

**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 0A1 / Noyau 0A1

Gatineau

Québec

K1A 0S5

Bid Fax: (819) 997-9776

**REQUEST FOR PRICE AND
AVAILABILITY**

**DEMANDE DE PRIX ET DE
DISPONIBILITÉ**

This is not a bid solicitation but an inquiry for the purpose of obtaining price and availability information for the goods, services, and construction specified herein. The information requested herein is for budgeting and planning purposes only. Contracts will not be entered into on the basis of suppliers' responses.

Il ne s'agit pas d'une invitation à soumissionner mais d'une demande de renseignements sur les prix et la disponibilité des biens, services et construction spécifiés aux présentes. Les renseignements demandés aux présentes sont nécessaires uniquement à l'établissement du budget et à la planification. Les marchés ne seront pas attribués suite aux réponses des fournisseurs/entrepreneurs.

Comments - Commentaires

Title - Sujet NAVAL LARGE TUG CONSTRUCTION PROJ.	
Solicitation No. - N° de l'invitation W8472-13NLTE/A	Date 2012-12-03
Client Reference No. - N° de référence du client W8472-13NLTE	GETS Ref. No. - N° de réf. de SEAG PW-\$\$MC-023-23383
File No. - N° de dossier 023mc.W8472-13NLTE	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2013-01-18	
Time Zone Fuseau horaire Eastern Standard Time EST	
F.O.B. - F.A.B.	
Plant-Usine: <input type="checkbox"/> Destination: <input type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Bilodeau, Allen	Buyer Id - Id de l'acheteur 023mc
Telephone No. - N° de téléphone (819) 956-5950 ()	FAX No. - N° de FAX () -
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction:	
Specified Herein Précisé dans les présentes	

Instructions: See Herein

Instructions: Voir aux présentes

Vendor/Firm Name and Address

**Raison sociale et adresse du
fournisseur/de l'entrepreneur**

Issuing Office - Bureau de distribution

Ship Construction, Refit and Related
Services/Construction navale, Radoubs et services
connexes

11 Laurier St. / 11, rue Laurier

6C2, Place du Portage

Gatineau

Québec

K1A 0S5

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

Solicitation No. - N° de l'invitation

W8472-13NLTE/A

Amd. No. - N° de la modif.

File No. - N° du dossier

023mcW8472-13NLTE

Buyer ID - Id de l'acheteur

023mc

CCC No./N° CCC - FMS No/ N° VME

SEE FOLLOWING ANNEXES:

- **SECTION 10 EXCERPTS OF NSPS UMBRELLA AGREEMENT**
- **DND TUGS STATEMENT OF OPERATIONAL REQUIREMENTS**

**NATIONAL SHIPBUILDING PROCUREMENT STRATEGY
SECTION 10 EXCERPTS FROM THE UMBRELLA AGREEMENT**

Section 10 - Competition

- 10.1 The Company agrees that neither the Company nor its subsidiaries or affiliates nor the person who controls any of them ("subsidiary," "affiliate", "control", and "person" are all as defined in the Canada Business Corporation Act, R.C.S. 1985, c. C-44, as amended) shall:
- a) submit a bid to Canada or any of its departments or agencies, or be eligible to submit such a bid, or be awarded a contract or be eligible to be awarded a contract for the construction of any ship less than 1000 tonnes in lightship displacement; or
 - b) merge or amalgamate with or enter into partnership with another Canadian shipyard or Canadian shipbuilder (collectively "shipyard"), or acquire all or substantially all of the assets of any other Canadian shipyard or any assets that are shipbuilding contracts entered into with Her Majesty in right of Canada, or enter into any agreement that would result in another Canadian shipyard acquiring all or substantially all of the assets of the Company, or any shipbuilding contracts that are contracts entered into with Her Majesty in right of Canada, or enter into any corporate transaction or corporate change or reorganization involving another Canadian shipyard, including the acquisition of shares in any other Canadian shipyard or acquisition of shares by another Canadian shipyard in the Company or any transaction involving the purchase of the assets of any other shipyard or of the Company by another Canadian shipyard, without Canada's prior written consent, which consent may be withheld in Canada's absolute discretion to implement the intent of this Section 10 as Canada sees fit. In this section 10.1, "Company" means the Company, its subsidiaries or affiliates or the person who controls any of them.
- 10.2 The provisions of section 10.1 shall be included in any resulting contract, and breach of either subsections a) or b) shall be a breach of any resulting contract that shall entitle Canada, without limiting any other remedy, to terminate the resulting contract. Each resulting contract shall also include the Company's warranty that it has complied with subsections 10.1 a) and b) from the date of its Bid until the date of execution of the resulting contract; compliance with this warranty shall be a condition of the resulting contract and subject to verification by Canada during the term of the resulting contract. The resulting contract shall also specify that if the Company does not comply with any warranty or it is determined that any warranty made by the Company is untrue, whether made knowingly or unknowingly, Canada shall have the right, pursuant to the default provisions of the resulting contract, to terminate the Contract for default.

