

Project No.: R.076325.006

May 2, 2018

ADDENDUM No. 1

The following changes to the tender documents are effective immediately and will form part of the contract documents:

CORRECTION: Solicitation Amendment No. 2 Dated 2018-04-30 - On Page 2, Change All Text Referencing Amendment No. 1 To Read Amendment No. 2

1. GENERAL

1.1	The Bidding Documents are amended as noted in this Addendum, which consists of four (4) pages plus the following attachments: 1. ASK-T1 Furniture Revisions and Coordination 2. ASK-T2 Rolling File Revisions and Coordination 3. Specification Section 10 56 27 Mobile Shelving Systems
1.2	This Addendum is issued prior to bid closing to incorporate revisions noted herein. Include in the Bid price all such revisions which will become part of the Work. Perform all such Work in accordance with the Contract Documents.
1.3	All affected drawings, schedules and panel changes shall be reflected in final as-built and manual submissions.

2. ANSWERS TO BIDDERS' QUESTIONS

2.1	Question: (re: High Density Mobile Filing System Section 10 56 27/in reference to 1.4.4) Does the system need to be designed to allow access underneath the mobile filing system deck? Answer: No.
2.2	Question: (re: High Density Mobile Filing System Section 10 56 27/in reference to 1.4.4) If access underneath is not required, is a grouted system acceptable? Answer: Yes.
2.3	Question: (re: High Density Mobile Filing System Section 10 56 27) 2.3.2 indicates shelf depths of 192 mm for single entry and 384 mm for double entry. Please confirm shelf depth. Answer: 381 mm for single entry/762 mm for double entry.
2.4	Question: (re: High Density Mobile Filing System Section 10 56 27) Is mobile system to be used primarily for legal size filing purposes? Answer: Yes.
2.5	Question: (re: High Density Mobile Filing System Section 10 56 27) Should system design allow for mobile to be locked down? (or is room secure?) Answer: Lock down is not required nor desirable. We do not want the exposed portion of the raised shelving unit deck to be left as a tripping hazard when the unit is locked down.
2.6	Question: (re: High Density Mobile Filing System) Answer: On drawing A5.2/room A211, there appears to be an additional component drawn between the last moveable double carriage and the column. Can you clarify what this represents? (it doesn't appear the column is furred out). Answer: The last shelving unit on the north side of the room is to be a fixed unit of single-entry type (see attached revised Drawing A5.2). It is to be installed as close as possible to the north side column.
2.7	Question: (re: High Density Mobile Filing System) Drawing 2 nd Floor Construction RCP indicates finished ceiling height in room A211 is 2520 mm. 2.3.4 indicates shelving height to be 2134 mm. The shelving height would not provide the required sprinkler clearance above the system. Please confirm finished ceiling height in filing room A211.

