



CORPORATE FACILITIES MEMORANDUM

TO: MAYOR J. LEHMAN AND MEMBERS OF COUNCIL

FROM: J. LIEFL, MANAGER OF FACILITY PLANNING AND DEVELOPMENT, EXT. 4478

NOTED: R. PEWS, P. ENG, DIRECTOR OF CORPORATE FACILITIES

D. MCALPINE, GENERAL MANAGER OF COMMUNITY AND CORPORATE SERVICES

M. PROWSE, CHIEF ADMINISTRATIVE OFFICER

RE: BARRIE SIMCOE EMERGENCY SERVICES CAMPUS PROJECT UPDATE

DATE: JUNE 17, 2019

The purpose of this Memorandum is to provide members of Council with an update concerning the Barrie Simcoe Emergency Services Campus project.

Project Updates:

- Major site construction is ongoing and has been progressing well, however ICI construction union labour negotiations are underway and strike action by the plumbing / pipefitting trades may impact productivity.
- Exterior earthworks and underground service installation re-commenced in May and is progressing well.
- Building A architectural siding is substantially complete and exterior brick installation has commenced.
- The atrium steel structure and roofing has been installed.
- Building A & C roofing is substantially complete.
- Steel stud installation in Building A is substantially complete.
- Painting has commenced in Building A on Level 4, and progressing throughout the building.
- Building C underground and overhead services have been installed.
- All rooftop air handling units have been delivered and installed.
- Move management consultant has been selected. Health Care Relocations (HCR) will be leading the coordination and planning of the eventual relocation of the legacy police facilities.
- Fixtures, Furniture and Equipment (FF&E) selection is complete and orders have been placed. This includes all office furniture and specialty police communications equipment.

Please refer to Appendix A for project update photos.

Schedule Updates:

Substantial and total project completion are on schedule, to be completed December 2019. The project team anticipates the relocation of Barrie Police Service operations to 110 Fairview Rd. to occur in January 2020. A construction forecasting and planning session is scheduled for the end of June to revalidate these deliverables.

Although the team is working to meet this December 2019 completion date, recent ICI construction union labour negotiations and strike action may impact productivity. Sheet Metal and Roofing installers have exercised their right to strike as of May 6, 2019 and Plumbers/Steamfitters have initiated strike action as of June 3, 2019. At this time, there is no projected end date to strike action. Masons are currently negotiating a new labour agreement with the understanding that they too will exercise their right to strike should an agreement not be ratified. Typical daily labour force has numbered approximately 110 workers, and that

has been reduced by approximately 40% due to these construction union labour negotiations and strike action. The daily labour force is expected to drop further should Masons strike as well. As the BSESC is a significant project in terms of value and labour force north of Toronto, there is the possibility that picketing will occur at the site entrances.

While labour negotiations are out of the project team's control, we recognize the impact they may have to the project schedule. To date, strike action and labour negotiations have not negatively impacted schedule but if strike action continues into mid to late June, there is the possibility of project delivery delays. In an effort to mitigate this risk, the project team have initiated the following strategies:

- Reoccurring meetings to plan and discuss how and where trades can work to be most effective.
- Trades are focusing on critical path areas of work to ensure there are no delays to significant operational components of the facility.
- Work sequences will be adjusted and on-site labour forces will be redirected to accommodate installations once strike action, or threat of, is removed.
- Ensuring work proceeds at an appropriate rate to prevent costly demobilization and remobilization of forces.

All project team members are dedicated to implementing the above initiatives and mitigating any threat to project delays to the extent possible.

Budget Update

Project staff are pleased to communicate that hard construction costs are currently forecasted to be below budgeted figures by 3%. Based on terms of the project contract, 50% of these savings are directed to the project team to share and the other 50% is directed to the owner group. Of the 50% of the owner portion, the City of Barrie is entitled to approximately 76% of these surplus funds. Funds received from the City's share will be reinvested into the project to contribute to other financial risks or returned to the City at the conclusion of the project.

Significant budget risks to the project continue to exist outside of these hard construction costs and savings. Below is an update of these risks:

1. IT equipment identified as being required by BPS post-validation that was not originally included in the project budget
Efforts to finalize pricing and equipment requirements to further mitigate the risk are ongoing.
2. BPS communication centre requirements
Efforts to finalize pricing and communication requirements to further mitigate the risk are ongoing.
3. Unusual material escalation related to unexpected tariffs
Efforts to validate the magnitude of material escalation and mitigate the risk are ongoing. The project team is awaiting analysis and feedback from trade partners.

Value Add and Risk Mitigation

Items #1 and #2 above are a requirement for BPS operation and have been prioritized. Project and Barrie Police Service staff continue to work diligently to mitigate these budget risks and, to the extent possible, plan to fund them within the approved project budget. Below are two examples of initiatives developed by the project team in order to mitigate these risks and find further savings.

