

**Meeting Date:** December 5, 2022  
**Department:** Community Services and Fire Services  
**Report No.:** CS-2022-32  
**Submitted by:** Robert Lilbourne, Director of Community Services  
Brent Smith, Director of Fire Services / Fire Chief  
**Approved by:** Fred Tranquilli, Chief Administrative Officer / Clerk  
**SUBJECT:** **Proposed New Station 1**

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**RECOMMENDATION: THAT: Council receive report number CS-2022-32 titled Proposed New Station 1; and further, THAT: Council directs staff to proceed to the next step including detailed costing and Site Plan Approval.**

**STRATEGIC PLAN ALIGNMENT:**

This matter is in accord with the following strategic priorities:

Local Infrastructure - Households and businesses in Strathroy-Caradoc are supported by reliable, financially responsible and well-maintained infrastructure network.

**BACKGROUND:**

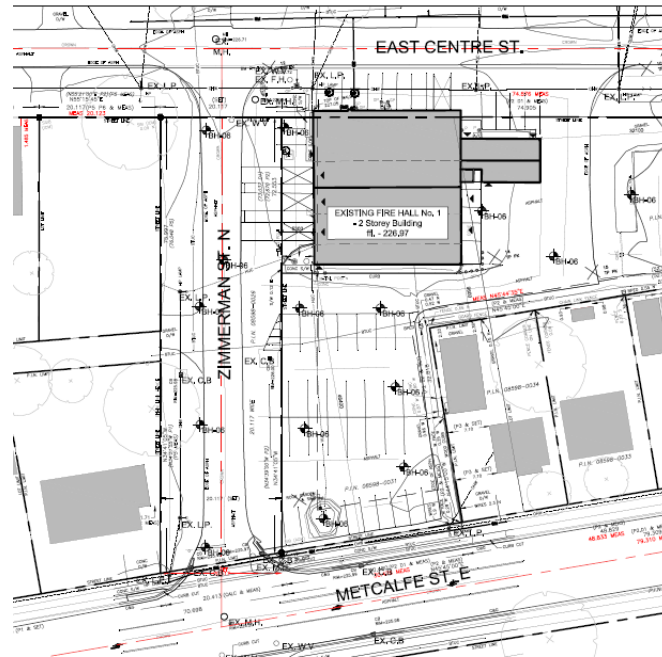
As our community grows so does the fire service and the community's expectations. Consistent with the Corporate Strategic Plan 2020-2029, Municipal Council adopted the Fire Master Plan (FMP) for the community, which identified that the age and condition of Strathroy Fire Hall (Station 1) warrants the station's replacement. The FMP recommended the Zimmerman location as the ideal site for the new hall to service Strathroy and area into the future.

The Municipality engaged a+Link Architects to work on the design of the station including the site layout. As staff and the architects worked through the process it was identified that the current hall will need to remain active during the construction of the new hall. This requires that the new hall fronts on Metcalfe St. and maintains drive through access from East Centre St. To facilitate this layout the closure of Zimmerman St. is required.

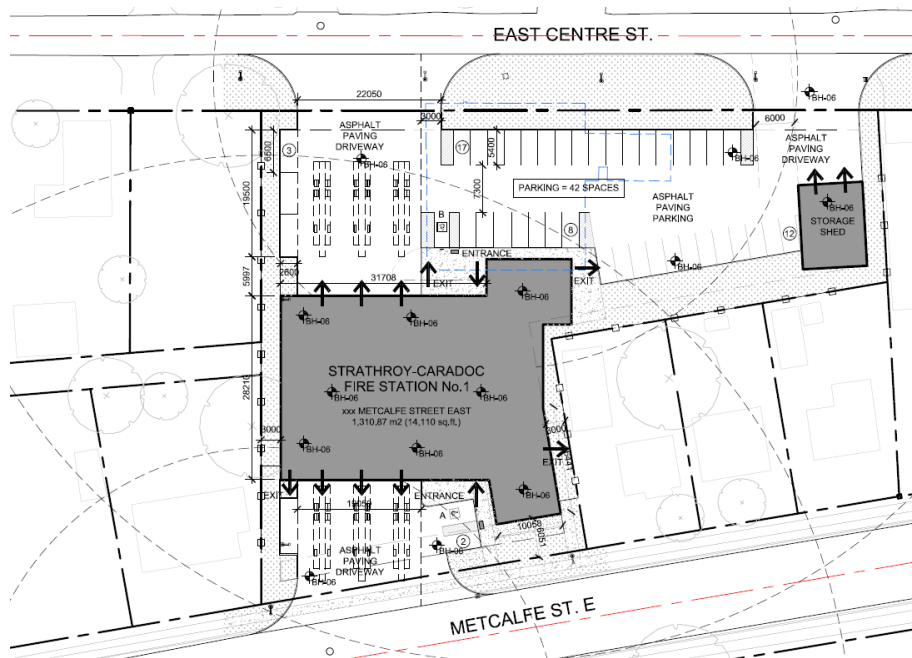
Staff brought forward Report CS-2022-29 titled "Closing of Zimmerman St.", which was accepted and approved by Council. The report illustrated that the closure would have no impact on neighbouring residents with the residents having direct access from Metcalfe St. and East Centre St. The report