GENERAL STATEMENT OF OPERATIONAL REQUIREMENT

Price and Availability Version 26 November 2012



DSP NO	C.001339
TITLE	NAVAL LARGE TUG ENHANCEMENT PROJECT

SPONSOR: Commander of the Royal Canadian Navy

General Statement of Requirements

Concept of Employment

The Royal Canadian Navy (RCN) will be purchasing six large tugs. Three large tugs are required on each coast (total: six). The large tugs will be of a commercial in service design and will require minimal customization to meet the requirements. The tugs shall perform a wide variety of tasks including harbour berthing, coastal towing, harbour fire fighting and other naval fleet support duties on a 24/7 basis. Daily services are scheduled; however, operational requirements often demand that services be initiated and/or continued outside of these regular working hours.

The tugs shall operate within 750 nautical miles of their respective home ports and conduct both in-harbour and out-of-harbour operations. Out-of-harbour operations will have a maximum combined transit and on-station time of ten (10) days. Longer deployments are possible, but will require port stops to refuel and replenish stores.

The tugs shall operate throughout the year in the wind, wave, tide and current conditions found in Canadian and US harbours and coastal waters. The tugs shall be capable of operating throughout a 24 hour day, in both unrestricted and restricted visibility as defined by the Convention on the International Regulations for Preventing Collisions at Sea (COLREGS).

Core Mission Tasks. All tugs shall be capable of performing the following QHM tasks:

- Perform cold and hot moves of all existing classes of RCN vessels, (PROTECTEUR*, HALIFAX, IROQUOIS, KINGSTON, and VICTORIA- classes), auxiliary vessels, floating industrial plants and barges in sustained winds of 25 knots from any directions and in current of up to 2 knots in any directions. *(Note: 2 tugs in combination will cold move PROTECTEUR class vessels);
- Provide berthing assistance to visiting foreign classes of naval vessels and submarines of similar sizes;
- Open, close, and secure the gates to harbour Floating Force Protection Boom (FFPB), and move sections of the FFPB, to permit arrival and departure of ships/vessels;
- Transfer limited quantities (a minimum of 20 tonnes per visit) of potable water.
- Sufficient range to conduct out-of-harbour coastal towing of a 1000 ton ship at 5 knots for 750 nautical miles in Beaufort 7 and associated seas.
- The tugs shall have a Fast Rescue Craft (FRC) as defined by TC/IMO regulations which will be used as a dual-purpose seaboat/lifeboat; desired length is approximately 5 meters.
- Provide an FRC davit in accordance with TC/IMO regulations
- Provide an articulated marine crane capable of handling naval mooring buoys, both in-harbour and at remote locations up to 2200lbs in calm sea conditions and, launching and recovering the onboard FRC with two crew members over the gunwales at least one meter away from shipside; maximum outreach of at least 5 meters from ship side.
- The each tug shall have a Fire Fighter 1 class firefighting capability, (FIFI 1 notation of a Classification Society) including the ability to provide around the clock immediate response.

General Characteristics

- Modern configuration that includes ergonomics features enabling a single person operation from the conning position for any projected evolution in any direction;
- Naval vessels are comparatively thin-hulled in relation to commercial vessels and the tugs shall have an adequate fendering system.
- Conceptually, the tugs shall be steel-hulled vessels designed for at least a 25 year life expectancy.
- Full load draft shall not exceed 6m.
- The tugs shall be built to Transport Canada Standards or a Transport Canada recognized Classification Society. The tugs will also permit a Harbour Pilot to embark and disembark between the tug and vessel while both vessels are underway at five knots or less and the tug is against the vessel's side.