Project No.: R.076325.006

May 2, 2018

	<p>Answer: This is a non-sprinklered building so no sprinkler clearance is required. Otherwise, the ceiling height is 2520 mm as indicated on Drawing A4.2.</p>
2.8	<p>Question: (re: High Density Mobile Filing System) Is the system a locking secure mobile system as pictured?</p>  <p>Answer: See answer to question 2.5 above.</p>
2.9	<p>Question: (re: High Density Mobile Filing System) What is aisle width in between the mobile carriages?</p> <p>Answer: 915 mm (36 inches).</p>
2.10	<p>Question: What is the actual application? (ie: letter filing, legal filing, file boxes, etc.)</p> <p>Answer: Legal filing.</p>
2.11	<p>Question: Single entry letter filing requires a minimum 12" shelf depth? (7.5" listed in spec - page 4 section 2.3.2.1.1) Note: legal size filing requires 15" deep shelves.</p> <p>Answer: See answer to question 2.3 above.</p>
2.12	<p>Question: Please confirm TL-2 & TL-3 Manufacturer</p> <p>Answer: There will not be a specific manufacturer. White glazed in the sizes as requested that meet the specification.</p>
2.13	<p>Question: Please confirm RF-3 Product name / manufacturer</p> <p>Answer: All material will be approved in the shop drawing stage for compliance with the contract documents. The colour and pattern of the material to match existing will be selected from the material approved in the shop drawing stage from the manufacturer's standard colour and pattern range to match existing.</p>
2.14	<p>Question: Please confirm room A213. Should this be RF3 not RF-1</p> <p>Answer: Yes. Revise room schedule for Room A213 Vestibule as per the floor plan: A213 Mail Drop with floor finish RF3.</p>
2.15	<p>Question: Will the existing Fire Alarm system for the 1ST & 2ND floors be removed, then replaced with a new Fire Alarm System?</p> <p>Answer: The fire alarm system is not being replaced in entirety. Existing devices within the areas affected by demolition are to be removed, and new devices installed at locations as identified on the plans and connected to the existing system.</p>
2.16	<p>Question: On drawing E3.1 – "Open Office" B150 shows existing 2'X4' fixtures, during the walkthrough I noticed the existing fixtures are 1'x4' are these meant to be new 2'x4'?</p> <p>Answer: The type 'EX' fixtures shown within Open Office B150 are in-correctly shown as 2x4 fixtures. The existing fixtures are 1x4. The note 1 reference however does not change, the existing fixtures within the space are to be relocated to allow for construction of the new corridor. The relocated fixtures are to utilize the existing circuit(s) and control(s) within the WED space.</p>

