Property branch Quebec region	Projet/Project RÉFECTION DES MURS DU CANAL-DE-LACHINE BIEF 4-SECTION 14 À 17 REHABILITATION OF THE LACHINE CANAL WALLS REACH 4, SECTORS 14 TO 17		Titre du dessin/ Drawing title: COUPES TRANSVERSALES CROSS SECTIONS	
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		révisions: 01	échelle/ scale: 1 : 50	nom du file/ fichier/ name	1+240



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Projet/Project
RÉFECTION DES MURS DU CANAL-DE-LACHINE
BIEF 4-SECTION 14 À 17
REHABILITATION OF THE LACHINE CANAL
WALLS REACH 4, SECTORS 14 TO 17

conçu designed
par/ by: B. Larivière, Ing. date: 2018-08-15

dessiné drawn
par/ by: M. Vincent date: 2018-08-15

révisions:
01

échelle/ scale:
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Titre du Drawing
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COUPES TRANSVERSALES
CROSS SECTIONS

approuvé approved
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no. de project
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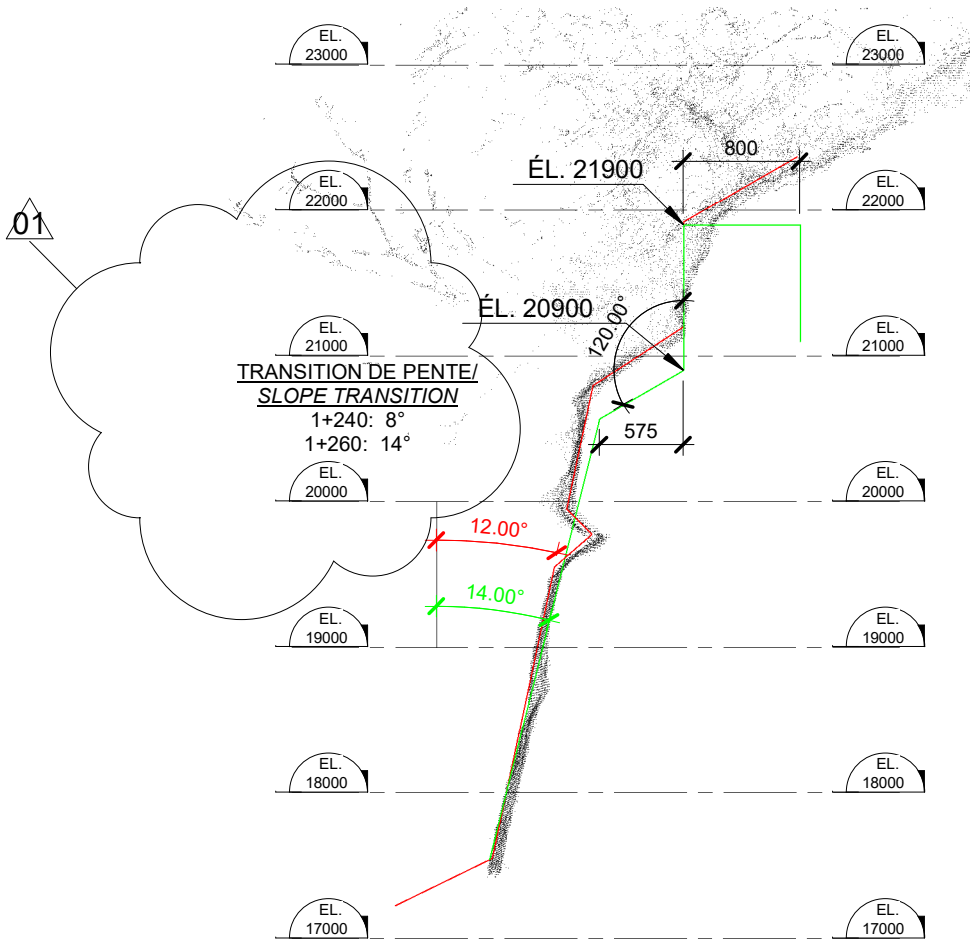
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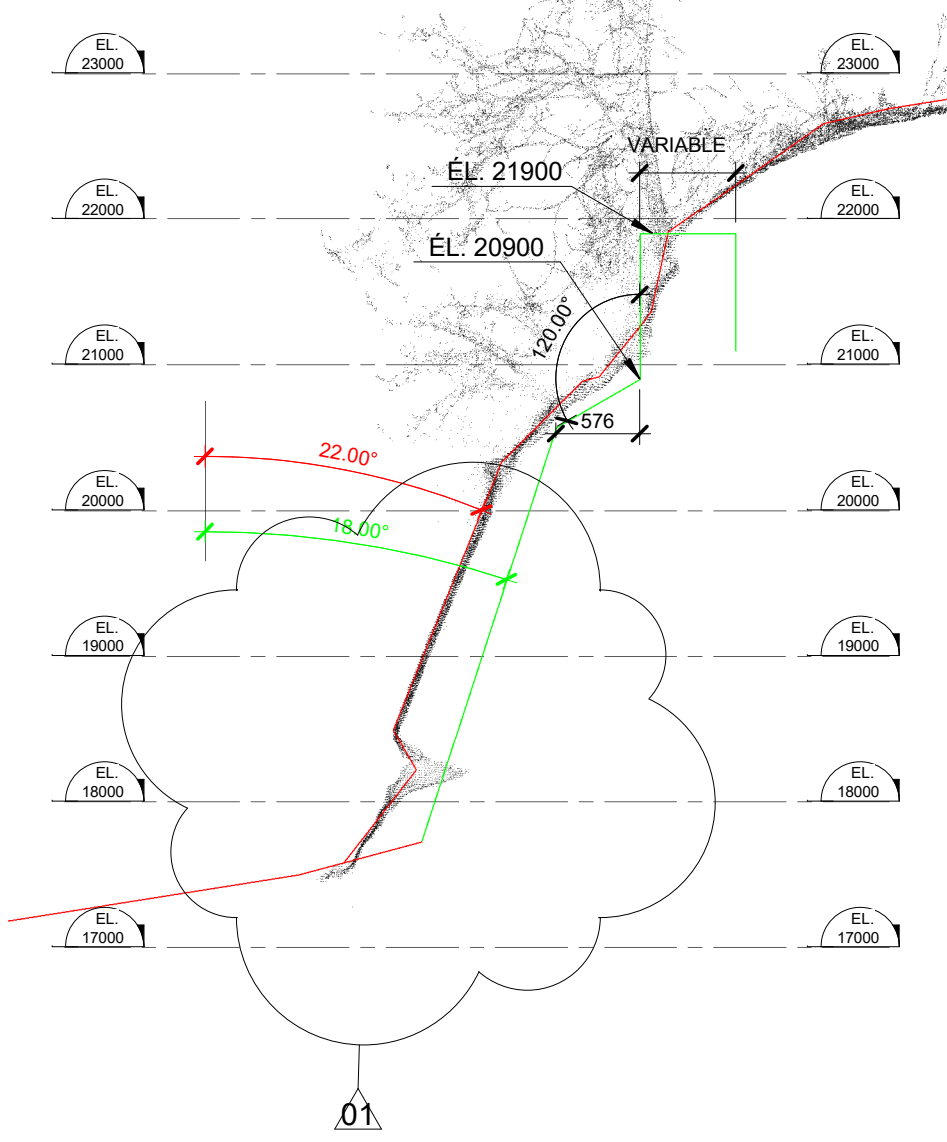
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Travaux publics et Services gouvernementaux Canada Direction générale des biens immobiliers Région du Québec	Public Works and Government Services Canada Real Property branch Quebec region	Projet/Project RÉFECTION DES MURS DU CANAL-DE-LACHINE BIEF 4-SECTION 14 À 17 REHABILITATION OF THE LACHINE CANAL WALLS REACH 4, SECTORS 14 TO 17		Titre du dessin/ Drawing title: COUPES TRANSVERSALES CROSS SECTIONS	
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		révisions: 01	échelle/ scale: 1 : 50		nom du file/ fichier/ name: 1+260



