



**RETURN BIDS TO:**

**RETOURNER LES SOUMISSIONS À:**

Réception des soumissions - TPSGC / Bid Receiving  
- PWGSC

1550, Avenue d'Estimauville

1550, D'Estimauville Avenue

Québec

Québec

G1J 0C7

**SOLICITATION AMENDMENT**

**MODIFICATION DE L'INVITATION**

The referenced document is hereby revised; unless otherwise indicated, all other terms and conditions of the Solicitation remain the same.

Ce document est par la présente révisé; sauf indication contraire, les modalités de l'invitation demeurent les mêmes.

**Comments - Commentaires**

**Vendor/Firm Name and Address**

Raison sociale et adresse du  
fournisseur/de l'entrepreneur

**Issuing Office - Bureau de distribution**

TPSGC-PWGSC

601-1550, Avenue d'Estimauville

Québec

Québec

G1J 0C7

<b>Title - Sujet</b> Remplacement de la tour - Mingan	
<b>Solicitation No. - N° de l'invitation</b> EE517-170427/A	<b>Amendment No. - N° modif.</b> 001
<b>Client Reference No. - N° de référence du client</b> EE517-170427	<b>Date</b> 2016-06-28
<b>GETS Reference No. - N° de référence de SEAG</b> PW-\$QCM-008-16793	
<b>File No. - N° de dossier</b> QCM-6-39071 (008)	<b>CCC No./N° CCC - FMS No./N° VME</b>
<b>Solicitation Closes - L'invitation prend fin</b> <b>at - à 02:00 PM</b> <b>on - le 2016-07-14</b>	<b>Time Zone</b> <b>Fuseau horaire</b> Heure Avancée de l'Est HAE
<b>F.O.B. - F.A.B.</b> <b>Plant-Usine:</b> <input type="checkbox"/> <b>Destination:</b> <input checked="" type="checkbox"/> <b>Other-Autre:</b> <input type="checkbox"/>	
<b>Address Enquiries to: - Adresser toutes questions à:</b> Rochette, Jean	<b>Buyer Id - Id de l'acheteur</b> qcm008
<b>Telephone No. - N° de téléphone</b> (418) 649-2834 ( )	<b>FAX No. - N° de FAX</b> (418) 648-2209
<b>Destination - of Goods, Services, and Construction:</b> <b>Destination - des biens, services et construction:</b> Mingan, Québec, Canada	

**Instructions: See Herein**

**Instructions: Voir aux présentes**

<b>Delivery Required - Livraison exigée</b>	<b>Delivery Offered - Livraison proposée</b>
<b>Vendor/Firm Name and Address</b> <b>Raison sociale et adresse du fournisseur/de l'entrepreneur</b>	
<b>Telephone No. - N° de téléphone</b> <b>Facsimile No. - N° de télécopieur</b>	
<b>Name and title of person authorized to sign on behalf of Vendor/Firm</b> <b>(type or print)</b> <b>Nom et titre de la personne autorisée à signer au nom du fournisseur/</b> <b>de l'entrepreneur (taper ou écrire en caractères d'imprimerie)</b>	
<b>Signature</b>	<b>Date</b>

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## AMENDEMENT 001

Title : REPLACEMENT OF A TELECOMMUNICATION TOWER

Included in the present amendment:

1. Modification no 1
- 

### MODIFICATION no 1

1. The solicitation number:

DELETE all references to EE474-170239/A  
INSERT instead EE517-170427/A

2. You will find enclosed the boring logs.
- 

ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED.



Englobe

Client :

TETRA TECH QI INC.

## BORING LOG

File n°: P-0010071-0-01-100  
Boring hole n°: TF-01-16  
Date: 2016-03-24

Project: Construction of a guyed tower

Situation : Longue-Pointe-de-Mingan, Qc

Coordinates (m): North 5570739,9 (Y)  
East 331039,4 (X)  
Arbitrary Elevation 98,74 (Z)  
Rock Depth: m Depth end: 8,23 m

State of sample

☐ Undisturbed ☒ Disturbed ☐ Lost ☐ Core

Organoleptic examinations on grounds:

Visual aspect: Inexistent (I); spread (Sp); soaked (S)  
Smell: Non-existent (NE); Light (L); Average (A); persistent (P)

