



RETURN BIDS TO:

RETOURNER LES SOUMISSIONS À:

**Bid Receiving - PWGSC / Réception des soumissions
- TPSGC**

11 LaurierSt./ 11, rue Laurier

Place du Portage, Phase III

Core 0B2 / Noyau 0B2

Gatineau

Québec

K1A 0S5

Bid Fax: (819) 997-9776

SOLICITATION AMENDMENT

MODIFICATION DE L'INVITATION

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

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

Comments - Commentaires

THIS DOCUMENT CONTAINS A SECURITY REQUIREMENT

"CE DOCUMENT COMPORTE DES EXIGENCES RELATIVES À LA SÉCURITÉ"

Window Cleaning Services / Service de nettoyage de vitres

Vendor/Firm Name and Address

Raison sociale et adresse du fournisseur/de l'entrepreneur

Issuing Office - Bureau de distribution

Maintenance & Professional Consulting Services
Division (FK)

11 Laurier St./ 11, rue Laurier

3C2, Place du Portage, Phase III

Gatineau

Québec

K1A 0S5

Title - Sujet WINDOW CLEANING	
Solicitation No. - N° de l'invitation EJ196-161614/A	Amendment No. - N° modif. 002
Client Reference No. - N° de référence du client 20161614	Date 2016-06-14
GETS Reference No. - N° de référence de SEAG PW-\$\$FK-258-70859	
File No. - N° de dossier fk258.EJ196-161614	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2016-06-14	
F.O.B. - F.A.B. Plant-Usine: <input type="checkbox"/> Destination: <input type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Hill, Cris	Buyer Id - Id de l'acheteur fk258
Telephone No. - N° de téléphone (873) 469-4891 ()	FAX No. - N° de FAX (819) 956-3600
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: See Herein	

Instructions: See Herein

Instructions: Voir aux présentes

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



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Window Cleaning Services / Service de nettoyage de vitres

Vendor/Firm Name and Address

Raison sociale et adresse du fournisseur/de l'entrepreneur

Issuing Office - Bureau de distribution

Maintenance & Professional Consulting Services
Division (FK)

11 Laurier St./ 11, rue Laurier

3C2, Place du Portage, Phase III

Gatineau

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K1A 0S5

Title - Sujet WINDOW CLEANING	
Solicitation No. - N° de l'invitation EJ196-161614/A	Amendment No. - N° modif. 002
Client Reference No. - N° de référence du client 20161614	Date 2016-06-03
GETS Reference No. - N° de référence de SEAG	
File No. - N° de dossier fk258.EJ196-161614	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2016-06-14	
Time Zone Fuseau horaire Eastern Daylight Saving Time EDT	
F.O.B. - F.A.B. Plant-Usine: <input type="checkbox"/> Destination: <input type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Hill, Cris	Buyer Id - Id de l'acheteur fk258
Telephone No. - N° de téléphone (873) 469-4891 ()	FAX No. - N° de FAX (819) 956-3600
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: See Herein	

Instructions: See Herein

Instructions: Voir aux présentes

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

Solicitation Amendment 002 for RFP EJ196-1614/A Cris Hill fk258
Window Cleaning at SJAM, Wellington Bldg and Block 1

This Amendment is raised to (1) add Site Visit Minutes, (2) Revised Annex B – Financial Bid and (3) add Annex G – Canopy Information as follows:

(1) Site Visit Minutes

Site Visit Minutes EJ196-161614/A May 18, 2016 8:00am Window Cleaning

Wellington Bldg (180 Wellington) & Sir John A Macdonald (144 Wellington) And Block 1 (Langevin Bldg-80 Wellington, Postal Station B-59 Sparks, Hope Bldg-63 Sparks, Blackburn Bldg-85 Sparks, Norcano Bldg-69 Sparks, Saxe Bldg-76 Sparks, Marshall Bldg-14 Metcalfe, O'Brien Bldg-65 Sparks, Nelms Bldg-67 Sparks, Canada's Four Corners-93 Sparks)

Site Visit Start Time: 8:31am Site Visit end Time: 10:15am

In attendance from PWGSC: Michel Richer (MSO-Building Services), John Reiter (MSO-Building Services), Jacques Moore (MSA), Cris Hill (Contracting Authority RPCD) and Riz Shah (RPCD)

Bidders in Attendance: Cody Building Services, Soulard Multi-Service, Galipeau Group, and Proserv

- Introduced myself as Contracting Authority (CA) and Riz Shah as a co-worker observing and Michel Richer as Technical Authority (TA) and John Reiter as his back up.

- Reminded the bidders that Security is **Secret at bid closing**

- Let all bidders know that the newest item in the RFP is Annex B Pricing Basis
- Also reminder bidders that cleaning schedule and work plans are due 15 working day prior to commencement of any work, this would be discussed more with the awarded contract at the pre-commencement
- Bidders were also reminded that after contract award and by the pre-commencement meeting they will be required to provide copies of the following certificates (no more than 5yrs old) for each employee named to work on the contract
 - a valid Fall Arrest certificate/wallet card (online not accepted);
 - a valid First Aid/CPR certificate/wallet card;
 - a valid Workplace Hazardous Material Inventory System (WHMIS) certificate/wallet card and
 - Suspended Access Equipment certificate
- Bidders were reminded that they are responsible for any required City Permits
- Bidders were reminded they are not allowed to clean the windows of a building or section of the building considered a construction site when work is in progress , they are to contact the TA
- Bidders were remind that they are responsible to have a certified engineer perform a roof anchor inspection annually and that a copy of the stamped inspection certification by the engineer will be submitted to the TA.
- Bidders were reminded that Commercial spaces located at the ground level of Wellington, Hope, Blackburn, Norcano, Saxe, O'Brien, Nelms and Canada's Four Corners are not to be cleaned.
- Bidders were reminded to review the SOW for times of operations for the window cleanings

- reminded the bidders to review the RFP and SOW and all drawings as this site has changed drastically from any previous contracts

- Bidders were reminded that there is no pressure washing on these sites

Solicitation Amendment 002 for RFP EJ196-1614/A Cris Hill fk258
Window Cleaning at SJAM, Wellington Bldg and Block 1

