



**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

**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**

Fuel & Construction Products Division  
L'Esplanade Laurier,  
140 O'Connor Street,  
East Tower, 4th floor,  
Ottawa  
Ontario  
K1A 0S5

<b>Title - Sujet</b> Water Treatment System	
<b>Solicitation No. - N° de l'invitation</b> W8476-216378/A	<b>Date</b> 2022-03-24
<b>Client Reference No. - N° de référence du client</b> W8476-216378	
<b>GETS Reference No. - N° de référence de SEAG</b> PW-\$\$HL-673-81098	
<b>File No. - N° de dossier</b> hl673.W8476-216378	<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> Eastern Daylight Saving Time EDT <b>on - le 2022-05-24</b> Heure Avancée de l'Est HAE	
<b>F.O.B. - F.A.B.</b> <b>Plant-Usine:</b> <input type="checkbox"/> <b>Destination:</b> <input checked="" type="checkbox"/> <b>Other-Autre:</b> <input type="checkbox"/>	
<b>Address Enquiries to: - Adresser toutes questions à:</b> Shaun Feagan	<b>Buyer Id - Id de l'acheteur</b> hl673
<b>Telephone No. - N° de téléphone</b> (613) 295-9018 ( )	<b>FAX No. - N° de FAX</b> ( ) -
<b>Destination - of Goods, Services, and Construction:</b> <b>Destination - des biens, services et construction:</b> Specified Herein	

**Instructions: See Herein**

**Instructions: Voir aux présentes**

<b>Delivery Required - Livraison exigée</b> See Herein – Voir ci-inclus	<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 No. - N° de l'invitation  
W8476-216378/A  
Client Ref. No. - N° de réf. du client  
W8476-216378

Amd. No. - N° de la modif.  
File No. - N° du dossier  
hl673.W8476-216378

Buyer ID - Id de l'acheteur  
hl673  
CCC No./N° CCC - FMS No./N° VME

## TABLE OF CONTENTS

<b>PART 1 – GENERAL INFORMATION .....</b>	<b>3</b>
1.1 INTRODUCTION.....	3
1.2 SUMMARY .....	3
1.3 DEBRIEFINGS .....	4
1.4 PHASED BID COMPLIANCE PROCESS .....	4
<b>PART 2 - BIDDER INSTRUCTIONS .....</b>	<b>5</b>
2.1 STANDARD INSTRUCTIONS, CLAUSES AND CONDITIONS.....	5
2.2 SUBMISSION OF BIDS .....	5
2.3 FORMER PUBLIC SERVANT .....	5
2.4 ENQUIRIES - BID SOLICITATION .....	6
2.5 APPLICABLE LAWS .....	7
2.6 BID CHALLENGE AND RECOURSE MECHANISMS .....	7
<b>PART 3 - BID PREPARATION INSTRUCTIONS.....</b>	<b>8</b>
3.1 BID PREPARATION INSTRUCTIONS – ELECTRONIC SUBMISSION .....	8
3.2 SECTION I: TECHNICAL BID .....	8
3.3 SECTION II: FINANCIAL BID .....	8
3.4 ELECTRONIC PAYMENT OF INVOICES – BID .....	8
3.5 EXCHANGE RATE FLUCTUATION .....	9
3.6 SECTION III: CERTIFICATIONS .....	9
3.7 SECTION IV: ADDITIONAL INFORMATION .....	9
<b>PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION .....</b>	<b>10</b>
4.1 EVALUATION PROCEDURES .....	10
4.2 PHASED BID COMPLIANCE PROCESS .....	10
4.3 TECHNICAL EVALUATION.....	13
4.4 FINANCIAL EVALUATION .....	13
4.5 BASIS OF SELECTION .....	13
<b>PART 5 – CERTIFICATIONS AND ADDITIONAL INFORMATION .....</b>	<b>14</b>
5.1 CERTIFICATIONS REQUIRED WITH THE BID .....	14
5.2 CERTIFICATIONS PRECEDENT TO CONTRACT AWARD AND ADDITIONAL INFORMATION .....	14
<b>PART 6 - SECURITY, FINANCIAL AND OTHER REQUIREMENTS.....</b>	<b>18</b>
6.1 SECURITY REQUIREMENTS .....	18
6.2 FINANCIAL CAPABILITY.....	18
6.3 CONTROLLED GOODS REQUIREMENT.....	18
6.4 INSURANCE REQUIREMENTS .....	18
<b>PART 7 - RESULTING CONTRACT CLAUSES .....</b>	<b>19</b>
7.1 STATEMENT OF WORK .....	19
7.2 STANDARD CLAUSES AND CONDITIONS .....	20
7.3 SECURITY REQUIREMENTS .....	20
7.4 PERIOD OF THE CONTRACT .....	22
7.5 AUTHORITIES .....	22
7.6 PAYMENT .....	23
7.7 INVOICING INSTRUCTIONS .....	24
7.8 CERTIFICATIONS AND ADDITIONAL INFORMATION .....	24
7.9 APPLICABLE LAWS .....	25
7.10 PRIORITY OF DOCUMENTS .....	25
7.11 DEFENCE CONTRACT.....	25
7.12 FOREIGN NATIONALS (CANADIAN CONTRACTOR OR FOREIGN CONTRACTOR).....	25
7.13 INSURANCE .....	25

7.14	CONTROLLED GOODS PROGRAM.....	25
7.15	CONDITION OF MATERIAL.....	25
7.16	CONTROLLED GOODS.....	25
7.17	BAR CODING - PACKAGE MARKING .....	25
7.18	WOOD PACKAGING MATERIALS.....	25
7.19	DELIVERY OF DANGEROUS GOODS/HAZARDOUS PRODUCTS.....	25
7.20	PACKAGING REQUIREMENTS USING SPECIFICATION D-LM-008-036/SF-000 .....	26
7.21	ISO 9001:2015 QUALITY MANAGEMENT SYSTEMS – REQUIREMENTS (QUALITY ASSURANCE CODE Q) .....	26
7.22	QUALITY ASSURANCE AUTHORITY .....	26
7.23	RELEASE DOCUMENTS .....	26
7.24	RELEASE DOCUMENTS - DISTRIBUTION .....	26
7.25	PALLETIZATION .....	26
7.26	CUSTOMS DUTIES – CONTRACTOR IMPORTER .....	26
7.27	PREPARATION FOR DELIVERY CANADIAN BASED CONTRACTOR .....	26
7.28	PREPARATION FOR DELIVERY UNITED STATES BASED CONTRACTOR .....	26
7.29	PREPARATION FOR DELIVERY EUROPEAN UNION.....	26
7.30	DANGEROUS GOODS/ HAZARDOUS PRODUCTS – LABELLING AND PACKAGING COMPLIANCE .....	27
7.31	PROCEDURES FOR DESIGN CHANGE OR ADDITIONAL WORK .....	27
7.32	DISPUTE RESOLUTION .....	27

## **PART 8 - RESULTING CONTRACT CLAUSES ..... 28**

8.1	STATEMENT OF WORK.....	28
8.2	WORK CATEGORIES .....	28
8.3	TASK AUTHORIZATION .....	29
8.4	STANDARD CLAUSES AND CONDITIONS .....	31
8.5	SECURITY REQUIREMENTS .....	31
8.6	TERM OF CONTRACT.....	33
8.7	AUTHORITIES .....	33
8.8	PROACTIVE DISCLOSURE OF CONTRACTS WITH FORMER PUBLIC SERVANTS .....	34
8.9	PAYMENT .....	35
8.10	INVOICING INSTRUCTIONS .....	36
8.11	ELECTRONIC PAYMENT OF INVOICES – CONTRACT .....	37
8.12	CERTIFICATIONS AND ADDITIONAL INFORMATION .....	37
8.13	APPLICABLE LAWS .....	37
8.14	PRIORITY OF DOCUMENTS .....	37
8.15	DEFENCE CONTRACT.....	37
8.16	FOREIGN NATIONALS (CANADIAN CONTRACTOR OR FOREIGN CONTRATOR).....	38
8.17	INSURANCE.....	38
8.18	CONTROLLED GOODS PROGRAM.....	38
8.19	SACC MANUAL CLAUSES .....	38
8.20	CLOSE-OUT RESPONSIBILITIES .....	38

## **ANNEXES:**

<b>ANNEX A1</b>	<b>STATEMENT OF WORK – ACQUISITION CONTRACT</b>
<b>ANNEX B1</b>	<b>BASIS OF PAYMENT – ACQUISITION CONTRACT</b>
<b>ANNEX C1</b>	<b>DELIVERY SCHEDULE – ACQUISITION CONTRACT</b>
<b>ANNEX D1</b>	<b>SECURITY REQUIREMENTS CHECKLIST – ACQUISITION CONTRACT</b>
<b>ANNEX A2</b>	<b>STATEMENT OF WORK – IN SERVICE SUPPORT CONTRACT</b>
<b>ANNEX B2</b>	<b>BASIS OF PAYMENT – IN SERVICE SUPPORT CONTRACT</b>
<b>ANNEX C2</b>	<b>LOGISTIC STATEMENT OF WORK – IN SERVICE SUPPORT CONTRACT</b>
<b>ANNEX D2</b>	<b>SECURITY REQUIREMENTS CHECKLIST – IN SERVICE SUPPORT CONTRACT</b>
<b>ANNEX E</b>	<b>TECHNICAL EVALUATION</b>
<b>ANNEX F</b>	<b>FINANCIAL EVALUATION</b>
<b>ANNEX G</b>	<b>ELECTRONIC PAYMENT INSTRUMENTS</b>
<b>ANNEX H</b>	<b>FEDERAL CONTRACTORS PROGRAM FOR EMPLOYMENT EQUITY</b>
<b>ANNEX I</b>	<b>EXAMPLE 626</b>

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## PART 1 – GENERAL INFORMATION

### 1.1 Introduction

The bid solicitation is divided into eight parts plus attachments and annexes, as follows:

- Part 1 General Information: provides a general description of the requirement;
- Part 2 Bidder Instructions: provides the instructions, clauses and conditions applicable to the bid solicitation;
- Part 3 Bid Preparation Instructions: provides Bidders with instructions on how to prepare their bid;
- Part 4 Evaluation Procedures and Basis of Selection: indicates how the evaluation will be conducted, the evaluation criteria that must be addressed in the bid, and the basis of selection;
- Part 5 Certifications and Additional Information: includes the certifications and additional information to be provided;
- Part 6 Security, Financial and Other Requirements: includes specific requirements that must be addressed by Bidders; and
- Part 7 Resulting Contract Clauses – Acquisition Contract: includes the clauses and conditions that will apply to any resulting Acquisition contract.
- Part 8 Resulting Contract Clauses – In Service Support Contract: includes the clauses and conditions that will apply to any resulting In Service Support contract.

The Annexes include:

- Annex A1 – Statement of Work For the Water Treatment System - Acquisition Contract
- Annex B1 – Basis of Payment – Acquisition Contract
- Annex C1 - Delivery Schedule – Acquisition Contract
- Annex D1 – Security Requirements Checklist – Acquisition Contract
- Annex A2 – Statement of Work – In Service Support Contract
- Annex B2 – Basis of Payment – In Service Support Contract
- Annex C2 – Logistics Statement of Work – In Service Support Contract
- Annex D2 – Security Requirements Checklist – In Service Support Contract
- Annex E – Technical Bid Evaluation
- Annex F – Financial Evaluation Tables
- Annex G – The Electronic Payment Instruments
- Annex H – The Federal Contractors Program for Employment Equity – Certification
- Annex I – Example DND 626 Task Authorization Form

### 1.2 Summary

The Department of National Defence has a requirement under the Advanced Sub-Unit Water Purification System (ASUWPS) Project which includes the following:

#### 1.2.1 Part A: Acquisition – Water Treatment Systems

The ASUWPS Project will dramatically improve the ability of the Canadian Forces to purify and distribute water at the sub-unit level. This solicitation outlines the requirements for the acquisition of Twenty-Six (26) Water Treatment Systems (WTS) with the option to procure up to Eleven (11) additional WTS as described herein.

The WTS will replace the obsolete sub-unit water purification systems that have already been divested, as well as increase the overall number of systems. This will fully enable Regular and Reserve Force units to sustain themselves as well as provide humanitarian support, both domestically and abroad.

### **1.2.2 Part B: In-Service Support for the Water Treatment Systems**

Five (5) years of In-Service Support (ISS) is required for the WTS plus Five (5) One-year options allowing Canada to extend the terms of the contract.

**Only one successful Bidder will be awarded both Contracts. Bidders must respond to the requirements for both of the WTS Acquisition and the WTS In-Service Support Contracts in their bid submission. Bids which do not respond to the requirements for both of the WTS Acquisition and WTS In-Service Support Contracts will be declared non-responsive and will receive no further consideration. For additional information, consult Part 4 – Evaluation Procedures and Basis of Selection.**

**1.2.3** There are security requirements associated with this requirement. For additional information, consult Part 6 - Security, Financial and Other Requirements, Part 7 – Resulting Contract Clauses – Acquisition Contract and Part 8 - Resulting Contract Clauses – In-Service Support Contract. For more information on personnel and organization security screening or security clauses, Bidders should refer to the Contract Security Program of Public Works and Government Services Canada (<http://www.tpsgc-pwgsc.gc.ca/esc-src/introduction-eng.html>) website.

**1.2.4** This procurement is subject to the Controlled Goods Program. The Defence Production Act defines Canadian Controlled Goods as certain goods listed in Canada's Export Control List, a regulation made pursuant to the Export and Import Permits Act (EIPA).

**1.2.5** The Federal Contractors Program (FCP) for employment equity applies to this procurement; refer to Part 5 – Certifications and Additional Information, Part 7 - Resulting Contract Clauses and the annex titled Federal Contractors Program for Employment Equity – Certification.

**1.2.6** This bid solicitation allows bidders to use the epost Connect service provided by Canada Post Corporation to transmit their bid electronically. Bidders must refer to Part 2 entitled Bidder Instructions, and Part 3 entitled Bid Preparation Instructions, of the bid solicitation, for further information.

### **1.3 Debriefings**

Bidders may request a debriefing on the results of the bid solicitation process. Bidders should make the request to the Contracting Authority within 15 working days from receipt of the results of the bid solicitation process. The debriefing may be in writing, by telephone or in person.

### **1.4 Phased Bid Compliance Process**

The Phased Bid Compliance Process applies to this requirement.

**Given that many people are currently working from home and in an effort to reduce the spread of the coronavirus disease (COVID-19) within communities, bidders are highly encouraged to transmit their bid electronically using the epost Connect service. Information on the epost Connect service can be found in Part 2 entitled Bidder Instructions, and Part 3 entitled Bid Preparation Instructions, of the bid solicitation.**

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## PART 2 - BIDDER INSTRUCTIONS

### 2.1 Standard Instructions, Clauses and Conditions

All instructions, clauses and conditions identified in the bid solicitation by number, date and title are set out in the [Standard Acquisition Clauses and Conditions Manual](https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual) (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

Bidders who submit a bid agree to be bound by the instructions, clauses and conditions of the bid solicitation and accept the clauses and conditions of the resulting contract.

The [2003](#) (2020-05-28) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

Subsection 5.4 of [2003](#), Standard Instructions - Goods or Services - Competitive Requirements, is amended as follows:

Delete: 60 days  
Insert: 180 days

### 2.2 Submission of Bids

Bids must be submitted only to Public Works and Government Services Canada (PWGSC) Bid Receiving Unit by the date, time and place indicated in the bid solicitation.

Note: For bidders choosing to submit using epost Connect for bids closing at the Bid Receiving Unit in the National Capital Region (NCR) the email address is:

[tpsgc.dgareceptiondessoumissions-abbidreceiving.pwgsc@tpsgc-pwgsc.gc.ca](mailto:tpsgc.dgareceptiondessoumissions-abbidreceiving.pwgsc@tpsgc-pwgsc.gc.ca)

Note: Bids will not be accepted if emailed directly to this email address. This email address is to be used to open an epost Connect conversation, as detailed in Standard Instructions [2003](#), or to send bids through an epost Connect message if the bidder is using its own licensing agreement for epost Connect.

Due to the nature of the bid solicitation, bids transmitted by facsimile to PWGSC will not be accepted.

### 2.3 Former Public Servant

Contracts awarded to former public servants (FPS) in receipt of a pension or of a lump sum payment must bear the closest public scrutiny, and reflect fairness in the spending of public funds. In order to comply with Treasury Board policies and directives on contracts awarded to FPSs, bidders must provide the information required below before contract award. If the answer to the questions and, as applicable the information required have not been received by the time the evaluation of bids is completed, Canada will inform the Bidder of a time frame within which to provide the information. Failure to comply with Canada's request and meet the requirement within the prescribed time frame will render the bid non-responsive.

#### Definitions

For the purposes of this clause, "former public servant" is any former member of a department as defined in the Financial Administration Act, R.S., 1985, c. F-11, a former member of the Canadian Armed Forces or a former member of the Royal Canadian Mounted Police. A former public servant may be:

- a. an individual;
- b. an individual who has incorporated;
- c. a partnership made of former public servants; or
- d. a sole proprietorship or entity where the affected individual has a controlling or major interest in the entity.

"lump sum payment period" means the period measured in weeks of salary, for which payment has been made to facilitate the transition to retirement or to other employment as a result of the implementation of various programs to reduce the size of the Public Service. The lump sum payment period does not include the period of severance pay, which is measured in a like manner.

"pension" means a pension or annual allowance paid under the Public Service Superannuation Act (PSSA), R.S., 1985, c. P-36, and any increases paid pursuant to the Supplementary Retirement Benefits Act, R.S., 1985, c. S-24 as it affects the PSSA. It does not include pensions payable pursuant to the Canadian Forces Superannuation Act, R.S., 1985, c. C-17, the Defence Services Pension Continuation Act, 1970, c. D-3, the Royal Canadian Mounted Police Pension Continuation Act, 1970, c. R-10, and the Royal Canadian Mounted Police Superannuation Act, R.S., 1985, c. R-11, the Members of Parliament Retiring Allowances Act, R.S. 1985, c. M-5, and that portion of pension payable to the Canada Pension Plan Act, R.S., 1985, c. C-8.

#### **Former Public Servant in Receipt of a Pension**

As per the above definitions, is the Bidder a FPS in receipt of a pension? **Yes ( ) No ( )**

If so, the Bidder must provide the following information, for all FPSs in receipt of a pension, as applicable:

- a. name of former public servant;
- b. date of termination of employment or retirement from the Public Service.

By providing this information, Bidders agree that the successful Bidder's status, with respect to being a former public servant in receipt of a pension, will be reported on departmental websites as part of the published proactive disclosure reports in accordance with Contracting Policy Notice: 2019-01 and the Guidelines on the Proactive Disclosure of Contracts.

#### **Work Force Adjustment Directive**

Is the Bidder a FPS who received a lump sum payment pursuant to the terms of the Work Force Adjustment Directive? **Yes ( ) No ( )**

If so, the Bidder must provide the following information:

- a. name of former public servant;
- b. conditions of the lump sum payment incentive;
- c. date of termination of employment;
- d. amount of lump sum payment;
- e. rate of pay on which lump sum payment is based;
- f. period of lump sum payment including start date, end date and number of weeks;
- g. number and amount (professional fees) of other contracts subject to the restrictions of a work force adjustment program.

#### **2.4 Enquiries - Bid Solicitation**

All enquiries must be submitted in writing to the Contracting Authority no later than ten (10) calendar days before the bid closing date. Enquiries received after that time may not be answered.

Bidders should reference as accurately as possible the numbered item of the bid solicitation to which the enquiry relates. Care should be taken by Bidders to explain each question in sufficient detail in order to enable Canada to provide an accurate answer. Technical enquiries that are of a proprietary nature must be clearly marked "proprietary" at each relevant item. Items identified as "proprietary" will be treated as such except where Canada determines that the enquiry is not of a proprietary nature. Canada may edit the question(s) or may request that the Bidder do so, so that the proprietary nature of the question(s) is eliminated and the enquiry can be answered to all Bidders. Enquiries not submitted in a form that can be distributed to all Bidders may not be answered by Canada.

## 2.5 Applicable Laws

Any resulting contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in Ontario.

Bidders may, at their discretion, substitute the applicable laws of a Canadian province or territory of their choice without affecting the validity of their bid, by deleting the name of the Canadian province or territory specified and inserting the name of the Canadian province or territory of their choice. If no change is made, it acknowledges that the applicable laws specified are acceptable to the Bidders.

## 2.6 Bid Challenge and Recourse Mechanisms

- (a) Several mechanisms are available to potential suppliers to challenge aspects of the procurement process up to and including contract award.
- (b) Canada encourages suppliers to first bring their concerns to the attention of the Contracting Authority. Canada's [Buy and Sell](#) website, under the heading "[Bid Challenge and Recourse Mechanisms](#)" contains information on potential complaint bodies such as:
  - Office of the Procurement Ombudsman (OPO)
  - Canadian International Trade Tribunal (CITT)
- (c) Suppliers should note that there are **strict deadlines** for filing complaints, and the time periods vary depending on the complaint body in question. Suppliers should therefore act quickly when they want to challenge any aspect of the procurement process.



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## **PART 3 - BID PREPARATION INSTRUCTIONS**

### **3.1 Bid Preparation Instructions – Electronic Submission**

Canada requests that the Bidder submits its bid in accordance with section 08 of the 2003 standard instructions. The epost Connect system has a limit of 1GB per single message posted and a limit of 20GB per conversation.

The bid must be gathered per section and separated as follows:

Section I: Technical Bid  
Section II: Financial Bid  
Section III: Certifications  
Section IV: Additional Information

Due to the nature of the Request for Proposal, transmission of bids by mail/courier to PWGSC BRU **will not be accepted**.

Prices must appear in the financial bid only. No prices must be indicated in any other section of the bid.

### **3.2 Section I: Technical Bid**

In their technical bid, Bidders should demonstrate their understanding of the requirements contained in the bid solicitation and explain how they will meet these requirements. Bidders should demonstrate their capability and describe their approach in a thorough, concise and clear manner for carrying out the work.

The technical bid should address clearly and in sufficient depth the points that are subject to the evaluation criteria against which the bid will be evaluated. Simply repeating the statement contained in the bid solicitation is not sufficient. In order to facilitate the evaluation of the bid, Canada requests that Bidders address and present topics in the order of the evaluation criteria under the same headings. To avoid duplication, Bidders may refer to different sections of their bids by identifying the specific paragraph and page number where the subject topic has already been addressed.

Canada requests that Bidders clearly distinguish between the WTS Acquisition requirement and the WTS In-Service Support requirement by using the following format:

Technical Bid Part A: WTS Acquisition  
Technical Bid Part B: WTS In-Service Support

### **3.3 Section II: Financial Bid**

#### For Part A: WTS Acquisition

Bidders must submit their financial bid in accordance with Basis of Payment for Acquisition at Annex B1. The total amount of Goods and Services Tax or Harmonized Sales Tax must be shown separately, if applicable.

#### For Part B: WTS In-Service Support

Bidders must submit their financial bid in accordance with Basis of Payment for In Service Support at Annex B2. The total amount of Goods and Services Tax or Harmonized Sales Tax must be shown separately, if applicable.

Bidders must also submit the Financial Evaluation Tables in Annex F. All Pricing submitted in Annex B1 and B2 must be the same used in Annex F.

### **3.4 Electronic Payment of Invoices – Bid**

If you are willing to accept payment of invoices by Electronic Payment Instruments, complete Annex G – Electronic Payment Instruments, to identify which ones are accepted.

Solicitation No. - N° de l'invitation  
W8476-216378/A  
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W8476-216378

Amd. No. - N° de la modif.  
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hl673.W8476-216378

Buyer ID - Id de l'acheteur  
hl673  
CCC No./N° CCC - FMS No./N° VME

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If Annex G Electronic Payment Instruments is not completed, it will be considered as if Electronic Payment Instruments are not being accepted for payment of invoices.

Acceptance of Electronic Payment Instruments will not be considered as an evaluation criterion.

**3.5 Exchange Rate Fluctuation**

C3011T (2013-11-06) Exchange Rate Fluctuation

**3.6 Section III: Certifications**

Bidders must submit the certifications and additional information required under Part 5 for Part A and Part B.

**3.7 Section IV: Additional Information**

There is a Security Requirement associated with each of the requirements

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## **PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION**

### **4.1 Evaluation Procedures**

- (a) Bids will be assessed in accordance with the entire requirement of the bid solicitation including the technical, financial evaluation criteria.
- (b) An evaluation team composed of representatives of Canada will evaluate the bids.
- (c) Canada will use the Phase Bid Compliance Process Described below at article 4.2

### **4.2 Phased Bid Compliance Process**

#### **4.2.1 General**

- (a) Canada is conducting the PBCP described below for this requirement.
- (b) Notwithstanding any review by Canada at Phase I or II of the PBCP, Bidders are and will remain solely responsible for the accuracy, consistency and completeness of their Bids and Canada does not undertake, by reason of this review, any obligations or responsibility for identifying any or all errors or omissions in Bids or in responses by a Bidder to any communication from Canada.

THE BIDDER ACKNOWLEDGES THAT THE REVIEWS IN PHASE I AND II OF THIS PBCP ARE PRELIMINARY AND DO NOT PRECLUDE A FINDING IN PHASE III THAT THE BID IS NON-RESPONSIVE, EVEN FOR MANDATORY REQUIREMENTS WHICH WERE SUBJECT TO REVIEW IN PHASE I OR II AND NOTWITHSTANDING THAT THE BID HAD BEEN FOUND RESPONSIVE IN SUCH EARLIER PHASE. CANADA MAY DEEM A BID TO BE NON-RESPONSIVE TO A MANDATORY REQUIREMENT AT ANY PHASE.

THE BIDDER ALSO ACKNOWLEDGES THAT ITS RESPONSE TO A NOTICE OR A COMPLIANCE ASSESSMENT REPORT (CAR) (EACH DEFINED BELOW) IN PHASE I OR II MAY NOT BE SUCCESSFUL IN RENDERING ITS BID RESPONSIVE TO THE MANDATORY REQUIREMENTS THAT ARE THE SUBJECT OF THE NOTICE OR CAR, AND MAY RENDER ITS BID NON-RESPONSIVE TO OTHER MANDATORY REQUIREMENTS.

- (c) Canada may, in its discretion, request and accept at any time from a Bidder and consider as part of the Bid, any information to correct errors or deficiencies in the Bid that are clerical or administrative, such as, without limitation, failure to sign the Bid or any part or to checkmark a box in a form, or other failure of format or form or failure to acknowledge; failure to provide a procurement business number or contact information such as names, addresses and telephone numbers; inadvertent errors in numbers or calculations that do not change the amount the Bidder has specified as the price or of any component thereof that is subject to evaluation. This shall not limit Canada's right to request or accept any information after the bid solicitation closing in circumstances where the bid solicitation expressly provides for this right. The Bidder will have the time period specified in writing by Canada to provide the necessary documentation. Failure to meet this deadline will result in the Bid being declared non-responsive.
- (d) The PBCP does not limit Canada's rights under Standard Acquisition Clauses and Conditions (SACC) 2003 (2020-05-28) Standard Instructions – Goods or Services – Competitive Requirements nor Canada's right to request or accept any information during the solicitation period or after bid solicitation closing in circumstances where the bid solicitation expressly provides for this right, or in the circumstances described in subsection (c).
- (e) Canada will send any Notice or CAR by any method Canada chooses, in its absolute discretion. The Bidder must submit its response by the method stipulated in the Notice or CAR. Responses are deemed to be received by Canada at the date and time they are delivered to Canada by the

method and at the address specified in the Notice or CAR. An email response permitted by the Notice or CAR is deemed received by Canada on the date and time it is received in Canada's email inbox at Canada's email address specified in the Notice or CAR. A Notice or CAR sent by Canada to the Bidder at any address provided by the Bidder in or pursuant to the Bid is deemed received by the Bidder on the date it is sent by Canada. Canada is not responsible for late receipt by Canada of a response, however caused.

#### **4.2.2 Phase I: Financial Bid**

- (a) After the closing date and time of this bid solicitation, Canada will examine the Bid to determine whether it includes a Financial Bid and whether any Financial Bid includes all information required by the solicitation. Canada's review in Phase I will be limited to identifying whether any information that is required under the bid solicitation to be included in the Financial Bid is missing from the Financial Bid. This review will not assess whether the Financial Bid meets any standard or is responsive to all solicitation requirements.
- (b) Canada's review in Phase I will be performed by officials of the Department of Public Works and Government Services.
- (c) If Canada determines, in its absolute discretion that there is no Financial Bid or that the Financial Bid is missing all of the information required by the bid solicitation to be included in the Financial Bid, then the Bid will be considered non-responsive and will be given no further consideration.
- (d) For Bids other than those described in c), Canada will send a written notice to the Bidder ("Notice") identifying where the Financial Bid is missing information. A Bidder, whose Financial Bid has been found responsive to the requirements that are reviewed at Phase I, will not receive a Notice. Such Bidders shall not be entitled to submit any additional information in respect of their Financial Bid.
- (e) The Bidders who have been sent a Notice shall have the time period specified in the Notice (the "Remedy Period") to remedy the matters identified in the Notice by providing to Canada, in writing, additional information or clarification in response to the Notice. Responses received after the end of the Remedy Period will not be considered by Canada, except in circumstances and on terms expressly provided for in the Notice.
- (f) In its response to the Notice, the Bidder will be entitled to remedy only that part of its Financial Bid which is identified in the Notice. For instance, where the Notice states that a required line item has been left blank, only the missing information may be added to the Financial Bid, except that, in those instances where the addition of such information will necessarily result in a change to other calculations previously submitted in its Financial Bid, (for example, the calculation to determine a total price), such necessary adjustments shall be identified by the Bidder and only these adjustments shall be made. All submitted information must comply with the requirements of this solicitation.
- (g) Any other changes to the Financial Bid submitted by the Bidder will be considered to be new information and will be disregarded. There will be no change permitted to any other Section of the Bidder's Bid. Information submitted in accordance with the requirements of this solicitation in response to the Notice will replace, in full, **only** that part of the original Financial Bid as is permitted above, and will be used for the remainder of the bid evaluation process.
- (h) Canada will determine whether the Financial Bid is responsive to the requirements reviewed at Phase I, considering such additional information or clarification as may have been provided by the Bidder in accordance with this Section. If the Financial Bid is not found responsive for the requirements reviewed at Phase I to the satisfaction of Canada, then the Bid shall be considered non-responsive and will receive no further consideration.

- (i) Only Bids found responsive to the requirements reviewed in Phase I to the satisfaction of Canada, will receive a Phase II review.

#### **4.2.3 Phase II: Technical Bid**

- (a) Canada's review at Phase II will be limited to a review of the Technical Bid to identify any instances where the Bidder has failed to meet any Eligible Mandatory Criterion. This review will not assess whether the Technical Bid meets any standard or is responsive to all solicitation requirements. Eligible Mandatory Criteria are all mandatory technical criteria that are identified in this solicitation as being subject to the PBCP. Mandatory technical criteria that are not identified in the solicitation as being subject to the PBCP, will not be evaluated until Phase III.
- (b) Canada will send a written notice to the Bidder (Compliance Assessment Report or "CAR") identifying any Eligible Mandatory Criteria that the Bid has failed to meet. A Bidder whose Bid has been found responsive to the requirements that are reviewed at Phase II will receive a CAR that states that its Bid has been found responsive to the requirements reviewed at Phase II. Such Bidder shall not be entitled to submit any response to the CAR.
- (c) A Bidder shall have the period specified in the CAR (the "Remedy Period") to remedy the failure to meet any Eligible Mandatory Criterion identified in the CAR by providing to Canada in writing additional or different information or clarification in response to the CAR. Responses received after the end of the Remedy Period will not be considered by Canada, except in circumstances and on terms expressly provided for in the CAR.
- (d) The Bidder's response must address only the Eligible Mandatory Criteria listed in the CAR as not having been achieved, and must include only such information as is necessary to achieve such compliance. Any additional information provided by the Bidder which is not necessary to achieve such compliance will not be considered by Canada, except that, in those instances where such a response to the Eligible Mandatory Criteria specified in the CAR will necessarily result in a consequential change to other parts of the Bid, the Bidder shall identify such additional changes, provided that its response must not include any change to the Financial Bid
- (e) The Bidder's response to the CAR should identify in each case the Eligible Mandatory Criterion in the CAR to which it is responding, including identifying in the corresponding section of the original Bid, the wording of the proposed change to that section, and the wording and location in the Bid of any other consequential changes that necessarily result from such change. In respect of any such consequential change, the Bidder must include a rationale explaining why such consequential change is a necessary result of the change proposed to meet the Eligible Mandatory Criterion. It is not up to Canada to revise the Bidder's Bid, and failure of the Bidder to do so in accordance with this subparagraph is at the Bidder's own risk. All submitted information must comply with the requirements of this solicitation.
- (f) Any changes to the Bid submitted by the Bidder other than as permitted in this solicitation, will be considered to be new information and will be disregarded. Information submitted in accordance with the requirements of this solicitation in response to the CAR will replace, in full, **only** that part of the original Bid as is permitted in this Section.
- (g) Additional or different information submitted during Phase II permitted by this section will be considered as included in the Bid, but will be considered by Canada in the evaluation of the Bid at Phase II only for the purpose of determining whether the Bid meets the Eligible Mandatory Criteria. It will not be used at any Phase of the evaluation to increase or decrease any score that the original Bid would achieve without the benefit of such additional or different information. For instance, an Eligible Mandatory Criterion that requires a mandatory minimum number of points to achieve compliance will be assessed at Phase II to determine whether such mandatory minimum score would be achieved with such additional or different information submitted by the Bidder in response to the CAR. If so, the Bid will be considered responsive in respect of such Eligible

Mandatory Criterion, and the additional or different information submitted by the Bidder shall bind the Bidder as part of its Bid, but the Bidder's original score, which was less than the mandatory minimum for such Eligible Mandatory Criterion, will not change, and it will be that original score that is used to calculate any score for the Bid

- (h) Canada will determine whether the Bid is responsive for the requirements reviewed at Phase II, considering such additional or different information or clarification as may have been provided by the Bidder in accordance with this Section. If the Bid is not found responsive for the requirements reviewed at Phase II to the satisfaction of Canada, then the Bid shall be considered non-responsive and will receive no further consideration.
- (i) Only Bids found responsive to the requirements reviewed in Phase II to the satisfaction of Canada, will receive a Phase III evaluation.

#### **4.2.4 Phase III: Final Evaluation of the Bid**

- (a) In Phase III, Canada will complete the evaluation of all Bids found responsive to the requirements reviewed at Phase II. Bids will be assessed in accordance with the entire requirement of the bid solicitation including the technical and financial evaluation criteria.
- (b) A Bid is non-responsive and will receive no further consideration if it does not meet all mandatory evaluation criteria of the solicitation

### **4.3 Technical Evaluation**

#### **4.3.1 Mandatory Technical Criteria**

Refer to Annex E of the Solicitation documents

**The Phased Bid Compliance Process will apply to all mandatory technical criteria**

#### **4.3.2 Point Rated Technical Criteria**

Refer Annex E of the Solicitation documents

**The Phased Bid Compliance Process will apply to all point rated technical criteria**

### **4.4 Financial Evaluation**

The price of the bid will be evaluated in Canadian dollars, Applicable Taxes excluded, FOB destination, Canadian customs duties and excise taxes included.

The bid prices will be evaluated using the Financial Evaluation Tables in Annex F.

### **4.5 Basis of Selection**

#### **4.5.1 Basis of Selection - Minimum Point Rating**

1. To be declared responsive, a bid must:
  - a) comply with all requirements of the bid solicitation; and
  - b) meet all mandatory technical evaluation criteria; and
  - c) obtain the required minimum of 38 points overall for the technical evaluation criteria which are subject to point rating. The rating is performed on a scale of 62 points
2. Bids not meeting (a) or (b) or (c) will be declared non-responsive. The responsive bid with the lowest overall evaluated price will be recommended for award of a contract.

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## PART 5 – CERTIFICATIONS AND ADDITIONAL INFORMATION

Bidders must provide the required certifications and additional information to be awarded a contract.

The certifications provided by Bidders to Canada are subject to verification by Canada at all times. Unless specified otherwise, Canada will declare a bid non-responsive, or will declare a contractor in default if any certification made by the Bidder is found to be untrue, whether made knowingly or unknowingly, during the bid evaluation period or during the contract period.

The Contracting Authority will have the right to ask for additional information to verify the Bidder's certifications. Failure to comply and to cooperate with any request or requirement imposed by the Contracting Authority will render the bid non-responsive or constitute a default under the Contract.

### 5.1 Certifications Required with the Bid

Bidders must submit the following duly completed certifications as part of their bid.

#### 5.1.1 Integrity Provisions - Declaration of Convicted Offences

In accordance with the Integrity Provisions of the Standard Instructions, all bidders must provide with their bid, **if applicable**, the Integrity declaration form available on the [Forms for the Integrity Regime](http://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html) website (<http://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html>), to be given further consideration in the procurement process.

### 5.2 Certifications Precedent to Contract Award and Additional Information

The certifications and additional information listed below should be submitted with the bid but may be submitted afterwards. If any of these required certifications or additional information is not completed and submitted as requested, the Contracting Authority will inform the Bidder of a time frame within which to provide the information. Failure to provide the certifications or the additional information listed below within the time frame specified will render the bid non-responsive.

#### 5.2.1 Integrity Provisions – Required Documentation

In accordance with the section titled Information to be provided when bidding, contracting or entering into a real property agreement of the [Ineligibility and Suspension Policy](http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html) (<http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html>), the Bidder must provide the required documentation, as applicable, to be given further consideration in the procurement process.

#### 5.2.2 Federal Contractors Program for Employment Equity - Bid Certification

By submitting a bid, the Bidder certifies that the Bidder, and any of the Bidder's members if the Bidder is a Joint Venture, is not named on the Federal Contractors Program (FCP) for employment equity "FCP Limited Eligibility to Bid" list available at the bottom of the page of the [Employment and Social Development Canada \(ESDC\) - Labour's](https://www.canada.ca/en/employment-social-development/programs/employment-equity/federal-contractor-program.html#) website (<https://www.canada.ca/en/employment-social-development/programs/employment-equity/federal-contractor-program.html#>).

Canada will have the right to declare a bid non-responsive if the Bidder, or any member of the Bidder if the Bidder is a Joint Venture, appears on the "FCP Limited Eligibility to Bid list at the time of contract award.

Canada will also have the right to terminate the Contract for default if a Contractor, or any member of the Contractor if the Contractor is a Joint Venture, appears on the ["FCP Limited Eligibility to Bid"](#) list during the period of the Contract.

The Bidder must provide the Contracting Authority with a completed annex titled Federal Contractors Program for Employment Equity - Certification, before contract award. If the Bidder is a Joint Venture, the Bidder must provide the Contracting Authority with a completed annex Federal Contractors Program for Employment Equity - Certification, for each member of the Joint Venture.



Solicitation No. - N° de l'invitation  
W8476-216378/A  
Client Ref. No. - N° de réf. du client  
W8476-216378

Amd. No. - N° de la modif.  
File No. - N° du dossier  
hl673.W8476-216378

Buyer ID - Id de l'acheteur  
hl673  
CCC No./N° CCC - FMS No./N° VME

### 5.2.3 Canada Environmental and Socio-Economic Initiative Certification

The Bidder must select and complete one of the following four certification statements.

1) The Bidder certifies that the Bidder is registered or meets ISO 14001.

\_\_\_\_\_  
Bidders' Authorized Representative Signature

\_\_\_\_\_  
Date

**OR**

2) The Bidder certifies that it meets and will continue to meet throughout the duration of the contract, a minimum of four (4) out of eight (8) criteria identified in the table below. The Bidder must indicate which four (4) criteria, as a minimum, are met.

Environmental criteria within the Bidders' organization	Insert a checkmark for each criterion that is met
Promotes a paperless environment through directives, procedures and/or programs	
All documents are printed double sided and in black and white for day to day business activity unless otherwise specified by your client	
Paper used for day to day business activity has a minimum of 30% recycled content and has a sustainable forestry management certification	
Utilizes environmentally preferable inks and purchase remanufactured ink cartridges or ink cartridges that can be returned to the manufacturer for reuse and recycling for day to day business activity.	
Recycling programs or policies on, but not limited to, the following:  - Greenhouse Gas (GHG) Reduction - GHG inventory - eWaste - Waste audits - Energy efficiency - Green procurement - Fleet requirements (green vehicles, vehicle tracking, low resistance tires, tire recycling, emission reduction, etc.) - LED lighting - Recycling bins for paper, newsprint, plastic and aluminum containers available and emptied regularly in accordance with local recycling program - Motion-sensored lighting - Solar/wind programs	
A minimum of 50% of office equipment has an energy efficient certification.	
Other Environmental or Green Registration or Certification.	
The Bidder should provide a brief description of the program in place in their bid.	
Other environmental initiatives and programs in place	
The Bidder should provide a brief description of the program in place in their bid.	

\_\_\_\_\_  
Bidders' Authorized Representative Name & Signature

\_\_\_\_\_  
Date

**OR**

3) The Bidder certifies that it manages and encourages targeted underrepresented suppliers, supplier ownership and groups (i.e., visible minorities, women, youth, and veterans of the Canadian Armed



Solicitation No. - N° de l'invitation  
W8476-216378/A  
Client Ref. No. - N° de réf. du client  
W8476-216378

Amd. No. - N° de la modif.  
File No. - N° du dossier  
hl673.W8476-216378

Buyer ID - Id de l'acheteur  
hl673  
CCC No./N° CCC - FMS No./N° VME

Forces) through the use of Human Resource (HR) policies, training or skills development policies or program, employment, scholarships, etc.

The Bidder should provide a brief description of the program in place in their bid.

\_\_\_\_\_  
Bidders' Authorized Representative Name & Signature

\_\_\_\_\_  
Date

**OR**

4) The Bidder certifies that it manages and encourages indigenous suppliers, supplier ownership and groups through the use of Human Resource (HR) policies, training or skills development policies or program, employment, scholarships, etc.

The Bidder should provide a brief description of the program in place in their bid.

\_\_\_\_\_  
Bidders' Authorized Representative Name & Signature

\_\_\_\_\_  
Date

#### **5.2.4 Status and Availability of Resources**

SACC Manual clause [A3005T](#) (2010-08-16) Status and Availability of Resources

#### **5.2.5 Certifications – Contract**

SACC Manual clause [A3015C](#) (2014-06-26) Certifications – Contract

#### **5.2.6 Education and Experience**

SACC Manual clause [A3010T](#) (2010-08-16) Education and Experience

#### **5.2.7 ISO 9001:2015 Quality Management Systems (Quality Assurance Code Q)**

The Bidder certifies that it complies, and will continue to comply throughout the duration of the contract, with all of the requirements of the article in Part 7 entitled ISO 9001:2015 Quality Management Systems (Quality Assurance Code Q).

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

#### **5.2.8 COVID-19 vaccination requirement**

This requirement is subject to the COVID-19 Vaccination Policy for Supplier Personnel. Failure to complete and provide the COVID-19 Vaccination requirement Certification as part of the bid will render the bid non-responsive.

#### **5.2.9 COVID-19 vaccination requirement certification**

In accordance with the COVID-19 Vaccination Policy for Supplier Personnel, all Bidders must provide with their bid, the COVID-19 Vaccination Requirement Certification attached to this bid solicitation, to be given further consideration in this procurement process. This Certification incorporated into the bid solicitation on its closing date is incorporated into, and forms a binding part of any resulting Contract.

#### **COVID-19 Vaccination Requirement Certification**

I, \_\_\_\_\_ (first and last name), as the representative of \_\_\_\_\_  
(name of business) pursuant to \_\_\_\_\_ (insert solicitation number), warrant and certify that

Solicitation No. - N° de l'invitation  
W8476-216378/A  
Client Ref. No. - N° de réf. du client  
W8476-216378

Amd. No. - N° de la modif.  
File No. - N° du dossier  
hl673.W8476-216378

Buyer ID - Id de l'acheteur  
hl673  
CCC No./N° CCC - FMS No./N° VME

all personnel that \_\_\_\_\_ (name of business) will provide on the resulting Contract who access federal government workplaces where they may come into contact with public servants will be:

- (a) fully vaccinated against COVID-19 with Health Canada-approved COVID-19 vaccine(s); or
- (b) for personnel that are unable to be vaccinated due to a certified medical contraindication, religion or other prohibited grounds of discrimination under the Canadian Human Rights Act, subject to accommodation and mitigation measures that have been presented to and approved by Canada; or
- (c) partially vaccinated against COVID-19 for a period of up to 10 weeks from the date of their first dose and subject to temporary measures that have been presented to and approved by Canada, immediately after which period the personnel will meet the conditions of (a) or (b) or will no longer access federal government workplaces where they may come into contact with public servants under this Contract;

until such time that Canada indicates that the vaccination requirements of the COVID-19 Vaccination Policy for Supplier Personnel are no longer in effect.

I certify that all personnel provided by \_\_\_\_\_ (name of business) have been notified of the vaccination requirements of the Government of Canada's COVID-19 Vaccination Policy for Supplier Personnel, and that the \_\_\_\_\_ (name of business) has certified to their compliance with this requirement.

I certify that the information provided is true as of the date indicated below and will continue to be true for the duration of the Contract. I understand that the certifications provided to Canada are subject to verification at all times. I also understand that Canada will declare a contractor in default, if a certification is found to be untrue, whether made knowingly or unknowingly, during the bid or contract period. Canada reserves the right to ask for additional information to verify the certifications. Failure to comply with any request or requirement imposed by Canada will constitute a default under the Contract.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

#### Optional

For data purposes only, initial below if your business already has its own mandatory vaccination policy or requirements for employees in place. Initialing below **is not** a substitute for completing the mandatory certification above.

Initials: \_\_\_\_\_

Information you provide on this Certification Form and in accordance with the Government of Canada's COVID-19 Vaccination Policy for Supplier Personnel will be protected, used, stored and disclosed in accordance with the Privacy Act. Please note that you have a right to access and correct any information on your file, and you have a right to file a complaint with the Office of the Privacy Commissioner regarding the handling of your personal information. These rights also apply to all individuals who are deemed to be personnel for the purpose for the Contract and who require access to federal government workplaces where they may come into contact with public servants.

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## PART 6 - SECURITY, FINANCIAL AND OTHER REQUIREMENTS

### 6.1 Security Requirements

1. At the date of bid closing, the following conditions must be met:
  - a) the Bidder must hold a valid organization security clearance as indicated in Parts 7 and 8 - Resulting Contract Clauses for Acquisition Contract and Resulting Contract Clauses for In Service Support Contract;
  - b) the Bidder's proposed individuals requiring access to classified or protected information, assets or sensitive work sites must meet the security requirements as indicated in Parts 7 and 8 - Resulting Contract Clauses for Acquisition Contract and Resulting Contract Clauses for In Service Support Contract;
  - c) the Bidder must provide the name of all individuals who will require access to classified or protected information, assets or sensitive work sites;
2. For additional information on security requirements, Bidders should refer to the Contract Security Program of Public Works and Government Services Canada (<http://www.tpsgc-pwgsc.gc.ca/esc-src/introduction-eng.html>) website.

### 6.2 Financial Capability

SACC Manual clause [A9033T](#) (2012-07-16) Financial Capability

### 6.3 Controlled Goods Requirement

SACC Manual clause [A9130T](#) (2019-11-28) Controlled Goods Program

### 6.4 Insurance Requirements

SACC Manual clause [G1005C](#) (2016-01-28) Insurance – No Specific Requirement

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## **PART 7 - RESULTING CONTRACT CLAUSES FOR THE ACQUISITION CONTRACT**

### **THIS DOCUMENT CONTAINS A SECURITY REQUIREMENT**

The following clauses and conditions apply to and form part of any Acquisition Contract resulting from the bid solicitation.

#### **7.1 Statement of Work**

The Contractor must perform the Work in accordance with the Statement of Work at Annex A1

##### **7.1.1 Optional Goods and/or Services**

The Contractor grants to Canada the irrevocable option to acquire the goods, services or both described at Annex B1 of the Contract under the same conditions and at the prices and/or rates stated in the Contract. The option may only be exercised by the Contracting Authority and will be evidenced, for administrative purposes only, through a contract amendment.

The contracting Authority may exercise this option within twenty four (24) months after contract award, by sending a written notice to the Contractor

##### **7.1.2 Task Authorization**

The Work or a portion of the Work to be performed under the Contract will be on an "as and when requested basis" using a Task Authorization (TA). The Work described in the TA must be in accordance with the scope of the Contract.

The contractor shall provide service or goods in accordance with the Statement of Work. The work is not limited to the categories listed below:

- a. Repair and overhaul
- b. Technical Investigations and Engineering Services
- c. Field Service Representative
- d. Training
- e. Provision of spares
- f. Special Tools and Test Equipment

##### **7.1.2.1 Task Authorization Process**

1. The Technical Authority will provide the Contractor with a description of the task in the form of a Statement of Work.

2. The Contractor must provide Canada, within 14 calendar days of its receipt, the proposed total estimated cost for performing the task and a breakdown of that cost, established in accordance with the Basis of Payment specified in the Contract.

3. The Procurement Authority (PA) will provide the DND 626 task authorization, and will contain the details of the activities to be performed, a description of the deliverables, and a schedule indicating completion dates for the major activities or submission dates for the deliverables. The Task Authorization will also include the applicable basis (bases) and methods of payment as specified in the Contract.

4. The Contractor must not commence work until task authorization, DND 626 authorized by the Procurement or Contracting Authority has been received by the Contractor. The Contractor acknowledges that any work performed before a TA has been received will be done at the Contractor's own risk.

#### **7.1.2.2 Task Authorization Limit**

The Procurement Authority may authorize individual task authorizations up to a limit of \$400,000.00, Applicable taxes included, inclusive of any revisions

Any task authorization to be issued in excess of that limit must be authorized by the Contracting Authority before issuance.

#### **7.1.2.3 Task Authorization - Department of National Defence**

The administration of the Task Authorization process will be carried out by The Department of National Defence. This process includes monitoring controlling and reporting on expenditures of the contract with task authorizations to the Contracting Authority.

### **7.2 Standard Clauses and Conditions**

All clauses and conditions identified in the Contract by number, date and title are set out in the [Standard Acquisition Clauses and Conditions Manual](https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual) (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

#### **7.2.1 General Conditions**

[2030](#) (2021-12-02) General Conditions - Higher Complexity - Goods, apply to and form part of the Acquisition Contract.

#### **7.2.2 Supplemental General Conditions**

[4006](#) (2010-06-16) Contractor to Own Intellectual Property Rights in Foreground Information apply to and form part of the Contract.

### **7.3 Security Requirements**

#### **7.3.1 Security Requirements – Canadian Supplier**

1. The Contractor/Offeror must, at all times during the performance of the Contract/Standing Offer, hold a valid Designated Organization Screening (DOS), issued by the Contract Security Program (CSP), Public Works and Government Services Canada (PWGSC).

2. The Contractor/Offeror personnel requiring access to sensitive site(s) must EACH hold a valid RELIABILITY STATUS, granted or approved by the CSP, PWGSC.

3. Subcontracts which contain security requirements are NOT to be awarded without the prior written permission of the CSP, PWGSC.

4. The Contractor/Offeror must comply with the provisions of the:

- a) Security Requirements Check List and security guide (if applicable), attached at Annex D1;
- b) Industrial Security Manual (Latest Edition).

#### **7.3.2 Security Requirements – Foreign Supplier**

The Canadian Designated Security Authority (Canadian DSA) for industrial security matters in Canada is the Industrial Security Sector (ISS), Public Works and Government Services Canada (PWGSC), administered by International Industrial Security Directorate (IISD), PWGSC. The Canadian DSA is the authority for confirming Contractor compliance with the security requirements for foreign suppliers. The following security requirements apply to the foreign recipient Contractor incorporated or authorized to do business in a jurisdiction other than Canada and delivering outside of Canada the services listed and described in the subsequent contract.

- 
1. The Foreign recipient Contractor must be from a Country within the North Atlantic Treaty Organization (NATO), the European Union (EU) or from a country with which Canada has an international bilateral security instrument. The Contract Security Program (CSP) has international bilateral security instruments with the countries listed on the following PWGSC website:  
<http://www.tpsgc-pwgsc.gc.ca/esc-src/international-eng.html> .
  2. The Foreign recipient Contractor must, at all times during the performance of the contract, hold an equivalence to a valid Designated Organization Screening (DOS), issued by the Canadian DSA as follows:
    - i. The Foreign recipient Contractor must provide proof that they are incorporated or authorized to do business in their jurisdiction.
    - ii. The Foreign recipient Contractor must not begin the work, services or performance until the Canadian Designated Security Authority (DSA) is satisfied that all contract security requirement conditions have been met. Canadian DSA confirmation must be provided, in writing, to the foreign recipient Contractor in an Attestation Form, to provide confirmation of compliance and authorization for services to be performed.
    - iii. The Foreign recipient Contractor must identify an authorized Contract Security Officer (CSO) and an Alternate Contract Security Officer (ACSO) (if applicable) to be responsible for the overseeing of the security requirements, as defined in this contract. This individual will be appointed by the proponent foreign recipient Contractor's Chief Executive officer or Designated Key Senior Official, defined as an owner, officer, director, executive, and or partner who occupy a position which would enable them to adversely affect the organization's policies or practices in the performance\ of the contract.
    - iv. The Foreign recipient Contractor must not permit access to Canadian restricted sites, except to its personnel subject to the following conditions:
      - a. Personnel have a need-to-know for the performance of the contract;
      - b. Personnel have been subject to a Criminal Record Check, with favourable results, from a recognized governmental agency or private sector organization in their country as well as a Background Verification, validated by the Canadian DSA;
      - c. The Foreign recipient Contractor must ensure that personnel provide consent to share results of the Criminal Record and Background Checks with the Canadian DSA and other Canadian Government Officials, if requested; and
      - d. The Government of Canada reserves the right to deny access to Canadian restricted sites to a foreign recipient Contractor for cause.
  3. The Foreign recipient Contractor requiring access to Canadian restricted sites, under this contract, must submit a Request for Site Access to the Chief Security Officer of the Department of National Defence of Canada.
  4. In the event that a Foreign recipient Contractor is chosen as a supplier for this contract, subsequent country-specific foreign security requirement clauses must be generated and promulgated by the Canadian DSA, and provided to the Government of Canada Contracting Authority, to ensure compliance with the security provisions, as defined by the Canadian DSA, in relation to equivalencies.
  5. Subcontracts which contain security requirements are NOT to be awarded without the prior written permission of the Canadian DSA.
  6. The Foreign recipient Contractor must comply with the provisions of the Security Requirements Check List attached at Annex D1.

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#### **7.4 Period of the Contract**

The period of the contract will be for three (3) years from date of Contract award.

##### **7.4.1 Delivery Date**

All the deliverables must be received in accordance with Annex C1 – Delivery Schedule – Acquisition Contract.

##### **7.4.2 Delivery Points**

Delivery of the requirement will be made to delivery point(s) specified at Annex C1 – Delivery Schedule – Acquisition Contract.

#### **7.5 Authorities**

##### **7.5.1 Contracting Authority**

The Contracting Authority for the Contract is:

Shaun Feagan, Supply Team Leader  
Public Works and Government Services Canada  
Real Property and Commercial Acquisitions Sector (RPCAS)  
Industrial Products and Vehicles Procurement Directorate  
Fuel and Construction Products Division

140 O'Connor Street,  
L'esplanade Laurier Tower East  
Ottawa, ON K1A 0S5  
Telephone: 613-295-9018  
[shaun.feagan@tpsgc-pwgsc.gc.ca](mailto:shaun.feagan@tpsgc-pwgsc.gc.ca)

The Contracting Authority is responsible for the management of the Contract and any changes to the Contract must be authorized in writing by the Contracting Authority. The Contractor must not perform work in excess of or outside the scope of the Contract based on verbal or written requests or instructions from anybody other than the Contracting Authority.

##### **7.5.2 Procurement Authority**

The Procurement Authority for the Contract is:

Name:  
Title:  
Organization:  
Address:

Telephone:  
E-mail address:

The Procurement Authority is the representative of the department or agency for whom the Work is being carried out under the Contract. The Procurement Authority is responsible for the implementation of tools and processes required for the administration of the Contract. The Contractor may discuss administrative matters identified in the Contract with the Procurement Authority however the Procurement Authority has no authority to authorize changes to the scope of the Work. Changes to the scope of Work can only be made through a contract amendment issued by the Contracting Authority.

Solicitation No. - N° de l'invitation  
W8476-216378/A  
Client Ref. No. - N° de réf. du client  
W8476-216378

Amd. No. - N° de la modif.  
File No. - N° du dossier  
hl673.W8476-216378

Buyer ID - Id de l'acheteur  
hl673  
CCC No./N° CCC - FMS No./N° VME

### 7.5.3 Technical Authority

The Technical Authority for the Contract is:

Name:  
Title:  
Organization:  
Address:

Telephone:  
E-mail address:

The Technical Authority named above is the representative of the department or agency for whom the Work is being carried out under the Contract and is responsible for all matters concerning the technical content of the Work under the Contract. Technical matters may be discussed with the Technical Authority, however the Technical Authority has no authority to authorize changes to the scope of the Work. Changes to the scope of the Work can only be made through a contract amendment issued by the Contracting Authority.

### 7.5.4 Contractor's Representative

Name: \_\_\_\_\_ Telephone: \_\_\_\_-\_\_\_\_-\_\_\_\_\_  
Title: \_\_\_\_\_ Facsimile: \_\_\_\_-\_\_\_\_-\_\_\_\_\_  
Address: \_\_\_\_\_ E-mail address: \_\_\_\_\_

## 7.6 Payment

### 7.6.1 Limitation of expenditure – Cumulative Total of all Task Authorizations

1. Canada's total liability to the Contractor under the Contract for all authorized Task Authorizations (TAs), inclusive of any revisions, must not exceed the sum of \$ \_\_\_\_\_. Customs duties are included and Applicable Taxes are extra.

2. No increase in the total liability of Canada will be authorized or paid to the Contractor unless an increase has been approved, in writing, by the Contracting Authority.

3. The Contractor must notify the Contracting Authority in writing as to the adequacy of this sum:

- a) when it is 75% committed, or
- b) four (4) months before the contract expiry date, or
- c) as soon as the Contractor considers that the sum is inadequate for the completion of the Work required in all authorized TAs, inclusive of any revisions,

whichever comes first.

4. If the notification is for inadequate contract funds, the Contractor must provide to the Contracting Authority a written estimate for the additional funds required. Provision of such information by the Contractor does not increase Canada's liability.

### 7.6.2 Basis of payment – Firm Unit Prices

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid firm unit prices per Annex B1 – Basis Of Payment – Acquisition Contract. Customs duties are included and Applicable taxes are extra.

Canada will not pay the Contractor for any design changes, modifications or interpretations of the Work, unless they have been approved, in writing, by the Contracting Authority before their incorporation into the Work.



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### 7.6.3 Multiple Payments

SACC Manual clause H1001C (2008-05-12) Multiple Payments

### 7.6.4 Electronic Payment of Invoices – Contract

The Contractor accepts to be paid using any of the following Electronic Payment Instrument(s):

- a. Visa Acquisition Card
- b. Mastercard Acquisition Card
- c. Direct Deposit (Domestic and International);
- d. Electronic Data Interchange (EDI);
- e. Wire Transfer (International Only);
- f. Large Value Transfer System (LVTS) (Over \$25M)

### 7.6.5 Discretionary Audit – Task Authorizations

SACC Manual Clause C0100C (2010-01-11) Discretionary Audit – Commercial Goods and/or Services

### 7.7 Invoicing Instructions

1. The Contractor must submit invoices in accordance with the section entitled "Invoice Submission" of the general conditions. Invoices cannot be submitted until all work identified in the invoice is completed.

Each invoice must be supported by:

- a. copy of time sheets to support the time claimed;
- b. a copy of the release document and any other documents as specified in the Contract;
- c. a copy of the invoices, receipts, vouchers for all direct expenses, and all travel and living expenses;
- d. a copy of the monthly progress report.

2. Invoices must be distributed as follows:

- a. The Electronic invoice must be forwarded to the following address for certification and payment:  
The Procurement Authority identified under the section entitled Authorities
- b. One (1) copy must be forwarded to the Contracting Authority identified under the section entitled "Authorities" of the Contract.
- c. One (1) copy must be forwarded to the consignee.

Note: Invoice(s) must be submitted electronically.

### 7.8 Certifications and Additional Information

#### 7.8.1 Compliance

Unless specified otherwise, the continuous compliance with the certifications provided by the Contractor in its bid or precedent to contract award, and the ongoing cooperation in providing additional information are conditions of the Contract and failure to comply will constitute the Contractor in default. Certifications are subject to verification by Canada during the entire period of the Contract.

#### 7.8.2 Federal Contractors Program for Employment Equity - Default by the Contractor

The Contractor understands and agrees that, when an Agreement to Implement Employment Equity (AIEE) exists between the Contractor and Employment and Social Development Canada (ESDC)-Labour, the AIEE must remain valid during the entire period of the Contract. If the AIEE becomes invalid, the name of the Contractor will be added to the "[FCP Limited Eligibility to Bid](#)" list. The imposition of such a sanction by ESDC will constitute the Contractor in default as per the terms of the Contract.

## 7.9 Applicable Laws

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in Ontario.

## 7.10 Priority of Documents

If there is a discrepancy between the wordings of any documents that appear on the list, the wording of the document that first appears on the list has priority over the wording of any document that subsequently appears on the list.

- (a) the Articles of Agreement;
- (b) the supplemental general conditions 4006 (2010-08-06) Contractor to Own Intellectual Property Rights in Foreground Information;
- (c) the general conditions 2030 (2018-06-21) General Conditions - Higher Complexity - Goods;
- (d) Annex A1, Statement of Work – Acquisition Contract;
- (e) Annex B1, Basis of Payment – Acquisition Contract;
- (f) Annex C1, Delivery schedule – Acquisition Contract;
- (g) Annex D1, Security Requirements Check List;
- (h) the signed Task Authorizations (including all of its annexes, if any);
- (i) the Contractor's bid dated \_\_\_\_\_, (to be completed at contract award)

## 7.11 Defence Contract

SACC Manual clause [A9006C](#) (2012-07-16) Defence Contract

## 7.12 Foreign Nationals (Canadian Contractor OR Foreign Contractor)

SACC Manual clause [A2000C](#) (2006-06-16) Foreign Nationals (Canadian Contractor)

SACC Manual clause [A2001C](#) (2006-06-16) Foreign Nationals (Foreign Contractor)

## 7.13 Insurance

SACC Manual clause [G1005C](#) (2016-01-28) Insurance - No Specific Requirement

## 7.14 Controlled Goods Program

SACC Manual clause [A9131C](#) (2020-11-19) Controlled Goods Program

## 7.15 Condition of Material

The Contractor must provide material that is new production of current manufacture supplied by the principal manufacturer or its accredited agent. The material must conform to the latest issue of the applicable drawing, specification and part number, as applicable, that was in effect on the bid closing date.

## 7.16 Controlled Goods

The Contract involves controlled goods as defined in the Schedule to the [Defence Production Act](#). The Contractor must identify those controlled goods to the Department of National Defence.

## 7.17 Bar Coding - Package Marking

The Contractor must apply, on the package, bar code information for all items, with Application Identifier 7001, using bar code symbology *UCC/EAN-128* (Uniform Code Council/EAN International). Below the bar code symbol, the Contractor must apply the Human-Readable Interpretation (HRI) markings.

The bar code marking(s) must be legible, applied to a printable surface or label and positioned in accordance with the Canadian Forces Packaging Specification *D-LM-008-002/SF-001, marking for Storage and Shipment* (in effect at the closing date of the bid solicitation).

## 7.18 Wood Packaging materials

SACC Manual clause D2025C (2017-08-17) Wood packaging materials

## 7.19 Delivery of Dangerous Goods/Hazardous Products

SACC Manual clause D3010C (2016-01-28) Delivery of Dangerous Goods/Hazardous Products

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## **7.20 Packaging requirements using Specification D-LM-008-036/SF-000**

The Contractor must prepare items for delivery with the latest issue of the Canadian Forces Packaging Specification D-LM-008-036/SF-000, DND Minimum requirements for Manufacturer's Standard Pack.

## **7.21 ISO 9001:2015 Quality Management Systems – Requirements (Quality Assurance Code Q)**

SACC Manual Clause D5540C (2021-05-20) ISO 9001:2015 Quality Management Systems – Requirements (Quality Assurance Code Q)

## **7.22 Quality Assurance Authority**

SACC Manual Clause D5510C (2017-08-17) Quality assurance authority (Department of National Defence): Canadian-based contractor

SACC Manual Clause D5515C (2010-01-11) Quality assurance authority (Department of National Defence): Foreign-based and United States Contractor

## **7.23 Release Documents**

SACC Manual Clause D5606C (2017-11-28) Release Documents (Department of National Defence) – Canadian-based Contractor

SACC Manual Clause D5605C (2021-05-20) Release Documents (Department of National Defence) – United States-based Contractor

SACC Manual Clause D5604C (2008-12-12) Release Documents (Department of National Defence) – Foreign-based Contractor

## **7.24 Release Documents - Distribution**

SACC Manual Clause D5620C (2012-07-16) Release Documents - Distribution

## **7.25 Palletization**

SACC Manual clause D6010C (2007-11-30) Palletization

## **7.26 Customs Duties – Contractor Importer**

SACC Manual clause C2611C (2007-11-30) Customs Duties – Contractor Importer

## **7.27 Preparation for Delivery Canadian based Contractor**

1. Preservation and packaging for items \_\_\_\_\_ must be in accordance with the Canadian Forces packaging specification *D-LM-008-001/SF-001*, and must be marked to *D-LM-008-002/SF-001*. Form Level B **Pkg Data Form Req'd** must be in accordance with *D-LM-008-011/SF-001*.
2. Packaging data forms previously approved by Canadian authorities are acceptable.
3. Approved coded packaging data is shown immediately below the description of the item to which it applies. Where no data is shown, the Contractor must submit a packaging data form for approval.

## **7.28 Preparation for Delivery United States based Contractor**

1. Preservation and packaging for items \_\_\_\_\_ must be in accordance with the current issue of *United States (U.S.) Department of Defense Military Standard MIL-STD-2073* and must be marked to *MIL-STD-129*.
2. Packaging data forms previously approved by U.S. authorities are acceptable.
3. Approved coded packaging data is shown immediately below the description of the item to which it applies. Where no data is shown, the Contractor must submit a packaging data form for approval.

## **7.29 Preparation for Delivery European Union**

1. The Contractor must prepare item number(s) \_\_\_\_\_ for preservation and packaging in accordance with NATO Marking and Packaging Standards as contained in the latest issue of *TL8100-0101/NATO-4*.
2. The Contractor must use packaging data forms previously approved or contained in *NATO-4*.

- 
3. The Contractor must ensure approved coded packaging data is shown immediately below the description of the corresponding item. Where no packaging data is shown, the Contractor must submit a packaging data form for approval.

**7.30 Dangerous Goods/ Hazardous Products – Labelling and packaging compliance**

SACC Manual clause D3015C (2014-09-25) Dangerous Goods/ Hazardous Products – Labelling and packaging compliance

**7.31 Procedures for Design Change or Additional Work**

SACC Manual clause B5007C (2010-01-11) Procedures for Design Change or Additional Work

**7.32 Dispute Resolution**

- (a) The parties agree to maintain open and honest communication about the Work throughout and after the performance of the contract.
- (b) The parties agree to consult and co-operate with each other in the furtherance of the contract and promptly notify the other party or parties and attempt to resolve problems or differences that may arise.
- (c) If the parties cannot resolve a dispute through consultation and cooperation, the parties agree to consult a neutral third party offering alternative dispute resolution services to attempt to address the dispute.
- (d) Options of alternative dispute resolution services can be found on Canada's Buy and Sell website under the heading "[Dispute Resolution](#)".

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## **PART 8 - RESULTING CONTRACT CLAUSES FOR THE IN SERVICE SUPPORT CONTRACT**

### **THIS DOCUMENT CONTAINS A SECURITY REQUIREMENT**

The following clauses and conditions apply to and form part of any Support Contract resulting from the bid solicitation.

#### **8.1 Statement of Work**

The Contractor must perform the Work in accordance with the Annex A2 – Statement of Work – In Service Support Contract and the Annex C2 – Logistics Statement of Work – In Service Support Contract.

##### **8.1.1 Optional Goods and/or Services**

The Contractor grants to Canada the irrevocable option to acquire the goods, services or both described at Annex B2 of the Contract under the same conditions and at the prices and/or rates stated in the Contract. The option may only be exercised by the Contracting Authority and will be evidenced, for administrative purposes only, through a contract amendment.

The Contracting Authority may exercise the option at any time before the expiry of the Contract by sending a written notice to the Contractor.

#### **8.2 Work Categories**

The Work is summarized into three (3) main categories as described in Annex A2 and as follows:

##### **8.2.1 Category 1 – CORE Requirements**

Core includes the following support requirements for the Water Treatment System including general environmental health and safety requirements, program management, Operating Support, engineering support, maintenance support, supply support, and personnel support resources.

##### **8.2.2 Category 2 – Repair & Overhaul and Tasking Requirements**

###### **8.2.2.1 R&O of the Water Treatment System**

On an “as and when requested” basis, including, but not limited to maintenance support, quality assurance, turnaround time, repair cost estimates, maximum repair costs, condemn/scrapping considerations, calibration, CARC painting, software maintenance and provision of material (included in Annex A2). R&O work will be initiated and controlled in accordance with the Task Authorization process described in section 8.3 of this document.

###### **8.2.2.2 Tasking Requirements for the Water Treatment System**

On an “as and when requested” basis, the Contractor shall provide Technical Investigations and Engineering Services (TIES), and Field Service Representative (FSR) services to support the R&O program and to support operational requirements. Support/Services tasks may include operating support, engineering support, maintenance support, supply support and training support related and other tasks requiring engineering and technical expertise related to the equipment as per Annex A2. This Includes upgrade, advice, training and disposal. Tasking work will be initiated and controlled in accordance with the Task Authorization process described in section 8.3 of this document.

##### **8.2.3 Category 3 – Contractor Markup (parts/material/shipping)**

On an “as and when requested” basis, the Contractor shall provide the provisions of spare parts and shipping used for repair only, for delivery to the Canadian Forces. Requests for parts will be initiated and controlled in accordance with the Task Authorization process described in section 8.3 of this document.

### 8.3 Task Authorization

The Service or a portion of the Service to be performed under the Contract will be on an "as and when requested basis" using a Task Authorization. The Service described in the Task Authorization must be in accordance with the scope of the Contract.

#### 8.3.1 Task Authorization - Department of National Defence

The administration of the Task Authorization process will be carried out by The Department of National Defence. This process includes monitoring controlling and reporting on expenditures of the contract with task authorizations to the Contracting Authority.

#### 8.3.2 Task Authorization Limit

The Procurement Authority may authorize individual task authorizations up to a limit of \$400,000.00, the Applicable Taxes included, inclusive of any revisions.

Any task authorization to be issued in excess of that limit must be authorized by the Contracting Authority before issuance.

#### 8.3.3 Task Authorization Process

- a. The Procurement Authority will provide the Contractor with a description of the work required using a draft DND 626, Task Authorization Form.
- b. The Task Authorization (TA) will contain the details of the activities to be performed, a description of the deliverables, and a schedule indicating completion dates for the major activities or submission dates for the deliverables. The TA will also include the applicable basis (bases) and methods of payment as specified in the Contract.
- c. The Contractor must provide the Technical Authority, within ten (10) calendar days of its receipt, the proposed total estimated price for performing the work and a breakdown of that price, established in accordance with the Basis of Payment specified in the Contract.
- d. The nature of the Task Authorizations (TA) will determined the next step as follows:
  - i. **For R&O/FSR Tasks:** The Procurement Authority will review the Contractor estimate and will process the TA, and any amendment(s), according to the TA Limit of the contract.
  - ii. **For TIES Tasks:** The Procurement Authority will review the Contractor estimate and will process the TA. When a task is estimated at more than 50% of the TA Limit, it will to be revised in collaboration with the PWGSC Contracting Authority, prior to issuance to the Contractor, to ensure conformity with the Contract and to verify if this is the best approach for this requirement. Any Amendment to a TA, which affects the scope of the Service and/or brings its total price above 50% of the TA limit, must also be subject to review by the PWGSC Contracting Authority before being issued by the Procurement Authority.
- e. Depending on its nature and the degree of certainty of its outcomes, the pricing for each task will be established as follows:
  - i. **Firm Price:** Where a firm price can be determined for a Task, the Contractor must complete the work in accordance with this specified firm price. The firm price will represent the total amount payable under the Task Authorization.
  - ii. **Ceiling Price:** Where a requirement is not well defined, or is of high risk, but a maximum price envelope can be estimated for a Task, the Contractor must complete the work within that ceiling price. The ceiling price will represent the maximum amount payable for the

completion of the Task Authorization. The ceiling price will be subject to downward adjustment based on the actual cost reasonably incurred in the performance of the work.

- iii. **Limitation of Expenditure:** Where a requirement is not well defined, or is of high risk, and it is not practical to utilize a firm price or a ceiling price, a limitation of expenditure (not to be exceeded) will represent the amount up to which the Contractor will be paid, regardless of the level of completion of the work. The Contractor must not perform any work or services, which would cause the total liability of Canada to exceed the authorized amount, unless an increase is approved by the Contracting Authority and authorized by Procurement Authority.

- f. The Contractor must not commence work until a TA authorized by Canada has been received by the Contractor. The Contractor acknowledges that any work performed before a TA has been received will be done at the Contractor's own risk.

#### 8.3.4 Periodic Usage Reports - Contracts with Task Authorizations

The Contractor must compile and maintain records on its provision of services to the federal government under authorized Task Authorizations issued under the Contract.

The Contractor must provide this data in accordance with the reporting requirements detailed below. If some data is not available, the reason must be indicated. If services are not provided during a given period, the Contractor must still provide a "NIL" report.

The data must be submitted on a quarterly basis to the Contracting Authority.

The quarterly periods are defined as follows:

- 1st quarter: April 1 to June 30;
- 2nd quarter: July 1 to September 30;
- 3rd quarter: October 1 to December 31; and
- 4th quarter: January 1 to March 31.

The data must be submitted to the Contracting Authority no later than fifteen (15) calendar days after the end of the reporting period.

#### Reporting Requirement- Details

A detailed and current record of all authorized tasks must be kept for each contract with a task authorization process. This record must contain:

##### For each authorized task:

- (i) the authorized task number or task revision number(s);
- (ii) a title or a brief description of each authorized task;
- (iii) the total estimated cost specified in the authorized Task Authorization (TA) of each task, applicable Taxes extra;
- (iv) the total amount, Applicable Taxes extra, expended to date against each authorized task;
- (v) the start and completion date for each authorized task; and
- (vi) the active status of each authorized task, as applicable.

##### For all authorized tasks:

- (i) the amount (exclusive of Applicable Taxes) specified in the contract (as last amended, as applicable) as Canada's total liability to the contractor for all authorized TAs; and
- (ii) the total amount, exclusive of Applicable Taxes, expended to date against all authorized TAs.



TASK AUTHORIZATION REPORT						
Contract Number :						
Reporting Period: _____ to _____						
TA Number	TA Amendment Number	Date of TA/TA Amendment	Value of TA/TA Amendment (Applicable Taxes excluded)	Applicable Taxes	Value of TA/TA Amendment (Applicable Taxes included)	Cumulative Amount

If the Contractor does not comply with the above reporting requirements, Canada has the right pursuant to the default provisions of the contract, to terminate the contract for default.

#### 8.4 Standard Clauses and Conditions

All clauses and conditions identified in the Contract by number, date and title are set out in the [Standard Acquisition Clauses and Conditions Manual](https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual) (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

##### 8.4.1 General Conditions

[2035](#) (2021-12-02) General Conditions - Higher Complexity - Services, apply to and form part of the Contract.

##### 8.4.2 Supplemental General Conditions

[4006](#) (2010-08-16) Contractor to own Intellectual Property Rights in Foreground Information, apply to and form part of the Contract.

#### 8.5 Security Requirements

##### 8.5.1 Security Requirements – Canadian Supplier

1. The Contractor/Offeror must, at all times during the performance of the Contract/Standing Offer, hold a valid Designated Organization Screening (DOS), issued by the Contract Security Program (CSP), Public Works and Government Services Canada (PWGSC).
2. The Contractor/Offeror personnel requiring access to sensitive site(s) must EACH hold a valid RELIABILITY STATUS, granted or approved by the CSP, PWGSC.
3. Subcontracts which contain security requirements are NOT to be awarded without the prior written permission of the CSP, PWGSC.
4. The Contractor/Offeror must comply with the provisions of the:
  - a) Security Requirements Check List and security guide (if applicable), attached at Annex D2;
  - b) Industrial Security Manual (Latest Edition).



### 8.5.2 Security Requirements – Foreign Supplier

The Canadian Designated Security Authority (Canadian DSA) for industrial security matters in Canada is the Industrial Security Sector (ISS), Public Works and Government Services Canada (PWGSC), administered by International Industrial Security Directorate (IISD), PWGSC. The Canadian DSA is the authority for confirming Contractor compliance with the security requirements for foreign suppliers. The following security requirements apply to the foreign recipient Contractor incorporated or authorized to do business in a jurisdiction other than Canada and delivering outside of Canada the services listed and described in the subsequent contract.

1. The Foreign recipient Contractor must be from a Country within the North Atlantic Treaty Organization (NATO), the European Union (EU) or from a country with which Canada has an international bilateral security instrument. The Contract Security Program (CSP) has international bilateral security instruments with the countries listed on the following PWGSC website:  
<http://www.tpsgc-pwgsc.gc.ca/esc-src/international-eng.html> .
2. The Foreign recipient Contractor must, at all times during the performance of the contract, hold an equivalence to a valid Designated Organization Screening (DOS), issued by the Canadian DSA as follows:
  - i. The Foreign recipient Contractor must provide proof that they are incorporated or authorized to do business in their jurisdiction.
  - ii. The Foreign recipient Contractor must not begin the work, services or performance until the Canadian Designated Security Authority (DSA) is satisfied that all contract security requirement conditions have been met. Canadian DSA confirmation must be provided, in writing, to the foreign recipient Contractor in an Attestation Form, to provide confirmation of compliance and authorization for services to be performed.
  - iii. The Foreign recipient Contractor must identify an authorized Contract Security Officer (CSO) and an Alternate Contract Security Officer (ACSO) (if applicable) to be responsible for the overseeing of the security requirements, as defined in this contract. This individual will be appointed by the proponent foreign recipient Contractor's Chief Executive officer or Designated Key Senior Official, defined as an owner, officer, director, executive, and or partner who occupy a position which would enable them to adversely affect the organization's policies or practices in the performance\ of the contract.
  - iv. The Foreign recipient Contractor must not permit access to Canadian restricted sites, except to its personnel subject to the following conditions:
    - a. Personnel have a need-to-know for the performance of the contract;
    - b. Personnel have been subject to a Criminal Record Check, with favourable results, from a recognized governmental agency or private sector organization in their country as well as a Background Verification, validated by the Canadian DSA;
    - c. The Foreign recipient Contractor must ensure that personnel provide consent to share results of the Criminal Record and Background Checks with the Canadian DSA and other Canadian Government Officials, if requested; and
    - d. The Government of Canada reserves the right to deny access to Canadian restricted sites to a foreign recipient Contractor for cause.
3. The Foreign recipient Contractor requiring access to Canadian restricted sites, under this contract, must submit a Request for Site Access to the Chief Security Officer of the Department of National Defence of Canada.

4. In the event that a Foreign recipient Contractor is chosen as a supplier for this contract, subsequent country-specific foreign security requirement clauses must be generated and promulgated by the Canadian DSA, and provided to the Government of Canada Contracting Authority, to ensure compliance with the security provisions, as defined by the Canadian DSA, in relation to equivalencies.

5. Subcontracts which contain security requirements are NOT to be awarded without the prior written permission of the Canadian DSA.

6. The Foreign recipient Contractor must comply with the provisions of the Security Requirements Check List attached at Annex D2.

## **8.6 Term of Contract**

### **8.6.1 Period of the Contract**

The Work is to be performed during the period beginning upon acceptance of the first WTS System under the Acquisition Contract. The period of the Contract is five (5) years.

### **8.6.2 Option to Extend the Contract**

The Contractor grants to Canada the irrevocable option to extend the term of the Contract by up to five (5) additional one (1) year periods under the same conditions. The Contractor agrees that, during the extended period of the Contract, it will be paid in accordance with the applicable provisions as set out in the Basis of Payment.

Canada may exercise this option at any time by sending a written notice to the Contractor at least 30 days calendar days before the expiry date of the Contract. The option may only be exercised by the Contracting Authority, and will be evidenced for administrative purposes only, through a contract amendment.

## **8.7 Authorities**

### **8.7.1 Contracting Authority**

The Contracting Authority for the Contract is:

Shaun Feagan, Supply Team Leader  
Public Works and Government Services Canada  
Real Property and Commercial Acquisitions Sector (RPCAS)  
Industrial Products and Vehicles Procurement Directorate  
Fuel and Construction Products Division

140 O'Connor Street,  
L'esplanade Laurier Tower East  
Ottawa, ON K1A 0S5  
Telephone: 613-295-9018  
[shaun.feagan@tpsgc-pwgsc.gc.ca](mailto:shaun.feagan@tpsgc-pwgsc.gc.ca)

The Contracting Authority is responsible for the management of the Contract and any changes to the Contract must be authorized in writing by the Contracting Authority. The Contractor must not perform work in excess of or outside the scope of the Contract based on verbal or written requests or instructions from anybody other than the Contracting Authority.

Solicitation No. - N° de l'invitation  
W8476-216378/A  
Client Ref. No. - N° de réf. du client  
W8476-216378

Amd. No. - N° de la modif.  
File No. - N° du dossier  
hl673.W8476-216378

Buyer ID - Id de l'acheteur  
hl673  
CCC No./N° CCC - FMS No./N° VME

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### 8.7.2 Procurement Authority

The Procurement Authority for the Contract is:

Name:  
Title:  
Organization:  
Address:

Telephone:  
E-mail address:

The Procurement Authority is the representative of the department or agency for whom the Work is being carried out under the Contract. The Procurement Authority is responsible for the implementation of tools and processes required for the administration of the Contract. The Contractor may discuss administrative matters identified in the Contract with the Procurement Authority however the Procurement Authority has no authority to authorize changes to the scope of the Work. Changes to the scope of Work can only be made through a contract amendment issued by the Contracting Authority.

### 8.7.3 Technical Authority

The Technical Authority for the Contract is:

Name:  
Title:  
Organization:  
Address:

Telephone:  
E-mail address:

The Technical Authority named above is the representative of the department or agency for whom the Work is being carried out under the Contract and is responsible for all matters concerning the technical content of the Work under the Contract. Technical matters may be discussed with the Technical Authority, however the Technical Authority has no authority to authorize changes to the scope of the Work. Changes to the scope of the Work can only be made through a contract amendment issued by the Contracting Authority.

### 8.7.4 Contractor Representative

The Contractor representative for the Contract is:

Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Organization: \_\_\_\_\_  
Address: \_\_\_\_\_  
Telephone: \_\_\_\_ - \_\_\_\_ - \_\_\_\_  
E-mail address: \_\_\_\_\_

The Contractor shall notify the authorities of any changes to this information for the duration of the contract.

## 8.8 Proactive Disclosure of Contracts with Former Public Servants

By providing information on its status, with respect to being a former public servant in receipt of a Public Service Superannuation Act (PSSA) pension, the Contractor has agreed that this information will be reported on departmental websites as part of the published proactive disclosure reports, in accordance with Contracting Policy Notice: 2019-01 of the Treasury Board Secretariat of Canada.

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## 8.9 Payment

### 8.9.1 Basis of Payment

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid in accordance with Annex C2, in Canadian dollars, FCA Free Carrier at Contractor's facilities, Incoterms 2020, Customs Duty, Excise Taxes included where applicable and Goods and Services Tax or Harmonized Sales Tax extra.

### 8.9.2 Limitation of Expenditure

1. Canada's total liability to the Contractor under this Contract must not exceed \$\_\_\_\_\_. Customs duties are included and Applicable Taxes are extra.
2. No increase in the total liability of Canada or in the price of the Work resulting from any design changes, modifications or interpretations of the Work, will be authorized or paid to the Contractor unless these design changes, modifications or interpretations have been approved, in writing, by the Contracting Authority before their incorporation into the Work. The Contractor must not perform any work or provide any service that would result in Canada's total liability being exceeded before obtaining the written approval of the Contracting Authority. The Contractor must notify the Contracting Authority in writing as to the adequacy of this sum:
  - (a) in the current fiscal year cash flow at the time it is 75 percent committed; or
  - (b) four (4) months prior to the Contract expiry date; or
  - (c) if the Contractor considers that the funds provided are inadequate for the completion of the Work, whichever comes first.
3. In the event that the notification refers to inadequate funds, the Contractor must provide to the Contracting Authority, in writing, an estimate for the additional funds required. Provision of such notification and estimate for the additional funds does not increase Canada's liability.

### 8.9.3 Method of Payment

#### 8.9.3.1 Method of Payment for R&O

SACC Manual Clause H1001C (2008-05-12) Multiple Payment

#### 8.9.3.2 Method of Payment for Other Services Performed Under Task Authorization

The Procurement Authority will identify which Method of Payment below will apply to a specific Task Authorization:

- a. SACC Manual clause H1001C (2008-05-12) Multiple Payment
1. Canada will make milestone payments in accordance with the Schedule of Milestones detailed in the Task Authorization and the payment provisions of the Contract, up to 90 percent of the amount claimed and approved by Canada if:
  - a. an accurate and complete claim for payment using form PWGSC-TPSGC 1111, Claim for Progress Payment, and any other document required by the Contract have been submitted in accordance with the invoicing instructions provided in the Contract;
  - b. the total amount for all milestone payments paid by Canada does not exceed 90 percent of the total amount to be paid under the Task Authorization;
  - c. all the certificates appearing on form PWGSC-TPSGC 1111 have been signed by the respective authorized representatives;
  - d. all work associated with the milestone and as applicable any deliverable required have been completed and accepted by Canada.
2. The balance of the amount payable will be paid in accordance with the payment provisions of the Contract upon completion and delivery of all Work required under the Task Authorization if the Work has been accepted by Canada and a final claim for the payment is submitted.

#### 8.9.4 Canada's Obligation – Portion of the Service – Task Authorization

Canada's obligation with respect to the portion of the Service under the Contract that is performed through Task Authorizations is limited to the total amount of the actual services performed by the Contractor.

#### 8.9.5 T1204 - Information Reporting by Contractor

1. Pursuant to paragraph 221 (1)(d) of the *Income Tax Act*, R.S. 1985, c.1 (5<sup>th</sup> Supp.), payments made by departments and agencies to contractors under applicable services contracts (including contracts involving a mix of goods and services) must be reported on a T1204 Government Service Contract Payments slip.
2. To enable departments and agencies to comply with this requirement, the Contractor must provide the following information within 30 calendar days following contract award:
  - a. the legal name of the Contractor, i.e. the legal name associated with its business number or Social Insurance Number (SIN), as well as its address and postal code;
  - b. the status of the Contractor, i.e. an individual, a sole proprietorship, a corporation, or a partnership;
  - c. the business number of the Contractor if the Contractor is a corporation or a partnership and the SIN if the Contractor is an individual or a sole proprietorship. In the case of a partnership, if the partnership does not have a business number, the partner who has signed the Contract must provide its SIN;
  - d. in the case of a joint venture, the business number of all parties to the joint venture who have a business number or their SIN if they do not have a business number.
3. The information must be sent to the person and address specified below. If the information includes a SIN, the information should be provided in an envelope marked "protected".

Name of person: \_\_\_\_\_  
Address: \_\_\_\_\_

#### 8.10 Invoicing Instructions

1. The Contractor must submit invoices in accordance with the section entitled "Invoice Submission" of the general conditions. Invoices cannot be submitted until all work identified in the invoice is completed.

The Contractor is requested to provide invoices in electronic format unless otherwise specified by the Contracting Authority or Procurement Authority, thereby reducing printed material.

The contractor must submit invoices on its own form, and must include the following information:

- a. Date
- b. Name and address of the consignee(s)
- c. Contract number, serial number and DND financial coding
- d. Task Authorization Number
- e. Rate of payment applicable to the labour hours
- f. Engineering or technical support categories
- g. Labour hours
- h. Cost of materials related to the Task
- i. Approved travel and living expenses (receipts required)
- j. Cost of subcontractor related to the task
- k. Supporting documentation such as, but not limited to, detailed copies of subcontractor and materials/parts invoices, copies of travel, hotel, car rental and airline receipts.

2. Invoices must be distributed as follows:

- a. The original must be forwarded or e-mailed to the Procurement Authority identified under the section entitled "Authorities" of the Contract.
- b. One (1) copy must be forwarded or e-mailed to the Contracting Authority identified under the section entitled "Authorities" of the Contract.

Note: Any credit notes (spares, scrap material) with supporting documentation must be shown as a credit on the invoice.

### 8.11 Electronic Payment of Invoices – Contract

The Contractor accepts to be paid using any of the following Electronic Payment Instrument(s):

- a. Visa Acquisition Card;
- b. MasterCard Acquisition Card;
- c. Direct Deposit (Domestic and International);
- d. Electronic Data Interchange (EDI);
- e. Wire Transfer (International Only);
- f. Large Value Transfer System (LVTS) (Over \$25M)

### 8.12 Certifications and Additional Information

#### 8.12.1 Compliance

Unless specified otherwise, the continuous compliance with the certifications provided by the Contractor in its bid or precedent to contract award, and the ongoing cooperation in providing additional information are conditions of the Contract and failure to comply will constitute the Contractor in default. Certifications are subject to verification by Canada during the entire period of the Contract.

#### 8.12.2 Federal Contractors Program for Employment Equity - Default by the Contractor

The Contractor understands and agrees that, when an Agreement to Implement Employment Equity (AIEE) exists between the Contractor and Employment and Social Development Canada (ESDC)-Labour, the AIEE must remain valid during the entire period of the Contract. If the AIEE becomes invalid, the name of the Contractor will be added to the "[FCP Limited Eligibility to Bid](#)" list. The imposition of such a sanction by ESDC will constitute the Contractor in default as per the terms of the Contract.

### 8.13 Applicable Laws

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in Ontario.

### 8.14 Priority of Documents

If there is a discrepancy between the wording of any documents that appear on the list, the wording of the document that first appears on the list has priority over the wording of any document that subsequently appears on the list.

- a) the Articles of Agreement;
- b) 4006 Supplemental General Conditions (2010-08-16)
- c) 2035 General Conditions - Higher Complexity - Services (2021-12-02);
- d) Annex A2, Statements of Work – In Service Support Contract;
- e) Annex C2, Logistic Statement of Work – In Service Support Contract;
- f) Annex B2, Basis of payment – In Service Support Contract;
- g) Annex D2, Security Requirement Check List – In Service Support;
- h) the signed Task Authorizations (including all of its annexes, if any);
- i) the Contractor's bid dated \_\_\_\_\_

### 8.15 Defence Contract

SACC Manual clause [A9006C](#) (2012-07-16) Defence Contract

#### 8.16 Foreign Nationals (Canadian Contractor OR Foreign Contractor)

SACC Manual clause [A2000C](#) (2006-06-16) Foreign Nationals (Canadian Contractor); OR  
SACC Manual clause [A2001C](#) (2006-06-16) Foreign Nationals (Foreign Contractor)

#### 8.17 Insurance

SACC Manual clause [G1005C](#) (2016-01-28) Insurance - No Specific Requirement

#### 8.18 Controlled Goods Program

SACC Manual clause [A9131C](#) (2020-11-19) Controlled Goods Program

#### 8.19 SACC Manual Clauses

The following terms and conditions are incorporated herein

SACC Reference	Section	Date
A9062C	Canadian Forces Site Regulations	2011-05-16
A9131C	Controlled Goods Program – Contract	2020-11-19
B4060C	Controlled Goods	2011-05-16
B7500C	Excess Goods	2006-06-16
D2025C	Wood Packaging Materials	2017-08-17
D6010C	Palletization	2007-11-30
D3010C	Delivery of Dangerous Goods/Hazardous Products	2016-01-28
D3015C	Dangerous Goods/Hazardous Products	2014-09-25
D5510C	Quality Assurance Authority (DND) - Canadian-based Contractor	2017-08-17
D5515C	Quality Assurance Authority (DND) – Foreign and United States Contractor	2010-01-11
D5540C	ISO 9001:2008 Quality Management Systems - Requirements (QAC Q)	2021-05-20
D5606C	Release Documents (DND) – Canadian-based Contractor	2017-11-28
D5605C	Release Documents (DND) – United States-based Contractor	2021-05-20
D5604C	Release Documents (DND) – Foreign-based Contractor	2008-12-12
G1005C	Insurance – No Specific Requirement	2016-01-28
L5001C	Surplus Government Property	2020-05-28

#### 8.20 Close-Out Responsibilities

Components received at the repair facility up to and including the contract expiry date must be repaired by the Contractor within the terms and conditions of the contract. However, when this Contract expires, or is terminated, all catalogue repairable items, spare parts (CIS, and any specific Government of Canada owned equipment on loan), must be transferred to the closest Depot. The not-yet inducted work and the not-yet completed work orders (items already be inducted for R&O process within the R&O pipeline) that were open before the end of the expiry date must be reported to the NDQAR and to the Procurement Authority prior to the contract expiration. Specific Contractor Supplied/Furnished Parts and Material, which the Contractor purchased or committed to be purchased in support of those not-yet completed work orders must also to be reported to the Procurement Authority.

DND may purchase at the Contractor's laid-down cost any remaining Contractor Supplied/Furnished Parts and Material, which have been purchased in support of R&O activities stipulated in this contract, and which cannot be returned for credit to the Contractor's supplier(s).



STATEMENT OF WORK  
FOR THE  
WATER TREATMENT SYSTEM



NOTICE

This documentation has been reviewed by the technical authority and does not contain controlled goods. Disclosure notices and handling instructions originally received with the document must continue to apply.

AVIS

Cette documentation a été révisée par l'autorité technique et ne contient pas de marchandises contrôlées. Les avis de divulgation et les instructions de manutention reçues originalement doivent continuer de s'appliquer.



## TABLE OF CONTENTS

1.0	SCOPE .....	8
1.1	Purpose .....	8
1.2	Background .....	8
1.3	Intended Use .....	8
1.4	Acronyms and Abbreviations .....	9
2.0	APPLICABLE DOCUMENTS .....	13
2.1	References .....	13
2.2	Order of Precedence .....	16
3.0	PROJECT MANAGEMENT .....	17
3.1	Project Management Program .....	17
3.2	Project Management Plan .....	17
3.3	Contract Master Schedule .....	17
3.4	Contract Work Breakdown Structure .....	17
3.5	Contract Status Report .....	18
3.6	Project Meetings .....	18
4.0	SYSTEMS ENGINEERING .....	20
4.1	Overview .....	20
4.2	Systems Engineering Management .....	20
4.3	System Design .....	22
4.4	Specialty Engineering .....	26
5.0	CONFIGURATION MANAGEMENT .....	27
5.1	Overview .....	27
5.2	Configuration Management Planning .....	27
5.3	Configuration Baselines .....	27
5.4	Configuration Control .....	27
5.5	Configuration Status Accounting .....	28
5.6	Configuration Audits .....	29
6.0	VERIFICATION .....	31
6.1	Verification Management .....	31
6.2	Acceptance Verification .....	34

---

6.3	Design Acceptance .....	40
7.0	QUALITY ASSURANCE .....	41
7.1	Contractor Quality Responsibilities.....	41
7.2	Non-Conforming Deliveries .....	41
8.0	INTEGRATED LOGISTICS SUPPORT (ILS).....	43
8.1	Maintenance Concept .....	43
8.2	Instruments, Decals, Data Plates and Warnings .....	44
8.3	Technical Publication Package.....	44
8.4	Provisioning Documentation.....	48
8.5	Initial Provisioning Guidance Conference.....	49
8.6	Initial Provisioning Conference .....	50
8.7	Identification Plates .....	50
8.8	Controlled & Non-Controlled Goods List.....	50
8.9	Identification Labels for Storage and Shipment, and Packaging Codes .....	51
8.10	List of Items to be Supported (for Support SOW).....	51
8.11	Training Sessions.....	51
8.12	Warranty Support Plan .....	52
8.13	Data Deliverable Format.....	52
9.0	ENVIRONMENTAL HEALTH AND SAFETY .....	53
9.1	General.....	53
9.2	Environmental Management System.....	54
9.3	EHS Packaging Labels and SDS .....	54
9.4	Equipment Environmental Assessment.....	54
10.0	TECHNICAL REQUIREMENTS.....	55
10.1	Overview .....	55
A1.0	APPENDIX: WTS TECHNICAL SPECIFICATION .....	56
A1.1	System Requirements .....	56
A1.2	WTS Components Requirements.....	60
A1.3	Physical Characteristics .....	102
A1.4	Functionality .....	107
A1.5	Environmental and Climatic Characteristics .....	110
A2.0	APPENDIX: CONTRACT DATA REQUIREMENTS LIST .....	112

---

---

A2.1	CDRL Item List .....	112
A2.2	CDRL Table Definitions .....	114
A2.3	CDRL – Project Management Plan .....	116
A2.4	CDRL – Contract Master Schedule .....	117
A2.5	CDRL – Contract Work Breakdown Structure .....	118
A2.6	CDRL – Contract Status Report .....	119
A2.7	CDRL – Meeting Agenda.....	120
A2.8	CDRL – Meeting Minutes .....	121
A2.9	CDRL – Systems Engineering Management Plan.....	122
A2.10	CDRL – Mandated System Review Package .....	123
A2.11	CDRL – Requirements Traceability Verification Matrix.....	124
A2.12	CDRL – Engineering Drawings and Associated Lists.....	125
A2.13	CDRL – Engineering Change Proposal.....	126
A2.14	CDRL – Configuration Status Accounting Report.....	127
A2.15	CDRL – Acceptance Test Plan and Procedures.....	128
A2.16	CDRL – Acceptance Test Reports .....	129
A2.17	CDRL – Top Level Assembly Drawing .....	130
A2.18	CDRL – WTS Operator Manual.....	131
A2.19	CDRL – WTU Operator Quick Reference Card .....	132
A2.20	CDRL – WTS Maintenance Manual .....	133
A2.21	CDRL – WTS Permissive Repair Schedule and Standard Repair Times ...	134
A2.22	CDRL – WTS Illustrated Parts Manual .....	135
A2.23	CDRL – WTS Operator Training Package.....	136
A2.24	CDRL – WTU and ASU Technician Training Package .....	137
A2.25	CDRL – WTS Preservation, Storage and Reactivation Instructions .....	138
A2.26	CDRL – WTS Stowage, Shipping and Handling Instructions.....	139
A2.27	CDRL – WTS Data Summary.....	140
A2.28	CDRL – MEU, ASU and WSU Stowage Maps .....	141
A2.29	CDRL – WTU Process and Flow Diagrams.....	142
A2.30	CDRL – WSU Operation, Maintenance and Parts Handbook.....	143
A2.31	CDRL – Provisioning Parts Breakdown.....	144
A2.32	CDRL – Supplementary Provisioning Technical Documentation.....	145

---

---

A2.33	CDRL – Special Tools and Test Equipment List.....	146
A2.34	CDRL – Equipment Delivery Status Report.....	147
A2.35	CDRL – Material Identification Data Set.....	148
A2.36	CDRL – Identification Plates – Design Template & Populated Designs .....	149
A2.37	CDRL – Controlled & Non-Controlled Goods List.....	150
A2.38	CDRL – Identification Labels for Storage and Shipment and Packaging Codes .....	151
A2.39	CDRL – List of Items to be Supported .....	152
A2.40	CDRL – Warranty Support Plan .....	153
A2.41	CDRL – Equipment Environmental Assessment .....	154
A3.0	APPENDIX: DATA ITEM DESCRIPTION .....	155
A3.1	DID Item List.....	155
A3.2	DID Table Definitions .....	157
A3.3	DID – Project Management Plan .....	158
A3.4	DID – Contract Master Schedule.....	160
A3.5	DID – Contract Work Breakdown Structure .....	162
A3.6	DID – Contract Status Report.....	163
A3.7	DID – Meeting Agenda .....	165
A3.8	DID – Meeting Minutes .....	166
A3.9	DID – Systems Engineering Management Plan .....	167
A3.10	DID – Mandated System Review Package.....	172
A3.11	DID – Requirements Traceability Verification Matrix .....	173
A3.12	DID – Engineering Drawings and Associated Lists .....	175
A3.13	DID – Engineering Change Proposal .....	176
A3.14	DID – Configuration Status Accounting Report .....	183
A3.15	DID – Acceptance Test Plan and Procedures .....	185
A3.16	DID – Acceptance Test Report.....	188
A3.17	DID – Top Level Assembly Drawing.....	189
A3.18	DID – WTS Operator Manual .....	190
A3.19	DID – WTU Operator Quick Reference Card.....	192
A3.20	DID – WTS Maintenance Manual .....	194
A3.21	DID – WTS Permissive Repair Schedule and Standard Repair Times.....	196

---

---

A3.22	DID – WTS Illustrated Parts Manual.....	197
A3.23	DID – WTS Operator Training Package .....	199
A3.24	DID – WTU and ASU Technician Training Package.....	201
A3.25	DID – WTS Preservation, Storage and Reactivation Instructions.....	203
A3.26	DID – WTS Stowage, Shipping and Handling Instructions .....	205
A3.27	DID – WTS Data Summary .....	207
A3.28	DID – MEU and ASU Stowage Maps .....	209
A3.29	DID – WTU Process and Flow Diagrams .....	210
A3.30	DID – WSU Operation, Maintenance and Parts Handbook .....	212
A3.31	DID – Provisioning Parts Breakdown .....	214
A3.32	DID – Supplementary Provisioning Technical Documentation .....	216
A3.33	DID – Special Tools and Test Equipment.....	217
A3.34	DID – Equipment Delivery Status Report .....	219
A3.35	DID – Material Identification Data Set .....	221
A3.36	DID – Identification Plates – Design Template & Populated Designs.....	222
A3.37	DID – Controlled & Non-Controlled Goods List .....	223
A3.38	DID – Identification Labels for Storage and Shipment and Packaging Codes .....	225
A3.39	DID – List of Items to be Supported .....	227
A3.40	DID – Warranty Support Plan .....	234
A3.41	DID – Equipment Environmental Assessment.....	236
A4.0	APPENDIX: COMMERCIAL (OEM) ENGINEERING DRAWINGS AND ASSOCIATED LISTS .....	239
A4.1	General.....	239
A4.2	Data Lists .....	240
A4.3	Reference Documents.....	240
A4.4	TDAN.....	240
A4.5	Drawing System .....	240
A4.6	Drawing Types .....	240
A4.7	Control Drawings.....	240
A4.8	Family-Tree Drawing(s).....	241
A4.9	Units of Measure .....	241

---

A4.10	Controlled Goods Identification .....	241
A4.11	Integration .....	241
A4.12	Quality Assurance Provisions .....	241
A4.13	Final Deliverable .....	242
A4.14	File Formats for Raster Data .....	242
A5.0	APPENDIX: WATER QUALITY TESTING REQUIREMENTS .....	247
A6.0	APPENDIX: CHEMICAL AGENT RESISTANT COATING (CARC) SYSTEM .....	258
A6.1	Scope .....	258
A6.2	Applicable Documents and Product NSNs .....	258
A6.3	Requirements .....	259

## **1.0 SCOPE**

### **1.1 Purpose**

- 1.1.1 The purpose of this Statement of Work (SOW) is to specify the requirements of a Water Treatment System (WTS) for the Canadian Armed Forces (CAF). The WTS is a part of the Advanced Sub-unit Water Purification System (ASUWPS) Project.
- 1.1.2 The main deliverables of the WTS include:
  - 1.1.2.1 Water Treatment Units (WTU);
  - 1.1.2.2 Miscellaneous Equipment Units (MEU);
  - 1.1.2.3 Water Storage Units (WSU);
  - 1.1.2.4 Trailers; and
  - 1.1.2.5 Arctic Sustainment Units (ASU).

### **1.2 Background**

- 1.2.1 Water is an essential combat supply and the lessons learned from operations over the last several decades has proven that it is not prudent to trust local water sources. These operations have been characterized by large geographic areas of operation with dispersed troops necessitating the requirement for a water purification system at the sub-unit level (up to 250 personnel). The existing sub-unit water purification system is obsolete and no longer supportable. Additionally, insufficient numbers of systems were held in the inventory to equip both Regular and Reserve Force units. There is an urgent need to deliver a new sub-unit water purification system in sufficient numbers to support the CAF.

### **1.3 Intended Use**

- 1.3.1 The WTS is intended to dramatically improve the ability of the CAF to provide drinking water for its soldiers at the sub-unit level. It will replace the existing obsolete sub-unit water purification systems and increase the overall number of systems to fully enable Regular and Reserve Force units to sustain themselves in domestic and international operations. It will be used across the spectrum of operations including war, peacekeeping and humanitarian assistance.
- 1.3.2 The WTS is intended to be a self-contained and rapidly deployable water purification and treatment system. To increase operational flexibility and ease of deployment, the principal components of the WTS, namely the WTU, MEU, WSU and ASU, will be packaged in two different size of ISO containers, BICON and QUADCON, (Half and quarter length of the standard 20-foot-long ISO container). The Trailer is intended to transport up to two (2) QUADCON or one (1) BICON ISO containers.



