

CHAMBERLAIN LOW ENERGY DUPLEX

March 28, 2019

To: Mayor Helps and Victoria City Council
 Victoria City Hall 1 Centennial Square
 Victoria BC V8W 1P6

Re: **Development Permit Application for 1068 Chamberlain Street**



Dear Mayor Helps and Victoria City Council,

This proposal is to issue a new Development Permit for 1068 Chamberlain Street. This application is for proposed changes that were included in the previous DDP No. 00275 (now retired), as well as a change from major renovation and addition to all new construction.

Our original proposal, approved in November 2017, was to modestly increase density in one of Victoria's most walkable neighbourhoods, in a manner that exemplifies efficient design and construction practices and respects the fabric of the existing established neighbourhood. The project is shaped by the following fundamental values:

- We believe that we have the skills, materials, and available technologies – *right now* - to build homes that are significantly more energy efficient, comfortable, healthy and long-lasting than most of what is being built today.
- We believe that environmental outcomes are at least as important as financial ones.
- We believe that thoughtfully designed infill is critical to supporting a walking and biking culture.
- We believe that sustainable design is compact design.

Our goal is to create housing for 2.5 families that uses less energy than the existing single family home on the property. Our intention is to live in the north half of the duplex, with extended family in the suite, and to call this vibrant neighbourhood our home for the long-term.

While the original proposal was to retain the existing home structure and complete a major renovation and addition, structural deficiencies only fully revealed and understood after stripping down the existing house made retention of the existing home as structure infeasible. The proposal has therefore been rewritten accordingly. The existing house was not a designated heritage building.

We previously submitted a Delegated Development Permit for a change to the roof shape. This current proposal includes the new roof design; the change from existing + new to all-new structure; minor window changes, and other minor changes that came through the Building Permit process and do not impact form and character. Floor areas, building size and siting etc are per the original design.

The project is mid-construction and currently subject to a stop work order until the new Development Permit is approved.

Description of Proposal:

The proposal is to construct a new strata duplex with a secondary rental suite in one half. The design is sensitive to the existing single family character of the neighbourhood. The rental suite will keep that half of the duplex affordable to families and offer additional rental accommodation in the neighbourhood. The rental suite will not be a separate strata unit.

The south half of the duplex will be a 145 sq.m. (~1560 sq.ft.), 3-bedroom, 2-storey home. The 1.5-story north half of the duplex will contain a 163 sq.m (~1750 sq.ft.) 2-bedroom main suite plus a 52 sq.m (~560

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sq.ft.) secondary rental suite in the lower level. The suite is intended as an independent rental accommodation particularly suited to multi-generational living.

Design will follow passive design principles (emphasis on super insulation, high performing windows, and airtight construction with no thermal bridging), with goals of achieving net-zero energy consumption, zero carbon emissions, and Passive House certification. The design is practical and compact, suitable for a family, and intended to be extremely comfortable and low impact. The location is highly desirable for its established character, natural beauty, proximity to high quality schools, and proximity to Oak Bay Avenue.

Materials from the existing house have been carefully retained and will be re-used for interior finishes.