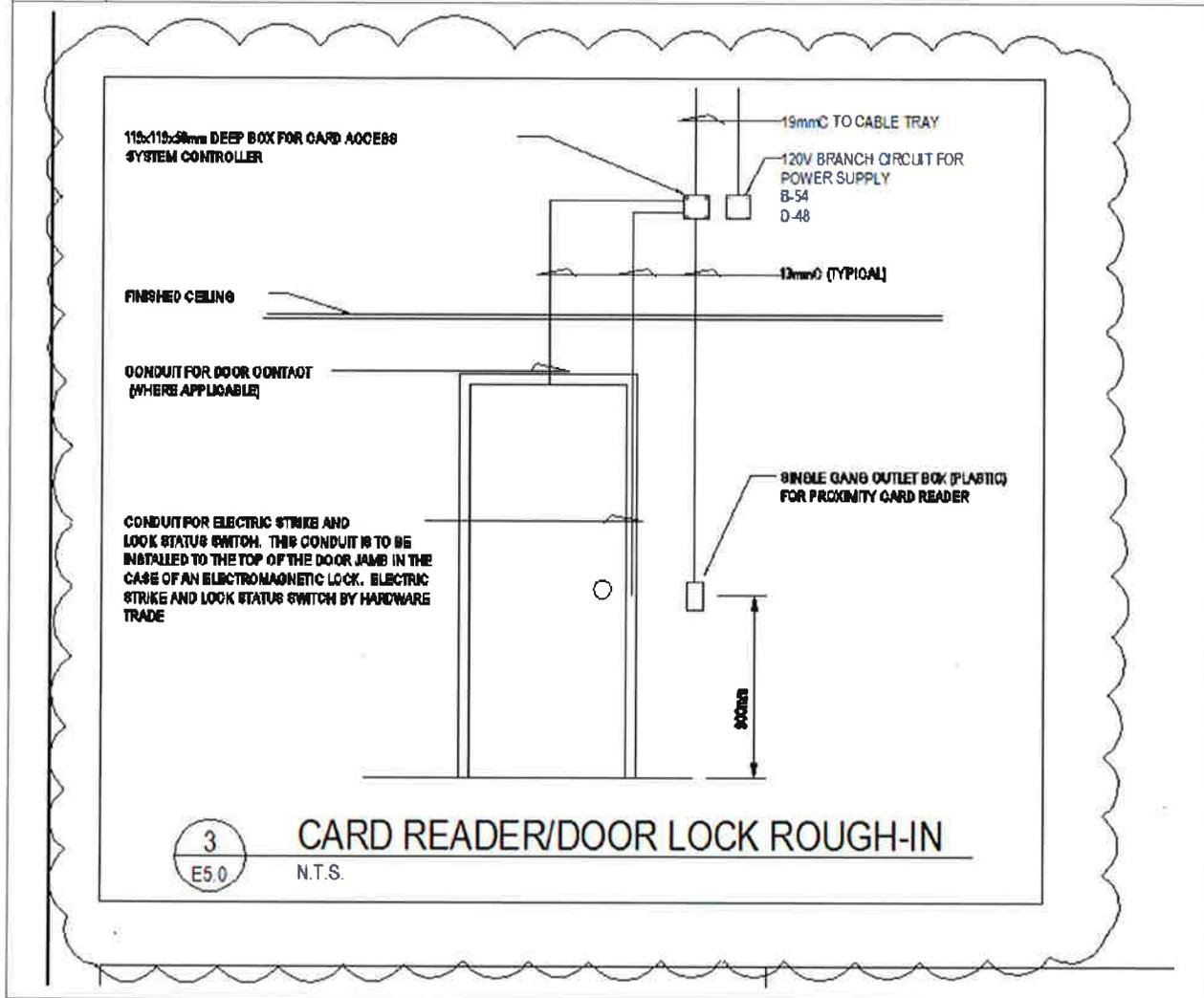
3. SPECIFICATIONS

3.1	<p>Section 10 56 27 Large Mobile Shelving Systems.</p> <p>1) Delete existing section entirely.</p> <p>2) Replace with attached Section 10 56 27 Mobile Shelving Systems in it's entirety.</p>

4. DRAWINGS

4.1	<p>Drawing #A1.1 – 1st Floor Demolition Plan:</p> <ul style="list-style-type: none"> Note 7 and Phasing includes addition for General Contractor to also store 7' table with stools. <p>See attached sketch ASK-T1 Furniture Revisions and Coordination</p>
4.2	<p>Drawing #A5.1 – 1st Floor Furniture Plan:</p> <ul style="list-style-type: none"> Previously indicated metal cabinet is now labeled safe and has been moved just north of column H4 There is no shredder to be located in plan as there are no electrical requirements - the 'shredder' is a bin. Scale, mail machine and fax have been flipped and moved north to the next set of workstations; electrical to be moved to this location. Order of these items was flipped to work better with column. Workstation has been modified and flipped and rotated from previously issued orientation. Phasing includes: General Contractor to also store 7' Table with stools. <p>See attached sketch ASK-T1 Furniture Revisions and Coordination</p>
4.3	<p>Drawing #A5.2 – 2nd Floor Furniture Plan:</p> <p>1) Revise as per attached sketch #ASK-T2 Rolling File Revisions and Coordination.</p>
4.4	<p>Drawing E1.1 – 1st Floor – Demolition Lighting:</p> <p>1) Revise symbol description in Electrical Legend as shown below: (revised from Fire Alarm Control Module to Security Door Contact rough-in)</p> <div style="text-align: center;"> <p>The diagram shows a vertical list of electrical symbols on the left, each connected by a horizontal line to its corresponding text description on the right. The symbols include a dome-shaped fire detector, a circular duct smoke detector, a square with 'M', a square with 'C', a square with 'C' and a camera icon, and a square with 'MS'. A large, irregular cloud-like shape is drawn around the 'M', 'C', and 'C' symbols.</p> </div>

4.5 Drawing E5.0 – Details and Schedules:
1) Revise detail #3 to identify conduit for door contacts (revised from mag lock).