## 1.4 Acronyms and Abbreviations

ABL	Allocated Baseline
ABS/EBS	Anti-lock Braking System/Electronic Braking System
ASU	Arctic Sustainment Unit
ATP&P	Acceptance Test Plan & Procedures
ATR	Acceptance Test Report
AV	Acceptance Verification
AWR	Additional Work Request
CA	Contracting Authority
BIC	International Container Bureau
BICON	Double Container
CAF	Canadian Armed Forces
CARC	Chemical Agent Resistant Coating
CDR	Critical Design Review
CDRL	Contract Data Requirements List
CFTO	Canadian Forces Technical Orders
CFU	Colony Forming Unit
CI	Configuration Item
CM	Centimetre
CM	Configuration Management
CMS	Contract Master Schedule
CMVSS	Canadian Motor Vehicle Safety Standards
CNCGL	Controlled & Non-Controlled Goods List
CSA	Canadian Standards Association
CSA	Configuration Status Accounting
CSC	Convention for Safe Containers
CSR	Contract Status Report
CWBS	Contract Work Breakdown Structure
CWS	Cold Weather Shelter
DBP	Disinfection by-products
DID	Data Item Description
DMC	Demilitarization Code
DND	Department of National Defence
DOC	Dissolve Organic Carbon
DQA	Directorate of Quality Assurance
EBS	Equipment Breakdown Structure

CNCGL	Controlled & Non-Controlled Goods List
ECP	Engineering Change Proposal
EDAL	Engineering Drawings and Associated Lists
ECCN	Export Control Classification Number
EEA	Equipment Environmental Assessment
EHS	Environmental Health and Safety
FBL	Functional Baseline
FMVSS	Federal Motor Vehicle Safety Standards
FSR	Field Service Representative
FSS	Fleet Support Spares
FPAV	First Production Article Verification
GCDWQ	Guideline for Canadian Drinking Water Quality
GFE	Government Furnished Equipment
GTW	Gross Trailer Weight
HPP	High Pressure Pump
IBC	Intermediate Bulk Container
IBC LINER	Intermediate Bulk Container Liner
ILAC MRA	International Laboratory Accreditation Cooperation Mutual Recognition Arrangement
ILS	Integrated Logistics Support
ILSM	Integrated Logistics Support Manager
IP	Intellectual Property
IPC	Initial Provisioning Conference
IPGC	Initial Provisioning Guidance Conference
IPM	Illustrated Parts Manual
ISO	International Standards Organization
ISO/IEC	International Organization for Standardization / International Electrotechnical Commission
IUT	Item Under Test
ITAR	International Traffic in Arms Regulations
LIS	List of Items Supported
MAC	Maximum Allowable Concentration
MEU	Miscellaneous Equipment Unit
MIDS	Material Identification Data Set
MilCOTS	Militarized Commercial off-the-Shelf
MIL-STD	United States Department of Defense Military Standard

MRC	Maximum Repair Cost
MSR	Mandated System Review
MSVS	Medium Support Vehicle System
MVSA	Motor Vehicle Safety Act
MVSR	Motor Vehicle Safety Regulations
NATO	North Atlantic Treaty Organization
NDID	National Defence Index of Documentation
NEMA	National Electrical Manufacturers Association
NRC	National Research Council of Canada
NSN	NATO Stock Number
NSF	National Sanitation Foundation
NTU	Nephelometric Turbidity Units
OEM	Original Equipment Manufacturer
PBL	Product Baseline
PCA	Physical Configuration Audit
PDR	Preliminary Design Review
PFU	Plaque Forming Unit
PMP	Project Management Plan
POL	Petroleum, Oils & Lubricants
PPB	Provisioning Parts Breakdown
PPM	Part-per-Million
PSPC	Public Services and Procurement Canada
QAR	Quality Assurance Representative
QUADCON	Quadruple Container
QMS	Quality Management System
RCE	Repair Cost Estimate
RF	Radio Frequency
RMS	Root Mean Square
R&M	Reliability and Maintainability
R&O	Repair and Overhaul
RTVM	Requirements Traceability Verification Matrix
SAE	Society of Automotive Engineers
SE	Systems Engineering
SEMP	System Engineering Management Plan
SMP	Standard Military Pattern
SOW	Statement of Work

SPTD	Supplementary Provisioning Technical Documentation
STANAG	Standardization Agreement
STTE	Special Tools and Test Equipment
TA	Technical Authority
TB	Thermal Blanket
TDS	Total Dissolved Solids
TIR	"Transports internationaux routiers" (International Road Transports)
TLAD	Top Level Assembly Drawing
TRR	Test Readiness Review
USML	United States Munitions List
WSU	Water Storage Unit
WTS	Water Treatment System
WTU	Water Treatment Unit

## 2.0 APPLICABLE DOCUMENTS

### 2.1 References

- 2.1.1 Whereas mentioned, the following Standards must be used for the preparation of deliverables to the extent specified in this SOW.

#### GOVERNMENT FURNISHED INFORMATION

<u>REFERENCE NUMBER</u>	<u>PROMULGATION DATE</u>	<u>REFERENCE TITLE</u>
C-01-100-100/AG-008	2017-11-02	WRITER'S GUIDE FOR TECHNICAL DOCUMENTATION
C-02-007-000/AG-001	2016-01-01	CONTROLLED TECHNOLOGY ACCES AND TRANSFER (CTAT) MANUAL
C-30-K77-000/MA-000	2021-02-16	DATA SUMMARY MSVS SMP CARGO VARIANT, TRUCK, 8X8, 9.5 TON, MSVS SMP, ALL VARIANTS
C-30-K77-000/MB-000	2018-09-21	TRUCK, LOAD HANDLING SYSTEM, 9.5 TON, 8X8, MSVS SMP
C-32-F40-000/MB-Z01	2012-04-16	OPERATOR'S INSTRUCTIONS - MILITARY SUPPLEMENT, TRUCK, 8 TONNES, 6X6, MSVS MILCOTS, NAVISTAR 7400 SERIES (ALL VARIANTS)
C-90-242-000/NJ-004	2017-01-27	DEPARTMENT OF DEFENSE STANDARD PRACTICE INSPECTION CRITERIA FOR INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO) CONTAINERS AND DEPARTMENT OF DEFENSE STANDARD FAMILY OF ISO SHELTERS
D-01-100-204/SF-000	2000-10-31	SPECIFICATION - PREPARATION OF PREVENTIVE MAINTENANCE INSTRUCTIONS
D-01-100-205/SF-000	2000-10-31	SPECIFICATION - PREPARATION OF CORRECTIVE MAINTENANCE INSTRUCTION
D-01-100-207/SF-002	1996-07-12	SPECIFICATION - PREPARATION OF INTERIM ILLUSTRATED PARTS MANUALS FOR LAND EQUIPMENTS
D-01-100-211/SF-000	1991-06-01	SPECIFICATION – PRESERVATION, STORAGE AND HANDLING INSTRUCTION
D-01-100-214/SF-000	2002-05-01	SPECIFICATION FOR PREPARATION OF PROVISIONING DOCUMENTATION FOR CANADIAN FORCES EQUIPMENT
D-01-300-100/SG-000	1992-02-01	STANDARD FOR SPECIFICATION PREPARATION - TECHNICAL CONTENT
D-01-400-001/SG-000	1979-04-02	STANDARD - ENGINEERING DRAWING PRACTICES FOR CLASS 1 DRAWINGS AND TECHNICAL DATA LISTS
D-01-400-002/SF-000	1983-11-30	SPECIFICATION FOR LEVELS OF ENGINEERING DRAWINGS AND ASSOCIATED LISTS

D-02-002-001/SG-001	2003-04-01	STANDARD – IDENTIFICATION MARKING OF CANADIAN MILITARY PROPERTY
D-02-006-008/SG-001	1985-05-16	THE DESIGN CHANGE, DEVIATION AND WAIVER PROCEDURE
D-80-001-055/SF-001	2005-08-01	SPECIFICATION FOR LABEL, CLOTHING AND EQUIPMENT
DCIEM 98-CR-15	1998-03	ANTHROPOMETRIC SURVEY OF THE LAND FORCES
D-LM-008-001/SF-001	1983-02-03	METHODS OF PACKAGING
D-LM-008-002/SF-001	1991-08-01	SPECIFICATION FOR MARKING FOR STORAGE AND SHIPMENT
D-LM-008-011/SF-001	1988-11-10	PREPARATION AND USE OF PACKAGING REQUIREMENTS CODES
D-LM-008-036/SF-000	2013-12-01	DND MINIMUM REQUIREMENT FOR MANUFACTURER'S STANDARD PACK

**COMMERCIALLY AVAILABLE**

<u>REFERENCE NUMBER</u>	<u>PROMULGATION DATE</u>	<u>REFERENCE TITLE</u>
ACMP-2009	2017	GUIDANCE ON CONFIGURATION MANAGEMENT
AECTP-230 ED.1	2009-05-07	CLIMATIC CONDITIONS
ANSI/EIA-649-C	2019	CONFIGURATION MANAGEMENT STANDARD
ASME Y14.100		ENGINEERING DRAWING PRACTICES
ASME Y14.24		TYPES AND APPLICATIONS OF ENGINEERING DRAWINGS
ASME Y14.34M		ASSOCIATED LISTS
ASTM D975-15A	2015-06-01	STANDARD SPECIFICATION FOR DIESEL FUEL OILS
CANADA LABOUR CODE	PART II, 2021	OCCUPATIONAL HEALTH AND SAFETY
CAN/CGSB-43.146-2016	APRIL 2016	DESIGN, MANUFACTURE AND USE OF INTERMEDIATE BULK CONTAINERS FOR THE TRANSPORTATION OF DANGEROUS GOODS
CAO 21-04	2014	PAINT AND MARKING POLICY FOR LAND EQUIPMENT, DLR/DGLEPM
CSA C22.1, ED.25	2021	CANADIAN ELECTRICAL CODE, PART I, SAFETY STANDARD FOR ELECTRICAL INSTALLATIONS
CSA C22.2, ED.11	2020	CANADIAN ELECTRICAL CODE, PART II, GENERAL
C.R.C., c. 1038	2019	TRANSPORT CANADA, MOTOR VEHICLE SAFETY REGULATIONS
CSC 1972	2014	INTERNATIONAL CONVENTION FOR SAFE CONTAINERS
DFO / 5080	1995-03	FRESHWATER INTAKE FISH SCREEN GUIDELINE
FED-STD-191A	1978-07-20	FEDERAL STANDARD 191A

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SAE AMS-STD-595	2017-02-14	COLORS USED IN GOVERNMENT PROCUREMENT
HEALTH CANADA	2020-01	GUIDELINES FOR CANADIAN DRINKING WATER QUALITY, GUIDELINE TECHNICAL DOCUMENT
HEALTH CANADA	2020-09	GUIDELINES FOR CANADIAN DRINKING WATER QUALITY, SUMMARY TABLE
IEEE 15288.1	2014	IEEE STANDARD FOR APPLICATION OF SYSTEMS ENGINEERING ON DEFENSE PROGRAMS
IEEE 15288.2	2014	IEEE STANDARD FOR TECHNICAL REVIEWS AND AUDITS ON DEFENSE PROGRAMS
ISO/IEC 17025	2017	GENERAL REQUIREMENTS FOR THE COMPETENCE OF TESTING AND CALIBRATION LABORATORIES
ISO 6346	1995	FREIGHT CONTAINERS -- CODING, IDENTIFICATION AND MARKING
ISO 7638-1 ED.3	2018-05	ROAD VEHICLES — CONNECTIONS FOR THE ELECTRICAL CONNECTION OF TOWING AND TOWED VEHICLES
ISO 668	2013-08-01	SERIES 1 FREIGHT CONTAINERS – CLASSIFICATION, DIMENSIONS AND RATINGS
MIL-DTL-53072F	2017-05-31	CHEMICAL AGENT RESISTANT COATING (CARC)
MIL-PRF-24667C, AM1	2018-03-27	COATING SYSTEM, NON-SKID
MIL-STD-188-124B	2000-12-18	GROUNDING, BONDING AND SHIELDING
MIL-STD-209K	2005-02-22	DEPARTMENT OF DEFENSE INTERFACE STANDARD FOR LIFTING AND TIEDOWN PROVISIONS
MIL-STD-810H,	2019-01-31	ENVIRONMENTAL ENGINEERING CONSIDERATIONS AND LABORATORY TESTS
MIL-STD-1179E	2011-06-13	LAMPS, REFLECTORS AND ASSOCIATED SIGNALING EQUIPMENT FOR MILITARY VEHICLES
MIL-STD-1366E	2006-10-31	INTERFACE STANDARD FOR TRANSPORTABILITY CRITERIA
MIL-STD-1474E	2015-04-15	DESIGN CRITERIA STANDARD NOISE LIMITS
MIL-STD-3037	2017-01-27	INSPECTION CRITERIA FOR INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO)
		CONTAINERS AND DEPARTMENT OF DEFENSE STANDARD FAMILY OF ISO SHELTERS
MIL-STD-31000B	2018-10-31	TECHNICAL DATA PACKAGES
NEMA IEC 60529, ED2.2	2013-08	DEGREES OF PROTECTION PROVIDED BY ENCLOSURES (IP CODE)
NPC	2015	NATIONAL PLUMBING CODE OF CANADA
NSF/ANSI 61	2018	DRINKING WATER SYSTEM COMPONENTS – HEALTH EFFECTS

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R.S., 1985, C. H-3	1985	HAZARDOUS PRODUCTS ACT
SAE J2180-2011	2011	TILT TABLE PROCEDURE FOR MEASURING THE STATIC ROLLOVER THRESHOLD FOR HEAVY TRUCKS
SOR/2003-289		FEDERAL HALOCARBON REGULATIONS
SOR/2008-273		PCB REGULATIONS
SOR/2012-285		PROHIBITION OF CERTAIN TOXIC SUBSTANCES REGULATIONS
SOR/2014-254		PRODUCTS CONTAINING MERCURY REGULATIONS
SOR/2016-137		OZONE-DEPLETING SUBSTANCES AND HALOCARBON ALTERNATIVES REGULATIONS
SOR/2018-196		PROHIBITION OF ASBESTOS AND PRODUCTS CONTAINING ASBESTOS REGULATIONS
STANAG 2601 ED.3	1996-05-31	STANDARDIZATION OF ELECTRICAL SYSTEMS IN TACTICAL LAND VEHICLES
STANAG 2604 ED.3	1986-02-12	BREAKING SYSTEMS BETWEEN TRACTOR, DRAW-BAR TRAILER AND SEMI-TRAILER EQUIPMENT COMBINATIONS FOR MILITARY USE
STANAG 2805 ED.5	1997-10-07	FORDING AND FLOTATION REQUIREMENTS FOR COMBAT AND SUPPORT GROUND VEHICLES
STANAG 4062 ED.6	2016-05-27	SLINGING AND TIE-DOWN FACILITIES FOR LIFTING AND TYING DOWN MILITARY EQUIPMENT
STANAG 4101 ED.2	2000-02-21	TOWING ATTACHMENTS
STANAG 4478 ED.1	2004-10-08	EMERGENCY TOWING AND RECOVERY FACILITIES FOR TACTICAL LAND VEHICLES
STANAG 4381 ED.1	1994-07-08	BLACKOUT LIGHTING SYSTEMS FOR TACTICAL LAND VEHICLES
Z234.1-00		CANADIAN METRIC PRACTICES GUIDE

## 2.2 Order of Precedence

- 2.2.1 In the event of conflict between the content in this SOW and the referenced documents, the content of this SOW will take precedence.

### **3.0 PROJECT MANAGEMENT**

#### **3.1 Project Management Program**

- 3.1.1 The Contractor must designate a Project Manager with the responsibilities to coordinate, execute, and manage the Contractor's project management activities for the Contract. The Contractor's Project Manager must have the total responsibility for all works required under the Contract.
- 3.1.2 The Contractor's Project Manager must be the primary point of contact between the Contractor, the DND Technical Authority (TA), and the PSPC Contracting Authority (CA) for all issues related to the Contract.

#### **3.2 Project Management Plan**

- 3.2.1 The Contractor must provide a Project Management Plan (PMP) IAW Contract Data Requirement List (CDRL) WTS-PM-001 at Appendix A2.3 to ANNEX A1 (pg. 116) and its associated Data Item Deliverable (DID) WTS-PM-001 at Appendix A3.3 to ANNEX A1 (pg. 158).
- 3.2.2 The Contractor must manage its program of activities under the contract IAW the approved PMP.

#### **3.3 Contract Master Schedule**

- 3.3.1 The Contractor must provide a Contract Master Schedule (CMS) IAW CDRL WTS-PM-002 at Appendix A2.4 to ANNEX A1 (pg. 117) and its associated Data Item Deliverable (DID) WTS-PM-002 at Appendix A3.4 to ANNEX A1 (pg.160).
- 3.3.2 The Contractor must use the approved CMS as the primary schedule for managing the project.
- 3.3.3 The Contractor may amend the approved CMS, without first obtaining the TA's and Contracting Authority's approval, as long as:
  - 3.3.3.1 Payments under the contract are not affected;
  - 3.3.3.2 The milestones dates are not affected; and
  - 3.3.3.3 The ability of Canada to meet its obligations under the contract is not affected.

#### **3.4 Contract Work Breakdown Structure**

- 3.4.1 The Contractor must provide a Contractor Work Breakdown Structure (CWBS) IAW CDRL WTS-PM-003 at Appendix A2.5 to ANNEX A1 (pg. 118) and its associated Data Item Deliverable (DID) WTS-PM-003 at Appendix A3.5 to ANNEX A1 (pg. 162).
- 3.4.2 The Contractor must manage the contract IAW the Approved CWBS.
- 3.4.3 The Contractor may amend the approved CWBS, without first obtaining the TA's approval, as long as:
  - 3.4.3.1 All elements affected by the amendment are below the reporting level;

3.4.3.2 The amendments are consistent with the approved CWBS; and

3.4.3.3 The TA is notified within 14 calendar days of the changes being made.

### 3.5 Contract Status Report

3.5.1 The Contractor must provide a Contract Status Report (CSR) IAW CDRL WTS-PM-004 at Appendix A2.6 to ANNEX A1 (pg. 119) and its associated DID WTS-PM-004 at Appendix A3.6 to ANNEX A1 (pg. 163).

### 3.6 Project Meetings

3.6.1 Meeting Organization and Coordination

3.6.1.1 The Contractor's Project Manager must be present at the Kick-off Meeting, and at other meetings when requested by Canada. If the Project Manager does not have final approval authority for decision making and changes, then the person that has that final approval authority must also be present.

3.6.2 Kick-off Meeting

3.6.2.1 The Contractor must hold and chair a Kick-off Meeting, at the Contractor's facility, within 42 calendar days after contract award to review and secure a common understanding of the following:

3.6.2.1.1 The requirements of the Contract;

3.6.2.1.2 The requirements of the SOW;

3.6.2.1.3 General overview of the project, risks, schedule and communication channels to follow, and

3.6.2.1.4 Other contractual and programmatic issues associated with the project as agreed to between the TA, CA and the Contractor.

3.6.2.2 During the Kick-off Meeting, the Contractor must provide a Top Level Assembly Drawing (TLAD) IAW CDRL WTS-ILS-201 at Appendix A2.17 to this ANNEX A1 (pg. 130) and its associated DID WTS-ILS-201 at Appendix A3.17 to this ANNEX A1 (pg. 189).

3.6.2.3 Refer to Meeting Documentation requirements found at ANNEX A1 para. 3.6.6.

3.6.3 Systems Engineering (SE) Meeting

3.6.3.1 The Contractor must hold and chair the first SE meeting following the closure of the Kick-Off Meeting, in order to:

3.6.3.1.1 Review and secure a common understanding of the requirements expressed in the SE CDRLs and DIDs, the Technical Specification(s), and other referenced specifications; and

3.6.3.1.2 Discuss possible design strategies and concepts.

- 3.6.3.2 If the preliminary design of the WTS, based on the requirements derived from the Technical Specification(s), is sufficiently advanced and the entry criteria for the Preliminary Design Review (PDR) have been met, as described in ANNEX A1 section 4.3.1, the Contractor can request approval for the PDR occurring along with this meeting.
- 3.6.3.3 Refer to Meeting Documentation requirements found at ANNEX A1 para. 3.6.6.
- 3.6.4 Integrated Logistics Support (ILS) Meeting
  - 3.6.4.1 The Contractor must hold and chair an ILS Meeting following the closure of the SE Meeting, in order to:
    - 3.6.4.1.1 Review and secure a common understanding of the requirements expressed in the ILS CDRLs and DIDs, DND Canadian Forces Technical Orders (CFTO)s and specifications; and,
    - 3.6.4.1.2 Discuss possible sparing strategies and concepts, Lowest Replaceable Units (LRUs), and lines of maintenance.
  - 3.6.4.2 Refer to Meeting Documentation requirements found at ANNEX A1 para. 3.6.6.
- 3.6.5 Other meetings
  - 3.6.5.1 The Contractor must hold and chair (at the Contractor's facility) additional SE meetings as described in ANNEX A1 para. 4.2.4.
  - 3.6.5.2 The Contractor and the TA may schedule informal reviews, such as teleconferences, video conferences, briefings and technical interchange meetings, to help achieve the requirements of the Contract.
- 3.6.6 Meeting Documentation
  - 3.6.6.1 The Contractor must prepare and deliver a meeting agenda for all formal meetings and conferences, and prepare and deliver the meeting minutes afterwards.
    - 3.6.6.1.1 The Contractor must provide the Meeting Agenda(s) IAW CDRL WTS-PM-005 at Appendix A2.7 to ANNEX A1 (pg. 120) and its associated DID WTS-PM-005 at Appendix A3.7 to ANNEX A1 (pg. 165).
    - 3.6.6.1.2 The Contractor must record, prepare, and provide the Meeting Minutes of each meeting IAW CDRL WTS-PM-006 at Appendix A2.8 to ANNEX A1 (pg. 121) and its associated DID WTS-PM-006 at Appendix A3.8 to ANNEX A1 (pg. 166).
  - 3.6.6.2 No change in the interpretation of the SOW, Technical Requirements Specification, cost, and schedule, as defined in the Contract, may be authorized by the minutes of a meeting. Such changes will require formal contract amendment by the CA.

## **4.0 SYSTEMS ENGINEERING**

### **4.1 Overview**

- 4.1.1 The Contractor must define and implement Systems Engineering (SE) processes in conformance with IEEE 15288.1-2014, or equivalent standard, as further described within this document.
  - 4.1.1.1 The Contractor must measure conformance via the outcomes and outputs specified by 15288.1-2014, or equivalent standard.
- 4.1.2 The Contractor must define and conduct technical reviews and audits in conformance with IEEE 15288.2-2014, or equivalent standard.
  - 4.1.2.1 The Contractor must measure conformance via the outputs and criteria specified by 15288.2-2014, or equivalent standard.
- 4.1.3 The Contractor must use SE processes to define the requirements for the system, to transform the requirements into an effective product providing the required functionality, and to sustain the product functionality during the production/manufacturing phase.
- 4.1.4 The Contractor must implement a SE process that will transform all system requirements into a set of lower level performance requirements which define the system, including the following:
  - 4.1.4.1 The SE process must plan, identify, and allocate functional requirements, provide inputs to documentation, and include requirement, design and implementation reviews.
  - 4.1.4.2 The SE effort must integrate all elements of a multifunctional engineering effort to meet system requirements.
- 4.1.5 The Contractor must ensure the timely integration of engineering specialties such as reliability, maintainability, supportability, cybersecurity, logistics engineering, human factors engineering, safety, value engineering, standardization, and transportability into design and development.
- 4.1.6 The Contractor must perform engineering, design activities, and tasks as necessary to support production, installation, integration, test, and acceptance of all hardware components and software delivered.

### **4.2 Systems Engineering Management**

- 4.2.1 The Contractor must designate a SE Manager with the responsibilities to coordinate, execute, and manage the Contractor's systems engineering activities for the Contract.
- 4.2.2 Systems Engineering Management Plan
  - 4.2.2.1 The Contractor must submit a Systems Engineering Management Plan (SEMP) IAW CDRL WTS-SE-101 at Appendix A2.9 to ANNEX A1 (pg. 122) and its associated DID WTS-SE-101 at Appendix A3.9 to ANNEX A1 (pg. 167).

- 4.2.2.2            The Contractor must conduct its program of engineering activities, and ensure that all Subcontractor activities are IAW the approved SEMP.
- 4.2.3            Engineering Schedule
  - 4.2.3.1            The Contractor must provide a time-based schedule of engineering activities as part of the CMS.
  - 4.2.3.2            The Contractor must capture all technical milestones, including system reviews, and their key dependencies in the CMS.
- 4.2.4            Conduct of Mandated System Reviews
  - 4.2.4.1            The Contractor must conduct all Mandated System Reviews (MSRs) and all Internal System Reviews IAW the approved SEMP.
  - 4.2.4.2            The Contractor must conduct all MSRs at Contractor premises unless otherwise agreed by the TA and CA.
  - 4.2.4.3            Unless otherwise agreed to between the parties, the Contractor must not commence a MSR until:
    - 4.2.4.3.1            All data items required by the CDRL to be delivered before the review have been delivered, and the TA considers the data items to be suitable for the purposes of conducting the review;
    - 4.2.4.3.2            All entry criteria defined in the governing plans for that review have been met;
    - 4.2.4.3.3            All action items from any previous reviews affecting this review have been successfully addressed or action plans agreed with the TA; and
    - 4.2.4.3.4            All pre-requisite activities defined in the contract have been successfully conducted.
  - 4.2.4.4            Prior to each MSR, the Contractor must provide a MSR Package for that review IAW CDRL WTS-SE-102 at Appendix A2.10 to ANNEX A1 (pg. 123) and its associated DID WTS-SE-102 at Appendix A3.10 to ANNEX A1 (pg. 172).
  - 4.2.4.5            Prior to each MSR, the Contractor must provide a Meeting Agenda for that review, and following each MSR, provide Meeting Minutes of that review.
    - 4.2.4.5.1            Refer to Meeting Documentation requirements found at ANNEX A1 para. 3.6.6.
  - 4.2.4.6            The Contractor must ensure that Contractor representatives and Subcontractors' representatives participate in each MSR to the subject and objectives of that System Review.
  - 4.2.4.7            The Contractor and the TA must co-chair each MSR.
  - 4.2.4.8            The TA will classify each action item raised during MSRs as either a major or minor action item, considering their impact on the objectives of the MSR.

- 4.2.4.9 Unless otherwise agreed between the parties, the Contractor must not exit a MSR until:
  - 4.2.4.9.1 All exit criteria, as defined in the governing plans for that review, have been met;
  - 4.2.4.9.2 All contract plans, schedules, and activities for future phases have been reviewed and confirmed as appropriate, realistic and achievable with acceptable risk;
  - 4.2.4.9.3 All major action items have been closed;
  - 4.2.4.9.4 All minor action items have been documented and assigned with agreed closure dates; and
  - 4.2.4.9.5 The MSR has achieved its objectives, as defined in the SOW and the governing plans relating to that review.
- 4.2.4.10 The Contractor must not claim completion for a MSR until both the TA and the Contractor are satisfied that all the exit criteria have been met.
- 4.2.5 Requirements Traceability Verification Matrix (RTVM)
  - 4.2.5.1 The Contractor must provide an RTVM IAW CDRL WTS-SE-103 at Appendix A2.11 to ANNEX A1 (pg. 124) and its associated DID WTS-SE-103 at Appendix A3.11 to ANNEX A1 (pg. 173).
  - 4.2.5.2 The Contractor must utilize the Technical Specification at Appendix A1.0 to ANNEX A1, to develop the RTVM and demonstrate compliance to the Technical Specification.
  - 4.2.5.3 The Contractor must trace each specification requirement and verification requirement to one or more requirements in the next lower level in the specification hierarchy (downward traceability).
  - 4.2.5.4 The Contractor must trace each specification requirement and verification requirement to one or more requirements in the next higher level in the specification hierarchy (upward traceability).

### 4.3 System Design

- 4.3.1 Preliminary Design Review (PDR)
  - 4.3.1.1 The Contractor must conduct a MSR, a PDR, at the completion of the preliminary design phase, IAW the approved SEMP.
    - 4.3.1.1.1 The purpose of the PDR is for the Government to formally review the activities and work products generated by the Contractor during the performance of the preliminary design stage in order to develop the allocated baseline, and to verify that the approach for the system design is ready to proceed into the detailed design phase.



- 4.3.1.1.2 The Contractor must present and describe the system design and program status.
- 4.3.1.1.3 The Contractor must include the following topics for discussion and presentation at the PDR:
  - 4.3.1.1.3.1 Assess the proposed packaging of the WTU, MEU and WSU within the standard QUADCONs and ASU within a standard BICON. The integration design of a whole WTS as a system: (2 QUADCONs mounted on a trailer; mounted and dismounted operation scenarios).
  - 4.3.1.1.3.2 Determine if the design of the proposed Water Filtration and Treatment System is mature enough for the Contractor's detailed design of the WTS.
  - 4.3.1.1.3.3 Logistics design aspects and concerns
  - 4.3.1.1.3.4 Test and evaluation;
  - 4.3.1.1.3.5 Program problem and risk areas, recommended solutions, and evaluation of alternatives; and
  - 4.3.1.1.3.6 Updated RTVM.
- 4.3.1.2 PDR Entry Criteria
  - 4.3.1.2.1 The Contractor must meet the following entry criteria for the PDR to take place:
    - 4.3.1.2.1.1 Updated RTVM showing traceability of requirements is available;
    - 4.3.1.2.1.2 Allocated Baseline has been developed;
    - 4.3.1.2.1.3 Risk assessments and risk mitigation plans have been developed;
    - 4.3.1.2.1.4 Reliability and Maintainability (R&M) requirements have been allocated to the design;
    - 4.3.1.2.1.5 CMS shows critical path through CDR;
    - 4.3.1.2.1.6 Program technical risk is medium or lower;
    - 4.3.1.2.1.7 Program execution risk is medium or lower;
- 4.3.1.3 PDR Exit Criteria
  - 4.3.1.3.1 The Contractor must meet the following exit criteria for the PDR to complete:
    - 4.3.1.3.1.1 CDRL items that were part of the PDR entry criteria have been discussed;
    - 4.3.1.3.1.2 Updated RTVM demonstrates forward and backward traceability;

- 4.3.1.3.1.3 Risk assessments and risk mitigation plans have been discussed. Risks and their respective mitigation plans are in place and manageable for implementation of the functional requirements into a preliminary design;
- 4.3.1.3.1.4 Program schedule is executable within the anticipated cost and technical risks;
- 4.3.1.3.1.5 Program is properly staffed;
- 4.3.1.3.1.6 PDR presentation materials are available;
- 4.3.1.3.1.7 Per the CMS, an executable schedule has been presented;
- 4.3.1.3.1.8 Allocated Baseline has been established;
- 4.3.2 Critical Design Review (CDR)
  - 4.3.2.1 The Contractor must conduct a MSR, a CDR, at the completion of the detailed design phase, IAW the approved SEMP.
    - 4.3.2.1.1 The purpose of the CDR is for the Government to formally review the activities and work products generated by the Contractor during the performance of the detail design stage in order to develop the product baseline, and to verify that the building blocks are either ready for further development, adequately defined for procurement, or adequately defined for fabrication.
    - 4.3.2.1.2 The Contractor must present and describe the finalized system design and program status, and address the design changes made since the PDR.
    - 4.3.2.1.3 The Contractor must include the following topics for discussion and presentation at the CDR:
      - 4.3.2.1.3.1 Ensure that the detailed design of the WTS addresses the performance requirements within the Technical Specification;
      - 4.3.2.1.3.2 Ensure that the detailed design of the WTS is adequate to proceed into fabrication, system integration and testing;
      - 4.3.2.1.3.3 Electromagnetic Environmental Effects impacts;
      - 4.3.2.1.3.4 R&M and system safety programs progress, including updated R&M predictions and hazards analysis results;
      - 4.3.2.1.3.5 Logistics design aspects and concerns;
      - 4.3.2.1.3.6 Test and evaluation;
      - 4.3.2.1.3.7 Program problem and risk areas, recommended solutions, and evaluation of alternatives; and
      - 4.3.2.1.3.8 Updated RTVM.

4.3.2.2 CDR Entry Criteria

4.3.2.2.1 The Contractor must meet the following entry criteria for the CDR to take place:

- 4.3.2.2.1.1 Updated RTVM showing requirements traceability is available;
- 4.3.2.2.1.2 Product Baseline has been developed;
- 4.3.2.2.1.3 Updated risk assessment and risk mitigation plans are available;
- 4.3.2.2.1.4 Risks and their respective mitigation plans are in place and manageable for implementation of the functional requirements into a final design;
- 4.3.2.2.1.5 R&M requirements have been addressed in the design;
- 4.3.2.2.1.6 Trade-off analyses have been completed;
- 4.3.2.2.1.7 Logistics analysis has been completed and plans have been established; and
- 4.3.2.2.1.8 CMS shows critical path through testing.

4.3.2.3 CDR Exit Criteria

4.3.2.3.1 The Contractor must meet the following exit criteria for the CDR to complete:

- 4.3.2.3.1.1 CDRL items that were part of the CDR entry criteria have been satisfactorily discussed;
- 4.3.2.3.1.2 Updated RTVM demonstrates forward and backward traceability;
- 4.3.2.3.1.3 Updated risk assessments and risk mitigation plans have been satisfactorily discussed. Risks and their respective mitigation plans are in place and manageable for implementation of the functional requirements into a final design;
- 4.3.2.3.1.4 Program schedule is executable within the anticipated cost and technical risks;
- 4.3.2.3.1.5 Program is properly staffed;
- 4.3.2.3.1.6 CDR presentation materials are available;
- 4.3.2.3.1.7 Per the CMS, an executable schedule has been presented; and
- 4.3.2.3.1.8 Product Baseline has been established.

4.3.3 Engineering Drawings and Associated Lists

- 4.3.3.1 The Contractor must provide a complete set of **LEVEL 2** Commercial Engineering Drawings and Associated Lists IAW CDRL WTS-SE-104 at Appendix A2.12 to ANNEX A1 (pg. 125) and its associated DID WTS-SE-104 at Appendix A3.12 to ANNEX A1 (pg. 175) and Appendix A4.0 APPENDIX: COMMERCIAL (OEM) ENGINEERING DRAWINGS AND ASSOCIATED LISTS

#### 4.4 Specialty Engineering

4.4.1 Growth, Evolution and Obsolescence Program

- 4.4.1.1 The Contractor must provide a growth, evolution and obsolescence program that meets the following objectives:
- 4.4.1.1.1 Technology evolution and Obsolescence issues are appropriately considered in the design of the WTS;
  - 4.4.1.1.2 The Contractor's design, development and production programs will not deliver equipment that has obsolescence problems at the time of delivery; and
  - 4.4.1.1.3 Solutions for the WTS minimize Life Cycle Cost when technology evolution and obsolescence issues are taken into consideration.
- 4.4.1.2 The Contractor must address the planning for, and the management of, the growth, evolution and obsolescence program in the SEMP.
- 4.4.1.3 The Contractor must conduct the growth, evolution and Obsolescence program IAW the approved SEMP.

4.4.2 Human Engineering

- 4.4.2.1 The Contractor must provide a Human Engineering program that meets the following objectives:
- 4.4.2.1.1 Develop or improve human interfaces of the WTS;
  - 4.4.2.1.2 Achieve required effectiveness of human performance during WTS operation, maintenance, support, control, and transportation; and
- 4.4.2.2 The Contractor must address planning for, and management of, the Human Engineering program in the SEMP.
- 4.4.2.3 The Contractor must conduct the Human Engineering program IAW the approved SEMP.

## **5.0 CONFIGURATION MANAGEMENT**

### **5.1 Overview**

- 5.1.1 The Contractor must conduct configuration management activities IAW IEEE 15288.1-2014 and ANSI/EIA-649-C, or equivalent standards, to ensure effective configuration identification, configuration control, change control, and configuration audits for the Work, as well as effective management and implementation of engineering changes.

### **5.2 Configuration Management Planning**

- 5.2.1 The Contractor must address planning for, and management of, the Configuration Management (CM) program in the SEMP.
- 5.2.2 The Contractor must manage, conduct and coordinate all Contractor and Subcontractor CM activities IAW the approved SEMP.
- 5.2.3 The Contractor must ensure that all Subcontractors comply with the requirements of the SEMP and are integrated into the Contractor's CM activities

### **5.3 Configuration Baselines**

- 5.3.1 The Contractor must develop and maintain each of the following Configuration Baselines for the WTS during the contract:
  - 5.3.1.1 Functional Baseline (FBL);
  - 5.3.1.2 Allocated Baseline (ABL); and
  - 5.3.1.3 Product Baseline (PBL).

### **5.4 Configuration Control**

- 5.4.1 The Contractor must manage configuration changes and Deviations (see para. 7.2.1), including their:
  - 5.4.1.1 Identification;
  - 5.4.1.2 Request and documentation;
  - 5.4.1.3 For configuration changes only, classification as Class I (major change) or Class II (minor change);
  - 5.4.1.4 Evaluation and coordination; and
  - 5.4.1.5 Implementation and verification of the changes.
- 5.4.2 The Contractor must provide Engineering Change Proposals (ECPs) IAW CDRL WTS-SE-105 at Appendix A2.13 to ANNEX A1 (pg. 126) and its associated DID WTS-SE-105 at Appendix A3.13 to ANNEX A1 (pg. 176), to implement changes to the approved FBL and PBL.

- 5.4.2.1 The Contractor must document all necessary changes to specifications, drawings and other documentation requiring revision should the ECP be approved, in place of the reference to Specification Change Notices.
- 5.4.2.2 Copies of these revisions must be provided for CDRLs already provided to DND, following the original CDRL timelines for review.
- 5.4.3 As per ACMP-2009, the Contractor must classify an ECP as Class I if:
  - 5.4.3.1 The FBL, once established, is affected to the extent that any of the requirements are not within specified limits or specified tolerances;
  - 5.4.3.2 The PBL, once established, is affected or the change impacts one or more of the following:
    - 5.4.3.2.1 Government Furnished Equipment (GFE);
    - 5.4.3.2.2 Safety (to include safety critical software);
    - 5.4.3.2.3 Security;
    - 5.4.3.2.4 Deliverable computer software;
    - 5.4.3.2.5 Compatibility or interoperability with interfacing items;
    - 5.4.3.2.6 Delivered operational and maintenance manuals;
    - 5.4.3.2.7 Interchangeability or replaceability; or
    - 5.4.3.2.8 Skills, manning, training, biomedical factors or human engineering design;
  - 5.4.3.3 Any of the contractual factors are affected, such as costs, guarantees, warranties, deliveries or scheduled contractual milestones.
- 5.4.4 The Contractor must classify an ECP as Class II for all changes not classified as Class I, and the Contractor will require that the TA reviews Class II changes for concurrence in the classification only.
  - 5.4.4.1 At the request of the TA, the Contractor must resubmit a proposed Class II change to a PBL as a proposed Class I change to that PBL.
- 5.4.5 The Contractor must, for any proposed change to a Configuration Baseline, ensure that all Configuration Baselines will be mutually consistent and compatible.

## 5.5 Configuration Status Accounting

- 5.5.1 The Contractor must establish and maintain, IAW the approved SEMP, a Configuration Status Accounting (CSA) system that correlates, stores, maintains and provides readily available views of all configuration information relating to those items identified as Configuration Items.
- 5.5.2 The Contractor must provide CSA Reports, from the Contractor's CSA system, IAW CDRL WTS-SE-106 at Appendix A2.14 to ANNEX A1 (pg. 127) and its associated DID WTS-SE-

106 at Appendix A3.14 to ANNEX A1 (pg. 183), capturing all current change status and change history and the as-designed, as-built, as-delivered and as-modified configuration of all Configuration Items and International Container Bureau (BIC) consisting of the DND Owner Code (CFCU) tracked components of the WTS.

- 5.5.2.1 For Computer Software Configuration Items and Computer Software Components, the CSA must include the as-delivered, as-modified and as-tested configuration as of a particular date.

## 5.6 Configuration Audits

- 5.6.1 The Contractor must invite the TA, or representatives appointed by the TA, to witness all Configuration Audits.
- 5.6.2 Unless the Contractor is otherwise notified by the TA, the TA or appointed representative(s) must witness all Configuration Audits that are conducted for the purpose of acceptance.
- 5.6.3 Unless the TA has notified that it will not witness a Configuration Audit IAW para 5.6.2, the Contractor must not conduct that Configuration Audit in the absence of the TA or the appointed representative(s).
- 5.6.4 Physical Configuration Audit (PCA)
  - 5.6.4.1 The Contractor must conduct a MSR, the PCA, on each WTS Configuration Item, prior to delivery, IAW the approved SEMP.
    - 5.6.4.1.1 The objective of the PCA for an item are to:
      - 5.6.4.1.1.1 Confirm that the 'as-built' or 'as-coded' configuration is consistent with the configuration documentation;
      - 5.6.4.1.1.2 Confirm that the configuration documentation is complete and accurate; and
      - 5.6.4.1.1.3 Establish or verify the PBL for the item.
    - 5.6.4.1.2 The Contractor must perform a detailed audit of engineering drawings, specifications, Technical Data and tests utilized in production of the Configuration Item, including the design documentation, listings, and manuals for software Configuration Items. The review includes an audit of the released engineering documentation and quality control records to make sure the as-built or as-coded configuration is reflected by this documentation.
    - 5.6.4.1.3 The Contractor must conduct a PCA on the first production article of a Configuration Item and those that are a re-procurement of a Configuration Item already in the inventory.
    - 5.6.4.1.4 Satisfactory completion of a PCA for a Configuration Item results in the establishment of the Product Baseline for that Configuration Item.



5.6.4.2 PCA Entry Criteria

5.6.4.2.1 The Contractor must meet the following entry criteria for the PCA to take place:

5.6.4.2.1.1 The Contractor has submitted the final draft of the product specification for the Configuration Item to be audited to the TA for review prior to PCA;

5.6.4.2.1.2 The Contractor has provided the TA with a current listing of all deviations and waivers against the item, either requested of, or approved by DND;

5.6.4.2.1.3 The Contractor has provided the TA with identification of the Configuration Item to be audited in terms of nomenclature, specification identification number and Configuration Item number; and

5.6.4.2.1.4 The Contractor has provided the TA with drawings, part numbers and build status of the Configuration Item subject to audit, including serial numbers and software identification.

5.6.4.3 PCA Exit Criteria

5.6.4.3.1 The Contractor must meet the following exit criteria for the PCA to complete:

5.6.4.3.1.1 CDRL items that were part of the PCA entry criteria have been satisfactorily discussed;

5.6.4.3.1.2 All risks identified during the course of PCA have been documented and analyzed, and the risks with proceeding to the next phase are acceptable to the TA;

5.6.4.3.1.3 Configuration differences between the Configuration Item qualified and the Configuration Item being audited have been made a matter of record in the PCA minutes; and

5.6.4.3.1.4 All build records for the Configuration Item confirm that the Configuration Item has been built IAW the drawings and specifications.

## **6.0 VERIFICATION**

### **6.1 Verification Management**

#### **6.1.1 Verification Planning**

- 6.1.1.1 The Contractor must address planning for, and management of, the Verification program in the SEMP.
- 6.1.1.2 The Contractor must conduct all Verification activities for the contract IAW the approved SEMP and approved Acceptance Test Plan and Procedures (ATP&Ps) CDRL WTS-SE-107 at Appendix A2.15 to ANNEX A1 (pg 128) and its associated DID WTS-SE-107 at Appendix A3.15 ANNEX A1 (pg. 185), which are necessary for each Verification phase.

#### **6.1.2 DND Involvement in Acceptance Verification (AV)**

- 6.1.2.1 The Contractor must invite the TA, or representatives appointed by the TA, to witness, and participate in when applicable, all AV activities.
- 6.1.2.2 Unless otherwise notified by the TA, the TA or appointed representative(s) must witness and participate in AV activities.
- 6.1.2.3 Unless the TA has notified that they will not witness an AV activity IAW para 6.1.2.2, the Contractor must not conduct that AV activity in the absence of TA or appointed representative(s).
- 6.1.2.4 Unless otherwise agreed in writing by the TA, the Contractor must provide the TA, or representatives appointed by the TA, with at least 42 Calendar Days advance notice of the start date and time of all AV activities for the WTS.

#### **6.1.3 Test Readiness Reviews (TRRs)**

- 6.1.3.1 Prior to the commencement of each AV phase, the Contractor must hold a MSR, a TRR, IAW the approved SEMP, which:
  - 6.1.3.1.1 Confirms the accuracy and completeness of the ATP&Ps for the verification phase;
  - 6.1.3.1.2 Confirms the status of the applicable Configuration Baseline and of the system, item, or process under test;
  - 6.1.3.1.3 Reviews results from preceding test activities, where applicable to the Acceptance Verification activity;
  - 6.1.3.1.4 Assures that the relevant Item Under Test (IUT) is ready for testing. The IUT may be a CI, group of CIs, subsystem, component or system;
  - 6.1.3.1.5 Assures that any DND resources required are available and prepared for formal testing; and
  - 6.1.3.1.6 Assures that the Contractor is prepared for formal testing.

6.1.3.2 The TRR must be held after the test procedures for formal testing have been dry run against the same configuration of the IUT as that which will be presented for formal testing. A technical understanding of the informal test results arising from the dry run must be established.

6.1.3.3 TRR Entry Criteria

6.1.3.3.1 The Contractor must meet the following entry criteria for the TRR to take place:

6.1.3.3.1.1 The status of all design and test documentation for the IUT has been established and declared to the TA;

6.1.3.3.1.2 The updated RTVM showing traceability from IUT requirements to the test procedures and contract test requirements has been established and declared to the TA; and

6.1.3.3.1.3 Action items from any previous reviews affecting TRR have been successfully addressed or action plans agreed with the TA.

6.1.3.4 TRR Exit Criteria

6.1.3.4.1 The Contractor must meet the following exit criteria for the TRR to complete:

6.1.3.4.1.1 All required resources including personnel, equipment and facilities are available for formal testing;

6.1.3.4.1.2 The IUT and test procedures are deemed to be satisfactory by both the Contractor and the TA to support formal testing;

6.1.3.4.1.3 Plans for the measurement and analysis program for the next AV phase have been agreed by the TA, including the measures to be collected, associated collection methods, and analysis techniques; and

6.1.3.4.1.4 All risks identified during the course of TRR have been documented and analyzed, and the risks with proceeding to the next phase are acceptable to the TA.

6.1.4 Failure Reporting and Analysis

6.1.4.1 During AV of the WTS elements, the Contractor must establish, maintain and update a Problem Resolution System that:

6.1.4.1.1 collects Failure data (including applicable CI identification and configuration data);

6.1.4.1.2 classifies the Failure Severity IAW the following table:

Failure Severity	Applies if a problem could:
1	a. prevent the accomplishment of an operational or mission essential capability b. jeopardize safety, security, or other requirement designated « critical »
2	a. adversely affect the accomplishment of an operational or mission essential capability and no work-around solution is known b. adversely affect technical, cost, or schedule risks to the Contract or to life-cycle support of the system, and no work-around solution is known
3	a. adversely affect the accomplishment of an operational or mission essential capability but a work-around solution is known b. adversely affect technical, cost, or schedule risks to the Contract or to life-cycle support of the system, but a work-around solution is known
4	a. result in user/operator inconvenience or annoyance but does not affect a required operational or mission essential capability b. result in inconvenience or annoyance for development or support personnel, but does not prevent the accomplishment of those responsibilities
5	any other effect

- 6.1.4.1.3 Documents the failures and associated failure modes;
- 6.1.4.1.4 Defines corrective actions;
- 6.1.4.1.5 Identifies the scope of additional verification activities required to confirm that the failure has been remedied; and
- 6.1.4.1.6 Maintains a history of all transactions.
- 6.1.4.2 The Contractor must provide all facilities and assistance reasonably required by the DND in order for the DND to access the Problem Resolution System for the duration of the contract.
- 6.1.4.3 The Contractor must submit for TA approval all corrective actions to address safety-related failures that occur during AV that are assigned a Failure Severity classification of either 1 or 2.
- 6.1.4.4 The Contractor must invite the TA, or representatives appointed by the TA, to witness corrective actions and the closure of failures during AV that are assigned a Failure Severity classification of either 1 or 2.
- 6.1.4.5 The Contractor must incorporate all updates to failures and associated reports into the Problem Resolution System.

6.1.5      Regression Testing

- 6.1.5.1      Subject to para. 6.1.5.2, the Contractor must repeat an AV activity (i.e. conduct regression testing) if:
  - 6.1.5.1.1      Changes are made to the configuration of a WTS component after starting an AV activity;
  - 6.1.5.1.2      The analysis of test data and the assessment of test results against pass/fail criteria indicate that the item under test has failed to meet its applicable requirements;
  - 6.1.5.1.3      The analysis of test data and the assessment of test results against pass/fail criteria are inconclusive; or
  - 6.1.5.1.4      The Contractor deviates from the ATP&Ps without prior approval by the TA.
- 6.1.5.2      If the Contractor can demonstrate to the satisfaction of the TA, by regression analysis or any other such means that changes to the configuration do not impact on an AV activity, then subject to the TA's approval of the regression analysis, or any other such means, the Contractor will not be required to repeat that AV activity.

6.2      **Acceptance Verification**

6.2.1      General

- 6.2.1.1      The Contractor must conduct AV on equipment that is of the same hardware, software, firmware and data configuration (as applicable) as that which will be offered for acceptance, unless otherwise agreed by the TA.
- 6.2.1.2      The Contractor must confirm that the test environment, all test equipment and software test tools, if applicable, used for the AV of the WTS are IAW the approved ATP&P.
- 6.2.1.3      The Contractor must maintain a log during all AV activities to record applicable information including test details, the configuration of the items under test, the ATP&Ps used and any deviations from them, the test results, and any configuration changes and maintenance actions.
- 6.2.1.4      The Contractor must provide Acceptance Test Reports (ATRs) IAW CDRL WTS-SE-108 at Appendix A2.16 to ANNEX A1 (pg. 129) and its associated DID WTS-SE-108 at Appendix A3.16 to ANNEX A1 (pg. 188), which are necessary for the evaluation of AV results, consistent with the approved ATP&Ps.

6.2.2      First Production Article Verification (FPAV)

- 6.2.2.1      The FPAV is conducted to ensure that the delivered WTS complies with RTVM, Para. 4.2.5, IAW CDRL WTS-SE-103 at Appendix A2.11 to ANNEX A1 (pg. 124) and its associated DID WTS-SE-103 at Appendix A3.11 to ANNEX A1 (pg. 173).

- 6.2.2.2 The Contractor must provide a current draft of the WTS Operator Manual IAW CDRL WTS-ILS-201 at Appendix A2.18 to this ANNEX A1 (pg. 131) and its associated DID WTS-ILS-201 at Appendix A3.18 to this ANNEX A1 (pg.190) (Para 8.3.1.1.1) upon the start of every WTS FPAV in order to allow the ILSM to conduct *in situ* validation during the FPAV.
- 6.2.2.2.1 Every new draft of the WTS Operator Manual submitted at FPAV(s) will be considered a First Draft by Canada for the purposes of CDRL timeline.
- 6.2.2.3 Water Quality Testing
- 6.2.2.3.1 The Contractor must ensure that the WTS passes the Water Quality Testing.
- 6.2.2.3.2 The testing will comprise of 4 different source waters defined in Appendix A5.0 to ANNEX A1.
- 6.2.2.4 Static Rollover Threshold (SRT)
- 6.2.2.4.1 The Contractor must ensure that the WTS in its primary mode of operation of WTU and MEU on the Trailer, without the prime mover, achieves a Static Rollover Threshold (SRT) of no less than 29° in either direction (roadside and curb).
- 6.2.2.4.2 The SRT will be measured using the procedures outlined in SAE J2180, May 2011, Tilt Table Procedure for Measuring the Static Rollover Threshold for Heavy Trucks and ATP&Ps;
- 6.2.2.5 Noise limit test
- 6.2.2.5.1 The Contractor must ensure that the WTU and components, necessary for the production of water, passes the audible noise limit test for an eight hour exposure IAW ATP&Ps;
- 6.2.2.5.2 The test must be conducted using a calibrated sound meter.
- 6.2.2.5.3 The test will be considered successful if the audible noise level generated does not exceed 87 dB (A) at 1m away from the center of the noise source and does not exceed 70 dB (A) at 7m away from the center of the noise source.
- 6.2.2.6 Road and Cross Country Test
- 6.2.2.6.1 The Contractor must ensure that the WTS in its primary mode of operation of WTU and MEU on the Trailer passes a Road and Cross Country Test.
- 6.2.2.6.2 The WTS road test will be conducted at CAF base of Gagetown, New-Brunswick, training area and surroundings roads. The Gagetown training area and surroundings roads are the utmost suitable location to represent the environment of which this equipment would be exposed through its service life. The WTS as configured in 6.2.2.6.1, must undergo five (5) times the equivalent of one (1) mission profile.

- 6.2.2.6.3      Testing will consist of towing the WTS, in its primary mode of operation configuration. The towing of the system will be over a total distance of 1000 km, on suitable roads, Trails, and Cross-Country routes. Routes will be mutually agreed upon by Canada and the manufacturer. Roads are defined as follow:
- 6.2.2.6.3.1      Primary Roads: 20% of the mission profile will be taking place on paved road. Paved road nominal speed will be 100 km/h. Paved road is defined as: all weather, maintained, hard surface (paved) roads with good driving visibility used for heavy and high density traffic. These roads have lanes with a minimum width of 2.7 m (9 ft.), and the legal maximum gross vehicle weight/gross combination weight (GVW/GCW) for the country or province is assured for all bridges. These roads are surfaces having an RMS roughness value of less than 0.5 cm.
- 6.2.2.6.3.2      Secondary (Gravel) Roads: 50% of the mission profile will be taking place on CAF Base training area, Main Surface Road (MSR). Secondary road nominal speed will be 60 km/h. The gravel road is described as: all weather, occasionally maintained, hard or loose surface (e.g., large rock, paved crushed rock, gravel) intended for medium-weight, low-density traffic. These roads have two lanes with a minimum width of 2.4 m (8 ft.) per lane. These roads are surfaces typically having an RMS roughness value varying between 0.3 and 1.8 cm.
- 6.2.2.6.3.3      Trails: 25% of the mission profile will be taking place on CAF Base training area trails. Trails nominal speed will be 20 km/h. Trails are defined as: one lane, unimproved, seldom maintained loose surface roads, intended for low density traffic with an expectation that characteristics will change as the weather changes from dry to wet. Trails have a minimum width of 2.4 m (8 ft.), no large obstacles (boulders, logs, stumps) and no bridging. These are surfaces typically having an RMS roughness value varying between 1.0 and 3.8 cm.
- 6.2.2.6.3.4      Cross-Country: 5% of the mission profile will be taking place in CAF Base training area. Cross-Country nominal speed will be the best possible Speed. Cross-Country is defined as: vehicle operations over terrain not subject to repeated traffic and where no roads, routes, well-worn trails or man-made improvements exist. These are surfaces typically having an RMS roughness value from than 2.0 cm to 12.7 cm.
- 6.2.2.6.3.5      Fording: One (1) fording mission of 21m in total length will be taking place on CAF driving course area. Mission will be taking place, in a concrete basin (shallow pond obstacle), in a still water, at a speed of 3-5 km/h, with a controlled depth of 750 mm. Ramp at both ends will permit gradual immersion and emersion of the WTS trailers;
- 6.2.2.6.3.6      Side slope: One (1) 25% side slope mission of 60 m total length will be taking place on CAF base driving course area. This side slope test is to confirm the stability and controllability of the WTS during the off road missions. One side slope mission consist of two (2) side passes

per mission, at a speed of 3-5 km/h. Driver will be crossing the obstacle in both directions;

**Table 1. One (1) WTS Mission profile**

<b>Mission</b>	<b>Description</b>	<b>Quantity or % of total distance</b>	<b>Nominal Speed or time</b>	<b>Nominal Roughness Range (Centimeter-RMS)</b>
<b>Total distance</b>	<b>Mission profile</b>	<b>200 km</b>	<b>KM/H</b>	
Paved road	Continuous asphalt or concrete	20%	100 km/h	< 0.5
Gravel road	Compacted gravel and dirt maintained by grading	50%	60 km/h	0.3 to 1.8
Trail	Loose surface, unmaintained	25%	20 km/h	1.0 to 3.8
Cross Country	Rocky surfaces, through mud and sand	5%	Best Possible Speed	2.0 to 12.7
Maximum Speed	Pass or downhill dash	1	110 km/h	
Fording	Water obstacle must be a minimal depth of 750 mm	1	3-5 km/h	
Hard Braking	Complete Deceleration per Mission	10	50 to 0 km/h	Any
Traverse Slope	25% side slope. Surface is hard and free of loose material. Intermediate stop approximately half way through the side slope. Once with driver facing up and once with driver facing down the slope	2	3-5 km/h	

**6.2.2.7      Functionality test #1**

6.2.2.7.1      Following the 50% completion of the road and cross country test, (2.5 X mission profile), the Contractor must complete the following:

6.2.2.7.1.1      Keeping system in its primary mode of operation, the contractor must conduct a detailed analysis of the WTS and trailer to validate that all components, systems and subsystems remain functional and operate within designed tolerances IAW ATP&Ps;

6.2.2.7.1.2      DND may conduct their own detailed analysis of the WTS after 50% of the road and cross country test completion;

6.2.2.7.1.3      The contractor will conduct a WTS reliability water production test as follow:



- 6.2.2.7.1.3.1 Location: New Brunswick, Base of Gagetown; training area, Swan lake;
- 6.2.2.7.1.3.2 Water production time: 1 hours
- 6.2.2.7.1.3.3 Water production rate for one hour: 1250L
- 6.2.2.7.1.3.4 Maintenance: Operator maintenance only, IAW with the Maintenance Concept (see 8.1) and the draft Operator Manual provided at the onset of FPAV (see 6.2.2.2).
- 6.2.2.7.1.3.5 Set up and tear down time: IAW ATP&P;
- 6.2.2.7.1.3.6 Test samples: A water sample will be taken at the end of the hour for a total of two (2) samples. The sampling test will consist of taking two samples, one (1) prior to the exit of the WTS and one (1) from the storage tank, for a total of two (2) samples.
  - 6.2.2.7.1.3.6.1 Test sample will be taken and sent to an accredited lab in New Brunswick.

6.2.2.8 Functionality test #2

- 6.2.2.8.1 Following the 100% completion of the Road and Cross Country Test, (5 X mission profile), the Contractor must complete the following:
  - 6.2.2.8.1.1 With the system in its secondary mode of operation (dismounted), the Contractor must conduct a detailed analysis of the WTS and trailer to validate that all components, systems and subsystems remain functional and operate within designed tolerances IAW ATP&Ps:
  - 6.2.2.8.1.2 DND may conduct their own detailed analysis of the WTS after 100% of the road and cross country test completion;
  - 6.2.2.8.1.3 The contractor will conduct a WTS reliability water production test as follow:
    - 6.2.2.8.1.3.1 Location: New Brunswick, Base of Gagetown; training area, Swan lake;
    - 6.2.2.8.1.3.2 Test duration: 72 hrs;
    - 6.2.2.8.1.3.3 Water production time: 60 hrs;
    - 6.2.2.8.1.3.4 Hours of daily operation: 24 hrs;
    - 6.2.2.8.1.3.5 Water production daily: 20 hrs;
    - 6.2.2.8.1.3.6 Water production per hour: 1250L; and
    - 6.2.2.8.1.3.7 Water production per day: 25 000L;

6.2.2.8.1.3.8 Maintenance: Operator maintenance only, IAW with the Maintenance Concept (see 8.1) and the draft Operator Manual provided at the onset of FPAV (see 6.2.2.2).

6.2.2.8.1.3.9 Set up and tear down time: IAW ATP&P;

6.2.2.8.1.3.10 Test samples: Will be taking place at the end of each day for a total of three (3) sample test. Each sample test will consist of taking two (2) samples, one (1) before exiting the WTU and one (1) from the storage tank for a total of 6 sample bottles.

6.2.2.8.1.3.10.1 Test sample will be taken and sent to an accredited lab in New Brunswick.

6.2.2.9 Test Failure

6.2.2.9.1 WTS test failure will consist of any damage surpassing Operator fault-finding and maintenance, IAW with the Maintenance Concept (see 8.1) and the draft Operator Manual provided at the onset of FPAV (see 6.2.2.2). Any damages, which will constitutes a test failure, when surpassing Operator fault-finding and maintenance are those that:

6.2.2.9.1.1.1 Prevent operation or towing,

6.2.2.9.1.1.2 Cause further operation to be unsafe, or

6.2.2.9.1.1.3 Further operation might result in extensive damage to the equipment;

6.2.2.10 Container inspection

6.2.2.10.1 ISO Container must have an inspection performed post road and cross country road test to ensure all system components remain free of damage and remains functional with no performance degradation IAW para 6.2.2.9.1 Any damage found to the containers components or observation of the containers degradation will constitute a test failure and the agreed upon process within the First Article Acceptance Plan will dictate the process to follow.

6.2.2.10.2 DND will conduct a visual inspection of the WTU and MEU and may conduct a more thorough inspection of the containers IAW C-90-242-000/NJ-001 which is MIL-STD-3037 section 5 detailed requirements of the visual exam;

6.2.2.10.2.1 DND's container inspection will be conducted by a certified container inspector: and

6.2.2.10.2.2 The inspection and measurement of the ISO container must be carried out at the same place, before and after the on-road and off-road test.

6.2.2.11 Trailer inspection:

6.2.2.11.1 The trailer must have an inspection performed pre and post road and cross country test to ensure all system components remain free of damage and

the trailer remains functional with no performance degradation IAW para 6.2.2.9.1. Any damage found to the trailer components or observation of the trailer degradation will constitute a test failure and the agreed upon process within the First Article Acceptance Plan ATP&P will dictate the process to follow.

### 6.3 Design Acceptance

6.3.1 The acceptance and approval of all ATRs from the FPAV by the DND TA constitutes **Design Acceptance** and is the final criterion to be met to allow the Contractor to proceed with series production of the WTS.

#### 6.3.2 Additional Work Requests (AWR)

6.3.2.1 During the performance of the contract, Canada may request that the contractor complete AWRs on an “as and when requested” basis. These AWRs will be limited to supplementary tasks related to work already described in the SOW and may include Field Services Representatives (FSR) support, Technical Investigation and Engineering Services (TIES) and minor Repair and Overhaul tasks;

6.3.2.2 The AWRs are not intended to increase the capabilities of the equipment, rather to address unforeseen work to ensure that the equipment is safe to operate, and that it functions as intended within the original scope.

## 7.0 QUALITY ASSURANCE

### 7.1 Contractor Quality Responsibilities

- 7.1.1 The Contractor must have a Quality Management System (QMS) Certified to ISO 9001:2015 'Quality Management Systems – Requirements', or other internationally accepted equivalent standard as agreed by DND Directorate of Quality Assurance (DQA), at Contract Award.
- 7.1.2 The Contractor must maintain and apply the QMS in para 7.1.1 to all phases of the contract and must notify the TA of any changes to the Certification status of the Contractor.
- 7.1.3 During progress of work under the contract, the DQA Quality Assurance Representative (QAR) may perform audit and surveillance activities in relation to the work performed, including any of the following:
  - 7.1.3.1 System Audit;
  - 7.1.3.2 Process Audit; or
  - 7.1.3.3 Product Audit.
- 7.1.4 The Contractor must provide all facilities and assistance reasonably required by the QAR in order for the QAR to perform audit and surveillance activities as described in para 7.1.3.
- 7.1.5 The Contractor must ensure that all Subcontractors have quality management systems that are appropriate to the work required under the Subcontract.
- 7.1.6 The Contractor must ensure that all work performed under a Subcontract meets the requirements of the QMS to be applied by the Contractor under para. 7.1.1.

### 7.2 Non-Conforming Deliveries

- 7.2.1 If the Contractor seeks to use non-conforming materials or work in the deliveries, the Contractor must follow D-02-006-008/SG-001 the Design Change, Deviation and Waiver Procedure and provide the related and completed form, which will be provided to the Contractor by the QAR when necessary. The following is a summary of the related form:
  - 7.2.1.1 FORM DND 675 – Request for Waiver or Deviation – is used to request and obtain waivers to permit the acceptance of items, which through error during manufacture, do not conform to the technical data requirements of the contract **OR** is used to request and obtain authorization for a temporary departure from the technical data requirements of the contract to be incorporated in any number of items being manufactured to the contract.
    - 7.2.1.1.1 Waiver – The written authorization granted after manufacture to permit the acceptance of items which during production **or** after having been submitted for inspection, are found to depart from the technical data requirements of the contract, but are considered suitable for use “as is” or after approved repair.
    - 7.2.1.1.2 Deviation – Written authorization for a temporary departure, granted prior to the manufacture of an item, to depart from a particular performance or

design requirement of a contract, specification, or referenced document, for a specific number of items, a specified service, or a specific period of time. This departure is NOT recorded in the technical data for future manufacture.

- 7.2.2 The DND may approve or not approve the application for a Waiver or Deviation in its sole and absolute discretion and may provide approval subject to any amendments to, or conditions on, the approval of the application for a Waiver or Deviation which are deemed necessary by DND.
- 7.2.3 Any approval of an application for a Waiver or Deviation will not release the Contractor from due performance of its obligations under the contract, except to the extent specifically set out in the approved application for a Waiver or Deviation.
- 7.2.4 If an application for a Waiver or Deviation is approved, the Contractor must undertake all actions to rectify the non-conformance IAW the timeframes and any other requirements for such rectification, or to meet any conditions specified in the approved application for a Waiver or Deviation.
- 7.2.5 When the Contractor has rectified the non-conformance(s) in an approved application for a Waiver or Deviation, it must notify the QAR and seek closure of the application for a Waiver or Deviation by submitting, with the notice, evidence to demonstrate that the applicable non-conformance(s) have been rectified.

## 8.0 INTEGRATED LOGISTICS SUPPORT (ILS)

### 8.1 Maintenance Concept

- 8.1.1 For the purposes of the ILS, the MEU is considered part of the WTU and must be included and treated as such in ILS deliverables.
- 8.1.2 The **WTU, ASU and WSU** will be maintainable by CAF operators and technicians in both field and base environments, with maintenance tasks generally divided as follows:
- 8.1.2.1 **Operator Maintenance** – consisting generally of simple tasks such as preliminary diagnosis of faults, visual inspections, consumables replenishment, minor preventive and corrective maintenance, and cleaning.
- 8.1.2.1.1 Any Operator Maintenance task requiring support equipment must have that support equipment available to the Operator and mounted on, or otherwise supplied with, the WTU, ASU, or WSU.
- 8.1.2.2 **Technician Maintenance, First Line** – consisting of preventive and minor corrective maintenance tasks by repair or replacement of parts, in the field, using the standard maintenance tools of the EME and WFE trades (T VEH 00129 and EPPE 00305) and any provided with the WTU, ASU or WSU. Task duration generally less than four (4) hours.
- 8.1.2.3 The more in-depth maintenance tasks, consisting of major corrective maintenance tasks, reconditioning of assemblies and component rebuilds, will be done through the Support Contract.
- 8.1.3 The **WTS Trailer** will be maintainable by CAF operators and technicians in both field and base environments, with maintenance tasks generally divided as follows:
- 8.1.3.1 **Operator Maintenance** – consisting generally of simple tasks such as preliminary diagnosis of faults, visual inspections, minor preventive and corrective maintenance, and cleaning. Task duration less than one (1) hour.
- 8.1.3.1.1 Any Operator Maintenance task requiring support equipment must have that support equipment available to the Operator and mounted on, or otherwise supplied with, the WTS Trailer.
- 8.1.3.2 **Technician Maintenance, First Line** – consisting of preventive and minor corrective maintenance tasks by repair or replacement of parts, in the field, using the standard maintenance tools of the EME and WFE trades and any provided with the WTS Trailer. Task duration generally less than four (4) hours.
- 8.1.3.3 **Technician Maintenance, Second Line** – consisting of major corrective maintenance requiring additional tools, specialized personnel, STTE, controlled environmental conditions or specific infrastructure requirements. Task duration generally between four (4) and twenty-four (24) hours.

## 8.2 Instruments, Decals, Data Plates and Warnings

- 8.2.1 The Contractor must deliver all instruments, decals and data plates marked in metric units.
- 8.2.2 Where international symbols are not possible, the Contractor must provide bilingual markings in English and Canadian French, as per paragraph 0.
- 8.2.3 The Contractor must provide warning and precautionary data plates in both official languages of Canada (English and Canadian French) in order to protect personnel and equipment, as per paragraph 0.

## 8.3 Technical Publication Package

- 8.3.1 The Contractor must prepare and deliver the following Technical Publications:
  - 8.3.1.1 WTS Operator Manual
    - 8.3.1.1.1 The Contractor must provide a WTS Operator Manual IAW CDRL WTS-ILS-202 at Appendix A2.18 to this ANNEX A1 (pg. 131) and its associated DID WTS-ILS-202 at Appendix A3.18 to this ANNEX A1 (pg.190).
    - 8.3.1.1.2 The WSU must be excluded from the WTS Operator Manual (see 8.3.1.13).
  - 8.3.1.2 WTU Operator Quick Reference Card
    - 8.3.1.2.1 The Contractor must provide a WTU Operator Quick Reference Card IAW CDRL WTS-ILS-203 at Appendix A2.19 to this ANNEX A1 (pg.132) and its associated DID WTS-ILS-203 at Appendix A3.19 to this ANNEX A1 (pg.192).
    - 8.3.1.2.2 Front Matter is not required for the WTU Operator Quick Reference Card (see 8.3.2).
  - 8.3.1.3 WTS Maintenance Manual
    - 8.3.1.3.1 The Contractor must provide a WTS Maintenance Manual IAW CDRL WTS-ILS-204 at Appendix A2.20 to this ANNEX A1 (pg. 133) and its associated DID WTS-ILS-204 at Appendix A3.20 to this ANNEX A1 (pg. 194).
    - 8.3.1.3.2 The WSU must be excluded from the WTS Maintenance Manual (see 8.3.1.13).
  - 8.3.1.4 WTS Permissive Repair Schedule and Standard Repair Times
    - 8.3.1.4.1 The Contractor must provide a WTS Permissive Repair Schedule and Standard Repair Times IAW CDRL WTS-ILS-205 at Appendix A2.21 to this ANNEX A1 (pg. 134) and its associated DID WTS-ILS-205 at Appendix A3.21 to this ANNEX A1 (pg. 196).

- 8.3.1.5           WTS Illustrated Parts Manual
  - 8.3.1.5.1           The Contractor must provide a WTS Illustrated Parts Manual IAW CDRL WTS-ILS-206 at Appendix A2.22 to this ANNEX A1 (pg. 135) and its associated DID WTS-ILS-206 at Appendix A3.22 to this ANNEX A1 (pg. 197).
  - 8.3.1.5.2           The scope of parts and assemblies to be included in the WTS Illustrated Parts Manual must match that of the Provisioning Parts Breakdown (see 8.4.4.1 below).
  - 8.3.1.5.3           The WTS Illustrated Parts Manual does not need to be provided in Canadian French.
  - 8.3.1.5.4           The WSU must be excluded from the WTS Illustrated Parts Manual (see 8.3.1.13).
- 8.3.1.6           WTS Operator Training Package
  - 8.3.1.6.1           The Contractor must provide a WTS Operator Training Package IAW CDRL WTS-ILS-207 at Appendix A2.23 of this ANNEX A1 (pg. 136) and its associated DID WTS-ILS-207 at Appendix A3.23 to this ANNEX A1 (pg. 199).
- 8.3.1.7           WTU and ASU Technician Training Package
  - 8.3.1.7.1           The Contractor must provide a WTU and ASU Technician Training Package IAW CDRL WTS-ILS-208 at Appendix A2.24 to this ANNEX A1 (pg. 137) and its associated DID WTS-ILS-208 at Appendix A3.24 to this ANNEX A1 (pg. 201).
- 8.3.1.8           WTS Preservation, Storage and Reactivation Instructions
  - 8.3.1.8.1           The Contractor must provide a WTS Preservation, Storage and Reactivation Instructions IAW CDRL WTS-ILS-209 at Appendix A2.25 to this ANNEX A1 (pg. 138) and its associated DID WTS-ILS-209 at Appendix A3.25 to ANNEX A1 (pg. 203).
- 8.3.1.9           WTS Stowage, Shipping and Handling Instructions
  - 8.3.1.9.1           The Contractor must provide a WTS Stowage, Shipping and Handling Instructions IAW CDRL WTS-ILS-210 at Appendix A2.26 to this ANNEX A1 (pg. 139) and its associated DID WTS-ILS-210 at Appendix A3.26 to this ANNEX A1 (pg. 205).
- 8.3.1.10          WTS Equipment Data Summary
  - 8.3.1.10.1          The Contractor must provide a WTS Equipment Data Summary IAW CDRL WTS-ILS-211 at Appendix A2.27 to this ANNEX A1 (pg. 140) and its associated DID WTS-ILS-211 at Appendix A3.27 to ANNEX A1 (pg. 207).



- 8.3.1.11 MEU, ASU and WSU Stowage Maps
  - 8.3.1.11.1 The Contractor must provide **MEU, ASU and WSU Stowage Maps** IAW CDRL WTS-ILS-212 at Appendix A2.28 to this ANNEX A1 (pg. 141), and its associated DID WTS-ILS-212 at Appendix A3.28 to this ANNEX A1 (pg. 209).
  - 8.3.1.11.2 Front Matter is not required for the MEU, ASU and WSU Stowage Maps (see 8.3.2).
- 8.3.1.12 WTU Process and Flow Diagrams
  - 8.3.1.12.1 The Contractor must provide a **WTU Process and Flow Diagrams** IAW CDRL WTS-ILS-213 at Appendix A2.29 to this ANNEX A1 (pg. 142), and its associated DID WTS-ILS-213 at Appendix A3.29 to this ANNEX A1 (pg. 210).
  - 8.3.1.12.2 Front Matter is not required for the WTU Process and Flow Diagrams (see 8.3.2).
- 8.3.1.13 WSU Operation, Maintenance and Parts Handbook
  - 8.3.1.13.1 The Contractor must provide a WSU Operation, Maintenance and Parts Handbook IAW CDRL WTS-ILS-214 at Appendix A2.30 to this ANNEX A1 (pg.143) and its associated DID WTS-ILS-214 at Appendix A3.30 to this ANNEX A1 (pg. 212).
- 8.3.2 Front Matter
  - 8.3.2.1 The Contractor must include the following in each Technical Publication (except where noted above):
    - 8.3.2.1.1 A cover page (a template will be provided by the Integrated Logistics Support Manager (ILSM) showing the date the publication was issued and the model/system designation;
    - 8.3.2.1.2 A List of Effective Pages;
    - 8.3.2.1.3 A Revision Control Table;
    - 8.3.2.1.4 A detailed Table of Contents and List of Figures & Tables; and
    - 8.3.2.1.5 An Acronyms and Abbreviations table
- 8.3.3 Supplementary Information
  - 8.3.3.1 The Contractor must provide supplementary information, in the portions of text that require it, with one or more of the following notices, in the order listed:
    - 8.3.3.1.1 **Danger.** The danger advisory will be used to draw attention to an extreme, violent and continuous hazard to life;

- 8.3.3.1.2      **Warning.** The warning advisory will be used to emphasize an operating or maintenance procedure, practice, condition, statement, which if not strictly observed, could result in injury to or death of personnel;
- 8.3.3.1.3      **Caution.** The caution advisory will be used to emphasize an operating or maintenance procedure, practice, condition, statement, which if not strictly observed, could result in maintenance, damage to or destruction of equipment, loss of mission effectiveness or long-term health hazards to personnel;
- 8.3.3.1.4      **Note.** The note will be used to point out a procedure, event or practice that it is desirable to highlight; and,
- 8.3.3.1.5      **Example.** The example will be used when required to clarify the preceding text.
- 8.3.4          The Contractor must provide the following certificates, for each accepted first-language Publication produced under ANNEX A1 paragraph 8.3, to the DND ILSM for approval:
  - 8.3.4.1          DND590 - Certificate of Validation; and
  - 8.3.4.2          DND591 - Certificate of Compliance.
- 8.3.5          Copyright - Foreground and Background Information
  - 8.3.5.1          The Contractor must incorporate the copyright symbol and one of the following notices into the Technical Publications, for all Foreground and Background information that is subject to copyright regardless of the form or medium upon which it is recorded:
    - 8.3.5.1.1          Intellectual Property (IP) in Foreground that belongs to the Contractor: “© (insert year) (insert IP owner). This deliverable was delivered under Contract no. XXXX and contains Foreground Intellectual Property (IP). Her Majesty the Queen in Right of Canada has a royalty-free and perpetual license to the IP and is permitted to use, reproduce, modify, and translate, including authorizing contractors to reproduce, modify, and translate, in whole or in part the deliverable for all government purposes including competitive tendering. Refer to the contract terms for additional details as required.”
    - 8.3.5.1.2          Intellectual Property (IP) in Background Information: “© (insert year) (insert IP owner). This deliverable was delivered under Contract no. XXXX and contains Background Intellectual Property (IP). Her Majesty the Queen in Right of Canada has a royalty-free and perpetual license to the Background IP for the purpose of exercising its rights in the Contract deliverables and Foreground Information. The license includes the rights to use, reproduce, modify, and translate this deliverable, and further includes the right to authorize others to use, reproduce, modify, and translate, in whole or in part the deliverable for all government purposes including competitive tendering. Refer to the contract terms for additional details as required.”

#### 8.3.6 Official Languages Requirements

- 8.3.6.1 The Contractor must deliver all Technical Publications in English and Canadian French (unless indicated above).
- 8.3.6.2 The Contractor must have all Technical Publications translated by certified translators, such as members of an authorized provincial association of translators, to ensure the quality of translated text.
- 8.3.6.3 The Contractor must ensure all translations are consistent with approved DND terminology. Approved terminology sources, in order of priority, are as follows:
  - 8.3.6.3.1 Canadian Oxford Dictionary for English and Le Petit Robert for French
  - 8.3.6.3.2 Termium, PSPC Translation Bureau Linguistic Data Bank (<http://www.termiumplus.gc.ca/>)
  - 8.3.6.3.3 The International Electrotechnical Commission's *Electropedia* Online Vocabulary (<http://www.electropedia.org/>)
  - 8.3.6.3.4 Terminology agreed-upon between the Contractor and DND ILSM, especially for terms specific to the WTS.
- 8.3.6.4 The Contractor must review and accept responsibility for the validity of all (both their own and all sub-Contractors) information found in the Technical Publications.
- 8.3.6.5 The Contractor must provide to the DND ILSM for approval, certificates of Translation Accuracy Check (DND2515) for each translated Publication produced under para 8.3 of ANNEX A1.

#### 8.4 Provisioning Documentation

- 8.4.1 The Provisioning Documentation (PD) lists and describes in detail all the procurable parts — regardless of source of supply — that make up the WTS as well as all specialized and specific items required to support the use and maintenance of the WTS. These include consumables required to operate and maintain the WTS (chemicals, specific lubricants, etc.) and specialized equipment (special tools, training aids, reusable transport and storage containers, etc.) specific to the WTS.
- 8.4.2 The PD allows the WTS's ILSM to plan and implement a sparing and support strategy. The PD will also help to determine the scope of repairs possible, thereby guiding the content of the WTS Maintenance Manual (see 8.3.1.3).
- 8.4.3 Additionally, the PD, especially the Provisioning Parts Breakdown (see 8.4.4.1), the matching WTS Illustrated Parts Manual (see 8.3.1.5) and the WSU Operation, Maintenance and Parts Handbook (see 8.3.1.13) will help future-proof the support of the WTS by providing the information necessary to the future LCMM of the WTS to address maintenance or supply issues that may occur outside of this contract that may not be addressed in the Publications supplied by it. It is therefore crucial that the PD be thorough and complete, with no "black box" assemblies present within. Further in-contract discussions related to the PD will take place during the ILS Kick-Off Meeting (see 3.6.4), the Initial Provisioning Guidance Conference (see 8.5), and the Initial Provisioning Conference (see 8.6).

8.4.4 The Contractor must prepare and deliver the following Provisioning Documentation:

8.4.4.1 Provisioning Parts Breakdown

8.4.4.1.1 The Contractor must provide a Provisioning Parts Breakdown IAW CDRL WTS-ILS-215 at Appendix A2.31 to this ANNEX A1 (pg.144) and its associated DID WTS-ILS-215 at Appendix A3.31 to this ANNEX A1 (pg.214).

8.4.4.2 Supplementary Provisioning Technical Documentation

8.4.4.2.1 The Contractor must provide Supplementary Provisioning Technical Documentation IAW CDRL WTS-ILS-216 at Appendix A2.32 to this ANNEX A1 (pg. 145) and its associated DID WTS-ILS-216 at Appendix A3.32 to this ANNEX A1 (pg. 216).

8.4.4.3 Special Tools and Test Equipment List

8.4.4.3.1 The Contractor must provide a Special Tools and Test Equipment List IAW CDRL WTS-ILS-217 at Appendix A2.33 to this ANNEX A1 (pg. 146) and its associated DID WTS-ILS-217 at Appendix A3.33 to this ANNEX A1 (pg.217).

8.4.4.4 Equipment Delivery Status Report

8.4.4.4.1 The Contractor must provide an Equipment Delivery Status Report IAW CDRL WTS-ILS-218 at Appendix A2.34 to this ANNEX A1 (pg.147), and its associated DID WTS-ILS-218 at Appendix A3.34 to this ANNEX A1 (pg. 219).

8.4.4.5 Materiel Identification Data Set

8.4.4.5.1 The Contractor must generate and provide a Materiel Identification Data Set (MIDS) for all serialized items IAW CDRL WTS-ILS-219 at Appendix A2.35 (page 148) to Annex A, and its associated DID WTS-ILS-219 at Appendix A3.35 (page 221) to this ANNEX A.

8.4.4.5.2 Should Canada exercise purchase options for serialized items, the Contractor must provide an updated MIDS for the new items only, under the same terms as 8.4.4.5.1 above.

## 8.5 Initial Provisioning Guidance Conference

8.5.1 The Contractor must hold and chair an Initial Provisioning Guidance Conference (IPGC).

8.5.1.1 The purpose of the IPGC is to clarify and explain the requirements of the Provisioning Documentation referred to in the contract in preparation for the Initial Provisioning Conference.

8.5.1.2 The IPGC team will normally consist of no more than two (2) DND representatives and should last no longer than one (1) day.

8.5.2 Refer to Meeting Documentation requirements found at ANNEX A1 para. 3.6.6.

## 8.6 Initial Provisioning Conference

- 8.6.1 The Contractor must hold and chair an Initial Provisioning Conference (IPC). The IPC will occur after the Contractor has delivered Provisioning Documentation (PD) suitable for a successful IPC as determined by the DND ILS Manager.
- 8.6.2 The purpose of an IPC is to allow DND to verify that the Provisioning Documentation reflects the current and complete configuration of the equipment being procured by comparing it against the Illustrated Parts Manual and Supplementary Provisioning Technical Documentation. It is also used to select the range of spares required to support the system during an initial period of service of two (2) years. For this purpose, the Contractor must provide:
  - 8.6.2.1 A suitable conference facility with projector(s), and three (3) unrestricted, hard-wired, broadband Internet access points through Ethernet (RJ45) connections;
  - 8.6.2.2 Engineering and product support assistance;
  - 8.6.2.3 The equipment for physical examination;
  - 8.6.2.4 Engineering, reliability and maintainability data; and
  - 8.6.2.5 Modification data, if applicable.
- 8.6.3 Refer to Meeting Documentation requirements found at ANNEX A1 para. 3.6.6.

## 8.7 Identification Plates

- 8.7.1 The Contractor must provide Identification Plates – Design Template & Populated Designs IAW CDRL WTS-ILS-220 at Appendix A2.35 to this ANNEX A1 (pg. 148) and its associated DID WTS-ILS-220 at Appendix A3.36 to this ANNEX A1 (pg. 222).
- 8.7.2 The Contractor must attach Identification Plates to the following components for ease of tracking within the Canadian Forces Supply System:
  - 8.7.2.1 Prime Equipment;
  - 8.7.2.2 Wiring harnesses and cables;
  - 8.7.2.3 Spares;
  - 8.7.2.4 STTE;
  - 8.7.2.5 Training Equipment;
  - 8.7.2.6 Transportation, Shipping, Storage Containers that are not single-use;
  - 8.7.2.7 Support Equipment (excluding common tools), and
  - 8.7.2.8 Automatic Test Equipment.

## 8.8 Controlled & Non-Controlled Goods List

- 8.8.1 Contractor must provide the Controlled & Non-Controlled Goods List with the Demilitarization Code (DMC) IAW CDRL WTS-ILS-221 at Appendix A2.37 to this ANNEX A1 (pg. 150) and its associated DID WTS-ILS-221 at Appendix A3.37 to this ANNEX A1 (pg. 223).

## 8.9 Identification Labels for Storage and Shipment, and Packaging Codes

- 8.9.1 The Contractor must supply all parts and equipment, packaged and packed as per D-LM-008-001/SF-001 following:
  - 8.9.1.1 Level B Limited Military Package;
  - 8.9.1.2 Level B Limited Military Pack;
- 8.9.2 The Contractor must label all packaging, produced under 8.9.1 above, as per D-LM-008-002/SF-001, using D-LM-008-011/SF-001 to prepare the required codes for packaging and preservation.
- 8.9.3 The Contractor must provide Identification Labels for Storage and Shipment, and Packaging Codes IAW CDRL WTS-ILS-222 at Appendix A2.38 to this ANNEX A1 (pg. 151), and its associated DID WTS-ILS-222 at Appendix A3.38 to this ANNEX A1 (pg. 225).

## 8.10 List of Items to be Supported (for Support SOW)

- 8.10.1 The Contractor must provide a List of Items to be Supported IAW CDRL WTS-ILS-223 at Appendix A2.39 to this ANNEX A1 (pg. 152), and its associated DID WTS-ILS-223 at Appendix A3.39 to this ANNEX A1 (pg. 227).

## 8.11 Training Sessions

- 8.11.1 The Contractor must provide the Training Session(s) after delivery of the first WTS.
  - 8.11.1.1 Scheduling of the Training Session(s) will be done after contract award, and jointly planned between the DND and the Contractor.
- 8.11.2 The Contractor must provide Training Session(s) consisting of: (Note: Quantity and location of sessions described in the deliverables table)
  - 8.11.2.1 Operator Training Session (train-the-trainer type) for one (1) to 10 students per course, with a course length of four (4) days.
- 8.11.3 The Contractor must provide the Training Session(s) in English. The instructor(s) must be bilingual or have assistance from a bilingual Subject Matter Expert in order to understand and answer questions from students in both official languages; English and Canadian French.
- 8.11.4 The Contractor must provide Instructor(s) that are Subject Matter Experts on the WTS equipment being provided.
- 8.11.5 The Contractor must use the approved and accepted **WTS Operator Training Package** for the Training Session(s), and course lessons must follow the content found within the training package.
- 8.11.6 The Contractor must provide the course material listed within the **WTS Operator Training Package** CDRL as being 'Issued to Students at Training Session(s)', and all course material and handouts must be provided in English and Canadian French.

8.11.7 The Contractor must use the WTS(s) and additional training material identified in the **WTS Operator Training Package Instructor Lesson Plan**, for the Training Session.

8.11.7.1 The Contractor must provide the additional training material that is listed in the **WTS Operator Training Package Instructor Lesson Plan** as 'supplied by the Contractor'.

8.11.7.2 The Contractor must set up the WTS(s) and additional training material that is listed in the **WTS Operator Training Package Instructor Lesson Plan** as 'supplied by the Contractor', for the Training Session.

## 8.12 Warranty Support Plan

8.12.1 The Contractor must provide a **Warranty Support Plan** IAW CDRL WTS-ILS-224 at Appendix A2.40 to this ANNEX A1 (pg. 153), and its associated DID WTS-ILS-224 at Appendix A3.40 to this ANNEX A1 (pg. 234).

## 8.13 Data Deliverable Format

8.13.1 Unless otherwise specified as a specific requirement, the Contractor must deliver all of the soft copies of data deliverables, in formats compatible with the office software currently in use by the DND as listed:

8.13.1.1 Microsoft (MS) Windows 7 Enterprise Operating System (OS), Service Pack 1;

8.13.1.2 MS Internet Explorer (IE) 9.0 with 256 Bit Encryption;

8.13.1.3 MS Office Professional Plus 2013 (Word, Excel, Access, PowerPoint and Outlook);

8.13.1.4 Adobe Acrobat X; and

8.13.1.5 WinZip 8.1 SR-1;

## **9.0 ENVIRONMENTAL HEALTH AND SAFETY**

### **9.1 General**

- 9.1.1 Substances listed under Prohibition of Certain Toxic Substances Regulations (SOR/2012-285) must not be incorporated in any part of the equipment.
- 9.1.2 Asbestos and asbestos containing products must not be incorporated in any part of the equipment, in accordance with the Prohibition of Asbestos and Products containing Asbestos Regulations (SOR/2018-196).
- 9.1.3 Halocarbons that are incorporated into the design of equipment, must comply with the Federal Halocarbon Regulations (SOR/2003-289) and the Ozone-depleting Substances and Halocarbon Alternatives Regulations (SOR/2016-137). If such substances must be used, the Contractor must:
  - 9.1.3.1 Inform the Technical Authority by identifying the substance(s).
  - 9.1.3.2 Identify the specific location within the equipment and its concentration.
- 9.1.4 The Mercury that is present in any part of the equipment, must comply with the mercury content limit as identified in the Products Containing Mercury Regulations (SOR/2014-254). If such substances must be used, the Contractor must:
  - 9.1.4.1 Inform the Technical Authority by identifying the substance(s).
  - 9.1.4.2 Identify the specific location within the equipment and its concentration.
- 9.1.5 Polychlorobiphenyl (PCBs) that are present in any part of the equipment, must comply with the PCB Regulations (SOR/2008-273). If such substances must be used, the Contractor must:
  - 9.1.5.1 Inform the Technical Authority by identifying the substance(s).
  - 9.1.5.2 Identify the specific location within the equipment and its concentration.
- 9.1.6 The Department is committed to the Federal programs to reduce and eliminate emissions from toxic substances. Contractors must identify and submit justifications for the use of all regulated products and those containing substances identified within the National Pollutant Release Inventory (NPRI, <https://www.canada.ca/en/environment-climate-change/services/national-pollutant-release-inventory/substances-list/threshold.html>) and List of Challenge Substances (<https://www.canada.ca/en/health-canada/services/chemical-substances/challenge/list.html>), and also the Toxic substances list (those identified within Schedule 1 of the Canadian Environmental Protection Act: <https://www.canada.ca/en/environment-climate-change/services/canadian-environmental-protection-act-registry/substances-list/toxic/schedule-1.html>) to the technical authority for approval.
- 9.1.7 Canada Labour Code, Part II dictates that the least hazardous materials should be used at the workplace. Therefore, the Contractor is to strive to use the least hazardous product that meets the requisite performance requirements.



- 9.1.8 The Contractor must incorporate Environmental Health and Safety (EHS) warnings and instructions in direct relation of the EHS risks presented in the contents into documentation.

## **9.2 Environmental Management System**

- 9.2.1 The Contractor must have a management system in place to control environmental, health and safety impacts resulting from their activities, products and services.
- 9.2.2 The Contractor must have a formalized set of procedures and control measures in place to achieve conformance with the requirements of this Work, while ensuring environmental, health and safety protection and pollution prevention.
- 9.2.3 The Contractor must also make reasonable effort to monitor that all subcontractors are in compliance with applicable environmental laws and regulations.

## **9.3 EHS Packaging Labels and SDS**

- 9.3.1 The Contractor must label and ship goods falling within the Hazardous Products Act, R.S.C. 1985, C. H-3 and regulation(s) there under, in accordance with the said Act and regulation(s).
  - 9.3.1.1 The Contractor must clearly identify the contents of the hazardous material with labels, and the SDS must explain what those hazards are.

## **9.4 Equipment Environmental Assessment**

- 9.4.1 The Contractor must provide an Equipment Environmental Assessment (EEA) IAW CDRL WTS-ILS-225 at Appendix A2.41 (page 154) to ANNEX A1, and its associated DID WTS-ILS-225 at Appendix A3.41 (page 236) to this ANNEX A1.
- 9.4.2 The Contractor must include appropriate warnings and instructions to mitigate these risks in technical documents.
- 9.4.3 The Contractor may provide confidential information in a separate document.

## **10.0 TECHNICAL REQUIREMENTS**

### **10.1 Overview**

10.1.1 The Contractor must comply with all specified requirements for each component of the WTS, stated in:

10.1.1.1 A1.0 APPENDIX: WTS TECHNICAL SPECIFICATION

A1.0 APPENDIX: WTS TECHNICAL SPECIFICATION		VERIFICATION METHOD	VERIFICATION PHASE
A1.1 System Requirements			
A1.1.1	General		
A1.1.1.1	The WTS must be a self-contained system comprising all the components and tools necessary for the transport, setup, operation and teardown of the system.		
A1.1.1.2	The WTS must allow all CAF personnel that fall within the 5th to 95th percentile range outlined in the DCIEM Report 98-CR-15 for CAF personnel, to carry out all functions and duties related to operating and maintaining the WTS.		
A1.1.1.3	The WTS must consist of the following major components and is further described in detail under section A1.2:		
A1.1.1.3.1	Water Treatment Unit (WTU);		
A1.1.1.3.2	Miscellaneous Equipment Unit (MEU);		
A1.1.1.3.3	Water Storage Units (WSU);		
A1.1.1.3.4	Arctic Sustainment Unit (ASU); and		
A1.1.1.3.5	Trailer.		
A1.1.1.4	The WTS is expected to have an in-service duration of 20 years.		
A1.1.2	Certification		FIRST PRODUCTION ARTICLE
A1.1.2.1	The WTS electrical components and equipment must be certified Canadian Standards Association (CSA) or equivalent national/international standard.		

**APPENDIX A  
TO W8476-216378  
REVISED 24 MARCH 2022**

A1.1.2.2	The WTS plumbing components, materials and equipment that comes in contact with potable water must comply with American National Standards Institute / National Sanitation Foundation (ANSI/NSF) Standard 61.	CERTIFICATION	FIRST PRODUCTION ARTICLE
A1.1.3	<b>Modes of Employment</b>		
A1.1.3.1	<b>Primary</b>		
A1.1.3.1.1	The WTU and MEU are mounted on the Trailer for both transport and operation. Operation is defined as producing potable water.	DEMO	FIRST PRODUCTION ARTICLE
A1.1.3.2	<b>Secondary</b>		
A1.1.3.2.1	The WTU and MEU are transported by means other than the Trailer. The WTU and MEU are off-loaded from its transport and operated while on the ground. Operation is defined as producing potable water.		
A1.1.3.3	<b>Cold Weather Operations</b>		
A1.1.3.3.1	For cold weather operations, units may require some or all of the equipment found within the ASU. Units not equipped with an ASU will receive an ASU through the CAF supply system when needed. The ASU is intended for logistical storage and movement of the cold weather components.	CERTIFICATION	FIRST PRODUCTION ARTICLE
A1.1.3.4	<b>Humanity/Domestic Operations</b>		
A1.1.3.4.1	For International Humanity or National Domestic operations where delivery and distribution of water to the local population is the predominant mission, the WSU may be used.		
A1.1.4	<b>Set up</b>		
A1.1.4.1	In its primary mode of employment, two operators must be able to set up the system within sixty (60) minutes after arrival at the selected water source.	DEMO	FIRST PRODUCTION ARTICLE

**APPENDIX A**  
**TO W8476-216378**  
**REVISED 24 MARCH 2022**

A1.1.4.2	Where conditions warrant the use of the ASU with the WTS, two (2) operators must be able to set up the system within two (2) hours after arrival at the selected water source.	DEMO	FIRST PRODUCTION ARTICLE
A1.1.4.3	Set up is defined as the system fully ready to pump water from the raw water source into the WTU and does not include run-up time associated with flushing out filter systems prior to producing potable water.		
A1.1.5	<b>Operation</b>		
A1.1.5.1	Once set up, the sustained operation of the system in its primary mode of employment must be achievable by one qualified operator.	DEMO	FIRST PRODUCTION ARTICLE
A1.1.5.1.1	Operation is defined as at least twenty (20) consecutive hours of water production and no more than four (4) hours of maintenance in a twenty-four (24) hour period.		
A1.1.6	<b>Teardown</b>		
A1.1.6.1	In its primary mode of employment and the system producing potable water, two operators must be able to tear down and prepare the system for a road move, including attaching the trailer to its prime mover in sixty (60) minutes.	DEMO	FIRST PRODUCTION ARTICLE
A1.1.6.2	Where conditions warrant the use of the ASU with the WTS, two (2) operators must be able to tear down and prepare the system for a road move, including attaching the trailer to its prime mover in two (2) hours.		
A1.1.7	<b>Transportability</b>		
A1.1.7.1	<b>Road Transportability</b>		
A1.1.7.1.1	In its primary mode of employment, the prime movers of the system are the MSVS Standard Military Pattern (SMP) (refer to references C-30-K77-000/MA-000 and C-30-K77-000/MB-000) and the MSVS Militarized Commercial off the Shelf (MILCOTS) truck (refer to reference C-32-F40-000/MB-Z01).	ANALYSIS	FIRST PRODUCTION ARTICLE

**APPENDIX A**  
**TO W8476-216378**  
**REVISED 24 MARCH 2022**

A1.1.7.1.2	The WTU, MEU, WSU and ASU must be transportable by the MSVS Pallet Load System (PLS) Trailer (8'x20') and commercial low-bed Trailers using the PLS or mounted on the flat deck secured in place by ISO twist locks.	ANALYSIS	FIRST PRODUCTION ARTICLE
A1.1.7.1.3	In its primary mode of employment, the system must have emergency towing and recovery facilities that comply with STANAG 4478 ED 1.	INSPECTION	FIRST PRODUCTION ARTICLE
A1.1.7.1.4	In its primary mode of employment, track width must not exceed or be less than the track width limits of the two (2) prime movers.		
A1.1.7.1.5	The WTS tongue weight must be between 10% and 15% of the GTW, regardless of the percentage laden.	ANALYSIS	FIRST PRODUCTION ARTICLE
A1.1.7.2	<b>Rail Transportability</b>	ANALYSIS	FIRST PRODUCTION ARTICLE
A1.1.7.2.1	In its primary mode of employment, the system must be transportable by rail in Canada as specified in MIL-STD-1366E, Chapter 5.2.		
A1.1.7.3	<b>Sea Transportability</b>	ANALYSIS	FIRST PRODUCTION ARTICLE
A1.1.7.3.1	In its primary mode of employment, the system must be transportable both above deck and below deck on military and commercial cargo vessels, including Roll-on Roll-off (RORO) and Lift-on Lift-off (LOLO).		
A1.1.7.4	<b>Air Transportability</b>	ANALYSIS	FIRST PRODUCTION ARTICLE
A1.1.7.4.1	The system must be transportable in the CC-177 Globemaster III and the CC-130 Hercules transport aircraft (secondary mode of operation (dismounted) must prevail due to the 9' height limitation).		
A1.1.7.4.2	The WTU, MEU, WSU and ASU must each be capable of being transported under CH-147 Chinook helicopter on a sling.		
A1.1.8	<b>Tie-Down and Lifting Points</b>		

A1.1.8.1	In its primary mode of employment, the system must have tie-down points as per STANAG 4062 to permit securing for all means of transportation in A1.1.7.	INSPECTION	FIRST PRODUCTION ARTICLE
A1.1.8.2	In its primary mode of employment, the system must have lifting points to permit lifting and loading for all means of transportation in A1.1.7 Lifting points must be installed on the same horizontal plane and allow for a balanced (horizontal) load to facilitate lifting.		
A1.1.8.3	Stencil or decal markings must be applied at each lifting and tie-down point, indicating their intended use and any limitations.		
A1.1.8.4	The Trailer must meet the Interface Standards for Lifting and Tie-down Provisions IAW MIL-STD-209 (Revision K).		
A1.1.8.5	The Trailer must be equipped with permanent, integrally attached tie-downs so that the Trailer with full payload of WTU and MEU mounted, can be tied down for transport.		
<b>A1.2 WTS Components Requirements</b>			
A1.2.1	<b>Water Treatment Unit (WTU)</b>	INSPECTION	FIRST PRODUCTION ARTICLE
A1.2.1.1	The WTU is contained in a weatherproof and insulated enclosure as described in A1.2.1.3		
A1.2.1.2	The WTU houses the Water Filtration and Treatment System, the Electrical System, the Automated Control System and an Internal Heater.		
A1.2.1.3	Enclosure	INSPECTION	FIRST PRODUCTION ARTICLE
A1.2.1.3.1	The weatherproof and insulated Enclosure is based on a QUADCON ISO container. The common ISO container requirements are outlined in A1.3.4		
A1.2.1.3.2	The Enclosure must have an integral external ladder to enable access to the roof of the Enclosure.		