Sample type

CF Split core drill  
TM Thin-walled tube  
PS Fixed plunger tube  
CR Core tube  
TA by Auger  
MA by Hand  
TU Transparent tube  
PW Englobe Core  
SG Frozen ground

Abbreviations

L Limits of consistency  
W<sub>L</sub> Liquid limit (%)  
W<sub>p</sub> Plastic limit (%)  
I<sub>p</sub> Indication of plasticity (%)  
I<sub>L</sub> Indication of liquidity  
W Water content (%)  
AG Grain size analysis  
S Sedimentometry  
R Refusal in the sinking  
VBS Valeur au Bleu du sol  
PDT Poids des tiges  
M.O. Organic material (%)  
K Permeability (cm/s)  
PV weight (kN/m³)  
A Absorption (l/min. m)  
U Uni-axial Compression (MPa)  
RQD Quality of rock (%)  
AC Chemical analysis  
P<sub>L</sub> Pression limite (kPa)  
E<sub>M</sub> Pression (MPa)  
E<sub>r</sub> Rock reaction (MPa)  
SP<sub>o</sub> Segregation potential (mm²/H °C)

Water level  
N Standard penetration (Nb coups/300mm)  
N<sub>c</sub> Dyn. penetration (shock qty/300mm)  
σ<sub>p</sub> Preconsolidation pressure (kPa)

TAS Ground rate

Shearing resistance

C<sub>U</sub> Undisturbed (kPa)  
C<sub>UR</sub> Disturbed (kPa)

Work site  
Laboratory

DEPTH - pi	STRATIGRAPHY			SYMBOL	Water Level (m) / DATE	SAMPLE						TESTS		RESULTS	TRIAL	
	DEPTH - m	ELEVATION - m DEPHT. - m	DESCRIPTION OF ROCK AND SOIL			TYPE AND NUMBER	STAT	GAUGE	RÉCUPÉRATION %	Shocks qty/150mm	"N" or RQD	Smell	Visual		Limits and water level (%) Wp W WL	Shearing resistance (kPa) or DYNAMIC PENETRATION 20 40 60 80 100 120 140 160 180
1	0,00		Brown, average compactness sand, tracks of silt.			CF-1	X	B	100	7-12 9-7	18					
2						CF-2	X	B	82	4-6 9-6	12					
3	97,52					CF-3	X	B	46	11-3 3-3	6					
4	1,22		Loose compactness.			CF-4	X	B	62	1-2 2-5	4					
5						CF-5	X	B	56	2-6 9-12	15					
6	96,30		Grey-brown, of average compactness sand, tracks of gravel and silt.			CF-6	X	B	52	8-7 9-11	16					
7	2,44					CF-7	X	B	54	12-15 15-18	30					
8			Sand, a little gravel in rocky, tracks of silt, grey, of dense compactness.			CF-8	X	B	49	10-13 20	33					
9						CF-9	X	B	59	15-16 18-21	34					
10						CF-10	X	B	54	4-11 14-15	25					
11	95,08															
12	3,66															
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																
25	91,12															
26	7,62		Grey, of average compactness sand, tracks of silt													
27	90,51															
28	8,23		End of the drilling in a depth of 8,23 m. N.P.: not moderate.													
29																
30																
31																
32																

Remarques:

\*\* Translated by PWGSC

Type de forage: Tubage NW/NQ par rotation

Équipement de forage: CME-55

Préparé par: S. Gauthier, tech.

Vérifié par: J.-N. G. Horth, ing.

2016-04-08

Page: 1 de 1


**Englobe**

Client :

TETRA TECH QI INC.

