

CONFIDENTIAL



("TAB" OR "CONTRACTOR")

# STORAGE NEEDS ASSESSMENT

A solution for: City of Winnipeg, Archives and Records Control/City Clerks  
Date: Department  
Version: December 21, 2017  
DRAFT

Presented to: Jody Baltessen & Scott Reid  
Address: 50 Myrtle Street, Winnipeg, MB R3E 2R2  
Tel: 204-986-7904 / 204-986-3713  
Email: [jbaltessen@winnipeg.ca](mailto:jbaltessen@winnipeg.ca) / [sreid@winnipeg.ca](mailto:sreid@winnipeg.ca)

Prepared by: Tanis Sinclair  
Address: 343 – 330 St. Mary Avenue, Winnipeg, MB R3C 3Z5  
Tel: 204-809-5990  
Email: [tsinclair@tab.com](mailto:tsinclair@tab.com)

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## STATEMENT OF CONFIDENTIALITY, LIABILITY AND VALIDITY

This document has been prepared specifically for The City of Winnipeg, Archives and Records Control/City Clerks Department and is proprietary to TAB.

Any dissemination or distribution of this assessment or copies thereof to any third party without TAB's prior written consent is strictly prohibited.

TAB shall not be liable for any technical or editorial errors or omissions contained herein, nor for any damages directly or indirectly arising from the furnishing of this proposal.

## ABOUT TAB

TAB provides organizations with a wide range of solutions to optimize business processes and to organize, access and manage paper and electronic documents. Our solutions include consulting and professional services, filing and storage products, and TAB FusionRMS, our records and information management software solution.

TAB is a private company with over 500 employees and sales offices in every major U.S. & Canadian city, as well as Amsterdam, London, and Sydney.

At TAB, we are proud of our track record of successful client relationships. We serve clients in a diverse range of industries, including financial, legal, medical, pharmaceutical, government and energy.

Our successes include:

- Converting hundreds of millions of paper documents to electronic formats using best-in-class imaging products and processes
- Implementing records management software to manage billions of corporate records
- Installing over 40,000 mobile shelving systems in North America
- Developing thousands of classification and retention policies for Canadian organizations
- Successfully relocating over 7,500 customer filing systems containing over 20 million records
- Providing project management and logistic services for the largest corporate file move in Canadian history
- Becoming the world's largest specialty folder manufacturer, manufacturing over 250,000 folders a day
- Partnering with 9 out of 11 of the largest Oil & Gas clients in Alberta.

## EXECUTIVE SUMMARY

The City of Winnipeg, Archives and Records Control/City Clerks Department has engaged TAB to provide an assessment of their storage requirements as they move forward with their plans to relocate into a new Archive and Records Centre. The goal is to space plan for the existing inventory as well as minimum 5 years of growth.

The project scope includes two phases;

### Phase I – Shelving Assessment and Recommendations

- TAB to perform an assessment and inventory of their current shelving.
- The assessment is to address equipment need recommendations based on the long-term storage goals. This is to include but not limited to:
  - What they have vs what they need.
  - How current shelving can be repurposed – i.e. as is in current state, can its current heights be raised through the addition of post extenders, new posts etc.
  - New equipment purchase recommendations.
  - Recommendations on heights, widths and depth of shelving best suited to maximize the storage of each collection type.
- Also need to assess their equipment inventory for retrieving and transporting materials to and from the shelving – i.e.: ladders, pallet jacks etc. and make recommendations on what additional equipment they may need because of our shelving recommendations.

### Phase II - Configuration of New Space

- TAB is to provide a plan for the configuration of the new space for each of the identified collections types.
- As part of this scope they would also be seeking recommendations as to how best store the collections on the shelving system – i.e.; oldest up top and back of space, etc.

## SITUATION OVERVIEW

### Current State

#### I - Record Storage

The City of Winnipeg currently has their Record storage located at 311 Ross Avenue and the space no longer meets their needs and is in the process of being decommissioned. A new space has been secured to be the new Archives and Record Control Centre in the Inkster Industrial Park. TAB went in to the existing locations at 311 Ross Avenue and 50 Myrtle Street and took an inventory of the records collections and the existing shelving that could be re-used and reconfigured in the new location. The results are as follows:

#### **Record Collections**

There are two main collections:

- City of Winnipeg Department file collections stored in Cubic Foot Boxes from a variety of City of Winnipeg Departments and Property Property Plans which are managed in 3 different custom sized boxes. The collections are spread over 2 floors – approximately 22,000 sq. ft.

