



**RETURN BIDS TO:**

**RETOURNER LES SOUMISSIONS À:**

Bid Receiving - PWGSC / Réception des soumissions -  
TPSGC

11 Laurier St. / 11, rue Laurier

Place du Portage, Phase III

Core 0B2 / Noyau 0B2

Gatineau, Québec K1A 0S5

Bid Fax: (819) 997-9776

**SOLICITATION AMENDMENT  
MODIFICATION DE L'INVITATION**

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

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

**Comments - Commentaires**

**Vendor/Firm Name and Address**

Raison sociale et adresse du  
fournisseur/de l'entrepreneur

**Issuing Office - Bureau de distribution**

Ship Refits and Conversions / Radoubss et  
modifications de navires and / et

11 Laurier St. / 11, rue Laurier

6C2, Place du Portage

Gatineau, Québec K1A 0S5

<b>Title - Sujet</b> CCGS EDWARD CORNWALLIS -DRYDOCK	
<b>Solicitation No. - N° de l'invitation</b> F7049-190047/A	<b>Amendment No. - N° modif.</b> 005
<b>Client Reference No. - N° de référence du client</b> F7049-190047	<b>Date</b> 2019-12-01
<b>GETS Reference No. - N° de référence de SEAG</b> PW-\$\$MD-034-27482	
<b>File No. - N° de dossier</b> 034md.F7049-190047	<b>CCC No./N° CCC - FMS No./N° VME</b>
<b>Solicitation Closes - L'invitation prend fin</b> <b>at - à 02:00 PM</b> <b>on - le 2019-12-18</b>	<b>Time Zone</b> <b>Fuseau horaire</b> Eastern Standard Time EST
<b>F.O.B. - F.A.B.</b> <b>Plant-Usine:</b> <input type="checkbox"/> <b>Destination:</b> <input checked="" type="checkbox"/> <b>Other-Autre:</b> <input type="checkbox"/>	
<b>Address Enquiries to: - Adresser toutes questions à:</b> Green, Dave	<b>Buyer Id - Id de l'acheteur</b> 034md
<b>Telephone No. - N° de téléphone</b> (819) 420-2900 ( )	<b>FAX No. - N° de FAX</b> ( ) -
<b>Destination - of Goods, Services, and Construction:</b> <b>Destination - des biens, services et construction:</b>	

Instructions: See Herein

Instructions: Voir aux présentes

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

**Solicitation Amendment # 5 is issued to:**

- 1) Modify Annex A, Multiple Sections
- 2) Respond to Vendor Questions (Bidders Conference and Post-Conference)
- 3) Upload Additional Drawings and Documents

**1) Modify Annex A, Multiple Sections**

At 6.4 Inclining Experiment Documentation  
Delete (in its entirety):

Insert:

6.4 Inclining Experiment Documentation

6.4.1.1 The Contractor must refer to Section 9.2 of this Specification for the details required for the Inclining Experiment.

6.4.1.2 The stamped and ABS approved Inclining Experiment Report for the modernized vessel must be delivered to the TA prior to the completion of the Dock Trial period.

At 6.5 Stability Booklet Documentation  
Delete (in its entirety):

Insert:

6.5 Stability Booklet Documentation

6.5.1.1 The Contractor must refer to Section 9.3 for the details required for the Trim and Stability Booklet.

At 9.0 INCLINING EXPERIMENT, TRIM AND STABILITY BOOKLET  
Delete (in its entirety):

Insert:

9.0 INCLINING EXPERIMENT, TRIM AND STABILITY BOOKLET

9.1 Inclining Experiment

9.1.1.1 The Contractor must perform an Inclining Experiment in the presence of an ABS Surveyor upon completion of the work and prior to vessel. The Contractor is responsible for the preparation and execution of the Inclining Experiment and must provide all necessary services, including necessary weights and other equipment mentioned in the Inclining Experiment Procedure, document J17002-R06 in section 15 of the TDP.

9.1.1.2 In accordance with section 15.4.2.5, under an existing contact, Lengkeek Vessel Engineering will provide supervision and direction to the Contractor in order to conduct the Inclining Experiment.

9.1.1.3 The Contractor must have an allowance of \$5,000 for the travel and living expenses of representatives from Lengkeek Vessel Engineering to conduct the Lightship Survey and supervise and direct the Inclining Experiment.

