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. EXTENTION OF THE BID'S CLOSING DATE

1.1 The closing date of bid's invitation is postponed to Wednesday, July 5th, 2017 at 2 p.m. HAE.

2. SA06 WORK DURATION

2.1 <u>Replace the article Sa06 work duration by the following:</u>

SA06 WORK DURATION

Contractor must perform and complete work at the latest 17 weeks after reception of award letter. Construction holidays, from July 23, 2017 to August 5, 2017, are excluded from the work duration.

3. PLANS

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

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

Modifications on plans, Adding sheets 25 à 28 - Annex :

- Sheet 25 Addition of additional information to illustrate water level and vertical clearances.
- Sheets 26 à 28 Addition of 3D survey of various sectors. See plans in annex of this addenda

3.2 <u>Modifications on plans, sheet 08 is cancelled and replaced by sheet 01 revision 01:</u>

Mobilization zone are added to the plans. See plans in annex. of this addenda

3.3 <u>Modifications on plans, Adding sheets– Orthophotos :</u>

Addition of orthophotos indicating the limits of properties of the APC as well as zones of mobilization. See plans in annex of this addenda.

N/Ref. : CLAC-1455-06

3.4 <u>Precision on curb located on plan sheet 17:</u>

Demolition of the curb

For the purposes of demolition take into consideration that the curb to be demolished is armed.

The demolition of the crowning wall type 2B repair (below the level of the curb) is include in the quantities of post 3.1 Cast -in-Place Concrete; Type XIV-R or XIV-S (self-consolidating).

Post 3.2 Demolition and reconstruction of wheelblockers (B3-S-01-A) deals exclusively of the demolition of the curb above the repair.

Anchors of the curbs

The 10M anchors of the curb shown on the plan are paid per unit and include item 3.4 Chemical anchor (galvanized steel). Steel Galvanized of the wheel chase shown on the plan is paid per kg and included in item 3.3 Reinforcing Steel Galvanized.

Gutters (detail 24 of sheet 17)

Rebuilt of gutters have to be similar to existing conditions. Minimally ten (10) gutters will need to be rebuilt.

3.5 <u>Precision on sheet 23 Maintenance of pedestrian and cycling traffic:</u>

Dimension of the temporary to be put in place for the cycling path have to be in accordance with the annex F of the list of signs post uses for cycling path of chapter 7 of the norm V «-Signalisation routière-volume 1, 2 et 3 des ouvrages routiers. » published by «les publications du Quebec. »

3.6 <u>Precision on repair type 2B of sheets 16 and 17:</u>

The demolition of the crowning wall type 2B (located below the curb) is include in the item 3.1 Cast -in-Place Concrete; Type XIV-R or XIV-S (self-consolidating)

Repairs of type 2A and 2B are repairs carried out continuously over the entire length of the sections covered by these types of repairs.

3.7 <u>General modifications of the project number (894-06 replace by 1455-06):</u>

For all plans, project number 894-06 will be replaced by 1455-06 on construction documents.

3.8 Modifications of title «repair» on plans:

For all plans, « Type 2 repair » will be replaced by « Type 2 Replacement » on construction plans.

N/Ref. : CLAC-1455-06

4. SPECIFICATIONS

4.1 <u>Precision of section 0 10 10 Archaeological monitoring:</u>

Consider that an archaeologist will be present at the site as mentioned in section 0 10 10 Archaeological monitoring.

4.2 Adding article 1.3.1.1.11 of section 01 11 00 Summary of work :

Add this article, « 1.3.1.1.11 A navigation corridor will have to be put in place on the encroachment line in the canal (ref plan 8#24) Contractor must install navigation buoy at the end of each work zone and an additional on in the middle.

The navigation buoys must be all green on the port (left) side when moving upstream direction and red on the starboard (right) side when moving upstream direction. In addition to the navigation buoys, security buoys (yellow) must be put in place to maintain a cable up flow. Installation of buoys must be in accordance with Transport Canada regulation

4.3 <u>Modifications of article 1.7.1.1 of section 01 11 00 Summary of work:</u>

Replace article 1.7.1.1 « The works under this contract including planning of banks, lands and paths used by the contractor must be completed 17 weeks after the receipt of the award letter.

The final demobilization must be completed ten (10) opening day after the acceptation by the owner of the declaration of substantial completion of works. »

By the following, « *The works under this contract including planning of banks, lands and paths used by the contractor must be completed 17 weeks after the receipt of the award letter.* Construction holidays, from July 23, 2017 to August 5, 2017, are excluded from the work duration.

The final demobilization must be completed ten (10) opening day after the acceptation by the owner of the declaration of substantial completion of works. »

4.4 Precision of article 1.9 of section 01 11 00 Summary of work:

<u>Railroad</u>

The presence of railroad flagman is not required. A minimum clearing of 5 meters must be permantely kept from railroad. The crossing of railroad is only allowed on the temporary crossing place as plan in specifications. An average of 7 trains a week with a passing time of 30 to 45 minutes are expected. The railroad belongs to the CN.

Navigation

Navigation for construction purpose must be restrained to the encroachment specify on plan 8. If the contractors need to use the canal for occasional transport purposes, a specific request and procedure of implementation will need to be address for approval. All transport request within the canal need to respect Transport Canada norms.

N/Ref. : CLAC-1455-06

4.5 Modifications of article 2.1.1.2.3 of section 01 29 00 payment procedures:

Replace article 2.1.1.2.3 « Access roads including the necessary deforestation, clearingup, removal of scrub, vines, dead wood, trees and shrub whose trunk diameter is less than 50 mm (measured from the diameter at chest height), 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. »

By the following, « 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. »

4.6 <u>Modifications of articles 2.1.5.1 et 2.1.5.1.1 of section 01 29 00 payment</u> procedures:

No modification

4.7 <u>Precision of article 2.1.6 of section 01 29 00 payment procedures:</u>

The guardrail must be removed, completely repainted, and put back in place. The rails are made of galvanised steal and the post are made of cast-iron. The paint does not contain lead.

4.8 <u>Precision of article 2.1.7 of section 01 29 00 payment procedures:</u>

This work involves the wire mesh fence at the East end of B3-N-18-D.

4.9 Modifications of article 2.2.7.2.9 et 2.3.5.2.6 à la section 01 29 00 paiement :

No modification

4.10 Modifications of articles 2.3.2.3.2 of section payment procedures:

Replace items 2.3.2.3.2 « Item 3.2 – Demolition and reconstruction of wheelblockers (B3-A-01A) » by the following « *Item 3.2 – Demolition and reconstruction of wheelblockers* (B3-S-01-A) »

4.11 <u>Modifications of the article 3.6.8 of section 31 23 33 Excavating, trenching and backfilling :</u>

Remplace the article 3.6.8 : « *Materials deemed unsuitable by the Department's laboratory will be replaced with Type 2 borrowing materials.* »

By the following : « *Materials deemed unsuitable by the Department's laboratory will be replaced with Type 1 Mg-20 borrowing materials.* »

N/Ref. : CLAC-1455-06

4.12 <u>Precision on workform ties</u>

For the special requirements of complete crowning walls replacement, formwork ties are not permitted in the concrete of the walls to retain the vertical walls of the formwork. The tie rods must be located above the formwork or on the soles and removed after installation. Reinforcement parts must be installed on the exterior of the formwork to ensure structural integrity.

For repair of the crowning walls workform ties are allowed.

5. TENDER FORM

5.1 Precision of article 1.5.4 Clearing of trees of more than 250 mm at DHP

Take into consideration that at least two (2) DPH trees of more than 500mm at DHP are located near the Garage Lapalme.

5.2 <u>Replacement of tender form:</u>

The tender form is cancelled and replace by the tender form revision 01. See tender on Annex.

6. **QUESTIONS FROM BIDDERS**

6.1 What is the type of concrete for the slab *(article 2.10 tender form)?:

The concrete for the slab need to have a minimum resistance of 1 Mpa. There is no specific type for this type of mix. For implementation purpose the mix should be able to be put in place by a concrete pump truck

6.2 <u>Do we have to put in place a 150mm or a 200 mm drain? The information seems</u> to be divergent between the plans and the bid form?

The drainage system to be place behind the wall must be 200mm. This item is paid in linear meter at the article 2.11.