also identified that the entry to the East Alley from Zimmerman would be eliminated, but that the residents continued to have access from Arthur St. The public consultation process for this approach was concluded and referenced in Report CS-2022-29.

### Existing Fire Hall Site Layout



### Proposed New Fire Hall Site Layout



Staff circulated a letter to residents within 150m of the site notifying them of the planned closure of Zimmerman St. One resident responded expressing traffic concerns on East Centre St. unrelated to the construction of the fire hall. The concerns identified the speed and volume of traffic on East

Centre St. Staff reached out to the concerned resident and proposed that staff conduct a traffic and speed assessment of East Centre St. in September to assess the concerns.

The closing of Zimmerman St. allows the proposed Strathroy Fire Hall (Station 1) to be built on the site recommended in the Fire Master Plan while maintaining the level of service residents have come to expect from our Fire Service.

**COMMENTS:**

Staff have been working on site plan, building layout and building design with a+Link Architects. The goal is to achieve a hall that blends into the neighbourhood, is esthetically pleasing, durable, and sustainable, which will function as a fire hall for at least forty years.

Knowing that the community is forecast to continue growing the FMP identified the need to expand when the force adjusts to composite and full time career firefighters. With this in mind, an area has been designated on the mezzanine as “dorms, day room and washroom” along with a possible future fitness area. These two areas will be ‘roughed in’ during the initial construction and are designated for future need.

When building new publicly funded facilities, there is an expectation that consideration will be given to the project’s environmental impact. A Fire Hall is required to be constructed using post disaster construction techniques but consideration is also being given to the building’s sustainability with respect to energy efficiency and material selections. The staff team and architects are reviewing options available with this design, which could include, but are not limited to the following strategies:

**Energy efficient building that exceeds current codes:**

- Higher insulation in the building envelope (Floors, Walls and Roofs)
- Enhanced glazing standards, Double glazed, low-e, including on West and South Elevations. Upgrade – Triple Glazing and Screens on east and west elevations.
- Mass walls for thermal retention.
- Hydronic heated floors. Whole Building, versus only Apparatus Bay.

**Electrical and Mechanical systems be energy efficient:**

- LED Lighting with automatic controls.
- Load shedding capability on major items.
- Hydronic floor heating.
- Ground source heat pump system, or Air Source Heat Pump. Geotechnical Consultant to confirm if Ground Source is viable for the Site.
- HVAC units / VRF with Energy Recovery.
- Low Flow Plumbing Fixtures.

**Renewable Energy Sources:**

- Photovoltaic solar panels on the roof.
- Photovoltaic array at parking.
- Hydronic panels on the roof to supplement water heating.
- Consider vertical turbine.

**Other beneficial considerations:**

- Parking Stormwater infiltration systems with Rain Garden.
- Green roof where no solar panels.
- Bird friendly glazing.
- Carbon sequestering wood structure which naturally reduces the carbon footprint.

- Durable materials will reduce the need for maintenance per CSA S478.
- Roof Stormwater retention for truck washing.
- GreenGlobes or LEED certification.
- Consider Net Zero building solution. Reduction of energy requirements + generate energy.

**CONSULTATION:**

Brent Smith, Director of Fire Services

Fred Tranquilli, CAO

Mike Holt, a+Link Partner

**FINANCIAL IMPLICATIONS:**

Based on the 2022 Canadian Construction Cost Guide a fire hall of this nature will cost between \$7M and \$10M. Staff will continue to fine tune this project including all technical and building materials needed and will provide a more detailed cost estimate in a future report.

**ATTACHMENTS:**

- Site and Floor Plan
- Exterior Images Station 1