9.1.1.4 The Inclining Experiment and Lightship Survey must be carried out in accordance with the procedures outlined in document J17002-R06, included in Section 15 of the TDP.

## 9.2 Inclining Experiment Documentation

9.2.1.1 The Contractor must have an allowance of \$5,000 for the production of the Inclining Experiment Report from Lengkeek Vessel Engineering. This cost will be adjusted by the PWGSC 1379 process.

9.2.1.2 The Contractor must refer to Section 6.4 of this Specification with regards to the documentation requirements for the Inclining Experiment Report.

## 9.3 Trim and Stability Booklet

9.3.1.1 Lengkeek Vessel Engineering will prepare an approved Trim and Stability Booklet under an existing contract with Canada.

Delete only the document: 5546-152-005 Inclining Experiment Procedure

Note: Please delete this document from the TDP to prevent confusion with the document J17002-R06 in Section 15.

## At 11.4 Inspections, Tests and Commissioning

Delete (in its entirety): 11.4.2.2

Insert:

11.4.2.2 An Inclining Experiment must be performed after conversion in accordance with Sections 9.0 and 15.4.25 of this specification.

## At 15.4.2 Testing

Delete (in its entirety): 15.4.2.5

Insert:

15.4.2.5 Upon the completion of all specification item installations, the Contractor must perform an inclining experiment under the direction and supervision of Lengkeek Vessel Engineering at the shipyard facility according to inclining test procedure outlined in document J17002-R06, and in conjunction with Section 6.0, 9.0 and 11.0 of this Specification.

At 11.3.17.4

Insert:

h) New ventilation supply louvers, closing devices and surrounding structure to be modified in accordance with drawing 5546-574-001 Ventilation in Engine Spaces.

At 11.3.17.5

Delete (in its entirety): 11.3.17.5

Insert:

11.3.17.5 In section 11.3.17.4, Items a) through e) inclusive are GSM. Items f) through h) inclusive must be supplied by the Contractor.

At 11.3.26.16

Delete:

In order to summarize sections 11.3.26.14 and 12.3.26.15, the Contractor is provided the following non-exhaustive list of system modifications for the Electrical Distribution System. All redundant wiring for the following systems must be removed. The Contractor must supply and install all material required to mount the GSM electrical boxes.

Insert:

11.3.26.16 In order to summarize sections 11.3.26.14 and 12.3.26.15, the Contractor is provided the following non-exhaustive list of system modifications for the Electrical Distribution System. All redundant wiring for the following systems must be removed and the Contractor supply and install new wiring as indicated below. The Contractor must supply and install all material required to mount the GSM electrical boxes.

At 12.3.1.3

Delete:

e) Techsol – Alarm and Monitoring System Upgrades;

Insert:

e) Trihedral Engineering – Alarm and Monitoring System Upgrades;

At 12.3.6

Delete (in its entirety): 12.3.6 Techsol Marine– Alarm and Monitoring Commissioning

Insert:

12.3.6 Trihedral Engineering – Alarm and Monitoring Commissioning

12.3.6.1 The Contractor must have an allowance of \$50,000 for the services, travel and living expenses of a Trihedral Engineering FSR to oversee the commissioning of the Alarm and Monitoring system. The actual amount must be adjusted up or down via 1379 action.

12.3.6.2 The Trihedral Engineering FSR will be responsible for executing the Trihedral Engineering commissioning plan including all configuration, measurements, record keeping and adjustments required

to the Alarm and Monitoring system in order to achieve an operational propulsion system.

12.3.6.3 The Contractor must supply the services of two (2) personnel to work under the direction of the Trihedral Engineering FSR for the duration of the commissioning of the Alarm and Monitoring system and all tests and trials of the vessel.

12.3.6.4 The Contractor must ensure the Trihedral Engineering FSR provides the commissioning requirements noted in 12.3.1.4 to the Integration Team within two (2) weeks of contract award in order to permit timely integration with the other system commissioning plans.

At 14.3.3.3

Delete (in its entirety): 14.3.3.3

Insert:

14.3.3.3 The removal of existing cables and the replacement cable list will be determined at the time of installation. The Contractor must bid \$15,000 allowance for the removal of existing wiring, supply and installation of any new wiring, glands, transit repairs and securing straps required. This allowance will be adjusted by PSPC 1379 and must be included in the overall bid price. All new power and control cables, supplied by Contractor, must be 0.6/1kV 110c of a low smoke zero halogen (LSZH) designation, and must also be braided/armored – unless, otherwise identified in the wiring specification.

