

MEETING ROOM

FURNITURE

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PART I: GENERAL

1. PROJECT INFORMATION

Public Works and Government Services Canada (PWGSC) is renovating the Wellington Building located at 180 Wellington Street in downtown Ottawa, Ontario. The building is to be occupied by the House of Commons (HoC).

The Wellington Building is a seven-story structure (a penthouse, a mezzanine, six [6] floors and two [2] basement levels) located on the south side of Wellington Street within the Parliamentary Precinct.

2. REQUIRED SERVICES

PWGSC requires the services of a Contractor to supply and install Furniture for 10 Meeting Rooms located at 180 Wellington Street, Ottawa, Ontario.

There are approximately 940 pieces of furniture to be delivered and installed between November 2015 and January 2016.

PART II: SCOPE OF WORK

1. The scope of work is for the design development, supply, delivery and installation of Meeting Room Furniture, as per the table below. The Meeting Room Furniture is divided into three (3) groups of like items.

The table below provides group number, drawing reference code and quantity for each piece of furniture. Drawing codes and quantities are referenced in Annex A.1: Furniture Drawings and Floor Plans for Meeting Room Furniture.

GROUP 1		
Furniture Type	Drawing Code	Quantity
Folding Table	CR-1	141
Corner Table Top	CR-3	22
Folding Table Extended Corner	CR-5	22
Auxiliary Table	CR-4	101
GROUP 2		
Two Seat Chair	CR-2	400
GROUP 3		
Folding Table Cart	CR-1	57
Auxiliary Table Cart	CR-4	34
Two Seat Chair Cart	CR-2	200

The Contractor will supply, deliver and install Meeting Room Furniture as detailed in this document.

1. GROUP 1

1. SCOPE

- 1.1. This specification is for the design development and manufacture of Meeting Room Furniture, Group 1, listed in the table below.

GROUP 1		
Furniture Type	Drawing Code	Quantity
Folding Table	CR-1	141
Corner Table Top	CR-3	22
Folding Table Extended Corner	CR-5	22
Auxiliary Table	CR-4	101

- 1.2. These specifications are to be read in conjunction with the Furniture Drawings and Floor Plans provided in Annex A.1.

1.2.1. Folding Table: CR-1

1.2.2. Folding Table Corner : CR-3

1.2.3. Folding Table Extended Corner: CR-5

1.2.4. Auxiliary Table: CR-4

- 1.3. All four (4) types of tables work in conjunction with each other to form a cohesive look and feel within the room.

It is the intent that each Folding Table not exceed 49 kg (110 pounds) to allow for ease of handling and to meet the House of Commons' Health and Safety requirements. The Contractor will be expected to work with the Technical Authority to modify the existing design of the Folding Table to enhance the ease of operation and streamline the production (design development). The Folding Table must work cohesively with the Folding Table Corner and the Folding Table Extended Corner pieces. The Contractor will be required to propose design improvements that will ensure the seamless operation of these tables as one unit (design development).

It is the intent that the Auxiliary Table replicates the design and function of the Folding Table with a 457mm (18") depth and having a weight that is relative to its size, but not exceeding 49 kg (110 pounds). The Contractor will work with the Technical Authority to make modifications to enhance the stability and ease of operation (design development) for this table.

2. STANDARDS AND REGULATIONS

All products are to comply with the following standards and regulations:

2.1 Standards

2.1.1 CAN/CGSB-44.227, Free Standing Office Desk Products and Components

2.1.2 AWMAC, Architectural Woodwork Standards

2.1.3 ANSI A208.1, Particleboard, Mat-Formed Wood, Grade M2 or greater

2.1.4 CAN/CGSB-69.34-M90, Materials and Finishes

2.1.5 CAS 108-05-4, Vinyl Acetate

Note: Undated reference refers to the latest issue.

2.2 Regulations

2.2.1 Ontario Regulations 347 "General-Waste Management Regulation R.R.O 1990" (as amended).

2.2.2 Ontario Regulation 102/94 "Waste Audits and Waste Reduction Work Plans".

2.2.3 Ontario Regulations 103/94 "Industrial, Commercial and Institutional Source Separation Programs".

3. ENVIRONMENTAL ATTRIBUTES

3.1 Only non-solvent based adhesives **MUST** be used.

3.2 The furniture **MUST** be manufactured in such a manner that liquid surface coatings are stored in controlled storage areas as per WHMIS requirements.

3.3 The furniture **MUST** be exposed to ventilated open air prior to delivery for a minimum of 24 hours prior to packaging for shipping, to allow for off-gassing.

3.4 All wood used in the manufacture of furniture **MUST** originate from a forest certified under PEFC International (which includes SFI, CSA) or FSC International.

3.5 The Manufacturer **MUST** have a hazardous and toxic material management system in place at its manufacturing facilities.

