



RETURN BIDS TO:

RETOURNER LES SOUMISSIONS À:

Public Works and Government Services Canada
Room 100-167 Lombard Avenue
Winnipeg
Manitoba
R3B076
Bid Fax: (204) 983-7796

REQUEST FOR PROPOSAL DEMANDE DE PROPOSITION

Proposal To: Public Works and Government Services Canada

We hereby offer to sell to Her Majesty the Queen in right of Canada, in accordance with the terms and conditions set out herein, referred to herein or attached hereto, the goods, services, and construction listed herein and on any attached sheets at the price(s) set out therefor.

Proposition aux: Travaux Publics et Services Gouvernementaux Canada

Nous offrons par la présente de vendre à Sa Majesté la Reine du chef du Canada, aux conditions énoncées ou incluses par référence dans la présente et aux annexes ci-jointes, les biens, services et construction énumérés ici sur toute feuille ci-annexée, au(x) prix indiqué(s).

Comments - Commentaires

Vendor/Firm Name and Address

Raison sociale et adresse du
fournisseur/de l'entrepreneur

Issuing Office - Bureau de distribution

Public Works and Government Services Canada
Northern Contaminated Site Program
ATB Place North Tower
10025 Jasper Avenue
Edmonton
Alberta
T5J 1S6

Title - Sujet Assainissement du site Resolute Bay	
Solicitation No. - N° de l'invitation EW699-182827/A	Date 2018-03-27
Client Reference No. - N° de référence du client INAC-EW699-182827	
GETS Reference No. - N° de référence de SEAG PW-\$NCS-012-11349	
File No. - N° de dossier NCS-7-40265 (012)	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2018-05-07	Time Zone Fuseau horaire Central Daylight Saving Time CDT
F.O.B. - F.A.B. Specified Herein - Précisé dans les présentes Plant-Usine: <input type="checkbox"/> Destination: <input type="checkbox"/> Other-Autre: <input checked="" type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Sarna (NCS), Crystal	Buyer Id - Id de l'acheteur ncs012
Telephone No. - N° de téléphone (204) 298-2742 ()	FAX No. - N° de FAX (204) 983-7796
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: DEPARTMENT OF PUBLIC WORKS AND GOVERNMENT SERVICES CANADA ATB PLACE, NORTH TOWER 10025 JASPER AVE EDMONTON Alberta T5J1S6 Canada	

Instructions: See Herein

Instructions: Voir aux présentes

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

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Room 100, 167 Lombard Ave.
Winnipeg, Manitoba
R3B 0T6**

Les entreprises qui souhaitent présenter des offres pour ce projet devraient se procurer les documents d'appel d'offres auprès de service SEAOG sur <http://achatsetventes.gc.ca/appels-d-offres>, un site Web du gouvernement du Canada.

Les entreprises qui se procurent des documents d'appel d'offres d'un source autre que le site officiel risquent de recevoir une documentation incomplète.

DEMANDE DE PROPOSITION

Assainissement des sites d'enfouissement de l'aéroport de Resolute Bay
Aéroport de Resolute Bay
Resolute Bay, Nunavut
No. de Project.: R.099508.001

AVIS IMPORTANT AUX SOUMISSIONNAIRES

Ce travail est lié à la demande de soumissions précédente EW699-160936.

SOUSSIONS À DEUX ENVELOPPES

Les soumissions doivent être présentées respectant un processus à « deux enveloppes ». Consulter l'IP08 aux Instructions particulières aux soumissionnaires.

PAIEMENT SANS DÉLAI DANS L'INDUSTRIE DE LA CONSTRUCTION

Principes en matière de paiement sans délai

Services publics et Approvisionnement Canada est d'avis que ces trois principes devraient régir le versement des paiements faits au titre des contrats de construction :

- Rapidité : Le Ministère examinera et traitera les factures dans les meilleurs délais. En cas de différend, Services publics et Approvisionnement Canada paiera les éléments non contestés, tout en s'employant à résoudre la question du montant contesté de façon rapide et équitable
- Transparence : Le Ministère rendra publics les renseignements sur les paiements versés au titre des contrats de construction, comme les dates de versement des paiements, ainsi que le nom des entreprises, les numéros de contrat et de projet; de leur côté, les entrepreneurs devraient communiquer ces renseignements aux paliers inférieurs
- Responsabilité partagée : Les payeurs et les bénéficiaires sont tenus de respecter les conditions de leurs contrats, entre autres leurs obligations liées au versement et à la réception des paiements, ainsi que d'adopter les pratiques exemplaires de l'industrie.

Pour plus de renseignements : <http://www.tpsgc-pwgsc.gc.ca/biens-property/divulcation-disclosure/psdic-ppci-fra.html>

APPUYER LE RECOURS AUX APPRENTIS

Le gouvernement du Canada propose de soutenir l'embauche d'apprentis dans le cadre des projets de construction et d'entretien du gouvernement fédéral. Afin de supporter l'initiative une attestation volontaire est à compléter à l'appendice 4 confirmant l'intention du soumissionnaire d'employer et former de la main d'œuvre.

MISE À JOUR SUR L'UTILISATION DE L'AMIANTE DE TPSGC

En date du 1^{er} avril 2016, tous les contrats de Travaux publics et services gouvernementaux Canada (TPSGC) qui portent sur des projets de nouvelle construction et des rénovations importantes interdiront l'utilisation des matériaux de construction contenant de l'amiante. Pour de plus amples informations veuillez consulter ce lien <http://www.tpsgc-pwgsc.gc.ca/comm/vedette-features/2016-04-19-00-fra.html>

AJOUT DE TERMINOLOGIE

Prendre connaissance à la condition supplémentaire CS03 de l'ajout de terminologie à la clause R2810D.

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R2710T INSTRUCTIONS GÉNÉRALES - SERVICES DE CONSTRUCTION - EXIGENCES RELATIVES À LA GARANTIE DE SOUMISSION (IG) (2017-09-21)

Les articles suivants de la clause R2710T sont reproduits sur le site WEB;

<https://achatsetventes.gc.ca/politiques-et-lignes-directrices/guide-des-clauses-et-conditions-uniformisees-d-achat/5/R>

IG01	Dispositions relatives à l'intégrité - soumission
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IG16	Évaluation du rendement
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IG18	Code de conduite pour l'approvisionnement-soumission

DOCUMENTS DU CONTRAT (DC)

CONDITIONS SUPPLÉMENTAIRES (CS)

CS01	Exigences relatives à la sécurité industrielle, lieu de sauvegarde des documents
CS02	Condition d'assurance
CS03	Interprétation
CS04	Remplacement d'individus spécifiques
CS05	La Sécurité et la Santé lieu de travail
CS06	Accord du Nunavut
CS07	Renseignements aux médias
CS08	Modification de la CG6.4 Calcul du Prix
CS09	Contrat d'évaluation du rendement
CS10	État du site contaminé

CS11 Propriété du matériel existant sur le site

FORMULAIRE DE SOUMISSION ET D'ACCEPTATION (SA)

SA01 Identification du projet
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SA03 Offre
SA04 Période de validité des soumissions
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INSTRUCTIONS PARTICULIÈRES AUX SOUMISSIONNAIRES (IP)

IP01 INTRODUCTION

1. Travaux publics et Services gouvernementaux Canada (TPSGC) à l'intention de faire appel à un entrepreneur pour assurer les services de construction selon les modalités exposées dans la présente invitation à soumissionner
2. On demande aux soumissionnaires qui donnent suite à cette invitation de présenter une soumission détaillée complète se rapportant à l'IP05 "Livraison des soumissions".

IP02 DOCUMENTS DE SOUMISSION

Les documents suivants constituent les documents de soumission:

1.
 - a. Appel d'offres - Page 1;
 - b. Instructions particulières aux soumissionnaires;
 - c. Instructions générales – services de construction – exigences relatives à la garantie de soumission R2710T (2017-09-21)
 - d. Clauses et conditions identifiées aux "Documents du contrat";
 - e. Dessins et devis;
 - f. Formulaire de soumission et d'acceptation et tout appendice s'y rattachant; et
 - g. Toute modification émise avant la clôture de l'invitation.

La présentation d'une soumission constitue une affirmation que le soumissionnaire a lu ces documents et accepte les modalités qui y sont énoncées.

2. Les Instructions générales - Services de construction - Exigences relatives à la garantie de soumission R2710T sont incorporées par renvoi et reproduites dans le Guide des clauses et conditions uniformisées d'achat (CCUA) publié par Travaux publics et Services gouvernementaux Canada (TPSGC). Le guide des CCUA est disponible sur le site Web de TPSGC: <https://achatsetventes.gc.ca/politiques-et-lignes-directrices/guide-des-clauses-et-conditions-uniformisees-d-achat/5/R>

IP03 DEMANDES DE RENSEIGNEMENTS PENDANT L'APPEL D'OFFRES

1. Toute demande de renseignements sur l'appel d'offres doit être présentée par écrit à l'autorité contractante dont le nom figure à l'Appel d'offres - Page 1, à l'adresse courriel crystal.sarna@tpsgc-pwgsc.gc.ca et ce le plus tôt possible pendant la durée de l'invitation. À l'exception de l'approbation de matériaux de remplacement, comme cela est décrit à l'IG15 de la R2710T, toutes les autres demandes de renseignements devraient être reçues au moins sept (7) jours civils avant la date de clôture de l'invitation afin de laisser suffisamment de temps pour y répondre. Pour ce qui est des demandes de renseignements reçues après cette date, il est possible qu'on ne puisse y répondre.
2. Pour assurer la cohérence et la qualité de l'information fournie aux soumissionnaires, l'autorité contractante examinera le contenu de la demande de renseignements et décidera s'il convient ou non de publier une modification.
3. Toutes les demandes de renseignements et autres communications envoyées avant la clôture de l'appel d'offres doivent être adressées UNIQUEMENT à l'autorité contractante dont le nom figure à l'Appel d'offres - Page 1. Le défaut de se conformer à cette exigence pourrait avoir pour conséquence que la soumission soit déclarée non recevable.

IP04 CONFÉRENCE DES SOUMISSIONNAIRES OPTIONNELLE

Une conférence des soumissionnaires aura lieu par WebEx le 11 avril 2018. La conférence commencera à 11h00 HC. Dans le cadre de la conférence, on examinera la portée du besoin précisé dans la demande de soumissions et on répondra aux questions qui seront posées. Il est recommandé que les soumissionnaires qui ont

l'intention de déposer une soumission assistent à la conférence ou y envoient un représentant.

Il est demandé aux soumissionnaires de communiquer avec l'autorité contractante avant la conférence pour confirmer la participation et obtenir les instructions pour nous joindre par courriel à l'adresse suivante : crystal.sarna@pwgsc.gc.ca ou par téléphone : 204-298-2742.

Les soumissionnaires sont priés de communiquer avec l'autorité contractante avant la conférence pour confirmer leur présence. Ils devraient fournir à l'autorité contractante, par écrit, une liste des personnes qui assisteront à la conférence et des questions qu'ils souhaitent y voir abordées au plus tard le 9 avril 2018.

Toute précision ou tout changement apporté à la demande de soumissions à la suite de la conférence des soumissionnaires sera inclus dans la demande de soumissions, sous la forme d'une modification. Les soumissionnaires qui ne participeront pas à la conférence pourront tout de même présenter une soumission.

IP05 LIVRAISON DES SOUMISSIONS

L'article IG09 de R2710T est remplacé par ce qui suit:

1. Les soumissions devront être présentées en respectant un processus à « deux enveloppes ». Les deux enveloppes doivent être jointes et cachetées ensemble dans une troisième enveloppe, l'enveloppe de soumission. Toutes les enveloppes sont fournies par le soumissionnaire.
2. L'enveloppe de soumission doit être adressée et présentée au bureau désigné sur la page frontispice « Appel d'offres » pour la réception des soumissions. Elle doit parvenir à ce bureau au plus tard à la date et à l'heure indiquée pour la clôture des soumissions. Le soumissionnaire doit s'assurer que l'information suivante est reproduite clairement, en caractères de frappe ou d'imprimerie au recto de l'enveloppe de soumission :
 - a. numéro de l'invitation;
 - b. le nom du soumissionnaire;
 - c. l'adresse de retour; et
 - d. l'heure et la date de clôture.
3. Le Formulaire de qualifications ainsi que tout autre document exigé doit être joint et cacheté dans une enveloppe avec l'information suivante reproduite clairement, en caractères de frappe ou d'imprimerie au recto de l'enveloppe :
 - a. **ENVELOPPE 1 - QUALIFICATION;**
 - b. numéro de l'invitation; et
 - c. nom du soumissionnaire.
4. Le Formulaire de soumission et d'acceptation (SA) ainsi que la garantie de soumission si applicable doivent être jointes et cachetées dans une enveloppe avec l'information suivante reproduite clairement, en caractères de frappe ou d'imprimerie au recto de l'enveloppe :
 - a. **ENVELOPPE 2 - PRIX;**
 - b. numéro de l'invitation; et
 - c. nom du soumissionnaire.

5. La livraison correcte des soumissions dans les délais prescrits est la responsabilité exclusive du soumissionnaire.

IP06 RÉVISION DES SOUMISSIONS

Les alinéas 1 et 3 de IG 10 de R2710T sont remplacés par la suivante;

Une soumission soumise en conformité avec ces instructions peut être révisée en soumettant en main propre une nouvelle enveloppe de prix. Elle doit parvenir au bureau de réception des soumissions au plus tard à la date et à l'heure indiquée pour la clôture des soumissions. Le soumissionnaire doit s'assurer que l'information suivante est reproduite clairement, en caractères de frappe ou d'imprimerie au recto de l'enveloppe de soumission :

- a. ENVELOPPE 1- RÉVISION QUALIFICATION et/ou ENVELOPPE 2 – RÉVISION PRIX
- b. numéro de l'invitation; et
- c. nom du soumissionnaire.

IP07 PROCESSUS DE CONFORMITÉ DES SOUMISSIONS EN PHASES

1.0 Généralités

a) *Pour ce besoin, le Canada applique le Processus de conformité des soumissions en phases tel que décrit ci-dessous.*

b) *Nonobstant tout examen par le Canada aux phases I ou II du Processus de conformité des soumissions en phases, les soumissionnaires sont et demeureront les seuls et uniques responsables de l'exactitude, de l'uniformité et de l'exhaustivité de leurs soumissions, et le Canada n'assume, en vertu de cet examen, aucune obligation ni de responsabilité envers les soumissionnaires de relever, en tout ou en partie, toute erreur ou toute omission, dans les soumissions ou en réponse à toute communication provenant d'un soumissionnaire.*

LE SOUMISSIONNAIRE RECONNAÎT QUE LES EXAMENS LORS DES PHASES I ET II DU PRÉSENT PROCESSUS DE CONFORMITÉ DES SOUMISSIONS EN PHASES NE SONT QUE PRÉLIMINAIRES ET N'EMPÊCHENT PAS QU'UNE SOUMISSION SOIT NÉANMOINS JUGÉE NON RECEVABLE À LA PHASE III, ET CE, MÊME POUR LES EXIGENCES OBLIGATOIRES QUI ONT FAIT L'OBJET D'UN EXAMEN AUX PHASES I OU II, ET MÊME SI LA SOUMISSION

AURAIT ÉTÉ JUGÉE RECEVABLE À UNE PHASE ANTÉRIEURE. LE CANADA PEUT DÉTERMINER À SA DISCRÉTION QU'UNE SOUMISSION NE RÉPOND PAS À UNE EXIGENCE OBLIGATOIRE À N'IMPORTE QUELLE DE CES PHASES. LE SOUMISSIONNAIRE RECONNAÎT ÉGALEMENT QUE MALGRÉ LE FAIT QU'IL AIT FOURNI UNE RÉPONSE À UN AVIS OU À UN RAPPORT D'ÉVALUATION DE LA CONFORMITÉ (REC) (TEL QUE CES TERMES SONT DÉFINIS PLUS BAS) QU'IL EST POSSIBLE QUE CETTE RÉPONSE NE SUFFISE PAS POUR QUE SA SOUMISSION SOIT JUGÉE CONFORME AUX AUTRES EXIGENCES OBLIGATOIRES.

c) Sans préjudice à ses autres droits, le Canada aura le droit, à sa discrétion absolue, et sans obligation, d'exiger ou d'accepter en tout temps, avant ou après la date de clôture de la demande de soumissions, tout document ou élément matériel des soumissionnaires visant à clarifier la soumission ou à corriger des lacunes ou des erreurs dans la soumission qu'il ne juge pas importantes, par exemple toutes les questions de forme, les erreurs de calcul et l'oubli de confirmer le tout avec une signature ou en vérifiant la bonne réception. Cela ne limitera pas son droit d'exiger ou d'accepter tout autre information après la clôture de la demande de soumissions dans des cas où la demande de soumissions le permet expressément.

d) Le PCSP ne limite pas les droits du Canada en vertu du Guide des clauses et conditions uniformisées d'achat (CCUA) 2003 (27-04-2017) Instructions uniformisées – biens ou services – besoins concurrentiels, ni le droit du Canada de demander ou d'accepter toute information pendant la période de soumission ou après la clôture de cette dernière, lorsque la demande de soumissions confère expressément ce droit au Canada, ou dans les circonstances décrites au paragraphe (c).

e) Le Canada enverra un AVIS ou un REC selon la méthode de son choix et à sa discrétion absolue. Le soumissionnaire doit soumettre sa réponse par la méthode stipulée dans l'AVIS ou le REC. Les réponses sont réputées avoir été reçues par le Canada à la date et à l'heure qu'elles ont été livrées au Canada par la méthode indiquée dans l'AVIS ou le REC et à l'adresse qui y figure. Un courriel de réponse autorisé dans l'AVIS ou le REC est réputé reçu par le Canada à la date et à l'heure auxquelles il a été reçu dans la boîte de réception de l'adresse électronique indiquée dans l'AVIS ou le REC. Un AVIS, ou un REC, envoyé par le Canada au soumissionnaire à l'adresse fournie par celui-ci dans la soumission ou après l'envoi de celle-ci est réputé avoir été reçu par le soumissionnaire à la date à laquelle il a été envoyé par le Canada. Le Canada n'assume aucune responsabilité envers les soumissionnaires pour les soumissions retardataires, peu importe la cause.

2.0 Phase I: Soumission financière:

- a) Après la date et l'heure de clôture de cette demande de soumissions, le Canada examinera la soumission pour déterminer si elle comporte une soumission financière et si celle-ci contient toute l'information demandée par la demande de soumissions. L'examen par le Canada à la phase I se limitera à déterminer s'il y manque des informations exigées par la demande de soumissions à la soumission financière. Cet examen n'évaluera pas si la soumission financière répond à toute norme ou si elle est conforme à toutes les exigences de la demande.

- b) L'examen du Canada dans la phase I sera effectué par des fonctionnaires du ministère de Services Publics et Approvisionnement Canada.
- c) Si le Canada détermine, selon sa discrétion absolue, qu'il n'y a pas de soumission financière ou qu'il manque toutes les informations demandées dans la soumission financière, la soumission sera alors jugée non recevable et sera rejetée.
- d) Pour les soumissions autres que celles décrites au paragraphe (C), Canada enverra un avis écrit au soumissionnaire (« Avis ») identifiant où la soumission financière manque d'informations. Un soumissionnaire dont la soumission financière a été jugée recevable selon les exigences examinées lors de la phase I ne recevra pas d'Avis. De tels soumissionnaires n'auront pas le droit de soumettre de l'information supplémentaire relativement à leur soumission financière.
 - e) Les soumissionnaires qui ont reçu un Avis bénéficieront d'un délai indiqué dans l'Avis (la « période de grâce ») pour redresser les points indiqués dans l'Avis en fournissant au Canada, par écrit, l'information supplémentaire ou une clarification en réponse à l'Avis. Les réponses reçues après la fin de la période de grâce ne seront pas prises en considération par le Canada sauf dans les circonstances et conditions stipulées expressément dans l'avis.
- e) Dans sa réponse à l'Avis, le soumissionnaire n'aura pas le droit de redresser que la partie de sa soumission financière qui est indiquée dans l'Avis. Par exemple, là où l'Avis indique que dans les cas où un élément a été laissé en blanc, seuls les informations manquantes pourront ainsi être ajoutées à la soumission financière, sauf que, dans les cas où l'ajout de ces informations entraînera nécessairement la modification d'autres renseignements sur les calculs qui ont déjà été présentés dans la soumission financière (p. ex. le calcul visant à déterminer le prix total), les rajustements nécessaires devront être mis en évidence par le soumissionnaire, et seuls ces rajustements pourront être effectués. Toutes les informations fournies doivent satisfaire aux exigences de la demande de soumissions.
- g) Toute autre modification apportée à la soumission financière soumise par le soumissionnaire sera considérée comme une nouvelle information et sera rejetée. Aucun changement ne sera autorisé à une quelconque section de la soumission du soumissionnaire. L'information soumise conformément aux exigences de cette demande de soumissions en réponse à l'Avis remplacera, en intégralité, **uniquement** la partie de la soumission financière originale telle qu'autorisée cidessus, et sera utilisée pour le reste du Processus d'évaluation des soumissions.
- h) Le Canada déterminera si la soumission financière est recevable pour les exigences examinées à la phase I, en tenant compte de l'information supplémentaire ou de la clarification fournie par le soumissionnaire conformément à la présente section. Si la soumission financière n'est pas jugée recevable au regard des exigences examinées à la phase I à la satisfaction du Canada, la soumission financière sera jugée non recevable et rejetée.
- i) Seules les soumissions jugées recevables au regard des exigences examinées à la phase I à la satisfaction du Canada seront examinées à la phase II.

3.0 Phase II : Soumission technique

- a) L'examen par le Canada au cours de la phase II se limitera à une évaluation de la soumission technique afin de vérifier si le soumissionnaire a respecté toutes les exigences obligatoires d'admissibilité. Cet examen n'évalue pas si la soumission technique répond à une norme ou répond à toutes les exigences de la soumission. Les exigences obligatoires d'admissibilité sont les critères techniques obligatoires tels qu'ainsi décrits dans la présente demande de soumissions comme faisant partie du Processus de conformité des soumissions en phases. Les critères techniques obligatoires qui ne sont pas identifiés dans la demande de soumissions comme faisant partie du Processus de conformité des soumissions en phases ne seront pas évalués avant la phase III.
- b) Le Canada enverra un avis écrit au soumissionnaire (un rapport d'évaluation de la conformité [REC]) précisant les exigences obligatoires d'admissibilité que la soumission n'a pas respectée. Un soumissionnaire dont la soumission a été jugée recevable au regard des exigences examinées au cours de la phase II recevra un REC qui précisera que sa soumission a été jugée recevable au regard des exigences examinées au cours de la phase II. Le soumissionnaire en question ne sera pas autorisé à soumettre des informations supplémentaires en réponse au REC.
- c) Le soumissionnaire disposera de la période de temps précisée dans le REC (« période de grâce ») pour remédier à l'omission de répondre à l'une ou l'autre des exigences obligatoires d'admissibilité inscrites dans le REC en fournissant au Canada, par écrit, des informations supplémentaires ou des clarifications en réponse au REC. Les réponses reçues après la fin de la période de grâce ne seront pas prises en considération par le Canada sauf, dans les circonstances et conditions expressément prévues par le REC.

d) La réponse du soumissionnaire doit adresser uniquement les exigences obligatoires d'admissibilité énumérées dans le rapport d'évaluation de conformité (REC) et considérées comme non accomplies, et doit inclure uniquement les renseignements nécessaires pour ainsi se conformer aux exigences. Toute information supplémentaire fournie par le soumissionnaire qui n'est pas requise pour se conformer aux exigences ne sera pas prise en considération par le Canada, à moins qu'elle n'ait un impact sur d'autres parties de la soumission, en tel cas ces changements par effet domino seront soulignés mais en aucun cas ces changements ne doivent porter sur le ou les prix.

f) La réponse du soumissionnaire au REC devra indiquer dans chaque cas l'exigence obligatoire d'admissibilité du REC à laquelle elle répond, notamment son indication dans la section correspondante de la soumission initiale, la formulation de la modification proposée pour cette section, ainsi que la formulation et l'endroit dans la soumission de toute autre modification en conséquence. Pour chaque modification en conséquence, le soumissionnaire doit justifier pourquoi il s'agit d'une conséquence modificatrice? Il n'incombe pas au Canada d'agir comme réviseur de la soumission du soumissionnaire; au contraire, il incombe au soumissionnaire de le faire en assumant les conséquences. Toutes les informations fournies doivent satisfaire aux exigences de la demande de soumissions.

f) Tout changement apporté à la soumission par le soumissionnaire en dehors de ce qui est demandé, sera considéré comme étant de l'information nouvelle et ne sera pas prise en considération. L'information soumise selon les exigences de cette demande de soumissions en réponse au REC remplacera, intégralement et **uniquement** la partie de la soumission originale telle qu'elle est autorisée dans cette section.

g) Les informations supplémentaires soumises pendant la phase II et permises par cette section seront considérées comme faisant partie de la soumission et seront prises en compte par le Canada dans l'évaluation de la soumission lors de la phase II que pour déterminer si la soumission respecte les exigences obligatoires admissibles. Celles-ci ne seront utilisées à aucune autre phase de l'évaluation pour augmenter ou diminuer les notes que la soumission originale pourrait obtenir sans les avantages de telles informations additionnelles. Par exemple, un critère obligatoire admissible qui exige l'obtention d'un nombre minimum de points pour être considéré conforme sera évalué à la phase II afin de déterminer si cette note minimum obligatoire aurait été obtenue si le soumissionnaire n'avait pas soumis les renseignements supplémentaires en réponse au REC.

Dans ce cas, la soumission sera considérée comme étant conforme par rapport à ce critère obligatoire admissible, et les renseignements supplémentaires soumis par le soumissionnaire lieront le soumissionnaire dans le cadre de sa soumission, mais la note originale du soumissionnaire, qui était inférieure à la note minimum obligatoire pour ce critère obligatoire admissible, ne changera pas, et c'est cette note originale qui sera utilisée pour calculer les notes pour la soumission.

h) Le Canada déterminera si la soumission est recevable pour les exigences examinées à la phase II, en tenant compte de l'information supplémentaire ou de la clarification fournie par le soumissionnaire conformément à la présente section. Si la soumission n'est pas jugée recevable selon des exigences examinées à la phase II à la satisfaction du Canada, la soumission financière sera jugée non recevable et rejetée.

i) Uniquement les soumissions jugées recevables selon les exigences examinées à la phase II et à la satisfaction du Canada seront ensuite évaluées à la phase III.

4.0 Phase III : Évaluation finale de la soumission

a) À la phase III, le Canada complétera l'évaluation de toutes les soumissions jugées recevables selon les exigences examinées à la phase II. Les soumissions seront évaluées par rapport à l'ensemble des exigences de la demande de soumissions, y compris les exigences d'évaluation technique et financière.

b) Une soumission est non recevable et sera rejetée si elle ne respecte pas toutes les exigences d'évaluation obligatoires de la demande de soumissions.

4.1. Évaluation Technique

Faire référence à l' APPENDICE 5 – Formulaire de Qualification

4.1.1 Exigences techniques obligatoires

Le Processus de conformité des soumissions en phases s'appliquera uniquement aux exigences techniques obligatoires indiquées par l'exposant (PC). Les exigences techniques obligatoires non affectés de l'exposant (PC) ne seront pas assujettis au Processus de conformité des soumissions en phases.

M1 Section I : Proposition technique, 260 points disponibles avec une note de passage de 60 % = note de passage minimale de 156 points.

M5 Section 2 : Proposition relative à la gestion et à l'organisation, 140 points disponibles avec une note de passage de 60 % = note de passage minimale de 84 points.

IP08 OUVERTURE DES SOUMISSIONS / ÉVALUATION

1. Il n'y aura pas d'ouverture des soumissions en public lors du dépôt de soumissions.
2. Enveloppe 2 — Prix — sera ouverte uniquement par SPAC et fera l'objet d'une évaluation quant à son intégralité. Les étapes indiquées à la phase 1 du processus de conformité des soumissions par étapes seront suivies.
3. Enveloppe 1 — Qualification — sera ouverte en privé. Cette enveloppe sera ouverte en premier pour évaluer les documents requis. Les exigences seront évaluées selon le principe de la réussite ou de l'échec ou selon une échelle de points. Les étapes indiquées à la phase 2 du processus de conformité des soumissions par étapes seront suivies. Toute soumission qui ne satisfait pas à l'ensemble des exigences obligatoires sera jugée non recevable et sera rejetée d'emblée.
3. Enveloppe 2 – Prix : Seules les enveloppes des soumissionnaires qui satisfont aux exigences obligatoires de l'étape de qualification suivant le processus de conformité des soumissions par étapes feront l'objet d'une évaluation. Prix – L'enveloppe 2 sera évaluée selon les exigences obligatoires requises. Si le soumissionnaire ne satisfait pas à une ou à chacune des exigences obligatoires, sa soumission sera jugée irrecevable et aucune autre considération ne sera donnée à la soumission.
4. L'entrepreneur ayant fourni la soumission recevable la plus basse sera recommandée pour l'octroi du contrat.
5. Les résultats des soumissions peuvent être obtenus en contactant l'agent d'approvisionnement dont le nom figure à l'Appel d'offres – Page 1.

IP09 ÉTABLISSEMENT DE LA SOUMISSION

L'entrepreneur doit établir la soumission d'après les documents pertinents énumérés dans les Instructions particulières aux soumissionnaires. Il lui appartient de demander des éclaircissements sur les clauses, les conditions ou les exigences techniques exprimées dans ce document.

IP10 FONDS INSUFFISANTS

Si la soumission conforme la plus basse dépasse le montant des fonds alloués par le Canada pour les travaux, le Canada pourra

- a. annuler l'appel d'offres; ou
- b. obtenir des fonds supplémentaires et attribuer le contrat au soumissionnaire ayant présenté la soumission conforme la plus basse.

IP11 COMPTE RENDU

Après l'attribution du contrat, les soumissionnaires peuvent demander un compte rendu des résultats du processus de demande de soumissions. Les soumissionnaires devraient en faire la demande à l'autorité contractante dans les 15 jours ouvrables, suivant la réception des résultats du processus de demande de soumissions. Le compte rendu peut être fourni par écrit, par téléphone ou en personne.

IP12 PÉRIODE DE VALIDITÉ DES SOUMISSIONS

1. Le Canada se réserve le droit de demander une prorogation de la période de validité des soumissions tel que précisé à la SA04 du Formulaire de soumission et d'acceptation. Dès réception d'un avis écrit du Canada, les soumissionnaires auront le choix d'accepter ou de refuser la prorogation proposée.
2. Si la prorogation mentionnée à l'alinéa ci-haut est acceptée par écrit par tous les soumissionnaires qui ont présenté une soumission, le Canada poursuivra alors sans tarder l'évaluation des soumissions et les processus d'approbation.
3. Si la prorogation mentionnée à l'alinéa 1. ci-haut n'est pas acceptée par écrit par tous les soumissionnaires qui ont présenté une soumission, le Canada pourra alors, à sa seule discrétion,
 - a. poursuivre l'évaluation des soumissions de ceux qui auront accepté la prorogation proposée et obtenir les approbations nécessaires; ou
 - b. annuler l'appel d'offres.
4. Les conditions exprimées dans les présentes ne limitent d'aucune façon les droits du Canada définis dans la loi ou en vertu de l'IG11 de R2710T.

IP13 DOCUMENTS DE CONSTRUCTION

À l'attribution du contrat, **une copie électronique** des dessins signés et scellés, du devis et des modifications sera fournie à l'entrepreneur retenu.

IP14 LIMITE QUANT AU NOMBRE DE PROPOSITIONS

- 1) Bien qu'il ne soit pas nécessaire de constituer une coentreprise pour participer à ce marché, des firmes peuvent décider de le faire, si elles le jugent opportun. Toutefois, on n'acceptera qu'une proposition par proposant, qu'elle soit présentée par une firme à titre de proposant distinct ou par cette firme dans le cadre d'une coentreprise. Si une firme intervenant individuellement ou dans le cadre d'une coentreprise présente plusieurs propositions, elles seront toutes rejetées, et la firme ou coentreprise dont cette firme fait partie ne sera pas retenue.
- 2) On entend par « coentreprise » une association de deux ou plusieurs parties réunissant leurs moyens financiers, leurs biens, leurs connaissances, leurs compétences, leur temps ou d'autres ressources dans un consortium, en s'engageant à en partager les bénéfices et les pertes, chacune exerçant sur l'entreprise un certain contrôle.
- 3) Ne constitue pas un accord de coentreprise, une convention selon laquelle le Canada conclut un contrat directement avec une entreprise principale qui peut faire appel à des sous-traitants pour assurer certaines tranches des travaux. Par conséquent, différents proposant peuvent proposer d'inclure dans leur équipe de l'entrepreneur, un même sous-traitant.
- 4) Sans égard au paragraphe 3 ci-dessus, afin d'éviter les conflits d'intérêts, réels ou apparents, lorsqu'une firme agit à titre de proposant individuel ou comme composante d'un proposant en coentreprise, cette firme ne peut faire partie de l'équipe d'un autre proposant, que ce soit à titre de sous-traitant ou à titre de composante d'un autre proposant en consortium. À défaut de respecter cette restriction, toutes les propositions ainsi présentées seront rejetées.
- 5) Toutes les coentreprises constituées pour fournir des services professionnels ou autres doivent respecter intégralement les exigences des lois provinciales ou territoriales afférentes, dans la province ou le territoire où se déroulera le projet.

IP15 PROGRAMME DE CAT ET DE SÉCURITÉ

1. Avant l'attribution du contrat, le soumissionnaire retenu remettra à l'autorité contractante les documents suivants :

- 1.1 un «Claim Cost Summary *Territoires du Nord-Ouest et Nunavut*» de la Commission des accidents du travail, ou la documentation équivalente d'une autre juridiction;
- 1.2 une lettre d'attestation de la commission sécurité au travail et de l'indemnisation des travailleurs, qui indique les directeurs, les supérieurs, les propriétaires et les partenaires qui seront sur le site ou qui prévoient l'être, et qui seront indemnisés, ou la documentation équivalente d'une autre juridiction; et;
- 1.3 un certificat de reconnaissance ou un plan de sécurité enregistré, accepté par l'autorité compétente. Un programme de santé et de sécurité, exigé par la loi sur la santé et la sécurité au travail de la province ou du territoire en question, serait accepté en remplacement du certificat de reconnaissance ou du plan de sécurité enregistré. Si aucun n'est requis par la loi, remplir et retourner plutôt le formulaire de déclaration ci annexé.

2. Le soumissionnaire retenu remettra tous les documents précités à l'autorité contractante au plus tard à la date précisée (habituellement trois à cinq jours après l'avis) par l'autorité contractante. Le défaut de répondre à la demande pourrait avoir pour conséquence que la soumission soit déclarée non conforme.

Exemption de l'application de programmes de sécurité génériques (*le Territoires du Nord-Ouest / Nunavut seulement*) - Les entrepreneurs ayant dix (10) employés ou moins n'ont pas besoin de programme écrit. Cependant, la preuve de l'existence d'un système de gestion de la santé et de la sécurité demeure une exigence.

IP16 STATUT ET DISPONIBILITE DU PERSONNEL

Afin d'assurer que l'équipe de personnel essentiel proposée par le soumissionnaire sera disponible pour effectuer le travail à l'attribution du marché, le soumissionnaire atteste que, si le marché lui est attribué au terme du processus de demande de propositions, chaque individu proposé dans sa soumission sera disponible pour exécuter les travaux, tel qu'exigé par les représentants du Canada, au moment indiqué dans la demande de soumissions ou convenue avec ce dernier. Si pour des raisons hors de son contrôle, le soumissionnaire est incapable de fournir les services d'un individu identifié dans sa soumission, le soumissionnaire peut proposer un remplaçant avec des qualités et une expérience similaires. Le soumissionnaire doit aviser l'autorité contractante de la raison pour le remplacement et fournir le nom, les qualités et l'expérience du remplaçant proposé. Pour les fins de cette clause, seule les raisons suivantes seront considérées comme étant hors du contrôle du soumissionnaire: la mort, la maladie, le congé de maternité et parental, la retraite, la démission, le congédiement justifié ou la résiliation par manquement d'une entente.

Si le soumissionnaire a proposé un individu qui n'est pas un employé du soumissionnaire, le soumissionnaire atteste qu'il a la permission de l'individu d'offrir ses services pour l'exécution des travaux et de soumettre son curriculum vitae au Canada. Le soumissionnaire doit, sur demande de l'autorité contractante, fournir une confirmation écrite, signée par l'individu, de la permission donnée au soumissionnaire ainsi que de sa disponibilité.

Le défaut de se conformer à cette exigence ou le défaut d'obtenir l'assentiment du Canada à un remplacement pourra faire en sorte que la proposition soit déclarée non conforme ou que le marché soit résilié pour cause de manquement.

Pour plus de précision, le soumissionnaire dont la proposition sera recommandée pour l'attribution du marché sera invité à confirmer dans deux jours de l'avis de réception, que l'équipe de personnel essentiel proposée est disponible pour effectuer le travail. Sous réserve de ce qui précède, si le personnel proposé n'est pas disponible, pour des raisons réputé dans le contrôle du soumissionnaire, le soumissionnaire retenu ne sera pas admissible à l'attribution du marché. Le soumissionnaire classé au deuxième rang verra sa proposition recommandée pour l'attribution du marché et le même processus s'appliquera.

IP17 SITES WEB

La connexion à certains des sites Web se trouvant aux documents d'appel d'offres est établie à partir d'hyperliens. La liste suivante énumère les adresses de ces sites Web.

Appendice L du Conseil du Trésor, Compagnies de cautionnement reconnues
<http://www.tbs-sct.gc.ca/pol/doc-fra.aspx?id=14494§ion=text#appL>

Achats et ventes
<https://achatsetventes.gc.ca/>

Sanctions économiques canadiennes
<http://www.international.gc.ca/sanctions/index.aspx?lang=fra>

Rapport d'évaluation du rendement de l'entrepreneur (Formulaire PWGSC-TPSGC 2913)
<http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/documents/2913.pdf>

Cautionnement de soumission (formulaire PWGSC-TPSGC 504)
<http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/documents/504.pdf>

Cautionnement d'exécution (formulaire PWGSC-TPSGC 505)
http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/documents/505_fra.pdf

Cautionnement pour le paiement de la main-d'oeuvre et des matériaux (formulaire PWGSC-TPSGC 506)
<http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/documents/506.pdf>

Guide des clauses et conditions uniformisées d'achats (CCUA)
<https://achatsetventes.gc.ca/politiques-et-lignes-directrices/guide-des-clauses-et-conditions-uniformisees-d-achat/5/R>

TPSGC, Services de sécurité industrielle
<http://ssi-iss.tpsgc-pwgsc.gc.ca/index-fra.html>

TPSGC, Code de conduite pour l'approvisionnement
<http://www.tpsgc-pwgsc.gc.ca/app-acq/cndt-cndct/contexte-context-fra.html>

TPSGC, Formulaires relatifs à l'administration des contrats de construction et de services d'experts-conseils
<http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/formulaires-forms-fra.html>

Formulaire de déclaration
<http://www.tpsgc-pwgsc.gc.ca/ci-if/formulaire-form-fra.html>

Accord Commerciaux
<https://achatsetventes.gc.ca/politiques-et-lignes-directrices/Cadre-strat-gique-et-juridique/Accords-commerciaux>

DOCUMENTS DU CONTRAT (DC)

1. Les documents suivants constituent le contrat:
 - a. Page « Contrat » une fois signée par le Canada;
 - b. Formulaire de soumission et d'acceptation et tout Appendice s'y rattachant rempli(s) en bonne et due forme;
 - c. Dessins et devis;
 - d. Conditions générales et clauses:

CG1	Dispositions générales	R2810D	(2017-08-17);
CG2	Administration du contrat	R2820D	(2016-01-28);
CG3	Exécution et contrôle des travaux	R2830D	(2015-02-25);
CG4	Mesures de protection	R2840D	(2008-05-12);
CG5	Modalités de paiement	R2850D	(2016-01-28);
CG6	Retards et modifications des travaux	R2860D	(2016-01-28);
CG7	Défaut, suspension ou résiliation du contrat	R2870D	(2008-05-12);
CG8	Règlement des différends	R2882D	(2016-01-28);
CG9	Garantie contractuelle	R2890D	(2014-06-26);
CG10	Assurances	R2900D	(2014-06-26);
Coûts admissibles pour les modifications de contrat sous CG6.4.1			R2950D (2015-02-25);
Conditions supplémentaires			
 - e. Toute modification émise ou toute révision de soumission recevable, reçue avant l'heure et la date déterminée pour la clôture de l'invitation;
 - f. Toute modification incorporée d'un commun accord entre le Canada et l'entrepreneur avant l'acceptation de la soumission; et
 - g. Toute modification aux documents du contrat qui est apportée conformément aux conditions générales.
2. Les documents identifiés par titre, numéro et date ci-dessus sont intégrés par renvoi et sont reproduits dans le Guide des clauses et conditions uniformisées d'achat (CCUA) publié par Travaux publics et Services gouvernementaux Canada (TPSGC). Le guide des CCUA est disponible sur le site Web de TPSGC: <https://achatsetventes.gc.ca/politiques-et-lignes-directrices/guide-des-clauses-et-conditions-uniformisees-d-achat/5/R>
3. La langue des documents du contrat est celle du Formulaire de soumission et d'acceptation présenté.

CONDITIONS SUPPLÉMENTAIRES (CS)

CS01 Ce contrat ne comporte aucune exigence relative à la sécurité.

CS02 CONDITIONS D'ASSURANCE

1) Polices d'assurance

- a) L'entrepreneur souscrit et maintient, à ses propres frais, les polices d'assurance conformément aux exigences de l'Attestation d'assurance. L'assurance doit être souscrite auprès d'un assureur autorisé à faire affaire au Canada.
- b) Le respect des exigences en matière d'assurance ne dégage pas l'entrepreneur de sa responsabilité en vertu du contrat, ni ne la diminue. L'entrepreneur est responsable de décider si une assurance supplémentaire est nécessaire pour remplir ses obligations en vertu du contrat et pour se conformer aux lois applicables. Toute assurance supplémentaire souscrite est à la charge de l'entrepreneur ainsi que pour son bénéfice et sa protection.

2) Période d'assurance

- a) Les polices exigées à l'Attestation d'assurance doivent prendre effet le jour de l'attribution du contrat et demeurer en vigueur pendant toute la durée du contrat.
- b) Il incombe à l'entrepreneur de fournir et de maintenir la couverture pour produits/travaux complétés de sa police d'assurance responsabilité civile des entreprises et ce pour un délai minimum de (6) six ans suivant la date du Certificat d'achèvement substantiel.

3) Preuve d'assurance

- a) Avant le début des travaux, et au plus tard trente (30) jours après l'acceptation de sa soumission, l'entrepreneur doit remettre au Canada une Attestation d'assurance sur le formulaire fournis.
- b) À la demande du Canada, l'entrepreneur doit fournir les originaux ou les copies certifiées de tous les contrats d'assurance auxquels l'entrepreneur a souscrit conformément à l'Attestation d'assurance.

4) Indemnités d'assurance

En cas de sinistre, l'entrepreneur doit faire sans délai toutes choses et exécuter tous documents requis pour le paiement de l'indemnité d'assurance.

5) Franchise

L'entrepreneur doit assumer le paiement de toutes sommes d'argent en règlement d'un sinistre, jusqu'à concurrence de la franchise.

CS03 INTERPRÉTATION

La Condition générale CG1.1.2 de la clause R2810D est modifié pour inclure les nouvelles terminologies suivantes

- « Services d'architecture et de génie » : services pour fournir une gamme de rapports d'enquêtes et de recommandations, la planification, la conception, la préparation ou la supervision de travaux de construction, de réparation, de rénovation ou de restauration et inclut les services de gestion de contrats, de projets immobiliers.
- « Services de construction » : la construction, la réparation, la rénovation ou la restauration d'un ouvrage à l'exception d'un navire et qui comprend; la fourniture et l'érection d'une structure préfabriquée; le dragage; la démolition; les services environnementaux liés à un bien immobilier; ou, la location d'outillage destiné directement ou indirectement à l'exécution des services de construction mentionnés ci-dessus.
- « Services d'entretien d'installations » :

services liés aux activités normalement associées à l'entretien d'une installation et le maintien des espaces, des structures et des infrastructures en bon état de fonctionnement, d'une manière routinière, prévue ou anticipée pour éviter la défaillance et / ou la dégradation, incluant des services d'inspections, d'essais, d'entretien, de classification quant à l'état de fonctionnement, de réparations, de reconstruction et de remise en état, ainsi que la fourniture de services d'entretien ménager, d'enlèvement des déchets, de déneigement, d'entretien des pelouses, de remplacement des revêtements de sol, d'appareils d'éclairage ou de plomberie, de peinture, et autres petits travaux.

CS04 REMPLACEMENT D'INDIVIDUS SPECIFIQUES

1. Si des individus spécifiques sont identifiés dans le contrat pour exécuter les travaux, l'entrepreneur doit fournir les services de ces individus, sauf s'il n'est pas en mesure de le faire pour des motifs indépendants de sa volonté. Aux fins de cette clause, seulement les raisons suivantes seront considérées indépendantes de la volonté du soumissionnaire: la mort, la maladie, le congé de maternité ou de paternité, la retraite, la démission, le renvoi justifié ou la résiliation pour inexécution.
2. Si l'entrepreneur n'est pas en mesure de fournir les services de tout individu spécifique identifié dans le contrat, l'entrepreneur doit fournir les services d'un remplaçant qui possède les qualifications et l'expérience similaires. Les remplaçants doivent avoir les mêmes qualifications que les personnes désignées dans la proposition et être acceptables par le Canada. L'entrepreneur doit, le plus tôt possible, aviser l'autorité contractante du motif du remplacement de l'individu et fournir:
 - a) le nom du remplaçant proposé ainsi que ses qualifications et son expérience; et
 - b) la preuve que le remplaçant proposé possède la cote de sécurité exigée accordée par le Canada, s'il y a lieu.
3. L'entrepreneur ne doit en aucun cas permettre que les travaux soient exécutés par des remplaçants non autorisés. L'autorité contractante peut ordonner qu'un remplaçant cesse d'exécuter les travaux. L'entrepreneur doit alors se conformer sans délai à cet ordre et retenir les services d'un autre remplaçant conformément au paragraphe 2. Le fait que l'autorité contractante n'ordonne pas qu'un remplaçant cesse d'exécuter les travaux n'a pas pour effet de relever l'entrepreneur de son obligation de satisfaire aux exigences du contrat.

CS05 LA SÉCURITÉ ET LA SANTÉ LIEU DE TRAVAIL

1. EMPLOYEUR/ENTREPRENEUR PRINCIPAL

- 1.1 Dans le cadre des règlements et de la loi sur la sûreté et la réglementation Territoires du Nord-Ouest et Nunavut, et pour la durée des travaux du contrat, l'entrepreneur doit :
 - 1.1.1 agir en tant qu'employeur, lorsqu'il n'y a qu'un seul employeur sur le lieu du travail, en accord avec l'autorité compétente;
 - 1.1.2 d'assumer le rôle d'entrepreneur principal où il y a deux employeurs ou plus qui s'occupent du travail, en même temps et au même endroit, en conformité avec ce que veut l'autorité compétente;
 - 1.1.3 s'il y a deux entrepreneurs ou plus qui travaillent simultanément et au même lieu de travail, sans limiter les conditions générales, de la commande du Canada* :
 - 1.1.3.1 d'assumer, en tant qu'entrepreneur principal, la responsabilité des autres entrepreneurs du Canada;
 - 1.1.3.2 d'accepter un autre entrepreneur du Canada comme entrepreneur principal et de se soumettre au plan de santé et de sécurité propre au site de cet entrepreneur.

Définition : après l'attribution du contrat, l'entrepreneur obéit à des ordres de modification

2. SOUMISSION

- 2.1 L'entrepreneur doit fournir au Canada:
 - 2.1.1 avant la réunion précédant le commencement des travaux, une télécopie et une copie d'un avis de projet dûment rempli de TPSGC (formulaire PWGSC - TPSGC 458) (le formulaire sera fourni à l'entrepreneur proposé avant l'attribution); comme envoyé à l'Autorité A Juridiction (AHJ) ; et
 - 2.1.2 avant le commencement des travaux et sans limiter les dispositions des Conditions générales :
 - 2.1.2.1 des copies de tous les autres permis, avis et documents connexes exigés par la portée des travaux/devis et/ou l'AC; et
 - 2.1.2.2 un site Santé et Sécurité spécifiques planifient comme demandé.

Solicitation No. - N° de l'invitation
EW699-182827
Client Ref. No. - N° de réf. du client
INAC EW699-182827

Amd. No. - N° de la modif.
NCS012
File No. - N° du dossier
NCS-7-40265

Buyer ID - Id de l'acheteur
CCC No./N° CCC - FMS No./N° VME

NOTE : Il ne faut pas afficher de formulaires qui comportent des renseignements personnels portant sur des tiers, comme les noms des employés de l'entrepreneur ou autre information connexe.

3. COORDONNÉES DES RESPONSABLES DE LA MAIN-D'OEUVRE

Les personnes citées ci-dessous sont les responsables de la main-d'oeuvre de chaque province ou territoire. Elles ne sont pas des représentantes de la Commission des accidents du travail.

Veuillez ne pas communiquer avec les personnes ci-dessous pour des questions concernant la Commission des accidents du travail. Il faut adresser ce genre de demande à la Commission des accidents du travail, et lorsque cette dernière est composée de deux entités (main-d'oeuvre et indemnisation), il faut s'adresser au responsable de l'indemnisation ou des services de l'employeur.

NUNAVUT

**Commission de la sécurité au travail et de
l'indemnisation des travailleurs d'Ouest et Nunavut
Services de prévention
C.P. 8888
Yellowknife, NT, X1A 2R3
Attention : Chef de la direction de la sécurité industrielle**

**Téléphone : (867) 669- 4403
Télécopieur : (867) 873- 0262**

Solicitation No. - N° de l'invitation
EW699-182827
Client Ref. No. - N° de réf. du client
INAC EW699-182827

Amd. No. - N° de la modif.
NCS012
File No. - N° du dossier
NCS-7-40265

Buyer ID - Id de l'acheteur

CCC No./N° CCC - FMS No./N° VME

DÉCLARATION

DATE : _____

NOM DE L'ENTREPRISE : _____

ADRESSE : _____

Cette entreprise est dispensée de l'exigence des règlements et de la Loi sur la sécurité des Territoires du Nord-Ouest / Nunavut d'avoir une politique et un programme de santé et sécurité formels, étant donné que l'entreprise ne compte pas, à l'heure actuelle, plus de dix (10) employés à temps plein, y compris ceux requis pour tous les projets en cours de tous les clients.

Nombre actuel d'employés à temps plein : _____

TITRE DE L'AGENT DE LA SOCIÉTÉ

SIGNATURE

CS06 ACCORD DU NUNAVUT

Pour ce besoin, il n'est pas obligatoire que les soumissionnaires/entrepreneurs/offrants incluent le Plan d'avantages offerts aux Inuits (PAI) dans leur proposition. Ce marché est assujéti à l'Accord entre les Inuits de la région désignée du Nunavut et Sa Majesté la Reine du chef du Canada.

Les soumissionnaires sont tenus, autant que possible, de faire appel à de la main-d'œuvre et à des sous-traitants inuits, de leur offrir autant d'occasions que possible de formation en cours d'emploi, et de faire participer les entreprises inuites de la localité et de la région lors de la réalisation du projet.