At 8:35am we proceeded to view the windows inside the Sir John A Macdonald

- Everybody agreed they did not need to see the roof
- Within the atrium any machine used to clean inside cannot be more than 100lbs per square foot
- Next we looked in the conference room
- Bidders were reminded if at any time the Prime Minister or any other dignitary arrives they may be asked to leave and may have to leave their equipment behind
- Bidders were also reminded if there is a lock down their employees locked in are to contact the company to let know
- Partial glass is not to be cleaned

- Bidders were also reminded that to get the proper equipment in to clean the high windows they will have to go through the front door
- We left at 9:15AM to go to Wellington Building, one contractor went back to his truck to change to safety boots as it was agreed to by all other contractors

At 9:07am we proceeded to view the windows inside the Wellington Bldg (180 Wellington)

- Started at the penthouse & roof
- Monorail inside skylight
- Viewed monorail gantry system from entry door
- Bidders were reminded everyone who will use the gantry system must be trained

- Bidders were reminded that on the 6th floor there is a green roof around the perimeter
- 5th floor
 - o Bidders were able to see the gantry system from the library
 - o Bidders observed the sunshade
 - o Michel to confirm if the sunshade is to be cleaned or notClean all sunshade after each clean of skylight and with separated price - see revised Annex B. All sunshade and surrounding wall has to be free of smudge and water run.
- It was confirmed by Roger Smith that the construction contractor Ellis Don will not be cleaning the windows, so bidders have to keep in mind that the first clean will be more expensive for 180 Wellington. All Interior windows were clean in construction clean up in December 2015. Except the retail area.

At 9:45am we proceeded to view the outside windows at the Wellington Bldg

- Glass roof canopy at main entrance – Michel to confirm load type (this is to be added to RFP as separate pricing?? And how many cleanings per year and what time (i.e. weekends, before 6am and/or after 6pm). **See attached Annex G – Canopy Info Sheet**
- Canopy is to be cleaned April, June, August and October with an "as & when" for December (**see revised Annex B Pricing**)
- **Canopy should be cleaned very early in the morning or after hours, due to the traffic on Wellington street**
- Bidders are reminded they have to think about permits with the city if they need to close down lanes or others area.
- Bidders were reminded that they are not to clean up any bird extrication, if this is requested by someone in any of the buildings they are to direct that person to the TA

Solicitation Amendment 002 for RFP EJ196-1614/A Cris Hill fk258
Window Cleaning at SJAM, Wellington Bldg and Block 1

We then proceeded to Block 1

- Bidders were reminded block 1 starts at the old Four Corners
- Bidders were reminded that roof anchors on all buildings to be certified by the contractor by a certified engineer
- Reminded that Postal Stn. B is under construction
- Everyone agreed they did not need to see the remainder of Block 1

- 10:15am finished site visit- all bidders still in attendance initialed out

(2) Revised Annex B – Financial Bid

Delete Annex B – Financial Bid in its entirety

Insert Revised Annex B – Financial Bid – see attached

(3) add Annex G – Canopy Information – see attached

Solicitation Amendment 002

Revised Annex B – Financial Bid

EJ196-161614/A Window Cleaning Services

Sir John A McDonald (144 Wellington), Wellington Building (180 Wellington) and Block 1

Section I: Financial Bid

PRICING SCHEDULE 1:

Firm all inclusive rates including labour, supervision, material, equipment, transportation, overhead, profit and all related costs (excluding HST/GST) for Interior and Exterior Window Cleaning in accordance with the Specification EJ196-161614 at Annex A.

1.1 Sir John A McDonald – 144 Wellington			
Method: "A" Both sides – Interior & Exterior Window Cleaning			
Period:	To be completed in the month of:	Firm Price per cleaning (GST Extra):	Firm annual price (GST Extra)
Year One(1) July 1/16 – April 30/17	July	\$ _____ =	\$ _____
Option Year One (1) May 1/17–April 30/18	May	\$ _____ =	\$ _____
Option Year Two (2) May 1/18–April 30/19	May	\$ _____ =	\$ _____
Option Year Three (3) May 1/19–April 30/20	May	\$ _____ =	\$ _____
Option Year Four (4) May 1/20–April 30/21	May	\$ _____ =	\$ _____
1.1 Sub Total:			\$ _____

1.2 Sir John A McDonald – 144 Wellington			
Method: "C" Exterior Window Cleaning			
Period:	To be completed in the month of:	Firm Price per cleaning (GST Extra):	Firm annual price (GST Extra)
Year One(1) July 1/16 – April 30/17	October	\$ _____ =	\$ _____
Option Year One (1) May 1/17–April 30/18	October	\$ _____ =	\$ _____
Option Year Two (2) May 1/18–April 30/19	October	\$ _____ =	\$ _____
Option Year Three (3) May 1/19–April 30/20	October	\$ _____ =	\$ _____
Option Year Four (4) May 1/20–April 30/21	October	\$ _____ =	\$ _____
1.2 Sub Total:			\$ _____

Solicitation Amendment 002
Revised Annex B – Financial Bid
 EJ196-161614/A Window Cleaning Services
 Sir John A McDonald (144 Wellington), Wellington Building (180 Wellington) and Block 1

All window frames around the building (180 Wellington) should be wiped down
 and dried off with a rag and water with mild soap.

1.3 Wellington Building 180 Wellington			
Method: "A" Both sides - Interior & Exterior Window Cleaning			
Period:	To be completed in the month of:	Firm Price per cleaning (GST Extra):	Firm annual price (GST Extra)
Year One(1) July 1/16 – April 30/17	July Note the construction Contractor will not be cleaning the Exterior Windows before this first cleaning	\$ _____ =	\$ _____
Option Year One (1) May 1/17–April 30/18	May	\$ _____ =	\$ _____
Option Year Two (2) May 1/18–April 30/19	May	\$ _____ =	\$ _____
Option Year Three (3) May 1/19–April 30/20	May	\$ _____ =	\$ _____
Option Year Four (4) May 1/20–April 30/21	May	\$ _____ =	\$ _____
1.3 Sub Total:			\$ _____

All window frames around the building (180 Wellington) should be wiped down
 and dried off with a rag and water with mild soap.

