



Pêches et Océans
Canada

Garde côtière
canadienne

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Canada

Canadian
Coast Guard



APPENDIX C: SPECIAL FEATURES OF THE LA ROMAINE SITE

SECTION C-01: SPECIAL FEATURES

1. COORDINATES AND ACCESS TO THE SITE

- 1.1. The site is located in La Romaine, on the *Basse-Côte-Nord* (Lower North Shore). The site is not owned by the CCG. It is owned by Telus. The Canadian Coast Guard (CCG) only owns its equipment shelter.

- 1.1.1. Site coordinates:

Site	Latitude (NAD 83)	Longitude (NAD 83)
La Romaine	50° 12' 56" N	60° 41' 03" W

- 1.1.2. La Romaine is located on the Lower North Shore and is accessible by boat. The Contractor shall therefore provide for the transportation of the shelter to La Romaine as a result of this constraint.

2. EXISTING FACILITIES BELONGING TO THE CCG

- 2.1. The CCG has an existing shelter that shall be dismantled. The shelter (10 m X 3.96 m) houses a generator and telecommunications equipment.
- 2.2. The foundation of the existing shelter is made of concrete sonotubes anchored into the rock.
- 2.3. The power supply to the existing shelter is aerial.
- 2.4. The coaxial cables for the antennas and beacons are underground, between the tower and the existing shelter.

3. EXISTING NON-CCG OWNED FACILITIES

- 3.1. On the site, there is a guyed tower owned by Telus.
- 3.2. On the site, there are three (3) other shelters owned by Telus and Hydro-Québec.
- 3.3. There is a chain link fence with a padlock around the tower.

4. SITE-SPECIFIC WORK

- 4.1. The Contractor shall temporarily relocate and install the existing shelter at the location specified in the development plan. To do this, the Contractor shall ensure that the ground surface is clean and provide the elements to level the shelter. The Contractor may propose an alternative location but shall obtain approval from the CCG and Telus.
- 4.2. CCG technicians are required on site for this phase of the work. The Contractor shall be responsible for releasing the cables, while the technicians shall handle and carry out the necessary cable extensions for the duration of the underground work and the installation of the new shelter.
- 4.3. The Contractor is responsible for protecting the cables throughout the duration of the work. A trench shall be made for the power supply cables for the temporary shelter and the coaxial cables for the antennas.
- 4.4. The Contractor shall provide rock-anchored foundations for this site in accordance with plans 09152-B036-SF F01 and 09152-B036-SF F02. Note that the rock is visible on part of the site and is located near the surface, but the height may vary. The Contractor shall adjust according to the nature of the soils encountered and the depth of the rock.

- 4.5. When excavating the foundations, the Contractor shall obtain the services of a geotechnical laboratory to confirm the quality of the rock for the installation of the anchors. If the rock is fractured and potentially frost-prone, the Contractor shall follow the laboratory's recommendations.
- 4.6. Part of the existing fence shall be dismantled and disposed of by the Contractor. A new part of the fence shall be built by the Contractor, including the grounding.
- 4.7. The Contractor shall ensure that the diesel tank for the generator is reinstalled in the temporary shelter for the duration of the work. The Contractor is responsible for ensuring a reliable and safe work method to avoid spills.
- 4.8. The Contractor is free to choose its excavation methods on site. In the event that rock breaking by jackhammer or blasting is required at any location near the tower's foundations, guy wires, transmission line bridge, and equipment shelter, the work method shall be submitted and approved by Telus, the CCG and the engineering firm that prepared the foundation plans (CIMA+).
- 4.9. The Contractor shall meet the quality assurance requirements specified in the technical specifications, by requesting the services of an external consultant. Without limitation, the following work requires the presence of an external consultant, who shall approve the concrete work, the excavation pit bottom for all foundations, and soil compaction (if required). A report shall be submitted to the CCG.
- 4.10. If the Contractor wishes to deviate from the foundation design (depth, bottom excavation, embankment, compaction, etc.) provided for in the plans, the proposal shall be approved by an engineer, who will produce a report to this effect before construction on the site.
- 4.11. Because the rock is present and shallow, the Contractor shall plan electrical earthing work accordingly. (See plans 09152-B036 MALT (1) and 09152-B036 MALT (2) in Appendix B for details)
- 4.12. Any company carrying out work in the tower shall have and be able to provide proof that its fitters have taken and passed:
 - A general health and safety course for construction work sites;
 - Working at heights training;
 - High angle rescue operations training.

5. SITE DECONTAMINATION WORK

- 5.1. An environmental soil characterization study was conducted at the Telus site in 2017, near the CCG facilities. The results of analyses show contamination with petroleum hydrocarbons C₁₀ to C₅₀ (PH C₁₀ to C₅₀). The volume of contaminated soils above criterion A of the MELCC Response Guide – *Protection des sols et réhabilitation des terrains contaminés du MELCC* [Protection of Soils and rehabilitation of contaminated sites by the MELCC (Response Guide)] by PH C₁₀-C₅₀ is estimated at 4m³. The environmental characterization report is attached in Appendix C-06.
- 5.2. The Contractor shall, under the supervision of an environmental consultant, remove and manage all soils contaminated with PH C₁₀ - C₅₀ beyond Criterion A of the Response Guide, as identified in Figure 2 in the Environmental Characterization Report (Golder, 2017). If evidence of contamination is observed in the walls and/or bottom of the excavation pit, or if the analytical results of soil samples to be taken from the walls and/or bottom of the excavation pit by the environmental consultant show residual PH C₁₀-C₅₀ contamination beyond criterion A, then the associated additional contaminated soils shall also be removed, so that all final walls and the final bottom of the excavation pit comply with criterion A in PH C₁₀-C₅₀.