END OF ADDENDUM NO. 1

Part 1 General

1.1 REFERENCE STANDARDS

- .1 American National Standards Institute (ANSI)
 - .1 ANSI MH28.1-1997, Industrial Grade Steel Shelving, Specification for the Design, Testing, Utilization, and Application of
- .2 ASTM International
 - .1 ASTM A653/ A653M-09, Specification for Steel Sheet, Zinc Coated (Galvanized) or Zinc Iron Alloy Coated (Galvannealed) by the Hot Dip Process.
- .3 Canadian General Standards Board (CGSB)
 - .1 CAN/CGSB-1.300-2000, Applied Coating System of Semigloss Baked Finish for Office Furniture.
- .4 CSA Group (CSA)
 - .1 CSA-G40.20-04/G40.21-04, General Requirements for Rolled or Welded Structural Quality Steel / Structural Quality Steels.
- .5 National Electrical Manufacturers' Association (NEMA)
 - .1 NEMA LD-3- 2005, High-pressure decorative laminates

1.2 DEFINITIONS

- .1 Carriage: framing supporting full length of shelving ranges.
- .2 Drifting: movement of mobile ranges along tracks, due to gravity.
- .3 Racking: deformation in the plane of rectangular framing.
- .4 Range: one or more shelving bays, single or double faced, connected together and supported by a carriage. Range length defines the front to back depth of a system.
- .5 Single-Entry Shelving: shelving that is designed to be accessed from one side only, is half-depth of double-faced shelving units, vertically adjustable independently of adjacent half-depth shelves designed to be accessible from the other side of the mobile shelving unit or range.

1.3 SYSTEM DESCRIPTION

- .1 Provide mechanically assisted mobile shelving system, consisting of the following:
 - .1 New shelving.
 - .2 Raised, levelled floor for recessing tracks.
 - .3 Recessed, levelled tracks.
 - .4 Mobile and fixed carriages.
 - .5 Drive mechanisms.
 - .6 Safety devices.
 - .7 Accessories.

1.4 DESIGN CRITERIA

- .1 Design system assuming shelf loading of 517 N/m.
- .2 Support shelves with lugs or clips.
- .3 Provide anti-tip devices for any mobile ranges whose height-to-width ratio exceeds 4:1, width being least plan dimension of carriage frame.
- .4 Design raised floor and ramp to support 2.4 kPa with maximum deflection of 1/360 of framing spans. Design as a tightly connected assembly of components, exclusive of floor finish, that can be readily assembled and dis-assembled non-progressively, i.e., starting at any assembly point in the raised floor.
- .5 Locate tracks to prevent ramps from extending past carriage ends.
- .6 Use materials designed not to deform under design loads and adversely affect performance.

1.5 PERFORMANCE CRITERIA

- .1 Systems shall meet performance requirements and design criteria when loaded to design capacity.
- .2 System shall operate smoothly, quietly, safely and consistently.
- .3 Maximum vertical deflection of carriage framing: 1/600 of spans.
- .4 Except as specified otherwise, components shall support design loads without permanent deformation.
- .5 Connections shall not loosen and components shall not be displaced due to vibration or system operation.
- .6 Maximum crank effort required to start and maintain range movement at any location and both directions shall be 45.0 N.
- .7 Drive mechanisms shall not exhibit play or looseness. Cranks shall require maximum ten degree rotation before starting range movement.
- .8 Fixed ranges shall not be displaced when impacted at normal operating speed, by maximum available number of adjacent mobile ranges.
- .9 Mobile ranges shall not drift.
- .10 Except for industrial type shelving, shelving posts and shelves shall be readily assembled, dis-assembled and re-assembled, without tools and with total salvage-ability of all components. Shelf supports shall not damage storage media.

1.6 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Submit in accordance with Section 01 33 00- Submittal Procedures.
- .2 Shop Drawings:
 - .1 Plan layout of system indicating raised floor and ramps, track location, extent and spacing, aisle access, crank locations, fixed and mobile ranges, and dimensions.
 - .2 Range end elevations, indicating dimensions, crank type and location, and aisle locks.

- .3 Clearances to adjacent building elements.
- .4 Large scale details at recessed tracks, raised floor perimeters and ramps, and anti-tip devices.
- .3 Product Data: submit manufacturer's product literature indicating compliance with specified requirements.
- .4 Samples:
 - .1 Submit minimum 100 mm x 100 mm duplicate samples, of colour and type of exposed finishes, on representative substrates. Identify colour and application on each sample.