At 15.3.4.12

Delete (in its entirety): 15.3.4.12

Insert:

15.3.4.12 After installation, a small void between Main deck plate and false floor of the pedestal must be coated with Interseal 670HS with access through a small plate as indicated on the guidance drawing J17002-S01. The Interseal 670HS must be applied with a minimum of 2 to 3 coats to achieve a DFT of 10 mils in accordance with the manufacturer's recommendations.

At 17.2.4.4

Delete (in its entirety): 17.2.4.4

Insert:

17.2.4.4 The Contractor must include in their bid the cost to supply and install/remove any enclosures and forced air heaters required to complete this spec item.

At 18.3.1.2

Delete: \$500

Insert: \$2,000

At 19.3.1.22

Delete: Amercoat 78 HB Coal Tar Epoxy

Insert: Intershield 300

At 28.3.1.10

Delete (in its entirety): 28.3.1.10

Insert:

28.3.1.10 The Contractor must supply and install all cables required for a properly functioning sewage treatment system. The Contractor must bid on supplying and installing 25 meters of 14-3 marine cable and 5 meters of small cableways and provide a unit cost per meter of cable and cableway material with the final amount to be adjusted up or down by PWGSC 1379 action.

At 38.3.3.6

Delete (in its entirety): 38.3.3.6

Insert:

38.3.3.6 The Contractor must include, in their Bid, the hydrostatic testing of 52 bottles of Nitrogen (37 small, 2 medium and 13 large) for the FM200 system – which must include the following:

- a) Removal, hydrostatic testing, refilling and installation of the Nitrogen bottles
- b) Transportation of the bottles to and from the vessel to a facility certified to hydrostatic test facility
- c) Starting the work on the first day of the refit, and fastest transportation route.

At 43.0 EXTERNAL DECKS – PAINT

Delete:

43.3.1.1 c) Wheelhouse Top

Delete (in its entirety):

43.3.5 Wheelhouse Top (in its entirety)

At 45.3.1.4

Delete (in its entirety): 45.3.1.4

Insert:

45.3.1.4 Tank internals must be inspected by the TA and an ABS Inspector. Rusty and bare areas must be power tool cleaned and sufficiently feathered to existing coatings. The Contractor must quote on providing a safety team for 3 hours for each tank inspection and provide a unit cost for each hour of providing a safety team. The final total for this work must be adjusted up or down by PWGSC 1379 action.

## 2) Respond to Vendor Questions

Q3. The detailed description of the work required to produce Inclining Experiment Report and Trim and Stability Booklet is presented in Section 9 of the CCGS Edward Cornwallis Vessel Life Extension Specification and summarized as follows:

9.2.1.1 - The Contractor must prepare and supply four (4) stamped and ABS approved paper copies of the CCGS Edward Cornwallis's Inclining Experiment Report, in metric units, for the modernized vessel.

9.4.1.1 - The Contractor must prepare and supply four (4) stamped and ABS approved paper copies of the CCGS Edward Cornwallis's Trim and Stability Booklet, in metric units, for the modernized vessel.

However, in Section 6 of the same Specification it says the following: in imperial and metric units

6.4.1.2 - The Contractor must prepare and supply two (2) stamped and ABS approved paper copies of the CCGS Edward Cornwallis Inclining Experiment Report, in imperial and metric units, for the modernized vessel.

6.5.1.2 - The Contractor must prepare and supply two (2) stamped and ABS approved paper copies of the CCGS Edward Cornwallis Trim and Stability Booklet, in imperial and metric units, for the modernized vessel.

QUESTION: Can CANADA please clarify the discrepancies between the two Sections above?

A3. Section 9 of the CCGS Edward Cornwallis Vessel Life Extension Specification has been replaced and Section 6 has been modified to reflect the changes.

Q4. I have not been able to find clarification regarding the amount and/or the cable identification numbers which are being replaced during the DWP. We have to allot 200 hours for "for the on-site planning and manipulation of the cable routing." There is also mention of "the cost to dispose of all equipment and cabling that has been deemed unusable." The spec also mentions in paras 26.3.1.8 – 26.3.1.10, that the contractor supplies and installs 27 ROXTEC cable transits. The spec also supplies cable diagram 3AFV6213 2290 but it neglects to confirm what existing cables are being reused and what is to be replaced.

