



## RETURN BIDS TO:

## RETOURNER LES SOUMISSIONS À:

Bid Receiving Public Works and Government  
Services Canada/Réception des soumissions Travaux  
publics et Services gouvernementaux Canada  
1713 Bedford Row  
Halifax, N.S./Halifax, (N.É.)  
Halifax  
Nova Scotia  
B3J 1T3  
Bid Fax: (902) 496-5016

## SOLICITATION AMENDMENT MODIFICATION DE L'INVITATION

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

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

### Comments - Commentaires

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

Issuing Office - Bureau de distribution  
Atlantic Region Acquisitions/Région de l'Atlantique  
Acquisitions  
1713 Bedford Row  
Halifax, N.S./Halifax, (N.É.)  
Halifax  
Nova Scotia  
B3J 1T3

<b>Title - Sujet</b> SLS Thermo-Plastic 3D Printer	
<b>Solicitation No. - N° de l'invitation</b> W7707-227053/A	<b>Amendment No. - N° modif.</b> 001
<b>Client Reference No. - N° de référence du client</b> W7707-22-7053	<b>Date</b> 2021-07-13
<b>GETS Reference No. - N° de référence de SEAG</b> PW-SHAL-207-11314	
<b>File No. - N° de dossier</b> HAL-1-87023 (207)	<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> Atlantic Daylight Saving Time ADT <b>on - le 2021-07-20</b> Heure Avancée de l'Atlantique HAA	
<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> Grieve, Bronwen	<b>Buyer Id - Id de l'acheteur</b> hal207
<b>Telephone No. - N° de téléphone</b> (902) 943-2394 ( )	<b>FAX No. - N° de FAX</b> (902) 496-5016
<b>Destination - of Goods, Services, and Construction:</b> <b>Destination - des biens, services et construction:</b>	

Instructions: See Herein

Instructions: Voir aux présentes

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

---

**Amendment 001 is raised to:**

- 1. Answer bidder questions;**
- 2. Amend Annex "A" Statement of Requirement;**
- 3. Amend Annex "A1" Technical Evaluation; and**
- 4. Include part reference photo.**

**1. Bidder Questions and Answers:**

Q1. With reference to annex A, item 1.

Would you please confirm if the requested dimension is in "inch", and it is correct?

A1: Yes, the build envelope being requested is correct – and yes, the measurements are in inches.

Q2. With reference to annex A, item 4 (Materials).

There is no machine available in the market which can process all the requested materials on a single machine having the super large envelope requested in item 1. Although technically possible to run all these materials on a single machine, it's not overly feasible from an operational perspective. The challenge is cross contamination during material processing. Machine and cleaning station go through a vacuum, and the used powder is sifted with new powder (high recycle rate). Would you please clarify?

A2: Materials will be used one at a time and cleaning will occur between runs to eliminate the possibility of cross contamination.

Q3. With reference to section "6. DELIVERABLES"

Would you please specify the volume and weight of each requested material package?

A3: Each requested material package must have a minimum 5 kg weight.

Q4. The size requirement of the build envelope is 18x18x24 in. We have a machine that is slightly lower in size that we would like to submit for evaluation. It does comply with all the other requirements. It is roughly 16x16x20 inches.

A4: DRDC will accept a build envelope with dimensions of minimum 16x16x20 inches. See amendment to Annex A and A1.

Q5. Is there a specific part DRDC is trying to build to justify this size, if so could we have access to the file to see if we can fit it into one of our equipment?

A5: Please see attached reference photo of the part DRDC intends to build.

**2. Amendments to Annex "A" Statement of Requirement:**

**a) Under section 5.1 SLS Thermo-Plastic 3D Printer:**

DELETE: in its entirety

INSERT:

## 5.1 SLS Thermo-Plastic 3D Printer

### Required Quantity: 1

The Contractor must provide the requirement with the following specifications:

Specifications	Value
Minimum Build Envelope (XYZ)	Minimum: 16 x 16 x 20 inch
Achievable accuracy	Plus/minus 0.005 inch
Print Layer Thickness	Maximum: 0.010 inch
Print using Material (Powder) Classes	Polyamide 11, Polyamide 12 (including glass bead filled, aluminum filled, carbon fibre reinforced, flame retardant), polystyrene, polyaryletherketone
User Interface	Intuitive Touchscreen
CAD File Format	Must include <u>Stereolithography</u> (.stl) format
Software Compatibility	Must be SOLIDWORKS compatible
Operation Compatibility	Microsoft Windows
Network Communication	10/100 Base-T Ethernet Connection Protocol
Power Requirements	208 Volts Alternating Current (VAC) 3-phase, 50/60 Hertz (Hz), 18 Ampere (A) (if different, must come with a converter).