4. MATERIALS

4.1 Hardwood Lumber

- 4.1.1 All hardwood lumber **MUST** be kiln dried to provide a uniform moisture content value in the range of 5%-9%. All wood **MUST** be free from open knots (other than an occasional pin knot, not more than 3.2 mm [1/8"] in diameter) and other defects that may affect the appearance and serviceability of the finished article.
- 4.1.2 Exposed parts (visible surfaces) **MUST** be constructed from plain sawn, select and better grade wood (species to be black walnut) to AWMAC Architectural Woodwork Standards for premium grade hardwood lumber, for a transparent finish and **MUST** have straight grain with no bow or hook.
- 4.1.3 Concealed parts (non-visible surfaces) of furniture **MUST** be constructed using birch or maple species to AWMAC Architectural Woodwork Standards for premium grade.
- 4.1.4 Wormholes are not permitted.

4.2 Hardwood Veneer

- 4.2.1. All veneer **MUST** be a minimum thickness of 0.6 mm (1/42").
- 4.2.2. Veneer **MUST** be press dried to a uniform moisture content of 10%-12%. Red streaks, wild grain, worm holes and improper cut is not permitted. A limited number of pin knots are permitted provided they are not in clusters and do not detract from the overall appearance of the panel.
- 4.2.3. All veneer **MUST** be book matched and in addition shall be center matched for all table tops and for all flat panel exterior surfaces such as side panels and modesty panels.
- 4.2.4. Veneer for exposed parts (visible surfaces), **MUST** be quarter cut black walnut species for a transparent finish.
- 4.2.5. Veneer for concealed parts (non-visible surfaces including back face of parts where veneer is applied to provide balanced construction) **MUST** be flat cut hardwood veneer.

4.3 Core Material

- 4.3.1 Materials, components and/or assemblies **MUST** be selected to adequately support performance requirements.
- 4.3.2 Sheet product **MUST** be made up of veneer core or a lightweight alternative that is proven to be the same or superior to veneer core in bending strength and screw holding strength.

4.4 Adhesives

- 4.4.1 Adhesives for hardwood veneering and joinery MUST be polyvinyl acetate resin emulsion or cross-linkable polyvinyl acetate resin emulsion type complying with CAS 108-05-4, Vinyl Acetate Elastomeric solvent-dispersed adhesives are not acceptable.

4.5 Wood Finishes

- 4.5.1. An example of an acceptable finish is:
- | | | |
|---------------|----------------------|---|
| Field colour | Mohawk Wiping Stain, | 404-D Dark Fruitwood |
| Accent colour | Mohawk Wiping Stain, | 2 parts 229 Brown Mahogany
1 part 209 Extra Dark Walnut
1 part Van Dyke Brown |
- 4.5.2. Finish all solid wood surfaces to premium grade quality standards, transparent, catalyzed lacquer finish system consisting of vinyl wash coat, stain, vinyl sealer, sand (220 grit) and catalyzed lacquer top coat to match colour and sheen.
- 4.5.3. The colour value and sheen MUST match existing furniture finish and as per the validated and approved sample.

4.6 Hardware and Accessories

- 4.6.1. Adjustable heavy duty metal glides MUST be provided. Stem length to be 100mm (4"). Finish to be black.
- 4.6.2. Extruded aluminum vertical wire management finish MUST be black (PVC will not be accepted).
- 4.6.3. Template(s) or mock-up(s) of custom recessed multi-media devices shall be provided to the Manufacturer by the House of Commons.
- 4.6.4. Flush cable metal grommets; finish MUST be black (or approved alternate) and shall be sized to pass a 50 mm (2") x 50 mm (2") x 12 mm (0.5") object.
- 4.6.5. Sprung Draw Catch to be
Lee Valley Tools: Sprung Draw Catch
Brass Plate Sprung Draw Catch 00L15.30, or equivalent
- 4.6.6. Giro Bolt lock assembly to be:
Hafele: Giro Bolt 261.05.902 – steel
Strike plate 261.05.993 - steel
Sleeve 262.54.5000 – steel, or equivalent
- 4.6.7. Invisible Hinge to be:
SOSS Door Hardware- Model #208 to suit installation, or equivalent

- 4.6.8. Pressure fit catch to be:
Richelieu: Product # 97002G, chrome finish, or equivalent

4.7 Perforated Metal:

- 4.7.1 Perforated metal to be used for wire management system MUST be.
 - Product Type: Square Hole
 - Weight: 0.35" / SF
 - Major Material: Aluminum
 - Minor Material: Type 3003-H14
 - Gauge (thickness): 050
 - Hole Size: 5/16" Hole
 - Centers: 1/2"
 - Hole Pattern: Straight Row
 - Sheet Width: 48"
 - Sheet Length: 96"
 - Percentage of Open Area: 39%
 - Straight Rows Parallel To: Width and Length

Contractor may provide two (2) acceptable equivalent alternates for approval by the Technical Authority. The onus of responsibility is on the Contractor to prove equivalency for acceptance by the Technical Authority.

- 4.7.2 All unidentified materials used in the design development of the tables require approval from the Technical Authority.