# Boring Log

File n°: P-0010071-0-01-100

Boring hole n°: TF-02-16

Date: 2016-03-23

Project Construction of a guyed tower

Situation: Longue-Pointe-de-Mingan, Qc

Coordinates (m): North 5570765,8 (Y)

East 331093,5 (X)

Arbitrarily Elevation 98,61 (Z)

Depth: m Depth end: 8,23 m

## Sample state

☐ Undisturbed ☒ Disturbed ☒ Lost ☐ Core

## Organoleptic examinations on grounds::

Visual aspect: Inexistent (I); spread (Sp); soaked (S)

Smell: Non-existent(NE); Light (L); Average (A); persistent (P)

## Sample type

CF Split core drill  
 TM Thin-walled tube  
 PS Fixed plunger tube  
 CR Core tube  
 TA by Auger  
 MA by Hand  
 TU Transparent tube  
 PW Englobe Core  
 SG Frozen ground

## Abbreviations

L Limits of consistency  
 W<sub>L</sub> Liquid limit (%)  
 W<sub>p</sub> Plastic limit (%)  
 I<sub>p</sub> Indication of plasticity (%)  
 I<sub>L</sub> Indication of liquid  
 W Water content (%)  
 AG Grain size analysis  
 S Sedimentometry  
 R Refusal in the sinking  
 VBS Valeur au Bleu du sol  
 PDT Poids des tiges  
 M.O. Organic material (%)  
 K Permeability (cm/s)  
 PV weight (kN/m³)  
 A Absorption (l/min. m)  
 U Uni-axial Compression (MPa)  
 RQD Quality of rock (%)  
 AC Chemical analysis  
 P<sub>L</sub> Pression limite (kPa)  
 E<sub>m</sub> Pression (MPa)  
 E<sub>r</sub> Rock reaction (MPa)  
 SP<sub>o</sub> Segregation potential (mm²/H °C)

Water level  
 N Standard penetration (Nb coups/300mm)  
 N<sub>c</sub> Dyn. penetration (shock qty/300mm)  
 σ<sub>p</sub> Preconsolidation pressure (kPa)

TAS Ground rate

## Shearing resistance

C<sub>u</sub> Undisturbed(kPa)C<sub>ur</sub> Disturbed (kPa)

Work site  
 Laboratory

STRATIGRAPHY				SAMPLE						TRIAL	
DEPTH - pi	DEPTH - m	DESCRIPTION OF ROCK AND SOIL	SYMBOL	TYPE AND NUMBER	STAT	GAUGE	RÉCUPÉRATION %	Shocks qty/150mm	"N" or RQD	TESTS organo.	RESULTS
	ELEVATION - m DEPHT. -		Water Level (m) / DATE							Smell Visual	Limits and water level (%) W <sub>p</sub> W <sub>L</sub> 20 40 60 80 100 120 Shearing resistance (kPa) or DYNAMIC PENETRATION 20 40 60 80 100 120 140 160 180
1	98,61 0,00	Sand, tracks of silt, beige to dark brown, loose compactness.		TA-1							
2				CF-2		B	85	3-4 5-8	9		
3				CF-3		B	80	5-6 8-8	12		
4	97,39 1,22	Average compactness.		CF-4		B	34	4-5 8-8	11		
5				CF-5		B	57	3-7 12-10	19		
6	96,17 2,44	Sand, a little gravel in rocky, tracks of silt, dark brown, average compactness.		CF-6		B	44	6-6 7-11	13		
7				CF-7		B	49	14-13 13-17	26		
8				CF-8		B	52	4-8 10-13	18		
9				CF-9		B	51	10-13 19-21	32		
10				CF-10		B	59	14-15 18-20	33		
11											
12											
13											
14											
15											
16											
17											
18											
19											
20	92,51 6,10	Grey, dense compactness.									
21											
22											
23											
24											
25											
26											
27	90,38 8,23	End of the drilling in a depth of 8,23 m. N P.: in 2,48 m of depth, March 23rd, 2016									
28											
29											
30											
31											
32											

## Remarques:

\*\* Translated by PWGSC

Type de forage: Tubage NW/NQ par rotation

Équipement de forage: CME-55

Préparé par: S. Gauthier, tech.

Vérifié par: J.-N. G. Horth, ing.

2016-04-08

Page: 1 de 1





Client :

TETRA TECH QI INC.