1.7 CLOSEOUT SUBMITTALS

- .1 Submit in accordance with Section 01 78 00- Closeout Submittals.
- .2 Product Operation and Maintenance Data:
 - .1 Submit operation and maintenance data including the following:
 - .1 Name, address and phone number of nearest firm qualified to service system.
 - .2 Parts lists referenced to drawings illustrating parts.
 - .3 Operating and troubleshooting instructions.
 - .4 Manufacturer's recommendations for servicing frequencies and adjustment.
- .3 Provide tools for assembly and disassembly, standard with storage shelving manufacturer.

1.8 DELIVERY, STORAGE AND HANDLING

- .1 Deliver, store and handle materials in accordance with Section 01 61 00- Common Product Requirements and with manufacturer's written instructions.
- .2 Delivery and Acceptance Requirements: deliver materials to site in original factory packaging, labelled with manufacturer's name and address.
- .3 Storage and Handling Requirements:
 - .1 Store materials indoors and in accordance with manufacturer's recommendations in clean, dry, well-ventilated area.
 - .2 Store and protect shelving from nicks, scratches, and blemishes.
 - .3 Replace defective or damaged materials with new.
- .4 Packaging Waste Management: remove for reuse and return by manufacturer of padding, crates, pallets and packaging materials in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal.

1.9 INSTALLER QUALIFICATIONS

- .1 Installer shall be a company authorized by the manufacturer to install and service system specified.

Part 2 Products

2.1 MATERIALS

- .1 Sheet Steel: commercial grade, stretcher levelled to ASTM A653M, without visible deformation or surface irregularities.
- .2 Steel Sections and Plates: to CAN/CSA-G40.21.

2.2 FOUR POST SHELVING

- .1 Four post and case style shelving shall meet or exceed requirements of ANSI MH 28.1, American National Standard for the Design, Testing, Utilization and Application of Industrial Grade Steel Shelving, except as follows:
 - .1 Install shelving not more than 13 mm from vertical in 3 m (changed from ANSI MH28.1, 1.4.4).
 - .2 Maximum vertical deflection of shelves shall be 1/200 of shelf span (changed from ANSI MH28.1, 6.2.3 (c)).
 - .3 Maximum permanent deformation must be equal to or less than 15% of L/200 (changed from ANSI MH28.1, 6.3.2).

2.3 SHELVING COMPONENTS

- .1 Posts: steel, shelf support slots at maximum 25 mm o.c., readily visible slot variations at maximum 150 mm centres for alignment of shelves. Integral end panels, full height and flush with both sides of posts.
- .2 Adjustable Shelves: single and double-entry type, sheet steel, front and back edges double bent or rolled more than 180 degrees, and as follows:
 - .1 Depth:
 - .1 Single-entry: 381 mm.
 - .2 Double-entry: 762 mm.
 - .2 Width: 1067 mm nominal.
 - .3 Slots for shelving dividers at 25 mm centres.
- .3 Base Shelf: similar to adjustable shelves.
- .4 Height of Shelving Bays: 255 mm minimum.
- .5 Number of Shelves Per Bay: 7, including base shelf, but not including top panels.
- .6 Base Kickplate: sheet steel, minimum 1.6 mm thick, edges bent 90 degrees with minimum 13 mm return.
- .7 Shelf backs: sheet steel, slotted for shelf dividers, height to suit dividers, but not less than 125 mm. Slots aligned with slots in shelves. One shelf back per shelf.
- .8 Top panels: sheet steel, thickness to match adjustable shelves.
- .9 Manufacturer's other standard components as required to meet specified requirements.