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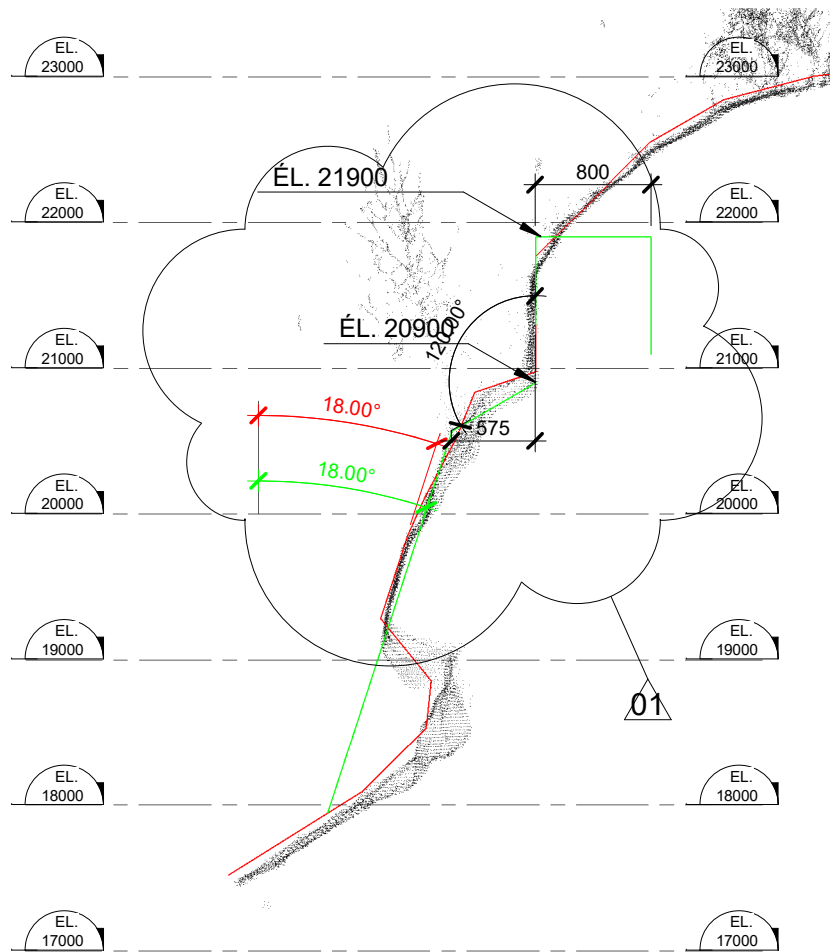
— PROFIL EXISTANT
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Travaux publics et Services gouvernementaux Canada Direction générale des biens immobiliers Région du Québec	Public Works and Government Services Canada Real Property branch Quebec region	Projet/Project RÉFECTION DES MURS DU CANAL-DE-LACHINE BIEF 4-SECTION 14 À 17 REHABILITATION OF THE LACHINE CANAL WALLS REACH 4, SECTORS 14 TO 17		Titre du dessin/ Drawing title: COUPES TRANSVERSALES CROSS SECTIONS	
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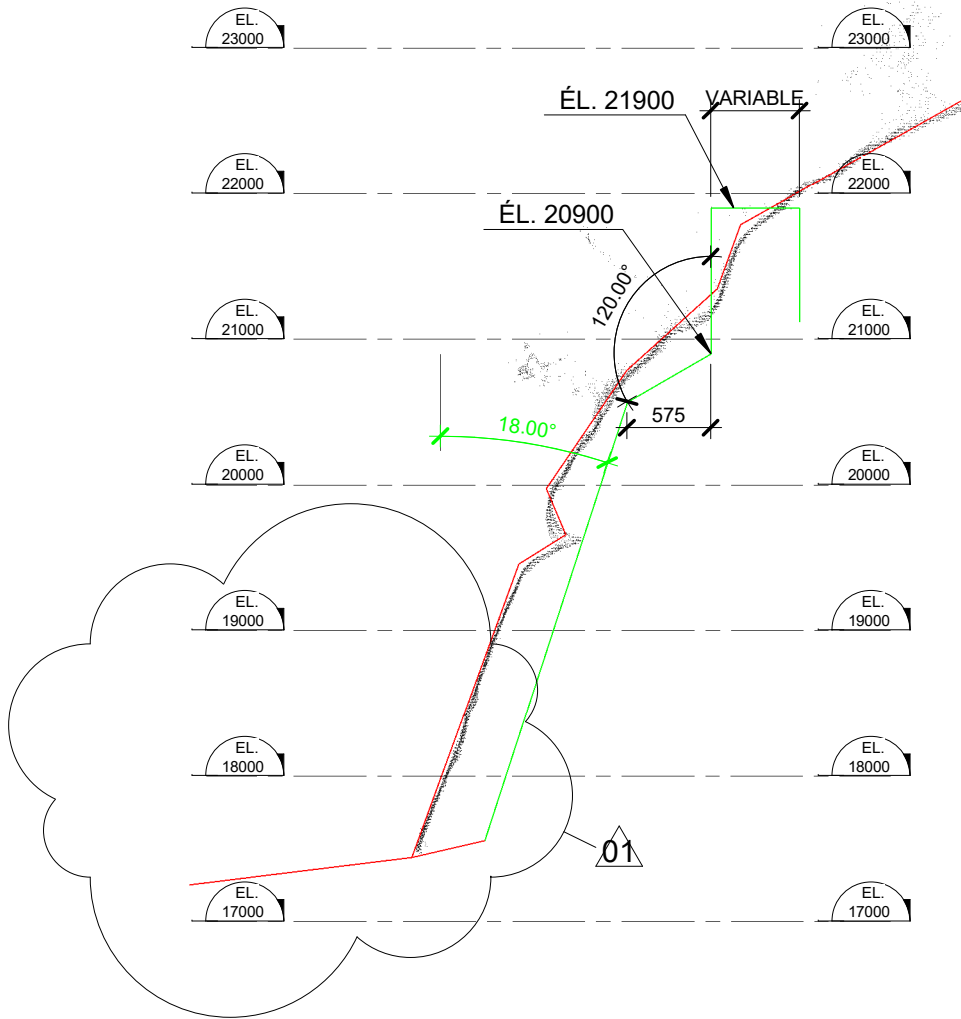
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Travaux publics et Services gouvernementaux Canada Direction générale des biens immobiliers Région du Québec	Public Works and Government Services Canada Real Property branch Quebec region	Projet/Project RÉFECTION DES MURS DU CANAL-DE-LACHINE BIEF 4-SECTION 14 À 17 REHABILITATION OF THE LACHINE CANAL WALLS REACH 4, SECTORS 14 TO 17		Titre du dessin/ Drawing title: COUPES TRANSVERSALES CROSS SECTIONS	
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RÉFECTION DES MURS DU CANAL-DE-LACHINE
BIEF 4-SECTION 14 À 17
REHABILITATION OF THE LACHINE CANAL
WALLS REACH 4, SECTORS 14 TO 17