QUESTION: Is the replacement cable list for Spec 26.0 CYCLOCONVERTER REPLACEMENT- to be determined during the DWP? If that's the case, is all cable removal, replacement and any other associated task regarding cable to be dealt with via a 1379?

A4. No. The Bidder must follow the Cabling Diagram RevD in the TDP.

- Q5. a) At Item 10: Can we substitute named FSR's by local service representative?
- b) Do you have an opening If shipyard works with other companies to perform jobs and substitute named FSR of your specification?
- A5. a) The CCG has provided primary contact information for the Bidders to use when contacting FSRs. CCG recognizes that some of the firms listed in section 10 of the specification have offices throughout Canada, and the Bidder may use a local office to arrange the FSR. Regardless of the source of the FSR, it is incumbent on the Contractor to provide the TA with documentation that proves the FSR attending the VLE is accredited by the parent company to perform the tasks listed in Annex A.
- b) The Contractor must not substitute "other companies to perform jobs". Although the "other companies" may have a general working knowledge of the equipment in question, are not up to date with the specific systems and equipment CCG is installing in the CCGS Edward Cornwallis.

Q6. At Item 14:

- a) 14.3.1.8 talks about purifier sludge tank; can't find on the capacity plan, is it the drain tank no21 at frame 70-72 at 1.88m3? If not, can you indicate location and capacity?
- b) 14.3.5.5.8 Would you accept Victaulic couplings to reconnect the 4inches vent pipes?
- c) 14.4.3.2 can you indicate % water/Maxiguard of the mixture for disposal?
- A6. a) The Purifier Sludge Tank is located on the port side of the Purifier Room, above the Tank Top at frames 59.5 to 69. The capacity is approximately 2.22 cubic meters.
- b) No, they must be reconnected as noted in section 14.3.5.
- c) The CCGS Cornwallis uses another Drew Marine product, Liquidewt instead of Maxiguard. The concentration of the Liquidewt is 10,000 to 15,000 ppm. The name of the product will be modified in section 14.4.3.2

Q7. At 38.3.3.6, would you please confirm the total number of cylinders and sizes? The totals do not add up.

A7. Section 38.3.3.6 will be modified to read:

The Contractor must include, in their Bid, the hydrostatic testing of 52 bottles of Nitrogen (37 small, 2 medium and 13 large) for the FM200 system – which must include the following:

- a) Removal, hydrostatic testing, refilling and installation of the Nitrogen bottles
- b) Transportation of the bottles to and from the vessel to a facility certified to hydrostatic test facility
- c) Starting the work on the first day of the refit, and fastest transportation route



Q8. We are unable to locate the following drawings named at 47.2.3. Would you please address where they can be found or add if they are missing?

- ABS Type Approval - Kidde Marine CO2 Suppression Systems
- PandID — CCGS Sir William Alexander - Forward / Aft Cargo Actuation Arrangement
- CO2 Marine Carbon Dioxide Version 2.4 -Design, Installation, Operation And Maintenance Manual
- Equipment Location (Annotated To Show Overall Location Of Major Components - Cylinders And Release Stations)

A8. Please find the drawing DB18356-M-001 Forward/Aft Cargo Actuation Arrangement and the drawing DB18356-M-002 Equipment Location attached to the Solicitation Amendment to be inserted in the TDP. The ABS Type Approval certificate is also included – document ABS\_CO2 Cert-Type Approval.

The CO2 Marine Carbon Dioxide Version 2.4 -Design, Installation, Operation And Maintenance Manual is provided directly to certified Kidde distributors directly and will be removed from Annex A as a reference document.

Q9: Section 15.4.2.5 of the specification states that Lengkeek Vessel Engineering must carry out the inclining test, which seems to conflict with the information in section 9.0. Can you please clarify what the Bidders are responsible for?

A9: Note the modifications to Annex A in the attached Solicitation Amendment for Sections 6, 9, 11 and 15 with regards to the Stability requirement for this project.

Q10. Would you please confirm/forward bidders the capacity of sea chests and sea bays?

