bunt &associates

November 24, 2020 04-20-0358

Laura Fader
Wexford Developments LP
#290 - 700 6th Ave SW
Calgary, AB
T2P 0T8

VIA E-MAIL: Ifader@wexforddevelopments.com



Dear Laura:

Re: 530 West Bay Terrace, Esquimalt, BC - Residential Development Parking Study

Please find attached our Parking Study for the proposed residential development at 530 West Bay Terrace for circulation to the Township of Esquimalt. We support the proposed parking supply as long as a robust Transportation Demand Management plan is in place.

Please let us know if you have any questions or comments regarding the enclosed report.

Yours truly,

Bunt & Associates

Simon Button, P.Eng., M.Eng., PMP

Transportation Engineer

1. INTRODUCTION

1.1 Study Purpose & Objective

Wexford Development Ltd. is proposing to develop a rental residential building at 530 West Bay Terrace in Esquimalt, BC. The site currently comprises of five single-storey apartment buildings containing a total of 20 rental units. The applicant is planning to right-size its vehicle parking supply to better align with the anticipated parking demand and to accommodate existing trees on the property which limit the footprint of the parkade.

This study assesses the suitability of the proposed vehicle parking supply by reviewing the local context and the anticipated parking demand, in addition to recommending a parking space allocation and a Transportation Demand Management strategy.

1.2 Development Details

The proposed development will consist of 119 rental units, 119 secure bicycle parking spaces, and 80 vehicle parking spaces. Figure 1 displays the site location at the southwest corner of the Dunsmuir Road & West Bay intersection with existing mid-rise residential buildings to the west and south.

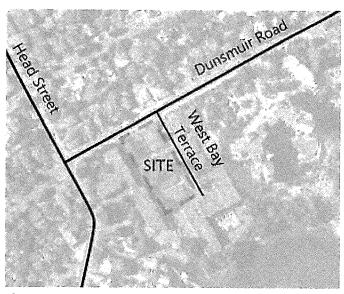


Figure 1: Site Location

1.3 Esquimalt's Bylaws and Policies

The Township's Parking Bylaw requires 1.3 vehicle parking space per dwelling unit. The Bylaw does not differentiate between different types of residential uses or geographic location. This rate equates to a minimum of 155 parking spaces for the proposed 119 units. The Bylaw also requires 1 of every 4 required parking spaces in Multiple Residential Zones to be reserved for visitors. Therefore, the Bylaw requires 116 residential spaces and 39 visitor spaces.

The development includes 80 spaces which equates to 0.7 spaces/unit and is 36 spaces below the minimum Bylaw amount.

The Township's Official Community Plan (OCP) notes that the Township should "support parking reductions where supported by a parking study". The Township's Parking Bylaw has not been substantially updated for over 20 years and the Township's 2019-2023 Strategic Priorities includes "developing a parking strategy including a review of the Parking Bylaw" as the first action item in the document. Therefore, many components of the Parking Bylaw could be out of date and not align with modern transportation planning principles and parking policy.

Providing the right amount of vehicle is key to creating a positive mode share shift towards more active transportation and transit use which has a lower environmental impact and public health costs compared to vehicle travel.

1.4 Study Organization

This study is organized as follows:

- Section 2 summarizes the existing land use, transportation, and on-street parking conditions surrounding the development site.
- Section 3 reviews the suitability of the proposed parking supply in the context of parking demand at similar buildings.
- Section 4 provides recommendations regarding parking management at the proposed development and on the adjacent streets.
- Section 5 provides the development's Transportation Demand Management strategy.

2. SITE CONTEXT

2.1 Land Use

Exhibit 1 illustrates the site context. It is located at the centre of the West Bay neighbourhood which is predominately residential, however, the area around the shore is a mix of commercial and residential land uses. The development site is less than a five-minute walk to Esquimalt Road which contains a mix of amenities and the highest densities in Esquimalt. This will allow future residents to access a variety of retail and services destinations as well as employment and educational opportunities within a short walk of their home.

2.2 Active Transportation

West Bay Terrace currently does not provide any sidewalks, however, one will be constructed along the development's site frontage from Dunsmuir Road to the south end of the street (Seaside Place apartments at 531 West Bay Terrace). Sidewalks are currently provided on both sides of Dunsmuir Road and Head Street which, in combination with crosswalks on all four legs of the Dunsmuir Road & Head Street intersection, provide clear walking routes through the West Bay neighbourhood and to Esquimalt Road.

