



RETURN BIDS TO:

RETOURNER LES SOUMISSIONS À:

Réception des soumissions - TPSGC / Bid Receiving -
PWGSC

1550, Avenue d'Estimauville
1550, D'Estimauville Avenue
Quebec
Quebec
G1K 4K1

**SOLICITATION AMENDMENT
MODIFICATION DE L'INVITATION**

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

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

Comments - Commentaires

Vendor/Firm Name and Address
Raison sociale et adresse du
fournisseur/de l'entrepreneur

Issuing Office - Bureau de distribution
TPSGC/PWGSC
1550 Avenue d'Estimauville
Québec
Québec
G1J 0C7

Title - Sujet CCGS Des Groseilliers-Refit 2019	
Solicitation No. - N° de l'invitation F3017-18N750/A	Amendment No. - N° modif. 005
Client Reference No. - N° de référence du client F3017-18N750	Date 2019-04-08
GETS Reference No. - N° de référence de SEAG PW-\$QCV-007-17627	
File No. - N° de dossier QCV-8-41247 (007)	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2019-04-10	Time Zone Fuseau horaire Heure Avancée de l'Est HAE
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: Simoneau, Steve	Buyer Id - Id de l'acheteur qcv007
Telephone No. - N° de téléphone (418) 649-2816 ()	FAX No. - N° de FAX (418) 648-2209
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction:	

Instructions: See Herein

Instructions: Voir aux présentes

Delivery Required - Livraison exigée	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

AMENDMENT 005

Included in the present amendment:

1. Addition of technical documents

1. Addition of technical documents (see following pages):

The following technical documents are included :

- Big Multibeam Cable Connections.pdf
- Big Multibeam One Line Diagrams.pdf

ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED

8.2 Cable List

It should be noted that the cables provided in the following cable lists should be confirmed prior to installation, as any future changes in scope or design may result in required changes to the cables.

8.2.1 Power Cables

The following is a list of the power cables required in this installation. Cables marked with an asterisk (*) are provided by Kongsberg as part of the EM 712 system, or by other manufacturers.

Table 1: Power Cable List

Cable Name	Cable Type	Rated Voltage	1 - Termination	1 - Location	2 - Termination	2 - Location
-CP_414-001	2C+G X 1.5MM2	250V	-DIST TBD:115V	+LOCKER 3	-JB 16:CTRL PWR	+LOCKER 3
-EM 712/C25*			-MARINE UPS:120VAC	+SNCR	-PROCESSING UNIT:PWR	+SNCR
-EM 712/C26*			-PROCESSING UNIT:GND	+SNCR	-GROUND:HULL	+SNCR
-EM 712/C33D	NEMA 5-15P TO IEC C13		-MARINE UPS:120VAC	+SNCR	-POS MV 320 PROCESSOR:PWR	+SNCR
-EM 712/C5*			-MARINE UPS:120VAC	+SNCR	-DISPLAY:PWR	+SNCR
-EM 712/C60*			-414-03:230V	+HEELING COMPARTMENT	-TRANSMITTER UNIT:PWR	+HEELING COMPARTMENT
-EM 712/C61*			-TRANSMITTER UNIT:GND	+HEELING COMPARTMENT	-GROUND:HULL	+HEELING COMPARTMENT
-EM 712/C64*			-414-03:230V	+HEELING COMPARTMENT	-RECEIVER UNIT 1:PWR	+HEELING COMPARTMENT
-EM 712/C65*			-RECEIVER UNIT 1:GND	+HEELING COMPARTMENT	-GROUND:HULL	+HEELING COMPARTMENT
-EM 712/C7*			-HYDROGRAPHIC WORK STATION:PWR	+SNCR	-MARINE UPS:120VAC	+SNCR
-EM 712/C8*			-HYDROGRAPHIC WORK STATION:GND	+SNCR	-GROUND:HULL	+SNCR
-EM 712/P01	3C X 16MM2	600V	-MCC12:M-701	+MCC12	-414-01:460V INPUT	+HEELING COMPARTMENT
-EM 712/P02	2C X 4MM2	600V	-414-01:460V	+HEELING COMPARTMENT	TRANSFORMER:PRI	+HEELING COMPARTMENT