A10. Capacities listed are approximate in Cubic Meters:

Sea Bay	29.9
High Sea Chest (P)	9.7
High Sea Chest (S)	9.7
Low Sea Chest (P)	9.2
Low Sea Chest (S)	9.2
Aft Sea Chest	0.8
Distiller Sea Chest	1.3

Q11. At 11.3.10.9 - The existing gensets may be removed and the new gensets must be installed through temporary access cutout in the tank top structure.

a) It appears that information is missing in these drawings ( IPI, document DBAE957879) for removal process of Alco gensets. Can you produce other drawings or give more details?

b) For removal of Alco gensets, we need the installation manual or documentation about these gensets. Can you please provide?

A11. a) The IPI document is the installation guide for the new Wartsila Engines. It does not address the removal of the Alco gensets, this process is for the Bidders to use their expertise in ship repair to determine the best removal process. CCG can provide two additional drawings, Alco 16-251 Lifting and Handling, and Alco Gen Set Outline.

b) CCG has been unable to locate any installation manuals for the Alco gensets other than the two drawings provided above.

Q12. At 11.3.17 Engine room ventilation system

a) Drawing 5546-574-001 shows many modifications according the technical request (Edward Cornwallis VLE), but new louvers job is not mentioned in this technical request. Can you clarify?

b) If new louvers job is to be completed, can you provide drawings for the new louvers to be installed?

A12. a) Section 11.3.17.3 indicates that "The ventilation system must be rebuilt in accordance with the following document: 5546-574-001 Ventilation in Engine Spaces". It is not the CCG's intension to detail in the specification each detail on each drawing. The Bidders should refer to the General Notes on drawing 5546-574-001. The Bidders should note on Section A-A of drawing 5546-574-001 the new bulkhead dimensions off Centreline and the new structure that differs from the existing structure to accommodate the indicated louver sizes.

Sections 11.3.17.4 and 11.3.17.5 will have an additional wording added:

11.3.17.4

h) New ventilation supply louvers, closing devices and surrounding structure to be modified in accordance with drawing 5546-574-001 Ventilation in Engine Spaces.

11.3.17.5

In section 11.3.17.4, Items a) through e) inclusive are GSM. Items f) through h) inclusive must be supplied by the Contractor.

b) CCG has not been able to locate the drawings specific to the CCGS Edward Cornwallis. CCG has provided two drawings as guidance for new louvers to be constructed or purchased – S32-230-79 (2 sheets) – Ventilation Louvers and Doors from the CCGS Laurier.

Q13. At 13.3.4.9 The Contractor must align and weld (as per the procedures and location in DBAE579946 (Tunnel Thruster IPI)) the new Stainless Steel ring into place. The Contractor must inject the adhesive into the stainless steel ring as per BAE579946 (Tunnel Thruster IPI).

Is Wartsila provide the new stainless steel ring?

A13. Yes, as noted on Tunnel Assembly Drawing DAAF322758, in the Tunnel Thruster IPI Document DBAE579946, the Stainless Steel ring (1600/1588 x 460mm) is Wartsila supplied. This is also noted

in the specification, section 13.2.7.1, Table 13-2, Item #2 – Stainless Wear Ring to be installed within the existing tunnel.

Q14. At 13.3.2.21 Contractor must prevent any ingress of blast media to the winch compartment i.e., the blasting area must be sealed off. Contractor must supply and apply one stripe and one complete coat of International Paint – Intershield 300 HS applied to all prepared steel. A stripe and one complete topcoat of International Paint Intergard 740 Grey must be applied after sufficient curing time is allowed for the previous coats and following all manufacturers recommendations to the entire motor tunnel.

Should the sandblast of motor thruster tunnel be to SA 2½ or SA 2?

A14. In accordance with the Intershield 300 Technical Data Sheet, it is recommended that the Abrasive Blast Cleaning be done to Sa2½ (ISO 8501-1:2007).

Q15. At 15.0 Buoy Crane Replacement

- a) As the upper flume tank is not in the fuel tank list of the item 46 and not clearly identified as a fuel tank on the capacity plan, can you confirm that information at appendix A page 421 is accurate and If we have to assume to clean/gas free this tank who will receive the crutch post of the new crane?
- b) At 15.3.4.12 Can you provide specification of the Bitumastic product and quantity required to fill the void space between the main deck and false floor for estimate purpose? Can you confirm that your intention is the fill the space with paint?
- c) At 15.3.24 Can you confirm material and schedule to use for the new fire line of the page 13 of 13 dwg J17002-SK1?