#### II - Archive Storage

- The client has a second location – 50 Myrtle Street which they moved into approximately 4 years ago. This location houses the City of Winnipeg's Archive collections and acts as a centre the public can access to perform research. This space is quite cramped and leaves little to no work space for the processing of materials still needing to be catalogued.
- The client has identified that the Tax Roll files will be removed from 50 Myrtle and relocated to the new location. All shelving will remain at 50 Myrtle. The Roll Collection consists of Volumes which are bound binder style books and Cubic Foot Boxes – both of which will need to be accounted for in the new space.
- \*The tax roll books are currently stored flat on the shelf due to their sizes and thickness, which leave a lot of unoccupied space on each shelf.

The current inventory counts for each collection type is as follows:

Collection	Inventory
Cubic Foot Boxes	18,482
Oversize Boxes	90
Plan Boxes 35"	380
Plan Boxes 39" Regular	7,201
Plan Boxes 39" Double High	100
Plan Boxes Oversize	66
*Tax Rolls	21,600 LFI

## Shelving

There are 4 varieties of existing shelving as follows:

### ***Tensco - 4 Post***

- 42" w x 16" D x 76 ¼" H & 42" W x 32" D x 76 ¼"
- Utilized for both Cubic Foot Boxes and Plan Boxes
- Currently utilizing 3 levels for storage

### ***Burroughs Clip Shelving***

- 42" W x 32" D x 84" H
- Utilized for storage of Cubic Foot Boxes
- Currently only utilizing 3 levels of storage due to location of ceiling pipes in storage area

### ***Static Shelving – Mobile Area – Style 1***

- 42" W x 36" D x 88" H
- Utilized for storage of Stubby Plan Boxes
- Currently utilizing 3 levels for storage as bottom shelf has been raised due to proximity to mobile system.

### ***Static Shelving – Mobile Area – Style 2***

- 42" W x 40" D x 88" H
- Utilized for storage of Long Plan Boxes
- Currently utilizing 3 levels of storage with 25 boxes per level
- Staff noted difficulty in retrieving boxes at 5 high and preference would be to have 20 boxes per level. \*

### ***Rousseau Open Bay Shelving***

- 36" W x 15" D x 84" H
- 7 Levels of shelving
- Currently storing open files (in open file boxes)

## Other – Equipment

- 1 - flat dolly
- 2 - 2-step platform ladders
- 3 - 4-step platform ladders
- 1 - 6-step platform ladder
- 1 - 8-step construction ladder
- 2 - mechanical easy lifts
- 3 - pallet jacks
- 1 - side table
- 2 - wire cage filing carts
- 3 - library carts
- 4 - trolleys
- 5 - push carts

**Art Storage**

- A mobile system for art storage located on the 3<sup>rd</sup> floor and is to be relocated into the new space as is.

**Other – Municipal Elections**

- Also stored at this location is the voting machines and equipment for the City Clerk's Office which also need to be accounted for in the new space configuration.

## PROPOSED SOLUTION

Based on the following City of Winnipeg goals:

1. Five years growth
2. Repurpose of as much of the existing equipment as possible
3. Be mindful of budget for new equipment investment
4. Maintain access aisles for pallet jack access

TAB has designed a new shelving floor plan configuration to meet the above goals which is included in Appendix A. A legend outlining the location of the repurposed shelving is listed below. The ceiling height of the new storage facility offers the client more flexibility for both the utilization of their existing shelving as well as any new shelving investments.

To maximize the space, we have elected to configure the double-faced units back to back. This allows staff to access from one side while reducing the number of aisles.

As many of the staff walk the space to retrieve and put away material, TAB has elected to have several banks of shelving units with aisles in between to allow for better access of equipment and shorter distances for exiting rows in the event of an emergency.

### Drawing Details

#### Legend:

Dark Green	Existing Tensco 4 Post Shelving
Dark Blue	Existing Burroughs Clip Shelving
Rose	Existing Shelving from Mobile & Around Mobile
Red	Existing Rousseau Shelving
Yellow	New Shelving – Cubic Foot Boxes
Light Grey	New Shelving – Plan Boxes
Light Green	New Shelving – Tax Rolls

### Storage Capacity

Item	Current Count	5 Year Growth	Capacity Goal	Configured Capacity
Oversize Box	90	0	90	See Cubic Foot
Cubic Foot Box	18,482	930/yr. = 4,650	32,132	24,288
Plan Box 35"	380	31/yr. = 155	535	720
Plan Box 39" DH	100	20/yr. = 100	200	See Plan Box R
Plan Box OS	66	0	66	See Plan Box R
Plan Box 38" R	7,201	523/yr. = 2,615	9,816	11,584

## RECOMMENDATIONS

### Cubic Foot Boxes

#### 1. *Tennsco - 4 Post*

- 42" w x 16" D x 76 ¼" H & 42" W x 32" D x 76 ¼"
- Currently utilizing 3 levels for storage

Additional capacity on EXISTING Inventory can be acquire with the following options;

OPTION ONE: As there are no overhead obstructions, it is possible for the client to maintain the current configuration, and utilize the top shelf which is currently empty. This would allow for an additional 6 boxes per single faced unit (16" D) and 12 boxes per double faced unit, there would be no top cover over these boxes.