2.4 SHELVING ACCESSORIES

- .1 Sheet Steel Shelf Dividers: tabs at bottom and back to engage shelves and shelf backs, and as follows:
 - .1 Height: 125 mm minimum.
 - .2 Depth: 380 mm.
 - .3 Number Per Shelf: 3. Do not count end brackets as dividers.
- .2 End Brackets: sheet steel, one at ends of ranges, two at intermediate posts.
- .3 Back panels: sheet steel, minimum 1.0 mm thick.

2.5 TRACKS

- .1 Material: steel, or a combination of steel and extruded aluminum.
- .2 Designed to be levelled and recessed flush with floor finish.

2.6 CARRIAGES

- .1 Squareness Tolerance: length of diagonals across carriages shall differ by no more than 1/900 of longest diagonal.
- .2 Carriages for Fixed Ranges: same as mobile carriages, except no drive mechanism. Continuous metal support all around carriage frame, matching carriage finish and mobile carriage clearance above floor.

2.7 RAISED FLOORS FOR RECESSING TRACKS

- .1 Finish Substrate: wood panel product to manufacturer's standard.
- .2 Supporting Components: steel, electro or hot-dip galvanized, or aluminum.
- .3 Perimeter Closure: sheet steel, galvanized, finished to match carriages, or wood, finished to match raised floor finish.
- .4 Raised Floor Finish: as indicated on drawings.

2.8 RAMPS

- .1 Structural Component: stainless steel.
- .2 Slope ramp maximum 1:10. Conceal fastening to raised floor support framing and to lower floor at toe of ramp.
- .3 Finish: stainless steel laminated to substrate, No. 4 finish, not less than 1.2 mm thick.
- .4 Continue under fixed carriages. Mitre ramp corners.

2.9 DRIVE MECHANISMS

- .1 Provide manufacturer's standard, concealed drive mechanism, modified as required to meet specified requirements.
- .2 Provide rotating crank at all mobile range ends adjacent to aisle access.
- .3 Provide suitable ball or roller bearings where rotating components are connected to non-rotating components.

- .4 Mechanism shall transfer operator force from cranks to drive shafts using steel chains and sprockets, and to load-bearing drive wheels via drive shafts.
- .5 Transfer carriage loads to wheels using permanently sealed, self-lubricating ball or roller bearings.
- .6 Provide spacers to eliminate friction between wheels and carriage framing.
- .7 Provide spring-loaded, free-wheeling sprocket assembly designed to maintain chain tension in drive mechanism.
- .8 Aisle Locks: provide manufacturer's standard device to lock drive mechanisms at each mobile range crank.

2.10 END PANELS

- .1 Type: one piece face construction, designed for easy access to drive mechanisms.
- .2 Material: painted sheet steel, minimum 1.0 mm thick exclusive of paint finish, or manufacturer's standard wood panel product, finished as specified. Faces shall be flat, with no visible deformation.
- .3 Panel edge profile thickness: minimum 19 mm. Triple bend sheet steel edge profiles.
- .4 Size: width to match carriage frame, height to extend from carriage frame to above shelving top panels.

2.11 ANTI-TIP DEVICES

- .1 Anti-tip devices shall be continuous along recessed tracks, with concealed modification of underside of carriage as required.
- .2 Secure anti-tip devices to structurally adequate building components.

2.12 ACCESSORIES

- .1 Bumpers: manufacturer's standard, in one colour.
- .2 Grout: non-shrinking, cementitious, pre-mixed type, compressive strength as required to support loads.

2.13 FABRICATION

- .1 Fabricate components square, straight, free of warpage, sharp edges, burrs and other potential hazards.
- .2 Accurately cut, machine, file and fit joints, corners, copes and mitres. Make exposed joints and connections tight, flush and smooth.
- .3 Install bumpers at maximum 1.5 m centres, aligned with bumpers on adjacent ranges.

2.14 FINISHES

- .1 Finish suitably prepared steel surfaces to CAN/CGSB-1.300.
- .2 Paint colour: manufacturer's standard colour closest to CGSB 1-GP-12c, colour 501-214, off-white - grey, semi-gloss.
- .3 Exposed Aluminum: clear anodized.