L'Accord du Nunavut contient une disposition exigeant l'inclusion de critères de soumission socio-économiques dans le document d'appels d'offres, si la chose est matériellement possible et compatible avec de bons principes de gestion des marchés, et sous réserve des obligations du Canada aux termes des accords commerciaux internationaux. Ces critères de soumission socio-économiques sont souvent désignés en tant que critères d'avantages pour les Inuits, et les soumissionnaires proposent des avantages pour les Inuits, dans le cadre de leur soumission, sous la forme d'un PAI.

Les dispositions qui s'appliquent à ce marché sont contenues dans la partie 6 – Critères de soumissions de l'article 24 – Marchés gouvernementaux de l'Accord du Nunavut. <http://nlca.tunngavik.com/>

24.6.1 Chaque fois que cela est faisable et compatible avec une saine gestion des marchés de l'État, et sous réserve des obligations internationales du Canada, l'ensemble des critères énumérés aux alinéas suivants, ou du moins tous ceux qui sont appropriés à l'égard d'un marché donné, font partie des critères fixés par le gouvernement du Canada en vue de l'adjudication des marchés de l'État dans la région du Nunavut :

- a) existence de sièges sociaux, de bureaux administratifs ou d'autres établissements dans la région désignée du Nunavut;
- b) embauche de travailleurs qui sont des Inuits, recours à des services professionnels des Inuits ou à des fournisseurs qui sont soit des Inuits, soit des entreprises inuites, pour exécuter le marché;
- c) prise d'engagements, dans le cadre du marché, en ce qui concerne la formation en cours d'emploi ou le perfectionnement professionnel des Inuits.

ENTREPRISE INUITE

Une « entreprise inuite » est une entité qui se conforme aux exigences juridiques relatives à l'exercice d'activités commerciales dans la région désignée du Nunavut et qui est :

- a) une société par actions à responsabilité limitée pouvant démontrer que plus de 51 % des actions avec droit de vote sont la propriété effective d'Inuits,
- b) une coopérative contrôlée par des Inuits, ou
- c) une entreprise individuelle ou un partenariat inuit.

« Inuit » s'entend d'une personne dont le nom figure dans la liste d'inscription des Inuits la plus récente, créée conformément aux exigences de l'article 35.2.1 de l'Accord entre les Inuits de la région du Nunavut et Sa Majesté la Reine du chef du Canada.

CS07 RENSEIGNEMENTS AUX MÉDIAS

La *Condition générale (CG) 1 - Dispositions générales – Services de construction CG1.2.3 Sécurité et protection des travaux et des documents de la clause R2810D* est modifiée pour inclure ce qui suit;

6. En raison de la nature confidentielle du contrat, l'entrepreneur ne répondra pas directement aux demandes de renseignements des médias au sujet des travaux. L'entrepreneur devra renvoyer toutes les demandes de renseignements des médias au représentant ministériel qui y répondra.

CS08 MODIFICATION DE LA CG6.4 – CALCUL DU PRIX

La CG6.4.1.4, Calcul du prix avant d'apporter des modifications, est modifiée comme suit :

La totalité des prix de main-d'oeuvre et d'équipement qui sont indiqués dans le tableau de l'*Appendice 1 – Personnel supplémentaire et/ou table d'équipement* doivent être acceptés à titre de prix fixes dans le cadre du contrat aux fins du calcul du prix de la modification des travaux.

LA CG6.4.2.2b), Calcul du prix après avoir apporté des modifications, est modifiée comme suit :

La totalité des prix de main-d'oeuvre et d'équipement qui sont indiqués dans le tableau *Appendice 1 – Personnel ou équipement supplémentaire* doivent être acceptés à titre de prix fixes dans le cadre du contrat aux fins du calcul du prix de la modification des travaux.

CS09 CONTRAT D'ÉVALUATION DU RENDEMENT

1. Les soumissionnaires doivent prendre note que le Canada évaluera le rendement de l'entrepreneur pendant la réalisation des travaux et au moment de leur achèvement. Cette évaluation portera sur la qualité des travaux exécutés, les délais d'exécution, la gestion de projet, la gestion du contrat et la gestion de la santé et de la sécurité. Si le rendement de l'entrepreneur est jugé insatisfaisant, les privilèges lui permettant de présenter des offres dans le cadre de travaux ultérieurs pourront être suspendus indéfiniment.

2. Le formulaire PWGSC-TPSGC 2913, SELECT — Formulaire du rapport d'évaluation du rendement de l'entrepreneur, est utilisé pour évaluer le rendement. Le formulaire PWGSC-TPSGC 2913 du système SELECT, Rapport d'évaluation du rendement de l'entrepreneur, est généralement utilisé pour évaluer le rendement. Toutefois, si les mesures prises par l'entrepreneur exigent d'apporter une modification conditionnelle ou entraînent une résiliation pour inexécution, TPSGC pourra procéder à une évaluation d'une mesure corrective du rendement d'un fournisseur. On trouvera de l'information sur les modifications conditionnelles et la Politique sur les mesures correctives du rendement des fournisseurs à l'adresse suivante : <https://achatsetventes.gc.ca/politiques-et-lignes-directrices/guide-des-approvisionnements/section/8/180>.

CS10 ÉTAT DU SITE CONTAMINÉ

R2840D : Remplacer la clause CG 4.4 par ce qui suit :

1. Pour l'application de la CG 4.4, il y a état de site contaminé lorsque des irritants ou contaminants solides, liquides, gazeux, thermiques ou radioactifs, ou d'autres substances ou matériaux dangereux ou toxiques, dont les moisissures et les autres formes de champignons, sont présents sur le chantier dans une quantité ou une concentration assez élevée pour constituer un danger, réel ou éventuel, pour l'environnement, les biens ou la santé et la sécurité de toute personne.
2. Aux fins des lois applicables, y compris celles liées aux substances toxiques et dangereuses, le Canada doit être considéré comme le propriétaire du site d'enfouissement de Resolute Bay à l'égard de l'état actuel.
3. En fonction de l'étendue de la contamination du site, les méthodes d'assainissement sont ou seront précisément décrites dans le contrat ou les lots de travaux de construction. L'entrepreneur doit mener ses opérations d'une manière sécuritaire et faire preuve de diligence.
4. Si les conditions du site diffèrent de ce que l'on pourrait raisonnablement prévoir ou que les méthodes d'assainissement précisées et entreprises raisonnablement ne produisent pas les résultats désirés, et si l'entrepreneur constate un état de site contaminé dont il n'avait pas connaissance ou qui ne lui a pas été divulgué ou s'il a des motifs raisonnables de croire à l'existence d'un état de site contaminé sur le chantier, il doit :
 - a. prendre toutes les mesures raisonnables, y compris arrêter les travaux, afin d'éviter que cet état de site contaminé n'entraîne quelque blessure, maladie ou décès, ou dégradation des biens ou de l'environnement;
 - b. aviser immédiatement le Canada de la situation, par écrit;

- c. prendre toutes les mesures raisonnables pour réduire au minimum les frais supplémentaires que pourrait entraîner tout arrêt des travaux.
5. Dès la réception de l'avis de l'entrepreneur, le Canada doit rapidement déterminer s'il existe un état de site contaminé, et indiquer par écrit à l'entrepreneur les mesures qu'il devra prendre ou les travaux qu'il devra exécuter à la suite de la décision du Canada.
 6. Si le Canada juge nécessaire de retenir les services de l'entrepreneur, ce dernier doit suivre les directives du Canada en ce qui a trait à l'excavation, au traitement, à l'enlèvement et à l'élimination de toute substance ou de tous matériaux polluants.
 7. Le Canada peut en tout temps, à sa seule et entière discrétion, retenir les services d'experts et d'entrepreneurs spécialisés pour aider à établir l'existence et l'ampleur de la contamination et le traitement approprié des conditions du site contaminé; l'entrepreneur doit leur permettre l'accès aux lieux et collaborer avec eux à l'accomplissement de leurs tâches et obligations.
 8. Sauf disposition contraire du contrat, les modalités des CG6.4, « Calcul du prix », doivent s'appliquer à tous les travaux supplémentaires à effectuer à cause d'un état de site contaminé.

CS11 PROPRIÉTÉ DU MATÉRIEL ACTUEL SUR LE SITE

Concernant les 26 conteneurs d'expédition mentionnés à (01 11 00), l'entrepreneur recommandé ayant été choisi accepte ce qui suit :

Sa Majesté ne garantit pas l'état ou l'utilisation des 26 conteneurs d'expédition. _____
(insérer le nom de l'entrepreneur choisi) a inspecté les conteneurs et les a approuvés; assume la propriété, le titre ainsi que les risques de perte et d'autres incidents liés à la propriété « tels quels »; tiendra Sa Majesté indemne et à couvert contre les réclamations, demandes, pertes, frais, dommages, actions, poursuites ou procédures de la part de quiconque, fondés, découlant, reliés, occasionnés ou attribuables aux contenants d'expédition et à l'utilisation future de ces contenants et de leur contenu.

FORMULAIRE DE SOUMISSION ET D'ACCEPTATION (SA)

SA01 IDENTIFICATION DU PROJET

Assainissement du site d'enfouissement de Resolute Bay
Resolute Bay, Nunavut
R.099508.001

SA02 NOM COMMERCIAL ET ADRESSE DU SOUMISSIONNAIRE

Nom: _____

Adresse: _____

Téléphone: _____ Télécopieur: _____ NEA _____

Adresse courriel : _____

Le Numéro d'organisation du Programme de sécurité industrielle _____
(si requis)

SA03 OFFRE

Le soumissionnaire offre au Canada d'exécuter les travaux du projet mentionné ci-dessus, conformément aux documents de soumission pour le **MONTANT TOTAL DE LA SOUMISSION INDIQUÉ DANS L'APPENDICE 1.**

SA04 PÉRIODE DE VALIDITÉ DES SOUMISSIONS

La soumission ne peut être retirée pour une période de soixante (60) jours suivant la date de clôture de l'invitation.

SA05 ACCEPTATION ET CONTRAT

À l'acceptation de l'offre de l'entrepreneur par le Canada, un contrat exécutoire sera formé entre le Canada et le soumissionnaire. Les documents constituant le contrat sont ceux mentionnés à la section Documents du contrat.

SA06 DURÉE DES TRAVAUX

L'entrepreneur doit exécuter et compléter les travaux dans les soixante-treize (73) semaines à partir de l'avis de l'acceptation de l'offre.

SA07 GARANTIE DE SOUMISSION

Le soumissionnaire doit joindre à sa soumission une garantie de soumission conformément à l'IG08 - Exigences relatives à la garantie de soumission de la R2710T - Instructions générales - Services de construction - Exigences relatives à la garantie de soumission

SA08 SIGNATURE

Nom et titre de la personne autorisée à signer au nom du soumissionnaire (Tapés ou lettres moulées)

Signature

Date

APPENDICE 1 - FORMULAIRE DE PRIX COMBINÉS

- 1) Les prix unitaires seront retenus pour établir le montant total des prix calculés. Toute erreur arithmétique a cet appendice sera corrigé par le Canada.
- 2) Le Canada peut rejeter la soumission si quelconque des prix soumis ne tient pas fidèlement compte du coût de l'exécution de la partie des travaux à laquelle ce prix s'applique.
- 3) **Il est obligatoire de fournir une soumission financière pour le lot de travaux principal et les lots de travaux facultatifs.**
- 4) Le prix du lot de travaux principal et de TOUS les lots de travaux facultatifs doit être établi en gardant à l'esprit que l'attribution du contrat peut comprendre n'importe quelle combinaison de lots de travaux facultatifs.

En cas de réduction de la portée de différents lots de travaux facultatifs, ou de parties de ces lots, après l'attribution du contrat, la modification du prix sera déterminée conformément à la CG6.4.

Le total de l'évaluation sera calculé à partir de la valeur globale du lot de travaux principal, c'est-à-dire les trois lots de travaux facultatifs combinés aux valeurs du tableau des activités supplémentaires éventuelles, peu importe la mesure dans laquelle les travaux facultatifs ont été inclus à l'attribution du contrat initial.

A) LOT DE TRAVAUX PRINCIPAL

Gestion des déchets et stabilisation

- Consolidation, emballage et élimination à distance des matières dangereuses;
- Matières non dangereuses — Consolidation, concassage/découpage et disposition au pied de AEC 1;
- Découpage/remplissage de la pente AEC 1, prénivellement pour obtenir une pente de 3h : 1 v; Approvisionnement et disposition du revêtement de granulat.

MONTANT FORFAITAIRE

Le montant forfaitaire désigne la partie des travaux qui est assujettie à un arrangement à prix forfaitaire.

- (a) Les travaux inclus dans le montant forfaitaire représentent tous les travaux qui ne sont pas inclus dans le tableau des prix unitaires.

MONTANT FORFAITAIRE (MF) Excluant les taxe(s) applicables

TABLEAU DES PRIX UNITAIRES

Le tableau des prix unitaires désigne la partie des travaux qui est assujettie à un arrangement à prix unitaires.

- a) Les travaux faisant partie de chaque article sont tels que décrits aux sections du devis en référence.
 b) Le prix unitaire ne doit pas inclure de montants pour des travaux qui ne sont pas inclus aux articles de prix unitaires.

Référence au devis	Catégorie de main-d'œuvre, outillage ou matériaux	Unité de mesure	Quantité Estimative (QE)	Prix unitaire (PU) Excluant les taxe(s) applicables	Prix calculé (QE x PU) Excluant les taxe(s) applicables
01 31 19-1	Réunions mensuelles sur l'état d'avancement sur le site (trois par année)	Chacun	6	\$	\$
02 81 01-2	Transport et élimination à distance dans des installations d'élimination agréées : déchets recouverts d'une peinture au plomb (Pb)	m ³	660	\$	\$
02 81 01-3	Transport et élimination à distance dans des installations d'élimination agréées : Piles	kg	2 825	\$	\$
02 81 01-4	Transport et élimination à distance dans des installations d'élimination agréées : Transformateurs	Chacun	22	\$	\$
02 81 01-5	Transport et élimination à distance dans des installations d'élimination agréées : Déchets liquides	l	3 400	\$	\$
02 82 00-2	Transport et élimination à distance dans des installations d'élimination agréées : Déchets d'amiante	kg	500	\$	\$
31 22 15-2	Approvisionnement, installation, compaction de la couche inférieure de revêtement de granulat de type 2, ce qui comprend le nivellement de AEC 1 : pente latérale et couverture du pied	m ³	1 200	\$	\$
31 22 15-3	Approvisionnement, installation, compaction de la couche supérieure de revêtement de granulat de type 1, ce qui comprend le nivellement de AEC 1 : couverture du sommet	m ³	3 500	\$	\$
31 22 15-4	Approvisionnement, installation, compaction des matériaux de granulat de type 2, ce qui comprend AEC 1 : couverture du sommet	m ³	7 400	\$	\$
31 32 19.01-1	Géotextile de AEC 1	m ²	1 000	\$	\$

MONTANT TOTAL DE LA SOUMISSION POUR LE LOT DE TRAVAUX PRINCIPAL (MF +TPC) Excluant les taxes applicable(s)	
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B) LOT DE TRAVAUX FACULTATIF A

Lot de travaux de nivellement dans AEC 2

- **Approvisionnement, disposition et remplissage de compactage, ce qui comprend le nivellement du site d'enfouissement de AEC 2.**

MONTANT FORFAITAIRE

Le montant forfaitaire désigne la partie des travaux qui est assujettie à un arrangement à prix forfaitaire.

- (a) Les travaux inclus dans le montant forfaitaire représentent tous les travaux qui ne sont pas inclus dans le tableau des prix unitaires.

MONTANT FORFAITAIRE (MF) Excluant les taxe(s) applicables

TABLEAU DES PRIX UNITAIRES

Le tableau des prix unitaires désigne la partie des travaux qui est assujettie à un arrangement à prix unitaires.

- a) Les travaux faisant partie de chaque article sont tels que décrits aux sections du devis en référence.
b) Le prix unitaire ne doit pas inclure de montants pour des travaux qui ne sont pas inclus aux articles de prix unitaires.

Référence au devis	Catégorie de main-d'œuvre, outillage ou matériaux	Unité de mesure	Quantité Estimative (QE)	Prix unitaire (PU) Excluant les taxe(s) applicables	Prix calculé (QE x PU) Excluant les taxe(s) applicables
31 05 16-A1	Approvisionnement des matériaux de granulat de type 2 pour la stabilité de la pente et le nivellement du sommet de AEC 2	m ³	13 460	\$	\$

MONTANT TOTAL DE LA SOUMISSION POUR LE LOT DE TRAVAUX FACULTATIF A (MF +TPC) Excluant les taxes applicables

C) LOT DE TRAVAUX FACULTATIF B

Lot des rigoles de AEC 2

- **Construction de rigoles dans AEC 2**

MONTANT FORFAITAIRE

Le montant forfaitaire désigne la partie des travaux qui est assujettie à un arrangement à prix forfaitaire.

- (a) Les travaux inclus dans le montant forfaitaire représentent tous les travaux qui ne sont pas inclus dans le tableau des prix unitaires.

MONTANT FORFAITAIRE (MF) Excluant les taxe(s) applicables

TABLEAU DES PRIX UNITAIRES

Le tableau des prix unitaires désigne la partie des travaux qui est assujettie à un arrangement à prix unitaires.

- a) Les travaux faisant partie de chaque article sont tels que décrits aux sections du devis en référence.
b) Le prix unitaire ne doit pas inclure de montants pour des travaux qui ne sont pas inclus aux articles de prix unitaires.

Référence au devis	Catégorie de main-d'œuvre, outillage ou matériaux	Unité de mesure	Quantité Estimative (QE)	Prix unitaire (PU) Excluant les taxe(s) applicables	Prix calculé (QE x PU) Excluant les taxe(s) applicables
31 32 19.01-B1	Géotextile de AEC 2	m ²	3 500	\$	\$

MONTANT TOTAL DE LA SOUMISSION POUR LE LOT DE TRAVAUX FACULTATIF B (MF +TPC) Excluant les taxes applicables

D) LOT DE TRAVAUX FACULTATIF C

Lot des sols contaminés

- Excavation, emballage et élimination à l'extérieur des sols contaminés.

MONTANT FORFAITAIRE

Le montant forfaitaire désigne la partie des travaux qui est assujettie à un arrangement à prix forfaitaire.

- (a) Les travaux inclus dans le montant forfaitaire représentent tous les travaux qui ne sont pas inclus dans le tableau des prix unitaires.

MONTANT FORFAITAIRE (MF) Excluant les taxes applicables

TABEAU DES PRIX UNITAIRES

Le tableau des prix unitaires désigne la partie des travaux qui est assujettie à un arrangement à prix unitaires.

- a) Les travaux faisant partie de chaque article sont tels que décrits aux sections du devis en référence.
b) Le prix unitaire ne doit pas inclure de montants pour des travaux qui ne sont pas inclus aux articles de prix unitaires.

Référence au devis	Catégorie de main-d'œuvre, outillage ou matériaux	Unité de mesure	Quantité Estimative (QE)	Prix unitaire (PU) Excluant les taxes applicables	Prix calculé (QE x PU) Excluant les taxes applicables
02 61 00-C1	Excavation, transport sur place et emballage des sols contaminés aux hydrocarbures pétroliers	m ³	75	\$	\$
02 61 00-C2	Excavation, transport et emballage des métaux mélangés et des sols contaminés aux hydrocarbures pétroliers	m ³	50	\$	\$
02 61 00-C3	Transport à distance et élimination dans des installations d'élimination agréée : Sols	Tonnes	150	\$	\$
02 61 00-C4	Transport à distance et élimination dans des installations d'élimination agréée : Sols mélangés	Tonnes	100	\$	\$
31 23 33.01-C1	Remblai et renouvellement de AEC 3 après les excavations du sol, ce qui comprend l'approvisionnement et l'installation de granulats de type 2.	m ³	125	\$	\$

MONTANT TOTAL DE LA SOUMISSION POUR LE LOT DE TRAVAUX FACULTATIF C (MF + TPC) Excluant les taxes applicables
--

C. PERSONNEL ET ÉQUIPEMENT SUPPLÉMENTAIRES POTENTIELS

Si le Canada détermine que, d'après la portée ou les changements prévus, il faudra plus de personnel ou d'équipement, il aura le droit de demander au soumissionnaire de fournir ce personnel ou cet équipement supplémentaire pour l'exécution des travaux ou d'une partie de ceux-ci. Les articles et les prix doivent être préapprouvés et seront intégrés par voie d'autorisation de modification.

1. L'entrepreneur sera remboursé pour le personnel supplémentaire demandé par le Canada conformément aux taux horaires fermes tout compris (y compris les coûts salariaux, les coûts indirects et le profit) précisés ci-dessous pour les catégories de personnel déterminées. Pour le personnel qui n'a pas été indiqué à l'avance ci-dessous, l'entrepreneur sera remboursé conformément aux taux qui seront négociés et convenus entre le Canada et le soumissionnaire après l'attribution du contrat.

2. Le prix unitaire de l'équipement doit être un prix tout compris, c'est-à-dire qu'il inclut l'ensemble des coûts de possession, d'exploitation et de supervision, notamment les coûts associés au conducteur d'équipement, aux lubrifiants, à la main-d'œuvre et aux pièces nécessaires à la maintenance de cet équipement. Les autres frais engagés par l'entrepreneur ne lui seront pas remboursés.

3. Les taux unitaires doivent comprendre l'intégralité des coûts, directs comme indirects. Les heures supplémentaires seront remboursées aux taux unitaires indiqués ci-dessus.

4. Les quantités estimées sont fournies uniquement aux fins d'évaluation.

No.	Description	Unité	Quantité	Unité	Quantité	Unité	Quantité
P1	Main-d'œuvre						
1	Gestionnaire principal de projet	Heures	100		\$		\$
2	Gestionnaire de projet	Heures	100		\$		\$
3	Directeur de chantier	Heures	250		\$		\$
4	Changement de quart de travail du surintendant du site	Heures	250		\$		\$
5	Spécialiste des déchets dangereux et non dangereux	Heures	250		\$		\$
6	Coordonnateur de la santé et sécurité sur le chantier et à l'extérieur	Heures	100		\$		\$
7	Ouvrier	Heures	200		\$		\$
8	Compagnon	Heures	100		\$		\$
9	Arpenteur	Heures	100		\$		\$
10	Surveillant de la faune	Heures	100		\$		\$
Sous-total – Main-d'œuvre							\$
P2	Équipement (avec opérateur)						
Tous les taux horaires pour l'utilisation des équipements devront inclure les tarifs des opérateurs.							
1	Excavateur; excavatrice;	Heures	150		\$		\$
2	Bouteur	Heures	150		\$		\$
3	Chargeur	Heures	150		\$		\$
4	Camions à pierres	Heures	200		\$		\$
Sous-total – Équipement							\$
TOTAL DES ACTIVITÉS SUPPLÉMENTAIRES ÉVENTUELLES ÉTENDUES (P1 + P2)							\$

Résumé financier

A) Montant total de la soumission – Lot de travaux principal	\$
B) Montant total de la soumission – Lot de travaux facultatif A	\$
C) Montant total de la soumission – Lot de travaux facultatif B	\$
D) Montant total de la soumission – Lot de travaux facultatif C	\$
E) Total des activités supplémentaires éventuelles étendues	\$
MONTANT TOTAL DE LA SOUMISSION taxes applicables en sus	\$

VENTILATION DU PAIEMENT FORFAITAIRE

1. La table ci-dessous n'est fournie qu'à titre d'information.
2. La ventilation du paiement forfaitaire n'est pas nécessaire au moment de la clôture des soumissions. Avant l'attribution du marché, le soumissionnaire/l'entrepreneur offrant le meilleur rapport qualité-prix devra remplir le formulaire ci-après.
3. Le prix total évalué doit être égal au prix indiqué dans la soumission conformément au total du formulaire de soumission de prix donné au moment de la clôture de l'invitation à soumissionner.

Il se peut qu'on demande une autre ventilation, le cas échéant.

Item #	Description	Unit	Qty	Unit Price	Extended Total
MAIN PACKAGE					
BOPC-1	Solde des coûts de projet, cela peut inclure par exemple :	Paie ment forfaitaire		\$ _____	\$ _____
	Toute variable coûts indirects pour frais généraux et admin			\$ _____	\$ _____
	Profit			\$ _____	\$ _____
	Coûts pour les expéditeurs			\$ _____	\$ _____
	Assurances			\$ _____	\$ _____
	Assurance tous risques			\$ _____	\$ _____
	Coûts de la CSTIT			\$ _____	\$ _____
	Frais d'entreprise			\$ _____	\$ _____
	Partie de l'entrepreneur des dépenses de formation			\$ _____	\$ _____
	Technicien médical d'urgence			\$ _____	\$ _____
	Équipements auxiliaires			\$ _____	\$ _____
	Véhicules de service			\$ _____	\$ _____
	Surveillance			\$ _____	\$ _____
	Réparations d'équipement et approvisionnement et transport de pièces			\$ _____	\$ _____
	D'autres coûts			\$ _____	\$ _____
01 31 19-2	Réunions de projet	Paie ment forfaitaire	1	_____ \$	_____ \$
01 35 29-1	Mise en œuvre du plan de santé et de sécurité	Paie ment forfaitaire	1	_____ \$	_____ \$
01 52 00-1	Approvisionnement, installation et entretien des installations de construction temporaires	Paie ment forfaitaire	1	_____ \$	_____ \$
01 53 00-1	Mobilisation du personnel, du matériel et des approvisionnements	Paie ment forfaitaire	1	_____ \$	_____ \$
01 53 00-2	Démobilisation du personnel, du matériel et des approvisionnements	Paie ment forfaitaire		_____ \$	_____ \$
02 41 13-1	Consolidation, transport, concassage/découpage et disposition des déchets non dangereux de AEC 1 (sommet et aux alentours du pied) dans la pente AEC 1.	Paie ment forfaitaire	1	_____ \$	_____ \$
02 41 13-2	Consolidation, transport, concassage/découpage et disposition des déchets non dangereux de AEC 2 dans la pente AEC 1.	Paie ment forfaitaire	1	_____ \$	_____ \$
02 41 13-3	Consolidation, transport, concassage/découpage et disposition	Paie ment forfaitaire	1	_____ \$	_____ \$

	des déchets non dangereux de AEC 3 (entreposage de véhicules et de métal et ravin) dans la pente AEC 1.				
02 81 01-1	Retrait, consolidation et emballage de tous les déchets dangereux solides ayant été relevés, y compris les déchets recouverts d'une peinture au plomb (Pb), les déchets liquides de piles et les transformateurs.	Païement forfaitaire	1	_____ \$	_____ \$
02 82 00-1	Retrait, consolidation et emballage de tous les déchets d'amiante ayant été relevés, y compris les matériaux contenant de l'amiante.	Païement forfaitaire	1	_____ \$	_____ \$
31 22 15-1	Découpage/remplissage, compactage et prénivellement du pied du site d'enfouissement AEC 1 et aménagement pour obtenir une pente de 3h : 1 v, comme indiqué	Païement forfaitaire	1	_____ \$	_____ \$
31 22 15-5	Construction de rigoles de drainage dans le site d'enfouissement AEC 1, y compris l'approvisionnement et l'installation de granulat de types 1 et 3.	Païement forfaitaire	1	_____ \$	_____ \$
31 22 15-6	Préparation et nivellement du site	Païement forfaitaire	1	_____ \$	_____ \$
31 22 15-7	Mise à niveau et entretien des routes d'accès au site	Païement forfaitaire	1	_____ \$	_____ \$
LOT DE TRAVAUX FACULTATIF A					
31 22 15-A1	Disposition et remplissage de compactage, ce qui comprend le nivellement du sommet et de la pente latérale du site d'enfouissement de AEC 2	Païement forfaitaire	1	_____ \$	_____ \$
LOT DE TRAVAUX FACULTATIF B					
31 22 15-B1	Construction de rigoles de drainage dans le site d'enfouissement AEC 2, ce qui comprend l'approvisionnement et l'installation de granulat de types 1 et 3.	Païement forfaitaire	1	_____ \$	_____ \$
Ventilation du montant forfaitaire total <i>Ce montant en dollars doit être égal à celui qui est fourni dans le formulaire de prix combiné pour A. Montant forfaitaire</i>					_____ \$

APPENDICE 3 - LISTE DES SOUS-TRAITANTS

- 1) Conformément à la clause IG07 – Liste des sous-traitants et fournisseurs des Instructions générales - Services de construction - Exigences relatives à la garantie de soumission R2710T, le soumissionnaire devrait accompagner sa soumission d'une liste de sous-traitants.
- 2) Le soumissionnaire devrait soumettre la liste des sous-traitants pour toute partie des travaux dont la valeur équivalait à au moins 20 % du prix soumissionné.

	Sous-traitant	Division
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		

APPENDICE 4 – ATTESTATION VOLONTAIRE À L'APPUI DU RECOURS AUX APPRENTIS

(page 1 de 2)

INITIATIVE DE TRAVAUX PUBLICS ET SERVICES GOUVERNEMENTAUX CANADA POUR L'EMBAUCHE D'APPRENTIS

1. Pour les encourager à participer à la formation d'apprentis, on demande aux employeurs qui soumissionnent pour des contrats de construction ou d'entretien de Travaux publics et Services gouvernementaux Canada (TPSGC) de signer une attestation volontaire, attestation signalant leur engagement à embaucher et former des apprentis.
2. Le Canada doit composer avec des pénuries de main-d'œuvre dans divers secteurs et dans diverses régions, en particulier dans des métiers spécialisés. Faciliter l'acquisition de compétences et la formation chez les Canadiens est une responsabilité partagée. Le gouvernement du Canada a pris l'engagement de faciliter l'utilisation d'apprentis dans le cadre des contrats fédéraux de construction et d'entretien. Les soumissionnaires ont un rôle important à jouer au titre du soutien des apprentis, à savoir les embaucher et les former. On les encourage à attester qu'ils proposent des possibilités d'emploi à des apprentis dans le cadre de leurs relations d'affaires avec le gouvernement du Canada.
3. Le gouvernement du Canada encourage les Canadiens à faire l'apprentissage de métiers spécialisés et à y faire carrière. En outre, le gouvernement offre un crédit d'impôt aux employeurs afin de les encourager à embaucher des apprentis. Vous trouverez de l'information à propos de ces mesures fiscales administrées par l'Agence du revenu du Canada dans son site Web à : www.cra-arc.gc.ca. Les employeurs sont aussi invités à se renseigner à propos de l'information et des mesures de soutien additionnelles dont ils pourraient tirer profit auprès de leur autorité provinciale ou territoriale en matière d'apprentissage.
4. Les attestations signées à la page 2 de 2 aideront à mieux comprendre comment les entrepreneurs utilisent des apprentis dans le cadre de contrats fédéraux de construction et d'entretien et pourraient éclairer l'élaboration, dans l'avenir, de nouvelles politiques et de nouveaux programmes.
5. L'entrepreneur atteste ce qui suit :

En vue de contribuer à la satisfaction de la demande en travailleurs qualifiés, l'entrepreneur convient de déployer et d'exiger de ses sous-traitants qu'ils déploient des efforts commerciaux raisonnables pour embaucher et former des apprentis inscrits, de s'efforcer d'utiliser pleinement les ratios compagnon/apprenti * autorisés et de respecter toutes les exigences liées à l'embauche prescrites dans les lois provinciales et territoriales.

L'entrepreneur consent, par la présente, à ce que cette information soit recueillie et conservée par TPSGC et Emploi et Développement social Canada en vue d'appuyer la compilation de données sur l'embauche et la formation d'apprentis dans le cadre de contrats fédéraux de construction et d'entretien.

Pour appuyer cette initiative, une attestation volontaire signalant que le fournisseur s'engage à embaucher et former des apprentis est disponible à la page 2 de 2.

Si vous acceptez, veuillez compléter et apposer votre signature à la page 2 de 2.

* **Le ratio compagnon/apprenti**, c'est le nombre de compagnons qualifiés/agrérés qu'un employeur doit employer dans une profession ou un métier désigné afin d'être admissible à inscrire un apprenti conformément à la législation, aux règlements, aux directives d'orientation ou aux arrêtés provinciaux/territoriaux émis par les autorités ou les organismes responsables.

Attestation volontaire
(A être volontairement retourner avec la soumission)
(page 2 de 2)

APPENDICE 4 – ATTESTATION VOLONTAIRE À L'APPUI DU RECOURS AUX APPRENTIS

Avis; L'entrepreneur sera appelé à compléter à tous les six mois ou à la fin des travaux un rapport tel qu'inclus à l'annexe C « Rapport volontaire d'apprentis employés pendant les contrats ».

Nom: _____

Signature: _____

Nom de la compagnie: _____

Dénomination sociale: _____

Numéro de l'invitation à soumissionner: _____

Nombre d'employés de l'entreprise: _____

Nombre planifié d'apprentis qui travailleront sur ce contrat: _____

Métiers spécialisés de ces apprentis;

APPENDICE 5 - FORMULAIRE DE QUALIFICATIONS

Procédures D'évaluation et Méthode de Sélection

(a) Les soumissions seront évaluées par rapport à l'ensemble du besoin de la demande de soumissions, notamment aux critères obligatoires et techniques, aux exigences en matière de gestion et d'organisation, Plan D'avantages Offerts Aux Inuits et aux critères financiers.

(b) L'évaluation sera assurée par une équipe constituée de représentants du gouvernement du Canada.

Méthode de sélection – Note combinée la plus haute sur le plan du mérite technique et du prix

1. Pour être déclarée recevable, une soumission doit :

- a. respecter toutes les exigences de la demande de soumissions; et
- b. satisfaire à tous les critères obligatoires; et
- c. obtenir le nombre minimal de points requis pour l'évaluation technique :
 - i. Section I : Possibilité de **260** points pour la proposition technique avec une note de 60 % = note de passage minimale de **156** points.
 - ii. Section II : Possibilité de **140** points pour la proposition de gestion avec une note de 60 % = note de passage minimale de **84** points.

2. Les soumissions qui ne répondent pas aux exigences a) ou b) ou c) seront déclarées non recevables.

3. La sélection sera faite en fonction du meilleur résultat global sur le plan du mérite technique et du prix. Une proportion de 60 % sera accordée au mérite technique et une proportion de 40 % sera accordée au prix.

4. Afin de déterminer la note pour le mérite technique, la note technique globale de chaque soumission recevable sera calculée comme suit : le nombre total de points obtenus sera divisé par le nombre total de points pouvant être accordés, puis multiplié par 60 %.

5. Afin de déterminer la note pour le prix, chaque soumission recevable sera évaluée proportionnellement au prix évalué le plus bas et selon le ratio de 40%.

6. Pour chaque soumission recevable, la cotation du mérite technique et la cotation du prix seront ajoutées pour déterminer la note combinée.

7. La soumission recevable ayant obtenu le plus de points ou celle ayant le prix évalué le combinée la plus élevée pour le mérite technique et le prix sera recommandée pour l'attribution du contrat.

Le tableau ci-dessous présente un exemple où les trois soumissions sont recevables et où la sélection de l'entrepreneur se fait en fonction d'un ratio de 60/40 à l'égard du mérite technique et du prix, respectivement.] Le nombre total de points pouvant être accordé est de 660, et le prix évalué le plus bas est de 45 000,00 \$ (45).

Méthode de sélection - Note combinée la plus haute sur le plan du mérite technique (60%) et du prix (40%)

		Soumissionnaire A	Soumissionnaire B	Soumissionnaire C	Soumissionnaire D	Soumissionnaire E
Note pour la proposition technique (Note de passage globale : 420)		550/600	530/600	475/600	515/600	418/600 Non-compliant
Note de plan des considérations relatives aux possibilités pour les Inuites/de plan d'avantages offerts aux Inuits (Aucune note de passage)		50/60	30/60	40/60	35/60	N/A
Note technique globale		600/660	560/660	515/660	550/660	N/A
Prix évalué de la		\$55,000.00	\$50,000.00	\$45,000.00	\$70,000.00	N/A
Calculs	Note pour le mérite technique	$600/660 \times 60 = 54.55$	$560/660 \times 60 = 50.91$	$515/660 \times 60 = 46.82$	$550/660 \times 60 = 50$	N/A
	Note pour le prix	$45/55 \times 40 = 32.73$	$45/50 \times 40 = 36.00$	$45/45 \times 40 = 40.00$	$45/70 \times 40 = 25.71$	N/A
Note combinée		87.28	86.91	86.82	75.71	N/A
Évaluation globale		11 st	3 rd	2 nd	4 th	N/A

CRITÈRES TECHNIQUES

Section I : Proposition technique

Dans leur soumission technique, les soumissionnaires devraient démontrer leur compréhension des exigences continues dans la demande de soumissions et des spécifications reproduites à l'annexe A, tout en précisant de quelle manière ils respecteront ces exigences. Les soumissionnaires devraient démontrer leur capacité à exécuter les travaux et décrire de façon complète, concise et claire l'approche qu'ils prendront pour les réaliser.

La soumission technique devrait traiter clairement et de manière suffisamment approfondie des points faisant l'objet des critères d'évaluation en fonction desquels la soumission sera évaluée. Il ne suffit pas de reprendre simplement les énoncés contenus dans l'invitation à soumissionner. Pour faciliter l'évaluation de la soumission, le gouvernement du Canada demande aux soumissionnaires de reprendre les sujets dans l'ordre des critères d'évaluation, sous les mêmes rubriques. Pour éviter les recoupements, les soumissionnaires peuvent faire des renvois aux différentes sections de leur soumission en indiquant le numéro du paragraphe et de la page où le sujet visé est déjà traité.

Portée des travaux	Critères	Nombre maximum de points
1.0	Techniques	
1.1 Calendrier	<p>Fournir un calendrier des activités qui met en évidence la durée de chacune des tâches principales. Le plan devrait comprendre, sans s'y limiter, les éléments suivants :</p> <ul style="list-style-type: none"> La ventilation de chaque tâche en un nombre suffisant de sous-tâches pour que le déroulement du projet puisse être facilement suivi par le représentant du ministère. Inclure tant les activités de travail que les éléments à soumettre. Établir le chemin critique des activités dans le calendrier et préciser la marge de manœuvre incluse dans la durée des activités indiquées. Un calendrier faisant clairement état de la séquence des activités de travail durant les saisons de construction. La ventilation d'au moins une activité de cheminement essentiel par lot de travaux (principal et facultatifs) qui pourrait avoir des incidences sur l'achèvement fructueux du projet en indiquant comment atténuer cette activité. Démontrez les dépenses annuelles prévues approximatives selon la section 01 11 00 <p>Une confirmation par écrit que le calendrier proposé sera respecté et que le temps et les dépenses d'exploitation connexes requis pour exécuter les travaux prévus dans le contrat en plus du calendrier proposé sont à la charge de l'entrepreneur.</p>	50 Points
1.2 Compréhension du projet	<p>Le soumissionnaire devrait démontrer clairement sa gérance de l'environnement de manière globale, sa compréhension de la nature unique du projet, de la portée du travail relative aux contraintes du fait de travailler dans une région éloignée ou semi-éloignée en ayant un soutien et un accès possiblement limité, et des défis que posent les enjeux clés en matière de logistique, de réglementation et d'environnement associés au lieu de travail proposé compte tenu de</p>	25 points

1.3 Santé et de sécurité	<p>Décrire les risques et les dangers propres au site et aux tâches en ajoutant des détails sur la façon dont ils devraient être atténués et gérés.</p> <p>Fournir une analyse approfondie des risques éventuels pour la santé et la sécurité qui s'appliquent aux travaux et qui ne donnent lieu à aucune préoccupation fondamentale en matière de santé ou de sécurité.</p> <p>Le soumissionnaire devrait démontrer clairement qu'il comprend les risques chimiques, physiques et environnementaux liés à la tâche ainsi que les plans de secours médical d'urgence.</p> <p>Cette section devrait comprendre des exemples concrets des outils, des procédures et des méthodes de préparation qui seront utilisés et mis en œuvre.</p>	<p>10 points</p>
1.4 Équipement Équipement et fournitures pour la remise en état des lieux	<p>Présenter un inventaire détaillé de l'équipement et des sources d'équipement proposés pour les travaux sur place, en précisant l'état et l'ancienneté (années/heures) de l'équipement lourd. Cela peut comprendre, sans s'y limiter, les équipements, les camions et les véhicules de terrassement, etc.</p> <p>Donner des précisions sur la façon dont l'équipement s'adaptera aux contraintes du chantier, décrire la redondance de l'équipement et son entretien sur le chantier, présenter un inventaire des pièces de rechange ainsi que les employés responsables de l'entretien et des réparations.</p> <p>Présenter un inventaire détaillé des fournitures nécessaires à l'exécution des travaux pour la remise en état des lieux. Cela peut comprendre, sans s'y limiter, les fournitures liées à l'assèchement, les équipements de surveillance, etc., mais pas les fournitures en matière de santé et de sécurité.</p> <p>Ajouter une description des problèmes éventuels ainsi que des mesures d'atténuation nécessaires.</p>	<p>30 points</p>

1.5 Mobilisation, démobilisation et considérations logistiques	<p>Fournir un plan de mobilisation qui comprend une description détaillée de la façon dont l'équipement, le carburant, les matériaux, les contenants à déchets, les fournitures et le personnel proposé seront transportés, à l'aller et au retour. Le plan devrait entre autres comprendre, sans s'y limiter, les éléments suivants :</p> <ul style="list-style-type: none"> • une description des aéronefs commerciaux ou nolisés qui seront utilisés et de leur caractère approprié pour le transport de l'équipement proposé; • une description des transports et des voyages de retour des conteneurs commerciaux ou du transport par barges nolisées qui seront utilisés, de leur caractère approprié et/ou des exigences réglementaires à respecter; • un plan de rechange avec cadre décisionnel indiquant quand le plan de rechange doit être suivi et si le plan proposé comporte des limites; • des précisions sur la gestion des carburants, y compris les volumes prévus, les types de carburant, le transport, le stockage et le transfert; • une compréhension et une conformité démontrées par rapport aux exigences réglementaires pertinentes. <p>Une compréhension démontrée des risques associés à la tâche et des mesures d'atténuation devant être mises en œuvre pour réduire ces risques.</p>	<p>35 points</p>
1.6 Fourniture, exploitation et entretien des installations du site	<p>Présenter un plan indiquant les activités sur place, les installations ainsi que les services à donner, le cas échéant. Le plan devrait entre autres comprendre, sans s'y limiter, les éléments suivants :</p> <ul style="list-style-type: none"> • source(s) d'eau potable. Estimation incluse de la consommation quotidienne d'eau et du volume total d'eau nécessaire; • des précisions sur le plan de gestion des eaux usées et le plan de gestion des déchets solides. Une estimation incluse du volume quotidien d'eaux noires et du volume quotidien ou hebdomadaire d'eaux grises; • des détails sur le système de communication; • des précisions sur le plan de gestion de la sécurité faunique; • des dispositions relatives aux représentants ministériels sur le site; • une preuve de la compréhension et du respect des exigences réglementaires en vigueur relativement à ces tâches. <p>Une compréhension démontrée des risques associés à la tâche et des mesures d'atténuation devant être mises en œuvre pour réduire ces risques.</p>	<p>10 points</p>
1.7 Produits géosynthétiques	<p>Fournir une description détaillée des sources des divers produits géosynthétiques pour le projet.</p> <p>Le soumissionnaire devrait démontrer sa compréhension des problèmes éventuels liés à l'approvisionnement des géosynthétiques, à la livraison, à l'entreposage, à la manipulation, à l'installation et aux mesures d'atténuation.</p>	<p>5 points</p>

1.8 Terrassement	<p>Donner des renseignements détaillés sur la façon dont le terrassement sera effectué. Le plan devrait comprendre, sans s'y limiter, les éléments suivants :</p> <ul style="list-style-type: none"> • assainissement ciblé de AEC 1, AEC 2 et AEC 3. <p>Une compréhension et une conformité démontrées par rapport aux exigences réglementaires pertinentes, de même qu'aux plans de gestion approuvés liés à la tâche.</p>	<p>10 points</p>
1.9 Source d'emprunt	<p>Présentation de précisions concernant les sources d'emprunt qui seront utilisées et les quantités estimatives de matériaux à utiliser. Cela devrait comprendre les sources d'emprunt à proximité du site de travaux.</p> <p>Inclure une description des problèmes éventuels et des mesures d'atténuation pour la production, l'approvisionnement et le traitement des matériaux de source d'emprunt.</p>	<p>10 points</p>
1.10 Stabilisation de la pente du site d'enfouissement	<p>Fournir des détails sur la stabilisation du site d'enfouissement de AEC 1, y compris, sans s'y limiter, sur la disposition et la compaction des matériaux, de même que sur les mesures de contrôle de la qualité et de la sécurité employées pendant la construction.</p> <p>Fournir des détails sur l'ensemble des aspects et des approches liés à ces travaux.</p> <p>Ajouter une description des problèmes éventuels ainsi que des mesures d'atténuation.</p>	<p>30 points</p>
1.11 Excavation, séparation et tri selon la taille, transport et disposition des déchets non dangereux	<p>Fournir des détails quant à la façon dont les matériaux et les déchets non dangereux seront excavés, adéquatement triés selon leur taille, transportés et disposés dans la zone d'enfouissement AEC 1.</p> <p>Fournir des détails au sujet des conteneurs ou des équipements qui seront utilisés afin de cerner, de séparer, de trier selon la taille et de transporter les déchets des emplacements actuels au site d'enfouissement. Cela comprend l'utilisation et les objectifs des 26 conteneurs d'expédition actuels et des fûts en acier qui sont sur le site pour être utilisés par le soumissionnaire.</p> <p>Décrire le transport des déchets dangereux jusqu'au site d'enfouissement, ce qui comprend l'entreposage provisoire, au besoin.</p> <p>Fournir des détails quant à la façon dont les zones touchées par l'élimination feront l'objet d'un assainissement, au besoin, conformément à la spécification.</p> <p>Fournir des précisions sur la gestion de l'eau, le cas échéant, au cours de ce processus. Les précisions devraient inclure les méthodes de protection, de traitement ou de confinement.</p> <p>Ajouter une description des problèmes éventuels ainsi que des mesures d'atténuation.</p>	<p>15 points</p>

1.12 Emballage, transport et élimination des déchets potentiellement dangereux	<p>Le soumissionnaire devrait fournir un plan de gestion des déchets dangereux. Le plan devrait comprendre, sans s'y limiter, les éléments suivants :</p> <ul style="list-style-type: none"> • Des détails quant à la zone interimaire de ramassage des déchets et aux méthodes de confirmation des déchets dangereux. • Des précisions sur la façon dont les matériaux dangereux cernés durant l'excavation seront pris en charge, entreposés, mis en conteneur et éliminés dans une installation de gestion des déchets autorisée. Une indication des installations de gestion des déchets qui seront utilisées. • Des précisions sur les conteneurs qui serviront à assurer le transport des déchets dangereux à partir du site jusqu'à l'installation de stockage des déchets, sur la façon dont les matériaux seront sécurisés, au besoin, et sur la manière dont l'entrepreneur doit se conformer à toutes les lois et à tous les règlements environnementaux qui s'appliquent par rapport au transport terrestre, maritime ou aérien des matières dangereuses. <p>Une description des problèmes éventuels ainsi que des mesures d'atténuation.</p>	<p>15 points</p>
1.13 Organisation à l'origine de la proposition	<p>Clarté, concision et exhaustivité de la proposition</p> <p>Fournir une proposition claire, concise et exhaustive bien structurée. Tous les critères ont été abordés dans l'ordre précisé dans la demande de propositions, et de façon assez détaillée pour indiquer une bonne compréhension des besoins et des services à fournir.</p>	<p>15 points</p>
<p align="center">Nombre maximum de points pour les critères techniques :</p>		<p>260 points</p>
<p align="center">Nombre minimum acceptable de points pour les critères techniques (60 %) :</p>		<p>156 points</p>

Section II : Critère de gestion et d'organisation

Dans leur offre de gestion et d'organisation, les soumissionnaires doivent décrire leur capacité et leur expérience, l'équipe de gestion du projet et le ou les contacts chez le client. Cette section doit clairement démontrer que vous avez la capacité de gérer le projet efficacement et avec efficience. Votre offre doit contenir de l'information suffisamment détaillée pour faire saisir les qualifications de votre équipe telle que décrite en annexe « A », concernant les activités de remise en état dans les emplacements du nord de régions éloignées. Précisez en détail l'organisation que vous proposez et de votre effectif y compris les ressources de relève pour le projet, l'historique de votre équipe de projet dans la région, et les dispositions que vous entendez prendre pour contrôler les coûts et respecter la portée des travaux.

Définitions

Projets d'assainissement similaires, en envergure et en portée désignent les projets dans des régions « nordiques » éloignées comportant des déplacements par transport maritime, la collecte de déblais, l'assainissement des sols, la construction d'installations de traitement des sols, etc.

Isolé s'entend d'un endroit qui n'a pas d'accès routier relié à un grand centre.

Nordique s'entend des secteurs situés au nord du 60^e parallèle (Yukon, T.-N.-O., Nunavut).