Scope Swaps: Each trade partner is responsible for a specific area of work contributing to the construction of the BSESC. There are instances where a certain trade partner may have price advantages in supply of material or efficiencies in installation. Where this advantage is identified, the project will work to transfer the

specific scope item from one trade partner to another, resulting in savings in time and or money, for the benefit of the project schedule and budget. To date the project has identified 36 such opportunities for trade partners to swap scope, with an estimated savings and/or cost avoidance of \$470,000 to the benefit of the project. We continue to strive to identify additional opportunities to swap scope for the benefit of the project schedule and budget.

Virtual Design and Construction: Virtual Design and Construction, or VDC, is a regularly occurring process in the BSESC project in order to find constructability issues or design opportunities, and identify solutions to address these in advance of actual construction. In many instances these solutions result in no cost changes and the avoidance of costly rework. To describe VDC further, the project team virtually constructs a section of the building using Building Information Modelling (BIM) software based upon the specified design as seen below in **Figure 1**. All effected trade partners are in attendance to provide input and suggestions using their expertise and knowledge in their trade discipline. Although difficult to quantify, it is evident that VDC is an effective tool to avoid costly rework, based upon outcomes from recent VDC sessions.

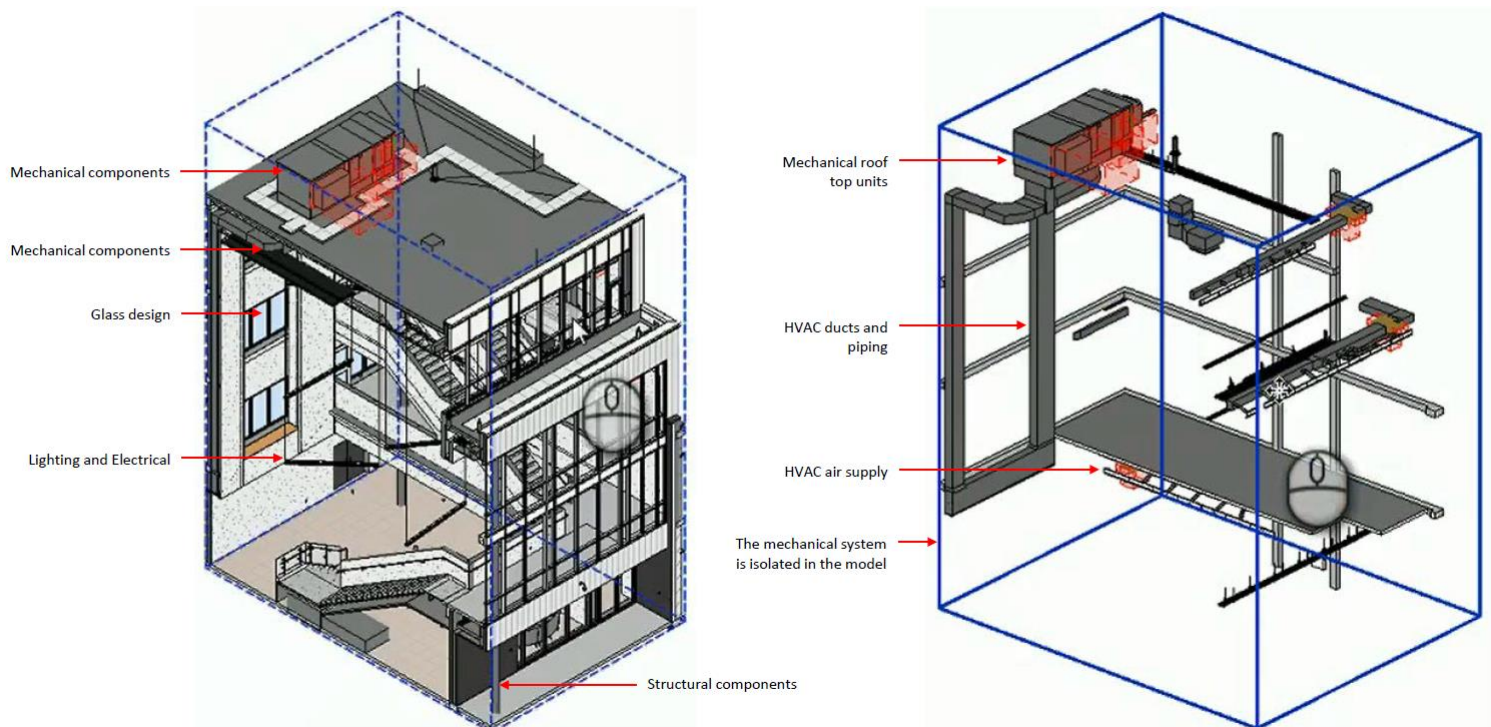


Figure 1 – BIM Model of Building ‘A’ Staff Circulation Space: The goal of VDC is to achieve collaboration and coordination of all building components on a construction project. Designs from different disciplines are brought together into a virtual model where interfering systems can be detected before being constructed. Clashes occur when different items are occupying the same space, such as a pipe passing through a wall, or a beam interfering with HVAC duct. VDC is important as it brings several models together (mechanical, architectural, structural, etc.) to avoid what could become expensive rework efforts with associated schedule impacts.