- 5.3. The environmental consultant will be hired by the CCG. The Contractor shall coordinate to have the environmental consultant present from the very start of excavation work.
- 5.4. During the work, the Contractor shall comply with all the standards applicable to the management of contaminated soils in the Response Guide. In particular, excavated contaminated soils shall be transported to a site authorized by MELCC. In addition, good management practices for contaminated soils shall be employed in a manner that does not spread contamination. For this purpose, the use of a waterproof membrane under the temporary storage area for contaminated soils is required. A tarpaulin shall also be installed on contaminated soil piles to limit water infiltration into the piles and to limit the airborne spread of contaminated soil.
- 5.5. In its proposal, the Contractor shall provide for the management of 4 m³ of soils contaminated with petroleum hydrocarbons, located according to the report provided. If additional quantities are encountered on the site, the Contractor may request additional costs, based on a unit cost per m³, established in advance in its bid.
- 5.6. Embankment material to be placed in the excavation pit for the contaminated soils as well as under the building shall be free of contamination, i.e., it shall meet criterion A of the Response Guide for all contaminants. Proof of the origin of the materials shall be provided (quarry weighing ticket, proof of bank where it was taken, etc.) to demonstrate that it is clean material. If in doubt, chemical analyses of the materials shall be required to verify the environmental quality.