A1.2.1.3.3	INSPECTION	FIRST PRODUCTION ARTICLE
The Enclosure must contain one (1) Fire Extinguisher NSN 4210-21-908-1048 (or equivalent), which is mounted on the wall using mounting brackets, NSN 4210-21-886-3387 (or equivalent), in the interior of the Enclosure near one of the main access panels or doors.		
A1.2.1.3.4		
The Enclosure must contain two (2) external weatherproof 120 VAC duplex receptacles of the GFCI NEMA 5-20RA type with covers.		
A1.2.1.3.5		
The Enclosure must contain an easily accessible inner Holder for the WTS Operator Manual (see 8.3.1.1) and WTU Operator Quick Reference Card (see 8.3.1.2) which must be of adequate size to accept both documents and must:		
A1.2.1.3.5.1		
Be rigid;		
A1.2.1.3.5.2		
Be transparent;		
A1.2.1.3.5.3		
Have a partially-open bottom or drain holes so no water can accumulate; and		
A1.2.1.3.5.4		
Be located on a flat vertical surface that is not a door or an access panel.		
A1.2.1.3.6		
The Enclosure must contain an easily accessible inner Holder for the WTU Process and Flow Diagrams (see 8.3.1.12), which must be of adequate size to accept the Process and Flow Diagrams and must:		
A1.2.1.3.6.1		
Be rigid;		
A1.2.1.3.6.2		
Be transparent;		
A1.2.1.3.6.3		
Have a partially-open bottom or drain holes so no water can accumulate;		
A1.2.1.3.6.4		
Be located on a flat vertical surface that is not a door or an access panel;		



A1.2.1.3.7	Access Panels and Doors	INSPECTION	FIRST PRODUCTION ARTICLE
A1.2.1.3.7.1	The Enclosure must incorporate doors and access panels to allow the operation and maintenance of all systems housed in the WTU.		
A1.2.1.3.7.2	The doors and access panels must be:		
A1.2.1.3.7.2.1	Lockable;		
A1.2.1.3.7.2.2	Weathertight;		
A1.2.1.3.7.2.3	Have hold-open fixtures and TIR securing gadgets (i.e. provisions for padlocking and custom sealing, locking mechanisms, tamper-evident devices).	INSPECTION	FIRST PRODUCTION ARTICLE
A1.2.1.3.8	Lighting		
A1.2.1.3.8.1	The Enclosure must have white interior LED lighting of 540 lux illuminance.		
A1.2.1.3.8.2	The Enclosure must have red blackout lighting for operations in a tactical military scenario.		
A1.2.1.3.8.3	Lighting must be controlled by a three-way switch which enables the operator to select off, white light or red blackout lighting.		
A1.2.1.3.8.3.1	The switching configuration must allow the user to select either lighting modes directly from the "OFF" position, to ensure that the operator does not have to switch through the white light mode to get to blackout mode, flashing the white LEDs in a tactical situation.		
A1.2.1.4	<b>Water Filtration and Treatment System</b>		
A1.2.1.4.1	<b>General</b>		

A1.2.1.4.1.1	The Water Filtration and Treatment System comprises the Plumbing, Clean in Place System, Pre-treatment Module, the Reverse Osmosis Module and the Chlorine Injection System.		
A1.2.1.4.1.2	The Water Filtration and Treatment System must operate in the following modes of operation:		
A1.2.1.4.1.2.1	Pre-treatment, In-process Single Pass Reverse Osmosis and Chlorine Injection.		
A1.2.1.4.1.2.2	Pre-treatment, In-process Double Pass Reverse Osmosis and Chlorine Injection.		
A1.2.1.4.2	<b>Plumbing</b>		
A1.2.1.4.2.1	The WTS Plumbing must meet the National Plumbing Code (NPC) of Canada (see Reference NPC 2015).		
A1.2.1.4.2.2	Stainless steel type 904L or 316L must be used for pipes and bends for welding and for similar parts without crevices.		
A1.2.1.4.2.3	Where crevices occur such as at flange connections, in valves and pumps, stainless steel type 254 SMO or similar with greater than or equal to 3% Mo must be used.		
A1.2.1.4.2.4	Piping must be pickled and passivated in order to protect against chloride attack.		
A1.2.1.4.2.5	Backing gas must be used when welding to avoid the weld oxide film forming a base for crevice corrosion.		
A1.2.1.4.2.6	Water flow velocity must be optimized (depending on the stainless steel type and applicable process) in order to promote the forming and maintenance of a passive film.		
A1.2.1.4.2.7	The design must avoid having areas where water can pool and stagnate and thus risk contamination.		
		CERTIFICATION	FIRST PRODUCTION ARTICLE

A1.2.1.4.2.8	All pipes must be self-draining.			FIRST PRODUCTION ARTICLE
A1.2.1.4.3	<b>Clean In Place System</b>			
A1.2.1.4.3.1	The Clean in Place System enables the cleaning, sanitization and preservation of the Water Filtration and Treatment System by providing a means to circulate chemical cleaning solutions, including citric acid and chlorine, through the Water Filtration and Treatment System.			
A1.2.1.4.3.2	When chlorine is used as part of the Clean in Place process and the Reverse Osmosis Membranes being used are susceptible to chlorine, the Reverse Osmosis Module must be physically isolatable to prevent the chlorine from coming into contact with the Reverse Osmosis membranes.		INSPECTION	FIRST PRODUCTION ARTICLE
A1.2.1.4.3.3	A drain valve must be installed at the lowest point to allow complete drainage of the cleaning solution following the sanitization process.			
A1.2.1.4.4	<b>Pre-treatment Module</b>			
A1.2.1.4.4.1	General			
A1.2.1.4.4.1.1	The Pre-treatment Module comprises the Intake Strainer Assembly, Multi Stage Mechanical Filtration System, and De-Chlorination System.			
A1.2.1.4.4.1.2	The role of the Pre-treatment Module is to pre-treat source water in order to maximize the efficiency of the Reverse Osmosis Module and to maximize the life of the Reverse Osmosis membranes by minimizing fouling, scaling and Reverse Osmosis membrane degradation.		INSPECTION	FIRST PRODUCTION ARTICLE
A1.2.1.4.4.2	Intake Strainer Assembly			

A1.2.1.4.4.2.1	The Intake Strainer Assembly consists of a quick-connect and disconnect intake strainer and a floatation buoy or collar.	INSPECTION	FIRST PRODUCTION ARTICLE
A1.2.1.4.4.2.2	The Intake Strainer Assembly design must follow the Department of Fisheries and Oceans (DFO) Freshwater Intake End-of-Pipe Fish Screen Guideline (see the References, DFO / 5080).		
A1.2.1.4.4.2.3	The Intake Strainer Assembly will be stored and transported in the MEU.		
A1.2.1.4.4.3	Mechanical Filtration System	TEST	FIRST PRODUCTION ARTICLE
A1.2.1.4.4.3.1	The Mechanical Filtration System must take feed water that has passed through the intake strainer and prepare the water for the Reverse Osmosis Module.		
A1.2.1.4.4.3.2	As fouling is expected to be one of the major challenges facing the system, a design approach that uses successive contaminant size exclusion must be employed to prevent fouling of downstream filters in the series.		
A1.2.1.4.4.3.3	All filtration technologies forming part of the Mechanical Filtration System must be self-cleaning through an automated back-pulsing or backwash capability that is initiated by a performance degradation.		
A1.2.1.4.4.3.4	The following types of filtration technologies will not be considered in the Mechanical Filtration System:		
A1.2.1.4.4.3.4.1	Sedimentation tanks, including chemical additives;		
A1.2.1.4.4.3.4.2	Disposable filters and cartridges;		
A1.2.1.4.4.3.4.3	Ozone systems; and		
A1.2.1.4.4.3.4.4	In process chemical injection		
A1.2.1.4.4.3.5	Physical Access		

<p>A1.2.1.4.4.3.5.1 The physical layout of the Mechanical Filtration System must allow unrestricted access to both the feed water and brine ends of each and every potential system being considered. This will allow for loading, unloading and troubleshooting of those elements.</p>	INSPECTION	FIRST PRODUCTION ARTICLE
<p>A1.2.1.4.4.3.5.2 Sample points must be incorporated to facilitate localizing and troubleshooting potential problems.</p>		
<p>A1.2.1.4.4.4 De-Chlorination System</p>		
<p>A1.2.1.4.4.4.1 The De-Chlorination System must reduce free chlorine in the source water down to the required concentration to prevent degradation of the Reverse Osmosis membranes from a water source with a chlorine level of up to and including 3 PPM.</p>	CERTIFICATION	FIRST PRODUCTION ARTICLE
<p>A1.2.1.4.4.4.2 If Reverse Osmosis membranes are used that are not susceptible to degradation from a water source with a chlorine level of 3 PPM, a De-Chlorination System is not necessary.</p>		
<p>A1.2.1.4.4.4.3 The De-Chlorination System must have an electronically controlled bypass with a manual backup when the system is not needed.</p>		
<p>A1.2.1.4.4.4.4 The absence of chlorine must be automatically monitored downstream of the De-Chlorination System.</p>	INSPECTION	FIRST PRODUCTION ARTICLE
<p>A1.2.1.4.4.4.4.1 In the event that the level of chlorine exceeds the threshold of the level which would cause irreparable damage to the Reverse Osmosis membranes, the High-Pressure Pump must be automatically shut off.</p>		
<p>A1.2.1.4.5 <b>Reverse Osmosis Module</b></p>		
<p>A1.2.1.4.5.1 The Reverse Osmosis (RO) Module must perform membrane water filtration process in the Ionic Range of the Filtration Spectrum between 0.0001 micron and 0.001 micron (Hyperfiltration).</p>	CERTIFICATION	FIRST PRODUCTION ARTICLE

**APPENDIX A**  
**TO W8476-216378**  
**REVISED 24 MARCH 2022**

A1.2.1.4.5.2	The RO pressure vessels must be corrosion proof and tested at 1.5 times the working pressure of the vessel.	CERTIFICATION	FIRST PRODUCTION ARTICLE
A1.2.1.4.5.3	The RO membranes must resist bacterial growth and reduce hydrolysis effects at pH extremes.		
A1.2.1.4.5.4	The RO Module must enable the Reverse Osmosis membranes to remain installed for seventy-two (72) hours when the WTS is not producing water without the need for removal and preservation of the Reverse Osmosis membranes.	INSPECTION	FIRST PRODUCTION ARTICLE
A1.2.1.4.5.5	High Pressure Pump	ANALYSIS	FIRST PRODUCTION ARTICLE
A1.2.1.4.5.5.1	The HPP must be made of Duplex 2205 and Super Duplex 2507 stainless steel and carbon reinforced PEEK for high corrosion resistance and strength.		
A1.2.1.4.5.5.2	The HPP must operate 8,000 hours before maintenance is required.		
A1.2.1.4.5.5.3	In the event of a loss of water pressure, the HPP must have an automated safety shut-off.		
A1.2.1.4.5.5.4	No oil lubrication must be required for the HPP.		
A1.2.1.4.6	<b>Chlorination Injection System</b>	CERTIFICATION	FIRST PRODUCTION ARTICLE
A1.2.1.4.6.1	Chlorine must be added to the permeate water to prevent microbiological contamination while permeate is stored and distributed after being processed through the Water Filtration and Treatment System.		
A1.2.1.4.6.2	The Chlorination Injection System must be an automated system that maintains a constant injection rate into the permeate water at $\geq 0.5$ mg/L and $\leq 2.0$ mg/L.	INSPECTION	
A1.2.1.4.6.3	The injection rate must be pre-selectable by the operator.		

**APPENDIX A  
TO W8476-216378  
REVISED 24 MARCH 2022**

A1.2.1.4.6.4	A sample point must be located prior to the Chlorination Injection System so that a sample of the permeate water without chlorine can be taken to conduct a present-absence test for microbiological contaminants.		FIRST PRODUCTION ARTICLE
A1.2.1.5	<b>Electrical System</b>		FIRST PRODUCTION ARTICLE
A1.2.1.5.1	Electrical components of the WTU must have an Ingress Protection (IP) rating of IP55.	CERTIFICATION	FIRST PRODUCTION ARTICLE
A1.2.1.5.2	<b>Generator Set</b>		FIRST PRODUCTION ARTICLE
A1.2.1.5.2.1	The Generator Set, as primary power source must provide power, during continuous operation to the WTS under the worst-case load conditions (assumed to be cold weather operations when all cold weather ASU components are required and the system is operating in double pass reverse osmosis) with a 20% safety margin.	ANALYSIS	FIRST PRODUCTION ARTICLE
A1.2.1.5.2.2	The Generator Set must use an Absorbed Glass Mat (AGM) maintenance-free battery.	INSPECTION	FIRST PRODUCTION ARTICLE
A1.2.1.5.2.3	The Generator Set must function on commercial diesel fuel No.2 conforming to ASTM D975-15A as well as NATO F-34 (JP-8) fuel.	TEST	FIRST PRODUCTION ARTICLE
A1.2.1.5.2.4	A six (6) meter long exhaust hose must be provided to funnel the exhaust away from the WTU. The exhaust hose must be stored in the MEU when not in use.	INSPECTION	FIRST PRODUCTION ARTICLE
A1.2.1.5.2.5	Integral Fuel Tank		
A1.2.1.5.2.5.1	The Integral Fuel Tank (IFT) must supply the fuel needed by the Generator Set to operate for eight (8) hours without refueling under worst-case loading conditions as outlined in A1.2.1.5.2.1.	TEST	FIRST PRODUCTION ARTICLE

A1.2.1.5.2.5.2	The IFT must have a liquid level limit control device and spill containment.	INSPECTION	FIRST PRODUCTION ARTICLE
A1.2.1.5.2.5.3	The IFT must be fully drainable by gravity.		
A1.2.1.5.2.5.4	The IFT must have a valve to remove water settled at the bottom of the fuel tank.		
A1.2.1.5.2.5.5	The operator must be able to add fuel to the fuel tank in both the primary and secondary mode of employment of the WTS.		
A1.2.1.5.2.6	Externally-mounted fuel fittings must be incorporated to enable connection to an external fuel source.		
A1.2.1.5.2.7	The Generator Set and IFT must be separated from the remainder of the WTU by a fire-resistant wall. .		
A1.2.1.5.2.8	The floor under the Generator Set and IFT must capture spilled liquids and fuel and subsequently allow the controlled drainage of spilled liquids and fuel.		
A1.2.1.5.3	<b>Electrical Distribution Panel</b>		
A1.2.1.5.3.1	The Electrical Distribution Panel (EDP) must monitor and control all power circuits.	INSPECTION	FIRST PRODUCTION ARTICLE
A1.2.1.5.3.2	Power circuits must be protected by automatic Ground Fault Circuit Interrupter(s) (GFCI).		
A1.2.1.5.3.3	The EDP must have Fault Indicators (visual and audible) to indicate malfunctions of the electrical system through the use of warning lights and alarms.		
A1.2.1.5.3.4	The EDP must have circuit breakers to allow isolation of equipment in the event of failure.		
A1.2.1.5.3.5	The EDP must have Battery voltage level indicator.		



A1.2.1.5.3.6	The EDP must have an emergency shut-off switch for the Generator Set.		
A1.2.1.5.4	<b>External Power Connection</b>		
A1.2.1.5.4.1	The Electrical System must have the capability to connect to a North American external power grid and must have additional capability to connect to a European external power grid.		
A1.2.1.5.4.2	Fifteen (15) m long power cable assemblies must be provided for external power connection.		
A1.2.1.5.4.3	The power cable assemblies must have Hubbell connectors (4P5W, IP67): male on one end and female on the other end.		
A1.2.1.5.4.4	The electrical power transfer between the Generator Set and external power must be performed manually and automatically.		
A1.2.1.5.4.5	A 4-pole transfer switch (switched-neutral system) must be implemented.		
A1.2.1.5.4.6	Voltage selection must be performed manually and automatically.		
A1.2.1.5.4.7	The phase sequence protection or reverse phase monitoring with Fault Indicators (visual and audible) must be implemented.		
A1.2.1.5.5	<b>Grounding Rods</b>		
A1.2.1.5.5.1	The Electrical System must be equipped with Grounding Rod(s) and the required cabling to connect them back to the Enclosure.		
A1.2.1.5.5.2	The Grounding Rod(s) configuration must be IAW MIL-STD-188-124B.		
A1.2.1.6	<b>Automated Control System</b>		
		INSPECTION	FIRST PRODUCTION ARTICLE
		INSPECTION	FIRST PRODUCTION ARTICLE

A1.2.1.6.1	The WTU must have an Automated Control System to enable the production of potable water without continuous direct intervention by the operator once the WTS has been set up for operation.	DEMO	FIRST PRODUCTION ARTICLE
A1.2.1.6.2	The Automated Control System must have a digital interface that meets the following requirements:		
A1.2.1.6.2.1	Must have a sun-readable screen;		
A1.2.1.6.2.2	Buttons or touch screen must be activated by an operator wearing CAF winter gloves; and		
A1.2.1.6.2.3	Language must be Canadian French and English, selectable by the operator.		
A1.2.1.6.3	The digital interface must allow the operator to:	DEMO	FIRST PRODUCTION ARTICLE
A1.2.1.6.3.1	Program the desired mode of operation as per A1.2.1.4.1.2 (single pass or double pass RO);		
A1.2.1.6.3.2	Set parameters for water production;		
A1.2.1.6.3.3	Monitor the status of the Water Filtration and Treatment System; and		
A1.2.1.6.3.4	Input changes to the parameters for water production.		
A1.2.1.6.4	The digital interface must display the following operational information:	DEMO	FIRST PRODUCTION ARTICLE
A1.2.1.6.4.1	Intake Water temperature;		
A1.2.1.6.4.2	Water TDS (intake, permeate and concentrate);		
A1.2.1.6.4.3	Water turbidity in-process control (intake, pre-RO / post-RO);		
A1.2.1.6.4.4	Water conductivity (pre-RO / post-RO);		

A1.2.1.6.4.5	Chlorine levels (post de-chlorination);	DEMO	FIRST PRODUCTION ARTICLE
A1.2.1.6.4.6	Water pressures;		
A1.2.1.6.4.7	Water flow rates.		
A1.2.1.6.5	The digital interface must provide specific warnings to the operator when abnormal operating conditions arise, including:		
A1.2.1.6.5.1	WTU malfunction;		
A1.2.1.6.5.2	Low intake pressure;		
A1.2.1.6.5.3	High TDS content in source water;		
A1.2.1.6.5.4	High TDS content in permeate water;		
A1.2.1.6.5.5	High free chlorine levels post De-chlorination (greater than 0.1 PPM);		
A1.2.1.6.5.6	Conductivity change;		
A1.2.1.6.5.7	Loss of system pressure;		
A1.2.1.6.5.8	Power supply malfunction;		
A1.2.1.6.5.9	Cleaning required;		
A1.2.1.6.5.10	Low fuel in the internal fuel tank; and		
A1.2.1.6.5.11	Any other parameters that are necessary to troubleshoot the system.		

**APPENDIX A**  
**TO W8476-216378**  
**REVISED 24 MARCH 2022**

A1.2.1.6.6	In the event that the digital interface is rendered inoperable, the WTU must be instrumented with analog backlight gauges that provide the operational information that the operator requires to produce potable water, and have a separate pressure transmitter to send the signals to the digital interface.	DEMO	FIRST PRODUCTION ARTICLE
A1.2.1.6.7	<b>Data Log</b>	DEMO	FIRST PRODUCTION ARTICLE
A1.2.1.6.7.1	The Automated Control System must have an electronic Data Log that records data from the WTU.		
A1.2.1.6.7.2	The Data Log must have a USB connector or a memory card reader to allow the download of data.		
A1.2.1.6.7.3	The downloaded data must be compatible with Microsoft Office Excel.		
A1.2.1.7	Internal Heater	TEST	FIRST PRODUCTION ARTICLE
A1.2.1.7.1	The Internal Heater must enable the operation of the WTS in cold weather operations as per A1.5.2.		
A1.2.2	<b>Miscellaneous Equipment Unit (MEU)</b>		
A1.2.2.1	<b>Enclosure</b>	INSPECTION	FIRST PRODUCTION ARTICLE
A1.2.2.1.1	The MEU is contained in a weatherproof enclosure which is based on a QUADCON ISO container. The common QUADCON ISO container requirements are outlined in A1.3.4		
A1.2.2.1.2	The Enclosure must have an integral external ladder to enable access to the roof of the Enclosure.		

**APPENDIX A**  
**TO W8476-216378**  
**REVISED 24 MARCH 2022**

A1.2.2.1.3	The Enclosure must have two (2) detachable steel cantilevers support of 1200 mm overall length each designed to clip into the corner lift points on the top of the ISO container, and be removed when not in use. The Enclosure cantilevers will be used to create an extension/offset for any camouflage nets (or tarpaulins) on one wall of the ISO container (or they can be used to hoist up the cam net), and for lifting of the Water Storage Tanks (refer to A1.2.2.11.1).	DEMO	FIRST PRODUCTION ARTICLE
A1.2.2.1.4	Two (2) ratcheted hand crank winches with lifting capacity 100 kg each must be provided to facilitate lifting of the empty Water Storage Tanks for cleaning and must be linked to the Enclosure cantilevers.		
A1.2.2.1.5	Electrical components of the MEU must have an Ingress Protection rating of IP55.	CERTIFICATION	FIRST PRODUCTION ARTICLE
A1.2.2.1.6	The Enclosure must contain one (1) Fire Extinguisher, NSN 4210-21-908-1048 (or equivalent), which is mounted on wall mounting brackets, NSN 4210-21-886-3387 (or equivalent), in the interior of the Enclosure near the main access door.		
A1.2.2.1.7	The Enclosure must contain a First Aid Kit, NSN 4545-21-111-8439 (or equivalent), mounted in the interior of the MEU near the main access door.		
A1.2.2.1.8	The interior of the Enclosure must be fitted with storage bins, cabinets, shelving and reels required to store and transport the Ancillary Equipment outlined in A1.2.2.2, the Consumables outlined in A1.2.2.3 and the Cold Weather Ancillary Equipment outlined in A1.2.3.2	INSPECTION	FIRST PRODUCTION ARTICLE
A1.2.2.1.8.1	If the WTU has the capacity to store material in addition to housing the systems specified in A1.2.1.2, a portion of the Ancillary Equipment must be stored in the WTU to free up additional stowage space in the MEU.		
A1.2.2.1.9	The MEU Enclosure must have installed within it a MEU Stowage Map Poster Holder that must:	INSPECTION	FIRST PRODUCTION ARTICLE

**APPENDIX A**  
**TO W8476-216378**  
**REVISED 24 MARCH 2022**

A1.2.2.1.9.1	Be rigid;	INSPECTION	FIRST PRODUCTION ARTICLE
A1.2.2.1.9.2	Be transparent;		
A1.2.2.1.9.3	Have a partially-open bottom or drain holes so no water can accumulate;		
A1.2.2.1.9.4	Be located on a flat vertical surface that is not a door or an access panel; and,		
A1.2.2.1.9.5	Allow the user to read the MEU Stowage Map Poster without removing it from its Holder.		
A1.2.2.1.10	Access Doors	INSPECTION	FIRST PRODUCTION ARTICLE
A1.2.2.1.10.1	The Enclosure must incorporate access doors at two ends to allow loading and unloading of Ancillary Equipment, Consumables and Cold Weather Ancillary Equipment.		
A1.2.2.1.10.2	The doors lockable, weathertight and have hold-open fixtures and TIR securing gadgets (i.e. provisions for padlocking and custom sealing, locking mechanisms, tamper-evident devices).		
A1.2.2.1.11	Lighting	INSPECTION	FIRST PRODUCTION ARTICLE
A1.2.2.1.11.1	The Enclosure must have white interior LED lighting of 540 lux illuminance.		
A1.2.2.1.11.2	The Enclosure must have red blackout lighting for operations in a tactical military scenario.		
A1.2.2.1.11.3	Lighting must be controlled by a three-way switch which enables the operator to select off, white light or red blackout lighting.		
A1.2.2.1.11.3.1	The switching configuration must allow the user to select either lighting modes from the "OFF" position, to ensure that the operator does not have to switch through the white light mode		

**APPENDIX A**  
**TO W8476-216378**  
**REVISED 24 MARCH 2022**

	to get to blackout mode, flashing the white LEDs in a tactical situation.		
A1.2.2.1.11.4	The electrical system for the lighting must allow for the use of both shore power and the WTU generator's power.	INSPECTION	FIRST PRODUCTION ARTICLE
A1.2.2.1.11.4.1	The power input(s) must be on the outside of the MEU QUADCON with weatherproof connections.		
A1.2.2.2	<b>Ancillary Equipment</b>		
A1.2.2.2.1	The ancillary equipment must include the following items:		
A1.2.2.2.1.1	Three (3) Feed Water Hoses (refer to A1.2.2.4);		
A1.2.2.2.1.2	Ten Concentrate Water Hoses (refer to para. A1.2.2.5);		
A1.2.2.2.1.3	Eleven Potable Water Hoses (refer to para. A1.2.2.6);		
A1.2.2.2.1.4	One (1) Water Distribution Nozzles (refer to para. A1.2.2.7)		
A1.2.2.2.1.5	One (1) Feed Pump (refer to A1.2.2.8);		
A1.2.2.2.1.6	One (1) Reverse Osmosis Membrane Preservation Kit (refer to A1.2.2.9);		
A1.2.2.2.1.7	One (1) Distribution Pump (refer to A1.2.2.10);		
A1.2.2.2.1.8	Three (3) Water Storage Tanks (refer to A1.2.2.11);		
A1.2.2.2.1.9	If necessary, three (3) Adaptors for the Potable Water Hoses to connect them to the Water Storage Tanks (refer to A1.2.2.11);		
A1.2.2.2.1.10	One (1) Adaptor for the Potable Water Hoses to connect them with a top inlet fitment (refer to A1.2.4.2.3.1.4);		
A1.2.2.2.1.11	One (1) Spill Kit (refer to A1.2.2.12);		
		INSPECTION	FIRST PRODUCTION ARTICLE

**APPENDIX A  
TO W8476-216378  
REVISED 24 MARCH 2022**

A1.2.2.2.1.12	One (1) Intake Strainer Assembly (refer to A1.2.1.4.4.2);	INSPECTION	FIRST PRODUCTION ARTICLE
A1.2.2.2.1.13	One (1) Exhaust Hose for Generator Set (refer to A1.2.1.5.2.4);		
A1.2.2.2.1.14	Two (2) Life Preserver Vest (refer to A1.2.2.13);		
A1.2.2.2.1.15	Two (2) Wading Overalls (refer to A1.2.2.14);		
A1.2.2.2.1.16	One (1) Water Quality Analysis Kit (refer to A1.2.2.15);		
A1.2.2.2.1.17	One (1) Turbidity Verification Kit (refer to A1.2.2.16); and		
A1.2.2.2.1.18	One (1) Potable Water Lab Kit (Refer to A1.2.2.17).		
A1.2.2.3	<b>Consumables</b>	INSPECTION	FIRST PRODUCTION ARTICLE
A1.2.2.3.1	The MEU must include the consumables necessary to sustain forty-five (45) days of consecutive operation at twenty (20) working hours plus four (4) hours a day of maintenance per day.		
A1.2.2.4	<b>Feed Water Hoses</b>	INSPECTION	FIRST PRODUCTION ARTICLE
A1.2.2.4.1	The Feed Water Hoses of A1.2.2.2, must meet the following requirements:		
A1.2.2.4.1.1	Fitted with 316L camlock fittings (one male fitting on one end and one female fitting on the opposing end).		
A1.2.2.4.1.2	Must be no less than 7.5 m in length.		
A1.2.2.4.1.3	Must be no more than 10 m in length.		
A1.2.2.4.1.4	Must be of sturdy construction with low friction/abrasion so that it can be dragged over any surfaces without being perforated.		
A1.2.2.4.1.5	Must provide high vacuum characteristics.		



A1.2.2.4.1.6	Must have an exceptional low temperature flexibility.	INSPECTION	FIRST PRODUCTION ARTICLE
A1.2.2.4.1.7	Must have a minimum bend radius of 130 mm without kinking or restricting flow;		
A1.2.2.4.1.8	Must be weather-resistant;		
A1.2.2.4.1.9	Must be resistant to common impurities found in fresh water, sea water, Calcium and magnesium, bicarbonate, carbonate, mineral acid H <sub>2</sub> SO <sub>4</sub> , HCl, CO <sub>2</sub> hydrogen ion, Sulfate, Chloride, Nitrate, Fluoride, Sodium, silica, Iron, Aluminium, Oxygen, Hydrogen Sulfide, Dissolved Solids, Suspended Solids.		
A1.2.2.4.1.10	Identified in large writing "Source Water" and "Eau d'Alimentation" and be colour-coded by a distinctive yellow colour.		
A1.2.2.5	<b>Concentrate Water Hoses</b>	INSPECTION	FIRST PRODUCTION ARTICLE
A1.2.2.5.1	The Concentrate Water Hoses of A1.2.2.2, must meet the following requirements:		
A1.2.2.5.1.1	Fitted with 316L camlock fittings (one male fitting on one end and one female fitting on the opposite end);		
A1.2.2.5.1.2	Must be no less than 7.5 m in length.		
A1.2.2.5.1.3	Must be no more than 10 m in length.		
A1.2.2.5.1.4	Covered with an abrasion and weather resistant synthetic cover.		
A1.2.2.5.1.5	Must be able to operate in a large temperature range IAW AECTP 230, Edition 1, Leaflets 2311/1 through 2311/3 and STANAG 2895, Edition 1, Annex C		
A1.2.2.5.1.6	Must be resistant to common impurities found in fresh water, sea water including Calcium and magnesium, bicarbonate, carbonate, mineral acid H <sub>2</sub> SO <sub>4</sub> , HCl, CO <sub>2</sub> hydrogen ion, Sulfate, Chloride,		

**APPENDIX A**  
**TO W8476-216378**  
**REVISED 24 MARCH 2022**

	Nitrate, Fluoride, Sodium, silica, Iron, Aluminium, Oxygen, Hydrogen Sulfide, Dissolved Solids, Suspended Solids		
A1.2.2.5.1.7	Identified in large writing "Concentrate Water" and "Eau de concentrat", and be colour-coded by a distinctive red colour.	INSPECTION	FIRST PRODUCTION ARTICLE
A1.2.2.6	<b>Potable Water Hoses</b>		
A1.2.2.6.1	The distribution water hoses of A1.2.2.2, from the bladder to the distribution pump must meet the following requirements:		
A1.2.2.6.1.1	Fitted with 316L camlock fittings (one male fitting on one end and one female fitting on the opposing end);		
A1.2.2.6.1.2	Each camlock fittings must have dust cap or plug;		
A1.2.2.6.1.3	Each dust cap or plug will be made of the same material of the camlock fittings 316L.		
A1.2.2.6.1.4	Each dust caps and plugs will be secured to the camlock fittings with a PVC coated cable lanyard as follow:		
A1.2.2.6.1.4.1	Lanyard must be no less than 300 mm in length; and		
A1.2.2.6.1.4.2	Lanyard must be no more than 500 mm in length;		
A1.2.2.6.1.5	Must be of sturdy construction with low friction/abrasion so that it can be dragged over any kind of surfaces without being perforated;		
A1.2.2.6.1.6	Must be weather resistant synthetic cover;		
A1.2.2.6.1.7	Must be able to operate in a large temperature range IAW AECTP 230, Edition 1, Leaflets 2311/1 through 2311/3 and STANAG 2895, Edition 1, Annex C.		
		INSPECTION	FIRST PRODUCTION ARTICLE

**APPENDIX A**  
**TO W8476-216378**  
**REVISED 24 MARCH 2022**

A1.2.2.6.1.8	Must be resistant against commonly used chemicals and degradations due to UV radiation.		
A1.2.2.6.1.9	Resistant to all chemical used to clean and preserve the system Calcium Hypochlorite (NSN 6810-219-124-561), Cleaner MC1 – Citric Acid, Anhydrous (NSN 6810-20-010-6573), Cleaner MC4 – Decontaminating Agent (NSN 6850-20-010-6684) and Preservative MP4 – Sodium Bisulphite, Reagent (NSN 6810-20-010-7087) cleaning solutions;	INSPECTION	FIRST PRODUCTION ARTICLE
A1.2.2.6.1.10	Identified in large writing with "Potable Water" and "Eau Potable", and be colour-coded by a distinctive blue colour.		
A1.2.2.7	<b>Water Distribution Nozzle</b>		
A1.2.2.7.1	The Water Distribution Nozzle of A1.2.2.2, must provide a flow of 1,250 L/h;		
A1.2.2.7.2	Must be fitted with 316L camlock to connect with potable hoses;		
A1.2.2.7.3	Must be fitted with 316L dusk cap.		
A1.2.2.7.3.1	Dusk cap must be secure to the camlock with a Cable PVC lanyard.		
A1.2.2.7.4	Must be fitted with an integral hook to be hang; and		
A1.2.2.7.5	Must permit variable flow to allow filling of various size containers.		
A1.2.2.8	<b>Feed Pump</b>		
A1.2.2.8.1	The Feed Pump of A1.2.2.2, is intended to pump source water from the raw water source to the WTU.		
A1.2.2.8.2	The Feed Pump must be man-portable with a maximum weight of 37 kg.		
		TEST	FIRST PRODUCTION ARTICLE

**APPENDIX A**  
**TO W8476-216378**  
**REVISED 24 MARCH 2022**

A1.2.2.8.3	The Feed Pump must have the same HP size as the Distribution Pump for commonality refer to A1.2.2.10.	TEST	FIRST PRODUCTION ARTICLE
A1.2.2.8.4	The Feed Pump must be self-priming or have a mechanical priming function.		
A1.2.2.8.5	The Feed Pump must have at least a suction lift of five (5) m from source water to the pump.		
A1.2.2.8.6	The Feed Pump must have at least a discharge lift of nine (9) m from the pump to the WTU when the three (3) Feed Water Hoses are connected together.		
A1.2.2.8.7	The Feed Pump must operate on 120/208 V with a power cord of no less than thirty (30 m).		
A1.2.2.8.8	The power cord for the Feed Pump must be equipped with a waterproof power plug having an IP69K or equivalent.		
A1.2.2.8.9	The feed pump must have cam locks, with plug and lanyard, at the water inlet and outlet, 316L stainless steel type.		
A1.2.2.9	<b>Reverse Osmosis Membrane Preservation Kit</b>		
A1.2.2.9.1	The Reverse Osmosis Membrane Preservation Kit of A1.2.2.2, must be a vacuum sealing system including the membrane storage bags or containers to store and protect reverse osmosis membranes from bacterial growth once they have been removed from the WTU.	INSPECTION	FIRST PRODUCTION ARTICLE
A1.2.2.9.2	The Reverse Osmosis Membrane Preservation Kit must include a rugged, air tight container to transport either individual or a group of vacuumed sealed reverse osmosis membranes. This container must be equipped with purge vents in the case of the container being transported in an unpressurized cargo aircraft.		

**APPENDIX A**  
**TO W8476-216378**  
**REVISED 24 MARCH 2022**

A1.2.2.9.3	If ceramic Reverse Osmosis Membranes are used, stowage containers must be provided to protect the membranes from breaking during all methods of transportation.		
A1.2.2.10	<b>Distribution Pump</b>		
A1.2.2.10.1	The Distribution Pump of A1.2.2.2, must be self-priming or have a mechanical priming function;	TEST	FIRST PRODUCTION ARTICLE
A1.2.2.10.2	The Distribution Pump must be man-portable with a maximum weight of 37 kg;		
A1.2.2.10.3	The Distribution Pump must operate on 120/208 V with a power cord of no less than thirty (30 m).		
A1.2.2.10.4	The power cord for the Distribution Pump must be equipped with a waterproof power plug having an IP69K or equivalent.		
A1.2.2.10.5	The Distribution Pump must pump purified water from the water storage tanks to the water transport vehicle or trailers;		
A1.2.2.10.6	The Distribution Pump must be able to discharge water, through a single hose access, at a distribution point, requiring no less than 10 potable hoses with an elevation difference of no less than 5 m, between the WTU and the water transport vehicle or trailers (These being higher than the WTU);		
A1.2.2.10.7	The Distribution Pump must operate on 120/208 V with 30 m power cord equipped with NEMA 5 power plug; and		
A1.2.2.10.8	The Distribution Pump must be equipped with the camlock inlet and outlet fittings with secured dust caps and plugs.		
A1.2.2.11	<b>Water Storage Tanks</b>	INSPECTION	FIRST PRODUCTION ARTICLE
A1.2.2.11.1	The Water Storage Tank of A1.2.2.2 must be NSN 5430-20-012-2725 (or equivalent).		

**APPENDIX A**  
**TO W8476-216378**  
**REVISED 24 MARCH 2022**

A1.2.2.12	<b>Spill Kit</b>		FIRST PRODUCTION ARTICLE
A1.2.2.12.1	The Spill Kit of A1.2.2.2 must be NSN 4235-21-920-4185 (or equivalent).		
A1.2.2.13	<b>Life Preserver Vest</b>		
A1.2.2.13.1	The Life Preserver Vest of A1.2.2.2 must be NSN 4220-20-000-0262 (or equivalent).	INSPECTION	FIRST PRODUCTION ARTICLE
A1.2.2.14	<b>Wading Overalls</b>		FIRST PRODUCTION ARTICLE
A1.2.2.14.1	The Wading Overalls of A1.2.2.2 must be NSN 8415-20-A0F-1690 (or equivalent).	INSPECTION	FIRST PRODUCTION ARTICLE
A1.2.2.15	<b>Water Quality Analysis Reconnaissance Kit</b>		FIRST PRODUCTION ARTICLE
A1.2.2.15.1	The Water Quality Analysis Reconnaissance Kit of A1.2.2.2, must be NSN 6630-21-912-5298 (or equivalent).	INSPECTION	FIRST PRODUCTION ARTICLE
A1.2.2.15.2	The Water Quality Analysis Reconnaissance Kit dimensions are 62 cm x 50 cm x 22 cm.		
A1.2.2.15.3	The Water Quality Analysis Reconnaissance Kit weight is 12.7 kg.		
A1.2.2.16	<b>Turbidity Verification Kit</b>		FIRST PRODUCTION ARTICLE
A1.2.2.16.1	The Turbidity Verification Kit of A1.2.2.2, Mettler Toledo InPro 8600, must be NSN 6630-20-010-3615 (or equivalent).	INSPECTION	FIRST PRODUCTION ARTICLE
A1.2.2.16.2	The Turbidity Verification Kit dimensions are 55 cm x 25 cm x 25 cm.		
A1.2.2.16.3	The Turbidity Verification Kit weight is 4.8 kg.		
A1.2.2.17	<b>Potable Water Lab Kit</b>	INSPECTION	

**APPENDIX A**  
**TO W8476-216378**  
**REVISED 24 MARCH 2022**

A1.2.2.17.1	The portable water lab of A1.2.2.2, must be NSN 6630-01-641-1591 (or equivalent).		FIRST PRODUCTION ARTICLE
A1.2.3	<b>Arctic Sustainment Unit (ASU)</b>		
A1.2.3.1	<b>Enclosure</b>		
A1.2.3.1.1	The ASU is contained in a weatherproof enclosure which is based on a BICON ISO container. The common BICON ISO container requirements are outlined in A1.3.4.	INSPECTION	FIRST PRODUCTION ARTICLE
A1.2.3.1.2	The interior of the Enclosure must be fitted with storage bins, cabinets, tablets and reels required to store and transport the Cold Weather Ancillary Equipment outlined in A1.2.3.2		
A1.2.3.1.3	The ASU Enclosure must have installed within it an ASU Stowage Map Poster Holder that must:		
A1.2.3.1.3.1	Be rigid;		
A1.2.3.1.3.2	Be transparent;		
A1.2.3.1.3.3	Have a partially-open bottom or drain holes so no water can accumulate;		
A1.2.3.1.3.4	Be located on a flat vertical surface that is not a door or an access panel; and		
A1.2.3.1.3.5	Allow the user to read the ASU Stowage Map Poster without removing it from its Holder.		
A1.2.3.2	<b>Cold Weather Ancillary Equipment</b>		FIRST PRODUCTION ARTICLE
A1.2.3.2.1	The Cold Weather Ancillary Equipment must include the following items:	INSPECTION	FIRST PRODUCTION ARTICLE
A1.2.3.2.1.1	Electrically-Heated Feed Water Hoses (refer to A1.2.3.3);		

A1.2.3.2.1.2	Electrically-Heated Concentrate Hoses (refer to A1.2.3.4);		
A1.2.3.2.1.3	Electrically-Heated Potable Water Hoses (refer to A1.2.3.5);		
A1.2.3.2.1.4	One (1) Feed Water Pump Electrically-Heated Blanket (refer to A1.2.3.6);		
A1.2.3.2.1.5	One (1) Distribution Pump Electrically-Heated Blanket (refer to A1.2.3.7); and		
A1.2.3.2.1.6	One (1) Cold Weather Shelter (refer to A1.2.3.8).		
A1.2.3.2.2	All Electrically-Heated Hoses or Electrically-Heated Sheaths or Electrically-Heated Blankets must have a daisy-chain capability in order to be electrically connected to each other.	INSPECTION	FIRST PRODUCTION ARTICLE
A1.2.3.3	<b>Electrically-Heated Feed Water Hoses</b>		
A1.2.3.3.1	The Electrically-Heated Feed Water Hoses, of A1.2.3.2, Sheaths or blankets must meet the following requirements:		
A1.2.3.3.1.1	Must be controlled from the WTU Electrical Distribution Panel (EDP).		
A1.2.3.3.1.2	Must have the capability to connect to the feed pump heated blanket.		
A1.2.3.3.1.3	Must have a built-in thermostatic control to prevent water from freezing;		
A1.2.3.3.1.4	Must allow connection of no less than three (3) hoses without having the water freezing/crystallizing.		
A1.2.3.3.1.5	Must heat 316L camlock fittings (one male fitting on one end and one female fitting on the opposing end).		
		INSPECTION	FIRST PRODUCTION ARTICLE



A1.2.3.3.1.6	Must be of sturdy construction with low friction/abrasion so that it can be dragged over any surfaces without being perforated;		
A1.2.3.3.1.7	Must be weather resistant;		
A1.2.3.3.1.8	Must be resistant to common impurities found in fresh water, sea water including Calcium and magnesium, bicarbonate, carbonate, mineral acid H <sub>2</sub> SO <sub>4</sub> , HCl, CO <sub>2</sub> hydrogen ion, Sulfate, Chloride, Nitrate, Fluoride, Sodium, silica, Iron, Aluminium, Oxygen, Hydrogen Sulfide, Dissolved Solids, Suspended Solids; and		
A1.2.3.3.1.9	Must remain flexible and be capable of being fully-coiled, fully-uncoiled, straightened, and maneuvered without damage over the full-range of climatic conditions and operating conditions outlined in A1.5.1.1.	INSPECTION	FIRST PRODUCTION ARTICLE
A1.2.3.4	<b>Electrically Heated Concentrate Water Hoses</b>	INSPECTION	FIRST PRODUCTION ARTICLE
A1.2.3.4.1	The Electrically Heated Concentrate Water Hoses of A1.2.3.2, must meet the following requirements:		
A1.2.3.4.1.1	Must be controlled from the (EDP).		
A1.2.3.4.1.2	Must have the capability to connect to the feed pump heated blanket.		
A1.2.3.4.1.3	Must have a built-in thermostatic control to prevent water from freezing;		
A1.2.3.4.1.4	Must allow connection of no less than five (5) hoses without having the water freezing/crystallizing.		
A1.2.3.4.1.5	Must heat 316L camlock fittings (one male fitting on one end and one female fitting on the opposing end).		
A1.2.3.4.1.6	Must be of sturdy construction with low friction/abrasion so that it can be dragged over any surfaces without being perforated ;		

**APPENDIX A**  
**TO W8476-216378**  
**REVISED 24 MARCH 2022**

A1.2.3.4.1.7	Must be resistant to common impurities found in fresh water, sea water including Calcium and magnesium, bicarbonate, carbonate, mineral acid H <sub>2</sub> SO <sub>4</sub> , HCl, CO <sub>2</sub> hydrogen ion, Sulfate, Chloride, Nitrate, Fluoride, Sodium, silica, Iron, Aluminium, Oxygen, Hydrogen Sulfide, Dissolved Solids, Suspended Solids and cleaner agents;		
A1.2.3.4.1.8	Must be weather resistant;	INSPECTION	FIRST PRODUCTION ARTICLE
A1.2.3.4.1.9	Must remain flexible and be capable of being fully-coiled, fully-uncoiled, straightened, and maneuvered without damage over the full-range of climatic conditions and operating conditions outlined in A1.5.1.1; and		
A1.2.3.4.1.10	Identified in large writing "Concentrate Water" and "Eau de concentrat", and be colour-coded by a distinctive red colour.		
A1.2.3.5	<b>Electrically-Heated Potable Water Hoses</b>	INSPECTION	FIRST PRODUCTION ARTICLE
A1.2.3.5.1	The Electrically-Heated Potable Water Hoses of A1.2.3.2 must meet the following requirements:		
A1.2.3.5.1.1	Must be controlled from the (EDP).		
A1.2.3.5.1.2	Must have the capability to connect to the distribution pump heated blanket.		
A1.2.3.5.1.3	Must have a built-in thermostatic control to prevent water from freezing;		
A1.2.3.5.1.4	Must allow connection of no less than five (5) hoses without having the water freezing/crystallizing.		
A1.2.3.5.1.5	Must heat 316L camlock fittings (one male fitting on one end and one female fitting on the opposing end and attached protective caps);		

**APPENDIX A**  
**TO W8476-216378**  
**REVISED 24 MARCH 2022**

A1.2.3.5.1.6	Must be of sturdy construction with low friction/abrasion so that it can be dragged over any surfaces without being perforated ;		
A1.2.3.5.1.7	Resistant to cleaning chemical use to sanitized, clean and preserve the system.		
A1.2.3.5.1.8	Must remain flexible and be capable of being fully-coiled, fully-uncoiled, straightened, and maneuvered without damage over the full-range of climatic conditions and operating conditions outlined in A1.5.1.1; and		
A1.2.3.5.1.9	Identified in large writing "Potable Water" and "Eau Potable" and be colour-coded by a distinctive green colour.	INSPECTION	FIRST PRODUCTION ARTICLE
A1.2.3.6	<b>Feed Water Pump Electrically-Heated Blanket</b>		
A1.2.3.6.1	The Feed Water Pump Electrically Heated Blanket of A1.2.3.2 must cover the Feed Water Pump (refer to A1.2.2.8) to prevent freezing of water.		
A1.2.3.6.2	Feed pump heated blanket heat must be controlled from the (EDP).		
A1.2.3.6.3	Must be able to connect to Feed and Concentrate heated hoses; and		
A1.2.3.6.4	Must provide self-regulating heat to protect water from freezing in the feed pump.	TEST	FIRST PRODUCTION ARTICLE
A1.2.3.7	<b>Distribution Pump Electrically Heated Blanket</b>		
A1.2.3.7.1	The Distribution Pump Electrically Heated Blanket of A1.2.3.2 must cover the Distribution Pump (refer to A1.2.2.10) to prevent freezing of water.		
A1.2.3.7.2	Distribution pump heated blanket heat must be controlled from the (EDP).		
A1.2.3.7.3	Must be able to connect to potable heated hoses; and	TEST	FIRST PRODUCTION ARTICLE

A1.2.3.7.4	Must provide self-regulating heat to protect water from freezing in the distribution pump.		
A1.2.3.8	<b>Cold Weather Shelter</b>		
A1.2.3.8.1	The Cold Weather Shelter (CWS) of A1.2.3.2 must be the following Government Furnished Equipment:		
A1.2.3.8.1.1	Must be Headquarter Shelters System Planning SHELTER, 2-MODULE NSN 8340-20-010-9594; and		
A1.2.3.8.1.2	Must contain one (1) Portable Heater, Duct Type, 130K BTUH NSN 4520-20-010-9713.	DEMO	FIRST PRODUCTION ARTICLE
A1.2.4	<b>Water Storage Unit (WSU)</b>		
A1.2.4.1	<b>Enclosure</b>		
A1.2.4.1.1	The WSU is contained in a weatherproof enclosure which is based on a QUADCON ISO container. The common QUADCON ISO container requirements are outlined in A1.3.4.	INSPECTION	FIRST PRODUCTION ARTICLE
A1.2.4.1.2	The interior of the Enclosure, of the water storage container, must be equipped with a method to secure the auxiliary equipment outlined at A1.2.4.2 to avoid damaging this equipment during transportation or handling of the QUADCON ISO container.		
A1.2.4.1.3	The WSU Enclosure must have installed within it a WSU Stowage Map Poster Holder that must:		
A1.2.4.1.3.1	Be rigid;		
A1.2.4.1.3.2	Be transparent;		
A1.2.4.1.3.3	Have a partially-open bottom or drain holes so no water can accumulate;	INSPECTION	FIRST PRODUCTION ARTICLE

A1.2.4.1.3.4	Be located on a flat vertical surface that is not a door or an access panel; and,		
A1.2.4.1.3.5	Allow the user to read the WSU Stowage Map Poster without removing it from its Holder.		
A1.2.4.2	<b>Water Storage Ancillary Equipment</b>		
A1.2.4.2.1	The Water Storage Ancillary Equipment must consist of the following items:		
A1.2.4.2.1.1	No less than Twelve (12) collapsible Intermediate Bulk Containers (IBC) as described in A1.2.4.2.2;		
A1.2.4.2.1.2	One hundred IBC Liners as described in A1.2.4.2.3;		
A1.2.4.2.1.3	Three (3) IBC Thermal Blankets as described in A1.2.4.2.4;		
A1.2.4.2.1.4	Eight (8) Single Faucets as described in A1.2.4.2.5;		
A1.2.4.2.1.5	Six (6) Filling Systems as described in A1.2.4.2.6;		
A1.2.4.2.1.6	Six (6) Large Faucets as described in A1.2.4.2.7;		
A1.2.4.2.1.7	Tools required to set up and maintain the WSU IAW the Operator Maintenance Concept, ANNEX A1 paragraph 8.1.2.1; and		
A1.2.4.2.1.8	Six (6) IBC connection kits as described in A1.2.4.2.2		
A1.2.4.2.2	<b>Intermediate Bulk Containers</b>		
A1.2.4.2.2.1	The Intermediate Bulk Containers (IBCs) of A1.2.4.2 must:		
A1.2.4.2.2.1.1	Meet the applicable requirements described in CAN/CGSB-43.146-2016 (Part 1);		

INSPECTION

FIRST  
PRODUCTION  
ARTICLE

INSPECTION

FIRST  
PRODUCTION  
ARTICLE

**APPENDIX A**  
**TO W8476-216378**  
**REVISED 24 MARCH 2022**

A1.2.4.2.2.1.2	Store and transport 1000 L of potable water with fit-form IBC Liners that are described in A1.2.4.2.3;		
A1.2.4.2.2.1.3	Have the same footprint and include contours which allow for safe and easy stacking of one IBC directly on top of another when folded for storage/transportation;		
A1.2.4.2.2.1.4	Be individually erectable and collapsible by one operator;		
A1.2.4.2.2.1.5	Be able to be stacked atop one another; at least 3 high, when empty or when full of water.		
A1.2.4.2.2.1.5.1	When three (3) IBCs are stacked atop one another, the resulting tower must be stable on a slope of 5% grade relative to level ground.	DEMO	FIRST PRODUCTION ARTICLE
A1.2.4.2.2.1.6	Have a means of rigidly holding in place the top inlet fitment and bottom outlet fitment of the IBC Liner which is described in A1.2.4.2.3.1.4;	INSPECTION	FIRST PRODUCTION ARTICLE
A1.2.4.2.2.1.6.1	When rigidly in place, an operator must be able to fill the IBC Liner through the top inlet fitment and drain through the bottom outlet fitment;		
A1.2.4.2.2.1.7	Have a waterproof identification pocket and transparent window with a minimum size of 153 mm (6") wide x 100 mm (4") high that is located on the same side as the bottom outlet fitment;		
A1.2.4.2.2.1.8	Have four-way forklift entry for ease of handling;		
A1.2.4.2.2.1.9	Have two handles per side properly spaced to allow for lifting by hand;		
A1.2.4.2.2.1.10	Weigh no more than one hundred (100) kg;		
A1.2.4.2.2.1.11	Be matte black or matte grey in color.		

**APPENDIX A**  
**TO W8476-216378**  
**REVISED 24 MARCH 2022**

A1.2.4.2.2.1.12	Have a connection kit capable of connecting at least five (5) IBCs together, allowing the water from all five (5) IBCs to be drawn from a single outlet:		
A1.2.4.2.2.1.12.1	The connection kit must provide enough hoses and fittings to accommodate five (5) IBCs placed at least 1m apart from one another (as measured from the two closest points of each adjacent IBC).		
A1.2.4.2.2.1.12.2	The fittings provided with the connection kit must be compatible with the IBC liner outlet fitting.		
A1.2.4.2.2.1.12.3	When all five (5) IBCs are connected together, a hose of at least 2m long must be tied into the system to be used as a distribution point.		
A1.2.4.2.2.1.12.4	The distribution hose of the connection kit must have a valve attached on the distribution end to allow for opening and closing of the entire connected system.		
A1.2.4.2.2.1.12.5	All fittings must have camlock connectors.		
A1.2.4.2.2.1.12.6	All fittings and hoses provided with the connection kit must be sized such that the Filling System described in para A1.2.4.2.6 would receive sufficient flow while connected to the distribution hose.		
A1.2.4.2.3	<b>Intermediate Bulk Container Liners</b>		
A1.2.4.2.3.1	The IBC Liner of A1.2.4.2 must:		
A1.2.4.2.3.1.1	Be certified American National Standards Institute / National Sanitation Foundation (ANSI/NSF) Standard 61.	CERTIFICATION	FIRST PRODUCTION ARTICLE
A1.2.4.2.3.1.2	Preserve stored potable water for no less than 30 days.	INSPECTION	

**APPENDIX A**  
**TO W8476-216378**  
**REVISED 24 MARCH 2022**

A1.2.4.2.3.1.3	Protect the stored potable water from contamination including debris, dust, mold, fungus and insects.	FIRST PRODUCTION ARTICLE
A1.2.4.2.3.1.4	Have a top inlet fitment with a cap and a bottom outlet fitment with a cap;	
A1.2.4.2.3.1.4.1	The top inlet and bottom outlet fitment must be male threaded;	FIRST PRODUCTION ARTICLE
A1.2.4.2.3.1.5	Be resistant to abrasion, tearing, ripping and piercing.	
A1.2.4.2.4	IBC Thermal Blanket	FIRST PRODUCTION ARTICLE
A1.2.4.2.4.1	The IBC Thermal Blanket of A1.2.4.2 must:	
A1.2.4.2.4.1.1	Cover the IBC/IBC Liner on all sides less the bottom while allowing access to the top inlet fitment, the bottom outlet fitment, carrying handles and four-way forklift lifting mechanism without compromising the insulation;	
A1.2.4.2.4.1.2	Protect the potable water inside the IBC/IBC Liner from rapid heating or cooling due to ambient temperature changes;	
A1.2.4.2.4.1.3	Weigh less than 15 kg;	
A1.2.4.2.4.1.4	Be durable and easy to clean; and	
A1.2.4.2.4.1.5	Be black or grey in color.	
A1.2.4.2.5	Single Faucet	
A1.2.4.2.5.1.1	The Single Faucet of A1.2.4.2 must connect directly to the bottom outlet fitment of the IBC Liner.	
A1.2.4.2.5.1.2	Be certified American National Standards Institute / National Sanitation Foundation (ANSI/NSF) Standard 61.	
INSPECTION		FIRST PRODUCTION ARTICLE
CERTIFICATION		



**APPENDIX A**  
**TO W8476-216378**  
**REVISED 24 MARCH 2022**

A1.2.4.2.5.1.3	The Single Faucet must enable the filling of a single 1.5 L water bottle in under ten (10) seconds.	DEMO	
A1.2.4.2.6	<b>Filling System (water dispensing)</b>		
A1.2.4.2.6.1	The Filling System of A1.2.4.2 must connect directly to the bottom outlet fitting of the IBC Liner or IBC connecting hose.	INSPECTION	
A1.2.4.2.6.2	Be certified American National Standards Institute / National Sanitation Foundation (ANSI/NSF) Standard 61.	CERTIFICATION	
A1.2.4.2.6.3	The Filling System must enable the simultaneous filling of no less than (6) 1.5 L water bottles in under ten (10) seconds, where each water bottle is filled at an individual filling point.	DEMO	FIRST PRODUCTION ARTICLE
A1.2.4.2.6.4	Individual filling points/faucets shall be spaced no closer than 45 cm to allow adjacent users to fill bottles simultaneously.		
A1.2.4.2.6.5	Faucets must have an automatic closing function to prevent wasting water.	INSPECTION	
A1.2.4.2.6.6	End of faucet discharge tube must be threaded to allow future commercial fittings/adapters to be connected.		
A1.2.4.2.7	<b>Large Faucet</b>		
A1.2.4.2.7.1	The Large Faucet of A1.2.4.2 must connect directly to the bottom outlet fitting of the IBC Liner.	INSPECTION	
A1.2.4.2.7.2	Be certified American National Standards Institute / National Sanitation Foundation (ANSI/NSF) Standard 61.	CERTIFICATION	FIRST PRODUCTION ARTICLE
A1.2.4.2.7.3	The Large Faucet must enable the filling of a 20 L jerry can (water jug) in under thirty (30) seconds.	DEMO	
A1.2.5	<b>Trailer</b>		

A1.2.5.1	<b>General</b>		CERTIFICATION	FIRST PRODUCTION ARTICLE
A1.2.5.1.1	For the Trailer to be admissible for importation into Canada, the manufacturer must be registered as a commercial importer with Transport Canada (TC). The application package is available upon request from Transport Canada.			
A1.2.5.1.2	The Trailer must meet all applicable Motor Vehicle Safety Regulations at the time of its manufacture.			
A1.2.5.1.3	The expected average annual usage of the Trailer is 2000 km.			
A1.2.5.2	<b>ISO Twist Locks</b>			
A1.2.5.2.1	The Trailer must be provided with eight (8) ISO twist locks as per ISO 668 to secure the WTU and MEU.		DEMO	FIRST PRODUCTION ARTICLE
A1.2.5.2.2	The ISO twist locks must come with guides to ensure loads settle properly over the twist locks to allow easy locking.			
A1.2.5.3	<b>Load Criteria</b>			
A1.2.5.3.1	The WTU and MEU must be loadable and off-loadable from the Trailer on uneven ground having a side slope / longitudinal slope of 5° and at an approach angle of 5°.		DEMO	FIRST PRODUCTION ARTICLE
A1.2.5.4	<b>Chassis</b>			
A1.2.5.4.1	<b>General</b>			
A1.2.5.4.1.1	The Trailer Chassis must be a tandem-axle design.		INSPECTION	FIRST PRODUCTION ARTICLE
A1.2.5.4.1.2	The Trailer Chassis must be equipped with a Rear Impact Guard that is retractable or foldable, IAW Canadian Motor Vehicle Safety Standards (CMVSS) 223.			

**APPENDIX A**  
**TO W8476-216378**  
**REVISED 24 MARCH 2022**

A1.2.5.4.1.3	The Trailer must have an adjustable Rear Support Leg in order to stabilize the Trailer when it is detached from either of the two (2) prime movers.	INSPECTION	FIRST PRODUCTION ARTICLE
A1.2.5.4.1.4	The Rear Support Leg must fold or retract out of the way in a manner that will not affect any function of the Trailer.		
A1.2.5.4.1.5	The Trailer Chassis must have recessed or bush-guarded protected lights, reflectors and related components IAW MIL-STD-1179E.		
A1.2.5.4.1.6	The Trailer Chassis must have a mounting point for an anti-static strap NSN 5920-00-636-3231 (or equivalent).		
A1.2.5.4.1.7	The Trailer Chassis must have a Jerry Can (Fuel & Water) Bracket NSN 2540-21-901-5046 (or equivalent).		
A1.2.5.4.2	<b>Suspension</b>	TEST	FIRST PRODUCTION ARTICLE
A1.2.5.4.2.1	The Trailer chassis suspension system, mounts and frame must function in a manner so as to ensure that all components of the WTS remain free from damage due to shock and vibration and while meeting the Transport Mission Profile outlined in Para 6.2.2.6. Table 1.		
A1.2.5.4.3	<b>Brakes</b>	INSPECTION	FIRST PRODUCTION ARTICLE
A1.2.5.4.3.1	The Trailer brake system design must be provided with full air-actuated service IAW CMVSS 121 or FMVSS 121 or country of origin vehicle trailer air brake system safety standards and must be fully compatible with the two prime movers braking system.		
A1.2.5.4.3.2	The trailer ABS/EBS must be integrated with the MSVS SMP using the vehicle's receptacle defined in each vehicle's respective operator manual, and ISO 7638-1 to allow safe braking.		

<b>A1.2.5.4.3.2.1</b>	As detailed in A1.2.5.4.3.1, the Contractor must demonstrate complete integration, compatibility and functionality of the combined vehicle & trailer air braking system.	<b>INSPECTION</b>	<b>FIRST PRODUCTION ARTICLE</b>
<b>A1.2.5.4.3.3</b>	The Trailer must be provided with an ABS that monitors and prevents wheel lock-up at each wheel station.		
<b>A1.2.5.4.3.4</b>	The trailer must be equipped with an external ABS malfunction indicator lamp (yellow) as detailed in CMVSS 121 Air Brake System paragraph S5.2.3.3.		
<b>A1.2.5.4.3.5</b>	The front of the Trailer Chassis must be equipped with air hoses, connectors and couplings and conform to STANAG 2604 ED.3, as follows:		
<b>A1.2.5.4.3.5.1</b>	Position of connectors; per Paragraph 4, Table 1, and Figure 1.		
<b>A1.2.5.4.3.5.2</b>	Nomenclature for Gladhands connectors and brake lines must be done IAW SAE J318: "Service" and "Emergency".		
<b>A1.2.5.4.3.5.3</b>	Identification of connector colour markings must be done IAW SAE J318:		
<b>A1.2.5.4.3.5.4</b>	Service Gladhands Braking Lines = Blue, and	<b>DEMO</b>	<b>FIRST PRODUCTION ARTICLE</b>
<b>A1.2.5.4.3.5.5</b>	Emergency Gladhands Braking Lines = Red.		
<b>A1.2.5.4.3.6</b>	The trailer must be equipped with dummy couplings mounted on the trailer to store the air brake hoses when not in use.		
<b>A1.2.5.4.3.7</b>	The Trailer Chassis must be equipped with parking brakes which must control and hold motionless, the WTS in its primary mode of employment, when facing in either direction, up or down, on a hard surfaced slope of no less than 20% IAW SAE J1452.		

**APPENDIX A  
TO W8476-216378  
REVISED 24 MARCH 2022**

A1.2.5.4.3.8	The Trailer Chassis air brake system must be provided with valves, drains or other methods of expelling moisture from all air reservoirs and lines.	INSPECTION	FIRST PRODUCTION ARTICLE
A1.2.5.4.4	<b>Wheels and Tires</b>	INSPECTION	FIRST PRODUCTION ARTICLE
A1.2.5.4.4.1	The Trailer Chassis must have tires that are the same as the two (2) prime movers, which are 395/85R20 tires.		
A1.2.5.4.4.2	The Trailer Chassis must have one (1) full size spare tire and wheel assembly.		
A1.2.5.4.4.3	The Trailer Chassis must be provided with 4 suitably sized wheel chocks.		
A1.2.5.4.4.4	The Trailer Chassis must have a spare wheel carrier assembly suitable for stowage and deployment of the spare tire and wheel assembly.		
A1.2.5.4.4.5	The wheel carrier, spare tire and wheel assembly must not impede or hamper any function of the WTS.		
A1.2.5.4.4.6	The Trailer wheels must be changed, including the removal and remounting of the tire and wheel in the carrier, by two (2) soldiers, within 30 minutes, using only tools that are included with the Prime Mover of which runs the same size tire and wheel assembly.	DEMO	FIRST PRODUCTION ARTICLE
A1.2.5.4.4.7	The Trailer Chassis must have wheel splash and stone throw protection above all wheels and mud flaps behind the rear wheels.	INSPECTION	FIRST PRODUCTION ARTICLE
A1.2.5.4.5	<b>Electrical System</b>	INSPECTION	FIRST PRODUCTION ARTICLE
A1.2.5.4.5.1	The Trailer Chassis must have a 24 VDC Standard Military Pattern (SMP) lighting system IAW STANAG 2601 ED.3. The Lamps, reflectors, and signals must be IAW MIL-STD-1179.		

A1.2.5.4.5.2	The trailer must have connectors and cables for all of the Trailer's needs: i.e. ABS, air and 12VDC and SMP 24VDC lighting.	FIRST PRODUCTION ARTICLE
A1.2.5.4.5.3	The trailer chassis tactical/blackout and non-tactical lighting systems must be compatible with the vehicle lighting system in accordance with STANAG 4007 Edition 2.	
A1.2.5.4.5.4	The Trailer Chassis must have a blackout lighting system IAW STANAG 4381.	
A1.2.5.4.5.5	The ABS/EBBS connection from the Trailer to the prime mover must adhere to the following requirements as per ISO 7638-1:	
A1.2.5.4.5.5.1	The Trailer must include a cable assembly which has an ISO 7638-1 compliant plug as defined in para 4.2 of ISO 7638-1	
A1.2.5.4.5.5.2	The cable described in para A1.2.5.4.5.5.1 must be long enough to connect to the socket on the rear of the prime mover when the WTT is attached to the prime mover's pintle.	
A1.2.5.4.5.5.3	The Trailer must include a park socket that the cable assembly can be plugged into when not in use, as per para 4.4 of ISO 7638-1	
A1.2.5.4.5.5.4	The Trailer must include a system to manage the cable while it is plugged into the park socket, so that the cable is not contacting the ground and is clear from moving parts.	INSPECTION
A1.2.5.4.5.6	All WTS electrical connectors or points of connection must have an Ingress Protection rating no less than IP56 IAW NEMA IEC 60529 or equivalent.	CERTIFICATION

**APPENDIX A**  
**TO W8476-216378**  
**REVISED 24 MARCH 2022**

A1.2.5.4.5.7	The trailer must be fitted with Breakaway connectors on all electrical cables to allow them to disconnect without causing damage to the rest of the ABS or Electrical systems if the cables are pulled by accident.		
A1.2.5.4.5.8	The trailer must be equipped with dummy couplings mounted on the trailer to store the electricals when not in use.	INSPECTION	FIRST PRODUCTION ARTICLE
A1.2.5.4.6	<b>Stowage Compartments</b>		
A1.2.5.4.6.1	The Trailer Chassis must have integrated Stowage Compartments, and be recessed within the dimensions stated in paragraph A1.3.2.		
A1.2.5.4.6.2	The Stowage Compartments must be of adequate size in order to store four (4) manufacturer supplied wheel chocks, two (2) large Cam nets, and any other tools or equipment specifically recommended and supplied by the manufacturer.	INSPECTION	FIRST PRODUCTION ARTICLE
A1.2.5.4.6.3	The Stowage Compartments must have a locking mechanism that will accept a padlock meeting ASTM F883-04 requirement F2S2.		
A1.2.5.4.7	<b>Data Plates and Markings</b>		
A1.2.5.4.7.1	The Trailer Chassis must have a license plate holder, IAW SAE J686, mounted at the rear.		
A1.2.5.4.7.2	The Trailer Chassis must have the following information permanently affixed in a conspicuous and protected location:		
A1.2.5.4.7.2.1	The manufacturer's name, model number, model year and Vehicle Identification Number (VIN);		
A1.2.5.4.7.2.2	The GTW ratings; and		
A1.2.5.4.7.2.3	The load data.		
		INSPECTION	FIRST PRODUCTION ARTICLE

**APPENDIX A**  
**TO W8476-216378**  
**REVISED 24 MARCH 2022**

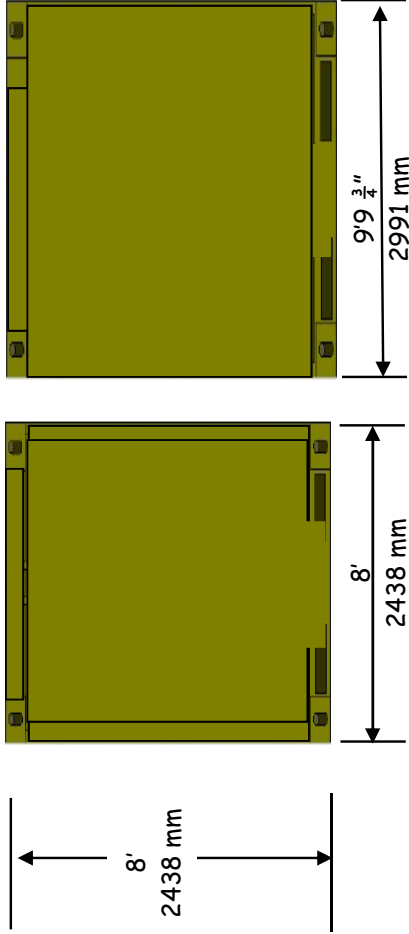
<b>A1.2.5.4.8</b>	<b>Drawbar and Accessories</b>		
<b>A1.2.5.4.8.1</b>	The Trailer Chassis must have a tow eye IAW STANAG 4101.	INSPECTION	FIRST PRODUCTION ARTICLE
<b>A1.2.5.4.8.2</b>	The Drawbar must be compatible with the height of the pintle of each of the two (2) prime movers $\pm$ 5% (based on load and tire pressure).	ANALYSIS	FIRST PRODUCTION ARTICLE
<b>A1.2.5.4.8.3</b>	The Drawbar must allow a swing radius between the rear of the two (2) Prime Movers and the Trailer, and must be IAW STANAG 4101.		
<b>A1.2.5.4.8.4</b>	The Trailer Chassis tow eye must have a setting for being secured in the fixed position, so that it can be towed by Vehicles with a rotating pintle hook.	INSPECTION	FIRST PRODUCTION ARTICLE
<b>A1.2.5.4.8.5</b>	The Trailer Chassis tow eye must rotate around the longitudinal axis.		
<b>A1.2.5.4.8.6</b>	The Trailer Chassis must have safety chains that are sufficient in length and possess hooks at the ends of these safety chains that are compatible with the clevises of the two (2) prime movers.	ANALYSIS	FIRST PRODUCTION ARTICLE
<b>A1.2.5.4.8.7</b>	The Trailer must have an adjustable front support leg in order to raise or lower the tongue, and stabilize the WTS when it is detached from either of the two (2) prime movers.	INSPECTION	FIRST PRODUCTION ARTICLE
<b>A1.2.5.4.8.7.1</b>	The front support leg must fold or retract out of the way in a manner that will not affect the function of the WTS when it is attached to either of the two (2) prime movers.	ANALYSIS	FIRST PRODUCTION ARTICLE
<b>A1.2.5.5</b>	<b>Walkways</b>		



A1.2.5.5.1	The Trailer must be equipped with a non-slip surface set of stairs, walkways and guardrails to allow access for the operation and maintenance of the WTU and MEU in the primary mode of employment of the WTS.	DEMO	FIRST PRODUCTION ARTICLE
A1.2.5.5.2	The stairs walkways and guardrails must be detachable and stored on the Trailer.		FIRST PRODUCTION ARTICLE
A1.2.5.5.3	The walkways must support three (3) personnel with weights IAW DCIEM Report 98-CR-15 for CF personnel.	ANALYSIS	FIRST PRODUCTION ARTICLE
A1.2.5.5.4	Dimensions of the walkways and requirements for guardrails must meet the Canada Occupational Health and Safety Regulations (SOR/86-304) requirements.		
A1.3 Physical Characteristics			
A1.3.1	Weight	CERTIFICATION	FIRST PRODUCTION ARTICLE
A1.3.1.1	The following weight restrictions must be adhered to:		
A1.3.1.1.1	WTS in its Primary Configuration (A1.1.3.1):10,000 kg.		
A1.3.2	Size	CERTIFICATION	FIRST PRODUCTION ARTICLE
A1.3.2.1	The dimensions of the WTS in its primary mode of employment and tires inflated to highway pressure must not exceed the following:		
A1.3.2.1.1	Height: 4.15 m;		
A1.3.2.1.2	Width: 2.6 m; and		
A1.3.2.1.3	Length: 6.0 m, including tongue.		
A1.3.3	Colour		

A1.3.3.1	<b>Exterior</b>		
A1.3.3.1.1	The exterior of the WTS must be painted type II, colour 34088 (Olive Drab) Chemical Agent Resistant Coating (CARC) as per MIL-DTL-53072E excluding tires, glass surfaces, wiring and nameplates, decals, and soft materials. Refer to A6.0 APPENDIX: CHEMICAL AGENT RESISTANT COATING (CARC) SYSTEM.	INSPECTION	FIRST PRODUCTION ARTICLE
A1.3.3.2	<b>Interior</b>		
A1.3.3.2.1	The interior of the WTS containers must be painted colour #17925 (gloss white) IAW AMS-STD-595 for the interior surfaces, except for all doors and access panel openings to the outside which must be painted as per A1.3.3.1.1.	INSPECTION	FIRST PRODUCTION ARTICLE
A1.3.3.3	<b>Non-Slip Surfaces and Hand/Foot Holds</b>		
A1.3.3.3.1	All surfaces used for walking or as a step area to operate and maintain the WTS must have a non-slip texture which complies with MIL-PRF-24667C Performance Specification: Coating System, Non-Skid.	INSPECTION	FIRST PRODUCTION ARTICLE
A1.3.3.3.2	The WTS must have hand and foot holds to allow the operator to operate and maintain the WTS.		
A1.3.4	<b>BICON and QUADCON ISO Container</b>		
A1.3.4.1	<b>ISO containers Requirements:</b>		
A1.3.4.1.1	BICON ISO Containers is one half length of the standard 20 foot long ISO container.		
A1.3.4.1.2	QUADCON ISO Containers are one quarter length of the standard 20 foot long ISO container.		
A1.3.4.1.3	The ISO Containers must have eight (8) corner fittings IAW ISO 1161, Series 1 Freight Containers - Corner fittings - Specification, fourth edition 1984-12-15.	INSPECTION	FIRST PRODUCTION ARTICLE

INSPECTION		FIRST PRODUCTION ARTICLE	
A1.3.4.1.4	The ISO Containers must have four (4) Container Couplers (Horizontal Twist locks), NSN 3040-01-387-4048, Connecting Link, Rigid (or equivalent), and have its own storage place inside the respective containers.		
A1.3.4.1.5	The ISO Containers must have four-way forklift pockets for handling as per ISO 1496-1.		
A1.3.4.1.6	No component must protrude past the exterior shell of the ISO Containers, except the ISO corner fittings during inter-modular/commercial shipping mode.		
A1.3.4.1.7	The exterior dimensions of the ISO Containers must meet ISO 668, Series 1 Freight Containers - Classification, dimensions and ratings, designations 1F (8'H) (see Fig. 1.2 and Fig 1.3):		
<div><div><div><div></div><div></div><div></div><div></div></div><div>8'</div><div>2438 mm</div></div><div><div><div></div><div></div><div></div><div></div></div><div>4'9 3/8"</div><div>1457 mm</div></div></div> <div><div><div></div><div></div><div></div><div></div></div><div>8'</div><div>2438 mm</div></div>		ANALYSIS	FIRST PRODUCTION ARTICLE
Figure 1.2 QUADCON ISO Containers Exterior Dimensions			

	<p>ANALYSIS</p> <p>FIRST PRODUCTION ARTICLE</p>
<p>Figure 1.3 BICON ISO Containers Exterior Dimensions</p>	
<p>A1.3.4.1.8</p> <p>The ISO Containers must be handled by Load Handling System (LHS), all containers-handling systems, and be shipped by commercial inter-modular shipping system (air, road, rail or sea) IAW the International Convention for Safe Containers and the Safe Containers Convention Act.</p>	<p>ANALYSIS</p> <p>FIRST PRODUCTION ARTICLE</p>
<p>A1.3.4.1.9</p> <p>The ISO Containers must be manufactured as per ISO 668, ISO 1161, and ISO 1496-1 (latest editions). The structural members of the containers must be made of weathering steel.</p>	<p>CERTIFICATION</p> <p>FIRST PRODUCTION ARTICLE</p>
<p>A1.3.4.1.10</p> <p>The ISO Containers must pass the waterproofness test as per ISO 1496-1.</p>	
<p>A1.3.4.1.11</p> <p>The ISO Containers interior floors must be non-porous, easy to clean, slip resistant, highly durable, water resistant and scratch resistant.</p>	<p>INSPECTION</p> <p>FIRST PRODUCTION ARTICLE</p>
<p>A1.3.4.2</p> <p><b>Certification of the ISO Containers</b></p>	<p>CERTIFICATION</p>

A1.3.4.2.1	The ISO Containers must be Convention for Safe Containers (CSC) certified as per International Association of Classification Societies.		FIRST PRODUCTION ARTICLE
A1.3.4.2.1.1	If attachment points or modifications made to the ISO Containers are incorporated after receiving its initial build CSC certification, the original ISO Container manufacturer must verify that the CSC is still valid and if not issue a new CSC certification and plate.		
A1.3.4.2.2	The ISO Containers must be affixed with the CSC plates.	INSPECTION	FIRST PRODUCTION ARTICLE
A1.3.4.3	<b>Identification and Marking of the ISO Containers</b>		
A1.3.4.3.1	A DND identification plate made of metal must be attached to each ISO Container and one of the personnel doors IAW D-02-002-001/SG-001.		
A1.3.4.3.2	IAW ISO 6346, the BIC (consisting of the DND Owner Code (CFCU), serial number and check digit) must be placed in the preferred horizontal format on the container as per the size and locations outlined in ISO 6346.		
A1.3.4.3.3	Each ISO Container must also have its new ISO Alphanumeric Identification Number stenciled/decaled in the vertical format on the inside of the curb side corner panel near the personnel door.	INSPECTION	FIRST PRODUCTION ARTICLE
A1.3.4.3.4	All exterior ISO identification markings must be stenciled/decaled on each ISO Container in a contrasting colour.		
A1.3.4.3.5	In order for DND to create the ISO Identification Numbers, the Contractor must provide:		
A1.3.4.3.5.1	Manufacturer serial number;		
A1.3.4.3.5.2	Manufacturer date;		
A1.3.4.3.5.3	Copies of the CSC certification, and	INSPECTION	

A1.3.4.3.5.4	Drawing(s) of the ISO Containers, with all interior attachment points and racks shown.		FIRST PRODUCTION ARTICLE
A1.3.4.3.6	ISO Identification Numbers will be assigned and issued by DND.		
A1.3.5	<b>Noise Emissions</b>		
A1.3.5.1	The audible noise level generated by the WTU equipment must not exceed 87 dB (A) IAW the steady noise level permitted for a full eight-hour work shift as per the Occupational Exposure Limits in Canada (Federal) criterion.		FIRST PRODUCTION ARTICLE
A1.3.5.2	The audible noise level generated by the WTS, while operating, must not exceed 70 dB (A) at any location seven (7) m away from the center of the noise source.	TEST	
A1.4	<b>Functionality</b>		
A1.4.1	<b>Performance Characteristics</b>		
A1.4.1.1	The WTS in its main configuration must be capable of purifying a wide range of source water from fresh and seawater sources composed of high levels of calcium, magnesium, bicarbonate, carbonate, minerals, H <sub>2</sub> SO <sub>4</sub> acid, HCl, CO <sub>2</sub> , hydrogen ion, sulphate, chloride, nitrate, fluoride, sodium, silica, iron, aluminum, oxygen, hydrogen sulphide, dissolved solids and suspended solids, while meeting Health Canada's Standards and Guidelines for Canadian Drinking Water Quality.		
A1.4.1.2	<b>Water Production</b>		
A1.4.1.2.1	Source Water Parameters	ANALYSIS	FIRST PRODUCTION ARTICLE
A1.4.1.2.1.1	The WTS must derive purified water from water sources with the following parameters across the climatic conditions outlined in A1.5.2:	ANALYSIS	FIRST PRODUCTION ARTICLE

A1.4.1.2.1.2	The WTS must be capable of purifying a water source containing no less than 45 000 ppm TDS.	ANALYSIS	FIRST PRODUCTION ARTICLE
A1.4.1.2.1.3	The WTS must be capable of purifying a water source with an NTU of no less than 200.		
A1.4.1.2.1.4	The WTS must be capable of purifying water source with a free chlorine level of no less than 3 ppm.		
A1.4.1.2.1.5	The WTS must be capable of purifying a water source with a temperature range of 4°C to 40°C.		
A1.4.1.2.1.6	The WTS must be capable of purifying a water source with a PH range of 5.5 to 8.3.		
A1.4.1.2.1.7	The WTS must be capable of purifying a water source with a hardness of no less 200 mg/Litre		
A1.4.1.2.1.8	The WTS must be capable of purifying a water source with a level of Dissolve Organic Carbon (DOC) of no less than 20 mg/Litre		
A1.4.1.3	<b>Water Quality Challenges</b>		
A1.4.1.3.1	The WTS must pass the water quality test outlined in Appendix A5.0 to ANNEX A1.	TEST	FIRST PRODUCTION ARTICLE
A1.4.1.3.2	The WTS must purified water from the specific source outlined in Mission profile Functionality test # 1 and #2, para 6.2.2.7 and 6.2.2.8, and meet water quality standard outlined para. A1.4.1.5.	TEST	FIRST PRODUCTION ARTICLE
A1.4.1.4	<b>Production Rates</b>		
A1.4.1.4.1	The WTS must produce purified water at the following production rates across the climatic conditions outlined in A1.5.1:		

<table><tr><th rowspan="2">Water Source</th><th colspan="2">Output Production</th></tr><tr><th>Litres/hour</th><th>Litres/day <small>see note</small></th></tr><tr><td>Fresh Water</td><td>1,250</td><td>25,000</td></tr><tr><td>Sea Water</td><td>625</td><td>12,500</td></tr></table>	Water Source	Output Production		Litres/hour	Litres/day <small>see note</small>	Fresh Water	1,250	25,000	Sea Water	625	12,500		
Water Source		Output Production											
	Litres/hour	Litres/day <small>see note</small>											
Fresh Water	1,250	25,000											
Sea Water	625	12,500											
Note: A day is defined as twenty (20) hours of consecutive operation in the twenty-four (24) hour period.													
A1.4.1.4.2	The WTS must meet the output quantities in A1.4.1.3.1 when its normal operating plane is at an angle of 10° in any direction from the horizontal.												
A1.4.1.4.3	The WTS must meet the output quantities in A1.4.1.3.1 when the WTS is located at sea level through to 2,000 m in elevation above sea level.												
A1.4.1.5	<b>Drinking Water Quality</b>												
A1.4.1.5.1	Water purified and treated by the WTS must meet the water quality requirements outlined in the Health Canada Guidelines for Canadian Drinking Water Quality (see the References – 2020 Guideline Technical Document and 2020 Summary Tables).	CERTIFICATION											
		FIRST PRODUCTION ARTICLE											
A1.4.2	<b>Mobility</b>												
A1.4.2.1	The WTS in primary mode of operation must achieve the Road and Cross Country test describe in ANNEX A1 para 6.2.2.6 to 6.2.2.11 without surpassing operator fault-finding and maintenance describe in ANNEX A1 para 6.2.2.9.	TEST											
A1.4.2.2	The WTS in primary mode of operation must pass the Static Rollover test describe in ANNEX A1 para 6.2.2.4												
A1.4.2.3	The WTS in its primary configuration must negotiate turns while being towed at posted speed limits on all Canadian highways (up to 110 km/h), without overturning, and while remaining stable at all times.	CERTIFICATION											
		FIRST PRODUCTION ARTICLE											



**APPENDIX A**  
**TO W8476-216378**  
**REVISED 24 MARCH 2022**

A1.4.2.3.1	The Dynamic Rollover Threshold must be defined by mathematical analysis and presented at CDR.		FIRST PRODUCTION ARTICLE
A1.4.2.4	The WTS in its primary configuration must be pulled or backed through light vegetation without damage to exterior components.		
A1.4.2.4.1	Light vegetation is defined as small trees/brush with a stem diameter of 25 mm and 1.5 m in height.		
A1.4.2.5	The angle of departure of the WTS in the primary mode of employment must be 18° with the angle measured as per SAE J1100 dimension A106-2. Note that the Rear Impact Guard may be retracted to meet this requirement.	ANALYSIS	FIRST PRODUCTION ARTICLE
A1.4.2.6	The WTS in the primary mode of employment must ford a water obstacle to a depth of 750 mm without preparation IAW with STANAG 2805 ED 5.	TEST	FIRST PRODUCTION ARTICLE
<b>A1.5 Environmental and Climatic Characteristics</b>			
A1.5.1	<b>Environmental/Climatic Requirements</b>		
A1.5.1.1	The WTS must meet all performance requirements in this specification, without physical damage or degradation to the WTS and sub-systems, during and after exposure to any combination of the meteorological and induced environmental conditions and factors identified in this specification.		
A1.5.2	<b>Climatic Conditions</b>		
A1.5.2.1	The WTS must be stored in all climatic conditions and factors associated with climatic categories A1, A2, A3, B1, B2, B3, C0, C1, and C2 IAW AECTP 230, Edition 1, Leaflets 2311/1 through 2311/3 and STANAG 2895, Edition 1, Annex C.	CERTIFICATION	FIRST PRODUCTION ARTICLE
A1.5.2.2	The WTS must be towed, be on stand-by, and be operable in all climatic conditions and factors associated with A1, A2, A3, B1, B2, B3, C0, C1, and	CERTIFICATION	FIRST PRODUCTION ARTICLE

**APPENDIX A**  
**TO W8476-216378**  
**REVISED 24 MARCH 2022**

C2 climatic categories IAW AECTP 230, Edition 1, Leaflets 2311/1 through 2311/3 and STANAG 2895, Edition 1, Annex C.			
A1.5.2.3	The WTS must operate in relative humidity ranging from 5% to 100%.	CERTIFICATION	FIRST PRODUCTION ARTICLE
A1.5.3	<b>Environmental Conditions</b>		
A1.5.3.1	The WTS must operate in heavy rain up to 20 mm/h and rain driven by wind gusts up to eighty (80) km/h over a period of no less than three (3) hours.	CERTIFICATION	FIRST PRODUCTION ARTICLE
A1.5.3.2	The WTS must operate in blowing sand and dust caused by wind gusts up to eighty (80) km/h over a period of no less than three (3) hours.		
A1.5.3.3	The WTS including ancillary equipment must be resistant to UV rays, fire, water, POL products, insects, animals, rot, mildew, and corrosion.		

## **A2.0 APPENDIX: CONTRACT DATA REQUIREMENTS LIST**

### **A2.1 CDRL Item List**

<b>CDRL #</b>	<b>Title</b>	<b>DID #</b>
WTS-PM-001	Project Management Plan	WTS-PM-001
WTS-PM-002	Contract Master Schedule	WTS-PM-002
WTS-PM-003	Contract Work Breakdown Structure	WTS-PM-003
WTS-PM-004	Contract Status Report	WTS-PM-004
WTS-PM-005	Meeting Agenda	WTS-PM-005
WTS-PM-006	Meeting Minutes	WTS-PM-006
WTS-SE-101	Systems Engineering Management Plan	WTS-SE-101
WTS-SE-102	Mandated System Review Package	WTS-SE-102
WTS-SE-103	Requirements Traceability Verification Matrix	WTS-SE-103
WTS-SE-104	Engineering Drawings & Associated Lists	WTS-SE-104
WTS-SE-105	Engineering Change Proposals	WTS-SE-105
WTS-SE-106	Configuration Status Accounting Report	WTS-SE-106
WTS-SE-107	Acceptance Test Plan and Procedures	WTS-SE-107
WTS-SE-108	Acceptance Test Reports	WTS-SE-108
WTS-ILS-201	Top Level Assembly Drawing	WTS-ILS-201
WTS-ILS-202	WTS Operator Manual	WTS-ILS-202
WTS-ILS-203	WTU Operator Quick Reference Card	WTS-ILS-203
WTS-ILS-204	WTS Maintenance Manual	WTS-ILS-204
WTS-ILS-205	WTS Permissive Repair Schedule and Standard Repair Times	WTS-ILS-205
WTS-ILS-206	WTS Illustrated Parts Manual	WTS-ILS-206
WTS-ILS-207	WTS Operator Training Package	WTS-ILS-207
WTS-ILS-208	WTU and ASU Technician Training Package	WTS-ILS-208
WTS-ILS-209	WTS Preservation, Storage and Reactivation Instructions	WTS-ILS-209
WTS-ILS-210	WTS Stowage, Shipping and Handling Instructions	WTS-ILS-210
WTS-ILS-211	WTS Data Summary	WTS-ILS-211
WTS-ILS-212	MEU, ASU and WSU Stowage Maps	WTS-ILS-212
WTS-ILS-213	WTU Process and Flow Diagrams	WTS-ILS-213
WTS-ILS-214	WSU Operation, Maintenance and Parts Handbook	WTS-ILS-214
WTS-ILS-215	Provisioning Parts Breakdown	WTS-ILS-215
WTS-ILS-216	Supplementary Provisioning Technical Documentation	WTS-ILS-216
WTS-ILS-217	Special Tools and Test Equipment	WTS-ILS-217
WTS-ILS-218	Equipment Delivery Status Report	WTS-ILS-218

**APPENDIX A**  
**TO W8476-216378**  
**REVISED 24 MARCH 2022**

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WTS-ILS-219	Material Identification Data Set	WTS-ILS-219
WTS-ILS-220	Identification Plates	WTS-ILS-220
WTS-ILS-221	Controlled & Non-Controlled Goods List	WTS-ILS-221
WTS-ILS-222	Identification Labels for Storage and Shipment and Packaging Codes	WTS-ILS-222
WTS-ILS-223	List of Items to be Supported	WTS-ILS-223
WTS-ILS-224	Warranty Support Plan	WTS-ILS-224
WTS-ILS-225	Equipment Environmental Assessment	WTS-ILS-225

## A2.2 CDRL Table Definitions

The following section defines the various blocks of information found on the CDRL forms:

### **BLOCK 1 – SYSTEM / ITEM**

Provides the name of the System or Item for which the CDRL applies.

### **BLOCK 2 – ITEM NUMBER**

The Item Number is a sequential three-digit number to uniquely identify the individual data item (CDRL number). Note that the 001-099 series is reserved to Project Management (PM) CDRLs, the 101-199 series is reserved to Systems Engineering (SE) CDRLs and the 201-299 series is reserved to Integrated Logistics Support (ILS) CDRLs.

### **BLOCK 3 - TITLE OR DESCRIPTION OF DATA**

The title of the data item being referred to in this CDRL.

### **BLOCK 4 - AUTHORITY (DATA ITEM NUMBER)**

Indicates the Data Item Description (DID) number to which this CDRL refers.

### **BLOCK 5 - CONTRACT REFERENCE**

The specific paragraph number of the Contract Demand, Statement of Work, Request for Proposal, Specification, or other applicable document to assist in identifying the work effort associated with the data item.

### **BLOCK 6 - FREQUENCY**

This block indicates the frequency of the delivered data. The following frequency codes are used:

ANNLY	Annually
ASGEN	As generated
ASREQ	As required
BI-MO	Every 2 months
BI-WK	Every 2 weeks
DAILY	Daily
MNTHY	Monthly
ONE/R	One time with revisions
OTIME	One time
QRTLY	Quarterly
R/ASR	Revisions as required
SEMIA	Semi-annually
WKLY	Weekly

### **BLOCK 7 – REQUIRING OFFICE**

Identifies the technical office of primary interest responsible for defining the data requirement, reviewing, acceptance and approval of the data item, and ensuring the adequacy of the delivered data.

### **BLOCK 8 – SUBMISSION SCHEDULE**

**DATE OF 1ST SUBMISSION** - The initial submission date or associated constraint for the 1st submission of the data item is indicated in this block using typical abbreviations as listed above under Block 11.

**DATE OF SUBSEQUENT SUBMISSION / EVENT** - The date(s) of subsequent submission(s) or associated constraint(s) of the data item is indicated in this block.

**BLOCK 9 - DISTRIBUTION AND ADDRESSEES**

Indicates the addressees and the respective number of copies (hard copies and soft copies separately), for either the draft or first submissions (Sub-Block "Draft"), and for the final or subsequent submissions (Sub-Block "Final"), for which the data item is required.

### A2.3 CDRL – Project Management Plan

CONTRACT DATA REQUIREMENTS LIST								
1. SYSTEM / ITEM Water Treatment System								
2. ITEM NUMBER CDRL WTS-PM-001		3. TITLE OR DESCRIPTION OF DATA Project Management Plan (PMP)		4. AUTHORITY (Data Item Number) DID WTS-PM-001				
5. CONTRACT REFERENCE SOW: <b>Para. 3.2.1 (pg. 17)</b> DID: <b>App. A3.3 (pg 158)</b>		6. FREQUENCY R/ASR		7. REQUIRING OFFICE DND PMO				
8. SUBMISSION SCHEDULE  <b>First Submission:</b> The Contractor must provide a draft PMP for review at the Kick-off meeting.  <b>Response Time:</b> Comments on the draft PMP will be provided by Canada no later than 14 calendar days after receipt of the <u>soft copy submission</u> .  <b>Subsequent Submission(s):</b> The Contractor must provide a revised PMP, addressing Canada's comments, for review and possible acceptance no later than 14 calendar days after the receipt of Canada's comments.  <b>Response Time:</b> Comments or acceptance of the revised PMP will be provided by Canada no later than seven (7) calendar days after receipt of the <u>soft copy submission</u> .				9. DISTRIBUTION and ADDRESSEES				
				A. ADDRESSEE	B. COPIES			
					DRAFT		FINAL	
					Hard Copy	Soft Copy	Hard Copy	Soft Copy
				DND TA		1		1

#### A2.4 CDRL – Contract Master Schedule

CONTRACT DATA REQUIREMENTS LIST							
1. SYSTEM / ITEM Water Treatment System							
2. ITEM NUMBER CDRL WTS-PM-002	3. TITLE OR DESCRIPTION OF DATA Contract Master Schedule (CMS)		4. AUTHORITY (Data Item Number) DID WTS-PM-002				
5. CONTRACT REFERENCE SOW: <b>Para. 3.3.1 (pg. 17)</b> DID: <b>App. A3.4 (pg.160)</b>	6. FREQUENCY  R/ASR		7. REQUIRING OFFICE DND PMO				
8. SUBMISSION SCHEDULE  <b>First Submission:</b> The Contractor must provide a draft CMS for review at the Kick-off meeting.  <b>Response Time:</b> Comments on the draft CMS will be provided by Canada no later than 14 calendar days after receipt of the <u>soft copy submission</u> .  <b>Subsequent Submission(s):</b> The Contractor must provide a revised CMS, addressing Canada's comments, for review and possible acceptance no later than 14 calendar days after the receipt of Canada's comments.  <b>Response Time:</b> Comments or acceptance of the revised CMS will be provided by Canada no later than seven (7) calendar days after receipt of the <u>soft copy submission</u> .  <b>Monthly Submissions (when changed):</b> After acceptance by Canada, the Contractor must provide an updated CMS (when changed) on a monthly basis, aligned with the Contract Status Report, throughout the contract.			9. DISTRIBUTION and ADDRESSEES				
			A. ADDRESSEE	B. COPIES			
				DRAFT		FINAL	
				Hard Copy	Soft Copy	Hard Copy	Soft Copy
			DND TA		1		1
			PSPC CA				1
			DND PA				1
			DND ILSM				1



## A2.5 CDRL – Contract Work Breakdown Structure

CONTRACT DATA REQUIREMENTS LIST							
1. SYSTEM / ITEM Water Treatment System							
2. ITEM NUMBER CDRL WTS-PM-003	3. TITLE OR DESCRIPTION OF DATA Contract Work Breakdown Structure (CWBS)		4. AUTHORITY (Data Item Number) DID WTS-PM-003				
5. CONTRACT REFERENCE SOW: <b>Para. 3.4.1 (pg. 17)</b> DID: <b>App. A3.5 (pg. 162)</b>	6. FREQUENCY  R/ASR		7. REQUIRING OFFICE DND PMO				
8. SUBMISSION SCHEDULE  <b>First Submission:</b> The Contractor must provide a draft CWBS for review no later than 28 calendar days after the Kick-off Meeting.  <b>Response Time:</b> Comments on the draft CWBS will be provided by Canada no later than 14 calendar days after receipt of the <u>soft copy submission</u> .  <b>Subsequent Submission(s):</b> The Contractor must provide a revised CWBS, addressing Canada's comments, for review and possible acceptance no later than 14 calendar days after the receipt of Canada's comments.  <b>Response Time:</b> Comments or acceptance of the revised CWBS will be provided by Canada no later than seven (7) calendar days after receipt of the <u>soft copy submission</u> .  <b>Monthly Submissions (when changed):</b> After acceptance by Canada, the Contractor must provide an updated CWBS (when changed) on a monthly basis, aligned with the Contract Status Report, throughout the contract.			9. DISTRIBUTION and ADDRESSEES				
			A. ADDRESSEE	B. COPIES			
				DRAFT		FINAL	
				Hard Copy	Soft Copy	Hard Copy	Soft Copy
			DND TA		1		1
			PSPC CA				1
			DND PA				1
			DND ILSM		1		1

## A2.6 CDRL – Contract Status Report

CONTRACT DATA REQUIREMENTS LIST								
1. SYSTEM / ITEM Water Treatment System								
2. ITEM NUMBER CDRL WTS-PM-004	3. TITLE OR DESCRIPTION OF DATA Contract Status Report (CSR)		4. AUTHORITY (Data Item Number) DID WTS-PM-004					
5. CONTRACT REFERENCE SOW: <b>Para. 3.5.1 (pg. 18)</b> DID: <b>App. A3.6 (pg 163)</b>	6. FREQUENCY  MNTHY		7. REQUIRING OFFICE DND PMO					
8. SUBMISSION SCHEDULE  <b>First Submission:</b> The Contractor must provide a draft CSR for review no later than 28 calendar days after the Kick-off Meeting.  <b>Response Time:</b> Comments on the draft CSR will be provided by Canada no later than 14 calendar days after receipt of the <u>soft copy submission</u> .  <b>Subsequent Submission(s):</b> The Contractor must provide a revised CSR, addressing Canada's comments, for review and possible acceptance no later than seven (7) calendar days after the receipt of Canada's comments.  <b>Response Time:</b> Comments or acceptance of the revised CSR will be provided by Canada no later than seven (7) calendar days after receipt of the <u>soft copy submission</u> .  <b>Monthly Submissions:</b> After acceptance by Canada, the Contractor must provide a CSR on a monthly basis throughout the contract.			9. DISTRIBUTION and ADDRESSEES					
			A. ADDRESSEE		B. COPIES			
					DRAFT		FINAL	
					Hard Copy	Soft Copy	Hard Copy	Soft Copy
			DND TA			1		1
			PSPC CA					1
DND PA					1			
DND ILSM					1			

## A2.7 CDRL – Meeting Agenda

CONTRACT DATA REQUIREMENTS LIST									
1. SYSTEM / ITEM Water Treatment System									
2. ITEM NUMBER CDRL WTS-PM-005		3. TITLE OR DESCRIPTION OF DATA Meeting Agenda		4. AUTHORITY (Data Item Number) DID WTS-PM-005					
5. CONTRACT REFERENCE SOW: <b>Para. 3.6.6.1.1 (pg. 19)</b> DID: <b>App. A3.7 (pg.165)</b>		6. FREQUENCY  ASREQ		7. REQUIRING OFFICE DND PMO					
8. SUBMISSION SCHEDULE  <b>First Submission:</b> The Contractor must provide a draft Meeting Agenda for review no later than seven (7) calendar days prior to each meeting.  <b>Response Time:</b> Comments on the draft Meeting Agenda, and additions and deletions of discussion items, will be provided by Canada no later than seven (7) calendar days after receipt of the <u>soft copy submission</u> .  <b>Subsequent Submission:</b> The Contractor must provide a revised Meeting Agenda, addressing Canada's comments, as a <u>soft copy</u> , one (1) business day before the meeting, and in <u>hard copy</u> at the meeting.				9. DISTRIBUTION and ADDRESSEES					
				A. ADDRESSEE	B. COPIES				
					DRAFT		FINAL		
					Hard Copy	Soft Copy	Hard Copy	Soft Copy	
				PSPC CA			1		1
				DND TA			1		1
				DND PA			1		1

## A2.8 CDRL – Meeting Minutes

CONTRACT DATA REQUIREMENTS LIST							
1. SYSTEM / ITEM Water Treatment System							
2. ITEM NUMBER CDRL WTS-PM-006	3. TITLE OR DESCRIPTION OF DATA Meeting Minutes		4. AUTHORITY (Data Item Number) DID WTS-PM-006				
5. CONTRACT REFERENCE SOW: <b>Para. 3.6.6.1.1 (pg. 19)</b> DID: <b>App. A3.8 (pg. 166)</b>	6. FREQUENCY  ASREQ		7. REQUIRING OFFICE  DND PMO				
8. SUBMISSION SCHEDULE  <b>First Submission:</b> The Contractor must provide draft Meeting Minutes for review no later than seven (7) calendar days following each meeting.  <b>Response Time:</b> Comments on the draft Meeting Minutes will be provided by Canada no later than seven (7) calendar days after receipt of the <u>soft copy submission</u> .  <b>Subsequent Submission(s):</b> The Contractor must provide revised Meeting Minutes, addressing Canada's comments, for review and possible acceptance no later than seven (7) calendar days after receipt of Canada's comments.  <b>Response Time:</b> Comments or acceptance of the revised Meeting Minutes will be provided by Canada no later than seven (7) calendar days after receipt of the <u>soft copy submission</u> .			9. DISTRIBUTION and ADDRESSEES				
			A. ADDRESSEE	B. COPIES			
				DRAFT		FINAL	
				Hard Copy	Soft Copy	Hard Copy	Soft Copy
			PSPC CA		1		1
			DND TA		1		1
			DND PA		1		1

## A2.9 CDRL – Systems Engineering Management Plan

CONTRACT DATA REQUIREMENTS LIST							
1. SYSTEM / ITEM Water Treatment System							
2. ITEM NUMBER CDRL WTS-SE-101	3. TITLE OR DESCRIPTION OF DATA Systems Engineering Management Plan (SEMP)		4. AUTHORITY (Data Item Number) DID WTS-SE-101				
5. CONTRACT REFERENCE SOW: <b>Para. 4.2.2.1 (pg. 20)</b> DID: <b>App. A3.9 (pg. 167)</b>	6. FREQUENCY  QRTLY		7. REQUIRING OFFICE DND PMO				
8. SUBMISSION SCHEDULE  <b>First Submission:</b> The Contractor must provide a draft SEMP for review at Kick-off meeting.  <b>Response Time:</b> Comments on the draft SEMP will be provided by Canada no later than 14 calendar days after receipt of the <u>soft copy submission</u> .  <b>Subsequent Submission(s):</b> The Contractor must provide a revised SEMP, addressing Canada's comments, for review and possible acceptance no later than 14 calendar days after the receipt of Canada's comments.  <b>Response Time:</b> Comments or acceptance of the revised SEMP will be provided by Canada no later than seven (7) calendar days after receipt of the <u>soft copy submission</u> .  <b>Quarterly Submissions:</b> After acceptance by Canada, the Contractor must provide a SEMP on a quarterly basis throughout the remainder of the contract, after changes have occurred.			9. DISTRIBUTION and ADDRESSEES				
			A. ADDRESSEE	B. COPIES			
				DRAFT		FINAL	
				Hard Copy	Soft Copy	Hard Copy	Soft Copy
			DND TA		1		1

**A2.10 CDRL – Mandated System Review Package**

CONTRACT DATA REQUIREMENTS LIST				
1. SYSTEM / ITEM Water Treatment System				
2. ITEM NUMBER CDRL WTS-SE-102	3. TITLE OR DESCRIPTION OF DATA Mandated System Review (MSR) Package		4. AUTHORITY (Data Item Number) DID WTS-SE-102	
5. CONTRACT REFERENCE SOW: <b>Para. 4.2.4.4 (pg. 21)</b> DID: <b>App. A3.10 (pg. 172)</b>	6. FREQUENCY  R/ASR		7. REQUIRING OFFICE DND PMO	
8. SUBMISSION SCHEDULE  <b>First Submission:</b> The Contractor must provide a draft MSR Package for review no later than 28 calendar days prior to each MSR meeting.  <b>Response Time:</b> Comments on the draft MSR Package will be provided by Canada no later than 14 calendar days after receipt of the <u>soft copy submission</u> .  <b>MSR Meeting Submission:</b> The Contractor must provide a revised MSR Package, addressing Canada's comments, for presentation and discussion, at the MSR meeting.  <b>Response Time:</b> Comments or acceptance of the revised MSR Package will be provided by Canada no later than seven (7) calendar days after the MSR meeting has concluded.  <b>Subsequent Submission(s):</b> The Contractor must provide a revised MSR Package, addressing Canada's comments, for review and possible acceptance no later than seven (7) calendar days after the receipt of Canada's comments.			9. DISTRIBUTION and ADDRESSEES	
			A. ADDRESSEE	
			B. COPIES	
			DRAFT	
			FINAL	
			Hard Copy	Soft Copy
			Hard Copy	Soft Copy
			DND TA	1

## A2.11 CDRL – Requirements Traceability Verification Matrix

CONTRACT DATA REQUIREMENTS LIST								
1. SYSTEM / ITEM Water Treatment System								
2. ITEM NUMBER CDRL WTS-SE-103	3. TITLE OR DESCRIPTION OF DATA Requirements Traceability Verification Matrix (RTVM)		4. AUTHORITY (Data Item Number) DID WTS-SE-103					
5. CONTRACT REFERENCE SOW: <b>Para. 4.2.5.1 (pg. 22)</b> DID: <b>App. A3.11 (pg. 173)</b>	6. FREQUENCY  R/ASR		7. REQUIRING OFFICE DND PMO					
8. SUBMISSION SCHEDULE  <b>First Submission:</b> The Contractor must provide a draft RTVM for review no later than 21 calendar days prior to each MSR meeting that requires it.  <b>Response Time:</b> Comments or acceptance of the draft RTVM will be provided by Canada no later than 14 calendar days after receipt of the <u>soft copy submission</u> .  <b>MSR Meeting Submission:</b> The Contractor must provide a revised RTVM, addressing Canada's comments, for presentation and discussion at the MSR meeting.  <b>Response Time:</b> Comments or acceptance of the revised RTVM will be provided by Canada no later than seven (7) calendar days after the MSR meeting has concluded.  <b>Subsequent Submission(s):</b> The Contractor must provide a revised RTVM, addressing Canada's comments, for review and possible acceptance no later than seven (7) calendar days after the receipt of Canada's comments.  <b>Final Submission:</b> The Contractor must provide the final and complete RTVM once the Acceptance Test Reports are accepted after completion of the Acceptance Verification.			9. DISTRIBUTION and ADDRESSEES					
			A. ADDRESSEE		B. COPIES			
					DRAFT		FINAL	
					Hard Copy	Soft Copy	Hard Copy	Soft Copy
			DND TA			1		1

## A2.12 CDRL – Engineering Drawings and Associated Lists

CONTRACT DATA REQUIREMENTS LIST							
1. SYSTEM / ITEM Water Treatment System							
2. ITEM NUMBER CDRL WTS-SE-104	3. TITLE OR DESCRIPTION OF DATA Engineering Drawings and Associated Lists		4. AUTHORITY (Data Item Number) DID WTS-SE-104				
5. CONTRACT REFERENCE SOW: <b>Para. 4.3.3.1 (pg. 26)</b> DID: <b>App. A3.12 (pg. 175)</b>	6. FREQUENCY  R/ASR		7. REQUIRING OFFICE DND PMO				
8. SUBMISSION SCHEDULE <b>First Submission:</b> The Contractor must provide a draft Engineering Drawings and Associated Lists (Level 1 – Conceptual and Developmental Design) for review no later than 21 calendar days prior to the CDR meeting, to confirm the maturity of the system design.  <b>Response Time:</b> Comments on the draft Engineering Drawings and Associated Lists will be provided by Canada no later than 14 calendar days after receipt of the <u>soft copy submission</u> .  <b>CDR Meeting Submission:</b> The Contractor must provide a revised Engineering Drawings and Associated Lists, addressing Canada’s comments, for presentation and discussion at the CDR meeting.  <b>Response Time:</b> Comments or acceptance of the revised Engineering Drawings and Associated Lists will be provided by Canada no later than seven (7) calendar days after the CDR meeting has concluded.  <b>Subsequent Submission:</b> The Contractor must provide a final Engineering Drawings and Associated Lists (Level 2 – Production Prototype and Limited Production), for review no later than 21 calendar days prior to the PCA meeting.  <b>Response Time:</b> Comments on the final Engineering Drawings and Associated Lists will be provided by Canada no later than 14 calendar days after receipt of the <u>soft copy submission</u> .  <b>PCA Meeting Submission:</b> The Contractor must provide a revised final Engineering Drawings and Associated Lists, addressing Canada’s comments, for discussion and use during the PCA meeting.  <b>Response Time:</b> Comments or acceptance of the revised final Engineering Drawings and Associated Lists will be provided by Canada no later than seven (7) calendar days after the PCA meeting has concluded.			9. DISTRIBUTION and ADDRESSEES				
			A. ADDRESSEE	B. COPIES			
				DRAFT		FINAL	
				Hard Copy	Soft Copy	Hard Copy	Soft Copy
			DND TA		1		1



### A2.13 CDRL – Engineering Change Proposal

CONTRACT DATA REQUIREMENTS LIST								
1. SYSTEM / ITEM Water Treatment System								
2. ITEM NUMBER CDRL WTS-SE-105		3. TITLE OR DESCRIPTION OF DATA Engineering Change Proposal (ECP)		4. AUTHORITY (Data Item Number) DID WTS-SE-105				
5. CONTRACT REFERENCE SOW: <b>Para. 5.4.2 (pg 27)</b> DID: <b>App. A3.13 (pg. 176)</b>		6. FREQUENCY  ASGEN		7. REQUIRING OFFICE DND PMO				
8. SUBMISSION SCHEDULE  <b>First Submission:</b> The Contractor must provide a draft ECP for review as required.  <b>Response Time:</b> Comments on the draft ECP will be provided by Canada no later than 14 calendar days after receipt of the <u>soft copy submission</u> .  <b>Subsequent Submission(s):</b> The Contractor must provide a revised ECP, addressing Canada's comments, for review and possible acceptance no later than 14 calendar days after the receipt of Canada's comments.  <b>Response Time:</b> Comments or acceptance of the revised ECP will be provided by Canada no later than seven (7) calendar days after receipt of the <u>soft copy submission</u> .			9. DISTRIBUTION and ADDRESSEES					
			A. ADDRESSEE		B. COPIES			
					DRAFT		FINAL	
					Hard Copy	Soft Copy	Hard Copy	Soft Copy
			DND TA			1		1