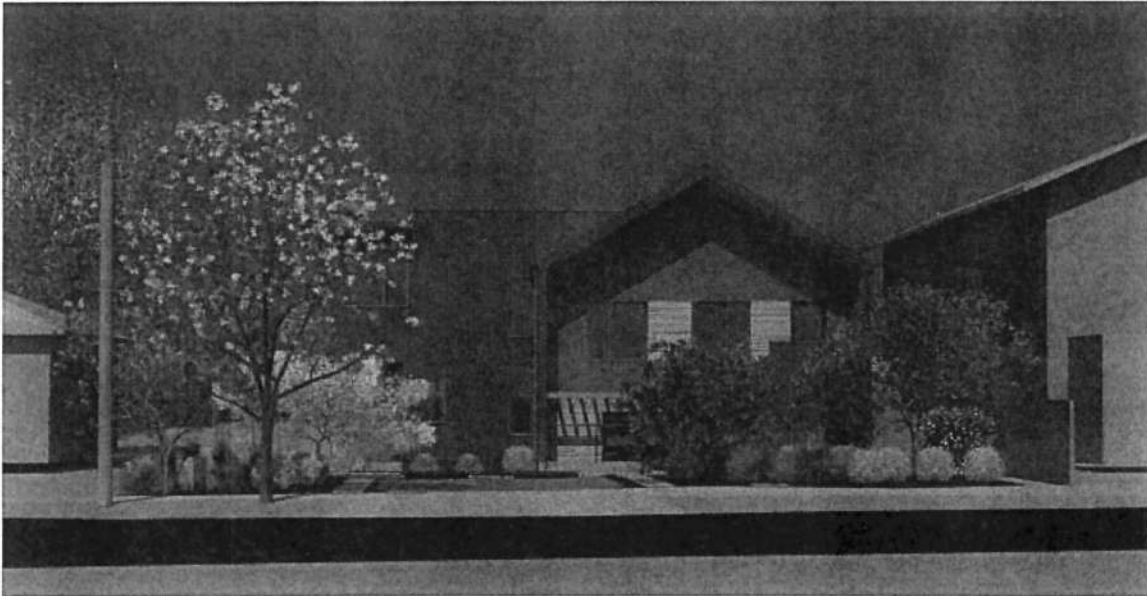


Figure 1: Rendering of proposed design

Policy Support: Land Development and Management

The proposal supports the Official Community Plan's (OCP) goal to create compact development patterns that use land efficiently. The lot is large (709.4 m²) and is the third property south of Oak Bay Avenue, adjacent to a 6-unit townhouse on the north side and a single family dwelling on the south. Our proposal will create additional housing that supports walking to Oak Bay Avenue's "Small Urban Village" economic center. The property is also a short walk to bus stops and a short walk or bike ride to neighbourhood schools.

The property was rezoned for duplex + suite as part of the original application.

The addition of the suite to the duplex diversifies the range of housing options available in this Traditional Residential neighbourhood, creating an option for extended family to remain closely connected, access amenities within a short walk, and age in place.

The immediate neighbourhood is characterized by a mixture of single family homes, house conversions, and multi-family dwellings. Many of the houses in the area have rental suites and several are house conversions.

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Policy Support: Climate Change and Energy

The proposal supports all five of the City's strategic goals around climate change and energy, as follows:

1. Increased resilience to climate change, energy scarcity and costs: By designing for Passive House certification, the new building will use very little energy. Because of the emphasis on constructing an airtight and highly insulated building envelope, the homes will also remain comfortable year-round, with very little need for additional heating or cooling. In the face of a natural disaster, the homes will stay warm longer without power.
2. Both halves of the duplex will be built solar PV ready and both will be all-electric. BC's hydro power supply has a much lower carbon footprint than combustion fuel. By building all-electric, both homes will also have the potential to generate and store all of their own power on-site.
3. The homes are sited in a location where cars are not needed. All amenities can be accessed within a short walk. Downtown is accessible by a short bike or bus ride.
4. The re-use of materials from the existing house will reduce construction waste and reduce the need for raw materials.
5. As outlined in 2. above, both sides of the proposed duplex will be solar PV ready, increasing Victoria's access to clean, renewable, and efficient energy sources.

Neighbourhood Consultation:

Neighbours were consulted extensively during the original rezoning/DP application process, with unanimous support expressed by both the public and council at the public hearing. Since then, we have sent updates directly to those neighbours who wished to be informed of such – including notifying them of this process. Project progress has also been reported in detail on the project blog, stretchdeveloper.com. All comments received express continued support for our project.

House Design:

The new building is designed to be extremely energy efficient and to use low embodied carbon materials to the extent possible. Significant resources are focused toward making the building envelope of the structure highly insulated and airtight. High efficiency heat recovery ventilators will be installed to ensure very high quality distributed ventilation air.

The design strategy presents a contrast between the two duplex halves, to distinguish the two homes while referencing the gable roof shape that is so common in this neighbourhood. The original design maintained the existing hip roof shape. With the need to rebuild the roof, the shape was modified to a gable roof, which is also consistent with the common typologies in the neighbourhood, but also improves the design of the structure, simplifies the roof transitions, and improves its environmental performance by reducing heat loss through the simpler shape.

The design uses vertical siding, cedar accents and stucco that reference traditional material choices evident on the block. Deep window reveals introduced by the thicker Passive House walls add visual interest and depth to the facade. The roof slope of the new addition is nearly flat, to minimize intrusion on neighbouring properties, facilitate the addition of solar panels, and allow maximum sun penetration to the north half of the duplex. These features, along with welcoming, street-facing entries for both halves of the duplex, adhere to the Neighbourliness Guidelines for Duplexes.

Refer to Appendix C for a description of the architectural rationale for the design.

Variations:

The proposed duplex meets the R2 requirements with the following requested variance:

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A. Rear yard setback: from 12.8m to 10.26m to accommodate a deck on the north half.

This is the same variance requested and granted on the original proposal. The original proposal also requested a variance for front yard parking, consistent with the R1-G preference. We understand this is no longer considered a variance.