Portée des travaux	Critères	Nombre maximum
2.0	Critères de gestion et d'organisation	
2.1 Qualifications et expérience de l'entreprise, de la coentreprise ou du consortium	<p>Fournir des précisions sur les qualifications de l'entreprise/la coentreprise/du consortium du soumissionnaire, de même qu'un contexte historique démontrant l'expérience liée précisément à des activités de portée similaire dans des régions éloignées et semi-éloignées. Le soumissionnaire sera évalué en fonction de l'ensemble de ses qualifications et de son expérience. L'expérience des sous-traitants ne sera pas examinée dans la présente section. Les propositions doivent comprendre, entre autres, les éléments suivants :</p> <ul style="list-style-type: none"> • Expérience antérieure de travail sur des projets d'assainissement dans des endroits éloignés ou semi-éloignés. • Description des heures et coûts de service proposés et explication de la façon dont les échéances et les coûts seront gérés durant la réalisation du projet. • Méthode de contrôle de la qualité proposée, explication sur la façon dont le contrôle de la qualité sera exercé durant la réalisation du projet. • Des détails sur le système de gestion de la santé et de la sécurité de l'entreprise, de la coentreprise ou du consortium et sur son certificat de reconnaissance ou l'équivalent. 	20 Points

<p>2.2 Références de clients</p>	<p>Fournir des preuves de trois (3) projets semblables d'assainissement que l'entreprise, la coentreprise ou le consortium a mené à bien et auxquels ont participé notamment les principaux membres de l'équipe de projet proposé. Dans le cadre de cette évaluation, on définit généralement un « projet semblable » comme un projet achevé qui prévoyait la construction de cellules d'enfouissement et la mise hors service de sites d'enfouissement historique dans des endroits éloignés et semi-éloignés. Si plus de trois références sont fournies, seules les références répondant aux critères feront l'objet d'une évaluation.</p> <p>Fournir la référence et la lettre d'un client (nom, adresse, téléphone et courriel du client) pour chaque projet énuméré, lesquels devront être signés et datés par le client du soumissionnaire.</p> <p>Le comité d'évaluation pourra communiquer avec les personnes dont le nom est cité en référence pour confirmer l'information fournie dans la soumission.</p> <p>Les lettres feront l'objet d'une évaluation fondée sur les critères suivants :</p> <ol style="list-style-type: none"> 1. La mesure dans laquelle le soumissionnaire a donné les services à temps (3 points); 2. La mesure dans laquelle le soumissionnaire a donné les services dans le respect des budgets (3 points); 3. La mesure dans laquelle le soumissionnaire a atteint l'objectif du projet (4 points). <p>Les lettres doivent être datées des quatre (4) dernières années, et les projets achevés dans les cinq (5) dernières années.</p> <p>Les références devraient indiquer ce qui suit, sans toutefois s'y limiter :</p> <ul style="list-style-type: none"> - les objectifs du projet; - la portée des services; - le budget; - la date de fin du projet; - les produits livrables. <p>On attribuera des points au soumissionnaire en tenant compte de l'ensemble de ses réalisations dans chacune des trois sous-catégories et non projet par projet.</p> <p>La priorité sera accordée aux projets pour lesquels on indique l'expérience et le rendement du personnel clé qui y sera affecté, peu importe quel a été son rôle dans une collaboration précédente avec l'entreprise du proposant.</p>	<p>30 points</p>
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<p>2.3 Qualifications des principaux intervenants</p>	<p>Fournir les curriculum vitæ (maximum de deux pages en format lettre [8x10]) pour les postes suivants : Le document devrait présenter l'expérience acquise dans le cadre de projets semblables, l'expérience de travail dans les régions éloignées et semi-éloignées ainsi que l'expérience liée au rôle proposé dans le cadre du projet.</p> <p>A. Gestionnaire de projet (max. 15 points) et remplaçant (4 points)</p> <ul style="list-style-type: none"> • Expérience manifeste de la gestion de projets de remise en état de lieux, réalisés à une échelle comparable à celle du projet proposé et d'une envergure semblable. • Expérience manifeste du contrôle des finances et des calendriers ainsi que de la liaison avec la clientèle. <p>B. Directeur de site (maximum de 15 points) et changement de quart de travail (maximum de 8 points)</p> <ul style="list-style-type: none"> • Expérience manifeste de la gestion du personnel dans les régions éloignées. • Expérience manifeste dans le rôle de surveillant de site et expérience dans le cadre de projets d'assainissement d'une portée similaire au projet proposé. <p>C. Coordinateurs de la santé et de la sécurité à l'extérieur du site (maximum de 8 points) et sur le site (maximum de 10 points)</p> <ul style="list-style-type: none"> • Expérience manifeste du travail dans des régions éloignées dans le cadre de projets d'assainissement d'une portée similaire au projet proposé. • Expérience manifeste de l'élaboration et de la mise en œuvre de programmes précis en matière de santé et sécurité pour les projets d'assainissement. <p>D. Spécialiste des déchets dangereux et non dangereux (maximum de 10 points)</p> <ul style="list-style-type: none"> • Expérience manifeste sur le terrain dans le cadre de projets d'assainissement d'une portée similaire au projet proposé. • Expérience de la reconnaissance, de l'échantillonnage, de la caractérisation, de la mise en conteneur et du transport des matières dangereuses et non dangereuses ainsi que de leur élimination. <p>REMARQUES</p> <p>1. Les remplaçants sont des employés affectés au projet dans le cas où les employés désignés sont absents pour cause de maladie, de changement d'emploi, etc.</p> <p>2. Les employés pour les changements de quart de travail sont ceux qui remplaceront fréquemment le personnel en place dans le cadre des changements de quart de travail survenant durant les travaux sur le site.</p> <p>3. Une personne peut jouer plus d'un rôle, exception faite du gestionnaire de projets et du surveillant de site qui tous deux doivent demeurer des rôles autonomes.</p> <p>4. Toute page excédant la limite de deux pages sera rejetée et ne sera pas prise en considération dans le cadre de l'évaluation.</p> <p>5. Si la formation ou la certification est utilisée afin de démontrer des qualifications, inclure l'année ou la date d'achèvement.</p> <p>6. Indiquez dans le curriculum vitæ le rôle assumé par les principaux membres de l'équipe du projet proposé relativement aux projets de référence indiqués à la section 2.2.</p>	<p>70 points</p>
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2.4 Recrutement et plan d'urgence	Le soumissionnaire devrait démontrer qu'il est effectivement en mesure de recruter le personnel nécessaire pour le projet, y compris les plans d'urgence couvrant les principaux membres de l'équipe.	10 points
2.5 Organigramme	<p>Le soumissionnaire devrait fournir un organigramme détaillé de l'équipe de projet comprenant les représentants de Transports Canada et de Services publics et Approvisionnement Canada, le représentant du Ministère, son personnel et les sous-traitants. Le soumissionnaire sera évalué par rapport à l'ensemble du contenu de l'organigramme. Ce dernier devrait comprendre les éléments suivants, sans toutefois s'y limiter :</p> <ul style="list-style-type: none"> • inclure tous les éléments de ressources, y compris le personnel de l'entrepreneur et les sous-traitants (3 points); • indiquer qui est responsable du contrôle global et des dispositions concernant le contrôle des coûts et la conformité aux spécifications (2 points); • indiquer clairement les voies de communication pour toutes les parties (5 points). 	10 points
Nombre maximum de points pour les critères techniques :		140 points
Nombre minimum acceptable de points pour les critères techniques (60 %) :		84 points

PLAN D'AVANTAGES OFFERTS AUX INUITS (PAI)

Évaluation de la garantie du plan des PAI

Pour qu'une offre reçoive un certain nombre de points concernant les garanties faites sur les critères du plan des PAI, **LE SOUMISSIONNAIRE DOIT FOURNIR LA PREUVE, DE PAIR AVEC SON OFFRE**, qu'il répond à l'objectif de chaque critère. Les soumissionnaires peuvent utiliser les TABLEAUX DE GARANTIE ci-joints pour compléter leur présentation sur le plan des PAI.

Comme preuve de leurs efforts et/ou garantie, les soumissionnaires doivent inclure, sans s'y limiter, les noms des personnes ou entreprises à contrat et la nature des activités au moment de la soumission. Les soumissionnaires doivent veiller à ce que la documentation qu'ils fournissent relativement au plan des PAI soit suffisamment probante et suffisamment claire pour permettre d'évaluer la conformité de leur offre aux critères énoncés dans les présentes. Il incombe aux soumissionnaires de fournir suffisamment de renseignements dans leur soumission pour permettre au comité d'évaluation de faire son évaluation. **LES SOUMISSIONNAIRES POURRONT RECEVOIR DES POINTS UNIQUEMENT POUR LES ENGAGEMENTS DÉMONTRÉS.** Seuls les documents inclus dans la proposition seront pris en considération. Les liens vers des adresses URL du site Web du soumissionnaire ne seront pas pris en considération.

Le Canada se réserve le droit de vérifier toute information fournie dans le plan des PAI, et les déclarations inexactes pourraient rendre la soumission non recevable.

Section III: Critères d'avantages pour les Inuits

Les soumissionnaires doivent fournir l'information demandée dans le tableau ci-dessous. Des points supplémentaires pourraient leur être attribués. Cette particularité est conforme aux accords sur les revendications territoriales du Nunavut et au mandat d'AADNC visant à appuyer et à prévoir des possibilités pour les communautés Inuit locales ayant conclues marchés fédéraux au sein d'une région visée par des revendications territoriales.

ITEM	Critères Points	Critères Points
3.0	Cet approvisionnement est assujéti aux dispositions de l'Accord sur le Nunavut. Le Canada se réserve le droit de confirmer la validité de toutes les déclarations et les garanties.	
3.1	ADMINISTRATION CENTRALE : Démontrer que le soumissionnaire dispose de sièges sociaux, de bureaux administratifs avec personnel ou d'autres installations dans la région du Nunavut. Note parfaite si l'on démontre l'existence de sièges sociaux de soumissionnaires, de bureaux administratifs ou d'autres installations avec personnel dans la zone visée par le règlement sur le Nunavut..	/10
3.2	MAIN-D'OEUVRE: L'emploi de main-d'oeuvre Inuite sur place pour exécuter les travaux visés par le marché. Les soumissionnaires seront évalués relativement à leur garantie ferme d'employer sur place des Inuits de la région désignée du Nunavut pour effectuer les travaux. Les pourcentages indiqués ci-dessous concernent précisément les heures de travail sur place indépendamment du fait qu'il s'agit d'employés de l'entrepreneur principal ou d'employés d'un sous-traitant. Les pourcentages doivent correspondre à une liste de postes précis qui peuvent être occupés, ou qui le seront, par des employés Inuits sur place. L'emploi d'Inuits sur place sera confirmé pendant les travaux d'après la documentation d'appui fournie par l'entrepreneur et l'examen des dossiers statistiques du représentant du Ministère sur la main-d'oeuvre Inuite sur place. 0 - 100 % du total d'heures de travail = 0 - 45 points. Les points seront attribués au prorata du pourcentage du total des points disponibles. ___ % x total des points Exemple : Le soumissionnaire garanti que 65 % des heures de travail seront accomplies par des employés autochtones/inuits = 65 % du total des points (45) 65 % x 45 = 29.25 points	/45

	<p>NOTE Le soumissionnaire doit démontrer comment il compte respecter le pourcentage de main-d'oeuvre autochtone. Simplement indiquer un engagement en pourcentage n'est pas suffisant pour obtenir les points. La note sera ajustée en fonction des documents justificatifs.</p> <p>***Des pénalités et des incitatifs s'appliqueront à ce critère.</p>	
3.4	<p>Sous-traitants ou fournisseurs:Le fait de faire appel à des sous-traitants ou à des fournisseurs inuits pour exécuter les travaux du marché.</p> <p>Les soumissionnaires seront évalués selon leur garantie ferme à faire appel à des soustraitants inuits de la région désignée du Nunavut associé au marché pour l'exécution des services ou la fourniture des biens et de l'équipement. Remarque : Si l'entrepreneur principal est une entreprise à propriété Inuite, la valeur totale en dollars du marché inuit doit également comprendre la part du marché revenant à l'entrepreneur.</p> <p>Les soumissionnaires doivent fournir leur garantie des sous-traitants ou des fournisseurs inuits conformément au suivant :</p> <p>Valeur estimative du contrat : \$ _____ - Moins sous-traitance non-inuite : \$ _____ = Total garanti pour les sous-traitants et fournisseurs inuits : \$ _____</p> <p>Les points seront attribués au prorata du pourcentage du total des points disponibles. _a_ % x total des points = points attribués</p> <p>Exemple : Valeur estimative du contrat : 100 000 \$ - Moins la sous-traitance non-inuit : - 45,000 \$ = Total garanti pour les sous-traitants et fournisseurs inuits : 55,000 \$</p> <p>55 000 \$ / 100 000 \$ = 0,55 x 100 = 55 %</p> <p>55 % x 45 = 24.75 points</p> <p>NOTE Les pourcentages DOIVENT ÊTRE APPUYÉS par une liste de fournisseurs/soustraitants particuliers qui peuvent être confirmés comme sous-traitants autochtones/inuits. La vérification du statut d'entreprise autochtones sera effectuée à l'aide d'une ou des ressources suivantes :</p> <ul style="list-style-type: none"> Base de données du répertoire d'entreprises inuites : http://inuitfirm.tunngavik.com. <p>*** Des pénalités s'appliqueront à ce critère.</p>	/45
3.	TOTAL POINTS AVAILABLE	/100

Evaluation Summary

Item	Category	Weight Factor	Rating	Technical Points Rating	Minimum pass mark	Maximum points
Section 1 – Technical Criteria						
1.1	Schedule	5.0	0-10	0-50	n/a	50
1.2	Project Understanding	2.5	0-10	0-25	n/a	25
1.3	Health and Safety	1.0	0-10	0-10	n/a	10
1.4	Equipment - Remediation Equipment and Supplies	3.0	0-10	0-30	n/a	30
1.5	Mobilization/ Demobilization and Logistical considerations	3.5	0-10	0-35	n/a	35
1.6	Supply, Operation and Maintenance of On-site Facilities	1.0	0-10	0-10	n/a	10
1.7	Geosynthetic Products	0.5	0-10	0-5	n/a	5
1.8	Earthworks	1.0	0-10	0-10	n/a	10
1.9	Borrow Source	1.0	0-10	0-10	n/a	10
1.10	Landfill	3.0	0-10	0-30	n/a	30
1.11	Excavation, Separation and Sizing, Transport and Placement of Non-Hazardous Waste	1.5	0-10	0-15	n/a	15
1.12	Packaging, Transport, and Disposal of Potential Hazardous Waste	1.5	0-10	0-15	n/a	15
1.13	Proposal Organization	1.5	0-10	0-15	n/a	15
TOTAL					156	260

Item	Category	Weight Factor	Rating	Technical Points Rating	Minimum pass mark	Maximum points
Section 2 - Management and Organization Criteria						
2.1	Company/Joint Venture/ Consortium Qualifications and Experience	2.0	0-10	0-20	n/a	20
2.2	Client References	3.0	0-10	0-30	n/a	30
2.3	Qualifications and Key Individuals					
2.3a	Project Manager	1.5	0-10	0-15	n/a	15
2.3b	Project Manager Back-up	0.4	0-10	0-4	n/a	4
2.3c	Site Superintendent	1.5	0-10	0-15	n/a	15
2.3d	Site Superintendent Cross-Shift	0.8	0-10	0-8	n/a	8
2.3e	Offsite Health and Safety Coordinator	0.8	0-10	0-8	n/a	8
2.3f	Onsite Health and Safety Coordinator	1.0	0-10	0-10	n/a	10
2.3g	Non-Hazardous Waste Specialist	1.0	0-10	0-10	n/a	10
2.4	Staffing Contingency Plan	1.0	0-10	0-10	n/a	10
2.5	Organization Chart	1.0	0-10	0-10	n/a	10
Total				0-140	84	140
Section 3 - Inuit Opportunities Considerations Criteria						
3.1	Nunavut Offices	Points to be assigned as described in criterion			n/a	10
3.2	Inuit Labour	Points to be assigned as described in criterion			n/a	45
3.3	Inuit Sub-Contractor Content	Points to be assigned as described in criterion			n/a	45
Total					n/a	100
Total – Proposition technique						500

TABLEAU GÉNÉRIQUE D'ÉVALUATION

Les membres du Comité d'évaluation de TPSGC évalueront les points forts et les faiblesses de la soumission selon les critères d'évaluation et attribueront une cote de nombre pair (0, 2, 4, 6, 8 ou 10) pour chaque critère d'évaluation selon le tableau générique d'évaluation qui suit. Lors de l'évaluation des propositions, le Comité d'évaluation de TPSGC pourrait attribuer une cote d'évaluation de nombre impair après qu'un consensus a été atteint.

Une fois qu'une note sur un total de 10 points sera déterminée, le facteur de pondération approprié sera utilisé pour calculer la note finale du soumissionnaire. Par exemple, si un critère est énuméré avec un total possible de 30 points, la note du soumissionnaire sur 10 sera multipliée par 3 pour obtenir la note finale du soumissionnaire pour ce critère.

	INADÉQUAT	FAIBLE	ADÉQUAT	PLEINEMENT SATISFAISANT	SOLIDE
0 Point	2 Points	4 Points	6 Points	8 Points	10 Points
N'a pas fourni de renseignements pouvant être évalués	Ne comprend pas du tout ou comprend mal les exigences	Connaît jusqu'à un certain point les exigences mais ne comprend pas suffisamment certains aspects des exigences	Démontre une bonne compréhension des exigences	Démontre une très bonne compréhension des exigences	Démontre une excellente compréhension des exigences
	Faiblesse ne peut être corrigée	De façon générale, il est peu probable que les faiblesses puissent être corrigées	Faiblesse pouvant facilement être corrigée	Aucune faiblesse significative	Aucune faiblesse apparente
	Le proposant manque de qualifications et d'expérience	Le proposant ne possède pas le minimum de qualifications et d'expérience	Le proposant possède le minimum de qualifications et d'expérience	Le proposant possède les qualifications et l'expérience	Le proposant est hautement qualifié et expérimenté
	Peu probable que l'équipe proposée soit en mesure de répondre aux besoins	Équipe ne compte pas tous les éléments ou expérience globale faible	Équipe compte tous les éléments et satisfera probablement aux exigences	Équipe compte tous les éléments - certains membres ont travaillé ensemble	Équipe solide - les membres ont travaillé efficacement ensemble à des projets similaires
	Projets antérieurs non connexes aux exigences du présent projet	Généralement les projets antérieurs ne sont pas connexes aux exigences du présent projet	Projets antérieurs généralement connexes aux exigences du présent projet	Projets antérieurs directement connexes aux exigences du présent projet	Principal responsable de projets antérieurs directement connexes aux exigences du présent projet
	Extrêmement faible; ne pourra pas satisfaire aux exigences de rendement	Peu de possibilité de satisfaire aux exigences de rendement	Capacité minimale acceptable; devrait satisfaire aux exigences minimales de rendement	Capacité satisfaisante - devrait obtenir des résultats efficaces	Capacité supérieure; devrait obtenir des résultats très efficaces

APPENDICE 6 - ÉTABLISSEMENT DE RAPPORTS ET CALCULS DE PÉNALITÉS DU PLAN D'AVANTAGES OFFERTS AUX INUITS

GARANTIE ET ATTESTATION DU SOUMISSIONNAIRE

1. Au moment de la soumission – Les tableaux ci-dessous peuvent être utilisés par les soumissionnaires pour soumettre une demande.
2. Les renseignements fournis peuvent faire l'objet de vérifications.
3. Aux fins de suivi, il est possible que les communautés pourront obtenir une copie du plan d'avantages offerts aux Inuits et pourront recevoir périodiquement les résultats de la surveillance de la performance.

TABEAU 1 – Siège social

Fournir l'adresse d'entreprise actuelle
Les soumissionnaires doivent montrer l'existence de sièges sociaux, de bureaux administratifs ou d'autres installations avec personnel dans la région désignée du Nunavut.

TABEAU 2 – Garantie du nombre d'employés inuits sur place

Nombre total d'heures-personnes inuites sur place pour ce marché
Nombre total d'heures-employés sur place pour ce marché

A/B = _____ %

Nom et titre du poste (Indiquer le ou les noms si possible)	Heures-employés inuits sur place	Heures-employés non autochtones/non inuits
Les soumissionnaires doivent inclure le nombre d'heures de travail à effectuer.		

TABEAU 3 – Garantie du nombre de sous-traitants et fournisseurs inuits :

Coût estimatif total des fournitures/matériaux/pièces d'équipement/services obtenus auprès d'entreprises inuites pour ce marché

Prix total de la soumission

= _____ %

Nom et titre du poste (Indiquer le ou les noms si possible)	Société Inuite Entreprise	Entreprise non Inuite
Le soumissionnaire doit inclure la valeur des travaux sous-traités. NOTE : Seuls les sous-traitants et les fournisseurs dont le statut d'entreprise autochtone peut être confirmé seront pris en compte dans les calculs. La vérification du statut d'entreprise autochtone sera effectuée conformément à l'article 3.3 Sous-traitants/fournisseurs.		

Attestation du soumissionnaire

Solicitation No. - N° de l'invitation
EW699-182827
Client Ref. No. - N° de réf. du client
INAC EW699-182827

Amd. No. - N° de la modif.
NCS012
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Le soumissionnaire doit soumettre l'attestation suivante si une garantie de plan des PAI est fournie soit au moment de la
soumission de l'offre, soit avant l'attribution du marché.

ATTESTATION DE PLAN D'AVANTAGES OFFERTS AUX INUITS :

NOM EN CARACTÈRES D'IMPRIMERIE

SIGNATURE

DATE

Le soumissionnaire atteste que la garantie de plan des PAI qui appuie sa soumission est exacte et complète.

ATTESTATION ET RAPPORT SUR LES RÉALISATIONS DE L'ENTREPRENEUR

1. Pour l'entrepreneur retenu seulement – Si une garantie de plan des PAI est fournie dans le cadre de l'offre, l'entrepreneur retenu doit fournir un résumé des activités entreprises pour répondre aux engagements pris dans le cadre de la partie de son offre concernant le plan des PAI. L'entrepreneur doit remplir les tableaux suivants, et fournir des pièces justificatives à l'appui (factures, registres de travail, reçus de paiements salariaux, etc.) sur une base avant le paiement final.
2. L'entrepreneur doit indiquer si des objectifs n'ont pas été atteints et pourquoi.
3. Les renseignements fournis peuvent faire l'objet de vérifications.
4. L'attestation du plan des PAI et les rapports de réalisations du plan des PAI doivent être remis avant le paiement final avec des détails sur la façon dont les entrepreneurs ont respecté la garantie du plan des PAI.
5. Le défaut de remettre l'attestation et le rapport demandés dans un délai de 15 jours ouvrables pourra se traduire par une pénalité de 2%
6. Aux fins de suivi, il est possible que les communautés pourront obtenir une copie du plan d'avantages offerts aux Inuits et pourront recevoir périodiquement les résultats de la surveillance de la performance.

Renvoyez les rapports à :

Nom de l'autorité contractante : Crystal Sarna

Courriel : crystal.sarna@pwgsc.gc.ca

TABLEAU 1 – Siège social

Fournir l'adresse d'entreprise actuelle
Les entrepreneurs démontrer doivent montrer l'existence de sièges sociaux, de bureaux administratifs ou d'autres installations avec personnel dans la région désignée du Nunavut.

TABLEAU 2 – Réalisations quant au nombre d'employés inuits sur place

Nombre total d'heures-personnes inuites sur place pour ce marché _____ %

Nombre total d'heures-employés pour ce marché

Nom et titre du poste (Indiquer le ou les noms si possible)	Heures-employés inuits sur place	Heures-employés non inuits sur place
L'entrepreneur doit inclure le nombre d'heures de travail effectuées.		

TABLEAU 3 – Réalisations quant au nombre de sous-traitants/fournisseurs Inuits :

Coût total des fournitures/matériaux/pièces d'équipement/services obtenus auprès d'entreprises inuites pour ce marché

Valeur finale du marché :

= _____ %

Nom de l'entreprise	Entreprise Inuite	Entreprise non Inuite
L'entrepreneur doit inclure la valeur des travaux sous-traités.		

Attestation de l'entrepreneur

ATTESTATION DU PLAN D'AVANTAGES OFFERTS AUX INUITS

NOM EN CARACTÈRES D'IMPRIMERIE

SIGNATURE

DATE

L'entrepreneur atteste que les renseignements contenus dans les TABLEAUX DES RÉALISATIONS sont exacts et complets.

CONDITIONS RÉGISSANT LES PÉNALITÉS LIÉS AU PLAN D'AVANTAGES OFFERTS AUX INUITS

1. Aux termes des dispositions du marché proposé, si l'entrepreneur respecte les garanties prévues et attestées dans sa soumission, l'entrepreneur se verra verser le prix du marché convenu.
2. Si l'entrepreneur ne réussit pas à obtenir le pourcentage certifié d'heures-employés inuits sur place pour le marché et ne parvient pas à atteindre son objectif à cet égard, un montant maximum de 1 % de la valeur finale du marché pourrait être déduit du paiement final ou des versements différés. (Tableau A)
3. Si l'entrepreneur ne réussit pas à recruter le pourcentage certifié de sous-traitants/fournisseurs inuits et ne parvient pas à atteindre son objectif à cet égard, un montant maximum de 1% de la valeur finale du marché pourrait être déduit du paiement final ou des versements différés. (Tableau B)
4. Les entrepreneurs qui dépassent la cible du plan des PAI fixée pour un des critères susmentionnés, mais qui n'atteignent pas celle d'un autre de ces critères, pourraient être assujettis à la fois à une pénalité et à une prime. Les conditions susmentionnées régissant les pénalités relativement à l'emploi d'Inuits seront évaluées en fonction des formules figurant aux présentes.
5. Le Canada est autorisé en tout temps à retenir, recouvrer, déduire ou prélever de toute somme due à l'entrepreneur par le Canada, tout montant de pénalités dû et impayé aux termes de la présente section.
6. Rien dans la présente section ne doit être interprété comme limitant les droits et les recours dont le Canada peut par ailleurs se prévaloir aux termes du marché.
7. Le Canada se réserve le droit, à sa seule discrétion, de réduire ou d'éliminer les pénalités s'il est clairement démontré que des efforts importants ont été faits pour respecter la garantie de plan des PAI et que les exigences minimales n'ont pu être respectées en raison de circonstances échappant au contrôle de l'entrepreneur.

REMARQUE : « VALEUR FINALE DU MARCHÉ » – Aux fins du calcul des pénalités, la valeur finale du marché comprend toutes les modifications apportées au montant initialement attribué, à moins qu'il soit précisé qu'elles sont exclues du calcul du plan des PAI au moment de la négociation ou de l'ordre de modification.

MESURES DE PÉNALITÉS POUR L'EMPLOI D'INUITS LISTE DE VÉRIFICATION			
ENTREPRENEUR : _____			
ÉTAPE	STATISTIQUES FINALES	% PROPOSÉ	% ACCOMPLI
1	Pourcentage d'heures-personnes de travail sur place pour des Inuits		
2	Pourcentage des coûts des sous-traitants/fournisseurs inuits		
3	Valeur finale du marché (hors TPS)		\$
4	<p>Garantie en matière d'emploi attesté sur place d'Inuits respectée, dépassée ou non atteinte?</p> <p>Respectée – Aucune pénalité ou prime d'encouragement.</p> <p>Non atteinte – L'entrepreneur peut se faire imposer une pénalité pouvant atteindre 1% de la valeur finale du marché. Passer au Tableau A.</p>		
5	<p>Garantie de sous-traitant/fournisseur attesté inuit respectée, dépassée ou non atteinte?</p> <p>Respectée – Aucune pénalité ou prime d'encouragement.</p> <p>Non atteinte – L'entrepreneur peut se faire imposer une pénalité pouvant atteindre 1 % de la valeur finale du marché. Passer au Tableau B.</p>		
6	COMMENTAIRES :		

TABLEAU A – ÉVALUATION DES TRAVAILLEURS INUITS SUR PLACE PÉNALITÉ RELATIVE À L'EMPLOI			
POINT N°	EXIGENCE	PONDÉRATIO N	NOTE
1	<p>Calculer le pourcentage atteint de la garantie pour l'emploi d'Inuits sur place selon la formule suivante :</p> <p>Pourcentage de la garantie = $\frac{\text{Atteint}}{\text{Proposé}} \times 100\%$ * 60 %</p> <p>Remarque : Un pourcentage de 50 % ou moins correspond à zéro point.</p>	60	
2	<p>DILIGENCE RAISONNABLE DE L'ENTREPRENEUR :</p> <p>On étudiera au cas par cas la capacité de l'entrepreneur de démontrer s'il a fait les efforts voulus pour respecter les garanties d'emploi d'Inuits sur place.</p> <p>Voici comment les points seront attribués à l'entrepreneur pour évaluer sa diligence :</p> <p>0-13 points – L'entrepreneur n'a fait que peu d'efforts, voire aucun effort, pour essayer de respecter les garanties en matière d'emploi du plan des PAI.</p> <p>14-27 points – L'entrepreneur a fait des efforts modérés pour essayer de respecter les garanties en matière d'emploi du plan des PAI.</p> <p>28-40 points – L'entrepreneur a fait des efforts remarquables pour essayer de respecter les garanties en matière d'emploi du plan des PAI.</p>	40	
3	NOTE TOTALE ÉTABLIE	100	
4	TOTAL DE LA PÉNALITÉ CALCULÉ : (100 - note totale établie) % x (valeur finale du marché) x 1 %	\$	
5	COMMENTAIRES OU JUSTIFICATIONS :		
6	<p>SIGNATURE DES MEMBRES DU COMITÉ D'ÉVALUATION :</p> <p>Représentant ministériel : _____</p> <p>Chargé de projet : _____</p> <p>Agent de négociation des marchés (SPAC) : _____</p>		

APPENDICE 7 — POUVOIRS DU REPRÉSENTANT MINISTÉRIEL

Autorité contractante

Nom : Crystal Sarna

Titre : Spécialiste de l'approvisionnement

Ministère : Travaux publics et Services gouvernementaux Canada

Téléphone : 204-298-2742

Courriel : crystal.sarna@pwgsc.gc.ca

À INSÉRER AU MOMENT DE L'ATTRIBUTION DU CONTRAT.

Responsable technique

Nom : _____

Titre : _____

Ministère : _____

Division : _____ :

Téléphone : ____ — ____ — _____

Courriel : _____

APPENDICE 8 — ATTESTATION DE COENTREPRISE

1. Une coentreprise est une association de deux parties ou plus qui regroupent leurs fonds, leurs biens, leurs connaissances, leur savoir-faire ou d'autres ressources au sein d'une entreprise commerciale conjointe, parfois appelée consortium, afin de déposer ensemble une soumission en vue de l'obtention d'un contrat. Les soumissionnaires qui présentent une proposition à titre de coentreprise doivent indiquer clairement qu'ils forment une coentreprise et fournir les renseignements suivants :
 - a. le nom de chaque membre de la coentreprise;
 - b. le numéro d'entreprise-approvisionnement de chaque membre de la coentreprise;
 - c. le nom du représentant de la coentreprise, c'est-à-dire le membre choisi par les autres membres pour les représenter, le cas échéant;
 - d. le nom de la coentreprise, le cas échéant.
2. Si les renseignements contenus dans l'offre ne sont pas clairs, le soumissionnaire devra fournir les renseignements à la demande de l'autorité contractante.
3. La soumission et tout contrat subséquent doivent être signés par tous les membres de la coentreprise à moins qu'un membre ait été nommé pour représenter tous les membres de la coentreprise. L'autorité contractante peut, en tout temps, demander à chaque membre de la coentreprise de confirmer que le représentant a reçu les pleins pouvoirs pour agir à titre de représentant aux fins de la demande de soumissions et tout contrat subséquent. Si un contrat est attribué à une coentreprise, tous ses membres seront individuellement et solidairement responsables de l'exécution du contrat subséquent.

Le soumissionnaire affirme que l'entité qui présente la soumission :

_____ EST une coentreprise au sens de la définition présentée ci-dessus OU

_____ N'EST PAS une coentreprise au sens de la définition présentée ci-dessus.

Le soumissionnaire qui est une coentreprise donne les renseignements supplémentaires suivants :

(a) le type de coentreprise (cocher la mention applicable) :

_____ coentreprise constituée en société

_____ coentreprise en commandite

_____ coentreprise en nom collectif

_____ coentreprise contractuelle

_____ autre

(b) Composition : (nom et adresse de tous les membres de la coentreprise)

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ANNEXE A – SPÉCIFICATIONS

Faire références aux documents ci-joints.

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ANNEXE B – ATTESTATION D'ASSURANCE

(Pour informations seulement, n'est pas requise lors du dépôt de soumission)



Travaux publics et
Services gouvernementaux
Canada

Public Works and
Government Services
Canada

ATTESTATION D'ASSURANCE

Page 1 de 2

Description et emplacement des travaux Assainissement du site d'enfouissement de Resolute Bay Resolute Bay (Nunavut)	N° de contrat. EW699-1812827
	N° de projet R.099508.001

Nom de l'assureur, du courtier ou de l'agent	Adresse (N°, rue)	Ville	Province	Code postal
Nom de l'assuré (Entrepreneur)	Adresse (N°, rue)	Ville	Province	Code Postal
Assuré additionnel Sa majesté la Reine du chef du Canada représentée par le Ministre des Travaux publics et des Services gouvernementaux				

Genre d'assurance	Compagnie et N° de la police	Date d'effet J / M / A	Date d'expiration J / M / A	Plafonds de garantie		
Responsabilité civile des entreprises Responsabilité complémentaire/exc édentaire.				Par sinistre	Global général annuel	Global - Risque après travaux
				\$	\$	\$
Responsabilité pollution des entreprises « Responsabilité légale en matière de pollution — Chantiers » « Responsabilité des entrepreneurs en matière de pollution » et « Responsabilité civile relative aux réservoirs de stockage » « Responsabilité professionnelle de l'entrepreneur »				\$		Global
				<input type="checkbox"/> Par incident <input type="checkbox"/> Par événement		\$
Responsabilité maritime				\$		

J'atteste que les polices ci-dessus ont été émises par des assureurs dans le cadre de leurs activités d'assurance au Canada et que ces polices sont présentement en vigueur, comprennent les garanties et dispositions applicables de la page 2 de l'Attestation d'assurance, incluant le préavis d'annulation ou de réduction de garantie.

Nom de la personne autorisée à signer au nom de(s) (l')assureur(s) (Cadre, agent, courtier)

Numéro de téléphone

Signature

Date J / M / A

ATTESTATION D'ASSURANCE Page 2 de 2

Généralités

Les polices exigées à la page 1 de l'Attestation d'assurance doivent être en vigueur et doivent inclure les garanties énumérées sous le genre d'assurance correspondant de cette page-ci.

Les polices doivent assurer l'entrepreneur et doivent inclure, en tant qu'assuré additionnel, Sa majesté la Reine du chef du Canada représentée par le Ministre des Travaux publics et des Services gouvernementaux.

La police d'assurance doit comprendre un avenant prévoyant un préavis écrit d'au moins trente (30) jours en cas d'annulation de l'assurance ou de toute réduction de la garantie d'assurance.

Sans augmenter la limite de responsabilité, la police doit couvrir toutes les parties assurées dans la pleine mesure de la couverture prévue.

De plus, la police doit s'appliquer à chaque assuré de la même manière et dans la même mesure que si une police distincte avait été émise à chacun d'eux.

Responsabilité civile des entreprises

La garantie d'assurance fournie ne doit pas être substantiellement inférieure à la garantie fournie par la dernière publication du formulaire BAC 2100.

La police doit inclure ou avoir un avenant pour l'inclusion d'une garantie pour les risques et dangers suivants si les travaux y sont assujettis :

- a) Dynamitage.
- b) Battage de pieux et travaux de caisson.
- c) Reprise en sous-œuvre.
- d) Enlèvement ou affaiblissement d'un support soutenant toute structure ou terrain, que ce support soit naturel ou non, si le travail est exécuté par l'entrepreneur assuré.

La police doit comporter:

- a) un « Plafond par sinistre » d'au moins **5 000 000 \$**;
- b) un « Plafond global général » d'au moins **10 000 000 \$** par année d'assurance, si le contrat d'assurance est assujetti à une telle limite.
- c) un « Plafond pour risque produits/après travaux » d'au moins **5 000 000 \$**.

Une assurance responsabilité complémentaire ou excédentaire peut être utilisée pour atteindre les plafonds obligatoires.

Assurance responsabilités couvrant l'atteinte à l'environnement

- 1- L'entrepreneur doit souscrire et maintenir, pendant toute la durée du contrat, une assurance « responsabilité civile en matière de pollution – Chantiers », une assurance « responsabilité de l'entrepreneur en matière de pollution », une assurance « responsabilité civile relative aux réservoirs de stockage », une assurance « responsabilité professionnelle de l'entrepreneur » d'un montant équivalant à celui habituellement fixé pour un contrat de cette nature; toutefois, la limite de responsabilité ne doit pas être inférieure à **5 000 000 \$ par accident** ou par sinistre et faire partie du total annuel.
2. S'il s'agit d'une police sur la base des réclamations, la couverture doit être valide pour une période minimale de douze (12) mois suivant la fin ou la résiliation du contrat.
3. La police d'assurance Responsabilité des entrepreneurs en matière de pollution doit comprendre les éléments suivants :
 - a. Assuré additionnel : Le Canada est désigné comme assuré additionnel, mais seulement en ce qui concerne les responsabilités qui peuvent découler de l'exécution du contrat par l'entrepreneur. L'intérêt du Canada en tant qu'assuré additionnel devrait se lire comme suit : Le Canada, représenté par Travaux publics et Services gouvernementaux Canada.
 - b. Avis d'annulation : L'assureur s'efforcera de donner à l'autorité contractante un avis écrit de trente (30) jours en cas d'annulation de la police.
 - c. Séparation des assurés : La police doit s'appliquer à chaque assuré de la même manière et dans la même mesure que si une police distincte avait été émise à chacun d'eux.
 - d. Responsabilité contractuelle générale : La police doit, sur une base générale ou par renvoi explicite au contrat, couvrir les obligations assumées en ce qui concerne les dispositions contractuelles.
 - e. Transport incident : La police doit couvrir les pertes découlant de tout déchet, produit ou matériel transporté, expédié ou livré par le biais d'un moyen de transport vers un emplacement situé au-delà des limites du site où l'entrepreneur ou toute entité pour laquelle il est juridiquement responsable exécute ou a exécuté les activités décrites dans le contrat.
 - f. Travaux d'élimination de l'amiante, du plomb et des moisissures : la politique doit étendre la couverture aux activités liées au retrait et à l'élimination des matériaux contenant de l'amiante, du plomb, ainsi que prestations de services de désamiantage.
 - g. Assurance de responsabilité civile relative aux réservoirs de stockage : La police doit couvrir les blessures corporelles et les dommages matériels causés hors site à des tiers par des rejets provenant de réservoirs de stockage (en surface et sous terre). La protection doit comprendre les mesures correctives et le nettoyage de ces rejets.
 - h. Droits de poursuite : Conformément à l'alinéa 5 d) de la [Loi sur le ministère de la Justice](#), L.R.C. 1993, ch. J-2, art. 1, si une poursuite est intentée par ou contre le Canada et que, indépendamment de la présente clause, l'assureur a le droit d'intervenir en poursuite ou en défense au nom du Canada à titre d'assuré additionnel désigné en vertu de la police d'assurance, l'assureur doit communiquer promptement avec le Procureur général du Canada, par lettre recommandée ou par service de messagerie, avec

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accusé de réception, pour s'entendre sur les stratégies juridiques.

Pour la province de Québec, envoyer à l'adresse suivante :

*Directeur
Direction du droit des affaires
Bureau régional du Québec (Ottawa)
Ministère de la Justice
284, rue Wellington, pièce SAT-6042
Ottawa (Ontario) K1A 0H8*

Pour les autres provinces et territoires, envoyer à l'adresse suivante :

*Avocat général principal
Section du contentieux des affaires civiles
Ministère de la Justice
234, rue Wellington, Tour de l'Est
Ottawa (Ontario) K1A 0H8*

Une copie de cette lettre doit être envoyée à l'autorité contractante à titre d'information. Le Canada se réserve le droit d'intervenir en codéfense dans toute poursuite intentée contre le Canada. Le Canada assumera tous les frais liés à cette codéfense. Si le Canada décide de participer à sa défense en cas de poursuite intentée contre lui et qu'il n'est pas d'accord avec un règlement proposé et accepté par l'assureur de l'entrepreneur et les plaignants qui aurait pour effet de donner lieu à un règlement ou au rejet de l'action intentée contre le Canada, ce dernier sera responsable envers l'assureur de l'entrepreneur pour toute différence entre le montant du règlement proposé et la somme adjugée ou payée en fin de compte (coûts et intérêts compris) au nom du Canada.

Responsabilité maritime

La garantie d'assurance doit être fournie par une police d'assurance protection et indemnisation mutuelle et doit comprendre une responsabilité additionnelle en matière de collision et de pollution.

L'assurance doit être souscrite auprès d'un membre du groupe international de sociétés d'assurance mutuelle, ou avec un marché fixe, et le montant ne doit pas être inférieur aux limites fixées par la *Loi sur la responsabilité en matière maritime*, L.C. 2001, ch. 6. La protection doit comprendre les membres d'équipage, s'ils ne sont pas couverts par l'assurance contre les accidents du travail du territoire ou de la province ayant juridiction sur ces employés.

La police doit renoncer à tout droit de subrogation contre le Canada, représenté par Travaux publics et Services gouvernementaux Canada, relativement à toute perte ou dommage au navire, peu en importe la cause.

ANNEXE C - RAPPORT VOLONTAIRE D'APPRENTIS EMPLOYÉS PENDANT LES CONTRATS (exemple)

(Ce rapport volontaire n'est pas requis lors du dépôt de soumission)

L'entrepreneur devrait compiler et tenir à jour des données sur le nombre d'apprentis ayant été embauchés pour travailler sur le contrat, ainsi que leur métier spécialisé.

L'entrepreneur devrait fournir ces données conformément au format ci-dessous. Si aucun apprenti n'a été embauché pendant la durée du contrat, l'entrepreneur devrait soumettre un rapport portant la mention « néant ».

Les données devraient être présentées à l'autorité contractante au plus tard six mois après l'octroi du contrat ou à la fin du contrat, selon la première éventualité.

Nombre d'apprentis embauchés	Métier spécialisé

(Ajouter des lignes au besoin)

March 16, 2018

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END OF SECTION

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C11	Landfill Construction – AEC1: Details
C12	Landfill Rehabilitation – AEC2: Sections
C-13	Remediation Activities – AEC3

END OF SECTION

March 26, 2018

Part 1 General

1.1 INTRODUCTION

- .1 Public Works and Government Services Canada (PWGSC), also known as Public Services and Procurement Canada (PSPC) is undertaking a remediation program on behalf of Transport Canada (TC). The following sections summarize the work required during the remediation program of the three (3) areas of environmental concern (AECs) requiring remedial work (Solid Waste Landfill – AEC 1, Historical Landfill – AEC 2 and Vehicle/Metal Storage Area – AEC 3), located within the Resolute Bay airport property, Resolute, Nunavut (the Site).
- .2 The main remediation project includes mobilization/demobilization of equipment, site set-up and housekeeping, excavation, hauling and placement of material (soil and waste), segregation of waste materials (hazardous and non-hazardous), packaging and shipping south of various hazardous materials for disposal), consolidating non-hazardous materials and integrating them into the AEC-1 Landfill slope and the rehabilitation of the AEC-1 landfill (grading the slope faces/top of the landfills to achieve desired slope angles, capping the top and slope of the former landfill area with borrow source aggregates, constructing drainage swales).
- .3 Optional remediation work packages will be authorized through a change order and include:
 - .1 Optional Package A - rehabilitation of the AEC-2 landfill (grading the slope faces/top of the landfills to achieve desired slope angles
 - .2 Optional Package B - constructing AEC-2 drainage swales); and
 - .3 Optional Package C - excavation and off-site disposal of contaminated soils from AEC-3, including backfill and grading, placement of excavated soils (clean and metal impacted).
- .4 The Contractor should complete a minimum 30% of the work in year 1. The work is defined by the percentage of the overall contract value.

1.2 SITE LOCATION

- .1 The Resolute Bay airport is five kilometers (km) northwest of the Inuit hamlet of Resolute located in Resolute Bay on Cornwallis Island, in the Qikiqtaaluk Region, Nunavut.
 - .1 AEC 1 – is located on airport property approximately 2 km north of the operational Resolute Airport airstrip (north end). It is located in close proximity to 4 sewage lagoons and a fence waste storage compound associated with active airport operations.
 - .2 AEC 2 – is located 0.5 km immediately west of the Airport airstrip and in close proximity to restricted access Airport activities.
 - .3 AEC-3 is located approximately northwest of the Resolute Airport airstrip and 2.75 km north-west of AEC-1. It is an inactive area that resides on Territorial property directly adjacent to the northern Resolute Airport property limit.

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1.3 SITE ACCESS

- .1 The Resolute Bay Airport Landfills are accessible from the municipal roads of the hamlet and airport service roads. Access to the three (3) areas of environmental concern (AECs) requiring remedial work (Solid Waste Landfill – AEC 1, Historical Landfill – AEC 2 and Vehicle/Metal Storage Area – AEC 3) is provided by single track dirt/gravel service roads running from the Airport to each location. Refer to Drawing C-01. There is no direct access road to the base of the slope of the Solid Waste Landfill (AEC 1). Refer to Drawing C-02.
- .2 Access to the site for completing all aspects of the works (including but not limited to mobilization, staging, waste consolidation, excavation, borrow source development, grading, demobilization, etc.) must be arranged with the Airport Authorities in advance of commencing any works.

1.4 SITE DESCRIPTION

- .1 The airport has been in operation since 1949. Originally constructed by the Royal Canadian Air Force, ownership changed to the Government of Canada and was operated by Transport Canada from 1964 to July 1, 1995. Ownership was then transferred from July 1, 1995 to April 1, 1999 to the Government of Northwest Territories and operations were maintained by the Arctic Airport Division of the Department of Transportation. Since April 1, 1999 the airport has been owned by the Government of Nunavut (GN), but Transport Canada maintains ownership of the landfills.
- .2 The generation of solid waste has occurred with the airport operations and development of the hamlet of Resolute. Consequently, the creation of several landfill sites has occurred to handle waste generation near the airport. Two (2) landfills and a waste metal storage area are present near the airport. Each location has identified environmental impacts as a result of historical and current activities associated with the airport and community. The waste metal storage area consists of three general subareas where waste metal is stored above ground and is estimated to have started operation between the late 1970s to mid-1980s. A historic landfill operated from 1947 to 1996 and was used by Canadian and American military, Transport Canada and various airport tenants. A solid waste landfill was developed between the 1960s and 1970s and operated officially until 1995. Both landfills are considered to be closed since the mid-1990s and not accepting waste.
- .3 The airport and hamlet of Resolute's water is supplied from Strip Lake, a naturally-occurring fresh water lake to the east of the main runway.
- .4 Waste material was dumped on the Solid Waste Landfill (AEC 1) around the 1960s and the 1970s. This landfill has not been officially used since 1995, when a new landfill was constructed southeast of the hamlet. However, as recently as 2013, there was evidence of wastes in the landfill.
- .5 There are no buildings within the work areas. There are some utility poles with overhead wires located in the potential borrow source areas. A sewage lagoon consisting of four separate containment cells is located southeast of the Solid Waste Landfill (AEC 1) and a fenced waste storage area located north of AEC-1 as shown in Drawing C-02, which must be protected during the work program. The sewage lagoon and storage compound are operated by the hamlet of Resolute.

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Access to the sewage lagoon and waste compound must be maintained throughout the entire work program.

- .6 The work areas are characterized, for the most part, by flat to gently sloping terrain. The Solid Waste Landfill (AEC 1) is characterized by sloping terrain, with elevations that range from 35 to 66 m above sea level (asl). The Vehicle/Metal Storage Area (AEC 3) is on the top of the south slope of the McMaster River Valley at an elevation of approximately 40 to 60 m asl. The Historic Landfill (AEC 2) is located west of the main runway directly adjacent to the airport. Where present, plant cover is sparse, irregular, and discontinuous.
- .7 The Contractor is required to obtain permission from the Resolute Airport Authority to access the site and for the Contractors use of the Airport property for carrying out all aspects of the works including construction work, access road upgrade, site staging, etc.
- .8 Surface soils in the work areas are generally granular, ranging from sand to gravel. Permafrost was encountered during intrusive investigation in the native soils in the vicinity of the Solid Waste Landfill (AEC 1) at an approximate depth of 0.6 m. Bedrock is present immediately adjacent and beneath the AEC1 landfill and was encountered on site in the area east and west beyond the toe of the landfill, along with fractured bedrock to the north.
- .9 The area surrounding the Resolute Bay Airport is largely undeveloped, and slopes gently to the west, towards Allen Bay (refer to Drawing C-01). Undeveloped lands located south-east of AEC-1 have been identified as a potential location for a borrow source for the development of aggregate required for the project. The potential borrow source location will be finalized by PWGSC/TC. Quarry Permit and permissions to develop the identified borrow sources will be obtained by PWGSC/TC on behalf of the Contractor.
- .10 There are currently 26 new Marine Shipping Containers with the nominal dimensions of 6.1 m x 2.4 m x 2.6 m (20 feet x 8 feet x 8.5 feet) stored at AEC 1. The Marine Shipping Containers are presently owned by TC and are registered with the Bureau International des Containers et du Transport Intermodal. All 26 Marine Shipping Containers will be divested to the contractor to ship all hazardous materials south to the approved project disposal facility. The Contractor is required to re-register the containers under the Contractor's name with the Bureau International des Containers et du Transport Intermodal. The Marine Shipping Containers are new and factory sealed or pad-locked if storing the hazardous materials containers mentioned below.
- .11 In addition to and stored within one of the shipping container are ten (10) - 208 L Hazardous Liquid waste tight head steel drums and 5 - 208 L Hazardous Solid Waste open head drums that will be divested to the Contractor upon award for the purpose of conducting the work described herein. Refer to Drawing C-02 for location.

1.5 RELATED SECTIONS

- .1 All sections of this contract document and drawings.

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1.6 REFERENCE DOCUMENTS

- .1 Phase III Environmental Site Assessment Report prepared by Franz Environmental Inc. as appended.
- .2 GAP Analysis Report prepared by Franz Environmental Inc. and SENES Consultants, as appended.
- .3 Other supporting documentation may be made available during the bidders meeting.

1.7 DEFINITIONS

- .1 Work(s): Scope of work as detailed and described in this Specification and potential additive ("Optional") scope of works under or in conjunction with this Specification.
- .2 Site: Resolute Bay Airport landfills and vehicle/metal storage areas, Resolute Bay, Nunavut.
- .3 Owner: the owner of the Site is the Government of Nunavut, operated by the Resolute Airport Authorities.
- .4 Departmental Representative: Directors and/or other employees designated as representatives (Department Representative Authorized Personnel) of and exercising the roles and attributes of Canada under the contract including those personnel authorized by Public Works and Government Services Canada and/or Transport Canada.
- .5 Contractor: Firm or representative retained to conduct the Works as per this Specification.
- .6 Contractor's Foreman: Contractor's resident site representative, who is authorized to make decisions on behalf of Contractor and will be present at the Site for the duration of the Works.
- .7 Provide: For this Specification, the word "provide" means supply and/or install at the cost of the contractor.
- .8 Area of Environmental Concern (AEC): An area of the site where, based on the background reports and studies, that has either environmental impacts or geotechnical issues that being addressed during the current remediation contract. Same meaning as Areas of Potential Concern (APEC).
- .9 AEC 1: Solid Waste Landfill, which is on the west side of the service road approximately 2 km north of the airport. Same meaning as APEC 1.
- .10 AEC 2: Historical Landfill, west of the service road, across from Parcel 9. Same meaning as APEC 2.
- .11 AEC 3: Vehicle/Metal Storage Area, along the northwest branch of the service road. Same meaning as Vehicle boneyard, APEC 3.
- .12 Work Areas: Any area falling within AEC 1, AEC 2, or AEC 3 and surrounding areas and/or any area utilized by the contractor in order to complete the remedial work outlined in the specifications.
- .13 Contaminated Soil: All soils indicated within the Contract Documents as exceeding the federal Soil Quality Criteria or as identified by Departmental

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Representative during the course of the Work.

- .14 Waste: Any physical object deposited within any of the work areas whether inert, hazardous or non-hazardous.
- .15 Landfill Materials: All non-hazardous waste originating from the former landfills and storage areas (AEC 1 to AEC 3) requiring transport, processing and placing within the Solid Waste Landfill (AEC 1).
- .16 Non-Hazardous Waste: Waste materials historically generated by the Airport and placed within the work area. Generally, it includes domestic waste and demolition debris. Same meaning as Landfill Waste, Debris, Garbage, Domestic Waste, and Construction Debris.
- .17 Buried Waste: Landfill materials that are covered, partially covered or below the surface of the surrounding area and require mechanical equipment to access, uncover, extricate or excavate to be packaged or hauled. Applies to work areas AEC 1, AEC 2, and AEC 3.
- .18 Surface Waste: Landfill materials that are exposed and openly sitting on the ground surface. The materials may or may not require mechanical equipment to access, uncover, extricate or excavate to be packaged or hauled. Applies to AEC 1, AEC 2, and AEC 3.
- .19 Hazardous Solid Wastes: Hazardous waste materials that are in a consolidated, solid, encapsulated or powder form within the work area. Generally, it includes transformers, batteries, fire extinguishers, asbestos containing materials and/or pesticides. Same meaning as Hazardous Materials, Designated Substances, Toxic Materials and Toxic Wastes.
- .20 Hazardous Fluid Wastes: Hazardous waste materials that are in a liquid, gaseous, gel-like or colloidal form within the work area. Generally, it includes paint, antifreezes, lubricants, fuels, glycols, ozone depleting substances and/or pesticides. Same meaning as Hazardous Materials, Hazardous Liquids, Designated Substances, Toxic Materials and Toxic Wastes.
- .21 Unknown Hazardous Material: Material designated as hazardous in accordance with the definition of Hazardous Waste Material in this section, and which has not been identified for collection and disposal in specifications and Drawings.
- .22 Lead Amended Paint Wastes: All painted materials within the Contract Documents as exceeding the territorial Environmental Guideline for Waste Lead and Lead Paint or as identified by Departmental Representative during the course of the Work.
- .23 Asbestos-Containing Materials (ACMs): materials identified under Existing Conditions including fallen materials and settled dust that contain asbestos greater than 1% by weight.
- .24 Asbestos Waste: Asbestos that is no longer useable for its intended purpose and is intended for disposal. It includes any type of material with greater than 1% asbestos by weight.
- .25 Top of Landfill: The relatively flat section of the work areas that is located at or above the Top of Slope and includes areas of historical landfill waste placement and/or soils. Same as Top of Escarpment.