conçu designed
par/ by: B. Lariviere, Ing. date: 2018-08-15

dessiné drawn
par/ by: M. Vincent date: 2018-08-15

révisions:
01

échelle/ scale:
1 : 50

Titre du Drawing
dessin/ title:
COUPES TRANSVERSALES
CROSS SECTIONS

approuvé approved
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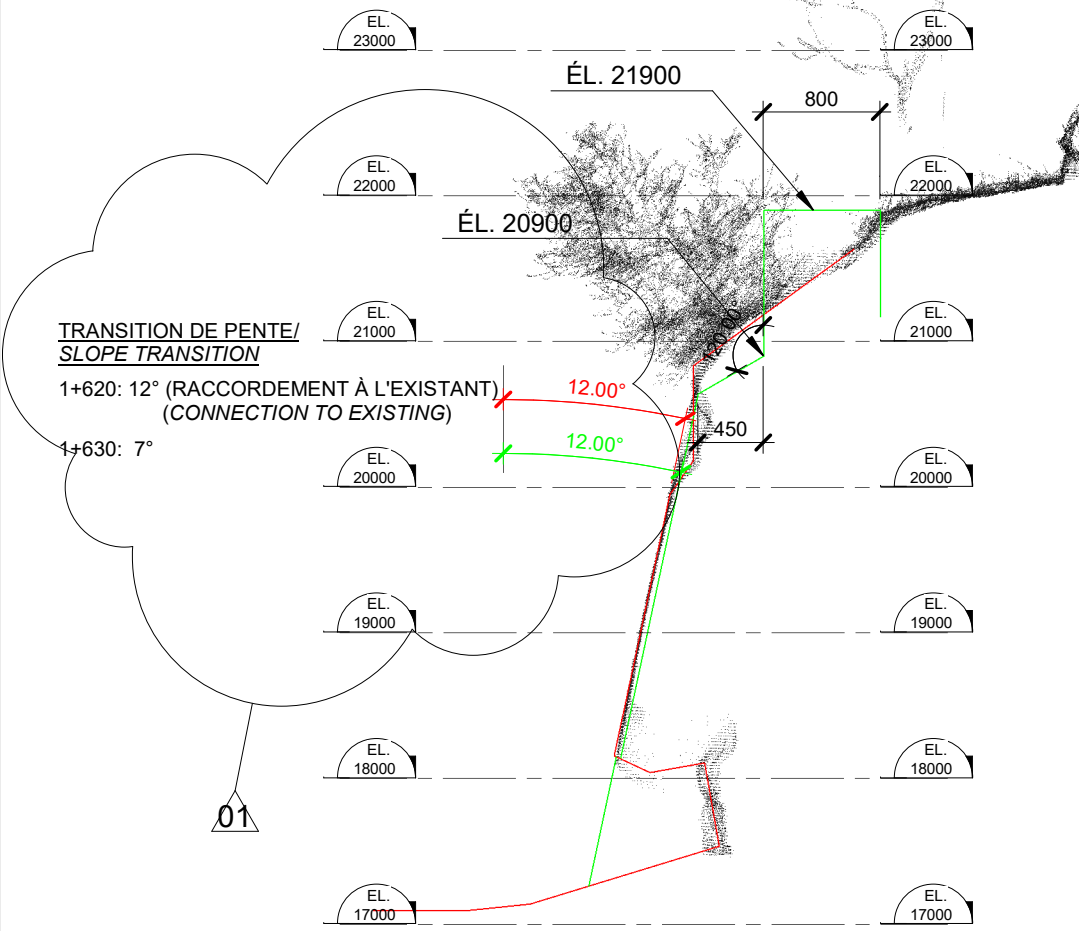
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AGENCE PARCS CANADA (APC)
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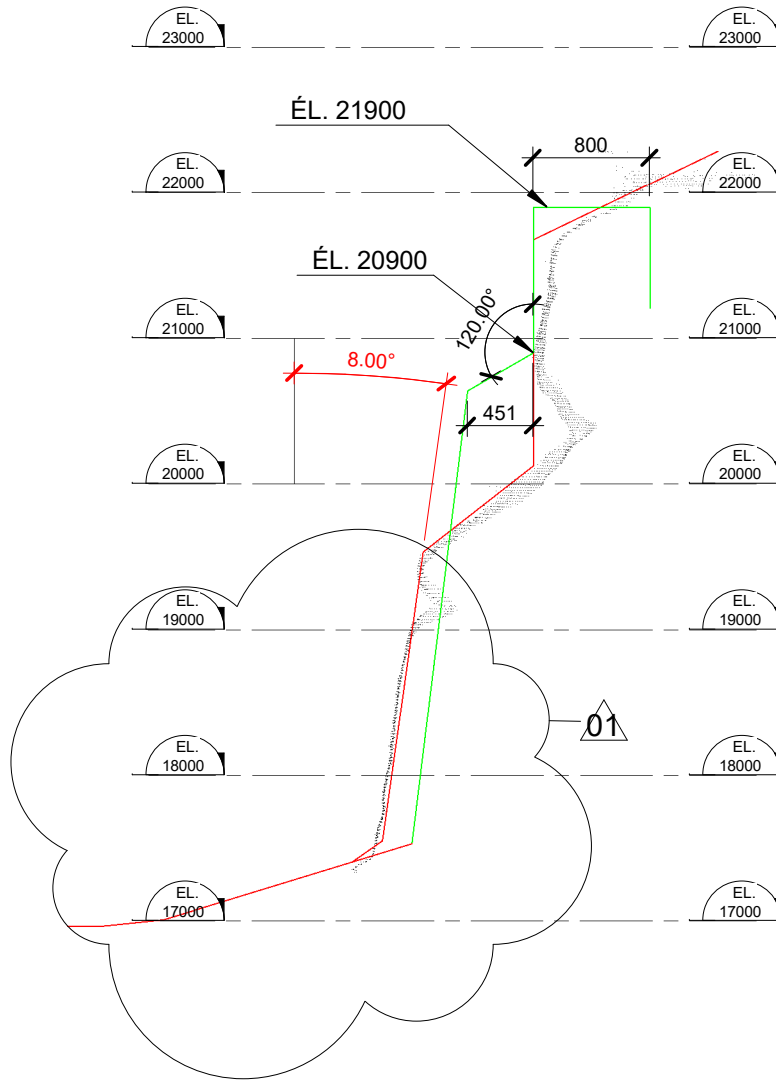
— PROFIL EXISTANT
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Travaux publics et Services gouvernementaux Canada Direction générale des biens immobiliers Région du Québec	Public Works and Government Services Canada Real Property branch Quebec region	Projet/Project RÉFECTION DES MURS DU CANAL-DE-LACHINE BIEF 4-SECTION 14 À 17 REHABILITATION OF THE LACHINE CANAL WALLS REACH 4, SECTORS 14 TO 17		Titre du dessin/ Drawing title: COUPES TRANSVERSALES CROSS SECTIONS	
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		révisions: 01	échelle/ scale: 1 : 50		nom du file fichier/ name 1+690