Crewing/Habitability

The tug's crew shall notionally be between 3-10 personnel, depending on employment. A crew of 3 will be required for in-harbour operations, and a crew of 9 will be required for out-of-harbour operations when the crew is required to stand watches. The maximum crew compliment will be 10. The crew will be Transport Canada (TC) certified personnel. The tug design shall have accommodations for a mixed-gender crew to carry out in-harbour and near coastal operations (e.g. tows, mooring buoy maintenance) of 10 days duration. The tug shall have cabins, washrooms, a gender neutral shower facility, a galley and a crew lounge.

Manoeuvrability

The tugs shall achieve a maximum speed of at least 12 knots at 90% MCR, fully loaded in calm water and have a minimal manoeuvring speed of 1 knot.

The tugs shall have:

- a) seamless, uninterrupted, and consistent thrust when changing the thrust vector through a full 360 degrees, for example an azimuth or a cycloid propulsion drive;
- b) the ability to turn the tug on its own position ("on the spot") without creeping or scribing an arc through the water (independent of current/wind forces);
- c) the ability to manoeuvre the tug sideways ("sidestepping") along a line of bearing, on any axis, with the operator having simultaneous and immediate control over the tug's heading, headway and sternway;
- d) an immediate response to control inputs changing the thrust direction and force; and
- e) a simple, intuitive, and easy-to-operate control system which gives the operator a high degree of control over both the direction and the force of the thrust.

Propulsion System

The propulsion system shall be based on a twin marine diesel configuration driving twin propulsion units which can provide 360 degrees of vectored thrust with a minimum bollard pull of 40 tons. The propulsion engines shall be fuelled by commercially available diesel fuel.

Deck Equipment.

The tugs shall be fitted with two self-tensioning heavy winches, one forward and one aft, each with dual drum capability for synthetic lines and encapsulated staples, bollards, windlasses, and other necessary deck equipment. Deck winches shall be situated to maximize towing efficiencies, maintain a clear working deck and incorporate features into the minimum number of winches. Winches can be multi-drum, waterfall, or single-purpose. Deck machinery shall be powered by one type of power source and be of proven manufacture for the towing industry.

Equipment list:

Equipment list Foredeck

- a) a hawser winch with self tensioning control capable of holding 250 feet of synthetic line and capable of operating at the tugs maximum rated bollard pull;
- b) a fitted staple for the hawser winch, suitable for use with synthetic lines;
- c) a minimum of eight fairleads suitable for synthetic line, four on the port side and four on the starboard side;
- d) an anchor winch, anchor and at least seven shackles (630 feet) of cable; and
- e) the hawser winch, staple and fairleads shall be situated to allow the hawser to be deployed forward at the centre line and to each side of the vessel.

Equipment list Afterdeck

- a) a hawser winch with self tensioning control capable of holding 600 feet of synthetic line capable of operating at the tug's maximum rated bollard pull in the indirect mode;
- b) the hawser winch shall have a secondary drum capable of holding 250 feet of synthetic line capable of operating at the tug's maximum rated bollard pull;
- c) a fitted staple for each hawser suitable for use with both winches and with synthetic lines;
- d) a towing winch capable of holding 2000 feet of wire rope capable of operating in a standard astern towing configuration sized to the tug's rated bollard pull; and
- e) the towing winch shall be fitted with spooling gear, towing pins, aft roller and cable clamps.

Winches shall have both remote and local controls. Their primary control shall be from the bridge. Local controls shall be at a safe location in the vicinity of the winch. Winch controls shall be situated where there will be an unobstructed line of sight to the tow in the primary towing direction when operating the controls. All winches shall have a quick release mechanism controllable both locally and from the bridge.

Bollards shall be of the full-height type to enable crew to work lines while standing.

Initial provisioning of berthing hawsers, strops, shackles, fenders, shot mats, and other ancillary deck equipment configured for the tugs and required for operations plus a two year supply of spares shall be supplied.