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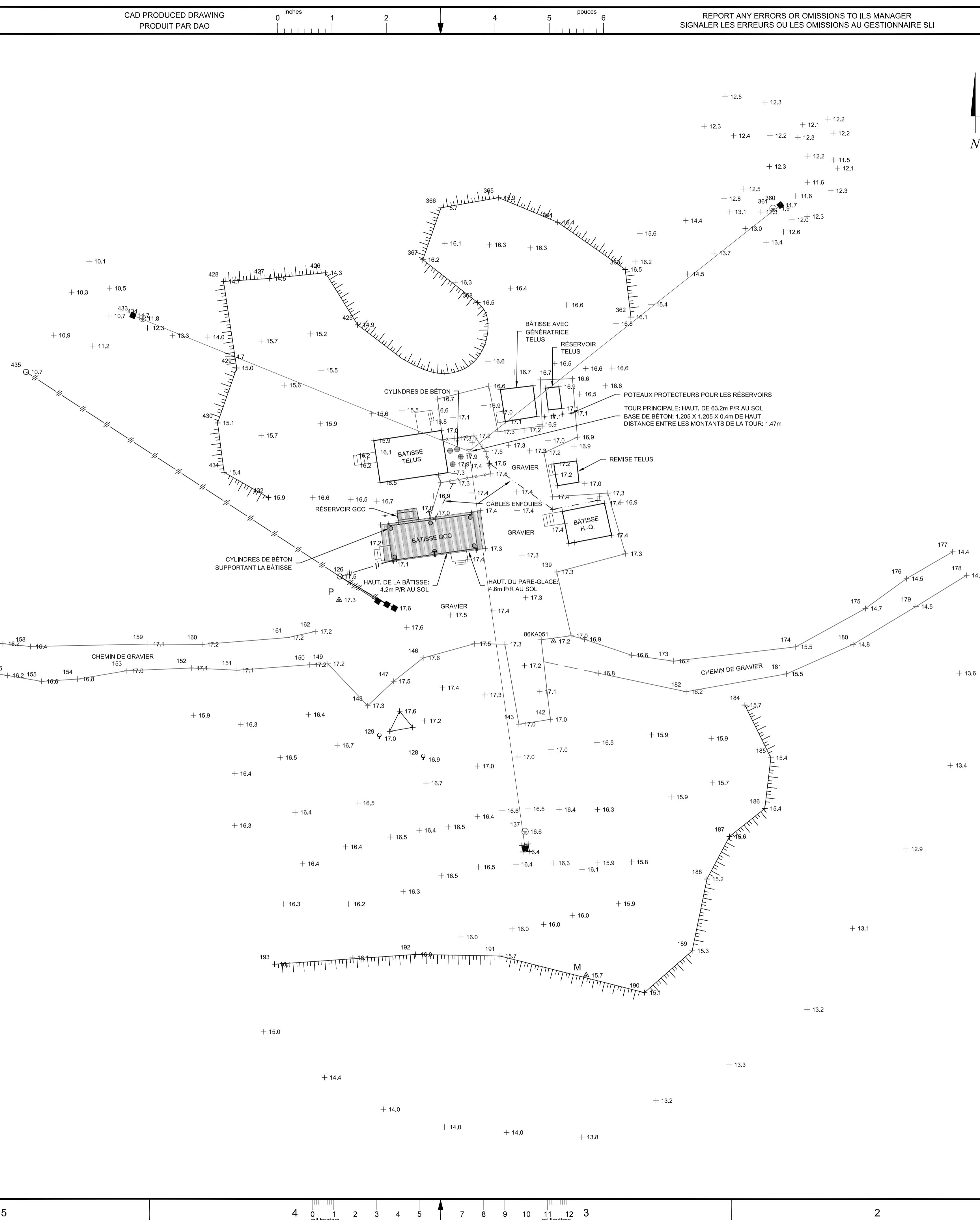
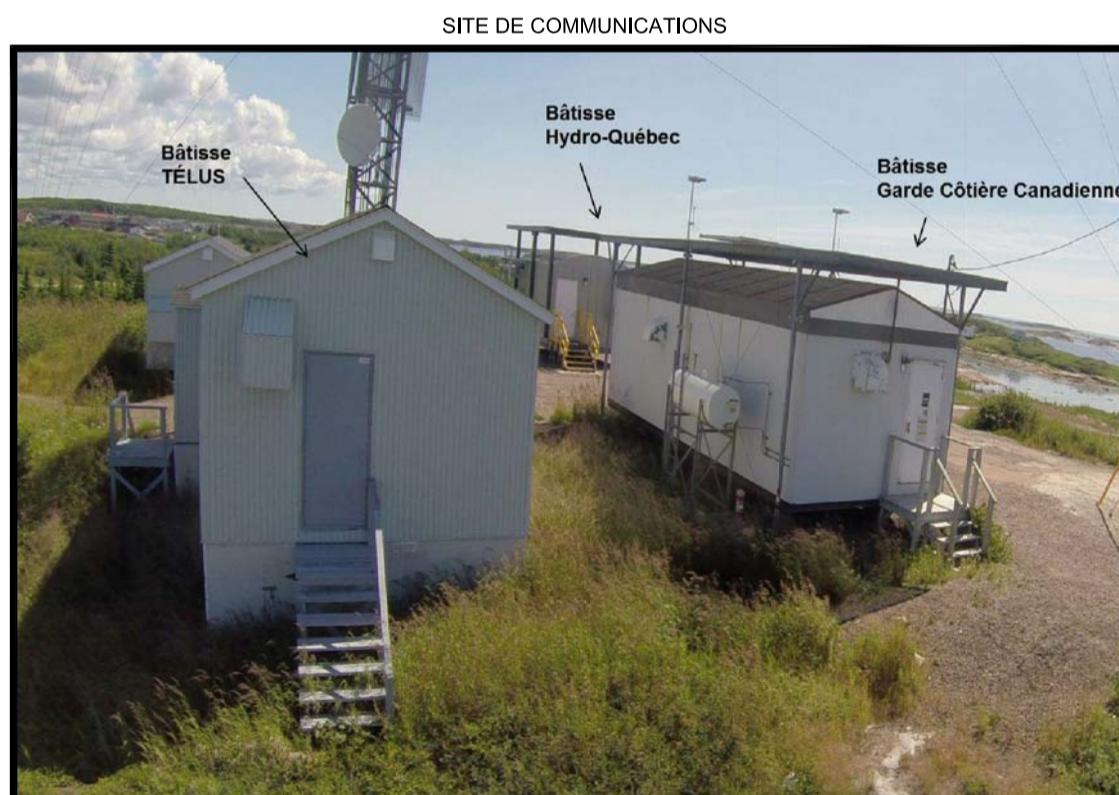
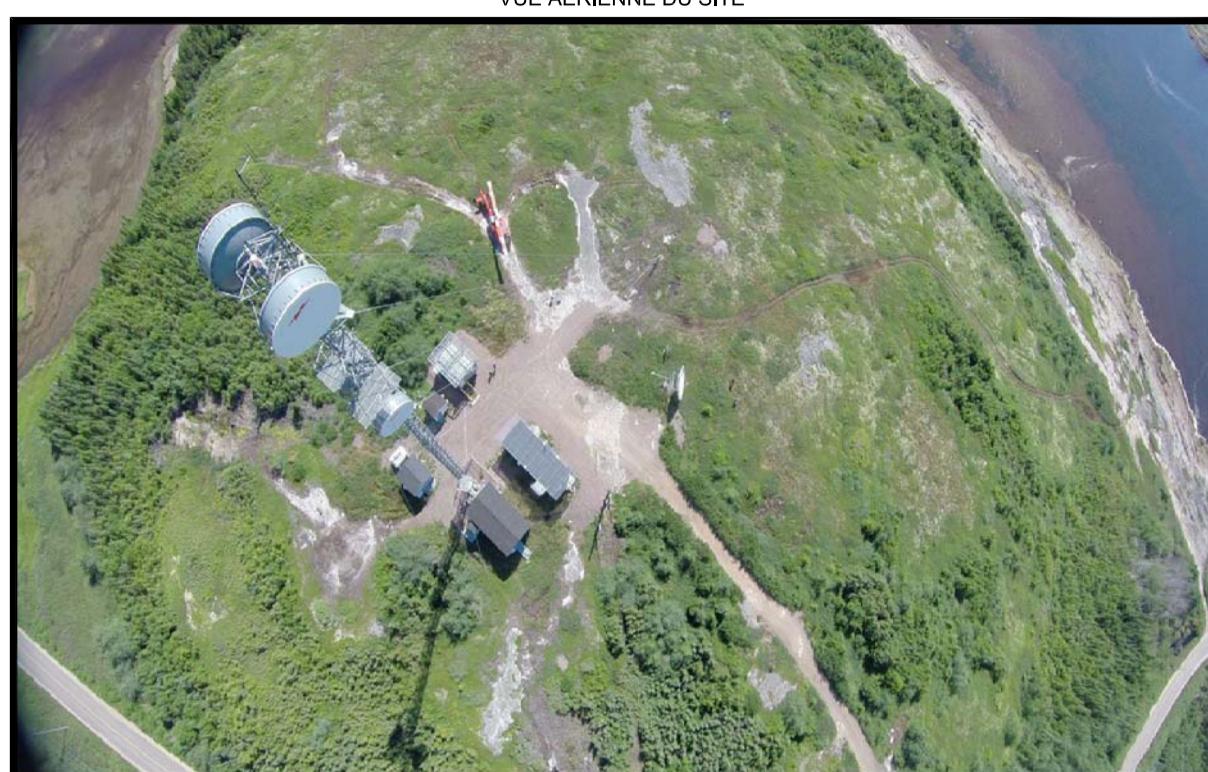
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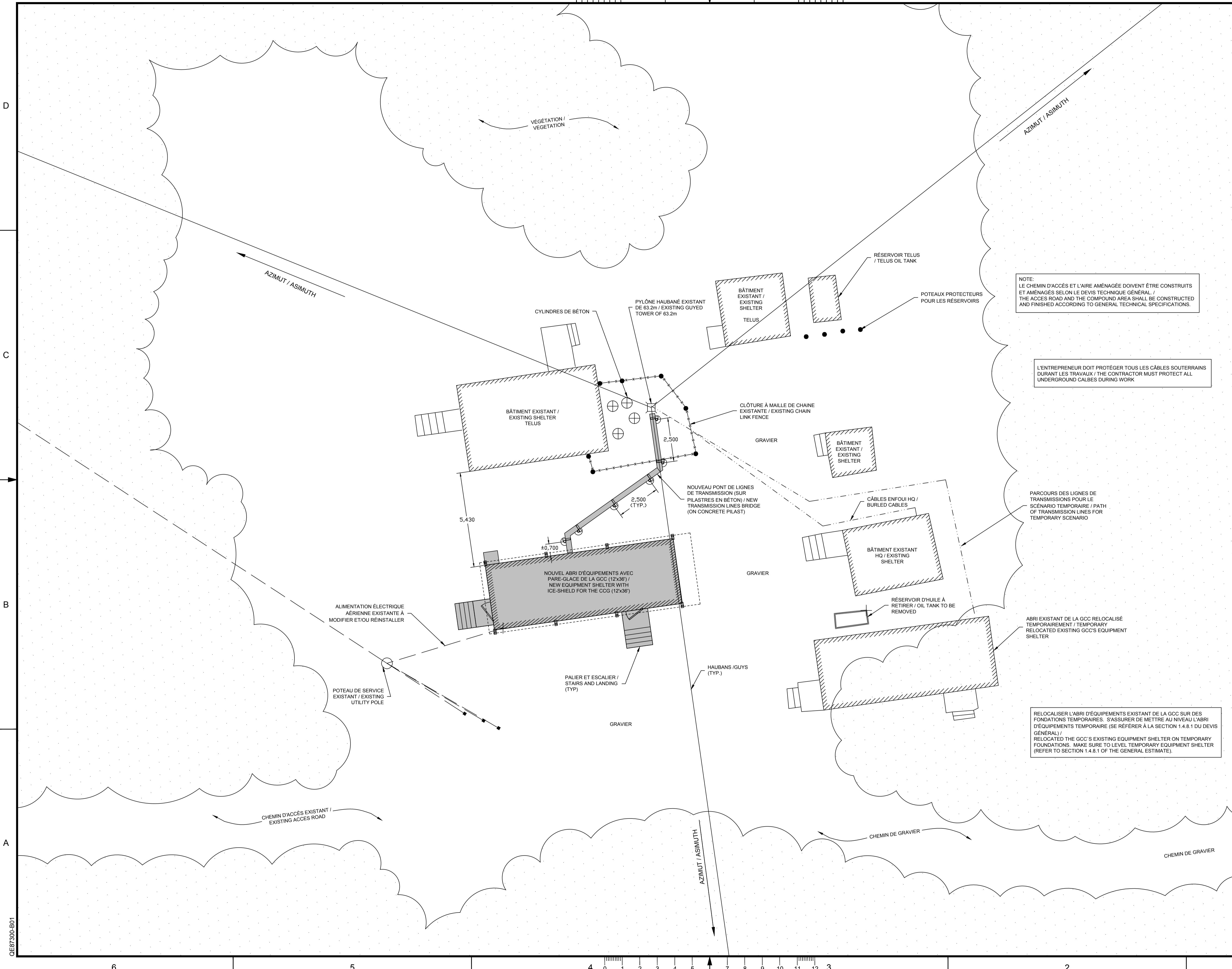