5. CONSTRUCTION

5.1 General

- 5.1.1 Furniture MUST be constructed in accordance with the drawings provided in Annex A.1 and approved shop drawings and MUST meet the requirements of CAN/CGSB-44.227 and AWMAC Architectural Woodwork Standards for premium grade woodwork. In case of conflict, the most stringent requirements apply.
- 5.1.2 Furniture parts, unless otherwise indicated on the drawings provided, MUST be constructed from veneered particleboard.
- 5.1.3 Ensure solid blocking where hardware attaches.
- 5.1.4 All veneered particleboard parts MUST be veneered both sides to provide balanced construction.
- 5.1.5 Finger jointed solid hardwood is not acceptable for exposed locations.

- 5.1.6 Edges of particleboard parts in exposed locations **MUST** be edged with same veneer species and quality as face, except where fully concealed by solid hardwood edging or molding. Finger jointed veneer edging will not be accepted.
- 5.1.7 Bottom edges of supports **MUST** be reinforced and sealed with at least a 0.8 mm (1/32") thick high pressure laminate, Formica, Black #909, (or approved equivalent) to prevent moisture penetration and breakout of glide inserts.

5.2 **Workmanship**

- 5.2.1 Wood and wood veneer surfaces and edges **MUST** be smoothly sanded and free of blemishes or defects such as tool marks, machine marks, sanding marks, surplus glue, raised grain, delamination or water marks.
- 5.2.2 Face veneers **MUST** be tightly joined and properly matched and **MUST** be similar in grain pattern and colour throughout any given area.
- 5.2.3 Moldings and solid wood edgings **MUST** be cleanly run, smoothly sanded, free of machine marks and with sharply defined detail.
- 5.2.4 Exposed joints **MUST** be neatly executed, rigid, tight and flush, with no tool, machine or cross sanding marks, slivering or patching which may impair the strength or appearance of the furniture piece.
- 5.2.5 All fastenings, including knock-down type connectors, **MUST** be completely concealed and **MUST** be set flush.
- 5.2.6 The application of material, drying time, sanding, cleaning, rubbing and waxing, **MUST** be controlled to produce items of uniform finish without sags, runs, overspray or other defects detrimental to a smooth quality appearance.

6. **FINISH**

- 6.1 As a minimum, all exposed and semi-exposed solid wood and wood veneer surfaces, other than drawer interiors and sides, **MUST** be finished using the following process:
 - One (1) coat of sub stain
 - One (1) coat of wiping stain
 - One (1) coat of sealer
 - One (1) coat of lacquerTop surfaces **MUST** receive a second coat of lacquer.
- 6.2 All units will go through the drying oven three (3) times. Once after the wiping stained has been wiped off, once after a coat of sealer has been applied and once after the final coat of lacquer is applied. Every unit **MUST** be scuff sanded and cleaned of all dust particles.

6.3 The exposed finishes **MUST** enhance the beauty of the wood through colour, clarity and sheen. Finish **MUST** consist of at least the processing steps stated in paragraph 6.1 and **MUST** be resistant to minor everyday usage.

2. GROUP 2

1. SCOPE

1.1. This specification is for the manufacture of Two Seat Chairs, Group 2, listed in the table below.

GROUP 2		
Furniture Type	Drawing Code	Quantity
Two Seat Chair	CR-2	400

1.2. These specifications are to be read in conjunction with the Furniture Drawings and Floor Plans drawings provided in Annex A.1.

1.2.1. Two Seat Chair CR-2

2. STANDARDS AND REGULATIONS

All products MUST comply with the following standards and regulations:

2.1 Standards

2.1.1 AWMAC, Architectural Woodwork Standards

2.1.2 CAN/CGSB-69.34-M90, Materials and Finishes

2.1.3 CAS 108-05-4, Vinyl Acetate

2.1.4 California Technical Bulletin 117A

Note: Undated reference refers to the latest issue.

2.2 Regulations

2.2.1 Ontario Regulations 347 "General-Waste Management Regulation R.R.O 1990" (as amended).

2.2.2 Ontario Regulation 92/94 "Waste Audits and Waste Reduction Work Plans".

2.2.3 Ontario Regulations 93/94 "Industrial, Commercial and Institutional Source Separation Programs".

3. ENVIRONMENTAL ATTRIBUTES

- 3.1 Only non-solvent based adhesives **MUST** be used.
- 3.2 The furniture **MUST** be manufactured in such a manner that liquid surface coatings are stored in controlled storage areas as per WHMIS requirements.
- 3.3 The furniture **MUST** be exposed to ventilated open air for a minimum of 24 hours prior to packaging for shipping, to allow for off-gassing.
- 3.4 The furniture **MUST** contain no plastic foam that is manufactured or formulated using CFC's or HCFC's.
- 3.5 All wood used in the manufacture of furniture **MUST** originate from a forest certified under PEFC International (which includes SFI, CSA) or FSC International.
- 3.6 The Manufacturer **MUST** have a hazardous and toxic material management system in place at its manufacturing facilities.

4. MATERIALS

4.1 Hardwood Lumber

- 4.1.1 All Hardwood lumber **MUST** be kiln dried to provide a uniform moisture content value in the range of 5%-9%. All wood **MUST** be free from open knots (other than occasional pin knot, not more than 3.2 mm [1/8"] in diameter) and other defects that may affect the appearance and serviceability of the finished article.
- 4.1.2 Exposed parts (visible surfaces) **MUST** be constructed from plain sawn, select and better grade wood (species to be black walnut) to AWMAC Architectural Woodwork Standards for premium grade hardwood lumber, for a transparent finish and **MUST** have straight grain with no bow or hook.
- 4.1.3 Wormholes are not permitted.