1.4 Wellington Building 180 Wellington			
Method: "C" Exterior Window Cleaning			
Period:	To be completed in the month of:	Firm Price per cleaning (GST Extra):	Firm annual price (GST Extra)
Year One(1) July 1/16 – April 30/17	October	\$ _____ =	\$ _____
Option Year One (1) May 1/17–April 30/18	October	\$ _____ =	\$ _____
Option Year Two (2) May 1/18–April 30/19	October	\$ _____ =	\$ _____
Option Year Three (3) May 1/19–April 30/20	October	\$ _____ =	\$ _____
Option Year Four (4) May 1/20–April 30/21	October	\$ _____ =	\$ _____
1.4 Sub Total:			\$ _____

Solicitation Amendment 002
Revised Annex B – Financial Bid
 EJ196-161614/A Window Cleaning Services
 Sir John A McDonald (144 Wellington), Wellington Building (180 Wellington) and Block 1

Block 1

1.5 Langevin Bldg 80 Wellington			
Method: "A" Both sides - Interior & Exterior Window Cleaning			
Period:	To be completed in the month of:	Firm Price per cleaning (GST Extra):	Firm annual price (GST Extra)
Year One(1) July 1/16 – April 30/17	July	\$ _____ =	\$ _____
Option Year One (1) May 1/17–April 30/18	May	\$ _____ =	\$ _____
Option Year Two (2) May 1/18–April 30/19	May	\$ _____ =	\$ _____
Option Year Three (3) May 1/19–April 30/20	May	\$ _____ =	\$ _____
Option Year Four (4) May 1/20–April 30/21	May	\$ _____ =	\$ _____
1.5 Sub Total:			\$ _____

1.6 Langevin Bldg 80 Wellington			
Method: "C" Exterior Window Cleaning			
Period:	To be completed in the month of:	Firm Price per cleaning (GST Extra):	Firm annual price (GST Extra)
Year One(1) July 1/16 – April 30/17	October	\$ _____ =	\$ _____
Option Year One (1) May 1/17–April 30/18	October	\$ _____ =	\$ _____
Option Year Two (2) May 1/18–April 30/19	October	\$ _____ =	\$ _____
Option Year Three (3) May 1/19–April 30/20	October	\$ _____ =	\$ _____
Option Year Four (4) May 1/20–April 30/21	October	\$ _____ =	\$ _____
1.6 Sub Total:			\$ _____

Solicitation Amendment 002
Revised Annex B – Financial Bid
 EJ196-161614/A Window Cleaning Services
 Sir John A McDonald (144 Wellington), Wellington Building (180 Wellington) and Block 1

1.7 Postal Station B 59 Sparks			
Method: "A" Both sides - Interior & Exterior Window Cleaning			
Period:	To be completed in the month of:	Firm Price per cleaning (GST Extra):	Firm annual price (GST Extra)
Year One(1) July 1/16 – April 30/17	July	\$ _____ =	\$ _____
Option Year One (1) May 1/17–April 30/18	May	\$ _____ =	\$ _____
Option Year Two (2) May 1/18–April 30/19	May	\$ _____ =	\$ _____
Option Year Three (3) May 1/19–April 30/20	May	\$ _____ =	\$ _____
Option Year Four (4) May 1/20–April 30/21	May	\$ _____ =	\$ _____
1.7 Sub Total:			\$ _____

1.8 Postal Station B 59 Sparks			
Method: "C" Exterior Window Cleaning			
Period:	To be completed in the month of:	Firm Price per cleaning (GST Extra):	Firm annual price (GST Extra)
Year One(1) July 1/16 – April 30/17	October	\$ _____ =	\$ _____
Option Year One (1) May 1/17–April 30/18	October	\$ _____ =	\$ _____
Option Year Two (2) May 1/18–April 30/19	October	\$ _____ =	\$ _____
Option Year Three (3) May 1/19–April 30/20	October	\$ _____ =	\$ _____
Option Year Four (4) May 1/20–April 30/21	October	\$ _____ =	\$ _____
1.8 Sub Total:			\$ _____

Solicitation Amendment 002

Revised Annex B – Financial Bid

EJ196-161614/A Window Cleaning Services

Sir John A McDonald (144 Wellington), Wellington Building (180 Wellington) and Block 1

1.9 Hope Bldg 63 Sparks			
Method: "A" Both sides - Interior & Exterior Window Cleaning			
Period:	To be completed in the month of:	Firm Price per cleaning (GST Extra):	Firm annual price (GST Extra)
Year One(1) July 1/16 – April 30/17	July	\$ _____ =	\$ _____
Option Year One (1) May 1/17–April 30/18	May	\$ _____ =	\$ _____
Option Year Two (2) May 1/18–April 30/19	May	\$ _____ =	\$ _____
Option Year Three (3) May 1/19–April 30/20	May	\$ _____ =	\$ _____
Option Year Four (4) May 1/20–April 30/21	May	\$ _____ =	\$ _____
1.9 Sub Total:			\$ _____

1.10 Hope Bldg 63 Sparks			
Method: "C" Exterior Window Cleaning			
Period:	To be completed in the month of:	Firm Price per cleaning (GST Extra):	Firm annual price (GST Extra)
Year One(1) July 1/16 – April 30/17	October	\$ _____ =	\$ _____
Option Year One (1) May 1/17–April 30/18	October	\$ _____ =	\$ _____
Option Year Two (2) May 1/18–April 30/19	October	\$ _____ =	\$ _____
Option Year Three (3) May 1/19–April 30/20	October	\$ _____ =	\$ _____
Option Year Four (4) May 1/20–April 30/21	October	\$ _____ =	\$ _____
1.10 Sub Total:			\$ _____

Solicitation Amendment 002
Revised Annex B – Financial Bid
 EJ196-161614/A Window Cleaning Services
 Sir John A McDonald (144 Wellington), Wellington Building (180 Wellington) and Block 1

1.11 Blackburn Bldg 85 Sparks			
Method: "A" Both sides - Interior & Exterior Window Cleaning			
Period:	To be completed in the month of:	Firm Price per cleaning (GST Extra):	Firm annual price (GST Extra)
Year One(1) July 1/16 – April 30/17	July	\$ _____ =	\$ _____
Option Year One (1) May 1/17–April 30/18	May	\$ _____ =	\$ _____
Option Year Two (2) May 1/18–April 30/19	May	\$ _____ =	\$ _____
Option Year Three (3) May 1/19–April 30/20	May	\$ _____ =	\$ _____
Option Year Four (4) May 1/20–April 30/21	May	\$ _____ =	\$ _____
1.11 Sub Total:			\$ _____