APPENDICE C : SPECIAL FEATURES OF LA ROMAINE SITE

SECTION C-02 : STATEMENT OF SITE AND DEVELOPMENT PLAN OF SITE

FOR CONSTRUCTION





**1- AMÉNAGEMENT DU SITE ÉTABLI À PARTIR DU
PLAN "RELEVÉ DE SITE" NO. QE87300-A02-CL
(ORIGINAL - TEL QUE RELEVÉ) PRÉPARÉ PAR LA
GCC DATÉ DU 27 OCTOBRE 2014.**

2- SE RÉFÉRER AU DEVIS TECHNIQUE GÉNÉRAL ET AUX EXIGENCES PARTICULIÈRES DU SITE POUR L'ÉTENDUE DES TRAVAUX ASSOCIÉS AU REMPLACEMENT DE L'ABRI D'ÉQUIPEMENTS DE LA GCC.

NOTE:
LE CHEMIN D'ACCÈS ET L'AIRE AMÉNAGÉE DOIVENT ÊTRE CONSTRUITS
ET AMÉNAGÉS SELON LE DEVIS TECHNIQUE GÉNÉRAL. /
THE ACES ROAD AND THE COMPOUND AREA SHALL BE CONSTRUCTED
AND FINISHED ACCORDING TO GENERAL TECHNICAL SPECIFICATIONS.

L'ENTREPRENEUR DOIT PROTÉGER TOUS LES CÂBLES SOUTERRAINS DURANT LES TRAVAUX / THE CONTRACTOR MUST PROTECT ALL UNDERGROUND CALBES DURING WORK

PARCOURS DES LIGNES DE TRANSMISSIONS POUR LE SCÉNARIO TEMPORAIRE / PA OF TRANSMISSION LINES FOR TEMPORARY SCENARIO

**ABRI EXISTANT DE LA GCC RELOCALISÉ TEMPORAIREMENT / TEMPORARY
RELOCATED EXISTING GCC'S EQUIPMENT SHELTER**

RELOCALISER L'ABRI D'ÉQUIPEMENTS EXISTANT DE LA GCC SUR DES FONDATIONS TEMPORAIRES. S'ASSURER DE METTRE AU NIVEAU L'ABRI D'ÉQUIPEMENTS TEMPORAIRE (SE RÉFÉRER À LA SECTION 1.4.8.1 DU DEVIS GÉNÉRAL) /
RELOCATED THE GCC'S EXISTING EQUIPMENT SHELTER ON TEMPORARY FOUNDATIONS. MAKE SURE TO LEVEL TEMPORARY EQUIPMENT SHELTER (REFER TO SECTION 1.4.8.1 OF THE GENERAL ESTIMATE).

0	ÉMIS POUR CONSTRUCTION	M.C.	2018-10-04
rev	description	by per	date

Asset - Actif

**TRAVAUX REMPLACEMENT DE L'ABRI
LA ROMAINE**

Q E 87

AIRE AMÉNAGÉE DU SITE
COMPOUND AREA LAYOUT

designed - conception	date
M.-P. GUAY	2018-10-04
drawn - dessiné	date
L. ARSENEAULT	2018-10-04
checked - vérifié	date
M.-P. GUAY	2018-10-04
approved - approuvé	date
M.-P. GUAY	2018-10-04
CCG ref. no. - no. réf. GCC 8062-0873	scale - échelle 1 : 100
drawing no. - no. dessin QE87300-B01	sheet-feuille 01/01
	rev-rév 0