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- .26 Top of Slope: The highest elevations of the slope. Same as Slope Edge, Nose of Landfill, Crest of the Slope.
- .27 Toe of Slope: The lowest elevations of the slope. Same as Slope Bottom or Base.
- .28 Side Slope: The angled plane of the landfill and/or overburden extending from the Top of Slope to the Toe of Slope. Same as Slope Surface or Slope Face.
- .29 Slope Angle: The current, proposed or final gradient of the Slope face measured in three dimensions (3D) and reported as an angle or ratio of horizontal (run) to vertical (rise).
- .30 Swale: A engineered linear depression constructed along the perimeter of the Top of Landfill (Upper), Toe of Slope (Lower) and Slope Face to collect and direct surface water flow away from the Landfill Top and Nose beyond and away from the landfill. Same as drainage ditch, trench.
- .31 Solid Hazardous Waste Containers: The intermediate container necessary to contain solid Hazardous Waste Material as required by the Transportation of Dangerous Goods Act and Regulations.
- .32 Marine Shipping Container: ready sea shipping containers with the nominal dimensions of 6.1 m x 2.4 m x 2.6 m (20 feet x 8 feet x 8.5 feet) and the container into which the intermediate containers are placed for the purpose of shipping to a disposal facility.
- .33 Temporary Storage Area: The designated area approved by the Departmental Representative for the storage of packaging and/or shipping containers prior to transportation off-site.

1.8 DESCRIPTION OF WORK

- .1 Work of this Contract comprises of various remediation activities to manage wastes and stabilize two former landfills and a former Vehicle/Metal Storage area at the Resolute Bay Airport located in Resolute Bay, Nunavut; as outlined in these specifications, includes but is not limited to the following:
 - .1 Main Work Package
 - .1 Acquire all required permits and approvals to conduct the works.
 - .2 Mobilization and demobilization of equipment, facilities and personnel to the Site; the nearest area with appropriate lodging facilities is the Hamlet of Resolute, Nunavut.
 - .3 Define and setup work areas (eg site security, hoarding area, truck turnaround, storage, temporary facilities).
 - .4 Complete survey of all work areas (AEC 1, AEC 2, AEC 3, and borrow areas) prior to beginning site work to establish existing conditions and throughout to confirm quantities.
 - .5 Supply aggregates to carry out the work from a local quarry or sourced from the identified borrow source area, described herein. Re-grade borrow source areas, as applicable, to allow for proper drainage and mitigate potential for surface water ponding.

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- .6 At all work areas (AEC-1, AEC-2 and AEC-3): Consolidation, containerization, transport, and off-site disposal of hazardous waste materials and lead-amended painted material to an approved licensed facility. Including, but not limited to:
 - .1 Hazardous Liquids
 - .2 Transformers
 - .3 Batteries
 - .4 Asbestos Containing Materials
 - .5 Painted Equipment/Vehicles (Pb)
- .7 At AEC 1: the following work to be completed included but is not limited to:
 - .1 Regrade, Cut/Fill and Excavation of non-stable soil and non-hazardous waste material located at the slope face to designed 3H:1V slope is achieved.
 - .2 Segregating of hazardous material unearthed during slope stability activities.
 - .3 Placement and compaction of borrow granular material within placed and processed waste layer to infill the voids and stabilize the material.
 - .4 Construct a 600 mm Type 2 (Fine) aggregate cover over entire AEC-1 landfill top.
 - .5 Construct an aggregate cover over the AEC-1 landfill side slope consisting of a 800 mm Type 2 (Fine) aggregate base overlain by a 300 mm Type 1 (Coarse) aggregate cap
 - .6 Construct drainage swales as indicated to direct surface water from adjacent areas around the AEC-1 Landfill. Drainage swales will be lined with non-woven geotextile material as per Contract Documents.
- .8 Upgrade access roads or create new access roads to facilitate construction traffic where necessary. The contractor shall consider site access roads or path requirements as indirect efforts to carry-out the works, and construct if required, at no extra cost to the Owner.
- .9 Re-grade any damaged municipal roads as required at the end of each contract year.
- .2 Optional Work Package A
 - .1 At AEC 2, the following optional work may be added to the main work package and includes but is not limited to:
 - .1 AEC-2 Landfill top and embankment will be re-graded to redirect surface water away from the slope face as directed by the Departmental Representative.

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.3 Optional Work Package B

.1 At AEC 2, the following work may be added to the main work package and includes but is not limited to:

.1 Construct surface drainage swales to promote drainage from existing culverts and to redirect surface water away from the top of the former AEC-2 landfill after grading the slope of the former landfill as indicated in Contract Documents.

.2 Drainage swales will be lined with non-woven geotextile material as per Contract Documents.

.4 Optional Work Package C

.1 At AEC 3, the following optional work may be added to the main work package and includes but is not limited to:

.1 Excavate, package, transport and dispose of off-site of approximately 125 m³ of contaminated soil (PHCs and metals) from AEC 3 to an approved licensed facility.

.2 Backfill and re-grade excavations with approved borrow material.

1.9 EXCLUSIONS OF WORKS

.1 Areas, landfill materials and items that are excluded from the current contract and are to be left as is and/or protected and maintained, as outlined in these specifications, including but is not limited to:

.1 AEC 1 – Potential Asbestos Containing Material Piles – Exclusion Area, avoid, do not add to or remove from piles.

.2 All Work Areas – Buried Wastes, unless exposed during AEC-1 slope stabilization;

.3 Hamlet operated Sewage Lagoons – Protect and Maintain.

.4 Hamlet operated Fenced Waste Storage Area – Protect and Maintain.

1.10 CONTRACTOR USE OF PREMISES

.1 The Contractor is required to obtain permission from the Resolute Airport Authority to access the site and for the Contractors use of the Airport property for carrying out all aspects of the works including construction work, access road upgrade, site staging, etc.

.1 Access to the project site will be given to the Contractor solely and exclusively for the completion of the landfill remediation work and limited to the work areas and the area reserved for the Contractor and owner access.

.2 Locate staging area within the work areas for material storage and parking as approved by Departmental Representative.

.3 Maintain fire access/control throughout the contract period.

.4 Maintain public access to the sewage lagoon and fenced storage area throughout the contract period.

.5 The contractor is required to restrict site access to the work areas and any stockpiled/stored waste or materials.

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- .6 Limit use of premises for:
 - .1 Security.
 - .2 Health and Safety.
 - .3 Work.
 - .4 Access.
 - .5 Storage.
- .7 Access to areas other than the work area is strictly forbidden to the Contractor unless so authorized by Departmental Representative in writing. The Contractor is strictly forbidden to access or restrict access to the buildings excluded from the work area.
- .8 It is strictly forbidden for the contractor to approach, utilize or traverse the Resolute Bay Airports runway during the remedial works, with the exception of mobilization/demobilization activities requiring aircraft and having obtained prior written permission from the Airport Manager.
- .9 It is strictly forbidden, except when authorized by Departmental Representative, to conduct excavation outside of the work area. Any soil/material excavated and associated work without the approval of Departmental Representative will become the responsibility of the Contractor who will be responsible for all associated costs to reinstate the impacted area.
- .10 No storage/placement of materials and/or equipment is permitted on site outside the work area as approved by Departmental Representative. Co-ordinate use of premises under direction of Departmental Representative.
- .11 Obtain and pay for use of additional storage or work areas needed for operations under this Contract.
- .12 At completion of operations, restore the site, work area and access roads to equal or better than that which existed before new work started.
- .13 Given the site's location and the potential for adverse weather conditions, the contractor shall consider fog, frost conditions and snow removal requirements, if encountered, at no extra cost to the Owner.
- .14 Twenty six (26) shipping containers were purchased new in 2015 for use by the contractor to carry out the works described herein. The ownership and responsibility of the marine shipping containers will be transferred to the contractor upon contract award.

1.11 EXISTING SERVICES/UTILITIES

- .1 Provide alternative routes for personnel and vehicular traffic.
- .2 Provide temporary services as directed by Departmental Representative to maintain critical systems.
- .3 Where unknown services are encountered, immediately advise Departmental Representative and confirm findings in writing.
- .4 Protect, relocate or maintain existing active services. When inactive services are encountered, cap off in manner approved by authorities having jurisdiction.
- .5 Record locations of maintained, re-routed and abandoned service lines.

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- .6 Construct barriers in accordance with contract documents.
- .7 Protect and maintain existing conditions of all existing Monitoring Wells.

1.12 DOCUMENTS REQUIRED

- .1 Maintain at job site, one copy of each document as follows:
 - .1 Contract Drawings.
 - .2 Specifications.
 - .3 Addenda.
 - .4 Water License
 - .5 Quarry Permit
 - .6 Materials/equipment tracking sheets, updated daily. (includes imported/exported materials, chargeable equipment hours)
 - .7 Meeting minutes.
 - .8 Reviewed Shop Drawings.
 - .9 List of Outstanding Shop Drawings.
 - .8 Change Orders.
 - .9 Other Modifications to Contract.
 - .10 Copy of Approved Work Schedule.
 - .11 Site Specific Health and Safety Plan including:
 - .1 Spill Contingency Plan.
 - .2 Fire Safety Plan.
 - .3 Emergency Response Plan.
 - .12 Contractor's Work Plan including:
 - .1 Environmental Protection Plan
 - .2 Mobilization and Demobilization Plan
 - .3 Grading and Cover Construction Plan.
 - .13 All applicable Territorial permits and licenses.
 - .14 All applicable Federal permits and licenses.
 - .15 Workers' Safety & Compensation Commission (WSCC) Notification of Project.
 - .16 Other documents as specified.

1.15 MEASUREMENT OF PAYMENT

- .1 Work under this Contract will be paid as follows:
 - .1 As defined in the RFP document and associated conditions

Part 2 Products

2.1 NOT USED

Part 3 Execution

3.1 NOT USED

END OF SECTION

PART 1 GENERAL

1.1 SECTION INCLUDES

- .1 General Restrictions
- .2 Work hours

1.2 RELATED SECTIONS

- .1 Section 01 32 16.07 – Construction Schedule
- .2 Section 01 33 00 – Submittals
- .3 Section 01 35 13 – Special Procedures for Contaminated Sites
- .4 Section 01 32 16 – Construction Progress Schedule

1.3 GENERAL RESTRICTIONS

- .1 No work of any kind can begin until the proper authorization from the Departmental Representative and/or work permits have been obtained.

1.4 HOURS OF WORK

- .1 Construction work time, normal hours:
 - .1 Work hours are to be determined by the contractor, agreed upon and approved by the Departmental Representative, and in accordance with applicable regulations from authorities having jurisdiction (eg. Airport Authority, Labour Standards Compliance Office).

1.5 PROCEDURE - GENERAL

- .1 Work under this contract is to be completed within the boundaries set forth in the attached drawings, such that
 - .1 The contractor's work areas including construction, equipment/material staging, offices and personnel parking are carried out in their entirety within the areas designated within the contract documents or as approved by the Departmental Representative and Authorities Having Jurisdiction (eg. Airport Authority).
 - .2 Limit ALL on-site quarry activities to within the boundaries identified within the contract documents, identify the specific borrow source area to be utilized and obtain approval by the Departmental Representative and any other stakeholders (eg. the Hamlet of Resolute Bay or Airport Authority).
 - .3 The contractor shall not impede public access to or use of municipal roads, sewage lagoon or other municipal or airport services.
- .2 The contractor shall protect, maintain existing conditions and is restricted from accessing or utilizing the following:
 - .1 AEC-1 – Municipal Sewage Lagoon
 - .2 AEC-1 – Municipal Fenced Storage Compound
 - .3 AEC-1 – Closed Landfarm Treatment Unit

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- .4 AEC-1 – Buried Asbestos Piles
- .5 AEC-1 and AEC-2 – Existing Motoring Wells
- .3 It is strictly forbidden for the contractor to approach, utilize or traverse the Resolute Bay Airports runway during the remedial works, with the exception of mobilization/demobilization activities requiring aircraft and having obtained prior written approval from the Airport Authorities.
- .4 It is strictly forbidden, except when authorized by Departmental Representative, to conduct excavation outside of the work area. Any soil/material excavated and associated work without the approval of Departmental Representative will become the responsibility of the Contractor who will be responsible for all associated costs to reinstate the impacted area.
- .5 No storage/placement of materials and/or equipment is permitted on site outside the work area as approved by Departmental Representative. Co-ordinate use of premises under direction of Departmental Representative.

1.6 MEASUREMENT OF PAYMENT

- .1 Work under this section will not be measured. Include all costs in Item BOPC-1, Balance of Project Costs in the Combined Price Form. Indicate the cost of this Work as a separate line item in the Cost Breakdown Structure (CBS) specified in Section 01 32 18 – Construction Progress Schedules – Bar (GANTT) Chart.

Part 2 Products

2.1 NOT USED

Part 3 Execution

3.1 NOT USED

END OF SECTION

Part 1 General

1.1 DEFINITION

- .1 Project Start-Up Meeting: conference call to be after Contract Award and to include the Contractor and representatives from TC and PSPC.
- .2 Pre-Construction Meeting: meeting to be prior to Contractor's initial Mobilization at a location of Contractor's choice with attendance also made available by teleconference and to include the Contractor and representatives from TC and PSPC.
- .3 Pre-Mobilization Site Visit: Contractor's visit to the site with Departmental Representative to check field conditions and obtain actual conditions required to ensure correct execution of the Work prior to site mobilization.
- .4 Monthly Progress Meeting: meeting to be held on-site at approximately monthly intervals during the construction season and to include the Contractor and representatives from TC and PSPC.
- .5 Weekly Construction Meeting: meeting to be held on-site with attendance also made available by teleconference at weekly intervals during the course of work and to include the Contractor and Departmental Representatives from and representatives from TC and PSPC.
- .6 Daily Tailgate Meeting: daily work plan and safety meeting to be held on-site during the construction season and to include Contractor and all construction staff.
- .7 End of Season Meeting: meeting to be held at the end of the construction season at location of Contractor's choice with attendance also made available by teleconference and to include the Contractor and representatives from TC and PSPC.

1.2 ADMINISTRATIVE

- .1 Responsibilities of Departmental Representative
 - .1 Schedule and administer project meetings throughout the progress of the work at the call of Departmental Representative.
 - .2 Prepare agenda for meetings.
 - .3 Preside at meetings.
 - .4 Record the meeting minutes. Include significant proceedings and decisions. Identify actions by parties.
 - .5 Reproduce and distribute electronic copies of minutes within two days after meetings and transmit to meeting participants and, affected parties not in attendance.
- .2 Responsibilities of Contractor
 - .1 Provide physical space and make arrangements for meetings unless otherwise specified.
 - .2 Representative of Contractor, Subcontractor and suppliers attending meetings must be qualified and authorized to act on behalf of party each represents.

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1.3 PROJECT START-UP MEETING

- .1 Within 5 days after award of Contract, request a teleconference meeting of parties in contract to discuss and resolve administrative procedures and responsibilities. PSPC is able to provide teleconferencing platform.
- .2 Departmental Representative, Contractor, major Subcontractors, field inspectors and supervisors will be in attendance.
- .3 Establish time and location of meeting and notify parties concerned minimum 3 days before meeting.
- .4 Agenda to include:
 - .1 Appointment of official representative of participants in the Work.
 - .2 Preliminary Schedule of Work.
 - .3 Preliminary schedule of submission of Work Plans, Cost Breakdown and other submittals.
 - .4 Set-up of Pre-Construction Meeting

1.4 PRE-CONSTRUCTION MEETING

- .1 As per Project Start-up Meeting, request a meeting of parties in contract to discuss and resolve administrative procedures and responsibilities.
- .2 Departmental Representative, Contractor, TC, major Sub-Contractors, field inspectors and supervisors will be in attendance in person or via teleconference.
- .3 Submit Agenda, establish time and location of meeting and notify parties concerned minimum seven (7) days before meeting.
- .4 Incorporate mutually agreed variations to Contract Documents into Agreement, prior to signing.
- .5 Agenda to include:
 - .1 Schedule of Work: in accordance with Section 01 32 16.07 – Construction Progress Schedules – Bar (GANTT) Chart.
 - .2 Schedule of submission of shop drawings, samples, plans, etc. Submit submittals in accordance with Section 01 33 00 – Submittal Procedures.
 - .3 Project photographs requirements.
 - .4 Requirements for temporary facilities, site sign, offices, storage sheds, utilities, and fences in accordance with contract documents.
 - .5 Site security in accordance with contract documents.
 - .6 Equipment to be used by Contractor. Location of equipment and proposed methods for mobilization and demobilization including a delivery schedule of contractor equipment.
 - .7 Proposed changes, change orders, procedures, approvals required, mark-up percentages permitted, time extensions, work day length, overtime, administrative requirements.
 - .8 Take-over procedures, acceptance, warranties in accordance with contract documents
 - .9 Review of project administration requirements with PWGSC contracting

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authority

- .10 Appointment of inspection and testing agencies or firms.
- .11 Regulatory Issues
- .12 Inuit involvement and reporting
- .13 Monthly progress claims, administrative procedures and hold backs.
- .14 Insurances, transcript of policies

1.5 MONTHLY PROGRESS MEETINGS

- .1 Department Representative will schedule Monthly Progress Meetings to be held on-site. Three (3) meetings per work season are anticipated.
 - .1 One of which will be a Pre-Mobilization Site-Visit to discuss existing conditions and mobilization planning.
 - .1 Provide a minimum of fourteen (14) days' notice to Departmental Representative prior to examining the site.
 - .2 Departmental Representatives, Contractor, PWGSC and TC will be in attendance.
 - .3 Notify Departmental Representative in writing by submitting a Pre-Mobilization Site Visit Report within seven (7) days of completing the visit, of all matters which could prejudice proper execution of the Work.
 - .2 One of which will facilitate an interseason inspection of works completed during the first work season.
- .2 Departmental Representative, Contractor, TC, major Sub-Contractors and supervisors will be in attendance.
 - .1 Departmental Representative will notify parties seven (7) days prior to meeting.
 - .2 Departmental Representative will record minutes of meetings and circulate to attending parties and affected parties not in attendance shortly after meeting.
- .3 Agenda may include the following:
 - .1 Summary of the previous month's site activities.
 - .2 Comparison of progress achieved with the Project Schedule.
 - .3 Schedules and action Contractor plans to take to get back on Schedule, if required.
 - .4 Confirmation of quantities.
 - .5 Health, safety and security issues.
 - .6 Summary of interactions with AHJ.
 - .7 Work plan for the following month.
 - .8 Other business.
- .4 Pre-Mobilization Site Visit

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1.6 WEEKLY CONSTRUCTION MEETINGS

- .1 During course of Work and one week prior to project completion, schedule progress meetings weekly or upon request. Frequency of meetings may increase during weeks prior to Project Completion.
- .2 As practical, weekly progress meetings should be regularly scheduled for the same day of the work week and time.
- .3 Contractor, major Subcontractors involved in Work, and Departmental Representative are to be in attendance.
- .4 Notify parties of changes to regularly scheduled meetings a minimum two days prior to meetings.
- .5 The Departmental Representative will record minutes of meetings and circulate to attending parties and affected parties not in attendance within two days after meeting.
- .6 Agenda to include the following:
 - .1 Health, Safety and Security Issues.
 - .2 Environmental Protection Update
 - .3 Review, approval of minutes of previous meeting.
 - .4 Review of Work progress since previous meeting.
 - .5 Field observations, problems, conflicts.
 - .6 Problems which impede construction schedule.
 - .7 Project Schedule review, identifying activities that are behind Schedule and providing corrective measures to stop slippage and regain projected schedule.
 - .8 Revision to construction schedule.
 - .9 Progress schedule, during succeeding work period.
 - .10 Review submittal schedules: expedite as required.
 - .11 Maintenance of quality standards.
 - .12 Review proposed changes for effect on construction schedule and on completion date.
 - .13 Correspondence from Authorities Having Jurisdiction (AHJ) or expected visits from AHJ.
 - .14 Other business.

1.7 DAILY TAILGATE MEETINGS

- .1 Contractor to preside over daily tailgate meetings with all construction staff and document minutes with daily reporting requirements.
- .2 The meetings are to review the work plan for the day and relevant morning safety topics as well as task-specific work-safe practices.

1.8 END OF SEASON MEETING

- .1 Request a meeting of parties in contract to discuss the previous construction season and resolve issues arising from same.

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- .2 Departmental Representative, Contractor, TC, major Sub-Contractors, field inspectors and supervisors will be in attendance.
- .3 Establish time and location of meeting and notify parties concerned minimum ten (10) days before meeting and allow for attendance by teleconference.
- .4 Departmental Representative will preside.
- .5 Agenda may include:
 - .1 Summary of the previous season's site activities.
 - .2 Comparison of progress achieved with the Project Schedule.
 - .3 Confirmation of quantities.
 - .4 Health, safety and security issues
 - .5 Summary of interactions with AHJ.
- .6 Departmental Representative will record minutes of meetings and circulate to attending parties and affected parties not in attendance within seven (7) days after meeting.

1.9 MEASUREMENT OF PAYMENT

- .1 Include all direct costs for the Monthly Progress Meetings, including Pre-Mobilization Site Visit and Interseason Inspection in the unit price per meeting for Item 01 31 19-1, On-site Monthly Progress Meetings as indicated in the Combined Price Form.
- .2 All direct costs for Start-up Meeting, Pre-construction Meeting, End of Season Meeting and Weekly Construction Meetings are to be included in the lump sum price, Item 01 31 19-2, Project Meetings as indicated in Combined Price Form.
- .3 Except as otherwise indicated herein, Work under this section will not be measured. Include all costs in Item BOPC-1, Balance of Project Costs in the Basis of Payment Schedule. Indicate the cost of this Work as a separate line item in the Cost Breakdown Structure specified in Section 01 32 18 – Construction Progress Schedules – Bar (GANTT) Chart.

Part 2 Products

2.1 NOT USED

Part 3 Execution

3.1 NOT USED

END OF SECTION

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Part 1 General

1.1 DEFINITIONS

- .1 Activity: element of Work performed during course of Project. Activity normally has expected duration, and expected cost and expected resource requirements. Activities can be subdivided into tasks.
- .2 Bar Chart (GANTT Chart): graphic display of schedule-related information. In typical bar chart, activities or other Project elements are listed down left side of chart, dates are shown across top, and activity durations are shown as date-placed horizontal bars. Generally Bar Chart should be derived from commercially available computerized project management software.
- .3 Baseline: original approved plan (for project, work package, or activity), plus or minus approved scope changes.
- .4 Construction Work Week: Minimum of Monday to Friday, inclusive, will provide seven day work week and define schedule calendar working days as part of Bar (GANTT) Chart submission. Weekend/holiday work is at the discretion of the Contractor.
- .5 Cost Breakdown Structure (CBS): A Cost Breakdown Structure (CBS) is a cost allocation to the lowest level of the Work Breakdown Structure (WBS). The CBS is a monthly breakdown of the costs of the various components of the structure including all work or service done by the contractor. The CBS will be used to compare the planned monthly costs with actual monthly costs as they occur throughout the project.
- .6 Duration: number of work periods (not including holidays or other nonworking periods) required to complete activity or other project element. Usually expressed as workdays or workweeks.
- .7 Milestone: significant event in project, usually completion of major deliverable.
- .8 Project Schedule: planned dates for performing activities and the planned dates for meeting milestones. Dynamic, detailed record of tasks or activities that must be accomplished to satisfy Project objectives. Monitoring and control process involves using Project Schedule as a baseline and in executing and controlling activities and is used as basis for decision making throughout project life cycle.
- .9 Project Planning, Monitoring and Control System: overall system operated by Departmental Representative to enable monitoring of project work in relation to established milestones.

1.2 REQUIREMENTS

- .1 Ensure Project Schedule is practical and remains within specified Contract duration.
- .2 Plan to complete Work in accordance with prescribed milestones and time frame.
- .3 Provide and maintain a work schedule showing anticipated progress stages and final completion of work within time period required by Contract.

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- .5 Ensure that it is understood that Award of Contract or time of beginning, rate of progress, Interim Certificate and Final Certificate as defined times of completion are of essence of this contract.
- .6 The expected turn-around time for the analytical results from any confirmatory samples (soil, water, aggregate, etc.) collected and submitted by the Departmental Representative is 14-days.

1.1 SUBMITTALS

- .1 Provide submittals in accordance with Contract Documents.
- .2 Submit Preliminary Project Schedule to Departmental Representative seven (7) days after contract award.
- .3 Submit Project Schedule to Departmental Representative within five (5) working days of receipt of acceptance of the Preliminary Project Schedule.
- .4 Submit Updated Project Schedule to Departmental Representative three (3) prior to scheduled monthly meetings or as directed by Departmental Representative.
- .5 Submit Cost Breakdown Structure – Monthly cash flow projections seven (7) days after contract award.

1.1 PROJECT SCHEDULE

- .1 Develop detailed Project Schedule derived from Master Plan. The project schedule will encompass all works from award to contract completion.
- .2 Ensure the detailed Project Schedule includes as minimum milestone and activity types as follows:
 - .1 Award of Contract
 - .2 Submittals
 - .3 Permits and Approvals
 - .4 Mobilization
 - .5 Hazardous Materials Off-Site Disposal
 - .6 Non-Hazardous Materials Re-Integration at AEC-1 Slope
 - .7 AEC-1 Landfill Cover
 - .8 Optional Work Packages
 - .9 Final Inspection and Interim Certificate of Completion
 - .10 Closeout Submittals
 - .11 Demobilization
 - .12 Final Certificate of Completion
- .3 Departmental Representative will review and return revised schedules within five working days of the Award of Contract.
- .4 Revise schedule per Departmental Representative revisions and resubmit within three working days.

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- .5 Contractor must indicate and account for how adverse weather conditions (i.e. snowfall, extreme cold, freezing rain, fog, etc.) will affect project schedule including temporary shut downs.
- .6 Accepted revised schedule will be used as baseline for updates.

1.6 PROJECT SCHEDULE REPORTING

- .1 Update Project Schedule on monthly basis reflecting activity changes and completions, as well as activities in progress; a minimum of three (3) days prior to scheduled monthly meetings and in support of all progress claims, or as directed by Departmental Representative
- .2 Include as part of Project Schedule, narrative report identifying Work status to date, comparing current progress to baseline, presenting current forecasts, defining problem areas, anticipated delays and impact with possible mitigation.

1.7 PROJECT MEETINGS

- .1 Discuss Project Schedule at regular site meetings, identify activities that are behind schedule and provide measures to regain slippage. Activities considered behind schedule are those with projected start or completion dates later than current approved dates shown on baseline schedule.
- .2 Weather related delays with their mitigation measures will be discussed and negotiated.

1.8 COST AND QUALITY CONTROL

- .1 Provide a Cost Breakdown Structure (CBS) based on Contractor's planned monthly costs and any modifications requested by Departmental Representative as follows:
- .2 CBS to be an organization of the Work to be performed, services to be provided and data to be submitted by Contractor.
- .3 The CBS to clearly define the Work elements of each item of the CBS.
- .4 The CBS to include a monthly breakdown of pay items included under Item BOPC -1, Balance of Project Costs in the Combined Price Form. All lump sum and unit price pay items included in the Combined Price Form to also be included in the CBS as a monthly cost to the project.
- .5 Prepare the CBS in computerized spreadsheet format compatible with the most recent release of Microsoft Excel software. Submit CBS in Excel and pdf format electronically.
- .6 Submit the CBS within seven (7) days following contract award date.

1.9 MEASUREMENT OF PAYMENT

- .1 Work under this section will not be measured. Include all costs in Item BOPC-1, Balance of Project Costs in the Combined Price Form. Indicate the cost of this Work as a separate line item in the Cost Breakdown Structure specified in Section 01 32 18 – Construction Progress Schedules – Bar (GANTT) Chart.

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Part 2	Products
2.1	NOT USED
Part 3	Execution
3.1	NOT USED

END OF SECTION

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Part 1 General

1.1 DEFINITION

- .1 Shop Drawings: drawings, diagrams, illustrations, schedules, performance charts, brochures, photographs, reports and other data which are to be provided by the Contractor to illustrate details of a portion of Work.

1.2 ADMINISTRATIVE

- .1 Submit to Departmental Representative submittals listed for review. Submittal list is bound into specification section and is for information only. Submit promptly and in orderly sequence to not cause delay in Work. Failure to submit in ample time is not considered sufficient reason for extension of Contract Time and no claim for extension by reason of such default will be allowed.
- .2 Do not proceed with Work affected by submittal until review is complete.
- .3 Present shop drawings, product data and samples in SI Metric units.
- .4 Where items or information is not produced in SI Metric units converted values are acceptable.
- .5 Review submittals prior to submission to Departmental Representative. This review represents that necessary requirements have been determined and verified, or will be, and that each submittal has been checked and coordinated with requirements of Work and Contract Documents. Submittals not stamped, signed, dated and identified as to specific project tasks will be returned without being examined and considered rejected.
- .6 Notify Departmental Representative, in writing at time of submission, identifying deviations from requirements of Contract Documents stating reasons for deviations.
- .7 Verify field measurements and affected adjacent Work are coordinated.
- .8 Contractor's responsibility for errors and omissions in submission is not relieved by Departmental Representative's review of submittals.
- .9 Contractor's responsibility for deviations in submission from requirements of Contract Documents is not relieved by Departmental Representative review.
- .10 Contractor to submit an annually tabulated Inuit Benefit Plan achievement reports and certification as per the duration of the contract:
- .11 Submit to Departmental Representative all manifests or records of transfer for contaminated soils transported to the approved off-site waste facility, as indicated, within five (5) days of their receipt at the off-site waste facility. Contractor progress invoices, if applicable, for hazardous materials transported off-site will not be approved without supporting documentation.
- .12 Submit to Departmental Representative all manifests for borrow material transportation to site within three (3) days of their placement and/or stockpiling on site. Contractor progress invoices for materials imported on-site will not be approved without supporting manifest and/or weigh bills.
- .13 Keep one reviewed copy of each submission on site.

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1.3 PHOTOGRAPHS

- .1 Provide digital photos in "Joint Photographic Experts Group" (.jpeg) format for Progress Photographs and Final Photographs.
- .2 Digital photographs to have a resolution equivalent to 2,592 x 1,944 pixel (5 Megapixel).
- .3 Progress and Final photographs to be submitted on compact disc (CD) or uploaded to the Contractor's filing sharing account. Provide two (2) copies of the Photograph CD.
- .5 File Management: Organize all folders, parent and sub-directories such that each photos of specific activities are all saved in the same activity specific.
- .6 Quantity: Provide sufficient number of photographs to adequately describe the Work activities carried out.
- .7 Submit final photographs prior to final progress payment request.

1.4 MEASUREMENT OF PAYMENT

- .1 Except as otherwise indicated herein, Work under this section will not be measured. Include all costs in Item BOPC-1, Balance of Project Costs in the Combined Price Form. Indicate the cost of this Work as a separate line item in the Cost Breakdown Structure specified in Section 01 32 18 – Construction Progress Schedules – Bar (GANTT) Chart.

Part 2 Products

2.1 NOT USED

Part 3 Execution

3.1 NOT USED

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Table 01 33 00-1
Contractor Submittal
Schedule

Specification Section	Description	Date
01 11 00	Optional Work Packages – Daily effort tracking	Submit daily, when completing optional work packages.
01 31 19	Project Start-up Meeting	Request and host Teleconference within 5-days of contract award
01 31 19	Pre-Construction Meeting	7 days prior to scheduled meeting
01 31 19	List of project subcontractors	Within 15 days of award
01 31 19	Pre-Mobilization Site Visit	14 days prior to conducting the site visit
01 31 19	Pre-Mobilization Site Visit Report	Within 7 days of completing the Pre-Mobilization Site Visit
01 32 16.07	Preliminary Project Schedule	Within 7 days of Contract Award
01 32 16.07	Project Schedule	Within 5 days of Preliminary Schedule approval
01 32 16.07	Cost Breakdown Structure – Monthly Cash Flow tabulated by Bid Items	Within 7 days of Contract Award
01 32 16.07	Updated Schedule	3 days prior to the scheduled monthly meeting, in support of progress claims, or as directed by Departmental Representative
01 33 00	Inuit Benefits Plan (IBP) documentation	Monthly and cumulative totals provided in a tabular format within 2-weeks of the end of each month
01 33 00	Final Photographs	Prior to final progress payment request
01 35 13.43	Site Layout Plan	Within 7 days of Contract Award
01 35 29.06	Site Specific Health and Safety Plan, which includes but not limited to: <ul style="list-style-type: none"> • Emergency Response Plan • Fuel Management Plan • Spill Contingency Plan • Wildlife Management Plan • Fire Safety <p>Amongst other sections and also includes:</p> <ul style="list-style-type: none"> • List of Contractor's health, safety, medical and first aid equipment and supplies on-site. 	Within 10 days of Contract Award and prior to mobilization
01 35 29.06	Notice of Work	Prior to commencing work as required by Authorities Having Jurisdiction.

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01 35 29.06	Health, Safety and Environmental Incident/Accident Reporting	Immediately report verbally, followed by written report within 24-hrs.
01 35 29.06	Safety Meeting Minutes	Within 3-days of each meeting
01 35 29.14	Personnel health and safety training certification	10 days prior to mobilization
01 35 43	Analytical Material Testing	As required
01 35 43	Aggregate Bulk samples	5 Days prior to use or transport on-site. Includes both on-site and off-site sources.
01 35 43	Environmental Protection Plan	Within 10 days of Contract Award
01 35 43	Environmental Protection Plan weekly updates	Weekly during construction meetings and in writing as requested by the DR.
01 41 00	Quarry Permit Documentation	Monthly, or as specified within the permit
01 41 00	Water License Documentation	Monthly, or as specified within the permit
01 52 00	Site layout drawings showing existing conditions and facilities, construction and temporary facilities	Submitted as part of the Site Layout Plan.
01 53 00	Mobilization and Demobilization Plan and Equipment List	Within 7 days of Contract Award
01 71 00	Qualifications of surveyor	Prior to mobilization to the site
01 71 00	Topographic maps of Work Sites (AEC 1, AEC 2, AEC 3, and all borrow areas)	Prior to any earthworks, at the end of each construction season and to support progress claims.
01 71 00	Raw and Processed survey data	Within 10 days of each surveying event and in support of related Progress Claims
01 71 00	Surveyor certification of conformance	Prior to final inspection following the completion of work
01 77 00	Request for final inspection	As required annually
01 78 00	Project Records Documents	Prior to final inspection following the completion of work
02 81 01	Material Safety Data Sheets	Prior to material delivery and commencement of work
02 81 01	<p>Hazardous Materials Management Plan, which includes but not limited to:</p> <ul style="list-style-type: none"> • Hazardous Materials Handling Plan • Asbestos Abatement Plan • Details on the location and construction of any Hazardous Waste Materials Processing Area • Details on the location and construction of any Temporary Storage Area <p>Amongst other sections and also includes:</p>	10 days prior to carrying out any work with Hazardous Materials

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	<ul style="list-style-type: none"> List of Contractor's proposed containers for handling and storage of hazardous waste materials 	
02 81 01	List of licensed Hazardous Waste Carriers and Hazardous Waste Treatment/Disposal Facilities	3 weeks prior to transporting any Hazardous Materials off of the site
02 81 01	Hazardous Materials Paperwork (shipping slips, waste manifests, and disposal)	Within 7 days following disposal
02 81 01	Hazardous Materials Handling Training Certificates	10 days prior to carrying out any work with Hazardous Materials
02 82 00.01	Asbestos waste containing material disposal plan/ methodology	As part of the Hazardous Material Management Plan
02 82 00.01	Proof of Asbestos Liability Insurance	10 days prior to carrying out any work with Asbestos Containing Materials
31 05 16	Aggregate Source development plan includes: <ul style="list-style-type: none"> Identified sources of material (third party supplier and or borrow source operated by contractor) Location and limits of area to be quarried if applicable Reclamation plan if applicable 	Submitted as part of the Grading and Cover Construction Plan
31 05 16	Off-site Fill/Aggregate Environmental and Geotechnical Quality testing results	7-days prior to transport, stockpiling or placing imported fill/aggregate materials on-site from off-site quarry operations
31 05 16	Off-site Fill/Aggregate supply/transport manifests	Within 3-days of transport, stockpiling or placing imported fill/aggregate materials on-site from off-site quarry operations
31 22 15	Grading and Cover Construction Plan	Within 7 days of Contract Award
31 32 19.01	Excavation Completion notification	In writing following the completion of each excavation. The DR will collect and submit samples within 3-days of this notification. Results expected to be received within 14-days following sample submission.
31 32 19.01	Geotextile QA/QC Information	2 weeks prior to mobilization

END OF SECTION

Part 1 General

1.1 REFERENCES

- .1 Transportation and Dangerous Goods Act (1999)
- .2 Canadian Council of Ministers of the Environment (CCME) Documentation
- .3 Species at Risk Act (SARA, 2002)
- .4 Canadian Environmental Protection Act (CEPA, 1999)

1.2 DEFINITIONS

- .1 Silt Fence: assembled, ready to install unit consisting of geotextile attached to drivable posts.
- .2 Geotextile: uniform in texture and appearance, having no defects, flaws, or tears that would affect its physical properties; and contain sufficient ultraviolet ray inhibitor and stabilizers to provide minimum 3-year service life from outdoor exposure.
- .3 Net Backing: industrial polypropylene mesh joined to geotextile at both top and bottom with double stitching of heavy-duty cord, with minimum width of 750 mm.
- .4 Posts: sharpened wood, approximately 50 mm square, protruding below bottom of geotextile to allow minimum 450 mm embedment; post spacing 2.4 m maximum. Geotextile and net backing should be securely fastened to each post using suitable staples.

1.3 SUBMITTALS

- .1 Submittals: in accordance with contract documents.
- .2 Submittals for Progress Meetings: make submittals at least 24 hours prior to scheduled progress meetings as follows:
 - .1 Updated progress schedule detailing activities. Include review of progress with respect to previously established dates for starting and stopping various stages of Work, major problems and action taken, injury reports, equipment breakdown, and material removal.
 - .2 Copies of transport manifests, trip tickets, and disposal receipts for waste materials removed from work area.
 - .3 Weekly copies of site entry and work area logbooks with information on worker and visitor access.
 - .4 Other information required by Departmental Representative or relevant to agenda for upcoming progress meeting.
- .3 Site Layout: within five days after date of Contract award and prior to mobilization to site, submit updated site layout drawings showing existing conditions and facilities, construction facilities and temporary controls provided by Contractor including following:
 - .1 Means of ingress, egress and temporary traffic control facilities.
 - .2 Equipment and material staging areas.

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- .3 Aggregate stockpile areas. Debris stockpile areas.
- .4 Hazardous waste storage container areas.
- .5 Exclusion Zones, Contaminant Reduction Zones, and other zones specified in Contractor's site-specific Health and Safety Plan.
- .6 Grading, including contours, required to construct temporary facilities.

1.4 REGULATORY REQUIREMENTS

- .1 Provide erosion and sediment control in accordance with federal and territorial regulations.
- .2 Provide any applicable dust control in accordance with federal and territorial regulations.
- .3 Comply with federal, territorial, and local anti-pollution laws, ordinances, codes, and regulations when disposing of waste materials, debris, and rubbish.
- .4 Work to meet or exceed minimum requirements established by federal, territorial, and local laws and regulations which are applicable.
 - .1 Contractor: responsible for complying with amendments as they become effective.
- .5 In event that compliance exceeds scope of work or conflicts with specific requirements of contract notify Departmental Representative immediately.

1.5 EQUIPMENT DECONTAMINATION

- .1 Decontaminate equipment after working in potentially contaminated Work areas and prior to subsequent Work or travel on clean areas.
- .2 Collect decontamination wastewater and sediments which accumulate on equipment decontamination pad. Transfer wastewater to designated wastewater storage tank(s).
- .3 Furnish and equip personnel engaged in equipment decontamination with protective equipment including suitable disposable clothing, respiratory protection, and face shields.

1.6 ENVIRONMENTAL PROTECTION FACILITIES

- .1 Provide, maintain, and operate storage/stockpiling facilities as required and in accordance with contract documents.
- .2 Provide, maintain, and operate temporary storage areas and hazardous materials processing facilities as required and in accordance with contract documents.

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1.7 DUST AND PARTICULATE CONTROL

- .1 Execute Work by methods to minimize raising dust from construction operations.
- .2 Implement and maintain dust and particulate control measures immediately during construction and in accordance with all applicable regulations.
- .3 Provide positive means to prevent airborne dust from dispersing into atmosphere. Use local water for dust and particulate control.

1.8 WATER CONTROL

- .1 Water cannot be sourced from the site. Water required during construction must be obtained from the Hamlet or a third party vendor. The contractor is responsible for making arrangements with third party vendors and/or AHJs.
- .2 The contractor must provide proof that the water used on site was sourced from the Hamlet. All other water locally sourced must be tested and shown to meet applicable regulations applicable for the specific use of the water (eg. Potable Water vs Construction use).
- .3 Maintain excavations and work areas free of water.
- .4 Protect site from standing or running water. Grade site to drain. Provide erosion control measures as required to protect native soils from erosion and permafrost from degrading.
- .5 Prevent surface water runoff from leaving work areas.
- .6 Prevent precipitation from infiltrating or from directly running off stockpiled contaminated soils and waste materials. Cover stockpiled contaminated soils and waste materials with an impermeable liner during periods of work stoppage including at end of each working day and as directed by Departmental Representative.
- .7 Dispose of water in manner not injurious to public health or safety, to property, or to any part of Work completed or under construction and in keeping with all applicable sections of the Water License or other AHJ regulations.
- .8 Provide, operate, and maintain necessary equipment appropriately sized to keep excavations, staging pads, and other work areas free from water.

1.8 DEWATERING

- .1 Dewater various parts of Work including, without limitation, excavations, structures, foundations, and Work areas.
- .2 Test and analyze water generated from dewatering activities and treat to meet required discharge or disposal criteria.

1.9 EROSION AND SEDIMENT CONTROL

- .1 Plan and execute construction by methods to control surface drainage from cuts and fills, from borrow and waste disposal areas, from stockpiles, staging areas, and other work areas. Prevent erosion and sedimentation.

- .2 Minimize amount of bare soil exposed at one time. Stabilize disturbed soils as quickly as practical. Remove accumulated sediment resulting from construction activity from adjoining surfaces, drainage systems, and water courses, and repair damage caused by soil erosion and sedimentation as directed by Departmental Representative.
- .3 Provide and maintain temporary measures which may include, silt fences, ditches, geotextiles, drains, berms, terracing, riprap, temporary drainage piping, sedimentation basins, dikes, and other construction required to prevent erosion and migration of silt, mud, sediment, and other debris off site or to other areas of site where damage might result, or that might otherwise be required by Laws and Regulations. Make sediment control measures available during construction. Place silt fences in ditches to prevent sediments from escaping from ditch terminations.
- .4 Plan construction procedures to avoid damage to work or equipment encroachment onto water bodies or drainage ditch banks. In event of damage, promptly take action to mitigate effects. Restore affected bank or water body to existing condition.
- .5 Installation:
 - .1 Construct temporary erosion control items as indicated. Actual alignment and/or location of various items as directed by Departmental Representative.
 - .2 Check erosion and sediment control measures weekly after each rainfall; during prolonged rainfall check daily.
 - .3 Silt fence may be removed at beginning of work day, replace at end of work day.
 - .4 Whenever sedimentation is caused by re-grading or other development, remove it from adjoining surfaces, drainage systems and repair damage as quickly as possible.
 - .5 Prior to or during construction, Departmental Representative may require installation or construction of improvements to prevent or correct temporary conditions on site. Improvements may include berms, mulching, sediment traps, detention and retention basins, grading, retaining walls, culverts, pipes, guardrails, temporary roads, and other measures appropriate to specific condition. Temporary improvements must remain in place and in operation as necessary or until otherwise directed by Departmental Representative.
 - .6 Remove temporary erosion and sediment control devices upon completion of Work. Materials once removed become property of Contractor.
- .6 Construct fill and waste areas by selective placement to avoid erosive surface silts or clays.
- .7 Periodically inspect earthwork to detect evidence of erosion and sedimentation; promptly apply corrective measures.
- .8 If soil and debris from site accumulate in low areas, roadways, ditches, or other areas where in Departmental Representative's determination it is undesirable, remove accumulation and restore area to original condition.

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1.10 PROGRESS CLEANING

- .1 Maintain cleanliness of Work and surrounding site to comply with federal, provincial, and local fire and safety laws, ordinances, codes, and regulations.
- .2 Co-ordinate cleaning operations with disposal operations to prevent accumulation of dust, dirt, debris, rubbish, and waste materials.

1.11 FINAL DECONTAMINATION

- .1 Perform final decontamination of construction facilities, equipment, and materials which may have come in contact with potentially contaminated materials prior to removal from site.
- .2 Perform decontamination as specified to satisfaction of Departmental Representative. Departmental Representative will direct Contractor to perform additional decontamination if required.

1.12 REMOVAL AND DISPOSAL

- .1 Remove surplus materials and temporary facilities from site.
- .2 Dispose of non-contaminated waste materials, litter, debris, and rubbish off site.
- .3 Do not burn or bury rubbish and waste materials generated by construction activities on site.
- .4 Do not dispose of volatile or hazardous wastes such as mineral spirits, oil, or paint thinner on-site.
- .5 Do not discharge wastes into streams or waterways.
- .6 Dispose of following materials at appropriate off-site facility identified by Contractor and approved by Departmental Representative:
 - .1 Non-contaminated litter and rubbish.
 - .2 Disposable PPE worn during final cleaning.
 - .3 Wastewater generated from final decontamination operations.
 - .4 Materials from decontamination pads.
- .7 Dispose of materials in accordance with contract documents and as directed by Departmental Representative.
- .8 Minimize generation of hazardous waste to maximum extent practicable. Take necessary precautions to avoid mixing clean and contaminated wastes.

1.13 RECORD KEEPING

- .1 Maintain adequate records to support information provided to Departmental Representative regarding reports as specified contract documents.
- .2 Maintain waste manifests, bills of lading for minimum of 375 days from date of issuance or longer period required by applicable law or regulation.

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1.14 MEASUREMENT OF PAYMENT

- .1 Except as otherwise indicated herein, Work under this section will not be measured. Include all costs in Item BOPC-1, Balance of Project Costs in the Basis of Payment Schedule. Indicate the cost of this Work as a separate line item in the Cost Breakdown Structure specified in Section 01 32 18 – Construction Progress Schedules – Bar (GANTT) Chart.

Part 2 Products

2.1 NOT USED

- .1 Not Used.

Part 3 Execution

3.1 NOT USED

- .1 Not Used.

END OF SECTION

Part 1 General

1.1 REFERENCES

- .1 Territory of Nunavut
 - .1 Safety Act, 2015.
- .2 Canada Labour Code, Canada Occupational Safety and Health Regulations 2002.

1.2 SUBMITTALS

- .1 Make submittals in accordance with Contract Documents.
- .2 Submit site-specific Health and Safety Plan within ten days after date of Contract Award and prior to mobilization to site. Address following items:
 - .1 A Statement of Contractor's Safety Policy.
 - .2 Safety Responsibilities of all on-site personnel.
 - .3 Name and telephone number of Contractor's Corporate Safety Officer and on-site Safety Representative.
 - .4 Safe Work Practices and/or Job Procedures.
 - .5 Results of safety and health risk or hazard analysis for construction activities, including:
 - .1 On-Site and Off-Site Traffic Management
 - .2 Extreme Temperature/Weather Works
 - .3 Works near and around Slopes/Inclines and unstable ground
 - .4 Works with and near Heavy Machinery
 - .5 Works with Hazardous Materials
 - .6 Works near and around operational airport
 - .7 Works near Sewage Disposal Area
 - .8 Any Additional Hazard identified by the Contractor
 - .6 Spill Contingency Plan
 - .7 Emergency Response Plan
 - .8 Wildlife Management Plan
 - .9 Fuel Management Plan
 - .10 Develop checklist for items to be inspected on a daily basis. Document actions taken.
 - .11 Personnel training requirements including:
 - .1 Names of personnel and alternates responsible for site safety and health, hazards present on site, and use of personal protective equipment.
 - .2 Work practices by which personnel can minimize risks from hazards, safe use of engineering controls and equipment on site, medical surveillance requirements, including recognition of symptoms and signs which might indicate overexposure to hazards, and elements of site-specific Health and Safety Plan.

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- .12 Personal protective equipment (PPE) program addressing:
 - .1 Donning and doffing procedures.
 - .2 PPE selection based upon site hazards.
 - .3 PPE use and limitations of equipment.
 - .4 Work mission duration, PPE maintenance and storage.
 - .5 PPE decontamination and disposal.
 - .6 PPE inspection procedures prior to, during, and after use.
 - .7 Evaluation of effectiveness of PPE program, and limitations during temperature extremes, and other appropriate medical considerations.
- .13 Medical surveillance requirements for personnel assigned to work at site.
- .14 Frequency and types of air monitoring, personnel monitoring, and environmental sampling techniques and instrumentation to be used, including methods of maintenance and calibration of monitoring and sampling equipment.
- .15 Site control measures employed at site including site map, site work zones, use of 'buddy system', site communications including site security, alerting means for emergencies, standard operating procedures or safe work practices, and identification of nearest medical assistance.
- .16 Decontamination procedures for both personnel and equipment.
- .17 Procedures dealing with heat and/or cold stress.
- .18 Spill containment program if waste material is generated, excavated, stored, or managed on site.
- .3 The Emergency Response Plan (ERP) is to address standard operating procedures to be implemented during emergency situations. Plans including procedures are to meet Safety Requirements below.
 - .1 Prepare and coordinate an ERP with contributions from appropriate authorities including the Government of Nunavut Safety Act, Hospitals, RCMP, Ministry of Transportation, and Ministry of Health. Plan will identify off-site Emergency Response Coordinator through whom all information and coordination will flow in the event of an incident.
 - .2 Emergency response requirements addressing: pre-emergency planning, personnel roles, lines of authority and communication, emergency recognition and prevention, safe distances and places of refuge, site security and control, evacuation routes and procedures, decontamination procedures not covered under decontamination section, emergency medical treatment and first aid, emergency alerting and response procedures, critique of response and follow-up, PPE and emergency equipment, site topography, layout, prevailing weather conditions, and procedures for reporting incidents to local, provincial, or federal agencies.
 - .3 Departmental Representative will have Contractor's On-site ERP reviewed by Authorities Having Jurisdiction and may request modifications or additions as necessary for the work.
- .4 Complete an inventory of Contractor's health, safety, medical and first aid equipment and supplies on-site to assess compliance with Authorities Having Jurisdiction requirements. Submit the inventory to Departmental Representative within ten (10)

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days of mobilization each season. Include a schedule for upgrading deficiencies to meet requirements of AHJ.

