

DATE OF MEETING November 26, 2018

AUTHORED BY KAREN FRY, FIRE CHIEF

SUBJECT **FIRE STATON #1 REPLACEMENT UPDATE**

## **OVERVIEW**

### **Purpose of Report**

To provide an update of the Fire Station #1 Replacement Project.

### **Recommendation**

That the Fire Station 1 Replacement Update report, dated 2018-NOV-26, be received for information.

## **BACKGROUND**

Fire Station 1 was constructed in 1966 and has served the City well for over 50 years as the main emergency response centre for the city containing the fire station, emergency coordination centre and dispatch centre. However, major building components are at the end of their usable life. Several capital asset management projects have been deferred for a number of years in order for Council to consider the value of refurbishment vs. replacement. During budget deliberations for 2016, Council directed staff to undertake a comprehensive analysis of the current Fire Station 1 and present options to Council for consideration.

HMCA Architecture and Design was contracted to perform the study that evaluated key building systems including structural, electrical, and mechanical. The architects facilitated a working group of staff from the City's Finance, Construction, Real Estate, Information Technology and Fire Rescue Departments, along with the Firefighter's Union through an information-gathering process that was combined with consultant's analysis and reports. A variety of options were evaluated culminating in four scenarios for renewal that are presented in the architect's report. Costing for each scenario was provided by Advicas Professional Quantity Surveyors Sustainability Consultants. The formula assumed a 45-year life cycle including replacement costs for each scenario, annual inflation, and replacement/asset management projects and operating costs.

**Status Quo** was to maintain and continue to upgrade the building and replace other systems upon future failures. This would also require a complete rebuild in 10 years.

**Scenario 1** was to expand and renovate the existing building.

**Scenario 2** was to build a new building on the adjacent site (Community Services building)

**Scenario 3** was to build a new building at the existing location.

The fundamental question arising from this study was whether the status quo is acceptable or whether the risks associated with it are too great to be ignored and a comprehensive renewal of the fire station is required in the near future. The facility's ability to remain operational after a major seismic event is critical.

### Scenario 3 – Build New at Existing Location

This option includes the construction of a new fire station integrating Fire Administration staff from 580 Fitzwilliam Street into one facility; and offers longterm operability for the current and future needs of the Fire Rescue Department. It entails replacement of the fire station in its current location, keeps the existing Milton Street access for optimum response performance and does not impact the Community Services Building. However, construction of the new building needs to be phased to maintain operations at the emergency coordination centre and dispatch centre. In addition, a temporary fire station is required during construction.

### Decision Matrix

The following matrix summarizes the key decision making elements for the selected option including long and short term financial impact.

|            | Major Rehabilitation | Capital Investment | Total Life Cycle Cost | Seismic Stability              | Risk of system failure     |
|------------|----------------------|--------------------|-----------------------|--------------------------------|----------------------------|
| Status Quo | \$1.1 M (2018)       | \$23.1 M (2028)    | \$46.6 M              | No upgrade till reconstruction | High (till reconstruction) |
| Scenario 1 | NA                   | \$17.0 M (2019)    | \$41.3 M              | 2017 BCBC post disaster        | Low                        |
| Scenario 2 | NA                   | \$15.6 M (2019)    | \$37.8 M              | 2017 BCBC post disaster        | Low                        |
| Scenario 3 | NA                   | \$16.9 M (2019)    | \$39.1 M              | 2017 BCBC post disaster        | Low                        |

At the 2017-MAY-08 Committee of the Whole meeting, *it was moved and seconded that Council direct Staff to include “Scenario 3 – Build New at Existing Location”, in the 2018 – 2022 Financial Plan, which would include funding from the general asset management reserve, or the strategic infrastructure reserve, or a combination of both. The motion carried.*

### DISCUSSION

What is wrong with the existing fire station?

- The existing fire station was built in 1966, and though it has had a seismic upgrade in 1999, it has a 43% deficit to the seismic requirements to the 2017 BC Building Code. Though the existing building would provide life safety to its occupants after an earthquake due to its prior seismic upgrade, it would likely suffer damage that would prevent its ongoing operation.
- Major infrastructure components are well beyond their life span or usage and are at a point where a failure could have significant impact to the operations of the station.

- While a major renovation was one of the options, the building would still need to be rebuilt within 10 years.
- Maintaining the status quo would lead to higher costs over the life of the building. Initial capital investment in the near future would be quite low but rebuilding a new facility in 10 years would be considerably more expensive than building the same facility now.
- The higher costs along with the risks associated with the existing facility, up to the point that it is rebuilt, suggests that the renewal of the fire station sooner provides the best value over the long term.

Did the consultant look at any other sites?

- The consultants looked at other locations where a NEW fire station could be built.
- Modelling and analysis was completed and the current location provides very good coverage in the highest incident area of the City and with the greatest structure fire and social challenges.
- Moving the station further up towards Nanaimo Ice Centre (NIC) or Nanaimo Aquatic Centre (NAC) would provide better response to the Westwood Lake area, but would also result in a longer response to the performance objectives (6:00 minutes response) into the highest response areas. (1/3 of 34% reduction)
- While other City owned and alternative sites were looked at, many of which were in close proximity to the existing fire station, the current location with emergency vehicle exiting onto Milton Street is preferred.

Have partnerships with other service providers been looked at?

- BC ambulance were part of some early preliminary discussions around the potential to lease space however, they were in transition at that time and unable to commit to any long term planning at that point.

Current Project Timeline:

2017-MAY-08 Council adopted the recommendation of Scenario 3 – Build New in Existing Location at a total cost of \$16.9 million.

Deloitte LLP was contracted to provide overall process implementation support on 2018-FEB-02. This would augment their report and provide a proper project management framework for the Fire Station #1 project.

At its Regular Council Meeting held 2018-FEB-19, Council directed Staff to proceed with an Alternate Approval Process (AAP) which would allow borrowing up to \$17 million dollars for the reconstruction of Fire Station #1.

At a Special Meeting on 2018-MAY-14 Council received the Alternative Approval Process – “Fire Station #1 Borrowing Bylaw 2018 No. 7257” which closed on 2018-MAY-04. 783 valid elector response forms were received prior to the deadline. In order for the process to fail, 6,842

(10% of electors) were required to submit forms. Based on the elector response forms received before the deadline, the Corporate Officer determined and certified that the elector approval in accordance with Section 86 of the *Community Charter* was obtained.

On 2018-OCT-24 a RFP for an Owner's Representative was awarded and contracted to Capex Project Advisory, who will manage the overall Fire Station #1 reconstruction as the project manager for the City of Nanaimo.

On 2018-AUG-03 a RFP for Fire Station #1, Replacement Architectural Services No. 2053 was issued. The project management team are in the final stages of evaluations of submissions and the contract will be awarded before 2018-NOV-30.

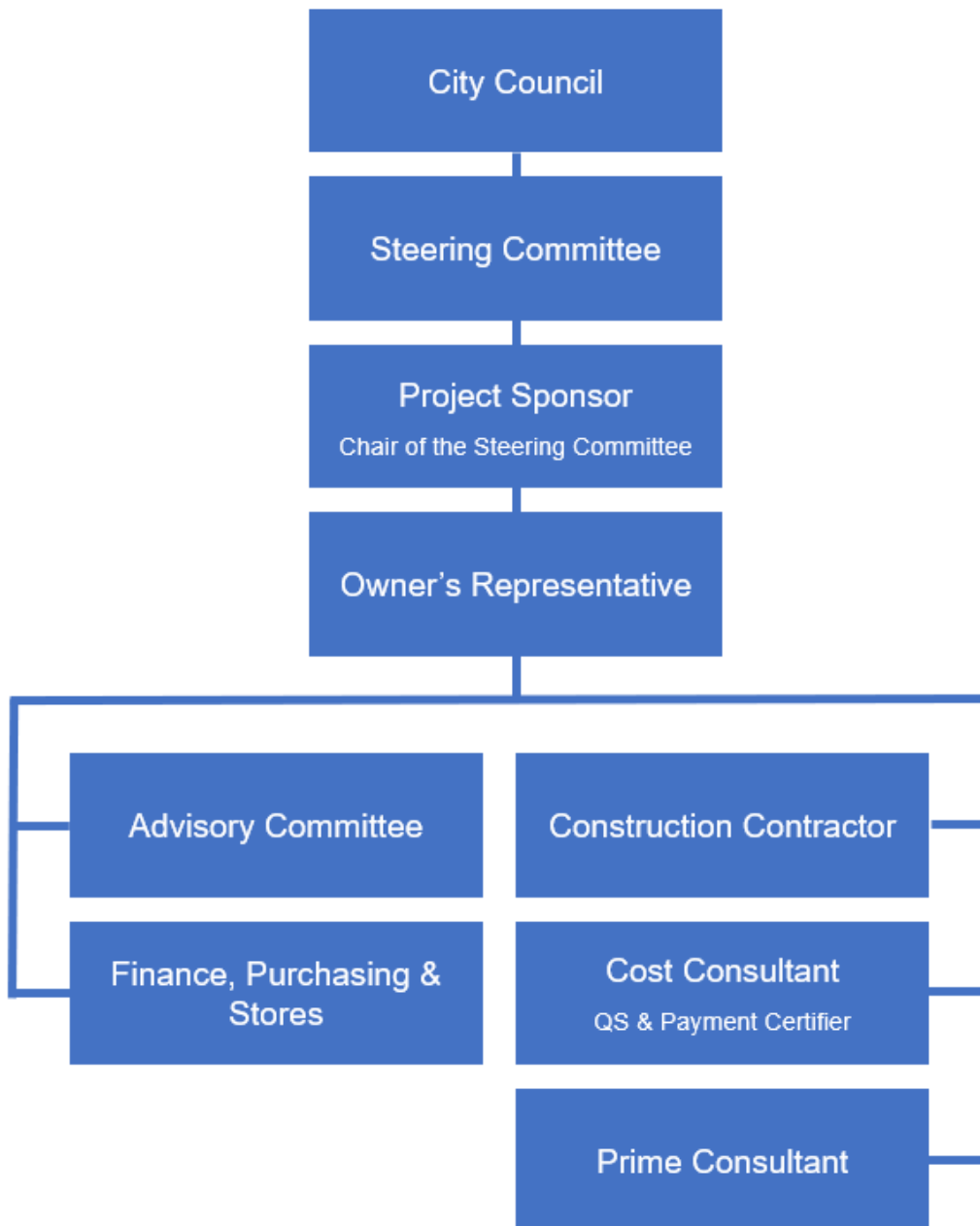
Annual borrowing for the project will be submitted as the project proceeds, this saves debt servicing dollars on the total \$17 million and will only draw funds as needed through the project lifecycle.

The estimated distribution of funds, at an order of magnitude level is identified below. These costs were included (and now summarized) from the original HCMA Fire Station #1 Business Case Analysis and as the planning on the project continues there will most likely be reallocation of various line items but the total costs will remain the same.

| <b>Project Phase</b>              | <b>Estimated Cost</b> |
|-----------------------------------|-----------------------|
| Planning & Project Management     | \$ 1,300,000          |
| Design                            | \$ 2,000,000          |
| Temporary Fire Station            | \$ 600,000            |
| Temporary Dispatch Centre and ECC | \$ 200,000            |
| Fire Station 1 Demolition         | \$ 600,000            |
| Fire Station 1 New Construction   | \$ 10,000,000         |
| Construction Contingency          | \$ 2,300,000          |
| <b>Total Estimated Cost</b>       | <b>\$ 17,000,000</b>  |

The following diagram outlines the relationships between the various City entities in completing the project.

The Steering Committee, made up of the CAO, Director of Public Works and Engineering and the Fire Chief, reports directly to Council.



Community engagement and key stakeholders, including as examples - Public Safety Committee, Nanaimo Old City Association and community neighbours will be informed and advised of the project during different phases as required.

### **SUMMARY POINTS**

- Fire Station #1 – Replacement is well underway with the successful Architectural Services to be awarded by 2018-NOV-30.
- Scenario #3 – Build NEW in existing location was the best solution and recommendation based on the business case completed by HCMA.
- Electoral Approval, through the Alternate Approval Process, has been obtained for a total not exceeding \$17 million.

### **ATTACHMENTS**

Attachment 1 - Fire Station #1 Business Case Analysis (presentation)

Attachment 2 - Fire Station #1 Business Case Analysis (report)

Attachment 3 - Fire Station #1 – Project Charter

#### **Submitted by:**

Karen Fry  
Fire Chief

#### **Concurrence by:**

Jake Rudolph  
Chief Administrative Officer