A square 150 mm drain also need to be must be put in place through the new walls in accordance with the details of the plan 19. The payment of this portion is included in the article 2.6 of the bid form,

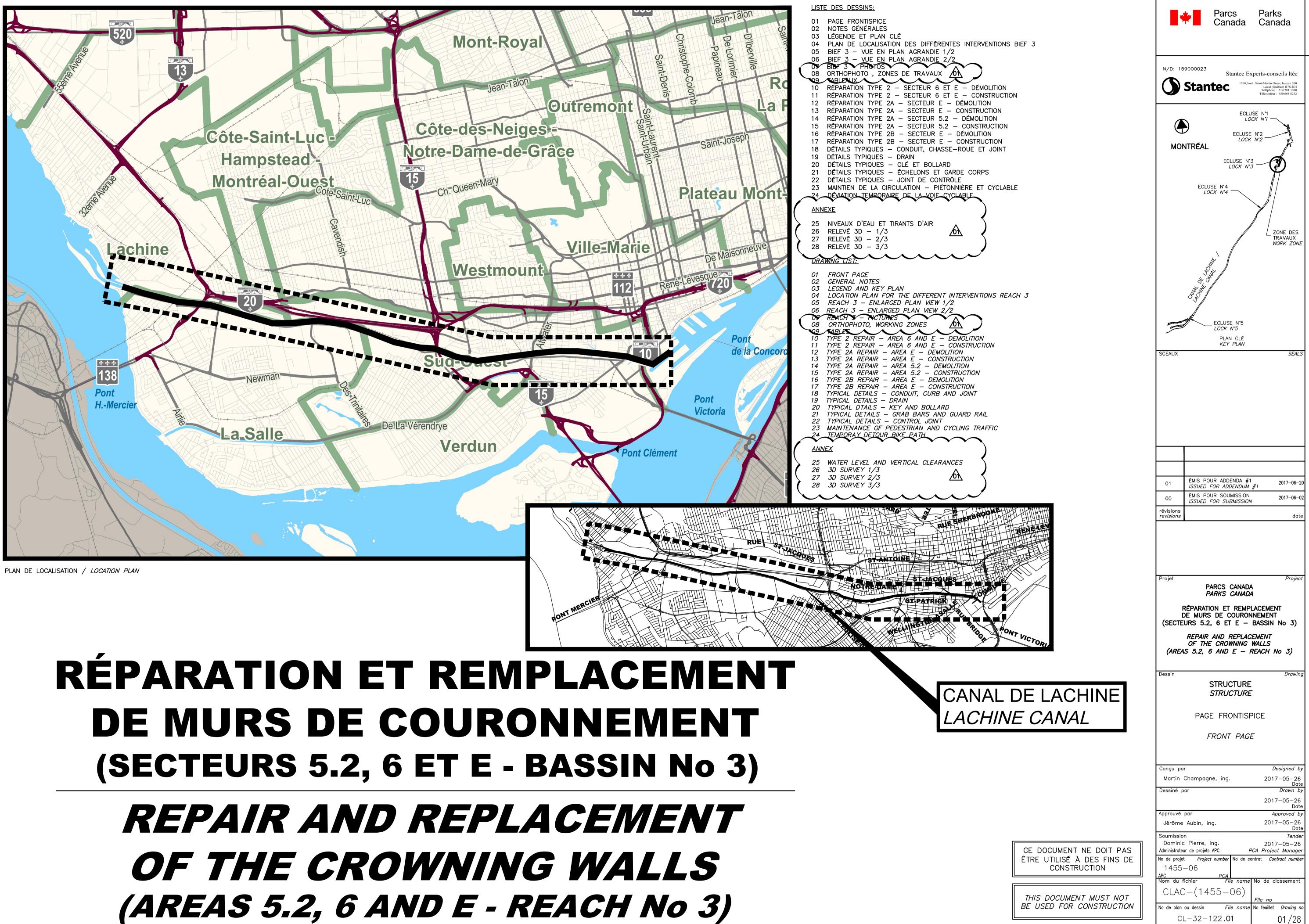
6.3 <u>Is a concrete truck allowed on the cycling path ? Are we allowed to close the</u> cycling path while the concrete is put in place? Should concrete work be planned during the night to avoir interference with the users ?

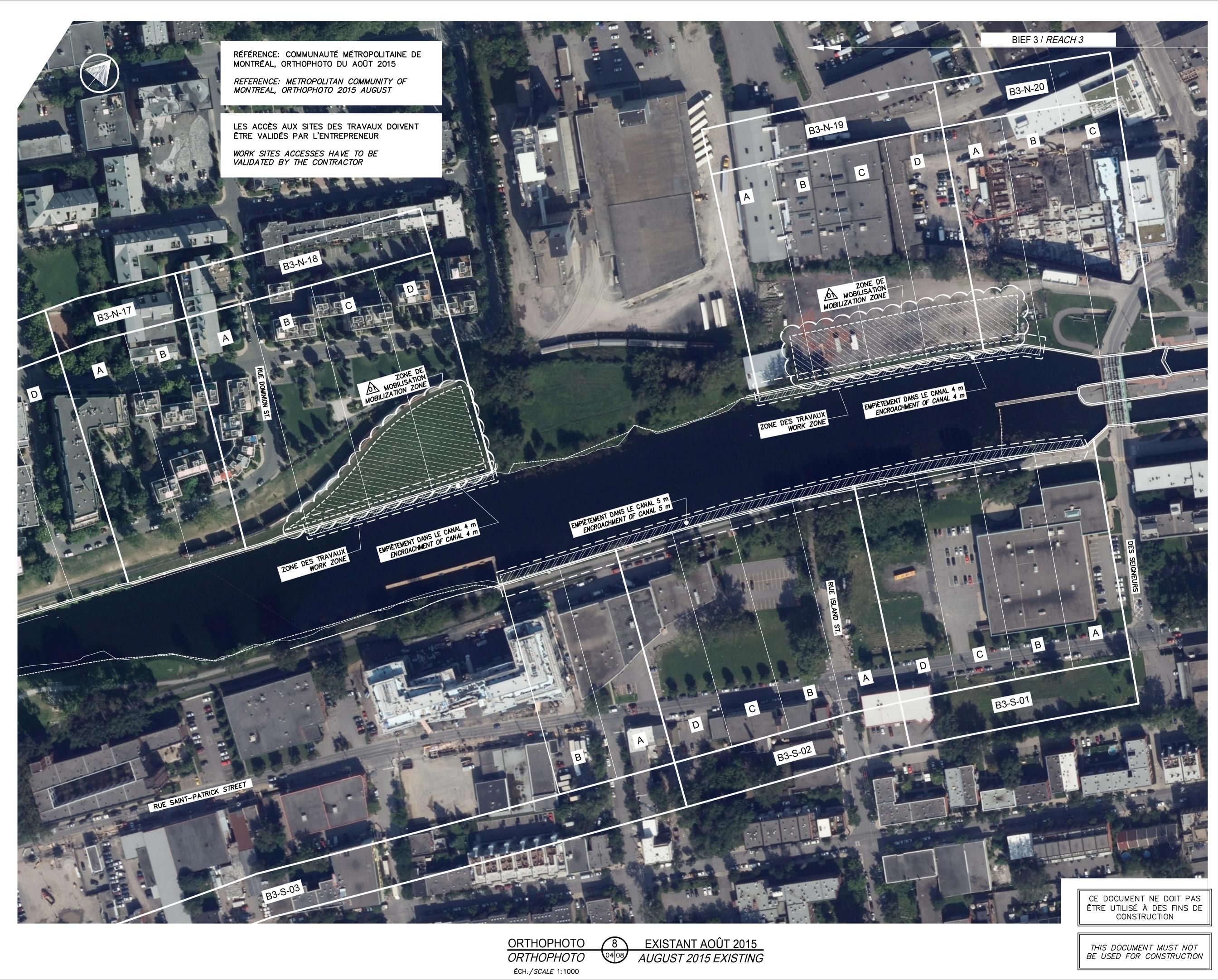
Heavy tuck such as concrete trucks are not allowed on the cycling path. Closing the cycling path is alos not allowed. In the event the contractor needs to put a piping system on the cycling path a temporary overpass allowing users to pass on the cycling path will need to be installed.