### b) Under section 5.2 Accessories:

DELETE: in its entirety

INSERT:

## 5.2 Accessories

The Contractor must provide the following accessories, which comply with the specifications of the system delivered under Section 5.1:

Item	Description	Required Quantity	Minimum Weight per package
5.2.1	Polyamide 11	1	5 kg
5.2.2	Polyamide 12 (glass bead filled, aluminum filled, carbon fibre reinforced, flame retardant)	1	5 kg
5.2.3	Polystyrene	1	5 kg
5.2.4	Polyaryletherketone	1	5 kg

### c) Under section 5.3.1 Accessories:

DELETE: in its entirety

INSERT:

#### 5.3.1 Accessories

Item	Description	Required Quantity	Minimum Weight per package
5.3.1.1	Powder Material Storage Unit	1	5 kg
5.3.1.2	Powder Material Preparation (Sieve) Unit	1	5 kg
5.3.1.3	Powder Material Waste Unit	1	5 kg
5.3.1.4	Polyamide 11	Up to 5	5 kg
5.3.1.5	Polyamide 12	Up to 5	5 kg
5.3.1.6	Polystyrene	Up to 5	5 kg
5.3.1.7	Polyaryletherketone	Up to 5	5 kg

### 3. Under Annex "A1" Technical Evaluation:

DELETE: in its entirety

INSERT:

**Instructions:**

The Bidder **must** address each Mandatory Technical Criteria listed below.

The Bidder should include one (1) copy of descriptive literature; if available, for the item(s) offered in sufficient detail to clearly indicate compliance with each of the individual requirements from the Mandatory Technical Criteria detailed herein. References to Internet websites or information that is not included in the bid will not be evaluated.

The Bidder should comment /cross reference the page number and highlight the specification in your technical data sheets or brochure to demonstrate and support your compliance for each of the Mandatory Technical Criteria.

The Bidder must provide as much detail as possible to support their comments and their claims of compliance for each specification.

**NOTE:** The Crown is under NO obligation to seek clarification of the bid(s) or the supporting technical documentation provided. Failure to meet any of the following will render your proposal non-compliant and will be given no further consideration.

Item	Mandatory Technical Criteria	Bidder to Reference Page Number/Comments
1.	Minimum Build Envelope (XYZ) must be minimum 16 x 16 x 20 inch	
2.	Achievable accuracy must be plus/minus 0.005 inch	
3.	Must have maximum 0.010 inch print layer thickness	
4.	Must print using all of the following:	
4.1.	Polyamide 11	
4.2.	All of the following Polyamide 12 (PA 12) Types:	
4.2.1.	PA 12 (Glass Bead Filled)	
4.2.2.	PA 12 (Aluminum Filled)	
4.2.3.	PA 12 (Carbon Fibre Reinforced)	
4.2.4.	PA 12 (Flame Retardant)	

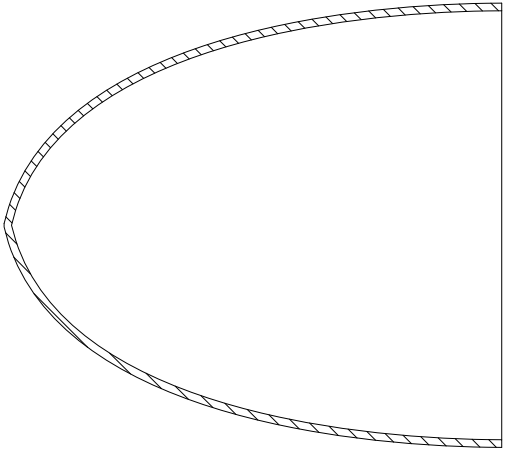
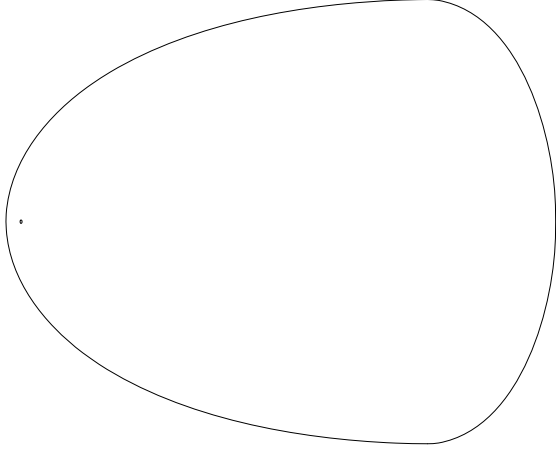
4.3.	Polystyrene	
4.4.	Polyaryletherketone	
5.	Must include an intuitive touchscreen user interface	
6.	CAD file format: Stereolithography (.stl) must be included	
7.	Software must be SOLIDWORKS compatible	
8.	Must be Microsoft Windows compatible	
9.	Network Connection must be 10/100 Base-T Ethernet Connection Protocol	
10.	Must meet the following Power Requirements:	
10.1.	208 Volts Alternating Current (VAC) 3-phase, 50/60 Hertz (Hz), 18 Ampere (A) (if different, must come with a converter).	