Machinery Plant/Space

The machinery plant shall be unmanned in the course of normal operations. The tugs shall have an area located in or near the main machinery space with sufficient tool stowage for a typical, anticipated tool fit. Any special tools required for completing operator maintenance aboard the tugs shall be supplied.

Electrical Plant

The electrical system for the tugs shall be designed and installed in accordance with TC regulations and the standards of a Classification Society. Electrical appliances shall comply with the CSA standards for equipment manufactured in Canada. Equipment manufactured outside Canada shall comply with CSA-equivalent codes. The power requirements are:

- a) Primary ship's service power: at least 440 volts alternating current (VAC), 60 Hertz (Hz), 3 phase; and
- b) Secondary power: 120 VAC, 60 Hz, 3 phase.
- c) DC power as required for electronics

Pollution Control

The tugs shall be able to embark and deploy Tier 1 pollution response equipment, a skimmer, and a standard-size PVC barrel of oil spill response materials.

General Maintenance

Materials, machinery and equipment used in the tugs shall have proven logistical support chains (sales offices, warehousing spares, and field service representatives) established and operating in Canada. Builder will be required to provide relevant Original Equipment Manufacturer and system information to allow a Royal Canadian Navy minor vessel in service support contractor to develop a 1st, 2nd, and 3rd level maintenance schedules.

Environmental Sustainability

The tug shall comply with all national and international pollution prevention regulations in force or anticipated at contract award. All engines on the vessel, including main propulsion, fire pumps, and generators shall be compliant with applicable IMO regulations.¹

Delivery Requirements

¹ Reference: Transport Canada, Response Organizations Standards (1995) – TP 12401 E. The IMO tier at the time of build, foreseeably, this will be IMO Tier II but could be Tier III.

The tugs shall be delivered to Halifax and Esquimalt for acceptance, to correspond with their intended place of employment with a complete Technical Data Package (TDP).

Familiarization Training General

The builder will be required to provide familiarization sessions with DND crews.

Additional Design Considerations

It is expected that tug designs actually in service will meet all requirements detailed in this document with minor or no significant modifications. However, should significant changes be required to the existing design, the following reduced requirements could be considered:

- 200 nautical mile range of tow
- Crew of 4 for 24 hours
- Crane capacity

Main Design Characteristics Summary Table with Comparative Requirements

Characteristic	Configuration 1 Coastal Tug Meeting all requirements of the SOR	Configuration 2 Harbour Tug Modified Operational Requirement (in italic)
Draft	Not greater than 6m	Not greater than 6m
Free Running Speed	Not less than 12 knots at 90 % of the maximum unrestricted continuous rating.	Not less than 12 knots at 90 % of the maximum unrestricted continuous rating.
Minimum Manoeuvring Speed	1 knot	1 knot
Bollard Pull	Minimum of 40 tonnes.	Minimum of 40 tonnes.
Note	Bollard Pull shall be suitable to meet operational requirements to cold move an auxiliary vessel with the following notional particulars 210m length overall with a displacement of 25,000 tonnes.	
Range	Not less than 2400 nautical miles at a transit speed of 10 knots.	<i>Sufficient range to conduct a coastal tow of a 1000 tonne vessel for 200 nautical miles</i>
Conduct coastal towing of 1000 tonne vessel	750 nautical miles	<i>200 nautical miles</i>
Endurance	Sustained operations for 10 days with full complement. Provisions and stowage for full complement for 10 days.	<i>Sustained operations for 4 days with full complement. Provisions and stowage for full complement for 4 days.</i>
Full Complement	Full Complement is defined as 10 persons, mixed gender, Transport Canada certified.	<i>Full Complement is defined as 4 persons, mixed gender, Transport Canada certified.</i>
Prime Movers	Twin Medium Speed Diesel Engines	Twin Medium Speed Diesel Engines
Propulsors	Twin propulsion units providing 360 degrees of vectored thrust.	Twin propulsion units providing 360 degrees of vectored thrust.
Provide 24/7 Firefighting	FiFi 1	FiFi 1
Voyage Classification	Near Coastal Voyage Class I	<i>Near Coastal Voyage Class II</i>
Hull	Steel	Steel
Servicing naval mooring buoys	Deck area and crane to able complete service including the lifting and handling of buoys	Not required