Item	Description	Quantity	Measuring Unit	Unit Price (\$)	Total (\$)
GENERAL CONDITIONS OF CONTRACTOR					
1.4.1	Site supervision office and field lab	1	Global		
1.4.2	Worksite organization	1	Global		
1.4.3	Temporary traffic maintenance and temporary signaling	1	Global		
1.4.4	Environment protection plan	1	Global		
1.4.5	Environmental protection	1	Global		
1.4.6	Complementary characterization of soils and management plan of soils and contaminated materials	1	Global		
SUB TOTAL – GENERAL CONDITIONS OF CONTRACTOR					
WALL SECTOR 14					
Concrete repair work without extra thickness (facing)					
14.5.1	Partial demolition, transport and disposal of concrete to be repaired (facing)	1900	m ²		
14.5.2	Supply and placement of concrete (cast-in-place or shotcrete) for repair without extra thickness (facing)	750¹	m ³		
Concrete repair work without extra thickness (crowning)					
14.6.1	Partial demolition, transport and disposal of concrete to be repaired (crowning)	1750	m ²		
14.6.2	Supply and placement of cast-in-place concrete for repair without extra thickness (crowning)	275	m ³		
Complete reconstruction of the crowning					
14.7.1	Demolition, transport and disposal of concrete (crowning)	40	m ³		
14.7.2	Supply and placement of cast-in-place concrete (crowning)	60	m ³		
Metal works					
14.8.1	Rehabilitation and reinstallation of existing ancestral bollards to recover or rehabilitate in place	19	Unit		
14.8.2	Supply and installation of the new vintage ladders	-	-	-	-
14.8.2.1	<i>2 bars ladders group</i>	41	Unit		
14.8.2.2	<i>3 bars ladders group</i>	7	Unit		
14.8.2.3	<i>5 bars ladders group</i>	1	Unit		
14.8.3	Repair of damaged ancestral bollards	2	Unit		
Civil works					
14.9.1	Clearing/grubbing	3800	m ²		

Item	Description	Quantity	Measuring Unit	Unit Price (\$)	Total (\$)
14.9.2	Manual removal of vegetation growing on crowning walls or retaining walls	1	Global		
14.9.3	Isolated trees cutting and grubbing	-	-		
14.9.3.1	<i>Diameter 150mm to 300mm, including waste management</i>	90	Unit		
14.9.3.2	<i>Diameter 300mm to 450mm, including waste management</i>	14	Unit		
14.9.3.3	<i>Diameter >450mm, including waste management</i>	5	Unit		
14.9.4	Excavation, transport, stockpiling (if required)	1	Global		
14.1095	Supplements for disposal and off-site elimination of cut material and contaminated material	-	-		
14.9.5.1	<i>Supplement for disposal and off-site elimination of cut materials with concentration of contaminants, after characterization, in the A-B range</i>	40¹	m.t.		
14.9.5.2	<i>Supplement for disposal and off-site elimination of cut materials with concentration of contaminants, after characterization, in the B-C range</i>	670¹	m.t.		
14.9.5.3	<i>Supplement for disposal and off-site elimination of cut materials with concentration of contaminants, after characterization, superior to C and lower than the RESC limit</i>	150¹	m.t.		
14.9.5.5	<i>Supplement for disposal and off-site elimination of large stones, rock or boulders with a volume greater than 1 cubic meter.</i>	25	m ³		
14.9.6	Supply, transport and placement of controlled backfill material	-	-		
14.9.6.2	<i>Supply, transport and placement of controlled backfill MG20b¹ material</i>	425¹	m ³		
14.9.7	Supply, transport and placement of drainage system behind the new walls	1	Global		
14.9.8	Topsoil and hydroseeding	1	Global		
14.9.9	Tree planting	30	Unit		
Miscellaneous Equipment					
14.10.1	Removal, reclamation and reinstallation of existing equipments	1	Global		
14.10.2	Removal of equipment on adjacent lots	-	-	-	-
14.10.2.1	Moving materials and containers lot 2 331 574	1	Global		
14.10.2.2	Moving materials and containers lot 2 331 583	1	Global		
14.10.3	Concrete slab demolition and reconstruction	250	m ²		
14.10.4	Steel fence demolition and reconstruction	170	m		

Item	Description	Quantity	Measuring Unit	Unit Price (\$)	Total (\$)
14.10.5	Chain link fence demolition and reconstruction	20	m		
SUB TOTAL – WALL SECTOR 14					