Esquimalt Road currently has painted bike lanes for the majority of its length, providing east-west connection through Esquimalt, including linking to the E&N Trail and the City of Vitoria to the east. The Township is currently developing an Active Transportation Network Plan which will identify locations for active transportation infrastructure improvements. The site is within a reasonable 4-kilometre (15 minute) bicycle of all parts of Esquimalt and Downtown Victoria making in a suitable transportation mode for many day-to-day activities.

2.3 Transit

Bus route #25 has eastbound and westbound stops on Dunsmuir Road, directly west of the development site. This route operates at limited service frequencies, connecting the site through Esquimalt to View Royal, Downtown Victoria, and up Cook Street to McKenzie Avenue. On Esquimalt Road (a 5-minute walk), route #15 provides high-frequency service (up to every 10 minutes) on Esquimalt Road through Downtown Victoria to the University of Victoria. The combination of these routes provide direct access through most of Esquimalt, Victoria West, Downtown Victoria, and to the University of Victoria.

2.4 On-street Parking

On-street parking is currently allowed on the east side of West Bay Terrace and the north side of Dunsmuir Road in proximity of the development site. No parking regulations are posted (i.e. maximum length of stay) and was observed to be heavily used.

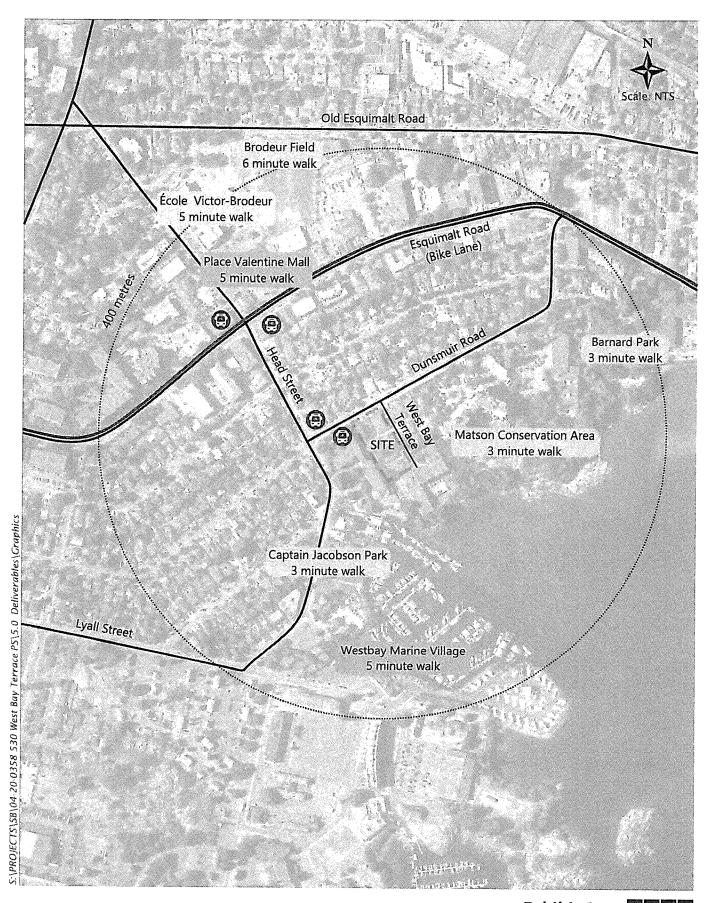


Exhibit 1 Site Context



PARKING REVIEW

Bunt collected and reviewed empirical vehicle parking data to assess the suitability of the proposed parking supply of 0.7 spaces/unit.

3.1 Trends in Off-street Parking Requirements

Many municipalities are updating their off-street parking requirements to reflect current/future parking demand and to incentivize more sustainable forms of transportation. Within the Capital Regional District, the City of Victoria updated its parking requirements in 2017 which includes reduced minimum requirements for rental apartments as opposed to strata units (since renters have a lower vehicle ownership rate than condo owners) and for proximity to commercial corridors or village centres.

Multiple other municipalities (including Esquimalt) have identified the need to update their off-street parking requirements in planning documents. Requiring large quantities of vehicle parking incentives vehicle ownership and use, has negative environmental impacts, limits the economic suitability of development sites, and can negatively impact urban design. Some municipalities have removed minimum vehicle parking requirements altogether, while some have removed them in key locations only as requiring vehicle parking does not align with their transportation and land use visions.

3.2 Resident Vehicle Ownership

Table 1 summarizes the building details and observations at a variety of residential buildings in a similar land use and transportation context to 530 West Bay Terrace. The first two locations listed are directly adjacent to the development site whereas the two locations on Esquimalt Road are only a short 400-metre walk away at the Dunsmuir Road intersection. The three Saanich locations are on Quadra Street between McKenzie Avenue and Tattersall Drive. They have good transit access and are within walking distance of a variety of destinations but are not in a village centre environment.