-EM 712/P03	3C X 6MM2	600V	TRANSFORMER:SEC	+HEELING COMPARTMENT	-414-03:230VAC	+HEELING COMPARTMENT
-EM 712/P04	3C X 6MM2	600V	-414-01:460V	+HEELING COMPARTMENT	-EM 16 LOCAL CONTROL CABINET:F1	+MBSC
-EM 712/P05	3C X 1.5MM2	600V	-EM 16 LOCAL CONTROL CABINET:U5	+MBSC	-HOIST MOTOR:460VAC	+MBSC
-EM 712/P06	3C X 2.5MM2	600V	-EM 16 LOCAL CONTROL CABINET:U7	+MBSC	-HPP MOTOR:460VAC	+MBSC
-EM 712/P20	2CX1.5MM2	250V	-PWR SUPPLY:24VDC	+BRIDGE	-BRIDGE PANEL:PWR	+BRIDGE

8.2.2 Control Cables

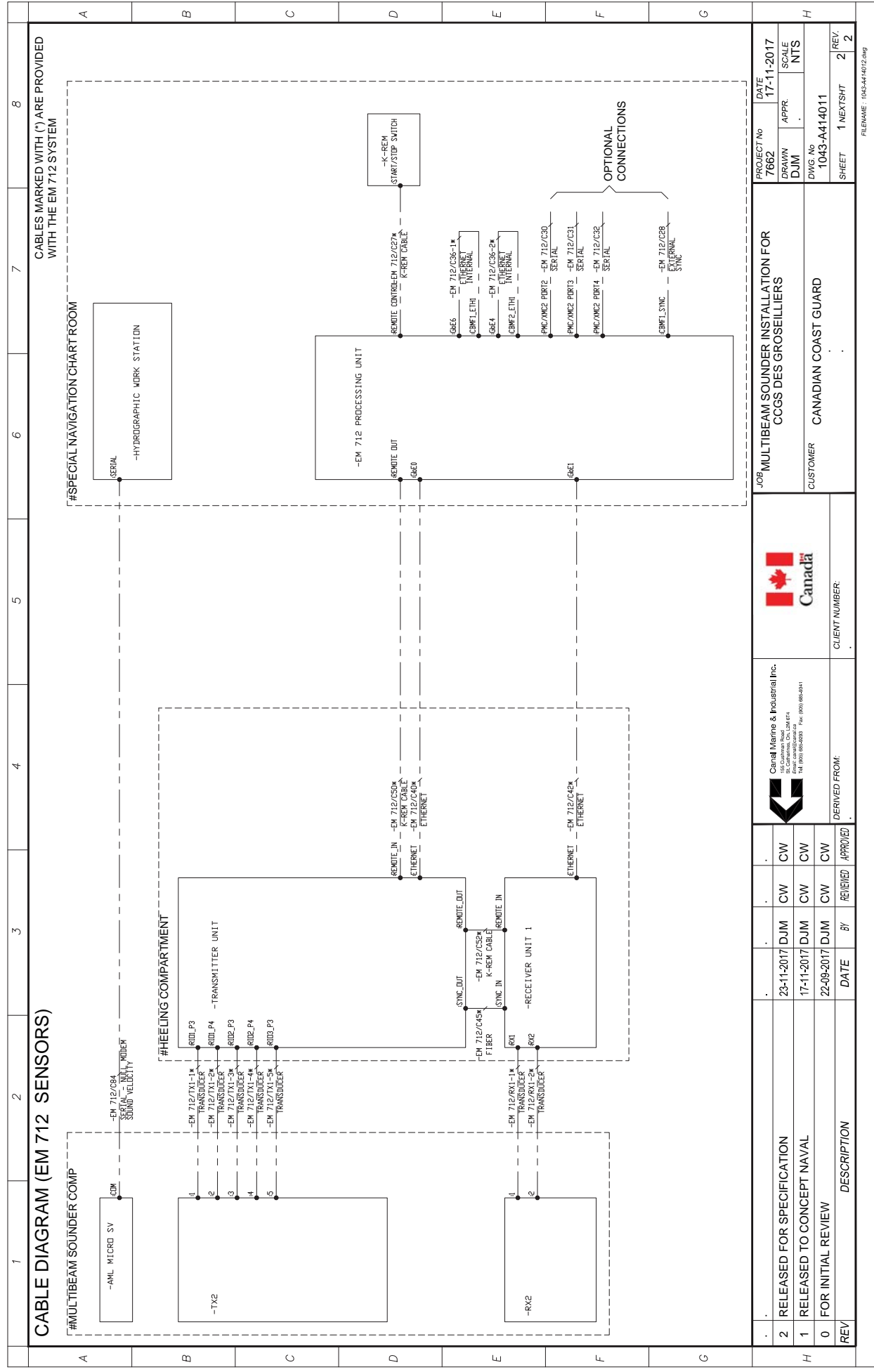
The following is a list of the communication and control cables required in this installation. Cables marked with an asterisk (*) are provided by Kongsberg as part of the EM 712 system, or by other manufacturers.