1.12 Blackburn Bldg 85 Sparks			
Method: "C" Exterior Window Cleaning			
Period:	To be completed in the month of:	Firm Price per cleaning (GST Extra):	Firm annual price (GST Extra)
Year One(1) July 1/16 – April 30/17	October	\$ _____ =	\$ _____
Option Year One (1) May 1/17–April 30/18	October	\$ _____ =	\$ _____
Option Year Two (2) May 1/18–April 30/19	October	\$ _____ =	\$ _____
Option Year Three (3) May 1/19–April 30/20	October	\$ _____ =	\$ _____
Option Year Four (4) May 1/20–April 30/21	October	\$ _____ =	\$ _____
1.12 Sub Total:			\$ _____

Solicitation Amendment 002
Revised Annex B – Financial Bid
 EJ196-161614/A Window Cleaning Services
 Sir John A McDonald (144 Wellington), Wellington Building (180 Wellington) and Block 1

1.13 Norcano Bldg 69 Sparks			
Method: "A" Both sides - Interior & Exterior Window Cleaning			
Period:	To be completed in the month of:	Firm Price per cleaning (GST Extra):	Firm annual price (GST Extra)
Year One(1) July 1/16 – April 30/17	July	\$ _____ =	\$ _____
Option Year One (1) May 1/17–April 30/18	May	\$ _____ =	\$ _____
Option Year Two (2) May 1/18–April 30/19	May	\$ _____ =	\$ _____
Option Year Three (3) May 1/19–April 30/20	May	\$ _____ =	\$ _____
Option Year Four (4) May 1/20–April 30/21	May	\$ _____ =	\$ _____
1.13 Sub Total:			\$ _____

1.14 Norcano Bldg 69 Sparks			
Method: "C" Exterior Window Cleaning			
Period:	To be completed in the month of:	Firm Price per cleaning (GST Extra):	Firm annual price (GST Extra)
Year One(1) July 1/16 – April 30/17	October	\$ _____ =	\$ _____
Option Year One (1) May 1/17–April 30/18	October	\$ _____ =	\$ _____
Option Year Two (2) May 1/18–April 30/19	October	\$ _____ =	\$ _____
Option Year Three (3) May 1/19–April 30/20	October	\$ _____ =	\$ _____
Option Year Four (4) May 1/20–April 30/21	October	\$ _____ =	\$ _____
1.14 Sub Total:			\$ _____

Solicitation Amendment 002

Revised Annex B – Financial Bid

EJ196-161614/A Window Cleaning Services

Sir John A McDonald (144 Wellington), Wellington Building (180 Wellington) and Block 1

1.15 Saxe Bldg 76 Sparks			
Method: "A" Both sides - Interior & Exterior Window Cleaning			
Period:	To be completed in the month of:	Firm Price per cleaning (GST Extra):	Firm annual price (GST Extra)
Year One(1) July 1/16 – April 30/17	July	\$ _____ =	\$ _____
Option Year One (1) May 1/17–April 30/18	May	\$ _____ =	\$ _____
Option Year Two (2) May 1/18–April 30/19	May	\$ _____ =	\$ _____
Option Year Three (3) May 1/19–April 30/20	May	\$ _____ =	\$ _____
Option Year Four (4) May 1/20–April 30/21	May	\$ _____ =	\$ _____
1.15 Sub Total:			\$ _____

1.16 Saxe Bldg 76 Sparks			
Method: "C" Exterior Window Cleaning			
Period:	To be completed in the month of:	Firm Price per cleaning (GST Extra):	Firm annual price (GST Extra)
Year One(1) July 1/16 – April 30/17	October	\$ _____ =	\$ _____
Option Year One (1) May 1/17–April 30/18	October	\$ _____ =	\$ _____
Option Year Two (2) May 1/18–April 30/19	October	\$ _____ =	\$ _____
Option Year Three (3) May 1/19–April 30/20	October	\$ _____ =	\$ _____
Option Year Four (4) May 1/20–April 30/21	October	\$ _____ =	\$ _____
1.16 Sub Total:			\$ _____

Solicitation Amendment 002
Revised Annex B – Financial Bid
 EJ196-161614/A Window Cleaning Services
 Sir John A McDonald (144 Wellington), Wellington Building (180 Wellington) and Block 1

1.17 Canada's Four Corners 93 Sparks			
Method: "A" Both sides - Interior & Exterior Window Cleaning			
Period:	To be completed in the month of:	Firm Price per cleaning (GST Extra):	Firm annual price (GST Extra)
Year One(1) July 1/16 – April 30/17	<u>NOT APPLICABLE YEAR ONE (1)</u>		
Option Year One (1) May 1/17–April 30/18	May	\$ _____ =	\$ _____
Option Year Two (2) May 1/18–April 30/19	May	\$ _____ =	\$ _____
Option Year Three (3) May 1/19–April 30/20	May	\$ _____ =	\$ _____
Option Year Four (4) May 1/20–April 30/21	May	\$ _____ =	\$ _____
1.17 Sub Total:			\$ _____

1.18 Canada's Four Corners 93 Sparks			
Method: "C" Exterior Window Cleaning			
Period:	To be completed in the month of:	Firm Price per cleaning (GST Extra):	Firm annual price (GST Extra)
Year One(1) July 1/16 – April 30/17	<u>NOT APPLICABLE YEAR ONE (1)</u>		
Option Year One (1) May 1/17–April 30/18	October	\$ _____ =	\$ _____
Option Year Two (2) May 1/18–April 30/19	October	\$ _____ =	\$ _____
Option Year Three (3) May 1/19–April 30/20	October	\$ _____ =	\$ _____
Option Year Four (4) May 1/20–April 30/21	October	\$ _____ =	\$ _____
1.18 Sub Total:			\$ _____

Solicitation Amendment 002
Revised Annex B – Financial Bid
 EJ196-161614/A Window Cleaning Services
 Sir John A McDonald (144 Wellington), Wellington Building (180 Wellington) and Block 1

1.19 Marshall Bldg 14 Metcalfe			
Method: "A" Both sides - Interior & Exterior Window Cleaning			
Period:	To be completed in the month of:	Firm Price per cleaning (GST Extra):	Firm annual price (GST Extra)
Year One(1) July 1/16 – April 30/17	<u>NOT APPLICABLE YEAR ONE (1)</u>		
Option Year One (1) May 1/17–April 30/18	May	\$ _____ =	\$ _____
Option Year Two (2) May 1/18–April 30/19	May	\$ _____ =	\$ _____
Option Year Three (3) May 1/19–April 30/20	May	\$ _____ =	\$ _____
Option Year Four (4) May 1/20–April 30/21	May	\$ _____ =	\$ _____
1.19 Sub Total:			\$ _____