- .4 Finish metals in contact with cementitious material, as follows:
 - .1 Carbon Steel: electro or hot-dip galvanize, or coat with zinc rich primer.
 - .2 Aluminum: bituminous paint.
- .5 Raised Floor Finish: as indicated on drawings.
- .6 Wood Product End Panels:
 - .1 Faces: melamine meeting NEMA Standard LQ1, "Decorative Boards", in manufacturer's standard colour closest to colour specified for sheet steel finish.
 - .2 Edges: PVC T-type, or rigid PVC strip applied with hot-melt adhesive, 3 mm thick, width to match panel thickness, colour selected by Departmental Representative from manufacturer's standard range.

Part 3 Execution

3.1 ASSEMBLY AND INSTALLATION, GENERAL

- .1 Assemble and install mobile shelving system components to manufacturer's recommendations, to meet specified requirements.
- .2 Provide back and side sway bracing for shelving without end and back panels, at end bays of each range and at alternate shelving bays within each range.
- .3 Secure fixed ranges as required to meet performance requirements.
- .4 Install end panels to both ends of mobile and fixed ranges. Conceal fasten end panels.

3.2 TRACK INSTALLATION

- .1 Install in accordance with manufacturer's recommendations and to meet performance requirements.
- .2 Mechanically interlock tracks at joints and secure with tension fastening.
- .3 Anchor tracks to floor structure at spacing recommended by manufacturer, at track ends and at both sides of joints.
- .4 Provide continuous grout bed under tracks.
- .5 Continue tracks under fixed ranges.

3.3 INSTALLATION OF RAISED FLOORS AND RAMPS

- .1 Install raised floor continuously between tracks, along full track lengths. Position as close to tracks as practicable and install so that raised floor finish is same elevation as top of tracks.
- .2 Install ramps continuously along ends of systems serving as access to aisles. Continue ramps under fixed ranges.
- .3 Securely fasten top of ramp to raised floor perimeter support framing and toe of ramp to lower floor, using concealed mechanical fastening.
- .4 Install finish over raised floor to finish manufacturer's recommendations.

