Design & Relaxation Rationale

Proposal

This development permit application is for a six-storey rental building at 1595 West 2nd Avenue - the northeast corner of West 2nd Avenue and Fir Street. The building contains five levels of residential rental above local-serving retail and restaurant space on the ground floor and contains three levels of underground parking below. Access to the parkade is from the southeast corner off of West 2nd and commercial loading is integrated into the building at the northwest corner of the building off of Fir Street.

The site was zoned by the City of Vancouver through a by-law to amend the False Creek Area Development Plan for Area 10B, as opposed to an owner initiated rezoning process that involved consultant drawings and analysis. Through detailed design development, key objectives have been met, and discretionary provisions are being requested with respect to loading, FSR exclusions and tree retention which are outlined below.

To meet the objectives of the False Creek Official Development Plan (ODP), and the amended False Creek Area Development Plan for Area 10B within, this project offers 20% of the residential floor area towards units that are below market rates and consistent with the City of Vancouver's Moderate Income Rental Housing Pilot Program (MIRHPP). Overall, the proposal seeks to add 100 new secured market and affordable units to Vancouver's rental supply, including 20 units dedicated for moderate income households. The project also offers a variety of unit types including 5 studios, 57 one-bedroom apartments, and 38 family-oriented two-bedroom units.

Density & FSR Exclusions

Most important to the project's viability, the project has been designed to be within an FSR limit of 2.33, or 82,000sf. This generally conforms to language in the CoV Referral Report, dated March 17, 2020, which states "the total floor area, at and above the ground level, would be approximately 7,618.05 sq. m (82,000 sq. ft.), this equates to approximately 2.3 FSR."

However, the language surrounding density in the subsequent By-law to amend the False Creek Area Development Plan, enacted July 24, 2020, drops any mention of FSR and includes a gross floor area (GFA) cap that does recognize typical FSR exclusions which reward good design practice, such as accommodating storage in suites or thickening walls for increased energy performance. The bylaw document states "the gross floor area for all uses must not exceed 7618.05 sq. m (82,000 sq.ft.)" and that the gross floor area includes "all typical floor area exclusions such as storage areas...". In contradiction, the by-law does go on to state that floor area exclusions associated with storage space must also have 20% of the excluded floor area go towards MIR units - suggesting here that floor area exclusions are still allowed.

In any case, it is essential for this project to work with typical FSR incentives and limitations with respect to density, as opposed to a GFA cap which is punitive toward design measures that would normally be awarded FSR area exclusions. To this end, this proposal would qualify for, and is seeking FSR exclusions for, the following:

- In-suite storage rooms.
- Amenity Room on Level 2.
- Kitchen exhaust shafts on Levels 2-6.
- 1% of total area in buildings four to six storeys where the majority of exterior wall space contain at least 100mm of thermal insulation in total thickness (Zoning and Development By-law Section 10.11.1)
- Floor area exclusions for exterior wall thickness (Zoning and Development By-law Section 10.11.2 and 10.11.3). Refer to Building Envelope FSR exclusion letter.

These FSR exclusions amount to approximately 4,244sf, and bring the proposed FSR to 2.30, or 80,768sf - below 82,000sf in terms of FSR. Therefore, we ask for discretion in allowing this project to utilize typical FSR exclusions found in the Zoning and Development By-law and related District Schedules in order to deliver this moderate-income rental project.

Lastly, due to the absence of a lane and constrained site geometry, we are proposing that the area at the ground level used for Class B loading and bicycle storage also be excluded from the computation of floor space ratio as is common throughout various commercial zoning districts in Vancouver.

For detailed statistics, refer to pages A1.01.1 and A1.01.2, and for FSR overlays, refer to A9.01 to A9.07.

Sustainable Design

This project is designed to be compliant with the VBBL Part 10 energy efficiency performance limits, and uses various energy conservation measures to achieve a sustainable design. For detailed information, refer to the energy modeling report prepared by Agua-Coast Engineering Ltd. Strategies include:

- A low-carbon energy system (LCES) design serving the commercial spaces at grade.
- Energy recovery ventilators (ERV's) in residential, amenity and retail spaces.
- Electric baseboard heat with air-conditioning in all suites.
- A window-to-wall area of less than 40%, together with high performance windows.
- High quality building materials such as masonry, composite metal panels, window-wall glazing and spandrel glass, and cementitious panel rainscreen cladding with punched windows.
- Continuous exterior insulation.
- Landscaping at grade and the amenity terraces at Level 2 and Level 7 provide trees, planters and urban agriculture which increase rainwater capture and soil infiltration.