- .5 Submit a written report of any accidents to the Departmental Representative within 24 hours (verbal report immediately). If death or serious injuries or damages are caused, report the accident promptly to Departmental Representative by telephone or facsimile in addition to any report required under federal and territorial laws and regulations.
- .6 Departmental Representative will review Contractor's site-specific Health and Safety Plan and provide comments to Contractor within five days after receipt of plan. Revise plan as appropriate and resubmit plan to Departmental Representative within three days after receipt of comments from Departmental Representative and prior to mobilization.
- .7 Medical Surveillance: submit certification of medical surveillance for site personnel, within five days after date of Contract Award and prior to mobilization to site. Submit additional certifications as personnel are sent to site.

1.3 FILING OF NOTICE

- .1 File Notice of Work with Federal and Territorial Authorities having jurisdiction.

1.4 REGULATORY REQUIREMENTS

- .1 Comply with specified standards and regulations to ensure safe operations at site containing hazardous or toxic materials and other hazards (such as wildlife encounters, falls, etc.).

1.5 SITE CONDITIONS

- .1 Work at site will involve contact with:
 - .1 Landfill Waste including metals and demolition debris.
 - .2 Petroleum Hydrocarbons (PHCs), Polycyclic Aromatic Hydrocarbons, and metals.
 - .3 Benzene, Toluene, Ethylbenzene, Xylenes (BTEX) generated from operations of equipment.
 - .4 Hazardous Wastes including Batteries, Antifreeze/Glycols, Paints (lead and PCB bearing), Asbestos Containing Material, Ozone-Depleting Substances and/or Pesticides.
 - .5 Sewage from lagoon overflow.
 - .6 Unstable material conditions on slopes.

1.6 GENERAL REQUIREMENTS

- .1 Develop written site-specific Health and Safety Plan prior to commencing site Work and continue to implement, maintain, and enforce plan until final demobilization from site. Health and Safety Plan must address project specifications.
- .2 Ensure Health and Safety guidelines provide for safe and minimal risk working environment for site personnel and minimize impact of activities involving contact with hazardous materials or hazardous wastes on general public and surrounding environment.

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- .3 Relief from or substitution for portion or provision of minimum Health and Safety Guidelines specified or reviewed site-specific Health and Safety Plan must be submitted to Departmental Representative in writing. Departmental Representative will respond in writing, either accepting or requesting improvements.

1.7 CONSTRUCTION SAFETY MEASURES

- .1 Observe and enforce construction safety measures required by the latest revisions of: Canada Labour Code, National Building Code of Canada, National Fire Code of Canada, Workers' Compensation Board, the applicable Occupational Health and Safety Regulations, and Territorial and local statutes and authorities.
- .2 Arrange regular safety meetings, to be held no less frequently than once per week. Record the minutes of such meetings and maintain a complete file for review by the appropriate authorities. Submit a copy of these meeting minutes to Departmental Representative within three (3) days of the meeting.
- .3 Maintain at the site, five (5) safety hats with liners, five (5) safety glasses and five (5) safety hi-visibility vests for use by Departmental Representative and visitors. Maintain a supply of ear plugs.
- .4 Maintain a supply of Tyvek or equivalent suits of various sizes as required for Contractor's staff, Departmental Representative and up to three visitors for the duration of the Work.
- .5 The Contractor's site-specific Health and Safety plan will outline the plan and procedures that will be undertaken to ensure work inside of or adjacent to an excavation is completed safely and in compliance with applicable regulations.
- .6 Prepare and coordinate an Emergency Response Plan with contributions from appropriate authorities including Government of NWT or Nunavut Safety Act, Hospitals, RCMP, Ministry of Transportation, and Ministry of Health. Plan will identify off site Emergency Response Coordinator through whom all information and coordination will flow in the event of an incident.
- .7 Verify that emergency procedures including appropriate First aid facilities and First Aid personnel are in place at the Work Site. First aid facilities and First Aid personnel must be in compliance with the NWT or Nunavut Safety Act.
- .8 Verify that procedures meet the Workers' Safety and Compensation Commission (WSCC) requirements.

1.8 RESPONSIBILITY

- .1 Be responsible for safety of persons and property on site and for protection of persons off site and environment to extent that they may be affected by conduct of Work.
- .2 Control access to the site. Persons with business at the site and who are not Contractor's employees must be briefed on site specific health and safety issues, and provided with a copy of the site specific health and safety plan.
- .3 Contractor may refuse access to the site to any person not complying with site specific health and safety standards.
- .4 Comply with and enforce compliance by employees with safety requirements of Contract Documents, applicable federal, provincial, and local statutes, regulations, and ordinances, and with site-specific Health and Safety Plan.

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1.9 COMPLIANCE REQUIREMENTS

- .1 Comply with Work Site Hazardous Materials Information System Regulations, RRNWT (Nu) 1990 c S-2, (Safety Act) — Nunavut
- .2 Comply with Asbestos Safety Regulations, NWT Reg. (NU) 016-92, (Safety Act) — Nunavut
- .3 Comply with Canada Labour Code, Canada Occupational Safety and Health Regulations, Part X - Hazardous Substances.
- .4 Provide Departmental Representative with Material Safety Data Sheets (MSDS) and documentation on any "hazardous" chemical that Contractor or Contractor Representatives plan to bring onto site.
- .5 Comply with Safety Act, General Safety Regulations, R.R.N.W.T (1990, c.S-1)

1.10 WORK STOPPAGE

- .1 Give precedence to safety and health of public and site personnel and protection of environment over cost and schedule considerations for Work.
- .2 Assign responsibility and obligation to Health and Safety Officer where required to stop or start Work when, at Health and Safety Officer's discretion, it is necessary or advisable for reasons of health or safety. Departmental Representative may also stop Work for health and safety considerations.
- .3 Departmental Representative or his representative has the authority to stop Work on the contract if, in his/ her opinion, the Work is being performed in an unsafe manner as required by the applicable safety legislation.

1.11 UNFORESEEN HAZARDS

- .1 Should unforeseen or peculiar safety-related factor, hazard, or condition become evident during performance of Work, stop work and immediately advise Departmental Representative verbally and in writing.

1.12 HEALTH AND SAFETY OFFICER

- .1 Employ and assign to Work competent and authorized representative as Health and Safety Officer. Health and Safety Officer must:
 - .1 Have minimum 4 years' site-related working experience specific to activities associated with the similar site work.
 - .2 Have basic working knowledge of specified occupational safety and health regulations.
 - .3 Be responsible for completing Health and Safety Training Session and ensuring that personnel not successfully completing the required training are not permitted to enter site to perform Work in Exclusion Zone or Contaminant Reduction Zone.
 - .4 Be responsible for implementing, enforcing daily and monitoring site-specific Health and Safety Plan.
 - .5 Be on site during execution of Work.

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1.13 PERSONNEL HEALTH, SAFETY, AND HYGIENE

- .1 Medical Surveillance: Where applicable, conduct medical surveillance of personnel as required by specified regulations.
- .2 Training: ensure personnel entering site are trained in accordance with specified personnel training requirements. Training session must be completed by Health and Safety Officer.
- .3 Levels of Protection: establish levels of protection for each Work area based on planned activity and location of activity. For work with asbestos containing material, comply with the protective equipment requirements listed in Contract Documents. Minimum PPE required for each level of protection as follows:
Modified Level C:
 - .1 Head, Eye, Ear Protection: hard hat, safety glasses, ear muffs or plugs.
 - .2 Hand Protection: gloves.
 - .3 Foot Protection: safety boots.
 - .4 Clothing: chemical resistant, thermal and weather specific, as required.
- .4 Personal Protective Equipment: Furnish site personnel with appropriate PPE as specified above. Ensure that safety equipment and protective clothing is kept clean and maintained.
- .5 Develop protective equipment usage procedures and ensure that procedures are strictly followed by site personnel; include following procedures as minimum:
 - .1 Ensure prescription eyeglasses worn are safety glasses.
 - .2 Ensure footwear is steel-toed safety boots and is covered by rubber overshoes when entering or working in potentially contaminated work areas.
 - .3 Dispose of or decontaminate PPE worn on site at end of each workday.
 - .4 Decontaminate reusable PPE before reissuing.
- .6 Temperature Stress: implement heat/cold stress monitoring program as applicable and include in site-specific Health and Safety Plan.
- .7 Personnel Hygiene and Personnel Decontamination Procedures. Provide minimum as follows:
 - .1 Suitable containers for storage and disposal of used disposable PPE.
 - .2 Potable water and suitable sanitation facility.
- .8 Emergency and First-Aid Equipment:
 - .1 Provide and maintain emergency and first-aid equipment in appropriate location on site as required by the regulations of the authorities having jurisdiction.
 - .2 As minimum, provide 1 certified first-aid technician on site at all times when work activities are in progress.
- .9 Site Communications:
 - .1 Post emergency numbers at conspicuous locations with site satellite telephone.

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- .2 Ensure personnel use of "buddy" system and develop hand signal system appropriate for site activities.
- .3 Safety Meetings: conduct mandatory daily safety meetings for personnel, and additionally as required by special or work-related conditions; include refresher training for existing equipment and protocols, review ongoing safety issues and protocols, and examine new site conditions as encountered. Hold additional safety meetings on as-needed basis.
- .10 Hazardous Substances:
 - .1 If the Work entails the use of any toxic or hazardous materials or chemicals, or otherwise creates a hazard to life, safety, or health, Work will be in accordance with the National Fire Code of Canada, Occupational Health and Safety Legislation, and WHMIS.
 - .2 Departmental Representative is to be advised, and a "Hot Work" permit issued by Contractor's designated representative in all cases involving welding, cutting, burning or the use of blow torches and salamanders. Special precautions are necessary to safeguard life and property from damage by fire or explosives.
 - .3 Wherever Work is being carried out in dangerous or hazardous areas involving the use of heat, fire watchers, equipped with sufficient fire extinguishers, will be provided. The determination of dangerous or hazardous areas along with the level of precaution necessary for Fire Watch will be at the discretion of Contractor. Notify Departmental Representative prior to that determination.
 - .4 Provide proper ventilation and eliminate all sources of ignition where flammable liquids, such as lacquers or urethanes are used.
- .11 Wildlife Management:
 - .1 Develop a Wildlife Management Plan, as part of the Site Specific Health and Safety Plan, that includes bear and large mammal safety and as a minimum meets the following requirements:
 - .1 Firearms must be stored and used in accordance with all Authorities having jurisdiction. Terms of Use for firearms must be submitted to Departmental Representative for review.
 - .2 All wildlife signs, encounters and sightings must be reported to Departmental Representative immediately and as part of the weekly report.
 - .3 A minimum of one person for each work team must be designated as a wildlife monitor and trained in firearms and wildlife deterrent use in accordance with Authorities having jurisdiction. Qualifications and training plans for wildlife monitors must be submitted to Departmental Representative as part of the Site Specific Health and Safety Plan.

1.14 SAFETY MEETING

- .1 Conduct task specific safety meetings (tailgate) as per Project requirements and as directed by Departmental Representative.
- .2 Conduct safety meetings with workers engaged in outdoor Work under summer or winter conditions. Topics must include hot and cold stress, exhaustion, snowmobile

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safety, buddy systems, and any other items inherent in working outdoors in winter in isolated environments.

- .3 Conduct mandatory daily safety meetings for personnel, and additionally as required by special or Work related conditions; include refresher training for existing equipment and protocols, review ongoing safety issues and protocols, and examine new site conditions as encountered. Hold additional safety meetings on an as needed basis or as specified by the AHJ. Keep records of meetings on file.

1.15 FUEL MANAGEMENT

- .1 Contractor is to prepare a Fuel Management Plan that establishes measures and procedures that enables the Contractor to safely manage fuel on-site per the contract requirements and in adherence to all applicable regulations from AHJs.
- .2 Vehicle and equipment re-fuelling:
 - .1 All vehicle and equipment re-fuelling must be conducted by appropriately trained personnel using the effective personal protective equipment in a manner which meets or exceeds regulatory requirements, including using drip pans.
 - .2 Records of fuel usage by activity must be maintained.
 - .3 When re-fuelling equipment, use leak free containers and reinforced rip and puncture proof hoses and nozzles. Remain in attendance for duration of refuelling operation, and ensure that all storage container outlets are properly sealed after use.
- .3 Fuel transport:
 - .1 All fuel transports including mobile re-fuelling trucks and fuel transport to stationary equipment such as generators or pumps or distributed storage areas, must occur in approved (CSA) containers with the notification and consent of site safety personnel.
- .4 Fuel Storage
 - .1 Provide plans for on site storage of fuel if required. All fuels required for the Work will be stored on site with appropriate secondary containment as per AHJs.
 - .2 All tanks must be installed, registered, inspected and decommissioned per all applicable regulations from AHJs

1.16 VEHICLE AND EQUIPMENT USAGE

- .1 Use of vehicles or equipment only when trained and authorized to do so.
- .2 Seatbelts must be worn at all times vehicle or equipment is in operation. Provide high visibility items such as beacons, etc.
- .3 Speed limits must be set and obeyed.
- .4 If access conditions are unsafe or marginally unsafe, maintain access to acceptable standards. Do not risk property damage or injury.
- .5 Vehicles are to not be idled for longer than 10 minutes (warm up) unless explicitly used as a place of refuge during animal encounters or for personnel working outdoors

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during winter operations. Exceptions are to be made in consultation with Departmental Representative.

- .6 Perform vehicle and equipment maintenance in a manner that avoids spillage of fuels, oils, grease, and coolants.
- .7 Place drip pans under stationary equipment with potential leaks.
- .8 Use, adjust and repair equipment or machinery only when authorized by the supervisor.
- .9 Vehicle/Equipment checks must be completed and the logbook updated at the beginning of every shift or when starting any vehicle or piece of equipment.

1.17 FLAMMABLE LIQUIDS

- .1 The handling, storage and use of flammable liquids will be governed by the current National Fire Code of Canada.
- .2 Flammable liquids such as gasoline, kerosene and naphtha may be kept for ready use in quantities not exceeding 45 litres provided they are stored in approved safety cans bearing the Underwriter's Laboratory of Canada or Factory Mutual seal of approval. Storage of quantities of flammable liquids exceeding 45 litres for Work purposes, requires the permission of the permitting authority.
- .3 Do not transfer flammable liquids in the vicinity of open flames or any type of heat-producing devices.
- .4 Do not use flammable liquids having a flash point below 38°C such as naphtha or gasoline as solvents or cleaning agents.
- .5 Store flammable waste liquids, for disposal, in approved containers located in a safe ventilated area. Quantities are to be kept to a minimum and Departmental Representative is to be notified when disposal is required.
- .6 Dispose of all flammable liquids in accordance with all applicable environmental regulations and with the contract documents.

1.18 STORAGE AND HANDLING OF FUEL

- .1 Locate fuel storage areas as approved by Departmental Representative and in accordance with the Water Board Permit.
- .2 Inspect fuel storage and dispensing facilities daily. Make available fire fighting and spill response equipment for immediate access at each fuel storage location.
- .3 Store all barrels containing fuel and/or hazardous materials in an elevated position, either on their side with bungs facing 9 and 3 o'clock position, or on pallets, upright, and banded.
- .4 All barrels to be individually identified. Label will be to industry standards and will provide all information necessary for health and safety and environmental purposes. Make available, to all personnel, Material Safety Data Sheets for all materials maintained at site or along right-of-ways.
- .5 All barrels/fuel containers to be labelled with owner's name, and Contractor's name as required by the Land Use Permit.
- .6 Treat all waste petroleum products, including used oil filters as hazardous materials.

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- .7 Conduct regular inspections of all machinery hydraulic, fuel, and cooling systems. Repair leaks immediately.
- .8 Pre-assemble and maintain emergency spill equipment, including at least two (2) fuel pumps, empty 200 L barrels and absorbent material sufficient to clean up a 1000 litre spill at all fuel storage sites. Maintain spill mats or pan under mobile fuelling containers and a spill kit at the re-fuelling area.
- .9 Remove all full and empty barrels, fuel storage facilities and associated materials and equipment from site at conclusion of Work.

1.19 SPILL CONTINGENCY AND EMERGENCY RESPONSE

- .1 Meet specified requirements and applicable regulations.
- .2 Submit to Departmental Representative, detailed Spill Contingency Plan. Identify response capabilities by detailing response times, and types and volumes of spills to which Contractor can respond. Following information is required as a minimum:
 - .1 A description of pre-emergency planning.
 - .2 Personnel roles, lines of authority and communication, emergency phone numbers.
 - .3 Emergency alerting and response procedures.
 - .4 Evacuation routes and procedures, safe distances and places of refuge.
 - .5 Directions/methods of getting to nearest medical facility.
 - .6 Emergency decontamination procedures.
 - .7 Emergency medical treatment and First-Aid.
 - .8 Emergency equipment and materials.
 - .9 Emergency protective equipment.
 - .10 Procedures for reporting incidents.
 - .11 Spill response and containment plans for all materials that could potentially be spilled.

1.20 MEDICAL

- .1 Provide and maintain first aid and medical care and facilities for all workers as required by the Statutes of the Nunavut Safety Act.
- .2 Provide the appropriate numbers of first aid kit, based on the number of workers, in accordance with the Nunavut Safety Act.
- .3 Establish an Emergency Response Plan acceptable to the Departmental Representative, for the removal of any injured person to medical facilities or a doctor's care in accordance with applicable legislative and regulatory requirements.
- .4 Provide proof of First Aid Attendant – Level 2 credentials to Departmental Representative as part of the Site Specific Health and Safety Plan. Provide the appropriate number of first aid responders on site in accordance with the NU Safety Act (minimum of one).
- .5 Emergency and First Aid Equipment:
 - .1 Locate and maintain emergency and first aid equipment in appropriate location on site including first aid kit to accommodate number of site

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personnel; portable emergency eye wash; fire protection equipment as required by legislation.

- .2 Locate two (2) self-contained blankets and towels; stretcher; and one (1) hand held emergency siren in all work areas.
- .3 Provide a minimum of one (1) Level 2 – First Aid Attendant defined for the purposes of this specification as a person with a Canadian Red Cross First Responder Certificate (for a 40-hr course), or equivalent, and maintain first aid and medical care and facilities for all workers.

1.21 ACCIDENTS AND ACCIDENT REPORTS

- .1 Immediately report, verbally, followed by a written report within 24 hours, to Departmental Representative, all accidents of any sort arising out of or in connection with the performance of the Work, giving full details and statements of witnesses. If death or serious injuries or damages are caused, report the accident promptly to Departmental Representative by telephone or other means in addition to any report required under Federal and Territorial laws and regulations.
- .2 If a claim is made by anyone against Contractor or Subcontractor on account of any accident, promptly report the facts in writing to Departmental Representative, giving full details of the claim.

1.22 SITE SECURITY

- .1 Limit site access only to persons employed on the Project. Unauthorized persons will be permitted on site only with the APPROVAL of the Departmental Representative and Contractor.

1.23 WILDLIFE MONITORS

- .1 Provide for the duration of the construction seasons, full-time wildlife monitors acceptable to Departmental Representative. Provide sufficient number of wildlife monitors with firearms and ammunition to protect the safety of all workers in all areas, including Departmental Representative and Departmental Representative's support staff during site operations.
- .2 All Wildlife Monitors are required to have a valid Firearm Certificate as per AHJ. Copies of the firearms certificates to be provided upon request by the Departmental Representative.
- .3 Assume full responsibility for reporting incidents associated with wildlife encounters.
- .4 Supply one vehicle per wildlife monitor to facilitate his duties.
- .5 Provide the wildlife monitors with mobile communication radios with charging units for on-site communication between the wildlife monitors, Contractor base radio, and Departmental Representative and Departmental Representative's Authorized Personnel.

1.24 FIRE SAFETY

- .1 Provide all fire prevention, fire protection and firefighting services at the Project site.
- .2 Implement a fire safety program that includes fire prevention, fire protection and firefighting requirements. Submit details of the fire safety program in writing to Departmental Representative for review prior to start of construction. Such review

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does not relieve Contractor from any obligations or responsibilities required by the Contract.

- .3 Ensure that any Sub-Contractors and other Contractor personnel on-site are briefed on fire safety requirements and are familiar with the fire prevention, fire protection and firefighting program.
- .4 The fire safety program to meet or exceed the most recent editions of the following codes and standards:
 - .1 Nunavut Safety Act.
 - .2 NWT Mine Health and Safety Act.
 - .3 National Fire Code of Canada.
 - .4 Canada Labour Code.
- .5 Personnel designated for firefighting services must be provided with training for any special hazards that may be present. These personnel must also be provided with protective equipment as required by the Canada Labour Code.

1.25 REPORTING FIRES

- .1 A person discovering a fire and all fire related incidents will report immediately, by fastest available means, to Departmental Representative and site superintendent.
- .2 A person discovering a fire will if possible, remain in the vicinity to direct firefighting personnel.

1.26 FIRE EXTINGUISHERS

- .1 Provide and maintain fire extinguishers in sufficient quantity to protect, in an emergency, the Work in progress and the physical size of the site.

1.27 MEASUREMENT OF PAYMENT

- .1 All costs for the preparation and completion of the Site Specific Health and Safety Plan, are to be included in the lump sum price paid for under Item 01 35 32-1, as indicated in Combined Price Form. The lump sum price for the Site Specific Health and Safety Plan will be paid after a satisfactory Site Specific Health and Safety Plan has been submitted to Departmental Representative.
- .2 Except as otherwise indicated herein, Work under this section will not be measured. Include all costs in Item BOPC-1, Balance of Project Costs in the Combined Price Form. Indicate the cost of Wildlife Monitors, First Aid Attendant and Supplies; and Implementation of the Site Specific Health and Safety Plan as a separate line items in the Cost Breakdown Structure (CBS) specified in Section 01 32 18 – Construction Progress Schedules – Bar (GANTT) Chart.

Part 2 Products

2.1 NOT USED

Part 3 Execution

3.1 NOT USED

END OF SECTION

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Part 1 General

1.1 RELATED REQUIREMENTS

- .1 Section 01 35 13.43 – Special Procedures for Contaminated Sites
- .2 Section 01 35 29.14 – Health and Safety for Contaminated Sites

1.2 DEFINITIONS

- .1 Environmental Pollution and Damage: presence of chemical, physical, biological elements or agents which adversely affect human health and welfare; unfavourably alter ecological balances of importance to human life; affect other species of importance to humankind; or degrade environment aesthetically, culturally and/or historically.
- .2 Environmental Protection: prevention/control of pollution and habitat or environment disruption during construction. Control of environmental pollution and damage requires consideration of land, water, and air; biological and cultural resources; and includes management of visual aesthetics; noise; solid, chemical, gaseous, and liquid waste; radiant energy and radioactive material as well as other pollutants.

1.3 REFERENCE STANDARDS

- .1 Comply with federal, territorial and local anti-pollution laws, ordinances, codes, and regulations when disposing of waste materials, debris, and rubbish including, but is not limited to:
 - .1 Transportation and Dangerous Goods Act. (TDG)
 - .2 Canadian Environmental Protection Act. (CEPA)
 - .3 Migratory Birds Convention Act
 - .4 Fisheries Act
 - .5 Environmental Protection Act, RSNWT (NU) 1988, c E-7 (Supp)
 - .6 Water Resources Agreement Act, RSNWT (NU) 1988, c 17 (Supp)
 - .7 Nunavut Safety Act,
 - .8 Work to meet or exceed minimum requirements established by federal, provincial, and local laws and regulations which are applicable.
 - .1 Contractor is responsible for complying with amendments as they become effective.

1.4 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Provide submittals in accordance with the contract documents.
- .2 Prior to commencing construction activities or delivery of materials to site, provide Environmental Protection Plan for review and approval by Departmental Representative.
- .3 Ensure Environmental Protection Plan includes comprehensive overview of known or potential environmental issues to be addressed during construction.

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- .4 Address topics at level of detail commensurate with environmental issue and required construction tasks.
- .5 Include in Environmental Protection Plan:
 - .1 Names of persons responsible for ensuring adherence to Environmental Protection Plan.
 - .2 Names and qualifications of persons responsible for manifesting hazardous waste to be removed from site.
 - .3 Names and qualifications of persons responsible for training site personnel.
 - .4 Descriptions of environmental protection personnel training program.
 - .5 Drawings showing locations of proposed material storage areas, structures, sanitary facilities, and stockpiles of excess or spoil materials including methods to control runoff and to contain materials on site.
 - .6 Traffic Control Plans including measures to reduce erosion of temporary roadbeds by construction traffic, especially during wet weather. Ensure plans include measures to minimize amount of mud transported onto public roads by vehicles or runoff.
 - .7 Work area plan showing proposed activity in each portion of area and identifying areas of limited use or non-use. Ensure plan includes measures for marking limits of use areas and methods for protection of features to be preserved within authorized work areas.
 - .8 Spill Control Plan including procedures, instructions, and reports to be used in event of unforeseen spill of regulated substance.
 - .9 Erosion, Sediment and Drainage Control Plan including procedures to control overland water flow, soil erosion, permafrost degradation, fugitive sediment or dust control throughout the course of the works.
 - .10 Contaminant Prevention Plan identifying potentially hazardous substances to be used on job site; intended actions to prevent introduction of such materials into air, water, or ground; and detailing provisions for compliance with Federal, Provincial, and Municipal laws and regulations for storage and handling of these materials.
 - .11 Submit weekly progress report as the work proceeds.
- .6 Prior to commencing each annual mobilization activities or delivery of materials to site, provide an updated Environmental Protection Plan for review and approval by Departmental Representative.

1.5 FIRES

- .1 Fires and burning of rubbish on site is not permitted.

1.6 DRUMS

- .1 Storage of Liquid Waste: Adequately sized drums made of appropriate materials, with closable and sealable lids, complete with labels for marking contents and date filled.
- .2 Storage of Solid Hazardous Waste: Adequately sized drums made of appropriate materials, closable and sealable lids, complete with labels for marking contents and date filled.

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- .3 Secondary containment must be established for each drum cache. The secondary containment must meet or exceeds regulatory requirements specific to the wastes.

1.7 WORK ADJACENT TO WATERWAYS

- .1 Construction equipment to be operated on land only.
- .2 Waterways to be kept free of excavated fill, waste material and debris.
- .3 Design and construct temporary crossings to minimize erosion to waterways.
- .4 Do not skid logs or construction materials across waterways.
- .5 Avoid spawning beds when constructing temporary crossings of waterways.
- .6 Minimize impacts and erosion to waterway during the construction of the swales.

1.8 POLLUTION CONTROL

- .1 Provide methods, means, and facilities to prevent contamination of soil, water, and atmosphere from discharge of contaminants, noxious substances and pollutants generated by construction work
- .2 Fuel Management as per sections 01 35 29.14 – Health and Safety for Contaminated Sites.
- .3 Be prepared to intercept, cleanup, and dispose of spills or release that may occur whether on land or water. Maintain materials and equipment required for cleanup of spills or releases readily accessible on site.
- .4 Promptly report spills and releases potentially causing damage to the environment to:
 - .1 Departmental Representative
 - .2 Authority having jurisdiction or interest in spill or release including Nunavut Department of Environment, local conservation authority, water supply authorities, drainage authority, road authority, and fire department, as applicable by law.
- .5 Take immediate action using available resources to contain and mitigate effects on environment and persons from spill or release.
- .6 Maintain erosion and pollution control features installed under this Contract.
- .7 Control emissions from equipment to local authorities' emission requirements.
- .8 Cover or wet down dry materials and rubbish to prevent blowing dust and debris. Provide dust control for temporary roads.

1.9 CONTAMINATED SOIL AND WASTE MANAGEMENT

- .1 All contaminated soil, landfill waste and liquid waste, if encountered, shall be separated and managed on-site to prevent contamination of uncontaminated material or migration to non-contaminated areas. Notify Departmental Representative immediately of any discoveries of contaminated soils, hazardous (liquid or solid) waste and groundwater during work not identified by the contract documents.

1.10 IMPORTATION OF FILL AND/OR OTHER MATERIALS

- .1 It is the contractor's responsibility to provide documentation pertaining to:

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- .1 Disclose location of origin for the material and provide historical/current details (e.g. nearby or former activities that may have an impact on material environmental quality).
- .2 Environmental quality of the material, including analytical testing results (where required) will be carried by and paid for by the Departmental Representative.
- .3 Submit a bulk sample of each material to the departmental representative for approval.
- .4 Provide at least 5 working days lead time for approval.
- .5 Conduct additional testing, at the cost of the contractor, if requested by the Departmental Representative.
- .6 Remove any excess imported materials from the Site.

1.11 MEASUREMENT OF PAYMENT

- .1 Work under this section will not be measured. Include all costs in Item BOPC-1, Balance of Project Costs in the Combined Price Form. Indicate the cost of this Work as a separate line item in the Cost Breakdown Structure (CBS) specified in Section 01 32 18 – Construction Progress Schedules – Bar (GANTT) Chart.

Part 2 Products

2.1 NOT USED

Part 3 Execution

3.1 NOT USED

END OF SECTION

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Part 1 General

1.1 REFERENCE AND CODES

- .1 Perform Work in accordance with the Contract Documents and meet or exceed all codes, standards and regulations applicable to the Work and issued under the authority of the Government of Canada and the Government of Nunavut. Advise Departmental Representative of any discrepancies in the codes, standards, and regulations applicable to the Work; in case of conflict or discrepancy, more stringent requirements apply.
- .2 Meet or exceed requirements of:
 - .1 Contract documents.
 - .2 Specified standards, codes and referenced documents.

1.2 REFERENCE AND CODES – FEDERAL

- .1 Meet or exceed the governing codes, standards and guidelines, and regulations applicable to Work (as amended) and issued under the authority of the Government of Canada. The following list is provided for reference purposes only, updated, amended or additional codes, standards, guidelines and regulations may apply:
 - .1 Canada Labour Code Part II-Occupational Health and Safety (R.S. 1985,c.L-2).
 - .2 Canada Occupational Health and Safety Regulations (SOR/86-304)
 - .3 Canadian Environmental Protection Act, S.C. 1999 (S.C. 1999, c.33) a.SOR/2002-318
 - .4 Controlled Products Regulations (SOR/88-66) a.SOR/2001-254
 - .5 Inter-provincial Movement of Hazardous Waste Regulations (SOR/2002-301)
 - .6 National Fire Code of Canada, 1995 a. 2002
 - .7 Ozone Depleting Substances Regulations, 1998 (SOR/99-7)
 - .8 Transportation of Dangerous Goods Act, 1992 (S.C. 1992, c.34) a.1999, c.31
 - .9 Transportation of Dangerous Goods Regulations (SOR/2001-286) a.SOR/2003-400
 - .10 Territorial Land Use Regulations (C.R.C., c.1524) a.98-430
 - .11 Storage Tank System for Petroleum Products & Allied Petroleum Products Regulations (SOR / 2008-197).
 - .12 Migratory Birds Convention Act. (S.C 1994, c.22).
 - .13 Fisheries Act (R.S.C., 1985, c. F-14).
 - .14 Abandoned Military Site Remediation Protocol (INAC, 2009).
 - .15 Environmental Code of Practice for Aboveground Storage Tank Systems Containing Petroleum and Allied Petroleum Products (CCME 2003).
 - .16 Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health (CCME, 1999).

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- .17 Canada-Wide Standard for Petroleum Hydrocarbons (PHC) in Soil (CCME, 2001).
- .18 Canadian Water Quality Guidelines for the Protection of Aquatic Life (CCME, 1999).
- .19 Export and Import of Hazardous Waste and Hazardous Recyclable Material Regulations (SOR/2005-149).
- .20 Arctic Waters Pollution and Prevention Act (A.A. 1985 CA-12)
- .21 Nunavut Waters and Nunavut Surface Rights Tribunal Act (SOR/2002-253)
- .22 Material Safety Data Sheets (MSDS), Health Canada / Workplace Hazardous
- .23 Materials Information System (WHMIS).
- .24 International Maritime Dangerous Goods Code, 2016 (IMDG Code).

1.3 REFERENCE AND CODES – NUNAVUT

- .1 Meet or exceed the governing codes, and regulations applicable to work and issued under the authority of the Government of Nunavut as follows: The following list is provided for reference purposes only, updated, amended or additional codes and regulations may apply:
 - .1 Environmental Protection Act (Nunavut) (R.S.N.W.T. 1988, c. E-7) a. 1998, c. 21, c. 24.
 - .2 Labour Standards Act (Nunavut) (R.S.N.W.T. 1988, c. L-1) amended S.Nu. 2012, c. 12, in force June 8, 2012.
 - .3 Public Health Act, S.N.W.T. 2007, c.17.
 - .4 Workplace Hazardous Materials Information System Regulations (R.R.N.W.T. 1990, c. S-2).
 - .5 Spill Contingency Planning and Reporting Regulations R-068-93.
 - .6 Fire Prevention Act, R.S.N.W.T. 1988, c. F-6.
 - .7 Used Oil and Waste Fuel Management Regulations, R-064-2003.
 - .8 Transportation of Dangerous Goods Act (S.N.W.T. 1990, c. 36).

1.4 STANDARDS AND GUIDELINES

- .1 Department of the Environment, Government of Nunavut. The following list is provided for reference purposes only, updated, amended or additional standards and guidelines may apply:
 - .1 Environmental Guidelines for Site Remediation, March 2009.
 - .2 Environmental Guidelines for Spill Contingency and Reporting Regulations, March 2011
 - .3 Environmental Guideline for General Management of Hazardous Waste, October 2010
 - .4 Environmental Guideline for Management of Waste Asbestos, April 2011.
 - .5 Environmental Guideline for Management of Waste Batteries, January 2011
 - .6 Environmental Guideline for Waste Lead and Lead Paint, October 2017.
 - .7 Environmental Guideline for Management of Waste Solvents, January 2011
 - .8 Environmental Guideline for Ambient Air Quality Standards, January 2011.

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- .9 Environmental Guidelines for Dust Suppression, January 2002, Government of Nunavut.
- .10 Environmental Guidelines for Ozone Depleting Substances, January 2002.
- .11 Environmental Guideline for Industrial Waste Discharge into Municipal Solid Waste and Sewage Treatment Facilities, April 2011.
- .12 Environmental Guidelines for Industrial Waste Discharge, January, 2002

1.5 PERMITS AND LICENCES

- .1 The following permits and licenses will be provided to the Contractor:
 - .1 Water Use Licence granted by the Nunavut Water Board (MWB Licence No.: 1BR-RBL1419)
 - .2 Quarry Permit for the borrow material
 - .3 Plan of Construction Operations (PCO) for works carried out on Airport Lands, will require Contractor contributions including but exclusively: works hours, work areas, staging areas, equipment, access routes, etc.
- .2 Obtaining any necessary permits and licenses is the responsibility of the Contractor
 - .1 Any other permits or permission regarding the access rights that may be required.
- .3 Respond to all regulatory inquiries in order to get permits and licences mentioned above and provide Departmental Representative with a copy of each response.

1.6 WHMIS

- .1 Comply with requirements of Workplace Hazardous Materials Information System (WHMIS) regarding use, handling, storage, and disposal of hazardous materials; and regarding labelling and provision of Material Safety Data Sheets acceptable to Labour Canada and Health and Welfare Canada.
- .2 Deliver copies of WHMIS data sheets to Departmental Representative on delivery of materials.

1.7 MEASUREMENT OF PAYMENT

- .1 Work under this section will not be measured. Include all costs in Item BOPC-1, Balance of Project Costs in the Combined Price Form. Indicate the cost of this Work as a separate line item in the Cost Breakdown Structure (CBS) specified in Section 01 32 18 – Construction Progress Schedules – Bar (GANTT) Chart.

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Part 2 Products

2.1 NOT USED

Part 3 Execution

3.1 NOT USED

END OF SECTION

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Part 1 General

1.1 REFERENCES

- .1 Canadian Standards Association (CSA International)
 - .1 CAN/CSA-Z321-96, Signs and Symbols for the Occupational Environment.

1.2 SUBMITTALS

- .1 Provide submittals in accordance with contract documents.

1.3 INSTALLATION AND REMOVAL

- .1 Prepare site plan indicating proposed location and dimensions of area to be staged and used by Contractor, type and quantity of equipment to be used, avenues of ingress/egress to work areas and details of fence/barrier installation, as necessary.
- .2 Identify areas requiring grading or aggregate to prevent tracking of mud.
- .3 Indicate use of supplemental or other staging area.
- .4 Provide construction facilities in order to execute work expeditiously.
- .5 Remove from site all construction facilities after use.
- .6 Restore areas occupied by temporary construction facilities to at least original condition that existed at start of construction.

1.4 HOARDING

- .1 Provide fencing as necessary to maintain a safe site for personnel and wildlife.
- .2 All excavations or unsafe slope left open at the end of the day will be adequately secured and locked using appropriate barriers and/or fencing.

1.5 GUARD RAILS AND BARRICADES

- .1 Provide secure, rigid guard rails and barricades around deep excavations, working slopes and along access ramps/roads.
- .2 Provide as required by governing authorities.

1.6 HOISTING

- .1 Provide, operate and maintain hoists/cranes required for moving materials and equipment. Make financial arrangements with Subcontractors for their use of hoists.
- .2 Hoists and/or cranes to be operated by qualified operator.

1.7 SITE STORAGE/LOADING

- .1 Confine work and operations of employees by Contract Documents. Do not unreasonably encumber premises with products.
- .2 Do not load or permit to load any part of Work with weight or force that will endanger Work.

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1.8 ACCESS

- .1 Obtain permission from the Resolute Airport Authority and other Authorities having Jurisdiction to access the site to carry-out all aspects of works (eg. Mobilization, staging, remediation, excavation, grading, demobilization, etc.)
- .2 Provide and maintain adequate access to project site for material, equipment and personnel. Where indicated on Contract Drawings, access site via designated haul roads and gates. Build up and maintain access roads to facilitate construction activities and return access road to equal or better condition prior to completion of the contract.
- .3 Build and maintain temporary ramping for access routes, as required, and provide snow and ice removal, if required during period of work. Restore areas to original condition, unless directed otherwise by the Departmental Representative.
- .4 Use existing roads for access to project site, as indicated. Maintain such roads for duration of contract and make good damage resulting from Contractor's use of roads.
- .5 Provide construction warning signs along existing roads that are used by construction traffic in compliance with local authorities having jurisdiction and subject to the Departmental Representative approval.
- .6 Where required, provide detour roads, ramps, culvert crossings to ensure traffic is maintained without hindrance. Provide and maintain signal flag operators, traffic signals, barricades and flares, lights, or lanterns as required to perform Work and protect the public.

1.9 EMERGENCY ACCESS ROUTES

- .1 Maintain direct and quick access to Site by emergency vehicles at all times throughout the duration of the work (e.g. regularly maintain access road and overhead clearances).

1.10 INFORMATIONAL AND WARNING DEVICES

- .1 Provide and maintain signs, flashing warning lights and other devices required to indicate construction activities or other temporary and unusual conditions resulting from project work which requires road user response.
- .2 Supply and erect signs, delineators, barricades and miscellaneous warning devices as specified by the local authorities having jurisdiction.
- .3 Place and maintain signs and other devices in locations recommended by the local authorities having jurisdiction.

1.11 PROTECTION FOR OFF-SITE AND PUBLIC PROPERTY

- .1 Protect surrounding private and public property from damage during performance of Work.
- .2 Be responsible for damage incurred.

1.12 CONSTRUCTION PARKING

- .1 Parking will be permitted on site provided it does not disrupt performance of Work.
- .2 Provide and maintain adequate access to project site.

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1.13 TEMPORARY UTILITIES

- .1 Provide temporary utilities in order to execute work expeditiously including, but not limited to:
 - .1 Construction lighting.
 - .2 Electrical power.
 - .3 Communications.
 - .4 Water.
 - .5 Heating.

1.14 TEMPORARY COMMUNICATION FACILITIES

- .1 Provide a satellite phone for emergency communications while at work site. Locate satellite phone in an area in close proximity to on-site workers. A satellite phone located in a vehicle is not acceptable. If phone is not manned continually, post times when incoming calls can be received.
- .2 Provide and pay for temporary telephone necessary for own use and use of Departmental Representative at selected accommodations.
- .3 Provide and pay for temporary internet connection necessary for own use and use of Departmental Representative at the site and/or selected accommodations.

1.15 EQUIPMENT, TOOL AND MATERIALS STORAGE

- .1 Provide and maintain, in clean and orderly condition, lockable weatherproof sheds for storage of tools, equipment and materials, as required by the Contractor.
- .2 Locate materials not required to be stored in weatherproof sheds, provided by Contractor as necessary, on site in manner to cause least interference with work activities.

1.16 SANITARY FACILITIES

- .1 Provide sanitary facilities for work force in accordance with governing regulations and ordinances.
- .2 Post notices and take precautions as required by local health authorities. Keep area and premises in sanitary condition.
- .3 Regularly clean and maintain washroom facilities. Empty out refuse and effluent at least once a week or greater if required.

1.17 WATER SUPPLY

- .1 Provide supply of potable water for construction use and clean water for dust control at no extra cost to the Client or Departmental Representative.

1.18 DEWATERING

- .1 Provide temporary drainage and pumping facilities to keep excavations and site free from standing water as directed in contract documents.

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1.19 CONSTRUCTION SIGNAGE

- .1 Provide site signage in English, French, and Inuktitut on all marine shipping containers and at any temporary storage area. Signage must indicate type of material being stored and provide general cautions in layman's terms.
- .2 No signs or advertisements, other than warning signs, are permitted on site. Company signs will be permitted with the approval of the Departmental Representative.
- .3 Signs and notices for safety and instruction shall be in both official languages. Graphic symbol shall conform to CAN/CSA-Z321.
- .4 Maintain approved signs and notices in good condition for duration of project, and dispose of off-site on completion of project or earlier if directed by the Departmental Representative.

1.20 PROTECTION AND MAINTENANCE OF TRAFFIC

- .1 Maintain access to the sewage lagoons and fenced waste storage area.
- .2 Provide access and temporary relocated roads as necessary to maintain traffic.
- .3 Contractor's traffic on public roads selected for hauling material to and from site should interfere as little as possible with public traffic.
- .4 Verify adequacy of existing roads and allowable load limit on these roads. Contractor: responsible for repair of damage to roads caused by construction operations.
- .5 Construct access and haul roads as necessary. Reinstall areas to original or better level and condition.
- .6 Haul roads: constructed with suitable grades and widths; sharp curves, blind corners, and dangerous cross traffic shall be avoided.
- .7 Provide necessary lighting, signs, barricades, and distinctive markings for safe movement of traffic.
- .8 Dust control: adequate to ensure safe operation at all times.
- .9 Location, grade, width, and alignment of construction and hauling roads: subject to approval by Departmental Representative.
- .10 Lighting: to assure full and clear visibility for full width of haul road and work areas during night work operations.
- .11 Provide snow removal during period of Work.
- .12 Remove, upon completion of work, haul roads designated by Departmental Representative.

1.21 CLEAN-UP

- .1 Separate waste materials for reuse and recycling in accordance with contract documents.
- .2 Remove construction debris, waste materials, packaging material from work site.

1.22 MEASUREMENT OF PAYMENT

- .1 All direct costs for the supply, installation, operation and maintenance of Temporary

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Construction Facilities are to be included in the lump sum price for Construction Facilities, Item 01 52 00-1, as indicated in Basis of Payment Schedule.

- .2 Except as otherwise indicated herein, Work under this section will not be measured. Include all costs in Item BOPC-1, Balance of Project Costs in the Basis of Payment Schedule. Indicate the cost of this Work as a separate line item in the Cost Breakdown Structure (CBS) specified in Section 01 32 18 – Construction Progress Schedules – Bar (GANTT) Chart.

Part 2 Products

2.1 NOT USED

Part 3 Execution

3.1 NOT USED

END OF SECTION

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Part 1 General

1.1 MOBILIZATION AND DEMOBILIZATION

- .1 Provide all labour, equipment and materials, and performance of all Work necessary for mobilization to, and demobilization from site.
- .2 Mobilization to include transportation to site of Contractor's labour, equipment, materials, and assembling, erecting, and preparing site in readiness to start Work, all in accordance with Contractor's Schedule.
- .3 Demobilization to include dismantling and removal from site, of all Contractor's equipment, construction facilities and materials, waste resulting from cleanup of site and transportation of labour from site.
- .4 Decontaminate and clean all equipment used on the Project prior to demobilization according to Section 01 35 15 – Special Procedures for Contaminated Sites.
- .5 Do not mobilize to the site without written authorization from the Departmental Representative.
- .6 Contractor must remove all equipment, supplies, wastes and any other materials generated or used throughout the course of the works from site including any waste materials that require off-site removal or disposal as part of the contract requirement.
- .7 Summarize the proposed mode, route, equipment, labour and all other requirements for the mobilization and demobilization of all required equipment, materials, waste and personnel to complete the remediation of the project, as indicated in these specifications, in a Mobilization and Demobilization Plan. Submit the Mobilization and Demobilization Plan to the Departmental Representative a maximum of seven (7) days after contract award.
- .8 All mobilization and demobilization methods to comply with the requirements of all applicable codes, standards, guidelines and Water License.

1.2 MOBILIZATION AND DEMOBILIZATION PLAN AND EQUIPMENT LIST

- .1 Provide a Mobilization and Demobilization Plan which includes, but is not limited to, the following items:
 - .1 Proposed mode(s), route, and timing.
 - .1 Including number of transport loads.
 - .2 In-transit storage or staging areas.
 - .3 Equipment, labour and other requirements required for mobilization, demobilization or winterization activities.
 - .4 Construction Equipment List of all equipment and materials that are planned to be transported to or from Site to complete the Work. List to include manufacturer name, model number, year, hours, weight in kilograms or metric tonnes, assessment of equipment completed by a certified mechanic. Maintain the complete list of construction

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equipment on site. Revise and provide this list to the Departmental Representative upon request. List to include and clearly identify Crown-owned equipment.

- .5 Planned date for mobilization to site and planned dates for demobilization from site.

1.3 SUBMITTALS

- .1 Provide Submittals in accordance with Section 01 33 00 – Submittal Procedure.
- .2 Submit to Departmental Representative one (1) electronic copy of the Mobilization and Demobilization Plan seven (7) days after contract award.
- .3 Indicate the cost of this Work as a separate line items in the cost breakdown specified in Section 01 32 18 – Construction Progress Schedules – Bar (GANTT) Chart.

1.4 MEASUREMENT OF PAYMENT

- .1 All costs for Mobilization of all equipment, materials, and transportation of Contractor's Personnel, including all transportation cost for crew rotations, meals in transit, accommodations in transit and any other cost necessary to mobilize are to be included in the lump sum price for Mobilization, Item 01 53 00-1, as indicated in the Combined Price Form.
- .2 All costs for Demobilization of all equipment and materials, demobilization of Contractor's Personnel and demobilization of all Contractor wastes for off-site disposal are to be included in the lump sum price for Demobilization, Item 01 53 00-2, as indicated in the Combined Price. Payment for Demobilization will be made after satisfactory cleanup of the site, removal from the site of all equipment, materials, site demolition debris materials and contaminated soils, as indicated and submission to Departmental Representative of all Contractor submittals.
- .3 Except as otherwise indicated herein, Work under this section will not be measured. Include all costs in Item BOPC-1, Balance of Project Costs in the Combined Price Form.

Part 2 Products

2.1 NOT USED

Part 3 Execution

3.1 NOT USED

END OF SECTION

March 16, 2018

Part 1 General

1.1 QUALIFICATIONS OF SURVEYOR

- .1 Qualified registered land surveyor, licensed to practice in Place of Work, acceptable to Departmental Representative.

1.2 SURVEY REFERENCE POINTS

- .1 Establish base horizontal and vertical control points as designated by the Departmental Representative.
- .2 Protect control points prior to starting site work. Preserve permanent reference points during construction.
- .3 Make no changes or relocations without prior written notice to Departmental Representative.
- .4 Report to Departmental Representative when reference point is lost or destroyed, or requires relocation because of necessary changes in grades or locations.
- .5 Require surveyor to replace control points in accordance with original survey control.

1.3 SURVEY REQUIREMENTS

- .1 Establish stable temporary survey control points for use in laying out work. Record locations, with horizontal and vertical data in Project Record Documents.
- .2 Establish four temporary survey control points at AEC 1, two at the top of the landfill and two at the bottom; four temporary survey control points at AEC 2, two at the top of the landfill, two at the bottom; and two temporary survey control points at AEC 3.
- .3 Prepare a topographic map of Work Sites (AEC 1, AEC 2, AEC 3, and all borrow areas) prior to any construction work as directed by Departmental Representative to provide a baseline survey for quantity measurements.
- .4 Maintain surveys for quantity calculations.
- .5 Survey elevations prior to any earthworks including, but not limited to:
 - .1 Aggregate Development of borrow areas.
 - .2 Excavation and grading of Landfill Materials.
 - .3 Excavation of contaminated soils in AEC 3.
 - .4 Construction of Swales
 - .5 Importing, placing and compaction of imported backfill.
- .6 Survey elevations after any construction works including, but not limited to:
 - .1 Aggregate Development of borrow areas
 - .2 Regrading of borrow areas.
 - .3 Excavation and grading of Landfill Materials.
 - .4 Excavation of contaminated soils at AEC-3, if required.

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- .5 Construction of Swales
- .6 Rough grading of AEC-1 Top and Slopes prior to Aggregate Cover placement
- .7 Final Grading of each Aggregate Cover layer
- .8 Final Grading of AEC-2, if required.
- .9 Importing, placing and compaction of stockpiled overburden used as backfill.
- .7 Prepare a topographic map of Work Sites (AEC 1, AEC 2, AEC 3, and all borrow areas) to support interseason and final inspections, , progress claims, and as directed by Departmental Representative to provide a baseline survey for quantity measurements. Quantities will be determined and agreed upon based on the survey results.

1.4 RECORDS

- .1 Maintain a complete, accurate log of control and survey work as it progresses.
- .2 On completion of major site improvements, prepare a certified survey showing dimensions, locations, angles and elevations of Work.
- .3 Record locations of maintained, re-routed and abandoned service lines.

1.5 SUBMITALS

- .1 Submit name and address of Surveyor to Departmental Representative.
- .2 Submit raw and processed survey data collected after each surveying event conducted at the site.
- .3 On request of Departmental Representative, submit documentation to verify accuracy of field engineering work.
- .4 Submit certificate signed by surveyor certifying those elevations and locations of completed Work that conform and do not conform with Contract Documents.

1.6 SUBSURFACE CONDITIONS

- .1 Promptly notify Departmental Representative in writing if subsurface conditions at Place of Work differ materially from those indicated in Contract Documents, or a reasonable assumption of probable conditions based thereon.
- .2 After prompt investigation, should Departmental Representative determine that conditions do differ materially, instructions will be issued for changes in Work as provided in Changes and Change Orders.

1.7 MEASUREMENT OF PAYMENT

- .1 Work under this section will not be measured. Include all costs in Item BOPC-1, Balance of Project Costs in the Combined Price Form. Indicate the cost of this Work as a separate line item in the Cost Breakdown Structure (CBS) specified in Section 01 32 18 – Construction Progress Schedules – Bar (GANTT) Chart.

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Part 2 Products

2.1 NOT USED

.1 Not Used.

Part 3 Execution

3.1 NOT USED

.1 Not Used.

END OF SECTION

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Part 1 General

1.1 ADMINISTRATIVE REQUIREMENTS

- .1 All close-out requirements are considered included under the contract and at no additional cost to the Departmental Representative.

1.2 CLOSEOUT PROCEDURES

- .1 Notify Departmental Representative when Work is considered ready for substantial performance evaluation.
- .2 Accompany Departmental Representative on preliminary inspection to determine items listed for completion or correction.
- .3 Comply with Departmental Representative's instructions for correction of items of Work listed in executed Certificate of Substantial Completion.
- .4 Notify Departmental Representative of instructions for completion of items of Work determined in Departmental Representative's final inspection.