4.2 Dowels

- 4.2.1 Dowels **MUST** be made of wood. Plastic is not acceptable.

4.3 Adhesives

- 4.3.1 Adhesives for hardwood veneering and joinery MUST be polyvinyl acetate resin emulsion or cross linkable polyvinyl acetate resin emulsion type complying with CAS 108-05.4 Vinyl Acetate. Elastomeric solvent-dispersed adhesives are not acceptable.

4.4 Wood Finishes

- 4.4.1 An example of an acceptable finish is: Mohawk Wiping Stain, 404-D Dark Fruitwood. Colour sample to be provided to the Contractor.
- 4.4.2 Finish all solid wood surfaces to premium grade quality standards, transparent, catalyzed lacquer finish system consisting of vinyl wash coat, stain, vinyl sealer, sand (220 grit) and catalyzed lacquer top coat to match colour and sheen.
- 4.4.3 The colour value and sheen MUST match existing furniture finish and as per the validated and approved sample.

4.5 Metal

- 4.5.1 Metal Reinforcement: Refer to drawings and specifications for reinforcing details.

4.6 Hardware and Accessories

- 4.6.1 Glides: Richelieu Nylon Nail Glide MP50260 Color: brown, or equivalent.
- 4.6.2 Custom Extruded Aluminum vertical wire management finish to be black (PVC will not be accepted). Size to be confirmed and tested by HoC.

4.7 Upholstery

- 4.7.1 Dust panel: Typar – Black, or equivalent
- 4.7.2 Burlap: 340 to 399g. (12-14 oz.) heavy duty grade
- 4.7.3 Muslin: light to medium weight, plain fabric
- 4.7.4 Upholstery Fabric:
 - Manufacturer: Maharam
 - Pattern: Crush 464780
 - Color: Smoke
 - Finish/Backing: Stain resistant, Acrylic, or equivalent

The Contractor may provide two (2) acceptable equivalent alternates for approval by the Technical Authority. The onus of responsibility is on the Contractor to prove equivalency for acceptance by the Technical Authority.

4.8 **Foam Padding**

- 4.8.1 Foam MUST be non-allergenic CFC free high density polyurethane, fire retardant foam.
- 4.8.2 Seat and back foam MUST have a minimum density of 40.0 to 41.6 kg/meter cubed (2.5-2.6 lb/cubic foot).
- 4.8.3 Seat and back firmness MUST be between 138-156 Newtons (31-35 pounds).
- 4.8.4 Bonding cement to be used MUST be as recommended by foam manufacturer.
- 4.8.5 Tacking tape to be used MUST be as recommended by foam manufacturer.

4.9 **Webbing**

- 4.9.1 Jute webbing, Grade A (top grade), 75-100 millimeters (3 to 4 inches) wide.
- 4.9.2 Webbing tacks: number 12 upholstery webbing tacks.

4.10 **Multi-Media**

- 4.10.1 All multi-media components to be supplied by The House of Commons. Samples or confirmed size of each component to be provided by The House of Commons prior to the preparation of shop drawings.

5. **CONSTRUCTION**

5.1 **General**

- 5.1.1 Furniture MUST be constructed in accordance with the drawings provided in Annex A.1
- 5.1.2 Finger jointed solid hardwood is not acceptable for exposed and semi-exposed locations.
- 5.1.3 Wood frame MUST be built square and level without wobble.

5.2 **Seat and Back Frame**

- 5.2.1 All edges and corners of the back and seat frame MUST be eased or rounded to prevent damage, abrasion, wearing and tearing of the fill and cover materials.

5.3 **Wood Joints**

- 5.3.1 All butt joints MUST be doweled and glued.
- 5.3.2 Reinforcing blocks MUST be properly fitted, screwed and glued.

- 5.3.3 Screws, for corner blocks MUST be countersunk. Screws to penetrate wood frame a minimum of 12 mm (1/2 “).
- 5.3.4 Screws MUST be driven to prevent stripping, splits or swelling of the jointing member and shall be flush or countersunk.

5.4 **Dowels**

- 5.4.1 Whenever possible use a minimum of two (2) dowels.
- 5.4.2 Diameter of dowel MUST be no more than one half the thickness of the wood it is to enter.
- 5.4.3 Dowels MUST go no deeper into either side than the two-thirds of the combined thickness of the wood.
- 5.4.4 Dowels MUST be grooved to allow excess glue to escape from the hole and squeeze between the edges of the joint.

5.5 **Upholstery**

- 5.5.1 The covering MUST be properly positioned, clean and well-tailored in appearance.
- 5.5.2 The bottom of the seat MUST be finished without exposed edges.
- 5.5.3 Outside back panel MUST be padded and upholstered.
- 5.5.4 All excess covering MUST be trimmed and any surplus removed.
- 5.5.5 Seat pan and back method of attachment MUST accommodate ease of removal for reupholstering.
- 5.5.6 Seaming: seat pan MUST be sewn; single stitch only.
- 5.5.7 Fastening devices, such as staples, MUST be positioned so as not to be visible.