## BORING LOG

File n°: P-0010071-0-01-100

Boring Hole n°: TF-03-16

Date: 2016-03-23

Project Construction of a guyed tower

Situation Longue-Pointe-de-Mingan, Qc

Coordinates (m): North 5570767,8 (Y)

East 331054,3 (X)

Arbitrary Elevation 98,97 (Z)

Depth: m Depth end: 8,23 m

## État des échantillons

☐ Intact ☒ Remanié ☐ Perdu ☐ Carotte

## Examens organoleptiques sur les sols:

Aspect visuel: Inexistant(I); Disséminé(D); Imbibé(IM)

Odeur: Inexistante(I); Légère(L); Moyenne(M); Persistante(P)

## Sample type

CF Split core drill  
 TM Thin-walled tube  
 PS Fixed plunger tube  
 CR Core tube  
 TA by Auger  
 MA by Hand  
 TU Transparent tube  
 PW Englobe Core  
 SG Frozen ground

## Abbreviations

L Limits of consistency  
 W<sub>L</sub> Liquid limit (%)  
 W<sub>p</sub> Plastic limit (%)  
 I<sub>p</sub> Indication of plasticity (%)  
 I<sub>L</sub> Indication of liquid  
 W Water content (%)  
 AG Grain size analysis  
 S Sedimentometry  
 R Refusal in the sinking  
 VBS Valeur au Bleu du sol  
 PDT Poids des tiges  
 M.O. Organic material (%)  
 K Permeability (cm/s)  
 PV weight (kN/m³)  
 A Absorption (l/min. m)  
 U Uni-axial Compression (MPa)  
 RQD Quality of rock (%)  
 AC Chemical analysis  
 P<sub>L</sub> Pression limite (kPa)  
 E<sub>m</sub> Pression (MPa)  
 E<sub>r</sub> Rock reaction (MPa)  
 SP<sub>o</sub> Segregation potential (mm/H °C)

Water level  
 N Standard penetration (Nb coups/300mm)  
 N<sub>c</sub> Dyn. penetration (shock qty/300mm)  
 σ<sub>p</sub> Preconsolidation pressure (kPa)

TAS Ground rate

## Shearing resistance

C<sub>u</sub> Undisturbed (kPa)C<sub>ur</sub> Disturbed (kPa)

Work site  
 Laboratory

DEPTH - pi	DEPTH - m	STRATIGRAPHY		SYMBOL	Water Level (m) / DATE	SAMPLE					TESTS		RESULTS	TRIAL	
		ELEVATION - m	DESCRIPTION OF ROCK AND SOIL			TYPE AND NUMBER	STAT	GAUGE	RÉCUPÉRATION %	Shocks qty/150mm	"N" or RQD	organo.		Limits and water level (%)	
		DEPHT - m												W <sub>p</sub> W <sub>L</sub>	
														20 40 60 80 100 120	
														Shearing resistance (kPa) or DYNAMIC PENETRATION	
														20 40 60 80 100 120 140 160 180	
1	0,00	98,97	Brown, average compactness sand, tracks of silt. Tracks of vegetable material		61,96,43 m 2016-03-23	CF-1	X	B	100	5-8 7-7	15		AG		
2	0,61	98,36	Brown, of average compactness sand, tracks of gravel and silt. Loose compactness.			CF-2	X	B	69	4-6 7-8	13		W=4.5		
3	1,22	97,75				CF-3	X	B	44	4-3 3-4	6				
4						CF-4	X	B	52	3-3 4-5	7				
5		96,53	Brown, of average compactness sand, tracks of gravel and of silt.			CF-5	X	B	61	5-6 7-8	13		AG		
6	2,44	95,92	Rocky sand, tracks of silt, brown, of average compactness.			CF-6	X	B	52	5-9 10-12	19		W=14.7		
7	3,05	95,31				CF-7	X	B	49	5-7 9-10	16				
8	3,66		Grey.			CF-8	X	B	28	6-10 9-16	29				
9						CF-9	X	B	54	15-16 19-25	35				
10		93,18	Dense compactness.			CF-10	X	B	44	10-14 16-20	30				
11	5,79	90,74	End of the drilling in a depth of 8,23 m. N.P.: in 2,54 m of depth, March 23rd, 2016.												

Remarques:

\*\* Translated by PWGSC

Type de forage: Tubage NW/NQ par rotation

Équipement de forage: CME-55

Préparé par: S. Gauthier, tech.

Vérifié par: J.-N. G. Horth, ing.

2016-04-08

Page: 1 de 1



Client :

TETRA TECH QI INC.