Project Benefits:

Economic:

- Locally owned and financed construction project
- Infill development supports economic vitality of the Oak Bay Village Small Urban Village

Social:

- Improved streetscape
- Addition of rental housing (suite)
- Facilitates multi-generational living and aging in place
- Educational opportunities for sustainable construction practices
- Site selection that supports walking and biking culture

Environmental:

- Building material re-use
- Site selection that supports biking and walking
- Permeable paving for parking strips and patio space
- Landscaping that prioritizes edibles, natives and plantings with minimal irrigation demand
- High efficiency plumbing fixtures
- All LED lighting
- Ultra low energy consuming buildings (targeting net zero energy, zero carbon emissions, and Passive House certification)

Conclusion:

The proposed project prioritizes environmental sustainability, carbon reduction and energy efficiency. It creates a modest increase in density in keeping with the OCP's goal to provide additional housing in the city's most walkable/bikeable neighbourhoods. The design is sensitive to the existing single family character of the neighbourhood.

Thank you for your thoughtful consideration of this proposal.

Best Regards,



Christy Love and Matthew Mahoney
Owners/Occupants of 1068 Chamberlain Street

APPENDIX C: Architectural Rationale

The 1000 block of Chamberlain Street is comprised of an eclectic mix of character homes. Existing homes range from 1 1/2 to 2 1/2 stories in height and exhibit a broad range of architectural styles reflecting their year of construction. The majority of homes draw broadly on traditional house forms and materials including horizontal wood siding, stucco, and they generate visual interest with expressed massing and projecting roof fascia and eaves.

Existing houses reflect their unique history of addition and renovation work identifiable through changes in material and style.

Roof profiles are predominantly hipped and gable styles, often with complex dormers. Deep overhangs and eaves expressed with dentil patterns contribute to the character of the homes. Asphalt shingles are the dominant choice.

Authentic materials predominate with ornate timber posts and railings in conjunction with lapped wood siding, stone and stucco. Occasional insertions of brick and galvanized, corrugated metal add to the eclectic flavour of the neighbourhood.

Colour is used extensively in the neighbourhood with vibrant hues, contrasting trim and natural accents. Grades vary considerably along the block with several houses and front yards elevated above the grade of the street. The natural grade in the zone of the project is moderately flat.

Dense, mature landscaping is the dominant feature of the street. Several houses are virtually concealed by front-yard vegetation. Grass appears selectively in front yards along with a mix of bed planting, shrubs, mature trees, textured paved areas and natural rock.

The proposed house offers a contemporary interpretation of the patterns and forms of the street. The intention of this project is to honour the architectural legacy of the neighbourhood with homes that reflect contemporary values and design. This is achieved through sympathetic scale, texture and massing.

Additional wall thickness will introduce deep reveals at window and door openings, enhancing the façade of the building with deep shadow lines.

The north half will be clad primarily in stucco, with cedar accents, similar to many homes throughout the neighbourhood.

The south half stands two stories with a grade entry and flat roof. The linear shape is a response to the narrow property. The south side yard setback has been increased to mitigate impact on the neighbouring property and existing mature tree and to create useable yard space adjacent to the house. The roof, which presents a parapet to the street, projects to shade south facing windows while maximizing solar penetration to the existing house to the north.

Front yard setbacks are aligned to adjacent houses. The characteristically shallow front yards of Gonzales contribute to the friendly character of the neighbourhood.

Similar to other houses in the neighbourhood, the massing of the building will be expressed to create visual interest and to improve connection to the front garden and the street. In addition to deeply expressed windows and extended roof soffits, the entries of both houses are expressed with massing and materials. The projecting mass of the north half's porch is enhanced with a projecting roof overhang and sculptural concrete steps. The lower entrance is defined with a shallow roof overhang and partially enclosed with a timber pergola. The alcove entry of the south half is recessed, creating a sculpted massing

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of the house's façade and a semi-enclosed, landscaped courtyard entry. A large street-facing window announces the entry.

The addition will be clad with fibre cement siding due to code non-combustibility requirements.

The houses are conceived together with their front yard landscaping. Entry, porch, stoop, windows, surface treatments, planting, fences and screens work together to create gardens that are beautiful, functional and seamlessly integrated with the homes.

Colour is chosen in the context of natural wood accents and front-yard landscaping of both houses. The dark French-grey hue mediates between the industrial sensibility of the metal roof and gutter and the natural tone and texture of natural wood, landscape and permeable paved surfaces. Vibrant colours are introduced in the glazed front doors of the houses and basement suite as a contemporary reference to the traditional use of colour in the street.