OPTION TWO: As there are no overhead obstructions, it is possible for the client to increase the height of the shelving to 97 ¼" to allow for 4 openings plus a top cover. This would ensure all boxes are covered, but would allow for future storage options on top of these units with no further investment. However, once you begin to store materials above the 97 ¼" H, you may require and investment into other mechanical equipment to allow for the placement and retrieval of materials.

#### 2. *Burroughs Clip Shelving*

- 42" W x 32" D x 84" H
- Utilized for storage of Cubic Foot Boxes
- Currently only utilizing 3 levels of storage due to location of ceiling pipes in storage area

As there are no overhead obstructions, the shelves can be spaced to allow for 4 openings with no top cover, but will increase the storage from 36 boxes per unit to 48 boxes per unit.

### New Shelving Investment – Cubic Box Storage

To meet the long-term storage goals, the investment into new shelving will be required and TAB's recommendation would be to invest in shelving 16" and/or 32" depth with 4 levels of storage that allow for 24 boxes per single faced unit and 48 boxes per double faced unit. The overall height requirement will depend upon the client's determination for the need of a top cover for the shelving units.

### Plan Boxes

#### 3. *Tennsco - 4 Post*

- 42" w x 16" D x 76 ¼" H
- Currently utilizing 3 levels for storage

Investment dollars are required to increase capacity of this existing shelving. As there are no overhead obstructions, it is possible for the client to increase the height of the shelving to 97 ¼" to allow for 4 openings plus a top cover. This would ensure all boxes are covered, but would allow for future storage options to the top of these units with no further investment. However, once you begin to store materials above the 97 ¼" H, you may require and investment into other mechanical equipment to allow for the placement and retrieval of materials.

#### 4. *Static Shelving – Mobile Area – Style 1*

- 42" W x 36" D x 88" H
- Utilized for storage of Stubby Plan Boxes
- Currently utilizing 3 levels for storage as bottom shelf has been raised due to proximity to mobile system.

As there are no overhead obstructions and the existing shelves can be repositioned to allow for 4 levels of storage with no top cover.

### 5. *Static Shelving – Mobile Area – Style 2*

- 48" W x 40" D x 88" H
- Utilized for storage of Long Plan Boxes
- Currently utilizing 3 levels of storage with 25 boxes per level
- Staff noted difficulty in retrieving boxes at 5 high and preference would be to have 20 boxes per level

The recommendation would be to reduce the number of boxes per opening to 20 from 25 but to utilize the top of the existing units to store an additional 20 boxes. This small change to the way in which product is stored will allow for 80 boxes per unit up from 75 per unit.

### **New Shelving Investment – Plan Boxes**

To meet the long-term storage goals, the investment into new shelving will be required and TAB's recommendation would be to invest in shelving that will provide a total 40" D and will provide 4 levels of storage to allow for up to 80 boxes unit.

In the proposed space planning drawing attached we have shown the repurposing of all existing shelving minus 1 unit of Burroughs clip shelving

### **Equipment**

Currently the City of Winnipeg has an assortment of dollies, pallet jacks, ladders, etc. as listed in the inventory list above. When preparing the shelving height recommendations contained within this report, we determined that by not exceeding a height of 97 ¼" the City of Winnipeg Archives and Records Control/City Clerks Department would not need to invest in additional equipment or training for staff to access the collections. There would also be no need for modification to staff duties due to changes in height of shelving.

### **Mobile Art Storage**

Relocate as per current configuration, no changes to layout required.

### **Tax Rolls**

The tax roll books are currently stored flat due to their sizes and thickness and leave wasted space on the shelf. Our recommendation would be to store these books upright to better utilize shelf space and maximize capacity.

### **Other Recommendations:**

Staff are required to load the materials on shelving as recommended to ensure the maximum capacity is reached. This is currently not consistent across the units and collections.

With the use on O'Neil there no need to specifically store by disposition or age as the client utilizes the O'Neil Inventory Management Software. One recommendation to assist with an improved retrieval time with respect to the box location on the shelf is to add another field of reference.

Currently the client only utilizes row, bay, and level. If they chose to change to a row, bay level, and section fields, they would reduce the number of boxes the need to look at.