5.6 **Workmanship**

- 5.6.1 Wood surfaces and edges MUST be smoothly sanded and free of blemishes or defects such as tool marks, machine marks, sanding marks, surplus glue, raised grain, delamination or water marks.
- 5.6.2 Solid wood edgings MUST be cleanly run, smoothly sanded, free of machine marks and with sharply defined detail.
- 5.6.3 Exposed joints MUST be neatly executed, rigid, tight and flush, with no tool, machine or cross sanding marks, slivering or patching which may impair the strength or appearance of the furniture piece.

- 5.6.4 All fastenings MUST be completely concealed and MUST be set flush.
- 5.6.5 The application of material, drying time, sanding, cleaning, rubbing and waxing MUST be controlled to produce items of uniform finish without sags, runs, overspray or other defects detrimental to a smooth quality appearance.

6. FINISH

- 6.1 As a minimum, all exposed solid wood surfaces MUST be finished using the following process:
 - One (1) coat of sub stain
 - One (1) coat of wiping stain
 - One (1) coat of sealer
 - One (1) coat of lacquerVisible surfaces MUST receive a second coat of lacquer.
- 6.2 All units will go through the drying oven three (3) times. Once after the wiping stained has been wiped off, once after a coat of sealer has been applied and once after the final coat of lacquer is applied. Every unit MUST be scuff sanded and cleaned of all dust particles.
- 6.3 The exposed wood finishes MUST enhance the beauty of the wood through colour, clarity and sheen. Finish MUST consist of at least the processing steps stated in paragraph 6.1 and MUST be resistant to minor everyday usage.

3. GROUP 3

1. SCOPE

- 1.1. This specification is for the design, development and manufacture of Moving Carts to be used for the transportation and storage of the Folding Tables and Two Seat Chairs, Group 3, as listed in the table below.

GROUP 3		
Furniture Type	Drawing Code	Quantity
Folding Table Cart	CR-1	57
Auxiliary Table Cart	CR-4	34
Two Seat Chair Cart	CR-2	200

- 1.2. These specifications are to be read in conjunction with the Furniture Drawings and Floor Plans provided in Annex A.1.

1.2.1. Folding Table Cart: CR-1

1.2.2. Auxiliary Table Cart: CR-4

1.2.3. Two Seat Chair Cart: CR-2

2. STANDARDS AND REGULATIONS

All products to comply with the following standard and regulations:

2.1 Standards

2.1.1 AWMAC, Architectural Woodwork Standards

2.1.2 CAN/CGSB-69.34-M90, Materials and Finishes

2.1.3 CAS 108-05-4, Vinyl Acetate

Note: Undated reference refers to the latest issue.

2.2 Regulations

2.2.1 Ontario Regulations 347 "General-Waste Management Regulation R.R.O 1990" (as amended).

2.2.2 Ontario Regulation 92/94 "Waste Audits and Waste Reduction Work Plans".

2.2.3 Ontario Regulations 93/94 "Industrial, Commercial and Institutional Source Separation Programs".

3. ENVIRONMENTAL ATTRIBUTES

- 3.1 Only non-solvent based adhesives MUST be used.
- 3.2 The product MUST be manufactured in such a manner that liquid surface coatings are stored in controlled storage areas as per WHMIS requirements.
- 3.3 The products MUST be exposed to ventilated open air for a minimum of 24 hours prior to packaging for shipping, to allow for off-gassing.
- 3.4 All wood used in the manufacture of moving carts MUST originate from a forest certified under PEFC International (which includes SFI, CSA) or FSC International.
- 3.5 The Manufacturer MUST have a hazardous and toxic material management system in place at its manufacturing facilities.

4. MATERIALS

4.1 General

- 4.2.1 Materials, components and/or assemblies MUST be selected to adequately support performance requirements.

4.2 Hardware and Accessories

- 4.2.1 Wheels MUST be heavy duty with rubber tires and large bearings to support load to withstand elevators and daily use.
- 4.2.2 Handle MUST be rigid to allow for manual operation of moving carts.
- 4.2.3 Grey felt overlay MUST be 9mm (3/8") x 736mm (29") x 1980mm (78").
- 4.2.4 Canvas Strap MUST be 38mm (1.5") wide complete with Velcro closure one side and D Ring.
- 4.2.5 Black closed cell foam blocking. MUST be "F" shaped 22mm (7/8" thick) x 127mm (5") wide x 152mm (6") high. Blocking comes with one (1) integrated Velcro strap to hold in place.

5. CONSTRUCTION

5.1 General

- 5.1.1 Moving Carts shall be constructed in accordance with the drawings provided in Annex A.1.
- 5.1.2 Moving Carts to have capacity for applicable load dimensions, weight, and design as indicated in drawings provided.

5.1.3 Moving Cart construction to withstand daily use.

5.2 **Workmanship**

5.2.1 The application of material, product, and assemblies shall be controlled to produce assembled items of uniform performance without defects detrimental to quality and function.