A15. a) The Flume Tanks are considered fuel tanks in the Capacity Plan, as evidenced by the specific gravity used to calculate the 98% tonnes value. Bidder should price in the need to clean and gas free for the installation of the park post for the new crane.

- b) The drawing for the crane pedestal is being updated to provide a small access cover so that the space can be coated by roller with the following product:

International Paints – Interseal 670HS. A Technical Data Sheet for the product is included in this solicitation amendment.

Section 15.3.4.12 will be modified to read:

After installation, a small void between Main deck plate and false floor of the pedestal must be coated with Interseal 670HS with access through a small plate as indicated on the guidance drawing J17002-S01. The Interseal 670HS must be applied with a minimum of 2 to 3 coats to achieve a DFT of 10 mils in accordance with the manufacturer's recommendations.

- c) Please see the existing Fire System Drawing VNDB2-234-01 in the Solicitation Amendment for clarification on piping materials and schedule.

Q16. At Spec 14.0 - Aux Diesel Replacement - I have not been able to find clarification regarding the amount and/or the cable identification numbers which are being replaced during the DWP. At Para 14.3.3.3. the spec mentions " All new power and control cables, supplied by Contractor, must be 0.6/1kV 110c of a low smoke zero halogen (LSZH) designation, and must also be braided/armored – unless, otherwise identified in the wiring specification." However this doesn't dictate that "All" cables are to be replaced or which ones.

Is the replacement cable list to be determined during the DWP? If that's the case, will all cable removal, replacement and any other associated task regarding cable will be dealt with via a 1379?

A16. Section 14.3.3.3 will be modified to read:

The removal of existing cables and the replacement cable list will be determined at the time of installation. The Contractor must bid \$15,000 allowance for the removal of existing wiring, supply and installation of any new wiring, glands, transit repairs and securing straps required. This allowance will be adjusted by PSPC 1379 and must be included in the overall bid price. All new power and control cables, supplied by Contractor, must be 0.6/1kV 110c of a low smoke zero halogen (LSZH) designation, and must also be braided/armored – unless, otherwise identified in the wiring specification.

Q17. At Spec 41 - Would CCG please provide the :

- a) Capacity of the SirviTec Zodiac in the Hangar?
- b) Present certificates for all the liferafts if possible?

A17. a) It has 4 person capacity.

b) The liferaft certificates are supplied in the following three documents : DOC199, DOC200 and DOC201 attached to the solicitation amendment.

Q18. At Spec 13.0 Bow Thruster Replacement - I have not been able to find clarification regarding the amount and/or the cable identification numbers which are being replaced during the DWP.

We require further details regarding the cable designations to be removed/replaced. In the current state of estimating this spec, all cable related activities will be dealt with via 1379. Please confirm.

A18. The Bidder should refer to the document DBAE765508 VFD and Controls Operation and Maintenance Manual in the TDP, in particular the drawing DAAF383169B – Complete Project Electrical Drawings Package for reference. The Bidder should note sections 13.2.6.3, 13.2.6.4 and 13.3.2.1.

Q19. At Spec 28.0 - Sewage Treatment Plant Modifications -

<b>28.3.1.10</b>	The Contractor must supply and install all cables required for a properly functioning sewage treatment system.
<b>28.3.1.11</b>	All electrical equipment required by the Contractor must be marine rated, comply with TP127, IEEE45, and be current production makes and models.
<b>28.3.1.12</b>	Cables must be run along existing cableways where possible. The Contractor is responsible for installing new cableways where necessary.

The following paras 28.3.1.10 to 12

The amount and type of cable to be removed and replaced for the new system is unclear. There are no cable types or lengths in spec. The above mentioned paras represent the cable information. Please confirm if all cable activities including but not limited to removal, replacement and terminations will be dealt with via 1379.

A19. Section 28.3.1.10 will be modified to read:

28.3.1.10

The Contractor must supply and install all cables required for a properly functioning sewage treatment system. The Contractor must bid on supplying and installing 25 meters of 14-3 marine cable and 5 meters of small cableways and provide a unit cost per meter of cable and cableway material with the final amount to be adjusted up or down by PWGSC 1379 action.