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APPENDICE C : SPECIAL FEATURES OF LA ROMAINE SITE

SECTION C-03 : PROPOSED GROUNDING

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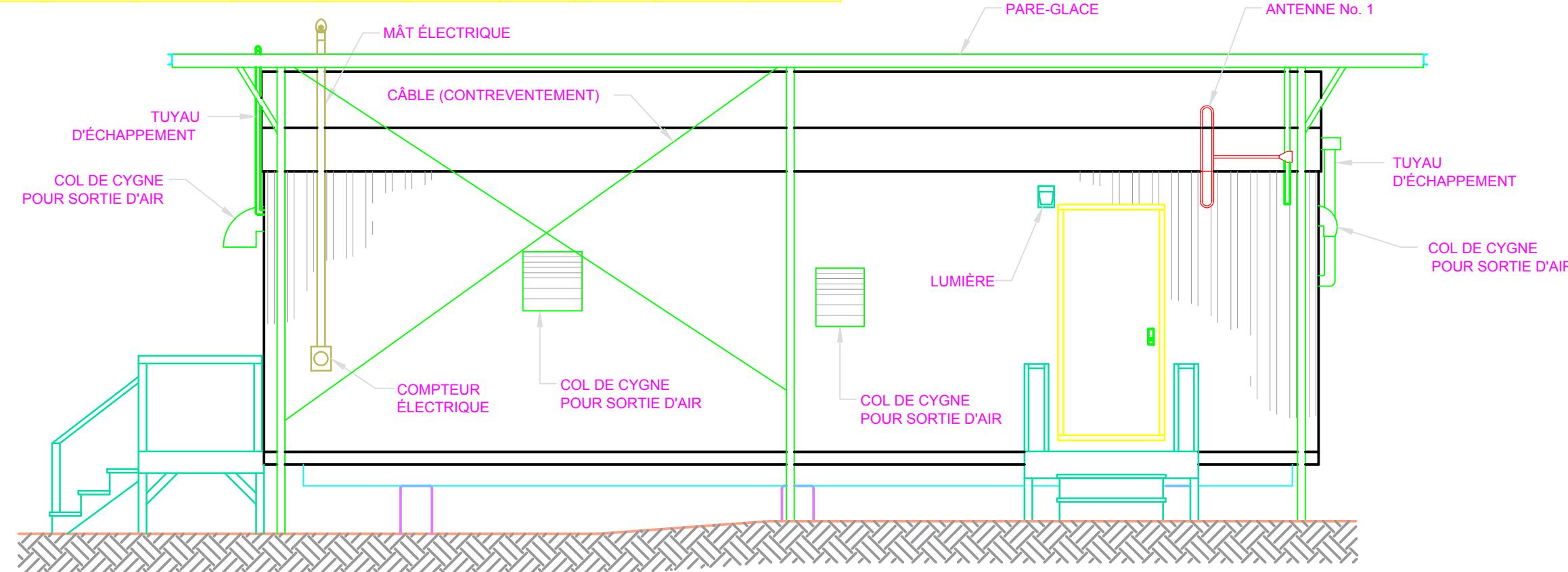
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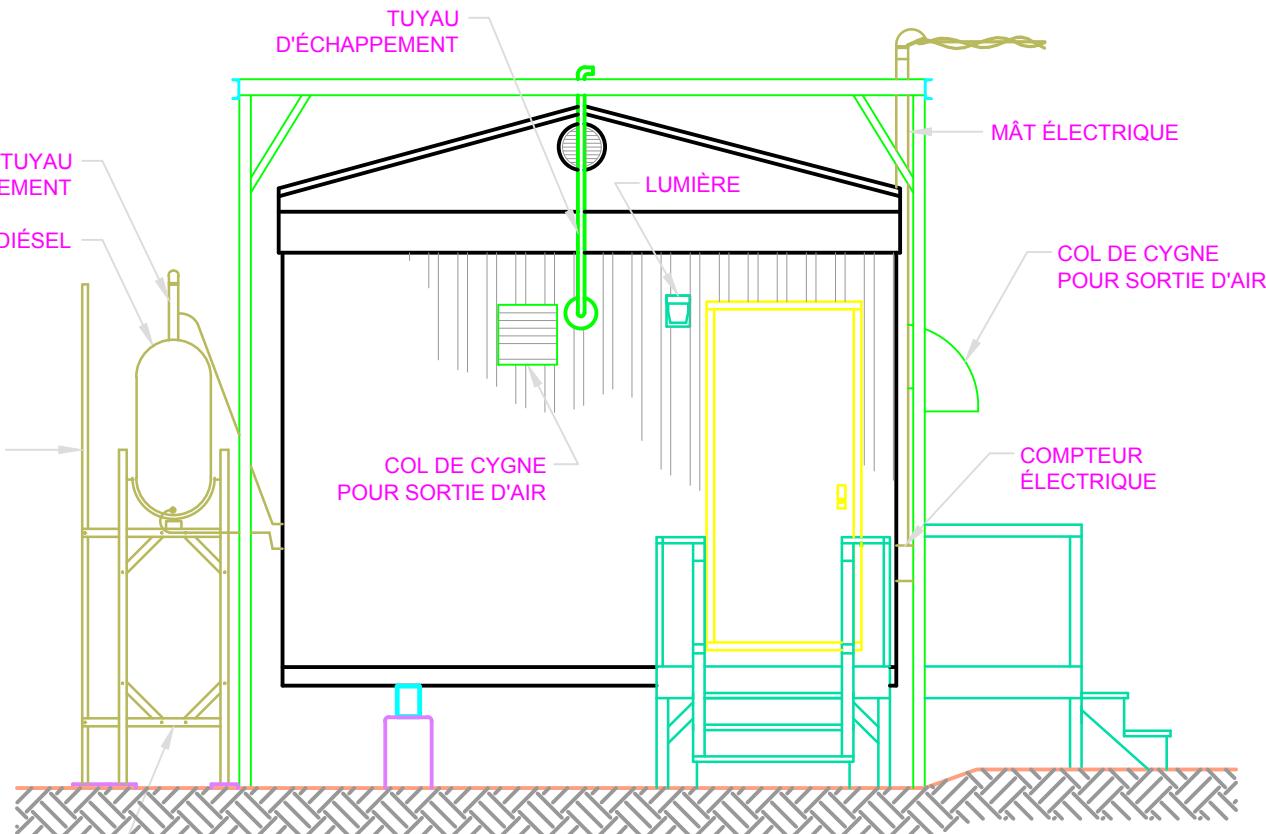
APPENDICE C : SPECIAL FEATURES OF LA ROMAINE SITE