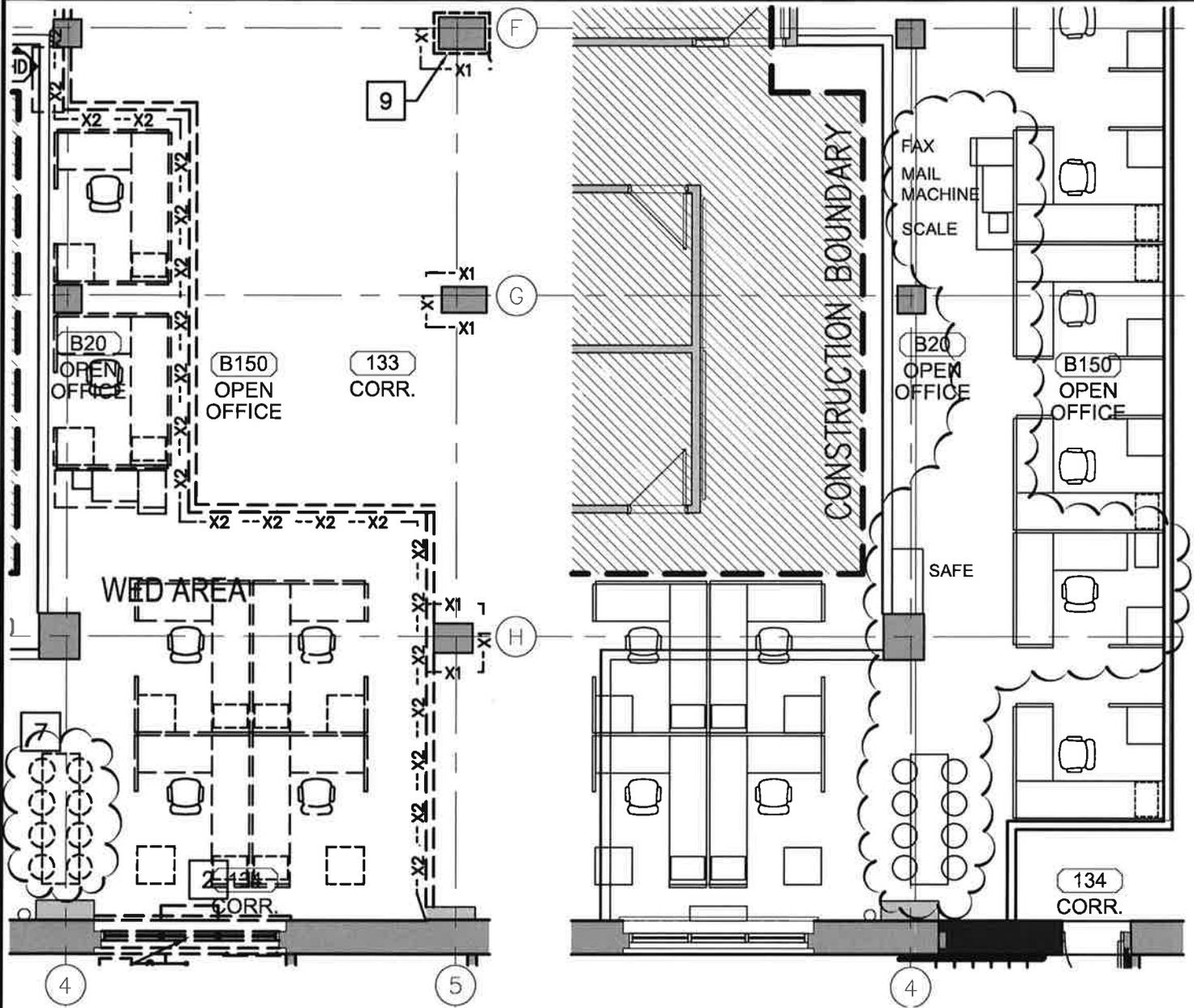
3.4 SYSTEM DEMONSTRATION

- .1 Arrange suitable time to demonstrate system performance to Departmental Representative and personnel intended to operate system.
- .2 Demonstrate recommended system operation and safety features.

3.5 CLEANING

- .1 Promptly remove debris, surplus materials and tools as work progresses.
- .2 Repair damage caused by work of this Section to existing structures and finishes.

END OF SECTION



DEMOLITION KEYED NOTES

7 FURNITURE 10 WORKSTATIONS AND RELATED FURNITURE, 7' TABLE WITH STOOLS AND EQUIPMENT:
 -CORCAN (DEPARTMENTAL REPRESENTATIVE) TO DISASSEMBLE.
 -GC TO STORE.
 -CORCAN TO REASSEMBLE.
 -GC TO RECONNECT ELECTRICAL TO FURNITURE.
 REFER TO FURNITURE PLAN SHEET A5.1

PHASING These notes are the same on every 1st floor sheet and have been included for ease of consideration

SUGGESTED 1ST FLOOR PHASING :

All phasing will need to be coordinated by the General Contractor, Departmental Representative and WED on site for the duration of this project.

	Week	Duration
1. WED to vacate 10 workstations	Week 0	1 day
2. Departmental Representative (CORCAN) disassemble WED workstations and equipment.	Week 1	1 week
4. GC to temporarily store WED workstations, table, stools and equipment.		
5. GC to erect temporary hoarding barrier (as per demolition plan), full height to limit distractions to WED operations		

Project title
**IRCC Relocation Fit-up
 Saskatoon, Saskatchewan
 101 - 22 Street East**

Drawing title
**Furniture Revisions
 and Coordination**

Drawn by jcg	PWGSC Project Manager Mark Van Beek		
Designed by	Project no. R.076325.006		
Approved by GK	Date 2018 /05 /01	Sheet ASK-T1	Revision