1.20 Marshall Bldg 14 Metcalfe			
Method: "C" Exterior Window Cleaning			
Period:	To be completed in the month of:	Firm Price per cleaning (GST Extra):	Firm annual price (GST Extra)
Year One(1) July 1/16 – April 30/17	<u>NOT APPLICABLE YEAR ONE (1)</u>		
Option Year One (1) May 1/17–April 30/18	October	\$ _____ =	\$ _____
Option Year Two (2) May 1/18–April 30/19	October	\$ _____ =	\$ _____
Option Year Three (3) May 1/19–April 30/20	October	\$ _____ =	\$ _____
Option Year Four (4) May 1/20–April 30/21	October	\$ _____ =	\$ _____
1.20 Sub Total:			\$ _____

Solicitation Amendment 002
Revised Annex B – Financial Bid
 EJ196-161614/A Window Cleaning Services
 Sir John A McDonald (144 Wellington), Wellington Building (180 Wellington) and Block 1

1.21 Welcome Info Centre 90 Wellington			
Method: "A" Both sides - Interior & Exterior Window Cleaning			
Period:	To be completed in the month of:	Firm Price per cleaning (GST Extra):	Firm annual price (GST Extra)
Year One(1) July 1/16 – April 30/17	July	\$ _____ =	\$ _____
Option Year One (1) May 1/17–April 30/18	May	\$ _____ =	\$ _____
Option Year Two (2) May 1/18–April 30/19	May	\$ _____ =	\$ _____
Option Year Three (3) May 1/19–April 30/20	May	\$ _____ =	\$ _____
Option Year Four (4) May 1/20–April 30/21	May	\$ _____ =	\$ _____
1.21 Sub Total:			\$ _____

1.22 Welcome Info Centre 90 Wellington			
Method: "C" Exterior Window Cleaning			
Period:	To be completed in the month of:	Firm Price per cleaning (GST Extra):	Firm annual price (GST Extra)
Year One(1) July 1/16 – April 30/17	October	\$ _____ =	\$ _____
Option Year One (1) May 1/17–April 30/18	October	\$ _____ =	\$ _____
Option Year Two (2) May 1/18–April 30/19	October	\$ _____ =	\$ _____
Option Year Three (3) May 1/19–April 30/20	October	\$ _____ =	\$ _____
Option Year Four (4) May 1/20–April 30/21	October	\$ _____ =	\$ _____
1.22 Sub Total:			\$ _____

Solicitation Amendment 002
Revised Annex B – Financial Bid
 EJ196-161614/A Window Cleaning Services
 Sir John A McDonald (144 Wellington), Wellington Building (180 Wellington) and Block 1

1.23 O'Brien Bldg 65 Sparks			
Method: "A" Both sides - Interior & Exterior Window Cleaning			
Period:	To be completed in the month of:	Firm Price per cleaning (GST Extra):	Firm annual price (GST Extra)
Year One(1) July 1/16 – April 30/17	July	\$ _____ =	\$ _____
Option Year One (1) May 1/17–April 30/18	May	\$ _____ =	\$ _____
Option Year Two (2) May 1/18–April 30/19	May	\$ _____ =	\$ _____
Option Year Three (3) May 1/19–April 30/20	May	\$ _____ =	\$ _____
Option Year Four (4) May 1/20–April 30/21	May	\$ _____ =	\$ _____
1.23 Sub Total:			\$ _____

1.24 O'Brien Bldg 65 Sparks			
Method: "C" Exterior Window Cleaning			
Period:	To be completed in the month of:	Firm Price per cleaning (GST Extra):	Firm annual price (GST Extra)
Year One(1) July 1/16 – April 30/17	October	\$ _____ =	\$ _____
Option Year One (1) May 1/17–April 30/18	October	\$ _____ =	\$ _____
Option Year Two (2) May 1/18–April 30/19	October	\$ _____ =	\$ _____
Option Year Three (3) May 1/19–April 30/20	October	\$ _____ =	\$ _____
Option Year Four (4) May 1/20–April 30/21	October	\$ _____ =	\$ _____
1.24 Sub Total:			\$ _____

Solicitation Amendment 002

Revised Annex B – Financial Bid

EJ196-161614/A Window Cleaning Services

Sir John A McDonald (144 Wellington), Wellington Building (180 Wellington) and Block 1

1.25 Nelms Bldg 67 Sparks			
Method: "A" Both sides - Interior & Exterior Window Cleaning			
Period:	To be completed in the month of:	Firm Price per cleaning (GST Extra):	Firm annual price (GST Extra)
Year One(1) July 1/16 – April 30/17	July	\$ _____ =	\$ _____
Option Year One (1) May 1/17–April 30/18	May	\$ _____ =	\$ _____
Option Year Two (2) May 1/18–April 30/19	May	\$ _____ =	\$ _____
Option Year Three (3) May 1/19–April 30/20	May	\$ _____ =	\$ _____
Option Year Four (4) May 1/20–April 30/21	May	\$ _____ =	\$ _____
1.25 Sub Total:			\$ _____

1.26 Nelms Bldg 67 Sparks			
Method: "C" Exterior Window Cleaning			
Period:	To be completed in the month of:	Firm Price per cleaning (GST Extra):	Firm annual price (GST Extra)
Year One(1) July 1/16 – April 30/17	October	\$ _____ =	\$ _____
Option Year One (1) May 1/17–April 30/18	October	\$ _____ =	\$ _____
Option Year Two (2) May 1/18–April 30/19	October	\$ _____ =	\$ _____
Option Year Three (3) May 1/19–April 30/20	October	\$ _____ =	\$ _____
Option Year Four (4) May 1/20–April 30/21	October	\$ _____ =	\$ _____
1.26 Sub Total:			\$ _____

Total Pricing Schedule 1 \$ _____

Solicitation Amendment 002
Revised Annex B – Financial Bid
 EJ196-161614/A Window Cleaning Services
 Sir John A McDonald (144 Wellington), Wellington Building (180 Wellington) and Block 1