## BORING LOG

File n°: P-0010071-0-01-100  
 Boring Hole n°: TF-04-16  
 Date: 2016-03-23

Projet: Construction of a guyed tower

Situation: Longue-Pointe-de-Mingan, Qc

Coordinates (m): North 5570801,1 (Y)  
 East 331039,1 (X)  
 Arbitrary Elevation 99,09 (Z)  
 Depth: m Depth end: 8,23 m

## État des échantillons

Intact ☐ Remanié ☒ Perdu ☐ Carotte ☐

## Examens organoleptiques sur les sols:

Aspect visuel: Inexistant(I); Disséminé(D); Imbibé(IM)  
 Odeur: Inexistante(I); Légère(L); Moyenne(M); Persistante(P)

## Sample type

CF Split core drill  
 TM Thin-walled tube  
 PS Fixed plunger tube  
 CR Core tube  
 TA by Auger  
 MA by Hand  
 TU Transparent tube  
 PW Englobe Core  
 SG Frozen ground

## Abbreviations

L Limits of consistency  
 W<sub>L</sub> Liquid limit (%)  
 W<sub>p</sub> Plastic limit (%)  
 I<sub>p</sub> Indication of plasticity (%)  
 I<sub>L</sub> Indication of liquid  
 W Water content (%)  
 AG Grain size analysis  
 S Sedimentometry  
 R Refusal in the sinking  
 VBS Valeur au Bleu du sol  
 PDT Poids des tiges  
 M.O. Organic material (%)  
 K Permeability (cm/s)  
 PV weight (kN/m²)  
 A Absorption (l/min. m)  
 U Uni-axial Compression (MPa)  
 RQD Quality of rock (%)  
 AC Chemical analysis  
 P<sub>L</sub> Pression limite (kPa)  
 E<sub>m</sub> Pression (MPa)  
 E<sub>r</sub> Rock reaction (MPa)  
 SP<sub>o</sub> Segregation potential (mm²/H °C)

Water level  
 N Standard penetration (Nb coups/300mm)  
 N<sub>c</sub> Dyn. penetration (shock qty/300mm)  
 σ<sub>p</sub> Preconsolidation pressure (kPa)

TAS Ground rate

## Shearing resistance

C<sub>u</sub> Undisturbed (kPa)  
 C<sub>ur</sub> Disturbed (kPa)

Work site  
 Laboratory

DEPTH - pi	DEPTH - m	STRATIGRAPHY		Water Level (m) / DATE	SAMPLE						TESTS		RESULTS	TRIAL	
		ELEVATION - m DEPHT -	DESCRIPTION OF ROCK AND SOIL		SYMBOL	TYPE AND NUMBER	STAT	GAUGE	RÉCUPÉRATION %	Shocks qty/150mm	"N" or RQD	organo.		Limits and water level (%) <div><div>Wp</div><div>W</div><div>Wl</div></div> <div>20 40 60 80 100 120</div>	
												Smell			Visual
		99,09 0,00	Sand, little of silt, brown, average compactness.		CF-1		B	82	2-14 10-9	24			AG W=34.2		
1					CF-2		B	70	8-8 8-8	16					
2					CF-3		B	39	6-3 3-4	6					
3		97,87 1,22	Loose compactness.		CF-4		B	49	4-2 3-2	5			AG W= 20,6		
4					CF-5		B	52	1-2 4-4	6					
5		97,26 1,83	Brown, loose compactness sand, tracks of silt.		CF-6		B	51	5-3 4-6	7					
6					CF-7		B	59	5-10 12-11	22					
7					CF-8		B	52	7-12 19-16	31					
8		96,04 3,05	Sand, tracks of little gravel and silt, brown, loose compactness.		CF-9		B	54	13-16 21-22	37					
9					CF-10		B	75	14-17 20-24	37					
10		95,43 3,66	Grey, average compactness.												
11															
12		94,82 4,27	Dense compactness.												
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24		91,47 7,62	Sand, tracks of silt, dark gray.												
25															
26		90,86 8,23	End of the drilling in a depth of 8,23 m. N.P.: not moderate.												
27															
28															
29															
30															
31															
32															

## Remarques:

\*\* Translated by PWGSC

Type de forage: Tubage NW/NQ par rotation

Équipement de forage: CME-55

Préparé par: S. Gauthier, tech.

Vérifié par: J.-N. G. Horth, ing.

2016-04-08

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