

BUILDER INSIGHT



Bulletin No 6 | 330 Goldstream Avenue

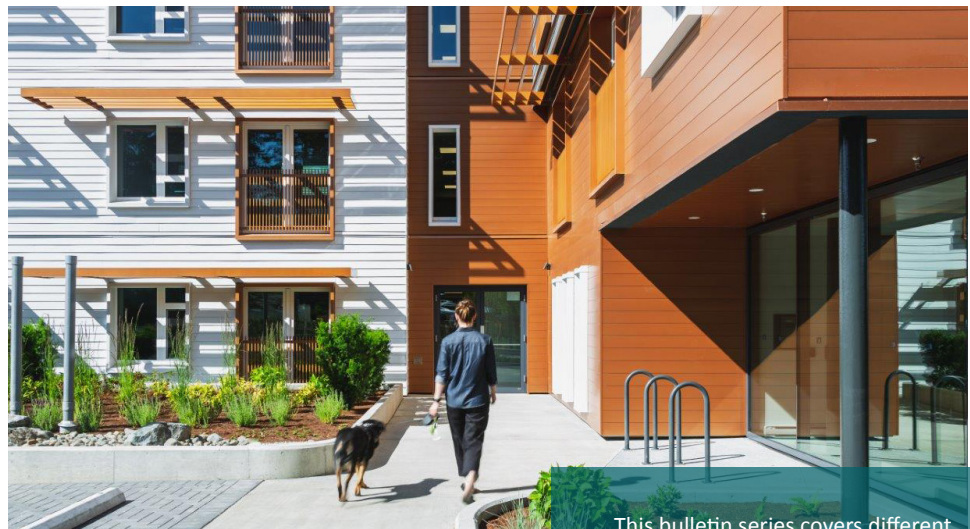
Regulatory Perspective – High-Performance Social Housing Project

Located in the City of Colwood in the Capital region of Vancouver Island, 330 Goldstream Avenue comprises 102-units of nonmarket housing for individuals, couples, and families with low-to-moderate income.

Developed by the Greater Victoria Housing Society (GVHS) and funded by BC Housing, the six-storey wood frame building comprises 6,121m² (65,862ft²) of gross floor area over two storeys of parking. The building accommodates a range of unit sizes – 50 studios, 39 one bedroom, one two bedrooms and 12 three bedrooms.

City of Colwood

The City of Colwood was the Authority Having Jurisdiction (AHJ) for the 330 Goldstream project. The City is a progressive municipality that is open and committed to supporting owners and project teams proposing innovative projects through the regulatory process.



330 Goldstream Main Entrance.

Photo courtesy James Jones in media publications
& @jamesjonesphotos on Instagram

This bulletin series covers different aspects of this innovative social housing project. Find them all in the BC Housing Research Centre Library.



FACTS AND FIGURES

Construction timeline:

January 2019 – May 2021

Construction budget:

\$18.99m

Residential units:

102

Site area:

3,820m² (41,103 ft²)

Total Gross Floor Area:

8,323m² (89,555 ft²) inc. Parking

Gross Floor Area, Residential:

6,121m² (65,862ft²)

Building Height:

23.9m (78.4ft)

Occupancy Classification:

BCBC 2012, Group C- Residential (6 levels), Group F3 – Garage (2 levels)

PROJECT TEAM

Owner:

Greater Victoria Housing Society

Architect:

Cascadia Architects

Envelope and Energy modelling:

RDH Building Science

Structural Engineering:

RJC Engineers

Building Code and fire science:

GHL Consultants Ltd.

General Contractor:

Kinetic Construction

Timber and prefab. installer:

Ron Anderson & Sons

Timber panel fabricator:

ZyTech

Siding contractor:

Brytar Contracting

Research management:

Scius Advisory

Lean coach:

Shift2Lean

Video, webcam and photography:

Multivista

The city worked constructively with the 330 Goldstream project team. The owner and consultant team commended the approval process as a relatively smooth.

Early adoption of the BC Energy Step Code

330 Goldstream was designed to meet the BC Energy Step Code level 4 – the highest level for multi-unit residential projects. Colwood Council adopted the BC Energy Step Code starting December 1, 2021, after the project was finished. 330 Goldstream served as an important demonstration project for the community.