Table 2: Communication and Control Cable List

-DESIG	Cable Type	Rated Voltage	1 - Termination	1 - Location	2 - Termination	2 - Location
-COM_414-001	PHONE CABLE - RJ11		-TELEPHONE:PHONE JACK	+HEELING COMPARTMENT	-VESSEL PHONE SYSTEM:PHONE JACK	+TBD
-COM_414-002	CAMERA CABLE - TBD		-CAMERA:CCTV	+MBSC	-VESSEL CAMERA SYSTEM:CCTV	+TBD
-CT_414-001	4C X 1.5MM2	250V	-RELAY RACK AD27863:BRIDGE CTRL	+LOCKER 3	-RELAY RACK AD27863:DOOR CTRL CABLE	+BRIDGE
-CT_414-002	8C X 1.5MM2	250V	-JB 16:REMOTE ACTUATION + FDBK	+LOCKER 3	-RELAY RACK AD27863:CTRL OUT	+LOCKER 3
-CT_414-003	2C X 1.5MM2	250V	-THERMOSTAT:OUTPUT	+MBSC	-HEATER:ON/OFF	+MBSC
-EM 712/C1*	VGA		-HYDROGRAPHIC WORK STATION:VIDEO OUT	+SNCR	-DISPLAY:VIDEO IN	+SNCR
-EM 712/C10*	ETHERNET		-PROCESSING UNIT:ETH1	+SNCR	-HYDROGRAPHIC WORK STATION:ETHERNET	+SNCR
-EM 712/C19	ETHERNET		-ETHERNET SWITCH:ETHERNET	+SNCR	-HYDROGRAPHIC WORK STATION:ETHERNET	+SNCR
-EM 712/C27*	K-REM CABLE		-PROCESSING UNIT:REMOTE CONTROL	+SNCR	-BRIDGE PANEL:START/STOP SWITCH	+BRIDGE
-EM 712/C3*	KEYBOARD (USB)		-HYDROGRAPHIC WORK STATION:KYBD	+SNCR	-KEYBOARD:KYBD	+SNCR
-EM 712/C33	ETHERNET		-PROCESSING UNIT:CPU3	+SNCR	-POS MV 320 PROCESSOR:ETHERNET	+SNCR
-EM 712/C33A*	GPS CABLE		-GPS1:COM	+MAST	-POS MV 320 PROCESSOR:GNSS1	+SNCR



