
MEMORANDUM

February 17, 2015

TO: Cynthia Lau
Planner, COV

FROM: Melanie Marchand
Project Manager

SUBJECT: Fire Hall No. 5 + Housing
3090 E 54th Avenue
Project Description

1. Overview

Fire hall No.5 was built on this site in 1952 and has served the community as a fire hall continuously since then. Since that time, the equipment used has gotten bigger and more specialized - so that an assortment of vehicles is now needed to meet the variety of tasks that are performed. Training requirements and accommodation standards have changed. The existing building, to put it simply, is out of date and worn out.

The City of Vancouver has set aside funding for its replacement and wants to take the opportunity to use the property to also provide affordable housing as part of its commitment to create more affordable housing. After reviewing a study to establish how housing might be added to the fire hall, the City solicited Expressions of interest from experienced non-profit agencies, to partner in the construction and operation of the affordable housing. This selection process resulted in the City partnering with the YWCA for the inclusion of women-led family housing.

Consultants then worked with all parties to create a preliminary design. This was shared for review and comment by the neighbourhood at an Open House on June 25, 2014, and through a questionnaire that was presented at the Open House as well as published on-line. A report summarizing the results is available at <http://vancouver.ca/files/cov/fire-hall-5-june-2014-questionnaire-findings.pdf> ; 78% either supported or were neutral about the project as presented.

Sustainability is an important goal for both the City and the YWCA; this project will be designed to be certified as LEED™ (NC 2009) Gold.

Project Description

2. The Site and Form of the Building

The building has one basement level with parking and service spaces, two floors in concrete construction for Fire Hall No. 5 and four in wood frame construction for Housing, with a rooftop outdoor amenity space for the Housing. The slope of the property enables an easy entry to the parking from the lane.

The functional requirements of the Fire Hall cause the building to take up much of the site so that underground parking must be built. The front setback for the west part of the frontage on 54th is determined by the size of trucks used by the Fire Hall since these are brought out to be checked over at the beginning of each shift; and the Community/Training Room is featured close to the property line on the NE corner of the site; the Fire Hall entrance is located next to the Community Room. On the west of the property is a two storey apartment building with a large sideyard screened by trees near the property line, the proposed building is articulated along this boundary with an exit stair occurring close to the property line and the balance of the building set approximately 2.2 m to 3 m from the property line and animated by a few windows. On the south side there is a lane and this provides parking and access to underground parking, place for a transformer, screened garbage storage at grade, while above grade there is a large patio on the third floor that complements the Amenity Room for the Housing. The west elevation is articulated to respond to the angled property line; the entrance to the housing is located along Kerr Street near the lane at the south of the site where its connection to the floors above can be expressed and it can be set away from the bus stop in front of the building.

The two uses, although good neighbours, require complete separation for the security of both the housing residents and the operations of this key civic infrastructure, the fire hall; for this reason there is no internal connection between the two uses except in the parking area. Both entrances are kept apart and distinct so that there is no confusion to the visitor.

Project Statistics

Site Dimensions: 39.64 m x 36.75 m

Site Area: 1450 sm

Building Area: 5265 sm

Building Height:

FSR: 2.68

Storeys: 6 levels, a rooftop patio, and one underground parking level

Parking Spaces: 7 regular and 1 small spaces for the Fire Hall; 5 regular and one handicapped space for the Housing.

Bicycle: 5 staff/ 4 public for the Fire Hall; 39 resident/ 4 public for the Housing

3. Fire Hall No. 5

The Fire Hall, which occupies the first and second floors, requires a tight plan so that crews can access their vehicle and depart within one minute of an alarm; to achieve this, a stair was located centrally and all spaces are then located for easy access to it and it's adjacent

door to the Equipment Bays. The Fire Hall will also specialize in maintaining all fire fighters' breathing apparatus for the department.

Spaces within the fire hall will include a Community/Training Room which will operate as a space where the Vancouver Fire And Rescue Services can offer CPR training, blood pressure clinics and other similar events, as well this room will function as a training and meeting room for the crews. Other spaces on the main floor will include the Captain's office, a Kitchen and Day Room for the crews, the maintenance area for the breathing apparatus, three bays for four emergency vehicles and support areas for the operation of the fire hall. The second floor contains a fitness facility as crews are required to participate in fitness activities daily, and dorms for two crews which are designed to permit all genders to cohabitate comfortably.

The fire hall will be occupied by a crew of four fire fighters, but as the community becomes more populous, including the new community on the South East Fraser Lands, the personnel will increase to two crews. The fire hall operates 24 hours/day 7 days/week. There are two shifts per day: 10 hour day shift and 14 hour night shift, during these times the crew must always be available for emergency calls. When not out on a call the activities of the crew are as follows:

- Daily truck checks (twice a day 8am and 6pm) Maintaining and cleaning equipment
- Preparing reports on incidents
- Public events - blood pressure clinics, hall tours, first aid classes
- Conducting Inspections in the district (inspectable properties only, such as multi-residential and commercial buildings)
- Hydrant Inspections
- Updating their knowledge and skills through study and drills
- Maintaining their personal fitness
- Preparing meals/eating, general housekeeping.