Table 1:	Vehicle	Ownership	Estimates

ADDRESS	TENURE	UNITS	VEHICLES/UNIT	SPACES/UNIT
Esquimalt				······································
531 West Bay Terrace	Rental	93	0.9	1.1
885 Dunsmuir Road	Rental	77	0.9	1.0
801 Esquimalt Road	Rental	32	0.7	1.0
803 Esquimait Road	Rental	27	0.7	1.4
Saanich				
3905 Quadra Street	Rental	39	0.8	1.3
1100 Union Road Victoria	Strata	39	0.8	1.3
3800 Quadra Street	Strata	31	0.8	1.3

The vehicle ownership rates were estimated by counting the number of parked vehicles in the late evening and then increasing the values based on a time-of-day factor from the Institute of Transportation Engineers Parking Generation Manual. This adjustment factor is intended to account for people that typically park their vehicle on the property but were not parked during the observations.

In addition, the on-street parking on West Bay Terrace and Dunsmuir Road was near fully occupied throughout the observations of the two adjacent buildings. Therefore, these parked vehicles were assumed to be related to 531 West Bay Terrace and 885 Dunsmuir Road as they are the largest adjacent buildings the estimated vehicle ownership rates shown in Table 1.

The seven buildings consistently have an estimated vehicle ownership rate of 0.7-0.9 vehicles/unit. The two buildings adjacent to the development site have an estimated vehicle ownership rate of 0.9 vehicles/unit whereas the two buildings on Esquimalt Road (which have the most convenient locations in terms of transit and active transportation) have the lowest rates at 0.7 vehicles/unit.

3.3 Visitor Parking Demand

The Township requires a high level of residential visitor parking compared to other municipalities in the region at 0.33 spaces/unit for multi-unit residential uses. Municipalities which have recently updated their off-street parking requirements typically require 0.10 visitor spaces/unit, however, the City of Vancouver requires 0.05 visitor spaces/unit.

Bunt's previous experience for similar municipalities across Greater Victoria and Greater Vancouver indicate that a visitor parking supply rate of **0.05 to 0.10 spaces/unit** is appropriate for most circumstances including the proposed development. This recommendation stems from the Metro Vancouver Residential Apartment Parking Study *I* which found that visitor parking demand never exceeded 0.06 vehicles per dwelling unit during the study period at any of the study locations. **Table 2** summarizes Bunt's direct peak visitor parking observations in Greater Victoria. The observed peak visitor parking demands including on- and off-street parking did not exceed 0.7 vehicles/unit and rarely exceeded 0.05 vehicles/unit.

¹ The visitor parking demand results from the Metro Vancouver Residential Parking Study was obtained from suburban sites in Burnaby, Port Coquitlam and Richmond which had varying levels of transit service. The visitor parking demand was not correlated with proximity to the Frequent Transit Network; in fact, the site with the worst transit service had the lowest peak visitor parking demand of 0.02 visitor vehicles per dwelling. Therefore, the results from the Metro Vancouver Residential Parking Study are seen as applicable to the proposed development.

Table 2: Peak Visitor Parking Observations

TENURE	UNITS	VEHICLES/UNIT	SPACES /UNIT
Rental	93	0.04	0.04
Rental	77	0.04	0.08
Rental	32	0.07	0.13

Strata	55	0.04	0.18
Strata	73	0.03	0.11
	Rental Rental Rental Strata	Rental 93	Rental 93 0.04 Rental 77 0.04 Rental 32 0.07 Strata 55 0.04

4. RECOMMENDATIONS

The proposed development is located within walking/cycling distance of a large number of destinations and also has good access to the regional transit network with frequent transit service located within a 5-minute walk and less frequent service directly adjacent to the development site.

The development is right-sizing its vehicle parking supply by providing parking at similar rates as observed at comparable buildings. The empirical data indicates that the proposed parking supply of 80 spaces (0.7 spaces/unit) can be managed effectively and is aligned with the movement towards more active transportation and transit use. A robust Transportation Demand Management plan (described in **Section 5**) should be implemented to ensure residents who do not own a vehicle are attracted to live in the proposed building.

4.1 Parking Supply and Allocation

Based on the empirical parking demand data collected, we recommend the following parking space allocation:

- 1 space for short-term pick-up/drop-off (less than 10 minutes)
- 6 spaces (0.05 spaces/unit) for visitors
- 73 spaces (0.61 spaces/unit) for residents

4.2 On-street Parking Management

The Township may consider introducing on-street parking regulations on West Bay Terrace and Dunsmuir Road with or without the proposed development at 530 West Bay Terrace. During the parking observations, the parking spaces were observed to be nearly fully occupied and have low turnover (indicating that people are using on-street parking for long-term parking). If the Township would like to achieve a lower on-street parking occupancy (to increase opportunities to find of finding a parking space) and/or to discourage long-term parking on-street, it could explore parking time limits and/or residential parking permits (among other options). Any implemented parking management measures should consider Esquimalt-wide considerations.