1.3 INSPECTION AND DECLARATION

- .1 Interseason Inspection: Contractor and Departmental Representative to conduct inspection of Work completed during the first construction season of the contract to identify deficiencies and defects and establish percentages of completion for partially completed Work. To be included within the costs associated with Monthly Progress Meetings.
- .2 Contractor's Inspection: Contractor: conduct inspection of Work, identify deficiencies and defects, and repair as required to conform to Contract Documents.
 - .1 Notify Departmental Representative in writing of satisfactory completion of Contractor's inspection and submit verification that corrections have been made.
 - .2 Request Departmental Representative Inspection
- .3 Departmental Representative Inspection:
 - .1 Departmental Representative and Contractor to inspect Work and identify defects and deficiencies.
 - .2 Contractor to correct Work as directed.
- .4 Completion Tasks: submit written certificates in English that tasks have been performed as follows:
 - .1 Work: completed and inspected for compliance with Contract Documents.
 - .2 Defects: corrected and deficiencies completed.
 - .3 Work: complete and ready for final inspection.
- .5 Final Inspection:
 - .1 When completion tasks are done, request final inspection of Work by Departmental Representative, and Contractor.

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- .2 Final Inspection will include topographic survey of final grade as well as inspection of all constructed erosion control features, as well as all areas where temporary controls were installed and all areas where work was conducted.
- .3 Where Work is deemed deficient by the Departmental Representative, complete outstanding Work and request re-inspection.

1.4 MEASUREMENT OF PAYMENT

- .1 Work under this section will not be measured. Include all costs in Item BOPC-1, Balance of Project Costs in the Combined Price Form. Indicate the cost of this Work as a separate line item in the Cost Breakdown Structure (CBS) specified in Section 01 32 18 – Construction Progress Schedules – Bar (GANTT) Chart.

Part 2 Products

2.1 NOT USED

Part 3 Execution

3.1 NOT USED

END OF SECTION

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Part 1 General

1.1 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Provide submittals in accordance with contract documents.
- .2 Prior to Substantial Performance of the Work, submit to the Departmental Representative, two final copies of marked-up (in red) construction drawings indicating work completed.
- .3 Furnish evidence, if requested, for type, source and quality of products provided. Such evidence as a minimum shall include weigh tickets, waste manifests, time logs, permits, etc.

1.2 AS-BUILT DOCUMENTS AND SAMPLES

- .1 Maintain, in addition to requirements in General Conditions, at site for Departmental Representative one record copy of:
 - .1 Contract Drawings.
 - .2 Specifications.
 - .3 Addenda.
 - .4 Change Orders and other modifications to Contract.
 - .5 Reviewed shop drawings, product data, and samples.
 - .6 Field test records.
 - .7 Inspection certificates.
- .2 Label record documents and file in accordance with Section number listings in List of Contents of this Project Manual.
 - .1 Label each document "PROJECT RECORD" in neat, large, printed letters.
 - .2 Maintain record documents in clean, dry and legible condition.
 - .3 Do not use record documents for construction purposes.
- .3 Keep record documents and samples available for inspection by Departmental Representative.

1.3 RECORDING INFORMATION ON PROJECT RECORD DOCUMENTS

- .1 Record information on two sets of drawings and specifications.
- .2 Provide and use felt tip marking pens, maintaining separate colours for each major system, for recording information.
- .3 Record information concurrently with construction progress.
 - .1 Do not conceal Work until required information is recorded.
- .4 Contract Drawings and shop drawings: mark each item to record actual construction, including:
 - .1 Measured horizontal and vertical extent of work completed. Provide measurements of areas where work is completed.

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- .2 Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
- .3 Measured locations of internal utilities and appurtenances, referenced to visible and accessible features of construction.
- .4 Measured horizontal and vertical locations of excavated, cut, Landfill Waste.
- .5 Measured horizontal and vertical locations of backfilled areas. Provide measurements of backfilled areas for each type of fill including, but not exclusively, Landfill Waste, Impacted Soils.
- .6 Measured horizontal and vertical locations of any soil contamination identified.
- .7 As-builts and field changes of dimension and detail. All as built dimensions shall be completed by the use of a total station survey and provided in electronic AutoCAD format.
- .8 Changes made by change orders.
- .9 Details not on original Contract Drawings.
- .10 References to related shop drawings and modifications.
- .11 All existing services and structures encountered during the course of the Work but not removed.
- .5 Specifications: mark each item to record actual construction, including:
 - .1 All work completed, particularly optional items and substitute items.
 - .2 Changes made by Addenda and change orders.
- .6 Other Documents: maintain manufacturer's certifications, inspection certifications, field test records, required by individual specifications sections.
- .7 Provide digital photos, as requested, for site records.
- .8 Maintain tickets/logs, waste manifests, and weigh bills for off-site removal/disposal of hazardous materials. Provide copies to Departmental Representative upon request and within 2 weeks of completion of Works.

1.4 FINAL SURVEY

- .1 Submit final site survey in accordance with Contract Documents, certifying that the certifying that elevations and locations of completed Work are in conformance, or non-conformance with Contract Documents.

1.5 OTHER RECORDS

- .1 Prior to completion of Project, submit the following to the Departmental Representative:
 - .1 Copies of all documents and permits obtained by the Contractor.
 - .2 Results of all testing carried out by the Contractor.
 - .3 Copies of all shipping documents identifying the shipper, the receiver and all carriers involved in the transport of materials.
 - .4 Information as required by the Water License.

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- .5 Information as required by the Quarry Permit.
- .6 Information as required by all other applicable regulatory bodies and AHJ.
- .7 Any other pertinent information
- .2 Consolidate the above information in one (1) document and submit to the Departmental Representative.

1.6 MEASUREMENT OF PAYMENT

- .1 Except as otherwise indicated herein, Work under this section will not be measured. Include all costs in Item BOPC-1, Combined Price Form in the Basis of Payment Schedule. Indicate the cost of this Work as a separate line item in the Cost Breakdown Structure (CBS) specified in Section 01 32 18 – Construction Progress Schedules – Bar (GANTT) Chart.

Part 2 Products

2.1 NOT USED

Part 3 Execution

3.1 NOT USED

END OF SECTION

Part 1 General

1.1 REFERENCES

- .1 Canadian Environmental Protection Act, 1999 (CEPA), c. 33.
- .2 Health Canada/Workplace Hazardous Materials Information System (WHMIS).
- .3 Material Safety Data Sheets (MSDS).
- .4 Transport Canada (TC).
 - .1 Transportation of Dangerous Goods Act, 1992 (TDGA), c. 34.

1.2 DEFINITIONS

- .1 Surface Debris: Landfill materials that are exposed and openly sitting on the ground surface. The materials may or may not require mechanical equipment to access, uncover, extricate or excavate to be packaged or hauled.
- .2 Buried Waste: Landfill materials that are covered, partially covered or below the surface of the surrounding area and require mechanical equipment to access, uncover, extricate or excavate to be packaged or hauled. Applies to work areas AEC 1, AEC 2, and AEC 3.
- .3 Restabilized Landfill Materials. – Any existing AEC-1 side slope surface debris or buried wastes required to be processed and/or cut/crushed in place to construct the stable side slope to attain max 3:1 (horizontal:vertical) grades. Surface debris from AEC-1 (Top and beyond the toe), AEC-2 and AEC-3 to be relocated to AEC-1 and processed/cut/crushed as Restabilized Landfill Material prior to placement of aggregate cover material.

1.3 QUALITY ASSURANCE

- .1 Regulatory Requirements: ensure Work is performed in compliance with CEPA, TDGA, the Land Use Permit, and applicable Federal, Territorial and Provincial regulations.
- .2 During Pre-Construction meeting and in accordance with the contract documents, verify Project requirements, review site conditions and provide co-ordination with other Subcontractors.
- .3 Execute construction occupational health and safety in accordance with the contract documents.

1.4 SCOPE OF WORK

- .1 Scope of activities is as follows but not limited to:
 - .1 Perform work in accordance with Contract Documents.
 - .2 Construct safe access to non-hazardous waste locations.
 - .3 All hazardous materials are to be removed in accordance with the contract documents before handling, moving, cutting/crushing non-hazardous materials.

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- .4 Collect, transport and segregate into stockpiles/caches all surface debris (non-hazardous) from AEC 2 and AEC 3, as indicated and as directed.
- .5 Collect, transport and segregate into stockpiles/caches all surface debris (non-hazardous) from the top of AEC 1 and beyond the toe, as indicated and as directed.
- .6 Non-hazardous debris material transported to the AEC-1 slope shall be cut to sizes no more than 2 m long, 300 mm high and 500 mm wide prior to disposal in AEC 1.
- .7 Non-hazardous debris (buried and surface) located along the slope of the landfill at AEC 1 to be managed in place during the construction of the Restabilized Landfill Materials side slopes as indicated.
- .8 Once the AEC-1 side slope has been prepared to receive non-hazardous wastes, transport and place all non-hazardous debris for disposal within the side slope of AEC 1.

1.5 SITE CONDITIONS

- .1 Arrange for site visit with the Departmental Representative to examine existing site conditions adjacent to non-hazardous waste work, prior to start of Work.
- .2 Review the site conditions upon arrival to the site and amend the workplan and schedule in consultation with Departmental Representative.
- .3 The topography of the area is generally flat at the top with steeply angled slopes. Geology on Site consists of glacially derived interbedded silt/clay and sand/gravel.
- .4 Additional Site information can be obtained from the appended reports that have been included for INFORMATION ONLY purposes.

1.6 PROTECTION

- .1 Perform all Work safely and in accordance with the contract documents.
- .2 Ensure proper handling and disposal procedures are maintained throughout the Project
- .3 Ensure that the Work does not adversely affect adjacent watercourses, groundwater and wildlife, or contribute to excess air and noise pollution.
- .4 Burning debris is strictly forbidden on site.
- .5 Do not dispose of contaminated water or other wastes into watercourses. Ensure proper disposal procedures are maintained throughout the Project.
- .6 Control disposal or runoff of water containing suspended sediments or other harmful substances by collecting and directing the water to a pre-determined pit or other measures as approved by the Departmental Representative.

1.7 ESTIMATED QUANTITIES

- .1 Estimated quantities of non-hazardous materials on the Resolute Bay Airport sites to be landfilled at AEC 1 as Restabilized Landfill Materials are as follows:
 - .1 300 m³ non-hazardous surface debris at AEC 3.
 - .2 20 m³ of scattered surface debris located at the bottom of the ravine north of AEC 3.

- .3 300 m³ non-hazardous surface and buried debris at AEC 2.
- .4 350 m³ non-hazardous surface debris located on top of landfill at AEC 1.
- .5 60 m³ non-hazardous surface debris located beyond the toe of slope at AEC 1.
- .6 23,000 m³ of non-hazardous debris (buried and surface) located along the slope of the landfill at AEC 1 to be cut/crushed or otherwise processed in place during the construction of the side slopes as indicated.

1.8 MEASUREMENT OF PAYMENT

- .1 Include all direct costs for work and services required to consolidate, transport and cut/crush and prepare material for landfilling the non-hazardous material from the top and beyond the toe of AEC 1 into the slope of AEC-1 in the lump sum price item 02 14 13-1 - Consolidate, Transport, Cut/Crush, and Place Non-Hazardous Material from AEC 1 (Top and beyond Toe) at AEC-1 Slope, as indicated in the Combined Price Form.
- .2 Include all direct costs for work and services required to consolidate, transport and cut/crush and prepare material for landfilling the non-hazardous material from AEC 2 into the slope of AEC-1 in the lump sum price item 02 14 13-2 - Consolidate, Transport, Cut/Crush, and Place Non-Hazardous Material from AEC 2 at AEC-1 Slope, as indicated in the Combined Price Form.
- .3 Include all direct costs for work and services required to consolidate, transport and cut/crush and prepare material for landfilling the non-hazardous material from AEC 3 into the slope of AEC-1 in the lump sum price item 02 14 13-3 - Consolidate, Transport, Cut/Crush, and Place Non-Hazardous Material from AEC 3 (Boneyard and Ravine) at AEC-1 Slope, as indicated in the Combined Price.
- .4 Except as otherwise indicated herein, Work under this section will not be measured. Include all costs in Item BOPC-1, Balance of Project Costs in the Combined Price Form. Indicate the cost of this Work as a separate line item in the Cost Breakdown Structure specified in Section 01 32 18 – Construction Progress Schedules – Bar (GANTT) Chart.

Part 2 Products

2.1 EQUIPMENT

- .1 Leave equipment and machinery running only while in use, except where extreme temperatures prohibit shutting down.
- .2 Equipment and heavy machinery to meet all applicable emission requirements and operate in compliance with applicable Federal and Territorial regulations and standards.

Part 3 Execution

3.1 PREPARATION

- .1 Inspect site with the Departmental Representative and verify extent and location of non-hazardous materials designated for removal and stockpiling/caching.

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- .2 Provide erosion control.
- .3 Locate stockpiled materials to eliminate cross contamination and double handling wherever possible.
- .4 Prior to non-hazardous debris collection, remove hazardous materials defined by authorities having jurisdiction, as per contract documents.
- .5 The hazardous materials to be removed from site as outlined in the contract documents.

3.2 HANDLING, SEGREGATION AND STOCKPILING OF DEBRIS

- .1 Completely remove all surface debris from AEC 1, AEC 2 and AEC 3, cut/crush and place in AEC-1 side slope landfill unless otherwise directed by Departmental Representative.
- .2 Advise Departmental Representative of any stained soil encountered during debris removal operations; location GPS coordinates to be recorded. If authorized by Departmental Representative, excavate stained and contaminated area identified during non-hazardous material removal operations. If required, testing of underlying stained soils for environmental quality will be carried out and paid for by Departmental Representative.
- .3 Reduce size and shape of non-hazardous materials, as practical, to facilitate ease of packaging, transport and stockpiling in AEC 1.
- .4 Transport and stockpile, if necessary, all non-hazardous materials from AEC 2 and AEC 3 for landfilling in AEC 1.
- .5 For placement in landfill at AEC 1 cut all material and debris as required:
 - .1 Large equipment/vehicles shall be reduced in volume at the recommendation and discretion of the Departmental Representative
 - .2 All remaining non-hazardous debris material shall be cut to sizes no more than 2 m long, 300 mm high and 500 mm wide.
- .6 Place non-hazardous material in AEC-1 landfill side slope as indicated in the contract documents.
- .7 The Contractor shall carry out all construction operations within the work areas approved by the Departmental Representative and Authorities Having Jurisdiction in a workmanlike manner so as to minimize damage to the sites, and shall, after such work, restore the site to the original level and condition.

3.3 RESTORATION

- .1 All areas within the work area used for site storage, temporary stockpiles, transport, site access, or remedial Work, must be returned to original conditions for use at no extra cost to the Owner or the Departmental Representative.
- .2 Use procedures that are not harmful to health, are not injurious to vegetation, and do not endanger wildlife, adjacent water courses or ground water.

END OF SECTION

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Part 1 General

1.1 RELATED REQUIREMENTS

- .1 Section 31 05 16 - Aggregate Materials
- .2 Section 31 23 33.01 - Excavating, Stockpiling and Backfilling

1.2 SUMMARY

- .1 Section includes Optional Work Package requirements related to the management of petroleum hydrocarbon (PHC) and co-mingled PHC and metal impacted soils within AEC-3 as indicated.
- .2 Work Includes:
 - .1 Co-ordination, supervision and preparation for treatment of contaminated soil.
 - .2 Provision and installation of materials and equipment necessary to remediate site.
 - .3 Implementation of safety work zones, site Health and Safety Plans, and Emergency Response Plans.
 - .4 Ensure that soil remediation program has no lasting impact on the environment.
 - .5 Construction of water control and recovery structures, as required.
 - .6 Backfilling of excavations and site restoration will be as per Section 31 22 15 Grading and not part of the work described herein.
- .3 Payment for work will be on a unit rate basis as identified herein.

1.3 REFERENCES

- .1 Applicable environmental and health and safety laws and regulations for [Territory] of Nunavut. In cases where divergent or conflicting codes exist, apply the most stringent code.
- .2 Canadian Council of Ministers of the Environment (CCME) Documentation.
- .3 Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health (PEHH) by Canadian Council of Ministers of the Environment (CCME), 2007.
- .4 Applicable environmental and health and safety laws and regulations for the Nunavut Territory.
- .5 Transport Canada (TC)
 - .1 Transportation of Dangerous Goods Act, 1992 (TDGA)

1.4 DEFINITIONS

- .1 Petroleum Hydrocarbon (PHC) Contaminated soil: soil having concentrations of benzene, toluene, ethylbenzene and xylenes (BTEX) parameters above the CCME BTEX residential/parkland standards, and/or petroleum hydrocarbons above the CCME CWS residential/parkland values for F1 Fractions, F2 Fraction, F3 Fraction, and F4 Fraction.

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- .2 Co-Mingled Soils: PHC Contaminated soils also having concentrations of one or more metal parameters above the CCME residential/parkland values .
- .3 Free Product The presence of a layer of separated phase liquid petroleum hydrocarbon product.
- .4 Clean Material: Material that has been sampled, analyzed, and determined to have petroleum hydrocarbon fraction concentrations below the site Standards outlined above.

1.5 DESCRIPTION OF OPTIONAL WORK

- .1 All works described within this section are Optional Work activities that will added to the contract and the main scope of work should the Owner exercise their right to award the Contractor this Work.
- .2 This section specifies the requirements for the excavation, transport and off-site disposal of contaminated material (soils), including the following:
- .3 PHC Contaminated Soils.
 - .1 Excavation, loading, hauling and disposal of hydrocarbon contaminated soils as identified on the Drawings.
 - .2 Cleanup standards as per Article 1.4.
- .4 Co-Mingled contaminated material.
 - .1 Excavation, loading, hauling and disposal of metals contaminated soils as identified on the Drawings.
 - .2 Cleanup standards as per Article 1.4.

1.6 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Provide submittals in accordance with Section 01 33 00 - Submittal Procedures.

1.7 DELIVERY, STORAGE AND HANDLING

- .1 Perform Work in a safe workmanlike manner and in accordance with the contract documents.
- .2 Store, handle, manage, transport and dispose contaminated materials (soils) in accordance with the Water License, CEPA, TDGA and applicable Federal and Territorial laws, regulations, codes and guidelines.
- .3 Co-ordinate collection, handling, packaging, and transport of contaminated materials (soils) with the Departmental Representative and abide by requirements for labelling under WHMIS and TDG Act and Regulations.
- .4 Place contaminated materials (soils) in designated containers/packaging, segregated by types, for storage in marine shipping containers until they can be mobilized, transported and shipped by the Contractor to a Departmental Representative approved landfill or treatment facility.

1.8 TRANSPORTATION

- .1 Transport hazardous materials and wastes in accordance with Federal Transportation of Dangerous Goods Act, Transportation of Dangerous Goods Regulations, and applicable Federal and Territorial regulations.

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- .2 Prior to transporting packaged Contaminated materials (soils), allow for inspection by Departmental Representative. Fix erroneously packaged materials immediately.
- .3 Label containers with durable, legible, visible safety marks as prescribed by Federal, Territorial and Provincial regulations.
- .4 Ensure that only certified trained personnel handle, offer for transport, or transport dangerous goods.
- .5 Provide daily logs of the storage of Contaminated materials (soils), by type, work area of origin and quantities.
- .6 Provide a final log of all Contaminated materials (soils) to be shipped for disposal at the approved landfill.
- .7 Provide digital, scanned .pdf copies, of shipping documents and waste manifests to Departmental Representative.
- .8 Track receipt of completed manifest from consignee after shipping dangerous goods. Provide photocopy of completed manifest to Departmental Representative.
- .9 Report any discharge, emission, or escape of Contaminated materials (soils) immediately to the Departmental Representative and appropriate provincial authority. Take reasonable measures to control release.
- .10 Report spills and accidents immediately to Departmental Representative. Submit a written spill report to Departmental Representative within 24 hours of incident.

1.9 QUALITY ASSURANCE

- .1 Be thoroughly familiar with and knowledgeable about existing site conditions scope of work and requirements of the Specification.
- .2 Only Contractor's personnel capable of demonstrating a history of satisfactory experience in the area of excavation and remedial works and who can satisfy Federal and Territorial requirements will be permitted to carry out the work of this Section. The Contractor's Superintendent responsible for the work of this Section is to have an appropriate level of experience in the area remedial works.
- .3 Follow at all times, guidelines such as those established in Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities: NIOSH Publication No. 85-115, or Hazardous Waste Worker Training Manual: Canadian LIUNA - Contractors Training Council, 1992.
- .4 All activities involving the handling of hazardous materials, including Hazardous Contaminated Soils, are to be directly supervised by the Contractor's personnel who have successfully completed a 40 hour training course for Hazardous Waste Activities in compliance with OSHA 29 CER 1910.120 or other approved equivalent training courses such as the Canadian Hazardous Waste Workers Program.
- .5 Contractor's personnel trained as described in this Section are to instruct and direct all workers with respect to the waste management procedures and labour and safety practices to be followed in carrying out the work.
- .6 Provide workers and the Departmental Representative's staff, when required, with protection appropriate to the potential type and level of contaminant exposure. Establish specific safety protocols prior to commencing clean up activities.

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- .7 Provide suitable safety clothing and equipment as required during the course of the work.
- .8 Trained and certified personnel are required to complete all Transportation of Dangerous Goods Act (TDGA) documentation and recording requirements.
- .9 Field Samples:
 - .1 Departmental representative will be responsible for the collection, shipping and payment of soil remediation verification samples.
 - .2 Support Departmental Representative in the collection of verification samples.
 - .3 The Departmental Representative will advise the contractor in writing of the results of verification testing in advance of site restoration work.
 - .4 It is anticipated that test results will be available within approximately fourteen (14) calendar days from the date that samples are transported from the site for laboratory analysis

1.10 SITE CONDITIONS

- .1 Review supporting documentation that described the extent of known Contaminated materials on-site.
- .2 No underground services present on-site. Prevent damage to above grade utility services.
- .3 Suspend operations whenever climatic conditions are unsatisfactory for excavating or regrading to conform with this Specification.
- .4 After occurrence of heavy rains, do not operate equipment in designated areas until the material has dried sufficiently to prevent excessive rutting.
- .5 The Contractor is advised that the ground in low-lying areas may often be saturated. Dewater saturated ground and ponded areas as required, complying with the Hamlet of Resolute by-laws and Territorial Guidelines.
- .6 Prior to the commencement of the work, remove snow, ice and standing water from areas to be excavated.
- .7 During excavation of contaminated soil, maintain a stable excavation and dewater as required or as directed by the Departmental Representative.

1.11 PROTECTION

- .1 Prevent damage to existing structures not part of this work. Immediately repair or replace any damage to the above, at no cost to the Departmental Representative or Owner.
- .2 Environmental protection measures are to be in accordance with the requirements specified in Section 01 35 43 - Environmental Procedures.
- .3 Prevent damage to existing services, i.e. hydro lines.
- .4 The release of all water resulting from the dewatering of ponded contaminated soil areas and the decontamination of excavation equipment is to be free from sediment and conform to applicable Discharge Criteria.

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1.12 PERSONNEL PROTECTION

- .1 Some areas designated for cleanup under this contract involve soils which contain hydrocarbons, which are considered hazardous to human health.
- .2 When working with hydrocarbons, and other contaminants, workers are to wear protective clothing and equipment acceptable to Labour Canada or Territorial Labour Department as suitable for exposure in the work area. Follow National Institute for Occupational Safety and Health (NIOSH) guidelines in providing protection for on-site personnel including contract employees and subcontractor, the Departmental Representative and other authorized site personnel. Provide details of protective clothing and equipment required for each work area in the Site Specific Health and Safety Plan as required by Section 01 35 32 - Site Specific Health and Safety Plan.
- .3 Supply sufficient quantities of designated protection equipment to fit all site personnel including the Departmental Representative and authorized visitors,. Educate workers as to risks, and train in safe work practices.

1.13 Measure of Payment

- .1 Include all direct costs in the unit price per cubic metre in-place for Item 02 61 00-C1 – Excavation, On-site Transportation and Packaging of PHC Contaminated Soil, excavated final quantities as determined by survey. The unit cost includes, but is not limited to, the following:
 - .1 Remedial excavation of PHC Soil from AEC-3 areas, as shown in Drawings.
 - .2 Hauling excavated soils on-site including any temporary storage or stockpiling of soils.
 - .3 Packaging excavated soil and loading into the shipping containers.
- .2 Include all direct costs in the unit price per cubic metre in-place for Item 02 61 00-C2 – Excavation, On-site Transportation and Packaging of Co-Mingled PHC Contaminated Soil, excavated final quantities as determined by survey. The unit cost includes, but is not limited to, the following:
 - .1 Remedial excavation of PHC Soil from AEC-3 areas, as shown in Drawings.
 - .2 Hauling excavated soils on-site including any temporary storage or stockpiling of soils.
 - .3 Packaging excavated soil and loading into the shipping containers.
- .3 Include all direct costs in the unit price per tonne for Item 02 61 00-C3 – Off-site Transport and Disposal at licensed disposal facility: PHC Impacted Soils, excavated final quantities as determined by disposal facility's waste manifests. The unit cost includes, but is not limited to, the following:
 - .1 Preparation of shipping containers for transport.
 - .2 Transport to and loading Shipping containers containing Contaminated soils onto a barge/ship.
 - .3 Marine and Land transport of Shipping containers containing Contaminated soils to southern waste facility approved by the Departmental Representative.
 - .4 All costs associated with the disposal of the Contaminated soils and necessary reporting.

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- .4 Include all direct costs in the unit price per tonne for Item 02 61 00-C4 – Off-site Transport and Disposal at licensed disposal facility: Co-Mingled Soils, excavated final quantities as determined by disposal facility's waste manifests. The unit cost includes, but is not limited to, the following:
 - .1 Preparation of shipping containers for transport.
 - .2 Transport to and loading Shipping containers containing Contaminated soils onto a barge/ship.
 - .3 Marine and Land transport of Shipping containers containing Contaminated soils to southern waste facility approved by the Departmental Representative.
 - .4 All costs associated with the disposal of the Contaminated soils and necessary reporting.
- .5 The following activities are considered incidental to the work identified by Items 02 61 00-1 and 02 61 00-2 and will not be measured separately:
 - .1 Equipment decontamination including preparation and operation of the equipment decontamination area.
 - .2 Dewatering of ponded contaminated soil areas, as required.
 - .3 Dewatering of groundwater from contaminated soil areas, as required
 - .4 Supply, installation and operation of materials and equipment for a water management and collection system as required
 - .5 Record Keeping.
 - .6 Provision of all necessary safety equipment and clothing.
 - .7 Excavation and backcasting of clean soil overlying areas of contaminated material at the direction of the departmental representative
 - .8 Installation of environmental controls, such as silt fences etc.
 - .9 Excavation of contaminated soils from within permafrost-affected zones.
 - .10 Excavation, transport, and disposal of non-hazardous debris to the AEC 1 landfill unearthed or exposed during excavation.
- .6 No extra payment will be made for soil removal from beyond the specified limits of excavation, unless such removal has been specifically directed by the Departmental Representative. The volume of contaminated soil excavation beyond the specified limits that have been approved by the Departmental Representative will be determined by the measured volume in the container.
- .7 Except as otherwise indicated herein, Work under this section will not be measured. Include all costs in Item BOPC-1, Balance of Project Costs in the Combined Price Form. Indicate the cost of this Work as a separate line item in the Cost Breakdown Structure specified in Section 01 32 18 – Construction Progress Schedules – Bar (GANTT) Chart.

Part 2 Products

2.1 MATERIALS

- .1 Not used.

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2.2 EQUIPMENT

- .1 Not used.

Part 3 Execution

3.1 EXCAVATION OF CONTAMINATED MATERIAL

- .1 Lay out excavation area of contaminated soil to the limits as indicated. The layout is to be field verified by the Departmental Representative prior to excavation. Survey and record on record set of drawings the original ground topography
- .2 Excavate area of contaminated soil to the limits as indicated
- .3 Suppress dust generated during excavation operations with a water spray. Prevent surface water from entering the excavated area.
- .4 Dewater ponded contaminated maternal area, as required. Maintain contaminated material excavation free of standing water during soil removal confirmatory sampling and backfilling activities. Manage and treat waste water and comply with the regulatory requirements as indicated in Section 01 35 43 - Environmental Procedures.
- .5 When excavating in the vicinity of a drainage course or a body of water, erect silt fences, floating silt curtains and/or containment berms to prevent the release of sediment and deleterious materials into the water.
- .6 Clean the excavating equipment including the bucket, tracks etc. of soil clumps and particles prior to demobilizing. Collect and dispose of the removed material in accordance with the contaminated soil designation Take special precautions to mitigate the tracking of contaminated soil over the site area.
- .7 Do not operate equipment in contaminated soil areas that have been excavated until the Departmental Representative has confirmed, based on the results of confirmatory testing, that no further excavation of contaminated soil in the area is required.
- .8 Once directed by the Departmental Representative, supply borrow granular material to backfill excavation areas to original ground, as specified in Section 31 23 33 – Excavating, Stockpiling and Backfilling.

3.2 EROSION, SEDIMENT AND DRAINAGE CONTROLS

- .1 Prior to commencement of the work, install temporary erosion, sediment and drainage controls to prevent siltation and disruption of water bodies in accordance with this Section and Section 01 35 43 - Environmental Procedures.
- .2 Erosion, sediment and drainage controls are to be maintained during all stages of work.
- .3 At the completion of contaminated soil excavation, remove the erosion sediment and drainage controls, as directed by the Departmental Representative. Dispose of all non-granular erosion, sediment and drainage control materials off-site.

3.3 EQUIPMENT DECONTAMINATION

- .1 Decontaminate equipment which comes into direct contact with the contaminated soils by steam cleaning or other means acceptable to the Departmental

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- Representative in a secure area capable of containing the waste generated by the washing operation
- .2 Collect and dispose of any contaminated soil that leaks, spills or otherwise leaves the piece of equipment during transport from the area of work to the decontamination area.
 - .3 Filter liquid waste resulting from the decontamination operation through an oil-absorbent material. Package and dispose of any oil-absorbent material in accordance with TDGA and dispose off-site at a licensed disposal facility.
 - .4 Treat any waste soil resulting from the decontamination procedure as hydrocarbon contaminated material, and handle accordingly.

END OF SECTION

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Part 1 General

1.1 INTRODUCTION

- .1 This section specifies the requirements for the collection, containerization, transport and disposal of hazardous waste from AEC 1, AEC 2 and AEC 3.
- .2 Work Includes: the collection and packaging of hazardous materials from AEC 1, 2 and 3 for transport and disposal to an approved hazardous waste landfill, as outlined in these specifications.

1.2 REFERENCES

- .1 Health Canada/Workplace Hazardous Materials Information System (WHMIS).
 - .1 Material Safety Data Sheets (MSDS).
- .2 Transportation of Dangerous Goods Act, 1992 (TDGA), c. 34.
- .3 Transportation of Dangerous Goods Act (TDG Act) 1999, (c. 34).
- .4 Transportation of Dangerous Goods Regulations (T-19.01-SOR/2003-400).
- .5 Environmental Protection Act, RSNWT (Nu) 1988, c E-7 (Supp)
- .6 Water Resources Agreement Act, RSNWT (Nu) 1988, c 17 (Supp)
- .7 Nunavut Safety Act RSNWT (Nu) 1988 cS-1
- .8 International Maritime Organization (IMO).
 - .1 International Maritime Dangerous Goods Code, 2016 (IMDG Code).

1.3 DEFINITIONS

- .1 Hazardous Material: product, substance, or organism that is either dangerous goods or a material that may cause adverse impact to environment or adversely affect health of persons, animals, or plant life when released into the environment.
- .2 Hazardous Waste Material: hazardous material no longer used for its original purpose and that is intended for recycling, treatment or disposal. The following items are designated as hazardous:
 - .1 Asbestos (unbagged).
 - .2 Batteries.
 - .3 Solvents.
 - .4 Antifreeze/Glycols.
 - .5 Pesticides.
 - .6 Ozone Depleting Substances.
 - .7 Transformer oils containing polychlorinated biphenyls (PCB) in excess of 2 ppm.
 - .8 Hazardous Lead-Amended Painted Material containing leachable lead concentrations in excess of 5 mg/L.
 - .9 Soils containing Petroleum Hydrocarbons (PHCs) and metals in concentrations above the applicable guidelines.

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- .10 Miscellaneous Hazardous Materials defined as those materials not classified as above but suspected to fall under the definition of Hazardous Wastes and Materials as specified in this section.
- .3 Processing: The sampling, testing, packaging and containerization of suspected Hazardous Waste Materials.
- .4 Hazardous Waste Containers: The container necessary to contain Hazardous Waste Material (solids and liquids) as required by the TDGA.
- .5 Marine Shipping Container: The container into which the Hazardous Waste containers are placed for the purpose of shipping to a disposal facility.
- .6 Temporary Processing Area: The designated area approved by the Departmental Representative for testing, packaging and containerization of waste material. Requirements for the Temporary Processing Area are outlined in this Section.
- .7 Temporary Storage Area: The designated area approved by the Departmental Representative for the storage of packaging and/or shipping containers prior to transportation off-site. Requirements for the Temporary Storage Area are outlined in this Section.
- .8 Contractor's Designated Hazardous Waste Disposal Facility: The Licensed Hazardous Waste Disposal Facility designated by Contractor and pre-approved by the Departmental Representative for the disposal of hazardous wastes specified under the provisions of this contract. Contractor must be able to provide documentation from the Designated Hazardous Waste Disposal Facility indicating full responsibility for all hazardous waste received from Resolute Bay airport landfill sites.
- .9 Waste: Any physical object deposited within any of the work areas whether inert, hazardous or non-hazardous.
- .10 Landfill Materials: All non-hazardous originating from the former landfills and storage areas (AEC 1 to AEC 3) requiring transport, processing and placing within the Solid Waste Landfill (AEC 1).
- .11 Non-Hazardous Waste: Waste materials historically generated by the Airport and placed within the work area. Generally, it includes domestic waste and demolition debris. Same meaning as Landfill Waste, Debris, Garbage, Domestic Waste, and Construction Debris.
- .12 Buried Waste: Landfill materials that are covered, partially covered or below the surface of the surrounding area and require mechanical equipment to access, uncover, extricate or excavate to be packaged or hauled. Applies to work areas AEC 1, AEC 2, and AEC 3.
- .13 Surface Waste: Landfill materials that are exposed and openly sitting on the ground surface. The materials may or may not require mechanical equipment to access, uncover, extricate or excavate to be packaged or hauled. Applies to AEC 1, AEC 2, and AEC 3.
- .14 Hazardous Solid Wastes: Hazardous waste materials that are in a consolidated, solid, encapsulated or powder form within the work area. Generally, it includes transformers, batteries, fire extinguishers, asbestos containing materials and/or pesticides. Same meaning as Hazardous Materials, Designated Substances, Toxic Materials and Toxic Wastes.

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- .15 Hazardous Fluid Wastes: Hazardous waste materials that are in a liquid, gaseous, gel-like or colloidal form within the work area. Generally, it includes paint, antifreezes, lubricants, fuels, glycols, ozone depleting substances and/or pesticides. Same meaning as Hazardous Materials, Hazardous Liquids, Designated Substances, Toxic Materials and Toxic Wastes.
- .16 Lead Amended Paint Wastes: All painted materials within the Contract Documents as exceeding the territorial Environmental Guideline for Waste Lead and Lead Paint or as identified by Departmental Representative during the course of the Work.
- .17 Asbestos-Containing Materials (ACMs): materials identified under Existing Conditions including fallen materials and settled dust that contain asbestos greater than 1% by weight.
- .18 Asbestos Waste: Asbestos that is no longer useable for its intended purpose and is intended for disposal. It includes any type of material with greater than 1% asbestos by weight.
- .19 Unknown Hazardous Material: Material designated as hazardous in accordance with the definition of Hazardous Waste Material in this section, and which has not been identified for collection and disposal in specifications and Drawings.

1.4 SUBMITTALS

- .1 All submittals must be in accordance with the contract documents.
- .2 Hazardous Waste Management Plan
 - .1 Submit a minimum ten (10) days prior to carrying out **an works** related to hazardous Materials a project specific Hazardous Waste Management Plan highlight the means, methods and supplies requirement to carry out the works include the following items:
 - .1 List all categories/type of waste, both hazardous and non-hazardous.
 - .2 Identify all materials in each category by type that will be disposed off-site at an approved disposal facility, identifying the licensed carrier and disposal facility site name, address, and telephone number.
 - .3 Provide a written plan providing details on the construction and utilization of Hazardous Waste Materials Processing Areas for the separation, handling and containerization of hazardous waste materials.
 - .4 Provide a written plan providing details on the construction and utilization of Temporary Storage Areas for the segregation and storage of hazardous waste materials while waiting for transport to an off-site disposal facility.
 - .5 Provide a weekly inventory of containers and contents within HW Materials Processing Area.
 - .6 Asbestos Abatement plan, per Section 02 82 00.
 - .3 Exhaustive list and quantities of all Hazardous Materials packaged, transported and disposed of at a Departmental Representative approved landfill.
 - .4 Submit Waste Disposal Certificate seven (7) days following disposal, include;
 - .1 Waste transport manifests.

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- .2 Chains of custodies.
- .3 Disposal Certificates or other proof of receipt at the approved waste facility

1.5 QUALITY CONTROL

- .1 Regulatory Requirements: ensure Work is performed in compliance with CEPA, TDGA, the Land Use Permit, and all applicable Federal and Territorial regulations.
- .2 During Pre-Construction meeting and in accordance with the Project requirements, review site conditions and provide co-ordination with other Subcontractors.
- .3 Arrange for site visit with the Departmental Representative to examine existing site conditions in AEC1, AEC 2 and AEC 3 work areas, prior to start of Work.
- .4 Execute construction occupational health and safety in accordance with the contract documents.

1.6 SCOPE OF WORK

- .1 Scope of activities is as follows but not limited to:
 - .1 Collect and package batteries.
 - .2 Collect and package paints.
 - .3 Collect and package lead amended painted material.
 - .4 Collect and package electrical equipment potentially containing PCBs.
 - .5 Inspect barrels in AEC 1, AEC 2, and AEC 3 for the presence of liquid waste. Drain, collect and containerize for off-site disposal any oil, fuel and lubricants encountered.
 - .6 Inspect transformers in AEC 1 and AEC 3 to verify the presence of transformer oil. Drain, collect and containerize for off-site disposal any transformer oil if present. Once emptied, the transformers are to be transported to AEC 1 for disposal. Any transformers that cannot be opened for inspection are to be containerized and prepared for off-site disposal.
 - .7 Collect asbestos-containing material and containerize per Contract Documents.
 - .8 Collect and package miscellaneous hazardous debris, segregate by type.
 - .9 On site transport and loading of the packaged hazardous materials to 26 Owner supplied marine shipping (sea) containers transferred to the Contractor.
 - .10 Off site transport and loading of supplied shipping containers to the Contractor arranged barge for disposal off-site at an approved facility.

1.7 DELIVERY, STORAGE AND HANDLING

- .1 Perform Work in a safe workmanlike manner and in accordance with the contract documents.
- .2 Store, handle, manage transport and dispose hazardous materials in accordance with the Water License, CEPA, TDGA and all applicable Federal and Territorial laws, regulations, codes and guidelines.

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- .3 Co-ordinate collection, handling, packaging, and transport of hazardous materials with the Departmental Representative and abide by requirements for labelling under WHMIS and TDG Act and Regulations.
- .4 Place materials defined as hazardous in designated containers/packaging, segregated by types, for storage in provided marine shipping containers (already on site) until they can be mobilized, transported and shipped by the Contractor to a Departmental Representative approved landfill or treatment facility.

1.8 TRANSPORTATION

- .1 Transport hazardous materials and wastes in accordance with Federal Transportation of Dangerous Goods Act, Transportation of Dangerous Goods Regulations, and applicable Territorial regulations.
- .2 If hazardous waste is generated on site:
 - .1 Co-ordinate transportation and disposal with the Departmental Representative.
 - .2 Ensure compliance with applicable Federal, Territorial and Municipal laws and regulations for generators of hazardous waste.
 - .3 Use only licensed carriers authorized by authorities having jurisdiction to accept subject material.
 - .4 Prepare and submit a list of licensed carriers and waste treatment and disposal facilities intended to be used to Departmental Representative for approval.
 - .5 Before shipping material obtain written notice from intended hazardous waste treatment or disposal facility it will accept material and it is licensed to accept this material.
 - .1 Contractor to collect, submit for analysis and pay for any hazardous material samples required to obtain the above acceptance or permission.
- .3 Prior to transporting packaged Hazardous Materials, allow for inspection by Departmental Representative. Fix erroneously packaged materials immediately.
- .4 Label containers with durable, legible, visible safety marks as prescribed by Federal, Territorial and Provincial regulations.
- .5 Ensure that only certified trained personnel handle, offer for transport, or transport dangerous goods.
- .6 Provide daily logs of the storage of Hazardous Materials, by type, work area of origin and quantities.
- .7 Provide a final log of all Hazardous Materials to be shipped for disposal at the approved landfill.
- .8 Provide digital, scanned .pdf copies, of shipping documents and waste manifests to Departmental Representative.
- .9 Track receipt of completed manifest from consignee after shipping dangerous goods. Provide photocopy of completed manifest to Departmental Representative.

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- .10 Report any discharge, emission, or escape of hazardous materials immediately to the Departmental Representative and appropriate territorial authority. Take reasonable measures to control release.
- .11 Report spills and accidents immediately to Departmental Representative. Submit a written spill report to Departmental Representative within 24 hours of incident.

1.9 SITE CONDITIONS

- .1 Ensure that hazardous material removal Work does not adversely affect adjacent watercourses, groundwater and wildlife, or contribute to excess air and noise pollution.
- .2 Do not dispose of wastes into watercourses.
- .3 Ensure proper disposal procedures are maintained throughout the Project.
- .4 Review the site conditions upon arrival to the site and amend the workplan and schedule accordingly. Submit pending amendments to the Departmental Representative for approval before enacting the modified workplan.
- .5 Collect and package hazardous materials from site at the start of the Work and securely store in Contractor supplied shipping containers mobilized and placed in designated Temporary Storage Area by the Contractor.

1.10 ESTIMATED QUANTITIES

- .1 Estimated quantities of exposed hazardous materials identified in the Resolute Landfill work areas are as follows:
 - .1 AEC 1 (Top of Landfill) – Hazardous wastes
 - .1 Batteries = 0.9 m³
 - .2 3 transformers = 0.5 m³
 - .3 Asbestos materials = 0.6 m³
 - .4 Liquid waste (fuel, oil, lubricants) = 1,500 L
 - .2 AEC 3 - Hazardous waste
 - .1 Batteries = 0.3 m³
 - .2 19 transformers = 12.6 m³
 - .3 Lead amended painted material = 660 m³
 - .4 Asbestos materials = 0.8 m³
 - .5 Liquid waste (fuel, oil, lubricants) = 1,900 L
- .2 Unknown hazardous waste materials: though not anticipated, any unknown hazardous waste materials which might be exposed during the excavation and removal of debris located along the face of the landfill are to be handled as described herein.

1.11 MEASUREMENT OF PAYMENT

- .1 Include all direct costs to remove, consolidate and package/ contain identified Hazardous Wastes in the lump sum price for Item 02 81 01-1 – Remove, Consolidate and Package all identified Solid Hazardous Wastes including: Lead (Pb) Painted Waste, Batteries Liquid Wastes and Transformers., as indicated in the Combined Price Form. The lump sum work item includes, but is not limited to, the following:

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- .1 Labour, equipment and materials to remove and collect identified Hazardous Materials including segregation or separation from Non-Hazardous Materials.
 - .2 Labour equipment and supplies required for draining and collecting the fluid hazardous liquid material from tanks, drums, and transformers
 - .3 Proper PPE for workers as required by all applicable regulations.
 - .4 Supply and transport to site of containers required to transport hazardous materials, including packaging, labels and signage for safe and secure transport.
 - .1 Containers must be appropriate for the type of waste transported.
 - .5 Management of processing areas as required to consolidate and contain waste materials.
 - .6 All required labelling, signage and protection of storage areas required by applicable regulations.
 - .7 Staging/ temporarily storing of containerized Hazardous Materials for pending off-site transport.
 - .8 Containerized hazardous waste shall meet all the requirements of the TDG Act and Regulations CEPA Regulations, Interprovincial Movement of Hazardous
 - .9 Waste Regulation and all other applicable Regulations.
 - .10 Preparing container inventory, tracking and submittals of all appropriate documentation to Departmental Representative and AHJ.
 - .11 All costs associated with repackaging of container contents resulting from the Contractor failing to properly pack and secure the container and/or its contents.
 - .12 Any and all analytical testing of materials required by the Contractor's Designated Hazardous Waste Disposal Facility and territorial or provincial regulations as applicable.
- .2 Include all direct costs for transporting off-site and disposal of Lead (Pb) Painted Waste in the cubic meters (m3) unit cost for Item 02 81 01-2, as measured by in existing conditions including measurements of length, width, height and estimated void space, as agreed upon with the Departmental Representative. The unit cost work item includes, but is not limited to, the following:
- .1 Any and all analytical testing of materials required by the Contractor's Designated Hazardous Waste Disposal Facility and territorial or provincial regulations as applicable.
 - .2 Preparation and submission of waste transport manifests to the Departmental Representative to meet all requirements of the TDGA and Regulations and Interprovincial Movement of Hazardous Waste Regulation (IMHWR).
 - .3 Transport-off-site, loading onto barge/ship and transport south.
 - .4 Permitting, transport, and off-loading of the containerized hazardous materials at the Contractor's Designated Hazardous Waste Disposal Facility.
 - .5 Final disposal of the hazardous material.

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- .3 Include all direct costs for transporting off-site and disposal of Batteries in the kilogram (Kg) unit cost for Item 02 81 01-3, as measured by calibrated scale and confirmed by weight tickets. The unit cost work item includes, but is not limited to, the following:
 - .1 Any and all analytical testing of materials required by the Contractor's Designated Hazardous Waste Disposal Facility and territorial or provincial regulations as applicable.
 - .2 Preparation and submission of waste transport manifests to the Departmental Representative to meet all requirements of the TDGA and Regulations and Interprovincial Movement of Hazardous Waste Regulation (IMHWR).
 - .3 Transport-off-site, loading onto barge/ship and transport south.
 - .4 Permitting, transport, and off-loading of the containerized hazardous materials at the Contractor's Designated Hazardous Waste Disposal Facility.
 - .5 Final disposal of the hazardous material.
- .4 Include all direct costs for transporting off-site and disposal of each Transformers in the Combined Price Form for Item 02 81 01-4. The unit cost work item includes, but is not limited to, the following:
 - .1 Any and all analytical testing of materials required by the Contractor's Designated Hazardous Waste Disposal Facility and territorial or provincial regulations as applicable.
 - .2 Preparation and submission of waste transport manifests to the Departmental Representative to meet all requirements of the TDGA and Regulations and Interprovincial Movement of Hazardous Waste Regulation (IMHWR).
 - .3 Transport-off-site, loading onto barge/ship and transport south.
 - .4 Permitting, transport, and off-loading of the containerized hazardous materials at the Contractor's Designated Hazardous Waste Disposal Facility.
 - .5 Final disposal of the hazardous material.
- .5 Include all direct costs for transporting off-site and disposal of Liquid Wastes in the Litres (L) unit cost for Item 02 81 01-4, as measured by the waste facility and confirmed by waste manifests. The unit cost work item includes, but is not limited to, the following:
 - .1 Any and all analytical testing of materials required by the Contractor's Designated Hazardous Waste Disposal Facility and territorial or provincial regulations as applicable.
 - .2 Preparation and submission of waste transport manifests to the Departmental Representative to meet all requirements of the TDGA and Regulations and Interprovincial Movement of Hazardous Waste Regulation (IMHWR).
 - .3 Transport-off-site, loading onto barge/ship and transport south.
 - .4 Permitting, transport, and off-loading of the containerized hazardous materials at the Contractor's Designated Hazardous Waste Disposal Facility.
 - .5 Final disposal of the hazardous material.
- .6 Except as otherwise indicated herein, Work under this section will not be measured. Include all costs in Item BOPC-1, Balance of Project Costs in the Combined Price Form. Indicate the cost of this Work as a separate line item in the Cost Breakdown Structure specified in Section 01 32 18 – Construction Progress Schedules – Bar (GANTT) Chart.

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Part 2 Products

2.1 MATERIALS

- .1 Only bring on site quantity of hazardous materials required to perform Work.
- .2 Maintain MSDSs in proximity to where materials are being used. Communicate this location to personnel who may have contact with hazardous materials.

2.2 EQUIPMENT

- .1 Leave equipment and machinery running only while in use, except where extreme temperatures prohibit shutting down.
- .2 Equipment and heavy machinery to meet all applicable emission requirements and operate in compliance with applicable Federal and Territorial regulations and standards.

2.3 HAZARDOUS MATERIALS CONTAINERS

- .1 Hazardous Waste Packaging Containers:
 - .1 Containers are to satisfy the requirements of the TDG Act and Regulations including the requirements for Intermediate Bulk Containers for marine transport of hazardous materials.
 - .2 Containers are to include all necessary liners to satisfy the TDGA requirements for marine transport.
 - .3 Ensure that packaging containers selected to be used for shipping (intermediate and marine shipping containers) are acceptable to transporting companies prior to importing them to the site.
 - .4 Submit details of the containers to the Departmental Representative for review prior to commencement of the Work.
- .2 Polyethylene sheeting:
 - .1 6 mil (0.15 mm) minimum thickness.
- .3 Intermediate Containers for storage of Hazardous Waste Materials:
 - .1 New drums with sealed lids. Select appropriate size and construction (steel, plastic, etc.) based on quantities and type of Hazardous Material.
 - .2 The Contractor, upon award of the contract, will take ownership of the following new drums located on-site inside one shipping container
 - .1 Five (5) 208-L open head steel drum (UN 1A2/Y1.4/140)
 - .2 Ten (10) 208-L closed head steel drum (UN 1A1/X1.8/300)
- .4 Contain asbestos in accordance with Contract Documents.
- .5 Provide access for the Departmental Representative to inspect all Hazardous Material Packaging as directed by the Departmental Representative.
- .6 For transport by cargo vehicle or vessel, package liquids in sealed drums and place drums inside a secondary containment (such as overpacks, or approved equivalent) on pallets and secure them to the pallets to prevent shifting during transportation.
- .7 All areas used for site storage, stockpiles or remedial Work, must be returned to original conditions at no extra cost to the Departmental Representative.

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Part 3 Execution

3.1 GENERAL REQUIREMENTS

- .1 Conduct all work in accordance with all applicable Federal, Territorial and Provincial legislation.
- .2 Inspect site with the Departmental Representative and verify extent and location of hazardous materials designated for removal and disposal.
- .3 Establish a Hazardous Material Processing Area for the placement of potentially hazardous waste materials for inspection, testing, classification and packaging, as well as for the consolidation and packaging of barrel liquids and sediments, and for the cleaning of barrels.
- .4 Establish a Temporary Storage Area, subject to approval by Departmental Representative, to provide a secure area for containerized Hazardous Waste Material prior to shipment for disposal as described in this Section.