## A2.14 CDRL – Configuration Status Accounting Report

CONTRACT DATA REQUIREMENTS LIST								
1. SYSTEM / ITEM Water Treatment System								
2. ITEM NUMBER CDRL WTS-SE-106		3. TITLE OR DESCRIPTION OF DATA Configuration Status Accounting (CSA) Report		4. AUTHORITY (Data Item Number) DID WTS-SE-106				
5. CONTRACT REFERENCE SOW: <b>Para. 5.5.2 (pg 28)</b> DID: <b>App. A3.14 (pg. 183)</b>		6. FREQUENCY  BI-MO		7. REQUIRING OFFICE DND PMO				
8. SUBMISSION SCHEDULE  <b>First Submission:</b> The Contractor must provide a draft CSA Report for review no later than 28 calendar days after the CDR meeting has concluded.  <b>Response Time:</b> Comments on the draft CSA Report will be provided by Canada no later than 14 calendar days after receipt of the <u>soft copy submission</u> .  <b>Subsequent Submission(s):</b> The Contractor must provide a revised CSA Report, addressing Canada's comments, for review and possible acceptance no later than 14 calendar days after the receipt of Canada's comments.  <b>Response Time:</b> Comments or acceptance of the revised CSA Report will be provided by Canada no later than seven (7) calendar days after receipt of the <u>soft copy submission</u> .  <b>Bi-Monthly Submissions:</b> After acceptance by Canada, the Contractor must provide a CSA Report on a bi-monthly basis throughout the remainder of the contract, after changes have occurred.			9. DISTRIBUTION and ADDRESSEES					
			A. ADDRESSEE		B. COPIES			
					DRAFT		FINAL	
					Hard Copy	Soft Copy	Hard Copy	Soft Copy
			DND TA			1		1

## A2.15 CDRL – Acceptance Test Plan and Procedures

CONTRACT DATA REQUIREMENTS LIST								
1. SYSTEM / ITEM Water Treatment System								
2. ITEM NUMBER CDRL WTS-SE-107	3. TITLE OR DESCRIPTION OF DATA Acceptance Test Plan and Procedures (ATP&P)		4. AUTHORITY (Data Item Number) DID WTS-SE-107					
5. CONTRACT REFERENCE SOW: <b>Para. 6.1.1.2 (pg.31)</b> DID: <b>App. A3.15 (pg. 185)</b>	6. FREQUENCY  R/ASR		7. REQUIRING OFFICE DND PMO					
8. SUBMISSION SCHEDULE  <b>First Submission:</b> The Contractor must provide a draft ATP&P for review no later than 28 calendar days prior to the TRR meeting.  <b>Response Time:</b> Comments on the draft ATP&P will be provided by Canada no later than 14 calendar days after receipt of the <u>soft copy submission</u> .  <b>TRR Meeting Submission:</b> The Contractor must provide a revised ATP&P, addressing Canada's comments, for presentation and discussion, at the TRR meeting.  <b>Response Time:</b> Comments or acceptance of the revised ATP&P will be provided by Canada no later than seven (7) calendar days after the TRR meeting has concluded.  <b>Subsequent Submission(s):</b> The Contractor must provide a revised ATP&P, addressing Canada's comments, for review and possible acceptance no later than seven (7) calendar days after the receipt of Canada's comments.			9. DISTRIBUTION and ADDRESSEES					
			A. ADDRESSEE		B. COPIES			
					DRAFT		FINAL	
					Hard Copy	Soft Copy	Hard Copy	Soft Copy
			DND TA			1		1

## A2.16 CDRL – Acceptance Test Reports

CONTRACT DATA REQUIREMENTS LIST							
1. SYSTEM / ITEM Water Treatment System							
2. ITEM NUMBER CDRL WTS-SE-108	3. TITLE OR DESCRIPTION OF DATA Acceptance Test Reports (ATRs)		4. AUTHORITY (Data Item Number) DID WTS-SE-108				
5. CONTRACT REFERENCE SOW: <b>Para.6.2.1.4(pg. 34)</b> DID: <b>App. A3.16 (pg. 188)</b>	6. FREQUENCY  R/ASR		7. REQUIRING OFFICE DND PMO				
8. SUBMISSION SCHEDULE  <b>First Submission:</b> The Contractor must provide draft ATRs for review no later than seven (7) calendar days after Acceptance Verification completion.  <b>Response Time:</b> Comments on the ATRs will be provided by Canada no later than 14 calendar days after receipt of the <u>soft copy submission</u> .  <b>Subsequent Submission(s):</b> The Contractor must provide revised ATRs, addressing Canada's comments, for review and possible acceptance no later than 14 calendar days after the receipt of Canada's comments.  <b>Response Time:</b> Comments or acceptance of the revised ATRs will be provided by Canada no later than 14 calendar days after receipt of the <u>soft copy submission</u> .			9. DISTRIBUTION and ADDRESSEES				
			A. ADDRESSEE	B. COPIES			
				DRAFT		FINAL	
				Hard Copy	Soft Copy	Hard Copy	Soft Copy
			DND TA		1		1

## A2.17 CDRL – Top Level Assembly Drawing

CONTRACT DATA REQUIREMENTS LIST							
1. SYSTEM / ITEM Water Treatment System							
2. ITEM NUMBER CDRL WTS-ILS-201	3. TITLE OR DESCRIPTION OF DATA Top Level Assembly Drawing		4. AUTHORITY (Data Item Number) DID WTS-ILS-201				
5. CONTRACT REFERENCE SOW: <b>Para. 3.6.2.2 (pg. 18)</b> DID: <b>App. A3.17 (pg.189)</b>	6. FREQUENCY  ONE/R		7. REQUIRING OFFICE  DND ILS Manager				
8. SUBMISSION SCHEDULE  <b>First Submission:</b> The Contractor must provide a draft TLAD for review by Canada during the Kick-Off Meeting.  <b>Response Time:</b> Comments on the draft TLAD will be provided by Canada no later than seven (7) calendar days after receipt of the <u>hard and soft copy submission</u> .  <b>Subsequent Submission(s):</b> The Contractor must provide a revised TLAD, addressing Canada's comments, for review and possible acceptance no later than seven (7) calendar days after the receipt of Canada's comments.  <b>Response Time:</b> Comments or acceptance of the revised TLAD will be provided by Canada no later than seven (7) calendar days after receipt of the <u>hard and soft copy submission</u> .			9. DISTRIBUTION and ADDRESSEES				
			A. ADDRESSEE	B. COPIES			
				DRAFT		FINAL	
				Hard Copy	Soft Copy	Hard Copy	Soft Copy
			DND ILSM	1	1	1	1

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A1 - 132 / 262

A1 - 133 / 262



## A2.21 CDRL – WTS Permissive Repair Schedule and Standard Repair Times

CONTRACT DATA REQUIREMENTS LIST								
1. SYSTEM / ITEM Water Treatment System								
2. ITEM NUMBER CDRL WTS-ILS-205	3. TITLE OR DESCRIPTION OF DATA WTS Permissive Repair Schedule and Standard Repair Times		4. AUTHORITY (Data Item Number) DID WTS-ILS-205					
5. CONTRACT REFERENCE SOW Para. 8.3.1.4.1 (pg. 44) DID: App. A3.21 (pg. 196)	6. FREQUENCY ONE/R		7. REQUIRING OFFICE DND ILS Manager					
8. SUBMISSION SCHEDULE  <b>First Submission (English):</b> The Contractor must provide a draft English WTS Permissive Repair Schedule and Standard Repair Times for review by Canada no later than 28 days following the acceptance of the English WTS Maintenance Manual.  <b>Response Time:</b> Comments on the draft English WTS Permissive Repair Schedule and Standard Repair Times will be provided by Canada no later than 21 days after receipt of the <u>hard copy submission</u> .  <b>Subsequent Submission(s) English:</b> The Contractor must provide a revised English WTS Permissive Repair Schedule and Standard Repair Times, addressing Canada's comments, for review and possible acceptance no later than 14 days after the receipt of Canada's comments.  <b>Response Time:</b> Comments or acceptance of the revised English WTS Permissive Repair Schedule and Standard Repair Times will be provided by Canada no later than 14 days after receipt of the <u>hard copy submission</u> .  <b>First Submission (Bilingual):</b> The Contractor must provide a draft Bilingual WTS Permissive Repair Schedule and Standard Repair Times for review by Canada no later than 28 days following the acceptance of the Bilingual WTS Maintenance Manual.  <b>Response Time:</b> Comments on the draft Bilingual WTS Permissive Repair Schedule and Standard Repair Times will be provided by Canada no later than 21 days after receipt of the <u>hard copy submission</u> .  <b>Subsequent Submission(s) (Bilingual):</b> The Contractor must provide a revised Bilingual WTS Permissive Repair Schedule and Standard Repair Times, addressing Canada's comments, for review and possible acceptance no later than 14 days after the receipt of Canada's comments, or at any time modifications are required to the WTS Permissive Repair Schedule and Standard Repair Times due to changes made to the WTS Maintenance Manual that also affect the former.  <b>Response Time:</b> Comments or acceptance of the revised Bilingual WTS Permissive Repair Schedule and Standard Repair Times will be provided by Canada no later than 14 calendar days after receipt of the <u>hard copy submission</u> .			9. DISTRIBUTION and ADDRESSEES					
			A. ADDRESSEE		B. COPIES			
					DRAFT		FINAL	
					Hard Copy	Soft Copy	Hard Copy	Soft Copy
			DND ILSM		1	1	1	1

## A2.22 CDRL – WTS Illustrated Parts Manual

CONTRACT DATA REQUIREMENTS LIST							
1. SYSTEM / ITEM Water Treatment System							
2. ITEM NUMBER CDRL WTS-ILS-206	3. TITLE OR DESCRIPTION OF DATA WTS Illustrated Parts Manual		4. AUTHORITY (Data Item Number) DID WTS-ILS-206				
5. CONTRACT REFERENCE SOW Para. 8.3.1.5.1 (pg. 45) DID: App. A3.22 (pg. 197)	6. FREQUENCY ONE/R		7. REQUIRING OFFICE DND ILS Manager				
8. SUBMISSION SCHEDULE  <b>First Submission:</b> The Contractor must provide a draft WTS Illustrated Parts Manual for review by Canada no later than 126 days following Design Acceptance.  <b>Response Time:</b> Comments on the draft WTS Illustrated Parts Manual will be provided by Canada no later than 91 days after receipt of the <u>hard copy submission</u> .  <b>Subsequent Submission(s):</b> The Contractor must provide a revised WTS Illustrated Parts Manual, addressing Canada's comments, for review and possible acceptance no later than 84 calendar days after the receipt of Canada's comments.  <b>Response Time:</b> Comments or acceptance of the revised WTS Illustrated Parts Manual will be provided by Canada no later than 42 calendar days after receipt of the <u>hard copy submission</u> .  <b>Note:</b> The Contractor must provide a subsequent submission of the WTS Illustrated Parts Manual if additional revisions or additions are required after completion of the IPC.			9. DISTRIBUTION and ADDRESSEES				
			A. ADDRESSEE	B. COPIES			
				DRAFT		FINAL	
				Hard Copy	Soft Copy	Hard Copy	Soft Copy
			DND ILSM	1	1	3	1

## A2.23 CDRL – WTS Operator Training Package

CONTRACT DATA REQUIREMENTS LIST				
1. SYSTEM / ITEM Water Treatment System				
2. ITEM NUMBER CDRL WTS-ILS-207	3. TITLE OR DESCRIPTION OF DATA WTS Operator Training Package	4. AUTHORITY (Data Item Number) DID WTS-ILS-207		
5. CONTRACT REFERENCE SOW: <b>Para. 8.3.1.6.1 (pg. 45)</b> DID: <b>App. A3.23 (pg. 199)</b>	6. FREQUENCY  ONE/R	7. REQUIRING OFFICE  DND ILS Manager		
8. SUBMISSION SCHEDULE  <b>First Submission (English):</b> The Contractor must provide a draft English WTS Operator Training Package for review by Canada at the same time as the submission of the second version of the English WTS Operator Manual.  <b>Response Time:</b> Comments on the draft English WTS Operator Training Package will be provided by Canada no later than 49 days after receipt of the <u>hard copy submission</u> .  <b>Subsequent Submission(s) (English):</b> The Contractor must provide a revised English WTS Operator Training Package, addressing Canada's comments, for review and possible acceptance no later than 35 days after the receipt of Canada's comments.  <b>Response Time:</b> Comments or acceptance of the revised English WTS Operator Training Package will be provided by Canada no later than 28 calendar days after receipt of the <u>hard copy submission</u> .  <b>First Submission (Bilingual):</b> The Contractor must provide a draft Bilingual WTS Operator Training Package for review by Canada no later than 70 days after the acceptance of the English WTS Operator Training Package.  <b>Response Time:</b> Comments on the draft Bilingual WTS Operator Training Package will be provided by Canada no later than 35 days after receipt of both the second version of the Bilingual WTS Operator Manual <u>hard copy submission</u> and the first version of the Bilingual WTS Operator Training Package <u>hard copy submission</u> .  <b>Subsequent Submission(s) (Bilingual):</b> The Contractor must provide a revised Bilingual WTS Operator Training Package, addressing Canada's comments, for review and possible acceptance no later than 28 calendar days after the receipt of Canada's comments, or at any time changes made to the WTS Operator Manual affect the former.  <b>Response Time:</b> Comments or acceptance of the revised Bilingual WTS Operator Training Package will be provided by Canada no later than 14 calendar days after receipt of the <u>hard copy submission</u> .		9. DISTRIBUTION and ADDRESSEES		
		A. ADDRESS		
		B. COPIES		
		DRAFT		FINAL
		Hard Copy	Soft Copy	Hard Copy
		Hard Copy	Soft Copy	Hard Copy
		DND ILSM	1	1
		Issued to Students at the Training Session(s)		1 – CD of the WTS Operator Training Package 1 – Student Handout only

## A2.24 CDRL – WTU and ASU Technician Training Package

CONTRACT DATA REQUIREMENTS LIST								
1. SYSTEM / ITEM Water Treatment System								
2. ITEM NUMBER CDRL WTS-ILS-208		3. TITLE OR DESCRIPTION OF DATA WTU and ASU Technician Training Package		4. AUTHORITY (Data Item Number) DID WTS-ILS-208				
5. CONTRACT REFERENCE SOW: <b>Para. 8.3.1.7.1 (pg. 45)</b> DID: <b>App. A3.24 (pg. 201)</b>		6. FREQUENCY  ONE/R		7. REQUIRING OFFICE  DND ILS Manager				
<div>8. SUBMISSION SCHEDULE</div> <p><b>First Submission (English):</b> The Contractor must provide a draft English WTU and ASU Technician Training Package for review by Canada at the same time as the submission of the second version of the English WTS Maintenance Manual.</p> <p><b>Response Time:</b> Comments on the draft English WTU and ASU Technician Training Package will be provided by Canada no later than 49 days after receipt of the <u>hard copy submission</u>.</p> <p><b>Subsequent Submission(s) (English):</b> The Contractor must provide a revised English WTU and ASU Technician Training Package, addressing Canada's comments, for review and possible acceptance no later than 35 days after the receipt of Canada's comments.</p> <p><b>Response Time:</b> Comments or acceptance of the revised English WTU and ASU Technician Training Package will be provided by Canada no later than 28 calendar days after receipt of the <u>hard copy submission</u>.</p> <p><b>First Submission (Bilingual):</b> The Contractor must provide a draft Bilingual WTU and ASU Technician Training Package for review by Canada no later than 70 days after the acceptance of the English WTU and ASU Technician Training Package.</p> <p><b>Response Time:</b> Comments on the draft Bilingual WTU and ASU Technician Training Package will be provided by Canada no later than 35 days after receipt of both the second version of the Bilingual WTS Maintenance Manual <u>hard copy submission</u> and the second version of the Bilingual WTU and ASU Technician Training Package <u>hard copy submission</u>.</p> <p><b>Subsequent Submission(s) (Bilingual):</b> The Contractor must provide a revised Bilingual WTU and ASU Technician Training Package, addressing Canada's comments, for review and possible acceptance no later than 28 calendar days after the receipt of Canada's comments, or at any time modifications are required to the WTU and ASU Technician Training Package due to changes made to the WTS Maintenance Manual that also affect the former.</p> <p><b>Response Time:</b> Comments or acceptance of the revised Bilingual WTU and ASU Technician Training Package will be provided by Canada no later than 14 calendar days after receipt of the <u>hard copy submission</u>.</p>				9. DISTRIBUTION and ADDRESSEES				
				A. ADDRESS	B. COPIES			
					DRAFT		FINAL	
					Hard Copy	Soft Copy	Hard Copy	Soft Copy
				DND ILSM	1	1	1	1
				Issued to Students at the Training Session(s)			1 – Student Handout only	1 – CD of the WTU and ASU Technician

## A2.25 CDRL – WTS Preservation, Storage and Reactivation Instructions

CONTRACT DATA REQUIREMENTS LIST								
1. SYSTEM / ITEM Water Treatment System								
2. ITEM NUMBER CDRL WTS-ILS-209	3. TITLE OR DESCRIPTION OF DATA WTS Preservation, Storage and Reactivation Instructions		4. AUTHORITY (Data Item Number) DID WTS-ILS-209					
5. CONTRACT REFERENCE SOW: <b>Para. 8.3.1.8.1 (pg. 45)</b> DID: <b>App. A3.25 (pg. 203)</b>	6. FREQUENCY  ONE/R		7. REQUIRING OFFICE  DND ILS Manager					
8. SUBMISSION SCHEDULE  <b>First Submission (English):</b> The Contractor must provide a draft English WTS Preservation, Storage and Reactivation Instructions for review by Canada at the same time as the first draft English WTS Maintenance Manual.  <b>Response Time:</b> Comments on the draft English WTS Preservation, Storage and Reactivation Instructions will be provided by Canada no later than 56 days after receipt of the <u>hard copy submission</u> .  <b>Subsequent Submission(s) (English):</b> The Contractor must provide a revised English WTS Preservation, Storage and Reactivation Instructions, addressing Canada's comments, for review and possible acceptance no later than 28 days after the receipt of Canada's comments.  <b>Response Time:</b> Comments or acceptance of the revised English WTS Preservation, Storage and Reactivation Instructions will be provided by Canada no later than 21 days after receipt of the <u>hard copy submission</u> .  <b>First Submission (Bilingual):</b> The Contractor must provide a draft Bilingual WTS Preservation, Storage and Reactivation Instructions for review by Canada no later than 84 days after the acceptance of the English WTS Preservation, Storage and Reactivation Instructions.  <b>Response Time:</b> Comments on the draft Bilingual WTS Preservation, Storage and Reactivation Instructions will be provided by Canada no later than 35 days after receipt of the <u>hard copy submission</u> .  <b>Subsequent Submission(s) (Bilingual):</b> The Contractor must provide a revised Bilingual WTS Preservation, Storage and Reactivation Instructions, addressing Canada's comments, for review and possible acceptance no later than 28 days after the receipt of Canada's comments.  <b>Response Time:</b> Comments or acceptance of the revised Bilingual WTS Preservation, Storage and Reactivation Instructions will be provided by Canada no later than 21 days after receipt of the <u>hard copy submission</u> .			9. DISTRIBUTION and ADDRESSEES					
			A. ADDRESSEE		B. COPIES			
					DRAFT		FINAL	
					Hard Copy	Soft Copy	Hard Copy	Soft Copy
			DND ILSM		1	1	1	1

**A1 - 139 / 262**

## A2.27 CDRL – WTS Data Summary

CONTRACT DATA REQUIREMENTS LIST				
1. SYSTEM / ITEM Water Treatment System				
2. ITEM NUMBER CDRL WTS-ILS-211	3. TITLE OR DESCRIPTION OF DATA WTS Data Summary	4. AUTHORITY (Data Item Number) DID WTS-ILS-211		
5. CONTRACT REFERENCE SOW: <b>Para. 8.3.1.10.1 (pg.45)</b> DID: <b>App. A3.27 (pg. 207)</b>	6. FREQUENCY  ONE/R	7. REQUIRING OFFICE  DND ILS Manager		
8. SUBMISSION SCHEDULE		9. DISTRIBUTION and ADDRESSEES		
<p><b>First Submission (English):</b> The Contractor must provide a draft English WTS Data Summary for review by Canada at the same time as the first draft English WTS Stowage, Shipping and Handling Instructions.</p> <p><b>Response Time:</b> Comments on the draft English WTS Data Summary will be provided by Canada at the same time as those against the first draft English WTS Stowage, Shipping and Handling Instructions.</p> <p><b>Subsequent Submission(s) (English):</b> The Contractor must provide a revised English WTS Data Summary, addressing Canada's comments, for review and possible acceptance at the same time as subsequent versions of the English WTS Stowage, Shipping and Handling Instructions are submitted, or no later than 21 days from the receipt of Canada's comments if it has already been accepted.</p> <p><b>Response Time:</b> Comments or acceptance of the revised English WTS Data Summary will be provided by Canada at the same time as those against subsequent versions of the English WTS Stowage, Shipping and Handling Instructions are submitted, or no later than 21 days from the receipt the <u>hardcopy submission</u> if it has already been accepted.</p> <p><b>First Submission (Bilingual):</b> The Contractor must provide a draft Bilingual WTS Data Summary for review by Canada no later than 35 days after the acceptance of the English WTS Data Summary.</p> <p><b>Response Time:</b> Comments on the draft Bilingual WTS Data Summary will be provided by Canada no later than 21 days after receipt of the <u>hard copy submission</u>.</p> <p><b>Subsequent Submission(s) (Bilingual):</b> The Contractor must provide a revised Bilingual WTS Data Summary, addressing Canada's comments, for review and possible acceptance no later than 21 days after the receipt of Canada's comments.</p> <p><b>Response Time:</b> Comments or acceptance of the revised Bilingual WTS Data Summary will be provided by Canada no later than 14 calendar days after receipt of the <u>hard copy submission</u>.</p>		A. ADDRESSEE		
		B. COPIES		
		DRAFT		FINAL
		Hard Copy	Soft Copy	Hard Copy
		1	1	1

## A2.28 CDRL – MEU, ASU and WSU Stowage Maps

CONTRACT DATA REQUIREMENTS LIST									
1. SYSTEM / ITEM Water Treatment System									
2. ITEM NUMBER CDRL WTS-ILS-212		3. TITLE OR DESCRIPTION OF DATA MEU, ASU and WSU Stowage Maps		4. AUTHORITY (Data Item Number) DID WTS-ILS-212					
5. CONTRACT REFERENCE SOW: <b>Para. 8.3.1.11.1 (pg.46)</b> DID: <b>App. A3.28 (pg. 209)</b>		6. FREQUENCY  ONE/R		7. REQUIRING OFFICE  DND ILS Manager					
<b>8. SUBMISSION SCHEDULE</b>  <b>First Submission:</b> The Contractor must provide draft MEU, ASU and WSU Stowage Maps for review by Canada at the same time as the first draft of the Illustrated Parts Manual.  <b>Response Time:</b> Comments on the draft MEU, ASU and WSU Stowage Maps will be provided by Canada no later than 28 days after receipt of the <u>soft copy submission</u> .  <b>Subsequent Submission(s):</b> The Contractor must provide a revised MEU, ASU and WSU Stowage Maps, addressing Canada's comments, for review and possible acceptance no later than 21 days after receipt of Canada's comments.  <b>Response Time:</b> As the NATO codification of stowed items progresses, Canada will provide the NATO stock numbers to the Contractor via email to then be included in the MEU, ASU and WSU Stowage Maps. Once all other aspects of the MEU, ASU and WSU Stowage Maps have been addressed, the Contractor need only supply the final Posters, with NSNs included, no later than 14 days after notification by Canada that the NATO codification is complete. If codification is unreasonably delayed by a third party, Canada may agree to accept an incomplete submission.				<b>9. DISTRIBUTION and ADDRESSEES</b>					
				<b>A. ADDRESSEE</b>		<b>B. COPIES</b>			
						<b>DRAFT</b>		<b>FINAL</b>	
						Hard Copy	Soft Copy	Hard Copy	Soft Copy
				DND ILSM		1	1	1	1
				MEU Map with each MEU				1	
				ASU Map with each ASU				1	
WSU Map with each WSU				1					



## A2.29 CDRL – WTU Process and Flow Diagrams

CONTRACT DATA REQUIREMENTS LIST								
1. SYSTEM / ITEM Water Treatment System								
2. ITEM NUMBER CDRL WTS-ILS-213		3. TITLE OR DESCRIPTION OF DATA WTU Process and Flow Diagrams		4. AUTHORITY (Data Item Number) DID WTS-ILS-213				
5. CONTRACT REFERENCE SOW: <b>Para. 8.3.1.12.1 (pg.46)</b> DID: <b>App. A3.29 (pg. 210)</b>		6. FREQUENCY  ONE/R		7. REQUIRING OFFICE  DND ILS Manager				
8. SUBMISSION SCHEDULE  <b>First Submission:</b> The Contractor must provide draft WTU Process and Flow Diagrams for review by Canada at the same time as the first draft of the English WTS Maintenance Manual.  <b>Response Time:</b> Comments on the draft WTU Process and Flow Diagrams will be provided by Canada no later than 42 days after receipt of the <u>soft copy submission</u> .  <b>Subsequent Submission(s):</b> The Contractor must provide revised WTU Process and Flow Diagrams, addressing Canada's comments, for review and possible acceptance no later than 28 days after receipt of Canada's comments.  <b>Response Time:</b> Comments or acceptance of the revised WTU Process and Flow Diagrams will be provided by Canada no later than 21 days after receipt of the <u>soft copy submission</u> .			9. DISTRIBUTION and ADDRESSEES					
			A. ADDRESSEE		B. COPIES			
					DRAFT		FINAL	
					Hard Copy	Soft Copy	Hard Copy	Soft Copy
			DND ILSM		1	1	1	1
			With each WTU				1	

### A2.30 CDRL – WSU Operation, Maintenance and Parts Handbook

CONTRACT DATA REQUIREMENTS LIST								
1. SYSTEM / ITEM Water Treatment System								
2. ITEM NUMBER CDRL WTS-ILS-214		3. TITLE OR DESCRIPTION OF DATA WSU Operation, Maintenance and Parts Handbook		4. AUTHORITY (Data Item Number) DID WTS-ILS-214				
5. CONTRACT REFERENCE SOW: <b>Para. 8.3.1.13.1 (pg. 46)</b> DID: <b>App. A3.30 (pg. 212)</b>		6. FREQUENCY  ONE/R		7. REQUIRING OFFICE  DND ILS Manager				
<div>8. SUBMISSION SCHEDULE</div> <p><b>First Submission:</b> The Contractor must provide draft WSU Operation, Maintenance and Parks Handbook (OMPH) for review by Canada no later than 63 days following Design Acceptance.</p> <p><b>Response Time:</b> Comments on the draft WSU OMPH will be provided by Canada no later than 42 days after receipt of the <u>soft copy submission</u>.</p> <p><b>Subsequent Submission(s):</b> The Contractor must provide revised WSU OMPH, addressing Canada's comments, for review and possible acceptance no later than 28 days after receipt of Canada's comments.</p> <p><b>Response Time:</b> Comments or acceptance of the revised WSU OMPH will be provided by Canada no later than 21 days after receipt of the <u>soft copy submission</u>.</p> <p><b>First Submission (Bilingual):</b> The Contractor must provide a draft Bilingual WSU OMPH for review by Canada no later than 42 days after the acceptance of the English WSU OMPH.</p> <p><b>Response Time:</b> Comments on the draft Bilingual WSU OMPH will be provided by Canada no later than 21 days after receipt of the <u>hard copy submission</u>.</p> <p><b>Subsequent Submission(s) (Bilingual):</b> The Contractor must provide a revised Bilingual WSU OMPH, addressing Canada's comments, for review and possible acceptance no later than 21 days after the receipt of Canada's comments.</p> <p><b>Response Time:</b> Comments or acceptance of the revised Bilingual WSU OMPH will be provided by Canada no later than 14 calendar days after receipt of the <u>hard copy submission</u>.</p>				9. DISTRIBUTION and ADDRESSEES				
				A. ADDRESSEE	B. COPIES			
					DRAFT		FINAL	
					Hard Copy	Soft Copy	Hard Copy	Soft Copy
				DND ILSM	1	1	1	1
				With each WSU			1	

### A2.31 CDRL – Provisioning Parts Breakdown

CONTRACT DATA REQUIREMENTS LIST								
1. SYSTEM / ITEM Water Treatment System								
2. ITEM NUMBER CDRL WTS-ILS-215	3. TITLE OR DESCRIPTION OF DATA Provisioning Parts Breakdown		4. AUTHORITY (Data Item Number) DID WTS-ILS-215					
5. CONTRACT REFERENCE SOW: <b>Para. 8.4.4.1.1 (pg. 49)</b> DID: <b>App. A3.31 (pg. 214)</b>	6. FREQUENCY  ONE/R		7. REQUIRING OFFICE  DND ILS Manager					
8. SUBMISSION SCHEDULE  <b>First Submission:</b> The Contractor must provide a draft Provisioning Parts Breakdown for review by Canada at the same time as the first WTS Illustrated Parts Manual draft submission.  <b>Response Time:</b> Comments on the draft Provisioning Parts Breakdown will be provided by Canada at the same time as those for the draft WTS Illustrated Parts Manual.  <b>Subsequent Submission(s):</b> The Contractor must provide a revised Provisioning Parts Breakdown, addressing Canada's comments, for review and possible acceptance along with the second and any subsequent submission of the Illustrated Parts Manual, as required.  <b>Response Time:</b> Comments or acceptance of the revised Provisioning Parts Breakdown will be provided by Canada no later than 21 days after receipt of the <u>soft copy submission</u> .  <b>Note:</b> The Contractor must provide a subsequent submission of the Provisioning Parts Breakdown if additional revisions or additions are required after completion of the IPC.			9. DISTRIBUTION and ADDRESSEES					
			A. ADDRESSEE		B. COPIES			
					DRAFT		FINAL	
					Hard Copy	Soft Copy	Hard Copy	Soft Copy
			DND ILSM		1		1	

## A2.32 CDRL – Supplementary Provisioning Technical Documentation

CONTRACT DATA REQUIREMENTS LIST									
1. SYSTEM / ITEM Water Treatment System									
2. ITEM NUMBER CDRL WTS-ILS-216		3. TITLE OR DESCRIPTION OF DATA Supplementary Provisioning Technical Documentation		4. AUTHORITY (Data Item Number) DID WTS-ILS-216					
5. CONTRACT REFERENCE SOW: <b>Para. 8.4.4.2.1 (pg. 49)</b> DID: <b>App. A3.32 (pg. 216)</b>		6. FREQUENCY  ONE/R		7. REQUIRING OFFICE  DND ILS Manager					
<b>8. SUBMISSION SCHEDULE</b>  <b>First Submission:</b> The Contractor must provide a draft Supplementary Provisioning Technical Documentation for review by Canada at the same time as the draft Provisioning Parts Breakdown submission.  <b>Response Time:</b> Comments on the draft Supplementary Provisioning Technical Documentation will be provided by Canada no later than 28 calendar days after receipt of the <u>soft copy submission</u> .  The Contractor must revise the draft Supplementary Provisioning Technical Documentation, addressing Canada's comments, and bring the revised Supplementary Provisioning Technical Documentation to the Initial Provisioning Conference.  <b>Subsequent Submission(s)</b> The Contractor must provide a revised Supplementary Provisioning Technical Documentation, addressing Canada's comments and changes resulting from decisions taken during the Initial Provisioning Conference, for review and possible acceptance no later than 21 calendar days from the end date of the Initial Provisioning Conference.  <b>Response Time:</b> Comments or acceptance of the revised Supplementary Provisioning Technical Documentation will be provided by Canada no later than 14 calendar days after receipt of the soft copy submission.				<b>9. DISTRIBUTION and ADDRESSEES</b>					
				<b>A. ADDRESSEE</b>		<b>B. COPIES</b>			
						<b>DRAFT</b>		<b>FINAL</b>	
						Hard Copy	Soft Copy	Hard Copy	Soft Copy
				DND ILSM			1		1

### A2.33 CDRL – Special Tools and Test Equipment List

CONTRACT DATA REQUIREMENTS LIST								
1. SYSTEM / ITEM Water Treatment System								
2. ITEM NUMBER CDRL WTS-ILS-217	3. TITLE OR DESCRIPTION OF DATA Special Tools and Test Equipment List		4. AUTHORITY (Data Item Number) DID WTS-ILS-217					
5. CONTRACT REFERENCE SOW: <b>Para. 8.4.4.3.1 (pg. 49)</b> DID: <b>App. A3.33 (pg. 217)</b>	6. FREQUENCY  ONE/R		7. REQUIRING OFFICE  DND ILS Manager					
8. SUBMISSION SCHEDULE  <b>First Submission:</b> The Contractor must provide a draft Special Tools and Test Equipment List for review by Canada no later than 49 days following Design Acceptance.  <b>Response Time:</b> Comments on the draft Special Tools and Test Equipment List will be provided by Canada no later than 28 days after receipt of the <u>soft copy submission</u> .  <b>Subsequent Submission(s):</b> The Contractor must provide a revised Special Tools and Test Equipment List, addressing Canada's comments, for review and possible acceptance no later than 21 days after receipt of Canada's comments.  <b>Response Time:</b> Comments or acceptance of the revised Special Tools and Test Equipment List will be provided by Canada no later than 14 calendar days after receipt of the <u>soft copy submission</u> .			9. DISTRIBUTION and ADDRESSEES					
			A. ADDRESSEE		B. COPIES			
					DRAFT		FINAL	
					Hard Copy	Soft Copy	Hard Copy	Soft Copy
			DND ILSM			1		1

## A2.34 CDRL – Equipment Delivery Status Report

CONTRACT DATA REQUIREMENTS LIST				
1. SYSTEM / ITEM Water Treatment System				
2. ITEM NUMBER CDRL WTS-ILS-218	3. TITLE OR DESCRIPTION OF DATA Equipment Delivery Status Report	4. AUTHORITY (Data Item Number) DID WTS-ILS-218		
5. CONTRACT REFERENCE SOW: <b>Para. 8.4.4.4.1 (pg. 49)</b> DID: <b>App. A3.34 (pg. 219)</b>	6. FREQUENCY MNTY	7. REQUIRING OFFICE DND ILS Manager		
8. SUBMISSION SCHEDULE  <b>First Submission:</b> The Contractor must provide a Equipment Delivery Status Report (EDSR) for review by Canada no later than thirty (30) calendar days following the beginning of WTS production.  <b>Response Time:</b> Comments on the EDSR will be provided by Canada no later than five (5) business days after receipt of the soft copy submission.  <b>Subsequent Submission(s):</b> The Contractor must provide a revised EDSR, addressing Canada's comments, for review no later than five (5) business days after receipt of Canada's comments. The Contractor must provide updated EDSRs every thirty (30) days until every WTS is delivered to Canada.  <b>Response Time:</b> Comments or acceptance of the revised EDSR will be provided by Canada no later than five (5) business days after receipt of the soft copy submission.		9. DISTRIBUTION and ADDRESSEES		
		A. ADDRESSEE	B. COPIES	
			Hard Copy	Soft Copy
		DND ILSM		1
		PSPC CA		1
DND PA		1		
DND TA		1		

### A2.35 CDRL – Material Identification Data Set

CONTRACT DATA REQUIREMENTS LIST			
1. SYSTEM / ITEM Water Treatment System			
2. ITEM NUMBER CDRL WTS-ILS-219	3. TITLE OR DESCRIPTION OF DATA Material Identification Data Set	4. AUTHORITY (Data Item Number) DID WTS-ILS-219	
5. CONTRACT REFERENCE SOW: <b>Para. 8.4.4.5 (pg. 49)</b> DID: <b>App. A3.35 (pg. 221)</b>	6. FREQUENCY  ONE/R	7. REQUIRING OFFICE  DND ILS Manager	
8. SUBMISSION SCHEDULE  <b>First Submission:</b> The Contractor must provide a Material Identification Data Set (MIDS) for review by Canada no later than twenty-eight (28) days following Design Acceptance, or in the case of new options purchases, no later than twenty-eight (28) days following the signing by Canada of the order(s).  <b>Response Time:</b> Comments on the MIDS will be provided by Canada no later than fourteen (14) days after receipt of the soft copy submission.  <b>Subsequent Submission(s):</b> The Contractor must provide a revised MIDS, addressing Canada's comments, for review no later than seven (14) days after receipt of Canada's comments.  <b>Response Time:</b> Comments or acceptance of the revised EDSR will be provided by Canada no later than seven (7) days after receipt of the soft copy submission.		9. DISTRIBUTION and ADDRESSEES	
		A. ADDRESSEE	B. COPIES
			DRAFT      FINAL
			Soft Copy      Soft Copy
		DND ILSM	1      1
		DND TA	1      1
		DND PA	1      1

A1 - 149 / 262



### A2.37 CDRL – Controlled & Non-Controlled Goods List

CONTRACT DATA REQUIREMENTS LIST								
1. SYSTEM / ITEM Water Treatment System								
2. ITEM NUMBER CDRL WTS-ILS-221		3. TITLE OR DESCRIPTION OF DATA Controlled & Non-Controlled Goods List (CNCGL)		4. AUTHORITY (Data Item Number) DID WTS-ILS-221				
5. CONTRACT REFERENCE SOW: <b>Para. 8.8.1 (pg. 50)</b> DID: <b>App. A3.37 (pg. 223)</b>		6. FREQUENCY  ONE/R		7. REQUIRING OFFICE  DND ILS Manager				
8. SUBMISSION SCHEDULE  <b>First Submission:</b> The Contractor must provide a draft CNCGL for review by Canada at the same time as the draft Provisioning Parts Breakdown submission.  <b>Response Time:</b> Comments on the draft CNCGL will be provided by Canada no later than 21 days after receipt of the <u>soft copy submission</u> .  <b>Subsequent Submission(s)</b> The Contractor must provide a revised CNCGL, addressing Canada's comments, for review and possible acceptance no later than 21 days after receipt of Canada's comments.  <b>Response Time:</b> Comments or acceptance of the revised CNCGL will be provided by Canada no later than 14 calendar days after receipt of the <u>soft copy submission</u> .			9. DISTRIBUTION and ADDRESSEES					
			A. ADDRESSEE		B. COPIES			
					DRAFT		FINAL	
					Hard Copy	Soft Copy	Hard Copy	Soft Copy
			DND ILSM			1	1	1

## A2.38 CDRL – Identification Labels for Storage and Shipment and Packaging Codes

CONTRACT DATA REQUIREMENTS LIST																																	
1. SYSTEM / ITEM <b>Water Treatment System</b>																																	
2. ITEM NUMBER <b>CDRL WTS-ILS-222</b>	3. TITLE OR DESCRIPTION OF DATA <b>Identification Labels for Storage and Shipment and Packaging Codes</b>	4. AUTHORITY (Data Item Number) <b>DID WTS-ILS-222</b>																															
5. CONTRACT REFERENCE <b>SOW: Para. 8.9.3 (pg. 51)</b> <b>DID: App. A3.38 (pg. 225)</b>	6. FREQUENCY <b>ONE/R</b>	7. REQUIRING OFFICE <b>DND ILS Manager</b>																															
8. SUBMISSION SCHEDULE		9. DISTRIBUTION and ADDRESSEES																															
<p><b><u>Identification Labels for Storage and Shipment (ILSS) Template</u></b></p> <p><b>First Submission:</b> The Contractor must provide draft ILSS Template(s) for review by Canada no later than 28 days following the close of the Initial Provisioning Conference.</p> <p><b>Response Time:</b> Comments on the draft ILSS Template(s) will be provided by Canada no later than 14 calendar days after receipt of the soft copy submission.</p> <p><b>Subsequent Submission(s):</b> The Contractor must provide revised ILSS Template(s), addressing Canada's comments, for review and possible acceptance no later than 14 calendar days after receipt of Canada's comments.</p> <p><b>Response Time:</b> Comments or acceptance of the ILSS Template(s) will be provided by Canada no later than 14 calendar days after receipt of the soft copy submission.</p> <p><b><u>Packaging Codes (CF271 forms)</u></b></p> <p><b>First Submission (WTS Main Equipment):</b> The Contractor must provide draft CF271 forms for review by Canada no later than 28 days after Canada provides to the Contractor the item(s)'s NATO Stock Number.</p> <p><b>First Submission (Spare parts and consumables):</b> The Contractor must provide draft CF271 forms for review by Canada as prescribed in the Additional Work Request for the purchase of Initial Spares.</p> <p><b>Response Time:</b> Comments on the draft CF271 forms will be provided by Canada no later than 21 calendar days after receipt of the <u>soft copy submission</u>.</p> <p><b>Subsequent Submission(s):</b> The Contractor must provide revised CF271 forms, addressing Canada's comments, for review and possible acceptance no later than 14 calendar days after receipt of Canada's comments.</p> <p><b>Response Time:</b> Comments or acceptance of the revised CF271 forms will be provided by Canada no later than 14 calendar days after receipt of the <u>soft copy submission</u>.</p>		A. ADDRESSEE	B. COPIES																														
		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="padding: 2px;">DRAFT</th> <th colspan="2" style="padding: 2px;">FINAL</th> </tr> <tr> <th style="padding: 2px;">Hard Copy</th> <th style="padding: 2px;">Soft Copy</th> <th style="padding: 2px;">Hard Copy</th> <th style="padding: 2px;">Soft Copy</th> </tr> </thead> <tbody> <tr> <td style="text-align: center; padding: 5px;">DND ILSM (ILSS Template)</td> <td style="text-align: center; padding: 5px;">1</td> <td style="text-align: center; padding: 5px;"></td> <td style="text-align: center; padding: 5px;">1</td> </tr> <tr> <td style="text-align: center; padding: 5px;">DND ILSM (CF271)</td> <td style="text-align: center; padding: 5px;">1</td> <td style="text-align: center; padding: 5px;"></td> <td style="text-align: center; padding: 5px;">1</td> </tr> <tr><td style="height: 20px;"></td><td></td><td></td><td></td></tr> <tr><td style="height: 20px;"></td><td></td><td></td><td></td></tr> <tr><td style="height: 20px;"></td><td></td><td></td><td></td></tr> </tbody> </table>				DRAFT		FINAL		Hard Copy	Soft Copy	Hard Copy	Soft Copy	DND ILSM (ILSS Template)	1		1	DND ILSM (CF271)	1		1												
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		DND ILSM (ILSS Template)	1		1																												
DND ILSM (CF271)	1		1																														

### A2.39 CDRL – List of Items to be Supported

CONTRACT DATA REQUIREMENTS LIST								
1. SYSTEM / ITEM Water Treatment System								
2. ITEM NUMBER CDRL WTS-ILS-223	3. TITLE OR DESCRIPTION OF DATA List of Items to be Supported		4. AUTHORITY (Data Item Number) DID WTS-ILS-223					
5. CONTRACT REFERENCE SOW: <b>Para. 8.10.1 (pg. 51)</b> DID: <b>App. A3.39 (pg. 227)</b>	6. FREQUENCY  ONE/R		7. REQUIRING OFFICE  DND ILS Manager					
8. SUBMISSION SCHEDULE  <b>First Submission:</b> The Contractor must provide a draft List of Items to be Supported for review by Canada no later than 35 days following the final acceptance of the WTS Illustrated Parts Manual, PPB and SPTD.  <b>Response Time:</b> Comments on the draft List of Items to be Supported will be provided by Canada no later than 21 days after receipt of the <u>soft copy submission</u> .  <b>Subsequent Submission(s):</b> The Contractor must provide a revised List of Items to be Supported, addressing Canada's comments, for review and possible acceptance no later than 21 days after receipt of Canada's comments.  <b>Response Time:</b> Comments or acceptance of the revised List of Items to be Supported will be provided by Canada no later than 14 days after receipt of the <u>soft copy submission</u> .			9. DISTRIBUTION and ADDRESSEES					
			A. ADDRESSEE		B. COPIES			
					DRAFT		FINAL	
					Hard Copy	Soft Copy	Hard Copy	Soft Copy
			DND ILSM		1		1	

#### A2.40 CDRL – Warranty Support Plan

CONTRACT DATA REQUIREMENTS LIST				
1. SYSTEM / ITEM Water Treatment System				
2. ITEM NUMBER CDRL WTS-ILS-224	3. TITLE OR DESCRIPTION OF DATA Warranty Support Plan	4. AUTHORITY (Data Item Number) DID WTS-ILS-224		
5. CONTRACT REFERENCE SOW: <b>Para. 8.12.1 (pg. 52)</b> DID: <b>App. A3.40 (pg. 234)</b>	6. FREQUENCY  ONE/R	7. REQUIRING OFFICE  DND ILS Manager		
8. SUBMISSION SCHEDULE		9. DISTRIBUTION and ADDRESSEES		
<p><b>First Submission:</b> The Contractor must provide a draft Warranty Support Plan for review by Canada no later than 84 days following the kick-off meeting.</p> <p><b>Response Time:</b> Comments on the draft Warranty Support Plan will be provided by Canada no later than 28 days after receipt of the <u>soft copy submission</u>.</p> <p><b>Subsequent Submission(s):</b> The Contractor must provide a revised Warranty Support Plan, addressing Canada's comments, for review and possible acceptance no later than 28 days after receipt of Canada's comments.</p> <p><b>Response Time:</b> Comments or acceptance of the revised Warranty Support Plan will be provided by Canada no later than 21 days after receipt of the <u>soft copy submission</u>.</p>		A. ADDRESSEE	B. COPIES	
			DRAFT	FINAL
			Hard Copy	Soft Copy
		DND ILSM		1

#### A2.41 CDRL – Equipment Environmental Assessment

CONTRACT DATA REQUIREMENTS LIST								
1. SYSTEM / ITEM Water Treatment System								
2. ITEM NUMBER CDRL WTS-ILS-225		3. TITLE OR DESCRIPTION OF DATA Equipment Environmental Assessment		4. AUTHORITY (Data Item Number) DID WTS-ILS-225				
5. CONTRACT REFERENCE SOW: <b>Para. 9.4.1 (pg. 54)</b> DID: <b>App. A3.41 (pg. 236)</b>		6. FREQUENCY  ONE/R		7. REQUIRING OFFICE  DND ILS Manager				
8. SUBMISSION SCHEDULE  <b>First Submission:</b> The Contractor must provide a draft Equipment Environmental Assessment for review by Canada no later than 84 days following the Design Acceptance.  <b>Response Time:</b> Comments on the draft Equipment Environmental Assessment will be provided by Canada no later than 56 days after receipt of the <u>soft copy submission</u> .  <b>Subsequent Submission(s):</b> The Contractor must provide a revised Equipment Environmental Assessment, addressing Canada's comments, for review and possible acceptance no later than 28 days after receipt of Canada's comments.  <b>Response Time:</b> Comments or acceptance of the revised Equipment Environmental Assessment will be provided by Canada no later than 14 days after receipt of the <u>soft copy submission</u> .			9. DISTRIBUTION and ADDRESSEES					
			A. ADDRESSEE		B. COPIES			
					DRAFT		FINAL	
					Hard Copy	Soft Copy	Hard Copy	Soft Copy
			DND TA			1		1

### **A3.0 APPENDIX: DATA ITEM DESCRIPTION**

#### **A3.1 DID Item List**

<b>DID #</b>	<b>Title</b>	<b>CDRL #</b>
WTS-PM-001	Project Management Plan	WTS-PM-001
WTS-PM-002	Contract Master Schedule	WTS-PM-002
WTS-PM-003	Contract Work Breakdown Structure	WTS-PM-003
WTS-PM-004	Contract Status Report	WTS-PM-004
WTS-PM-005	Meeting Agenda	WTS-PM-005
WTS-PM-006	Meeting Minutes	WTS-PM-006
WTS-SE-101	Systems Engineering Management Plan (SEMP)	WTS-SE-101
WTS-SE-102	Mandated System Review Package	WTS-SE-102
WTS-SE-103	Requirements Traceability Verification Matrix	WTS-SE-103
WTS-SE-104	Engineering Drawings & Associated Lists	WTS-SE-104
WTS-SE-105	Engineering Change Proposals	WTS-SE-105
WTS-SE-106	Configuration Status Accounting Report	WTS-SE-106
WTS-SE-107	Acceptance Test Plan and Procedures	WTS-SE-107
WTS-SE-108	Acceptance Test Reports	WTS-SE-108
WTS-ILS-201	Top Level Assembly Drawing	WTS-ILS-201
WTS-ILS-202	WTS Operator Manual	WTS-ILS-202
WTS-ILS-203	WTU Operator Quick Reference Card	WTS-ILS-203
WTS-ILS-204	WTS Maintenance Manual	WTS-ILS-204
WTS-ILS-205	WTS Permissive Repair Schedule and Standard Repair Times	WTS-ILS-205
WTS-ILS-206	WTS Illustrated Parts Manual	WTS-ILS-206
WTS-ILS-207	WTS Operator Training Package	WTS-ILS-207
WTS-ILS-208	WTU and ASU Technician Training Package	WTS-ILS-208
WTS-ILS-209	WTS Preservation, Storage and Reactivation Instructions	WTS-ILS-209
WTS-ILS-210	WTS Stowage, Shipping and Handling Instructions	WTS-ILS-210
WTS-ILS-211	WTS Data Summary	WTS-ILS-211
WTS-ILS-212	MEU, ASU and WSU Stowage Maps	WTS-ILS-212
WTS-ILS-213	WTU Process and Flow Diagrams	WTS-ILS-213
WTS-ILS-214	WSU Operation, Maintenance and Parts Handbook	WTS-ILS-214
WTS-ILS-215	Provisioning Parts Breakdown	WTS-ILS-215
WTS-ILS-216	Supplementary Provisioning Technical Documentation	WTS-ILS-216
WTS-ILS-217	Special Tools and Test Equipment List	WTS-ILS-217
WTS-ILS-218	Equipment Delivery Status Report	WTS-ILS-218

WTS-ILS-219	Material Identification Data Set	WTS-ILS-219
WTS-ILS-220	Identification Plates	WTS-ILS-220
WTS-ILS-221	Controlled & Non-Controlled Goods List	WTS-ILS-221
WTS-ILS-222	Identification Labels for Storage and Shipment and Packaging Codes	WTS-ILS-222
WTS-ILS-223	List of Items to be Supported	WTS-ILS-223
WTS-ILS-224	Warranty Support Plan	WTS-ILS-224
WTS-ILS-225	Equipment Environmental Assessment	WTS-ILS-225

## A3.2 DID Table Definitions

The following section defines the various blocks of information found on the Data Item Description (DID) forms:

### **BLOCK 1 – TITLE**

The title of the data item for the DID.

### **BLOCK 2 - IDENTIFICATION NUMBER**

The Data Item Description (DID) number, consisting of a sequential three-digit number and prefixed with an abbreviation code, to uniquely identify the DID. Note that the 001-099 series is reserved to Project Management (PM) DIDs, the 101-199 series is reserved to Systems Engineering (SE) DIDs and the 201-299 series is reserved to Integrated Logistics Support (ILS) DIDs. The abbreviation codes used for the prefix are:

- “PM” for Project Management
- “SE” for Systems Engineering
- “ILS” for Integrated Logistics Support

### **BLOCK 3 - DESCRIPTION**

Provides a general description of the data content requirements.

### **BLOCK 4 – RELATED DOCUMENT(S)**

Provides a listing of the related documents and specifications associated with and required to produce this DID.

### **BLOCK 5 - CONTRACT REFERENCE**

The specific paragraph numbers from the Contract Statement of Work and CDRL to assist in identifying the work effort associated with the data item.

### **BLOCK 6 - PREPARATION INSTRUCTIONS**

Provides the preparation instructions for the content and format requirements for the DID.



### A3.3 DID – Project Management Plan

DATA ITEM DESCRIPTION	
1. TITLE <b>Project Management Plan (PMP)</b>	2. IDENTIFICATION NUMBER DID WTS-PM-001
3. DESCRIPTION The Project Management Plan (PMP) is the top-level plan that describes the Contractor's strategy, plans, methodologies and processes for meeting the requirements of the Contract.	
4. RELATED DOCUMENTS	5. CONTRACT REFERENCE SOW: <b>Para. 3.2.1 (pg. 17)</b> CDRL: <b>App. A2.3 (pg.116)</b>
6. PREPARATION INSTRUCTIONS	
6.1. <b>CONTENT</b>	
6.1.1. The PMP must describe the management processes, administrative procedures and organizational structure that will be used to manage the work of the Contractor.	
6.1.2. The PMP must further detail the practices and procedures for project scheduling, planning, organizing, directing, executing, communicating, reporting, managing risk, managing environmental health and safety issues and impacts, managing information, and closing of action items for all Work required by the Contract.	
6.1.3. The PMP must address in detail the above points through the following:	
6.1.3.1. Overview:	
6.1.3.1.1. Purpose, Background, Scope and Objectives;	
6.1.3.1.2. Assumptions, Constraints and Risks;	
6.1.3.1.3. All Project Deliverables;	
6.1.3.1.4. Organization Summary; and	
6.1.3.1.5. Schedule Summary.	
6.1.3.2. Organization:	
6.1.3.2.1. Project Management Organizational Chart, consisting of internal and external organizations as it pertains to this Contract;	
6.1.3.3. Management Processes:	
6.1.3.3.1. Project Management Approach and Procedures;	
6.1.3.3.2. Schedule Control;	
6.1.3.3.3. Quality Assurance;	
6.1.3.3.4. Reporting;	
6.1.3.3.5. Communications;	
6.1.3.3.6. Risk Management (RM);	
6.1.3.3.7. Environmental, Health and Safety Issues Management;	
6.1.3.3.8. Information Management (IM); and	
6.1.3.3.9. Change Control Processes.	

**6.2. SOFT COPY FORMAT**

- 6.2.1. The PMP must be submitted as a PDF file type.
- 6.2.2. **Soft Copy format submission size below 7MB** – The PMP PDF may be submitted via email as follows:
  - 6.2.2.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract.
  - 6.2.2.2. Subject Field: WTS-PM-001 – PMP – [Rev #] – [Date of Issue]
- 6.2.3. **Soft Copy format submission size at or above 7MB** - The PMP PDF must be submitted on CD or DVD media and be labelled as follows:
  - 6.2.3.1. Water Treatment System
  - 6.2.3.2. PMP;
  - 6.2.3.3. WTS-PM-001;
  - 6.2.3.4. The Revision number, and
  - 6.2.3.5. The date of issue.

#### A3.4 DID – Contract Master Schedule

DATA ITEM DESCRIPTION	
1. TITLE <b>Contract Master Schedule (CMS)</b>	2. IDENTIFICATION NUMBER DID WTS-PM-002
3. DESCRIPTION  The CMS describes the Contractor's planned sequence of activities, milestones and decision points to enable the objectives of the Contract to be met. Additionally, the CMS defines the current Contract schedule status, comparing the current schedule to the contracted schedule. The CMS also compares the current schedule status with any applicable baseline schedule.	
4. RELATED DOCUMENTS  The CMS inter-relates with the following data items: <ul style="list-style-type: none"> <li>• Project Management Plan (PMP); and</li> <li>• Contract Work Breakdown Structure (CWBS).</li> </ul>	5. CONTRACT REFERENCE  SOW: <b>Para. 3.3.1 (pg. 17)</b> CDRL: <b>App. A2.4 (pg.117)</b>
6. PREPARATION INSTRUCTIONS  6.1. <b>CONTENT</b>  6.1.1. <b>Data to be Included</b> 6.1.1.1. The CMS must graphically depict the contract schedule and progress at the activity level. 6.1.1.2. The CMS must graphically present or otherwise identify: <ul style="list-style-type: none"> <li>6.1.1.2.1. activities and their estimated durations;</li> <li>6.1.1.2.2. milestones, including milestones in the contract;</li> <li>6.1.1.2.3. the relationships and dependencies between activities and milestones to be accomplished by or for the Contractor in the performance of its obligations under the contract;</li> <li>6.1.1.2.4. earliest and latest start and finish dates for all activities and milestones;</li> <li>6.1.1.2.5. critical and non-critical paths;</li> <li>6.1.1.2.6. floats available on all activities and milestones;</li> <li>6.1.1.2.7. allocated resources for each activity; and</li> <li>6.1.1.2.8. notes on the use of the CMS, including a glossary of terms and symbols used.</li> </ul> 6.1.1.3. The CMS must include: <ul style="list-style-type: none"> <li>6.1.1.3.1. all other schedules required under the contract (eg, the Systems Engineering schedule);</li> <li>6.1.1.3.2. Subcontractor schedules, to a level of detail that is consistent with the level of detail for the Contractor's own schedule;</li> <li>6.1.1.3.3. other major events, as agreed between the Contractor and DND;</li> <li>6.1.1.3.4. DND tasks, where such tasks interface with, and may affect, Contractor tasks; and</li> <li>6.1.1.3.5. significant reviews, such as Mandated System Reviews.</li> </ul> 6.1.2. <b>Integration with Other Management Information</b> 6.1.2.1. The CMS must be traceable to the CWBS and to milestones in the contract. 6.1.3. <b>Narrative Analysis</b> 6.1.3.1. Each submission of the CMS must contain an explanation of the cause of each milestone's rescheduled forecast date that is later than the milestone's current approved scheduled baseline date for the issue of the CMS in which the rescheduled forecast date was first reported.	

- 6.1.3.2. Subsequent issues of the CMS need only address changes from previously reported dates. The narrative analysis for the CMS must address possible impact on other milestones and activities, and must describe work-around plans to minimise the impact

**6.2. SOFT COPY FORMAT**

- 6.2.1. The CMS must be the primary schedule for the contract, and all other schedules must be subordinate to the CMS.
- 6.2.2. The CMS must be submitted as a PDF file type.
- 6.2.3. The CMS must be displayed in a variety of formats, including:
- 6.2.3.1. a Gantt chart;
  - 6.2.3.2. a list of all tasks, together with their planned and actual start and completion dates; and
  - 6.2.3.3. a listing of milestones (including Milestones in the contract), together with their original, rescheduled, forecast and actual completion dates.
- 6.2.4. **Soft Copy format submission size below 7MB** – The CMS PDF may be submitted via email as follows:
- 6.2.4.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract.
  - 6.2.4.2. Subject Field: WTS-PM-002 – CMS – [Rev #] – [Date of Issue]
- 6.2.5. **Soft Copy format submission size at or above 7MB** - The CMS PDF must be submitted on CD or DVD media and be labelled as follows:
- 6.2.5.1. Water Treatment System
  - 6.2.5.2. CMS;
  - 6.2.5.3. WTS-PM-002;
  - 6.2.5.4. The Revision number, and
  - 6.2.5.5. The date of issue.

### A3.5 DID – Contract Work Breakdown Structure

DATA ITEM DESCRIPTION	
1. TITLE <b>Contract Work Breakdown Structure (CWBS)</b>	2. IDENTIFICATION NUMBER DID WTS-PM-003
3. DESCRIPTION The CWBS forms the framework for Contract planning, management and status reporting and for estimating costs, schedule, resource requirements and technical achievements at completion.	
4. RELATED DOCUMENTS The CWBS is related to, and must be consistent with, the CMS.	5. CONTRACT REFERENCE SOW: <b>Para. 3.4.1 (pg. 17)</b> CDRL: <b>App. A2.5 (pg.118)</b>
6. PREPARATION INSTRUCTIONS	
6.1. <b>CONTENT</b> 6.1.1. The CWBS must include a Work Breakdown Structure (WBS) index, a WBS graphic, and a WBS dictionary. 6.1.2. <b>WBS Index</b> 6.1.2.1. The CWBS must include a WBS index delivered in a tool that has an Outline Mode (specifically Microsoft Word), such that it can be reviewed at any level of expansion. 6.1.2.2. The WBS index must be derived from the WBS dictionary and each record in the WBS index must include: 6.1.2.2.1. WBS element number; 6.1.2.2.2. WBS element title; 6.1.2.2.3. WBS element revision date and revision number; 6.1.2.2.4. Task agency; and 6.1.2.2.5. Cross references to the conditions of contract and Statement of Work. 6.1.3. <b>WBS Graphic</b> 6.1.3.1. The CWBS must include a WBS graphic, which contains the same information as the WBS index, but shown in a graphical form, usually a tree structure.	
6.2. <b>SOFT COPY FORMAT</b> 6.2.1. The CWBS must be submitted as a Microsoft Word file type. 6.2.2. <b>Soft Copy format submission size below 7MB</b> – The CWBS Microsoft Word file may be submitted via email as follows: 6.2.2.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract. 6.2.2.2. Subject Field: WTS-PM-003 – CWBS – [Rev #] – [Date of Issue] 6.2.3. <b>Soft Copy format submission size at or above 7MB</b> - The CWBS Microsoft Word file must be submitted on CD or DVD media and be labelled as follows: 6.2.3.1. Water Treatment System 6.2.3.2. CWBS; 6.2.3.3. WTS-PM-003; 6.2.3.4. The Revision number, and 6.2.3.5. The date of issue.	

### A3.6 DID – Contract Status Report

DATA ITEM DESCRIPTION	
1. TITLE <b>Contract Status Report (CSR)</b>	2. IDENTIFICATION NUMBER DID WTS-PM-004
3. DESCRIPTION The Contract Status Report (CSR) is the principal statement and explanation of the status of the contract at the end of each reporting period.	
4. RELATED DOCUMENTS	5. CONTRACT REFERENCE SOW: <b>Para. 3.5.1 (pg. 18)</b> CDRL: <b>App. A2.6 (pg.119)</b>
6. PREPARATION INSTRUCTIONS	
6.1. <b>CONTENT</b>	
6.1.1. The CSR must identify the date at which the CSR is valid, and the time period since the status date of the previous CSR (the 'reporting period').	
6.1.2. The CSR must include the following information:	
6.1.2.1. A summary of significant work activities (including those undertaken by major Subcontractors) undertaken during the reporting period;	
6.1.2.2. A summary of significant work activities (including those undertaken by major Subcontractors) expected to be undertaken in the next reporting period.	
6.1.2.3. A summary of progress (including progress by major Subcontractors) against the CMS.	
6.1.2.4. A narrative detailing progress against milestones, expected date of completion of near milestones, problem areas and work-around plans where required;	
6.1.2.5. A status report on contract data deliverable end items as called up in the CDRLs;	
6.1.2.6. An engineering report, giving the status of engineering activity;	
6.1.2.7. An Integrated Logistic Support (ILS) report, giving the status of ILS activity;	
6.1.2.8. A list of correspondence that requires a response from the DND/PSPC, but for which no response has been received; and	
6.1.2.9. A list of DND/PSPC correspondence to the Contractor for which a response is outstanding, and an estimate of the response date.	
6.1.3. <b>Risk Register</b>	
6.1.3.1. The CSR must include a Risk Register that reflects the current status of risk for the contract;	
6.1.3.2. The Risk Register information provided must include:	
6.1.3.2.1. Identification of each risk (sequence number, name and description);	
6.1.3.2.2. Its likelihood and potential severity;	
6.1.3.2.3. Who is assigned to manage the risk;	
6.1.3.2.4. The planned risk response should the event occur; and	
6.1.3.2.5. The risk mitigation (actions taken in advance to reduce probability/impact.	
6.1.3.2.6. Once individual identified risks have been resolved, they can be removed from the active Risk Register.	

**6.1.4. Configuration Change Register**

- 6.1.4.1. The CSR must include a Configuration Change Register (CCR), which records all activities relating to Contract Change Proposals (CCP), Engineering Change Proposals (ECPs) and Deviations during the reporting period. The first section of the CCR must contain active items, and the second section must contain brief details of closed and completed items.
- 6.1.4.2. The active items section of the CCR must include information such as reference number, title, abstract, date raised, date approved, affected section of the contract, responsible party, cost/savings involved, date of last action, status at last action, target date for completion of next action, target status at completion of next action, and target date for completion of the CCP, ECP, or Deviation.
- 6.1.4.3. The closed and completed section of the CCR must include information such as reference number, title, abstract, affected section of the contract, cost/savings involved, and closure/completion date.

**6.2. SOFT COPY FORMAT**

- 6.2.1. The CSR must be submitted as a PDF file type.
- 6.2.2. The CSR PDF must be submitted via email (submission size not to exceed 7MB) as follows:
  - 6.2.2.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract.
  - 6.2.2.2. Subject Field: WTS-PM-004 – CSR – [Rev #] – [Date of Issue]

### A3.7 DID – Meeting Agenda

DATA ITEM DESCRIPTION	
1. TITLE <b>Meeting Agenda</b>	2. IDENTIFICATION NUMBER DID WTS-PM-005
3. DESCRIPTION  The Meeting Agenda contains the venue information and identifies the discussion items to be covered at meetings.	
4. RELATED DOCUMENTS	5. CONTRACT REFERENCE SOW: <b>Para. 3.6.6.1.1 (pg. 19)</b> CDRL: <b>App. A2.7 (pg.120)</b>
6. PREPARATION INSTRUCTIONS  6.1. <b>CONTENT</b>  6.1.1. The Meeting Agenda must set forth the venue, identify all requirements and list the discussion items to be covered at the meeting.  6.1.2. Venue. The Meeting Agenda must address the venue as follows: 6.1.2.1. Meeting Identification Number; 6.1.2.2. Purpose; 6.1.2.3. Date, time and location; and 6.1.2.4. Attendees.  6.1.3. Discussion items. The Meeting Agenda must address the discussion items through the following sections: 6.1.3.1. Opening Remarks; 6.1.3.2. Agenda Review; 6.1.3.3. Review of Previous Minutes; 6.1.3.4. Opened Discussion Items; 6.1.3.5. New Discussion Items; 6.1.3.6. Review of Action Items; 6.1.3.7. Next Venue; and 6.1.3.8. Closing Remarks.  6.2. <b>HARD COPY FORMAT</b>  6.2.1. The Meeting Agenda must be printed on paper with these characteristics: 6.2.1.1. Weight of no less than 90 gsm; 6.2.1.2. Brightness of no less than 92 ISO brightness;  6.3. <b>SOFT COPY FORMAT</b>  6.3.1. The Meeting Agenda must be submitted as a MS Word file type.  6.3.2. The Meeting Agenda MS Word document must be submitted via email (submission size not to exceed 7MB) as follows:  6.3.2.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract.  6.3.2.2. Subject Field: WTS-PM-005 – Meeting Agenda – [Rev #] – [Date of Issue]	



### A3.8 DID – Meeting Minutes

DATA ITEM DESCRIPTION	
1. TITLE <b>Meeting Minutes</b>	2. IDENTIFICATION NUMBER DID WTS-PM-006
3. DESCRIPTION The Meeting Minutes contains the detailed records of proceedings, discussions, decisions and action items from meetings.	
4. RELATED DOCUMENTS	5. CONTRACT REFERENCE SOW: <b>Para. 3.6.6.1.1 (pg. 19)</b> CDRL: <b>App. A2.8 (pg.121)</b>
6. PREPARATION INSTRUCTIONS	
6.1. <b>CONTENT</b>	
6.1.1. The Meeting Minutes must contain the detailed records of proceedings, discussions, decisions and action items from the meeting and be presented through the following sections:	
6.1.1.1. General – consisting of meeting identification number, purpose, date, time and location;	
6.1.1.2. Attendees, consisting of the organization each person represents, and the identification of the Chairperson(s);	
6.1.1.3. Opening Remarks;	
6.1.1.4. <b>Action Item Report</b> - used to monitor issues, assign responsibility, direct action and track status, history, and progress, and must consisting of:	
6.1.1.4.1. Item #; date initiated; required action; assigned actionee; target completion date; cross-reference to all related action items.	
6.1.1.4.2. Action Item Report must be <b>updated</b> with each meeting and must consisting of:	
6.1.1.4.2.1. Action Item current status and the actual date completed;	
6.1.1.5. Next Venue;	
6.1.1.6. Closing Remarks;	
6.2. <b>SOFT COPY FORMAT</b>	
6.2.1. The Meeting Minutes must be submitted as a PDF file type.	
6.2.2. The Meeting Minutes PDF must be submitted via email (submission size not to exceed 7MB) as follows:	
6.2.2.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract.	
6.2.2.2. Subject Field: WTS-PM-006 – Meeting Minutes – [Rev #] – [Date of Issue]	

### A3.9 DID – Systems Engineering Management Plan

DATA ITEM DESCRIPTION	
1. TITLE <b>Systems Engineering Management Plan (SEMP)</b>	2. IDENTIFICATION NUMBER DID WTS-SE-101
3. DESCRIPTION  The SEMP describes the Contractor's strategy, plans, methodologies and processes for the management of a fully integrated engineering program IAW the contract. The SEMP describes the relationships between concurrent activities as well as between sequential activities to demonstrate that a fully integrated engineering program has been achieved.	
4. RELATED DOCUMENTS  <b>IEEE 15288.1, IEEE Standard for Application of Systems Engineering on Defense Programs</b>  <b>IEEE 15288.2, IEEE Standard for Technical Reviews and Audits on Defense Programs</b>  <b>ANSI/EIA-649-C, Configuration Management Standard</b>	5. CONTRACT REFERENCE  SOW: <b>Para. 4.2.2.1 (pg. 20)</b>  CDRL: <b>App. A2.9 (pg. 122)</b>
6. PREPARATION INSTRUCTIONS  6.1. <b>CONTENT</b>  6.1.1. <b>Engineering Management</b>  6.1.1.1. The SEMP must define the engineering organisation for the contract, including the key engineering positions, and the partitioning of engineering effort between the various Contractor and Subcontractor organisations.  6.1.1.2. The SEMP must describe how technical effort will be coordinated to meet cost, schedule, and performance objectives.  6.1.1.3. The SEMP must summarise planned personnel needs, applicable to the various phases of the contract, by discipline and level of expertise.  6.1.1.4. The SEMP must identify the standards (eg, IEEE 15288 and ANSI/EIA-649-C) to be utilised by the Contractor and Subcontractors to undertake the Systems Engineering, software, Configuration Management (CM) and Verification activities, including the proposed tailoring of those standards to meet requirements of the contract.  6.1.1.5. The SEMP Management/Organization portion must describe the Contractor's systems engineering organization, responsibilities, terms of reference, internal operating relationships within the company, external operating relationships with subcontractors, management relationships, management procedures and supporting and tracking system.  6.1.2. <b>Systems Engineering Process</b>  6.1.2.1. The SEMP must define the tailored application of the Contractor's Systems Engineering process to the activities of the contract, including:  6.1.2.1.1. the major products and/or increments to be delivered;  6.1.2.1.2. the major outcomes to be achieved;  6.1.2.1.3. the major Systems Engineering tools that will be used for the Contract;  6.1.2.1.4. the methods for documentation and control of engineering and technical information, including expected specifications and Configuration Baselines;  6.1.2.1.5. the methods and tools for analysis and validation of system requirements;  6.1.2.1.6. the required implementation tasks, including the integration and assembly of the system; and	

- 6.1.2.1.7. the approach, methods, procedures, and tools to be used for systems analysis and control, including establishing and maintaining requirements traceability.

**6.1.3. Technical Risk Management**

- 6.1.3.1. The SEMP must describe the risk-management strategies associated with any global, engineering-related risks.

**6.1.4. Software Development and Management**

- 6.1.4.1. The SEMP must define the tailored application of the Contractor's software processes to the activities of the Contract, including:

- 6.1.4.1.1. the management of software development activities undertaken by Subcontractors; and
- 6.1.4.1.2. the development of software being undertaken by the Contractor.

**6.1.5. System Reviews**

- 6.1.5.1. The SEMP must describe the approach planned to establish and conduct all System Reviews (i.e. Mandated System Reviews and Internal System Reviews) required under the contract.
- 6.1.5.2. The SEMP must describe, for each engineering related System Review, the relationship between the System Review and other engineering program activities.
- 6.1.5.3. Based on the SOW requirements for System Reviews and the Contractor's internal processes, the SEMP must detail the following information for each of the engineering related System Reviews:
  - 6.1.5.3.1. organisations and individuals involved in the review and their specific review responsibilities;
  - 6.1.5.3.2. proposed review venue;
  - 6.1.5.3.3. review objectives;
  - 6.1.5.3.4. pre-requisites for the conduct of the review (i.e. entry criteria);
  - 6.1.5.3.5. actions to be addressed during the System Review, including the documentation to be reviewed;
  - 6.1.5.3.6. essential review completion criteria (i.e. exit criteria); and
  - 6.1.5.3.7. applicable Milestone criteria specified in the contract.

**6.1.6. Growth, Evolution and Obsolescence**

- 6.1.6.1. The SEMP must, for the Contractor's growth, evolution and Obsolescence program:
  - 6.1.6.1.1. describe the technical measures and methods to be used to identify and assess candidate elements, including hardware and software items, and the primary candidate elements to be addressed under by program;
  - 6.1.6.1.2. describe the application of design aspects (e.g. modularity and 'open architectures') to improve system growth, facilitate evolution, and to counter Obsolescence;
  - 6.1.6.1.3. identify the steps to be undertaken during the acquisition phase to balance technological maturity and Obsolescence risks, and solutions to minimise the complexity (and cost) of through-life upgrades; and
  - 6.1.6.1.4. identify the steps to be undertaken during the support phase to maintain effective and supportable equipment configurations and the expected need for upgrades.

**6.1.7. Human Engineering**

- 6.1.7.1. The SEMP must, for the Contractor's Human Engineering program:
  - 6.1.7.1.1. identify the standards to be used, and that have been used for COTS / MOTS items, and describe the application of those standards to meet the Human Engineering requirements of the system;

6.1.7.1.2. the activities, including system functional requirements analysis, equipment design and procedures development activities, to be undertaken in order to meet the Human Engineering required under the contract; and

6.1.7.1.3. the Verification methods to be applied for the Human Engineering program.

**6.1.8. Configuration Management**

6.1.8.1. The SEMP must describe the Contractor's CM methodology, processes and activities for meeting the CM requirements of the contract, including:

6.1.8.1.1. the approach planned to establish and maintain Configuration Control and audit of identified system products and processes;

6.1.8.1.2. the requirements for establishing Configuration Baselines and the documentation to be used to define each baseline; and

6.1.8.1.3. the approach planned to establish and maintain control of external and internal interfaces.

**6.1.8.2. Configuration Identification**

**6.1.8.2.1. Selection of Configuration Items**

6.1.8.2.1.1. The SEMP must define the procedures for the selection of CIs, and detail the criteria used for their selection. The SEMP must, by inclusion or reference, define the list of CIs and their respective specifications and other defining top-level documentation.

**6.1.8.2.2. Configuration Baselines**

6.1.8.2.2.1. The SEMP must define the requirements for establishing Configuration Baselines, and include:

6.1.8.2.2.1.1. the procedures for the establishment of, at least, the Functional, Allocated and Product Baselines; and

6.1.8.2.2.1.2. the documentation to be used to define each Configuration Baseline.

**6.1.8.2.3. Engineering Release**

6.1.8.2.3.1. The SEMP must define the procedures for issuing approved configuration documentation, and amendments to this documentation, to functional activities (e.g. manufacturing, logistics, and acquisition) within the Contractor's organisation.

**6.1.8.2.4. Configuration Control**

6.1.8.2.4.1. The SEMP must define the procedures, including DND involvement, and associated documentation for processing the following:

6.1.8.2.4.1.1. classification of changes, and the level of authority for change approval / concurrence;

6.1.8.2.4.1.2. Contractual change requests;

6.1.8.2.4.1.3. Major Changes;

6.1.8.2.4.1.4. Minor Changes;

6.1.8.2.4.1.5. requests for Deviations/Waivers; and

6.1.8.2.4.1.6. Specification Change Notices.

**6.1.8.3. Configuration Status Accounting (CSA)**

6.1.8.3.1. The SEMP must define the procedures for CSA, including:

6.1.8.3.1.1. methods for collecting, recording, processing and maintaining the data required to provide the status of accounting information through reports on the CSA database.

6.1.8.3.1.2. a complete description of the CSA database with respect to the areas related to:

- 6.1.8.3.1.2.1. the identification of the currently approved configuration documentation and configuration identifiers associated with each CI;
- 6.1.8.3.1.2.2. the status of proposed engineering changes from initiation to implementation;
- 6.1.8.3.1.2.3. the results of configuration audits, and the status and disposition of discrepancies;
- 6.1.8.3.1.2.4. the status of requests for deviations;
- 6.1.8.3.1.2.5. the ability to trace changes from the baseline documentation of each CI; and
- 6.1.8.3.1.2.6. the effectiveness and installation status of configuration changes to all CIs.

6.1.8.4. Configuration Audits

6.1.8.4.1. The SEMP must:

- 6.1.8.4.1.1. describe the Contractor's methodology and processes to establish and conduct Physical Configuration Audits (PCAs);
- 6.1.8.4.1.2. describe the plans, procedures, documentation, and schedules for the audits; and
- 6.1.8.4.1.3. describe the format for reporting results of in-process audits.

6.1.8.5. Subcontractor Control

- 6.1.8.5.1. The SEMP must define the methods used to ensure that Subcontractors comply with the Configuration Management requirements of the contract.

6.1.9. **Verification**

6.1.9.1. The SEMP must, for the Contractor's Verification program:

- 6.1.9.1.1. describe the overall Verification program objectives, activities and schedule;
- 6.1.9.1.2. describe the use of the RTVM and the extent to which previous Verification results are proposed to be used for Acceptance Verification purposes;
- 6.1.9.1.3. describe the process for recording Failure reporting and analysis, and the approach to regression testing; and
- 6.1.9.1.4. identify the requirements for DND Personnel and other resources in order to conduct the Verification program.

6.1.9.2. Verification Activities

- 6.1.9.2.1. The SEMP must describe the verification activities to be conducted to demonstrate that the system offered for acceptance complies with the requirements of the contract.
- 6.1.9.2.2. The SEMP must describe all test activities to be included in the verification of the system.
- 6.1.9.2.3. The SEMP must detail requirements and procedures for the DND provision of resources for, and involvement in, or witnessing of, verification activities.
- 6.1.9.2.4. Where the Contractor proposes to claim previous verification results as precluding the need for specific verification activities within the Verification program, the SEMP must summarise:
  - 6.1.9.2.4.1. the scope and context of the previous verification activities;
  - 6.1.9.2.4.2. the reasons why the previous results preclude the need for specific verification activities including how the previous results are valid for the configuration of the system, and the intended operational role and environment; and
  - 6.1.9.2.4.3. how the previous verification results will be integrated into the planned verification activities and the RTVM.

6.1.9.3. Flow Diagram

- 6.1.9.3.1. The SEMP must include an overall flow diagram of the verification program for the system, this flow must be sequentially arranged to include:

- 6.1.9.3.1.1. all significant verification milestones and efforts in the development phase associated with each class of verification;
- 6.1.9.3.1.2. hardware and software integration schedules;
- 6.1.9.3.1.3. requirements for concurrency of verification activities;
- 6.1.9.3.1.4. the Contractor/Subcontractor or group responsible for each verification event; and
- 6.1.9.3.1.5. any additional information that clarifies the description of the test program.
- 6.1.9.3.2. The flow diagram must reflect predicted dates for significant milestones.
- 6.1.9.4. Verification Objectives
  - 6.1.9.4.1. The SEMP must specify the broad objective for each verification phase for the system, and objectives must be specified in terms of verifying part or all of system or lower level specifications (e.g. subsystem specifications).
- 6.1.9.5. Test Readiness Reviews
  - 6.1.9.5.1. The SEMP must outline the procedures for conducting Test Readiness Reviews (TRRs).
- 6.1.9.6. Failure and Corrective Action Management
  - 6.1.9.6.1. The SEMP must describe the Problem Resolution System used for the collection of Failure data for the system and must identify when it will be established.
  - 6.1.9.6.2. The SEMP must identify the process used to analyse failures and track the corrective action taken as a result of a failure, and the interaction with the engineering development groups, logistic organisation, Subcontractors and the DND.
  - 6.1.9.6.3. The SEMP must identify how regression testing for the system will be managed following test failure or design change throughout the Verification program.

## 6.2. **SOFT COPY FORMAT**

- 6.2.1. The SEMP must be submitted as a PDF file type.
- 6.2.2. **Soft Copy format submission size below 7MB** – The SEMP PDF may be submitted via email as follows:
  - 6.2.2.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract.
  - 6.2.2.2. Subject Field: WTS-SE-101– SEMP – [Rev #] – [Date of Issue]
- 6.2.3. **Soft Copy format submission size at or above 7MB** - The SEMP PDF must be submitted on CD or DVD media and be labelled as follows:
  - 6.2.3.1. Water Treatment System;
  - 6.2.3.2. SEMP;
  - 6.2.3.3. WTS-SE-101;
  - 6.2.3.4. The Revision number, and
  - 6.2.3.5. The date of issue.

### A3.10 DID – Mandated System Review Package

DATA ITEM DESCRIPTION	
1. TITLE <b>Mandated System Review Package (MSR) Package</b>	2. IDENTIFICATION NUMBER DID WTS-SE-102
3. DESCRIPTION The purpose of MSR Package is to allow the Contractor and DND Representatives to prepare for MSRs in order to gain maximum value from the reviews.	
4. RELATED DOCUMENTS	5. CONTRACT REFERENCE SOW: <b>Para. 4.2.4.4 (pg. 21)</b>  CDRL: <b>App.A2.10 (pg.123)</b>
6. PREPARATION INSTRUCTIONS 6.1. <b>CONTENT</b> 6.1.1. The MSR Package must include information to be reviewed and discussed at the specific MSR, including: 6.1.1.1. documentation that is necessary to show that the objectives of the MSR have been satisfied; 6.1.1.2. presentation material on the topics of discussion as described in the SOW; 6.1.1.3. all relevant documents not previously delivered and needed to meet the objectives and entry criteria of the MSR; 6.1.1.4. where applicable to the MSR, status of technical performance measures against expectations; and 6.1.1.5. where applicable to the MSR, current configuration status along with any identified discrepancies in Configuration Baselines.  6.2. <b>SOFT COPY FORMAT</b> 6.2.1. The MSR Package must be submitted as a PDF file type. 6.2.2. <b>Soft Copy format submission size below 7MB</b> – The MSR Package PDF may be submitted via email as follows: 6.2.2.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract. 6.2.2.2. Subject Field: WTS-SE-102– MSR Package – [Rev #] – [Date of Issue] 6.2.3. <b>Soft Copy format submission size at or above 7MB</b> - The MSR Package PDF must be submitted on CD or DVD media and be labelled as follows: 6.2.3.1. Water Treatment System; 6.2.3.2. MSR Package; 6.2.3.3. WTS-SE-102; 6.2.3.4. The Revision number, and 6.2.3.5. The date of issue.	

### A3.11 DID – Requirements Traceability Verification Matrix

DATA ITEM DESCRIPTION	
1. TITLE <b>Requirements Traceability Verification Matrix (RTVM)</b>	2. IDENTIFICATION NUMBER DID WTS-SE-103
3. DESCRIPTION  The RTVM provides bidirectional traceability from high-level system performance requirements, to the lowest-level requirements. The RTVM shows the traceability and allocation of the requirements contained in the specification tree (i.e. performance specification, detailed specification, subsystem specification, software requirements specification, interface specification and design documentation). The RTVM is also used to verify how each requirement is verified.	
4. RELATED DOCUMENTS  Technical Specification at Appendix A1.0 to ANNEX A1	5. CONTRACT REFERENCE  SOW: <b>Para. 4.2.5.1 (pg. 22)</b> CDRL: <b>App. A2.11 (pg.124)</b>
6. PREPARATION INSTRUCTIONS  6.1. <b>CONTENT</b>  6.1.1. The RTVM must provide backwards and forward traceability through multiple levels of design hierarchy (i.e. the RTVM must document each requirement from its source through analysis, design, testing, and acceptance), to assess the impact of potential specification changes.  6.1.2. The RTVM must include the verification criteria for each requirement for testing purposes.  6.1.3. <u>For the PDR and CDR</u> , the RTVM must contain the following:  6.1.3.1. <b>Architecture Description Page:</b> Include a detailed description of the RTVM, show relationships and define all the terms, acronyms used in the RTVM fields.  6.1.3.2. <b>Unique Identification:</b> A unique identifier for each requirement;  6.1.3.3. <b>Requirement Source &amp; Reference:</b> The paragraph number and requirement statement (or brief summary of the requirement to provide context);  6.1.3.4. <b>Requirement Allocation:</b> Enter the specific system, subsystem, hardware item, component, Computer Software Configuration Item, Computer Software Component and Computer Software Unit that each requirement has been allocated. System level requirements must be allocated to all Configuration Items defined for the system.  6.1.3.5. <b>Form of End Product:</b> Enter the form and maturity level of the end product used for verification. For example the form can be the system, subsystem, unit level, software configuration Item and the maturity level can be the prototype, first production article, or final configuration item.  6.1.3.6. <b>Verification Method:</b> For each requirement, enter the verification method as follows:  6.1.3.6.1. "Certification" – Two forms of Certification are possible: - the first would be from a 3rd party recognized association of technical knowledge and expertise in the applicable area being sought, and the second from an "in house" qualified expert that would certify that the standards are met IAW their own testing or investigation and is attesting to their professional opinion.  6.1.3.6.2. "Analysis" – An element of verification that uses established technical or mathematical models or simulations, algorithms, charts, graphs, circuit diagrams, or other scientific principles and procedures to provide evidence that stated requirements were met.  6.1.3.6.3. "Inspection" – An element of verification that is generally non-destructive and typically includes the use of sight, hearing, smell, touch, and taste; simple physical manipulation; and mechanical and electrical gauging and measurement.	



- 6.1.3.6.4. "Demonstration" – An element of verification that involves the actual operation of an item to provide evidence that the required functions were accomplished under specific scenarios. The items may be instrumented and performance monitored.
- 6.1.3.6.5. "Test" – An element of verification in which scientific principles and procedures are applied to determine the properties or functional capabilities of items.
- 6.1.3.7. **Description of Verification:** A brief description of the verification method, intended as a vehicle for early agreement by both parties to define the scope of the verification activities.
- 6.1.3.8. **Comments:** Enter explanatory notes as required.
- 6.1.4. For the TRR and after completion of the Acceptance Verification (and ATRs), the RTVM must contain the following:
  - 6.1.4.1. **Verification Document:** Enter the document number, title, and date of the verification document that contains the verification method.
  - 6.1.4.2. **Verification Document Paragraph:** Enter the verification document paragraph number that provides the verification method.
  - 6.1.4.3. **Verification Procedure:** Enter the verification procedure section, and verification procedure step(s) that provides the verification method for each requirement.
  - 6.1.4.4. **Other Tests:** Enter the names of other tests conducted, prior to verification of the requirement, where the requirement is being tested.
  - 6.1.4.5. **Verification Results:** Enter the results of the verification for each requirement. Did system under test conform to the requirement? (Yes, No).
  - 6.1.4.6. **Corrective Actions:** Enter all corrective actions taken and the results of the corrective actions.
  - 6.1.4.7. **Comments:** Enter explanatory notes as required.
- 6.2. **SOFT COPY FORMAT**
  - 6.2.1. The RTVM must be in an Excel Spreadsheet (MS Office Professional Plus 2013) / electronic relational database (DOORS 9.5 or Access Database (MS Office Professional Plus 2013)) format that can be manipulated to show bidirectional requirements traceability and track the verification of each requirement.
  - 6.2.2. **Soft Copy format submission size below 7MB** – The RTVM may be submitted via email as follows:
    - 6.2.2.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract.
    - 6.2.2.2. Subject Field: WTS-SE-103 – RTVM – [Rev #] – [Date of Issue]
  - 6.2.3. **Soft Copy format submission size at or above 7MB** - The RTVM must be submitted on CD or DVD media and be labelled as follows:
    - 6.2.3.1. Water Treatment System
    - 6.2.3.2. RTVM;
    - 6.2.3.3. WTS-SE-103;
    - 6.2.3.4. The Revision number, and
    - 6.2.3.5. The date of issue.

### A3.12 DID – Engineering Drawings and Associated Lists

DATA ITEM DESCRIPTION	
1. TITLE <b>Engineering Drawings and Associated Lists</b>	2. IDENTIFICATION NUMBER DID WTS-SE-104
3. DESCRIPTION The Engineering Drawings and Associated Lists will accurately define the interface to external systems and will enable the system to be maintained and supported over its life.	
4. RELATED DOCUMENTS <b>APPENDIX A4.0: APPENDIX: COMMERCIAL (OEM) ENGINEERING DRAWINGS AND ASSOCIATED LISTS</b>	5. CONTRACT REFERENCE SOW: <b>Para. 4.3.3.1 (pg. 25)</b> CDRL: <b>App. A2.12 (pg.125)</b>
6. PREPARATION INSTRUCTIONS 6.1. <b>CONTENT</b> 6.1.1. The Engineering Drawings and Associated Lists must be provided IAW the requirements described in Appendix A4.0. 6.2. <b>SOFT COPY FORMAT</b> 6.2.1. The Engineering Drawings, Associated Lists, Reference Data, and the associated Metadata must be submitted as soft copy deliverables as described in Appendix A4.0. 6.2.2. <b>Soft Copy format submission size below 7MB</b> – The Engineering Drawings and Associated Lists may be submitted via email as follows: 6.2.2.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract. 6.2.2.2. Subject Field: WTS-SE-104 – Engineering Drawings and Associated Lists – [Rev #] – [Date of Issue] 6.2.3. <b>Soft Copy format submission size at or above 7MB</b> - The Engineering Drawings and Associated Lists must be submitted on CD or DVD media and be labelled as follows: 6.2.3.1. Water Treatment System 6.2.3.2. Engineering Drawings and Associated Lists; 6.2.3.3. WTS-SE-104; 6.2.3.4. The Revision number, and 6.2.3.5. The date of issue.	

### A3.13 DID – Engineering Change Proposal

DATA ITEM DESCRIPTION	
1. TITLE <b>Engineering Change Proposal (ECP)</b>	2. IDENTIFICATION NUMBER DID WTS-SE-105
3. DESCRIPTION An ECP is a request for authorization to make changes to an approved baseline. An ECP includes the documentation both to describe and to substantiate the engineering change.	
4. RELATED DOCUMENTS <b>ACMP-2009 – Guidance on Configuration Management</b>	5. CONTRACT REFERENCE SOW: <b>Para. 5.4.2 (pg. 27)</b> CDRL: <b>App. A2.13 (pg.126)</b>
6. PREPARATION INSTRUCTIONS	
6.1. <b>CONTENT</b>	
6.1.1. The following refers to the ECP form following this DID.	
6.1.2. <b>Block 1.</b> The Contractor must enter the submittal date of the ECP.	
6.1.3. <b>Block 2.</b> The Contractor must enter the originating organization's name, address and contact information.	
6.1.4. <b>Block 3.</b> The Contractor must classify the ECP IAW ACMP-2009, and enter the class of ECP as either "Class I" or "Class II".	
6.1.5. <b>Block 4.</b> The Contractor must use at least one of the following codes to classify the ECP:	
6.1.5.1. B – Functional Baseline, Allocated Baseline or Product Baseline changed from established baseline;	
6.1.5.2. C – Compatibility with interfacing items;	
6.1.5.3. D – Delivered operational or maintenance manuals require change;	
6.1.5.4. G – Government Furnished Equipment affected;	
6.1.5.5. I – Interchangeability or replaceability affected;	
6.1.5.6. O – Operational or logistics support change;	
6.1.5.7. P – Personnel skills, manning, training or human factors engineering consideration;	
6.1.5.8. S – Safety or security; or	
6.1.5.9. Z – Contractual item such as cost or schedule.	
6.1.6. <b>Block 5.</b> The Contractor must recommend the a priority for processing the ECP from the following:	
6.1.6.1. E - Emergency. Vital modification required to rectify a condition which may result in a serious hazard to personnel or equipment or may seriously compromise national security. ECP to be actioned within 24 hours.	
6.1.6.2. U - Urgent. Urgent modification required to rectify a condition that results in degraded mission effectiveness. ECP to be actioned within 5 days.	
6.1.6.3. R - Routine. ECP to be actioned within 30 days.	
6.1.7. <b>Block 6.</b> The Contractor must describe the ECP with the following:	
6.1.7.1. No. A unique number consisting of "ECP-Y-NNN", where:	
6.1.7.1.1. Y – C (Contractor) or P (Project Office – DND) indicating ECP originator, and	
6.1.7.1.2. NNN - Unique serial number for the ECP;	
6.1.7.2. Type – P (Preliminary) or F (Final);	

- 6.1.7.3. Revision – Enter revision indicator to identify version; and
- 6.1.7.4. SYSTEM DESIGNATION – Identify and describe the system/sub-system affected by the ECP. Include reference to affected configuration identifier(s).
- 6.1.8. **Block 7.**
  - 6.1.8.1. The Contractor must list all specifications affected by the ECP.
  - 6.1.8.2. The Contractor must list all documents affected by the ECP.
  - 6.1.8.3. The Contractor must submit copies of the affected specifications and documents with the ECP.
- 6.1.9. **Block 8.**
  - 6.1.9.1. The Contractor must list all drawings affected by the change.
  - 6.1.9.2. The Contractor must submit copies of the affected drawings with the ECP.
- 6.1.10. **Block 9.** The Contractor must enter a brief title that identifies the ECP.
- 6.1.11. **Block 10.**
  - 6.1.11.1. The Contractor must describe the engineering change.
  - 6.1.11.2. Supplementary information may be attached to the ECP to describe the proposed change.
- 6.1.12. **Block 11.**
  - 6.1.12.1. The Contractor must explain the need for the engineering change.
  - 6.1.12.2. The Contractor must explain the benefit to Canada such as enhanced performance, range, reliability or maintainability.
- 6.1.13. **Block 12.**
  - 6.1.13.1. The Contractor must state the contract number affected by the ECP.
  - 6.1.13.2. The Contractor must identify the contract line item number affected by the proposed engineering change.
- 6.1.14. **Block 13.**
  - 6.1.14.1. The Contractor must indicate the estimated date when change can be incorporated into production.
  - 6.1.14.2. The Contractor must indicate the planned serial number or lot number upon which the change will be implemented.
- 6.1.15. **Block 14.**
  - 6.1.15.1. The Contractor must provide the delivery schedule of items incorporating the engineering change.
  - 6.1.15.2. The Contractor must identify if the change is a variance from the current established production and delivery schedule.
- 6.1.16. **Block 15.**
  - 6.1.16.1. Block 15a. The Contractor must indicate the lot numbers or serial numbers to be retrofitted as a result of the change.
  - 6.1.16.2. Block 15b. The Contractor must enter details of delivery schedule, quantities and locations for completing the retrofit as a result of the change.
- 6.1.17. **Block 16.** The Contractor must estimate the total cost or savings that results if the ECP is approved.
- 6.1.18. **Block 17.** The Contractor must identify which configuration items (CI) will change as a result of the ECP's approval.
- 6.1.19. **Block 18.** The Contractor must indicate which other CI will be affected by the ECP's approval.
- 6.1.20. **Block 19.** The Contractor must state whether other contractors or Government activities will be affected by the ECP.

6.1.21. **Block 20.**

6.1.21.1. The Contractor must describe the performance change that results if the ECP is approved.

6.1.21.2. The Contractor must describe the impact upon performance specifications, including the defined functional and physical interfaces, which would be affected by the ECP.

6.1.22. **Block 21.** The Contractor must describe other effects, such as the effect upon health and safety, if the ECP is approved.

6.1.23. **Block 22.** The Contractor must describe effects of the proposed change upon performance in quantitative terms as it relates to the defence system and CI specifications.

6.1.24. **Block 23.**

6.1.24.1. The Contractor must print the name of the individual authorized to submit the ECP.

6.1.24.2. The Contractors' authorized individual must sign and date the ECP.

6.1.25. **Block 24.**

6.1.25.1. The Contractor must indicate the effects of the proposed engineering change upon configuration identification and contract reference by checking the corresponding box at 24a through 24e.

6.1.25.2. The Contractor must describe the effects upon the product configuration identification and contract specifications with reference to Specification Change Notices, Notices of Revision (NORs) or other enclosure(s).

6.1.25.3. The Contractor must identify the enclosures and their relevant paragraph numbers within the space adjacent to blocks 24a through 24e.

6.1.26. **Block 25.**

6.1.26.1. The Contractor must indicate the effects of the proposed engineering change upon operational employment by checking the corresponding boxes at blocks 25a through 26j.

6.1.26.2. The Contractor must explain these effects within enclosures.

6.1.26.3. The Contractor must identify the enclosures and their relevant paragraph numbers within the space adjacent to blocks 25a through 25j.

6.1.26.4. The Contractor must use quantitative values when reliability and service life are affected. Survivability includes nuclear survivability.

6.1.27. **Block 26.**

6.1.27.1. The Contractor must indicate the effects of the proposed engineering change upon Integrated Logistics Support (ILS) by checking the corresponding boxes at blocks 26a through 26n.

6.1.27.2. The Contractor must explain these effects within enclosures.

6.1.27.3. The Contractor must identify the enclosures and their relevant paragraph numbers within the space adjacent to blocks 26a through 26n.

6.1.27.4. The Contractor must indicate the method used to determine ILS plans and items required for the support of the new configuration.

6.1.28. **Block 27.**

6.1.28.1. The Contractor must indicate other considerations of the proposed engineering change by checking the boxes at blocks 27a through 27i.

6.1.28.2. The Contractor must explain the effects within enclosures.

6.1.28.3. The Contractor must identify the enclosures and their relevant paragraph numbers within the space adjacent to blocks 27a through 27i.

6.1.29. **Block 28.**

6.1.29.1. The Contractor must summarize the alternative solutions considered such as revisions of operation, maintenance procedures, inspections, servicing requirements or part replacement schedules.

- 6.1.29.2. The Contractor must provide an analysis of the alternatives, identify the advantages and disadvantages inherent to each alternative.
- 6.1.29.3. The Contractor must present supporting data with the proposal to authenticate the trade-off analysis if the analysis addresses new concepts or new technology.
- 6.1.29.4. The Contractor shows the reasons for adopting the alternative proposed by the ECP.
- 6.1.30. **Block 29.**
  - 6.1.30.1. The Contractor must recommend additional tests, trials, installations, prototypes, fit checks, or other verification that prove the proposed engineering change performs as expected.
  - 6.1.30.2. The Contractor must recommend the test objective, test vehicle(s) and GFE to be used for the verification.
- 6.1.31. **Block 30.**
  - 6.1.31.1. The Contractor must recommend whether or not to retrofit the engineering change into accepted items.
  - 6.1.31.2. The Contractor must substantiate the retrofit recommendation with data and a brief description of the action required.
- 6.1.32. **Block 31.** The Contractor must show the work-hours, material costs and subcontract costs to retrofit the defence system.
- 6.1.33. **Block 32.** The Contractor must show the work-hours required to test the defence system following retrofit.
- 6.1.34. **Block 33.** The Contractor must state whether to incorporate the proposed change before, after or concurrently with other approved engineering changes.
- 6.1.35. **Block 34.**
  - 6.1.35.1. The Contractor must indicate whether one or more Contractor field service representatives (FSR) are required for the retrofit.
  - 6.1.35.2. If "yes" to FSR, then the Contractor must attach a proposed program for Contractor participation.
- 6.1.36. **Block 35.** The Contractor must estimate the total time period a defence system must be removed from operational service for the retrofit.
- 6.1.37. **Block 36.**
  - 6.1.37.1. The Contractor must summarize the cumulative effect upon performance of this ECP and previously approved ECPs when design limitations are being approached or exceeded.
  - 6.1.37.2. Consequences of ECP disapproval may be stated within Block 36 or within a referenced enclosure.
- 6.1.38. **Block 37.** The Contractor must request a date for approval by the contracting authority to implement the change.
- 6.2. **SOFT COPY FORMAT**
  - 6.2.1. The ECP must be submitted as a PDF file type.
  - 6.2.2. The ECP PDF must be submitted via email (submission size not to exceed 7MB) as follows:
    - 6.2.2.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract.
    - 6.2.2.2. Subject Field: WTS-SE-105 – ECP – [Rev #] – [Date of Issue]

<b>ENGINEERING CHANGE PROPOSAL (ECP)</b>					
1. DATE (YY/MM/DD)					
2. ORIGINATOR NAME AND ADDRESS					
3. CLASS OF ECP (I or II)		4. CLASSIFICATION CODE (Applicable to Class I Only)			5. PRIORITY
6. ECP DESIGNATION					
No.		Type		Revision	
SYSTEM DESIGNATION:					
7. SPECIFICATIONS / DOCUMENTS AFFECTED			8. DRAWINGS AFFECTED		
Spec/Doc No.	Title	Rev	Dwg No.	Title	REV
9. TITLE OF CHANGE					
10. DESCRIPTION OF CHANGE					
11. NEED FOR CHANGE					
12. CONTRACT NUMBER AND LINE ITEMS					
13. PRODUCTION EFFECTIVITY			14. EFFECT UPON PRODUCTION DELIVERY SCHEDULE		
15. RETROFIT					
15a. RECOMMENDED ITEM EFFECTIVITY			15b. ESTIMATED KIT DELIVERY SCHEDULE / LOCATIONS		
16. ESTIMATED COSTS / SAVINGS UNDER CONTRACT					

<b>IMPACT ANALYSIS / EFFECTS</b>	
17. ITEMS / SYSTEMS DIRECTLY AFFECTED	
18. OTHER SYSTEMS AFFECTED	
19. OTHER CONTRACTORS / ACTIVITIES AFFECTED	
20. EFFECTS UPON PERFORMANCE / SYSTEM SPECIFICATIONS	
21. EFFECTS UPON EMPLOYMENT, INTEGRATED LOGISTICS SUPPORT, TRAINING, OPERATIONAL EFFECTIVENESS, ENVIRONMENT, HEALTH & SAFETY (EHS) OR SOFTWARE	
22. EFFECTS UPON ITEM SPECIFICATIONS	
23. SUBMITTING ACTIVITY – Authorized Signature (Print Name and Sign)	Date



**APPENDIX A**  
**TO W8476-216378**  
**REVISED 24 MARCH 2022**

EFFECTS UPON PRODUCT CONFIGURATION IDENTIFICATION, LOGISTICS AND OPERATIONS							
(X)	FACTOR	ENCL	PAR	(X)	FACTOR	ENCL	PAR
	<b>24. EFFECT UPON PRODUCT CONFIGURATION IDENTIFICATION OR CONTRACT</b>				<b>25. EFFECT UPON OPERATIONAL EMPLOYMENT</b>		
	a. PERFORMANCE				a. SAFETY		
	b. WEIGHT BALANCE STABILITY ( <i>Aircraft</i> )				b. SURVIVABILITY		
	c. WEIGHT-MOMENT ( <i>Other Equipment</i> )				c. RELIABILITY		
	d. CDRL, TECHNICAL DATA				d. MAINTAINABILITY		
	e. NOMENCLATURE				e. SERVICE LIFE		
					f. OPERATING PROCEDURES		
	<b>26. EFFECT UPON INTEGRATED LOGISTICS SUPPORT (ILS) ELEMENTS</b>				g. ELECTROMAGNETIC INTERFERENCE		
	a. ILS PLANS				h. ACTIVATION SCHEDULE		
	b. MAINTENANCE CONCEPT, PLANS AND PROCEDURES				i. CRITICAL SINGLE POINT FAILURE ITEMS		
	c. LOGISTICS SUPPORT ANALYSIS				j. INTEROPERABILITY		
	d. INTERIM SUPPORT PROGRAMS						
	e. SPARES AND REPAIR PARTS				<b>27. OTHER CONSIDERATIONS</b>		
	f. TECH MANUALS/PROGRAMMING TAPES				a. INTERFACE		
	g. FACILITIES				b. OTHER AFFECTED EQUIPMENT/GFE/ GFI		
	h. SUPPORT EQUIPMENT				c. PHYSICAL CONSTRAINTS		
	i. OPERATOR TRAINING				d. COMPUTER PROGRAMS AND RESOURCES		
	j. OPERATOR TRAINING EQUIPMENT				e. REWORK OF OTHER EQUIPMENT		
	k. MAINTENANCE TRAINING				f. SYSTEM TEST PROCEDURES		
	l. MAINTENANCE TRAINING EQUIPMENT				g. WARRANTY/GUARANTEE		
	m. CONTRACT MAINTENANCE				h. PARTS CONTROL		
	n. PACKAGING, HANDLING, STORAGE, TRANSPORTABILITY				i. LIFE CYCLE COSTS		
<b>28. ALTERNATE SOLUTIONS</b>							
<b>29. DEVELOPMENTAL STATUS</b>							
<b>30. RECOMMENDATIONS FOR RETROFIT</b>							
<b>31. WORK-HOURS, MATERIAL COSTS AND SUBCONTRACT COSTS PER UNIT TO INSTALL RETROFIT KITS</b>							
a. WORK HOURS		b. MATERIAL COSTS			c. SUBCONTRACT COSTS		
<b>32. WORK-HOURS TO CONDUCT SYSTEM TESTS AFTER RETROFIT</b>							
<b>33. THIS CHANGE MUST BE ACCOMPLISHED</b> <input type="checkbox"/> BEFORE <input type="checkbox"/> WITH <input type="checkbox"/> AFTER THE FOLLOWING CHANGES				<b>34. IS CONTRACTOR FIELD SERVICE REPRESENTATIVE REQUIRED?</b> <input type="checkbox"/> YES <input type="checkbox"/> NO		<b>35. OUT OF SERVICE TIME</b>	
<b>36. EFFECT OF THIS ECP AND PREVIOUSLY APPROVED ECPs UPON ITEM</b>				<b>37. DATE CONTRACTUAL AUTHORITY NEEDED</b>			

### A3.14 DID – Configuration Status Accounting Report

DATA ITEM DESCRIPTION	
1. TITLE <b>Configuration Status Accounting (CSA) Report</b>	2. IDENTIFICATION NUMBER DID WTS-SE-106
3. DESCRIPTION The CSA Report provides details about the current Configuration Items (CIs), including existing CIs and those being developed under the Contract; documentation and identification numbers relating to those CIs, and changes to the items and their configuration documentation	
4. RELATED DOCUMENTS <b>ANSI/EIA-649-C – Configuration Management Standard</b>	5. CONTRACT REFERENCE SOW: <b>Para. 5.5.2 (pg. 28)</b> CDRL: <b>App. A2.14 (pg.127)</b>
6. PREPARATION INSTRUCTIONS	
6.1. <b>CONTENT</b>	
6.1.1. The CSA Report must include data from the CSA system, including:	
6.1.1.1. the identification of the currently approved configuration documentation and configuration identifiers associated with each CI;	
6.1.1.2. the status of proposed engineering changes from initiation to implementation;	
6.1.1.3. the status and disposition of discrepancies from configuration audits;	
6.1.1.4. the status of applications / requests for deviations and waivers;	
6.1.1.5. the ability to trace changes from the baseline documentation of each CI; and	
6.1.1.6. the effectiveness and installation status of configuration changes to all CIs at all locations.	
6.1.2. <b>Indentured Item List</b>	
6.1.2.1. For each CI, the CSA Report must include an Indentured Item List that illustrates the breakdown structure of subordinate CIs, parts, assemblies, sub-assemblies and Software, such that the relationships (e.g. where used, next higher assembly) within the product breakdown structure can be clearly understood.	
6.1.2.2. The Indentured Item List must, for each item in the product breakdown structure, include:	
6.1.2.2.1. the configuration identifier / product identifier / Unique Item Identifier (UII);	
6.1.2.2.2. the nature of the CI (i.e. system, hardware, software);	
6.1.2.2.3. the manufacturer's Enterprise Identifier (e.g. Commercial and Government Entity (CAGE) code);	
6.1.2.2.4. the manufacturer's reference number / part number for the item;	
6.1.2.2.5. an Effectivity identifier, such as a version number, useable on code or other, used to designate that a CI is useable on one or more higher-level CIs or end items; and	
6.1.2.2.6. the name of the CI, part, component, assembly or Software item, as applicable.	
6.1.2.3. The product hierarchy in the Indentured Item List must be described to a level of detail that provides the DND with sufficient understanding of the evolving solution and to meet life cycle support concepts, supportability and other goals under the Contract.	
6.1.3. <b>Functional Baseline Report</b>	
6.1.3.1. The CSA Report must include Functional Baseline Reports that list the configuration documentation used to define the FBL for each CI including:	

- 6.1.3.1.1. requirements specifications (functional, interoperability and interface characteristics and design constraints);
- 6.1.3.1.2. external interface definition documentation; and
- 6.1.3.1.3. agreed Verification documentation required to demonstrate the CI's characteristics.