APPENDIX A



North Elevation of Building 'A' – May 30, 2019



South Elevation of Building 'A' – May 30, 2019



Partial West Elevation of Building 'A' (along Fairview Road) – May 30, 2019



Exterior Utilities and Earthworks in Progress – May 30, 2019



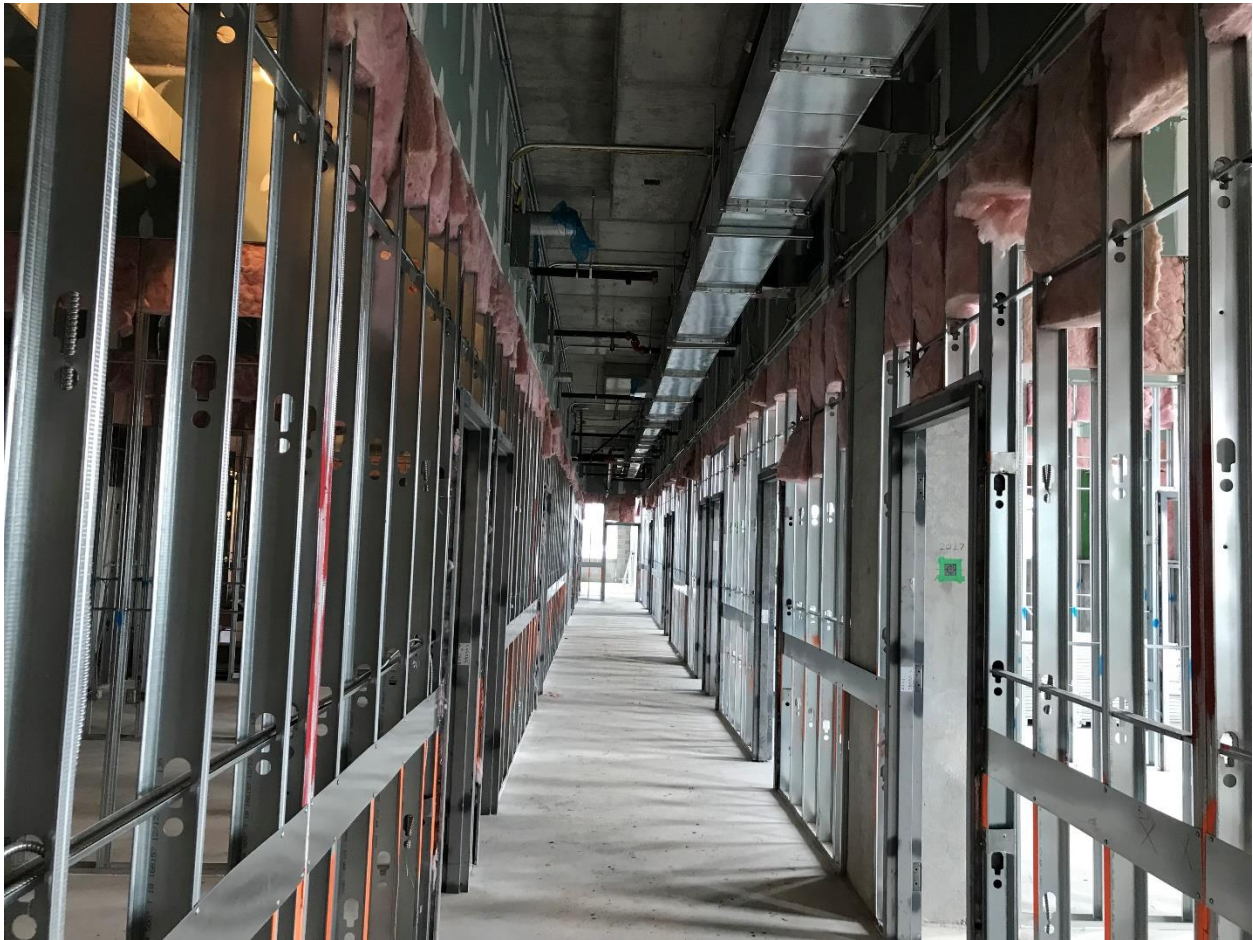
Building 'C' – South-West – May 30, 2019



Atrium of Building 'A' – View from Level 4 – May 30, 2019



Level 4 – In Ceiling Services – May 30, 2019



Level 2 – Corridor – May 30, 2019



Level 4 – Mechanical Room – May 30, 2019