3.2 PROTECTION

- .1 Perform work in a safe and environmentally acceptable manner. Comply with requirements of Contract Documents.
- .2 Avoid releasing any hazardous materials into the environment during handling of hazardous waste materials.
- .3 Ensure that hazardous materials work does not adversely affect adjacent watercourses, groundwater and wildlife, or contribute to excess air and noise pollution.
- .4 Control disposal or runoff of water containing suspended sediments or other harmful substances by collecting and directing the water to a pre-determined pit or other measures as approved by the Departmental Representative.
- .5 In the event of a spill, invoke the Spill Contingency Plan and/or Emergency Response Plan and take appropriate action.
- .6 Provide a full range of cleanup and protective equipment at the site to contain and cleanup spills, and protect personnel, as required. The cleanup equipment is to include booms (sorber and containment), sorbents for cleanup, fire extinguishers for A-B-C fires, overpacks for contaminated soils, pumps, hand shovels, picks and containment barriers such as plastic sheeting. Personnel protective equipment is to include clothing, protective suits, respirators, etc. to comply with potential emergency conditions and in accordance with NIOSH guidelines.
- .7 Site personnel handling hazardous waste material are required to wear protective clothing and equipment suitable for exposure in the work area as per Contract Documents.
- .8 Establish a Hazardous Material Processing Area for the placement of potentially hazardous waste materials for inspection, testing, classification and packaging, as well as for the consolidation and packaging of barrel liquids and sediments, and for the cleaning of barrels.
- .9 Handle materials containing asbestos in accordance with Contract Documents.

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3.3 HAZARDOUS WASTE MATERIAL PROCESSING AND STORAGE AREAS

- .1 Establish a Hazardous Waste Material Processing Area in each area requiring work (AEC 1 and AEC 3) for the purpose of:
 - .1 Sorting, packaging, sampling, and processing hazardous waste materials; and
 - .2 Consolidating compatible hazardous liquids and solids in intermediate containers for off-site disposal at the approved landfill.
- .2 Establish the Hazardous Waste Material Processing Area to:
 - .1 Be of sufficient size and capacity to accommodate the volume of material to be processed at any one time;
 - .2 Provide for the sampling, testing, and packaging of hazardous waste materials and wash water;
 - .3 Minimize the handling of hazardous waste materials;
 - .4 Isolate hazardous materials and wash water from other Work operations;
 - .5 Provide access for consolidation, packaging, cleaning of barrels, and transporting containers to the means of transportation;
 - .6 Be leak-proof and to contain all runoff water, spills, and leaks so as not to contaminate the environment.
- .3 Immediately clean up any spills, leaks, or other releases of liquid or sediment from this area in accordance with the contract documents.
- .4 Submit details of the Hazardous Waste Material Processing Area to the Departmental Representative for review and approval prior to commencing remediation activities.
- .5 Submit details of the containers proposed to be used for handling and storage of hazardous waste materials to the Departmental Representative for review prior to purchasing and mobilizing them to the site. Include all required approvals, as well as a description of the type and volume of containers.
- .6 Establish a Temporary Storage Area for storage of containerized Hazardous Wastes for the purpose of:
 - .1 Safely storing the Packaged Hazardous Goods to be protected from weather, humans, wildlife and vehicles.
 - .2 Loading within the Owner supplied shipping containers.
 - .3 All packaged Hazardous Wastes must be adequately labelled and sealed prior to storing within the marine shipping containers.
 - .4 No stacking of marine shipping containers will be allowed.
- .7 Submit to the Departmental Representative a detailed inventory of the Temporary Storage Area indicating location and contents of each intermediate container.

3.4 REMOVAL AND SORTING OF HAZARDOUS WASTE MATERIALS

- .1 Collect from site all hazardous materials.
- .2 Collect all Hazardous Material surface debris at the site as identified during the preparation of the Waste Disposal Workplan and package, transport and dispose of off-site unless otherwise directed by the Departmental Representative.

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- .3 Reduce size and shape of materials to facilitate ease of packaging, loading, transport and disposal off site.
- .4 Advise the Departmental Representative of any stained soils encountered during debris removal operations. Testing for classification will be carried out and paid for by the Departmental Representative.
- .5 Continually monitor the remediation operation to identify potentially hazardous material.
- .6 Immediately suspend localized operations if suspected hazardous material or debris is identified, immediately notify Departmental Representative and allow visual confirmation of the nature of the material or debris to be established.
- .7 Store suspicious material in a secured area or secured containers, if the nature of the material or debris can't be confirmed. Advise the Departmental Representative about the findings. Material needs to be seized until the nature of the material is confirmed by the Departmental Representative. Testing for classification will be carried out and paid for by the Departmental Representative.
- .8 Take the appropriate action in the event of a spill or other emergency situation.
- .9 Have available a full range of cleanup and protective equipment at the site of debris removal to contain and cleanup spills, and protect personnel as required.
- .10 Site personnel in the vicinity of the debris removal operations or handling hazardous material are required to wear environmental protection equipment in accordance with NIOSH guidelines.
- .11 At the end of each day's work, leave work areas in safe and stable condition.

3.5 CONTAINERIZATION OF LEACHABLE LEAD PAINTED MATERIALS

- .1 Collect leachable lead painted materials, cut/crush and place in marine shipping containers in a manner to minimize voids within the container ensuring that no movement of the material will occur during normal conditions of transport.
- .2 Distribute the weight of the material evenly across the floor of the container. Do not concentrate heavy loads on small areas of the floor.
- .3 Position materials within the container so that the center of gravity is below the half-height of the container.
- .4 Position materials within the container such that lateral bracing for the load is not provided by the sidewalls of the container. Provide and use wood bracing material or strapping to ensure the material does not move during transport. Anchor the strapping material to the fastening loops built into the frame of the container. Anchor the bracing material to the structural frame of the container.
- .5 Lock marine shipping containers within the Temporary Storage Area in a manner that prevents access to the contents by unauthorized personnel.
- .6 Decontaminate all equipment that comes into direct contact with leachable lead based paint during dismantling operations. Place all rags or cloths used during the equipment decontamination in polyethylene bags. Place bags in the Hazardous Waste Materials specified in this Section.

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3.6 PACKAGING, LABELLING AND INVENTORY

- .1 Provide a numbering system and maintain an inventory of all intermediate and marine shipping containers with Hazardous Waste Materials to be transported and disposed off-site.
- .2 Package and label each "hazardous material" in accordance with the Class and Packaging Group as per TDGA.
- .3 Submit to Departmental Representative a copy of the inventory of the contents of each marine shipping container prior to transport.

3.7 RESTORATION

- .1 Restore temporary processing and storage areas and other areas damaged during Work to match condition of adjacent, undisturbed areas.
- .2 Use procedures that are not harmful to health, are not injurious to vegetation, and do not endanger wildlife, adjacent water courses or ground water.

END OF SECTION

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Part 1 General

1.1 REFERENCES

- .1 Department of Justice Canada (Jus).
 - .1 Canadian Environmental Protection Act, 1999 (CEPA).
- .2 Transport Canada (TC).
 - .1 Transportation of Dangerous Goods Act, 1992 (TDGA).
- .3 International Maritime Organization (IMO).
 - .1 International Maritime Dangerous Goods Code, 2016 (IMDG Code).
- .4 Department of the Environment, Government of Nunavut:
 - .1 Environmental Guideline for Management of Waste Asbestos, April 2011.

1.2 DEFINITIONS

- .1 HEPA vacuum: High Efficiency Particulate Air filtered vacuum equipment with filter system capable of collecting and retaining fibres greater than 0.3 microns in any direction at 99.97% efficiency.
- .2 Amended Water: water with non-ionic surfactant wetting agent added to reduce water tension to allow thorough wetting of fibres.
- .3 Asbestos-Containing Materials (ACMs): materials identified under Existing Conditions including fallen materials and settled dust that contain asbestos greater than 1% by weight.
- .4 Asbestos Waste: Asbestos that is no longer useable for its intended purpose and is intended for disposal. It includes any type of material with greater than 1% asbestos by weight.
- .5 Asbestos Work Area: area where Work takes place which will, or may, disturb ACMs.
- .6 Authorized Visitors: Departmental Representative, Departmental Representative's Authorized Personnel or designated representatives, and representatives of regulatory agencies.
- .7 Polyethylene: polyethylene sheeting or rip-proof polyethylene sheeting with tape along edges, around penetrating objects, over cuts and tears, and elsewhere as required to provide protection and isolation.
- .8 Sprayer: garden reservoir type sprayer or airless spray equipment capable of producing mist or fine spray. Must have appropriate capacity for Work.

1.3 SUBMITTALS

- .1 Submittals in accordance with contract documents.
- .2 Submit as part of the Hazardous Waste Management Plan, a written plan explaining the means, methods the Contractor will implement to carry out the

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Asbestos Abatement works, including safety requirements and necessary supplies.

- .3 Submit proof satisfactory to Departmental Representative that suitable arrangements have been made to dispose of asbestos-containing waste in accordance with requirements of authority having jurisdiction.
- .4 Submit Provincial, Territorial and/or local requirements for Notice of Project Form.
- .5 Submit proof of Contractor's Asbestos Liability Insurance.
- .6 Submit to Departmental Representative necessary permits for transportation and storage of asbestos containing waste and proof that asbestos containing waste has been received and properly disposed.

1.4 QUALITY ASSURANCE

- .1 Regulatory Requirements: comply with Federal, Provincial, Territorial, and local requirements pertaining to asbestos, provided that in case of conflict among these requirements or with these specifications, more stringent requirement applies. Comply with regulations in effect at time Work is performed.
- .2 Execute construction occupational health and safety in accordance with the contract documents.
 - .1 Safety Requirements: worker protection.
 - .1 Protective equipment and clothing to be worn by workers while in Asbestos Work Area include:
 - .1 Non-powered reusable or replaceable filter-type respirator equipped with HEPA filter cartridges, personally issued to worker and marked as to efficiency and purpose, suitable for protection against asbestos and acceptable to authorities having jurisdictions.
 - .2 Disposable-type protective clothing that does not readily retain or permit penetration of asbestos fibres, consisting of full-body covering including head covering with snug-fitting cuffs at wrists, ankles, and neck.
 - .2 Eating, drinking, chewing, and smoking are not permitted in Asbestos Work Area.
 - .3 Before leaving Asbestos Work Area, dispose of protective clothing as contaminated waste as specified.
 - .4 Ensure workers wash hands and face when leaving Asbestos Work Area.
 - .5 Ensure that no person required to enter an Asbestos Work Area has facial hair that affects seal between respirator and face.

1.5 WASTE MANAGEMENT AND STORAGE

- .1 Place materials defined as hazardous in designated Asbestos Waste containers.
- .2 Handling and storage of hazardous materials in accordance with the CEPA, TDGA, Regional and Municipal regulations.
- .3 Disposal of asbestos waste generated by removal activities must comply with Federal, Provincial, Territorial and Municipal regulations. Dispose of asbestos

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waste in sealed double thickness 6 ml bags or leak proof drums. Label containers with appropriate warning labels.

- .4 Provide daily logs of ACM handling and storage.

1.6 EXISTING CONDITIONS

- .1 Asbestos Waste was reported as primarily non-friable Asbestos Containing Materials including brake pads, panels and insulation located at the following areas and associated existing bulk volumes:

- .1 0.6m³ at AEC-1 as surficial debris
- .2 0.9m³ at AEC-3 as surficial debris

- .2 Notify Departmental Representative of friable material discovered during Work and not apparent from drawings, specifications, or report pertaining to Work. Do not disturb such material pending instructions from Departmental Representative.

1.7 MEASUREMENT OF PAYMENT

- .1 Include all direct costs to remove, consolidate and package/ contain identified Asbestos Containing Materials (ACM) in the lump sum price for Item 02 82 00-1 – Remove, Consolidate and Package all identified Asbestos Containing Materials (ACM), as indicated in the Combined Price Form. The lump sum work item includes, but is not limited to, the following:

- .1 Labour, equipment and materials to remove and collect identified Hazardous Materials including segregation or separation from Non-Hazardous Materials.
- .2 Labour equipment and supplies required for the protection of the worker and environment.
- .3 Proper PPE for workers as required by all applicable regulations.
- .4 Supply and transport to site of containers required to transport Asbestos Waste, including packaging, labels and signage for safe and secure transport.
 - .1 Containers must be appropriate for the type of waste transported.
- .5 Management of processing areas as required to consolidate and contain waste materials.
- .6 All required labelling, signage and protection of storage areas required by applicable regulations.
- .7 Staging/ temporarily storing of containerized ACMs for pending off-site transport as Asbestos Waste.
- .8 Containerized ACMs shall meet all the requirements of the TDG Act and Regulations CEPA Regulations, Interprovincial Movement of Hazardous
- .9 Waste Regulation and all other applicable Regulations.
- .10 Preparing container inventory, tracking and submittals of all appropriate documentation to Departmental Representative and AHJ.
- .11 All costs associated with repackaging of container contents resulting from the Contractor failing to properly pack and secure the container and/or its contents.

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- .12 Additional costs for analytical testing and/ or transport should materials not be acceptable for receipt at the Contractor's Hazardous Waste Disposal Facility.
- .2 Include all direct costs for transporting off-site and disposal of Asbestos Waste in the kilogram (Kg) unit cost for Item 02 81 01-3, as measured by calibrated scale and confirmed by weight tickets. The unit cost work item includes, but is not limited to, the following:
 - .1 Any and all analytical testing of materials required by the Contractor's Designated Hazardous Waste Disposal Facility and territorial or provincial regulations as applicable.
 - .2 Preparation and submission of waste transport manifests to the Departmental Representative to meet all requirements of the TDGA and Regulations and Interprovincial Movement of Hazardous Waste Regulation (IMHWR).
 - .3 Transport-off-site, loading onto barge/ship and transport south.
 - .4 Permitting, transport, and off-loading of the containerized hazardous materials at the Contractor's Designated Hazardous Waste Disposal Facility.
 - .5 Final disposal of the hazardous material.
- .3 Except as otherwise indicated herein, Work under this section will not be measured. Include all costs in Item BOPC-1, Balance of Project Costs in the Combined Price Form. Indicate the cost of this Work as a separate line item in the Cost Breakdown Structure specified in Section 01 32 18 – Construction Progress Schedules – Bar (GANTT) Chart.

Part 2 Products

2.1 MATERIALS

- .1 Wetting Agent: 50% polyoxyethylene ester and 50% polyoxyethylene ether mixed with water in a concentration to provide thorough wetting of asbestos-containing material.
- .2 Asbestos Waste Containers: contain waste in two separate containers.
 - .1 Inner container: 0.15 mm thick sealable polyethylene waste bag.
 - .2 Outer container: sealable metal or fibre type where there are sharp objects included in waste material; otherwise outer container may be sealable metal or fibre type or second 0.15 mm thick sealable polyethylene bag.
 - .3 Labelling requirements: affix preprinted cautionary asbestos warning in both official languages that is visible when ready for removal to disposal site.
 - .4 Tape: tape suitable for sealing polyethylene to surfaces under both dry and wet conditions using amended water.

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Part 3 Execution

3.1 PROCEDURES

- .1 Before beginning Work, isolate Asbestos Work Area using, minimum, preprinted cautionary asbestos warning signs in both official languages that are visible at access routes to Asbestos Work Area.
 - .1 Remove visible dust from surfaces in the Work area where dust is likely to be disturbed during course of Work.
 - .2 Use HEPA vacuum, or damp cloths where damp cleaning does not create a hazard and is otherwise appropriate.
 - .3 Do not use compressed air to clean up or remove dust from any surface.
- .2 Prevent spread of dust from Asbestos Work Area using measures appropriate to Work to be done.
- .3 Wet materials containing asbestos to be cut, ground, abraded, scraped, drilled, or otherwise disturbed unless wetting creates hazard or causes damage.
 - .1 Use garden reservoir type low - velocity fine - mist sprayer.
 - .2 Perform Work to reduce dust creation to lowest levels practicable.
 - .3 Work will be subject to visual inspection.
- .4 Clean-Up:
 - .1 Frequently during Work and immediately after completion of Work, clean up dust and asbestos-containing waste using HEPA vacuum or by damp cloths.
 - .2 Place asbestos-containing waste in sealed dust-tight waste bags. Treat disposable protective clothing as asbestos waste; wet and fold these items to contain dust, and then place in plastic bags.
 - .3 Clean exterior of each waste-filled bag using damp cloths or HEPA vacuum and place in second clean waste bag immediately prior to removal from Asbestos Work Area.
 - .4 Seal waste bags and place for temporary storage in marine shipping containers. Transport off-site to a pre-approved hazardous waste landfill and dispose of in accordance with requirements of Provincial, Territorial and Federal regulations.
 - .5 Perform final thorough clean-up of Work areas and adjacent areas affected by Work using HEPA vacuum, damp cloths, or other methods approved by the Departmental Representative.

END OF SECTION

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Part 1 General

1.1 DESCRIPTION

- .1 This section specifies the requirements for the processing of aggregates to be incorporated into the work as granular fill or coarse aggregate cover.
- .2 It is anticipated that there will be no requirements for crushing of granular materials to satisfy gradation specifications. There are requirements to select, blend, and/or screen granular materials to satisfy gradation specifications as indicated in this Section. Moisture conditioning of material from borrow sources may be required.
- .3 It is anticipated that there will be a need to prepare and process aggregate, into working stockpiles, in advance of the work. Permafrost within the potential borrow material at the site must be addressed to the Departmental Representatives satisfaction prior to any aggregate sources being used for the earthworks.

1.2 SOURCE APPROVAL

- .1 Source of materials (on-site borrow source or off-site local quarry) to be incorporated into work requires approval by Departmental Representative.
- .2 Approval to excavate borrow material from on-site will be granted in consultation with AHJs including the Hamlet of Resolute Bay, Nunavut Airports, federal and territorial governments.
- .3 PWGSC/TC is applying for a Quarry Permit for the Borrow Source Areas indicated in the contract documents.
- .4 The Contractor can choose to use alternate aggregate sources including an off-site local quarry, at their risk and discretion, if sufficient volumes of aggregate can be attained to carry out the Work.
- .5 The Contractor will obtain any additionally required permits and approvals from AHJs prior to beginning work.
- .6 Inform Departmental Representative of proposed alternate source location of aggregates and provide access for sampling at least seven days prior to commencing production. Departmental Representative will conduct confirmatory testing of borrow material, if required, to determine if any contamination is present.
- .7 If, in the opinion of Departmental Representative, materials from the proposed alternate source do not meet, or cannot reasonably be processed to meet specified requirements, locate, at no additional cost, an alternative source or demonstrate that material from source in question can be processed to meet specified requirements.
- .8 Should a change of material source be proposed during work, advise Departmental Representative one week in advance of proposed change to allow sampling and testing.
- .9 Acceptance of a material at source does not preclude future rejection if it is subsequently found to lack uniformity, or if it fails to conform to requirements specified, or if its field performance is found to be unsatisfactory.
- .10 Geotechnical information of potential Borrow Sources Area, including a borrow assessment and the results of laboratory analyses of soil samples obtained from the site, are in the background documents. These reports will be provided as described in Contract Documents.

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- .1 Three potential borrow areas exist at the site as indicated (East, West and Northeast Borrow Areas).
- .2 All potential borrow areas will require preparatory work to condition the borrow material to meet the desired specifications.
- .3 Permafrost was encountered at shallow depths (<450 mm) in all locations inspected as part of the borrow source assessment works (see Appendix B).
- .4 The sourcing of borrow from these potential areas is at the Contractor's discretion; aggregate and soil used for the work shall ultimately meet the requirements of the specifications. The Contractor can propose alternative sources of borrow.
 - .1 If the contractor proposes alternative borrow sources, then the Contractor must demonstrate, at their cost, the environmental and geotechnical suitability of the materials for use within the works. Submit environmental and geotechnical analyses 7-days prior to transporting, stockpiling or placing imported borrow materials on-site.
 - .2 Throughout the works, submit within 3-days all supply and/or transport manifests of imported borrow source materials.

1.3 PRODUCTION SAMPLING

- .1 Aggregate will be subject to continual sampling by Departmental Representative during production either at the stockpile or at the place of work. The aggregate is to meet the required specifications regardless of the place of sampling.
- .2 Provide Departmental Representative with ready access to source and processed material for purpose of sampling and testing.
- .3 Samples are to be obtained according to industry acceptable practices.

1.4 MEASUREMENT OF PAYMENT

- .1 Main Work Package Borrow Aggregate Items
 - .1 Payment for development of Type 1 (coarse) aggregate materials to be used as erosional control along the AEC-1 Side Slope and Toe will be made at the unit price per cubic metre tendered under Item 31 22 15-3 in the Combined Price Form. Price to include all direct costs including labour, equipment and materials necessary for development processing and transport of aggregate materials from borrow source to and placement within AEC-1. Final quantities to be supported by survey data collected and compared before and after placement of the Side Slopes and Toe.
 - .2 Payment for development of Type 1 (coarse) aggregate materials to be used as erosional control along the AEC-1 swales will be made at the lump sum cost tendered under Item 31 22 15-5 in the Combined Price Form. Price to include all direct costs including labour, equipment and materials necessary for development processing and transport of aggregate materials from borrow source to and placement within AEC-1 Swales. Final quantities to be supported by survey data collected and compared before and after placement of the erosional control along the swales.
 - .3 Payment for development of Type 2 (fine) aggregate materials to construct and stabilize the AEC-1 Side Slope and Toe will be made at the unit price per cubic metre tendered under Item 31 22 15-2 in the Combined Price Form. Price to include all direct costs including labour, equipment and materials

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- necessary for development processing and transport of aggregate materials. Final quantities to be supported by survey data collected and compared before and after placement of the Side Slope and Toe.
- .4 Payment for development of Type 2 (fine) aggregate materials to construct the AEC-1 Top aggregate cover will be made at the unit price per cubic metre tendered under Item 31 22 15-4 in the Combined Price Form. Price to include all direct costs including labour, equipment and materials necessary for development processing and transport of aggregate materials from borrow source to and placement within AEC-1. Final quantities to be supported by survey data collected and compared before and after placement of the Cover.
- .5 Payment for development of Type 3 (Steep Swale) aggregate materials to be used to construct the AEC-1 side slope steep swales will be made at the lump sum cost tendered under Item 31 22 15-5 in the Combined Price Form. Price to include all direct costs including labour, equipment and materials necessary for development processing and transport of aggregate materials from borrow source to and placement within AEC-1 Steep Swales. Final quantities to be supported by survey data collected and compared before and after placement in the swales.
- .2 Optional Work Package Borrow Aggregate Items
- .1 All works described within this section as Optional Work activities may be added to the contract and the main scope of work should the Owner exercise their right to award the Contractor this Work. Only Optional Work activities added to the contract will be paid for upon their completion.
- .2 Payment for development of Type 2 (fine) aggregate materials to construct and stabilize the AEC-2 Side Slope and Toe and promote surface water drainage on the Top will be made at the unit price per cubic metre tendered under Item 31 05 16-A1 in the Combined Price Form. Price to include all direct costs including labour, equipment, and materials necessary for development, processing and transport of aggregate materials from borrow source to and stockpiled within AEC-2. Final quantities to be supported by survey data collected and compared before and after placement of the Side Slope and Toe.
- .3 Payment for development of Type 1 (coarse) aggregate materials to be used as erosional control along the AEC-2 swales will be made at the lump sum cost tendered under Item 31 22 15-B1 in the Combined Price Form. Price to include all direct costs including labour, equipment and materials necessary for development, processing, and transport of aggregate materials from borrow source to and placement within AEC-2 Swales. Final quantities to be supported by survey data collected and compared before and after placement of the erosional control in the swales.
- .4 Payment for development of Type 3 (Steep Swale) aggregate materials to be used to construct the AEC-1 side slope steep swales will be made at the lump sum cost tendered under Item 31 22 15-B1 in the Combined Price Form. Price to include all direct costs including labour, equipment and materials necessary for development processing and transport of aggregate materials from borrow source to and placement within AEC-2 Steep Swales. Final quantities to be supported by survey data collected and compared before and after placement in the swales.

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- .5 Payment for development of Type 2 (fine) aggregate materials to backfill excavations at AEC-3 will be made at the unit price per cubic metre tendered under Item 31 23 33.01-C1 in the Combined Price Form. Price to include all direct costs including labour, equipment and materials necessary for development, processing, and transport of aggregate materials. Final quantities to be supported by survey data collected and compared before and after placement of the backfill.
- .3 Except as otherwise indicated herein, Work under this section will not be measured. Include all costs in Item BOPC-1, Balance of Project Costs in the Combined Price Form. Indicate the cost of this Work as a separate line item in the Cost Breakdown Structure specified in Section 01 32 18 – Construction Progress Schedules – Bar (GANTT) Chart.
- .4 No payments will be issued for excess materials produced, or for aggregate materials that have been rejected for use on-site. Materials rejected for use on-site will be handled, re-shaped, and/or disposed of off-site as directed by the Departmental Representative at no additional cost.

Part 2 Products

2.1 MATERIALS

- .1 Aggregate quality: sound, hard, durable material free from soft, thin, elongated or laminated particles, organic material or other deleterious substances.
- .2 Flat and elongated particles are those whose greatest dimension exceeds five times their least dimension.
- .3 Type 1 (Coarse) aggregates satisfying requirements of applicable section are to be composed of naturally formed particles of stone.
- .4 Type 1 (Coarse) Aggregate:
 - .1 Type 1 (Coarse) Aggregate is select material obtained from excavations or other sources approved by Departmental Representative, generally consisting of screened stone or gravel in an unfrozen state and free from rocks larger than 300 mm, waste or other deleterious material.
 - .2 Type 1 Aggregate is used for construction of the 0.3m upper aggregate layer on the AEC-1 side slope engineered cover and in Swales, as indicated.
 - .3 Gradation to be within the following limits when tested to ASTM C136 and ASTM C117, sieve sizes to CAN/CGSB-8.2:

Sieve Size (mm)	% Pass by Weight
3250	100
150	40 to 80
50	0

- .5 Type 2 (Fine) Aggregate:
 - .1 Type 2 (Fine) Aggregate is a non-saline, well-graded sand with gravel and some fines used for the construction of engineered cover.
 - .2 Gradation to be within the following limits when tested to ASTM C136 and ASTM C117, sieve sizes to CAN/CGSB-8.2:

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Sieve Size (mm)	% Pass by Weight
50	100
12.5	55 to 95
5	45 to 90
2	35 to 80
0.425	25 to 70

- .1 Type 3 (Steep Swale) Aggregate:
 - .1 Type 3 (Steep Swale) Aggregate is select material obtained from excavations or other sources approved by Departmental Representative, generally consisting of screened stone or gravel in an unfrozen state and free from rocks larger than 500 mm, waste or other deleterious material.
 - .2 Type 3 Aggregate is used for construction of the 0.5m aggregate layer on the AEC-1 side slope Steep Swale, as indicated.
 - .3 Gradation to be within the following limits when tested to ASTM C136 and ASTM C117, sieve sizes to CAN/CGSB-8.2:

Sieve Size (mm)	% Pass by Weight
300	70 to 100
225	50 to 70
150	35 to 50
50	0

- .2 Materials classified as unsuitable will include:
 - .1 Non-uniform material of widely varying moisture density characteristics.
 - .2 Soils with moisture content exceeding optimum moisture by 5% or more.
 - .3 Soils containing organic material, snow, ice or other deleterious material.
 - .4 Frozen borrow material.

Part 3 Execution

3.1 DEVELOPMENT OF AGGREGATE SOURCE

- .1 Delineate with the Departmental Representative the limits of the borrow sources to be developed to confirm that they are within the Quarry Permit limits and have the topography surveyed by a licensed surveyor to confirm the site grades at the beginning of the aggregate recovery program.
- .2 Remove any debris (known or unknown) from the area, as described in Contract Documents, prior to excavating borrow materials.
- .3 Any significant deposits (thicknesses greater than 0.1 m) of organic material, as determined by Departmental Representative, are to be avoided and left undisturbed during development of an aggregate source.
- .4 Strip an area ahead of excavating operation sufficient to prevent contamination of aggregate by deleterious materials.
- .5 Recover and stockpile organic material as encountered for future use as cover material on the borrow area upon completion of the aggregate recovery program.

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- .6 Implement erosion control measures as required to minimize impacts on the local environment and comply with the conditions outlined in Contract Documents.
- .7 When excavation is completed, dress sides of excavation to achieve gentle slopes, maximum of 3H:1V, which fit local topography, and provides swales or ditches as required to minimize surface standing water.
- .8 Trim off and dress slopes of waste material piles and leave site in neat condition.
- .9 Trim, backblade and restore burrow areas to a condition acceptable to Departmental Representative matching surrounding conditions.

3.2 PROCESSING

- .1 Process aggregates uniformly using methods that prevent contamination, segregation and degradation.
- .2 Blend aggregates if required to obtain gradation requirement specified. Use methods and equipment that are approved by the Departmental Representative.
- .3 Blending to decrease percentage of flat and elongated particles is permitted.
- .4 When operating in stratified deposits use excavation equipment and methods that will produce uniform, homogeneous aggregate.
- .5 Moisture condition aggregate as required to achieve the compaction requirements within the contract documents.
- .6 Dry aggregate as required to provide ease of handling during freezing temperatures or to place and compact according to this Specification.

3.3 HANDLING

- .1 Handle and transport aggregates to avoid segregation, contamination and degradation.

3.4 STOCKPILING

- .1 Stockpile aggregates on site in locations indicated or designated by Departmental Representative.
- .2 Stockpiling sites are to be level, well drained, and of adequate bearing capacity and stability to support stockpiled materials and handling equipment.
- .3 Except where stockpiled on acceptably stabilized areas do not incorporate bottom 300 mm of pile into work.
- .4 Separate aggregate stockpiles of different types far enough apart to prevent intermixing.
- .5 Reject intermixed or contaminated materials. Remove and dispose of rejected materials as directed by Departmental Representative within 48 hours of rejection.
- .6 Stockpile materials in uniform layers of one (1) metre maximum thickness.
- .7 Complete each layer over the entire stockpile area before beginning next layer.
- .8 Uniformly spot-dump aggregates delivered to stockpile in trucks and build up stockpile as specified.
- .9 Coning of piles or spilling materials over edges of pile will not be permitted.
- .10 During snowy conditions, prevent ice and snow from becoming mixed into stockpile.

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3.5 STOCKPILE CLEANUP

- .1 Leave stockpile site in a tidy, well drained condition, free of standing surface water to satisfaction of Departmental Representative.
- .2 Leave any unused aggregates in neat compact stockpiles or as directed by Departmental Representative.

END OF SECTION

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Part 1 **General**

1.1 **DESCRIPTION**

- .1 This Section specifies requirements for the Main Work Package:
 - .1 The Upgrading and Maintenance of site access routes.
 - .2 Construct AEC-1 side slope including processing in place of non-hazardous debris along perimeter the existing AEC 1 landfill slope.
 - .3 Integration of processed non-hazardous surface waste or landfill materials from AEC1, AEC 2 and AEC 3 into the side slope of AEC 1.
 - .4 Construct AEC 1 landfill aggregate cover as indicated.
 - .5 Constructing the AEC-1 Swales.
- .2 This Section also specifies requirements for select Optional Work Packages:
 - .1 Re-shaping and re-grading of the AEC 2 landfill as indicated.
 - .2 Constructing the AEC-2 Swales.
 - .3 Grading of the AEC 3 Vehicle Storage Area as indicated.

1.2 **DEFINITION**

- .1 Re-shaping: The leveling and grading of designated areas to blend in with the natural terrain and provide positive drainage. Reshaping does not require the supply and placement of additional materials but does entail spreading and compaction of surplus materials.
- .2 Re-grading: The leveling and grading of designated areas and which includes the supply and placement of additional aggregate (fill) to blend in with the natural terrain and provide positive drainage.
- .3 Compaction: A performance-based specification has been provided for the compaction of the fill to be used as part of the remediation program. The performance-based specifications are as indicated.
- .4 Borrow Material: Material obtained from approved areas and required for grading work.
- .5 Top of Slope: The highest elevations of the slope. Same as Slope Edge, Nose of Landfill, Crest of the Slope.
- .6 Toe of Slope: The lowest elevations of the slope. Same as Slope Bottom or Base.
- .7 Side Slope: The angled plane of the landfill and/or overburden extending from the Top of Slope to the Toe of Slope. Same as Slope Surface or Slope Face.
- .8 Specific classifications of granular materials are described in Contract Documents.

1.3 **SUBMITTALS**

- .1 Prepare a Grading and Cover Construction Plan within seven (7) days of contract award in accordance with Section 01 33 00 – Submittal Procedures.
- .2 The Plan shall be a work methodology document, which shall detail the following:

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- .1 Sequencing and duration of each the Rough Grading, Cover Construction and Final Grading Work.
- .2 Methods and equipment for the planned excavations
 - .1 Details and contingencies regarding considerations for soft ground.
 - .2 Details and contingencies regarding considerations for bedrock.
 - .3 Details and contingencies regarding considerations for frozen ground or permafrost.
- .3 Consideration for water management
- .4 Aggregate Source Development Plan including:
 - .1 Identified sources of material (third party supplier and or borrow source operated by contractor)
 - .2 Location and limits of area to be quarried if applicable
 - .3 Reclamation plan if applicable
 - .4 Proposed locations for stockpiling any borrow or excavated material.
- .5 Methods for survey control to execute the work and prepare final As-Builts.
- .6 Haulage routes, and plans for maintenance of the existing access and routes.
- .7 Methodology and considerations regarding side slope stability for all grading and construction work.

1.4 SITE CONDITIONS

- .1 Ensure that all work under this section meet the terms and references of applicable operations-use permits for the respective work areas within the site.
- .2 Suspend operations whenever climatic conditions are unsatisfactory for grading to conform to this Specification.
- .3 Only operate equipment in work areas where materials are sufficiently dry to prevent excessive rutting.
- .4 Areas to be graded are to be free from debris and excessive snow, ice or standing water.
- .5 Existing access roads are to be used during remediation activities and may require repair and upgrading during the course of the work.

1.5 PROTECTION

- .1 Environmental protection measures are to be in accordance with Contract Documents. Follow the approved Erosion, Sediment and Drainage Control Plan submitted in accordance with Contract Documents.
- .2 Full time access to the sewage lagoons by others must be maintained for the duration of the work. The existing lagoon system, including the inlet structure, are off-limits and are to be protected for the duration of the work..

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1.6 SAMPLES

- .1 Inform Departmental Representative of proposed source of fill materials and provide access for sampling. Give a minimum of two weeks (14 days) notice to allow for laboratory analysis of samples.

1.7 MEASUREMENT OF PAYMENT

- .1 Main Work Package Grading Items
 - .1 Include all direct costs related to the construction and stabilization of the side slope of AEC-1 as a unit price per cubic metre under Item 31 22 15-1, Cut/Fill, Compact and Pre-Grade AEC 1 Landfill toe and slope to 3h:1v as indicated in the Combined Price Form. The scope of work for item 31 22 15-1 is to include, but not limited to:
 - .1 The cut/crush/process, transport, placement, and incorporation of non-hazardous surface waste and landfill materials from all work areas (AEC-1 to AEC-3) into the stabilized 3H:1V slope.
 - .2 The cut/crush/process and incorporation of non-hazardous slope side debris from AEC-1 (surface or exposed during construction) into the stabilized 3H:1V slope.
 - .3 Grading of the existing AEC-1 slope side or crest soils/wastes to establish the stabilized 3H:1V slope
 - .4 Grading of the existing AEC-1 Top Cap to infill low areas in preparation for the 2% slope of the Aggregate cover.
 - .5 Place and compact Type 2 (fine) soils within any void spaces of placed wastes that cannot be further cut/crushed/processed.
 - .6 The protection of the existing sewage lagoon is incidental to the work.
 - .7 Review with the Departmental Representative any grading concerns that may effect the existing sewage lagoons.
 - .2 Include all direct costs related to the construction of the Lower Aggregate Cover Layer of the side slope of AEC-1 as a unit price per cubic metre under Item 31 22 15-2, Place, Compact Type 2 Aggregate Cover including Grading AEC 1: Side Slope and Toe Cover as indicated in the Combined Price Form. The scope of work for item 31 22 15-2 is to include, but not limited to:
 - .1 Supply, install and compact a 500-mm thick layer of Type 2 (fine) aggregate materials on the prepared base layer of soils/waste.
 - .2 Extend the aggregate cap 10-m beyond the crest of the AEC-1 slope and into the Top.
 - .3 Extend the aggregate cap 5-m beyond the toe of the AEC-1 slope.
 - .4 Grade aggregate cover to achieve the designed grade of 3V:1HFinal quantities to be supported by survey data collected and compared before and after placement of the Cover.
 - .3 Include all direct costs related to the construction of the Upper Aggregate Cover Layer of the side slope of AEC-1 as a unit price per cubic metre under Item 31 22 15-3, Place, Compact Type 1 Aggregate Cover including final Grading AEC 1: Side Slope and Toe Cover as indicated in the Combined

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Price Form. The scope of work for item 31 22 15-3 is to include, but not limited to:

- .1 Supply, install and compact a 300-mm thick layer of Type 1 (coarse) aggregate materials on the Type 2 layer.
- .2 Extend the aggregate cap 10-m beyond the crest of the AEC-1 slope and into the Top.
- .3 Extend the aggregate cap 5-m beyond the toe of the AEC-1 slope.
- .4 Grade aggregate cover to achieve the designed grade of 3V:1H

Final quantities to be supported by survey data collected and compared before and after placement of the Cover.

- .4 Include all direct costs related to the construction of the Aggregate Cover of the AEC-1 Top as a unit price per cubic metre under Item 31 22 15-4, Place, Compact Type 1 including Grading AEC 1: Top Cap as indicated in the Combined Price Form. The scope of work for item 31 22 15-4 is to include, but not limited to:

- .1 Supply and Install and compact a 600-mm thick layer of Type 2 (fine) aggregate materials on the prepared base layer of soils.
- .2 Grade aggregate cover to match the height of the side slope cover and to achieve the designed grade of 2.0%.
- .3 Grade aggregate cover to match the side berms of any directly adjacent swales.

Final quantities to be supported by survey data collected and compared before and after placement of the Cover.

- .5 Include all direct costs for work and services required for construction of drainage swales at AEC 1 landfill the lump sum Construct Drainage Swales at AEC 1 Landfill, Item 31 22 15-5, as indicated in the Combined Price Form. The scope of work for item 31 22 15-5 is to include, but not limited to:

- .1 Cut/Fill, as necessary to construct the drainage swale and berms
- .2 Grading of channel to achieve a slope of 0.5%
- .3 Supply and Install Type 1 (coarse) and Type 3 aggregates on the surface of the swale as indicated in Drawings.
- .4 Protect and maintain the slopes and surfaces directly adjacent to the Sewage Lagoon.
- .5 Construct the fan shaped swale outwashes at the ends of the swales, as designed.

Final quantities to be supported by survey data collected and compared before and after placement of the Swales.

- .6 Site preparation and maintenance grading of the landfill AEC 1 as required for the grading work at the respective work areas will be paid as a lump sum under Items 31 22 15-6, Site Preparation and Grading in the Combined Price Form. Diversion and draining to keep areas free of standing water comprises part of the site preparation and maintenance general grading work.
- .7 Upgrading and maintenance of site routes to access work areas will be paid as a lump sum under Items 31 22 15-7, Upgrading and Maintenance of Site

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Access Routes in the Basis of Payment Schedule. Use existing site accesses to the extent possible and minimize the construction of new routes and only with the prior written approval of the Departmental Representative. Clearing and grubbing to facilitate work comprise part of the upgrading and maintenance work.

.2 Optional Work Package Grading Items

- .1 All works described within this section as Optional Work activities may be added to the contract and the main scope of work should the Owner exercise their right to award the Contractor this Work. Only Optional Work activities added to the contract will be paid for upon their completion.
- .2 Include all direct costs related to the re-shaping and re-grading of the top and side slope of AEC-2 as a lump sum under Item 31 22 15-A1, Place, Compact Fill including Grading: AEC 2 Landfill Top and Side Slope as indicated in the Combined Price Form. The scope of work for item 31 22 15-A1 is to include, but not limited to:
 - .1 Grading of the existing AEC-2 slope side soils to establish the stabilized 3H:1V slope
 - .2 Grading of the existing AEC-2 Top fill to infill low areas and grading of the 2% slope.
 - .3 Supply and Install and compact Type 2 (fine) soils within any low areas or to cover exposed wastes.
 - .4 The protection of the access road is incidental to the work.
 - .5 Review with the Departmental Representative any grading concerns regarding the access roads or exposed wastes.
- .3 Include all direct costs for work and services required for construction of drainage swales at AEC 2 landfill the lump sum Construct Drainage Swales at AEC 2 Landfill, Item 31 22 15-B1, as indicated in the Combined Price Form. The scope of work for item 31 22 15-B1 is to include, but not limited to:
 - .1 Cut/Fill, as necessary to construct the drainage swale and berms
 - .2 Grading of channel to achieve a minimum slope of 0.5%
 - .3 Supply and Install Type 1 (coarse) and Type 3 aggregates on the surface of the swale as indicated in Drawings.
 - .4 Protect and maintain the slopes and surfaces directly adjacent to the Access Roadway.
 - .5 Construct the fan shaped swale outwashes at the ends of the swales, as designed.

Final quantities to be supported by survey data collected and compared before and after placement of the Swales.

- .3 Except as otherwise indicated herein, Work under this section will not be measured. Include all costs in Item BOPC-1, Balance of Project Costs in the Combined Price Form. Indicate the cost of this Work as a separate line item in the Cost Breakdown Structure specified in Section 01 32 18 – Construction Progress Schedules – Bar (GANTT) Chart.

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Part 2 Products

2.1 MATERIALS

- .1 Borrow material used for the Aggregate Cover of the AEC 1 landfill, and other work areas, requires the approval of Departmental Representative.
- .2 Aggregate material is to be prepared as per the specifications outlined in Contract Documents.

Part 3 Execution

3.1 GENERAL SITE GRADING AND MAINTENANCE

- .1 Grade and maintain work areas as required in preparation of the work at the respective landfill locations.
- .2 Maintain natural drainage patterns and keep areas free of standing water.

3.2 WORK NEAR WATER BODIES

- .1 Erosion and Sediment Control measures, as outlined in Contract Documents, are to be implemented as required to ensure that sediment or erosion produced do not enter adjacent or downgradient water bodies.

3.3 UPGRADING AND MAINTENANCE OF ACCESS ROUTES

- .1 Upgrade and maintain access routes to facilitate work using existing access routes to the extent possible.
- .2 Ensure drainage of access routes and adjacent lands to provide surface drainage. Where necessary, cut swales to channel surface drainage in such a manner as to minimize surface erosion.

3.4 CONSTRUCT AEC-1 SIDE SLOPE

- .1 Pull back or push down soil and non-hazardous debris from the existing crest, slope and toe of the landfill to construct a 3H:1V slope from within the landfill embankment (Cut/Fill) until stable material is identified by the Departmental Representative.
- .2 Cut, crush or otherwise process non-hazardous wastes from the crest, slope or toe in place, if possible. If non-hazardous debris is unstable, transport to safe location within the work area for processing and then re-integrate into the AEC-1 side slope
- .3 Compact waste during cut/fill slope construction and during placing and spreading of the waste material. The equipment must be capable of crushing demolition debris during compaction efforts. Compact waste debris by making a minimum of six passes per lift using a small dozer (10,000 kg).
- .4 Compact each layer to completely infill voids within the waste layer prior to proceeding with placement of the next overlying waste layer and prior to placement of the final cover.
- .5 Place Type 2 (fine) aggregate as required to infill voids within the waste layer that cannot be crushed/compacted.
- .6 Grade the slope face area to a 3H:1V as indicated in the contract documents.

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3.5 INTEGRATING NON-HAZARDOUS DEBRIS FROM PERIMETER OF AEC 1 LANDFILL

- .1 Cut non-hazardous surface debris from AEC-1 (Top and beyond the toe), AEC-2 and AEC-3 down to size for integration into the AEC-1 side slope as per the requirements outlined in Contract Documents.
- .2 Transport and integrate non-hazardous surface debris from all AECs into the AEC-1 side slope. Place debris flat along the slope of the landfill in uniform, horizontal lifts. The thickness of each waste lift is to be such that all voids within the waste can be filled with fine aggregate material. The maximum thickness of each waste lift is not to exceed 500 mm.
- .3 Compact waste during placing and spreading of the waste material. The equipment must be capable of crushing demolition debris during compaction efforts. Compact waste debris by making a minimum of six passes per lift using a small dozer (10,000 kg).
- .4 Compact each layer to completely infill voids within the waste layer prior to proceeding with placement of the next overlying waste layer and prior to placement of the final cover.
- .5 Place Type 2 (fine) aggregate as required to infill voids within the waste layer that cannot be crushed/compacted.

3.6 CONSTRUCT AEC 1 LANDFILL AGGREGATE COVER - TOP

- .1 Cut/Fill and reshape grades of the existing AEC-1 landfill top as indicated and in general with a 2.0% promoting surface water flow towards
- .2 Supply and place a 600 mm of Type 2 (fine) aggregate as indicated.
- .3 Place Type 2 (fine) aggregate in loose lifts not to exceed 300 mm.
- .4 Compact fine aggregate by making a minimum of six passes per lift using a small dozer (10,000 kg).
- .5 Grade the aggregate cover at the end of each work day to promote drainage.
- .6 Aggregate cover to blend in with the side slope aggregate cover, natural terrain and provide positive drainage off the landfill.

3.7 CONSTRUCT AEC 1 LANDFILL AGGREGATE COVER – SIDE SLOPE

- .1 Construct Aggregate Cover on the landfill side slope after Departmental Representative has approved the grade (3H:1V) and compaction of the slope. Consolidated, crushed, compacted or placed wastes must be covered with Type 2 (fine) fill within 2-days to minimize exposure and physical hazards associated with the wastes.
- .2 Lower Aggregate Cover Layer – Type 2
 - .1 Supply and place a 800 mm of Type 2 (fine) aggregate as indicated along the entire AEC-1 slope extending 10-m beyond the crest on top of the landfill and 5-m beyond the toe of the landfill.
 - .2 Place Type 2 (fine) aggregate in loose lifts not to exceed 300 mm.

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- .3 Compact Type 2 (fine) aggregate by making a minimum of six passes per lift using a small dozer (10,000 kg) and to prevent the Upper Aggregate Cover Layer from pushing into or reduce the thickness of the Lower Aggregate Cover Layer..
- .3 Upper Aggregate Cover Layer – Type 1
 - .1 Supply and place a 300 mm of Type 1 (coarse) aggregate as indicated along the entire AEC-1 side slope extending 10-m beyond the crest on top of the landfill and 5-m beyond the toe of the landfill.
 - .2 Place Type 1 (coarse) aggregate in loose lifts not to exceed 300 mm.
 - .3 Ensure Upper layer Aggregate Cover Layer is uniformly placed and does not reduce the Lower Aggregate Cover thickness
 - .4 Compact Type 2 (fine) aggregate by making a minimum of six passes per lift using a small dozer (10,000 kg).
 - .5 Upper aggregate cover to blend in with the natural terrain and provide positive drainage off the landfill.
- .4 Grade the aggregate cover at the end of each work day to promote drainage.

3.8 CONSTRUCT AEC-1 DRAINAGE SWALES

- .1 Construct AEC-1 swales as indicated on Drawings.
- .2 Where possible, Construct drainage swales by excavating soils below existing ground conditions to the required depths, as indicated and as directed by the Departmental Representative.
- .3 Construct drainage swales over existing conditions, as required, due to, but not exclusively to, the following site conditions:
 - .1 Potential buried debris at the top of the AEC-1 Landfill
 - .2 Exposed bedrock.

3.9 OPTIONAL WORK PACKAGE - RE-SHAPING AND RE-GRADING OF AEC 2 LANDFILL

- .1 Relocate existing surface debris to the AEC 1 landfill as per Contract Documents. Review site conditions with the Departmental Representative prior to commencing earthworks at this location.
- .2 Re-shape the landfill top and embankments to the lines and grades as indicated in Drawing AEC-2.
 - .1 Relocate and place site derived soils (cut/fill) and/or Type 1 (fine) aggregate in loose lifts not to exceed 300 mm.
 - .2 Do not Cut or Excavate existing soils to depths greater than 0.2m to protect the existing soil cover.
 - .3 Compact the placed soil and aggregate by making six passes per lift using a small dozer (10,000 kg).
 - .4 Grade the area to promote drainage.
- .3 Contractor shall not cut or excavate more than 0.2m from the existing surfaces within AEC-2 to minimize potential exposure of buried wastes.

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- .4 Immediate stop grading efforts should buried wastes become exposed, notify the Departmental Representative and do not recommence grading operations within the 20-m of the exposed wastes until permitted by the Departmental Representative.

3.10 OPTIONAL WORK PACKAGE - CONSTRUCT AEC-2 DRAINAGE SWALES

- .1 Construct AEC-2 swales as indicated on Drawings.
- .2 Where possible, Construct drainage swales by excavating soils below existing ground conditions to the required depths, as indicated and as directed by the Departmental Representative.
- .3 Construct drainage swales over existing conditions, as required, due to, but not exclusively to, the following site conditions:
 - .1 Potential buried debris at the top of the AEC-2 Landfill
 - .2 Exposed bedrock.

3.11 SITE RESTORATION OF WORKED AREAS

- .1 Re-shape and re-grade work areas and depressions created by the removal of debris, contaminated soil, and relocation of borrow material.
- .2 Ensure drainage of restored areas to maintain natural drainage patterns and keep areas free of standing water.

3.12 TEMPORARY STORAGE AREA

- .1 Develop a Temporary Storage Area for the storage of containerized hazardous waste materials and contaminated soil.
- .2 Prepare the Temporary Storage Area to comply with the following:
 - .1 Provide easy access to the off-site transport equipment. For the purposes of this contract a 30 m by 30 m area is to be assumed; however, may be larger in size upon approval of the Departmental Representative.
 - .2 Allow the equipment and packaging containers to be level and distribute the weight of the containers evenly to the supporting surface.
 - .3 The area is to be free of standing water.
 - .4 Surface water run-on to the area must be minimized. The area must not be subject to flooding, excessive snow drifting, and/or seasonal saturation.
 - .5 Sufficiently compact the area so as to prevent the containers from settling into the soil. Supply, place and compact additional waste rock as required.
 - .6 Locate at least 30 m from any body of water.
 - .7 In an area routinely accessed or essential to Contractor's workforce or site personnel.
 - .8 More than 30 metres away from flammable materials.
 - .9 Set timbers or another form of base to ensure that containers used to package non-hazardous and hazardous materials going off-site do not freeze to the ground prior to demobilization from site.
- .3 Within the Temporary Storage Areas, segregate the various types of containerized materials as described in Contract Documents.

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- .4 Provide signage for Temporary Storage Area in accordance with Contract Documents.
- .5 Erect a barricade to demarcate the limits of the Temporary Storage Area.

3.13 MAINTENANCE

- .1 Maintain finished surfaces in a condition in accordance with this Section until demobilization.

3.14 SITE SURVEYS

- .1 All work areas, including borrow areas, are to be surveyed prior to the commencement of work with a hardcopy and electronic copy (in AutoCAD format) of the survey provided to the Departmental Representative.
- .2 All work areas, including borrow areas, are to be surveyed upon completion of the remediation work with a hardcopy and electronic copy of the survey provided to the Departmental Representative.
- .3 The electronic survey files are to be provided in a AutoCAD compatible format.
- .4 Temporary bench marks are to be established and maintained for the duration of the project.

3.15 TESTING

- .1 Testing of materials and compaction testing will be carried out and paid for by Department Representative.
- .2 Frequency of testing will be determined by Department Representative.

3.16 FINISHING AND TOLERANCES

- .1 All areas to be covered with granular material are to be uniform without projections or depressions exceeding 100 mm in three (3) metres.
- .2 Granular fill surfaces to be within 100 mm of design elevations but not uniformly high or low.
- .3 Finished surface are to be graded to promote positive drainage and minimize standing water.