**6.1.4. Product Baseline Report**

- 6.1.4.1. The CSA Report must include Product Baseline Reports that list the configuration documentation or other information artefacts used to define the PBL for each CI, and which include the following types of documentation:

- 6.1.4.1.1. specifications for the system and subordinate CIs including both hardware and software CIs;
- 6.1.4.1.2. interface control documents;
- 6.1.4.1.3. engineering and manufacturing drawings and associated lists (e.g. bill of materials, wiring lists, assembly drawings, item quantities);
- 6.1.4.1.4. design documentation (including, as applicable, software and firmware source code, and system, hardware, software and firmware design documentation);
- 6.1.4.1.5. computer aided design, simulation and modelling files;
- 6.1.4.1.6. Verification plans, procedures and reports;
- 6.1.4.1.7. audit reports, certifications and associated action items;
- 6.1.4.1.8. Engineering Change Proposals (ECPs) and requests for deviations/waivers ;
- 6.1.4.1.9. operation and maintenance manuals;
- 6.1.4.1.10. recommended spares and support and test equipment; and
- 6.1.4.1.11. associated Training materials.

- 6.1.4.2. Configuration documentation for the Product Baseline Report must be identified to a level of detail commensurate with the expected Defence activities and support strategy for the product.

**6.2. SOFT COPY FORMAT**

- 6.2.1. The CSA Report must be submitted as a PDF file type.
- 6.2.2. **Soft Copy format submission size below 7MB** – The CSA Report may be submitted via email as follows:
  - 6.2.2.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract.
  - 6.2.2.2. Subject Field: WTS-SE-106 – CSA Report – [Rev #] – [Date of Issue]
- 6.2.3. **Soft Copy format submission size at or above 7MB** - The CSA Report must be submitted on CD or DVD media and be labelled as follows:
  - 6.2.3.1. Water Treatment System
  - 6.2.3.2. CSA Report;
  - 6.2.3.3. WTS-SE-106;
  - 6.2.3.4. The Revision number, and
  - 6.2.3.5. The date of issue.

### A3.15 DID – Acceptance Test Plan and Procedures

DATA ITEM DESCRIPTION	
1. TITLE <b>Acceptance Test Plan and Procedures (ATP&amp;P)</b>	2. IDENTIFICATION NUMBER DID WTS-SE-107
3. DESCRIPTION  The ATP&P describes the organisations, schedule, responsibilities, procedures and other details that are necessary for the conduct of the test program, as required under the contract and the approved governing plan for Verification. The activities defined by the ATP&P are used to confirm the quality of the Supplies and that the Contract requirements have been met.	
4. RELATED DOCUMENTS	5. CONTRACT REFERENCE SOW: <b>Para.6.1.1.2 (pg. 30)</b> CDRL: <b>App. A2.15 (pg. 128)</b>
6. PREPARATION INSTRUCTIONS  6.1. <b>CONTENT</b>  6.1.1. <b>Detailed Requirements – Plan</b>  6.1.1.1. The ATP&P must separately identify each requirement, and in respect of each requirement:  6.1.1.1.1. provide a summary description of the test, including the organisation(s) involved in the test and the responsibilities of key individuals;  6.1.1.1.2. reference the RTVM entries that detail which requirements are being tested, and whether Verification of a requirement will be established by the test;  6.1.1.1.3. provide a description of the test article, including test configuration identification;  6.1.1.1.4. detail system configuration and initial conditions for test;  6.1.1.1.5. identify any limitations, assumptions and constraints associated with the Verification activity, including any measurements that need to be taken at the time of the Verification activity to record uncontrollable conditions (e.g. ambient temperature);  6.1.1.1.6. identify any location or environmental considerations for the conduct of the Verification activities;  6.1.1.1.7. state the means, or combination of means, which will be used to Verify compliance with the requirement, for example, stand-alone system, integration test;  6.1.1.1.8. identify, with respect to the means stated in 6.1.1.1.7 above, whether the Verification of the requirement will be fully established by either a discrete test, as part of a test of the complete functioning system, or both;  6.1.1.1.9. identify the precursor test activities and the immediate successor test activities covered by a separate ATP&P, as applicable;  6.1.1.1.10. identify the subordinate test procedures that describe the test steps for each test case listed in the ATP&P; and  6.1.1.1.11. include details of the test organisation and the significant test equipment, documentation and facilities required for the conduct of the Verification activity, with cross-references to the applicable test procedures for additional detail.  6.1.1.2. The ATP&P must define the procedures to be undertaken when a test result indicates that the test article has failed, and to provide traceability of any investigation or technical follow-up, corrective actions, and retest / regression testing, to maintain the integrity of the final results and reports.  6.1.1.3. The ATP&P must list those Acceptance Test Reports (ATRs) that are generated by the ATP&P.	

6.1.1.4. The ATP&P must reference the RTVM that provides traceability of each requirement to test item and test procedures that will verify satisfactory compliance.

**6.1.2. Detailed Requirements – Procedures**

6.1.2.1. For each test procedure identified under 6.1.1.1.10 above, the ATP&P must include, using separate annexes for each procedure:

6.1.2.1.1. a description of the scope of the test, including a test method, which must provide a general description of the test activity;

6.1.2.1.2. a description of the configuration of the item(s) under test and initial conditions for test, including any preparatory requirements or other pre-test activities;

6.1.2.1.3. a description of the test equipment (including the configuration of test equipment), documentation (including details of calibration and certification of test equipment if required), venue and personnel required for the conduct of the test;

6.1.2.1.4. all safety precautions necessary for the performance of the test procedure;

6.1.2.1.5. a description of any data inputs or data files required for the conduct of the test; and

6.1.2.1.6. step-by-step procedures for the performance of the test, in sufficient detail to identify every action necessary for the conduct of the test, including:

6.1.2.1.6.1. pre-test actions;

6.1.2.1.6.2. any notes, cautions or warnings that are necessary at each stage of the test procedure;

6.1.2.1.6.3. required operator test input;

6.1.2.1.6.4. expected outcomes or results;

6.1.2.1.6.5. space for recording actual results;

6.1.2.1.6.6. space for comments;

6.1.2.1.6.7. a block for sign-off signatures for all parties present at the test;

6.1.2.1.6.8. a space for recording the configuration of the item(s) under test, including all major hardware and software Configuration Items;

6.1.2.1.6.9. a space for recording all test equipment utilised and the calibration date of the equipment;

6.1.2.1.6.10. if applicable, a space for recording details of test-recording media that will support test analysis; and

6.1.2.1.6.11. a space for recording any post-test actions.

6.1.2.2. In conjunction with each test step, the test procedure must define what measurements, readings, or observations are required for a correct response.

6.1.2.3. As part of the test assessment data, PASS/FAIL criteria or the expected qualitative or quantitative result must also be defined.

6.1.2.4. Where a quantitative result is declared, this must include the allowable tolerance.

6.1.2.5. Where a qualitative result is declared, this must include a description of the expected results of the test.

**6.2. SOFT COPY FORMAT**

6.2.1. The ATP&P must be submitted as a PDF file type.

6.2.2. **Soft Copy format submission size below 7MB** – The ATP&P may be submitted via email as follows:

6.2.2.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract.

6.2.2.2. Subject Field: WTS-SE-107 – ATP&P – [Rev #] – [Date of Issue]

6.2.3. **Soft Copy format submission size at or above 7MB** - The ATP&P must be submitted on CD or DVD media and be labelled as follows:

6.2.3.1. Water Treatment System

6.2.3.2. ATP&P;

6.2.3.3. WTS-SE-107;

6.2.3.4. The Revision number, and

6.2.3.5. The date of issue.

### A3.16 DID – Acceptance Test Report

DATA ITEM DESCRIPTION	
1. TITLE <b>Acceptance Test Report (ATR)</b>	2. IDENTIFICATION NUMBER DID WTS-SE-108
3. DESCRIPTION The ATR is used to document the results of the system test activity. In particular, the ATR formally documents the results, conclusions and recommendations of testing conducted according to the governing plan for Verification (e.g. SEMP) and associated Acceptance Test Plan and Procedures (ATP&Ps).	
4. RELATED DOCUMENTS	5. CONTRACT REFERENCE SOW: <b>Para. 6.2.1.4 (pg. 34)</b> CDRL: <b>App. A2.16 (pg.129)</b>
6. PREPARATION INSTRUCTIONS	
6.1. <b>CONTENT</b>	
6.1.1. The ATR must include:	
6.1.1.1. data to uniquely identify the Supplies being Verified, which may include:	
6.1.1.1.1. item names;	
6.1.1.1.2. stock numbers;	
6.1.1.1.3. part numbers;	
6.1.1.1.4. item quantity;	
6.1.1.1.5. serial numbers; and	
6.1.1.1.6. configuration status;	
6.1.2. references to relevant ATP&P and details of any differences between the ATP&P and the 'as run' test procedure;	
6.1.3. reports of the relevant verification results, supported by the applicable raw results / measurement data, calculations, etc., as attachments;	
6.1.4. reports on any corrective action found necessary as a result of verification activities, and of any subsequent re-verification activities required; and	
6.1.5. names of the DND representative(s) who witnessed the verification activities, or reference to the authority given to conduct the verification activities without a DND presence.	
6.2. <b>SOFT COPY FORMAT</b>	
6.2.1. The ATR must be submitted as a PDF file type.	
6.2.2. <b>Soft Copy format submission size below 7MB</b> – The ATR may be submitted via email as follows:	
6.2.2.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract.	
6.2.2.2. Subject Field: WTS-SE-108 – ATR – [Rev #] – [Date of Issue]	
6.2.3. <b>Soft Copy format submission size at or above 7MB</b> - The ATR must be submitted on CD or DVD media and be labelled as follows:	
6.2.3.1. Water Treatment System	
6.2.3.2. ATR;	
6.2.3.3. WTS-SE-108;	
6.2.3.4. The Revision number, and	
6.2.3.5. The date of issue.	

### A3.17 DID – Top Level Assembly Drawing

DATA ITEM DESCRIPTION	
1. TITLE <b>Top Level Assembly Drawing</b>	2. IDENTIFICATION NUMBER DID WTS-ILS-201
3. DESCRIPTION The Top Level Assembly Drawing (TLAD) describes the assembled relationship of all the parts of the system.	
4. RELATED DOCUMENTS <b>D-01-400-001/SG-000</b> <i>Standard - Engineering Drawing Practices</i> <b>D-01-400-002/SF-000</b> <i>Specification - Levels of Engineering Drawings</i>	5. CONTRACT REFERENCE SOW: <b>Para. 3.6.2.2 (pg. 18)</b> CDRL: <b>App.A2.17 (pg.130)</b>
6. PREPARATION INSTRUCTIONS	
6.1. <b>CONTENT</b>	
6.1.1. The TLAD must contain all information necessary to identify all the components of the WTS.	
6.2. <b>GENERAL FORMAT</b>	
6.2.1. The TLAD must be prepared IAW D-01-400-001/SG-000, Engineering Drawing Practices, para 7.4, and D-01-400-002/SF-000: Levels of Engineering Drawings, para 3.3.2 (Level 2).	
6.3. <b>HARD COPY FORMAT</b>	
6.3.1. The TLAD must be printed on paper with these characteristics:	
6.3.1.1. Standard US Ledger size (432 mm x 279 mm)	
6.3.1.2. Weight of no less than 90 gsm;	
6.3.1.3. Brightness of no less than 92 ISO brightness;	
6.4. <b>SOFT COPY FORMAT</b>	
6.4.1. The TLAD must be submitted as a PDF file type, and match the printed format and layout.	
6.4.2. Viewing the PDF version: pages, regardless of size, containing text and illustrations in landscape, must be rotated for electronic viewing and reading in landscape.	
6.4.3. <b>Soft Copy format submission size below 7MB</b> – The TLAD PDF may be submitted via email as follows:	
6.4.3.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract.	
6.4.3.2. Subject Field: WTS-ILS-201 – TLAD – [Rev #] – [Date of Issue]	
6.4.4. <b>Soft Copy format submission size at or above 7MB</b> - The TLAD PDF must be submitted on CD or DVD media and be labelled as follows:	
6.4.4.1. Water Treatment System	
6.4.4.2. TLAD;	
6.4.4.3. WTS-ILS-201;	
6.4.4.4. The Revision number, and	
6.4.4.5. The date of issue.	



### A3.18 DID – WTS Operator Manual

DATA ITEM DESCRIPTION	
1. TITLE <b>WTS Operator Manual</b>	2. IDENTIFICATION NUMBER DID WTS-ILS-202
3. DESCRIPTION The WTS Operator Manual contains all the essential information required to describe the safe and correct operative procedures and operator maintenance associated with the equipment.	
4. RELATED DOCUMENTS <b>C-01-100-100/AG-008</b> <i>Writer's Guide for Technical Documentation</i>	5. CONTRACT REFERENCE SOW: <b>Para 8.3.1.1.1 (pg. 44)</b> CDRL: <b>App. A2.18 (pg. 131)</b>
6 PREPARATION INSTRUCTIONS	
6.1 <b>CONTENT</b>	
6.1.1 The WTS Operator Manual must cover the following topics, and others judged pertinent by the Contractor:	
6.1.1.1 General Description/Equipment Overview, divided by CI;	
6.1.1.2 Pre-use testing/inspection;	
6.1.1.3 Preparation and set up for use, assuming a start state of a towing Prime Mover arriving at a staging site;	
6.1.1.4 Use and operation to cover the following scenarios:	
6.1.1.4.1 The WTU mounted on the Trailer;	
6.1.1.4.2 The WTU at ground level;	
6.1.1.4.3 The WTU and the ASU equipment in both of the above scenarios; and,	
6.1.1.4.4 The WTS Trailer used as a general purpose Trailer (loading and lashing limitations, etc.) in a separate section.	
6.1.1.5 Equipment stowage and preparation for travel, from an operating state to the towing Prime mover being ready to leave the area.	
6.1.1.6 Operator fault-finding and maintenance, IAW the Maintenance Concept paragraph 8.1 (pg. 43);	
6.1.1.7 Shut-down and post-shut-down actions and precautions;	
6.1.1.8 Safety/Hazardous material issues;	
6.1.2 The WTS Operator Manual material covered in 6.1.1 above, must be amplified by illustrations, line drawings, and high quality colour pictures.	
6.1.3 As the ASU will be used only occasionally, where applicable and practicable, the Operator Manual's text must contain references to allow the User to quickly skip information and instructions specific to the ASU as they are moving through the manual (example: "If not using the ASU, go to paragraph 4.5.3"). The intent is to prevent the User from moving back and forth within the manual, instead allowing the User to proceed forward more quickly in the manual when not using the ASU.	
6.2 <b>GENERAL FORMAT</b>	
6.2.1 The WTS Operator Manual must be prepared in the Contractor's format while being in full conformance with the above-stated issue of C-01-100-100/AG-008.	

- 6.2.2 The WTS Operator Manual must include the National Defence Index of Documentation (NDID) number (provided to the Contractor by DND) that must be placed on the top right corner of all the pages of the manual.

**6.3 HARD COPY FORMAT**

- 6.3.1 The accepted WTS Operator Manual hard copies must be:

- 6.3.1.1 Printed on paper with these characteristics:

- 6.3.1.1.1 Standard US Letter Size (270 mm x 216 mm);
- 6.3.1.1.2 Covers: 320-370 gsm polyester film (such as Pico Film), matt surface and white;
- 6.3.1.1.3 Pages: 90-150 gsm polyester film (such as Pico Film), matt surface and white.

- 6.3.1.2 Bound using white or black spiral Polyvinylchloride (PVC) coil.

**6.4 SOFT COPY FORMAT**

- 6.4.1 The WTS Operator Manual must be provided as both MS Word and PDF file formats with searchable text that matches the printed publication's format and layout. Links, bookmarks and thumbnails are to be included in the PDF file. All references made to a specific paragraph, figure, appendix must be appropriately linked.
- 6.4.2 Viewing the WTS Operator Manual PDF: pages, regardless of size, containing text and illustrations in landscape, must be rotated for electronic viewing and reading in landscape.
- 6.4.3 **Soft Copy format submission size below 7MB** – The WTS Operator Manual PDF and its native file may be submitted via email as follows:
- 6.4.3.1 To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract.
  - 6.4.3.2 Subject Field: WTS-ILS-202 – WTS Operator Manual – [Rev #] – [Date of Issue]
- 6.4.4 **Soft Copy format submission size at or above 7MB** - The WTS Operator Manual PDF and its native file must be submitted on CD or DVD media and be labelled as follows:
- 6.4.4.1 Water Treatment System
  - 6.4.4.2 WTS Operator Manual;
  - 6.4.4.3 WTS-ILS-202;
  - 6.4.4.4 The Revision number, and
  - 6.4.4.5 The date of issue.

### A3.19 DID – WTU Operator Quick Reference Card

DATA ITEM DESCRIPTION	
1. TITLE <b>WTU Operator Quick Reference Card</b>	2. IDENTIFICATION NUMBER DID WTS-ILS-203
3. DESCRIPTION WTU Operator Quick Reference Card (OQRC) will allow the trained user to quickly unpack, assemble, and safely use the equipment.	
4. RELATED DOCUMENTS	5. CONTRACT REFERENCE SOW: <b>Para 8.3.1.2.1 (pg.44)</b> CDRL: <b>App. A2.19 (pg.132)</b>
6. PREPARATION INSTRUCTIONS	
<p>6.1. <b>CONTENT</b></p> <p>6.1.1. The OQRC must contain the necessary instructions to allow a trained user to quickly, safely and effectively operate the WTU in any filtration process mode.</p> <p>6.1.2. The OQRC must assume that the WTU's initial state is: staged, either on or off the WTS Trailer.</p> <p>6.1.3. The OQRC instructions must be based on pictograms illustrating the sequence of steps required while using only minimal text to assist in the understanding of the document. Desired look and feel would be similar to commercial airline safety pamphlets describing the use of oxygen masks, and emergency exits.</p> <p>6.1.4. The OQRC must not introduce new information and procedures not also described in the WTS Operator Manual, as the WTS Operator Manual is the master document on how to use the equipment.</p> <p>6.1.5. The OQRC must contain a Cautionary Advisory with the appropriate safety heading:</p> <p>6.1.5.1. The OQRC Cautionary Advisory's heading must be determined based on the criteria set out in ANNEX A1 SOW Paragraph 8.3.3.1.</p> <p>6.1.5.2. The OQRC Cautionary Advisory must read: <b>"This WTU Operator Quick Reference Card is intended solely for experienced users who have been trained on this equipment, and have read and understood its WTS Operator Manual (CFTO# to be supplied by DND). When in doubt, read the WTS Operator Manual before operating this equipment."</b></p> <p>6.1.5.3. The OQRC cautionary advisory must also have, immediately following this text, a brief description of the consequences of misuse of the equipment, linked to the same criteria listed in 6.1.5.1 above.</p> <p>6.2. <b>HARD COPY FORMAT</b></p> <p>6.2.1. The accepted OQRC hard copies must:</p> <p>6.2.1.1. Be printed on paper with pages of 320-370 gsm polyester film (such as Pico Film), matt surface and white colour;</p> <p>6.2.1.2. Be bound with white or black spiral PVC coil (such as PLASTIKOIL®);</p> <p>6.2.1.3. Contain no more than six (6) sheets of standard US Letter size (270 mm x 216 mm);</p> <p>6.2.1.4. Be produced and printed exclusively in black and white (for legibility in black-out mode).</p> <p>6.3. <b>SOFT COPY FORMAT</b></p> <p>6.3.1. The OQRC must be provided as a PDF file with searchable text that matches the printed publication's format and layout. Links, bookmarks and thumbnails are to be included in the PDF file.</p> <p>6.3.2. Viewing the OQRC PDF: pages, regardless of size, containing text and illustrations in landscape, must be rotated for electronic viewing and reading in landscape.</p>	

6.3.3. **Soft Copy format submission size below 7MB** – The OQRC PDF and its native file may be submitted via email as follows:

6.3.3.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract.

6.3.3.2. Subject Field: WTS-ILS-203 – OQRC – [Rev #] – [Date of Issue]

6.3.4. **Soft Copy format submission size at or above 7MB** - The OQRC PDF and its native file must be submitted on CD or DVD media and be labelled as follows:

6.3.4.1. Water Treatment System

6.3.4.2. OQRC;

6.3.4.3. WTS-ILS-203;

6.3.4.4. The Revision number, and

6.3.4.5. The date of issue.

## A3.20 DID – WTS Maintenance Manual

DATA ITEM DESCRIPTION	
1. TITLE <b>WTS Maintenance Manual</b>	2. IDENTIFICATION NUMBER DID WTS-ILS-204
3. DESCRIPTION The WTS Maintenance Manual contains all the information required by the Technician to perform preventative and corrective maintenance procedures and troubleshooting of the equipment.	
4. RELATED DOCUMENTS <b>D-01-100-204/SF-000</b> <i>Preparation of Preventive Maintenance Instructions</i> <b>D-01-100-205/SF-000</b> <i>Preparation of Corrective Maintenance Instructions</i> <b>C-01-100-100/AG-008</b> <i>Writer's Guide for Technical Documentation</i>	5. CONTRACT REFERENCE <b>SOW: Para 8.3.1.3.1 (pg. 44)</b> <b>CDRL: App. A2.20 (pg.133)</b>
6. PREPARATION INSTRUCTIONS	
6.1. <b>CONTENT</b>	
6.1.1. The WTS Maintenance Manual must provide descriptive essential, preventive and corrective maintenance information on all components, groups of equipment and systems IAW the Maintenance Concept, Paragraph 8.1.2.2 (pg. 43).	
6.1.2. Information generated from 6.1.1 above must be sorted and divided by main assembly (WTU, Trailer, MEU and ASU), and then IAW D-01-100-204/SF-001 and IAW D-01-100-205/SF-001 within the main assembly's section.	
6.1.3. The WTS Maintenance Manual text must be amplified by comprehensive system or component illustrations, good quality color pictures, pictograms and schematics.	
6.2. <b>GENERAL FORMAT</b>	
6.2.1. The WTS Maintenance Manual must be prepared in the Contractor's format and be in full conformance with the current issue of C-01-100-100/AG-008, D-01-100-204/SF-000 and D-01-100-205/SF-000.	
6.2.2. The WTS Maintenance Manual must include the National Defence Index of Documentation (NDID) number (provided to the Contractor by DND) that must be placed on the right top corner of all the pages of the manual.	
6.2.3. The WTS Maintenance Manual must use illustrations, good quality color pictures and pictograms as appropriate to enable Technicians.	
6.3. <b>HARD COPY FORMAT</b>	
6.3.1. The accepted WTS Maintenance Manual hard copies must be:	
6.3.1.1. Printed on paper with these characteristics:	
6.3.1.1.1. Standard US Letter Size (216 mm x 270 mm);	
6.3.1.1.2. Covers: 320-370 gsm polyester film (such as Pico Film), matt surface and white;	
6.3.1.1.3. Pages: 90-150 gsm polyester film (such as Pico Film), matt surface and white;	
6.3.1.2. Bound with white or black spiral PVC coil (such as PLASTIKOIL®)	

6.4. **SOFT COPY FORMAT**

6.4.1. The WTS Maintenance Manual soft copy format must meet the following:

- 6.4.1.1. Be submitted as PDF and its native file and match the printed publication's format and layout. Links, bookmarks, and thumbnails are to be included in the PDF file.
- 6.4.1.2. All references made to a specific paragraph, figure, appendix must be appropriately linked.
- 6.4.1.3. Viewing the files: pages, regardless of size, containing text and illustrations in landscape, must be rotated for electronic viewing and reading in landscape.

6.4.2. **Soft Copy format submission size below 7MB** – The WTS Maintenance Manual PDF and its native file may be submitted via email as follows:

- 6.4.2.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract.
- 6.4.2.2. Subject Field: WTS-ILS-204 – WTS Maintenance Manual – [Rev #] – [Date of Issue]

6.4.3. **Soft Copy format submission size at or above 7MB** - The WTS Maintenance Manual PDF and its native file must be submitted on CD or DVD media and be labelled as follows:

- 6.4.3.1. Water Treatment System
- 6.4.3.2. WTS Maintenance Manual;
- 6.4.3.3. WTS-ILS-204;
- 6.4.3.4. The Revision number, and
- 6.4.3.5. The date of issue.

### A3.21 DID – WTS Permissive Repair Schedule and Standard Repair Times

DATA ITEM DESCRIPTION	
1. TITLE <b>WTS Permissive Repair Schedule and Standard Repair Times</b>	2. IDENTIFICATION NUMBER DID WTS-ILS-205
3. DESCRIPTION The WTS Permissive Repair Schedule and Standard Repair Times (PRS & SRT) provides information for maintenance support and planning of the equipment.	
4. RELATED DOCUMENTS <b>C-04-010-002/AM-000</b> <i>Permissive Repair Schedules (PRSs) and Standard Repair Times (SRTs);</i> <b>C-04-006-001/AM-001</b> <i>Land Maintenance System Lines of Maintenance and Levels of Repair</i>	5. CONTRACT REFERENCE SOW: <b>Para 8.3.1.4.1 (pg. 44)</b> CDRL: <b>App. A2.21 (pg.134)</b>
6. PREPARATION INSTRUCTIONS	
6.1. <b>CONTENT</b>	
6.1.1. The PRS & SRT must include a breakdown of all maintenance tasks for Operators and Technicians, IAW the Maintenance Concept (see ANNEX A1, Paragraph 8.1 (pg. 43).	
6.1.2. The Levels of Repair and Lines of Maintenance for the PRS & SRT must be determined using the definitions provided in C-04-006-001/AM-001 and in discussions with DND ILS personnel.	
6.2. <b>GENERAL FORMAT</b>	
6.2.1. The PRS & SRT must be prepared in full conformance with C-04-010-002/AM-000;	
6.2.2. The PRS & SRT must have the National Defence Index of Documentation (NDID) number (provided to the Contractor by DND) that must be placed on the top right corner of each page.	
6.3. <b>HARD COPY FORMAT</b>	
6.3.1. The PRS & SRT hard copies must be:	
6.3.1.1. Printed on paper with these characteristics:	
6.3.1.1.1. Standard US Letter Size (270 mm x 216 mm)	
6.3.1.1.2. Covers: 320-370 gsm polyester film (such as Pico Film), matt surface and white colour	
6.3.1.1.3. Pages: 90-150 gsm polyester film (such as Pico Film), matt surface and white colour	
6.3.1.2. Bound with white or black spiral PVC coil (such as PLASTIKOIL®)	
6.4. <b>SOFT COPY FORMAT</b>	
6.4.1. The PRS & SRT must be provided as PDF and native file formats with searchable text that matches the printed publication's format and layout. Links, bookmarks and thumbnails are to be included in the PDF file. All references made to a specific paragraph, figure, appendix must be appropriately linked.	
6.4.2. <b>Soft Copy format submission size below 7MB</b> – The PRS & SRT PDF and its native file may be submitted via email as follows:	
6.4.2.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract.	
6.4.2.2. Subject Field: WTS-ILS-205 – PRS & SRT – [Rev #] – [Date of Issue]	
6.4.3. <b>Soft Copy format submission size at or above 7MB</b> - The PRS & SRT PDF and its native file must be submitted on CD or DVD media and be labelled as follows:	
6.4.3.1. Water Treatment System	
6.4.3.2. PRS & SRT;	
6.4.3.3. WTS-ILS-205;	
6.4.3.4. The Revision number, and	
6.4.3.5. The date of issue.	

### A3.22 DID – WTS Illustrated Parts Manual

DATA ITEM DESCRIPTION																											
1. TITLE <b>WTS Illustrated Parts Manual</b>	2. IDENTIFICATION NUMBER DID WTS-ILS-206																										
3. DESCRIPTION The WTS Illustrated Parts Manual contains all the necessary information to positively identify all parts of the equipment.																											
4. RELATED DOCUMENTS <b>D-01-100-207/SF-002</b> <i>Preparation of Interim WTS Illustrated Parts Manuals for Land Equipment.</i>	5. CONTRACT REFERENCE SOW: <b>Para 8.3.1.5.1 (pg. 45)</b> CDRL: <b>App. A2.22 (pg.135)</b>																										
6 PREPARATION INSTRUCTIONS																											
<p>6.1 <b>CONTENT</b></p> <p>6.1.1 The WTS Illustrated Parts Manual content must be IAW D-01-100-207/SF-002, and the drawings must be sequenced as per the PPB breakdown of assemblies, by level. That is, an illustration showing a B-level assembly must have all C-level parts identified in that drawing, as practicable. All of the C-level parts from that list that have D-level parts must have their illustrations sequenced as per the PPB, drilling completely through the assemblies before showing the next. See Fig 1 below.</p> <div style="display: flex; align-items: center; justify-content: center;"> <table border="1" style="margin-right: 20px;"> <thead> <tr> <th>PPB Indention</th><th>Serial</th></tr> </thead> <tbody> <tr><td>A</td><td>1</td></tr> <tr><td>B</td><td>2</td></tr> <tr><td>C</td><td>3</td></tr> <tr><td>C</td><td>4</td></tr> <tr><td>D</td><td>5</td></tr> <tr><td>D</td><td>6</td></tr> <tr><td>C</td><td>7</td></tr> <tr><td>D</td><td>8</td></tr> <tr><td>D</td><td>9</td></tr> <tr><td>B</td><td>10</td></tr> <tr><td>C</td><td>11</td></tr> <tr><td>C</td><td>12</td></tr> </tbody> </table> </div>		PPB Indention	Serial	A	1	B	2	C	3	C	4	D	5	D	6	C	7	D	8	D	9	B	10	C	11	C	12
PPB Indention	Serial																										
A	1																										
B	2																										
C	3																										
C	4																										
D	5																										
D	6																										
C	7																										
D	8																										
D	9																										
B	10																										
C	11																										
C	12																										
<p style="text-align: center;"><b>Figure 1. IPM Breakdown Sequence</b></p> <p>6.1.2 The WTS Illustrated Parts Manual must contain illustrations, exploded views, and drawings and associated lists necessary for the proper identification of all parts, assemblies, and special equipment to the Lowest Replaceable Unit (LRU).</p> <p>6.1.3 The exploded views contained in the WTS Illustrated Parts Manual must amplify the relationship between all parts and assemblies to facilitate repair of the equipment and the replacement of parts and assemblies down to the LRU.</p> <p>6.1.4 The WTS Illustrated Parts Manual must include the National Defence Index of Documentation (NDID) number, provided to the Contractor by DND, which must be placed on the top right corner of each page of the manual.</p>																											



**6.2 GENERAL FORMAT**

- 6.2.1 The format of the WTS Illustrated Parts Manual must be IAW D-01-100-207/SF-002, with the exception that "NCAGE" must be used instead of "NSCM" (see DID WTT-ILS-211).
- 6.2.2 The WTS Illustrated Parts Manual must **not** use photographs as illustrations.

**6.3 HARD COPY FORMAT**

- 6.3.1 The accepted WTS Illustrated Parts Manual hard copies must be:

- 6.3.1.1 Printed on paper with these characteristics:

- 6.3.1.1.1 Standard US Letter Size (216 mm x 270 mm);
    - 6.3.1.1.2 Covers: 320-370 gsm Polyester film, matt surface and white;
    - 6.3.1.1.3 Pages: 90-150 gsm Polyester film, matt surface and white;

- 6.3.1.2 Bound with white or black spiral PVC coil (such as PLASTIKOIL®).

**6.4 SOFT COPY FORMAT**

- 6.4.1 The WTS Illustrated Parts Manual soft copy format must be PDF, with searchable text, with pages rotated as needed for normal viewing on screen.
- 6.4.2 **Soft Copy format submission size below 7MB** – The WTS Illustrated Parts Manual PDF may be submitted via email as follows:
  - 6.4.2.1 To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract.
  - 6.4.2.2 Subject Field: WTS-ILS-206 – WTS Illustrated Parts Manual – Rev [#] – [Date of Issue]
- 6.4.3 **Soft Copy format submission size at or above 7MB** - The WTS Illustrated Parts Manual PDF and its native file must be submitted on CD or DVD media and be labelled as follows:
  - 6.4.3.1 Water Treatment System
  - 6.4.3.2 WTS Illustrated Parts Manual;
  - 6.4.3.3 WTS-ILS-206;
  - 6.4.3.4 The Revision number, and
  - 6.4.3.5 The date of issue.

### A3.23 DID – WTS Operator Training Package

DATA ITEM DESCRIPTION	
1. TITLE <b>WTS Operator Training Package</b>	2. IDENTIFICATION NUMBER DID WTS-ILS-207
3. DESCRIPTION The WTS Operator Training Package will be used as the reference material during the Training Sessions, and to facilitate future lesson plan preparation on the operation, Operator maintenance and storage of the equipment.	
4. RELATED DOCUMENTS <b>C-01-100-100/AG-008</b> <i>Writer's Guide for Technical Documentation</i>	5. CONTRACT REFERENCE SOW: <b>Para 8.3.1.6.1 (pg.45)</b> CDRL: <b>App. A2.23 (pg.136)</b>
6. PREPARATION INSTRUCTIONS 6.1. <b>CONTENT</b> 6.1.1. The WTS Operator Training Package course material must include, in the order judged most appropriate by the Contractor, the following subjects: 6.1.1.1. General Description/Equipment Overview; 6.1.1.2. Pre-use testing/inspection; 6.1.1.3. Preparation and set up for use; 6.1.1.4. Use and operation, including operation under emergency, adverse, or abnormal conditions, when applicable; 6.1.1.5. Preparation for travel and handling; 6.1.1.6. Storage, preservation, exercising, and reactivation procedures; 6.1.1.7. Safety and Hazardous material issues; 6.1.1.8. Operator Troubleshooting and testing; 6.1.1.9. Basic diagnosis and fault finding; and, 6.1.1.10. Operator Maintenance IAW the Maintenance Concept Paragraph 8.1 (pg. 43). 6.1.2. The Operator Training Package course material must be amplified by colour illustrations, line drawings, and good quality colour pictures. 6.1.3. The WTS Operator Training Package course material subjects must be approached from the perspective of a user trained in basic water purification concepts. 6.1.4. The WTS Operator Training Package course material must not present any information that cannot also be found in the Technical Publication Package documents; those documents remain the primary reference for the equipment. 6.1.5. The WTS Operator Training Package must include a <b>Student Handout</b> that includes the course material described above. 6.1.6. The WTS Operator Training Package must include an <b>Instructor Lesson Plan</b> that includes the course material described above, speaker's notes, and outlines the following: 6.1.6.1. Classroom's physical and functional requirements; 6.1.6.2. Field area's physical and functional requirements; 6.1.6.3. Training Session schedule, divided by course material subjects; 6.1.6.4. Instructor/Student ratio for the course material subjects;	

6.1.6.5. Training materiel to be supplied by the Contractor;

6.1.6.6. Training material to be supplied by Canada.

**6.2. GENERAL FORMAT**

6.2.1. The WTS Operator Training Package can be prepared in the Contractor's format while using C-01-100-100/AG-008 as guidance.

6.2.2. No Contractor or sub-contractor logo, name, trademark, or other wording or device that may be interpreted as advertising must appear in the publication.

6.2.3. The WTS Operator Training Package **Student Handout** must have no more than three (3) slides per page of the course material, and have additional space and lines for note taking.

6.2.4. The WTS Operator Training Package **Instructor Lesson Plan** must have one (1) slide per page of the course material, with the speaker's notes below it.

**6.3. HARD COPY FORMAT**

6.3.1. The WTS Operator Training Package must be furnished in a three (3) ring binder(s) and printed on paper with these characteristics:

6.3.1.1. Weight of no less than 90 gsm;

6.3.1.2. Brightness of no less than 92 ISO brightness;

**6.4. SOFT COPY FORMAT**

6.4.1. The WTS Operator Training Package soft copy format must be MS PowerPoint.

6.4.2. **Soft Copy format submission size below 7MB** – The WTS Operator Training Package may be submitted via email as follows:

6.4.2.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract.

6.4.2.2. Subject Field: WTS-ILS-207 – WTS Operator Training Package – [Rev #] – [Date of Issue]

6.4.3. **Soft Copy format submission size at or above 7MB** - The WTS Operator Training Package file must be submitted on CD or DVD media and be labelled as follows:

6.4.3.1. Water Treatment System

6.4.3.2. WTS Operator Training Package;

6.4.3.3. WTS-ILS-207;

6.4.3.4. The Revision number, and

6.4.3.5. The date of issue.

### A3.24 DID – WTU and ASU Technician Training Package

DATA ITEM DESCRIPTION	
1. TITLE <b>WTU and ASU Technician Training Package</b>	2. IDENTIFICATION NUMBER DID WTS-ILS-208
3. DESCRIPTION The WTU and ASU Technician Training Package will be used as the reference material during the Training Sessions, and to facilitate future lesson plan preparation on the operation, Technician maintenance and storage of the equipment.	
4. RELATED DOCUMENTS <b>C-01-100-100/AG-008</b> <i>Writer's Guide for Technical Documentation</i>	5. CONTRACT REFERENCE SOW: <b>Para 8.3.1.7.1 (pg. 45)</b> CDRL: <b>App. A2.24 (pg.137)</b>
6. PREPARATION INSTRUCTIONS	
6.1. <b>CONTENT</b>	
6.1.1. The WTU and ASU Technician Training Package course material must include, in the order judged most appropriate by the Contractor, the following subjects:	
6.1.1.1. General Description/Equipment Overview;	
6.1.1.2. Pre-use testing/inspection;	
6.1.1.3. Preparation and set up for use;	
6.1.1.4. Use and operation, including operation under emergency, adverse, or abnormal conditions, when applicable;	
6.1.1.5. Storage, preparation for travel, preservation, and handling procedures;	
6.1.1.6. Safety and hazardous material issues;	
6.1.1.7. Troubleshooting and testing;	
6.1.1.8. Advanced diagnosis and fault finding;	
6.1.1.9. Corrective and preventive maintenance procedures that are particular to the equipment versus general mechanical procedures, IAW the Maintenance Concept Paragraph 8.1 (pg. 43).	
6.1.2. The Technician Training Package course material must be amplified by colour illustrations, line drawings, and good quality colour pictures.	
6.1.3. The WTU and ASU Technician Training Package course material subjects must be approached from the perspective of Technicians who are experienced in general water treatment equipment maintenance.	
6.1.4. The WTU and ASU Technician Training Package course material must not present any information that cannot also be found in the Technical Publication Package documents; those documents remain the primary reference for the equipment.	
6.1.5. The WTU and ASU Technician Training Package must include a <b>Student Handout</b> that includes the course material described above.	
6.1.6. The WTU and ASU Technician Training Package must include an <b>Instructor Lesson Plan</b> that includes the course material described above, speaker's notes, and outlines the following:	
6.1.6.1. Classroom's physical and functional requirements;	
6.1.6.2. Field area's physical and functional requirements;	
6.1.6.3. Training Session schedule divided by course material subjects;	
6.1.6.4. Instructor/Student ratio for the course material subjects;	

6.1.6.5. Training materiel to be supplied by the Contractor;

6.1.6.6. Training material to be supplied by Canada.

6.2. **GENERAL FORMAT**

6.2.1. The WTU and ASU Technician Training Package can be prepared in the Contractor's format, using C-01-100-100/AG-008 as guidance.

6.2.2. No Contractor or sub-contractor logo, name, trademark, or other wording or device that may be interpreted as advertising must appear in the publication.

6.2.3. The WTU and ASU Technician Training Package **Student Handout** must have no more than three (3) slides per page of the course material, and have additional space and lines for note taking.

6.2.4. The WTU and ASU Technician Training Package **Instructor Lesson Plan** must have one (1) slide per page of the course material, with the speaker's notes below it.

6.3. **HARD COPY FORMAT**

6.3.1. The WTU and ASU Technician Training Package must be furnished in a three (3) ring binder(s) and printed on paper with these characteristics:

6.3.1.1. Weight of no less than 90 gsm;

6.3.1.2. Brightness of no less than 92 ISO brightness;

6.4. **SOFT COPY FORMAT**

6.4.1. The WTU and ASU Technician Training Package soft copy format must be MS PowerPoint.

6.4.2. **Soft Copy format submission size below 7MB** – The WTU and ASU Technician Training Package may be submitted via email as follows:

6.4.2.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract.

6.4.2.2. Subject Field: WTS-ILS-208 – WTU and ASU Technician Training Package – [Rev #] – [Date of Issue]

6.4.3. **Soft Copy format submission size at or above 7MB** - The WTU and ASU Technician Training Package file must be submitted on CD or DVD media and be labelled as follows:

6.4.3.1. Water Treatment System

6.4.3.2. WTU and ASU Technician Training Package;

6.4.3.3. WTS-ILS-208;

6.4.3.4. The Revision number, and

6.4.3.5. The date of issue.

### A3.25 DID – WTS Preservation, Storage and Reactivation Instructions

DATA ITEM DESCRIPTION	
1. TITLE <b>WTS Preservation, Storage and Reactivation Instructions</b>	2. IDENTIFICATION NUMBER DID WTS-ILS-209
3. DESCRIPTION The WTS Preservation, Storage and Reactivation Instructions (PSRI) provides guidance for the storage and preservation, in-storage inspections, exercising, and reactivation of equipment.	
4. RELATED DOCUMENTS <b>D-01-100-211/SF-000</b> <i>Preservation, Storage and Handling Instructions</i> <b>C-01-100-100/AG-008</b> <i>Writer's Guide for Technical Documentation</i>	5. CONTRACT REFERENCE SOW: <b>Para 8.3.1.8.1 (pg. 45)</b> CDRL: <b>App. A2.25 (pg.138)</b>
6. PREPARATION INSTRUCTIONS	
6.1. <b>CONTENT</b>	
6.1.1. The WTS PSRI must contain the necessary data as outlined in D-01-100-211/SF-000, <i>Preservation, Storage and Handling Instructions</i> , <b>omitting</b> Part 4 – Handling and Shipping.	
6.1.2. The WTS PSRI must be divided by main assembly (WTU, Trailer, MEU, ASU and WSU).	
6.2. <b>GENERAL FORMAT</b>	
6.2.1. The PSRI must be prepared in the Contractor's format while being in full conformance with the above-stated issue of C-01-100-100/AG-008.	
6.2.2. The PSRI must have the National Defence Index of Documentation (NDID) number, provided to the Contractor by DND, on the top right corner of all the pages.	
6.3. <b>HARD COPY FORMAT</b>	
6.3.1. The accepted PSRI hard copies must be:	
6.3.1.1. Printed on paper with these characteristics:	
6.3.1.1.1. Standard US Letter Size (216 mm x 270 mm);	
6.3.1.1.2. Covers: 320-370 gsm polyester film (such as Pico Film), matt surface and white;	
6.3.1.1.3. Pages: 90-150 gsm polyester film (such as Pico Film), matt surface and white;	
6.3.1.2. Bound with white or black spiral PVC coil (such as PLASTIKOIL®)	
6.4. <b>SOFT COPY FORMAT</b>	
6.4.1. The PSRI must be provided as a PDF file with searchable text that matches the printed publication's format and layout. Links, bookmarks and thumbnails are to be included in the PDF file. All references made to a specific paragraph, figure, appendix must be appropriately linked.	
6.4.2. Viewing the PDF version: pages, regardless of size, containing text and illustrations in landscape, must be rotated for electronic viewing and reading in landscape.	
6.4.3. <b>Soft Copy format submission size below 7MB</b> – The PRSI PDF and its native file may be submitted via email as follows:	
6.4.3.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract.	
6.4.3.2. Subject Field: WTS-ILS-209 – PRSI – [Rev #] – [Date of Issue]	

6.4.4. **Soft Copy format submission size at or above 7MB** - The PRSI PDF and its native file must be submitted on CD or DVD media and be labelled as follows:

- 6.4.4.1. Water Treatment System
- 6.4.4.2. PRSI;
- 6.4.4.3. WTS-ILS-209;
- 6.4.4.4. The Revision number, and
- 6.4.4.5. The date of issue.

### A3.26 DID – WTS Stowage, Shipping and Handling Instructions

DATA ITEM DESCRIPTION	
1. TITLE <b>WTS Stowage, Shipping and Handling Instructions</b>	2. IDENTIFICATION NUMBER DID WTS-ILS-210
3. DESCRIPTION The WTS Stowage, Shipping and Handling Instructions (SSHI) manual provides guidance for the safe stowage, shipping and handling of the equipment.	
4. RELATED DOCUMENTS <b>D-01-100-211/SF-000</b> <i>Preservation, Storage and Handling Instructions</i> <b>C-01-100-100/AG-008</b> <i>Writer's Guide for Technical Documentation</i>	5. CONTRACT REFERENCE SOW: <b>Paragraph 8.3.1.9.1 (pg.45)</b> CDRL: <b>App. A2.26 (pg.139)</b>
6. PREPARATION INSTRUCTIONS 6.1. <b>CONTENT</b> 6.1.1. The WTS SSHI must contain the necessary data as outlined in Part 4 – <i>Handling and Shipping</i> of D-01-100-211/SF-000, arranged for the following scenarios: 6.1.1.1. The WTS as one unit, consisting of the WTU and the MEU, secured to the Trailer: 6.1.1.1.1. Standard means of conveyance, including: 6.1.1.1.1.1. Towed by SMP vehicle; 6.1.1.1.1.2. Towed by an adequate civilian / commercial vehicle; 6.1.1.1.1.3. Rail transport; 6.1.1.1.1.4. Maritime transport; and, 6.1.1.1.1.5. Air Transport. 6.1.1.1.2. Standard means of handling, including: 6.1.1.1.2.1. Cranes 6.1.1.1.2. If any of the means of conveyance or handling above require the removal of the WTU and MEU from the Trailer, this removal procedure must be included in the WTS SSHI. 6.1.1.3. The Trailer alone; 6.1.1.3.1. Standard means of conveyance, including: 6.1.1.3.1.1. Towed by SMP vehicle; 6.1.1.3.1.2. Towed by civilian / commercial vehicle; 6.1.1.3.1.3. Stowed on another generic flat trailer; 6.1.1.3.1.4. Rail transport; 6.1.1.3.1.5. Maritime transport; and, 6.1.1.3.1.6. Air Transport. 6.1.1.3.2. All standard means of handling: 6.1.1.3.2.1. Cranes; 6.1.1.3.2.2. Military Mobile Maintenance and Recovery Vehicles (TBD); 6.1.1.4. The WTU and MEU as conjoined and separate containers: 6.1.1.4.1. Standard means of conveyance, including: 6.1.1.4.1.1. Stowed on a generic flat trailer; 6.1.1.4.1.2. Stowed on the WTS Trailer; 6.1.1.4.1.3. Rail transport; 6.1.1.4.1.4. Maritime transport; and, 6.1.1.4.1.5. Air Transport.	



6.1.1.4.2. All standard means of handling:

6.1.1.4.2.1. Cranes;

6.1.1.4.2.2. Forklifts;

6.1.2. Data common to all means of conveyance and handling need not be repeated and can be grouped in a general section.

**6.2. GENERAL FORMAT**

6.2.1. The SSHI must be prepared in the Contractor's format while being in full conformance with the above-stated issue of C-01-100-100/AG-008.

6.2.2. The SSHI must have the National Defence Index of Documentation (NDID) number, provided to the Contractor by DND, on the top right corner of all the pages.

**6.3. HARD COPY FORMAT**

6.3.1. The accepted SSHI hard copies must be:

6.3.1.1. Printed on paper with these characteristics:

6.3.1.1.1. Standard US Letter Size (216 mm x 270 mm);

6.3.1.1.2. Covers: 320-370 gsm polyester film (such as Pico Film), matt surface and white;

6.3.1.1.3. Pages: 90-150 gsm polyester film (such as Pico Film), matt surface and white;

6.3.1.2. Bound with white or black spiral PVC coil (such as PLASTIKOIL®)

**6.4. SOFT COPY FORMAT**

6.4.1. The SSHI must be provided as a PDF file with searchable text that matches the printed publication's format and layout. Links, bookmarks and thumbnails are to be included in the PDF file. All references made to a specific paragraph, figure, appendix must be appropriately linked.

6.4.2. Viewing the PDF version: pages, regardless of size, containing text and illustrations in landscape, must be rotated for electronic viewing and reading in landscape.

6.4.3. **Soft Copy format submission size below 7MB** – The SSHI PDF and its native file may be submitted via email as follows:

6.4.3.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract.

6.4.3.2. Subject Field: WTS-ILS-210 – SSHI – [Rev #] – [Date of Issue]

6.4.4. **Soft Copy format submission size at or above 7MB** - The SSHI PDF and its native file must be submitted on CD or DVD media and be labelled as follows:

6.4.4.1. Water Treatment System

6.4.4.2. SSHI;

6.4.4.3. WTS-ILS-210;

6.4.4.4. The Revision number, and

6.4.4.5. The date of issue.

### A3.27 DID – WTS Data Summary

DATA ITEM DESCRIPTION	
1. TITLE <b>WTS Data Summary</b>	2. IDENTIFICATION NUMBER DID WTS-ILS-211
3. DESCRIPTION The WTS Data Summary provides technical specifications and descriptive identification data for the equipment, in abbreviated form, suitable for management or staff planning.	
4. RELATED DOCUMENTS <b>D-01-100-200/SF-00</b> , <i>Preparation of Equipment Data Summaries; and</i> , <b>C-01-100-100/AG-008</b> , <i>Writer's Guide for Technical Documentation</i>	5. CONTRACT REFERENCE SOW: <b>Para 8.3.1.10.1 (pg. 45)</b> CDRL: <b>App. A2.27 (pg. 140)</b>
6. PREPARATION INSTRUCTIONS	
6.1. <b>CONTENT</b>	
6.1.1. The WTS Data Summary's content must be as outlined in D-01-100-200/SF-015, with the deviation that only line drawings must be used. Only applicable data points need to be included, i.e. the document must not contain "not applicable" or "n/a" markings.	
6.1.2. The WTS Data Summary contents must be included for the following system permutations, in the order listed, each in a ready-to-deploy configuration:	
6.1.2.1. The WTS complete, with WTU, MEU loaded and secured to the Trailer, ready to deploy	
6.1.2.2. The WTU container independently;	
6.1.2.3. The MEU container independently; and,	
6.1.2.4. The Trailer independently.	
6.2. <b>GENERAL FORMAT</b>	
6.2.1. The WTS Data Summary must be prepared in the Contractor's format while being in full conformance with the above-stated issue of C-01-100-100/AG-008.	
6.2.2. The WTS Data Summary must have the National Defence Index of Documentation (NDID) number, provided to the Contractor by DND, on the top right corner of all the pages.	
6.3. <b>HARD COPY FORMAT</b>	
6.3.1. The accepted WTS Data Summary hard copies must be:	
6.3.1.1. Printed on paper with these characteristics:	
6.3.1.1.1. Standard US Letter Size (216 mm x 270 mm);	
6.3.1.1.2. Covers: 320-370 gsm polyester film (such as Pico Film), matt surface and white;	
6.3.1.1.3. Pages: 90-150 gsm polyester film (such as Pico Film), matt surface and white;	
6.3.1.2. Bound with white or black spiral PVC coil (such as PLASTIKOIL®)	
6.4. <b>SOFT COPY FORMAT</b>	
6.4.1. The WTS Data Summary must be provided as a PDF file with searchable text that matches the printed publication's format and layout. Links, bookmarks and thumbnails are to be included in the PDF file. All references made to a specific paragraph, figure, appendix must be appropriately linked.	

6.4.2. **Soft Copy format submission size below 7MB** – The WTS Data Summary PDF and its native file may be submitted via email as follows:

6.4.2.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract.

6.4.2.2. Subject Field: WTS-ILS-211 – WTS Data Summary – [Rev #] – [Date of Issue]

6.4.3. **Soft Copy format submission size at or above 7MB** - The WTS Data Summary PDF and its native file must be submitted on CD or DVD media and be labelled as follows:

6.4.3.1. Water Treatment System

6.4.3.2. WTS Data Summary;

6.4.3.3. WTS-ILS-211;

6.4.3.4. The Revision number, and

6.4.3.5. The date of issue.

### A3.28 DID – MEU and ASU Stowage Maps

DATA ITEM DESCRIPTION	
1. TITLE <b>MEU, ASU and WSU Stowage Maps</b>	2. IDENTIFICATION NUMBER DID WTS-ILS-212
3. DESCRIPTION The MEU, ASU and WSU Stowage Maps will lay out where items are stored within the MEU Enclosure and the ASU Enclosure in separate documents to allow WTS Users to quickly locate items or identify missing items and aid in the stowage of items when operations are complete.	
4. RELATED DOCUMENTS	5. CONTRACT REFERENCE SOW: <b>Para 8.3.1.10.1 (pg. 46)</b> CDRL: <b>App. A2.28 (pg. 141)</b>
6. PREPARATION INSTRUCTIONS	
6.1. <b>CONTENT</b>	
6.1.1. The MEU, ASU and WSU Stowage Maps must graphically map out, in separate posters, the locations of all of the items included in:	
6.1.1.1. The MEU Enclosure's Ancillary Equipment (A1.2.2.2) and Consumables (A1.2.2.3),	
6.1.1.2. The ASU Enclosure's Cold Weather Ancillary Equipment (A1.2.3.2); and	
6.1.1.3. The WSU Enclosure's Water Storage Ancillary Equipment (A1.2.4.2)	
6.1.2. Items mapped within the Stowage Maps must be identified by item name, MRN, and NATO Stock Number.	
6.1.3. If a numbering or other marking scheme is used on shelves or drawers or etc. In the MEU, ASU and WSU Enclosures, this scheme must also be used in the Stowage Maps using the same graphical representation as practical (font, symbology, etc.).	
6.2. <b>GENERAL FORMAT</b>	
6.2.1. The MEU, ASU and WSU Stowage Maps must be prepared as single-sided, single sheet, black and white posters, 11" x 17" (standard US Ledger size).	
6.3. <b>HARD COPY FORMAT</b>	
6.3.1. The MEU, ASU and WSU Stowage Maps must be printed on polyester film (such as Pico Film), 320-370 gsm, matt surface and white.	
6.4. <b>SOFT COPY FORMAT</b>	
6.4.1. The MEU, ASU and WSU Stowage Maps must be provided as PDF or MS Office-compatible files.	
6.4.2. <b>Soft Copy format submission size below 7MB</b> – MEU, ASU and WSU Stowage Maps may be submitted via email as follows:	
6.4.2.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract.	
6.4.2.2. Subject Field: WTS-ILS-212 – MEU (or) ASU (or) WSU Stowage Map Poster – [Rev #] – [Date of Issue]	
6.4.3. <b>Soft Copy format submission size at or above 7MB</b> – The MEU, ASU and WSU Stowage Maps file must be submitted on CD or DVD media and be labelled as follows:	
6.4.3.1. Water Treatment System	
6.4.3.2. MEU, ASU and WSU Stowage Map Poster	
6.4.3.3. WTS-ILS-212;	
6.4.3.4. The Revision number, and	
6.4.3.5. The date of issue.	

### A3.29 DID – WTU Process and Flow Diagrams

DATA ITEM DESCRIPTION	
1. TITLE <b>WTU Process and Flow Diagrams</b>	2. IDENTIFICATION NUMBER DID WTS-ILS-213
3. DESCRIPTION WTU Process and Flow (P&F) Diagrams show, in poster form, the complete routing of any and all fluids involved in the various water treatment processes through the components of the WTU.	
4. RELATED DOCUMENTS	5. CONTRACT REFERENCE SOW: <b>Para 8.3.1.12.1 (pg.46)</b> CDRL: <b>App. A2.29 (pg.142)</b>
6. PREPARATION INSTRUCTIONS	
<p>6.1. <b>CONTENT</b></p> <p>6.1.1. The P&amp;F Diagrams must show (as applicable to the process and WTU design) the flow of raw water; concentrate; ultra-filtration filtrate; permeate; backwash, etc. for every process available to the WTU operators and maintainers, such as:</p> <ul style="list-style-type: none"> <li>6.1.1.1. First and second passes;</li> <li>6.1.1.2. Ultra-filtration back flush, clean, forward flush;</li> <li>6.1.1.3. Reverse Osmosis single and double pass; membrane exercising;</li> <li>6.1.1.4. WTU Preservation</li> </ul> <p>6.1.2. Each process from 6.1.1 above must have a P&amp;F Diagram on their own page.</p> <p>6.1.3. Each P&amp;F Diagram must:</p> <ul style="list-style-type: none"> <li>6.1.3.1. Show all of the WTU components involved in fluid flow, regardless of their involvement in the process being described, in roughly the same layout and relative location as in the actual WTU as practical;</li> <li>6.1.3.2. Have the involved fluid flows colour-coded by type. This colour code must be identical between P&amp;F Diagrams;</li> <li>6.1.3.3. Use simplified symbols for the active components (valves, pumps, gauges), labelled for easy location of the corresponding components within the WTU.</li> <li>6.1.3.4. Have a symbols legend on each P&amp;F diagram.</li> </ul> <p>6.2. <b>GENERAL FORMAT</b></p> <p>6.2.1. The WTU Process and Flow Diagrams must be prepared in the Contractor's format in standard US Ledger paper size (11" x 17"), landscape orientation.</p> <p>6.3. <b>HARD COPY FORMAT</b></p> <p>6.3.1. The accepted WTU Process and Flow Diagrams hard copies must be:</p> <ul style="list-style-type: none"> <li>6.3.1.1. Printed on 320-370 gsm polyester film (such as Pico Film), matt surface and white;</li> <li>6.3.1.2. Bound with white or black spiral PVC coil (such as PLASTIKOIL®) on the long edge, with images oriented so that no booklet rotation is necessary to read both the upper and lower P&amp;F diagrams when the booklet is open.</li> </ul>	

6.4. **SOFT COPY FORMAT**

- 6.4.1. The WTU Process and Flow Diagrams must be provided as PDF and native formats.
- 6.4.2. **Soft Copy format submission size below 7MB** – The WTU Process and Flow Diagrams may be submitted via email as follows:
  - 6.4.2.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract.
  - 6.4.2.2. Subject Field: WTS-ILS-213 – WTU Process and Flow Diagrams – [Rev #] – [Date of Issue]
- 6.4.3. **Soft Copy format submission size at or above 7MB** – The WTU Process and Flow Diagrams file must be submitted on CD or DVD media and be labelled as follows:
  - 6.4.3.1. Water Treatment System
  - 6.4.3.2. WTU Process and Flow Diagrams
  - 6.4.3.3. WTS-ILS-213;
  - 6.4.3.4. The Revision number, and
  - 6.4.3.5. The date of issue.

### A3.30 DID – WSU Operation, Maintenance and Parts Handbook

DATA ITEM DESCRIPTION	
1. TITLE <b>WSU Operation, Maintenance and Parts Handbook</b>	2. IDENTIFICATION NUMBER DID WTS-ILS-214
3. DESCRIPTION The WSU Operation, Maintenance and Parts Handbook (OMPH) will allow an operator to effectively operate and maintain the system and identify its parts.	
4. RELATED DOCUMENTS <b>D-01-100-205/SF-000</b> <i>Specification for Preparation of Corrective Maintenance Instruction;</i> <b>D-01-100-204/SF-000</b> <i>Specification for Preparation of Preventive Maintenance Instructions;</i> <b>C-01-100-100/AG-008</b> <i>Writer's Guide for Technical Documentation</i>	5. CONTRACT REFERENCE <b>SOW: Para. 8.3.1.13.1 (pg. 46)</b> <b>CDRL: App. A2.30 (pg. 143)</b>
6 PREPARATION INSTRUCTIONS  6.1 CONTENT 6.1.1 Operation 6.1.1.1 General Description/Equipment Overview; 6.1.1.2 Pre-use testing/inspection; 6.1.1.3 Preparation and set up for use, assuming a start state of a WSU Prime Mover arriving at a staging site, and including all possible configurations of IBC and plumbing; 6.1.1.4 Use and operation of each of those configurations 6.1.1.5 Equipment stowage and preparation for travel 6.1.2 Maintenance 6.1.2.1 The maintenance topics must consist of: 6.1.2.1.1 Pre-maintenance procedures to make the equipment safe; 6.1.2.1.2 Troubleshooting and testing; 6.1.2.1.3 Basic diagnosis and fault finding; 6.1.2.1.4 Adjustments, maintenance and repairs grouped IAW the Maintenance Concept para 8.1.2 (pg. 43), and presented IAW D-01-100-205/SF-000 and D-01-100-204/SF-000; 6.1.2.1.5 Safety/Hazardous material issues; 6.1.2.2 The maintenance material must be amplified by colour illustrations, line drawings, and good quality colour pictures. 6.1.3 Parts Handbook 6.1.3.1 The Maintenance and Parts Handbook must have an Illustrated Parts List section that contains all the necessary information to positively identify and relate, to each other, all the parts of the equipment that are procurable and those involved in all maintenance tasks outlined in 6.1.2 above. 6.1.3.2 The Illustrated parts List must have drawings of the parts and assemblies: line drawings and exploded views in black and white only; and, 6.1.3.3 The Illustrated parts List must have corresponding table(s) containing:	

- 6.1.3.3.1 Item Number (callout in the drawing(s));
- 6.1.3.3.2 Item Name;
- 6.1.3.3.3 Manufacturer's Part Number;
- 6.1.3.3.4 Manufacturer's NCAGE code;
- 6.1.3.3.5 Contractor's Part Number (CPN), if the Contractor is not the original Manufacturer;
- 6.1.3.3.6 NATO Stock Number (NSN), if known; and,
- 6.1.3.3.7 Quantity per Assembly (QPA).

## 6.2 GENERAL FORMAT

- 6.2.1 The WSU OMPH must be prepared in the Contractor's format and must be in full conformance with the above-stated issue of C-01-100-100/AG-008.

## 6.3 HARD COPY FORMAT

- 6.3.1 The accepted WSU OMPH hard copies must be:
  - 6.3.1.1 Printed on paper with these characteristics:
    - 6.3.1.1.1 Standard US Letter Size (216 mm x 270 mm)
    - 6.3.1.1.2 Covers: 320-370 g/m<sup>2</sup> polyester film (such as Pico Film), matt surface and white colour
    - 6.3.1.1.3 Pages: 90-150 g/m<sup>2</sup> polyester film (such as Pico Film), matt surface and white colour
  - 6.3.1.2 Bound with white or black spiral PVC coil (such as PLASTIKOIL®)

## 6.4 SOFT COPY FORMAT

- 6.4.1 The WSU OMPH must be provided as a PDF file with searchable text that matches the printed publication's format and layout.
  - 6.4.1.1 Links, bookmarks and thumbnails are to be included in the PDF file.
  - 6.4.1.2 All references made to a specific paragraph, figure, appendix must be appropriately linked.
  - 6.4.1.3 Viewing the PDF version: pages, regardless of size, containing text and illustrations in landscape, must be rotated for electronic viewing and reading in landscape.
- 6.4.2 **Soft Copy format submission size below 7MB** – The WSU OMPH PDF and its native file may be submitted via email as follows:
  - 6.4.2.1 To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract.
  - 6.4.2.2 Subject Field: WTS-ILS-214 – WSU OMPH – [Rev #] – [Date of Issue]
- 6.4.3 **Copy format submission size at or above 7MB** - The WSU OMPH PDF and its native file must be submitted on CD or DVD media and be labelled as follows:
  - 6.4.3.1 Water Treatment System
  - 6.4.3.2 WSU OMPH;
  - 6.4.3.3 WTS-ILS-214;
  - 6.4.3.4 The Revision number, and
  - 6.4.3.5 The date of issue.



### A3.31 DID – Provisioning Parts Breakdown

DATA ITEM DESCRIPTION	
1. TITLE <b>Provisioning Parts Breakdown</b>	2. IDENTIFICATION NUMBER DID WTS-ILS-215
3. DESCRIPTION The Provisioning Parts Breakdown (PPB) is a top-down breakdown of the equipment in the configuration in which it is being procured.	
4. RELATED DOCUMENTS <b>D-01-100-214/SF-000</b> <i>Specification for Preparation of Provisioning Documentation for Canadian Forces Equipment</i>	5. CONTRACT REFERENCE SOW: <b>Para 8.4.4.1.1 (pg. 49)</b> CDRL: <b>App.A2.31 (pg.144)</b>
6 PREPARATION INSTRUCTIONS 6.1 <b>CONTENT</b> 6.1.1 The PPB must be prepared IAW D-01-100-214/SF-000, with modifications listed below. 6.1.2 The following data fields must be added to the PPB: 6.1.2.1 Quantity per End Item (QPEI): Between Fields number 9 and 10, refers to the total number of times the item is used in the whole prime equipment (A-level). This field may contain whatever number of numeric characters needed to show the quantities. 6.1.2.2 SPTD filename: As the last Field, must contain the line item's applicable SPTD filename. This field may be whatever size adequate to fully show the data therein. 6.1.3 Common fasteners and hardware (items with "Y" indention code) must have an Item Name that describes their key characteristics so that equivalents can be identified from alternate sources, as possible within the mandated field size. Example: "Hex Head Screw M8 x 1.25mm, 30mm Lg, 18-8 SS"  6.1.4 For clarity: 6.1.4.1 Original Equipment Manufacturer's Part Number refers only to the Contractor which DND has contracted to supply the equipment; data from sub-contractors for items that they did not manufacture or do not control are not permitted. This field may be left blank if no data is available, or if it is the same as the Manufacturer's Reference Number (MRN). 6.1.4.2 Quantity per Assembly (QPA) refers to the number of times the item is used in the next higher assembly. For example, a C-level item's QPA will show the number of times it is used in its related B-level assembly, without being multiplied by the number of B-level assemblies. 6.1.4.3 NATO Commercial and Government Entity (NCAGE) Codes can be searched and requested through the NATO portal: <a href="https://eportal.nspa.nato.int/AC135Public/scage/CageList.aspx">https://eportal.nspa.nato.int/AC135Public/scage/CageList.aspx</a> .  6.1.5 The Source Maintenance and Recoverability (SMR) Codes are used to communicate maintenance and supply instructions to the various logistic support levels and user organizations for the logistic support of systems, equipment, and end items. The PPB SMR Codes must be chosen from the following list:	

<b>SMR Field Position</b>	<b>Code</b>	<b>Application/Explanation</b>
First and Second Position Source Codes	PA	Item procured and stocked for anticipated or known usage. Items are normally considered for replenishment
	PC	Item procured and stocked, but is deteriorative in nature.
	PF	Support equipment which will not be stocked, but which will be centrally procured on demand.
	XA	Item is not procured or stocked because the requirements for the item will result in the replacement of the next higher assembly
	XC	Installation drawing, diagram, instruction sheet, or field Service drawing, that is identified by the manufacturers' part number.
Third Position Maintenance Codes	C	Support item is removed, replaced, used by the operator/crew.
	O	Support item is removed, replaced, or used at the Technician Maintenance level.
	K	Repairable item. Item is removed, replaced, or used at contractor facility.
Fourth Position Repair Codes	C	The lowest maintenance activity capable of complete repair of the support item is the operator/crew.
	O	The lowest maintenance activity capable of complete repair of the support item is the Technician Maintenance level.
	K	Repairable support item. Complete repair capability exists at a designated contractor facility.
	Z	Non-repairable.
Fifth Position Recoverability Codes	C	Repairable item. When uneconomically repairable, condemn and disposed by the operator/crew.
	Z	Non-repairable item. When item becomes unserviceable, condemn and disposed of by authorized activity.
	O	Repairable item. When uneconomically repairable, condemn and dispose at organizational activity.
	K	Repairable item. Condemnation and disposal to be performed at contractor facility.

## 6.2 GENERAL FORMAT

- 6.2.1 The PPB must be prepared as an MS Excel spreadsheet, formatted IAW D-01-100-214/SF-000, taking into account the modifications listed in para 6.1.2 above.

## 6.3 SOFT COPY FORMAT

- 6.3.1 **Soft Copy format submission size below 7MB** – The PPB may be submitted via email as follows:

- 6.3.1.1 To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract.  
6.3.1.2 Subject Field: WTS-ILS-215 – PPB – [Rev #] – [Date of Issue]

- 6.3.2 **Soft Copy format submission size at or above 7MB** - The PPB file must be submitted on CD or DVD media and be labelled as follows:

- 6.3.2.1 Water Treatment System  
6.3.2.2 Provisioning Parts Breakdown;  
6.3.2.3 WTS-ILS-215;  
6.3.2.4 The Revision number, and  
6.3.2.5 The date of issue.

### A3.32 DID – Supplementary Provisioning Technical Documentation

DATA ITEM DESCRIPTION	
1. TITLE <b>Supplementary Provisioning Technical Documentation</b>	2. IDENTIFICATION NUMBER DID WTS-ILS-216
3. DESCRIPTION The Supplementary Provisioning Technical Documentation (SPTD) fully identifies and describes part(s) that may be catalogued.	
4. RELATED DOCUMENTS <b>D-01-100-214/SF-000</b> <i>Specification for Preparation of Provisioning Documentation for Canadian Forces Equipment</i>	5. CONTRACT REFERENCE SOW: <b>Para 8.4.4.2.1 (pg. 49)</b> CDRL: <b>App. A2.32 (pg.145)</b>
6. <b>PREPARATION INSTRUCTIONS</b>	
6.1. <b>CONTENT</b>	
6.1.1. The Supplementary Provisioning Technical Documentation (SPTD) must be provided for each item appearing on the Provisioning Documentation, IAW D-01-100-214/SF-000.	
6.1.2. The SPTD must include the technical data required for DND to classify and fully describe the item within the NATO codification system, allowing for item identification and cataloguing purposes.	
6.2. <b>SOFT COPY FORMAT</b>	
6.2.1. The SPTD must be submitted with filenames in the following format: (MRN_ (NCAGE) _ (item name).(software extension).	
6.2.2. <b>Soft Copy format submission size below 7MB</b> – The SPTD may be submitted via email as follows:	
6.2.2.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract.	
6.2.2.2. Subject Field: WTS-ILS-216 – SPTD – [Rev #] – [Date of Issue]	
6.2.3. <b>Soft Copy format submission size at or above 7MB</b> – The SPTD must be submitted on CD or DVD media and be labelled as follows:	
6.2.3.1. Water Treatment System	
6.2.3.2. SPTD;	
6.2.3.3. WTS-ILS-216;	
6.2.3.4. The Revision number, and	
6.2.3.5. The date of issue.	

### A3.33 DID – Special Tools and Test Equipment

DATA ITEM DESCRIPTION	
1. TITLE <b>Special Tools and Test Equipment List</b>	2. IDENTIFICATION NUMBER DID WTS-ILS-217
3. DESCRIPTION The Special Tools and Test Equipment (STTE) provides a list of all special tools and testing equipment required to maintain and operate the equipment.	
4. RELATED DOCUMENTS	5. CONTRACT REFERENCE SOW: <b>Paragraph 8.4.4.3.1 (pg. 49)</b> CDRL: <b>App. A2.33 (pg.146)</b>
6. PREPARATION INSTRUCTIONS 6.1. <b>CONTENT</b> 6.1.1. The STTE must include the following for each item listed: 6.1.1.1. Item Name; 6.1.1.2. Reference (Manufacturer's Part) Number; 6.1.1.3. NSCM/CAGE Code; 6.1.1.4. NSN (if available) or SPTD of item (if NSN is not available); 6.1.1.5. Maintenance Level; 6.1.1.6. Recommended Buy Quantity; 6.1.1.7. Standard Unit Price; 6.1.1.8. Date of First Article Delivery; 6.1.1.9. Picture(s) or Drawing(s) of item; and, 6.1.1.10. Description and Function of STTE 6.1.2. The above STTE item list may be divided into sub-sections such as: 6.1.2.1. Operations Support Equipment; 6.1.2.2. Maintenance Support Equipment; 6.1.2.3. Calibration Equipment; 6.1.2.4. Test, Measurement and Diagnostic Equipment (TMDE); 6.1.2.5. Automatic Test Equipment (ATE) and its Test Program Set (TPS); and 6.1.2.6. Computer Resources Support Requirement. 6.2. <b>GENERAL FORMAT</b> 6.2.1. The STTE must be prepared as an MS Excel spreadsheet 6.3. <b>SOFT COPY FORMAT</b> 6.3.1. The STTE must be provided as an MS Excel Spreadsheet file. 6.3.2. <b>Soft Copy format submission size below 7MB</b> – The STTE may be submitted via email as follows: 6.3.2.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract. 6.3.2.2. Subject Field: WTS-ILS-217 – STTE – [Rev #] – [Date of Issue]	

6.3.3. **Soft Copy format submission size at or above 7MB** – The STTE file must be submitted on CD or DVD media and be labelled as follows:

- 6.3.3.1. Water Treatment System
- 6.3.3.2. Special Tools and Test Equipment
- 6.3.3.3. WTS-ILS-217;
- 6.3.3.4. The Revision number, and
- 6.3.3.5. The date of issue.

### A3.34 DID – Equipment Delivery Status Report

DATA ITEM DESCRIPTION	
1. TITLE <b>Equipment Delivery Status Report</b>	2. IDENTIFICATION NUMBER DID WTS-ILS-218
3. DESCRIPTION The Equipment Delivery Status Report (EDSR) will report on the Delivery Status of the WTS and to identify and correct any problems which will adversely affect their timely delivery.	
4. RELATED DOCUMENTS	5. CONTRACT REFERENCE SOW: <b>Para 8.4.4.4.1 (pg.49)</b> CDRL: <b>App. A2.34 (pg.147)</b>
6. PREPARATION INSTRUCTIONS	
6.1. <b>CONTENT</b>	
6.1.1. The EDSR must contain the data requested through the column headers of Table 1 shown below, and any added by the Contractor (see 6.2.1).	
6.2. <b>GENERAL FORMAT</b>	
6.2.1. The EDSR must be prepared in a Microsoft Excel spreadsheet containing at least the data columns shown in Table 1 below. At their discretion, the Contractor may add relevant data columns for their purposes and any they believe will be useful in monitoring and reporting the delivery status of the equipment.	
6.2.2. Line items in the EDSR must be grouped by destination (Canadian Forces Supply Depots).	
6.3. <b>SOFT COPY FORMAT</b>	
6.3.1. The EDSR must be provided as a MS Excel spreadsheet file.	
6.3.2. <b>Soft Copy format submission size below 7MB</b> – The EDSR may be submitted via email as follows:	
6.3.2.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract.	
6.3.2.2. Subject Field: WTS-ILS-218 – EDSR – [Rev #] – [Date of Issue]	
6.3.3. <b>Soft Copy format submission size at or above 7MB</b> – The EDSR file must be submitted on CD or DVD media and be labelled as follows:	
6.3.3.1. Water Treatment System	
6.3.3.2. EDSR	
6.3.3.3. WTS-ILS-218	
6.3.3.4. The Report's Date	

Table 1

Contract Delivery Status Report - WTT						
		Contract Number:	W8476-XXXX		Report Date:	28/05/2018
		WTT NSN:	1000-21-789-7890		Next Report:	26/06/2018
Destination	Line No.	VIN (or S/N)	Status	Anticipated Ship Date:	Actual Ship Date:	Notes
Edmonton (7CFSD)	1	2ASD-100	Shipped	25/05/2018	26/05/2018	Invoice # L1022, 30/05/2018
	2	2ASD-101	Ready to ship	01/06/2018		Invoice # L1024, 09/06/2018
	3	2ASD-102	Ready to ship	01/06/2018		Invoice # L1024, 09/06/2018
	4	2ASD-103	In Production	16/06/2018		
	5	2ASD-104	In Production	16/06/2018		
	6	2ASD-105	In Production	16/06/2018		
	7	2ASD-106	In Production	16/06/2018		
	8	2ASD-107	In QA	10/06/2018		On track to ship
	9	2ASD-108	In QA	10/06/2018		On track to ship
Montreal (25CFSD)	10	2ASD-109	Prod: July 2018	18/08/2018		May be delayed due to part back order
	11	2ASD-110	Prod: July 2018	18/08/2018		May be delayed due to part back order
	12	2ASD-111	Prod: July 2018	18/08/2018		May be delayed due to part back order
	13	2ASD-112	Prod: July 2018	18/08/2018		May be delayed due to part back order
	14	2ASD-113	Prod: Aug 2018	23/09/2018		
	15	2ASD-114	Prod: Aug 2018	23/09/2018		
	16	2ASD-115	Prod: Aug 2018	23/09/2018		
	17	2ASD-116	Prod: Aug 2018	23/09/2018		

### A3.35 DID – Material Identification Data Set

DATA ITEM DESCRIPTION	
1. TITLE <b>Material Identification Data Set</b>	2. IDENTIFICATION NUMBER <b>DID WTS-ILS-219</b>
3. DESCRIPTION To identify the data elements and format required to complete the Materiel Identification Data Set (MIDS) for each serialized item being procured. This data will be used to create the WTS Equipment Master Record.	
4. RELATED DOCUMENTS MIDS Excel sheet template: oem-emr-template.xls	5. CONTRACT REFERENCE <b>SOW: Para. 8.4.4.5 (pg. 49)</b> <b>CDRL: App. A2.35 (pg. 148)</b>
6. PREPARATION INSTRUCTIONS	
6.1. <b>CONTENT</b>	
6.1.1. The MIDS must contain the following data:	
6.1.1.1. Unique Item Identification	
6.1.1.1.1. Item Description (English)	
6.1.1.1.2. Item Description (French)	
6.1.1.1.3. Manufacturer's NCAGE	
6.1.1.1.4. Manufacturer's Part Number (MPN)	
6.1.1.1.5. Manufacturer's Serial Number	
6.1.1.2. Parent Identification:	
6.1.1.2.1. Applicable ERN, or	
6.1.1.2.2. Parent Manufacturer's NCAGE	
6.1.1.2.3. Parent Manufacturer's Part Number (MPN)	
6.1.1.2.4. Parent Manufacturer's Serial Number	
6.2. <b>GENERAL FORMAT</b>	
6.2.1. The MIDS must be presented in accordance with the MIDS Excel Sheet template referenced.	
6.3. <b>SOFT COPY FORMAT</b>	
6.3.1. The MIDS must be delivered as an Excel spreadsheet.	
6.3.2. <b>Soft Copy format submission size below 7MB</b> – The MIDS may be submitted via email as follows:	
6.3.2.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract.	
6.3.2.2. Subject Field: WTS-ILS-219 – MIDS – [Rev #] – [Date of Issue]	
6.3.3. <b>Soft Copy format submission size at or above 7MB</b> – The MIDS file must be submitted on CD or DVD media and be labelled as follows:	
6.3.3.1. Water Treatment System	
6.3.3.2. Material Identification Data Set	
6.3.3.3. WTS-ILS-219;	
6.3.3.4. The Revision number, and	
6.3.3.5. The date of issue.	



### A3.36 DID – Identification Plates – Design Template & Populated Designs

DATA ITEM DESCRIPTION	
1. TITLE <b>Identification Plates – Design Template &amp; Populated Designs</b>	2. IDENTIFICATION NUMBER DID WTS-ILS-220
3. DESCRIPTION The Identification Plates uniquely identify equipment and components and spares based on the procedures governing the identification marking of Canadian military property.	
4. RELATED DOCUMENTS <b>D-02-002-001/SG-001</b> <i>Canadian Forces Standard Identification Marking of Canadian Military Property</i> <b>D-01-400-002/SF-000</b> <i>Specification for Levels of Engineering Drawings and Associated Lists</i>	5. CONTRACT REFERENCE SOW: <b>Paragraph 8.7.1 (pg. 50)</b> CDRL: <b>App. A2.35 (pg.148)</b>
6. PREPARATION INSTRUCTIONS 6.1. <b>CONTENT AND GENERAL FORMAT</b> 6.1.1. IAW D-02-002-001/SG-001, the Identification Plates affixed to each item included in ANNEX A1, SOW paragraph 8.7.1 must be of size, format, and construction appropriate for the item being identified, and contain the data required for those Identification Plate formats in both official languages. 6.1.2. The Identification Plates Design Template & Populated Designs must be prepared as representative Level 2 drawings (see D-01-400-002/SF-000). 6.1.2.1. The Level 2 drawings must include the mounting or installation method for each Identification Plate, with any fasteners described by size, and/or technical standard, and/or NSN, and quantity. 6.2. <b>HARD COPY FORMAT</b> 6.2.1. The Identification Plates Design Template & Populated Designs must be: 6.2.1.1. Printed in 1:1 scale; 6.2.1.2. Printed on Standard US Ledger size paper (432 mm x 279 mm), with a: 6.2.1.2.1. Weight of no less than 90 gsm; 6.2.1.2.2. Brightness of no less than 92 ISO brightness; 6.3. <b>SOFT COPY FORMAT</b> 6.3.1. The Identification Plates Design Template & Populated Designs must be provided as PDF files, labelled by [Item Name]_[MRN].pdf. 6.3.2. The Identification Plates Design Template and Populated Designs PDFs containing text and illustrations in landscape, must be rotated for electronic viewing and reading in landscape. 6.3.3. <b>Soft Copy format submission size below 7MB</b> – The Identification Plates Design Template & Populated Designs may be submitted via email as follows: 6.3.3.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract. 6.3.3.2. Subject Field: WTS-ILS-220 – Identification Plates – [Rev #] – [Date of Issue] 6.3.4. <b>Soft Copy format submission size at or above 7MB</b> – The Identification Plates Design Template & Populated Designs file must be submitted on CD or DVD media and be labelled as follows: 6.3.4.1. Water Treatment System 6.3.4.2. Identification Plates 6.3.4.3. WTS-ILS-220; 6.3.4.4. The Revision number, and 6.3.4.5. The date of issue.	

### A3.37 DID – Controlled & Non-Controlled Goods List

DATA ITEM DESCRIPTION	
1. TITLE <b>Controlled &amp; Non-Controlled Goods List (CNCGL)</b>	2. IDENTIFICATION NUMBER DID WTS-ILS-221
3. DESCRIPTION  <u>Controlled Goods Items</u> – The CNCGL identifies if the controlled goods end items, components and sub-components of the equipment are specifically designed and modified for military purpose, and provides the Demilitarization Instructions if required.  <u>Non-Controlled Goods Items</u> – The CNCGL still includes non-controlled goods end items, components and sub-components of the equipment, as they will still require a DMC code assignment.	
4. RELATED DOCUMENTS <b>C-02-007-000/AG-001</b> <i>Controlled Technology Access and Transfer (CTAT) Manual</i>	5. CONTRACT REFERENCE SOW: <b>Para 8.8.1 (pg. 50)</b> CDRL: <b>App. A2.37 (pg.150)</b>
6. PREPARATION INSTRUCTIONS 6.1. <b>CONTENT</b> 6.1.1. The CNCGL must identify end items accordingly, IAW C-02-007-000/AG-001: <ul style="list-style-type: none"> <li>6.1.1.1. For Canadian origin items, Canada's Export Control List (ECL) articles that apply IAW the Defence Product Act (DPA);</li> <li>6.1.1.2. For US origin dual use, the Export Control Classification Number (ECCN) of the Commerce Control List that applies;</li> <li>6.1.1.3. For US origin controlled goods also known as defence articles, the United States Munitions List (USML) Category and paragraph that apply IAW the International Traffic in Arms Regulations (ITAR);and</li> <li>6.1.1.4. For all other countries other than Canada and the USA, the category and article of the Wassenaar Control List that applies.</li> <li>6.1.1.5. All items require a Demilitarization Code (DMC).</li> </ul> 6.2. <b>GENERAL FORMAT</b> 6.2.1. The CNCGL must be in spreadsheet format with 6 columns: <ul style="list-style-type: none"> <li>6.2.1.1. Item name;</li> <li>6.2.1.2. Ref paragraph for Canadian origin items (ECL);</li> <li>6.2.1.3. Ref paragraph for US origin controlled goods (USML);</li> <li>6.2.1.4. Demilitarization Code (DMC);</li> <li>6.2.1.5. Formal Demilitarisation Instructions, if DMC is F;</li> <li>6.2.1.6. Remarks.</li> </ul> 6.3. <b>HARD COPY FORMAT</b> 6.3.1. The CNCGL must be printed on paper with these characteristics: <ul style="list-style-type: none"> <li>6.3.1.1. Weight of no less than 90 gsm;</li> <li>6.3.1.2. Brightness of no less than 92 ISO brightness;</li> </ul>	

6.4. **SOFT COPY FORMAT**

- 6.4.1. The CNCGL must be provided as an MS Excel Spreadsheet file.
- 6.4.2. **Soft Copy format submission size below 7MB** – The CNCGL may be submitted via email as follows:
  - 6.4.2.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract.
  - 6.4.2.2. Subject Field: WTS-ILS-221 – CNCGL – [Rev #] – [Date of Issue]
- 6.4.3. **Soft Copy format submission size at or above 7MB** – The CNCGL file must be submitted on CD or DVD media and be labelled as follows:
  - 6.4.3.1. Water Treatment System
  - 6.4.3.2. CNCGL
  - 6.4.3.3. WTS-ILS-221;
  - 6.4.3.4. The Revision number, and
  - 6.4.3.5. The date of issue.

### A3.38 DID – Identification Labels for Storage and Shipment and Packaging Codes

DATA ITEM DESCRIPTION	
1. TITLE <b>Identification Labels for Storage and Shipment and Packaging Codes</b>	2. IDENTIFICATION NUMBER DID WTS-ILS-222
3. DESCRIPTION The Identification Labels for Storage and Shipment (ILSS) and Packaging Codes ensures that the labelling used to identify packages for items procured by DND and shipped to and stored at a Canadian facility comply with CAF Specifications. As well, this will allow DND to obtain a complete record of packaging codes for catalogued items of the equipment.	
4. RELATED DOCUMENTS <b>D-LM-008-011/SF-001</b> <i>Preparation and Use of Packaging Requirements Codes</i> <b>D-LM-008-002/SF-001</b> <i>Specification for Marking for Storage and Shipment</i> <b>D-01-400-002/SF-000</b> <i>Levels of Engineering Drawings and Associated Lists</i> <b>CF271</b> DND Form <i>Packaging Data</i>	5. CONTRACT REFERENCE SOW: <b>Para 8.9.3 (pg.51)</b> CDRL: <b>App. A2.38 (pg.151)</b>
6. PREPARATION INSTRUCTIONS 6.1. <b>CONTENT AND GENERAL FORMAT</b> 6.1.1. The ILSS designs, populated with the appropriate data, must be provided as Level 1 drawings (see D-01-400-002/SF-000) and include dimensions to show the measurements as defined by D-LM-008-002/SF-001 (example: text size, bar code dimensions). 6.1.2. A separate Packaging Code (CF271 Form) must be provided electronically for each item that: 6.1.2.1. Requires special packaging, packing, or preservation considerations to meet the required protection level (see 4.7.1 of the SOW), as per D-LM-008-011/SF-001 (see Table 1 below); and, 6.1.2.2. Has a NATO Stock Number (NSN). 6.1.3. The CF271 forms' file name must correspond to the item listed within, either by its part number or NSN (example: CF271 9422-01-552-8836.xls). 6.2. <b>HARD COPY FORMAT</b> 6.2.1. The ILSS designs must be printed on paper with these characteristics: 6.2.1.1. Standard US Ledger size (432 mm x 279 mm) 6.2.1.2. Weight of no less than 90 gsm; 6.2.1.3. Brightness of no less than 92 ISO brightness; 6.3. <b>SOFT COPY FORMAT</b> 6.3.1. The ILSS must be provided as PDF files. 6.3.2. The ILSS PDFs containing text and illustrations in landscape, must be rotated for electronic viewing and reading in landscape. 6.3.3. The CF271 Packaging Codes must be provided as an MS Excel Spreadsheet file. 6.3.4. <b>Soft Copy format submission size below 7MB</b> – The ILSS and Packaging Codes must be submitted via email as follows: 6.3.4.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract. 6.3.4.2. Subject Field: WTS-ILS-222 – Identification Labels for Storage and Shipment and Packaging Codes – [Rev #] – [Date of Issue] 6.3.5. <b>Soft Copy format submission size at or above 7MB</b> – The ILSS and Packaging Codes files must be submitted on CD or DVD media and be labelled as follows: 6.3.5.1. Water Treatment System 6.3.5.2. Identification Labels for Storage and Shipment and Packaging Codes 6.3.5.3. WTS-ILS-222; 6.3.5.4. The Revision number, and 6.3.5.5. The date of issue.	



### A3.39 DID – List of Items to be Supported

DATA ITEM DESCRIPTION	
1. TITLE <b>List of Items to be Supported</b>	2. IDENTIFICATION NUMBER DID WTS-ILS-223
3. DESCRIPTION  The List of Items to be Supported (LIS) will provide the repairable/consumable item data, software items and technical data, which will be supported once the system is delivered. DND will use this information, along with the provisioning data, to populate the Support SOW Appendix A1.0 tables.	
4. RELATED DOCUMENTS	5. CONTRACT REFERENCE SOW: <b>Para 8.10.1 (pg.51)</b> CDRL: <b>App. A2.39 (pg.152)</b>
6. PREPARATION INSTRUCTIONS	
6.1. <b>CONTENT</b>	
6.1.1. The LIS must provide an overview and understanding to DND on how the WTS and its associated equipment will be supported once the WTS is delivered; refer to the Support SOW for further information.	
6.1.2. The LIS must provide the following completed tables, stemming from the Concept of Operation & Support (IAW the Support SOW), and IAW the <b>Maintenance Concept</b> ANNEX A1 paragraph 8.1 (pg. 43):	
6.1.2.1. Supported Repairable-Consumable Equipment and Spares Table – This includes the repairable equipment or components of the complete system, STTE, and consumable equipment.	
6.1.2.2. Supported Software Items Table – This includes all provided software, such as software resident in the Repairable Items or information systems.	
6.1.2.3. Supported Technical Data Table – This includes the Technical Data and publications, and training material for which the Contractor will provide support.	
6.2. <b>GENERAL FORMAT</b>	
6.2.1. The LIS must be prepared as an MS Word document with tables.	
6.3. <b>SOFT COPY FORMAT</b>	
6.3.1. The LIS must be provided as an MS Word file.	
6.3.2. <b>Soft Copy format submission size below 7MB</b> – The LIS may be submitted via email as follows:	
6.3.2.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract.	
6.3.2.2. Subject Field: WTS-ILS-223 – LIS – [Rev #] – [Date of Issue]	
6.3.3. <b>Soft Copy format submission size at or above 7MB</b> – The LIS file must be submitted on CD or DVD media and be labelled as follows:	
6.3.3.1. Water Treatment System	
6.3.3.2. LIS	
6.3.3.3. WTS-ILS-223;	
6.3.3.4. The Revision number, and	
6.3.3.5. The date of issue.	

## Supported Repairable-Consumable Equipment and Spares Table

An explanation of each column is detailed below: Note: Column 1 through 5 are standard, and will apply to all Support SOWs; columns 6 through 8 are optional and should be tailored or removed as needed once the Support concept and Support SOW are written.

1. System Identifier MRN/OEM Part No – A unique identifier for the Item, as used in the applicable technical manuals or supply management system.
2. Item Nomenclature – The name of the Item that may include Item class/group categories and functional descriptors.
3. NATO Stock Number (NSN) – The 13-digit identifier used in NATO and allied cataloguing systems. The NSN will be included if the Item is to be ordered by DND.
4. Regular or Free-Flow R&O by Item  

Repair Cost Estimate (RCE) – Identifies that the item will require a cost estimate before repairs or overhaul can begin.

This is used for regular R&O when equipment is more complex so the TA requires more visibility on what is being proposed, has not yet reached steady-state and is therefore harder to predict typical repair costs/requirements, and repairs occur infrequently.

Maximum Repair Cost (MRC) – Identifies the maximum amount authorized that includes all labour and material costs, to be expended to repair an item. Repairs above the MRC must be approved by DND before any repair or overhaul work commences. Standard Selection Notice Observation Message procedures as detailed in A-LM-184-001/JS-001 must apply.

This is used for free-flow R&O when equipment repairs are well understood or are less complex, and is used for repairs that occur at a high rate.
5. Repair Turn-Around-Time (TAT) – Identifies the Repair TAT, if different from the general Repair TAT, as defined in Support SOW, indicating that this item is of greater importance to the operation of the WTS and therefore requires a faster turn-around. Repair TAT is indicated in calendar days; if left blank, then general Repair TAT is followed.
6. Fleet Support Spares (FSS) quantity to hold – Describes the quantity of each item that the Contractor will hold and maintain, or left blank, if item does NOT have a required sparing level quantity or category isn't applicable.  

FSS are used to support the fleet, both domestically or while on deployment, and can be used by Contractor FSRs during repair tasking, for faster TAT during R&O, and in 'repair by replacement' situations, where the repair can be done in the field or when parts are required so rarely that they would not be stocked in depot, and the cost is minimal compared to the transport cost of shipping equipment back for R&O Maintenance Support at the Contractor's site.
7. Operational Spares Kits – Base Operating Spares Kit (BOSK) – Describes the collection of operational deployment spares, and quantities of each item, held in reserve in pre-positioned storage. If left blank the item is not included in the operational spares kits or category isn't applicable.  

BOSK(s) are held domestically with DART at CFB Trenton, and in operation will be deployed to a base which supports the forward deployments.
8. Detailed Inspection & Maintenance / Detailed Inspection & Equipment Rotation – Indicates which items will require a detailed inspection and maintenance / detailed inspection & equipment rotation, performed by the Contractor, following the manufacturer's instructions for use and inspection.

**APPENDIX A**  
**TO W8476-216378**  
**REVISED 24 MARCH 2022**

- a. Detailed Inspection & Maintenance (Insp. Maint.)  
i. 'Y – WTS Equip. QTY' = yes, detailed inspection & maintenance required for the listed quantity of WTS Equipment.  
b. 'N' or blank = no.

**NOTE:** INFORMATION IN THIS TABLE WILL BE FINALIZED AFTER DELIVERY AND ACCEPTANCE OF THE PROVISIONING DOCUMENTATION.

Item Identifier MRN/OEM Part No. (1)	Item Nomenclature (2)	NSN (if item can be ordered) (3)	Regular or Free-Flow RCE/MRC (4)	Repair TAT (cal. Days) (5)	Fleet Support Spares (Qty. to hold) (6)	Operational Spares Kits (7)	<u>Insp. Maint.</u> (Y – WTS Equip. QTY) (8)
						BOSK Qty.	
	Water Treatment Unit (WTU)		RCE		2 (GFE - will be provided by DND from existing stock)		<u>Insp. Maint.</u> Y – Qty 26 in:  37 CER, 36 CER, 4 ESR, CFSME ,35 RGC, 5 RGC, 2 AETS, 34 RGC, 33 CER, 2 CER, DART, 32 CER 31 CER, 38 CER, 4 CES, 1 CER, 41 CER, 39 CER and OEM
	Miscellaneous Equipment Unit (MEU)		RCE		2 (GFE - will be provided by DND from existing stock)		<u>Insp. Maint.</u> Y – Qty 26 in:  37 CER, 36 CER, 4 ESR, CFSME ,35 RGC, 5 RGC, 2 AETS, 34 RGC, 33 CER, 2 CER, DART, 32 CER 31 CER, 38 CER, 4 CES, 1 CER, 41 CER, 39 CER and OEM
	Trailer		RCE		2 (GFE - will be provided by DND from existing stock)		<u>Insp. Maint.</u> Y – Qty 24 in:  37 CER, 36 CER, 4 ESR, CFSME ,35 RGC, 5 RGC, 2 AETS, 34 RGC, 33 CER, 2 CER, DART, 32 CER 31 CER, 38 CER, 4 CES, 1 CER, 41 CER, 39 CER and OEM



**APPENDIX A**  
**TO W8476-216378**  
**REVISED 24 MARCH 2022**

Item Identifier MRN/OEM Part No. (1)	Item Nomenclature (2)	NSN (if item can be ordered) (3)	Regular or Free-Flow RCE/MRC (4)	Repair TAT (cal. Days) (5)	Fleet Support Spares (Qty. to hold) (6)	Operational Spares Kits (7)	<u>Insp. Maint.</u> (Y – WTS Equip. QTY) (8)
						BOSK Qty.	
	Arctic Sustainment Unit (ASU)		RCE				<u>Insp. Maint.</u> Y – Qty 7 in: CFSME, 4 ESR, 5 RGC, 2 AETS, 2 CER, 4 CES and 1 CER.
	Water Storage Unit (WSU)		RCE				<u>Insp. Maint.</u> Y – Qty 37 in: 37 CER, 36 CER, 4 ESR, CFSME, 5 RGC, 2 AETS, 35 RGC, 34 RGC, 33 CER, 2 CER, 1 Fd Hosp, 1 Wing, CJOC Kingston, DART, 32 CER, 31 CER, 38 CER, 4 CES, 1 CER, 41 CER, 39 CER
<b>Ancillary Equipment:</b>							
	Feed Water Hose				10	4	
	Concentrate Water Hose				10	4	
	Potable Water Hose				10	5	
	Hose spare parts kit, to include cap, o ring, lanyard, repair kit				10	5	
	Water Distribution Nozzle				2	1	
	Feed Pump				5	1	
	Distribution Pump				5	1	
	Water Storage Tank				5	2	
	Spill Kit				2	1	
	Tool kit				2	1	
	Safety equipment, to include goggle, work gloves, latex gloves, mask, hear protector				5	2	
	Rope 3/8" x 50'				2	1	
	Intake Strainer + floatation Assembly				5	1	
	Exhaust Hose for Generator Set				5	1	
	Life Preserver Vest				2	1	
	Wading Overall				2	1	
	Water Quality Analysis Kit				5	1	

**APPENDIX A**  
**TO W8476-216378**  
**REVISED 24 MARCH 2022**

Item Identifier MRN/OEM Part No. (1)	Item Nomenclature (2)	NSN (if item can be ordered) (3)	Regular or Free-Flow RCE/MRC (4)	Repair TAT (cal. Days) (5)	Fleet Support Spares (Qty. to hold) (6)	Operational Spares Kits (7)	<u>Insp. Maint.</u> (Y – WTS Equip. QTY) (8)
						BOSK Qty.	
	Turbidity Verification Kit				3	1	
	Reverse Osmosis (RO) membranes				10	5	
	RO preservation container				5	0	
	Glycerine (gallon)				10	2	
	Filtration element other than RO				5	2	
	Chemicals (30 days deployment)				5	3	
	Replacement Valve (of each kind)				2	1	
	NATO Hose fittings kit				5	1	
	Manuals and Reference card last edition (of each)				2	1	
	Generator set (repair parts for 90 days deployment)				2	1	
	High pressure pump				5	1	
	Repair Valve part kit (of each)				10	1	
	Meter Analyser + harness (of each)				5	1	
	Pressure Gage + Harness (of each)				5	1	
<b>Cold Weather Ancillary Equipment:</b>							
	Electrically-Heated Feed Water Hoses				5	1	
	Electrically-Heated Concentrate Hoses				5	1	
	Electrically-Heated Potable Water Hoses				5	2	
	Feed Water Pump Electrically- Heated Blanket				5	2	
	Distribution Pump Electrically- Heated Blanket				5	2	
<b>Trailer Electrical Components:</b>							
	Front Harness				10	1	
	Mid Main Harness				5	1	
	Rear Harness				5	1	
	LED Markers				10	1	
	LED SMP Taillight				10	1	
	LED Licence Plate Lamp				10	1	
<b>Trailer Axle Components:</b>							
	Axle Assembly				3	0	

**APPENDIX A**  
**TO W8476-216378**  
**REVISED 24 MARCH 2022**

Item Identifier MRN/OEM Part No. (1)	Item Nomenclature (2)	NSN (if item can be ordered) (3)	Regular or Free-Flow RCE/MRC (4)	Repair TAT (cal. Days) (5)	Fleet Support Spares (Qty. to hold) (6)	Operational Spares Kits (7)	<u>Insp. Maint.</u> (Y – WTS Equip. QTY) (8)
						BOSK Qty.	
	Wheel Assembly				10	0	
	Tire				20	0	
	Wheel Bearings				20	0	
<b>Trailer Brake Components:</b>							
	Brake Drum				5	1	
	Brake Shoe				5	1	
	Air Chamber				2	1	
	Air Reservoir				2	1	
	Coiled Air Hose				2	1	
	Function Valve				2	1	
	Brake Adjusters				2	1	
<b>Trailer Suspension Components:</b>							
	Spring Assembly				5	1	
<b>Trailer Structural Frame:</b>							
	Landing Gear				10	1	
	Drawbar Assembly				5	1	

### Supported Software Items Table

An explanation of each column is detailed below: Note: Column 1 through 3 are standard, and will apply if there is software to support, columns 4 through 5 are optional and should be tailored or removed as needed once the Support concept and Support SOW is written.

1. Identifier MRN/OEM Part No – A unique identifier for the Item of software, or the hardware that it is hosted on.
2. Item Nomenclature – The name of the Item that may include Item class/group categories and functional descriptors.
3. Software version number – The version or revision number of the software item.
4. SW Update – Requires software updates to DND/CAF (e.g., may be part of regular upgrade program or to incorporate third party updates) IAW the Support SOW ('Y' = yes, 'N' or blank = no).
5. Help Desk – Included with Help Desk support for DND/CAF, IAW the Support SOW, for this software ('Y' = yes, 'N' or blank = no).

**NOTE:** INFORMATION IN THIS TABLE WILL BE FINALIZED AFTER DELIVERY AND ACCEPTANCE OF THE TECHNICAL PUBLICATIONS.

Identifier MRN/OEM Part No. (1)	Item Nomenclature (2)	Software Version Number (3)	SW Update (Y/N) (4)	Help Desk (Y/N) (5)

### Supported Technical Data Table

An explanation of each column is detailed below: Note: include all the technical publications and other relevant ILS documents from the SOW that you want the Support Contractor to maintain up to date after configuration management changes or obsolescence.

1. Publication Number – The unique identifier for the published Item of Technical Data.
2. Title – The title of the item of Technical Data.

**NOTE:** INFORMATION IN THIS TABLE WILL BE FINALIZED AFTER DELIVERY AND ACCEPTANCE OF THE TECHNICAL PUBLICATIONS.

Publication Identifier (1)	Title (2)
TBD	WTS OPERATOR MANUAL
TBD	WTU OPERATOR QUICK REFERENCE CARD
TBD	WTS MAINTENANCE MANUAL
TBD	WTS PERMISSIVE REPAIR SCHEDULE AND STANDARD REPAIR TIMES
TBD	WTS ILLUSTRATED PARTS MANUAL
TBD	WTS OPERATOR TRAINING PACKAGE
TBD	WTU AND ASU TECHNICIAN TRAINING PACKAGE
TBD	WTS PRESERVATION, STORAGE AND REACTIVATION INSTRUCTIONS
TBD	WTS STOWAGE, SHIPPING AND HANDLING INSTRUCTIONS
TBD	WTS DATA SUMMARY
TBD	MEU AND ASU STOWAGE MAP POSTERS
TBD	WTU PROCESS AND FLOW DIAGRAMS
TBD	PROVISIONING PARTS BREAKDOWN
TBD	SUPPLEMENTARY PROVISIONING TECHNICAL DOCUMENTATION
TBD	SPECIAL TOOL & TESTING EQUIPMENT
TBD	IDENTIFICATION PLATES
TBD	CONTROLLED & NON-CONTROLLED GOODS LIST
TBD	IDENTIFICATION LABELS FOR STORAGE AND SHIPMENT AND PACKAGING CODES

### A3.40 DID – Warranty Support Plan

DATA ITEM DESCRIPTION	
1. TITLE <b>Warranty Support Plan</b>	2. IDENTIFICATION NUMBER DID WTS-ILS-224
3. DESCRIPTION The Warranty Support Plan (WSP) identifies and documents the elements that compose the Warranty Support for the WTS, and provides the framework and strategy to meet Warranty Support obligations.	
4. RELATED DOCUMENTS <b>C-01-100-100/AG-008: <i>Writer's Guide for Technical Documentation</i></b>	5. CONTRACT REFERENCE SOW: <b>Paragraph 8.12.1 (pg.52)</b> CDRL: <b>App. A2.40 (pg.153)</b>
6. PREPARATION INSTRUCTIONS	
6.1. <b>CONTENT</b> <ul style="list-style-type: none"> <li>6.1.1. The Warranty Support Plan's (WSP) subject matter must include, but not be limited to, a detailed discussion on the following:             <ul style="list-style-type: none"> <li>6.1.1.1. An introduction with a stated purpose and scope.</li> <li>6.1.1.2. A description of the warranty section. A key point of contact with the Contractor for warranty support matters must be identified.</li> <li>6.1.1.3. Detailed summary of what is covered under the WTS's standard warranty including applicable terms and conditions, such as parts and labour, time, usage, and maintenance servicing requirements.</li> <li>6.1.1.4. Complete warranty control procedures including, but not necessarily limited to, the following:                 <ul style="list-style-type: none"> <li>6.1.1.4.1. Interfacing actions between Contractor and Canada for initiating a warranty action and shipping instructions;</li> <li>6.1.1.4.2. Procedures followed for the evaluation of defective warrantable items, including ILS publications;</li> <li>6.1.1.4.3. Procedures to be followed where warranty claims are not substantiated, but DND elects to have the item repaired and returned to service by the Contractor;</li> <li>6.1.1.4.4. Details relating to the Contractor's disposal of unserviceable warrantable components;</li> <li>6.1.1.4.5. How the Contractor will compensate DND for effecting warranty repairs on the Contractor's behalf;</li> <li>6.1.1.4.6. How the Contractor will notify Canada of recalls, emerging safety issues, and other urgent matters the Contractor gains knowledge of concerning the Work.</li> <li>6.1.1.4.7. How the Contractor will report and correct discrepancies or amend information within the ILS documentation and the dissemination of those amendments and corrections; and,</li> <li>6.1.1.4.8. How the Contractor will report all closed warranty claims and the status of open claims.</li> </ul> </li> </ul> </li> <li>6.1.1.5. Terms and conditions of the packaging warranty coverage;</li> <li>6.1.1.6. Details of the process (detailed steps) to be followed to action a warranty claim for repairs performed by the contractor;</li> <li>6.1.2. Each topic of discussion must be addressed in a manner that clearly identifies any documentation or information required from DND.</li> <li>6.1.3. Any documentation used in Warranty Support activities must be identified and templates included as part of the Warranty Support Plan as Appendices.</li> </ul>	

**6.2. GENERAL FORMAT**

- 6.2.1. The WSP must be prepared in the Contractor's format while conforming to the latest issue of C-01-100-100/AG-008.