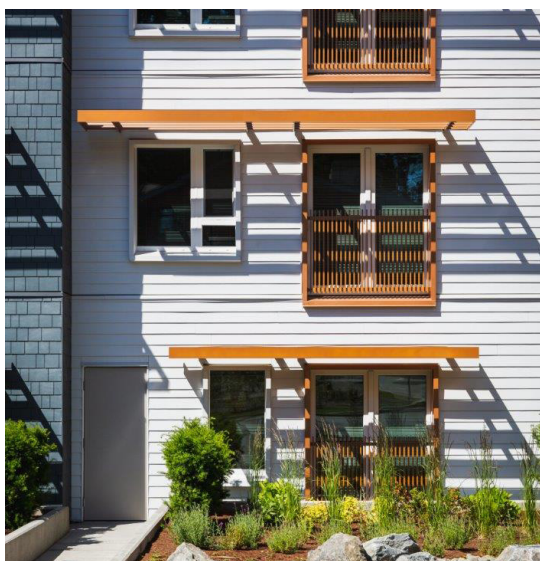
Alternate solution

330 Goldstream is a six-storey light wood frame building. When the doors opened in May 2021, it was the tallest building in Colwood built with combustible construction. The building’s height exceeded the reach of the city’s firefighting equipment, requiring an alternative sprinkler solution.

Site constraints

The project had to address challenging site constraints arising from the subdivision configuration which effectively landlocked 330 Goldstream in the middle of several lots. The only access was a 7m (23') wide driveway entrance shared with a neighboring health centre.

330 Goldstream Permitting Timeline	
2017	330 Goldstream consultant design start
October 2017	Development Permit (DP) submission
May 2018	DP revisions submission
	Building Permit (BP) submission
July 2018	City of Colwood: DP issued
June 2018	BP revisions submission
December 2018	City of Colwood: BP issued
January 2019	Construction commences
May 2021	Project substantial completion
	Occupancy Permit issued
June 2021	Occupants start to move in



The building’s features and envelope strategy highlight how the adoption the BC Step Code performance targets can positively impact multifamily residential buildings.



330 Goldstream provides direct access to the Galloping Goose Trail, which connects Colwood to neighboring municipalities, including Victoria. Photos courtesy James Jones in media publications & @jamesjonesphotos on Instagram

330 Goldstream Permitting Process

After subdivision of the property was complete, the 330 Goldstream project was required to apply for a development permit before embarking on building permit approval. The DP process took 9 months. However, the collaborative nature of the process meant that the city allowed the two applications to overlap with the building permit submission being made 3 months prior to formal development permit approval. Overall, the permit approval process took 14 months from development permit application in October 2017 to issuing the building permit in December 2019.

The development application process for 330 Goldstream began with an initial review by staff. A development panel was convened that brought all the relevant city planners, engineers, inspectors, Fire Marshall, and others together to discuss and coordinate the city's response to the application. The project team were then invited to present to the panel, ensuring that the key discussion points and decisions were heard and agreed by all the key decision makers at the same time.

This collaborative approach between the city and the project team meant that the development permit process was reasonably quick and efficient in terms of administration time. With a good understanding of the project early on, the city's collaborative process also meant that the building permit application could not only be submitted early, but also be processed quickly as many of the senior city managers with signing authority were involved in the development panel. The building permit approval process took 6 months.



330 Goldstream utilized prefabricated light wood wall panels.
(Source: Multivista)

Permit Lessons Learned

City staff capacity constraints

Like many BC municipalities in the late 2010's, the City of Colwood experienced a surge in development with 100-150 additional permit applications submitted to the city each year. At the time of the 330 Goldstream permitting process, Colwood witnessed an increase in new construction development from \$79M in 2017 to \$149M in 2018.

However, staffing had not grown at the same pace. The city appreciated active applicants such as the team for 330 Goldstream, who worked closely with city staff early to help them understand the project's application.

Regulatory flexibility

At the time of 330 Goldstream's development process, the city did not offer specific incentives for affordable housing projects or for innovative energy efficient design. However, the city did provide some Development Cost Charge (DCC) relaxations and design flexibility that helped to address the site constraints. This was possible because Greater Victoria Housing Society and Cascadia Architects worked cooperatively early on, allowing the city staff to understand the unique challenges of the project and support the development of the site-specific solutions.