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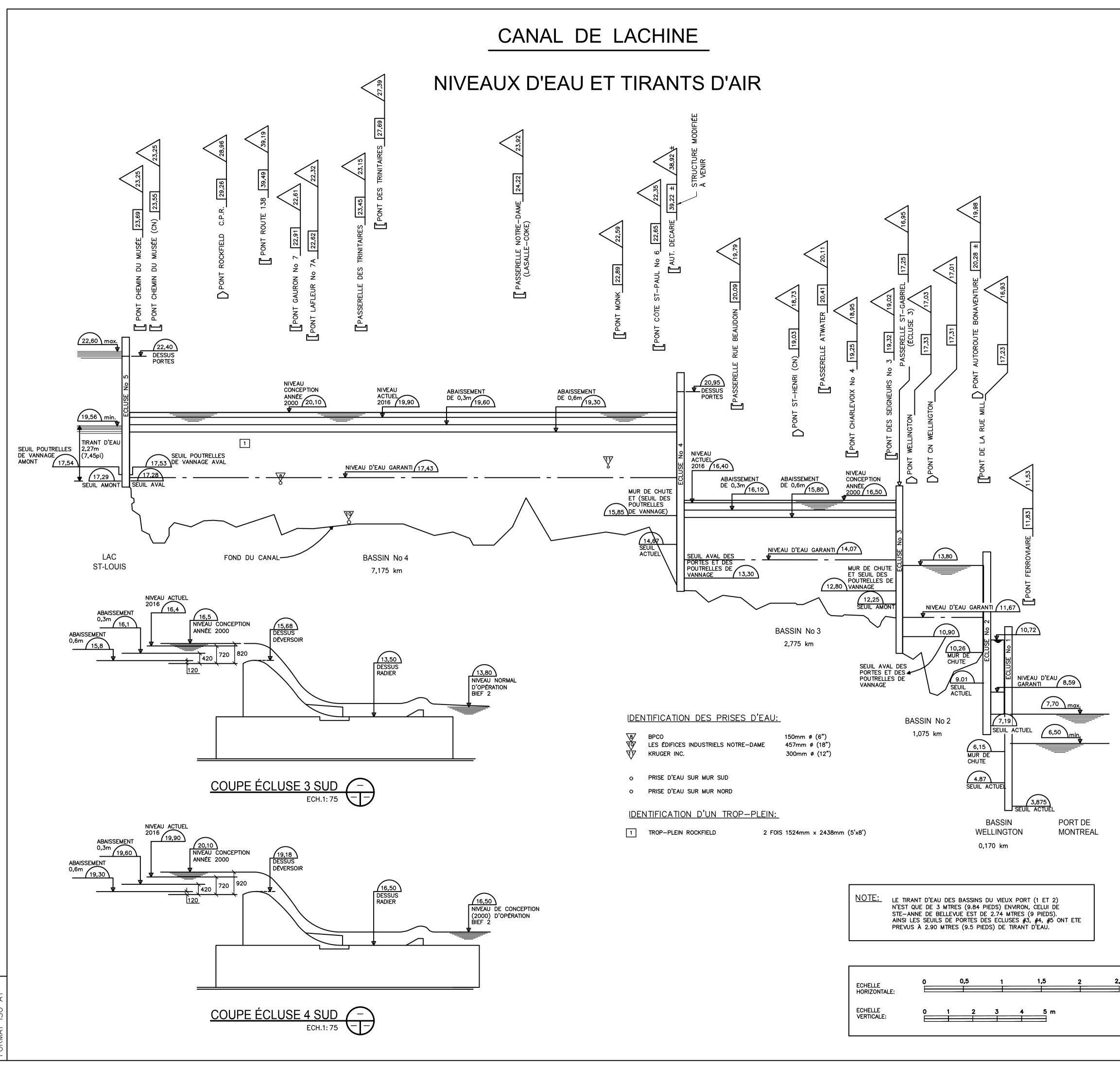
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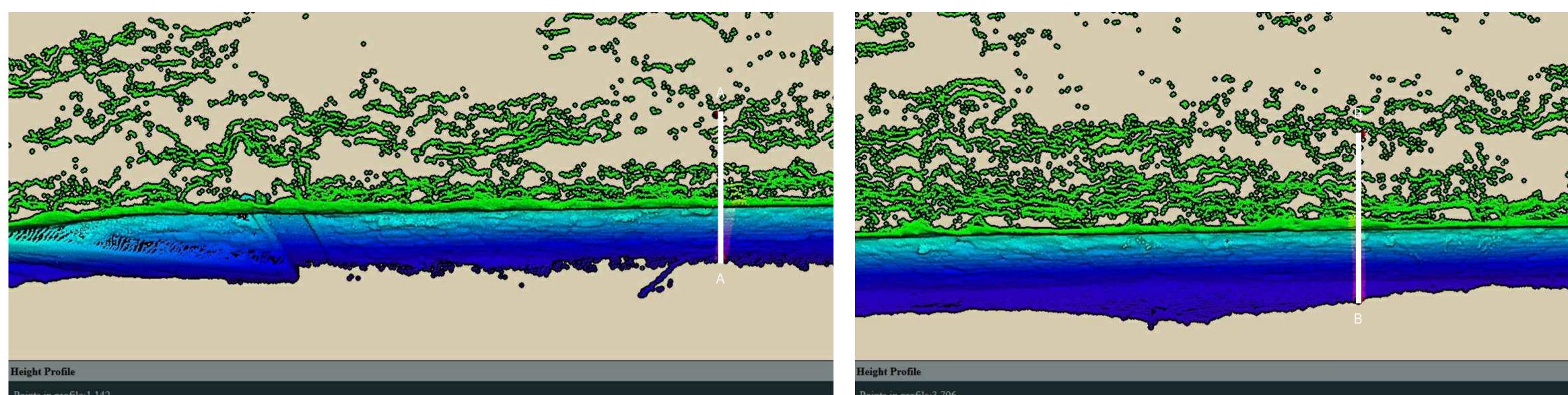
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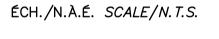
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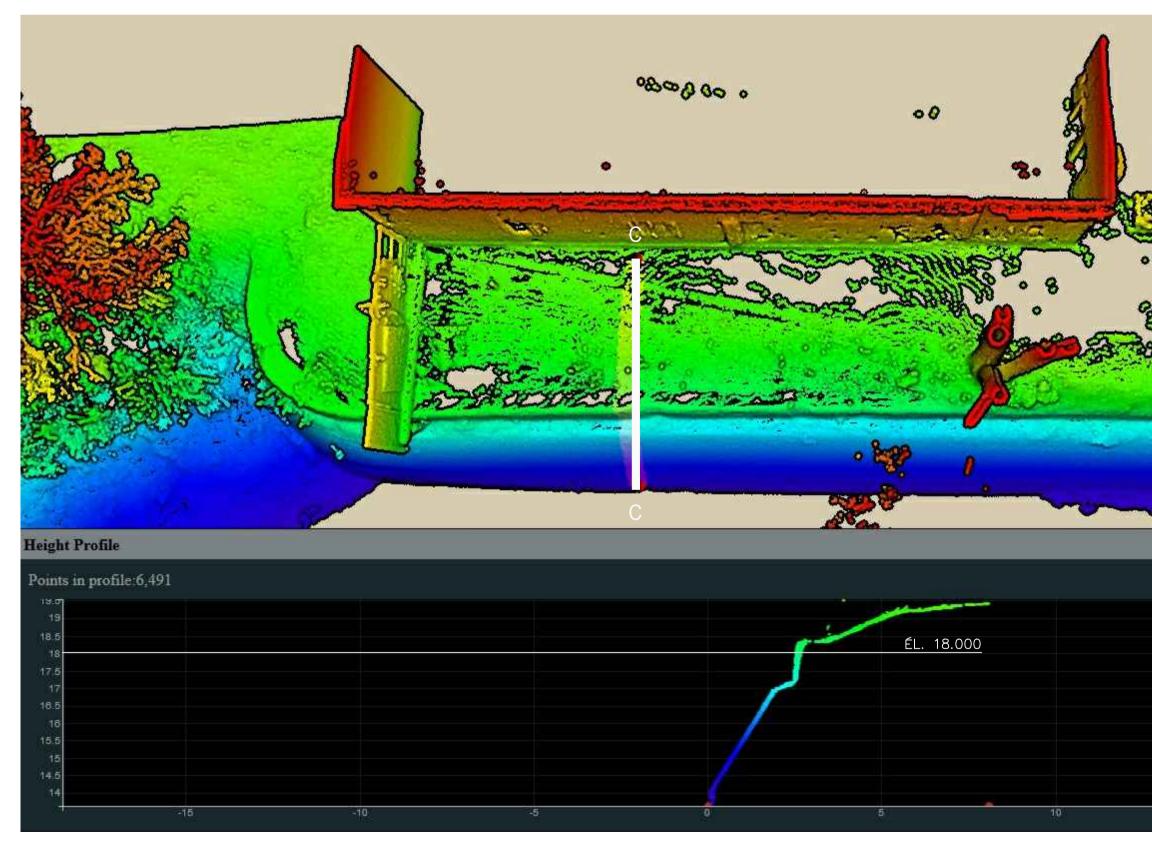
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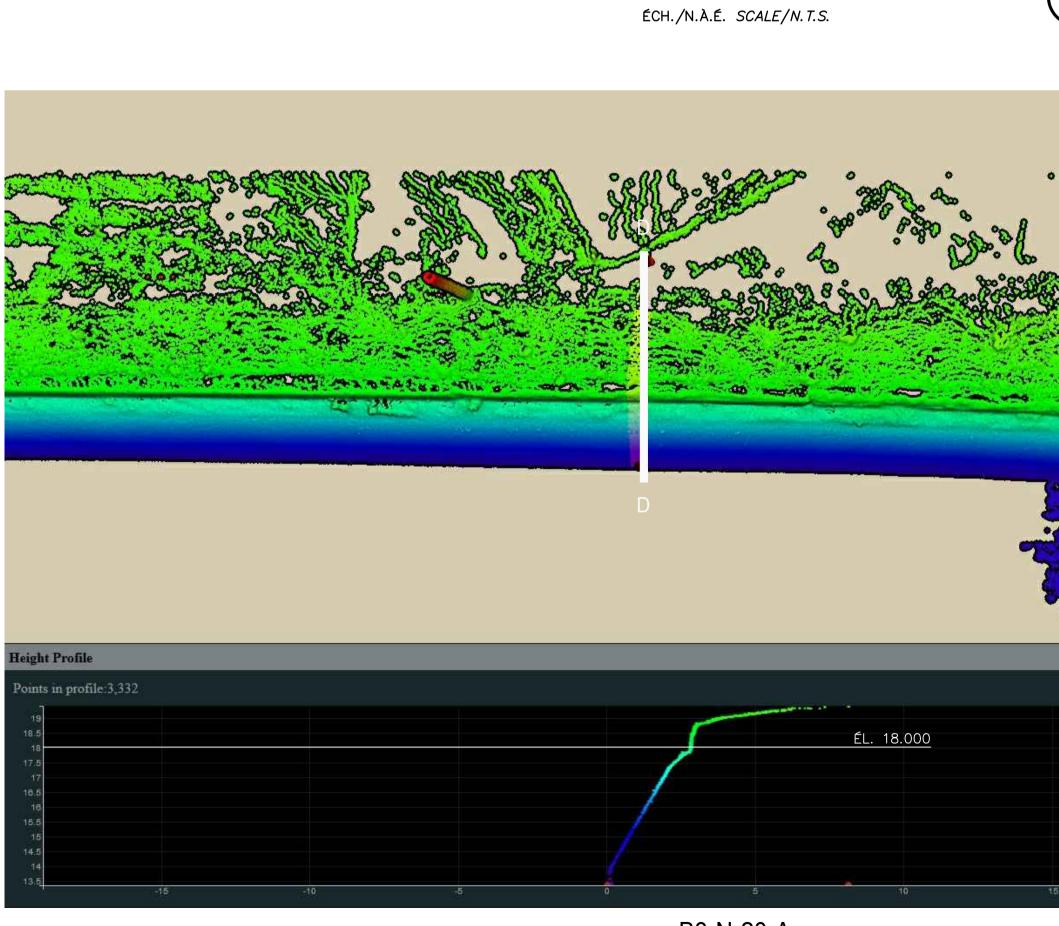