SECTION C-04 : EXISTING ELEMENTS

ANTENNE	TYPE	ÉLÉVATION(m)	AZIMUT(°)	FABRICANT	UTILISATEUR	RÉFÉRENCE	POLAR	CÂBLE	ÉLÉV. SOL(m)
								TYPE	
1	SRL-210	3.5	196	SINCLAIR	-	-	-	LDF2-50	-



ÉLÉVATION A

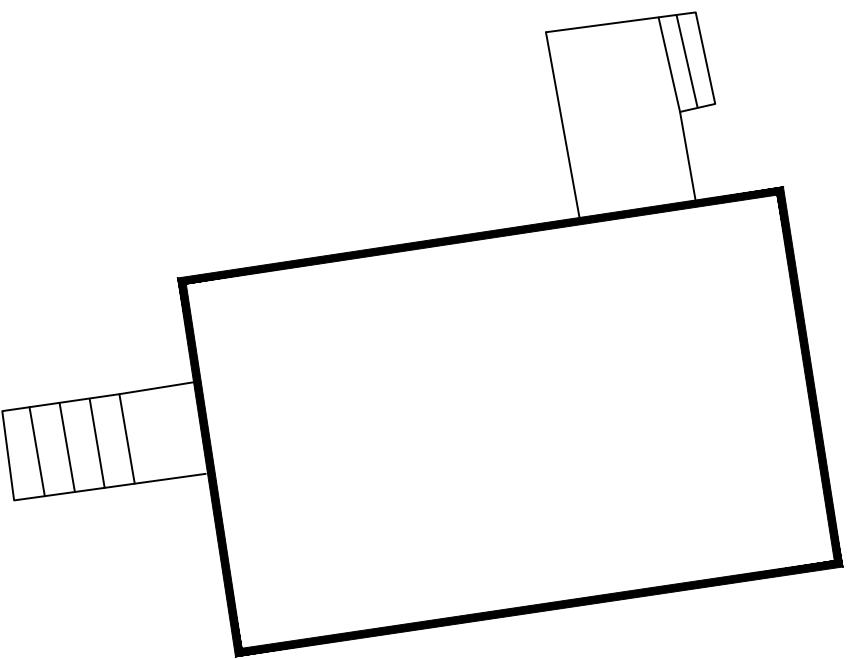


ÉLÉVATION B

A	TEL QUE RELEVÉ	M.L.	2005/03
Rév.	Description	Par/BY	Date
Toute modification doit être rapportée à / All modification must be reported to:			
Garde côtière, région du Québec Direction des Services techniques intégrés Informations Techniques et Graphiques			
Dossier / File: LA ROMAINE SITE DE COMMUNICATION			
Dessin / Drawing: ROULOTTE 3.9m x 10.06m ÉLÉVATIONS			
Conçu par / Designed by: Date			
Dessiné par / Drawn by: Date			
A. LEGAULT 2005-03-22			
Vérifié par / Verified by: Date			
A. LEGAULT 2005-03-22			
Approuvé par / Approved by: Date			
D.M. GUERRA 2005-03-22			
No. dossier / File no.:		Echelle / Scale:	
QE87300		1 : 50	
No. dessin / Drawing no.:		Feuille / Sheet:	
QE87300-701-AE		01/02	