Scheduled activities:

- At the beginning of each shift the fire truck is checked (pre-trip inspection) and equipment on the truck is deployed as required for checking.
- Drills (simulations for training)
- Inspections
- monthly generator check

Unscheduled activities:

- Emergency calls Code Three - immediate and fast response is required, lights and sirens are required to be on to alert traffic; the Captain will use judgement at all times, particularly at night, to limit the use of sirens to when needed for safety.
- Emergency calls Code Two - immediate response but no lights and sirens required.

Although it is impossible to predict the future, we can report the type of activity experienced at this fire hall:

FH 5 Yearly responses

Medical	945
Fire Alarm	251
Public Service	141
False Alarms	132
Motor Vehicle Accidents	125
Fires with Damage	39
Border Coverage	30
Public Hazards	15
Hazardous Materials	14
Other	47
Cancelled	181
TOTAL	1920

Times of responses:

Peak times: 1 pm to 10 pm with 5pm as the busiest

Slowest time: midnight to 7 am with 5am been the slowest

Noise

There is always a concern with noise related to the fire hall, below is a list of the main noise-producing elements/activities and the plan to mitigate the noise:

- The sirens are only used outside of the hall and the Captain will use judgement at all times, particularly at night, to limit the use of sirens to when needed for safety.
- The truck exhaust fan will be equipped with a silencer (this hall already has this equipment, it is anticipated that there will be a small improvement with the new equipment). This fan operates when the truck is turned on inside the building and for about 5 minutes after the truck has left.
- generator - the existing hall does not have a generator, but current standards require one. It will be located in the basement and sound attenuation will be designed by an acoustical engineer. The generator will operate when there is a power interruption and for monthly checks.
- compressor - a compressor is needed to support the maintenance of the Self Contained Breathing Apparatus as well as for the repair of equipment and to maintain tire inflation on the vehicles. The compressor will run intermittently during the day. It is located in a room in the basement and it will be built with sound attenuation as designed by the acoustical engineer.
- Truck noise - see scheduled activities above, this will be similar to the current activities on site.

Garbage & Recycling

Garbage and recycling will be done through residential pick up services - this is the case for all fire halls.

4. YWCA Housing

This is an ideal location for family housing. There are two primary schools and one high school in easy walking distance, the library and supermarket are across the street at Champlain Mall, two community centres are about one km away, and there are several parks nearby, and, two bus routes have stops nearby.

The Housing portion of the building consists of an entrance from the SE corner of the site, and floors 3 to 6 which contain 28 2-bedroom suites and 3 3-bedroom suites. An Amenity Room with a large outdoor patio is proposed for the third floor, as well, a rooftop outdoor Amenity Space is designed to include a picnic area, a children's play area and opportunities for urban agriculture. Five secure parking stalls are provided under the building while one exterior space is off the lane. Secure bicycle storage is provided on the parking level.

The YWCA is committed to supporting the residents with on-site programs and staff. These programs will only be offered to the residents. Staff will consist of one full time Coordinator, one part time legal educator and one part time building manager.

Garbage & Recycling

Garbage and recycling will be done through commercial pick up services from a fenced area dedicated to the housing and located along the lane.

5. Rezoning Request

The site is presently zoned CD-1. The applicant is requesting to rezone only this property to a new CD-1 to reflect the uses and design needs of the proposed project.

The site falls within the Victoria Fraserview Killarney Community Vision area. It provides two significant community benefits: a renewed fire hall, and 31 units of Social Housing.

Requested Variance

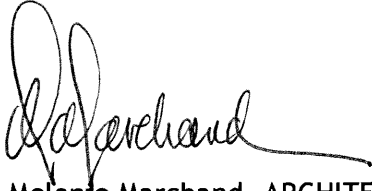
The Parking Bylaw is hard to interpret since the zoning for the property is an existing CD-1. The parking proposed for the Fire Hall has been established by the Fire Chief as 8 spaces; the parking proposed for the Social Housing is 6 spaces, all as outlined in the report by Bunt & Associates, dated January 28, 2015.

6. Design Rationale

The existing zoning permits the redevelopment of the fire hall but it did not anticipate a joint use project of this type resulting in this rezoning application.

The area south of 54th is entirely governed by a CD-1 that described the desired built-form of a number of properties, it was approved in 1962. The zoning of the adjacent area north of 54th is RS-1 single-family; the balance of the existing CD-1 zone in which the project is situated comprises various forms of multi-family buildings - generally townhouses and two-storey multi-unit residences.

This site is ideally located for an increase in density as it is at a busy intersection on arterial streets, adjacent to a local shopping area in the mall across the street, a Library is across the street, and it is on two bus routes (26 & 49). Both parts of the project have public benefit, and the Community has shown a good level of support to the preliminary design.



Melanie Marchand, ARCHITECT MAIBC
Project Manager

tel: 604.873.7851

fax: 604.871.6084

melanie.marchand@cancover.ca

MM/

<none>