**6.3. HARD COPY FORMAT**

- 6.3.1. The WSP must be printed on paper with these characteristics:
- 6.3.1.1. Weight of no less than 90 gsm;
  - 6.3.1.2. Brightness of no less than 92 ISO brightness;

**6.4. SOFT COPY FORMAT**

- 6.4.1. The WSP must be provided as
- 6.4.2. **Soft Copy format submission size below 7MB** – The WSP may be submitted via email as follows:
- 6.4.2.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract.
  - 6.4.2.2. Subject Field: WTS-ILS-224 – Warranty Support Plan – [Rev #] – [Date of Issue]
- 6.4.3. **Soft Copy format submission size at or above 7MB** – The WSP file must be submitted on CD or DVD media and be labelled as follows:
- 6.4.3.1. Water Treatment System
  - 6.4.3.2. Warranty Support Plan
  - 6.4.3.3. WTS-ILS-224;
  - 6.4.3.4. The Revision number, and
  - 6.4.3.5. The date of issue.

### A3.41 DID – Equipment Environmental Assessment

DATA ITEM DESCRIPTION	
1. TITLE <b>Equipment Environmental Assessment (EEA)</b>	2. IDENTIFICATION NUMBER <b>DID WTS-ILS-225</b>
3. DESCRIPTION The EEA identifies and documents potential environmental impacts of the equipment over the entire life-cycle and the associated mitigation measures required to reduce or eliminate them.	
4. RELATED DOCUMENTS	5. CONTRACT REFERENCE <b>SOW: Para. 9.4.1 (pg. 54)</b> <b>CDRL: App. A2.41 (pg. 154)</b>
6. PREPARATION INSTRUCTIONS 6.1. <b>CONTENT</b> 6.1.1. <b>Title Page</b> 6.1.1.1. Equipment Name and NSN (if available). 6.1.1.2. Assessment Contact: Name, title and company name of the author of the EEA. 6.1.2. <b>Executive Summary</b> 6.1.2.1. Provide a brief summary of potential environmental impacts and recommended mitigation measures for each life-cycle (test and evaluation following production, operation and maintenance, and demilitarization and disposal). 6.1.3. <b>Equipment Description</b> 6.1.3.1. Equipment description: Provide an overview of the equipment and identify each major sub-system as per the Equipment Breakdown Structure. 6.1.3.2. For each major sub-system, identify the following: 6.1.3.2.1. Ionizing radiation sources (radioisotopes and x-ray). e.g. Uranium, Radon, plutonium and tritium etc. 6.1.3.2.2. Non-ionizing radiation sources (radiofrequency and lasers). 6.1.3.2.3. Identify toxic substances that are incorporated into the equipment design. Provide additional information in tabular form in ANNEX A. 6.1.3.2.4. Identify chemical products listed in ANNEX B. 6.1.3.2.5. Provide Safety Data Sheets (SDS) that are less than three years old for all chemical products in accordance with WHMIS 2015 requirements in Annex C for all chemical products. 6.1.4. <b>Environmental Assessment</b> 6.1.4.1. For each lifecycle phase (test and evaluation following production, operation and maintenance, and demilitarization and disposal) discuss the following: 6.1.4.1.1. Lifecycle activities: Describe anticipated activities (including operator and maintenance tasks that are detailed in Contractor provided Technical Documentation) and identify if any of these activities have the potential to: release a polluting substance to air, water or land (e.g. exhaust emissions, hazardous waste, spills, etc.); impact human health; noise or vibration; and/or alter landscape features. Note: The scope of the EEA excludes activities related to the use of munitions. 6.1.4.1.2. Environmental impacts: Describe the potential environmental impacts identified above.	

6.1.4.1.3. **Mitigation Measures:** Describe mitigation measures to eliminate or reduce identified potential environmental impacts, including those that are part of the design, any warning devices, emission control equipment, spill response, safe handling and disposal procedures, training, PPE, labels on equipment, cautions and warnings in the Technical Documentation, monitoring or inspections, etc.

**6.1.5. Conclusions and Recommendations**

6.1.5.1. Summarize the main environmental impacts and recommended mitigation measures.

**6.1.6. References**

6.1.6.1. List references consulted in the completion of the EEA (such as Canadian legislation, DND policies and procedures, technical documentation, etc.).

**6.1.7. ANNEX A - List of Toxic Substances in the Equipment**

Toxic Substance	NSN	Original OEM Part Number	Item Description	Location	Additional Details
Antimony, Arsenic, Beryllium, Brass, Bronze, Chromium VI, Cobalt, Copper, Lead, Precious and radioactive metals					
Halocarbons					Type and weight (kg). Global Warming Potential of Hydrofluorocarbons used for refrigerant applications.
Ionizing radiation					Type and quantity or activity level
Mercury and its compounds					Product Category, form of mercury (e.g. liquid, vapour) and weight (mg)
Non-ionizing radiation					Type of electromagnetic energy (laser, microwave, radio frequency) and strength
Polychlorinated Biphenyl					Form (liquid or solid), quantity (kg), volume (L) and concentration in ppm

Note: Provide information on the presence of other metals, metal coatings, surface treatments, etc.

**6.1.8. ANNEX B – List of Chemical Products**

Chemical Product	NSN	Product Part Number / Manufacturer	Ingredient	Chemical Abstract Service Number	Controls*
Adhesives, anti-seize, batteries, solvents, cleaners and degreasers, compressed gases, corrosion inhibitor, cutting fluid, decontaminant, desiccant, detector kit, fire extinguishing agent, fuel, grease, inspection penetrant, lubricants, paints and related commodities (CARC topcoat, CARC primer, CARC wash-primer, sealants).					

\*Controls: Identify if the substance is regulated under the Canadian Environmental Protection Act, 1999; targeted in Schedule 1, Toxic Substance List under CEPA and/or subject to the reporting requirements under the National Pollutant Release Inventory (NPRI).

**6.1.9. Annex C – Safety Data Sheets SDS for all chemical products identified in the EEA**

**6.2. SOFT COPY FORMAT**

6.2.1. The EEA must be provided as a PDF file.

6.2.2. **Soft Copy format submission size below 7MB** – The EEA may be submitted via email as follows:

6.2.2.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract.

6.2.2.2. Subject Field: WTS-ILS-225 – EEA – [Rev #] – [Date of Issue]

6.2.3. **Soft Copy format submission size at or above 7MB** – The EEA file must be submitted on CD or DVD media and be labelled as follows:



- |                                   |
|-----------------------------------|
| 6.2.3.1. Water Treatment System   |
| 6.2.3.2. EEA                      |
| 6.2.3.3. WTS-ILS-225;             |
| 6.2.3.4. The Revision number, and |
| 6.2.3.5. The date of issue.       |

## **A4.0 APPENDIX: COMMERCIAL (OEM) ENGINEERING DRAWINGS AND ASSOCIATED LISTS**

### **A4.1 General**

A4.1.1 The Contractor must provide Engineering Drawings, Associated Lists and Reference Documents IAW the following requirements and in the final form specified below.

#### **A4.1.2 Technical Data Action Notice (TDAN) Number**

A4.1.2.1 A TDAN number will be assigned to control the acquisition of all Engineering Drawings and Associated Lists produced under this contract. TDAN numbers will be assigned upon request by DSCO 4-6 individually as required.

#### **A4.1.3 New and Existing Drawings**

A4.1.3.1 When required, the Contractor must prepare and deliver new Engineering Drawings and Associated Lists which meet the design disclosure and legibility requirements of the specified level as defined by the Canadian Forces Engineering Drawings and Associated Lists specification D-01-400-002/SF-000.

A4.1.3.2 Existing Contractor Drawings being provided as part of the Engineering Drawing Package must meet the requirements of paragraph 3.2 of D-01-400-002/SF-000. In the event that Contractor Drawings do not meet the specified requirements the Contractor must rework the drawings to ensure that the requirements are met.

##### **A4.1.3.3 Drawing Levels**

A4.1.3.3.1 Level 1 – Conceptual and Developmental Design

A4.1.3.3.2 Level 2 – Production Prototype and Limited Production

A4.1.3.3.3 Level 3 – Production

#### **A4.1.4 Drawing Practices**

A4.1.4.1 Drawing practices must be IAW ASME Y14.100.

#### **A4.1.5 Data Rights Legend**

A4.1.5.1 The Contractor must mark all Foreground & Background Engineering Drawings & Associated Lists delivered under this contract with the following notation, that pertains to the “Intellectual Property Rights” and/or “Data Rights” clause(s) of the contract:

A4.1.5.1.1 Intellectual Property (IP) in Foreground that belongs to the Contractor: “© (insert year) (insert IP owner). This deliverable was delivered under Contract no. XXXX and contains Foreground Intellectual Property (IP). Her Majesty the Queen in Right of Canada has a royalty-free and perpetual license to the IP and is permitted to use, reproduce, modify, and translate, including authorizing contractors to reproduce, modify, and translate, in whole or in part the deliverable for all government purposes

including competitive tendering. Refer to the contract terms for additional details as required.”

- A4.1.5.1.2 Intellectual Property (IP) in Background Information: “© (insert year) (insert IP owner). This deliverable was delivered under Contract no. XXXX and contains Background Intellectual Property (IP). Her Majesty the Queen in Right of Canada has a royalty-free and perpetual license to the Background IP for the purpose of exercising its rights in the Contract deliverables and Foreground Information. The license includes the rights to use, reproduce, modify, and translate this deliverable, and further includes the right to authorize others to use, reproduce, modify, and translate, in whole or in part the deliverable for all government purposes including competitive tendering. Refer to the contract terms for additional details as required.”

## A4.2 Data Lists

- A4.2.1 The Contractor must provide Data Lists complete with Cover Sheets, prepared IAW ASME Y14.34M and supplied along with the Engineering Drawings. Data Lists must be prepared at the item level of assembly (and/or end item) declared for future production by the Technical Authority. Cover sheets must be prepared as sheet one (1) of the Data List. Cover Sheets must include the Contract Number and a note which details the **Intellectual Property Rights** that apply to the data identified on the Data List, see para. A4.1.5.

## A4.3 Reference Documents

- A4.3.1 The Contractor must include reference documents called up on the Engineering Drawings (excepting those, which are government, society and readily available industrial specifications or standards) as part of the Engineering Drawings and Associated Lists.

## A4.4 TDAN

- A4.4.1 The Contractor must prepare a TDAN listing all Drawings and Associated Lists delivered as a result of the contract. A sample TDAN can be provided upon request.

## A4.5 Drawing System

- A4.5.1 The Contractor must use a mono-detail drawing system.

## A4.6 Drawing Types

- A4.6.1 The Contractor must provide the necessary types of drawings that will satisfy the sophistication of the specified drawing level. Drawing types selected must be IAW ASME Y14.24. Type selection must be subject to the approval of both the DND Technical Authority and DSCO 4-6.

## A4.7 Control Drawings

- A4.7.1 The Contractor must prepare Control Drawings as defined in ASME Y14.24, for commercial items approved for use in the design, which are not defined by Government or nationally recognized industrial specifications and standards.

#### **A4.8 Family-Tree Drawing(s)**

- A4.8.1 When required, the Contractor must prepare Family-Tree Drawing(s) of the complete configuration of the Engineering Drawing Package and it must be subject to the approval of both the DND Technical Authority and DSCO 4-6.

#### **A4.9 Units of Measure**

- A4.9.1 The DND Technical Authority will determine the units of measure (metric or Imperial).
- A4.9.2 Metric drawings produced by the Contractor must comply with ASTM SI10 American National Standard for Metric Practice.

#### **A4.10 Controlled Goods Identification**

- A4.10.1 The Contractor must mark all drawings and Associated Lists with the appropriate Controlled Goods Identification. These e-stamps can be obtained from DSCO 4-6. The DND Technical Authority will determine the Controlled Good status of the drawings and lists.

#### **A4.11 Integration**

- A4.11.1 The Contractor must integrate the new and existing drawings to form a complete Engineering Drawing Package.

#### **A4.12 Quality Assurance Provisions**

- A4.12.1 Quality of the Engineering Drawings and Associated Lists delivered on this contract is the responsibility of the Contractor and subject to the quality requirements of the contract.

##### **A4.12.2 Acceptance**

- A4.12.2.1 Acceptance of the Engineering Drawings, Associated Lists and Reference Documents for technical content requirements will be the responsibility of the DND Technical Authority. Acceptance of the Engineering Drawings, Associated Lists, Reference Documents and Electronic Data Deliverables for format requirements will be DSCO 4-6.

##### **A4.12.3 Interim Deliverables for Acceptance Purposes**

###### **A4.12.3.1 Level 1 – Conceptual and Developmental Design**

- A4.12.3.1.1 The Contractor must provide Level 1 Engineering Drawings, Associated Lists and Reference Documents to the Technical Authority upon completion.

###### **A4.12.3.2 Level 2 – Production Prototype and Limited Production**

- A4.12.3.2.1 Following acceptance of the Level 1 Engineering Drawings, Associated Lists and Reference Documents, the Contractor must provide Level 2 Engineering Drawings, Associated Lists and Reference Documents to the Technical Authority.

### A4.13 Final Deliverable

A4.13.1 Upon acceptance, the Contractor must provide Level 2 Engineering Drawings, Associated Lists and Reference Data in soft copy form as outlined herein.

#### A4.13.2 Soft Copy Deliverables

A4.13.2.1 The Contractor must include the Engineering Drawings, Associated Lists, Reference Data and the associated Metadata in electronic form, in the provided soft copy deliverables.

#### A4.13.3 Engineering Drawings

A4.13.3.1 The Contractor must provide Engineering Drawings as a PDF file (Raster) as detailed herein. Multi-sheet drawings must be delivered as one file.

#### A4.13.4 Associated Lists

A4.13.4.1 The Contractor must provide Associated Lists as a PDF file.

#### A4.13.5 Reference Documents

A4.13.5.1 The Contractor must provide Reference Documents as a PDF file.

#### A4.13.6 TDAN

A4.13.6.1 The Contractor must provide the TDAN, complete with contractor's signature, as a PDF file, with the final deliverables.

#### A4.13.7 Metadata (Capture of Related Information)

A4.13.7.1 The Contractor must provide Metadata for all Engineering Drawing and Associated List deliverables. Metadata records must contain the information shown in Table 1 below. Metadata must be delivered as a Microsoft Access database shown at Figure 1 below.

#### A4.13.8 Database Table

A4.13.8.1 The Contractor must deliver each file with a corresponding database record. All records must be entered into a single Microsoft Access 2010 database table. Fields without corresponding information must remain blank. The Microsoft Access database file must be named with the "batch no.mdb".

### A4.14 File Formats for Raster Data

A4.14.1 The Contractor must provide raster image data in PDF format, and meet the following requirements:

#### A4.14.2 Image Size

A4.14.2.1 Raster images for drawings/associated lists must retain the sheet size of the Master/Native file.

**A4.14.3 Image Colour**

A4.14.3.1 Images must be black on white background.

**A4.14.4 File Names/Batch Number Allocation**

A4.14.4.1 File names must be made up from the document number by adding a prefix (L for LAND, A for AIR and M for MARITIME). Batch numbers must be requested from DSCO 4-6.

**TABLE 1 INDEX FIELDS**

Order	Field Name	Max Field Length	Field Definition / Description	Example Entry
1	<b>FILENAME</b> (all one word)	12 (8.3)	Name of electronic file - unique filename for uploading in database. Alpha characters must be uppercase.	<b>L9775457-1.PDF</b>
2	<b>BATCHNO</b> (all one word)	8	Batch number - used for uploading files in database. Batch number will be issued by DSCO 4-6. Alpha characters must be uppercase.	<b>LZ001</b>
3	<b>DOCUMENTNO</b> (all one word)	25	This field must contain the document number.	<b>9775457</b>
4	<b>REVISION</b>	3	Letter or number indicating the revision level. If there is no rev, indicate with dash ("-")	<b>B</b>
5	<b>SHEETNO</b> (all one word)	3	Sheet number x to y.	<b>1-5</b>
6	<b>NOOFSHEETS</b> (all one word)	3	Sheet number x to y. Enter the value of y.	<b>5</b>
7	<b>FRAMENO</b> (all one word)	3	This field must be left blank.	
8	<b>NOOFFRAMES</b> (all one word)	3	This field must be left blank.	
9	<b>NSCM</b>	5	This field must contain the NATO Supply Code for Manufacturers (NSCM) of the Owner of the data. (Also known as FSCM, CAGE or NCAGE code.)	<b>35907</b>
10	<b>SIZE</b>	2	This field contains the document size. -For imperial sizes use A, B, C, D, E, F, G, H, J, K and LE (for legal) -For metric sizes use A4, A3, A2, A1, A0 and B1.	<b>A2</b>

**APPENDIX A**  
**TO W8476-216378**  
**REVISED 24 MARCH 2022**

11	<b>ADDITIONALIDENTIFIER</b> (all one word)	10	This open field must be used when two (2) or more documents have the same document number but are different documents.  e.g. Document 12345, Document 12345 DCR 001, then "DCR 001" would be entered in this field. When field is not applicable, leave blank.	<b>DCR-001</b>
12	<b>DATARIGHTS</b> (all one word)	1	The data rights as specified in the contract. "L" for "LIMITED" or "U" for "UNLIMITED"	<b>U</b>
13	<b>DOCUMENTTITLE</b> (all one word)	240	Title of document. (i.e. Drawing title)	<b>BRACKET ASSY</b>
14	<b>TDANNO</b> (all one word)	12	This field must be used to enter the TDAN number assigned for the project.	<b>174471XXX</b>
15	<b>ERN</b>	12	This field must be used for the Equipment Registration Number (ERN).	<b>30-650-000</b>
16	<b>EAC</b>	8	This field must be left blank.	
17	<b>EQUIPMENT</b>	75	Name of the Equipment.	<b>BISON</b>
18	<b>CTAT</b>	1	If the data is "Not Controlled", DM Code "A" must be entered. If the data is "Controlled Goods", DM Code "D" must be entered.	<b>A or D</b>
19	<b>PROJECTNAME</b>	30	This field is filled in by DSCO 4-6. This field must be left blank.	

FILENAME	BATCH NO	DOCUMENT NO	REVISION	SHEET NO	NO OF SHEETS	FRA ME NO	NO OF FRAMES	NSCM	SIZE	ADDITIONAL IDENTIFIER	DATA RIGHTS	TDANNO	DOCUMENTTITLE	ERN	EAC	EQUIP	CTAT	PROJECTNAME
LDL-9775457-1.pdf	LZ001	DL-9775457-1	-	1-2	2			35907	A4		U	174471137	BRACKET ASSY				A	
LDL-9775457-1.doc	LZ001	NATDL-9775457-1	-	1-2	2			35907	A4		U	174471137	BRACKET ASSY				A	NATIVE FILES
L9775457.pdf	LZ001	9775457	-	1-5	5			35907	A1		U	174471137	BRACKET ASSY				A	
L9775457.dwg	LZ001	NAT9775457	-	1-5	5			35907	A1		U	174471137	BRACKET ASSY				A	NATIVE FILES
L9775458.pdf	LZ001	9775458	-	1	1			35907	A0		U	174471137	BRACKET ASSY				A	
* L9775457.zip	LZ001	NAT9775457	-	1	1			35907	1		U	174471137	BRACKET ASSY				A	NATIVE FILES

\*Combine 3D CAD native files (Solid Works, Solid Edge, Inventor...) in .zip file using the top level drawing number as the file name.

**File Naming Convention**

**File Name**

**Description**

LDL-9775457-1.pdf                      Data List no DL-9775457-1, Sheet 1 to 2, Rev -  
LDL-9775457-1.doc                  Data List no DL-9775457-1, Sheet 1 to 2, Rev -  
L9775457.pdf                          Drawing no 9775457, Sheet 1 to 5, Rev -  
L9775457.dwg                        Drawing no 9775457, Sheet 1 of 5, Rev -  
L9775458.pdf                        Drawing no 9775458, Sheet 1 of 1, Rev -  
L9775457.zip                         \*Native CAD Model Files, all files & sheets, Rev -

**Filename Prefixes**

A, L or M9775457.pdf [(A)ir, (L)and or (M)aritime + 9775457 = Document Number]

**FIGURE 1    METADATA EXAMPLE (New Drawings & Associated Lists)**



FILENAME	BATCH NO	DOCUMENT NO	REVISION	SHEET NO	NO OF SHEETS	FRAME NO	NO OF FRAMES	NSCM	SIZ E	ADDITIONAL IDENTIFIER	DATA RIGHTS	TDANNO	DOCUMENTTITLE	ERN	EAC	EQUIP	CTAT	PROJECTNAME
LDL-9775457-1-A.pdf	LZ001	DL-9775457-1	A	1-2	2			35907	A4		U	174471137	BRACKET ASSY				A	
LDL-9775457-1-A.doc	LZ001	NATDL-9775457-1	A	1-2	2			35907	A4		U	174471137	BRACKET ASSY				A	NATIVE FILES
L9775457-A.pdf	LZ001	9775457	A	1-5	5			35907	A1		U	174471137	BRACKET ASSY				A	
L9775457-A.dwg	LZ001	NAT9775457	A	1-5	5			35907	A1		U	174471137	BRACKET ASSY				A	NATIVE FILES
L9775458-B.pdf	LZ001	9775458	B	1	1			35907	A0		U	174471137	BRACKET ASSY				A	
* L9775457-A.zip	LZ001	NAT9775457	A	1	1			35907	1		U	174471137	BRACKET ASSY				A	NATIVE FILES

\*Combine 3D CAD native files (Solid Works, Solid Edge, Inventor...) in .zip file using the top level drawing number as the file name.

### **File Naming Convention**

File Name	Description
LDL-9775457-1-A.pdf	Data List no DL-9775457-1, Sheet 1 to 2, Rev A
LDL-9775457-1-A.doc	Data List no DL-9775457-1, Sheet 1 to 2, Rev A
L9775457-A.pdf	Drawing no 9775457, Sheet 1 to 5, Rev A
L9775457-A.dwg	Drawing no 9775457, Sheet 1 of 5, Rev A
L9775458-B.pdf	Drawing no 9775458, Sheet 1 of 1, Rev B
L9775457-A.zip	*Native CAD Model Files, all files & sheets, Rev A

### **Filename Prefixes**

A, L or M9775457.pdf [(A)jr, (L)and or (M)aritime + 9775457 = Document Number]

**FIGURE 2 METADATA EXAMPLE (Revised Drawings & Associated Lists)**

## **A5.0 APPENDIX: WATER QUALITY TESTING REQUIREMENTS**

### **A5.1 General**

#### **A5.1.1 Objective**

A5.1.1.1 The objective of the water quality testing is to ensure that the WTS meets the minimum performance requirements defined by Canada for contaminant reduction and for quantity of potable water.

#### **A5.1.2 Requirements**

A5.1.2.1 Water quality testing will be conducted on the WTS utilizing test waters. Test water will verify the effectiveness of the WTS in reducing high concentrations of select contaminants and dissolved elements, to acceptable drinking water guideline levels. The WTS will be required to produce the minimum quantity of water within a given time frame.

A5.1.2.2 The water quality testing consists of treating the four (4) test waters:

A5.1.2.2.1 Organic Compound Fouling and Hard Water Treatment ;

A5.1.2.2.2 Bacteria and Virus Elimination;

A5.1.2.2.3 Organic Compound Reduction; and

A5.1.2.2.4 Inorganic Compound Reduction.

A5.1.2.3 The test waters preparation and verification requirements are described in A5.1 and A5.2. Sections; and the water quality test procedures and evaluation criteria are in Section A5.3.

A5.1.2.4 The contractor responsibilities WRT Water Quality Testing Requirements are as follows:

A5.1.2.4.1 Must provide facility for water quality testing (IAW A5.1.3);

A5.1.2.4.2 Must provide a test design set up plan (IAW A5.1.4);

A5.1.2.4.3 Must provide a quality source feed water (IAW A5.1.5), and

A5.1.2.4.4 Must collect water samples IAW Lab protocol (IAW A5.1.6).

#### **A5.1.3 Facility**

A5.1.3.1 Contractor's responsibilities with respect to the water quality testing facility are:

A5.1.3.1.1 Water quality testing must not be subjected to outdoor ambient temperatures or weather events;

A5.1.3.1.2 Must have access to water source, water drainage, power, or other materials and/or tools required to address potential problems that we could encounter during setup;

- A5.1.3.1.3 Must allow the WTS to operate using both Generator and external power source inside the facility;
- A5.1.3.1.4 Must provide vessels to contain test waters as well as Permeate waters upon completion of filtration;
- A5.1.3.1.5 Must permit access for multiple days of testing and/or possible re-test on sub-subsequent day(s) or week(s); and
- A5.1.3.1.6 Must permit access to Government Canada personnel and equipment to conduct testing;

#### A5.1.4 Test Setup

- A5.1.4.1 The Setup of the WTS vessels will be imperative to allow Canada and the Contractor conducting in-situ testing concurrently to confirm test waters meet the defined general parameters.

- A5.1.4.2 Contractor's responsibilities with respect to test set up are:

- A5.1.4.2.1 The contractor must allow DND personnel to assist with test installation, source water preparation and test water analysis, in-situ verification and confirmation of data measurements with their own equipment, in conjunction with the contractor's personnel.
- A5.1.4.2.2 The Contractor must conduct all in-situ water testing and sampling with DND personnel and subject matter experts witnessing the procedure;
- A5.1.4.2.3 The contractor must have an inline system set up with a temperature probe at the WTS inlet to maintain and monitor the feed test water temperature;
- A5.1.4.2.4 The contractor must have an inline system set up to monitor the total dissolved solids (TDS) of the feed test water at the WTS inlet; and
- A5.1.4.2.5 A flow rate and pressure monitor must be set up after every unit operation in the WTS (a unit operation in the WTS is defined as a component that is designed, or would be reasonably assumed, to change the system pressure or that is designed to remove contaminants from the challenge water).
- A5.1.4.2.6 Must utilize vessels with the following requirements:
  - A5.1.4.2.6.1 The vessel(s) must be constructed of a material that will not contaminate the challenge and permeate water;
  - A5.1.4.2.6.2 Must be of an appropriate size in order to contain the required volume of test water IAW approved test plan.
  - A5.1.4.2.6.3 Must be outfitted with a system that continuously agitates the test water to maintain contaminant suspension and to ensure equal contaminant distribution; and
  - A5.1.4.2.6.4 Must have water level markings in liters, on reservoir body;

**A5.1.5 Source of water**

- A5.1.5.1 The Contractor must supply the **source water** and **test water** for the WTS test IAW approved Test plan and procedures;
- A5.1.5.2 The **Source water** is the water that meets the general parameters defined by Canada, prior to any addition of ingredients. The Contractor will be responsible to provide lab result, to Canada, confirming that the water source meet all the parameters, IAW test plan.
- A5.1.5.3 The **Test water** is the source water with the addition of the ingredients from **Table 1. Test Water Ingredients and General Parameter Requirements**.
- A5.1.5.4 Contractor's responsibilities with respect to the source water and test waters are as follows:
  - A5.1.5.4.1 Source water and Test waters must be prepared by the contractor;
  - A5.1.5.4.2 The contractor must demonstrate that the water source does not contain ingredients at levels that will affect the water quality testing (Lab support data);
  - A5.1.5.4.3 The contractor must allow appropriate time for homogenization of the test water mixture and demonstrate, with in-situ measurements (e.g. density, TDS/ conductivity) , that test water meet the general parameters defined by Canada at A5.3 Test Procedures and Minimum Performance Requirements #1,2,3 and 4;
  - A5.1.5.4.4 The contractor must prepare sufficient test water for each respective test and achieve the amount of required average permeate flow rate specified in Test Water 1,2,3 and 4;
  - A5.1.5.4.5 The contractor must continuously agitate the test water to maintain contaminant suspension and to ensure equal contaminant distribution;

**A5.1.6 In situ Testing, Sampling and Analyses**

- A5.1.6.1 All *in situ* testing, water sampling and subsequent laboratory analyses must be conducted to ensure general test waters parameters and contaminant requirements are met and to determine permeate contaminant concentrations.
- A5.1.6.2 Any evident variation of the in-situ test results of the test water(s) parameters between Canada and the contractor must be addressed by taking the average parameter reading of Canada's and the contractor's results.
- A5.1.6.3 Until source water and test water parameters conditions have been met, the WTS testing will not take place. Once met, they must be maintained throughout the test.
- A5.1.6.4 The Contractor must have a contract in place with the laboratory(ies) conducting the analyses. Canada must be listed on the contract with the laboratory(ies) conducting the analyses and copied on test results directly from the lab. Lab results can be sent to PSPC Canada.

A5.1.6.5 All laboratory analyses must be conducted by a laboratory which is accredited to ISO/IEC 17025 for the required parameters in drinking water. The laboratory accreditation must be from an accreditation body which is signatory to the ILAC MRA (International Laboratory Accreditation Cooperation Mutual Recognition Arrangement).

A5.1.6.6 Samples Responsibilities:

A5.1.6.6.1 Sample collection must be IAW approved methods by a recognized water testing standards development organization (e.g. ASTM, NSA, EPA, and Health Canada). The following sample collections must be the contractor's responsibility.

A5.1.6.6.1.1 Source water samples prior to adding any ingredient IAW approved test plan;

A5.1.6.6.1.2 Test water samples after adding ingredients IAW approved test plan;

A5.1.6.6.1.3 Test water samples of the in process test water at various stages of treatment IAW approved test plan; and

A5.1.6.6.1.4 Permeate sample post filtration;

A5.1.6.6.2 Sampling must be appropriate to ensure the integrity of the test results for the parameters being tested, and performed in accordance with water testing standards,

A5.1.6.6.3 Failure to follow the defined procedures may result in the Contractor conducting a re-tests.

#### **A5.1.7 Compliance**

A5.1.7.1 Laboratory test results that do not meet the contaminant parameters or permeate quality requirements defined for each test water will be considered a fail and the contractor will be required to address the issue and conduct a re-test. The permeate quality requirements are based on the Guidelines for Canadian Drinking Water Quality (GCDWQ) and on the Ontario Drinking Water Standards (ODWS) for instances where the GCDWQ lacks specificity.

**APPENDIX A**  
**TO W8476-216378**  
**REVISED 24 MARCH 2022**

**ation and Verification**

**Table 1. Test Water Ingredients and General Parameter Requirements.**

	Test Water						
	1 – Bio-fouling and Hardness		2 – Bacteria and Virus Elimination		3 – Organic Reduction		4 – Inorganic Reduction
<b>ts and imum itration</b>	Sodium chloride	44,780 ppm	Escherichia Col	5·10 <sup>8</sup> CFU/L	MTBE	0.25 ppm	Sodium Arsenite 1 ppm (as arsenic (III))
	Calcium chloride	200 ppm calcium carbonate equivalent	GI F-Specific RNA Coliphage MS2	5·10 <sup>8</sup> PFU/L	Carbon Tetrachloride	0.1 ppm	Sodium Iodide 60 ppm (as iodide)
	Magnesium chloride		Sodium Chloride	290 ppm	Chloroform	2.0 ppm	Sodium Fluoride 50 ppm (as fluoride)
	Humic acid	20 ppm	Humic acid	10 ppm	Benzene	0.4 ppm	Sodium Perchlorate 0.2 ppm (as perchlorate)
					Sodium Chloride	300 ppm	Sodium Nitrate 195 ppm (as nitrate)
							Cesium Chloride 1.5 ppm (as cesium)
							Mercury (II) Chloride 0.02 ppm (as mercury (II))
							Lead (II) Chloride 0.5 ppm (as lead (II))
							Sodium Chloride 135 ppm
<b>Chlorine (ppm)</b>	<0.002		<0.002		<0.002		<0.002
<b>Water Temperature (C)</b>	18-22		18-22		18-22		18-22
<b>pH</b>	6-8		6-8		6-8		6-8
<b>Hardness (ppm)</b>	45,000 (±10%)		≥300		≥300		≥1,500
<b>Alkalinity (ppm)</b>	≥200		<200		<200		<200
<b>Alkalinity (ppm)</b>	≥20		≥10		<5 <sup>1</sup>		<5 <sup>1</sup>
<b>Alkalinity (ppm)</b>	≤1		≤1		≤1		≤1

if the Environment (MOE). 2003 (revised 2006). The Technical Support Document for the Ontario Drinking Water Quality Standards, Objectives and

### A5.3 Test Procedures and Minimum Performance Requirements

#### A5.3.1 Requirements

A5.3.1.1 The required test conditions, test water concentrations, and allowable permeate concentrations for each of the test waters are in Sections A1.5.2 – A1.5.5. The general parameters defined in Section A1.4 must be monitored in-situ and maintained throughout the test. The specific test water and permeate contaminant concentrations will be verified by laboratory testing.

#### A5.3.2 Test Water 1: Organic Carbon Fouling and Hard Water Treatment

A5.3.2.1 The test water parameters, contaminant concentrations, and allowable permeate concentrations for organic carbon fouling and hard water treatment are in Table 2.

**Table 2. Test water 1 - Test Conditions, Contaminant Parameters and Performance Requirements**

Test Conditions		
Test Duration	2 hrs	
Required Average Permeate Flow Rate	625 L/h	
Contaminant Parameters and Performance Requirements		
Contaminant Parameter	Test Water Concentration (ppm)	Allowable Permeate Concentration (ppm)
TDS	45,000 +/- 10%	AO: ≤ 500 (Table 2, p. 19) <sup>1</sup>
Hardness	200	80-100 (Table 2, p. 13)
DOC	20	AO: 5 (p. 21) <sup>2</sup>
Sodium	17,616 ppm	200 ppm (Table 2, p. 18) <sup>1</sup>
Chloride	27,164 ppm	250 ppm (Table 2, p. 9) <sup>1</sup>

<sup>1</sup> AO – Aesthetic Objective. Health Canada (2020). Guidelines for Canadian Drinking Water Quality – Summary Table. Water and Air Quality Bureau, Healthy Environments and Consumer Safety Branch, Health Canada, Ottawa, Ontario.

<sup>2</sup> AO – Aesthetic Objective. Ontario Ministry of the Environment (MOE). 2003 (revised 2006). The Technical Support Document for the Ontario Drinking Water Quality Standards, Objectives and Guideline. PIBS 4449e01 Available on <https://www.ontario.ca/>

#### A5.3.3 Test Procedure:

A5.3.3.1 The WTS must be flushed with water as per system requirements and the flow and pressure must be recorded after every unit operation in the WTS to use as a clean system baseline.

A5.3.3.2 The test water must run through the WTS with the WTS operating in a double-pass mode. The trial is said to start 5 minutes after the test water begins being processed by the WTS and the trial is set to last for 2 hours. The inlet temperature reading the inlet total dissolved solids reading must be recorded at the start of the trial every 5 minutes after trial start to ensure feed consistency. These values must be automatically monitored and recorded for the entire duration of the trial.

A5.3.3.3 The flow rate and pressure must be recorded after every unit operation in the WTS at the start of the trial and every 5 minutes after trial start. These values must be automatically monitored and recorded for the entire duration of the trial.

- A5.3.3.4 To determine contaminant rejection/reduction, a sample must be collected from permeate streams every 15 minutes. The temperature, pH, TDS, and free chlorine of these samples must be measured immediately. The samples must then be processed and shipped to a laboratory to determine the concentrations of TDS, DOC, water hardness (as calcium carbonate), sodium, chloride, and disinfection by-products (DBPs).
- A5.3.3.5 The WTS must be turned off after 2 hours of trial time, drained and then the Contractor manufacturer's instructions must be followed to operate the clean-in-place system.
- A5.3.3.6 The remaining volume of test water must be measured. The remaining test water volume is to be compared to the volume of permeate produced and the initial test water volume to determine the percent permeate production.

#### A5.3.4 Evaluation Criteria

- A5.3.4.1 The permeate flow rate data after filtration processes collected every 5 minutes must be plotted. The data will be extrapolated to estimate the flow rate curve of the WTS over 20 hours of continuous operation. The WTS is deemed to have sufficient permeate flow rate if the total flow rate expected during 20 hours of operation averages of 625 L/h.
- A5.3.4.2 All permeate parameter values and contaminant concentrations must meet the specified permeate quality standards in Table 2. DBP concentrations must meet GCDWQ standards, pH standards excluded. The quality standards must be met by both the single-pass and double-pass permeate samples, however total TDS reduction, sodium reduction, and chlorine reduction must only be met by the double-pass permeate sample.

#### A5.3.5 Test water 2: Bacteria and Virus Elimination

- A5.3.5.1 The test water parameters, contaminant concentrations, and allowable permeate concentrations for bacteria and virus elimination are in Table 3.

**Table 3. Test Water 2 - Test Conditions, Contaminant Parameters and Performance Requirements**

Test Conditions		
Test Duration		1 hr
Required Average Permeate Flow Rate		1,250 L/h
Contaminant Parameters and Performance Requirements		
Contaminant Parameter	Test Water Concentration (ppm)	Allowable Permeate Concentration (ppm)
DOC	10.00 ppm	AO: 5 (p. 21) <sup>2</sup>
Escherichia Coli	5·10 <sup>8</sup> CFU/L	None detectable/100 mL (Table 1, p.4) <sup>1</sup>
GI F-Specific RNA Coliphage MS2	5·10 <sup>8</sup> PFU/L	None detectable /100 mL (Table 1, p.4 as "Total coliforms" surrogate) <sup>1</sup>

<sup>1</sup> AO – Aesthetic Objective. Health Canada (2020). Guidelines for Canadian Drinking Water Quality – Summary Table. Water and Air Quality Bureau, Healthy Environments and Consumer Safety Branch, Health Canada, Ottawa, Ontario.



<sup>2</sup> AO – Aesthetic Objective. Ontario Ministry of the Environment (MOE). 2003 (revised 2006). The Technical Support Document for the Ontario Drinking Water Quality Standards, Objectives and Guideline. PIBS 4449e01 Available on <https://www.ontario.ca/>

**A5.3.6 Test Procedure:**

- A5.3.6.1 The WTS must be flushed with water as per system requirements and the flow rate and pressure must be recorded after every unit operation in the WTS to use as a clean system baseline.
- A5.3.6.2 The test water must run through the WTS with the WTS operating in single-pass mode. The trial is said to start 5 minutes after the test water begins being processed by the WTS and the trial is set to last for 1 hour. The inlet temperature reading and the inlet total dissolved solids reading must be recorded at the start of the trial and every 5 minutes after trial start to ensure feed consistency. These values would ideally be automatically monitored and recorded for the entire duration of the trial.
- A5.3.6.3 The flow rate and pressure must be recorded after every unit operation in the WTS at the start of the trial and every 5 minutes after trial start. These values must be automatically monitored and recorded for the entire duration of the trial.
- A5.3.6.4 To determine contaminant reduction, a sample must be collected from the permeate stream every 15 minutes. The temperature, pH, TDS, and free chlorine of these sample must be measured immediately. The samples must be analyzed within one hour using an ATP test to determine the concentration of intracellular ATP and dissolved (extracellular) ATP. The samples must then be processed and shipped to a laboratory to determine the concentrations of DOC, Escherichia Coli, GI F-Specific RNA Coliphage MS2 and DBPs.
- A5.3.6.5 The WTS must be turned off after 1 hour of trial time, drained and then the manufacturer's instructions must be followed to operate the clean-in-place system
- A5.3.6.6 The remaining volume of test water must be measured. The remaining test water volume is to be compared to the volume of permeate produced and the initial test water volume to determine the percent permeate production.
- A5.3.6.7 A sample of the left-over test water must be collected. This sample must be analyzed must within one hour using an ATP test to determine the concentration of intracellular ATP and dissolved (extracellular) ATP.

**A5.3.7 Evaluation Criteria:**

- A5.3.7.1 The permeate flow rate data after single-pass collected every 5 minutes will be plotted. The data will be extrapolated to estimate the flow rate curve of the WTS over 20 hours of continuous operation. The WTS is deemed to have sufficient permeate flow rate if the total flow rate expected during 20 hours of operation averages to 1,250 L/h.
- A5.3.7.2 All permeate parameter values and contaminant concentrations must meet the specified permeate quality standards in Table 3. DBP concentrations must meet GCDWQ standards, pH standards excluded. The sample collected from the left-over test water in Test Procedure at Para A5.7.2.7 above must demonstrate that active biological contaminants in the test water remained at the concentrations specified in Table 3.

### A5.3.8 Test water 3: Organic Compound Reduction

- A5.3.8.1 The test water parameters, contaminant concentrations, and allowable permeate concentrations for the organic compound rejection challenge are in Table 4.

**Table 4. Test Water 3 - Test Conditions, Contaminant Parameters and Performance Requirements**

Test Conditions		
Test Duration		1 hr
Required Average Permeate Flow Rate		1,250 L/h
Contaminant Parameters and Performance Requirements		
Contaminant Parameter	Test Water Concentration (ppm)	Allowable Permeate Concentration (ppm)
MTBE	0.25 ppm	0.015 ppm (Table 2, p.15) <sup>1</sup>
Carbon Tetrachloride	0.1 ppm	0.002 ppm (Table 2, p.9) <sup>1</sup>
Chloroform	2.0 ppm	0.1 ppm (Table 2, p.20 as "Trihalomethanes" surrogate) <sup>1</sup>
Benzene	0.4 ppm	0.005 ppm (Table 2, p. 7) <sup>1</sup>

<sup>1</sup> AO – Aesthetic Objective. Health Canada (2020). Guidelines for Canadian Drinking Water Quality – Summary Table. Water and Air Quality Bureau, Healthy Environments and Consumer Safety Branch, Health Canada, Ottawa, Ontario.

### A5.3.9 Test Procedure:

- A5.3.9.1 The WTS system must be flushed with source water and the flow rate and pressure must be recorded after every unit operation in the WTS to use as a clean system baseline.
- A5.3.9.2 The test water must run through the WTS with the WTS operating in single-pass mode. The trial is said to start 5 minutes after the test water begins being processed by the WTS and the trial is set to last for 1 hour. The inlet temperature reading and the inlet total dissolved solids reading must be recorded at the start of the trial and every 5 minutes after trial start to ensure feed consistency. These values would ideally be automatically monitored and recorded for the entire duration of the trial.
- A5.3.9.3 The flow rate and pressure must be recorded after every unit operation in the WTS at the start of the trial and every 5 minutes after trial start. These values would ideally be automatically monitored and recorded for the entire duration of the trial.
- A5.3.9.4 To determine contaminant rejection, a sample must be collected from the permeate stream every 15 minutes. The temperature, pH, TDS, and free chlorine of these samples must be measured immediately. The samples must then be processed and shipped to a laboratory to determine the concentrations of MTBE, carbon tetrachloride, benzene, and DBPs.
- A5.3.9.5 The WTS must be turned off after 1 hour of trial time, drained and then the manufacturer's instructions must be followed to operate the clean-in-place system.
- A5.3.9.6 The remaining volume of test water must be measured. The remaining test water volume is to be compared to the volume of permeate produced and to the initial test water volume to determine the percent permeate production.

#### A5.3.10 Evaluation Criteria

A5.3.10.1 The permeate flow rate data after single-pass collected every 5 minutes will be plotted. The data will be extrapolated to estimate the flow rate curve of the WTS over 20 hours of continuous operation. The WTS is deemed to have sufficient permeate flow rate if the total flow rate expected during 20 hours of operation averages to 1,250 L/h.

A5.3.10.2 All permeate parameter values and contaminant concentrations must meet the specified allowable permeate concentrations in Table 4. DBP concentrations must meet GCDWQ standards.

#### A5.3.11 Test water 4: Inorganic Compound Reduction

A5.3.11.1 The test water parameters, contaminant concentrations, and allowable permeate concentrations for the inorganic compound rejection challenge are in Table 5.

**Table 5. Test water 4 - Test Conditions, Contaminant Parameters and Performance Requirements**

Test Conditions		
Test Duration		1 hr
Required Average Permeate Flow Rate		625 L/h
Contaminant Parameters and Performance Requirements		
Contaminant Parameter	Test Water Concentration (ppm)	Allowable Permeate Concentration (ppm)
Arsenic (III)	1	0.01 ppm (Table 2, p. 7) <sup>1</sup>
Iodide	60	0.03 ppm (Table 3, p. 22 as "Iodine-131" surrogate) <sup>1,3</sup>
Fluoride	50	1.5 ppm (Table 2, p. 13) <sup>1</sup>
Perchlorate	0.2	0.006 ppm (Table 7.2, p. 34) <sup>2</sup>
Nitrate	195	10 ppm (Table 2, p. 15) <sup>1</sup>
Cesium	1.5	0.001 ppm (Table 3, p. 22 as "Cesium-137" surrogate) <sup>1,3</sup>
Mercury (II)	0.2	0.001 ppm (Table 2, p. 15) <sup>1</sup>
Lead (II)	0.5	0.005 ppm (Table 2, p. 14) <sup>1</sup>
Chloride	135	200 ppm (Table 2, p. 18) <sup>1</sup>
Chloride	80.23	250 ppm (Table 2, p. 9) <sup>1</sup>
TDS	1500	AO: ≤ 500 (Table 2, p. 19) <sup>1</sup>

<sup>1</sup> AO – Aesthetic Objective. Health Canada (2020). Guidelines for Canadian Drinking Water Quality – Summary Table. Water and Air Quality Bureau, Healthy Environments and Consumer Safety Branch, Health Canada, Ottawa, Ontario.

<sup>2</sup> NSF International (2016). NSF/ANSI 58 - Reverse osmosis drinking water treatment systems. NSF International Standard/American National Standard for Drinking Water Treatment Units. NSF International.

<sup>3</sup>Permeate Quality Standard adjusted with respect to percent rejection objective and post-processing analysis limitations

#### A5.3.12 Test Procedure:

A5.3.12.1 The WTS must be flushed with water and the flow rate and pressure must be recorded after every unit operation in the WTS to use as a clean system baseline.

- A5.3.12.2 The test water must run through the WTS with the WTS operating in double-pass mode. The trial is said to start 5 minutes after the test water begins being processed by the WTS and the trial is set to last for 1 hour. The inlet temperature reading and the inlet total dissolved solids reading must be recorded at the start of the trial and every 5 minutes after trial start to ensure feed consistency. These values would ideally be automatically monitored and recorded for the entire duration of the trial.
- A5.3.12.3 The flow rate and pressure must be recorded after every unit operation in the WTS at the start of the trial and every 5 minutes after trial start. These values would ideally be automatically monitored and recorded for the entire duration of the trial.
- A5.3.12.4 To determine contaminant reduction, a sample must be collected from permeate streams every 15 minutes. The temperature, pH, TDS, and free chlorine of these samples must be measured immediately. The samples must then be processed and shipped to a laboratory to determine the concentrations of the inorganic parameters identified in Table 5.
- A5.3.12.5 The WTS must be turned off after 1 hour of trial time, drained and then the manufacturer's instructions must be followed to operate the clean-in-place system
- A5.3.12.6 The remaining volume of test water must be measured. The remaining test water volume is to be compared to the volume of permeate produced and the initial test water volume to determine the percent permeate production.

#### **A5.3.13 Evaluation Criteria**

- A5.3.13.1 The permeate flow rate data after single-pass collected every 5 minutes will be plotted. The data will be extrapolated to estimate the flow rate curve of the WTS over 20 hours of continuous operation. The WTS is deemed to have sufficient permeate flow rate if the total flow rate expected during 20 hours of operation averages to 625 L/h.
- A5.3.13.2 All permeate parameter values and contaminant concentrations must meet the specified permeate quality standards in Table 5.

## A6.0 APPENDIX: CHEMICAL AGENT RESISTANT COATING (CARC) SYSTEM

### A6.1 Scope

- A6.1.1 This appendix outlines the procedures to be followed and the products to be used in order to paint surfaces of the Canadian Army operational vehicles/equipment with the distinctive exterior permanent matt green colour (AMS-STD-595 #34094) and interior permanent gloss white colour (AMS-STD-595 #17925) coating systems that provide the corrosion, the camouflage, the infra-red and CARC properties required for the protection of the vehicles/equipment and for the protection of the soldier.

### A6.2 Applicable Documents and Product NSNs

- A6.2.1 Copies of these documents are available online from the US Department of Defense web site at <http://quicksearch.dla.mil/> or from the Standardization Document Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094.

Specification	NSN	Description
MIL-DTL-53072	N/A	Detail Specification Chemical Agent Resistant Coating (CARC) System Application Procedures and Quality Control Inspection
DOD-P-15328	8030-00-281-2726	Primer (Wash), Pre-treatment (Formula 117 For Metals) (Metric) (NSN for 1 US Gal size kit)
TT-C-490 Type III	8030-00-281-2726	Chemical Conversion Coatings and Pre-treatments for Ferrous Surfaces (Base for Organic Coatings) (NSN for 1 US Gal size kit)
AMS-STD-595	N/A	Colors Used in Government Procurement
MIL-DTL-53022 Type IV	8010-01-589-7077	Primer, Epoxy Coating, (Enhanced) Corrosion Inhibiting, Lead and Chromate Free (NSN for 1.25 US Gal size kit)
MIL-DTL-53022 Type V	8010-01-610-7329	Primer, Epoxy Coating, (Enhanced) Corrosion Inhibiting, Lead and Chromate Free (NSN for 6X250 ml aerosol can kits)
MIL-PRF-32348 Type I Class I with a maximum of 45 Gloss Units at 60°	8010-01-592-0167 8010-01-620-2690	Primer, Powder Coating, Corrosion Inhibiting (NSN for 50 pound bag, colour #26622 or #27875 with a maximum Gloss level of 45 Gloss Units as determined by ASTM D523 at a 60° geometry)
ASTM D 523	N/A	Standard Test Method for Specular Gloss
MIL-PRF-24667 Type I, II or IV, Composition G	8010-01-397-3806	Coating System, Non-Skid, for Roll, Spray or Self-Adhering Application (NSN for 5 US Gal kit)
MIL-DTL-64159 Type II	8010-01-493-3169 8010-01-493-3170 8010-01-493-3177 8010-01-493-3179	Coating, Water Dispersible Aliphatic Polyurethane, Chemical Agent Resistant (NSNs are for 0.75 and 3 US Gal size colour green #34094 and tan #33446)
MIL-DTL-64159 Type III	8010-01-596-7862 8010-01-596-7859 8010-01-596-7855	Coating, Water Dispersible Aliphatic Polyurethane, Chemical Agent Resistant (NSNs are for 30 mL kit colour green #34094, for 30 mL kit colour tan #33446 and for 30 mL kit colour black #37030 respectively)
MIL-PRF-22750 Type II Class H Grade B	8010-01-419-1164	Performance Specification, Coating, Epoxy, High Solids, Interior Use Only (NSN is for 1 US Gal kit colour white #17925)

MIL-PRF-32348 Type II Class I	8010-01-605-5413	Primer Powder Coating with no finish coating for <u>interior use only</u> , Chemical Agent Resistant ( <i>50 pound bag, colour white #17925</i> )
MIL-PRF-32348 Type III Class I	-	Powder Coating Camouflage Chemical Agent Resistant Finish ( <i>50 pound bag, colour green #34094</i> )
MIL-PRF-32348 Type III Class I	-	Powder Coating Camouflage Chemical Agent Resistant Finish ( <i>50 pound bag, colour tan #33446</i> )
MIL-PRF-32348 Type IV Class I	8010-01-610-2410	Powder Topcoat, Ammunition Container Chemical Agent Resistant Coating ( <i>NSN for 50 pound bag, colour green #34079</i> )
MIL-PRF-32348 Type IV Class I	8010-01-610-2413	Powder Topcoat, Ammunition Container Chemical Agent Resistant Coating ( <i>NSN for 50 pound bag, colour Tan #33446</i> )
TSP	7930-20-A0H-0013	Tri-Sodium Phosphate ( <i>1 pound container</i> )
Acetone	6810-21-878-4860	Acetone Technical ( <i>1 Liter container</i> )

### A6.3 Requirements

A6.3.1 A CARC system must be applied on the interior and exterior surfaces of the Canadian Army operational vehicles/equipment in conformance with the following descriptions.

#### A6.3.2 Cleaning

A6.3.2.1 All parts must be cleaned immediately before surface preparation. Prior to surface preparation, all surfaces must be freed of corrosion or soil contaminants such as grease, oil, welding flux, scale, dirt, adhesives or other foreign matter that may interfere with surface preparation, treatment or coating. For this purpose use a hot alkaline cleaning by immersion, spray or vapour process or appropriate organic solvent(s) as per MIL-DTL-53072 (latest edition).

A6.3.2.2 Precautions must be taken to ensure that surfaces remain clean and dry until they are pre-treated, primed and top coated.

#### A6.3.3 Surface Preparation

A6.3.3.1 Heavy metal parts must be processed by abrasive grit blast to a white metal SSPC-SP-5 surface finish to impart a profile of 38 to 50 microns (1.5 to 2 mils). Lighter delicate metal parts that cannot withstand aggressive grit blasting without warping must be processed in accordance with paragraph A6.3.3.2. For non-metallic parts surface preparation, perform a uniform scuffing of the surface with a 180 grit abrasive media. Dust-off surfaces.

A6.3.3.2 For delicate metal parts surface preparation, perform an abrasive grit blast cleaning to a white metal SSPC-SP-5 surface finish imparting to the substrate a profile of 13 microns. Dust-off surfaces.

#### A6.3.4 Surface pre-treatment

A6.3.4.1 Metal parts and non-metallic parts surfaces prepared as per paragraph A6.3.3.1 above do not require pre-treatment.

- A6.3.4.2 Delicate metal part surfaces prepared as per paragraph A6.3.3.2 above must receive an organic pre-treatment (wash primer) coating meeting the requirements of specification TT-C-490 type III (DOD-P-15328) (latest edition).

**A6.3.5 Primer**

- A6.3.5.1 A liquid primer coating meeting the requirements of specification MIL-DTL-53022 Type IV (latest edition), Epoxy Coating, Enhanced Corrosion Protection or a powder primer coating, Corrosion Inhibiting meeting the requirements of specification MIL-PRF-32348 Type I Class I (latest edition) with a maximum Gloss level of 45 Gloss Units as determined by ASTM D523 at a 60° geometry must be applied to all surfaces that need to be coated. These primers must be applied to a dry film thickness (DFT) as recommended by the manufacturer technical data sheet or specifically for MIL-DTL-53022 Type IV (latest edition) when applied direct to metal (i.e. w/o pre-treatment), a DFT of 50 to 63 microns must be achieved when measuring the DFT of the primers over the highest peaks of the profile. For interior surfaces see also para A6.3.7.2.2.

- A6.3.5.2 WARNING: Powder primer coatings requiring a cure temperature above 180°C must not be used on composite materials or parts pre-treated with TT-C-490 Type III.

**A6.3.6 Non-Skid Surface**

- A6.3.6.1 Apply, as per manufacturer's instructions a non-skid coating meeting the requirements of specification MIL-PRF-24667 Type I, II, or IV, Composition G, (latest edition) colour #36076 (dark grey) in accordance with AMS-STD-595 (latest edition) to surface areas intended as walk-on surfaces.

- A6.3.6.2 WARNING: Products qualified to MIL-PRF-24667 Type I, II, or IV, Composition G are applied in a relatively thick coat and contain solvents that will negatively affect the adhesion of the primer MIL-DTL-53022 Type IV if applied too soon i.e. before the primer "Dry Hard" condition has been reached. Therefore, the non-skid product must be applied no sooner than the dry hard condition of the primer and its dry hard condition must be reached within a period of time that will allow for the application of the topcoat within 24 hours of the application of the primer.

**A6.3.7 Topcoat**

**A6.3.7.1 Exterior Surfaces**

- A6.3.7.1.1 A liquid polyurethane topcoat meeting the requirements of specification MIL-DTL-64159 Type II (latest edition) or a finish powder coating meeting the requirements of MIL-PRF-32348 Type III Class I, colour #34094 (flat green) as per AMS-STD-595 (latest edition) must be applied to exterior surfaces including exterior walk-on surface areas having non-skid coating.

- A6.3.7.1.2 WARNING: Powder coatings requiring a cure temperature above 180°C must not be applied over composite materials, MIL-PRF-24667 Type I, II, or IV, Composition G non-skid or MIL-DTL-53022 Type IV epoxy based coatings.

**A6.3.7.2 Interior Surfaces**

- A6.3.7.2.1 An epoxy topcoat meeting the requirements of specification MIL-PRF-22750 Type II, Class H, Grade B (latest edition), colour #17925 (gloss white) as per AMS-STD-595 (latest edition) must be applied to interior surfaces including walk-on surface areas with non-skid coating.
- A6.3.7.2.2 Powder primers that do not require a finish coating and meeting the requirements of MIL-PRF-32348 Type II Class I (latest edition), colour #17925 (gloss white) as per AMS-STD-595 (latest edition) intended for direct to metal in a single application can also be used on interior surfaces.
- A6.3.7.2.3 **WARNING:** Powder primer coatings requiring a cure temperature above 180°C must not be applied over composites or MIL-PRF-24667 Type I, II, or IV, Composition G non-skid epoxy based coatings.

A6.3.7.3 Interior surfaces of parts that could be directly exposed to chemical agents such as hatches, ramps and doors must be coated as per paragraph A6.3.7.1 above.

A6.3.7.4 **WARNING:** The topcoats must not be applied before the “Dry Hard” condition of the non-skid material has been reached and must be applied within 24 hours after the application of the primer. There must be no walking on non-skid surfaces for a period of 7 days to allow full cure of the coating system.

**A6.3.8 Marking and Touch-Up**

**A6.3.8.1 Marking**

- A6.3.8.1.1 Markings identifying the vehicle/equipment information, the flag, numbering and lettering must be performed with a touch-up coating kit meeting MIL-DTL-64159 Type III (latest edition) and AMS-STD-595 (latest edition) colour #37030 (flat black). Markings must be applied directly over the CARC system topcoat following its cleaning, if required, with a 2% weight TSP in potable water solution followed by a potable water rinse and then an acetone wipe & dry.

**A6.3.8.2 Touch-Up**

- A6.3.8.2.1 For defects or damages to the CARC system that expose the substrate it is required to clean the area to be reworked; for this purpose use a 2% weight TSP in potable water solution followed by a potable water rinse and then an acetone wipe & dry. For metallic components it is then required to remove rust or corroded metal by sanding using an 80 grit paper or a mechanically driven steel brush (if a steel brush is used it will be required to clean again the surface as described above). For composite materials, hand-scuff using a 180 grit paper. Remove sanding dust with a clean dry paint brush and apply a coat of primer meeting the requirements of specification MIL-DTL-53022 Type V (latest edition); feather-in with the existing primer. Touch-up of the topcoat must be performed (at the dry-to-touch condition of the touch-up primer) with a touch-up coating kit meeting MIL-DTL-64159 Type III (latest edition) and AMS-STD-595 (latest edition) colour #34094 (flat green); feather-in with the existing topcoat.



- A6.3.8.2.2 For defects or damages to the CARC system that expose the primer it is required to clean the area to be reworked; for this purpose use a 2% weight TSP in potable water solution followed by a potable water rinse and then an acetone wipe & dry. Hand-scuff the primer and surrounding topcoat using a 180 grit scuffing paper. Touch-up of the topcoat must be performed with a touch-up coating kit meeting MIL-DTL-64159 Type III (latest edition) and AMS-STD-595 (latest edition) colour #34094 (flat green); feather-in with the existing topcoat.

**A6.3.9 Selection of Materials, Mixing and Application**

- A6.3.9.1 Materials used must be selected from the applicable qualified products list (QPL/QPD) and must be mixed and applied as per the manufacturers' Technical Data Sheet (except for MIL-DTL-53022 Type IV (latest edition) DFT when applied direct to metal (see para A6.3.5.1). The brand name and QPL/QPD number of the materials used must be reported to the Technical Authority/Project Configuration Manager for CAF configuration, health, and safety purposes after acceptance of First Article Test Report.

**A6.3.10 Special Measures for Equipment Manufacturers / Painting Contractors**

- A6.3.10.1 In any instance where the CARC system specified herein interferes with the design features of specific components that are key to the operation of the equipment, it is the manufacturer's responsibility to identify and propose a suitable alternative coating system having high chemical agent resistance and corrosion protection properties. The brand name of the approved alternative coating system materials must be reported to the TA.
- A6.3.10.2 Deviations from CARC products and application processes identified herein as well as deviations from the product manufacturer Technical Data Sheet must be reported to the TA for their evaluation and approval.

ANNEX B1

BASIS OF PAYMENT

MANDATORY COMPLETION OF EACH PRICE "BOX". IF THERE IS NO COST PLEASE INSERT "0".						
Item #	Location	Item Description	Qty	Unit price	Total price	
1	CFB Gagetown, NB	Equipment delivery #1 must be within 40 weeks of Design Acceptance. This will only be accepted once the ILS Document Delivery items are provided and accepted by DND. Costs for Preparation for shipping, Shipping and Packaging must be included in the unit prices.	Water Treatment Unit (WTU) (para. A1.2.1)	4	\$ -	\$ -
			Miscellaneous Equipment Unit (MEU) (para. A1.2.2)	4	\$ -	
			Arctic Sustainment Unit (ASU) (para. A1.2.3)	2	\$ -	
			Water Storage Unit (WSU) (para A1.2.4)	5	\$ -	
			Trailer (para. A1.2.5)	4	\$ -	
2	CFB Edmonton, AB		Water Treatment Unit (WTU) (para. A1.2.1)	3	\$ -	\$ -
			Miscellaneous Equipment Unit (MEU) (para. A1.2.2)	3	\$ -	
			Arctic Sustainment Unit (ASU) (para. A1.2.3)	2	\$ -	
			Water Storage Unit (WSU) (para A1.2.4)	4	\$ -	
			Trailer (para. A1.2.5)	3	\$ -	
3	CFB Petawawa, ON	Equipment deliveries #2, #3, and #4 must be within 52 weeks of Design Acceptance, and must include the following items, and the remaining CDRL items. Costs for Preparation for shipping, Shipping and Packaging must be included in the unit prices.	Water Treatment Unit (WTU) (para. A1.2.1)	3	\$ -	\$ -
			Miscellaneous Equipment Unit (MEU) (para. A1.2.2)	3	\$ -	
			Arctic Sustainment Unit (ASU) (para. A1.2.3)	1	\$ -	
			Water Storage Unit (WSU) (para A1.2.4)	7	\$ -	
			Trailer (para. A1.2.5)	3	\$ -	
4	CFB Valcartier, QC		Water Treatment Unit (WTU) (para. A1.2.1)	4	\$ -	\$ -
			Miscellaneous Equipment Unit (MEU) (para. A1.2.2)	4	\$ -	
			Arctic Sustainment Unit (ASU) (para. A1.2.3)	2	\$ -	
			Water Storage Unit (WSU) (para A1.2.4)	6	\$ -	
			Trailer (para. A1.2.5)	4	\$ -	
5	CFB Petawawa, ON		Water Treatment Unit (WTU) (para. A1.2.1)	4	\$ -	\$ -
			Miscellaneous Equipment Unit (MEU) (para. A1.2.2)	4	\$ -	
			Water Storage Unit (WSU) (para A1.2.4)	8	\$ -	
			Trailer (para. A1.2.5)	4	\$ -	
6	CFB Valcartier, QC	Equipment deliveries #5, #6, #7, and #8 must be within 78 weeks of Design Acceptance. This does not include Option Items. Costs for Preparation for shipping, Shipping and Packaging must be included in the unit prices.	Water Treatment Unit (WTU) (para. A1.2.1)	3	\$ -	\$ -
			Miscellaneous Equipment Unit (MEU) (para. A1.2.2)	3	\$ -	
			Water Storage Unit (WSU) (para A1.2.4)	9	\$ -	
			Trailer (para. A1.2.5)	1	\$ -	
7	CFB Gagetown, NB		Water Treatment Unit (WTU) (para. A1.2.1)	3	\$ -	\$ -
			Miscellaneous Equipment Unit (MEU) (para. A1.2.2)	3	\$ -	
			Trailer (para. A1.2.5)	3	\$ -	
8	CFB Edmonton, AB		Water Treatment Unit (WTU) (para. A1.2.1)	2	\$ -	\$ -
			Miscellaneous Equipment Unit (MEU) (para. A1.2.2)	2	\$ -	
			Water Storage Unit (WSU) (para A1.2.4)	3	\$ -	
			Trailer (para. A1.2.5)	2	\$ -	
9	Project Management Plan (para. 3.2)		LOT	\$ -	\$ -	
10	Contract Master Schedule (para. 3.3)		LOT	\$ -	\$ -	
11	Contract Work Breakdown Structure (para 3.4)		LOT	\$ -	\$ -	
12	Contract Status Report (para 3.5)		LOT	\$ -	\$ -	
13	Kick-off, Systems Engineering and ILS Meetings (para. 3.6.2 - 3.6.4)		1	\$ -	\$ -	
	Meeting Agenda (para. 3.6.6.1.1)					
	Meeting Minutes (para. 3.6.6.1.2)					
14	Systems Engineering Management Plan (SEMP) (para. 4.2.2.1)		LOT	\$ -	\$ -	
15	Mandated System Review (MSR) Package - Preliminary Design Review (PDR) (para. 4.2.4.4)		1	\$ -	\$ -	
	Requirements Traceability Verification Matrix (RTVM) - PDR (para. 4.2.5)					
	PDR Meeting (para. 4.3.1)					
	Meeting Agenda (para. 3.6.6.1.1)					
	Meeting Minutes (para. 3.6.6.1.2)					
16	MSR Package - Critical Design Review (CDR) (para. 4.2.4.4)		1	\$ -	\$ -	
	Engineering Drawings and Associated Lists - Level 1 Conceptual and Developmental Design (para. 4.4.3)					
	RTVM - CDR (para 4.2.5)					
	CDR Meeting (para. 4.3.2)					
	Meeting Agenda (para. 3.6.6.1.1)					
17	Configuration Status Accounting Report (para. 5.5.2)		1	\$ -	\$ -	
	MSR Package - Testing Readiness Review (TRR) (para. 4.2.4.4)					
	Acceptance Test Plans and Procedures (para. 6.1.1.2)					
	RTVM - TRR (para 4.2.5)					
	TRR Meeting (para 6.1.3)					
18	Meeting Agenda (para. 3.6.6.1.1)		1	\$ -	\$ -	
	Meeting Minutes (para. 3.6.6.1.2)					
	Acceptance Verification (para 6.2)					
	Acceptance Test Reports (para. 6.2.1.4)					
	RTVM Final (para 4.2.5)					
19	MSR Package - Physical Configuration Audit (PCA) (para. 4.2.4.4)		1	\$ -	\$ -	
	Engineering Drawings and Associated Lists - Level 2 Production Prototype and Limited Production (para. 4.4.3)					
	PCA Meeting (para. 5.6.4)					
	Meeting Agenda (para. 3.6.6.1.1)					
	Meeting Minutes (para. 3.6.6.1.2)					
20	Top Level Assembly Drawing (TLAD) (para. 3.6.2.2)		1	\$ -	\$ -	
21	WTS Operator Manual - English (para. 8.3.1.1)		1	\$ -	\$ -	
22A	WTS Operator Manual - Bilingual (para. 8.3.1.1)		LOT	\$ -	\$ -	
23A	WTU Operator Quick Reference Card - English (para 8.3.1.2)		1	\$ -	\$ -	
23B	WTU Operator Quick Reference Card - Bilingual (para 8.3.1.2)		LOT	\$ -	\$ -	
24A	WTS Maintenance Manual - English (para. 8.3.1.3)		1	\$ -	\$ -	
24B	WTS Maintenance Manual - Bilingual (para. 8.3.1.3)		LOT	\$ -	\$ -	

25A	WTS Permissive Repair Schedule and Standard Repair Times - English (para. 8.3.1.4)		1	\$	-	\$	-		
25B	WTS Permissive Repair Schedule and Standard Repair Times - Bilingual (para. 8.3.1.4)		1	\$	-	\$	-		
26	WTS Illustrated Parts Manual (para. 8.3.1.5)		1	\$	-	\$	-		
27A	WTS Operator Training Package - English (para. 8.3.1.6)		1	\$	-	\$	-		
27B	WTS Operator Training Package - Bilingual (para. 8.3.1.6)		LOT	\$	-	\$	-		
28A	WTU and ASU Technician Training Package - English (para. 8.3.1.7)		1	\$	-	\$	-		
28B	WTU and ASU Technician Training Package - Bilingual (para. 8.3.1.7)		LOT	\$	-	\$	-		
29A	WTS Preservation, Storage and Reactivation Instructions - English (para. 8.3.1.8)		1	\$	-	\$	-		
29B	WTS Preservation, Storage and Reactivation Instructions - Bilingual (para. 8.3.1.8)		1	\$	-	\$	-		
30A	WTS Stowage, Shipping and Handling Instructions - English (para. 8.3.1.9)		1	\$	-	\$	-		
30B	WTS Stowage, Shipping and Handling Instructions - Bilingual (para. 8.3.1.9)		1	\$	-	\$	-		
31A	WTS Data Summary - English (para. 8.3.1.10)		1	\$	-	\$	-		
31B	WTS Data Summary - Bilingual (para. 8.3.1.10)		1	\$	-	\$	-		
32	MEU, ASU and WSU Stowage Maps (para. 8.3.1.11)		LOT	\$	-	\$	-		
33	WTU Process and Flow Diagrams (para. 8.3.1.12)		LOT	\$	-	\$	-		
34A	WSU Operation, Maintenance and Parts Handbook - English (para. 8.3.1.13)		1	\$	-	\$	-		
34B	WSU Operation, Maintenance and Parts Handbook - Bilingual (para. 8.3.1.13)		LOT	\$	-	\$	-		
35	Provisioning Parts Breakdown (para. 8.4.3.1)		1	\$	-	\$	-		
36	Supplementary Provisioning Technical Documentation (para. 8.4.3.2)		1	\$	-	\$	-		
37	Special Tools and Test Equipment List (para. 8.4.3.3)		1	\$	-	\$	-		
38	Equipment Delivery Status Report (para. 8.4.3.4)		LOT	\$	-	\$	-		
39	Material Identification Data Set (para. 8.4.4.5)		1	\$	-	\$	-		
40	Initial Provisioning Guidance Conference (para. 8.5.1)		1	\$	-	\$	-		
	Meeting Agenda (para. 3.6.6.1.1)								
	Meeting Minutes (para. 3.6.6.1.2)								
41	Initial Provisioning Conference (para. 8.6.1)		1	\$	-	\$	-		
	Meeting Agenda (para. 3.6.6.1.1)								
	Meeting Minutes (para. 3.6.6.1.2)								
42	Identification Plates – Design Template & Populated Designs (para. 8.7)		LOT	\$	-	\$	-		
43	Controlled & Non-Controlled Goods List (para. 8.8)		1	\$	-	\$	-		
44	Identification Labels for Storage and Shipment and Packaging Codes (para. 8.9)		1	\$	-	\$	-		
45	List of Items to be Supported (para. 8.10)		1	\$	-	\$	-		
46A	WTS	Training Location:	1	\$	-	\$	-		
46B	Operator	CFB Gagetown, NB	1	\$	-	\$	-		
46C	Training	CFB Valcartier, QC	1	\$	-	\$	-		
46D	Session	CFB Petawawa, ON	1	\$	-	\$	-		
46D	(para. 8.11)	CFB Edmonton, AB	1	\$	-	\$	-		
47	Warranty Support Plan (para. 8.12)		1	\$	-	\$	-		
48	Equipment Environmental Assessment (para. 9.4)		1	\$	-	\$	-		
				Total Firm Requirements (Items 1 to 48 inclusive)				\$	-
Note 1:	Items 1 - 48 above and Items 49 - 53 below will be evaluated for the lowest overall price.								
Note 2:	‘LOT’ equates to the quantity needed to fulfill the requirements of the CDRL and revisions, until accepted by DND.								
Optional Requirements:									
Item #	Item Description			Qty	Unit price		Total price		
49	Water Treatment Unit (WTU) (para. A1.2.1), up to 11 additional units, including packaging and shipping preparation costs for each unit			11	\$	-	\$	-	
50	Miscellaneous Equipment Unit (MEU) (para. A1.2.2), up to 11 additional units, including packaging and shipping preparation costs for each unit			11	\$	-	\$	-	
51	Arctic Sustainment Unit (ASU) (para. A1.2.3), up to 3 additional units, including packaging and shipping preparation costs for each unit			3	\$	-	\$	-	
52	Water Storage Unit (WSU) (para A1.2.4), up to 18 additional units, including packaging and shipping preparation costs for each unit			18	\$	-	\$	-	
53	Trailer (para. A1.2.5), up to 11 additional units, including packaging and shipping preparation costs for each unit			11	\$	-	\$	-	
54	Option to acquire Spare Parts after approval from DND			-	TBD		TBD		
55	Option to acquire Special Tool & Testing Equipment after approval from DND			-	TBD		TBD		
56	Option to acquire Fleet Support Spares after approval from DND - as described in the Annex A A3.38 DID - List of Items to be Supported.			-	TBD		TBD		
57	Additional Work Requests (if required)			-	TBD		TBD		
				Total Optional Requirements (Items 49 to 53 inclusive)				\$	-
Total Acquisition Cost = addition of Total Firm Requirements cost and Total Optional Requirements cost (to be evaluated as part of lowest overall price)									
					\$	-			

## WATER TREATMENT SYSTEM DELIVERY SCHEDULE



### NOTICE

This documentation has been reviewed by the technical authority and does not contain controlled goods. Disclosure notices and handling instructions originally received with the document must continue to apply.

### AVIS

Cette documentation a été révisée par l'autorité technique et ne contient pas de marchandises contrôlées. Les avis de divulgation et les instructions de manutention reçues originalement doivent continuer de s'appliquer.

Item #	Item Description	Qty
<b>ILS Document Delivery</b>	ILS document delivery must include the following items, as per Annex B1, in accordance with CDRL submission dates:	
21	Top Level Assembly Drawing	1
22	WTS Operator Manual	LOT
23	WTU Operator Quick Reference Card	LOT
24	WTS Maintenance Manual	LOT
25	WTS Permissive Repair Schedule and Standard Repair Times	1
26	WTS Illustrated Parts Manual	1
27	WTS Operator Training Package	LOT
28	WTU and ASU Technician Training Package	LOT
29	WTS Preservation, Storage and Reactivation Instructions	1
30	WTS Stowage, Shipping and Handling Instructions	1
31	WTS Data Summary	1
32	MEU, WSU, and ASU Stowage Maps	LOT
33	WTU Process and Flow Diagrams	LOT
34	WSU Operation, Maintenance and Parts Handbook	LOT
35	Provisioning Parts Breakdown	1
36	Supplementary Provisioning Technical Documentation	1
37	Special Tools and Test Equipment List	1
38	Material Identification Data Set	1
39	Identification Plates	LOT
40	Controlled & Non-Controlled Goods List	1
41	Identification Labels for Storage and Shipment, and Packaging Codes	1
46	Warranty Support Plan	1
<b>First Equipment Delivery</b>	First equipment delivery must be within <b>40 weeks of Design Acceptance</b> . This will only be accepted <b><u>once the ILS Document Delivery items are provided and accepted by DND.</u></b>	
Item 1 of BoP	Delivery Location – Equipment Fielding Coordination Centre – CFB Gagetown NB	
1	WTU	4
2	MEU	4
3	ASU	2
4	WSU	5
5	Trailer	4
<b>Second Equipment Delivery</b>	Second equipment delivery must be within <b>52 weeks of Design Acceptance</b> , and must include the following items, and the remaining CDRL items.	
Item 2 of BoP	Delivery location – Equipment Fielding Coordination Centre – CFB Edmonton AB	
1	WTU	3
2	MEU	3
3	ASU	2
4	WSU	4
5	Trailer	3

Item 3 of BoP	Delivery location – Equipment Fielding Coordination Centre – CFB Petawawa ON	
1	WTU	3
2	MEU	3
3	ASU	1
4	WSU	7
5	Trailer	3
Item 4 of BoP	Delivery Location - Equipment Fielding Coordination Centre – CFB Valcartier QC	
1	WTU	4
2	MEU	4
3	ASU	2
4	WSU	6
5	Trailer	4
<b>Final Equipment Delivery</b>	The final equipment delivery must be within <b>78 weeks of Design Acceptance</b> . <u>This does not include Option Items.</u>	
Item 5 of BoP	Delivery Location - Equipment Fielding Coordination Centre – CFB Petawawa ON	
1	WTU	4
2	MEU	4
4	WSU	8
5	Trailer	4
Item 6 of BoP	Delivery Location - Equipment Fielding Coordination Centre – CFB Valcartier QC	
1	WTU	3
2	MEU	3
4	WSU	9
5	Trailer	1
Item 7 of BoP	Delivery Location - Equipment Fielding Coordination Centre – CFB Gagetown NB	
1	WTU	3
2	MEU	3
5	Trailer	3
Item 8 of BoP	Delivery location – Equipment Fielding Coordination Centre – CFB Edmonton AB	
1	WTU	2
2	MEU	2
4	WSU	3
5	Trailer	2
<p><b>All deliveries must be made by appointment only, coordinated with the ILSM. The consignee may refuse shipments if prior arrangements have not been made.</b></p>		

Solicitation No. - N° de l'invitation  
W8476-216378/A  
Client Ref. No. - N° de réf. du client  
W8476-216378

Amd. No. - N° de la modif.  
File No. - N° du dossier  
hl673.W8476-216378

Buyer ID - Id de l'acheteur  
hl673  
CCC No./N° CCC - FMS No./N° VME

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## **ANNEX D1 - SECURITY REQUIREMENTS CHECK LIST – ACQUISITION CONTRACT**



SECURITY REQUIREMENTS CHECK LIST (SRCL)

LISTE DE VÉRIFICATION DES EXIGENCES RELATIVES À LA SÉCURITÉ (LVERS)

PART A - CONTRACT INFORMATION / PARTIE A - INFORMATION CONTRACTUELLE

1. Originating Government Department or Organization / Ministère ou organisme gouvernemental d'origine		2. Branch or Directorate / Direction générale ou Direction	
Department of National Defence		DCSEM	
3. a) Subcontract Number / Numéro du contrat de sous-traitance		3. b) Name and Address of Subcontractor / Nom et adresse du sous-traitant	
Not Applicable		Not Applicable	
4. Brief Description of Work / Brève description du travail			
Development and delivery of the Water Treatment Systems (WTS) for the Canadian Armed Forces (CAF). The Contractor personnel will need to access DND/CAF Operations Zone (i.e. any Canadian Forces Base in the country) for the training sessions, so Contractor staff will need Reliability Status.			
5. a) Will the supplier require access to Controlled Goods? Le fournisseur aura-t-il accès à des marchandises contrôlées?		<input checked="" type="checkbox"/> No Non	<input type="checkbox"/> Yes Oui
5. b) Will the supplier require access to unclassified military technical data subject to the provisions of the Technical Data Control Regulations? Le fournisseur aura-t-il accès à des données techniques militaires non classifiées qui sont assujetties aux dispositions du Règlement sur le contrôle des données techniques?		<input checked="" type="checkbox"/> No Non	<input type="checkbox"/> Yes Oui
6. Indicate the type of access required / Indiquer le type d'accès requis			
6. a) Will the supplier and its employees require access to PROTECTED and/or CLASSIFIED information or assets? Le fournisseur ainsi que les employés auront-ils accès à des renseignements ou à des biens PROTÉGÉS et/ou CLASSIFIÉS? (Specify the level of access using the chart in Question 7. c) (Préciser le niveau d'accès en utilisant le tableau qui se trouve à la question 7. c)		<input checked="" type="checkbox"/> No Non	<input type="checkbox"/> Yes Oui
6. b) Will the supplier and its employees (e.g. cleaners, maintenance personnel) require access to restricted access areas? No access to PROTECTED and/or CLASSIFIED information or assets is permitted. Le fournisseur et ses employés (p. ex. nettoyeurs, personnel d'entretien) auront-ils accès à des zones d'accès restreintes? L'accès à des renseignements ou à des biens PROTÉGÉS et/ou CLASSIFIÉS n'est pas autorisé.		<input type="checkbox"/> No Non	<input checked="" type="checkbox"/> Yes Oui
6. c) Is this a commercial courier or delivery requirement with <b>no</b> overnight storage? S'agit-il d'un contrat de messagerie ou de livraison commerciale <b>sans</b> entreposage de nuit?		<input checked="" type="checkbox"/> No Non	<input type="checkbox"/> Yes Oui
7. a) Indicate the type of information that the supplier will be required to access / Indiquer le type d'information auquel le fournisseur devra avoir accès			
Canada	NATO / OTAN	Foreign / Étranger	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7. b) Release restrictions / Restrictions relatives à la diffusion			
No release restrictions Aucune restriction relative à la diffusion	All NATO countries Tous les pays de l'OTAN	No release restrictions Aucune restriction relative à la diffusion	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Not releasable À ne pas diffuser			
<input type="checkbox"/>			
Restricted to: / Limité à :	Restricted to: / Limité à :	Restricted to: / Limité à :	
Specify country(ies): / Préciser le(s) pays :	Specify country(ies): / Préciser le(s) pays :	Specify country(ies): / Préciser le(s) pays :	
7. c) Level of information / Niveau d'information			
PROTECTED A PROTÉGÉ A	NATO UNCLASSIFIED NATO NON CLASSIFIÉ	PROTECTED A PROTÉGÉ A	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
PROTECTED B PROTÉGÉ B	NATO RESTRICTED NATO DIFFUSION RESTREINTE	PROTECTED B PROTÉGÉ B	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
PROTECTED C PROTÉGÉ C	NATO CONFIDENTIAL NATO CONFIDENTIEL	PROTECTED C PROTÉGÉ C	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
CONFIDENTIAL CONFIDENTIEL	NATO SECRET NATO SECRET	CONFIDENTIAL CONFIDENTIEL	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
SECRET SECRET	COSMIC TOP SECRET COSMIC TRÈS SECRET	SECRET SECRET	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
TOP SECRET TRÈS SECRET		TOP SECRET TRÈS SECRET	
<input type="checkbox"/>		<input type="checkbox"/>	
TOP SECRET (SIGINT) TRÈS SECRET (SIGINT)		TOP SECRET (SIGINT) TRÈS SECRET (SIGINT)	
<input type="checkbox"/>		<input type="checkbox"/>	





**PART A (continued) / PARTIE A (suite)**

8. Will the supplier require access to PROTECTED and/or CLASSIFIED COMSEC information or assets?  
Le fournisseur aura-t-il accès à des renseignements ou à des biens COMSEC désignés PROTÉGÉS et/ou CLASSIFIÉS? ☒ No ☐ Yes  
Non Oui  
If Yes, indicate the level of sensitivity:  
Dans l'affirmative, indiquer le niveau de sensibilité :
9. Will the supplier require access to extremely sensitive INFOSEC information or assets?  
Le fournisseur aura-t-il accès à des renseignements ou à des biens INFOSEC de nature extrêmement délicate? ☒ No ☐ Yes  
Non Oui  
Short Title(s) of material / Titre(s) abrégé(s) du matériel :   
Document Number / Numéro du document :

**PART B - PERSONNEL (SUPPLIER) / PARTIE B - PERSONNEL (FOURNISSEUR)**

10. a) Personnel security screening level required / Niveau de contrôle de la sécurité du personnel requis

<input checked="" type="checkbox"/> RELIABILITY STATUS COTE DE FIABILITÉ	<input type="checkbox"/> CONFIDENTIAL CONFIDENTIEL	<input type="checkbox"/> SECRET SECRET	<input type="checkbox"/> TOP SECRET TRÈS SECRET
<input type="checkbox"/> TOP SECRET – SIGINT TRÈS SECRET – SIGINT	<input type="checkbox"/> NATO CONFIDENTIAL NATO CONFIDENTIEL	<input type="checkbox"/> NATO SECRET NATO SECRET	<input type="checkbox"/> COSMIC TOP SECRET COSMIC TRÈS SECRET
<input type="checkbox"/> SITE ACCESS ACCÈS AUX EMPLACEMENTS			

Special comments:  
Commentaires spéciaux :

NOTE: If multiple levels of screening are identified, a Security Classification Guide must be provided.

REMARQUE : Si plusieurs niveaux de contrôle de sécurité sont requis, un guide de classification de la sécurité doit être fourni.

10. b) May unscreened personnel be used for portions of the work?  
Du personnel sans autorisation sécuritaire peut-il se voir confier des parties du travail? ☒ No ☐ Yes  
Non Oui  
If Yes, will unscreened personnel be escorted?  
Dans l'affirmative, le personnel en question sera-t-il escorté? ☐ No ☐ Yes  
Non Oui

**PART C - SAFEGUARDS (SUPPLIER) / PARTIE C - MESURES DE PROTECTION (FOURNISSEUR)**

**INFORMATION / ASSETS / RENSEIGNEMENTS / BIENS**

11. a) Will the supplier be required to receive and store PROTECTED and/or CLASSIFIED information or assets on its site or premises?  
Le fournisseur sera-t-il tenu de recevoir et d'entreposer sur place des renseignements ou des biens PROTÉGÉS et/ou CLASSIFIÉS? ☒ No ☐ Yes  
Non Oui
11. b) Will the supplier be required to safeguard COMSEC information or assets?  
Le fournisseur sera-t-il tenu de protéger des renseignements ou des biens COMSEC? ☒ No ☐ Yes  
Non Oui

**PRODUCTION**

11. c) Will the production (manufacture, and/or repair and/or modification) of PROTECTED and/or CLASSIFIED material or equipment occur at the supplier's site or premises?  
Les installations du fournisseur serviront-elles à la production (fabrication et/ou réparation et/ou modification) de matériel PROTÉGÉ et/ou CLASSIFIÉ? ☒ No ☐ Yes  
Non Oui

**INFORMATION TECHNOLOGY (IT) MEDIA / SUPPORT RELATIF À LA TECHNOLOGIE DE L'INFORMATION (TI)**

11. d) Will the supplier be required to use its IT systems to electronically process, produce or store PROTECTED and/or CLASSIFIED information or data?  
Le fournisseur sera-t-il tenu d'utiliser ses propres systèmes informatiques pour traiter, produire ou stocker électroniquement des renseignements ou des données PROTÉGÉS et/ou CLASSIFIÉS? ☒ No ☐ Yes  
Non Oui
11. e) Will there be an electronic link between the supplier's IT systems and the government department or agency?  
Disposera-t-on d'un lien électronique entre le système informatique du fournisseur et celui du ministère ou de l'agence gouvernementale? ☒ No ☐ Yes  
Non Oui



Government  
of Canada

Gouvernement  
du Canada

Contract Number / Numéro du contrat

**W8476-216378**

Security Classification / Classification de sécurité

**UNCLASSIFIED**

**PART C - (continued) / PARTIE C - (suite)**

For users completing the form **manually** use the summary chart below to indicate the category(ies) and level(s) of safeguarding required at the supplier's site(s) or premises.

Les utilisateurs qui remplissent le formulaire **manuellement** doivent utiliser le tableau récapitulatif ci-dessous pour indiquer, pour chaque catégorie, les niveaux de sauvegarde requis aux installations du fournisseur.

For users completing the form **online** (via the Internet), the summary chart is automatically populated by your responses to previous questions.

Dans le cas des utilisateurs qui remplissent le formulaire **en ligne** (par Internet), les réponses aux questions précédentes sont automatiquement saisies dans le tableau récapitulatif.

**SUMMARY CHART / TABLEAU RÉCAPITULATIF**

Category Catégorie	PROTECTED PROTÉGÉ			CLASSIFIED CLASSIFIÉ			NATO				COMSEC					
	A	B	C	CONFIDENTIAL	SECRET	TOP SECRET	NATO RESTRICTED	NATO CONFIDENTIAL	NATO SECRET	COSMIC TOP SECRET	PROTECTED PROTÉGÉ			CONFIDENTIAL	SECRET	TOP SECRET
				CONFIDENTIEL		TRÈS SECRET	NATO DIFFUSION RESTREINTE	NATO CONFIDENTIEL		COSMIC COSMIC TRÈS SECRET	A	B	C	CONFIDENTIEL		TRÈS SECRET
Information / Assets Renseignements / Biens Production																
IT Media / Support TI																
IT Link / Lien électronique																

12. a) Is the description of the work contained within this SRCL PROTECTED and/or CLASSIFIED?

La description du travail visé par la présente LVERS est-elle de nature PROTÉGÉE et/ou CLASSIFIÉE?



No  
Non

Yes  
Oui

**If Yes, classify this form by annotating the top and bottom in the area entitled "Security Classification".**

**Dans l'affirmative, classifiez le présent formulaire en indiquant le niveau de sécurité dans la case intitulée « Classification de sécurité » au haut et au bas du formulaire.**

12. b) Will the documentation attached to this SRCL be PROTECTED and/or CLASSIFIED?

La documentation associée à la présente LVERS sera-t-elle PROTÉGÉE et/ou CLASSIFIÉE?



No  
Non

Yes  
Oui

**If Yes, classify this form by annotating the top and bottom in the area entitled "Security Classification" and indicate with attachments (e.g. SECRET with Attachments).**

**Dans l'affirmative, classifiez le présent formulaire en indiquant le niveau de sécurité dans la case intitulée « Classification de sécurité » au haut et au bas du formulaire et indiquer qu'il y a des pièces jointes (p. ex. SECRET avec des pièces jointes).**



**PART D - AUTHORIZATION / PARTIE D - AUTORISATION**

13. Organization Project Authority / Chargé de projet de l'organisme

Name (print) - Nom (en lettres moulées)	Title - Titre	Signature
<b>ILIA EKCHTOUT</b>	Project Management Engineer - Technical Authority	<b>EKCHTOUT, ILIA 564</b> <small>Digitally signed by EKCHTOUT, ILIA 564 Date: 2020.10.16 10:02:34 -04'00'</small>
Telephone No. - N° de téléphone <b>819-939-0686</b>	Facsimile No. - N° de télécopieur	E-mail address - Adresse courriel <b>ilia.ekchtout@forces.gc.ca</b>
		Date <b>2020-10-16</b>

14. Organization Security Authority / Responsable de la sécurité de l'organisme

Name (print) - Nom (en lettres moulées)	Title - Titre	Signature
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Telephone No. - N° de téléphone <b>613-996-0286</b>	Facsimile No. - N° de télécopieur	E-mail address - Adresse courriel <b>sasa.medjovic@forces.gc.ca</b>
		Date

15. Are there additional instructions (e.g. Security Guide, Security Classification Guide) attached? Des instructions supplémentaires (p. ex. Guide de sécurité, Guide de classification de la sécurité) sont-elles jointes?	<input type="checkbox"/> No Non	<input type="checkbox"/> Yes Oui
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16. Procurement Officer / Agent d'approvisionnement

Name (print) - Nom (en lettres moulées)	Title - Titre	Signature
Telephone No. - N° de téléphone	Facsimile No. - N° de télécopieur	E-mail address - Adresse courriel
		Date

17. Contracting Security Authority / Autorité contractante en matière de sécurité

Cynthia Laverdure Contract Security Officer <a href="mailto:cynthia.laverdure@pwgsc.gc.ca">cynthia.laverdure@pwgsc.gc.ca</a>	Signature
E-mail address - Adresse courriel	Date

STATEMENT OF WORK  
FOR THE SUPPORT OF THE  
WATER TREATMENT SYSTEM



NOTICE

This documentation has been reviewed by the technical authority and does not contain controlled goods. Disclosure notices and handling instructions originally received with the document must continue to apply.

AVIS

Cette documentation a été révisée par l'autorité technique et ne contient pas de marchandises contrôlées. Les avis de divulgation et les instructions de manutention reçues originalement doivent continuer de s'appliquer.

## TABLE OF CONTENTS

1.0	SCOPE .....	6
1.1	Purpose .....	6
1.2	Support Timelines .....	6
1.3	Background .....	6
1.4	Concept of Operations & Support.....	6
1.5	‘CORE’, ‘R&O’, and ‘TASKING’ .....	10
1.6	Land Equipment Management System .....	10
1.7	Contractors Performing R&O.....	11
1.8	Acronyms and Abbreviations.....	12
2.0	APPLICABLE DOCUMENTS .....	15
2.1	References .....	15
2.2	Order of Precedence .....	15
3.0	CORE REQUIREMENTS.....	16
3.1	General.....	16
3.1.1	Logistics Statements of Work.....	16
3.1.2	Environmental Health and Safety.....	16
3.2	Program Management.....	17
3.2.1	General .....	17
3.2.2	Contract Reporting.....	17
3.2.3	Program Meetings.....	17
3.2.4	Government Property.....	19
3.2.5	Hazardous Materials .....	19
3.3	Operating Support .....	19
3.3.1	Operator and Technical Personnel .....	19
3.3.2	Notice to Move – FSRs .....	19
3.4	Engineering Support.....	20
3.4.1	General .....	20
3.4.2	Configuration Management.....	20
3.4.3	Technical Data Management .....	20
3.4.4	Official Language Requirements.....	21

---

3.4.5	Technical Problem Management .....	22
3.5	Maintenance Support .....	24
3.5.1	Maintenance Information Database .....	24
3.5.2	Care of Fleet Support Spares .....	24
3.5.3	Detailed Inspection and Maintenance .....	24
3.6	Supply Support.....	25
3.6.1	Contractor Warehouse Resources.....	25
3.6.2	Inventory Management .....	25
3.6.3	Catalogue for the Provision of Repairable and Consumable Items.....	25
3.6.4	Obsolescence Management .....	25
3.6.5	DND-Owned Stock Supply Logistics .....	25
3.7	Personnel Support Resources.....	26
3.7.1	Plant Shutdown/Vacation Period.....	26
4.0	R&O REQUIREMENTS .....	28
4.1	Maintenance Support .....	28
4.1.1	General .....	28
4.1.2	Extent of R&O Maintenance.....	28
4.1.3	Quality Assurance .....	29
4.1.4	Repair Turn-Around-Time (TAT).....	29
4.1.5	Repair Cost Estimates (RCE) .....	29
4.1.6	Maximum Repair Cost.....	30
4.1.7	Condemn/Scrapping Considerations .....	30
4.1.8	Calibration Requirements.....	30
4.1.9	CARC Painting.....	30
4.1.10	Software Maintenance .....	31
4.1.11	Provision of Material (R&O) .....	31
5.0	TASKING REQUIREMENTS .....	32
5.1	Operating Support.....	32
5.1.1	Operator and Technical Personnel .....	32
5.1.2	Operational Spares Kits .....	32
5.2	Engineering Support.....	33
5.2.1	Technical Investigation and Engineering Support.....	33

---

---

5.3	Maintenance Support .....	34
5.3.1	Care of Arctic Sustainment Units (ASUs) Held by the Contractor .....	34
5.3.2	Detailed Inspection and Maintenance .....	34
5.4	Supply Support.....	34
5.4.1	Provision of Material (Fleet Support Spares) .....	34
5.4.2	Provision of Material (Operational Spares Kits) .....	34
5.4.3	Provision of Material (DND request) .....	35
5.4.4	Packaging and Shipping .....	35
5.4.5	Disposal of DND-owned Stock.....	35
5.5	Training Support.....	35
5.5.1	Training Sessions .....	35
6.0	CONTRACT DELIVERABLES .....	37
6.1	Repaired Material .....	37
6.2	R&O Service Record and Test Report .....	37
6.3	Data Deliverable List .....	37
6.4	List of Deliverables .....	37
6.5	Data Format .....	38
A1.0	APPENDIX: LIST OF ITEMS TO BE SUPPORTED .....	39
A1.1	Supported Equipment and Spares .....	39
A1.2	Supported Software Items .....	44
A1.3	Technical Data – Support Requirements.....	45
A2.0	APPENDIX: CONTRACT DATA REQUIREMENTS LIST .....	46
A2.1	CDRL Item List .....	46
A2.2	CDRL Table Definitions .....	47
A2.3	CDRL – Contract Status Report .....	49
A2.4	CDRL – Meeting Agenda.....	50
A2.5	CDRL – Meeting Minutes .....	51
A2.6	CDRL – Technical Data Plan & List.....	52
A2.7	CDRL – Catalogue of Repairable and Consumable Items .....	53
A3.0	APPENDIX: DATA ITEM DESCRIPTION .....	54
A3.1	DID Item List.....	54
A3.2	DID Table Definitions .....	55

---

A3.3	DID – Contract Status Report.....	56
A3.4	DID – Meeting Agenda .....	60
A3.5	DID – Meeting Minutes .....	61
A3.6	DID – Technical Data Plan & List .....	62
A3.7	DID – Catalogue of Repairable and Consumable Items .....	64
A4.0	APPENDIX: MERCURY CONTAINING PRODUCTS/COMPOUNDS.....	66
A4.1	General.....	66
A5.0	APPENDIX: CHEMICAL AGENT RESISTANT COATING SYSTEM.....	69
A5.1	Scope .....	69
A5.2	Applicable Documents and Product NSNs .....	69
A5.3	Requirements .....	70



## 1.0 SCOPE

### 1.1 Purpose

- 1.1.1 The purpose of this Statement of Work (SOW) is to describe DND's requirements for work to be carried out by the Contractor, including the provision of material and Repair & Overhaul (R&O), in support of the Water Treatment System (WTS).
- 1.1.2 Work will be conducted and completed either in Canada at Canadian Armed Forces (CAF) locations, at operational sites where CAF are deployed, or at the Contractor's plant.

### 1.2 Support Timelines

- 1.2.1 The timelines for the work and provision of material within this Support SOW will relate to the 'First Delivery' milestone from the Acquisition Contract, as the support would only be needed once equipment is initially delivered.

### 1.3 Background

- 1.3.1 More often than not, the equipment will be intermittently used, but crucial when needed to support on-going Canadian Armed Forces (CAF) operations.

### 1.4 Concept of Operations & Support

- 1.4.1 The Concept of Operations provides context necessary to fully understand the SOW.

Aspect	Description
Operational Environment and System Description	<p>The WTS is a part of the Advanced Sub-unit Water Purification System (ASUWPS) Project. The WTS includes:</p> <ul style="list-style-type: none"><li>• 26 Water Treatment Units (WTU);</li><li>• 26 Miscellaneous Equipment Units (MEU);</li><li>• 24 Trailers;</li><li>• 7 Arctic Sustainment Units (ASU); and</li><li>• 42 Water Storage Units (WSU);</li></ul> <p>Option Requirements (up to):</p> <ul style="list-style-type: none"><li>• 11 Water Treatment Units (WTU);</li><li>• 11 Miscellaneous Equipment Units (MEU);</li><li>• 11 Trailers;</li><li>• 3 Arctic Sustainment Units (ASU); and</li><li>• 18 Water Storage Units (WSU);</li></ul> <p>Water is an essential combat supply and the lessons learned from operations over the last several decades has proven that it is not prudent to trust local water sources. These operations have been characterized by large geographic areas of operation with dispersed troops necessitating the requirement for a water purification system at the sub-unit level (up to 250 personnel).</p>
Intended Use	<p>The WTS is intended to dramatically improve the ability of the CAF to provide drinking water for its soldiers at the sub-unit level. It will replace the existing obsolete sub-unit water purification systems and increase the</p>

Aspect	Description
	<p>overall number of systems to fully enable Regular and Reserve Force units to sustain themselves in domestic and international operations. It will be used across the spectrum of operations including war, peacekeeping and humanitarian assistance.</p> <p>The WTS is intended to be a self-contained and rapidly deployable water purification and treatment system. To increase operational flexibility and ease of deployment, the principal components of the WTS, namely the WTU, MEU, ASU and WSU, will be packaged in quadcon and bicon ISO containers (one quarter or one half length of the standard 20 foot long ISO container). The Trailer is intended to transport up to two (2) quadcon or one bicon ISO containers.</p>
Location of Supported Systems	<p>The WTU, MEU and Trailer will reside in the following locations spread across Canada, from East to West (<b>QTY of WTU, MEU and Trailer per location/region</b>):</p> <p><b>QTY 1</b></p> <ol style="list-style-type: none"> <li>37 Combat Engineer Regiment (CER) – St. John's NL</li> <li>36 CER – Shearwater NS</li> <li>4 Engineer Support Regiment (4 ESR) – Canadian Forces Base (CFB) Gagetown NB</li> <li>5e Régiment de génie de combat (5 RGC) – CFB Valcartier QC</li> <li>35 RGC – Quebec City QC</li> <li>34 RGC – Montreal QC</li> <li>33 CER – Ottawa ON</li> <li>2 CER – CFB Petawawa ON</li> <li>32 CER – Toronto ON</li> <li>31 CER – St. Thomas ON</li> <li>38 CER – Saskatoon SK</li> <li>4 Construction Engineer Squadron (4 CES) – Cold Lake AB</li> <li>1 CER – CFB Edmonton AB</li> <li>41 CER – Edmonton AB</li> <li>39 CER – Chilliwack BC</li> </ol> <p><b>QTY 2</b></p> <ol style="list-style-type: none"> <li>Canadian Joint Operations Command (CJOC) Disaster Assistance Response Team (DART) – CFB Trenton ON</li> <li>OEM location op stock</li> </ol> <p><b>QTY 3 (only one Trailer)</b></p> <ol style="list-style-type: none"> <li>2 Air Expeditionary Training Squadron (AETS) – Bagotville QC</li> </ol> <p><b>QTY 4</b></p> <ol style="list-style-type: none"> <li>Canadian Forces School of Military Engineering (CFSME) – CFB Gagetown NB</li> </ol> <p>The ASU will reside in the following locations spread across Canada, from East to West (QTY of ASU per location/region):</p> <p><b>QTY 1</b></p> <ol style="list-style-type: none"> <li>4 ESR – CFB Gagetown NB</li> <li>CFSME – CFB Gagetown NB</li> <li>5 RGC – CFB Valcartier QC</li> <li>2 AETS – Bagotville QC</li> <li>2 CER – CFB Petawawa ON</li> <li>4 CES – CFB Cold Lake AB</li> <li>1 CER – CFB Edmonton AB</li> </ol>

Aspect	Description
	<p>The WSU will reside in the following locations spread across Canada, from East to West (QTY of WSU per location/region):</p> <p><b>QTY 1</b></p> <ol style="list-style-type: none"> <li>37 CER – St. John's NL</li> <li>36 CER – Shearwater Halifax NS</li> <li>4 ESR – CFB Gagetown NB</li> <li>CFSME – CFB Gagetown NB</li> <li>Other on CFB Gagetown NB</li> <li>5 RGC – CFB Valcartier QC</li> <li>Other on CFB Valcartier QC</li> <li>35 RGC – Quebec City QC</li> <li>34 RGC – Montreal QC</li> <li>33 CER – Ottawa ON</li> <li>2 CER – CFB Petawawa ON</li> <li>1 Fd Hosp – CFB Petawawa ON</li> <li>1 Wing – CFB Petawawa ON</li> <li>Other on CFB Petawawa ON</li> <li>32 CER – Toronto ON</li> <li>31 CER – St. Thomas ON</li> <li>38 CER – Saskatoon SK</li> <li>1 CER – CFB Edmonton AB</li> <li>Other on CFB Edmonton AB</li> <li>41 CER – Edmonton AB</li> <li>39 CER – Chilliwack BC</li> </ol> <p><b>QTY 2</b></p> <ol style="list-style-type: none"> <li>4 CES – CFB Cold Lake AB</li> </ol> <p><b>QTY 3</b></p> <ol style="list-style-type: none"> <li>(DART) – CFB Trenton ON</li> </ol> <p><b>QTY 5</b></p> <ol style="list-style-type: none"> <li>CJOC – Kingston ON (TBC)</li> <li>Log Stock – Montreal QC (25 CFSD)</li> </ol> <p><b>QTY 6</b></p> <ol style="list-style-type: none"> <li>2 AETS – CFB Bagotville QC</li> </ol> <p><b>Option Requirements (up to):</b></p> <p>If selected, the 11 options (WTU, MEU and Trailer) will reside in the following locations across Canada, from east to west (WTU, MEU and Trailer QTYs by location/region):</p> <p><b>QTY 1</b></p> <ol style="list-style-type: none"> <li>36 CER – Sydney NS;</li> <li>37 CER – Fredericton NB;</li> <li>34 RGC – Rouyn Noranda QC;</li> <li>33 CER – Ottawa ON,/32 CER – Toronto ON/ 34 RGC – Montreal;</li> <li>32 CER – Toronto ON;</li> <li>31 CER – Waterloo ON;</li> <li>38 CER – Winnipeg MB;</li> <li>41 CER – Calgary AB; and</li> <li>39 CER – Trail BC;</li> </ol> <p><b>QTY 2</b></p> <ol style="list-style-type: none"> <li>OEM op stock</li> </ol>

Aspect	Description
	<p>If elected, the 18 WSU will reside in the following locations spread across Canada, from East to West (QTY of WSU per location/region):</p> <p><b>QTY TBD</b></p> <p>1. Location TBD</p> <p>If elected, the 3 ASU will reside in the following locations spread across Canada, from East to West (QTY of ASU per location/region):</p> <p><b>QTY TBD</b></p> <p>1. Location TBD</p>
Anticipated service life	20 years
DND Responsibilities for Maintenance	<p>The WTS will be maintainable by CAF operators and technicians in a field environment as prescribed for each item of equipment:</p> <p>The WTU, ASU and WSU will be maintainable by CAF operators and technicians in both field and base environments, with maintenance tasks generally divided as follows:</p> <p><b>Operator Maintenance</b> – consisting generally of simple tasks such as preliminary diagnosis of faults, visual inspections, consumables replenishment and cleaning.</p> <p><b>Technician Maintenance, First Line</b> – consisting of preventive and minor corrective maintenance tasks by repair or replacement of parts, in the field, using the standard maintenance tools of the EME and WFE trades and any provided with the WTU, ASU or WSU. Task duration generally less than four (4) hours.</p> <p>The WTS Trailer will be maintainable by CAF operators and technicians in both field and base environments, with maintenance tasks generally divided as follows:</p> <p><b>Operator Maintenance</b> – consisting generally of simple tasks such as preliminary diagnosis of faults, visual inspections, minor preventive and corrective maintenance, and cleaning. Task duration less than one (1) hour.</p> <p><b>Technician Maintenance, First Line</b> – consisting of preventive and minor corrective maintenance tasks by repair or replacement of parts, in the field, using the standard maintenance tools of the EME and WFE trades and any provided with the WTS Trailer. Task duration generally less than four (4) hours.</p> <p><b>Technician Maintenance, Second Line</b> – consisting of major corrective maintenance requiring additional tools, specialized personnel, STTE, controlled environmental conditions or specific infrastructure requirements. Task duration generally between four (4) and twenty-four (24) hours.</p>

Aspect	Description
Contractor Responsibilities for Maintenance	The more in-depth maintenance tasks, consisting of corrective maintenance tasks, reconditioning of assemblies and component rebuilds, will be done through this support contract.
Contractor Training Responsibility	Contractor will provide Operator and Technician training as and when required. Training material is being provided through the Acquisition Contract.
Levels of Spares (Fleet Support and Operational Spares Kits)	<p>The support concept includes the following spares for support:</p> <p><b>Fleet Support Spares (FSS)</b> – These spares will be kept and maintained at the Contractor site and used to support the fleet. They can be used by Contractor FSRs during repair tasks, for faster turn-around time (TAT) during R&amp;O, and in ‘repair by replacement’ situations, where the repair can be done in the field or when parts are required so rarely that they would not be stocked in depot, and the cost is minimal compared to the transport cost of shipping equipment back for R&amp;O Maintenance Support at the Contractor’s site.</p> <p><b>Operational Spares Kits</b> –Base Operating Spares Kit (BOSK) is the collection of operational deployment spares held in reserve in pre-positioned storage.</p> <p>The BOSK will be held domestically with DART at CFB Trenton and in operation will be deployed to a base which supports the forward deployments.</p> <p>The BOSK will contain some of the higher cost &amp; long lead time items, allowing for replacement of the main components.</p> <p>FSS will be used to replenish any lost or damaged items within the Operational Spares Kits while they are deployed.</p>

## 1.5 ‘CORE’, ‘R&O’, and ‘TASKING’

- 1.5.1 Some of the support activities will be CORE (designated within section 3.0 **CORE REQUIREMENTS** within the SOW).
- 1.5.2 The Contractor must also perform R&O maintenance work (designated within section 4.0 **R&O REQUIREMENTS** within the SOW) as a pre-authorized R&O repair using a Selection Notice and Priority Summary (SNAPS) procedure that does not exceed the maximum repair cost (MRC).
- 1.5.3 Finally, the Contractor must perform work in response to TASKINGS (designated within section 5.0 **TASKING REQUIREMENTS** within the SOW) initiated by DND and Public Service and Procurement Canada (PSPC), through the DND 626 Task Authorization process.