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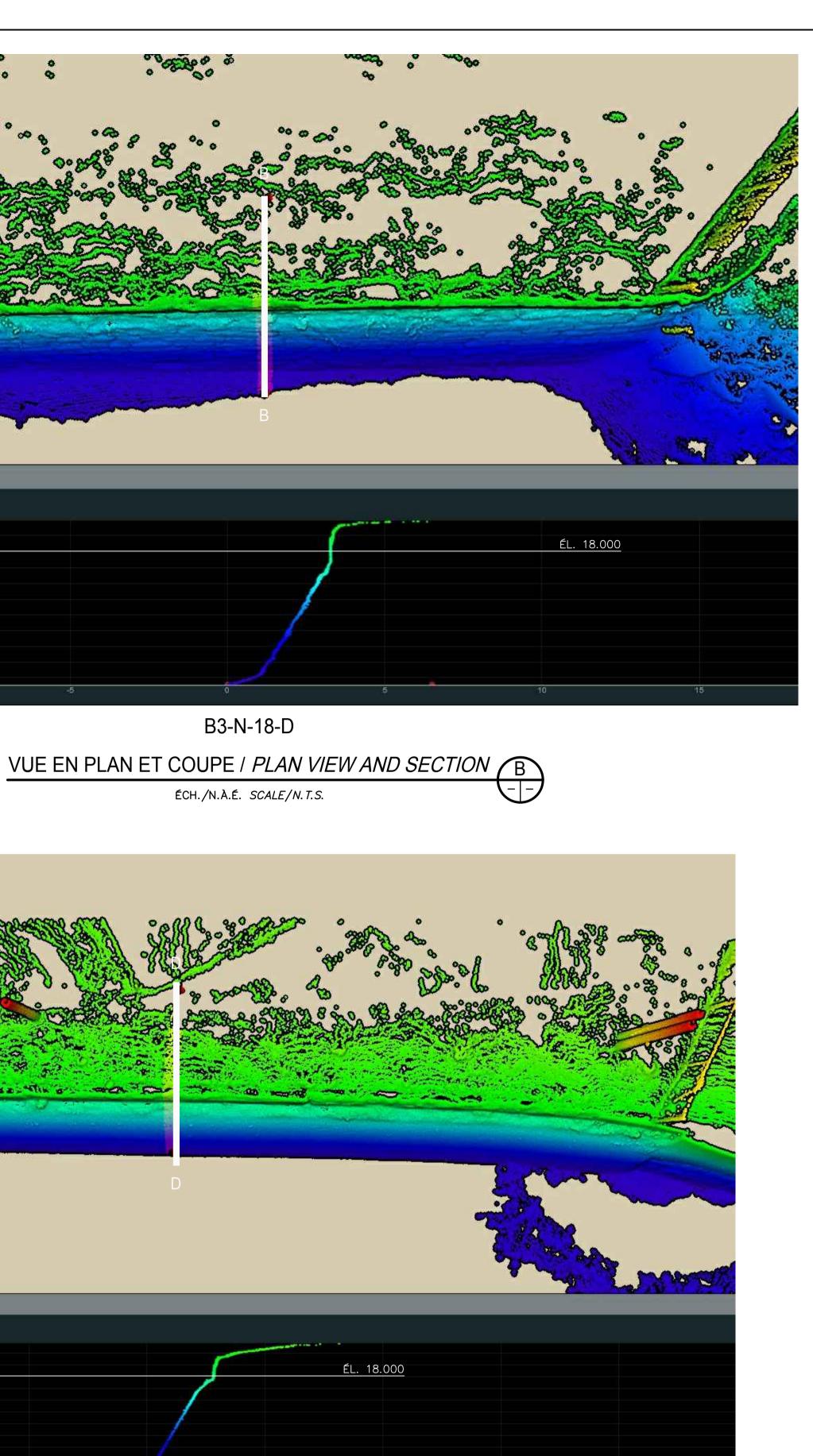