PRICING SCHEDULE 2:

Firm all inclusive rates including labour, supervision, material, equipment, transportation, overhead, profit and all related costs (excluding HST/GST) for Cameras in accordance with the Specification EJ196-161614 at Annex A

2.1 Cameras as per Annex E3 drawings (clean cameras lenses and/or covers)			
Period:	To be completed in the month of:	Firm Price per cleaning (GST Extra):	Firm annual price (GST Extra)
Year One(1) July 1/16 – April 30/17	July	\$ _____ =	\$ _____
Option Year One (1) May 1/17–April 30/18	May	\$ _____ =	\$ _____
Option Year Two (2) May 1/18–April 30/19	May	\$ _____ =	\$ _____
Option Year Three (3) May 1/19–April 30/20	May	\$ _____ =	\$ _____
Option Year Four (4) May 1/20–April 30/21	May	\$ _____ =	\$ _____
2.1 Sub Total:			\$ _____

2.2 Cameras as per Annex E3 drawings (clean cameras lenses and/or covers)			
Period:	To be completed in the month of:	Firm Price per cleaning (GST Extra):	Firm annual price (GST Extra)
Year One(1) July 1/16 – April 30/17	October	\$ _____ =	\$ _____
Option Year One (1) May 1/17–April 30/18	October	\$ _____ =	\$ _____
Option Year Two (2) May 1/18–April 30/19	October	\$ _____ =	\$ _____
Option Year Three (3) May 1/19–April 30/20	October	\$ _____ =	\$ _____
Option Year Four (4) May 1/20–April 30/21	October	\$ _____ =	\$ _____
2.2 Sub Total:			\$ _____

Solicitation Amendment 002
Revised Annex B – Financial Bid
 EJ196-161614/A Window Cleaning Services
 Sir John A McDonald (144 Wellington), Wellington Building (180 Wellington) and Block 1

2.3 Wellington Building – 180 Wellington Liberty Sunshades To be cleaned after every skylight clean (sunshade and surrounding walls to be free of smudges & water runs)			
Period:	To be completed in the month of:	Firm Price per cleaning (GST Extra):	Firm annual price (GST Extra)
Year One(1) July 1/16 – April 30/17	July	\$ _____ =	\$ _____
Option Year One (1) May 1/17–April 30/18	May	\$ _____ =	\$ _____
Option Year Two (2) May 1/18–April 30/19	May	\$ _____ =	\$ _____
Option Year Three (3) May 1/19–April 30/20	May	\$ _____ =	\$ _____
Option Year Four (4) May 1/20–April 30/21	May	\$ _____ =	\$ _____
2.3 Sub Total:			\$ _____

2.4 Wellington Building – 180 Wellington Liberty Sunshades To be cleaned after every skylight clean (sunshade and surrounding walls to be free of smudges & water runs)			
Period:	To be completed in the month of:	Firm Price per cleaning (GST Extra):	Firm annual price (GST Extra)
Year One(1) July 1/16 – April 30/17	October	\$ _____ =	\$ _____
Option Year One (1) May 1/17–April 30/18	October	\$ _____ =	\$ _____
Option Year Two (2) May 1/18–April 30/19	October	\$ _____ =	\$ _____
Option Year Three (3) May 1/19–April 30/20	October	\$ _____ =	\$ _____
Option Year Four (4) May 1/20–April 30/21	October	\$ _____ =	\$ _____
2.4 Sub Total:			\$ _____

Solicitation Amendment 002

Revised Annex B – Financial Bid

EJ196-161614/A Window Cleaning Services

Sir John A McDonald (144 Wellington), Wellington Building (180 Wellington) and Block 1

2.5 Wellington Building – 180 Wellington Canopy				
(Should be cleaned very early in the morning or after hours, due to the traffic)				
(All Black metal including chain on canopy to be wiped down and dried off with a rag and water with mild soap)				
Period:	To be completed in the month of:	Firm Price per Monthly cleaning	Frequency	Firm annual price (GST Extra)
Year One(1) July 1/16 – April 30/17	April, June, August and October	\$ _____ =	X 4 =	\$ _____
Option Year One (1) May 1/17–April 30/18	April, June, August and October	\$ _____ =	X 4 =	\$ _____
Option Year Two (2) May 1/18–April 30/19	April, June, August and October	\$ _____ =	X 4 =	\$ _____
Option Year Three (3) May 1/19–April 30/20	April, June, August and October	\$ _____ =	X 4 =	\$ _____
Option Year Four (4) May 1/20–April 30/21	April, June, August and October	\$ _____ =	X 4 =	\$ _____
2.5 Sub Total:			\$	

Total Pricing Schedule 2 \$ _____

Solicitation Amendment 002

Revised Annex B – Financial Bid

EJ196-161614/A Window Cleaning Services

Sir John A McDonald (144 Wellington), Wellington Building (180 Wellington) and Block 1

PRICING SCHEDULE 3

Provide firm all inclusive rates including labour, supervision, material, equipment, transportation, overhead, profit and all related costs (excluding HST/GST) for Method A Interior and Exterior Window Cleaning in accordance with the Specification EJ196-1161614 at Annex A for Cleaning of Front Window and Cleaning of Roof Window for Sir John A McDonald ONLY on an **“as and when requested”** basis only.

“Estimated Frequency” per year is for evaluation purposes only.
(Frequency can be less than 4 or more than 4 times per year)

3.1 SIR JOHN A MCDONALD BUILDING, 144 WELLINGTON STREET FRONT WINDOW			
Method: “A” Interior and Exterior Window Cleaning as per Annex E2 drawings			
Period:	*Estimated Frequency x	Firm Price per cleaning (GST Extra):	Extended Price (GST Extra)
Year One(1) July 1/16 – April 30/17	4 x	\$ =	\$
Option Year One (1) May 1/17–April 30/18	4 x	\$ =	\$
Option Year Two (2) May 1/18–April 30/19	4 x	\$ =	\$
Option Year Three (3) May 1/19–April 30/20	4 x	\$ =	\$
Option Year Four (4) May 1/20–April 30/21	4 x	\$ =	\$
3.1 Sub Total:			\$