## 1.6 Land Equipment Management System

- 1.6.1 The Contractor should be familiar with the Land Equipment Management System (LEMS) that is documented in B-GL-342-001/FP-000, which describes the DND approach to the management of land equipment.

## 1.7 Contractors Performing R&O

- 1.7.1 Some of the work performed by the Contractor will be repair and overhaul of equipment. The *Special Instructions Repair and Overhaul Contractors* (A-LM-184-001/JS-001) describes the instructions and procedures governing civilian contractors engaged in the R&O of material on behalf of the DND.

## 1.8 Acronyms and Abbreviations

AAS	Accountable Advance Spares
ASU	Arctic Sustainment Unit
AWR	Additional Work Request
BOSK	Base Operating Spares Kit
CA	Contracting Authority
CAF	Canadian Armed Forces
CER	Combat Engineer Regiment
CAGE	Commercial and Government Entity
CARC	Chemical Agent Resistant Coating
CDRL	Contract Data Requirements List
CFB	Canadian Forces Base
CFSD	Canadian Forces Supply Depot
CFSME	Canadian Forces School of Military Engineering
CFTO	Canadian Forces Technical Order
CGCS	Canadian Government Cataloguing System
CIS	Contract Issue Spares
CORE	Designates CORE (fixed price basis) requirements
COTS	Commercial off the Shelf
CRPA	Contractor Repair Parts Account
CRCI	Catalogue of Repairable and Consumable Items
CSA	Canadian Standards Association
CSR	Contract Status Report
DGLEPM	Director General Land Equipment Program Management
DID	Data Item Description
DND	Department of National Defence
DRMIS	Defence Resources Management Information System
DSCO	Director Supply Chain Operations
EHS	Environmental Health and Safety
EMS	Environmental Management System
EMT	Equipment Management Team
ESR	Engineer Support Regiment
FOSK	Forward Operating Spares Kit
FSS	Fleet Support Spares
FSR	Field Service Representative
GFE	Government Furnished Equipment

GFOS	Government Furnished Overhaul Spares
IAW	In Accordance With
ILS	Integrated Logistic Support
IP	Intellectual Property
ITAR	International Traffic in Arms Regulations
LEMS	Land Equipment Maintenance System
MEU	Miscellaneous Equipment Unit
MRC	Maximum Repair Cost
MS	Microsoft
NATO	North Atlantic Treaty Organization
NCAGE	NATO Commercial and Government Entity
NDHQ	National Defence Headquarters
NDQAR	National Defence Quality Assurance Region
NSN	NATO Stock Number
NTM	Notice to Move
OEM	Original Equipment Manufacturer
OS	Operating System
OSP	Operating Support Plan
PA	Procurement Authority
PDF	Portable Document Format
PSPC	Public Service and Procurement Canada
R&O	Repair and Overhaul
RbR	Repair by Replacement
RCE	Repair Cost Estimate
RGC	Régiment de génie de combat
RMA	Repair Material Account
RSA	Repair Shop Account
SMP	Support Management Plan
SNAPS	Selection Notice and Priority Summary
SOW	Statement of Work
SPTD	Supplementary Provisioning Technical Documentation
STTE	Special Tools and Test Equipment
TA	Technical Authority
TASKING	Designates TASKING (as and when needed) requirements
TAT	Turn-around-time
TDP	Technical Data Package



TDPL	Technical Data Plan & List
TIES	Technical Investigation and Engineering Studies
TPM	Technical Problem Management
WSU	Water Storage Unit
WTS	Water Treatment System
WTU	Water Treatment Unit

## 2.0 APPLICABLE DOCUMENTS

### 2.1 References

- 2.1.1 Whereas mentioned, the following Standards must be used for the preparation of deliverables to the extent specified in this SOW:

<u>REFERENCE NUMBER</u>	<u>PROMULGATION DATE</u>	<u>REFERENCE TITLE</u>
A-LM-184-001/JS-001	2016-01-30	SPECIAL INSTRUCTIONS REPAIR AND OVERHAUL CONTRACTORS
ANSI/EIA-649-C	2019	CONFIGURATION MANAGEMENT STANDARD
B-GL-342-001/FP-000	2001-09-10	LAND EQUIPMENT MANAGEMENT SYSTEM (LEMS)
C-02-005-009/AM-000	2013-06-01	INSPECTION AND CONDITIONING OF MATERIAL RETURNED TO AND HELD IN THE SUPPLY SYSTEM
D-01-100-214/SF-000	1991-11-05	SPECIFICATION FOR PREPARATION OF PROVISIONING DOCUMENTATION FOR CANADIAN FORCES EQUIPMENT
D-01-400-001/SG-000	1979-07-05	STANDARD - ENGINEERING DRAWING PRACTICES FOR CLASS 1 DRAWINGS AND TECHNICAL DATA LIST
D-LM-008-001/SF-001	1983-02-03	METHODS OF PACKAGING
D-LM-008-002/SF-001	1991-08-01	SPECIFICATION FOR MARKING FOR STORAGE AND SHIPMENT
D-LM-008-011/SF-001	1988-11-10	PREPARATION AND USE OF PACKAGING REQUIREMENTS CODES
SOR/99-7	1998	OZONE-DEPLETING SUBSTANCES REGULATIONS, 1998

### 2.2 Order of Precedence

- 2.2.1 In the event of conflict between the content in this SOW and the referenced documents, the content of this SOW will take precedence.

### **3.0 CORE REQUIREMENTS**

#### **3.1 General**

##### **3.1.1 Logistics Statements of Work**

- 3.1.1.1 The Logistics Statement of Work is attached herein and forms part of this SOW, and is listed as Annex B2.

##### **3.1.2 Environmental Health and Safety**

###### **3.1.2.1 General**

- 3.1.2.1.1 Environmental Health and Safety (EHS) considerations must be incorporated into the decision-making process for the work performed under this Contract.
- 3.1.2.1.2 The Contractor must provide for and allow DND inspection and monitoring of EHS documentation throughout the life of the contract.
- 3.1.2.1.3 New or amended support documentation created by the Contractor must incorporate appropriate EHS warnings and instructions in direct relation of the EHS risks presented in the contents. The Contractor must ensure that revisions to specifications, standards, technical publications and test programs are reviewed for EHS compliance.
- 3.1.2.1.4 The Contractor must provide (when asked) and ensure the use of up-to-date (no older than three (3) years) Material Safety Data Sheets.

###### **3.1.2.2 Environmental Management System (EMS) Requirement**

- 3.1.2.2.1 The Contractor must have an environmental management system in place to control environmental impacts resulting from their activities, products or services that is consistent with ISO 14001 – Environmental Management Systems; Requirements with Guidance for Use. Certification to this standard is preferred but not necessary. The Technical Authority will have the right to make examinations and such audits of the EMS.
- 3.1.2.2.2 The EMS requirement is applicable to the Contractor, however the Contractor must make reasonable effort to monitor that all subcontractors are in compliance with applicable environmental laws and regulations.

###### **3.1.2.3 Halocarbons**

- 3.1.2.3.1 Halocarbons, as identified within the Ozone-Depleting Substances Regulations (SOR/99-7), must not be incorporated into the operation or maintenance of equipment, products, or support services.

###### **3.1.2.4 Mercury**

- 3.1.2.4.1 The Contractor must not replace an existing component or add a new equipment component containing mercury, when a mercury-free alternative exists.

3.1.2.4.2 For each case where the products must contain mercury or its compounds, the Contractor must submit a statement that it is not technically feasible to use a mercury-free product in its place, and explain why.

3.1.2.4.3 Where the products contain mercury or its compounds, in all shapes or forms, or where its operation or maintenance requires the use of mercury or its compounds, the Contractor must provide in tabular format, to the Technical Authority (TA), the information specified in Appendix A4.0 for each occurrence of mercury or its compounds.

## 3.2 Program Management

### 3.2.1 General

#### 3.2.1.1 Contractor Test Facilities

3.2.1.1.1 The Contractor must possess or have access to testing facilities required to confirm serviceability of the equipment after repair or upgrade work on the WTS or its equipment.

#### 3.2.1.2 Contractor Publication Resources

3.2.1.2.1 The Contractor must have office resources necessary to produce electronic manuals, technical drawings, and other logistics and engineering documentation.

### 3.2.2 Contract Reporting

3.2.2.1 The Contractor must provide a Contract Status Report (CSR) in accordance with (IAW) Contract Data Requirement List (CDRL) WTS-PM-001 at Appendix A2.3 (page 49) and its associated Data Item Delivery (DID) WTS-PM-001 at Appendix A3.3 (page 56).

3.2.2.2 The Contractor must, upon request, make supporting data for the CSR available to the DND EMT and PSPC CA.

### 3.2.3 Program Meetings

#### 3.2.3.1 Meeting Organization and Coordination

3.2.3.1.1 The Contractor must ensure that the necessary data, personnel and facilities are available for each meeting.

3.2.3.1.2 As appropriate, meetings may be held at the Contractor's or DND facilities at the discretion of the DND EMT.

3.2.3.1.3 The Contractor's Program Manager must be present at all meetings. If the Program Manager does not have final approval authority for decision making and changes, then the person that has that final approval authority must also be present at all meetings.

- 3.2.3.2 Kick-off Meeting
  - 3.2.3.2.1 The Contractor must hold and chair, along with Canada, a Kick-off Meeting no later than 21 calendar days after contract award, to review and secure a common understanding of the requirements expressed in this contract.
- 3.2.3.3 Contract Performance Review Meetings
  - 3.2.3.3.1 The Contractor must hold and chair, along with Canada, Contract Performance Review Meetings at intervals of no greater than six (6) months or as otherwise agreed to with DND/PSPC.
  - 3.2.3.3.2 The Contractor must address the following topics at each Contract Performance Review Meeting:
    - 3.2.3.3.2.1 Discuss contract status, management, and financial aspects of the contract, also drawing information from the CSR DID Section A: Contract Status, Appendix A3.3 (page 56).
    - 3.2.3.3.2.2 Discuss the status of the WTS and its associated equipment, the extent of its usage, and all anticipated surges in operations.
    - 3.2.3.3.2.3 A Support Performance Review to discuss the Support delivered since the last reporting period, drawing information from the CSR DID Section B: Support Summary, Appendix A3.3 (page 56).
    - 3.2.3.3.2.4 Address all external changes impacting contract performance, such as commitments for deployment(s) made by DND, and
    - 3.2.3.3.2.5 Identify and determine the actions required for longer-term planning of contract management activities and the provision of support.
- 3.2.3.4 Other meetings
  - 3.2.3.4.1 The Contractor and the DND EMT may schedule informal reviews, such as conference calls, webinars (conference calls augmented by simultaneous PowerPoint presentations on the Internet), video conferences, briefings and technical interchange meetings, as required to help achieve the requirements of the contract.
- 3.2.3.5 Meeting Documentation
  - 3.2.3.5.1 The Contractor must provide Meeting Agendas IAW CDRL WTS-PM-002 at Appendix A2.4 (page 50) and its associated DID WTS-PM-002 at Appendix A3.4 (page 60).
  - 3.2.3.5.2 The Contractor must record and provide the Meeting Minutes IAW CDRL WTS-PM-003 at Appendix A2.5 (page 51) and its associated DID WTS-PM-003 at Appendix A3.5 (page 61).
  - 3.2.3.5.3 No change in the interpretation of the program management, SOW, cost, or schedule, as defined in the contract, may be authorized by the minutes of a meeting. Such change must require formal contract amendment by the CA.

3.2.4 Government Property

3.2.4.1 All equipment / spares / parts that may be provided to the Contractor in support of the WTS, must be considered DND-owned, regardless of being held at the Contractor's facility.

3.2.4.1.1 Government-owned and DND-owned must be considered as interchangeable terms.

3.2.4.2 The Contractor must provide suitable protections, such as a separated secure storage facility and insurance, to protect all Government Supplied Materials, including equipment, spares, parts, Technical Data Package (TDP), documentation, software, special tools and test equipment.

3.2.5 Hazardous Materials

3.2.5.1 The Contractor must be solely responsible for the handling, transportation and disposal of all waste, and hazardous waste material generated as a result of the work in this Statement of Work.

### 3.3 Operating Support

3.3.1 Operator and Technical Personnel

3.3.1.1 In order to provide satisfactory Operator and Technical Personnel (Field Service Representatives & Mobile Repair Parties are possibly the same resources), the Contractor must provide the following:

3.3.1.1.1 Operator and Technical Personnel that can provide training on the WTS.

3.3.1.1.2 Operator and Technical Personnel that can work extended hours and during holidays.

3.3.1.1.3 Operator and Technical Personnel that can perform in-depth maintenance on the WTS.

3.3.1.1.4 Operator and Technical Personnel that can mentor and advise CAF operators and technicians in the performance of their tasks using the WTS.

3.3.1.1.5 Operator and Technical Personnel that are knowledgeable of the Contractor's engineering and support organization and able to obtain a quick response to queries regarding technical concerns and material status.

3.3.2 Notice to Move – FSRs

3.3.2.1 When CAF military units are issued the initial operational Notice to Move (NTM) instructions, the DND EMT will provide direction to the Contractor regarding the action required of it with respect to support of the WTS, and will keep the Contractor informed of the staging of the deployment.

3.3.2.2 For deployment of the FSRs, the Contractor must have:

- 3.3.2.2.1 FSR resources ready to travel to a domestic (within Canada) destination in no more than 14 calendar days.
- 3.3.2.2.2 FSR resources ready to travel to an out-of-country destination in no more than 28 calendar days.
- 3.3.2.2.2.1 The actual arrival time will depend on the situation, such as the required use of DND transportation, or the speed at which the deployed WTS(s) will arrive at the destination.

### 3.4 Engineering Support

#### 3.4.1 General

- 3.4.1.1 The Contractor must provide Engineering Support for the WTS, its equipment and all associated items as listed in Appendix A1.0 To the SOW, but continuing the Engineering Support as the configuration evolves, as described in ANNEX A2 section 3.4.2.

#### 3.4.2 Configuration Management

- 3.4.2.1 The Contractor must control changes to the configuration of the WTS and its equipment, and identify and maintain a record of the configuration of the WTS, its equipment and all associated items.
- 3.4.2.2 To propose changes to the configuration of the WTS, the Contractor must submit an Engineering Change Proposal (ECP) in Contractor format, following the guidance in ANSI/EIA-649-C.
- 3.4.2.3 The Contractor must track and report the status of the configuration changes (to both hardware and software) within the CSR.

#### 3.4.3 Technical Data Management

- 3.4.3.1 The Contractor must log, store, protect, and control the distribution of technical data received from DND, sub-Contractors, OEMs, vendors, or other sources.
- 3.4.3.2 The Contractor must maintain the publications identified in the Technical Data table of Appendix A1.0 To ANNEX A2, and incorporate DND-issued amendments and OEM amendments that have been approved by the DND EMT, and update the publications after obsolescence and configuration management changes.
- 3.4.3.3 The Contractor must provide a Technical Data Plan & List IAW CDRL WTS-PM-004 at Appendix A2.6 (page 52) and its associated DID WTS-PM-004 at Appendix A3.6 (page 62).
  - 3.4.3.3.1 The Contractor must continue to manage the list throughout the contract term.
  - 3.4.3.3.2 Along with the Technical Data List, the Contractor must provide CD/DVD(s) of the electronic versions of the Technical Data on the list, as

per CDRL WTS-PM-004 at Appendix A2.6 (page 52) and its associated DID WTS-PM-004 at Appendix A3.6 (page 62).

3.4.3.3.3 The Contractor must incorporate the copyright symbol and one of the following notices into all Foreground and Background information that is subject to copyright regardless of the form or medium upon which it is recorded:

3.4.3.3.3.1 IP in Foreground that belongs to the Contractor: "© (insert year) (insert IP owner). This deliverable was delivered under Contract no. XXXX and contains Foreground IP. Her Majesty the Queen in Right of Canada has a royalty-free and perpetual license to the IP and is permitted to use, reproduce, modify, and translate, including authorizing contractors to reproduce, modify, and translate, in whole or in part the deliverable for all government purposes including competitive tendering. Refer to the contract terms for additional details as required."

3.4.3.3.3.2 IP in Background Information: "© (insert year) (insert IP owner). This deliverable was delivered under Contract no. XXXX and contains Background IP. Her Majesty the Queen in Right of Canada has a royalty-free and perpetual license to the Background IP for the purpose of exercising its rights in the Contract deliverables and Foreground Information. The license includes the rights to use, reproduce, modify, and translate this deliverable, and further includes the right to authorize others to use, reproduce, modify, and translate, in whole or in part the deliverable for all government purposes including competitive tendering. Refer to the contract terms for additional details as required."

3.4.3.4 The Contractor must provide **electronic copies** of the Technical Data publications, **within forty-eight (48) hours**, after revisions/amendments are made and quality is assured, if the revisions/amendments made are:

3.4.3.4.1 For aspects of health, safety or security of personnel who will use the equipment.

3.4.3.4.2 For proper operation or maintenance of equipment or the WTS.

3.4.3.5 The Contractor must implement document revisions, updating the document's change page, and ensuring correct and current data is issued for use.

3.4.3.6 The Contractor must have Technical Data publications translated as per ANNEX A2 section 3.4.4.

3.4.3.7 The Contractor must provide a means of disaster recovery, including maintaining and keeping current an off-site, secure backup of all technical data.

#### 3.4.4 Official Language Requirements

3.4.4.1 The Contractor must keep both the English and Canadian French versions of bilingual technical publications up to date and make changes simultaneously to both versions.



- 3.4.4.2 The Contractor must have publications translated by certified translators, such as members of an authorized provincial association of translators, to ensure the quality of translated text.
- 3.4.4.3 The Contractor must ensure all translations are consistent with approved DND terminology. Approved terminology sources, in order of priority, are as follows:
- 3.4.4.3.1 Canadian Oxford Dictionary Second Edition (for English);
- 3.4.4.3.2 Le Petit Robert Edition 2017 (for French); and
- 3.4.4.3.3 Termium, PSPC Translation Bureau Linguistic Data Bank (<http://www.termiumplus.gc.ca/>);
- 3.4.4.4 The Contractor must review and accept responsibility for the validity of all (both their own and all sub-Contractors) information found in the Technical Publications.
- 3.4.5 Technical Problem Management
- 3.4.5.1 The Contractor must, no later than 28 calendar days after contract award, establish a Technical Problem Management (TPM) database and associated management procedures to identify, investigate and resolve technical problems with the WTS.
- 3.4.5.1.1 This database must enable technical problem reports to be generated and continuously monitored, and be summarized in the CSR.
- 3.4.5.2 The Contractor must ensure that:
- 3.4.5.2.1 Detected problems (such as equipment defects, publication deficiencies, and unsatisfactory conditions, software faults or viruses, discrepancies in inventory, process inadequacies, excessive repair turn-around times, and parts obsolescence issues) are recorded in problem reports.
- 3.4.5.2.2 Problems are classified by category and priority.
- 3.4.5.2.3 Problems are analyzed to determine their root cause, including potential system, hardware and software failures/faults, errors in publications, inadequate training, procedure inadequacies, and unresponsiveness of supporting organizations.
- 3.4.5.2.4 Corrective action undertaken to resolve the problem(s) is tracked and documented.
- 3.4.5.3 The Contractor must bring urgent (eg. Health & safety, time-sensitive, costly) technical problems to the immediate attention of the DND EMT via email and, if necessary, telephone call.
- 3.4.5.4 The Contractor must make recommendations regarding ways to reduce costs, product improvement, and failure investigations, submitted in proposal format to DND, and must include cost of the work proposed, justification for the work, and the business case to support the work. (If implemented, this will be done through a TASKING.)



### 3.5 Maintenance Support

#### 3.5.1 Maintenance Information Database

- 3.5.1.1 The Contractor must maintain a Maintenance Information Database.
- 3.5.1.2 The Contractor must include within the Maintenance Information Database:
  - 3.5.1.2.1 The serial numbers used in each instance of WTS equipment.
  - 3.5.1.2.2 The modification status of each serial numbered item of equipment.
  - 3.5.1.2.3 Forecast requirements for scheduled maintenance, based on preventive maintenance requirements.
    - 3.5.1.2.3.1 If available, the DND EMT will provide the Contractor with system level estimates of operating hours of usage, bearing in mind the potential range of circumstances from storage to surge.
    - 3.5.1.2.3.2 These estimates will be reviewed every six (6) months at the Contract Performance Review Meetings as per ANNEX A2 paragraph 3.2.3.3 (if they have been provided by the DND EMT).
  - 3.5.1.2.4 Detailed Invoices for each serial-numbered equipment received for R&O.
- 3.5.1.3 The Contractor must use the Maintenance Information Database to manage its maintenance activities and to prepare summary information to be included in the CSR.

#### 3.5.2 Care of Fleet Support Spares

- 3.5.2.1 The Contractor must ensure that the items in the FSS, as defined in Appendix A1.0 List of Items to be Supported (page 39), are maintained in a serviceable state and are preserved and packaged for long term storage.

#### 3.5.3 Detailed Inspection and Maintenance

- 3.5.3.1 The Contractor must include the results of this Detailed Inspection and Maintenance in the CSR.
- 3.5.3.2 WTS Fielded in the Regiments
  - 3.5.3.2.1 Due to intermittent use and the potential for undocumented exceptional events, the Contractor must perform, occurring every two (2) years (so 50% of the fleet each year), a detailed inspection and maintenance, following the manufacturer's instructions for use and inspection, of the WTS fielded in the regiments, as defined in Appendix A1.0 List of Items to be Supported (page 39).
  - 3.5.3.2.2 When DND requires the Contractor to perform this detailed inspection and maintenance, the DND EMT will notify the Contractor accordingly via a TASKING, since the cost will vary depending on the situation encountered.

### 3.6 Supply Support

#### 3.6.1 Contractor Warehouse Resources

- 3.6.1.1 The Contractor must have personnel, secured space, shelving, fixtures, storage aids, material handling and other resources necessary to provide inventory management and supply services.

#### 3.6.2 Inventory Management

- 3.6.2.1 Contractor must review the inventory (potentially comparing it to provisioning data, and the subsequent usage data) to meet the needs of on-going operations, anticipated surges, possible FSRs, and R&O activities and report concerns in the CSR.
- 3.6.2.2 The Contractor must have access to inventory for support of its R&O work, as defined in Appendix A1.0 List of Items to be Supported (page 39), based on the required Repair Turn-Around-Time defined at ANNEX A2 section 4.1.4.1, or as otherwise indicated in the Appendix A1.0 List of Items to be Supported (page 39);
- 3.6.2.3 The Contractor must manage FSS holdings, as defined in Appendix A1.0 List of Items to be Supported (page 39);

#### 3.6.3 Catalogue for the Provision of Repairable and Consumable Items

- 3.6.3.1 The Contractor must provide the Catalogue of Repairable and Consumable Items IAW CDRL WTS-ILS-201 at Appendix A2.7 (page 53) and its associated DID WTS-ILS-201 at Appendix A3.7 (pg. 64).
  - 3.6.3.1.1 DND will use this catalogue, through TASKING(s), for the provision of repairable and consumable items.
  - 3.6.3.1.2 The Contractor must update the Catalogue for the Provision of Repairable and Consumable Items if parts become obsolete, see ANNEX A2 s 3.6.4.1.

#### 3.6.4 Obsolescence Management

- 3.6.4.1 The Contractor must conduct Obsolescence Management to ensure uninterrupted support of the equipment.
  - 3.6.4.1.1 The Contractor must work with Original Equipment Manufacturers (OEMs) and vendors to maintain awareness of what parts are becoming obsolete, and determine a source of supply for repairable and consumables items.
- 3.6.4.2 Obsolete part replacement will be handled as a TASKING request, further described in ANNEX A2 para. 5.4.3.2.

#### 3.6.5 DND-Owned Stock Supply Logistics

- 3.6.5.1           The Contractor must refer to the Logistics SOW in Annex B2, and A-LM-184-001/JS-001 Section 8.2, for further requirements for equipment logistics for DND-owned equipment.
- 3.6.5.2           Supply Accounts for DND-owned Stock
  - 3.6.5.2.1           The Contractor will be allocated a Repairable Material Account (RMA). All material (generally prime equipment and Line Replaceable Units that are DND-owned) shipped to the Contractor must be identified in the Defence Resource Management Information System (DRMIS) against the assigned RMA.
- 3.6.5.3           Contract Issue Spares
  - 3.6.5.3.1           The Contractor must maintain visibility of DND-owned stock, classified as Contract Issue Spares (CIS).
    - 3.6.5.3.1.1           To account for these CIS, the Contractor will be allocated a Contractor Repair Parts Account (CRPA) and a Repair Shop Account (RSA).
- 3.6.5.4           Stock Control and Stock Taking (DND-owned Stock)
  - 3.6.5.4.1           The Contractor must perform stock control and stocktaking of DND-owned Contractor held inventory, including:
    - 3.6.5.4.1.1           Institute, maintain and apply a system for inventory accounting, control, storage and handling, preservation, protection and maintenance.
    - 3.6.5.4.1.2           Designate, allocate and prepare a storage area in its facility specifically to accommodate DND-owned stock.
    - 3.6.5.4.1.3           As a risk mitigation measure, in case of a strike or lockout action, ensure that DND has continued access to, and protection of, inventory that it requires in support of operations.
    - 3.6.5.4.1.4           Initiate and complete a one hundred per cent (100%) manual stocktaking (visual confirmation) of RMA, RSA, CRPA (CIS) and all material listed in the Contractor Held Inventory Report, one (1) time each year.
    - 3.6.5.4.1.5           The Contractor must promptly investigate discrepancies arising from the DND-owned inventory of materiel managed by the Contractor and must immediately notify DND of any deficiencies discovered.

### 3.7    **Personnel Support Resources**

- 3.7.1           Plant Shutdown/Vacation Period
  - 3.7.1.1           Prior to plant shutdown and vacation periods, the Contractor must arrange for adequate facilities/personnel to be available to ensure the satisfaction of urgent TASKING(s).

- 3.7.1.2 If the Contractor personnel are not on-site during shutdown, a list of names and home phone numbers, of those Contractor personnel to be contacted during plant closure, must be provided to the DND EMT and NDQAR.
- 3.7.1.3 The Contractor must continue to meet the requirements and timelines within this SOW regardless of Plant Shutdown/Vacation Periods.

## **4.0 R&O REQUIREMENTS**

### **4.1 Maintenance Support**

#### **4.1.1 General**

4.1.1.1 The terms 'repair' and 'overhaul' are defined as follows:

4.1.1.1.1 Repair - The identification and correction of those specific defects which degrade the performance of an item, causing it to function below its specification or not as described in its operations manual.

4.1.1.1.2 Overhaul - The restoration of an item to its original condition and life expectancy. It includes the replacement of worn, damaged or life expired parts; the incorporation of approved modifications; and the rework of components as necessary.

4.1.1.2 The Contractor must provide Maintenance Support, including Repair and Overhaul (R&O), for the repairable items listed in A1.0 List of Items to be Supported (page 39).

4.1.1.3 The Contractor must perform R&O in accordance with this SOW, A-LM-184-001/JS-001 Special Instructions Repair and Overhaul Contractors, and the Quality Assurance requirements stated in ANNEX A2 section 4.1.3, such that the CAF will be provided with functional, safe and reliable WTS.

4.1.1.4 The Contractor must use parts and materials as per the most recent or OEM design configuration.

4.1.1.4.1 Changes to the parts, equipment configuration, or design must be approved by the TA, and executed in accordance with the SOW.

#### **4.1.2 Extent of R&O Maintenance**

4.1.2.1 The Contractor must provide R&O Maintenance support to the extent listed here:

4.1.2.1.1 Materials - All equipment system components must be inspected and repaired as required. Defective components must be repaired or replaced.

4.1.2.1.2 Mechanical - All mechanical systems must be inspected and repaired as required. Defective components must be repaired or replaced.

4.1.2.1.3 Electrical - All electrical components must be inspected, tested and repaired as required. Defective components must be repaired or replaced.

4.1.2.1.4 Safety - All systems/components affecting the safety of the user/operator or those affecting hazardous operation of the equipment must be inspected and tested for correct operation. Defective components must be replaced. All warning decals, labels, data plates must be clear and legible.

4.1.3      Quality Assurance

4.1.3.1      Quality of R&O Work

- 4.1.3.1.1      The R&O must be performed in accordance with this SOW and the Quality Assurance requirements stated herein, such that the CAF will be provided with functional, safe and reliable equipment. In the case of differences among these references, this SOW takes precedence.

4.1.3.2      Quality Assurance Representative

- 4.1.3.2.1      All stages of the R&O procedures will be subject to inspection by a Canadian Government DND Quality Assurance Representative unless DND authorizes otherwise. The representative will monitor for best industrial practices and will have the authority to stop work if poor practices or dangerous conditions are noted and cannot be resolved on-site.

4.1.3.3      Testing and Inspection

- 4.1.3.3.1      The Contractor must perform testing to confirm serviceability for each piece of repaired/overhauled equipment.
- 4.1.3.3.2      The Contractor must prepare a test report in the Contractor's format. A copy of the report must be retained by the Contractor and a copy forwarded electronically to the TA.
- 4.1.3.3.3      The Contractor must visually inspect all completed equipment for security of components and hazardous conditions, and all deficiencies must be noted and repaired.

4.1.4      Repair Turn-Around-Time (TAT)

- 4.1.4.1      The Contractor must complete repairs **within ninety (90) calendar days from receipt**, unless otherwise indicated in Appendix A1.0 List of Items to be Supported (page 39) or by the DND EMT.
- 4.1.4.1.1      The repair TAT includes all the time that the item requiring repair is in the custody of the Contractor, from receipt at the handover point to return to the handover point.
- 4.1.4.2      In the case of a priority repair request, system-level refurbishment, or battle damage repair, the DND EMT will provide a SOW defining the scope of work and new schedule, as a TASKING.

4.1.5      Repair Cost Estimates (RCE)

- 4.1.5.1      Upon receipt of the Repairable Items indicating an RCE, as shown items in Appendix A1.0 List of Items to be Supported (page 39), the Contractor must provide an RCE including all labour, sub-contracting and shipping, materiel costs and administration fees to the TA for approval before the repair can proceed.
- 4.1.5.2      If DND provides spare parts to the Contractor, or spare parts are already Contractor Held and Managed, the Contractor must deduct the value of the parts from the RCE of the item for which the parts are intended.



4.1.6 Maximum Repair Cost

- 4.1.6.1 The Maximum Repair Cost (MRC) is defined as “The maximum amount authorized that includes all labour and material costs, to be expended to repair an item.” It is a guard against the possibility of an item being repaired at a cost that exceeds its value to DND, and **should not** be interpreted as the amount that DND necessarily intends to pay.
- 4.1.6.2 For each Repairable Item indicating an MRC, as shown in Appendix A1.0 List of Items to be Supported (page 39), the Contractor must not exceed the MRC without authorization from the DND EMT.
- 4.1.6.3 If DND provides spare parts to the Contractor, or spare parts are already Contractor Held and Managed, the Contractor must deduct the value of the parts from the MRC of the item for which the parts are intended.

4.1.7 Condemn/Scrapping Considerations

- 4.1.7.1 If it is decided not to repair the equipment, the DND EMT will provide guidance on scrapping procedures to the Contractor at that time.
- 4.1.7.2 If the equipment contains embedded software (and possibly data) it may be necessary to erase the stored software and data prior to disposing of the equipment. In such cases, the Contractor must seek direction from the DND EMT.
- 4.1.7.3 When DND-owned equipment is to be scrapped, the Contractor must take care to comply with all International Traffic in Arms Regulations (ITAR) regarding the disposal method used and record keeping.
  - 4.1.7.3.1 Guidance on disposal is available through assigned Demilitarization Codes.

4.1.8 Calibration Requirements

- 4.1.8.1 The Contractor must ensure that all items and equipment they receive for maintenance, requiring calibration, are calibrated by an accredited organization for the class of testing appropriate to the equipment.

4.1.9 CARC Painting

- 4.1.9.1 Equipment may require repainting or touching up (depending on condition upon receipt). The Contractor must perform Chemical Agent Resistant Coating (CARC) painting work in accordance with A5.0 APPENDIX: CHEMICAL AGENT RESISTANT COATING SYSTEM.
- 4.1.9.2 The Contractor must utilize best painting procedures in accordance with the paint manufacturer's recommendations, and the finished product must produce a durable finish and a smooth appearance free from runs, sag, and orange peel.

4.1.10 Software Maintenance

- 4.1.10.1 The Contractor must perform routine software maintenance including software installation, data load and unload, backup and recovery, release replication and distribution.

4.1.11 Provision of Material (R&O)

- 4.1.11.1 The Contractor must obtain the parts (repairable and consumable items) required for the R&O Maintenance Support, including locating sources of supply.

- 4.1.11.2 The Contractor must obtain and make available parts for **'Repair by Replacement'** (RbR) situations, where the repair can be done in the field.

- 4.1.11.2.1 As the WTS will not have reached a steady-state with predictable maintenance and repair expectations at the execution of this Support Contract, DND will stock the depot with minimal spare parts for the support of the WTS during this interim support period.

- 4.1.11.2.2 RbR parts would also apply for parts that are required so rarely that they would never be stocked in depot, and the cost is minimal compared to the transport cost of shipping the WTS back for R&O Maintenance Support at the Contractor's site.

- 4.1.11.2.3 RbR parts would be requested on an as and when required basis that will be detailed in a DND 626 Task Authorization.

## **5.0 TASKING REQUIREMENTS**

### **5.1 Operating Support**

#### **5.1.1 Operator and Technical Personnel**

- 5.1.1.1 The Contractor must provide Operator and Technical Personnel that have the security clearance necessary to participate in deployed DND/CAF operations, including secured military field environments and deployed camps/forward operating bases (In-Theatre).

#### **5.1.2 Operational Spares Kits**

- 5.1.2.1 The Contractor must provide Base Operating Spares Kits (BOSKs), where each BOSK enables a military unit, or Contractor staff, to sustain a deployed WTS in continuous operations for 90 calendar days without re-supply.

- 5.1.2.2 If DND requires the Contractor to purchase more Operational Spares Kits, or replenish Operational Spares Kits, the DND EMT will notify the Contractor accordingly via a TASKING (see ANNEX A2 section 5.4.2.1).

- 5.1.2.3 For the Operational Spares Kits, the Contractor must provide:

- 5.1.2.3.1 The equipment and spares, as detailed in Appendix A1.0 List of Items to be Supported (page 39) of this SOW, needed to support Operator Maintenance and Technician Maintenance that would occur during deployment.

- 5.1.2.3.2 Special tools and test equipment, as detailed in Appendix A1.0 List of Items to be Supported (page 39) of this SOW, needed to support Operator Maintenance and Technician Maintenance that would occur during deployment.

- 5.1.2.3.3 Additional items that would be needed if the Contractor provided Field Service Representative (FSR) support, including regular tool kits, as DND tools might not be available.

- 5.1.2.3.4 Packaging (see ANNEX A2 section 5.1.2.4 and 5.1.2.5) and organizational systems (e.g. Shelving, supports, item list and locator) allowing for safe transport of and quick access to the equipment, spares and tools.

- 5.1.2.4 The Contractor must provide Operational Spares Kits packaged and packed as per D-LM-008-001/SF-001 following:

- 5.1.2.4.1 Level B Limited Military Package; and

- 5.1.2.4.2 Level B Limited Military Pack;

- 5.1.2.5 The Contractor must label the packaging, produced under 5.1.2.4 above, as per D-LM-008-002/SF-001, using D-LM-008-011/SF-001 to prepare the required packaging and preservation codes.

- 5.1.2.6 The Contractor must provide information regarding the content of the Operational Spares Kits in the Catalogue of Repairable and Consumable Items, see ANNEX A2 section 3.6.3.1.

## 5.2 Engineering Support

### 5.2.1 Technical Investigation and Engineering Support

- 5.2.1.1 The Contractor must provide TIES, when and as requested by DND. Such tasks could include:
- 5.2.1.1.1 Conducting specialized testing;
  - 5.2.1.1.2 Performing specialist engineering studies, such as human factors, survivability, electromagnetic interference / compatibility, safety and health, reliability and maintainability;
  - 5.2.1.1.3 Providing engineering assessments and recommendations (for example, regarding trends, failures (including repetitive failures), defects, safety hazards, corrosion, and technology insertion);
  - 5.2.1.1.4 Developing alternate or supplementary operating, maintenance, and supply procedures;
  - 5.2.1.1.5 Rationalizing the preventive maintenance requirements in areas where there is a potential for significant improvements in maintenance effectiveness or efficiency;
  - 5.2.1.1.6 Preparing technical bulletins and preparing supporting technical data;
  - 5.2.1.1.7 Developing repair schemes for potential repairs not covered in maintenance manuals;
  - 5.2.1.1.8 Preparing additional publications or amendments to existing publications;
  - 5.2.1.1.9 Translating technical publications into either Canadian official language (English or Canadian French);
  - 5.2.1.1.10 Performing post battle damage assessments, and determine how to return equipment to a serviceable state, or if it can be cannibalized for parts;
  - 5.2.1.1.11 Designing and developing modifications / upgrades / conversions, updating drawings, preparing modification installation instructions and providing modification installation kits;
  - 5.2.1.1.12 Investigating software faults, and viruses, and develop solutions. Update software embedded in the system or its associated equipment, and
  - 5.2.1.1.13 Assessing regulatory compliance, especially regarding safety and protection of the environment.
  - 5.2.1.1.14 Obtain CSA/UL or equivalent safety certifications for the equipment that has been modified or repaired through the work under this contract.

5.2.1.2 A TIES request may be initiated by either Canada or by the Contractor, but **must not commence prior to receipt of an approved DND 626 Task Authorization**. In support of each TIES request, the Contractor must provide the following information:

- 5.2.1.2.1 The scope and objectives of the TIES TASKING;
- 5.2.1.2.2 The estimated duration;
- 5.2.1.2.3 Depending upon the nature of the TASKING, the appropriate reporting frequency and report format;
- 5.2.1.2.4 All other requirements applicable to the type of engineering effort, and
- 5.2.1.2.5 The estimated cost.

5.2.1.3 On completion of the TIES, the Contractor must report its findings to the DND TA within fourteen (14) calendar days, or another timeframe agreed to by the DND TA.

### 5.3 Maintenance Support

5.3.1 Care of Arctic Sustainment Units (ASUs) Held by the Contractor

5.3.1.1 The Contractor must ensure that the ASUs, as defined in Appendix A1.0 List of Items to be Supported (page 39), are maintained in a serviceable state and are preserved and packaged for long term storage.

5.3.2 Detailed Inspection and Maintenance

5.3.2.1 ASUs Held by the Contractor

5.3.2.1.1 The Contractor must perform a yearly detailed inspection and maintenance, following the manufacturer's instructions for use and inspection, for the ASUs held by the Contractor, as defined in Appendix A1.0 List of Items to be Supported (page 35).

### 5.4 Supply Support

5.4.1 Provision of Material (Fleet Support Spares)

5.4.1.1 The Contractor must acquire and replenish FSS holdings in the inventory when requested by DND.

5.4.2 Provision of Material (Operational Spares Kits)

5.4.2.1 The Contractor must purchase Operational Spares Kits, and replenish Operational Spares Kit holdings when requested by DND.

5.4.2.1.1 After deployment of the Operational Spares Kits, DND will return unused items within the kits to the Contractor for re-use within the replenished operational spares kits.

- 5.4.2.1.2 The Contractor must verify the Operational Spares Kit(s) fully-serviceable state before re-using the item in the Operational Spares Kits.

- 5.4.3 Provision of Material (DND request)

- 5.4.3.1 The Contractor must obtain spare parts (repairable and consumable items) or software, and provide them to DND for Operator or Technician Maintenance (see section 1.4 Concept of Operations & Support) activities when requested.
  - 5.4.3.2 The Contractor must purchase replacement parts, for those parts that have become obsolete, for use in the WTS.

- 5.4.4 Packaging and Shipping

- 5.4.4.1 All parts and equipment supplied by the Contractor must be packaged and packed as per D-LM-008-001/SF-001.
    - 5.4.4.1.1 The Contractor must select Preservation and Packaging Levels (Level A, Level B, or Level C) based on criteria set out in the referenced specification.
  - 5.4.4.2 Packaging produced by the Contractor must be labeled as per D-LM-008-002/SF-001, using D-LM-008-011/SF-001 to prepare the required packaging and preservation codes.

- 5.4.5 Disposal of DND-owned Stock

- 5.4.5.1 The Contractor, when authorized by the DND EMT, must arrange and perform disposal of an equipment item.
  - 5.4.5.2 The Contractor must conduct disposals, under the DND EMT authority, in accordance with applicable DND regulations, the Defence Production Act, and with applicable environmental laws and regulations.
  - 5.4.5.3 Further requirements are stated in ANNEX A2 section 4.1.7, Condemn/Scrapping Considerations.

## 5.5 Training Support

- 5.5.1 Training Sessions

- 5.5.1.1 The Contractor must provide Training Sessions when requested by the DND EMT.
    - 5.5.1.1.1 Scheduling of the Training Sessions will be jointly planned between the DND and the Contractor.
  - 5.5.1.2 The Contractor must provide the Training Session(s) in English, by a bilingual instructor, in order for them to understand and answer questions from the class in both official languages; English and Canadian French.
  - 5.5.1.3 The Contractor must provide Instructor(s) that are SMEs on the WTS equipment.

- 5.5.1.4 The Contractor must use the approved and accepted **WTS Operator Training Package**, identified in the Technical Data table of Appendix A1.0 to ANNEX A2, for the Training Sessions, and course lessons must follow the content found within that training package.
- 5.5.1.4.1 The Contractor must supply the course material, specifically a Hard Copy of the Student Handout and Soft Copy CD of the training package for each student, and all course material must be provided in English and Canadian French.
- 5.5.2 Training Material
  - 5.5.2.1 The Contractor must use the WTS(s) and additional training material identified in the **WTS Operator Package Instructor Lesson Plan** for the Training Session.
    - 5.5.2.1.1 The Contractor must provide the additional training material that is listed in the **WTS Operator Training Package Instructor Lesson Plan** as 'supplied by the Contractor'.
    - 5.5.2.1.2 The Contractor must set-up the WTS(s) and additional training material that is listed in the **WTS Operator Training Package Instructor Lesson Plan** as 'supplied by the Contractor', for the Training Session.
- 5.5.3 Update of Training Package
  - 5.5.3.1 The Contractor must update or improve, when requested by DND, the **WTS Operator Training Package** after course delivery, to address comments received during the Training Sessions from students and instructors, or include additional operational scenarios making the delivered training more relevant to how the equipment is actually used in an operation.

## 6.0 CONTRACT DELIVERABLES

### 6.1 Repaired Material

- 6.1.1 The Contractor will receive direction from the TA for the final delivery destination of all repaired materiel on an individual basis; however, if not received the default delivery will be to 25 CFSD.
- 6.1.2 The Contractor must include a properly completed and signed CF942/CF942A Materiel Condition Tag/Label, when applicable, IAW C-02-005-009/AM-000 Inspection and Condition of Materiel Returned to and Held in the Supply System, for all returned items.
- 6.1.2.1 The CF942/CF942A Tags/Labels are to be directly attached to the materiel returned after repair and overhaul IAW C-02-005-009/AM-000, and will be provided by DND Quality Assurance Representative.

### 6.2 R&O Service Record and Test Report

- 6.2.1 The Contractor must provide an R&O Service Record and Test Report with each piece of equipment for shipment, returning from R&O.

### 6.3 Data Deliverable List

- 6.3.1 The Contractor must prepare and deliver all data and equipment required under the Contract as summarized in ANNEX A2 section 6.4.
- 6.3.2 Note: 'LOT' equates to the quantity needed to fulfill the requirements of the CDRL, including revisions, as necessary until accepted by DND.

### 6.4 List of Deliverables

Item	Item Description	Initial Submission/ Delivery QTY	Subsequent Submissions / Replenishment
1	CORE Requirements – work performed continuously under a fixed price basis.	As defined in section 3.0 within ANNEX A2	-
2	Contract Status Report (para 3.2.2.1)	LOT	Monthly - CSRs
3	Meeting Agenda (para 3.2.3.5.1)	LOT	LOT
4	Meeting Minutes (para 3.2.3.5.2)	LOT	LOT
5A	Technical Data Plan & List (para. 3.4.3.3)	LOT	Semi-Annually – TDPL Section B
5B	CD/DVD(s) of electronic versions of the Technical Data (para. 3.4.3.3.2)	-	Semi-Annually
6	Catalogue of Repairable and Consumable Items (para. 3.6.3.1)	LOT	Semi-annually
7	R&O Requirements – work performed as a pre-authorized R&O repair	As defined in section 4.0 Within ANNEX A2	-



8	R&O Service Record and Test Report	LOT – with the equipment for shipment	LOT – with the equipment for shipment
9	TASKING Requirements – work performed through DND 626 Task Authorization process (as-and-when requested work).	As defined in section 5.0 within ANNEX A2	-

## 6.5 Data Format

6.5.1 Unless otherwise specified as a specific requirement, the Contractor must deliver all of the soft copies of data deliverables, in formats compatible with the office software currently in use by the DND as listed:

6.5.1.1 Microsoft (MS) Windows 7 Enterprise Operating System (OS), Service Pack 1;

6.5.1.2 MS Internet Explorer (IE) 9.0 with 256 Bit Encryption;

6.5.1.3 MS Office Professional Plus 2013 (Word, Excel, Access, PowerPoint and Outlook);

6.5.1.4 Adobe Acrobat X; and

6.5.1.5 WinZip 8.1 SR-1;

6.5.2 Those compatible formats must allow the files to be recognized, opened, and viewed or read in their intended form and format using DND's office software, along with allowing the user to modify, select, copy and paste information from the files to other DND office software files.

## **A1.0 APPENDIX: LIST OF ITEMS TO BE SUPPORTED**

### **A1.1 Supported Equipment and Spares**

A1.1.1 The Contractor must provide support for the equipment and spare items specified in Table 1 (below) in accordance with the SOW. An explanation of each column is detailed below:

A1.1.1.1 System Identifier MRN/OEM Part No – A unique identifier for the Item, as used in the applicable technical manuals or supply management system.

A1.1.1.2 Item Nomenclature – The name of the Item that may include Item class/group categories and functional descriptors.

A1.1.1.3 NATO Stock Number (NSN) – The 13-digit identifier used in NATO and allied cataloguing systems. The NSN will be included if the Item is to be ordered by DND.

A1.1.1.4 Regular or Free-Flow R&O by Item

A1.1.1.4.1 Repair Cost Estimate (RCE) – Identifies that the item will require a cost estimate before repairs or overhaul can begin.

A1.1.1.4.1.1 This is used for regular R&O when equipment is more complex so the TA requires more visibility on what is being proposed, has not yet reached steady-state and is therefore harder to predict typical repair costs/requirements, and repairs occur at a low rate.

A1.1.1.4.2 Maximum Repair Cost (MRC) – Identifies the maximum amount authorized that includes all labour and material costs, to be expended to repair an item. Repairs above the MRC must be approved by DND before any repair or overhaul work commences, standard Selection Notice Observation Message procedures as detailed in A-LM-184-001/JS-001 must apply.

A1.1.1.4.2.1 This is used for free-flow R&O when equipment repairs are well understood or are less complex, and are used for repairs that occur at a high rate.

A1.1.1.5 Repair TAT – Identifies the Repair TAT, if different from the general Repair TAT, as defined in the Support SOW at para. 4.1.3.1, indicating that this item is of greater importance to the operation of the WTS and therefore requires a faster turn-around. Repair TAT is indicated in calendar days, if left blank, then general Repair TAT is followed.

A1.1.1.6 FSS quantity to hold – Describes the quantity of each item that the Contractor will hold and maintain, or left blank, if item does NOT have a required sparing level quantity or category isn't applicable.

A1.1.1.6.1 FSS are used to support the fleet, both domestically or while on deployment, and can be used by the Contractor FSRs during repair tasks, for faster TAT during R&O.

A1.1.1.6.2 FSS are also used in RbR situations, where the repair can be done in the field or when parts are required so rarely that they would not be stocked in depot, and the cost is minimal compared to the transport cost of shipping equipment back for R&O Maintenance Support at the Contractor's site.

A1.1.1.7 Operational Spares Kits – Base Operating Spares Kit (BOSK) – Describes the collection of operational deployment spares, and quantities of each item, held in reserve in pre-positioned storage. If left blank the item is not included in the operational spares kits or category isn't applicable.

A1.1.1.7.1 The BOSK will be held domestically with DART at CFB Trenton, and in operation will be deployed to a base which supports the forward deployments.

A1.1.1.8 Detailed Inspection & Maintenance – Indicates which items will require a detailed inspection and maintenance, performed by the Contractor, following the manufacturer's instructions for use and inspection.

A1.1.1.8.1 Detailed Inspection & Maintenance (Insp. Maint.)

A1.1.1.8.1.1 'Y – WTS Equip. QTY' = yes, detailed inspection & maintenance required for the listed quantity of WTS Equipment.

A1.1.1.8.2 'N' or blank = no.

**Table 1: Supported Equipment and Spares**

**NOTE: INFORMATION IN THIS TABLE WILL BE FINALIZED DURING THE ACQUISITION CONTRACT**

Item Identifier MRN/OEM Part No. (1)	Item Nomenclature (2)	NSN (if item can be ordered) (3)	Regular or Free-Flow RCE/MRC (4)	Repair TAT (cal. Days) (5)	FSS (Qty. to hold) (6)	Operational Spares Kits (7)	<u>Insp. Maint.</u> (Y – WTS Equip. QTY) (8)
						BOSK Qty.	
	Water Treatment Unit (WTU)		RCE		2  (GFE - will be provided by DND from existing stock)		<u>Insp. Maint.</u>  Y – Qty 26 in: 37 CER, 36 CER, 4 ESR, CFSME ,35 RGC, 5 RGC, 2 AETS, 34 RGC, 33 CER, 2 CER, DART, 32 CER 31 CER, 38 CER, 4 CES, 1 CER, 41 CER, 39 CER and OEM

**ANNEX A2**  
**TO W8476-216378**  
**REVISED 01 MARCH 2022**

Item Identifier MRN/OEM Part No. (1)	Item Nomenclature (2)	NSN (if item can be ordered) (3)	Regular or Free-Flow RCE/MRC (4)	Repair TAT (cal. Days) (5)	FSS (Qty. to hold) (6)	Operational Spares Kits (7)	Insp. Maint. (Y – WTS Equip. QTY)
						BOSK Qty.	(8)
	Miscellaneous Equipment Unit (MEU)		RCE		2  (GFE - will be provided by DND from existing stock)		<u>Insp. Maint.</u> Y – Qty 26 in:  37 CER, 36 CER, 4 ESR, CFSME ,35 RGC, 5 RGC, 2 AETS, 34 RGC, 33 CER, 2 CER, DART, 32 CER 31 CER, 38 CER, 4 CES, 1 CER, 41 CER, 39 CER and OEM
	Trailer		RCE		2  (GFE - will be provided by DND from existing stock)		<u>Insp. Maint.</u> Y – Qty 24 in:  37 CER, 36 CER, 4 ESR, CFSME ,35 RGC, 5 RGC, 2 AETS, 34 RGC, 33 CER, 2 CER, DART, 32 CER 31 CER, 38 CER, 4 CES, 1 CER, 41 CER, 39 CER and OEM
	Arctic Sustainment Unit (ASU)		RCE				<u>Insp. Maint.</u> Y – Qty 7 in: CFSME, 4 ESR, 5 RGC, 2 AETS, 2 CER, 4 CES and 1 CER.
	Water Storage Unit (WSU)		RCE				<u>Insp. Maint.</u> Y – Qty 37 in: 37 CER, 36 CER, 4 ESR, CFSME, 5 RGC, 2 AETS, 35 RGC, 34 RGC, 33 CER, 2 CER, 1 Fd Hosp, 1 Wing, CJOC Kingston, DART, 32 CER, 31 CER, 38 CER, 4 CES, 1 CER, 41 CER, 39 CER
Ancillary Equipment:							
	Feed Water Hose				10	4	
	Concentrate Water Hose				10	4	

ANNEX A2  
TO W8476-216378  
REVISED 01 MARCH 2022

Item Identifier MRN/OEM Part No. (1)	Item Nomenclature (2)	NSN (if item can be ordered) (3)	Regular or Free-Flow RCE/MRC (4)	Repair TAT (cal. Days) (5)	FSS (Qty. to hold) (6)	Operational Spares Kits (7)	<u>Insp. Maint.</u> (Y – WTS Equip. QTY) (8)
						BOSK Qty.	
	Potable Water Hose				10	5	
	Hose spare parts kit, to include cap, o ring, lanyard, repair kit				10	5	
	Water Distribution Nozzle				2	1	
	Feed Pump				5	1	
	Distribution Pump				5	1	
	Water Storage Tank				5	2	
	Spill Kit				2	1	
	Tool kit				2	1	
	Safety equipment, to include goggle, work gloves, latex gloves, mask, hear protector				5	2	
	Rope 3/8" x 50'				2	1	
	Intake Strainer + floatation Assembly				5	1	
	Exhaust Hose for Generator Set				5	1	
	Life Preserver Vest				2	1	
	Wading Overall				2	1	
	Water Quality Analysis Kit				5	1	
	Turbidity Verification Kit				3	1	
	Reverse Osmosis (RO) membranes				10	5	
	RO preservation container				5	0	
	Glycerine (gallon)				10	2	
	Filtration element other than RO				5	2	
	Chemicals (90 days deployment)				5	3	
	Replacement Valve (of each kind)				2	1	
	NATO Hose fittings kit				5	1	
	Manuals and Reference card last edition (of each)				2	1	
	Generator set (repair parts for 90 days deployment)				2	1	
	High pressure pump				5	1	
	Repair Valve part kit (of each)				10	1	
	Meter Analyser + harness (of each)				5	1	
	Pressure Gage + Harness (of each)				5	1	

ANNEX A2  
TO W8476-216378  
REVISED 01 MARCH 2022

Item Identifier MRN/OEM Part No. (1)	Item Nomenclature (2)	NSN (if item can be ordered) (3)	Regular or Free-Flow RCE/MRC (4)	Repair TAT (cal. Days) (5)	FSS (Qty. to hold) (6)	Operational Spares Kits (7)	Insp. Maint. (Y – WTS Equip. QTY)
						BOSK Qty.	(8)
Cold Weather Ancillary Equipment:							
	Electrically-Heated Feed Water Hoses				5	1	
	Electrically-Heated Concentrate Hoses				5	1	
	Electrically-Heated Potable Water Hoses				5	2	
	Feed Water Pump Electrically-Heated Blanket				5	2	
	Distribution Pump Electrically-Heated Blanket				5	2	
Trailer Electrical Components:							
	Front Harness				10	1	
	Mid Main Harness				5	1	
	Rear Harness				5	1	
	LED Markers				10	1	
	LED SMP Taillight				10	1	
	LED Licence Plate Lamp				10	1	
Trailer Axle Components:							
	Axle Assembly				3	0	
	Wheel Assembly				10	0	
	Tire				20	0	
	Wheel Bearings				20	0	
Trailer Brake Components:							
	Brake Drum				5	1	
	Brake Shoe				5	1	
	Air Chamber				2	1	
	Air Reservoir				2	1	
	Coiled Air Hose				2	1	
	Function Valve				2	1	
	Brake Adjusters				2	1	
Trailer Suspension Components:							
	Spring Assembly				5	1	
Trailer Structural Frame:							
	Landing Gear				10	1	
	Drawbar Assembly				5	1	

## A1.2 Supported Software Items

A1.2.1 The Contractor must provide support for the software Items specified in Table 2 (below) in accordance with the SOW. An explanation of each column is detailed below:

- A1.2.1.1 Identifier MRN/OEM Part No – A unique identifier for the Item of software, or the hardware that it is hosted on.
- A1.2.1.2 Item Nomenclature – The name of the Item that may include Item class/group categories and functional descriptors.
- A1.2.1.3 Software version number – The version or revision number of the software item.
- A1.2.1.4 SW Update – Requires software updates to DND/CAF (eg, may be part of regular upgrade program or to incorporate third party updates) in accordance with the Support SOW ('Y' = yes, 'N' or blank = no).

**Table 2: Software Items**

**NOTE: INFORMATION IN THIS TABLE WILL BE FINALIZED DURING THE ACQUISITION CONTRACT**

Identifier MRN/OEM Part No. (1)	Item Nomenclature (2)	Software Version Number (3)	SW Update (Y/N) (4)

### A1.3 Technical Data – Support Requirements

A1.3.1 The Contractor must provide support for the publications specified in Table 3 (below), including updated versions/editions of the Technical Data, in accordance with the SOW. An explanation of each column is detailed below:

A1.3.1.1 Publication Number – The unique identifier for the published Item of Technical Data.

A1.3.1.2 Title – The title of the item of Technical Data.

**Table 3: Technical Data**

**NOTE:** INFORMATION IN THIS TABLE WILL BE FINALIZED DURING THE ACQUISITION CONTRACT

<b>Publication Identifier (1)</b>	<b>Title (2)</b>
TBD	WTS OPERATOR MANUAL
TBD	WTU OPERATOR QUICK REFERENCE CARD
TBD	WTS MAINTENANCE MANUAL
TBD	WTS PERMISSIVE REPAIR SCHEDULE AND STANDARD REPAIR TIMES
TBD	WTS ILLUSTRATED PARTS MANUAL
TBD	WTS OPERATOR TRAINING PACKAGE
TBD	WTU AND ASU TECHNICIAN TRAINING PACKAGE
TBD	WTS PRESERVATION, STORAGE AND REACTIVATION INSTRUCTIONS
TBD	WTS STOWAGE, SHIPPING, AND HANDLING INSTRUCTIONS
TBD	WTS DATA SUMMARY
TBD	MEU AND ASU STOWAGE MAP POSTERS
TBD	WTU PROCESS AND FLOW DIAGRAMS
TBD	PROVISIONING PARTS BREAKDOWN
TBD	SUPPLEMENTARY PROVISIONING TECHNICAL DOCUMENTATION
TBD	SPECIAL TOOL & TESTING EQUIPMENT
TBD	IDENTIFICATION PLATES
TBD	CONTROLLED & NON-CONTROLLED GOODS LIST
TBD	IDENTIFICATION LABELS FOR STORAGE AND SHIPMENT AND PACKAGING CODES



## **A2.0 APPENDIX: CONTRACT DATA REQUIREMENTS LIST**

### **A2.1 CDRL Item List**

<b>CDRL #</b>	<b>Title</b>	<b>DID #</b>
WTS-PM-001	Contract Status Report	WTS-PM-001
WTS-PM-002	Meeting Agenda	WTS-PM-002
WTS-PM-003	Meeting Minutes	WTS-PM-003
WTS-PM-004	Technical Data Plan & List	WTS-PM-004
WTS-ILS-201	Catalogue of Repairable and Consumable Items	WTS-ILS-201

## A2.2 CDRL Table Definitions

The following section defines the various blocks of information found on the CDRL forms:

### **BLOCK 1 – SYSTEM / ITEM**

Provides the name of the System or Item for which the CDRL applies.

### **BLOCK 2 – ITEM NUMBER**

The Item Number is a sequential three-digit number to uniquely identify the individual data item (CDRL number). Note that the 001-099 series is reserved to Project Management (PM) CDRLs, the 101-199 series is reserved to Systems Engineering (SE) CDRLs and the 201-299 series is reserved to Integrated Logistics Support (ILS) CDRLs.

### **BLOCK 3 - TITLE OR DESCRIPTION OF DATA**

The title of the data item being referred to in this CDRL.

### **BLOCK 4 - AUTHORITY (DATA ITEM NUMBER)**

Indicates the Data Item Description (DID) number to which this CDRL refers.

### **BLOCK 5 - CONTRACT REFERENCE**

The specific paragraph number of the Contract Demand, Statement of Work, Request for Proposal, Specification, or other applicable document to assist in identifying the work effort associated with the data item.

### **BLOCK 6 - FREQUENCY**

This block indicates the frequency of the delivered data. The following frequency codes are used:

ANNLY	Annually
ASGEN	As generated
ASREQ	As required
BI-MO	Every 2 months
BI-WK	Every 2 weeks
DAILY	Daily
MNTHY	Monthly
ONE/R	One time with revisions
OTIME	One time
QRTLY	Quarterly
R/ASR	Revisions as required
SEMIA	Semi-annually
WKLY	Weekly

### **BLOCK 7 – REQUIRING OFFICE**

Identifies the technical office of primary interest responsible for defining the data requirement, reviewing, acceptance and approval of the data item, and ensuring the adequacy of the delivered data.

### **BLOCK 8 – SUBMISSION SCHEDULE**

**DATE OF 1ST SUBMISSION** - The initial submission date or associated constraint for the 1st submission of the data item is indicated in this block using typical abbreviations as listed above under Block 11.

**DATE OF SUBSEQUENT SUBMISSION / EVENT** - The date(s) of subsequent submission(s) or associated constraint(s) of the data item is indicated in this block.

**BLOCK 9 - DISTRIBUTION AND ADDRESSEES**

Indicates the addressees and the respective number of copies (hard copies and soft copies separately), for either the draft or first submissions (Sub-Block "Draft"), and for the final or subsequent submissions (Sub-Block "Final"), for which the data item is required.

### A2.3 CDRL – Contract Status Report

CONTRACT DATA REQUIREMENTS LIST								
1. SYSTEM / ITEM Water Treatment System								
2. ITEM NUMBER CDRL WTS-PM-001	3. TITLE OR DESCRIPTION OF DATA Contract Status Report (CSR)		4. AUTHORITY (Data Item Number) DID WTS-PM-001					
5. CONTRACT REFERENCE SOW: <b>Para. 3.2.2.1 (pg. 17)</b> DID: <b>App. A3.3 (pg. 56)</b>	6. FREQUENCY  MNTY		7. REQUIRING OFFICE DND EMT					
8. SUBMISSION SCHEDULE  <b>First Submission:</b> The Contractor must provide a draft CSR for review no later than 28 calendar days after the Kick-off Meeting.  <b>Response Time:</b> Comments on the draft CSR will be provided by Canada no later than 14 calendar days after receipt of the <u>soft copy submission</u> .  <b>Subsequent Submission(s):</b> The Contractor must provide a revised CSR, addressing Canada's comments, for review and possible acceptance no later than 7 calendar days after the receipt of Canada's comments.  <b>Response Time:</b> Comments or acceptance of the revised CSR will be provided by Canada no later than seven (7) calendar days after receipt of the <u>soft copy submission</u> .  <b>Monthly Submissions:</b> After acceptance by Canada, the Contractor must provide a CSR on a monthly basis throughout the contract.			9. DISTRIBUTION and ADDRESSEES					
			A. ADDRESSEE		B. COPIES			
					DRAFT		FINAL	
					Hard Copy	Soft Copy	Hard Copy	Soft Copy
			DND TA		0	1	0	1
			PSPC CA		0	0	0	1
DND PA		0	0	0	1			

#### A2.4 CDRL – Meeting Agenda

CONTRACT DATA REQUIREMENTS LIST							
1. SYSTEM / ITEM Water Treatment System							
2. ITEM NUMBER CDRL WTS-PM-002	3. TITLE OR DESCRIPTION OF DATA Meeting Agenda		4. AUTHORITY (Data Item Number) DID WTS-PM-002				
5. CONTRACT REFERENCE SOW: <b>Para.3.2.3.5.1 (pg. 18)</b> DID: <b>App. A3.4 (pg. 60)</b>	6. FREQUENCY  ASREQ		7. REQUIRING OFFICE DND EMT				
8. SUBMISSION SCHEDULE  <b>First Submission:</b> The Contractor must provide a draft Meeting Agenda for review no later than seven (7) calendar days prior to each meeting.  <b>Response Time:</b> Comments on the draft Meeting Agenda, and additions and deletions of discussion items, will be provided by Canada no later than five (5) calendar days after receipt of the <u>soft copy submission</u> .  <b>Subsequent Submission:</b> The Contractor must provide a revised Meeting Agenda, addressing Canada's comments, in <u>soft copy</u> one (1) calendar day prior to each meeting, and in <u>hard copy</u> at the meeting.			9. DISTRIBUTION and ADDRESSEES				
			A. ADDRESSEE	B. COPIES			
				DRAFT		FINAL	
				Hard Copy	Soft Copy	Hard Copy	Soft Copy
			PSPC CA	0	1	1	1
			DND TA	0	1	1	1
			DND PA	0	1	1	1

## A2.5 CDRL – Meeting Minutes

CONTRACT DATA REQUIREMENTS LIST							
1. SYSTEM / ITEM Water Treatment System							
2. ITEM NUMBER CDRL WTS-PM-003	3. TITLE OR DESCRIPTION OF DATA Meeting Minutes		4. AUTHORITY (Data Item Number) DID WTS-PM-003				
5. CONTRACT REFERENCE SOW: <b>Para. 3.2.3.5.2 (pg. 18)</b> DID: <b>App. A3.5 (pg. 61)</b>	6. FREQUENCY  ASREQ		7. REQUIRING OFFICE  DND PMO				
8. SUBMISSION SCHEDULE  <b>First Submission:</b> The Contractor must provide draft Meeting Minutes for review no later than seven (7) calendar days following each meeting.  <b>Response Time:</b> Comments on the draft Meeting Minutes will be provided by Canada no later than seven (7) calendar days after receipt of the <u>soft copy submission</u> .  <b>Subsequent Submission(s):</b> The Contractor must provide revised Meeting Minutes, addressing Canada's comments, for review and possible acceptance no later than seven (7) calendar days after receipt of Canada's comments.  <b>Response Time:</b> Comments or acceptance of the revised Meeting Minutes will be provided by Canada no later than seven (7) calendar days after receipt of the <u>soft copy submission</u> .			9. DISTRIBUTION and ADDRESSEES				
			A. ADDRESSEE	B. COPIES			
				DRAFT		FINAL	
				Hard Copy	Soft Copy	Hard Copy	Soft Copy
			PSPC CA	0	1	0	1
			DND TA	0	1	0	1
			DND PA	0	1	0	1

## A2.6 CDRL – Technical Data Plan & List

CONTRACT DATA REQUIREMENTS LIST								
1. SYSTEM / ITEM Water Treatment System								
2. ITEM NUMBER CDRL WTS-PM-004		3. TITLE OR DESCRIPTION OF DATA Technical Data Plan & List (TDPL)		4. AUTHORITY (Data Item Number) DID WTS-PM-004				
5. CONTRACT REFERENCE SOW: <b>Para. 3.4.3.3 (pg. 20)</b> DID: <b>App. A3.6 (pg. 62)</b>		6. FREQUENCY  R/ASR & SEMIA		7. REQUIRING OFFICE  DND EMT				
<div>8. SUBMISSION SCHEDULE</div> <p><b>First Submission:</b> The Contractor must provide a draft TDPL (Section A &amp; B) for review no later than 42 calendar days after the Kick-off Meeting.</p> <p><b>Response Time:</b> Comments on the draft TDPL (Section A &amp; B) will be provided by Canada no later than 14 calendar days after receipt of the <u>soft copy submission</u>.</p> <p><b>Subsequent Submission(s):</b> The Contractor must provide a revised TDPL (Section A &amp; B), addressing Canada's comments, for review and possible acceptance no later than 14 calendar days after the receipt of Canada's comments.</p> <p><b>Response Time:</b> Comments or acceptance of the revised TDPL (Section A &amp; B) will be provided by Canada no later than seven (7) calendar days after receipt of the <u>soft copy submission</u>.</p> <p><b>Semi-Annual Submissions:</b> After acceptance by Canada, the Contractor must provide a TDPL (Section B – Technical Data List) for review and possible acceptance on a semi-annual basis throughout the contract.</p> <p>The Contractor must provide a CD/DVD(s) of the up-to-date electronic versions of the Technical Data on the list (TDPL Section B), and all Software Updates, on a semi-annual basis throughout the contract.</p>				9. DISTRIBUTION and ADDRESSEES				
				A. ADDRESSEE	B. COPIES			
					DRAFT		FINAL	
					Hard Copy	Soft Copy	Hard Copy	Soft Copy
				PSPC CA	0	1	0	1
				DND TA	0	1	0	1

## A2.7 CDRL – Catalogue of Repairable and Consumable Items

CONTRACT DATA REQUIREMENTS LIST								
1. SYSTEM / ITEM Water Treatment System								
2. ITEM NUMBER CDRL WTS-ILS-201	3. TITLE OR DESCRIPTION OF DATA Catalogue of Repairable and Consumable Items (CRCI)		4. AUTHORITY (Data Item Number) DID WTS-ILS-201					
5. CONTRACT REFERENCE SOW: <b>Para. 3.6.3.1 (pg. 25)</b> DID: <b>App. A3.7 (pg. 64)</b>	6. FREQUENCY  R/ASR & SEMIA		7. REQUIRING OFFICE  DND EMT					
8. SUBMISSION SCHEDULE  <b>First Submission:</b> The Contractor must provide a draft CRCI for review no later than 63 calendar days after the Kick-off Meeting.  <b>Response Time:</b> Comments on the draft CRCI will be provided by Canada no later than 14 calendar days after receipt of the <u>soft copy submission</u> .  <b>Subsequent Submission(s):</b> The Contractor must provide a revised CRCI, addressing Canada's comments, for review and possible acceptance no later than 14 calendar days after the receipt of Canada's comments.  <b>Response Time:</b> Comments or acceptance of the revised CRCI will be provided by Canada no later than seven (7) calendar days after receipt of the <u>soft copy submission</u> .  <b>Semi-Annual Submissions:</b> After acceptance by Canada, the Contractor must provide a CRCI for review and possible acceptance on a semi-annual basis throughout the contract.			9. DISTRIBUTION and ADDRESSEES					
			A. ADDRESSEE		B. COPIES			
					DRAFT		FINAL	
					Hard Copy	Soft Copy	Hard Copy	Soft Copy
			DND TA	0	1	0	1	



### **A3.0 APPENDIX: DATA ITEM DESCRIPTION**

#### **A3.1 DID Item List**

<b>DID #</b>	<b>Title</b>	<b>CDRL #</b>
WTS-PM-001	Contract Status Report	WTS-PM-001
WTS-PM-002	Meeting Agenda	WTS-PM-002
WTS-PM-003	Meeting Minutes	WTS-PM-003
WTS-PM-004	Technical Data Plan & List	WTS-PM-004
WTS-ILS-201	Catalogue of Repairable and Consumable Items	WTS-ILS-201

### A3.2 DID Table Definitions

The following section defines the various blocks of information found on the Data Item Description (DID) forms:

#### **BLOCK 1 – TITLE**

The title of the data item for the DID.

#### **BLOCK 2 - IDENTIFICATION NUMBER**

The Data Item Description (DID) number, consisting of a sequential three-digit number and prefixed with an abbreviation code, to uniquely identify the DID. Note that the 001-099 series is reserved to Project Management (PM) DIDs, the 101-199 series is reserved to Systems Engineering (SE) DIDs and the 201-299 series is reserved to Integrated Logistics Support (ILS) DIDs. The abbreviation codes used for the prefix are:

- “PM” for Project Management
- “SE” for Systems Engineering
- “ILS” for Integrated Logistics Support

#### **BLOCK 3 - DESCRIPTION**

Provides a general description of the data content requirements.

#### **BLOCK 4 – RELATED DOCUMENT(S)**

Provides a listing of the related documents and specifications associated with and required to produce this DID.

#### **BLOCK 5 - CONTRACT REFERENCE**

The specific paragraph numbers from the Contract Statement of Work and CDRL to assist in identifying the work effort associated with the data item.

#### **BLOCK 6 - PREPARATION INSTRUCTIONS**

Provides the preparation instructions for the content and format requirements for the DID.

### A3.3 DID – Contract Status Report

DATA ITEM DESCRIPTION	
1. TITLE <b>Contract Status Report (CSR)</b>	2. IDENTIFICATION NUMBER DID WTS-PM-001
3. DESCRIPTION  The Contract Status Report (CSR) is the principal statement and explanation of the status of the contract at the end of each reporting period, and will summarise the Contractor's progress and activities in relation to the Project milestones, schedule, and contract data deliverables.	
4. RELATED DOCUMENTS	5. CONTRACT REFERENCE SOW: <b>Para. 3.2.2.1 (pg. 17)</b> CDRL: <b>App. A2.3 (pg. 49)</b>
6. PREPARATION INSTRUCTIONS  6.1. <b>CONTENT</b>  6.1.1. <b>SECTION A: Contract Status</b>  6.1.1.1. The CSR must identify the date at which the CSR is valid, and the time period since the status date of the previous CSR (the 'reporting period').  6.1.1.2. The CSR must include the following information:  6.1.1.2.1. A summary of work activities (to be covered in detail in the Support Summary Report of the CSR) undertaken during the reporting period;  6.1.1.2.2. A summary of work activities expected to be undertaken in the next reporting period and all significant forthcoming events likely to influence the provision of Support or contract management activities, as applicable.  6.1.1.2.3. A list of correspondence that requires a response from the DND/PSPC, but for which no response has been received; and  6.1.1.2.4. A list of DND/PSPC correspondence to the Contractor for which a response is outstanding, and an estimate of the response date.  6.1.1.3. Contract Status Accounting Report (CSAR)  6.1.1.3.1. The Contract Status Accounting Report must include the following information:  6.1.1.3.1.1. The start date for the work activity undertaken during the reporting period.  6.1.1.3.1.2. A classification of the activity type such as Repair, TIES, FSR & Travel.  6.1.1.3.1.3. A description of the activity.  6.1.1.3.1.4. The estimated completion date of the activity.  6.1.1.3.1.5. The estimated cost of the activity.  6.1.1.3.1.6. The amount invoiced against the activity.  6.1.1.3.1.7. A summary of work activities expected to be undertaken in the next reporting period and all significant forthcoming events likely to influence the provision of Support or Contract management activities, as applicable.	

## Contract Status Accounting Report (CSAR)

Information current as of: *Date*

Reporting Period: *1 April XXXX - 31 March XXXX*

Item	Start Date	Activity Type	Description	Estimated Completion Date	Sub-Total	Estimated Expense (Euro, CAD, USD, GBP)	Invoiced (Euro, CAD, USD, GBP)	Comments
					0		0	
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								

Next reporting period activities

Estimated Completion Date      Estimated Amount for next FY

1								
2								

### 6.1.2. SECTION B: Support Summary

6.1.2.1. The CSR must include a Support Summary that describes the applicable support provided during the reporting period.

#### 6.1.2.2. Operating Support

6.1.2.2.1. The Operating Support sub-section must include, for the reporting period and as required by the Contract, details of:

6.1.2.2.1.1. Operator and Technical Resource deployments, quantifying the level of effort related to the various activities;

6.1.2.2.1.2. Operational Spares Kit deployments, and resulting replenishments once returned;

#### 6.1.2.3. Engineering Support

6.1.2.3.1. The Engineering Support sub-section must include, for the reporting period and as required by the Contract, details of:

6.1.2.3.1.1. Configuration Management changes;

6.1.2.3.1.2. Technical Data Management activities;

6.1.2.3.1.3. Software Updates (if applicable);

6.1.2.3.1.4. Technical Investigation and Engineering Support activities undertaken, including all significant outcomes or recommendations resulting from them;

6.1.2.3.1.5. Technical Problem Reports including the following information:

6.1.2.3.1.5.1. Category, priority, and title;

6.1.2.3.1.5.2. Date originated and originated by;

6.1.2.3.1.5.3. Assigned Contractor subject matter expert, and date assigned;

6.1.2.3.1.5.4. Technical problem corrective action plan;

6.1.2.3.1.5.5. Corrective action approval authority, if known;

6.1.2.3.1.5.6. Forecast completion date;

6.1.2.3.1.5.7. Reasons for delays;

6.1.2.3.1.5.8. Technical problem workarounds, if needed, and

6.1.2.3.1.5.9. Links to related technical reports.

6.1.2.3.2. The Support Summary must include a Configuration Management Equipment List (originally based on Appendix A1.0 List of Items to be Supported (page 39) to this SOW), showing the most current configuration of the WTS, its equipment and all associated items. The list must be provided in a table format including:

6.1.2.3.2.1. Serial numbers of the equipment installed in each instance of the WTS and also variances in configuration among instances of the system.

6.1.2.3.2.2. For each listed item, basic information must be recorded, including:

6.1.2.3.2.2.1. Item name;

6.1.2.3.2.2.2. Part number;

6.1.2.3.2.2.3. Model number (if applicable);

6.1.2.3.2.2.4. Original equipment manufacturer;

6.1.2.3.2.2.5. Commercial and Government Entity (CAGE) Code, and

6.1.2.3.2.2.6. NATO Stock Number (NSN), if available.

6.1.2.3.2.3. Software items must be identified by name, software identification number and version number.

**6.1.2.4. Maintenance Support**

6.1.2.4.1. The Maintenance Support sub-section must include, for the reporting period and as required by the Contract, details of:

6.1.2.4.1.1. Details of WTS and Operational Spares Kit that had the detailed inspection and maintenance during the reporting period, and what repairs or replacements were done. Include schedule for completing remaining detailed inspection and maintenance.

6.1.2.4.1.2. The number and type of Maintenance activities undertaken and all significant delays or issues encountered;

6.1.2.4.1.3. Maintenance Report, summarizing:

6.1.2.4.1.3.1. The number and nature of the defects or unexpected failure modes;

6.1.2.4.1.3.2. For each item undergoing R&O, indicate what was found wrong with the item;

6.1.2.4.1.3.3. In the instances when the Contractor can find nothing wrong with an item sent for repair, this must be indicated so the root cause can be investigated.

6.1.2.4.1.3.4. The measures that can be (or already has been) undertaken to avoid future defects or failure modes of a similar nature, and

6.1.2.4.1.3.5. Those defects and unexpected failure modes remaining without resolution or pending DND EMT action.

6.1.2.4.1.4. Each Repairable Item, by item name and quantity that has been identified as beyond physical repair or beyond economic repair, must be listed.

**6.1.2.5. Supply Support**

6.1.2.5.1. The Supply Support sub-section must include, for the reporting period and as required by the Contract, details of:

6.1.2.5.1.1. All issues or concerns with Inventory Management and stock item levels, such as stock item levels being low and needing replenishment;

6.1.2.5.1.2. Fleet Support Spares replenishments;

6.1.2.5.1.3. Obsolescence Management activities;

6.1.2.5.1.4. The numbers of stock movements, and cost of procurement, under:

6.1.2.5.1.4.1. Provision of Material (Operational Spares Kits);

6.1.2.5.1.4.2. Provision of Material (Fleet Support Spares);

6.1.2.5.1.4.3. Provision of Material (DND request), and

6.1.2.5.1.4.4. Disposal of DND-owned Stock;

6.1.2.5.1.5. All significant problems either encountered or envisaged with obtaining particular stock items, and

6.1.2.5.1.6. Disposals of DND-owned Stock.

**6.1.2.6. Training Support**

6.1.2.6.1. The Training Support sub-section must include, for the reporting period and as required by the Contract, details of:

6.1.2.6.1.1. The name and quantity of each Training Session conducted;

6.1.2.6.1.2. Activities to review and update the Training Package; and

6.1.2.6.1.3. Recommended changes for the training program, materials and equipment.

**6.1.2.7. Other Observations and Opportunities**

6.1.2.7.1. The Support Summary must include other details of other events, or on-going activities that the Contractor believes to be significant to the performance of the support services during the reporting period.

6.1.2.7.2. The Support Summary must include a description of opportunities identified by the Contractor that could improve the effectiveness and efficiency of the support provided.

**6.2. SOFT COPY FORMAT**

6.2.1. The CSR must be submitted as a PDF file type.

6.2.2. The CSR PDF must be submitted via email (submission size not to exceed 7MB) as follows:

6.2.2.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract.

6.2.2.2. Subject Field: WTS-PM-001 – CSR – [Rev #] – [Date of Issue]

#### A3.4 DID – Meeting Agenda

DATA ITEM DESCRIPTION	
1. TITLE <b>Meeting Agenda</b>	2. IDENTIFICATION NUMBER DID WTS-PM-002
3. DESCRIPTION The Meeting Agenda contains the venue information and identifies the discussion items to be covered at meetings.	
4. RELATED DOCUMENTS	5. CONTRACT REFERENCE SOW: <b>Para. 3.2.3.5.1 (pg. 18)</b> CDRL: <b>App. A2.4 (pg. 50)</b>
6. PREPARATION INSTRUCTIONS	
6.1. <b>CONTENT</b>	
6.1.1. The Meeting Agenda must set forth the venue, identify all requirements and list the discussion items to be covered at the meeting.	
6.1.2. Venue. The Meeting Agenda must address the venue as follows:	
6.1.2.1. Meeting Identification Number;	
6.1.2.2. Purpose;	
6.1.2.3. Date, time and location; and	
6.1.2.4. Attendees.	
6.1.3. Discussion items. The Meeting Agenda must address the discussion items through the following sections:	
6.1.3.1. Opening Remarks;	
6.1.3.2. Agenda Review;	
6.1.3.3. Review of Previous Minutes;	
6.1.3.4. Opened Discussion Items;	
6.1.3.5. New Discussion Items;	
6.1.3.6. Review of Action Items;	
6.1.3.7. Next Venue; and	
6.1.3.8. Closing Remarks.	
6.2. <b>HARD COPY FORMAT</b>	
6.2.1. The Meeting Agenda must be printed on paper with these characteristics:	
6.2.1.1. Weight of no less than 90 gsm;	
6.2.1.2. Brightness of no less than 96 ISO brightness;	
6.3. <b>SOFT COPY FORMAT</b>	
6.3.1. The Meeting Agenda must be submitted as a PDF file type.	
6.3.2. The Meeting Agenda PDF must be submitted via email (submission size not to exceed 7MB) as follows:	
6.3.2.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract.	
6.3.2.2. Subject Field: WTS-PM-002 – Meeting Agenda – [Rev #] – [Date of Issue]	

### A3.5 DID – Meeting Minutes

DATA ITEM DESCRIPTION	
1. TITLE <b>Meeting Minutes</b>	2. IDENTIFICATION NUMBER DID WTS-PM-003
3. DESCRIPTION The Meeting Minutes contains the detailed records of proceedings, discussions, decisions and action items from meetings.	
4. RELATED DOCUMENTS	5. CONTRACT REFERENCE SOW: <b>Para. 3.2.3.5.2 (pg. 18)</b> CDRL: <b>App. A2.5 (pg. 51)</b>
6. PREPARATION INSTRUCTIONS <b>6.1. CONTENT</b> 6.1.1. The Meeting Minutes must contain the detailed records of proceedings, discussions, decisions and action items from the meeting and be presented through the following sections: 6.1.1.1. General – consisting of meeting identification number, purpose, date, time and location; 6.1.1.2. Attendees, consisting of the organization each person represents, and the identification of the Chairperson(s); 6.1.1.3. Opening Remarks; 6.1.1.4. <b>Action Item Report</b> - used to monitor issues, assign responsibility, direct action and track status, history, and progress, and must consisting of: 6.1.1.4.1. Item #; date initiated; required action; assigned actionee; target completion date; cross-reference to all related action items. 6.1.1.4.2. Action Item Report must be <b>updated</b> with each meeting and must consisting of: 6.1.1.4.2.1. Action Item current status and the actual date completed; 6.1.1.5. Next Venue; 6.1.1.6. Closing Remarks; <b>6.2. SOFT COPY FORMAT</b> 6.2.1. The Meeting Minutes must be submitted as a PDF file type. 6.2.2. The Meeting Minutes PDF must be submitted via email (submission size not to exceed 7MB) as follows: 6.2.2.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract. 6.2.2.2. Subject Field: WTS-PM-003 – Meeting Minutes – [Rev #] – [Date of Issue]	



### A3.6 DID – Technical Data Plan & List

DATA ITEM DESCRIPTION	
1. TITLE <b>Technical Data Plan &amp; List</b>	2. IDENTIFICATION NUMBER DID WTS-PM-004
3. DESCRIPTION <p>The Technical Data Plan &amp; List (TDPL) describes the Contractor's strategy, plans, methodology, and processes for meeting the Contract requirements for the identification, control, update, validation and support of Technical Data.</p> <p>The TDPL also identifies and defines the Contractor's and sub-Contractor's Technical Data associated with the Contract. The configuration of the TDPL is managed to keep track of changes to the list of Technical Data throughout the period of the Contract.</p>	
4. RELATED DOCUMENTS	5. CONTRACT REFERENCE SOW: <b>Para. 3.4.3.3 (pg. 20)</b> CDRL: <b>App. A2.6 (pg. 52)</b>
6. PREPARATION INSTRUCTIONS 6.1. <b>CONTENT</b> 6.1.1. <b>Section A – Technical Data Organisation &amp; Management</b> 6.1.1.1. <b>Technical Data Organisation</b> 6.1.1.1.1. The TDPL must describe the Contractor's organisational arrangements for meeting the Technical Data requirements of the Contract, including: 6.1.1.1.1.1. The Contractor's Technical Data manager and the organisational units primarily involved in managing Technical Data; and 6.1.1.1.1.2. The Contractor's and approved sub-Contractor's management positions with responsibilities for Technical Data (eg, configuration managers, managers of technical information libraries, and quality managers). 6.1.1.2. <b>Technical Data Management</b> 6.1.1.2.1. The TDPL must describe the Contractor's strategy, methodology, and processes for managing Technical Data, including: 6.1.1.2.1.1. Distribution of Technical Data and distribution of updates to Technical Data, within the Contractor's and sub-Contractors' organisations and, where applicable, DND units; 6.1.1.2.1.2. Configuration Control of Technical Data, including: 6.1.1.2.1.2.1. Version control; 6.1.1.2.1.2.2. Matching Technical Data, including publications, with equipment configurations where multiple configurations exist, and 6.1.1.2.1.2.3. Storage, backup and recovery of electronic Technical Data. 6.1.1.2.2. The TDPL must the Contractor's processes for controlling and enabling access to Technical Data that is subject to restrictions or caveats associated with security, export licences, Technical Assistance Agreements, escrow arrangements, or IP rights. 6.1.1.2.3. The TDPL must describe the Contractor's expectations of the DND with respect to the management of Technical Data. 6.1.1.3. <b>Technical Data Development</b> 6.1.1.3.1. The TDPL must describe:	

6.1.1.3.1.1. The Contractor's typical activities associated with the identification, design, development, review, and delivery of new Technical Data and updates to existing Technical Data;

6.1.1.3.1.2. The standards and specifications to be applied for the development of new Technical Data and for updates to existing Technical Data;

**6.1.2. Section B – Technical Data List (TDL)**

6.1.2.1. The TDL must list all of the Technical Data:

6.1.2.1.1. Used by the Contractor and sub-Contractors in the provision of the support services; and

6.1.2.1.2. Generated by the Contractor and approved sub-Contractors as an outcome of providing the support services.

6.1.2.2. The TDL must list software separately from the other types of Technical Data.

6.1.2.3. The TDL must include the following information for each Item of Technical Data:

6.1.2.3.1. The name or title of the Technical Data;

6.1.2.3.2. The Item's reference number or document number for the Technical Data, including revision and amendment status;

6.1.2.3.3. A brief description of the Technical Data, including the purpose of the Technical Data;

6.1.2.3.4. The developmental status of the Technical Data (eg, existing and not to be modified, existing and to be modified, and new);

6.1.2.3.5. The source of the Technical Data (eg, name of sub-Contractor);

6.1.2.3.6. If not electronic Technical Data, delivery information, including location (to include the details of the escrow agent, if applicable, and the support organisations), quantity, and delivery date;

6.1.2.3.7. Security classification;

**6.2. SOFT COPY FORMAT**

6.2.1. The TDPL must be submitted as a PDF file type.

6.2.2. **Soft Copy format submission size below 7MB** – The TDPL PDF may be submitted via email as follows:

6.2.2.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract.

6.2.2.2. Subject Field: WTS-PM-004 – TDPL – [Rev #] – [Date of Issue]

6.2.3. **Soft Copy format submission size at or above 7MB** – The TDPL PDF must be submitted on CD or DVD media and be labelled as follows:

6.2.3.1. Water Treatment System

6.2.3.2. TDPL;

6.2.3.3. WTS-PM-004;

6.2.3.4. The Revision number, and

6.2.3.5. The date of issue.

### A3.7 DID – Catalogue of Repairable and Consumable Items

DATA ITEM DESCRIPTION	
1. TITLE <b>Catalogue of Repairable and Consumable Items</b>	2. IDENTIFICATION NUMBER DID WTS-ILS-201
3. DESCRIPTION  The Catalogue of Repairable and Consumable Items (CRCI) will be used by the DND EMT to potentially order additional Fleet Support Spares and Operational Spares Kits, and as such, will also include the necessary NATO codification cataloguing information to allow receipt at depot and movement within the world.  The CRCI will provide the DND EMT with the ability to continue to support deployed equipment beyond the time period of the Operational Spares Kits, should this become necessary.	
4. RELATED DOCUMENTS  <b>D-01-100-214/SF-000</b> <i>Specification for Preparation of Provisioning Documentation for Canadian Forces Equipment</i>  <b>D-01-400-001/SG-000</b> <i>Standard – Engineering Drawing Practices for Class 1 Drawings and Technical Data List</i>	5. CONTRACT REFERENCE  SOW: <b>Para. 3.6.3.1 (pg. 25)</b>  CDRL: <b>App. A2.7 (pg. 53)</b>
6. PREPARATION INSTRUCTIONS  6.1. <b>CONTENT</b>  6.1.1. The CRCI must include:  6.1.1.1. Basic ordering data including item identification, prices, and lead times for Fleet Support Spares and Operational Spares Kits.  6.1.1.2. Information regarding the content of the Operational Spares Kits, needed by the DRMIS and DND Transportation, such as: items included, weight and dimensions, and identification of all hazardous material or dangerous goods.  6.1.1.3. Supplementary Provisioning Technical Documentation (SPTD), for each item of the Fleet Support Spares and Operational Spares Kits, and must include the technical data required for DND to classify and fully describe the item within the NATO codification system, allowing for item identification and cataloguing purposes;  6.1.1.3.1. Key elements of good SPTD:  6.1.1.3.1.1. Displays the true manufacturer company logo & address (or NCAGE), and MRN (see D-01-100-214/SF-000 for definitions.).  6.1.1.3.1.2. Lists characteristic data of the item:  6.1.1.3.1.2.1. Configuration;  6.1.1.3.1.2.2. Physical characteristics, such as dimensions, tolerances, material, mandatory processes, surface finish, and protective coatings;  6.1.1.3.1.2.3. Electrical Characteristics;  6.1.1.3.1.2.4. Performance data;  6.1.1.3.1.2.5. Special features which contribute to the uniqueness of the item, especially for common items modified to a particular standard of performance.  6.1.1.3.1.3. Clearly shows the item in question.  6.1.1.3.1.4. Show where the item fits in the next higher assembly (if practical)	

6.2. **GENERAL FORMAT**

- 6.2.1. The SPTD must be prepared as black and white line drawing(s) or with good quality photograph(s) within a Technical Datasheet.
  - 6.2.1.1. If prepared as a drawing, the SPTD must follow the drawing format of D-01-400-001/SG-000 section 7.4, with attached parts lists (for assemblies), so that DND can ensure that the Provisioning Documentation reflects the current and complete configuration of the equipment being produced.

6.3. **SOFT COPY FORMAT**

- 6.3.1. The CRCI must be submitted as a PDF file type.
- 6.3.2. The SPTD must be submitted in PDF file type, with filenames in the following format: (MRN)\_(NCAGE)\_(item name).pdf.
- 6.3.3. **Soft Copy format submission size below 7MB** – The CRCI & SPTD PDFs may be submitted via email as follows:
  - 6.3.3.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract.
  - 6.3.3.2. Subject Field: WTS-ILS-201 – CRCI – [Rev #] – [Date of Issue]
- 6.3.4. **Soft Copy format submission size at or above 7MB** - The CRCI & SPTD PDFs must be submitted on CD or DVD media and be labelled as follows:
  - 6.3.4.1. Water Treatment System
  - 6.3.4.2. CRCI;
  - 6.3.4.3. WTS-ILS-201;
  - 6.3.4.4. The Revision number, and
  - 6.3.4.5. The date of issue.

## **A4.0 APPENDIX: MERCURY CONTAINING PRODUCTS/COMPOUNDS**

### **A4.1 General**

A4.1.1 Mercury and its compounds are listed as a toxic substance in Schedule 1 to the Canadian Environmental Protection Act, 1999. Consequently, the Contractor must comply with the following requirements:

A4.1.1.1 The Contractor must not replace an existing component or add a new equipment component containing mercury, when a mercury-free alternative exists.

A4.1.1.2 For each case where the products must contain mercury or its compounds, the Contractor must submit a statement that it is not technically feasible to use a mercury-free product in its place, and explain why;

A4.1.1.3 Products containing mercury or its compounds must comply with mercury content limits specified in all relevant standard;

A4.1.1.4 Where the products contain mercury or its compounds, in all shapes or forms, or where its operation or maintenance requires the use of mercury or its compounds, the Contractor must provide in tabular format, to the Technical Authority (TA), the following for each occurrence of mercury or its compounds:

A4.1.1.4.1 Identification of the Products as containing mercury or its compounds;

A4.1.1.4.2 NATO Stock Number of the Products, if available;

A4.1.1.4.3 Description of the Products:

A4.1.1.4.3.1 Manufacturer of the item or part containing mercury or its compounds;

A4.1.1.4.3.2 Manufacturer part number of the item or part containing mercury or its compounds;

A4.1.1.4.3.3 National Supply Code for Manufacturers (NSCM) / Commercial and Government Entity (CAGE) Code of the item or part containing mercury or its compounds;

A4.1.1.4.3.4 Description of the mercury or its compounds of the item or part containing mercury or its compounds;

A4.1.1.4.3.5 The form of mercury or its compounds (e.g. liquid, vapour, amalgam, metal halide); and

A4.1.1.4.3.6 The location of the mercury or its compounds on or in the item or part containing mercury or its compounds;

A4.1.1.4.4 Material Safety Data Sheet, where possible;

A4.1.1.5 The Contractor is responsible to ensure that products containing mercury or its compounds are labeled in a readily visible location identifying that the item contains mercury or its compounds. The label must be bilingual and in accordance with the following standard:

- A4.1.1.5.1      The information must be in characters that are at least 3 mm in height, legible and indelible and that are impressed, embossed or in a colour that contrasts with the label's background or the colour of the product as applicable.
- A4.1.1.5.2      The label must be enclosed by a borderline and easily distinguishable from other graphic material on the product or its package.
- A4.1.1.5.3      The label must be bilingual and must include following contents:
- A4.1.1.5.3.1      A statement "CAUTION/MISE EN GARDE" in characters that are at least 4 mm in height;
- A4.1.1.5.3.2      A statement that the product contains mercury and the content of mercury in the product in milligrams;
- A4.1.1.5.3.3      Information on the action to be taken in case of accidental breakage and a description of the risks associated with the use of the product, the address of a website that contains the information, or contact information for a person who can provide that information;
- A4.1.1.5.3.4      Information on the options available for proper disposal and recycling in accordance with the laws of jurisdiction where the disposal or recycling to take place, the address of a website that contains the information, or contact information for a person who can provide that information;
- A4.1.1.5.3.5      A warning that the product should be managed in accordance with the applicable disposal or recycling laws;
- A4.1.1.5.3.6      The "Hg" symbol encircled by a line on a readily visible location on the product where the characters are at least 3 mm in height which are impressed, embossed or in a colour that contrasts with the label's background or the colour of the product as applicable;
- A4.1.1.5.3.7      If the product is not large enough to accommodate the information, the information must be:
- 4.1.1.5.3.7.1      In a readily visible location on the package in which the product is sold or offered for sale; or
- 4.1.1.5.3.7.2      In a notice attached to the product or in a manual that accompanies the product, if there is no package, or if the package is not large enough to accommodate the information;
- 4.1.1.5.3.7.3      In both official languages;
- A4.1.1.6      Technical documentation provided by the Contractor must contain:
- A4.1.1.6.1      Product warning to provide information on the mercury content and other relevant information. The technical document must also include information on part numbers containing mercury, location, type of mercury, manufacturer's information, mercury content, and MSDS information (refer to para. A4.1.1.4).

- A4.1.1.6.2      A written work procedure for processes involving the safe handling of mercury-containing equipment, components and materials, must be included. It must identify procedures for mercury spills cleanups and disposal procedures. The work procedure must identify proper Personal Protective Equipment in the case of a spill. A warning indicating that the product should be disposed of or recycled in accordance with the applicable laws must also be included.

## A5.0 APPENDIX: CHEMICAL AGENT RESISTANT COATING SYSTEM

### A5.1 Scope

- A5.1.1 This appendix outlines the procedures to be followed and the products to be used in order to paint surfaces of the Canadian Army operational vehicles/equipment with the distinctive exterior permanent matt green colour (AMS-STD-595 #34094) and interior permanent gloss white colour (AMS-STD-595 #17925) coating systems that provide the corrosion, the camouflage, the infra-red and CARC properties required for the protection of the vehicles/equipment and for the protection of the soldier.

### A5.2 Applicable Documents and Product NSNs

- A5.2.1 Copies of these documents are available online from the US Department of Defense web site at <http://quicksearch.dla.mil/> or from the Standardization Document Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094.

Specification	NSN	Description
MIL-DTL-53072	N/A	Detail Specification Chemical Agent Resistant Coating (CARC) System Application Procedures and Quality Control Inspection
DOD-P-15328	8030-00-281-2726	Primer (Wash), Pre-treatment (Formula 117 For Metals) (Metric) (NSN for 1 US Gal size kit)
TT-C-490 Type III	8030-00-281-2726	Chemical Conversion Coatings and Pretreatments for Ferrous Surfaces (Base for Organic Coatings) (NSN for 1 US Gal size kit)
AMS-STD-595	N/A	Colors Used in Government Procurement
MIL-DTL-53022 Type IV	8010-01-589-7077	Primer, Epoxy Coating, (Enhanced) Corrosion Inhibiting, Lead and Chromate Free (NSN for 1.25 US Gal size kit)
MIL-DTL-53022 Type V	8010-01-610-7329	Primer, Epoxy Coating, (Enhanced) Corrosion Inhibiting, Lead and Chromate Free (NSN for 6X250 ml aerosol can kits)
MIL-PRF-32348 Type I Class I with a maximum of 45 Gloss Units at 60°	8010-01-592-0167 8010-01-620-2690	Primer, Powder Coating, Corrosion Inhibiting (NSN for 50 pound bag, colour #26622 or #27875 with a maximum Gloss level of 45 Gloss Units as determined by ASTM D523 at a 60° geometry)
ASTM D 523	N/A	Standard Test Method for Specular Gloss
MIL-PRF-24667 Type I, II or IV, Composition G	8010-01-397-3806	Coating System, Non-Skid, for Roll, Spray or Self-Adhering Application (NSN for 5 US Gal kit)
MIL-DTL-64159 Type II	8010-01-493-3169 8010-01-493-3170 8010-01-493-3177 8010-01-493-3179	Coating, Water Dispersible Aliphatic Polyurethane, Chemical Agent Resistant (NSNs are for 0.75 and 3 US Gal size colour green #34094 and tan #33446)



MIL-DTL-64159 Type III	8010-01-596-7862 8010-01-596-7859 8010-01-596-7855	Coating, Water Dispersible Aliphatic Polyurethane, Chemical Agent Resistant ( <i>NSNs are for 30 mL kit colour green #34094, for 30 mL kit colour tan #33446 and for 30 mL kit colour black #37030 respectively</i> )
MIL-PRF-22750 Type II Class H Grade B	8010-01-419-1164	Performance Specification, Coating, Epoxy, High Solids, Interior Use Only ( <i>NSN is for 1 US Gal kit colour white #17925</i> )
MIL-PRF-32348 Type II Class I	8010-01-605-5413	Primer Powder Coating with no finish coating for <u>interior use only</u> , Chemical Agent Resistant ( <i>50 pound bag, colour white #17925</i> )
MIL-PRF-32348 Type III Class I	-	Powder Coating Camouflage Chemical Agent Resistant Finish ( <i>50 pound bag, colour green #34094</i> )
MIL-PRF-32348 Type III Class I	-	Powder Coating Camouflage Chemical Agent Resistant Finish ( <i>50 pound bag, colour tan #33446</i> )
MIL-PRF-32348 Type IV Class I	8010-01-610-2410	Powder Topcoat, Ammunition Container Chemical Agent Resistant Coating ( <i>NSN for 50 pound bag, colour green #34079</i> )
MIL-PRF-32348 Type IV Class I	8010-01-610-2413	Powder Topcoat, Ammunition Container Chemical Agent Resistant Coating ( <i>NSN for 50 pound bag, colour Tan #33446</i> )
TSP	7930-20-A0H-0013	Tri-Sodium Phosphate ( <i>1 pound container</i> )
Acetone	6810-21-878-4860	Acetone Technical ( <i>1 Liter container</i> )

### A5.3 Requirements

A5.3.1 A CARC system must be applied on the interior and exterior surfaces of the Canadian Army operational vehicles/equipment in conformance with the following descriptions.

#### A5.3.2 Cleaning

A5.3.2.1 All parts must be cleaned immediately before surface preparation. Prior to surface preparation, all surfaces must be freed of corrosion or soil contaminants such as grease, oil, welding flux, scale, dirt, adhesives or other foreign matter that may interfere with surface preparation, treatment or coating. For this purpose use a hot alkaline cleaning by immersion, spray or vapour process or appropriate organic solvent(s) as per MIL-DTL-53072 (latest edition).

A5.3.2.2 Precautions must be taken to ensure that surfaces remain clean and dry until they are pre-treated, primed and topcoated.

#### A5.3.3 Surface Preparation

A5.3.3.1 Heavy metal parts must be processed by abrasive grit blast to a white metal SSPC-SP-5 surface finish to impart a profile of 38 to 50 microns (1.5 to 2 mils). Lighter delicate metal parts that cannot withstand aggressive grit blasting without warping must be processed in accordance with paragraph A5.3.3.2. For non-

metallic parts surface preparation, perform a uniform scuffing of the surface with a 180 grit abrasive media. Dust-off surfaces.

- A5.3.3.2 For delicate metal parts surface preparation, perform an abrasive grit blast cleaning to a white metal SSPC-SP-5 surface finish imparting to the substrate a profile of 13 microns. Dust-off surfaces.