6. FINISH

6.1 A clear wear and moisture resistant finish of one (1) coat sanding sealer and one (1) coat of lacquer.

4. SUBMITTALS

1. GENERAL

- 1.1. The Contractor MUST, prior to final manufacturing, submit the following listed deliverables to the Project Authority: Shop Drawings, Product Data (as per section 2 below), Mock- Ups (as per section 3 below) and Prototype (as per section 4 below). Deliverables are to be submitted in accordance with the schedule in PART IV: SUPPLY, DELIVERY AND INSTALLATION REQUIREMENTS.
- 1.2. The Contractor MUST not proceed with manufacturing until review and acceptance of submittals is complete.
- 1.3. Submittals not stamped, signed, dated and identified as to specific project may be rejected.

2. SHOP DRAWINGS AND PRODUCT DATA

- 2.1. The term "shop drawings" means drawings, diagrams, illustrations, schedules, performance charts, brochures and other data which are to be provided by Contractor to illustrate details of a portion of Work.
- 2.2. The Contractor MUST indicate materials, methods of construction and attachment or anchorage, connections, explanatory notes and other information necessary for completion of Work. Where articles or equipment attach or connect to other articles or equipment, indicate that such items have been coordinated. Indicate cross references to design drawings and specifications.
- 2.3. Allow ten (10) working days for Technical Authority's review of each submission.
- 2.4. The Contractor MUST make changes in shop drawings as the Technical Authority may require, consistent with the requirements. When resubmitting, notify the Technical Authority in writing of revisions other than those requested.
- 2.5. If upon review by the Technical Authority, no errors or omissions are discovered or if only minor corrections are made, copies will be returned and fabrication and installation of Work may proceed. If shop drawings are rejected, noted copy will be returned and resubmission of corrected shop drawings, through same procedure indicated above, MUST be performed before fabrication and installation of Work may proceed.
- 2.6. The review of shop drawings by the Technical Authority is for the sole purpose of ascertaining conformance with the detail design. The Technical Authority's review of shop drawings MUST not relieve the Contractor of responsibility for errors or omissions in the shop drawings.
- 2.7. The Contractor MUST include a transmittal letter with all submissions. The transmittal letter MUST contain the following:
 - 2.7.1 Date
 - 2.7.2 Contract title and number

- 2.7.3 Contractor's name and address
- 2.7.4 Identification and quantity of each shop drawing, product data and sample
- 2.8. All submissions made by the Contractor MUST include:
 - 2.8.1 Date and revision dates
 - 2.8.2 Contract title and number
 - 2.8.3 Name and address of Contractor
 - 2.8.4 Name and address of Manufacturer
 - 2.8.5 Details of appropriate portions of Work as applicable
 - 2.8.6 Fabrication
 - 2.8.7 Dimensions
 - 2.8.8 Performance characteristics
 - 2.8.9 Standards
 - 2.8.10 Relationship to adjacent components
- 2.9. For Technical Authority's review, the Contractor MUST submit:
 - 2.9.1 Six (6) prints of shop drawings for each furniture piece in Groups 1 through 3.
 - 2.9.2 Six (6) copies of product data sheets or brochures for accessories and finishes where shop drawings will not be prepared due to standardized manufacture of product.
 - 2.9.3 Six (6) copies of test reports for specified materials and as requested by the Technical Authority:
 - 2.9.3.1 Report signed by authorized official of testing laboratory that material, product or system identical to material, product or system to be provided has been tested in accord with specified requirements.
 - 2.9.3.2 Testing MUST have been on or after January 1, 2011.
 - 2.9.4 Six (6) copies of a statement certifying compliance with all environmental attributes detailed in the requirements.
 - 2.9.4.1 Certificates MUST be dated after award of contract complete with project name.
 - 2.9.5 Six (6) copies of manufacturer's instructions for materials and components and as requested by the Technical Authority.

- 2.9.6 Pre-printed material describing the product, system or material, including special notices and Material Safety Data Sheets concerning impedances, hazards and safety precautions.

3. MOCK-UP

- 3.1 The purpose of the mock-up is to review and verify:
 - 3.1.1 The design and functionality of the Folding Table Extended Corner and Auxiliary Table and to assess design refinements affecting ease of use, construction and durability based on design details provided in the Furniture Drawings and Floor Plans, in Annex A.1.
 - 3.1.2 Furniture structural details.
 - 3.1.3 Confirm ease of use, cabling installation, disassembly and stackability (where required);
 - 3.1.4 The final weight of the Folding Table Extended Corner and Auxiliary Table.
- 3.2 The Contractor MUST prepare two (2) iterations of mock-ups for review by the Technical Authority showing the progression of the design for the Folding Table Extended Corner and Auxiliary Table (total four [4] mock-ups).
 - 3.2.1 The first iteration of mock-ups MUST be built in accordance with the approved shop drawings.
 - 3.2.2 The second iteration of mock-ups MUST incorporate modifications as the design process develops towards an end solution.
- 3.3 The Contractor MUST deliver mock-ups to a site within the National Capital Region specified by the Technical Authority. The mock-ups are to be available for review and comment for ten (10) working days. Final modifications or adjustments will be examined and reviewed by the Technical Authority prior to manufacturing and delivery of the final furniture products.
- 3.4 The Contractor MUST remove the mock-ups when advised in writing to do so, by the Technical Authority.