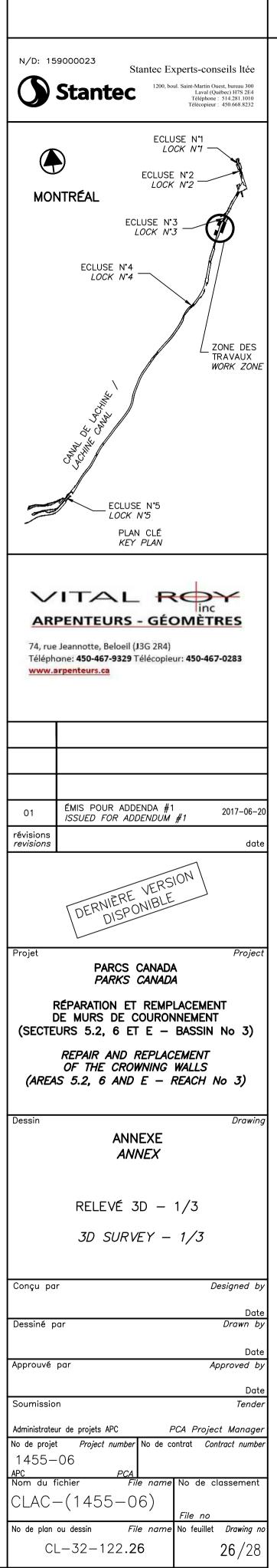
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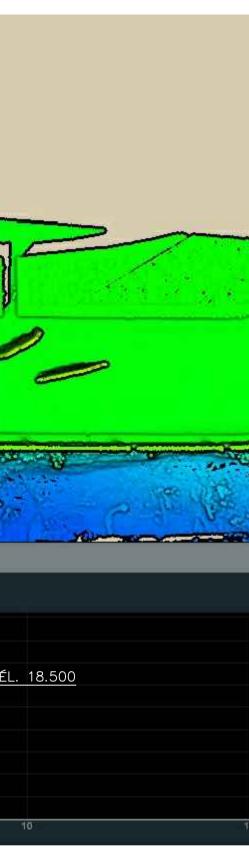
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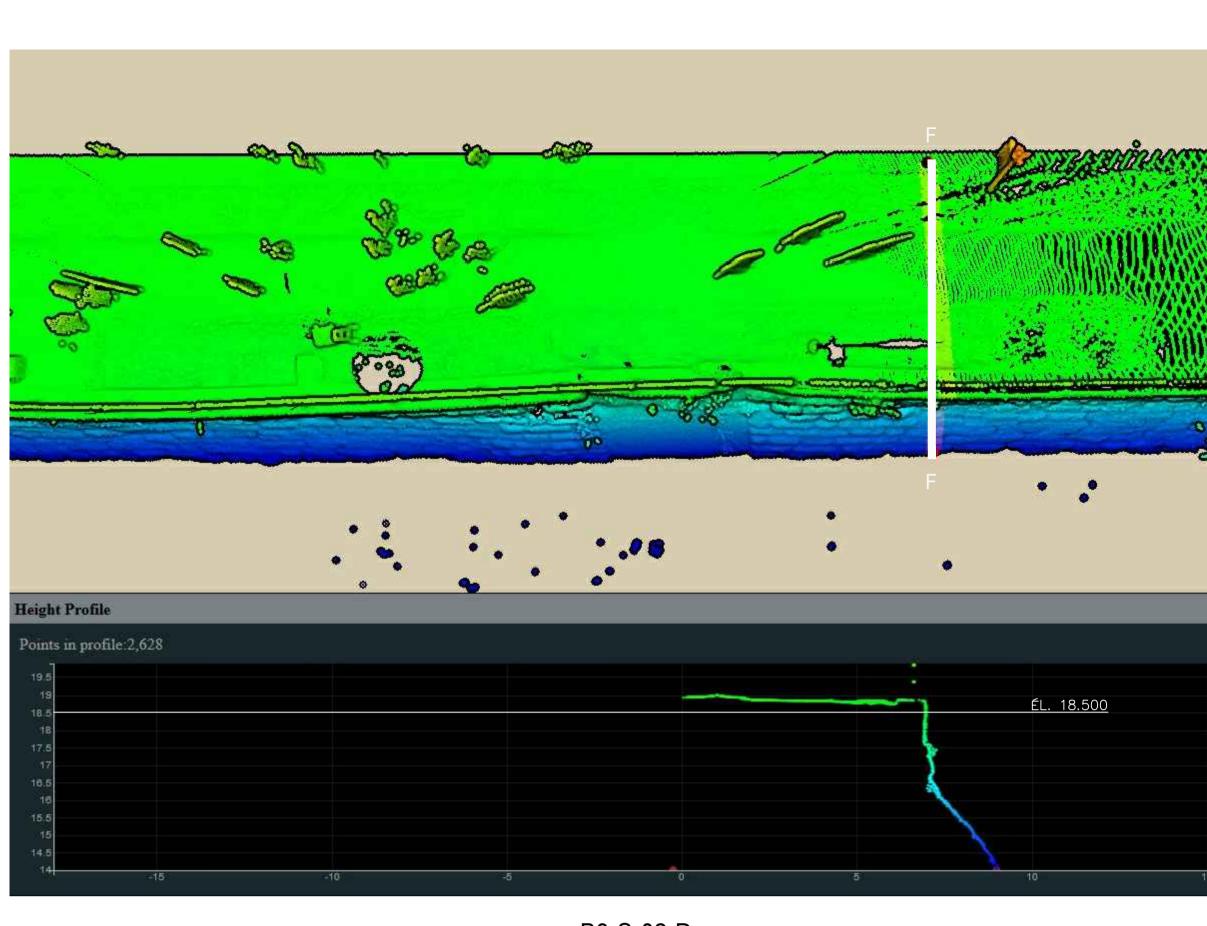
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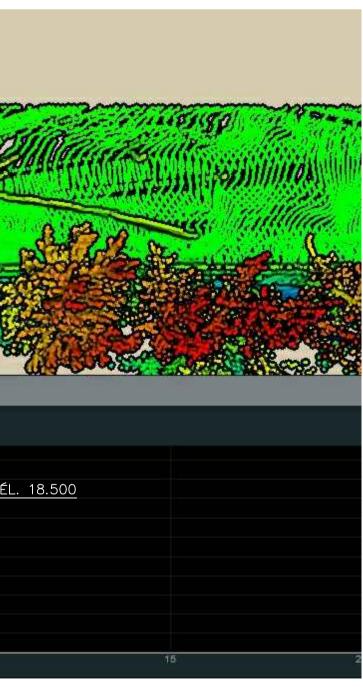




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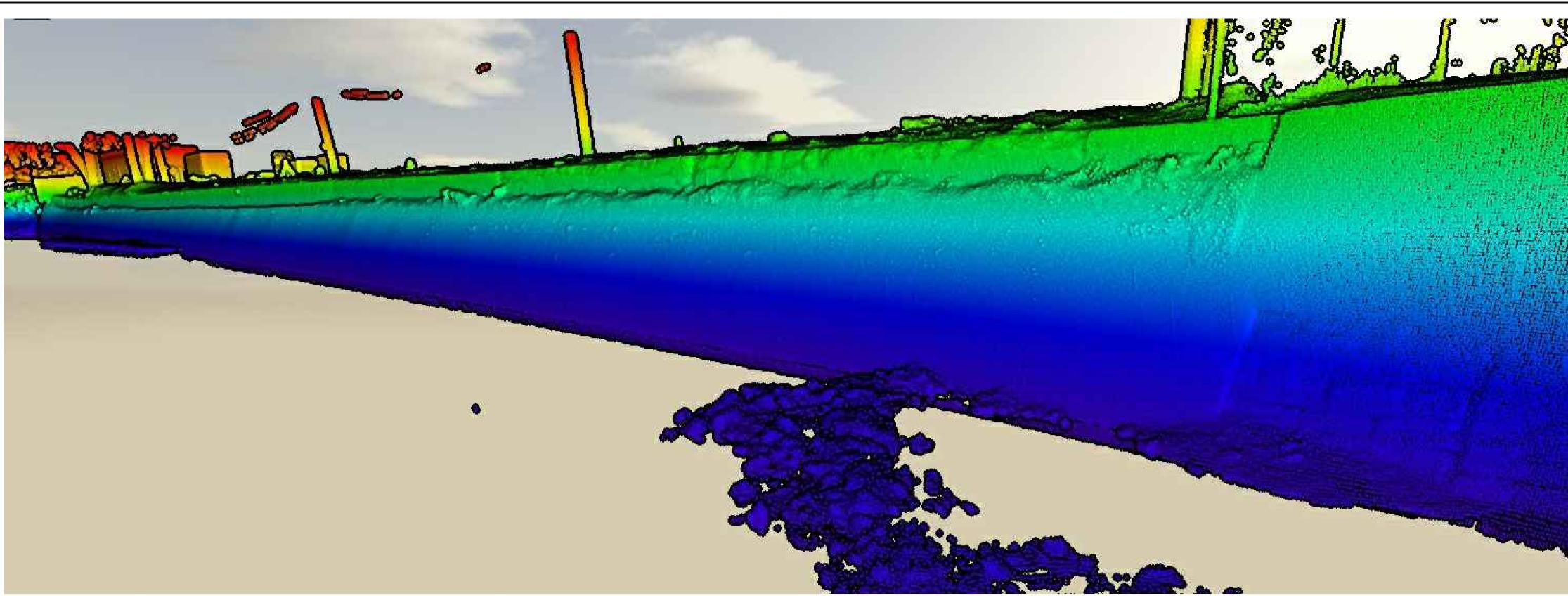