A5.3.4 Surface pre-treatment

- A5.3.4.1 Metal parts and non-metallic parts surfaces prepared as per paragraph A5.3.3.1 above do not require pre-treatment.

- A5.3.4.2 Delicate metal part surfaces prepared as per paragraph A5.3.3.2 above must receive an organic pre-treatment (wash primer) coating meeting the requirements of specification TT-C-490 type III (DOD-P-15328) (latest edition).

A5.3.5 Primer

- A5.3.5.1 A liquid primer coating meeting the requirements of specification MIL-DTL-53022 Type IV (latest edition), Epoxy Coating, Enhanced Corrosion Protection or a powder primer coating, Corrosion Inhibiting meeting the requirements of specification MIL-PRF-32348 Type I Class I (latest edition) with a maximum Gloss level of 45 Gloss Units as determined by ASTM D523 at a 60° geometry must be applied to all surfaces that need to be coated. These primers must be applied to a dry film thickness (DFT) as recommended by the manufacturer technical data sheet or specifically for MIL-DTL-53022 Type IV (latest edition) when applied direct to metal (i.e. w/o pre-treatment), a DFT of 50 to 63 microns must be achieved when measuring the DFT of the primers over the highest peaks of the profile. For interior surfaces see also para A5.3.7.2.2.

- A5.3.5.2 WARNING: Powder primer coatings requiring a cure temperature above 180°C must not be used on composite materials or parts pre-treated with TT-C-490 Type III.

A5.3.6 Non-Skid Surface

- A5.3.6.1 Apply, as per manufacturer's instructions a non-skid coating meeting the requirements of specification MIL-PRF-24667 Type I, II, or IV, Composition G, (latest edition) colour #36076 (dark grey) in accordance with AMS-STD-595 (latest edition) to surface areas intended as walk-on surfaces.

- A5.3.6.2 WARNING: Products qualified to MIL-PRF-24667 Type I, II, or IV, Composition G are applied in a relatively thick coat and contain solvents that will negatively affect the adhesion of the primer MIL-DTL-53022 Type IV if applied too soon i.e. before the primer "Dry Hard" condition has been reached. Therefore, the non-skid product must be applied no sooner than the dry hard condition of the primer and its dry hard condition must be reached within a period of time that will allow for the application of the topcoat within 24 hours of the application of the primer.

A5.3.7 Topcoat

- A5.3.7.1 Exterior Surfaces

- A5.3.7.1.1 A liquid polyurethane topcoat meeting the requirements of specification MIL-DTL-64159 Type II (latest edition) or a finish powder coating meeting the requirements of MIL-PRF-32348 Type III Class I, colour #34094 (flat green) as per AMS-STD-595 (latest edition) must be applied to exterior surfaces including exterior walk-on surface areas having non-skid coating.
- A5.3.7.1.2 WARNING: Powder coatings requiring a cure temperature above 180°C must not be applied over composite materials, MIL-PRF-24667 Type I, II, or IV, Composition G non-skid or MIL-DTL-53022 Type IV epoxy based coatings.
- A5.3.7.2 Interior Surfaces
- A5.3.7.2.1 An epoxy topcoat meeting the requirements of specification MIL-PRF-22750 Type II, Class H, Grade B (latest edition), colour #17925 (gloss white) as per AMS-STD-595 (latest edition) must be applied to interior surfaces including walk-on surface areas with non-skid coating.
- A5.3.7.2.2 Powder primers that do not require a finish coating and meeting the requirements of MIL-PRF-32348 Type II Class I (latest edition), colour #17925 (gloss white) as per AMS-STD-595 (latest edition) intended for direct to metal in a single application can also be used on interior surfaces.
- A5.3.7.2.3 WARNING: Powder primer coatings requiring a cure temperature above 180°C must not be applied over composites or MIL-PRF-24667 Type I, II, or IV, Composition G non-skid epoxy based coatings.
- A5.3.7.3 Interior surfaces of parts that could be directly exposed to chemical agents such as hatches, ramps and doors must be coated as per paragraph A5.3.7.1 above.
- A5.3.7.4 WARNING: The topcoats must not be applied before the "Dry Hard" condition of the non-skid material has been reached and must be applied within 24 hours after the application of the primer. There must be no walking on non-skid surfaces for a period of 7 days to allow full cure of the coating system.
- A5.3.8 Marking and Touch-Up
- A5.3.8.1 Marking
- A5.3.8.1.1 Markings identifying the vehicle/equipment information, the flag, numbering and lettering must be performed with a touch-up coating kit meeting MIL-DTL-64159 Type III (latest edition) and AMS-STD-595 (latest edition) colour #37030 (flat black). Markings must be applied directly over the CARC system topcoat following its cleaning, if required, with a 2% weight TSP in potable water solution followed by a potable water rinse and then an acetone wipe & dry.
- A5.3.8.2 Touch-Up
- A5.3.8.2.1 For defects or damages to the CARC system that expose the substrate it is required to clean the area to be reworked; for this purpose use a 2% weight TSP in potable water solution followed by a potable water rinse and then an acetone wipe & dry. For metallic components it is then required to remove rust or corroded metal by sanding using an 80 grit paper or a

mechanically driven steel brush (if a steel brush is used it will be required to clean again the surface as described above). For composite materials, hand-scuff using a 180 grit paper. Remove sanding dust with a clean dry paint brush and apply a coat of primer meeting the requirements of specification MIL-DTL-53022 Type V (latest edition); feather-in with the existing primer. Touch-up of the topcoat must be performed (at the dry-to-touch condition of the touch-up primer) with a touch-up coating kit meeting MIL-DTL-64159 Type III (latest edition) and AMS-STD-595 (latest edition) colour #34094 (flat green); feather-in with the existing topcoat.

- A5.3.8.2.2 For defects or damages to the CARC system that expose the primer it is required to clean the area to be reworked; for this purpose use a 2% weight TSP in potable water solution followed by a potable water rinse and then an acetone wipe & dry. Hand-scuff the primer and surrounding topcoat using a 180 grit scuffing paper. Touch-up of the topcoat must be performed with a touch-up coating kit meeting MIL-DTL-64159 Type III (latest edition) and AMS-STD-595 (latest edition) colour #34094 (flat green); feather-in with the existing topcoat.

A5.3.9 Selection of Materials, Mixing and Application

- A5.3.9.1 Materials used must be selected from the applicable qualified products list (QPL/QPD) and must be mixed and applied as per the manufacturers' Technical Data Sheet (except for MIL-DTL-53022 Type IV (latest edition) DFT when applied direct to metal (see para A5.3.5.1). The brand name and QPL/QPD number of the materials used must be reported to the Technical Authority/Project Configuration Manager for CAF configuration, health, and safety purposes after acceptance of First Article Test Report.

A5.3.10 Special Measures for Equipment Manufacturers / Painting Contractors

- A5.3.10.1 In any instance where the CARC system specified herein interferes with the design features of specific components that are key to the operation of the equipment, it is the manufacturer's responsibility to identify and propose a suitable alternative coating system having high chemical agent resistance and corrosion protection properties. The brand name of the approved alternative coating system materials must be reported to the TA.
- A5.3.10.2 Deviations from CARC products and application processes identified herein as well as deviations from the product manufacturer Technical Data Sheet must be reported to the TA for their evaluation and approval.

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## ANNEX B2 - BASIS OF PAYMENT

### 1. Terms

The Basis of Payment (BoP) is in effect for the entire duration of the Water Treatment System (WTS) In Service Support (ISS) Contract with a 5-year firm period and up to five (5) optional periods of one-year each.

The ISS Contract commences with acceptance of the first WTS system under the WTS Acquisition Contract.

The hourly rates are firm, all-inclusive of direct & indirect costs, overhead rates, General and Administrative rates and profit in accordance with Contract Cost Principles 1031-2. Applicable taxes are extra.

### 2. Work Categories

The WTS ISS SOW describes the sustainment requirements. From a BoP standpoint, the work performed under this contract will be performed under three distinct Work Categories:

Category 1 – CORE Requirements (Fixed Price Elements) – See Annex A2, Section 3.0

Category 2 – Repair & Overhaul and Tasking Requirements (Fixed Labour Rates, Variable Level of Effort) – See Annex A2, Section 4.0 and 5.0

Category 3 – Contractor Markup – Applicable to Direct Material Costs incurred

Prices and Rates to be used as per the Tables below.

### 3. For In-Plant Repair and Overhaul (Task Based R&O) and Detailed Diagnostic Inspection

The Contractor will be paid for the actual hours incurred, times the applicable firm hourly rates as specified in **Table 2.1**. These rates include the time spent inspecting, evaluating and estimating the cost of repair. Customs Duties are included and the Goods and Services Tax or Harmonized Sales Tax is extra, if applicable. Canada will not pay the Contractor for any design changes, modifications or interpretations of the Work unless they have been approved, in writing, by the Contracting Authority before their incorporation into the Work.

### 4. For Special Investigations and Technical Studies (SITS) / Technical Investigation and Engineering Services (TIES) / Field Service Representative (FSR) / and Training when tasked to do so by a duly signed and completed DND 626 Task Authorization

The Procurement Authority will identify which Basis of Payment below will apply to a specific Task Authorization.

- a. **Firm Price TA:** In consideration of the Contractor satisfactorily completing all of its obligations under the authorized Task Authorization (TA), the Contractor will be paid the firm lot price, based on the hourly rates detailed in Table 2.1, as specified in the authorized Task Authorization. Customs Duties are included and the Goods and Services Tax or Harmonized Sales Tax is extra, if applicable.
- b. **Ceiling Price TA:** The Contractor will be reimbursed for the costs reasonably and properly incurred in the performance of the Work, as determined in accordance with the hourly rates detailed in Table 2.1, to a ceiling price, as specified in the authorized Task Authorization. Customs duties are included and Applicable Taxes are extra.

The ceiling price is subject to downward adjustment so as not to exceed the actual costs reasonably incurred in the performance of the Work and computed in accordance with the Basis of Payment.

- c. **Limitation of Expenditure TA:** The Contractor will be reimbursed for the costs reasonably and properly incurred in the performance of the Work specified in the authorized Task Authorization (TA), as determined in accordance with the hourly rates detailed in Table 2.1, to the limitation of expenditure specified in the authorized TA.

Canada's liability to the Contractor under the authorized TA must not exceed the limitation of expenditure specified in the authorized TA. Customs duties are included and Applicable Taxes are extra.

No increase in the liability of Canada or in the price of the Work specified in the authorized TA resulting from any design changes, modifications or interpretations of the Work will be authorized or paid to the Contractor unless these design changes, modifications or interpretations have been authorized, in writing, by the Contracting Authority before their incorporation into the Work.

**5. For Subcontracting Work, Contractor Furnished Spares Material, Shipping**

When conducting R&O/FSR/Training work requiring subcontractors, the Contractor will be paid a firm price based on the rates specified in Table 2.1 using the applicable multiplier shown in Table 2.2. Fixed cost elements will be reimbursed using the rate shown in Table 3. Customs Duties are subject to exemption and Applicable Taxes are extra.

**6. For Overtime Work Authorization**

Emergency repairs/work which is specifically requested to be performed at other than normal working hours will be paid at the rates specified in Table 2.1 using the applicable multiplier shown in Table 2.2 for overtime on normal days, weekends, and statutory holidays. No premium overtime must be charged unless authorized in writing by the Procurement Authority.

**7. For Travel and Living Expenses**

The Contractor will be reimbursed its authorized travel and living expenses reasonably and properly incurred in the performance of the Work, at cost, without any allowance for profit and/or administrative overhead, in accordance with the meal, private vehicle provided in Appendices B, C and D of the National Joint Council Travel Directive (<https://www.njc-cnm.gc.ca/directive/d10/en>), and with the other provisions of the directive referring to "travellers", rather than those referring to "employees".

All payments are subject to government audit.

All travel must have prior authorization of the Procurement Authority.

**8. For Out of Canada and Continental USA Insurance**

For authorized requests to provide out-of-Canada and Continental USA FSR/Training requirements, when tasked by a duly signed DND 626, the Contractor will be paid its actual costs for insurance to complete the Work without allowance for mark-up or profit. All payments are subject to Government audit. Expenses claimed shall be supported by vouchers, receipts, etc. All originals must be retained by the Contractor pending verification by Canada.

**9. Contractor's Laid-Down Cost**

The Contractor's laid-down cost is defined as the cost incurred by the Contractor to acquire a specific product or service for resale to the government. This includes the supplier's invoice price (less trade discounts), plus any applicable charges for incoming transportation, foreign exchange, customs duty and brokerage, but excludes the Goods and Services Tax and the Harmonized Sales Tax, Selling & G&A (SG&A) Overhead, Overheads, Material Handling (if applicable) and Profit.

**Table 1 – CORE Requirements**

(firm monthly rates)

Monthly core rates	Year 1	Year 2	Year 3	Year 4	Year 5	Option Year 1	Option Year 2	Option Year 3	Option Year 4	Option Year 5
Monthly fee (\$/month)										

**Table 2.1 – Repair & Overhaul and Tasking Requirements**

(firm hourly rates, all-inclusive of direct & indirect costs, overhead rates, General and Administrative rates and profit, Applicable taxes are extra)

Labour Category	Year 1	Year 2	Year 3	Year 4	Year 5	Option Year 1	Option Year 2	Option Year 3	Option Year 4	Option Year 5
Project Manager										
Engineer										
Technician										
Technologist										
Logistician										
Draftsperson/Illustrator										

**Table 2.2 – Labour Rate Multiplier**

(factor to be applied against the corresponding hourly rate, if applicable)

Labour Category	OT X 1 (after normal hours work)	OT X 2 (Statutory holiday and weekend)	Danger Prime Rate	Subcontractor Rate
Project Manager				
Engineer				
Technician				
Technologist				
Logistician				
Draftsperson/Illustrator				

**Table 3 – Contractor Markup**

Parts Procurement	_____ %
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**LOGISTICS**  
**STATEMENT OF WORK**

*For*

**Repair and Overhaul Contracts**

**Including**

**In and Out of Country Repair**

**Major Equipment**

**Accountable Advance Spares**

*Issued on authority of the Assistant Deputy Minister (Material) (ADM(Mat))*

OPI: DMPP 9-6 28/05/2018



## Record of Changes

Identification of changes		Date Entered	Signature
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**TABLE OF CONTENTS**

1.0	GENERAL INTRODUCTION.....	5
1.1	AIM .....	5
1.2	EXTENT OF WORK/TYPES OF EQUIPMENT (Mandatory).....	6
2.0	RECEIPT (Mandatory) .....	6
2.1	DISCREPANCIES IN SHIPMENTS (Mandatory).....	6
3.0	WORK CONTROL (Mandatory) .....	6
3.1	COMPLETION OF WORK (Mandatory) .....	6
3.2	STOP REPAIR ACTION (Mandatory) .....	6
4.0	ANNUAL REPAIR FORECAST – SNAPS (As applicable on an exceptional basis) 6	
5.0	COST CONTROL (Mandatory) .....	6
6.0	COSTING RECORDS (Mandatory).....	6
6.1	INVOICE/CLAIMS FOR PAYMENT (AAS SPARES) (As applicable).....	7
7.0	MAINTENANCE SUPPORT-MINOR REPAIRS (Mandatory) .....	7
7.1	MOBILE REPAIR PARTIES (MRPs) (As Applicable) .....	7
7.2	EQUIPMENT TURN AROUND TIME (TAT) (Mandatory).....	7
7.3	PRIORITY REPAIR REQUEST (PRR) (Mandatory) .....	7
7.4	SPECIAL INVESTIGATIONS & TECHNICAL STUDIES (SITs) (As applicable).....	7
7.5	TECHNICAL INVESTIGATIONS & ENGINEERING STUDIES (TIES) (As Applicable).....	7
7.6	TERMINATION OF CONTRACT (Mandatory).....	7
8.0	SUPPLY SUPPORT/SUSTAINMENT SUPPORT (Mandatory) .....	7
8.1	TRANSACTION DOCUMENTATION (Mandatory).....	7
8.2	CONTRACTOR SUPPLY ACCOUNTING (Mandatory).....	8
8.3	MANAGEMENT OF DND-OWNED SPARES (As Applicable) .....	8
8.4	SPARES REVIEW (As applicable).....	8
8.5	STOCKTAKING.....	9
8.6	SELECTION NOTICE OBSERVATION MESSAGE (SNOM) (Mandatory) 9	
8.7	EMBODIMENT FEES (As Applicable) .....	9
8.8	LOSS OR DAMAGE TO DND MATERIEL (Mandatory) .....	9
8.9	SCRAP - CUSTODY & DISPOSAL (Mandatory).....	9
8.10	PACKAGING (Mandatory).....	9

**ANNEX C2**  
**TO W8476-216378**  
**REVISED 04 Nov 2021**

8.11	REUSABLE CONTAINER (As Applicable) .....	9
8.12	TRANSPORTATION/SHIPMENT IDENTIFICATION/MODE OF SHIPMENT/LOSS OR DAMAGE IN TRANSIT/ GENERAL CLAIMS PROCEDURES (Mandatory) .....	9
9.0	WARRANTY CONSIDERATION (Mandatory).....	9
10.0	CONTRACTOR USE OF DND EQUIPMENT/PUBLICATIONS (As Applicable) 9	
11.0	PUBLICATIONS (As Applicable) .....	10
12.0	OFFICE SERVICES (As Applicable) .....	10
13.0	MINUTES OF MEETINGS (Mandatory) .....	10
14.0	PLANT SHUTDOWN/VACATION PERIOD (Mandatory) .....	10
15.0	REPORTS (Mandatory).....	10

## 1.0 GENERAL INTRODUCTION

### 1.1 AIM

This Logistic Statement of Work (LOG SOW) is distributed on the authority of the Assistant Deputy Minister (Material) (ADM (Mat)). It will be distributed, as required, internally to ADM (Mat) staff engaged in creating Repair and Overhaul (R&O) Contracts and Procurement Instruments (PI) and those who manage Repair and Overhaul Contracts.

This is a common LOG SOW which will entail contract conditions for Repair and Overhaul contracts for:

**In and Out of country:** For step by step instruction on in and out of country repair process refer to Annex B in the A-LM-184-001/JS-001. This model will describe the roles and responsibilities in the end to end repair process.

**Major Equipment:** For complete instructions on receipt of Major Equipment, refer to Chapter 2 in the A-LM-184-001/JS-001.

**Accountable Advance Spares** For complete instruction on AAS, refer to Chapter 8.2.7 in the A-LM-184-001/JS-001.

**This LOG SOW is to be read in conjunction with the A-LM-184-001/JS-001 for additional information. It is to be noted that there are Chapters that are mandatory when using the LOGSOW and must not be removed from the LOGSOW, if the contractor is managing Government Owned Materiel.**

**It is to be noted that the LOG SOW is to be used primarily as a guide for R&O contracts. It is paramount that this LOG SOW be utilised with minimal changes for reasons of procurement standardization and departmental accountability. However, changes are permissible where there is a need to clarify specific requirements that would apply to equipment/weapon systems undergoing procurement and contract action.**

**They are as follows:**

**The following Chapters will be identified as mandatory or as applicable.**

It is important to understand the system of record (DRMIS) being used in DND and the various account structures in place. Contractors requiring access to DRMIS must obtain a PKI (Public Key Infrastructure) card in accordance with the recently implemented Two-Factor Authentication. All of this information is located in Chapter 1.1 of the A-LM-184-001/JS-001.

## **1.2 EXTENT OF WORK/TYPES OF EQUIPMENT (Mandatory)**

Refer to Chapter 1.2 of A-LM-184-001/JS-001 for further information on the different types of DND Equipment that are authorized for repair and the category types.

## **2.0 RECEIPT (Mandatory)**

Refer to Ch. 2.0 of the A-LM 184 for complete instruction on how to process receipts.

## **2.1 DISCREPANCIES IN SHIPMENTS (Mandatory)**

The Contractor must action discrepancies in shipments in accordance with Chapter 2.1 of A-LM-184-001/JS-001.

## **3.0 WORK CONTROL (Mandatory)**

The Contractor must ensure that the repair of all DND equipment is controlled by a serial numbered work order IAW Chap 3 of A-LM-184-001/JS-001.

## **3.1 COMPLETION OF WORK (Mandatory)**

Refer to Chapter 3.1 of A-LM-184-001/JS-001.

## **3.2 STOP REPAIR ACTION (Mandatory)**

The Contractor must comply immediately with all stop repair instructions. Detailed procedures are contained in Chapter 3.2 of A-LM-184-001/JS-001.

## **4.0 ANNUAL REPAIR FORECAST – SNAPS (As applicable on an exceptional basis)**

Refer to Chapter 4 of the A-LM-184-001/JS-001 for more information.

## **5.0 COST CONTROL (Mandatory)**

Refer to Chapter 5.0 of the A-LM-184-001/JS-001 for more information.

## **6.0 COSTING RECORDS (Mandatory)**

The Contractor must prepare forms and maintain records IAW Chapter 6.0 of the A-LM-184-001/JS-001.

## **6.1 INVOICE/CLAIMS FOR PAYMENT (AAS SPARES) (As applicable)**

The Contractor must submit monthly invoices for AA spare parts, IAW Chapter 6.1 of the A-LM-184-001/JS-001.

## **7.0 MAINTENANCE SUPPORT-MINOR REPAIRS (Mandatory)**

Refer to Chapter 7.0 of the A-LM-184-001/JS-001 for more information.

### **7.1 MOBILE REPAIR PARTIES (MRPs) (As Applicable)**

Refer to Chapter 7.1 of the A-LM-184-001/JS-001 for more information.

### **7.2 EQUIPMENT TURN AROUND TIME (TAT) (Mandatory)**

Refer to Chapter 7.2 of the A-LM-184-001/JS-001 for more information.

### **7.3 PRIORITY REPAIR REQUEST (PRR) (Mandatory)**

Refer to Chapter 7.3 of the A-LM-184-001/JS-001 for more information.

### **7.4 SPECIAL INVESTIGATIONS & TECHNICAL STUDIES (SITs) (As applicable)**

Refer to Chapter 7.4 of the A-LM-184-001/JS-001 for more information.

### **7.5 TECHNICAL INVESTIGATIONS & ENGINEERING STUDIES (TIES) (As Applicable)**

Refer to Chapter 7.5 of the A-LM-184-001/JS-001 for more information.

### **7.6 TERMINATION OF CONTRACT (Mandatory)**

Refer to Chapter 7.6 of A-LM-184-001/JS-001.

## **8.0 SUPPLY SUPPORT/SUSTAINMENT SUPPORT (Mandatory)**

### **8.1 TRANSACTION DOCUMENTATION (Mandatory)**

Refer to Chapter 8.1 of A-LM-184-001/JS-001 for more information.

## **8.2 CONTRACTOR SUPPLY ACCOUNTING (Mandatory)**

Refer to Ch. 8.2. For explanation of CRPA/CIS.

### **8.2.3 CONTRACTOR ISSUE SPARES (CIS) MATERIEL RECEIVED OFF CONTRACT/PROCUREMENT (As Applicable)**

Refer to Chapter 8.2.3 of A-LM-184-001/JS-001 for more information.

### **8.2.4 SHORTAGE OF CONTRACT ISSUE SPARES (CIS) (As Applicable)**

Refer to Section 8.2.4 of A-LM-184-001/JS-001 for more information.

### **8.2.5 ORDERING/RECEIVING CATALOGUED CIS IN DRMIS (As Applicable)**

Refer to Section 8.2.5 of A-LM-184-001/JS-001 for more information.

### **8.2.6 GOVERNMENT FURNISHED OVERHAUL SPARES (GFOS) (As Applicable)**

Refer to Section 8.2.6 for further explanation and detail.

### **8.2.7 ACCOUNTABLE ADVANCE SPARES (AAS) (As Applicable)**

Refer to Section 8.2.7 for further explanation and detail.

## **8.3 MANAGEMENT OF DND-OWNED SPARES (As Applicable)**

Refer to Chapter 8.3.1 of A-LM-184-001/JS-001 for more information.

## **8.4 SPARES REVIEW (As applicable)**

Refer to Chapter 8.4 of A-LM-184-001/JS-001 for more information.

### **8.4.1 LOAN OF GOVERNMENT FURNISHED INFORMATION/ GOVERNMENT FURNISHED EQUIPMENT (GFI/GFE) (As Applicable)**

Refer to Section 8.4.1 for further explanation and detail.

## **8.5 STOCKTAKING (Mandatory)**

Refer to Section 8.5 for further explanation and detail.

## **8.6 SELECTION NOTICE OBSERVATION MESSAGE (SNOM) (Mandatory)**

Refer to Chapter 8.6 of A-LM-184-001/JS-001.

## **8.7 EMBODIMENT FEES (As Applicable)**

Refer to section 8.7 of A-LM-184-001/JS-001 for further explanation and detail.

## **8.8 LOSS OR DAMAGE TO DND MATERIEL (Mandatory)**

Refer to section 8.8 of A-LM-184-001/JS-001 for further explanation and detail.

## **8.9 SCRAP - CUSTODY & DISPOSAL (Mandatory)**

Refer to section 8.9 of A-LM-184-001/JS-001 for further explanation and detail.

## **8.10 PACKAGING (Mandatory)**

Refer to section 8.10 of A-LM-184-001/JS-001 for further explanation and detail.

## **8.11 REUSABLE CONTAINER (As Applicable)**

Refer to Chapter 8.11 of the A-LM-184-001/JS-001 for more information.

## **8.12 TRANSPORTATION/SHIPMENT IDENTIFICATION/MODE OF SHIPMENT/LOSS OR DAMAGE IN TRANSIT/ GENERAL CLAIMS PROCEDURES (Mandatory)**

Refer to Chapter 8.12 of the A-LM-184-001/JS-001 for more information.

## **9.0 WARRANTY CONSIDERATION (Mandatory)**

Refer to Chapter 9.0 of the A-LM-184-001/JS-001 for more information.

## **10.0 CONTRACTOR USE OF DND EQUIPMENT/PUBLICATIONS (As Applicable)**

Refer to Chapter 10.0 of the A-LM-184-001/JS-001 for more information.



## **11.0 PUBLICATIONS (As Applicable)**

Refer to Chapter 11 of A-LM-184-001/JS-001 for more information.

## **12.0 OFFICE SERVICES (As Applicable)**

Refer to Ch. 12 of A-LM-184-001/JS-001 for further explanation.

## **13.0 MINUTES OF MEETINGS (Mandatory)**

Refer to Ch. 13 of A-LM-184-001/JS-001 for further explanation.

## **14.0 PLANT SHUTDOWN/VACATION PERIOD (Mandatory)**

Refer to Ch. 14 of A-LM-184-001/JS-001 for further explanation.

## **15.0 REPORTS (Mandatory)**

Refer to Ch. 15 of A-LM-184-001/JS-001 for a complete list of reports available to contractors.

Solicitation No. - N° de l'invitation  
W8476-216378/A  
Client Ref. No. - N° de réf. du client  
W8476-216378

Amd. No. - N° de la modif.  
File No. - N° du dossier  
hl673.W8476-216378

Buyer ID - Id de l'acheteur  
hl673  
CCC No./N° CCC - FMS No./N° VME

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## **ANNEX D2 - SECURITY REQUIREMENTS CHECK LIST – IN SERVICE SUPPORT CONTRACT**



SECURITY REQUIREMENTS CHECK LIST (SRCL)

LISTE DE VÉRIFICATION DES EXIGENCES RELATIVES À LA SÉCURITÉ (LVERS)

PART A - CONTRACT INFORMATION / PARTIE A - INFORMATION CONTRACTUELLE

1. Originating Government Department or Organization / Ministère ou organisme gouvernemental d'origine		2. Branch or Directorate / Direction générale ou Direction	
Department of National Defence		DCSEM	
3. a) Subcontract Number / Numéro du contrat de sous-traitance		3. b) Name and Address of Subcontractor / Nom et adresse du sous-traitant	
Not Applicable		Not Applicable	
4. Brief Description of Work / Brève description du travail			
Development and delivery of the Water Treatment Systems (WTS) for the Canadian Armed Forces (CAF). The Contractor personnel will need to access DND/CAF Operations Zone (i.e. any Canadian Forces Base in the country) for the training sessions, so Contractor staff will need Reliability Status.			
5. a) Will the supplier require access to Controlled Goods? Le fournisseur aura-t-il accès à des marchandises contrôlées?		<input checked="" type="checkbox"/> No Non	<input type="checkbox"/> Yes Oui
5. b) Will the supplier require access to unclassified military technical data subject to the provisions of the Technical Data Control Regulations? Le fournisseur aura-t-il accès à des données techniques militaires non classifiées qui sont assujetties aux dispositions du Règlement sur le contrôle des données techniques?		<input checked="" type="checkbox"/> No Non	<input type="checkbox"/> Yes Oui
6. Indicate the type of access required / Indiquer le type d'accès requis			
6. a) Will the supplier and its employees require access to PROTECTED and/or CLASSIFIED information or assets? Le fournisseur ainsi que les employés auront-ils accès à des renseignements ou à des biens PROTÉGÉS et/ou CLASSIFIÉS? (Specify the level of access using the chart in Question 7. c) (Préciser le niveau d'accès en utilisant le tableau qui se trouve à la question 7. c)		<input checked="" type="checkbox"/> No Non	<input type="checkbox"/> Yes Oui
6. b) Will the supplier and its employees (e.g. cleaners, maintenance personnel) require access to restricted access areas? No access to PROTECTED and/or CLASSIFIED information or assets is permitted. Le fournisseur et ses employés (p. ex. nettoyeurs, personnel d'entretien) auront-ils accès à des zones d'accès restreintes? L'accès à des renseignements ou à des biens PROTÉGÉS et/ou CLASSIFIÉS n'est pas autorisé.		<input type="checkbox"/> No Non	<input checked="" type="checkbox"/> Yes Oui
6. c) Is this a commercial courier or delivery requirement with <b>no</b> overnight storage? S'agit-il d'un contrat de messagerie ou de livraison commerciale <b>sans</b> entreposage de nuit?		<input checked="" type="checkbox"/> No Non	<input type="checkbox"/> Yes Oui
7. a) Indicate the type of information that the supplier will be required to access / Indiquer le type d'information auquel le fournisseur devra avoir accès			
Canada		NATO / OTAN	Foreign / Étranger
7. b) Release restrictions / Restrictions relatives à la diffusion			
No release restrictions Aucune restriction relative à la diffusion		All NATO countries Tous les pays de l'OTAN	No release restrictions Aucune restriction relative à la diffusion
Not releasable À ne pas diffuser			
Restricted to: / Limité à : Specify country(ies): / Préciser le(s) pays :		Restricted to: / Limité à : Specify country(ies): / Préciser le(s) pays :	Restricted to: / Limité à : Specify country(ies): / Préciser le(s) pays :
7. c) Level of information / Niveau d'information			
PROTECTED A PROTÉGÉ A		NATO UNCLASSIFIED NATO NON CLASSIFIÉ	PROTECTED A PROTÉGÉ A
PROTECTED B PROTÉGÉ B		NATO RESTRICTED NATO DIFFUSION RESTREINTE	PROTECTED B PROTÉGÉ B
PROTECTED C PROTÉGÉ C		NATO CONFIDENTIAL NATO CONFIDENTIEL	PROTECTED C PROTÉGÉ C
CONFIDENTIAL CONFIDENTIEL		NATO SECRET NATO SECRET	CONFIDENTIAL CONFIDENTIEL
SECRET SECRET		COSMIC TOP SECRET COSMIC TRÈS SECRET	SECRET SECRET
TOP SECRET TRÈS SECRET			TOP SECRET TRÈS SECRET
TOP SECRET (SIGINT) TRÈS SECRET (SIGINT)			TOP SECRET (SIGINT) TRÈS SECRET (SIGINT)



**PART A (continued) / PARTIE A (suite)**

8. Will the supplier require access to PROTECTED and/or CLASSIFIED COMSEC information or assets?  
Le fournisseur aura-t-il accès à des renseignements ou à des biens COMSEC désignés PROTÉGÉS et/ou CLASSIFIÉS? ☒ No ☐ Yes  
Non Oui  
If Yes, indicate the level of sensitivity:  
Dans l'affirmative, indiquer le niveau de sensibilité :
9. Will the supplier require access to extremely sensitive INFOSEC information or assets?  
Le fournisseur aura-t-il accès à des renseignements ou à des biens INFOSEC de nature extrêmement délicate? ☒ No ☐ Yes  
Non Oui  
Short Title(s) of material / Titre(s) abrégé(s) du matériel :   
Document Number / Numéro du document :

**PART B - PERSONNEL (SUPPLIER) / PARTIE B - PERSONNEL (FOURNISSEUR)**

10. a) Personnel security screening level required / Niveau de contrôle de la sécurité du personnel requis

- |   |   |   |  |
|---|---|---|--|
| <input checked="" type="checkbox"/> RELIABILITY STATUS<br>COTE DE FIABILITÉ | <input type="checkbox"/> CONFIDENTIAL<br>CONFIDENTIEL           | <input type="checkbox"/> SECRET<br>SECRET           | <input type="checkbox"/> TOP SECRET<br>TRÈS SECRET               |
| <input type="checkbox"/> TOP SECRET – SIGINT<br>TRÈS SECRET – SIGINT        | <input type="checkbox"/> NATO CONFIDENTIAL<br>NATO CONFIDENTIEL | <input type="checkbox"/> NATO SECRET<br>NATO SECRET | <input type="checkbox"/> COSMIC TOP SECRET<br>COSMIC TRÈS SECRET |
| <input type="checkbox"/> SITE ACCESS<br>ACCÈS AUX EMPLACEMENTS              |   |   |  |

Special comments:  
Commentaires spéciaux :

NOTE: If multiple levels of screening are identified, a Security Classification Guide must be provided.

REMARQUE : Si plusieurs niveaux de contrôle de sécurité sont requis, un guide de classification de la sécurité doit être fourni.

10. b) May unscreened personnel be used for portions of the work?  
Du personnel sans autorisation sécuritaire peut-il se voir confier des parties du travail? ☒ No ☐ Yes  
Non Oui  
If Yes, will unscreened personnel be escorted?  
Dans l'affirmative, le personnel en question sera-t-il escorté? ☐ No ☐ Yes  
Non Oui

**PART C - SAFEGUARDS (SUPPLIER) / PARTIE C - MESURES DE PROTECTION (FOURNISSEUR)**

**INFORMATION / ASSETS / RENSEIGNEMENTS / BIENS**

11. a) Will the supplier be required to receive and store PROTECTED and/or CLASSIFIED information or assets on its site or premises?  
Le fournisseur sera-t-il tenu de recevoir et d'entreposer sur place des renseignements ou des biens PROTÉGÉS et/ou CLASSIFIÉS? ☒ No ☐ Yes  
Non Oui
11. b) Will the supplier be required to safeguard COMSEC information or assets?  
Le fournisseur sera-t-il tenu de protéger des renseignements ou des biens COMSEC? ☒ No ☐ Yes  
Non Oui

**PRODUCTION**

11. c) Will the production (manufacture, and/or repair and/or modification) of PROTECTED and/or CLASSIFIED material or equipment occur at the supplier's site or premises?  
Les installations du fournisseur serviront-elles à la production (fabrication et/ou réparation et/ou modification) de matériel PROTÉGÉ et/ou CLASSIFIÉ? ☒ No ☐ Yes  
Non Oui

**INFORMATION TECHNOLOGY (IT) MEDIA / SUPPORT RELATIF À LA TECHNOLOGIE DE L'INFORMATION (TI)**

11. d) Will the supplier be required to use its IT systems to electronically process, produce or store PROTECTED and/or CLASSIFIED information or data?  
Le fournisseur sera-t-il tenu d'utiliser ses propres systèmes informatiques pour traiter, produire ou stocker électroniquement des renseignements ou des données PROTÉGÉS et/ou CLASSIFIÉS? ☒ No ☐ Yes  
Non Oui
11. e) Will there be an electronic link between the supplier's IT systems and the government department or agency?  
Disposera-t-on d'un lien électronique entre le système informatique du fournisseur et celui du ministère ou de l'agence gouvernementale? ☒ No ☐ Yes  
Non Oui



Government  
of Canada

Gouvernement  
du Canada

Contract Number / Numéro du contrat

**W8476-216378**

Security Classification / Classification de sécurité

**UNCLASSIFIED**

**PART C - (continued) / PARTIE C - (suite)**

For users completing the form **manually** use the summary chart below to indicate the category(ies) and level(s) of safeguarding required at the supplier's site(s) or premises.

Les utilisateurs qui remplissent le formulaire **manuellement** doivent utiliser le tableau récapitulatif ci-dessous pour indiquer, pour chaque catégorie, les niveaux de sauvegarde requis aux installations du fournisseur.

For users completing the form **online** (via the Internet), the summary chart is automatically populated by your responses to previous questions.

Dans le cas des utilisateurs qui remplissent le formulaire **en ligne** (par Internet), les réponses aux questions précédentes sont automatiquement saisies dans le tableau récapitulatif.

**SUMMARY CHART / TABLEAU RÉCAPITULATIF**

Category Catégorie	PROTECTED PROTÉGÉ			CLASSIFIED CLASSIFIÉ			NATO				COMSEC					
	A	B	C	CONFIDENTIAL	SECRET	TOP SECRET	NATO RESTRICTED	NATO CONFIDENTIAL	NATO SECRET	COSMIC TOP SECRET	PROTECTED PROTÉGÉ			CONFIDENTIAL	SECRET	TOP SECRET
				CONFIDENTIEL		TRÈS SECRET	NATO DIFFUSION RESTREINTE	NATO CONFIDENTIEL		COSMIC COSMIC TRÈS SECRET	A	B	C	CONFIDENTIEL		TRÈS SECRET
Information / Assets Renseignements / Biens Production																
IT Media / Support TI																
IT Link / Lien électronique																

12. a) Is the description of the work contained within this SRCL PROTECTED and/or CLASSIFIED?

La description du travail visé par la présente LVERS est-elle de nature PROTÉGÉE et/ou CLASSIFIÉE?



No  
Non

Yes  
Oui

**If Yes, classify this form by annotating the top and bottom in the area entitled "Security Classification".**

**Dans l'affirmative, classifiez le présent formulaire en indiquant le niveau de sécurité dans la case intitulée « Classification de sécurité » au haut et au bas du formulaire.**

12. b) Will the documentation attached to this SRCL be PROTECTED and/or CLASSIFIED?

La documentation associée à la présente LVERS sera-t-elle PROTÉGÉE et/ou CLASSIFIÉE?



No  
Non

Yes  
Oui

**If Yes, classify this form by annotating the top and bottom in the area entitled "Security Classification" and indicate with attachments (e.g. SECRET with Attachments).**

**Dans l'affirmative, classifiez le présent formulaire en indiquant le niveau de sécurité dans la case intitulée « Classification de sécurité » au haut et au bas du formulaire et indiquer qu'il y a des pièces jointes (p. ex. SECRET avec des pièces jointes).**



**PART D - AUTHORIZATION / PARTIE D - AUTORISATION**

13. Organization Project Authority / Chargé de projet de l'organisme

Name (print) - Nom (en lettres moulées)	Title - Titre	Signature
<b>ILIA EKCHTOUT</b>	Project Management Engineer - Technical Authority	<b>EKCHTOUT, ILIA 564</b> <small>Digitally signed by EKCHTOUT, ILIA 564 Date: 2020.10.16 10:02:34 -04'00'</small>
Telephone No. - N° de téléphone <b>819-939-0686</b>	Facsimile No. - N° de télécopieur	E-mail address - Adresse courriel <b>ilia.ekchtout@forces.gc.ca</b>
		Date <b>2020-10-16</b>

14. Organization Security Authority / Responsable de la sécurité de l'organisme

Name (print) - Nom (en lettres moulées)	Title - Titre	Signature
<b>Sasa Medjovic</b>	Senior security analyst	
Telephone No. - N° de téléphone <b>613-996-0286</b>	Facsimile No. - N° de télécopieur	E-mail address - Adresse courriel <b>sasa.medjovic@forces.gc.ca</b>
		Date

15. Are there additional instructions (e.g. Security Guide, Security Classification Guide) attached? Des instructions supplémentaires (p. ex. Guide de sécurité, Guide de classification de la sécurité) sont-elles jointes?	<input type="checkbox"/> No Non	<input type="checkbox"/> Yes Oui
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16. Procurement Officer / Agent d'approvisionnement

Name (print) - Nom (en lettres moulées)	Title - Titre	Signature
Telephone No. - N° de téléphone	Facsimile No. - N° de télécopieur	E-mail address - Adresse courriel
		Date

17. Contracting Security Authority / Autorité contractante en matière de sécurité

Cynthia Laverdure Contract Security Officer <a href="mailto:cynthia.laverdure@pwgsc.gc.ca">cynthia.laverdure@pwgsc.gc.ca</a>	Signature
E-mail address - Adresse courriel	Date

TECHNICAL PROPOSAL REQUIREMENTS  
AND BID EVALUATION  
FOR THE  
WATER TREATMENT SYSTEM



NOTICE

This documentation has been reviewed by the technical authority and does not contain controlled goods. Disclosure notices and handling instructions originally received with the document must continue to apply.

AVIS

Cette documentation a été révisée par l'autorité technique et ne contient pas de marchandises contrôlées. Les avis de divulgation et les instructions de manutention reçues originalement doivent continuer de s'appliquer.

## TABLE OF CONTENTS

1.0	GENERAL.....	3
1.1	Introduction.....	3
2.0	TECHNICAL PROPOSAL REQUIREMENTS .....	3
2.1	Responding to Evaluation Criteria .....	3
3.0	TECHNICAL BID EVALUATION .....	4
3.1	Technical Evaluation of Compliance .....	4
4.0	Glossary.....	4
5.0	Evaluation of Key Mandatory Requirements .....	6
6.0	Evaluation of Point-Rated Criteria.....	15



## 1.0 GENERAL

### 1.1 Introduction

- 1.1.1 This document is split into two (2) parts and defines the criteria that will be used to perform the technical evaluation of each bid for the procurement of the Water Treatment System (WTS), as well as the WTS In-service support:
  - 1.1.1.1 The first part, Technical Proposal Requirements, defines the information required from the Bidders for their proposal to be evaluated.
  - 1.1.1.2 The second part, Technical Bid Evaluation, defines the evaluation process Canada will undertake.

## 2.0 TECHNICAL PROPOSAL REQUIREMENTS

### 2.1 Responding to Evaluation Criteria

- 2.1.1 Bidders must provide the information required for each listed requirement in accordance with the method identified in the “Compliance Documentation Required” column in the Evaluation of Key Mandatory Requirements table.
  - 2.1.1.1 The following compliance method defines the information required:
    - 2.1.1.1.1 **Compliance Statement (CS)** - Where “CS” is identified, the Bidder must describe in detail how the equipment offered fully complies with the requirement. Supporting documentation must be provided describing completely and in detail how the requirement is met as detailed below.
    - 2.1.1.1.2 For each listed requirement, the Bidder must provide a response in the “Bidder’s Response/References” column in the Evaluation of Key Mandatory Requirements table(s) to clearly explain how the requirement is met, either by including the specific reference to indicate where in their proposal the information is found or including the complete response directly in that column. As supporting documentation is expected to be quite voluminous, meticulous direction to where this info can be found within the Bidders submission is paramount. Inadequate supporting documents or poorly indicated direction may result in bids being found Non – Compliant.
- 2.1.2 For the purpose of this solicitation, a “Bidder’s Team” includes all entities whose experience is being used to meet the evaluation criteria of this bid. The “Bidder” is the “Company” within the “Bidder’s Team” that is submitting this bid.
  - 2.1.2.1 Where a Bidder cites experience, Canada will only consider this experience if the experience is accessible to the Bidder and the Bidder can rely upon and use the experience in the performance of any resulting Contract. The Bidder is required to demonstrate this agreement is in place at the time of bid submission.
  - 2.1.2.2 Experience listed without providing any supporting data to describe where, how and by whom such experience was obtained, or failure to demonstrate that the Bidder has an agreement in place with the entity that has that experience, that

experience may not be considered for evaluation purposes and again result in the bid being found Non – Compliant.

- 2.1.2.3 Canada reserves the right to verify details of any supporting documents provided by the bidder with the listed customer point of contact.

### **3.0 TECHNICAL BID EVALUATION**

#### **3.1 Technical Evaluation of Compliance**

##### **3.1.1 Stage 1 - Evaluation of Key Mandatory Requirements**

- 3.1.1.1 The evaluation team will use the Bidder's submitted proposal to determine compliance against key mandatory requirements. See the Evaluation of Key Mandatory Requirements below for more details.

##### **3.1.2 Stage 2 - Evaluation of Point-Rated Criteria**

- 3.1.2.1 The evaluation team will use the Bidder's submitted proposal to score the Rated Evaluation Criteria. See the Evaluation of Point-Rated Criteria table for more details.
- 3.1.2.2 DND reserves the right to verify details of any supporting documents provided by the bidder with the listed customer point of contact.
- 3.1.2.3 For Point Rated Criteria 1 only, additional points awarded will be cumulative so long as the point rated criteria is assessed as met. A maximum of 30 points can be awarded.
- 3.1.2.4 For Point Rated Criteria 2 through 5:
  - 3.1.2.4.1 If the point rated criteria for 5 points is assessed as met then 5 points will be awarded.
  - 3.1.2.4.2 If the point rated criteria for 8 points is assessed as met then 8 points will be awarded.
  - 3.1.2.4.3 A maximum of 8 points can be awarded.
- 3.1.2.5 For Point Rated Criteria 1 through 5 totally:
  - 3.1.2.5.1 A mandatory of 38 points of a possible 62 points must be achieved in order for the bid to be compliant. Failure to achieve the minimum 38 points in Stage 2 will result in the complete bid being "Non-Compliant" and no further review of the bid will take place.

##### **3.1.3 Assessment**

- 3.1.3.1 Results of compliance and non-compliance of the Bid Evaluation will be provided through PSPC CA.

### **4.0 Glossary**

4.1.1 In the bid evaluation grids below, terms used are defined as follows:

- 4.1.1.1 "Mobile" is defined as a standalone system capable of being transported by road, air and sea, and operated in a new location repeatedly without degradation of performance.
- 4.1.1.2 A "Fleet" is defined as ten (10) or more systems.
- 4.1.1.3 "Major Equipment" is defined as a system having a monetary value of at least \$300,000 (CAD) per unit.
- 4.1.1.4 A "Heavy Trailer" is defined as 2.5 ton GTW or greater.

## 5.0 Evaluation of Key Mandatory Requirements

Serial	Requirement Reference(s)	Requirement Description	Compliance Documentation Required CS - Compliance Statement (with supporting documentation)	Bidder's Response/References	Compliance (This column is for the Evaluation Team only)	
					"C"	"NC"
M1	Annex A, Appendix A, Para A1.4.1.2.1	<p>The Bidder's Team must have designed, tested and delivered two (2) different potable water purification systems within the last 10 years, each having met or exceeded all of the following requirements:</p> <ol style="list-style-type: none"> <li>1. Treats a high salinity source water of a minimum of 25,000 ppm of Total Dissolved Solids (TDS).</li> <li>2. Treats high levels of organic compounds of a minimum of 15 mg/L of Dissolved Organic Carbon (DOC).</li> <li>3. Treats a source water containing high levels (minimum of 25 mg/L) of heavy metals.</li> </ol> <p>The Bidder must provide the following information in their supporting documents for each of the two (2) different potable water purification systems:</p> <ol style="list-style-type: none"> <li>1. A copy of the front page of the signed contract proving delivery of the system or a formal letter from the customer certifying receipt of the system with a customer point of contact whom DND can contact to verify information provided by the Bidder.</li> <li>2. Overall description of the potable water purification system, with a detailed description of: <ol style="list-style-type: none"> <li>a. the design of the filtration system,</li> <li>b. the performance specifications for the system,</li> <li>c. the source water parameters, and</li> <li>d. the testing conducted and the resultant water parameters achieved.</li> </ol> </li> </ol>	CS			

ANNEX E  
TO W8476-216378  
REVISED 23 FEB 2022

Serial	Requirement Reference(s)	Requirement Description	Compliance Documentation Required CS - Compliance Statement (with supporting documentation)	Bidder's Response/References	Compliance (This column is for the Evaluation Team only)	
					"C"	"NC"
M2	Annex A1, Appendix A, Para A1.2.5	<p>The Bidder's Team must demonstrate that it has designed, tested and delivered a minimum of three (3) different "Fleets" (as defined in paragraph 4.1.1.2) of "Heavy Trailers" (as defined in paragraph 4.1.1.4 within the past ten (10) years.</p> <p>The Bidder must provide the following in their supporting documents for each of these above fleets:</p> <ol style="list-style-type: none"> <li>1. A copy of the front page of the signed contract proving delivery of the fleet or a formal letter from the customer certifying receipt of the system with a customer point of contact whom DND can contact to verify information provided by the Bidder.</li> <li>2. A description of the "Heavy Trailers" that were delivered including: <ol style="list-style-type: none"> <li>a. Number of "Heavy Trailers" delivered,</li> <li>b. Date of delivery, and</li> <li>c. Contract value.</li> </ol> </li> </ol>	CS			

**ANNEX E**  
**TO W8476-216378**  
**REVISED 23 FEB 2022**

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					"C"	"NC"
M3	ANNEX E Para 4.1.1.2 & Para 4.1.1.3.	<p>The Bidder's Team must have manufactured either:</p> <ol style="list-style-type: none"> <li>a "Fleet" of "Major Equipment" for a NATO military customer within the last ten (10) years or</li> <li>a fleet of complex mechanical equipment having a minimum monetary value of \$14M CAD for a NATO military customer within the last ten (10) years.</li> </ol> <p>The Bidder must provide the following in their supporting documents:</p> <ol style="list-style-type: none"> <li>A copy of the front page of the signed contract proving delivery of the equipment or a formal letter from the customer certifying receipt of the system with a customer point of contact whom DND can contact to verify information provided by the Bidder.</li> <li>A description of the "Fleet" of "Major Equipment" or fleet of complex mechanical equipment, that was manufactured including: <ol style="list-style-type: none"> <li>Number of systems manufactured,</li> <li>Date that the systems were manufactured, and</li> <li>Monetary value of the "Fleet" of "Major Equipment" or complex mechanical equipment that was manufactured.</li> </ol> </li> </ol>	CS			

**ANNEX E**  
**TO W8476-216378**  
**REVISED 23 FEB 2022**

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					"C"	"NC"
M4	Annex A1, Para 8	<p>The Bidder's Team must have delivered Integrated Logistics Support to a NATO military customer in the last ten (10) years for a:</p> <ol style="list-style-type: none"> <li>"Major Equipment" (as defined in paragraph 4.1.1.3) "Fleet" (as defined in paragraph 4.1.1.2) in the last ten (10) years or</li> <li>Fleet of complex mechanical equipment having a minimum monetary value of \$14M CAD in the last ten (10) years.</li> </ol> <p>As a minimum, Integrated Logistics Support must have consisted of the provision of Operator and Maintenance Publications, Operator and Maintenance training sessions and spare parts.</p> <p>The Bidder must provide the following information in their supporting documents:</p> <ol style="list-style-type: none"> <li>A copy of the front page of the signed contract proving delivery of the Integrated Logistics Support or a formal letter from the customer certifying receipt of the Integrated Logistics Support with a customer point of contact whom DND can contact to verify information provided by the Bidder.</li> <li>A description of the "Major Equipment" OR the fleet of complex mechanical equipment for which Integrated Logistics Support was provided including: <ol style="list-style-type: none"> <li>Number of systems comprising the "Fleet",</li> <li>Monetary value of the "Fleet" of "Major Equipment" OR fleet of complex mechanical equipment, and</li> <li>Date that the Integrated Logistics Support was provided.</li> </ol> </li> </ol>	CS			

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					"C"	"NC"
M5	Annex A2	<p>The Bidder's Team must demonstrate that it has provided a minimum of three (3) years of continuous in-service sustainment of a:</p> <ul style="list-style-type: none"> <li>a. "Major Equipment" (as defined in paragraph 4.1.1.3) "Fleet" (as defined in paragraph 4.1.1.2) for a customer in the last ten (10) years OR</li> <li>b. Fleet of complex mechanical equipment having a minimum monetary value of \$14M CAD for a customer in the last ten (10) years.</li> </ul> <p>As a minimum, in-service sustainment must have consisted of Field Services Representative (FSR) support, Technical Investigation and Engineering Services (TIES), obsolescence management and the provision of spare parts. The Bidder must provide the following information in their supporting documents:</p> <ul style="list-style-type: none"> <li>1. A copy of the front page of the signed contract proving delivery of in-service sustainment or a formal letter from the customer certifying that in-service sustainment was provided with a customer point of contact whom DND can contact to verify information provided by the Bidder.</li> <li>2. A description of the "Major Equipment" OR fleet of complex mechanical equipment, that was sustained including: <ul style="list-style-type: none"> <li>a. Number of systems sustained.</li> <li>b. Monetary value of the "Major Equipment" OR fleet of complex mechanical equipment, and</li> <li>c. Date that the sustainment was provided.</li> </ul> </li> </ul>	CS			



M6	Annex A1, Appendix A, Para A1.2.1.4	<p>The Bidder's Team must provide a detailed design of their proposed Water Filtration and Treatment Module (as described in section A1.2.1.4 of the WTS Technical Specification) to demonstrate that their design is capable of purifying and treating the four challenge waters outlined in Appendix 5.0 of the Statement of Work while producing the specified quantity of permeate water.</p> <p>The supporting documents must include:</p> <ol style="list-style-type: none"> <li>1. A flow diagram of operations which illustrates all components and sub-components needed to purify and treat the challenge water, clean and sanitize the system, and store and distribute the clean water.</li> <li>2. A supporting legend which describes each component and sub-component illustrated in the above flow diagrams.</li> <li>3. Supporting technical data, specification or data sheets for each component and sub-component in the flow diagrams.</li> <li>4. A detailed analysis of each challenge water and how the proposed system will process the raw intake water and achieve both the required water output (as outlined in section A1.4.1.4.1) and reduction levels specified in Appendix 5.0 of the Statement of Work.</li> <li>5. A proposed outline plan of how the bidder proposes to conduct the four challenge water tests.</li> </ol> <p>The Bidder's design will be assessed against the following criteria:</p> <ol style="list-style-type: none"> <li>1. The design is complete, specifically, all elements specified in section A1.2.1.4 of the WTS Technical Specification are included with their respective supporting technical data, specification or data sheets.</li> <li>2. The design illustrates a logical sequencing of the processes needed from raw water intake, purification and treatment, cleaning and sanitizing, and output to the water storage tanks and subsequent distribution.</li> <li>3. The design utilizes mature, reliable and available technologies.</li> <li>4. The design depicts a feasible solution which will successfully purify and treat the four challenge waters and achieve the specified water output and reduction levels.</li> </ol> <p>The proposed outline plan supports the testing detailed in Appendix 5.0 Water Quality Testing Requirements of the Statement of Work.</p>	CS		
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**ANNEX E**  
**TO W8476-216378**  
**REVISED 23 FEB 2022**

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					"C"	"NC"
M7	Annex A1, Appendix A	<p>The Bidder must provide a Size/Space claim Analysis of their proposed WTS. This analysis must demonstrate that for each of the following sections, all items listed within those respective sections will physically fit within the designated envelopes:</p> <ol style="list-style-type: none"> <li>1. A1.3.2 WTS in its Primary Configuration,</li> <li>2. A1.2.1 WTU,</li> <li>3. A1.2.2 MEU,</li> <li>4. A1.2.3 ASU, and</li> <li>5. A1.2.4 WSU</li> </ol> <p>The Bidder's Size Analysis will be assessed against the following criteria:</p> <ol style="list-style-type: none"> <li>1. Proposed solution does not exceed the specification outlined in the Technical Specification of the SOW.</li> <li>2. Completeness of the analysis, specifically, that all elements are considered and accounted for.</li> </ol>	CS			
M8	Annex A1, Appendix A, Para A1.3.1	<p>The Bidder must provide a Weight Analysis of their proposed WTS to demonstrate that their proposed WTS solution meets the weight restriction outlined in section A1.3.1 of the Technical Specification of the SOW.</p> <p>The Bidder's Weight Analysis will be assessed against the following criteria:</p> <ol style="list-style-type: none"> <li>1. Weight of the proposed WTS does not exceed the specification outlined in section A1.3.1 of the Technical Specification of the SOW.</li> <li>2. Completeness of the analysis, specifically, that all elements weights are considered and accounted for.</li> </ol>	CS			

**ANNEX E**  
**TO W8476-216378**  
**REVISED 23 FEB 2022**

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					"C"	"NC"
M9	Annex A1, Appendix A, Para A1.2.1.5.2.1	<p>The Bidder must provide a Power Analysis of their proposed WTS to demonstrate that their proposed WTS solution meets the requirements outlined in section A1.2.1.5.2.1 of the Technical Specification of the SOW.</p> <p>The Bidder's Power Analysis will be assessed against the following criteria:</p> <ol style="list-style-type: none"> <li>1. The proposed generator meets the power requirements of the system as specified in section A1.2.1.5.2.1 of the Technical Specification of the SOW.</li> <li>2. Completeness of the analysis, specifically, that all electrical elements that draw power are considered and accounted for.</li> </ol>	CS			

**ANNEX E**  
**TO W8476-216378**  
**REVISED 23 FEB 2022**

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					"C"	"NC"
M10	Annex A1, Para 4.1.5	<p>The Bidder must provide a Human Factors Analysis of their proposed WTS to demonstrate that their proposed WTS solution considers ease of setup and teardown, stowage and accessibility for both operation and maintenance.</p> <p>The Bidder's Human Factors Analysis will be assessed against the following criteria:</p> <ol style="list-style-type: none"> <li>1. The layout of the Trailer steps and walkways depicts a feasible solution when it comes to ease of access to the WTU for either the operation or maintenance of on-board systems, and access doors on the MEU, ASU and WSU.</li> <li>2. Ease of access to the interior of the MEU, ASU and WSU to facilitate loading and unloading of items stowed within the respective containers. This includes access to interior bins and cabinets in the case of the MEU and ASU.</li> <li>3. Ease of access to the WTU on-board generator for fueling and maintenance.</li> <li>4. Ease of access to the WTU for the loading and unloading of membranes/filters and access to the Clean-in-Place tank.</li> <li>5. Ease of access to the WTU on-board control panel, pumps, valve and filtration equipment for maintenance and diagnostic.</li> </ol>	CS			

## 6.0 Evaluation of Point-Rated Criteria

ID	Criteria	Points	Bidder's Team Self-Assessment	Compliance Documentation Required CS - Compliance Statement (with supporting documentation)	Bidder's Response Reference
PR1	<p>For the potable water purification systems delivered in accordance with M1, additional points will be awarded if at least one (1) of the two (2) systems meets or exceeds the following requirements:</p> <ol style="list-style-type: none"> <li>1. Treats a high salinity source water of a minimum of 45,000 ppm of Total Dissolved Solids (TDS).</li> <li>2. Treats high levels of organic compounds of a minimum of 20 mg/L of Dissolved Organic Carbon (DOC).</li> <li>3. Treats Nuclear, Biological and Chemical (NBC) agents.</li> <li>4. Is "Mobile" as defined in paragraph 4.1.1.1.</li> <li>5. Is containerized in an ISO Container (seacan, bicon or quadcon).</li> <li>6. Is a "Fleet" as defined in paragraph 4.1.1.2 that has been delivered to a NATO nation.</li> </ol> <p>The Bidder must provide the additional information in their supporting documents to supplement the information needed as part of M1 to show compliance with the above requirements:</p> <ol style="list-style-type: none"> <li>1. A copy of the front page of the signed contract proving delivery of the system or a formal letter from the customer certifying receipt of the system.</li> <li>2. A customer point of contact for the system whom DND can contact to verify information provided by the Bidder.</li> </ol>	<p>5</p> <p>5</p> <p>5</p> <p>5</p> <p>5</p> <p>5</p>		CS	

<div>3. Overall description of the water purification system.</div> <div>4. Detailed description of the design of the filtrate system.</div> <div>5. Performance specifications for the system.</div> <div>6. Detailed description of source water parameters.</div> <div>7. Detailed description of the testing conducted and the resultant water parameters achieved.</div>					
	PR1 Max points	30			

ID	Criteria	Points	Bidder's Team Self-Assessment	Compliance Documentation Required CS - Compliance Statement (with supporting documentation)	Bidder's Response Reference
PR2	<p>EITHER...</p> <p>The Bidder's Team must demonstrate that it has designed, tested and delivered five (5) or six (6) different "Fleets" (as defined in paragraph 4.1.1.2) of "Heavy Trailers" (as defined in paragraph 4.1.1.4) within the past ten (10) years.</p> <p>The Bidder must provide the following information in their supporting documents for each "Fleet" of "Heavy Trailers":</p> <ol style="list-style-type: none"> <li>1. A copy of the front page of the signed contract proving delivery of the system or a formal letter from the customer certifying receipt of the system.</li> <li>2. A customer point of contact whom DND can contact to verify information provided by the Bidder.</li> <li>3. A description of the "Heavy Trailers" that were delivered.</li> <li>4. Number of "Heavy Trailers" delivered.</li> <li>5. Date of delivery.</li> <li>6. Contract value.</li> </ol> <p>OR...</p> <p>The Bidder's Team must demonstrate that it has designed, tested and delivered seven (7) or more different "Fleets" (as defined in paragraph 4.1.1.2) of "Heavy Trailers" (as defined in paragraph 4.1.1.4) within the past ten (10) years.</p>	5		CS	
		8		CS	





ID	Criteria	Points	Bidder's Team Self-Assessment	Compliance Documentation Required CS - Compliance Statement (with supporting documentation)	Bidder's Response Reference
PR3	<p>EITHER...</p> <p>The Bidder's Team must have manufactured:</p> <ol style="list-style-type: none"> <li>two (2) "Fleets" (as defined in paragraph 4.1.1.2) of "Major Equipment" (as defined in paragraph 4.1.1.3) for a NATO military customer within the last ten (10) years OR</li> <li>two (2) fleets of complex mechanical equipment having a minimum monetary value of \$14M CAD each for a NATO military customer within the last ten (10) years.</li> </ol> <p>The Bidder must provide the following in their supporting documents:</p> <ol style="list-style-type: none"> <li>A copy of the front page of the signed contract proving delivery of the system or a formal letter from the customer certifying receipt of the system.</li> <li>A customer point of contact whom DND can contact to verify information provided by the Bidder.</li> <li>A description of the "Fleet" of "Major Equipment" or fleet of complex mechanical equipment that was manufactured.</li> <li>Number of systems manufactured.</li> <li>Date that the systems were manufactured.</li> <li>Monetary value of the "Fleet" of "Major Equipment" or fleet of complex mechanical equipment.</li> </ol>	5		CS	

	<p>OR...</p> <p>The Bidder's Team must have manufactured:</p> <ol style="list-style-type: none"> <li>three (3) "Fleets" (as defined in paragraph 4.1.1.2) of "Major Equipment" (as defined in paragraph 4.1.1.3) for a NATO military customer within the last ten (10) years OR</li> <li>three (3) fleets of complex mechanical equipment having a minimum monetary value of \$14M CAD each for a NATO military customer within the last ten (10) years.</li> </ol> <p>The Bidder must provide the following in their supporting documents:</p> <ol style="list-style-type: none"> <li>A copy of the front page of the signed contract proving delivery of the system or a formal letter from the customer certifying receipt of the system.</li> <li>A customer point of contact whom DND can contact to verify information provided by the Bidder.</li> <li>A description of the "Fleet" of "Major Equipment" OR fleet of complex mechanical equipment, that was manufactured.</li> <li>Number of systems manufactured.</li> <li>Date that the systems were manufactured.</li> <li>Monetary value of the "Fleet" of "Major Equipment" OR fleet of complex mechanical equipment.</li> </ol>	8		CS	
	PR3 Max points	8			

ID	Criteria	Points	Bidder's Team Self-Assessment	Compliance Documentation Required CS - Compliance Statement (with supporting documentation)	Bidder's Response Reference
PR4	<p>EITHER...</p> <p>The Bidder's Team must have delivered Integrated Logistics Support to a NATO military customer on:</p> <ol style="list-style-type: none"> <li>two (2) different "Major Equipment" (as defined in paragraph 4.1.1.3) "Fleets" (as defined in paragraph 4.1.1.2) in the last ten (10) years OR</li> <li>two (2) different fleets of complex mechanical equipment having a minimum monetary value of \$14M CAD each in the last ten (10) years.</li> </ol> <p>As a minimum, Integrated Logistics Support must have consisted of the provision of Operator and Maintenance Publications, Operator and Maintenance training sessions and spare parts.</p> <p>The Bidder must provide the following information in their supporting documents for each "Major Equipment" "Fleet" or for each fleet of complex mechanical equipment for which Integrated Logistics Support was provided:</p> <ol style="list-style-type: none"> <li>A copy of the front page of the signed contract proving delivery of the Integrated Logistics Support or a formal letter from the customer certifying receipt of the Integrated Logistics Support.</li> <li>A customer point of contact whom DND can contact to verify information provided by the Bidder.</li> <li>A description of the "Major Equipment" or the fleet of complex mechanical equipment for which Integrated Logistics Support was provided.</li> <li>Number of systems comprising the "Fleet".</li> </ol>	5		CS	

	<p>5. Monetary value of the "Major Equipment"</p> <p>6. Date that the sustainment was provided.</p> <p>OR...</p> <p>The Bidder's Team must have delivered Integrated Logistics Support to a NATO military customer on:</p> <ol style="list-style-type: none"> <li>1. three (3) different "Major Equipment" (as defined in paragraph 4.1.1.3) "Fleets" (as defined in paragraph 4.1.1.2) in the last ten (10) years OR</li> <li>2. three (3) different fleets of complex mechanical equipment having a minimum monetary value of \$14M CAD each in the last ten (10) years.</li> </ol> <p>As a minimum, Integrated Logistics Support must have consisted of the provision of Operator and Maintenance Publications, Operator and Maintenance training sessions and spare parts.</p> <p>The Bidder must provide the following information in their supporting documents for each "Major Equipment" "Fleet" or for each fleet of complex mechanical equipment for which Integrated Logistics Support was provided:</p> <ol style="list-style-type: none"> <li>1. A copy of the front page of the signed contract proving delivery of the Integrated Logistics Support or a formal letter from the customer certifying receipt of the Integrated Logistics Support.</li> <li>2. A customer point of contact whom DND can contact to verify information provided by the Bidder.</li> <li>3. A description of the "Major Equipment" for which Integrated Logistics Support was provided.</li> <li>4. Number of systems comprising the "Fleet".</li> <li>5. Monetary value of the "Major Equipment".</li> <li>6. Date that the sustainment was provided.</li> </ol>			
	PR4 Max points	8		CS

ID	Criteria	Points	Bidder's Team Self-Assessment	Compliance Documentation Required CS - Compliance Statement (with supporting documentation)	Bidder's Response Reference
PR5	<p>EITHER...</p> <p>The Bidder's Team must demonstrate that it has provided a minimum of three (3) years of continuous in-service sustainment on:</p> <ol style="list-style-type: none"> <li>two (2) different "Major Equipment" (as defined in paragraph 4.1.1.3) "Fleets" (as defined in paragraph 4.1.1.2) for a customer in the last ten (10) years OR</li> <li>two (2) different fleets of complex mechanical equipment having a minimum monetary value of \$14M CAD each for a customer in the last ten (10) years.</li> </ol> <p>As a minimum, in-service sustainment must have consisted of Field Services Representative (FSR) support, Technical Investigation and Engineering Services (TIES), obsolescence management and the provision of spare parts.</p> <p>The Bidder must provide the following information in their supporting documents for each "Major Equipment" "Fleet" or for each fleet of complex mechanical equipment that was sustained:</p> <ol style="list-style-type: none"> <li>A copy of the front page of the signed contract proving delivery of in-service sustainment or a formal letter from the customer certifying that in-service sustainment was provided.</li> <li>A customer point of contact whom DND can contact to verify information provided by the Bidder.</li> <li>A description of the "Major Equipment" that was sustained.</li> <li>Number of systems comprising the "Fleet".</li> <li>Monetary value of the "Major Equipment".</li> <li>Date that the sustainment was provided.</li> </ol>	5		CS	

OR...	<p>The Bidder's Team must demonstrate that it has provided a minimum of three (3) years of continuous in-service sustainment on:</p> <ol style="list-style-type: none"> <li>three (3) different "Major Equipment" (as defined in paragraph 4.1.1.3) "Fleets" (as defined in paragraph 4.1.1.2) for a customer in the last ten (10) years or</li> <li>three (3) different fleets of complex mechanical equipment having a minimum monetary value of \$14M CAD each for a customer in the last ten (10) years.</li> </ol> <p>As a minimum, in-service sustainment must have consisted of Field Services Representative (FSR) support, Technical Investigation and Engineering Services (TIES), obsolescence management and the provision of spare parts.</p> <p>The Bidder must provide the following information in their supporting documents for each "Major Equipment" "Fleet" or for each fleet of complex mechanical equipment that was sustained:</p> <ol style="list-style-type: none"> <li>A copy of the front page of the signed contract proving delivery of in-service sustainment or a formal letter from the customer certifying that in-service sustainment was provided.</li> <li>A customer point of contact whom DND can contact to verify information provided by the Bidder.</li> <li>A description of the "Major Equipment" that was sustained.</li> <li>Number of systems comprising the "Fleet".</li> <li>Monetary value of the "Major Equipment".</li> <li>Date that the sustainment was provided.</li> </ol>	8		CS	
	PR5 Max points	8			

Solicitation No. - N° de l'invitation  
W8476-216378  
Client Ref. No. - N de rf. du client  
W8476-216378

Amd. No. - N de la modif.  
File No. - N du dossier  
hl673 W8476-216378

Buyer ID - Id de l'acheteur  
hl673  
CCC No./N CCC - FMS No./N VME

## ANNEX F

### FINANCIAL EVALUATION TABLES

#### WATER TREATMENT SYSTEM

#### Financial Evaluation Pricing Summary Sheet

<u>Tables</u>	<u>Cost</u>
Acquisition Cost:	\$0.00
In-Service Support Cost:	\$650,000.00
<b>Grand Total (CAD):</b>	<b>\$650,000.00</b>

Total EVALUATED Cost of Water Treatment project, including the Acquisition, Initial Provisioning Spares and the In-Service Support cost.  
**NOTE:** THIS VALUE IS FOR EVALUATION PURPOSES ONLY AND DOES NOT REPRESENT ANY INTENDED OR POTENTIAL FINAL CONTRACT VALUE.  
\*If applicable, will be filled in by Canada as per section 3.5 of the Bidder Instructions.

ANNEX F

FINANCIAL EVALUATION  
ACQUISITION FINANCIAL EVALUATION TABLE  
WATER TREATMENT SYSTEM

**Bidders' Instructions:** Bidders must fill in ALL of the blue cells below. When filling in the requisite information, the Bidder must consider the work described in the Aquisition SOW as the basis for the financial bid submission.

Table 1 - ACQUISITION						
MANDATORY COMPLETION OF EACH PRICE "BOX". IF THERE IS NO COST PLEASE INSERT "0".						
Item #	Location	Item Description	Qty	Unit price	Total price	
1	CFB Gagetown, NB	Equipment delivery #1 must be within 40 weeks of Design Acceptance. This will only be accepted once the ILS Document Delivery Items are provided and accepted by DND. Costs for Preparation for shipping, Shipping and Packaging must be included in the unit prices.	Water Treatment Unit (WTU) (para. A1.2.1)	4	\$ -	\$ -
			Miscellaneous Equipment Unit (MEU) (para. A1.2.2)	4	\$ -	
			Arctic Sustainment Unit (ASU) (para. A1.2.3)	2	\$ -	
			Water Storage Unit (WSU) (para A1.2.4)	5	\$ -	
			Trailer (para. A1.2.5)	4	\$ -	
2	CFB Edmonton, AB		Water Treatment Unit (WTU) (para. A1.2.1)	3	\$ -	\$ -
			Miscellaneous Equipment Unit (MEU) (para. A1.2.2)	3	\$ -	
			Arctic Sustainment Unit (ASU) (para. A1.2.3)	2	\$ -	
			Water Storage Unit (WSU) (para A1.2.4)	4	\$ -	
			Trailer (para. A1.2.5)	3	\$ -	
3	CFB Petawawa, ON	Equipment deliveries #2, #3, and #4 must be within 52 weeks of Design Acceptance, and must include the following items, and the remaining CDRL items. Costs for Preparation for shipping, Shipping and Packaging must be included in the unit prices.	Water Treatment Unit (WTU) (para. A1.2.1)	3	\$ -	\$ -
			Miscellaneous Equipment Unit (MEU) (para. A1.2.2)	3	\$ -	
			Arctic Sustainment Unit (ASU) (para. A1.2.3)	1	\$ -	
			Water Storage Unit (WSU) (para A1.2.4)	7	\$ -	
			Trailer (para. A1.2.5)	3	\$ -	
4	CFB Valcartier, QC		Water Treatment Unit (WTU) (para. A1.2.1)	4	\$ -	\$ -
			Miscellaneous Equipment Unit (MEU) (para. A1.2.2)	4	\$ -	
			Arctic Sustainment Unit (ASU) (para. A1.2.3)	2	\$ -	
			Water Storage Unit (WSU) (para A1.2.4)	6	\$ -	
			Trailer (para. A1.2.5)	4	\$ -	
5	CFB Petawawa, ON		Water Treatment Unit (WTU) (para. A1.2.1)	4	\$ -	\$ -
			Miscellaneous Equipment Unit (MEU) (para. A1.2.2)	4	\$ -	
			Water Storage Unit (WSU) (para A1.2.4)	8	\$ -	
			Trailer (para. A1.2.5)	4	\$ -	
6	CFB Valcartier, QC	Equipment deliveries #5, #6, #7, and #8 must be within 78 weeks of Design Acceptance. This does not include Option Items. Costs for Preparation for shipping, Shipping and Packaging must be included in the unit prices.	Water Treatment Unit (WTU) (para. A1.2.1)	3	\$ -	\$ -
			Miscellaneous Equipment Unit (MEU) (para. A1.2.2)	3	\$ -	
			Water Storage Unit (WSU) (para A1.2.4)	9	\$ -	
			Trailer (para. A1.2.5)	1	\$ -	
7	CFB Gagetown, NB		Water Treatment Unit (WTU) (para. A1.2.1)	3	\$ -	\$ -
			Miscellaneous Equipment Unit (MEU) (para. A1.2.2)	3	\$ -	
			Trailer (para. A1.2.5)	3	\$ -	
8	CFB Edmonton, AB		Water Treatment Unit (WTU) (para. A1.2.1)	2	\$ -	\$ -
			Miscellaneous Equipment Unit (MEU) (para. A1.2.2)	2	\$ -	
			Water Storage Unit (WSU) (para A1.2.4)	3	\$ -	
			Trailer (para. A1.2.5)	2	\$ -	
9	Project Management Plan (para. 3.2)		LOT	\$ -	\$ -	
10	Contract Master Schedule (para. 3.3)		LOT	\$ -	\$ -	
11	Contract Work Breakdown Structure (para 3.4)		LOT	\$ -	\$ -	
12	Contract Status Report (para 3.5)		LOT	\$ -	\$ -	
13	Kick-off, Systems Engineering and ILS Meetings (para. 3.6.2 - 3.6.4)					
	Meeting Agenda (para. 3.6.6.1.1)		1	\$ -	\$ -	
	Meeting Minutes (para. 3.6.6.1.2)					
14	Systems Engineering Management Plan (SEMP) (para. 4.2.2.1)		LOT	\$ -	\$ -	
15	Mandated System Review (MSR) Package - Preliminary Design Review (PDR) (para. 4.2.4.4)					
	Requirements Traceability Verification Matrix (RTVM) - PDR (para. 4.2.5)					
	PDR Meeting (para. 4.3.1)		1	\$ -	\$ -	
	Meeting Agenda (para. 3.6.6.1.1)					
16	Meeting Minutes (para. 3.6.6.1.2)					
	MSR Package - Critical Design Review (CDR) (para. 4.2.4.4)					
	Engineering Drawings and Associated Lists - Level 1 Conceptual and Developmental Design (para. 4.4.3)					
	RTVM - CDR (para 4.2.5)		1	\$ -	\$ -	
17	CDR Meeting (para. 4.3.2)					
	Meeting Agenda (para. 3.6.6.1.1)					
	Meeting Minutes (para. 3.6.6.1.2)					
	Configuration Status Accounting Report (para. 5.5.2)		1	\$ -	\$ -	
18	MSR Package - Testing Readiness Review (TRR) (para. 4.2.4.4)					
	Acceptance Test Plans and Procedures (para. 6.1.1.2)					
	RTVM - TRR (para 4.2.5)		1	\$ -	\$ -	
	TRR Meeting (para 6.1.3)					
	Meeting Agenda (para. 3.6.6.1.1)					
19	Meeting Minutes (para. 3.6.6.1.2)					
	Acceptance Verification (para 6.2)					
	Acceptance Test Reports (para. 6.2.1.4)		1	\$ -	\$ -	
	RTVM Final (para 4.2.5)					



20	MSR Package - Physical Configuration Audit (PCA) (para. 4.2.4.4)		1	\$	-	\$	-		
	Engineering Drawings and Associated Lists - Level 2 Production Prototype and Limited Production (para. 4.4.3)								
	PCA Meeting (para. 5.6.4)								
	Meeting Agenda (para. 3.6.6.1.1)								
	Meeting Minutes (para. 3.6.6.1.2)								
21	Top Level Assembly Drawing (TLAD) (para. 3.6.2.2)		1	\$	-	\$	-		
22A	WTS Operator Manual - English (para. 8.3.1.1)		1	\$	-	\$	-		
22A	WTS Operator Manual - Bilingual (para. 8.3.1.1)		LOT	\$	-	\$	-		
23A	WTU Operator Quick Reference Card - English (para 8.3.1.2)		1	\$	-	\$	-		
23B	WTU Operator Quick Reference Card - Bilingual (para 8.3.1.2)		LOT	\$	-	\$	-		
24A	WTS Maintenance Manual - English (para. 8.3.1.3)		1	\$	-	\$	-		
24B	WTS Maintenance Manual - Bilingual (para. 8.3.1.3)		LOT	\$	-	\$	-		
25A	WTS Permissive Repair Schedule and Standard Repair Times - English (para. 8.3.1.4)		1	\$	-	\$	-		
25B	WTS Permissive Repair Schedule and Standard Repair Times - Bilingual (para. 8.3.1.4)		1	\$	-	\$	-		
26	WTS Illustrated Parts Manual (para. 8.3.1.5)		1	\$	-	\$	-		
27A	WTS Operator Training Package - English (para. 8.3.1.6)		1	\$	-	\$	-		
27B	WTS Operator Training Package - Bilingual (para. 8.3.1.6)		LOT	\$	-	\$	-		
28A	WTU and ASU Technician Training Package - English (para. 8.3.1.7)		1	\$	-	\$	-		
28B	WTU and ASU Technician Training Package - Bilingual (para. 8.3.1.7)		LOT	\$	-	\$	-		
29A	WTS Preservation, Storage and Reactivation Instructions - English (para. 8.3.1.8)		1	\$	-	\$	-		
29B	WTS Preservation, Storage and Reactivation Instructions - Bilingual (para. 8.3.1.8)		1	\$	-	\$	-		
30A	WTS Stowage, Shipping and Handling Instructions - English (para. 8.3.1.9)		1	\$	-	\$	-		
30B	WTS Stowage, Shipping and Handling Instructions - Bilingual (para. 8.3.1.9)		1	\$	-	\$	-		
31A	WTS Data Summary - English (para. 8.3.1.10)		1	\$	-	\$	-		
31B	WTS Data Summary - Bilingual (para. 8.3.1.10)		1	\$	-	\$	-		
32	MEU, ASU and WSU Stowage Maps (para. 8.3.1.11)		LOT	\$	-	\$	-		
33	WTU Process and Flow Diagrams (para. 8.3.1.12)		LOT	\$	-	\$	-		
34A	WSU Operation, Maintenance and Parts Handbook - English (para. 8.3.1.13)		1	\$	-	\$	-		
34B	WSU Operation, Maintenance and Parts Handbook - Bilingual (para. 8.3.1.13)		LOT	\$	-	\$	-		
35	Provisioning Parts Breakdown (para. 8.4.3.1)		1	\$	-	\$	-		
36	Supplementary Provisioning Technical Documentation (para. 8.4.3.2)		1	\$	-	\$	-		
37	Special Tools and Test Equipment List (para. 8.4.3.3)		1	\$	-	\$	-		
38	Equipment Delivery Status Report (para. 8.4.3.4)		LOT	\$	-	\$	-		
39	Material Identification Data Set (para. 8.4.4.5)		1	\$	-	\$	-		
40	Initial Provisioning Guidance Conference (para. 8.5.1)		1	\$	-	\$	-		
	Meeting Agenda (para. 3.6.6.1.1)								
	Meeting Minutes (para. 3.6.6.1.2)								
41	Initial Provisioning Conference (para. 8.6.1)		1	\$	-	\$	-		
	Meeting Agenda (para. 3.6.6.1.1)								
	Meeting Minutes (para. 3.6.6.1.2)								
42	Identification Plates – Design Template & Populated Designs (para. 8.7)		LOT	\$	-	\$	-		
43	Controlled & Non-Controlled Goods List (para. 8.8)		1	\$	-	\$	-		
44	Identification Labels for Storage and Shipment and Packaging Codes (para. 8.9)		1	\$	-	\$	-		
45	List of Items to be Supported (para. 8.10)		1	\$	-	\$	-		
	WTS Operator Training Session (para. 8.11)	Training Location: CFB Gagetown, NB	1	\$	-	\$	-		
46A		CFB Valcartier, QC	1	\$	-	\$	-		
46B		CFB Petawawa, ON	1	\$	-	\$	-		
46C		CFB Edmonton, AB	1	\$	-	\$	-		
46D	Warranty Support Plan (para. 8.12)		1	\$	-	\$	-		
47	Equipment Environmental Assessment (para. 9.4)		1	\$	-	\$	-		
48			1	\$	-	\$	-		
Total Firm Requirements (Items 1 to 48 inclusive)							\$	-	
Note 1:	Items 1 - 48 above and Items 49 - 53 below will be evaluated for the lowest overall price.								
Note 2:	'LOT' equates to the quantity needed to fulfill the requirements of the CDRL and revisions, until accepted by DND.								
Optional Requirements:									
Item #	Item Description		Qty	Unit price		Total price			
49	Water Treatment Unit (WTU) (para. A1.2.1), up to 11 additional units, including packaging and shipping preparation costs for each unit		11	\$	-	\$	-		
50	Miscellaneous Equipment Unit (MEU) (para. A1.2.2), up to 11 additional units, including packaging and shipping preparation costs for each unit		11	\$	-	\$	-		
51	Arctic Sustainment Unit (ASU) (para. A1.2.3), up to 3 additional units, including packaging and shipping preparation costs for each unit		3	\$	-	\$	-		
52	Water Storage Unit (WSU) (para A1.2.4), up to 18 additional units, including packaging and shipping preparation costs for each unit		18	\$	-	\$	-		
53	Trailer (para. A1.2.5), up to 11 additional units, including packaging and shipping preparation costs for each unit		11	\$	-	\$	-		
54	Option to acquire Spare Parts after approval from DND		-	TBD		TBD			
55	Option to acquire Special Tool & Testing Equipment after approval from DND		-	TBD		TBD			
56	Option to acquire Fleet Support Spares after approval from DND - as described in the Annex A A3.38 DID - List of Items to be Supported.		-	TBD		TBD			
57	Additional Work Requests (if required)		-	TBD		TBD			
Total Optional Requirements (Items 49 to 53 inclusive)							\$	-	
	Total Acquisition Cost = addition of Total Firm Requirements cost and Total Optional Requirements cost (to be evaluated as part of lowest overall price)							\$	-

ANNEX F

FINANCIAL EVALUATION  
IN-SERVICE SUPPORT FINANCIAL EVALUATION TABLE - WATER TREATMENT SYSTEM

Table 2 - IN-SERVICE SUPPORT	
Bidders' Instructions	
Note 1	Bidders must fill in ALL of the blue cells in Tables 2.1, 2.2, 2.3 and 2.4 below. When filing in the requisite information, the Bidder must consider the work described in ANNEX A2, Support SOW as well as information provided in the Tables 2.1 through 2.4 as the basis for the financial bid submission. In all cases, the Bidder must clearly show how costs were derived. <b>Additional supporting documentation must be included where elaboration of stated costs is necessary</b> beyond filling in Tables 2.1, 2.2, 2.3 and 2.4.
Note 2	In Table 2.2, the bidder must forecast the total cost of the CORE Activities for each year of the contract, including firm and option years. CORE Activities are considered "fixed" prices. The Contractor will receive an annual amount (invoiced monthly) to complete the CORE work activities for the duration of the contract. The annual CORE Activities cost will be subsequently used as the annual value in the In-Service Support Contract. Additionally, the Workforce Categories and Rates Table 2.1 will also be used as part of the In-Service Support Contract.
Note 3	For Tables 2.3 and 2.4, the bidder must forecast the amount of hours per labour category for the duration of the contract to complete each task. If applicable, the bidder must also forecast Parts Provisioning Mark-up as a percentage rate for the duration of the contract, including firm and option years.
Note 4	For the purpose of calculating labor costs in Tables 2.3 and 2.4, bidders must indicate the hourly rate for each labour category in Table 2.1. One-half hour lunch is included in a standard work day. Overtime beyond the normal work day and normal weekly work hours, as determined by the bidders, must be compensated on the basis of the hourly rate, also determined by the bidder, using the multiplier for the overtime rate: OT x 1 (after hours work), OT x 2 (holiday and weekend). A subcontractor rate will also be identified if the bidder determines that subcontractors will be used instead of employees. The danger pay rate multiplier must also be identified in this table.
Note 5	The In-Service Support Contract will be issued as a separate contract from the Acquisition Contract, and will only be initiated once Initial Operating Capability has been achieved in the Acquisition Contract.

Location of Supported Systems (For Information Only)									
Regular Force Units									
Unit	Location	WTU	MEU	Trailer	ASU	WSU			
1 CER	Edmonton, AB	1	1	1	1	1			
CFB	Edmonton, AB	0	0	0	0	1			
2 CER	Pretawawa, ON	1	1	1	1	1			
CFB	Pretawawa, ON	0	0	0	0	1			
1 Fd Hospital	Pretawawa, ON	0	0	0	0	1			
1 Wing	Pretawawa, ON	0	0	0	0	1			
4 ESR	Gagetown, NB	1	1	1	1	1			
CFB	Gagetown, NB	0	0	0	0	1			
5 CER	Valcartier, QC	1	1	1	1	1			
CFB	Valcartier, QC	0	0	0	0	1			
CFRME	Gagetown, NB	4	4	4	1	1			
DART	Trenton, ON	2	2	2	0	3			
4 CES	Cold Lake, AB	1	1	1	1	2			
2 AETS	Bigocton, QC	3	3	1	1	6			
CDOC	Kingston, ON	0	0	0	0	5			
Total		14	14	12	7	27			

		Reserve Force Units					
Unit	Location	WTU	MEU	Trailer	ASU	WSU	
31 CER	St-Thomas, ON	1	1	1	0	1	
32 CER	Toronto, ON	1	1	1	0	1	
33 CER	Ottawa, ON	1	1	1	0	1	
34 CER	Montreal, QC	1	1	1	0	1	
35 CER	Quebec, QC	1	1	1	0	1	
36 CER	Shearwater, NS	1	1	1	0	1	
37 CER	St-John's, NL	1	1	1	0	1	
38 CER	Saskatoon, SK	1	1	1	0	1	
39 CER	Chilliwack, BC	1	1	1	0	1	
41 CER	Edmonton, AB	1	1	1	0	1	
Total		10	10	10	0	10	
OP-Stock							
OP-stock	CEM	2	2	2	0	0	
OP stock	Montreal, QC	0	0	0	0	5	
Total		2	2	2	0	5	
Total (not including optional requirements)		26	26	24	7	42	

		Optional Requirements (if elected; up to quantities shown)					
Units	Location	WTU	MEU	Trailer	ASU	WSU	
31 CER	Waterloo, ON	1	1	1	0	0	
32 CER	Toronto, ON	1	1	1	0	0	
33 CER	Ottawa, ON	1	1	1	0	0	
34 CER	Rouyn Noranda, QC	1	1	1	0	0	
36 CER	Sydney, NS	1	1	1	0	0	
37 CER	Fredricton, NB	1	1	1	0	0	
38 CER	Winnipeg, SK	1	1	1	0	0	
39 CER	Trail, BC	1	1	1	0	0	
41 CER	Calgary, AB	1	1	1	0	0	
OP Stock	OEM	2	2	2	0	0	
OP Stock	Montreal, QC	0	0	0	3	18	
Total of Optional Requirements		11	11	11	3	18	

Table 2.1 - Workforce Categories and Rates Table

DETAILS		Firm Years					Option Years					Hourly rate multiplier for OT, Danger Prime, Subcontractor (i.e. 1.1, 1.5, 2.0)			
		YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10	OT X 1 (after normal hours work)	OT X 2 (Statutory holiday and weekend)	Danger Prime Rate	Subcontractor Rate
Bidders must provide the following rates, for the firm and option contract years, to be applied in determining actual annual expenditures under TABLE 2.2, 2.3 and 2.4 of the SUPPORT SOW (CORE, R&O and TASKING activities). *** These rates will not be evaluated, only the Projected Total Annual Cost of SUPPORT SOW 3.0 Core Activities, 4.0 R&O Activities and 5.0 Tasking Activities	Project Manager	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	1.00	1.00	1.00	1.00
	Engineer	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	1.00	1.00	1.00	1.00
	Technician	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	1.00	1.00	1.00	1.00
	Technologist	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	1.00	1.00	1.00	1.00
	Logistician	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	1.00	1.00	1.00	1.00
	Draftperson/Illustrator	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	1.00	1.00	1.00	1.00

Table 2.2 - SUPPORT SOW 3.0 Core Activities

		Total Cost for each year of the contract									
		Firm Years					Option Years				
		YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10
CORE Activity	CORE Activity Description	Breakdown of Core Activity Costs (use YEAR 1 costs for this breakdown)									
Program Management	General Planning and Reporting, Meetings, Government Property, Hazardous Materials	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Operating Support	Personnel, Deployments, FSR	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Engineering Support	General, Configuration & Data Mgmt., Official Language Req, Tech Problem Mgmt.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Maintenance Support	Maintenance information for personnel, support for equipment, detailed inspection and maintenance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supply Support	Contract Warehouse Resources, Inventory Mgmt., Catalogue for the Provision of Repairable and Consumable Items, Obsolescence Mgmt, DND-Owned Stock Supply Logistics	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Personnel Support Resources	Adequate facilities and personnel, nominal list and compliance with requirements and deadlines.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Total SUPPORT SOW 3.0 Core Activities (to be included as part of the evaluation of lowest overall price)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
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Table 2.3 - SUPPORT SOW 4.0 R&O Activities

		Total Cost for each year of the contract									
		Firm Years					Option Years				
		YEAR 1 (300 hrs)	YEAR 2 (300 hrs)	YEAR 3 (300 hrs)	YEAR 4 (350 hrs)	YEAR 5 (400 hrs)	YEAR 6 (400 hrs)	YEAR 7 (400 hrs)	YEAR 8 (400 hrs)	YEAR 9 (400 hrs)	YEAR 10 (400 hrs)
Repair & Overall Activities	DETAILS	Labour Details <span>GREEN</span> (The sum of the percentage per labour category must equal 100%. Labour Category will sum to reflect a valid input. )									
		Labour Category	Work load contribution	Percentage Completed By Contractor (0%-100%)	Percentage Completed By Sub-Contractor (0%-100%)						
Maintenance Support (R&O Labour Costs)	For maintenance support work, described in ANNEX A3, Support SOW, R&O requirements. Bidder must provide the annual cost of maintenance support based on estimated support hours and workload contribution for each category, to be performed by the contractor or subcontractor: Year 1 – estimated to be 300 hours Year 2 – estimated to be 300 hours Year 3 – estimated to be 300 hours Year 4 – estimated to be 350 hours Year 5 – estimated to be 400 hours Year 6 – estimated to be 400 hours Year 7 – estimated to be 400 hours Year 8 – estimated to be 400 hours Year 9 – estimated to be 400 hours Year 10 – estimated to be 400 hours	Project Manager	10%	0%	0%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		Engineer	20%	0%	0%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		Technician	40%	0%	0%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		Technologist	15%	0%	0%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		Logistician	10%	0%	0%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		Draftperson/Illustrator	5%	0%	0%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
						\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
						\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
						\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		Sub-total				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

[illegible]

[illegible]



Training Support - Training Course Support for CF5ME (Maintainer Course)											
	Labour Details				Total Cost for each year of the contract						
					Firm Years						
					YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	Option Years YEAR 7    YEAR 8    YEAR 9    YEAR 10
<b>Training Support - Training Course Support for CF5ME (Maintainer Course)</b>  The bidder must provide operator and technical resource costs to support the maintenance technician courses conducted by O&P training staff at CF5ME in Oagtown, MO, including travel costs:  <b>Maintainer Course:</b> Duration of the task: Two (2) per year Number of training days / courses: 5 days; Number of hours of work / day: 8 hours; Include half hour for lunch, as detailed in Note 5  Note: The operator and the maintainer courses will never be administered at the same time.	Labour Category	Regular Hours	Hours @ OT 1	Hours @ OT 2	Hours @ Subcontractor Rate						
	Project Manager					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Engineer					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Technician					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Technologist					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Logistician					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Drift person/illustrator					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Sub-total					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Training Support - Training DART support											
	Labour Details				Total Cost for each year of the contract						
					Firm Years						
					YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	Option Years YEAR 7    YEAR 8    YEAR 9    YEAR 10
<b>Training Support - Training DART support</b>  The bidder must provide the cost of the operator and technical resources to support DART Technical Assistance Visit (TAV) in Wenton ON, including travel costs:  <b>Duration of the task:</b> Number of training days / courses: 10 days total; Number of hours of work / day: 8 hours; Include half hour for lunch, as detailed in Note 5  Indicate the person(s) the bidder believes will be best suited to provide deployment readiness confirmation to the Operator and Winter Fuel Environmental (WFE) Technician. Indicate the normal work period and overtime rate (if applicable).	Labour Category	Regular Hours	Hours @ OT 1	Hours @ OT 2	Hours @ Subcontractor Rate						
	Project Manager					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Engineer					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Technician					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Technologist					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Logistician					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Drift person/illustrator					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Sub-total					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
						\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total SUPPORT SOW 5.0 Tasking Activities (to be included as part of the evaluation of lowest overall price)</b>						\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Annual Cost of SUPPORT SOW 3.0 Core Activities, 4.0 R&amp;O Activities and 5.0 Tasking Activities</b>						\$ 100,000.00 \$	50,000.00 \$	50,000.00 \$	100,000.00 \$	50,000.00 \$	50,000.00 \$ 50,000.00 \$ 50,000.00 \$ 100,000.00 \$
						**Total for firm and option years of In Service Support (ISS Bid Value) [to be evaluated as part of lowest overall price]					
						\$ 650,000.00					

Solicitation No. - N° de l'invitation  
W8476-216378/A  
Client Ref. No. - N° de réf. du client  
W8476-216378

Amd. No. - N° de la modif.  
File No. - N° du dossier  
hl673.W8476-216378

Buyer ID - Id de l'acheteur  
hl673  
CCC No./N° CCC - FMS No./N° VME

## **ANNEX G – ELECTRONIC PAYMENT INSTRUMENTS**

The Bidder accepts to be paid by any of the following Electronic Payment Instrument(s):

- ☐ VISA Acquisition Card;
- ☐ MasterCard Acquisition Card;
- ☐ Direct Deposit (Domestic and International);
- ☐ Electronic Data Interchange (EDI);
- ☐ Wire Transfer (International Only);
- ☐ Large Value Transfer System (LVTS) (Over \$25M)



## ANNEX H - FEDERAL CONTRACTORS PROGRAM FOR EMPLOYMENT EQUITY – CERTIFICATION

I, the Bidder, by submitting the present information to the Contracting Authority, certify that the information provided is true as of the date indicated below. The certifications provided to Canada are subject to verification at all times. I understand that Canada will declare a bid non-responsive, or will declare a contractor in default, if a certification is found to be untrue, whether during the bid evaluation period or during the contract period. Canada will have the right to ask for additional information to verify the Bidder's certifications. Failure to comply with any request or requirement imposed by Canada may render the bid non-responsive or constitute a default under the Contract.

For further information on the Federal Contractors Program for Employment Equity visit [Employment and Social Development Canada \(ESDC\) – Labour's](#) website.

Date: \_\_\_\_\_ (YYYY/MM/DD) (If left blank, the date will be deemed to be the bid solicitation closing date.)

Complete both A and B.

A. Check only one of the following:

- ☐ A1. The Bidder certifies having no work force in Canada.
- ☐ A2. The Bidder certifies being a public sector employer.
- ☐ A3. The Bidder certifies being a [federally regulated employer](#) being subject to the [Employment Equity Act](#).
- ☐ A4. The Bidder certifies having a combined work force in Canada of less than 100 permanent full-time and/or permanent part-time employees.

A5. The Bidder has a combined workforce in Canada of 100 or more employees; and

- ☐ A5.1. The Bidder certifies already having a valid and current [Agreement to Implement Employment Equity](#) (AIEE) in place with ESDC-Labour.
- OR**
- ☐ A5.2. The Bidder certifies having submitted the [Agreement to Implement Employment Equity \(LAB1168\)](#) to ESDC-Labour. As this is a condition to contract award, proceed to completing the form Agreement to Implement Employment Equity (LAB1168), duly signing it, and transmit it to ESDC-Labour.

B. Check only one of the following:

- ☐ B1. The Bidder is not a Joint Venture.

**OR**

- ☐ B2. The Bidder is a Joint venture and each member of the Joint Venture must provide the Contracting Authority with a completed annex Federal Contractors Program for Employment Equity - Certification. (Refer to the Joint Venture section of the Standard Instructions)

Solicitation No. - N° de l'invitation  
W8476-216378/A  
Client Ref. No. - N° de réf. du client  
W8476-216378

Amd. No. - N° de la modif.  
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hl673.W8476-216378

Buyer ID - Id de l'acheteur  
hl673  
CCC No./N° CCC - FMS No./N° VME

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## **ANNEX I - DND 626 TASK AUTHORIZATION FORM**

**TASK AUTHORIZATION**  
**AUTORISATION DES TÂCHES**

All invoices/progress claims must show the reference Contract and Task numbers. Toutes les factures doivent indiquer les numéros du contrat et de la tâche.		Contract no. – N° du contrat
		Task no. – N° de la tâche
Amendment no. – N° de la modification	Increase/Decrease – Augmentation/Réduction	Previous value – Valeur précédente
To – À	<b>TO THE CONTRACTOR</b>  You are requested to supply the following services in accordance with the terms of the above reference contract. Only services included in the contract shall be supplied against this task.  Please advise the undersigned if the completion date cannot be met. Invoices/progress claims shall be prepared in accordance with the instructions set out in the contract.  <b>À L'ENTREPRENEUR</b>  Vous êtes prié de fournir les services suivants en conformité des termes du contrat mentionné ci-dessus. Seuls les services mentionnés dans le contrat doivent être fournis à l'appui de cette demande.  Prière d'aviser le signataire si la livraison ne peut se faire dans les délais prescrits. Les factures doivent être établies selon les instructions énoncées dans le contrat.	
Delivery location – Expédiez à		
Delivery/Completion date – Date de livraison/d’achèvement	Date	for the Department of National Defence pour le ministère de la Défense nationale
Contract item no. N° d'article du contrat	Services	Cost Prix
		GST/HST TPS/TVH
	Total	
APPLICABLE ONLY TO PWGSC CONTRACTS: The Contract Authority signature is required when the total value of the DND 626 exceeds the threshold specified in the contract.		
NE S'APPLIQUE QU'AUX CONTRATS DE TPSGC : La signature de l'autorité contractante est requise lorsque la valeur totale du formulaire DND 626 est supérieure au seuil précisé dans le contrat.		
for the Department of Public Works and Government Services pour le ministère des Travaux publics et services gouvernementaux		

## Instructions for completing DND 626 - Task Authorization

### Contract no.

Enter the PWGSC contract number in full.

### Task no.

Enter the sequential Task number.

### Amendment no.

Enter the amendment number when the original Task is amended to change the scope or the value.

### Increase/Decrease

Enter the increase or decrease total dollar amount including taxes.

### Previous value

Enter the previous total dollar amount including taxes.

### To

Name of the contractor.

### Delivery location

Location where the work will be completed, if other than the contractor's location.

### Delivery/Completion date

Completion date for the task.

### for the Department of National Defence

Signature of the DND person who has delegated **Authority** for signing DND 626 (level of authority based on the dollar value of the task and the equivalent signing authority in the PAM 1.4). **Note:** the person signing in this block ensures that the work is within the scope of the contract, that sufficient funds remain in the contract to cover this task and that the task is affordable within the Project/Unit budget.

### Services

Define the requirement briefly (attach the SOW) and identify the cost of the task using the contractor's quote on the level of effort. The Task must use the basis of payment stipulated in the contract. If there are several basis of payment then list here the one(s) that will apply to the task quote (e.g. milestone payments; per diem rates/labour category hourly rates; travel and living rates; firm price/ceiling price, etc.). All the terms and conditions of the contract apply to this Task Authorization and cannot be ignored or amended for this task. Therefore it is not necessary to restate these general contract terms and conditions on the DND 626 Task form.

### Cost

The cost of the Task broken out into the individual costed items in **Services**.

### GST/HST

The GST/HST cost as appropriate.

### Total

The total cost of the task. The contractor may not exceed this amount without the approval of DND indicated on an amended DND 626. The amendment value may not exceed 50% (or the percentage for amendments established in the contract) of the original value of the task authorization. The total cost of a DND 626, including all amendments, may not exceed the funding limit identified in the contract.

### Applicable only to PWGSC contracts

This block only applies to those Task Authorization contracts awarded by PWGSC. The contract will include a specified threshold for DND sole approval of the DND 626 and a percentage for DND to approve amendments to the original DND 626. Tasks that will exceed these thresholds must be passed to the PWGSC Contracting Authority for review and signature prior to authorizing the contractor to begin work.

### Note:

Work on the task may not commence prior to the date this form is signed by the DA Authority - for tasks within the DND threshold; and by both DND and PWGSC for those tasks over the DND threshold.

## Instructions pour compléter le formulaire DND 626 - Autorisation des tâches

### N° du contrat

Inscrivez le numéro du contrat de TPSGC en entier.

### N° de la tâche

Inscrivez le numéro de tâche séquentiel.

### N° de la modification

Inscrivez le numéro de modification lorsque la tâche originale est modifiée pour en changer la portée.

### Augmentation/Réduction

Inscrivez le montant total de l'augmentation ou de la diminution, y compris les taxes.

### Valeur précédente

Inscrivez le montant total précédent, y compris les taxes.

### À

Nom de l'entrepreneur.

### Expédiez à

Endroit où le travail sera effectué, si celui-ci diffère du lieu d'affaires de l'entrepreneur.

### Date de livraison/d'achèvement

Date d'achèvement de la tâche.

### pour le ministère de la Défense nationale

Signature du représentant du MDN auquel on a délégué le **pouvoir d'approbation** en ce qui a trait à la signature du formulaire DND 626 (niveau d'autorité basé sur la valeur de la tâche et le signataire autorisé équivalent mentionné dans le MAA 1.4). **Nota :** la personne qui signe cette attache de signature confirme que les travaux respectent la portée du contrat, que suffisamment de fonds sont prévus au contrat pour couvrir cette tâche et que le budget alloué à l'unité ou pour le projet le permet.

### Services

Définissez brièvement le besoin (joignez l'ET) et établissez le coût de la tâche à l'aide de la soumission de l'entrepreneur selon le niveau de difficulté de celle-ci. Les modalités de paiement stipulées dans le contrat s'appliquent à la tâche. Si plusieurs d'entre elles sont prévues, énumérez ici celle/celles qui s'appliquera/ront à la soumission pour la tâche à accomplir (p.ex. acompte fondé sur les étapes franchies; taux quotidien ou taux horaire établi selon la catégorie de main-d'œuvre; frais de déplacement et de séjour; prix fixe ou prix plafond; etc.). Toutes les modalités du contrat s'appliquent à cette autorisation de tâche et ne peuvent être négligées ou modifiées quant à la tâche en question. Il n'est donc pas nécessaire de répéter ces modalités générales afférentes au contrat sur le formulaire DND 626.

### Prix

Mentionnez le coût de la tâche en le répartissant selon les frais afférents à chaque item mentionné dans la rubrique **Services**.

### TPS/TVH

Mentionnez le montant de la TPS/TVH, s'il y a lieu.

### Total

Mentionnez le coût total de la tâche. L'entrepreneur ne peut dépasser ce montant sans l'approbation du MDN, formulaire DND 626 modifié à l'appui. Le coût de la modification ne peut pas être supérieur à 50 p. 100 du montant initial prévu dans l'autorisation de tâche (ou au pourcentage prévu dans le contrat pour les modifications). Le coût total spécifié dans le formulaire DND 626, y compris toutes les modifications, ne peut dépasser le plafond de financement mentionné dans le contrat.

### Ne s'applique qu'aux contrats de TPSGC

Le présent paragraphe s'applique uniquement aux autorisations de tâche accordées par TPSGC. On inscrira dans le formulaire DND 626 un plafond précis qui ne pourra être approuvé que par le MDN et un pourcentage selon lequel le MDN pourra approuver des modifications au formulaire DND 626 original. Les tâches dont le coût dépasse ces plafonds doivent être soumises à l'autorité contractante de TPSGC pour examen et signature avant qu'on autorise l'entrepreneur à débiter les travaux.

### Nota :

Les travaux ne peuvent commencer avant la date de signature de ce formulaire par le responsable du MDN, pour les tâches dont le coût est inférieur au plafond établi par le MDN, et par le MDN et TPSGC pour les tâches dont le coût dépasse le plafond établi par le MDN.