

Peterborough Police Service Facility Condition Assessment and Functional Space Analysis

SZa Shoalts and Zaback Architects Ltd. April 16, 2019

Introduction



City of Peterborough



Peterborough Police Services



Shoalts and Zaback Architects Ltd.

Agenda

- **1.** Brief History of the Station
- **2.** Tasks Completed to Prepare the Report
- **3.** Outcome of the Report
- 4. Recommendations

Brief History of the Station

1968

- Peterborough Police Service moved to its current location
- · Two-storey, purpose-built building
- 85 Staff
- 19,600 ft² (1,820 m²)

1985

- Second floor added to accommodate 133 total staff
- Planned to accommodate the needs of the Service for 10 years
- 133 Staff
- Added 10,000 ft² (930 m²)

1998

- City of Peterborough and Lakefield amalgamated, including Policing
- New Adequacy Standards came into effect
- 143 Staff

2005

- City completed a Facility Review to ensure adequacy for next 10 Years
- 162 Staff, projected to reach 178
- Actual staff in 2015: 185

Brief History of the Station

2009

- · Building was expanded
- 2,910 ft² (270 m²) added on three floors in the northeast corner
- Property to the east was added to site for parking

2010

Further renovations to create more office space

2011

- Board Report indicated that the station was "Beyond Capacity"
- It was essential to plan for the future

2015

- PPS began contract policing of Cavan-Monaghan
- 191 Staff

2017-2019

- PPS 2017-2019 Business Plan included goal of addressing the long-term accommodation requirements of the station
- City of Peterborough issues a Request for Proposals to complete a Facility Conditions Assessment and Functional Space Analysis
- SZA were hired in July 2018 to complete this report

Tasks Completed

- **1.** Gathering Existing Documentation
- 2. Review of the Current Accommodation
 - Structure and Envelope
 - Mechanical and Electrical Systems
 - Site and Parking
 - Security and Crime Prevention Through Environmental Design (CPTED)
- **3.** Review of Functional Space Needs
 - Meetings with Committee
 - Series of Meetings with 14 Stakeholder Groups
 - Best Practice, Past Experience
 - Code and Standards
- **4.** Review of Codes and Regulation

Tasks Completed

- 5. Summarized Deficiencies
- **6.** Gathered Population and Staffing Data
- **7.** Summarized Staff and Space Needs
- 8. Options Prepared
- **9.** Options Evaluated

(Selected Deficiencies)

Site

- Existing site is insufficient to accommodate an expanded station and all parking requirements
- High-risk building; the building does not meet current Security Standards
- No separation of Public and Private/Secure access
- Storm water management issues





(Selected Deficiencies)

Building

- The structure and systems are not designed to Post Disaster requirements
- The building is not fully sprinklered
- The building envelope contains lower insulation levels compared to current requirements
- The mechanical and electrical systems are at capacity and have poor control
- Poor/inadequate ventilation in some areas:
 - Detention
 - Property
 - Labs

(Selected Deficiencies)

Functional

- Inadequate separation of Public/Semi-Private and Private spaces
- Inadequate forensic lab facilities
- Poor spatial organization and lack of support spaces
 - Patrol
 - Investigative Services
- Poor interviewing facilities
- Inadequate staff facilities
- Lack of training facilities

(Selected Deficiencies)



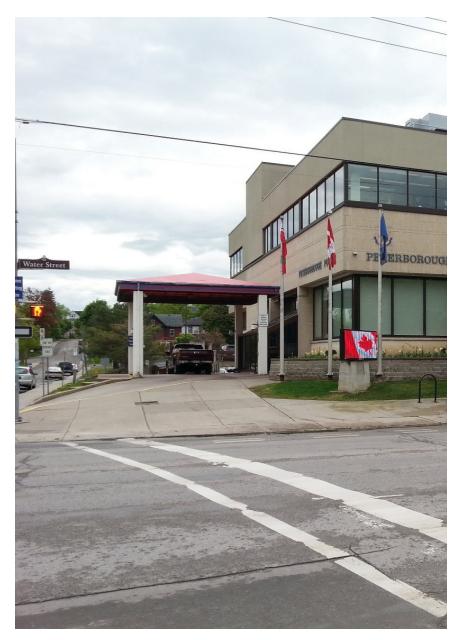


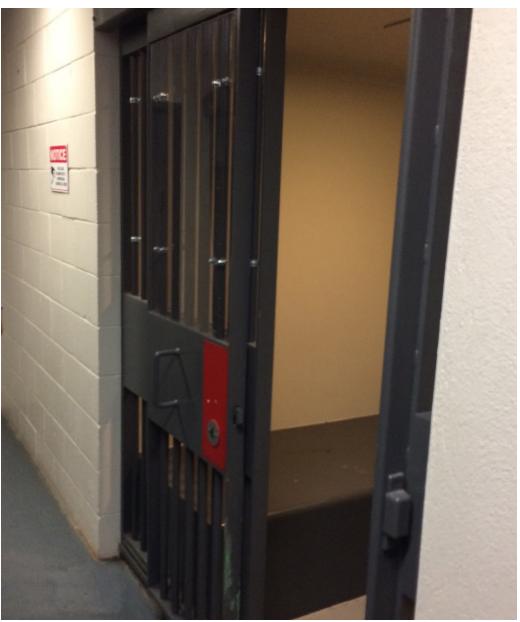
(Selected Deficiencies)