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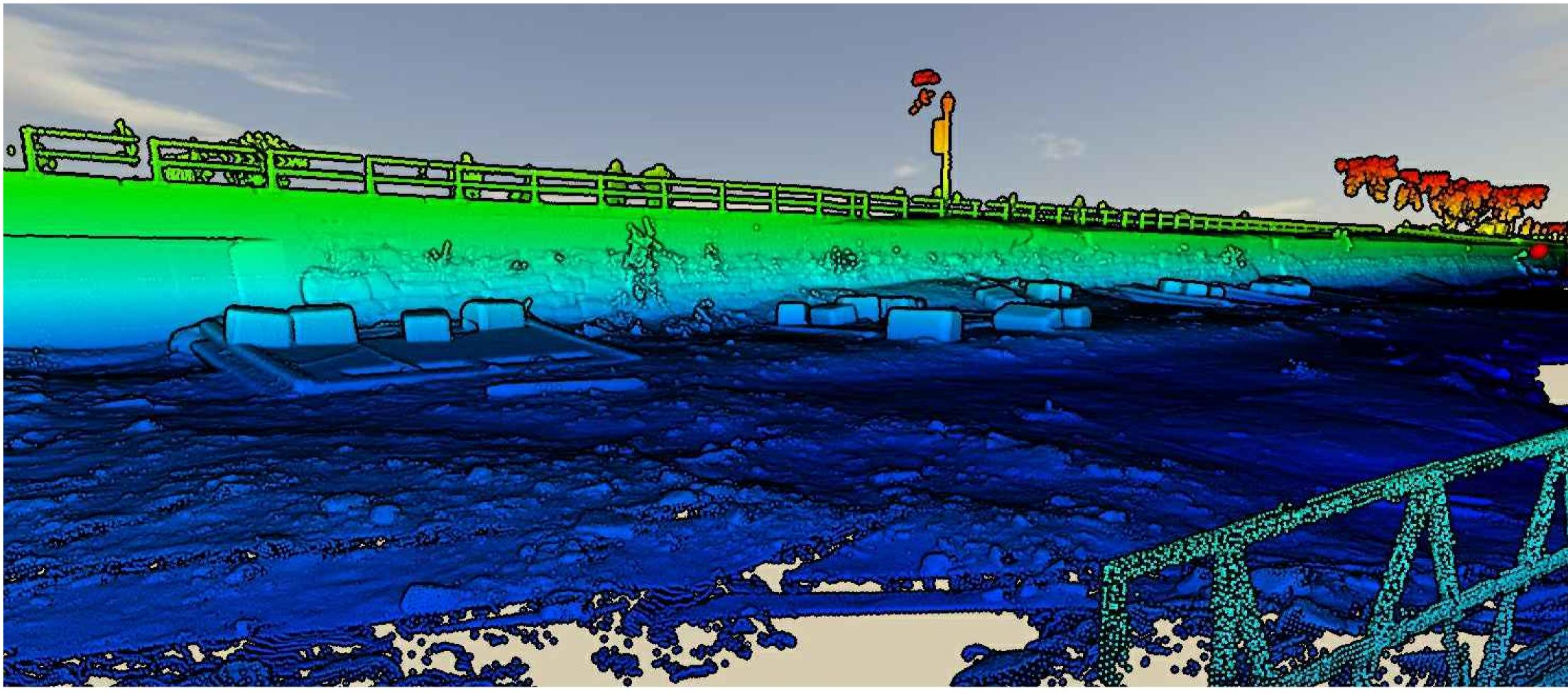
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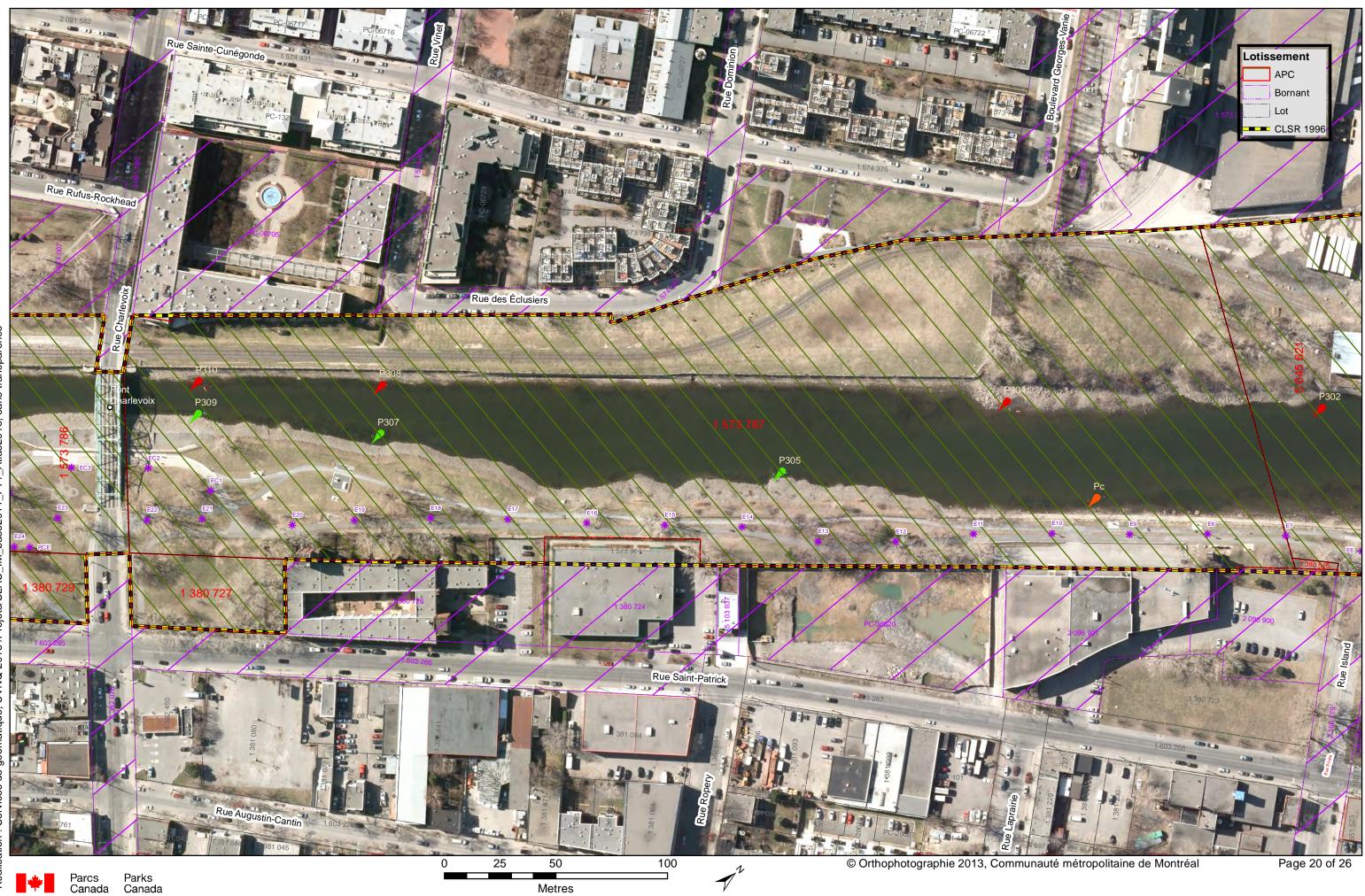
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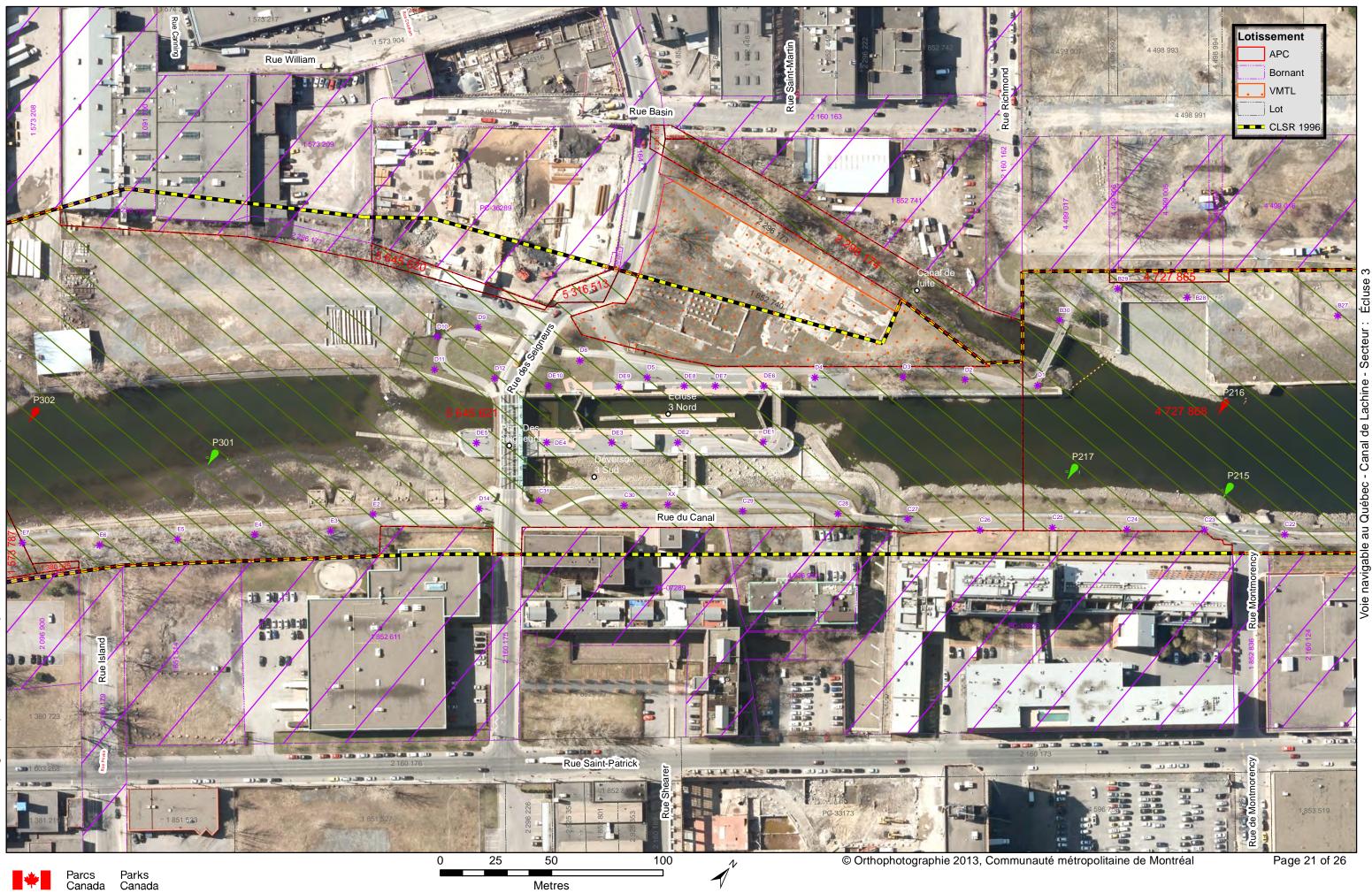
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Specifications

N/Ref. : CLAC-1455-06

SODDING



Part 1 General

1.1 RELATED REQUIREMENTS

.1 Section 32 91 19.13 - Topsoil Placement and Grading

1.2 **REFERENCES**

Not used.