Prefabrication and wood construction

City staff were aware of the environmental benefits of wood and of the time and cost advantages of prefabrication. The City of Colwood is a one of twenty-one municipalities participating in a tall wood demonstration initiative being organized by the Province of BC. While 330 Goldstream is only six storeys, it serves as an important stepping-stone, encouraging discussions about prefabrication, site logistics and, importantly, firefighting responses. City staff encourage developers, owners and project teams to bring innovative wood solutions into their office for discussion as early as possible to determine how the city can support the next affordable, wood housing tower.

Owner’s and Architect’s Perspectives

The development and building permits for 330 Goldstream were prepared and submitted by Cascadia Architects. Greater Victoria Housing Society (GVHS) and Cascadia were pleased with the City of Colwood’s enthusiasm for the affordable housing project. Despite the complexities, the architects found that the permitting process quite typical for a BC building authority. Cascadia Architects noted that: “working with Colwood was quite easy throughout the process”. However, GVHS and Cascadia highlighted challenges with the subdivided site.

Site challenges

The 330 Goldstream project is in a densifying multi-family neighborhood behind the Pacific Centre for Wellbeing located at 324 Goldstream Avenue, which was completed in 2017. When the property was sub-divided for the health centre, the new 330 Goldstream Ave lot was formed as a “panhandle”, a configuration not generally favoured by the City of Colwood. This subdivision was only allowed on condition that “every unit constructed on the land is affordable housing” (Colwood Land Use Bylaw 151, 1989 – Consolidated Version, Section 7.5D). For GVHS, this meant the purchase of the site did not require rezoning, which the City of Colwood estimates saved the project about 1 year. However, the landlocked site caused several challenges.

During design, the consultants needed to shift the building south-east to avoid a service easement on the tight site. The site sloped steeply to the north which

required the consultants to cleverly design the parkade access to minimize the amount of concrete wall exposure while using the advantages of the slope to minimize excavation. Cascadia designed patterns on the parkade exterior walls and created portals on the parkade’s north elevation to add interest, bring in fresh air and daylight.

The 330 Goldstream site also suffered from major water ingress from the higher health centre site. This, combined with a generally high water table in the area, necessitated both temporary water pumps during construction and a redesign of the site water management civil works with the addition of sump pumps.

Feasibility and risk analysis

While GVHS acquired 330 Goldstream’s land at a good price, the site challenges added considerable cost and time to the construction process. In hindsight, GVHS noted that 330 Goldstream really needed to be considered an “urban site” due to the proximity of neighbouring sites. This required the team to build a temporary access road, which constrained access for excavations and sloping, and limited space for hoarding and construction sequencing (something prefabrication is sensitive too).

Both GVHS and the contractor, Kinetic Construction, agree that the issues arising from the 330 Goldstream’s site serve as a reminder of how important thorough and detailed assessment at the time of land purchase, and during pre-construction by the contractor, is for project success.



330 Goldstream is a “panhandle” site with only one access. Not a site that is typically favoured by the City of Colwood.



Parkade feature wall and large daylight portals. (Source: Multivista)

Building Authority Perspective

City of Colwood staff working on 330 Goldstream’s permitting process generally felt that the process went relatively smoothly because GVHS and Cascadia Architects engaged with city staff early and constructively.

Information continuity

The city’s collaborative internal processes – exemplified by the review panel of all key staff that was convened for the 330 Goldstream project – helped to ensure information continuity throughout the process and allowed city staff to assist the project team efficiently from start to finish. The design intent and evolution was communicated through regular and timely two-way consultation between the city and project team.

Tackling project constraints early

Starting discussions early with the city ensures the project team was working with the latest and best information from the city available. The firefighting height limitations and the service easement for the site access could have been unpleasant surprises. Working with the city to identify these constraints during permit application submission minimized the need for significant changes had the design matured without these constraints properly factored into the project.

Collaborative approach to permitting

City staff believed that a collaborative approach to permitting results in a more constructive, less adversarial “user experience” to permitting. For small communities like Colwood with limited staff and resources, this is vital for ensuring larger projects have their complex requirements identified and addressed in a timely manner while streamlining internal administration processes for very busy staff.

Universal definition for affordable housing

City staff noted that there may be misunderstanding over the definition of “affordable housing”, leading to confusion across the market. The city understands that a larger discussion about updating the definition of affordable housing in BC and Canada is already happening. However, staff suggested that a BC-based definition would be helpful for defining and developing targeted policy tools to encourage more affordable housing like 330 Goldstream.

Acknowledgement

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