END OF SECTION

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Part 1 General

1.1 DESCRIPTION

- .1 This section specifies methods and procedures for the Optional Work package that includes excavating of the Contaminated materials (soil) as shown in the Drawings.
- .2 The Optional Work consists of the following:
 - .1 Excavation of Contaminated materials (soil) and Backfill excavation with Type 2 material).

1.2 DEFINITIONS

- .1 Common excavation: excavation of materials of whatever nature, which are not included under definitions of grading or re-shaping.
- .2 Contaminated material (soil): Soil that has evidence of impacts either physical (e.g. visual or olfactory) or analytical.
 - .1 Landfill Materials: All non-hazardous waste originating from the former landfills and storage areas (AEC 1 to AEC 3) requiring transport, processing and placing within the Solid Waste Landfill (AEC 1).
 - .2 Non-Hazardous Waste: Waste materials historically generated by the Airport and placed within the work area. Generally, it includes domestic waste and demolition debris. Same meaning as Landfill Waste, Debris, Garbage, Domestic Waste, and Construction Debris.
 - .3 Buried Waste: Landfill materials that are covered, partially covered or below the surface of the surrounding area and require mechanical equipment to access, uncover, extricate or excavate to be packaged or hauled. Applies to work areas AEC 1, AEC 2, and AEC 3.
- .3 Imported/Borrow material: material obtained from locations outside work area to be graded, and required for construction of fill areas or for other portions of Work.

1.3 SUBMITTALS

- .1 Make submittals in accordance with Contract Documents.
- .2 Quality Control:
 - .1 Submit condition survey of existing conditions, excavation limits/depths and final conditions as described in Contract Documents.

1.4 QUALITY CONTROL

- .1 Perform all work in accordance with Federal, Territorial and Municipal regulations whichever is more stringent.
- .2 Perform all work in accordance with the contract documents.
- .3 Health and Safety Requirements:
 - .1 Do construction occupational health and safety in accordance with Contract Documents.

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- .2 Complete all work in accordance with applicable Federal and Territorial Occupational Health and Safety Legislation and Nunavut Labour Standards Act for construction site work.

1.5 PROTECTION

- .1 Environmental Protection Measures to be in accordance with the requirements specified in the contract documents.
- .2 Protect archaeological sensitive areas and gravesites encountered during construction, suspend all activities in that area, and notify Departmental Representative immediately.
- .3 Use procedures that are not harmful to health, are not injurious to vegetation, and do not endanger wildlife, adjacent water courses or ground water.
- .4 Suspend operations whenever climatic conditions are unsatisfactory for excavation or grading to conform with this specification.

1.6 MEASUREMENT OF PAYMENT

- .1 All works described within this section as Optional Work activities may be added to the contract and the main scope of work should the Owner exercise their right to award the Contractor this Work. Only Optional Work activities added to the contract will be paid for upon their completion.
- .2 Include all direct costs with the backfilling and re-grading of AEC-3 excavations in the lump sum price, Item 31 23 33.01-C1, as indicated in the Combined Price Form.
- .3 Except as otherwise indicated herein, Work under this section will not be measured. Include all costs in Item BOPC-1, Balance of Project Costs in the Combined Price Form. Indicate the cost of this Work as a separate line item in the Cost Breakdown Structure specified in Section 01 32 18 – Construction Progress Schedules – Bar (GANTT) Chart.

Part 2 Products

2.1 MATERIALS

- .1 Type 2 Fill: Locally available borrow material, approved by Departmental Representative for use intended, unfrozen and free from rocks larger than fifty (50) mm, cinders, ashes, sods, refuse or other deleterious materials.
 - .1 Must meet gradation requirements within the contract
- .2 All borrowing for materials must follow the conditions of the quarry permit.

Part 3 Execution

3.1 SITE PREPARATION

- .1 Remove obstructions, ice and snow, from surfaces to be excavated within limits indicated.
- .2 Remove cleared materials.
- .3 Minimize rutting and erosion of all access trails and clearings.

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- .4 Select appropriate areas for stockpiling, segregation and landfill material caches.

3.2 PREPARATION/PROTECTION

- .1 Protect existing features in accordance with Contract Documents and applicable local regulations.
- .2 Keep excavations clean, free of standing water, and loose soil/waste.
- .3 Where soil is subject to significant volume change due to change in moisture content, cover and protect to Departmental Representative approval.
- .4 Protect natural and man-made features required to remain undisturbed.

3.3 BORROW MATERIALS

- .1 Obtain from areas in accordance with the Quarry Permit.
- .2 Notify Departmental Representative whenever unsuitable materials are encountered in borrow areas.
- .3 Stripping, stockpiling and replacement or placement to a new location of organic material and stripping and disposal of waste material found when excavating existing granular fills to be as directed by Departmental Representative.
- .4 Final grading of borrow area upon completion to be tidy and prevent on-going erosion and/or permafrost degradation drained condition.
- .5 Upon completion of final grading, leave all slopes in a stable condition and spread all stripped organics.
- .6 Transport material from borrow areas to the Work areas via existing access trails where available. Maintain and provide for dust control on the access trails between the borrow area and the Work areas.
- .7 Implement sufficient erosion and sediment control measures to prevent sediment release off construction boundaries and into water bodies.

3.4 STOCKPILING

- .1 Stockpile fill materials in areas designated by Departmental Representative.
- .2 Protect fill materials from contamination.
- .3 Implement sufficient erosion and sediment control measures to prevent sediment release into water bodies.
- .4 Stockpiled Contaminated materials must be covered to protect from precipitation per the contract.

3.5 BACKFILLING

- .1 Notify the Departmental Representative when each excavation is completed to the limits/depth described in the contract documents. Within 3-days of this notification the Departmental Representative will collect and submit for analysis confirmatory samples from each excavation.
- .2 Restore excavated areas after conducting necessary elevation surveys and receiving approval from the Departmental Representative.

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- .3 Backfill excavations using "Type 2" material and compact soil to density similar to adjacent natural soil upon completion of soil remediation. Ensure confirmatory sampling results indicate that contaminant concentrations are in compliance with applicable guidelines prior to backfilling.
- .4 Areas to be backfilled to be free from debris, snow, ice, water and frozen ground.
- .5 Do not use backfill material which is frozen or contains ice, snow or debris.

END OF SECTION

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Part 1 General

1.1 DESCRIPTION

- .1 This section specifies the requirements for the supply and installation of non-woven geotextiles for the geosynthetic liner to be installed along constructed swales in AEC 1 and AEC 2 as per contract documents.

1.2 MANUFACTURER'S CERTIFICATION AND WARRANTY

- .1 Provide to Departmental Representative, two (2) weeks prior to shipment of the material to site, a copy of the Mill Run QA/QC data showing that the material to be shipped to the site has test values for each property specified in this section that meet or exceed the property values specified for that material.
- .2 These certificates are to be signed by the Manufacturer's Product Manager or Quality Control Manager.
- .3 Provide a written warranty from the geotextile manufacturer against defects or deficiencies in the quality of the geotextile material supplied.

1.3 Measurement of Payment

- .1 Main Work Package - Geotextiles
 - .1 Supply and place non woven geotextile for the AEC-1 Swales, as indicated, will be paid as a unit rate under Item 31 32 19.01-1, AEC-1 Geotextile in the Combined Price Form.
 - .1 The unit rate for the geotextile will be measured by the aerial coverage in square metres (m²) and will need to account for the required overlaps.
 - .2 Optional Work Package Geotextiles
 - .1 All works described within this section as Optional Work activities may be added to the contract and the main scope of work should the Owner exercise their right to award the Contractor this Work. Only Optional Work activities added to the contract will be paid for upon their completion.
 - .2 Supply and place non woven geotextile for the AEC-2 Swales, as indicated, will be paid as a unit rate under Item 31 32 19.01-B1, AEC-2 Geotextile in the Combined Price Form.
 - .1 The unit rate for the geotextile will be measured by the aerial coverage in square metres (m²) and will need to account for the required overlaps.
 - .3 Except as otherwise indicated herein, Work under this section will not be measured. Include all costs in Item BOPC-1, Balance of Project Costs in the Combined Price Form. Indicate the cost of this Work as a separate line item in the Cost Breakdown Structure specified in Section 01 32 18 – Construction Progress Schedules – Bar (GANTT) Chart.

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Part 2 Products

2.1 MATERIALS

- .1 Non-Woven Geotextile: The geotextile is to be a non-woven fabric consisting only of continuous chain polymeric filaments or yarns of polyester, formed into a stable network by needle punching. The fabric is to be inert to commonly encountered chemicals, hydrocarbons, mildew and rot resistant, resistant to ultraviolet light exposure, insect and rodent resistant, and conform to the properties listed below. The minimum average roll value (weakest principal direction) for strength properties of any individual roll tested from the manufacturing lot or lots of a particular shipment is to be in excess of the minimum average roll value, weakest principal direction, stipulated below.

.1	Thickness – Typical (ASTM D5199)	8.0 mm
.2	Grab Tensile Strength (ASTM D4632):	900 N.
.3	Elongation at Failure (ASTM D4632):	50 %.
.4	Tear Strength (ASTM D4533):	350 N.
.5	Apparent Opening Size (ASTM D4751)	150 microns
.6	Puncture (ASTM D4833):	1000 N.
.7	Weight – Typical (ASTM D5261):	570 g/m ²

2.2 SHIPPING, HANDLING AND STORAGE

- .1 Provide the geotextile in rolls wrapped with protective covering to protect the fabric from mud, dirt, dust, and debris. The fabric is to be free of defects or flaws which significantly affect its physical properties. Label each roll of fabric in the shipment with a number or symbol to identify that production run.
- .2 During delivery and storage, protect geotextiles from direct sunlight, ultraviolet rays, excessive heat, mud, dirt, dust, debris, rodents and water.

Part 3 Execution

3.1 QUALITY ASSURANCE

- .1 All materials, procedures, operations, and methods are to be in strict conformance with the Drawings and Specifications and are to be subjected to strict quality assurance monitoring as detailed herein. The installed systems are to conform to the Drawings and Specifications, except as otherwise authorized in writing by Departmental Representative.

3.2 UNDERLYING SURFACE PREPARATION

- .1 Ensure that the surface underlying the geotextile is clean and is free from angular rocks, debris and protrusions.

3.3 DEPLOYMENT

- .1 Do not begin installation of geotextile until the base has been approved by Departmental Representative.

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- .2 Deploy the geotextile by unrolling onto the prepared surface in orientation, manner and locations indicated.
- .3 Place geotextile material smooth and free of tension stress, folds, wrinkles and creases.
- .4 Place geotextile material on sloping surfaces in one continuous length from toe of slope to upper extent of geotextile, perpendicular to the slope direction.
- .5 Overlap adjacent geotextile panels in accordance with manufacturer's recommendations (minimum 300 mm).
- .6 Employ sufficient temporary anchorage to hold geotextile in place during backfilling.
- .7 Protect installed geotextile material from displacement and damage until, during and after placement of additional material layers.
- .8 Repair rips or tears with a patch to cover a minimum of 1 metre on each side of the rip or tear.

3.4 ANCHORAGE

- .1 Anchor and backfill the geotextile as shown. Temporary anchorage can be provided by sandbags. Compact backfill in such a manner as to not damage the geotextile.

3.5 PROTECTION

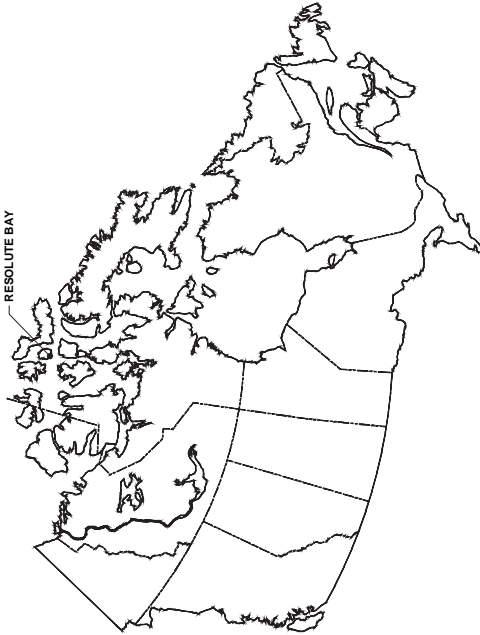
- .1 Do not permit passage of any vehicle directly on geotextile at any time.

END OF SECTION

REAL PROPERTY SERVICES
Western Region

SITE REMEDIATION PROGRAM

DRAWING INDEX	
Sheet No.	TITLE
R-000019.001	C-00 COVER SHEET
R-000019.001	C-01 SITE LOCATION
R-000019.001	C-02 EXISTING CONDITIONS AND SITE PHOTOGRAPHS - AC01
R-000019.001	C-03 EXISTING CONDITIONS - AC01 PLAN AND SECTIONS
R-000019.001	C-04 EXISTING CONDITIONS AND SITE PHOTOGRAPHS - AC02
R-000019.001	C-05 EXISTING CONDITIONS - AC02 PLAN AND SECTIONS
R-000019.001	C-06 EXISTING CONDITIONS AND SITE PHOTOGRAPHS - AC03
R-000019.001	C-07 EXISTING CONDITIONS - AC01 BORROW AREAS
R-000019.001	C-08 REMEDIATION ACTIVITIES - AC01
R-000019.001	C-09 LANDFILL REMEDIATION - AC01 SECTIONS
R-000019.001	C-10 REMEDIATION ACTIVITIES - AC02
R-000019.001	C-11 LANDFILL CONSTRUCTION - AC01 DETAILS
R-000019.001	C-12 LANDFILL REMEDIATION - AC02 SECTIONS
R-000019.001	C-13 REMEDIATION ACTIVITIES - AC03



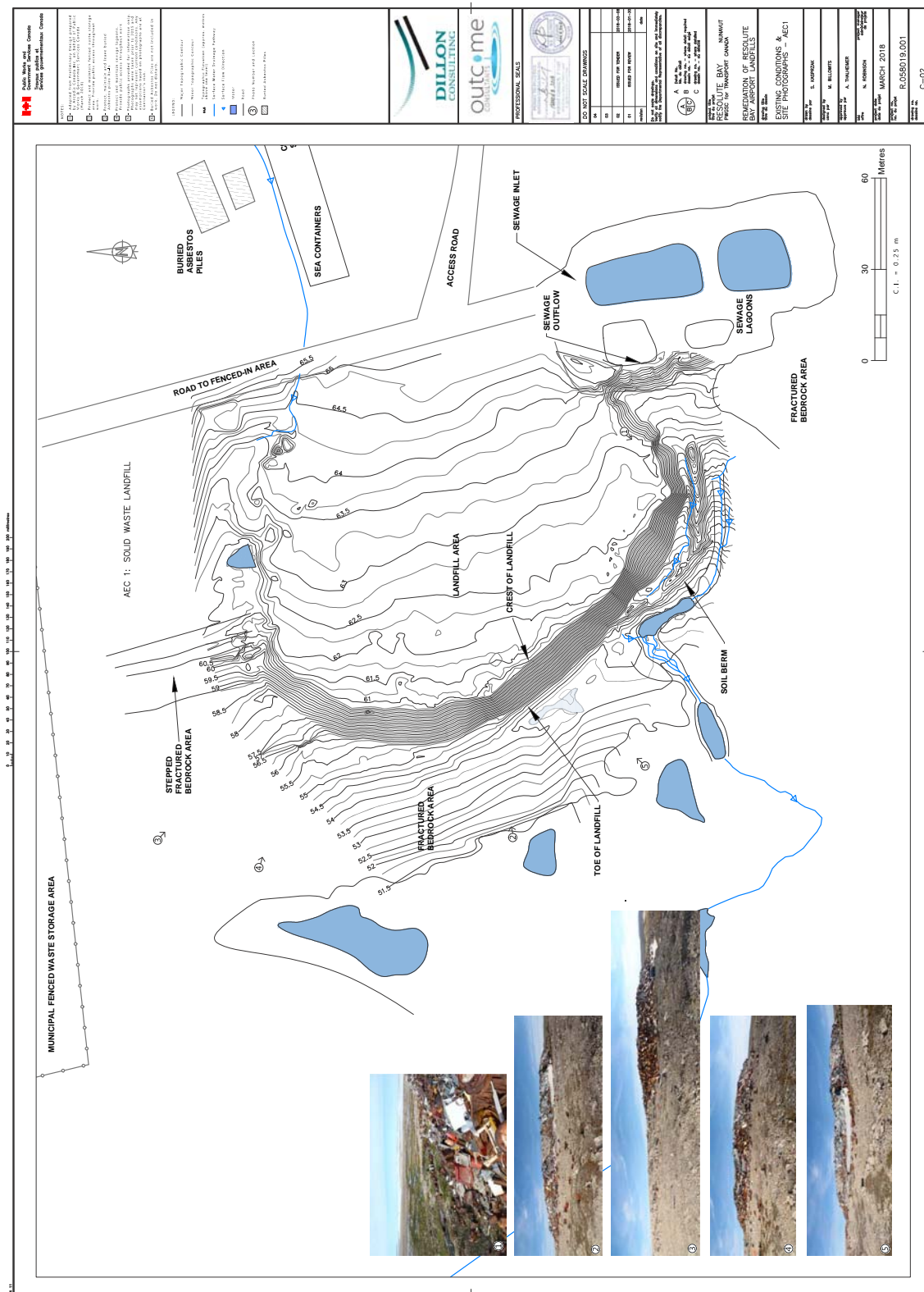
RESOLUTE BAY AIRPORT LANDFILLS REMEDIATION PROJECT

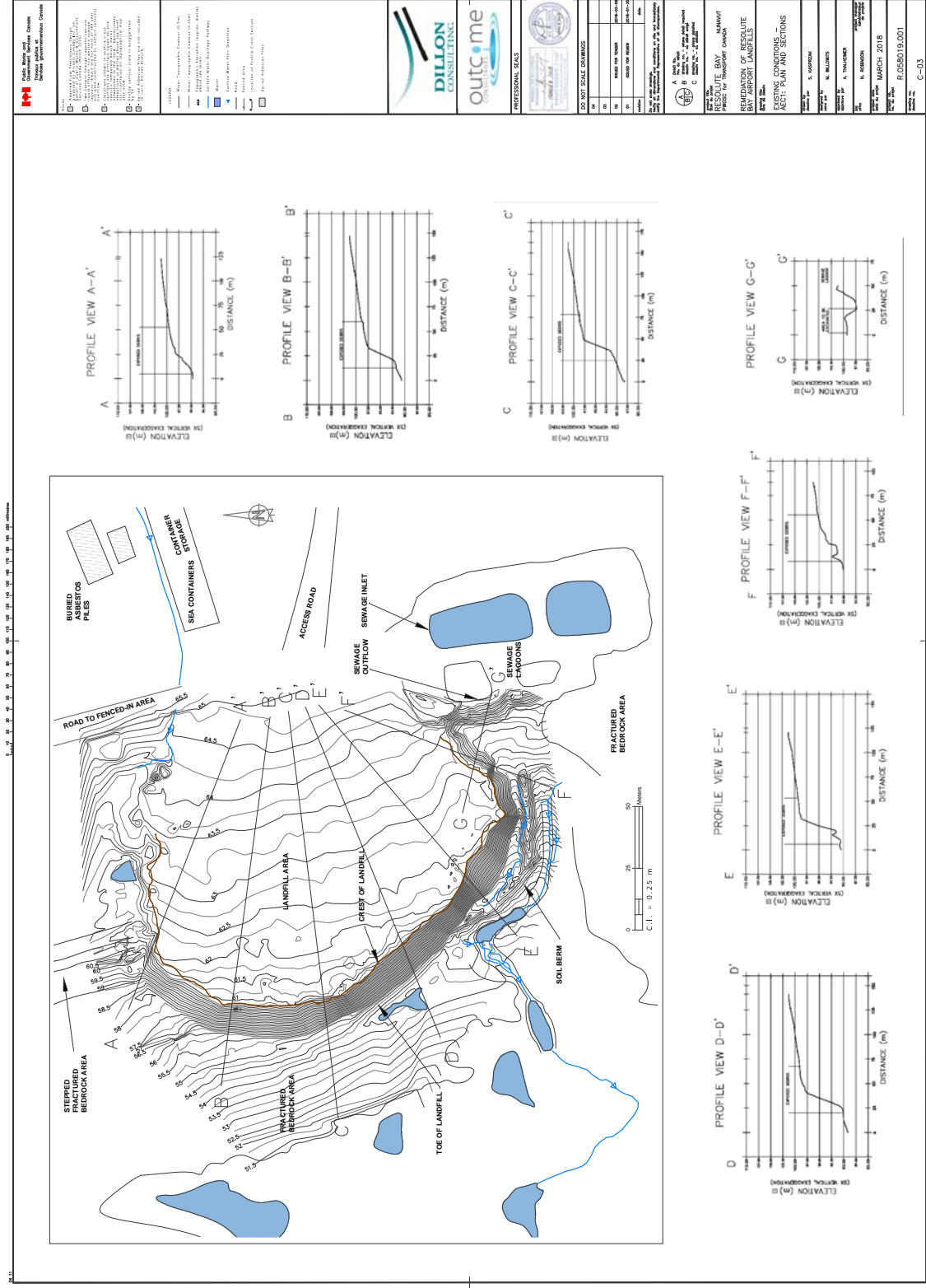
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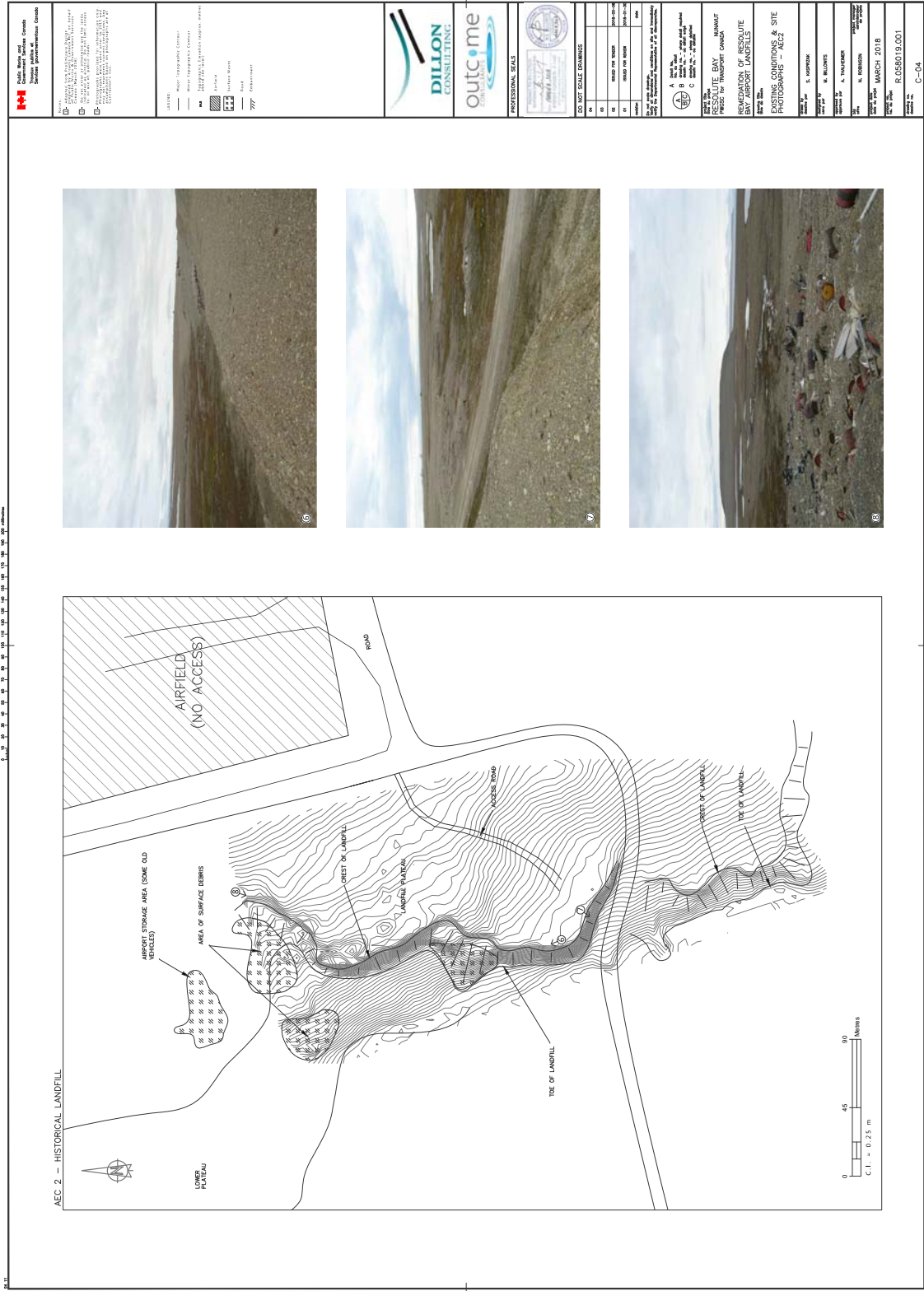


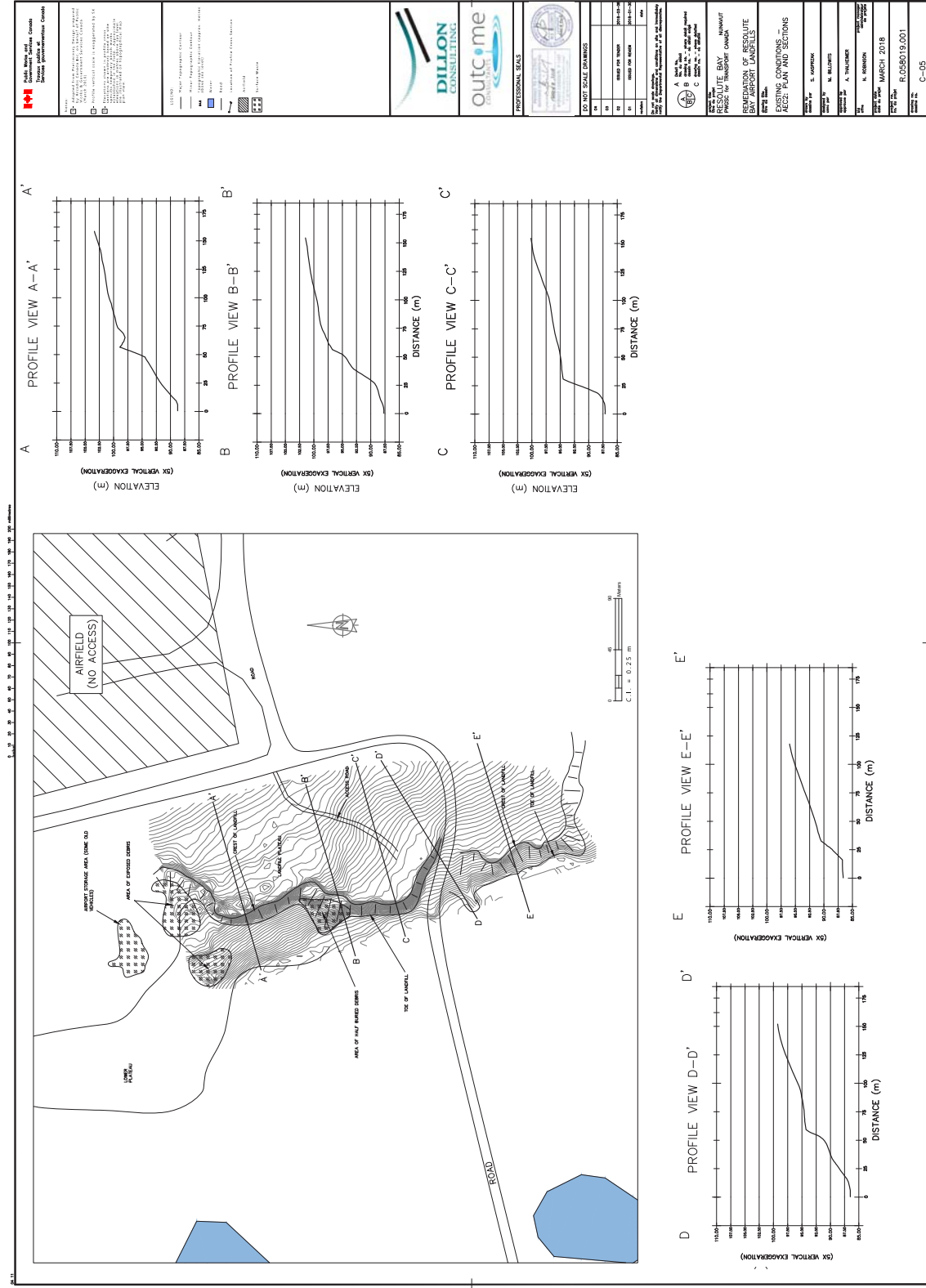
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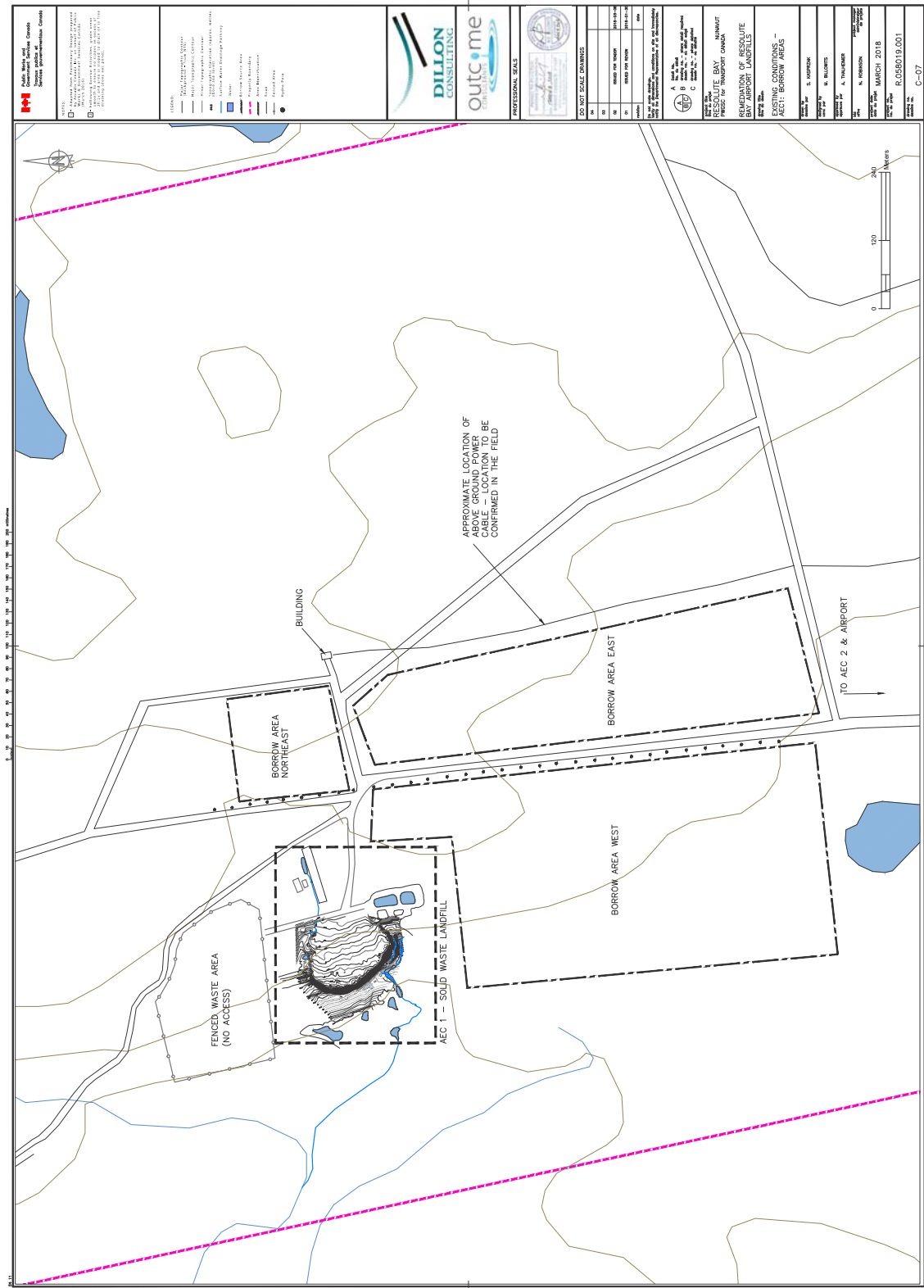
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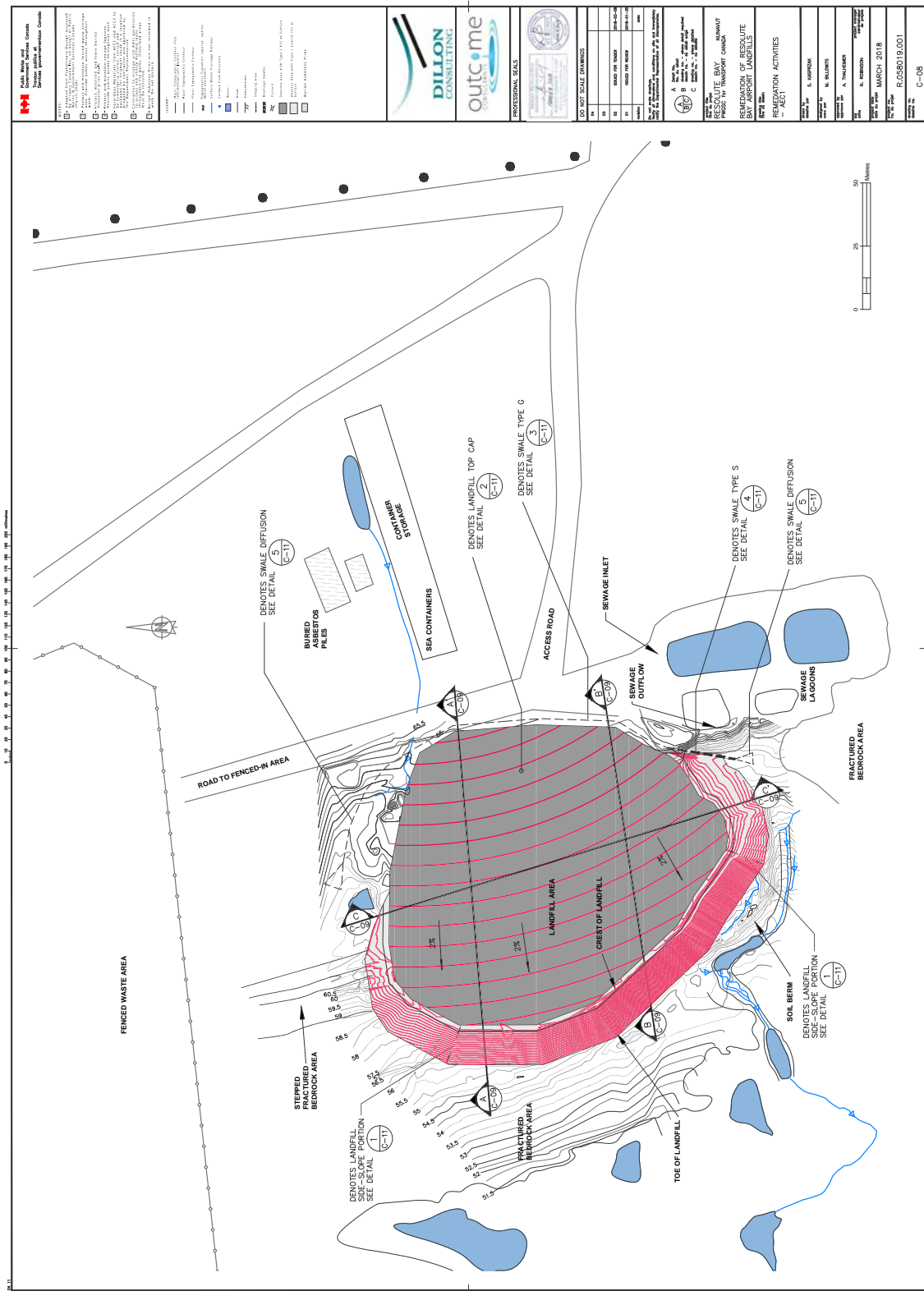


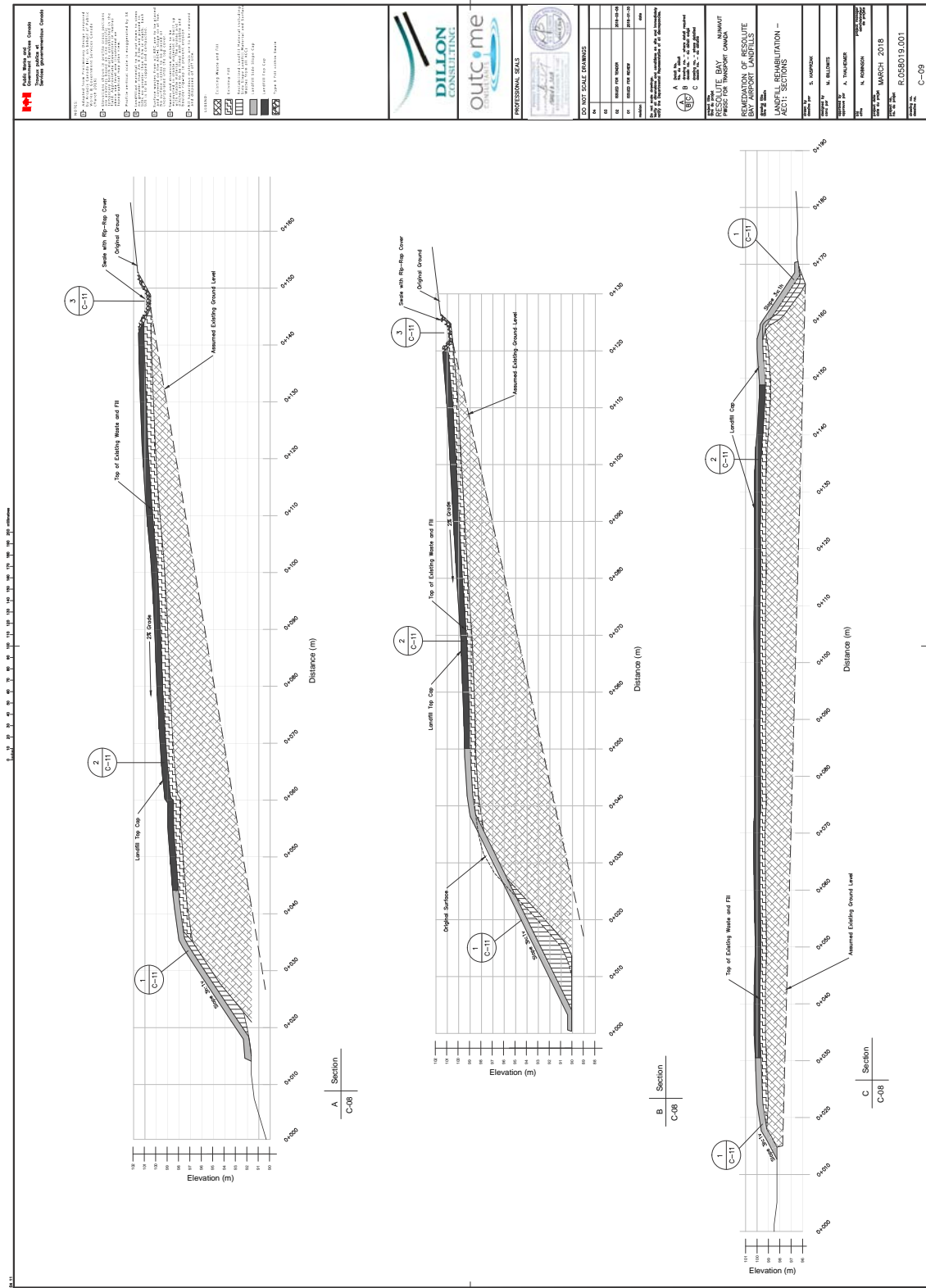


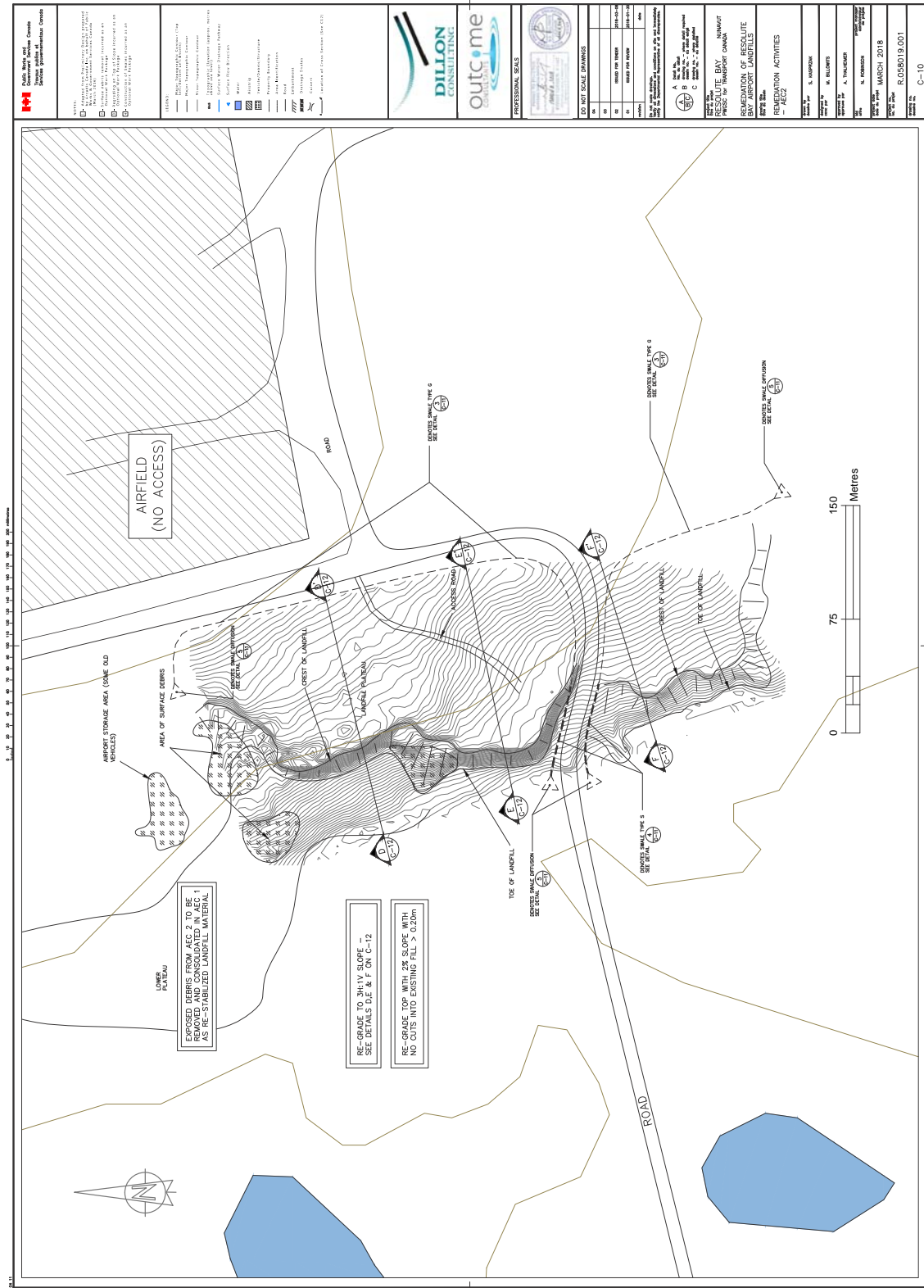


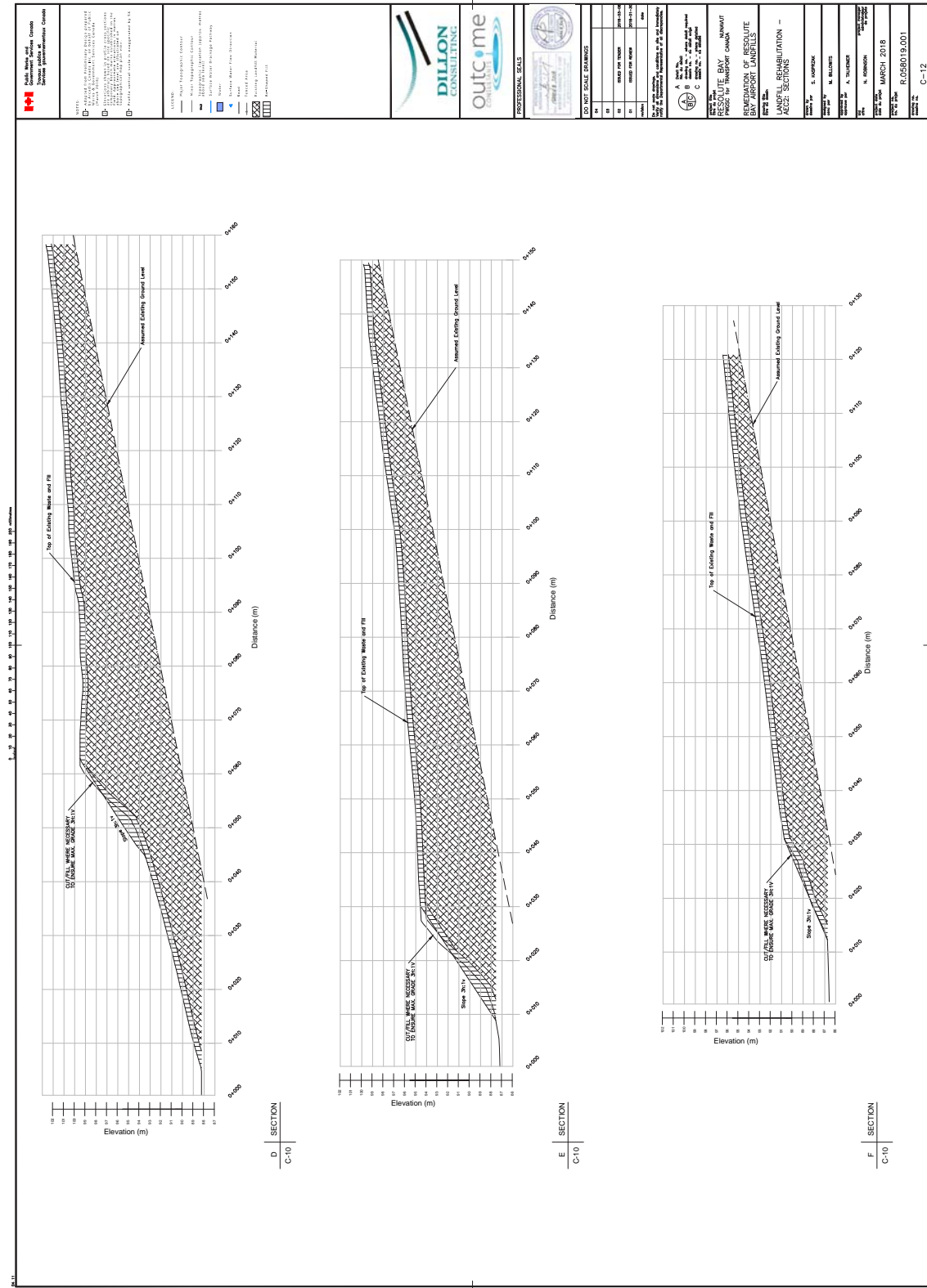












RESOLUTE BAY LANDFILL SHIPPING CONTAINER 2013 PHOTOS, RESOLUTE BAY, NUNAVUT



Figure 1. General Location of 26 Shipping Containers



Figure 2. Container storage location showing 6 of 26 containers during early placement. Facing North.

RESOLUTE BAY LANDFILL SHIPPING CONTAINER 2013 PHOTOS, RESOLUTE BAY, NUNAVUT



Figure 3: North side of containers, facing east.



Figure 4: South side of containers, facing northeast.

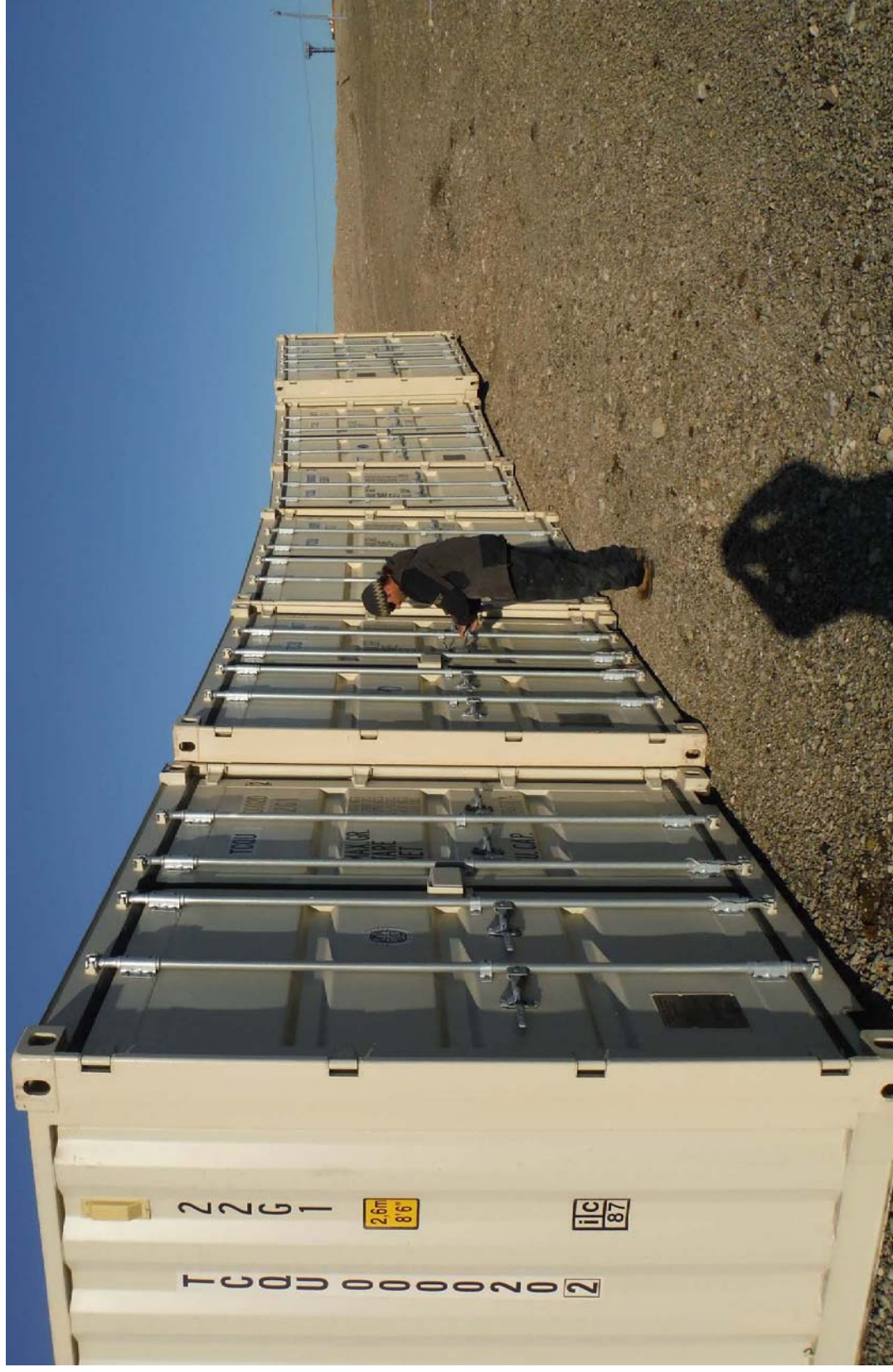


Figure 5. Close up of south side of containers.



Figure 6 Typical inside of container.



Figure 7: container seal.



Figure 8: 45 gallon drums