WALL SECTOR 15					
Concrete repair work without extra thickness (facing)					
15.5.1	Partial demolition, transport and disposal of concrete to be repaired (facing)	300	m ²		
15.5.2	Supply and placement of concrete (cast-in-place or shotcrete) for repair without extra thickness (facing)	65	m ³		
Concrete repair work without extra thickness (crowning)					
15.6.1	Partial demolition, transport and disposal of concrete to be repaired (crowning)	80	m ²		
15.6.2	Supply and placement of cast-in-place concrete for repair without extra thickness (crowning)	15	m ³		
Complete reconstruction of the crowning					
15.7.1	Demolition, transport and disposal of concrete (crowning)	140	m ³		
15.7.2	Supply and placement of cast-in-place concrete (crowning)	200	m ³		
Metal works					
15.8.1	Rehabilitation and reinstallation of existing ancestral bollards to recover or rehabilitate in place	4	Unit		
15.8.2	Supply and installation of the new vintage ladders	-	-	-	-
15.8.2.2	<i>3 bars ladders group</i>	4	Unit		
15.8.2.3	<i>5 bars ladders group</i>	5	Unit		
15.8.3	Repair of damaged ancestral bollards	3	Unit		
Civil works					
15.9.1	Clearing/grubbing	450	m ²		
15.9.2	Manual removal of vegetation growing on crowning walls or retaining walls	1	Global		
15.9.3	Isolated trees cutting	-	-		
15.9.3.1	<i>Diameter 150mm to 300mm, including waste management</i>	6	Unit		
15.9.3.2	<i>Diameter 300mm to 450mm, including waste management</i>	1	Unit		
15.9.4	Excavation, transport, stockpiling (if required)	1	Global		

Item	Description	Quantity	Measuring Unit	Unit Price (\$)	Total (\$)
15.9.5	Supplements for disposal and off-site elimination of cut material and contaminated material	-	-		
15.9.5.1	<i>Supplement for disposal and off-site elimination of cut materials with concentration of contaminants, after characterization, in the A-B range</i>	100	m.t.		
15.9.5.2	<i>Supplement for disposal and off-site elimination of cut materials with concentration of contaminants, after characterization, in the B-C range</i>	1400¹	m.t.		
15.9.5.5	<i>Supplement for disposal and off-site elimination of large stones, rock or boulders with a volume greater than 1 cubic meter.</i>	10	m ³		
15.9.6	Supply, transport and placement of controlled backfill material	-	-	-	-
15.9.6.1	<i>Supply, transport and placement of controlled backfill MG112 material</i>	600¹	m ³		
15.9.6.2	<i>Supply, transport and placement of controlled backfill MG20b¹ material</i>	200¹	m ³		
15.9.7	Supply, transport and placement of drainage system behind the new walls	1	Global		
15.9.8	Topsoil and hydroseeding	1	Global		
15.9.9	Tree planting	2	Unit		
Miscellaneous Equipment					
15.10.1¹	Removal, reclamation and reinstallation of existing equipments¹	1	Global		
SUB-TOTAL – WALL SECTOR 15					

WALL SECTOR 16					
Concrete repair work without extra thickness (facing)					
16.5.1	Partial demolition, transport and disposal of concrete to be repaired (facing)	100	m ²		
16.5.2	Supply and placement of concrete (cast-in-place or shotcrete) for repair without extra thickness (facing)	115	m ³		
Concrete repair work without extra thickness (crowning)					
16.6.1	Partial demolition, transport and disposal of concrete to be repaired (crowning)	70	m ²		
16.6.2	Supply and placement of cast-in-place concrete for repair without extra thickness (crowning)	12	m ³		
Metal works					
16.8.1	Rehabilitation and reinstallation of existing ancestral bollards to recover or rehabilitate in place	1	Unit		