Q20. Referring to Section 11.3.26.16. It is not clear if the contractor is expected to supply the generator cables. (Including the generator main power cables) Will this be GSM or is the contractor expected to supply?" If so are main power cables 18 (1 Conductor 700 MCM) or 8 (3 Conductor 700 MCM) as they are described both way on different Wartsila documents?

A20. The Bidder is directed to review section 11.3.26.16 a) 3) – "Replacement of all generator cables, including main power, preheater and control cables to Main Switchboard and Power Management System;". (CCG added italics) CCG will reword this section to provide clarity:

11.3.26.16

In order to summarize sections 11.3.26.14 and 12.3.26.15, the Contractor is provided the following non-exhaustive list of system modifications for the Electrical Distribution System. All redundant wiring for the following systems must be removed and the Contractor supply and install new wiring as indicated below. The Contractor must supply and install all material required to mount the GSM electrical boxes.

a). . . j) remain same.

Q21. Referring to Section 14.3.3.2 it is not clear if the contractor is expected to replace or provide any new cables, only that a new transit is required. Is the contractor expected to replace any cables?

Solicitation No. - N° de l'invitation  
F7049-190047/A  
Client Ref. No. - N° de réf. du client  
F7049-190047

Amd. No 5. - N°5 de la modif.  
File No. - N° du dossier  
034mdF7049-190047

Buyer ID - Id de l'acheteur  
034md  
CCC No./N° CCC - FMS No./N° VME

---

A21. The spec states that “*The contractor is responsible to correct any leakage; also, **to supply and install all cabling not identified as being supplied by TA.***”

## **Bidders Conference Solicitation and Specification Related Questions**

### **Spec. Ref.**

- 2.2.7 Q: How will Asbestos be addressed when found?  
A: Will be addressed with 1379s.
- 3.9 Q: Are the Anti-vibration mounts for the engines GFE?  
A: Yes.
- 4.2 Q: Will the existing Load Analysis be provided?  
A: Yes. Post-meeting note: The existing Load Analysis for the vessel was provided in the TDP in Section 11, file VNDB2-352-01 Electrical Load Analysis.
- 6.1.4 Q: What will be the working drawing turnaround time?  
A: As per the SOW. Please note that the AutoCAD drawings will be supplied to speed up the drawing process.
- 7.3 Q: How long will Sea Trials take?  
A: Approximately 7 days.
- 8.2.1.14 Q: Will there be assistance to document which spaces are areas of concern for winterization?  
A: Yes, the crew will assist in identifying those areas during the change of custody.
- 11.3.5.8 Q: Can this be considered for an allowance?  
A: No.
- 11.3.10.7 Q: Will there be a FSR to assist in separating the existing gensets?  
A: No.
- 12.3.5 Q: Is the \$600,000 allowance a typo?  
A: No, it is correct.
- 15.3.2.3 Q: Will all the crane components be disposed of as scrap?  
A: The chart in this section breaks down the components that CCG wishes to keep as Category "A" equipment and the Contractor must refer to section 1.10.2 for details on how to store this equipment. Please note the last sentence of 1.10.2.2 – Canada will be responsible for shipping from the shipyard.
- 15.3.16.6 Q: Can you provide the cable list for the conduits through the fuel tanks?  
A: Yes, additional drawings will be provided.
- 15.3.19.3 Q: Does the conduit go 'through the pedestal'?  
A: No, the conduit runs through the "new crane pedestal support bracket". This is clearly shown in the associated drawings.