4. PROTOTYPE

- 4.1 The Contractor MUST prepare one (1) prototype for each listed furniture piece in Groups 1 and 2 and each listed moving cart in Group 3. The prototypes MUST be built in accordance with the shop drawings. The purpose of the prototypes will be to allow the Technical Authority to review and verify casework details, confirm ease of cabling installation and verify the ease of use of each furniture piece and moving cart.

- 4.2 Prototypes MUST be delivered to a site within the National Capital Region specified by the Technical Authority. The prototypes are to be available for review and comment for ten (10) working days. Final modifications or adjustments will be examined and reviewed by the Technical Authority prior to manufacturing and delivery of the final furniture products.
- 4.3 The Contractor MUST remove the prototypes when advised in writing to do so, by the Technical Authority.
- 4.4 Prototypes may form part of final work and are to be the last items installed.

PART III: CORPORATE REQUIREMENTS

1. Corporate Background

- 1.1. The Contractor MUST identify the manufacturing company, delivery company and installation company of the requirements.

2. Qualifications

- 2.1. The furniture manufacturer MUST have a minimum of seven (7) years' experience in the manufacturing and sales of furniture.
- 2.2. All installers MUST be trained in the installation of the furniture specified in PART II: SCOPE OF WORK before the delivery of product to site.

3. Local Representation

- 3.1. Manufacturers MUST have a local representative available to address issues and provide Customer Service duties.

4. Warranty

- 4.1. All furniture pieces as contained within PART II: SCOPE OF WORK, MUST be warranted for a period of at least six (6) years for manufacturer's defects, from the final date of acceptance.
- 4.2. The Contractor MUST provide a plan for dealing with warranty issues. The plan MUST clearly identify what constitutes replacement or repair, timelines for service and any costs involved.
- 4.3. The Contractor MUST respond to telephone and e-mail contact by PWGSC or The House of Commons within 24 hours.
- 4.4. The Contractor MUST have a local representative available to address issues relating to warranty.

5. Quality Assurance

- 5.1. The Manufacturer MUST have a written quality assurance program, ISO Certification or ISO Certification equivalent.

6. Storage Services

- 6.1. The Contractor MUST have the ability to store the product if required.

PART IV: SUPPLY, DELIVERY AND INSTALLATION REQUIREMENTS

1. SUPPLY, DELIVERY AND INSTALLATION

1.1 The Contractor **MUST** supply all material and labour necessary for the supply, delivery and installation of all furniture required and detailed in PART II: SCOPE OF WORK.

1.2 As described in PART II: SCOPE OF WORK, Section 4, Submittals, the Contractor **MUST** submit shop drawings, mock-ups (for the Folding Table Extended Corner and Auxiliary Table, only), and prototypes prior to manufacturing. Below is a table that provides estimated duration for shop drawings, mock-up, prototype, manufacturing and delivery by floor.

1.2.1 Activities to supply, deliver and install Meeting Room Furniture

Activities for Supply, Delivery and Installation	Responsible Authority	Approximate Duration in Weeks
Submit shop drawings and schedule	Contractor	6
Review shop drawings	Technical Authority	2
Production and submission of mock-up	Contractor	6
Mock-up review and acceptance	Technical Authority	2
Production and submission of prototype	Contractor	6
Prototype review and acceptance	Technical Authority	2
Manufacture	Contractor	TBD
Deliver and install	Contractor	10
Inspection process and deficiencies procedure (see PART VI)	Project Authority and Technical Authority	5

1.3 It is the intent to install items floor by floor on the 3rd and 4th floors. Location of furniture pieces for each of these floors is available in Annex A.1.

1.4 Approximate installation timeframe is November 2015 to January 2016. Final schedule to be confirmed by the Project Authority four (4) months prior to delivery.

1.5 The Contractor will be responsible to take the necessary steps to ensure all interior finishes i.e., door frames, flooring finishes, elevators, etc. are protected against damage.

1.6 The minimum level of service required is detailed below:

1.6.1 Deliver product to loading dock.

1.6.2 Uncrate product.

1.6.3 Inspect product for damage.

1.6.4 Install product.

- 1.6.5 Ensure all products function properly, i.e., test lock mechanisms, level guides, etc.
- 1.6.6 Make minor adjustments/repairs as required.
- 1.6.7 Clean product once installed.
- 1.6.8 Place all waste material in designated receptacle at the loading dock.
- 1.6.9 Clean up the installation site. The site MUST present a neat and orderly appearance at all times.