5. TRANSPORTATION DEMAND MANAGEMENT

5.1 Definition

TDM is defined as the "application of strategies and policies to reduce travel demand (specifically that of single-occupancy private vehicles), or to redistribute this demand in space or in time"². The objective of TDM is to reduce vehicle usage (through additional walking, cycling and transit use) and vehicle parking demand. Regional and municipal governments, transit agencies, private developers, residents/resident associations or employers can all employ TDM measures to meet these objectives.

5.2 TDM Strategy

The proposed TDM strategy will assist the development's residents and the surrounding neighbourhood have less reliance on private vehicle ownership.

5.2.1 Car Share Vehicle and Memberships

The applicant is reviewing options to purchase a car-share vehicle for the Modo Car Co-op. There are already two Modo vehicles within a 5-minute walk of the development site (see Figure 2), already making it a viable service for residents who do not own a vehicle. The applicant is also considering purchasing life-time memberships for the building which would be accessible to residents who do not use a parking space. Residents would still need to pay the hourly/distance fees for vehicle use but would not need to pay a monthly membership fee or purchase a lifetime membership to use Modo vehicles as long as they remain residents.

This initiative will both attract residents who do not own a vehicle and make living in the building without owning a vehicle easier by enabling residents to easily access a shared vehicle when needed.

If a car-share vehicle is purchased for Modo, Bunt recommends that the vehicle be placed on-street for optimal useability and marketing to nearby residents. Modo prefers for its vehicles to be located on-street for this reason and the Township's OCP supports the reservation of on-street parking for car-share vehicles.

² http://ops.fhwa.dot.gov/tdm/index.htm FHWA Travel Demand Management home page

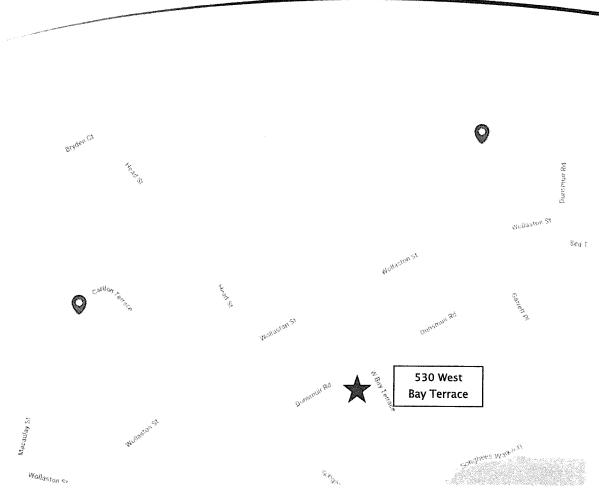


Figure 2: Modo Vehicle Locations

The Metro Vancouver Car Share Study provides some information about the reduction of vehicle ownership based on car share usage. The number of vehicles owned per household was shown to drop 27% when a Modo membership was acquired³. The study also shows that the top home-based amenity that survey respondents indicated would have them shift modes is the availability of car share vehicles. This study reinforces the premise that supplying car share vehicles for the development and/or purchasing lifetime car-share memberships will reduce the development's parking demand.

5.2.2 Secure Bicycle Parking

The development includes 119 secure bicycle parking spaces for residents to use. While the Township has not adopted bicycle parking requirements, the OCP encourages the inclusion of bicycle facilities in new developments.

http://www.metrovancouver.org/services/regionalplanning/PlanningPublications/MetroVancouverCarShareStudyTechnicalReport.pdf

All secure bicycle parking will be located at-grade, making it convenient for residents to use, without the need to bike through the vehicle parkade. The bicycle parking areas are being thoughtfully designed and are intended to have high-quality finishing's to make them inviting to residents. Electric outlets will be provided to accommodate the growing interest in electric-assisted bicycles. Finally, the provision of a bicycle repair area and washing facilities is being planned to make bicycle ownership easier.

5.2.3 Marketing Efforts & Transportation Options Brochure

Marketing efforts for the development will focus on benefits of transportation options that exist in the immediate area and how the development is providing amenities to facilitate active and sustainable transportation modes. New residents will be provided with a Transportation Options brochure as part of their welcome pack which provides maps highlighting bike amenities and nearby routes, key destinations within walking distance of the site, transit stops and routes, and the location of the proposed car share vehicle and other car share locations in close proximity.