-EM 712/C33B*	GPS CABLE		-GPS2:COM	+MAST	-POS MV 320 PROCESSOR:GNSS2	+SNCR
-EM 712/C33C*	IMU CABLE		-IMU:COM	+MBSC	-POS MV 320 PROCESSOR:IMU	+SNCR
-EM 712/C34	COAXIAL		-PROCESSING UNIT:CBMF1_1PPS	+SNCR	-POS MV 320 PROCESSOR:1PPS	+SNCR
-EM 712/C36-1*	ETHERNET		-EM 712 PROCESSING UNIT:GbE6	+SNCR	-EM 712 PROCESSING UNIT:CBMF1_ETH1	+SNCR
-EM 712/C36-2*	ETHERNET		-EM 712 PROCESSING UNIT:GbE4	+SNCR	-EM 712 PROCESSING UNIT:CBMF2_ETH1	+SNCR
-EM 712/C4*	MOUSE (USB)		-MOUSE:MOUSE	+SNCR	-HYDROGRAPHIC WORK STATION:MOUSE	+SNCR
-EM 712/C40*	ETHERNET		-TRANSMITTER UNIT:ETHERNET	+HEELING COMPARTMENT	-EM 712 PROCESSING UNIT:GbE0	+SNCR
-EM 712/C42*	ETHERNET		-RECEIVER UNIT 1:ETHERNET	+HEELING COMPARTMENT	-EM 712 PROCESSING UNIT:GbE1	+SNCR
-EM 712/C45*	FIBER		-RECEIVER UNIT 1:SYNC IN	+HEELING COMPARTMENT	-TRANSMITTER UNIT:SYNC_OUT	+HEELING COMPARTMENT
-EM 712/C50*	K-REM CABLE		-TRANSMITTER UNIT:REMOTE_IN	+HEELING COMPARTMENT	-EM 712 PROCESSING UNIT:REMOTE_OUT	+SNCR
-EM 712/C52*	K-REM CABLE		-RECEIVER UNIT 1:REMOTE IN	+HEELING COMPARTMENT	-TRANSMITTER UNIT:REMOTE_OUT	+HEELING COMPARTMENT
-EM 712/C70	VGA		-POST PROCESSING WORKSTATION:VIDEO OUT	+SNCR	-DISPLAY:VIDEO IN	+SNCR
-EM 712/C71	VGA		-POST PROCESSING WORKSTATION:VIDEO OUT #2	+SNCR	-BRIDGE REMOTE DISPLAY:VIDEO IN 1	+BRIDGE
-EM 712/C72	VGA		-HYDROGRAPHIC WORK STATION:VIDEO OUT #2	+SNCR	-BRIDGE REMOTE DISPLAY:VIDEO IN 2	+BRIDGE
-EM 712/C73	KEYBOARD (USB)		-POST PROCESSING WORKSTATION:KYBD	+SNCR	-KEYBOARD:KYBD	+SNCR
-EM 712/C74	MOUSE (USB)		-MOUSE:MOUSE	+SNCR	-POST PROCESSING WORKSTATION:MOUSE	+SNCR
-EM 712/C75	ETHERNET		-EM 16 LOCAL CONTROL CABINET:ETHERNET	+MBSC	-ETHERNET SWITCH:ETHERNET	+SNCR
-EM 712/C79	4C X 1.5MM2	250V	-RAM:FDBK	+MBSC	-EM 16 LOCAL CONTROL CABINET:RAM FDBK	+MBSC
-EM 712/C80	8C X 1.5MM2	250V	-GATE VALVE:CTRL	+MBSC	-EM 16 LOCAL CONTROL CABINET:GV CTRL	+MBSC
-EM 712/C81	ETHERNET		-POS MV 320 PROCESSOR:ETHERNET	+SNCR	-ETHERNET SWITCH:ETHERNET	+SNCR
-EM 712/C82	ETHERNET		-ETHERNET SWITCH:ETHERNET	+SNCR	-POST PROCESSING WORKSTATION:ETHERNET	+SNCR
-EM 712/C83	ETHERNET		-ETHERNET SWITCH:ETHERNET	+SNCR	-BRIDGE PANEL:ETHERNET	+BRIDGE
-EM 712/C84	SERIAL - NULL MODEM		-AML MICRO SV:COM	+MBSC	-HYDROGRAPHIC WORK STATION:SERIAL	+SNCR



CABLE DIAGRAM (EM 712 INTERFACES AND EXTERNAL SYSTEMS)

#PRINCIPAL DECK LOCKER #3

#MULTIBEAM SOUNDER COMPARTMENT

#TBD

#MAST

#SPECIAL NAVIGATION CHART ROOM

#BRIDGE

CABLES MARKED WITH (*) ARE PROVIDED WITH THE EM 712 SYSTEM

PROJECT No 7662 DATE 17-11-2017
DRAWN BY DJM APPR . SCALE NTS
DWG No 1043-A414021 SHEET 2 NEXTSHT 3 REV. 2

JOB MULTIBEAM SOUNDER INSTALLATION FOR CCGS DES GROSEILLIERS
CUSTOMER CANADIAN COAST GUARD

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DERIVED FROM:
23-11-2017 DJM CW
17-11-2017 DJM CW
22-09-2017 DJM CW
DATE BY REVIEWED APPROVED

DESCRIPTION

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