- 
- 16.3.3.4 Q: Can we all agree to go with the Sir William Alexander mast design so we are all bidding on the same thing?  
A: The SWA design was one of the provided designs for Bidders to consider and can be used with the understanding that current fall arrest requirements must be incorporated in an updated design.
- 17.2.4.4 Q: Is the \$30,000 allowance enough for this – we have ships that are entirely wrapped in order to perform this work.  
A: CCG will discuss this.  
Post Meeting: 17.2.4.4 is amended to remove the allowance.
- 18.3.1.2 Q: The allowance of \$500 seems low for 2 days of man-lift time, should it be increased?  
A: Yes, we will have it increased to \$2000.
- 19.3.1.2 Q: Can you clarify if the Contractor is to supply the O-cord noted?  
A: Yes, the Contractor must supply the O-cord.
- 19.3.1.18 Q: Can you clarify the wording about the FSR allowance being “at cost without any allowance for overhead or profit”?  
A: CCG will reword the clause to match wording elsewhere in the specification.
- 19.3.1.22 Q: Coal Tar Epoxy is no longer available, we would recommend the equivalent of Intershield 300 for this application.  
A: CCG concurs, and will modify the wording of this clause to reflect the Intershield 300 product.
- 19.3.1.25 Q: This section says “each” propeller and “tail shafts”, want to confirm just one shaft is being removed?  
A: Yes, only 1 (one) shaft is being removed.
- 25.3.4.4 Clarification – the number of shots to be bid on is 5000, this should be reflected in the Pricing Data Sheet.
- 27 Q: Is this specification for just one 10” valve?  
A: Yes.
- 32, 33 Q: Should these happen close to the end of the refit?  
A: Unless additional effort to cover and protect these areas for the duration of the refit, it would be best to leave these until near the end.
- 39 Q: Will the boat be on the Miranda davit when it arrives?  
A: Yes, a requirement for sailing. The CCG crew can remove the boat, and it will need storage in the ship yard for the duration of the refit.
- 42 Q: Will the barge be on board?  
A: The aluminum barge will be removed prior to arrival at the ship yard.
- 43.3.5 Q: The Wheelhouse Top looks in good shape, can we confirm the area of work to be done in this specification?  
A: Post-meeting: This specification item will be removed from the specification.



45.3.1.4 Q: Can we have an allowance for a watchman at the entrance to the tanks for the duration of the inspection as we have no idea how long the inspection may take?  
A: Post-meeting: 45.3.1.4 is amended to include a provision for a safety team.

48.3.1.2 Q: These trades are charged out at different rates, will the Pricing Data Sheet reflect this?  
A: The pricing data sheet will be amended and the hours distributed evenly.

50.3.1 Q: Do we need to break out the pricing by the different trades?  
A: The pricing data sheet will be amended and the hours distributed evenly.

50.5.3 Q: Was the training by Techsol to be included in the \$130,000 allowance?  
A: Yes.

Annex H Q: After the 5000 hours is reached, can there be a rate adjustment?  
A: No. 5000 hours is only a tool used for evaluation purposes; It is not an estimation of unscheduled work. As stated in Annex H–H2 “The firm hourly charge-out labour rate and the material mark-up will remain firm for the duration of the Contract including any subsequent amendments.” As such, Bidders should provide a rate they are comfortable with for the full duration of the contract, including any extensions.

ITT 2.1 Q: Would Canada verify if a Bidder is entitled to compensation for cancelled/re-bids?  
A: None. As per the SACC 2003 Standard Instructions - Goods or Services - Competitive Requirements, subsections 11 and 15, Canada reserves the right to cancel or re-issue solicitations. Bidders must bear all costs of bid preparation and submission.

General Q: Will the Contracting Authority and Technical Authority be on site for the duration of the contract?  
A: The Technical Authority will be on site.

#### Transfer of Custody

Q: When will the transfer of custody take place? When will the crew depart?  
A: The transfer of custody will take place after arrival at the Contractor's facility once the crew has completed offloading. Actual date to be determined closer to the ship's arrival at the yard.

#### Annex B & H

Q: Where the Contractor is to provide support as required by an FSR over a designated holiday, how is it handled? How is it handled province to province?  
A: As defined at Annex B and Annex H – B3 Overtime, the Contractor will be entitled to bill at the double-time rate. There is no distinction between provinces and their respective designated holidays.

Solicitation No. - N° de l'invitation  
F7049-190047/A  
Client Ref. No. - N° de réf. du client  
F7049-190047

Amd. No 5. - N°5 de la modif.  
File No. - N° du dossier  
034mdF7049-190047

Buyer ID - Id de l'acheteur  
034md  
CCC No./N° CCC - FMS No./N° VME

---

#### 7.16 Work Schedule

Q: Should the Contractor submit a 5, 6 or 7 day work schedule?

A: Canada will not dictate the scheduling other than to define the Work Period for the project to be completed in. It is the responsibility of the Bidder to complete and submit a work schedule that complies with the overall Work Period based on their individual resources and capabilities.

### 3) Upload Additional Drawings and Documents

File name on Buyandsell.gc.ca: Addl Docs per Q&A 3-23

**End of Solicitation Amendment #5**