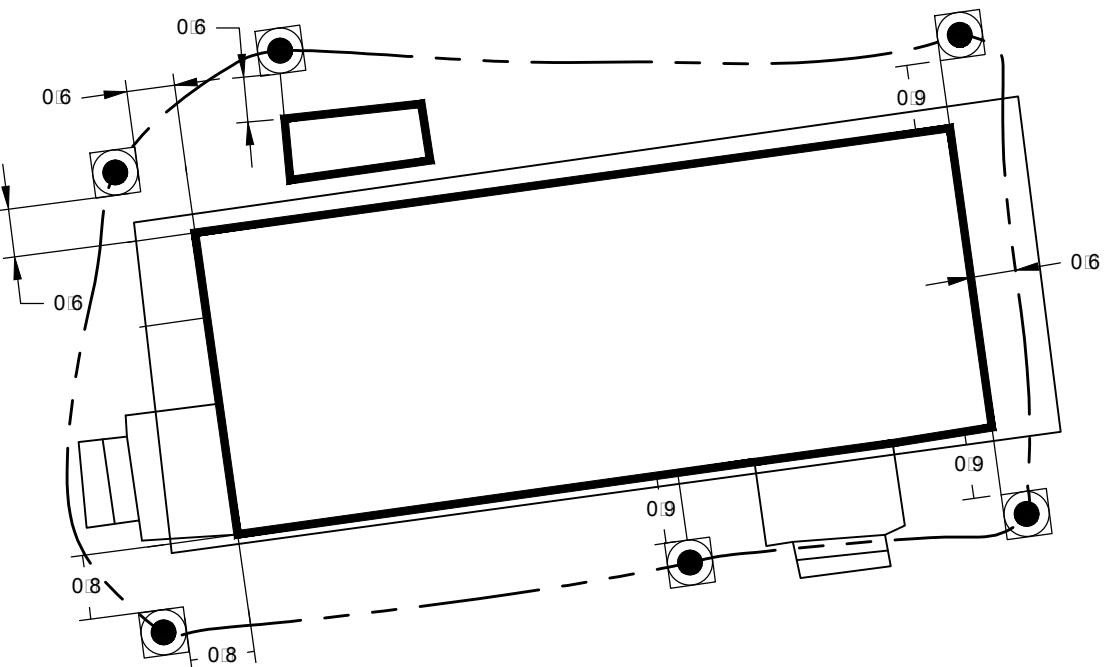
C SPÉCIFICATION DES TRAVAUX

- 1- Réaliser les travaux soulignés en jaune, selon le plan 09125-01 et 09125-06 fourni à ce document.
- 2- Respecter les notes jointes ainsi que la légende indiquées au plan.
- 3- Tous les câbles enfouis seront en cuivre #2/0 étamé et toronné (câble de la boucle).
- 4- Tous les câbles apparents seront en acier galvanisé 11 mm (7/16"), sauf les câbles raccordant la plaque de MALT de l'entrée des câbles et l'entrée électrique.
- 5- Au site de La Romaine, creuser environ 18 pouces une tranchée autour de l'abri d'équipement.
- 6- Installer le câble de MALT en cuivre et les plaques de cuivre selon le plan 09125-01 et/ou aux endroits les plus humides et les plus profonds.
- 7- Fixer au roc les câbles et les plaques de cuivres à quelques endroits ou lorsque possible.
- 8- Étendre trois (3) poches de Groundmax sous la plaque et trois (3) poches de Groundmax sur la plaque. Le Groundmax devrait dépasser d'environ 4" la plaque de cuivre de chaque côté et ainsi avoir 4" d'épaisseur en dessous et sur le dessus.
- 9- Étendre environ 4" de Groundmax le long du câble de cuivre (1 poche pour environ 6').
- 10- Remblayer le câble avec les matériaux de déblais (idéalement 6" à 12").
- 11- S'il y a du roc en surface, y fixer le câble de MALT et ajouter du matériel disponible sur le site pour recouvrir le câble.
- 12- Valider l'impédance du système.



B NOTES

- SOUDURES EXOTHERMIQUES SUR LES STRUCTURES EXTÉRIEURES RECOUVERT ENDUIT ANTICOROSION.
- SOUDURES EXOTHERMIQUES SUR LES POINTS SOUTERRAINS RECOUVERTS D'ENDUIT GOUDRONNÉ
- TOUS LES CÂBLES EXTÉRIEURS SONT EN ACIER 11 mm (7/16") Ø GALVANISÉ SAUF INDICATION CONTRAIRE.
- TOUS LES CÂBLES ENFOUIS SONT EN CUIVRE #2/0 ÉTAMÉ ET TORONNÉ.
- TOUTES LES PLAQUES DE MALT DOIVENT ÊTRE ESPACÉES DE 6000 mm (20') SI POSSIBLE



0	ORIGINAL	MPG	2016-03-23
rev	description	by	pér date

Asset - Actif

LA ROMAINE
SITE DE TÉLÉCOMMUNICATION

Drawing - Dessin

SYSTÈME DE PROTECTION
CONTRE LA FOUDRE

drawn - dessiné	date
SLI	2016-03-23

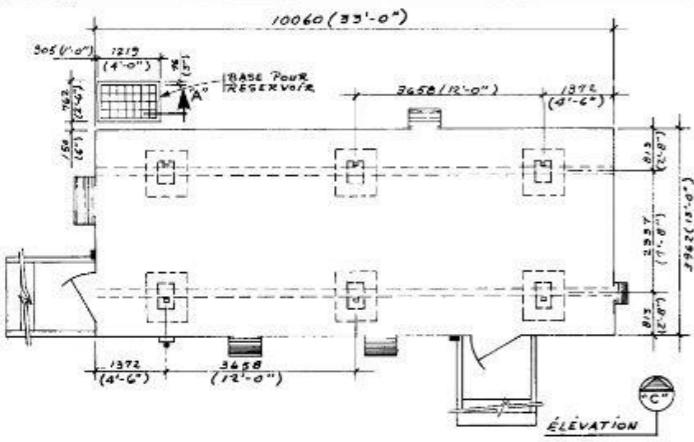
designed - conception	date
M.-P. GUAY	2016-02-15

checked - vérifiée	date
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approved - approuvé	date
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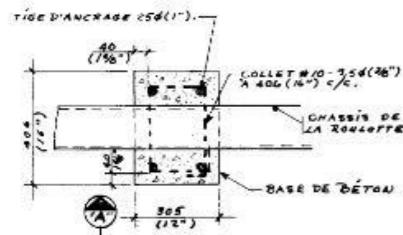
CCG ref. no. - no. réf. GCC	scale - échelle
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drawing no. - no. dessin	sheet-feuille	rev
QE87300-MALT	01/01	0



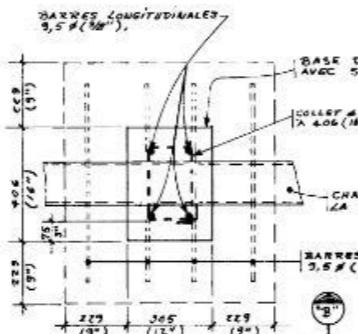
VUE EN PLAN DES FONDATIONS
LOCALISATION DES BASES DE BÉTON

ECH.: 1/16 = 1'-0"



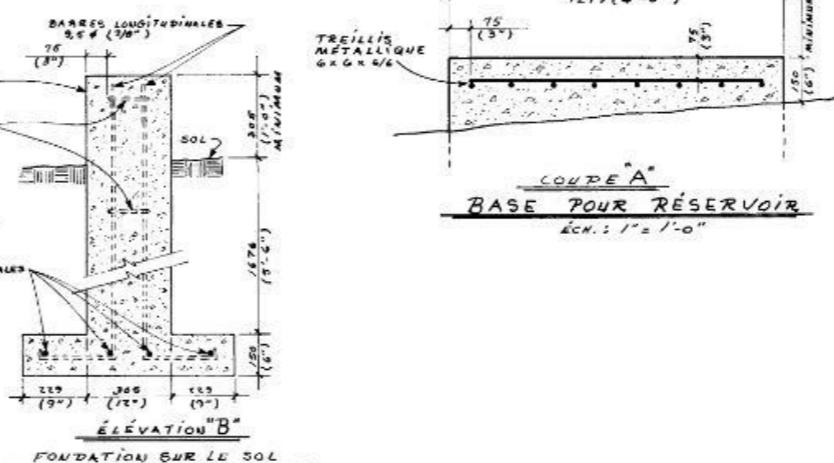
VUE EN PLAN
FONDATION SUR LE ROC

ECH.: 1" = 1'-0"



VUE EN PLAN
FONDATION SUR LE SOL

ECH.: 1" = 1'-0"