Codes and Regulations

- The building and site are not accessible
- Forensic labs ventilation and plumbing are not to current design practices
- Detention areas are undersized and outdated
- Cell doors are older type with bars that are no longer used in current design practices for safety
- Property and evidence secure storage room must be accessed to shut off water lines in cells
- Lack of training facilities

(Selected Deficiencies)





Population and Staffing Data

- Population of Peterborough is expected to grow +/- 0.5% a year for the next 25 years
- Current PPS staffing levels are below national average
- Current population (including Lakefield and Cavan-Monaghan) is approximately 97,000
- 25 year projected population is 106,500
- Current PPS staffing is 215
- 25 year projected staffing is 236-285

Summary of Space Needs

- SZA prepared a 'draft' program of spaces that would accommodate the future Service requirements
- This program includes a reorganization of the existing building program elements (approx. 30,000 sq.ft.) into a new expanded facility of approx. 95,000 sq.ft.
- The program is not intended as a final list of requirements, rather a demonstration of the potential needs to be used as a tool for planning and site evaluation and comparison
- In addition to the existing space needs the new program includes additional spaces for training (combative, exercise, classroom and firearms), file and equipment storage, meeting / project rooms, IT infrastructure, interview rooms, enlarged lab and property areas, additional staff spaces, specialty vehicle storage and detention processing etc.

To demonstrate options for the future service accommodations:

- 1a. Addition and Renovation on the Existing Site
- **1b.** New Station on the Existing Site
- 2. New Station on a Generic Site
- 3. New Station as an Addition and Renovation to Another Building
- 4. Phased New Construction on a Generic Site

Assumptions

- PPS must remain in operation throughout
- Land is available in a "central" location of adequate size
- Costs:

New Construction: \$350-\$450/ft²
Renovation: \$220-\$300/ft²
Demolition: \$15/ft²
Site Work: \$350,000/acre

Professional Fees: 8-12% (new construction)

10-15% (renovation)

- Costs exclude land acquisition, moving and temporary location, FFE, and permits
- Costs are based on 2019 Canadian Dollars (\$CDN). Costs must be planned to increase by 3% per year beyond 2019.



1a. Addition & Renovation on the Existing Site



1b. New Station on the Existing Site



2. New Station on a Generic Site



4. Phased New Station on a Generic Site

Options Evaluated

Section 9 - Recommendations

Ranking of Options

		Option 1a	Option 1b	Option 2	Option 3	Option 4	Comments
Building Functionality	25	20	22	25	22	25	New building will be most functional
Site Functionality	20	5	5	20	15	20	New site will be most functional
Construction Cost (Lowest man cost ÷ option cost) x 20	20	15.5	15.3	16.6	20.0	16.6	Existing building renovated may be least expensive if it is suited for new purpose
Mitigation of Service Disruption	15	5	8	15	15	15	New building on new site will allow ongoing Police operations
Expansion Potential	10	0	0	10	7	10	New site of adequate size should provide expansion. Existing site has no expansion potential.
Project Duration	5	1	2	5	4	0	New construction will take less time to construct.
Associated Costs	3	0	0	0.5 to 3	0.5 to 3	0.5 to 3	Existing site is free. New site must be purchased unless City owned. New site allows sale / repurposing of existing HQ. Existing site will incur additional cost premiums for staged work and construction complications for restricted site.
Civic Presence	2	2	2	0	0	0	New sites will not have strong downtown presence
Total	100	49	54	92 to 94.5	83 to 85.5	87 to 89.5	

Options Evaluated

- 1a. Addition and Renovation on the Existing Site
 - \$50,235,130.00
 - The site is too small to accommodate the requirements and the work would interrupt service continuity
- 1b. New Station on the Existing Site
 - \$51,190,885.00
 - The site is too small to accommodate the requirements and the work would interrupt service continuity
- 2. New Station on a Generic Site
 - \$46,991,550.00
 - This is the preferred option
- 3. New Station as an Addition and Renovation to Another Building
 - \$39,051,310.00
 - This is a viable option
- 4. Phased New Construction on a Generic Site
 - \$46,991,550.00
 - This is also a viable option, provides the opportunity to spread out the financing

Recommendations

- 1. Complete a Detailed Site Study
- 2. Hire a Consultant Team to develop design concept, building program, detailed design, and contract documents
- **3.** Further evaluate pros and cons of a Phased Project
- **4.** Construct a new Police Station to serve the current and future needs of the Peterborough Police Service

Discussion