1.3 ADMINISTRATIVE REQUIREMENTS

- .1 Scheduling: in accordance with Section 01 32 16.07 *Construction Progress Schedule*.
 - .1 Schedule sod laying to coincide with preparation of soil surface.
 - .2 Schedule sod installation when frost is not present in ground.
- .2 Pre-Installation Meetings: in accordance with Section 01 31 19 Project Meetings.
 - .1 Conduct pre-installation meeting to verify project requirements, installation instructions and warranty requirements.

1.4 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Submit in accordance with Section 01 33 00 *Submittal Procedures*.
- .2 Technical Specifications:
 - .1 Submit manufacturer's instructions, printed product literature and data sheets for sod, geotextile and fertilizer and include product characteristics, performance criteria, physical size, finish and limitations.
 - .2 Submit 2 copies of WHMIS MSDS in accordance with Section 01 35 29.06 *Health and Safety Requirements*.
- .3 Samples:
 - .1 Submit:
 - .1 Sod for each type specified.
 - .1 Install approved samples in 1 square metre mock-ups and maintain in accordance with maintenance requirements during establishment period.
 - .2 Bio-degradable geotextile fabric.
 - .3 0.5 kg container of each type of fertilizer used.
 - .2 Obtain approval of samples by the Government Representative.
- .4 Certificates
 - .1 Submit product certificates signed by manufacturer certifying materials comply with specified performance characteristics and criteria and physical requirements of seed mix, seed purity, and sod quality.
- .5 Test Reports





.1 Submit certified test reports showing compliance with specified performance characteristics and physical properties of seed mix, seed purity, and sod quality.

1.5 QUALITY ASSURANCE

- .1 Quality control: in accordance with Section 01 45 00 *Quality Control*.
- .2 Qualifications:
 - .1 Landscape Contractor: to be a Member in good standing of the *Association des paysagistes professionnels du Québec* (APPQ) or any other horticultural association approved by the Government Representative.
 - .2 Landscape Planting Supervisor: Landscape Industry Certified Technician with Softscape Installation designation.
 - .3 Landscape Maintenance Supervisor: Landscape Industry Certified Technician with Turf Maintenance designation.

1.6 DELIVERY, STORAGE AND HANDLING

- .1 Deliver, store and handle materials in accordance with Section 01 61 00 *Common Product Requirements* and with manufacturer's written instructions.
- .2 Delivery and Acceptance Requirements: deliver materials to site in original factory packaging, labelled with manufacturer's name and address.
- .3 Storage and Handling Requirements:
 - .1 Store materials in accordance with supplier's recommendations.
 - .2 Replace defective or damaged materials with new.
- .4 Develop a construction waste management plan for the works covered by this section in accordance with Section 01 74 21 *Construction/Demolition Waste Management and Disposal.*
- .5 Packaging Waste Management: remove for reuse and return by manufacturer of pallets, crates, padding, packaging materials as specified in Construction Waste Management Plan Waste Reduction Workplan in accordance with Section 017421 *Construction/Demolition Waste Management and Disposal.*

Part 2 Products

2.1 MATERIALS

- .1 Number One Turf Grass Nursery Sod: sod that has been especially sown and cultivated in nursery fields as turf grass crop.
 - .1 Turf Grass Nursery Sod types:
 - .1 Number One Kentucky Bluegrass Sod: Nursery Sod grown solely from seed of cultivars of Kentucky Bluegrass, containing not less than 50 % Kentucky Bluegrass cultivars.
 - .2 Number One Kentucky Bluegrass Sod Fescue Sod: Nursery Sod grown solely from seed mixture of cultivars of Kentucky Bluegrass and Chewing Fescue or Creeping Red Fescue, containing not less than 40 %





Kentucky Bluegrass cultivars and 30% Chewing Fescue or Creeping Red Fescue cultivars.

- .3 Number One Named Cultivars: Nursery Sod grown from certified seed.
- .2 Turf Grass Nursery Sod quality:
 - .1 Not more than 1 broadleaf weed and up to 1 % native grasses per 40 square metres.
 - .2 Density of sod sufficient so that no soil is visible from height of 1,500 mm when mown to height of 50 mm.
 - .3 Mowing height limit: 35 to 65 mm.
 - .4 Soil portion of sod: 6 to 15 mm in thickness.
- .2 Commercial Grade Turf Grass Nursery:
 - .1 Mow sod at height directed by Government Representative DCC Representative Government Representative within 36 hours prior to lifting, and remove clippings.
 - .2 Not more than 5 broadleaf weeds and up to 20 % native grasses per 40 square metres.
- .3 Sod establishment support:
 - .1 Biodegradable geotextile, square mesh.
 - .2 Wooden pegs: 17 x 8 x 200 mm.
 - .3 Biodegradable starch pegs: 17 x 8 x 200 mm.
- .4 Water:
 - .1 Supplied by the Contractor.
- .5 Fertilizer:
 - .1 To Canada "Fertilizers Act" and Fertilizers Regulations.
 - .2 Complete, synthetic, slow release with 65 % of nitrogen content in water-insoluble form.

2.2 SOURCE QUALITY CONTROL

- .1 Submit to the Government Representative, at least 2 weeks prior to delivery, the proposed source of sod and obtain written approval. No other source shall be accepted without written approval from the Government Representative.
- .2 When proposed source of sod is approved, use no other source without written authorization from the Government Representative.

Part 3 Execution

3.1 INSTALLERS

.1 Installers must be members in good standing of the *Association des paysagistes professionnels du Québec* (APPQ) or any other horticultural association approved by the Government Representative.





3.2 EXAMINATION

- .1 Verification of Conditions: verify that conditions of substrate previously installed under other Sections or Contracts are acceptable for sod installation in accordance with manufacturer's written instructions.
 - .1 Visually inspect substrate in presence of the Government Representative.
 - .2 Inform the Government Representative of unacceptable conditions immediately upon discovery.
 - .3 Proceed with installation only after unacceptable conditions have been remedied and after receipt of written approval to proceed from the Government Representative.

3.3 PREPARATION

- .1 Verify that grades are correct and prepared in accordance with Section 32 91 19.13 -*Topsoil Placement and Grading.* If discrepancies occur, notify the Government Representative, and commence work when instructed by the Government Representative.
- .2 Do not perform work under adverse field conditions such as frozen soil, excessively wet soil or soil covered with snow, ice, or standing water.
- .3 Remove and dispose of weeds; debris; stones 50 mm in diameter and larger; soil contaminated by oil, gasoline and other deleterious materials; off site in location as directed by the Government Representative in accordance with Section 01 74 21 *Construction/Demolition Waste Management and Disposal.*

3.4 IMPLEMENTATION

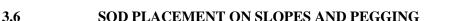
- .1 Ensure sod placement is done under supervision of certified Landscape Planting Supervisor.
- .2 Lawn sodding periods are between late thaw and June 15th (spring), and between August 15th and the beginning of the frost (fall season).
- .3 Do not perform work when conditions are unfavorable, such as when the ground is frozen or damp, or when covered with snow, ice or stagnant water.
- .4 Sod must be delivered within 24 hours of collection. They must be laid within 48 hours of collection.
- .5 In dry weather, before laying sod sections, the Contractor must protect them to maintain their vitality by maintaining sufficient moisture to prevent the soil from becoming detached during handling.

3.5 SOD PLACEMENT

- .1 Lay sod sections in rows, joints staggered. Butt sections closely without overlapping or leaving gaps between sections. Cut out irregular or thin sections with sharp implements.
- .2 Roll sod as directed by the Government Representative. Provide close contact between sod and soil by light rolling. Use of heavy roller to correct irregularities in grade is not permitted.
- .3 Water sufficiently so that water penetrates and soaks grass sections to the ground immediately after laying sod sheets.



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- .1 Install and secure geotextile fabric in areas indicated, in accordance with manufacturer's instructions.
- .2 Start laying sod at bottom of slopes.
- .3 Unroll sod sections perpendicular to slope, using offset joints. Tighten them one against the other to leave no voids, but do not overlap. Cut narrow or irregularly shaped sections using sharp tools.
- .4 Plant stakes in sod laid on steep slopes, whose gradient exceeds 1/3, and the on the sod placed within 1 m of manholes and less than 1 m from canals and drainage ditches. Arrange stakes as follows:
 - .1 100 mm below top edge at 200 mm on centre for first sod sections along contours of slopes.
 - .2 No less than 3 pegs per square metre.
 - .3 No less than 6 pegs per square metre in drainage structures. Adjust pattern as directed by the Government Representative.
 - .4 Drive pegs vertically so that they are 20 mm above soil surface of sod sections.
- .5 Water sufficiently so that water penetrates and soaks sod sections to the ground immediately after laying sod sheets.