1.7 Delivery Services

- 1.7.1 Deliveries are only to be scheduled between 7:00pm and 12:00am, Monday to Friday via the loading dock. All delivered materials are to be moved from the loading dock to their respective rooms by 12:00 am each day.
- 1.7.2 All deliveries to be scheduled five (5) working days in advance with the Project Authority.
- 1.7.3 At no time is Sparks Street to be used for removals, staging or deliveries.
- 1.7.4 Each driver coming to site MUST review and understand the *traffic control plan* provided by the Construction Manager in the Health and Safety Plan (refer to Annex A.2 Health and Safety Preparedness Plan, 180 Wellington Street, Wellington Building Renovation) prior to the delivery being made.
- 1.7.5 One (1) loading dock serves the entire building. Note: the loading dock is not accessible by tractor trailer. Maximum size of delivery trucks to be limited to 22' length (e.g. 5 ton truck).
- 1.7.6 There will be no opportunity for jockeying or maneuvering the contents of the delivery vehicle while at the loading dock. The item(s) to be delivered MUST be the first accessible item(s) in the delivery vehicle.
- 1.7.7 The Wellington Building has two (2) freight elevators. They will be available for transportation of materials to floors during the times noted above. Elevator: inside dimensions, Length 2675mm (105") x Width 1700mm(67") x Height 2745mm.(108") Clear opening, Width 1219mm (48") x Height 2133mm (84"). One (1) elevator has a 600mm (24") high doghouse the width of the cab.
- 1.7.8 All deliveries MUST have a packing slip that clearly identify the following:
 - 1.7.8.1 Description of item(s)
 - 1.7.8.2 Total number of item(s)

1.8 Installation Services

- 1.8.1 The site is considered a construction site. Installation will be carried out during normal working hours, which are defined as Monday to Friday, from 7:00am to 5:00pm, excluding statutory holidays. Installations will be scheduled by the Project Authority.
- 1.8.2 The Construction Manager (CM) is responsible for scheduling the use of the elevator.
- 1.8.3 Installers are required to have a designated Supervisor on site while the work is being carried out.

PART V: HEALTH AND SAFETY

1. General:

- 1.1 Until **April 2016**, the Construction Manager (CM), assumes the role of “Constructor” as defined in the Occupational Health and Safety Act and Regulations for construction Projects and is fully responsible for ensuring compliance with OSHA for all aspects of the Project.
- 1.2 The Contractor MUST comply with the Construction Manager’s Health and Safety Procedures and Policy described below and attached under Annex A.2.
- 1.3 A Site Orientation Course will be provided by the CM to all of the Contractor’s personnel required to access the worksite.
- 1.4 All personnel accessing the site (beyond the loading dock) are required to have valid WHMIS and Basics of Fall Protection training cards during their time on site. Copies of the training cards will be taken by Construction Manager at the site orientation course
- 1.5 The Construction Manager complies with and enforces the requirements of:
 - 1.5.1 The National Building Code of Canada 2005 (NBC), Part 8 Safety Measures at Construction and Demolition Sites and Provincial Regulations for Construction Projects.
 - 1.5.2 The Designated Substances Report.
 - 1.5.3 The Workplace Hazardous Materials Information System (WHMIS) regarding use, handling, storage and disposal of hazardous materials; and labeling and the provision of Material Safety Data Sheets (MSDS) acceptable to Human Resources and Skills Development Canada, Labour Program.

PART VI: INSPECTION, DEFICIENCY & ACCEPTANCE PROCEDURES

The Contractor MUST adhere to the following inspection deficiency and acceptance procedure:

1. INSPECTIONS

1.1. At Manufacturer's Premises

1.1.1. The Project Authority and Technical Authority reserve the right to visit the manufacturer's premises.

1.2. Inspection Upon Delivery

1.2.1. The Project Authority will inspect all products arriving on-site.

1.2.2. There will be an inspection of the building prior to any deliveries by the Contractor. Damages will be formally documented by the Project Authority and a copy provided to the Contractor.

1.3. Inspection During Installation

1.3.1. The Project Authority and Technical Authority will inspect all products during installation.

1.4. Inspection Upon Completion of Installation

1.4.1. The Contractor MUST notify the Project Authority when the installation is completed.

1.4.2. The Project Authority and the Technical Authority will perform the inspection within five (5) business days after notification of the completed installation.

2. DEFICIENCIES & ACCEPTANCE

2.1. The Project Authority will prepare a deficiency list documenting all deficiencies upon installation completion.

2.2. The deficiency list will be forwarded to the Contractor.

2.3. Within three (3) working days of receipt of this deficiency list, the Contractor MUST complete all minor deficiencies and make all adjustments not requiring new parts.

2.4. For all outstanding deficiencies, the Contractor MUST submit a deficiency rectification plan with delivery dates and completion dates, within five (5) working days from receipt of the deficiency list.

2.5. In instances where replacement furniture pieces are required before deficiency rectification can be scheduled, temporary pieces of furniture will need to be supplied. These pieces will be identified at the time of the walk-through inspections and itemized on the deficiency list.

- 2.6. The Contractor MUST notify the Project Authority and the Contracting Authority when all deficiencies have been rectified.
- 2.7. A final inspection will be coordinated by the Project Authority with the Contractor and other PWGSC stakeholders. Once all rectified deficiencies pass inspection, the Contracting Authority will provide the Contractor a final sign-off that the work is accepted.