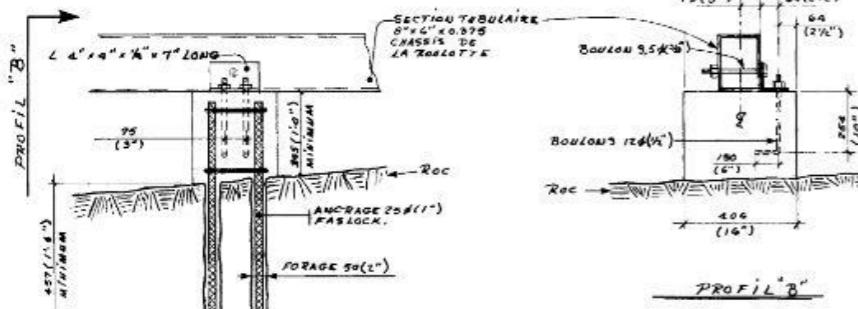


COUPE "A"
BASE POUR RÉSERVOIR

ECH.: 1" = 1'-0"

ÉLEVATION "B"
FONDATION SUR LE SOL

ECH.: 1" = 1'-0"



ÉLEVATION "B"

FONDATION SUR LE ROC

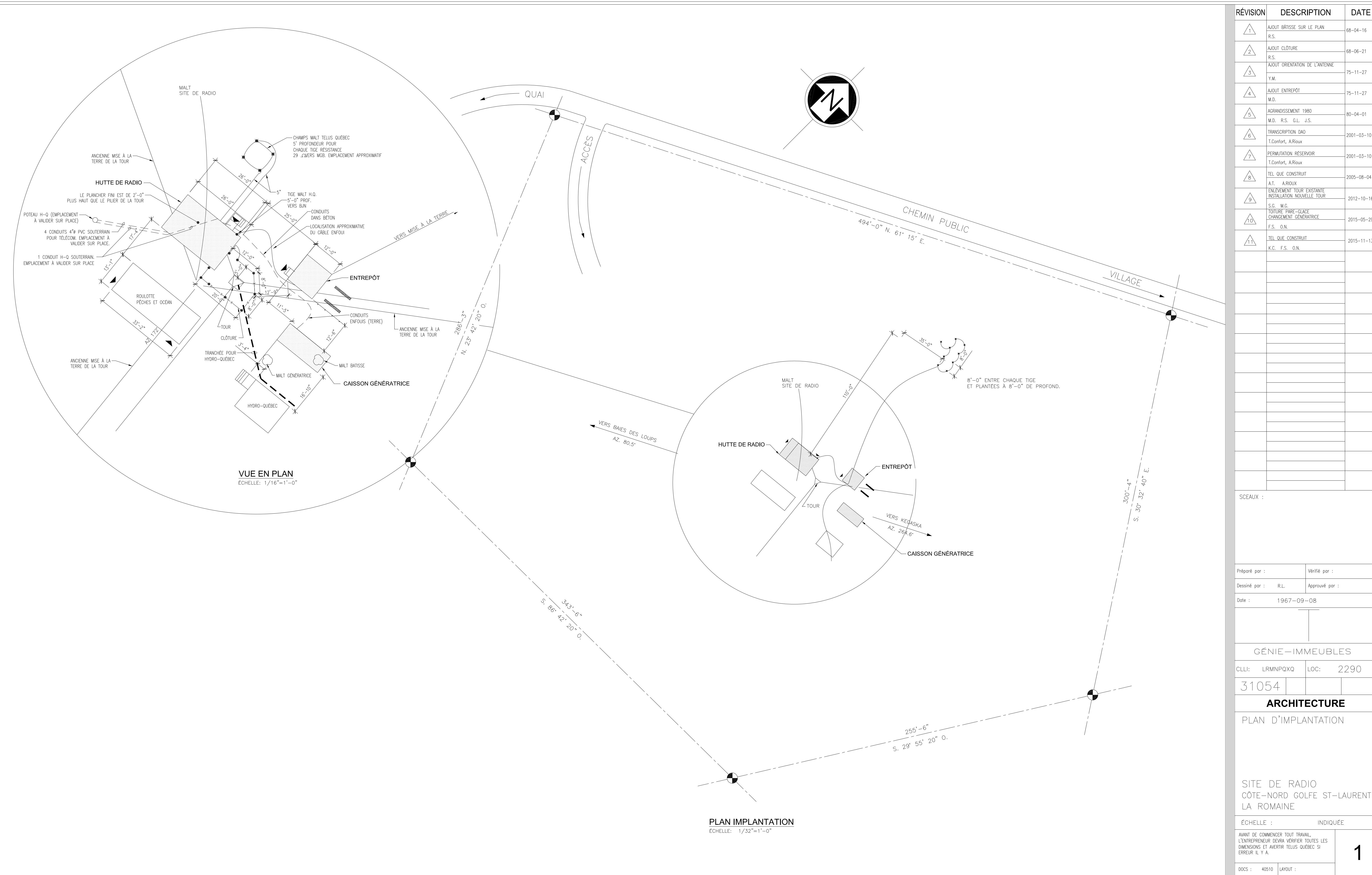
ECH.: 1" = 1'-0"

11/98/11/04 MISE À JOUR R.P.

Guide chiffré Canadian
Canadienne Coast Guard
Personnel
Technique

LA ROMAINE
ROULOTTE
3962 x 10060 (13'-0" x 33'-0")
DÉTAILS DES
FONDATIONS

Echelle INDICUÉE Date : GSIC-84-4989





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APPENDIX C-05

La Romaine
SPECIAL FEATURES OF THE SITE



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APPENDIX C: SPECIAL FEATURES OF THE LA ROMAINE SITE

SECTION C-05: SITE AND FACILITY PHOTOS



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Photos 1 and 2: Site access road



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SPECIAL FEATURES OF THE SITE



Photo 2: Overview of the site



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Photo 3: Existing CCG shelter



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Photo 4: CCG Shelter



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Photo 5: Cable entry



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Photo 6: Electrical pole and rock found on surface.



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Photo 11: New shelter to be installed



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La Romaine
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Photo 12: New shelter to be installed