Item	Description	Quantity	Measuring Unit	Unit Price (\$)	Total (\$)
16.8.2	Supply and installation of the new vintage ladders	-	--	-	-
16.8.2.1	<i>2 bars ladders</i>	1	Unit		
Civil works					
16.9.1	Clearing/grubbing	180	m ²		
16.9.2	Manual removal of vegetation growing on crowning walls or retaining walls	1	Global		
16.9.4	Excavation, transport, stockpiling (if required)	1	Global		
16.9.5	Supplements for disposal and off-site elimination of cut material and contaminated material	-	-	-	-
16.9.5.1	<i>Supplement for disposal and off-site elimination of cut materials with concentration of contaminants, after characterization, in the A-B range</i>	40	m.t.		
16.9.5.2	<i>Supplement for disposal and off-site elimination of cut materials with concentration of contaminants, after characterization, in the B-C range</i>	40	m.t.		
16.9.5.5	<i>Supplement for disposal and off-site elimination of large stones, rock or boulders with a volume greater than 1 cubic meter.</i>	2	m ³		
16.9.6	Supply, transport and placement of controlled backfill material	-	-		
16.9.6.2	<i>Supply, transport and placement of controlled backfill MG20b¹ material</i>	10	m ³		
16.9.8	Topsoil and hydroseeding	1	Global		
16.9.9	Tree planting	3	Unit		
SUB-TOTAL – WALL TYPE 16					

WALL TYPE 17					
Concrete repair work without extra thickness (facing)					
17.5.1	Partial demolition, transport and disposal of concrete to be repaired (facing)	2450	m ²		
17.5.2	Supply and placement of concrete (cast-in-place or shotcrete) for repair without extra thickness (facing)	700	m ³		
Concrete repair work without extra thickness (crowning)					
17.6.1	Partial demolition, transport and disposal of concrete to be repaired (crowning)	1800	m ²		

Item	Description	Quantity	Measuring Unit	Unit Price (\$)	Total (\$)
17.6.2	Supply and placement of cast-in-place concrete for repair without extra thickness (crowning)	240	m ³		
Complete reconstruction of the crowning					
17.7.1	Demolition, transport and disposal of concrete (crowning)	40	m ³		
17.7.2	Supply and placement of cast-in-place concrete (crowning)	60	m ³		
Metal works					
17.8.1	Rehabilitation and reinstallation of existing ancestral bollards to recover or rehabilitate in place	12	Unit		
17.8.2	Supply and installation of the new vintage ladders	-	-		
17.8.2.1	<i>2 bars ladders</i>	7	Unit		
17.8.2.2	<i>3 bars ladders</i>	10	Unit		
17.8.3	Repair of damaged ancestral bollards	1	Unit		
Civil works					
17.9.1	Clearing/grubbing	4700	m ²		
17.9.2	Manual removal of vegetation growing on crowning walls or retaining walls	1	Global		
17.9.3	Isolated trees cutting	-	-		
17.9.3.1	<i>Diameter 150mm to 300mm, including waste management</i>	126	Unit		
17.9.3.2	<i>Diameter 300mm to 450mm, including waste management</i>	32	Unit		
17.9.3.3	<i>Diameter >450mm, including waste management</i>	18	Unit		
17.9.4	Excavation, transport, stockpiling (if required)	1	Global		
17.9.5	Supplements for disposal and off-site elimination of cut material and contaminated material	-	-		
17.9.5.1	<i>Supplement for disposal and off-site elimination of cut materials with concentration of contaminants, after characterization, in the A-B range</i>	800	m.t.		
17.9.5.2	<i>Supplement for disposal and off-site elimination of cut materials with concentration of contaminants, after characterization, in the B-C range</i>	2100¹	m.t.		
17.9.5.3	<i>Supplement for disposal and off-site elimination of cut materials with concentration of contaminants, after characterization, superior to C and lower than the RESC limit</i>	3200¹	m.t.		

Item	Description	Quantity	Measuring Unit	Unit Price (\$)	Total (\$)
17.9.5.4	<i>Supplement for disposal and off-site elimination of cut materials with concentration of contaminants, after characterization, superior to the RESC limit</i>	780 ¹	m.t.		
17.9.5.5	<i>Supplement for disposal and off-site elimination of large stones, rock or boulders with a volume greater than 1 cubic meter.</i>	40	m ³		
17.9.6	Supply, transport and placement of controlled backfill material	-	-		
17.9.6.2	<i>Supply, transport and placement of controlled backfill MG20b¹ material</i>	2800 ¹	m ³		
17.9.7	Supply, transport and placement of drainage system behind the new walls	1	Global		
17.9.8	Topsoil and hydroseeding	1	Global		
17.9.9	Tree planting	40	Unit		
Miscellaneous Equipment					
17.10.1	Removal, reclamation and reinstallation of existing equipments	1	Global		
17.10.5	Chain link fence demolition and reconstruction	180	m		
SUB-TOTAL – WALL SECTOR 17					
TOTAL COST BEFORE TAXES					

¹ ADDENDA #1