3.7 FERTILIZING PROGRAM

- .1 Fertilize during formation and warranty periods.
- .2 Apply fertilizer uniformly, the basic formula of which meets 1-3-1 providing a minimum of 25 kg / ha of nitrogen (N), 75 kg / ha of phosphorus (P_2O_5) and 25 kg / Ha of potassium (K_2O). The recommendations of the laboratory performing the soil analysis take precedence over the above requirements

3.8 CLEANING

- .1 Progress Cleaning: clean in accordance with Section 01 74 11 *Cleaning*.
 - .1 Leave Work area clean at end of each day.
 - .2 Keep pavement and area adjacent to site clean and free from mud, dirt, and debris at all times.
- .2 Final Cleaning: upon completion remove surplus materials, rubbish, tools, and equipment in accordance with Section 01 74 11 *Cleaning*.
 - .1 Clean and reinstate areas affected by Work.
- .3 Waste Management: separate waste materials for reuse, compost, and recycling 01 74 21 - *Construction/Demolition Waste Management and Disposal*.
 - .1 Remove recycling and compost containers and bins from site and dispose of materials at appropriate facility.
 - .2 Divert unused fertilizer from landfill to official hazardous material collections site approved by the Government Representative.



3.9



- .1 Protect newly sodded areas from deterioration with snow fence on rigid frame as directed by the Government Representative.
- .2 Remove protection after inspection as directed by the Government Representative.

3.10 MAINTENANCE DURING ESTABLISHMENT PERIOD

- .1 Perform following operations from time of installation until acceptance.
 - .1 Water sodded areas in sufficient quantities and at frequency required to maintain optimum soil moisture condition to a depth of 75 mm.
 - .2 Cut grass to 50 mm when or prior to it reaching height of 75 mm.
 - .3 Maintain sodded areas weed free 95%.
 - .4 Fertilize areas in accordance with fertilizing program. Spread half of required amount of fertilizer in one direction and remainder at right angles and water in well.
 - .5 Temporary barriers or signage to be maintained where required to protect newly established sod.

3.11 ACCEPTANCE

- .1 Turf Grass Nursery Sod areas will be accepted by the Government Representative provided that:
 - .1 Sodded areas are properly established.
 - .2 Sod is free of bare and dead spots.
 - .3 No surface soil is visible from height of 1500 mm when grass has been cut to height of 50 mm.
 - .4 Sodded areas have been cut minimum 2 times prior to acceptance.
- .2 Sodded Commercial Grade Turf Grass Nursery Sod areas will be accepted by the Government Representative provided that:
 - .1 Sodded areas are properly established.
 - .2 Extent of surface soil visible when grass has been cut to height of 60 mm is acceptable.
 - .3 Sod is free of bare or dead spots and extent of weeds apparent in grass is acceptable.
 - .4 Sodded areas have been cut minimum 2 times prior to acceptance.
 - .5 Fertilizing in accordance with fertilizer program has been carried out at least once.
- .3 Areas sodded in fall will be accepted in following spring one month after start of growing season provided acceptance conditions are fulfilled.
- .4 When environmental conditions allow, all sodded areas showing shrinkage cracks shall be top-dressed and seeded with a seed mix matching the original.

3.12 MAINTENANCE DURING WARRANTY PERIOD

.1 Perform following operations from time of acceptance until end of warranty period:





- .1 Water sodded Turf Grass Nursery Sod Commercial Grade Turf Grass Nursery Sod areas at weekly intervals to obtain optimum soil moisture conditions to depth of 100 mm.
- .2 Repair and re-sod dead or bare spots to satisfaction of the Government Representative.
- .3 Cut grass and remove clippings that will smother grass as directed by the Government Representative to height as follows:
 - .1 Turf Grass Nursery Sod:
 - .1 50 mm during normal growing conditions.
 - .2 Commercial Grade Turf Grass Nursery Sod:
 - .1 60 mm during normal growing conditions.
 - .3 Cut grass at 2 week intervals; at intervals where approximately one third of growth is removed in single cut.
 - .4 Fertilize areas in accordance with fertilizing program. Spread half of required amount of fertilizer in one direction and remainder at right angles and water in well.
 - .5 Remove weeds by mechanical means.

END OF SECTION



Tender form

N/Ref. : CLAC-1455-06



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PARKS CANADA AGENCY

REHABILITATION OF CANAL LACHINE WALLS

PROJECT No : CLAC-1455-06

BID FORM- 1455-06 REVISION 01

	TABLE OF UNIT COSTS: it is agreed that the following table is the Table of Unit Costs to be used for the purposes of this Contract								
PAYM	AYMENT ITEMS								
\mathbf{N}°	Description of work	Unit	Unit cost	Quantity	TOTAL AMOUNT				
1.	SITE OFFICE, ENVIRONNEMENT AND GENERAL ITEMS								
1.1	Construction Facilities	Lump sum		1					
1.2	Environmental Protection Measures	Lump sum		1					
1.3	Sediment barrier	Lin. M.		650					
1.4	Turbidity curtain	Lin. M.		650					
1.5	Clearing								
1.5.1	- Clearing of trees between 100 mm and 150 mm inclusive at DHP	Unit		4					
1.5.2	- Clearing of trees between 150 mm and 200 mm inclusive at DHP	Unit		2					
1.5.3	- Clearing of trees between 200 mm and 250 mm inclusive at DHP	Unit		2					
1.5.4	- Clearing of trees of more than 250 mm at DHP	Unit		4					
1.6	Removal, Painting and Repositioning of Guardrails	Lin. M.		550					
1.7	Removal and Reinstallation of a 1,8 m fences with post with post 2,0 metersc/c	Unit		10					
1.8	Platforms and Access System	Lin. M.		630					



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PAYM	PAYMENT ITEMS								
\mathbf{N}°	Description of work	Unit	Unit cost Quantity	TOTAL AMOUNT					
2.	REPLACEMENT OF THE CROWNING WALLS								
2.1	Excavations et backfilling	Cu M.	439						
2.2	Disposal of Contaminated Soil								
2.2.1	- Range A-B	Ton	250						
2.2.2	- Range B -C	Ton	250						
2.2.3	- Range C+	Ton	250						
2.2.4	- Range > D	Ton	600						
2.3	Concrete Demolition and/or Removal of collapsed walls	Cu M.	226						
2.4	Reinforcing Steel Galvanized	Kg	17721						
2.5	Chemical Anchors	Unit	600						
2.6	Wall Concrete	Cu M.	203						
2.7	Bollards	Unit	6						
2.8	Steps	Unit	8						
2.9	Type 1 borrowing materials, MG-20	Ton	1350						
2.10	Concrete for Concrete Slab (Concrete 1 MPa)	Cu M.	31						



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PAYN	PAYMENT ITEMS									
\mathbf{N}°	Description of work	Unit	Unit cost	Quantity	TOTAL AMOUNT					
2.11	Perforated Drain (200 mm) and Geotextile, PCV (type 1) or PCV COEX (type 1) or PE (type 2), 180 kPa min.	Lin. M.		120						
2.12	Topsoil	Sqrt. m		532						
2.13	Hydroseeding	Sqrt. m		532						
2.14	Geotextile	Sqrt. m		618						
3	REPAIR OF THE CROWING WALL									
3.1	Cast -in-Place Concrete; Type XIV-R or XIV-S (self-consolidating)	Cu M.		135						
3.2	Demolition and reconstruction of wheelblockers (B3-S-01-A)	Lin. M.		30						
3.3	Reinforcing Steel Galvanized	Kg		11030						
3.4	Chemical Anchors	Unit		7650						
3.5	Bollards	Unit		6						
3.6	Rungs	Unit		37						
3.7	Laying Sod	Sqrt. M.		510						
4	SPECIALIZED EQUIPMENT									
4.1	Installation of a legal survey marker	Unit		2						

Parcs Parks Canada Canada PARKS CANADA AGENCY **REHABILITATION OF CANAL LACHINE WALLS** PROJECT No : CLAC-1455-06 BID FORM- 1455-06 REVISION 01 TABLE OF UNIT COSTS: it is agreed that the following table is the Table of Unit Costs to be used for the purposes of this Contract PAYMENT ITEMS N° Description of work Quantity TOTAL AMOUNT Unit Unit cost TRAFFIC MAINTENANCE AND TEMPORARY SIGNAGE 5 5.1 Traffic Maintenance and temporary signage Days 119 5.2 Temporary deviation cycling path Lump sum 1 5.3 Special signs Sqrt. M. 20 **Total Items :** Company : Prepared by : Date :