**4. Reference Photo:**

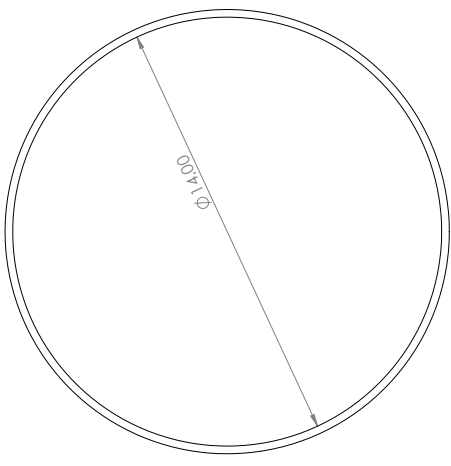
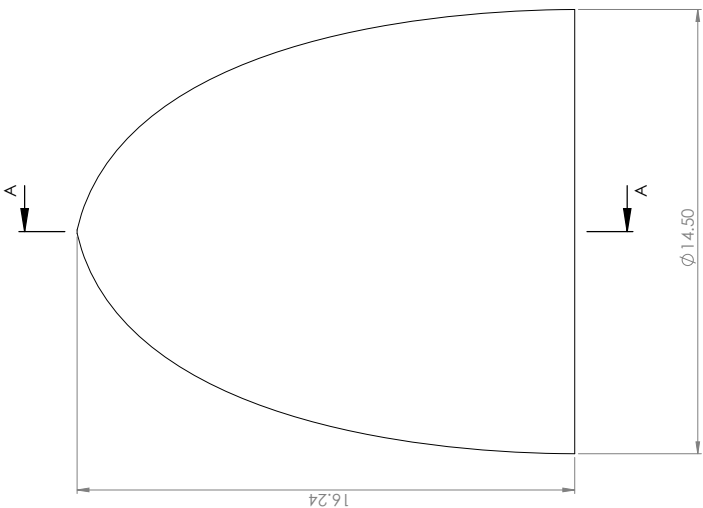
See next page.

4 3 2 1

D C B A



SECTION A-A  
SCALE 1:3



UNLESS OTHERWISE SPECIFIED:		NAME	DATE
DRAWN	BY		
CHECKED	BY		
ENG. APPR.	BY		
WFO APPR.	BY		
Q. A.	BY		
COMMENTS:			
INTERPRET GEOMETRIC CONSTRUCTION			
TOLERANCES ARE IN INCHES			
FRACTIONAL: 1/16, 1/8, 1/4, 3/8, 1/2, 5/8, 3/4, 7/8			
DECIMAL: TWO PLACE DECIMAL			
THREE PLACE DECIMAL			
SURFACE FINISH: UNLESS OTHERWISE SPECIFIED			
DO NOT SCALE DRAWING			
NEXT ASY		USED ON	
APPLICATION			
TITLE: NOSE CONE			
SIZE DWG. NO.		REV	
C			
SCALE: 1:3		WEIGHT: SHEET 1 OF 2	

NOTES:  
1. THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF THE COMPANY AND IS NOT TO BE REPRODUCED IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF THE COMPANY.  
2. ANY REVISIONS TO THIS DRAWING MUST BE APPROVED BY THE DESIGNER AND THE COMPANY ENGINEER.  
3. ANY REVISIONS TO THIS DRAWING MUST BE APPROVED BY THE DESIGNER AND THE COMPANY ENGINEER.

4 3 2 1

Solicitation No. - N° de l'invitation  
W7707-227053/A  
Client Ref. No. - N° de réf. du client

Amd. No. - N° de la modif.  
001  
File No. - N° du dossier

Buyer ID - Id de l'acheteur  
ha1207  
CCC No./N° CCC - FMS No./N° VME

---

***ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED***