

SALT SPRING ISLAND FIRE PROTECTION DISTRICT

STAFF REPORT – Request for Board Decision

DATE: April 27, 2020
SUBJECT: SSIFPD Needs and Facilities Assessment Project
TO: Chair and Board of Trustees
FROM: Laurie Taylor, CAO

PURPOSE

To review the Salt Spring Island Fire Protection District (SSIFPD) Fire Station Baseline Needs Assessment prepared by FireWise Consulting; the updated Herold Engineering report (2005-2020); and to consider the initial recommendations of the Fire Rescue Advisory Committee

BACKGROUND

With health and safety top of mind amidst the COVID-19 pandemic, the Board and the Fire Rescue Advisory Committee are meeting online to work on the Fire Rescue Needs and Facilities Assessment Project and will continue to explore options so the District can be ready to move forward with any next steps and community consultation as identified.

At its meeting of April 15, 2020, the Fire Rescue Advisory Committee received two reports:

1. 2020 Fire Station Baseline Needs Assessment: FireWise Consulting
2. 2020 Update, Fire Hall No. 1 Structural Assessment Report: Herold Engineering

The Salt Spring Island Fire Rescue Baseline Needs Assessment was prepared by FireWise Consulting as part of their work to provide an overall evaluation of the SSIFR Ganges Fire Hall. This assessment, along with the Herold Engineering report, were commissioned and authorized by the SSIFPD Board at their meeting held January 20, 2020. The purpose of the reports was to consolidate the available reports and current observations on the overall suitability and condition of Fire Hall #1.

As a result of the initial review of the of the reports and discussion, the Fire Rescue Advisory Committee puts forth the following short- and long-term recommendations for the Board to consider, based on the two key reports:

Short-term options include: recommended repairs to the roof, ventilation and electrical system to meet WorkSafeBC, Occupational Health and Safety and the BC Building Code for the safety of Firefighters and others who work in or visit the building.

Long-term options include: recommendations on whether the current site can be renovated, whether it can remain in the same location and alternates. Key factors include the need to ensure that any current

or future facility must meet legal, regulatory and industry standards as well as the protection and safety of the community pre- and post-disaster.

As noted in the report, the importance of the Ganges Fire Hall to fire, rescue and emergency management capabilities cannot be overstated. Most of the SSIFR's response capacity is stored in this facility and the Fire Hall saw extensive use as an EOC during recent windstorms. The loss of this facility and its response and coordination capability would be disastrous for the community's ability to deal with serious events. This would be particularly critical in an event like an earthquake or tsunami that have hit multiple communities and caused loss of housing and infrastructure.

The Fire Rescue Advisory Committee will continue to meet and work through the remaining sections of the report and provide recommendations to the Board of Trustees to consider.

The Fire Rescue Advisory Committee also identified the importance of ongoing communication. Initial communication plans called for extensive face-to-face outreach, such as attending the Farmers' Market, community group presentations, tours and open houses, COVID-19 and new physical distancing protocols has changed all that. New ideas to support information sharing and feedback with the community using online platforms are being developed.

In the meantime, community members are encouraged to sign up to receive ongoing Project Updates via email on the District's website: <https://saltspringfire.com/fire-rescue-advisory-committee/>

1. Short Term Recommendations: Current Situation

Advisory Committee Recommendation:

That the Fire Rescue Advisory Committee agree to forward the Baseline Needs Assessment Report Recommendation 1 to the SSI Fire Protection District Board of Trustees to form the basis of an action plan to secure and make the current Ganges Fire Hall safe for ongoing operations while a new facility is developed.

Background:

There are currently a range of issues, including building mould and asbestos contamination, electrical and operational problems, that need to be addressed in the immediate future to ensure the safety of staff and public while this facility remains operational. Quotes and or estimates should be obtained for consideration. This information would form the basis of an Interim Facility Risk Management Plan to address WorkSafeBC and Fire Code non-compliance issues as well as any discussions for future use. Key deficiencies and recommendations include:

- A qualified electrician should be engaged to evaluate what is required to make the Fire Hall's electrical system compliant with current codes and standards.
- For example, the current system is unable to handle additional equipment such as a built-in generator or air compressor for Self-Contained Breathing Apparatus (air tanks).
- Roof repairs to extend the life of the roof 2-5 years should be undertaken immediately.

- Currently the roof leaks are being managed with a temporary tarp as a cover.
- Termite damage reported in the training room should be investigated and stabilized.
- Vehicle exhaust extraction systems must be assessed to ensure their installation and operations are compliant with manufacturer specifications.
- The harmful effects of carcinogenic vehicle exhaust are well-documented. The current system does not provide full protection to the occupants.
- Ventilation systems should be evaluated to ensure adequate air movement through and around the building and equipment.
- The Ganges Fire Hall is inadequately ventilated as required by WorkSafeBC's Occupational Health and Safety regulations. Inadequate ventilation results in serious humidity and air quality issues such as mould and damage to equipment. Currently temporary measures such as residential dehumidifiers are being used to try to manage the situation with limited success.

Prior to the Board deciding on what actions need to be undertaken, estimates need to be obtained for the work. Staff recommends the following resolution:

Recommendation

THAT the Board direct staff to obtain quotes and or estimates for the short-term works to be done including evaluation and repairs of the electrical system, roof repairs, termite damage, assessment of vehicle exhaust extraction systems and evaluation of air ventilation systems as identified in the Baseline Needs Assessment Report.

2. Long Term Recommendations: Current Site and Facility

Advisory Committee Recommendation:

That the Fire Rescue Advisory Committee recommend due to the costs to bring Fire Hall 1 into compliance with the current building code and the siting being inadequate for safe and efficient operations that the continued use of Fire Hall 1 be eliminated as an option for a long term solution for housing Salt Spring Island Fire Rescue and that other sites be evaluated for a new facility.

Background:

The Ganges Fire Hall has been the subject of numerous reviews and assessments starting with a 2005 Herold Engineering structural condition report. This analysis indicated that the facility was not compliant with modern British Columbia Building Code requirements for structural integrity, particularly those related to post-disaster standards. The building is constructed on reclaimed land in the harbour area and sits very nearly at sea level.

Existing Building:

Both the Herold Engineering report (2005 and updated in 2020) indicate that the building would require extensive renovations to bring it into compliance with today's BC Building Code. The BC Code deems fire

halls as public safety buildings and requires they be constructed to a higher geotechnical standard and must comply with a Post-Disaster Standard which includes seismic standards.

The Herold Engineering report finds:

- For the purposes of high-level planning, a project cost of \$1,500,000 to \$2,000,000 should be used to seismically retrofit the building to near code level structural performance.
- This does not consider renovations to the building, including design, construction, and loss of use.
- In their opinion, “it would be more cost-effective to look for a new site to build a replacement hall rather than complete a seismic upgrade on the existing structure.”

Existing Site:

Typically, the Ganges Fire Hall is a busy site, especially during weekends. The site footprint is too small to hold the current fire trucks and equipment without encroaching on public property. The busy location also impacts response time due to congested traffic and lack of parking for responding firefighters. It also lacks accessibility features for persons with disabilities.

Historical pictures also suggest that the entire original Fire Hall was built on simple grade beams with no evidence of piers or pilings under them. To meet building code requirements, the entire foundation would require replacement and upgrading.

The Herold Engineering Report finds:

- That the upgraded foundations would need to incorporate design for mitigating any potential liquefaction and/or settlement of the soils beneath the firehall could result in the firehall being unusable after seismic event

In summary, the Baseline Assessment report finds:

- The Ganges Fire Hall site is inadequate for safe and efficient operations. The size and condition of the site cannot support a modern fire hall. It would be cost prohibitive to bring the building into compliance with the current building code.

Recommendation

That the Board accept the Fire Rescue Advisory Committee recommendation that due to the costs to bring Fire Hall 1 into compliance with the current building code and the siting being inadequate for safe and efficient operations that the continued use of Fire Hall 1 be eliminated as an option for a long term solution for housing Salt Spring Island Fire Rescue and that other sites be evaluated for a new facility.

3. Long Term Recommendations: Brinkworthy Site

Advisory Committee Recommendation:

That the Fire Rescue Advisory Committee recommend the Board of Trustees request a formal water servicing decision from the North Salt Spring Waterworks District related to the Brinkworthy site. Failing approval by the North Salt Spring Waterworks District for the provision of water, the Committee recommend a feasibility study on the use of the water well(s) be undertaken.

Background:

If the Board decides to move forward with a new location for the Ganges Fire Hall, the next step is to assess the suitability of the Brinkworthy site. This site already owned by the SSIFPD and could potentially save ratepayers the large expense of a land purchase.

A number of items would need to be assessed in terms of its suitability before this site can be considered such as water servicing. To that end, there is a desire to see if water service can be obtained before continuing.

Staff spoke to the North Salt Spring Waterworks District and were advised that it would likely take months for their Board to make a decision on a request for a water service from the SSIFPD. The next NSSWD Board meeting is April 30, 2020. In order to meet the agenda deadline date, SSIFPD staff submitted a letter to their Board for a request for water service on April 21. As well our staff is looking into other options for water servicing and will report back at a future meeting.

The SSIFPD Fire Station Baseline Needs Assessment Report prepared by Firewise Consulting and the Ganges Fire Hall Seismic Assessment 2020 Update prepared by Herold Engineering were pre-circulated to the Board and are attached to this report.

Recommendation

That the Board receive the SSIFPD Fire Station Baseline Needs Assessment Report prepared by Firewise Consulting and the Ganges Fire Hall Seismic Assessment 2020 Update prepared by Herold Engineering

Respectfully submitted,

Laurie Taylor
CAO

Attach:

Draft minutes Fire Hall Advisory Committee meeting April 15, 2020
SSIFPD Fire Station Baseline Needs Assessment Report – Firewise Consulting
Ganges Fire Hall Seismic Assessment 2020 Update – Herold Engineering