3.2 SIR JOHN A MCDONALD BUILDING, 144 WELLINGTON STREET ROOF WINDOW			
Method: “A” Interior and Exterior Window Cleaning as per Annex E2 drawings			
Period:	*Estimated Frequency x	Firm Price per cleaning (GST Extra):	Firm annual price (GST Extra)
Year One(1) July 1/16 – April 30/17	4 x	\$ =	\$
Option Year One (1) May 1/17–April 30/18	4 x	\$ =	\$
Option Year Two (2) May 1/18–April 30/19	4 x	\$ =	\$
Option Year Three (3) May 1/19–April 30/20	4 x	\$ =	\$
Option Year Four (4) May 1/20–April 30/21	4 x	\$ =	\$
3.2 Sub Total:			\$

Solicitation Amendment 002
Revised Annex B – Financial Bid
 EJ196-161614/A Window Cleaning Services
 Sir John A McDonald (144 Wellington), Wellington Building (180 Wellington) and Block 1

3.3 Wellington Building – 180 Wellington Canopy			
(Should be cleaned very early in the morning or after hours, due to the traffic) (All Black metal including chain on canopy to be wiped down and dried off with a rag and water with mild soap)			
Period:	Estimated Date To be completed in the month of:	Firm Price per cleaning (GST Extra):	Firm annual price (GST Extra)
Year One(1) July 1/16 – April 30/17	December	\$ _____ =	\$ _____
Option Year One (1) May 1/17–April 30/18	December	\$ _____ =	\$ _____
Option Year Two (2) May 1/18–April 30/19	December	\$ _____ =	\$ _____
Option Year Three (3) May 1/19–April 30/20	December	\$ _____ =	\$ _____
Option Year Four (4) May 1/20–April 30/21	December	\$ _____ =	\$ _____
3.3 Sub Total:			\$ _____

Total Pricing Schedule 3 \$ _____

Solicitation Amendment 002

Revised Annex B – Financial Bid

EJ196-161614/A Window Cleaning Services

Sir John A McDonald (144 Wellington), Wellington Building (180 Wellington) and Block 1

PRICING SCHEDULE 4:

Firm all inclusive prices including overhead, profit, all materials and all related additional costs for **Method A and C** on an "AS AND WHEN REQUESTED" basis only, for **Emergency and Extra Cleaning** as identified herein.

* estimated hours are for evaluations purposes only.

4.1) LABOUR: Our firm hourly rate per qualified personnel shall be:

i) Regular Hours 6:00 to 18:00, Monday to Friday	YEAR 1 RATE	OPTION YEAR 1 RATE	OPTION YEAR 2 RATE	OPTION YEAR 3 RATE	OPTION YEAR 4 RATE
Hourly Rate	\$ ____ /HR	\$ ____ /HR	\$ ____ /HR	\$ ____ /HR	\$ ____ /HR
*Estimated quantity of hours per year:	25	25	25	25	25
Extended Price:	\$ ____	\$ ____	\$ ____	\$ ____	\$ ____
4.1(i) SUB-TOTAL:					\$ ____

ii) Outside Regular Hours Monday to Friday	YEAR 1 RATE	OPTION YEAR 1 RATE	OPTION YEAR 2 RATE	OPTION YEAR 3 RATE	OPTION YEAR 4 RATE
Hourly Rate	\$ ____ /HR	\$ ____ /HR	\$ ____ /HR	\$ ____ /HR	\$ ____ /HR
*Estimated quantity of hours per year:	10	10	10	10	10
Extended Price:	\$ ____	\$ ____	\$ ____	\$ ____	\$ ____
4.1 (ii) SUB-TOTAL:					\$ ____

iii) Saturday, Sunday and Satutory Holidays	YEAR 1 RATE	OPTION YEAR 1 RATE	OPTION YEAR 2 RATE	OPTION YEAR 3 RATE	OPTION YEAR 4 RATE
Hourly Rate	\$ ____ /HR	\$ ____ /HR	\$ ____ /HR	\$ ____ /HR	\$ ____ /HR
*Estimated quantity of hours per year:	50	50	50	50	50
Extended Price:	\$ ____	\$ ____	\$ ____	\$ ____	\$ ____
4.1 (iii) SUB-TOTAL:					\$ ____

Total Pricing Schedule 4 \$ _____

Solicitation Amendment 002
Revised Annex B – Financial Bid
EJ196-161614/A Window Cleaning Services
Sir John A McDonald (144 Wellington), Wellington Building (180 Wellington) and Block 1

Sum of Pricing Schedules

Pricing Schedule 1: **GRAND TOTAL** \$ _____

Pricing Schedule 2: **GRAND TOTAL** \$ _____

Pricing Schedule 3 : **GRAND TOTAL** \$ _____

Pricing Schedule 4: **GRAND TOTAL** \$ _____

TOTAL BID PRICE \$ _____

In the case of error in the extension of prices, the unit price will govern. Canada may enter into contract without negotiation.

.....
PAURA & ASSOCIATES INC.

Structural Engineering for the Building Envelope Industry

22 Academy St., Unit B, St. Catharines, On., CANADA, L2R 4Z6

voice: 905 682 9009 fax: 905 682 4045 email: mpaura@cogeco.net
.....

date: February 24, 2015

transmittal or fax to:

Ron Coppens, National Contract Glazing Ltd.
fax #: (613) 731-6971

from: Ryan Heska
project: Wellington - Canopy
pages: 4 (including this cover sheet)

Remarks:

Ron;

The glass for the canopy will need to be 10mm tempered/1.5mm SGP/10mm tempered laminated. The glass will need to be siliconed to the aluminum extrusion with a 12mm silicone bite on all (4) sides. The aluminum extrusion will then be fixed to the steel with #12 stainless steel teks at 16" O/C. All through holes will need to be sealed to prevent water from entering the extrusion.

The aluminum code allows for a deflection criteria of L/175 or 19mm maximum deflection over the span of the glass edge. The steel code deflection criteria is L/300 which would apply to the main canopy steel structure.

Any questions, please call.
Regards,
Ryan Heska

.....