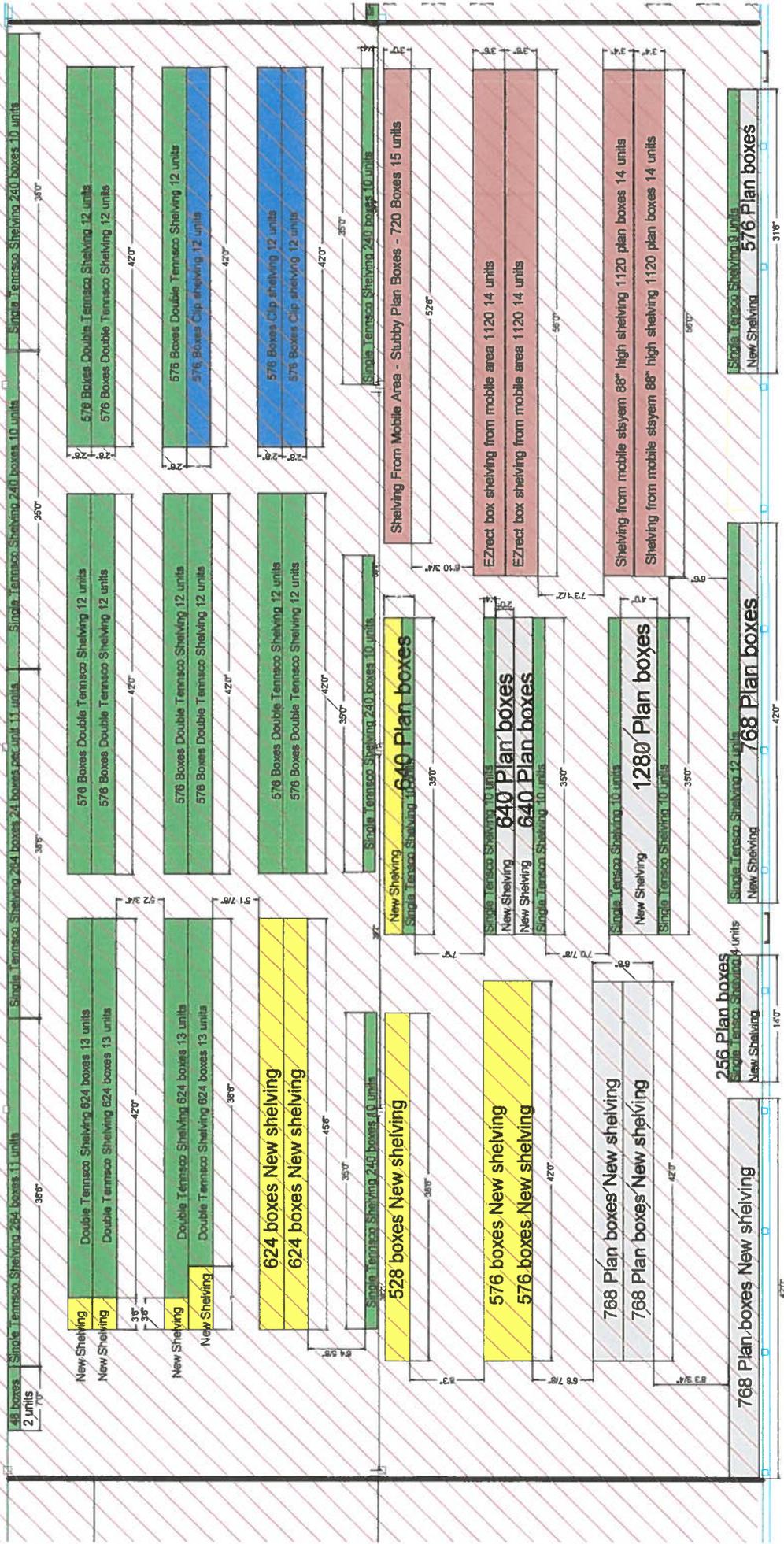
- For example. Cubic Foot Boxes – this format would require the picker to look at the 4 boxes in the location for the box they need instead 12.

## APPENDICES

### Appendix A – Drawing Configurations



# APPENDIX A - SIDE A



400'

ALL DESIGNS REPRESENTED BY  
DRAWING ARE CONFIDENTIAL AND  
SHOULD NOT BE DISCLOSED  
WITHOUT WRITTEN PERMISSION  
FROM TAB.

TITLE	Shelving Configuration - 1450 Mountain	DWG NO	
OFFICE	City of Winnipeg Archives & Records Control	SCALE	1:200
REP	TAB Winnipeg	DATE	December 21, 2017
	Tanis Sinclair	REVISED	