Proposed Rental Housing Proider 1595 West 2nd Avenue Vancouver B.C. On Consultant:



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Design & Relaxation Rationale (continued)

Massing, Form & Character

The massing of the building follows a "4-and-2" typology, emphasizing a four-storey streetwall with two recessed floors above. The stepped-back upper levels decrease the scale of the building, mitigate shadow throw, and create a form that is respectful of the iconic Waterfall building to the south. This stepping also creates generous terrace space for residents on Level 5 and provides room for planters at the "flatiron" corners. The building setback at Level 5 and 6 is approximately 6'-0", which is generally considered adequate to provide usable outdoor space. Greater setbacks and terracing are provided at the east and north end corners.

In plan, following the shape of the site and prescribed setbacks, the building takes on an "L" shape which addresses the two flanking streets. The building truncates in width at the east and north ends due to the triangular shape of the site. The footprint of the ground level and the parkade fills the Lishape but still provides a north setback averaging 18 feet which is greater than the 12' required in the development area bylaw. The orientation of the L-shaped massing also helps minimize shadows which fall largely on the treed area to the north. And being on the north side of West 2nd Avenue, shadows do not affect the Waterfall building to the south.

The design concept seeks to embolden the massing with "ship-like" extended and strutted roof overhangs at the two flatiron corners which fly above the deeper terrace setbacks below. Oculus openings act as portholes to let light and air through the large overhangs. The massing is anchored at the chamfered primary corner with a 4-storey brick element and a large sweeping retail canopy. The building extends north and east from the chamfer with a lighter feel both in colour and materiality, using a combination of cementitious panels and window wall above a 1-storey brick base. The linear street elevations are interrupted by additional 4-storey brick accents which break up the dominant Level 4 roof overhang to provide further relief in the massing. The base of the building incorporates an interval of portal openings between brick pilasters utilizing high quality materials and canopy protected glazed storefronts. The penthouse levels are highlighted with window-wall and spandrel glass to provide a lantern effect which spills down at the southeast corner to give the restaurant and its recessed seating terrace a unique identity.

On the north side of Level 2, the amenity room is co-located with outdoor space which offers seating areas and children's play space surrounded by planters and trees. On the roof, there is additional outdoor amenity space featuring several urban agriculture plots and gathering spaces surrounded by continuous planters. Together, the rooftop spaces offer generous outdoor space to building inhabitants and are fully accessible. Refer to the Landscape drawings for further details.

The parking access is at the east end of the site to minimize the impact on the continuous retail frontage and to minimize the need for exterior ramps. The grade change along West 2nd also provides opportunity for a short driveway into a "hole in the wall" parkade entry below the restaurant and facing east away from the pedestrian frontage and away from the Waterfall building. On the north side of the building, several trees need to be removed due to the siting of the building and landscaped exit paths.

Landscaping, Site Pathways and Tree Retention

This project seeks to enhance the site and building with landscaping at grade and on the major building steps and terraces. Maximum care has been taken to retain as many existing trees as possible while respecting the required landscaping buffer, SROW's, future transit requirements and the connection to the neighbouring Senakw development to the northwest. In addition, trees that do have to be removed will be replaced with new trees on a portion of the "pan handle" to the north, new street trees along Fir Street and West 2nd Avenue, and additional trees on the Level 2 landscaped terrace.

For further analysis on tree retention and removal, refer to the Tree Management Plan and Arborist Report prepared by Froggers Creek Tree Consultants Ltd. Refer also to the Landscape drawings.

Commercial and Residential Loading

The loading requirements for this site are three Class B loading spaces (1 residential + 2 commercial) and one Class A passenger space. Due to the lack of lane access and constrained site geometry, this project proposes to provide one oversized Class B loading space to be shared between commercial and residential use, and four Class A loading stalls at the P1 level (two for commercial and two for residential) in lieu of the three 3 Class B loading spaces required. For a detailed loading review and rationale, refer to the report prepared by Watt Consulting Group.





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Proposed Rental Housing Project 1595 West 2nd Avenue Appendix C.



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