Paura & Associates Inc.
Building Envelope Structural Engineering

Sketches not to scale

CANOPY:

$$SNOW = 3.0 \text{ kPa}$$

$$WIND UPLIFT = 1.5 \text{ kPa}$$

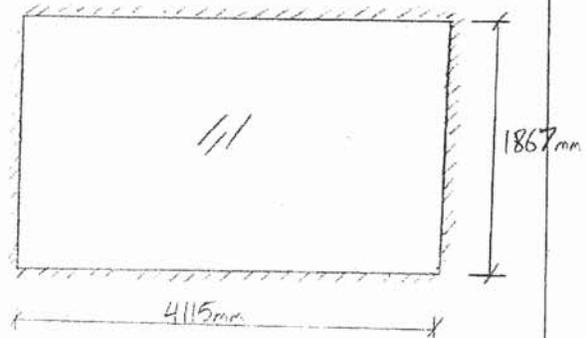
* TRY 10mm TEMP./1.5mm SGP/10mm TEMP. LAM.

RESULTS:

$$\Delta_{MAX} = 10.78 \text{ mm} \quad \text{OK}$$

$$f_{MAX} = 22.09 \text{ MPa} \quad f_{ALL} = 73 \text{ MPa} \quad \text{OK}$$

$$WIND LOAD CAPACITY = 11.61 \text{ kPa}$$



SILICONE BITE:

10mm SILICONE BITE

$$f = \frac{1357}{12} (1.5) = 142.0 \text{ kPa}$$

$$f_{ALL} = 138.0 \text{ kPa} \quad \underline{NG}$$

* USE 19mm MIN. SILICONE BITE

$$f = \frac{1357}{12} (1.9) = 115.74 \text{ kPa} \quad \text{OK}$$

FIXING TO STEEL: #12 SIZED BOLTS AT 16" OC

$$T = 1.5 \left(\frac{1357}{12} \right) (0.400) = 1.18 \text{ kN/BOLT}$$

$$T_A = 4.448 (1159) = 5.15 \text{ kN/BOLT} > T \quad \text{OK}$$

MechInfo A5.7/0008 - Wind and Snow Loads BS 6262-3 and BS 5516-2**24 February 2015*****Four edge supported glazing***Outer pane **20 mm Toughened Laminate**Inner pane **None**

Glass constant (K value)	76570	Self weight N/m2	500
Larger dimension mm	4115	Smaller dimension mm	1867
Wind load capacity N/m2			11605 <i>ok✓</i>
Upward wind load N/m2			1500
Downward wind load N/m2			500
Snow Load N/m2			3000
Slope (0 horizontal, 90 vertical) deg			0
Allowable deflection (half load) mm	25		
Required glass constant (K value)	62019		
Deflection at half load mm	self wt only	self wt+snow	worst case
		5.06	5.49
Deflection at full load mm	1.45	9.96	10.78 <i>ok✓</i>
Effective stress N/mm2	22.09 <i>ok✓</i>		

TABLE 1—ALLOWABLE PULLOUT VALUES FOR DRIL-FLEX AND KWIK-FLEX FASTENERS¹

SCREW TYPE	SCREW SIZE	DRILL POINT TYPE	DRILL CAP ² (inch)	PULLOUT (pounds)											ALUM 6063-T5 THICKNESS (inch)				
				STEEL GAGE ³ OR THICKNESS (inch)											1/8"	3/16"	1/4"		
				No. 18 Gage	No. 18	No. 16	No. 14	No. 12	1/8"	7/16"	1/2"	3/4"	7/8"	1"					
Self-drill	10-16	3	0.150	158	200	254	638	677	-	-	-	-	-	-	-	-	-	-	-
	12-14	3	0.187	158	210	284	450	620	1159	-	-	-	-	-	-	-	-	-	-
	1/2"-14	3	0.187	159	212	274	480	740	1015	-	-	-	-	-	-	-	-	-	-
	1/4"-20	4	0.312	206	260	765	1045	1215	1690	1936	2182	2662	3422	3421	417	1027	-	-	-
	1/4"-24	4	0.312	-	-	-	859	1029	1690	1931	2662	3422	3421	417	1027	-	-	-	-
Self-lap	3/16"-24 ⁴	-	-	-	-	760	932	1729	1931	2662	3422	3421	417	1027	-	-	-	-	-

For SI: 1 inch = 25.4 mm, 1 pound = 4.448 N.

¹Steel members shall conform to ASTM A 36. Aluminum members shall be 6063-T5 aluminum alloy.

²The maximum drill capacity is the maximum metal thickness the fastener can self-drill and self-lap.

³The base-metal thickness of No. 12 gage steel is 0.105 inch, of No. 14 gage steel is 0.075 inch, of No. 16 gage steel is 0.060 inch and of No. 18 gage steel is 0.048 inch.

⁴For self-lap fasteners, use 0.290-inch predrilled holes through members.

TABLE 2—ALLOWABLE SHEAR VALUES FOR DRIL-FLEX AND KWIK-FLEX FASTENERS¹

SCREW TYPE	SCREW SIZE	DRILL POINT TYPE	DRILL CAP ² (inch)	SHEAR (pounds)										ALUM 6063-T5 THICKNESS (inch)					
				STEEL GAGE ³ OR THICKNESS (inch)										1/8" - 1/4"	1/8" - 1/4"				
				No. 18-18 Gage	No. 18-14 Gage	No. 16-16 Gage	No. 14-14 Gage	1/8" - 1/4"	3/16" - 1/4"	1/4" - 1/2"	1/4" - 1/2"	1/4" - 1/2"	1/4" - 1/2"						
Self-drill	10-16	3	.150	545	693	585	-	-	-	-	-	-	-	-	-	-	-	-	-
	12-14	3	.187	526	847	662	727	-	-	-	-	-	-	-	-	-	-	-	-
	1/2"-14	3	.187	558	925	672	967	635	-	-	-	-	-	-	-	-	-	-	-
	1/4"-20	4	.312	540	835	633	980	670	715	660	1904	2113	2116	740	1147	-	-	-	-
	1/4"-24	4	.312	-	-	-	-	-	2194	2182	2116	2116	804	1170	-	-	-	-	-
Self-lap	3/16"-24 ⁴	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

For SI: 1 inch = 25.4 mm, 1 pound = 4.448 N.

¹Steel members shall conform to ASTM A 36. Aluminum members shall be 6063-T5 aluminum alloy.

²The maximum drill capacity is the maximum metal thickness the fastener can self-drill and self-lap.

³The base-metal thickness of No. 12 gage steel is 0.105 inch, of No. 14 gage steel is 0.075 inch, of No. 16 gage steel is 0.060 inch and of No. 18 gage steel is 0.048 inch.

⁴For self-lap fasteners, use 0.290-inch predrilled holes through members.