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To: Lorne Wolinsky
Vice President, Development
Ledcor Property Investments Ltd.
1400 - 1067 West Cordova Street,
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RE: North Bluff Road - Zoning Bylaw Parking Requirements and Recommended Supply

Step One Mobility has reviewed the current drawings for the Telus site at 14780 North Bluff Road in White Rock, BC (the Project). The Project proposes an approximately 6 storey wood frame rental residential building with about 98 residential units (37.7% two bedroom or larger) as well as a Telus communications equipment area of about 501m² (5,400ft²). Ledcor is seeking an opinion on appropriate parking rates and potential opportunities to right-size the amount of parking provided on the site.

This memo provides a preliminary opinion on appropriate on-site parking supply based on several factors. This letter considers the City of White Rock Zoning Bylaw requirements and policies, data on vehicle ownership from various sources, available rental parking pricing information, local parking regulations and our experience with similar projects.

SITE CHARACTERISTICS

Automobile ownership is influenced by the ability for people to meet their daily needs without a vehicle. When people live close to reliable transit service, diverse shopping opportunities, and neighbourhood amenities like schools, parks, and community centres, they are more able to reduce the number of cars they own. Some households may choose not to own a car at all. The project location has characteristics supportive of reduced automobile use and ownership including.

- Adjacency to all-day frequent transit service along North Bluff Road,
- Located 800m from the White Rock Transit Centre, part of the frequent transit network (FTN),
- Within 800m of various shopping opportunities in the Semiahmoo neighbourhood,
- Located within 400m of Centennial Park and associated recreation facilities, and
- Located within 400m of elementary and high schools.

These factors support a more compact urban form, and together with higher density residential development like the proposed development, contribute to reduced driving and parking needs (Ewing & Cervero, 2017).



CITY OF WHITE ROCK BY-LAW REQUIREMENTS

North Bluff Road is proposed as a purpose-built rental housing development with a mid-rise form. The City of White Rock Zoning Bylaw requires parking, bicycle parking and loading for secure market rental developments at the same rate as other multi-family residential developments.

Estimated residential Zoning Bylaw requirements for vehicle parking, bicycle parking and loading are provided in Table 1.

Table 1 - Estimated Residential Vehicle Parking Requirements

Space Type	Unit Count	Requirement	Required	Included Accessible Parking
Resident	98	1.2 per unit	118	3, including 2 van accessible spaces
Visitor	98	0.3 per unit	29	
Loading	98	1 if over 10 units	1	
Class I – Long Term Bike Parking	98	1 per unit	98	
Class II – Long Term Bike Parking	98	0.2 per unit	20	

A total of 147 parking spaces are required. In addition, there may be parking and loading requirements for the Telus equipment uses. The City of White Rock does not define requirements for telecommunications, utilities, or similar uses in the zoning by-law. We understand that the Telus uses proposed on-site have low staffing requirements and generally consist of independently operating equipment. Based on this, parking and loading needs are likely to be low and occasional. We also understand that due to regulatory requirements, the City's ability to require parking for the Telus uses may be limited. We suggest further exploring parking and loading needs with Telus to ensure that their needs are met, in particular loading needs.

COMPARABLE ZONING BY-LAW REQUIREMENTS

A policy scan for completed for nearby cities to assess comparable parking requirements. Most nearby city's have zoning by-law requirements for resident and visitor parking that are, in aggregate, lower than those of the City of White Rock. A summary of nearby cities is provided in Table 2.

Table 2 - Comparable Parking Requirements for Nearby Cities

	Land Use	Rental Residential Minimum	Minimum Difference	
Surrey	Multiple Unit Residential Building with housing agreement for rental and underground parking	1.0 per unit, plus 0.1 per unit for visitors (Max of 1.2 per unit, plus 0.2 per unit for visitors)	108	-27%
City of Langley	RM3 Multiple Residential High Density Zone	Studio/1br - 1.2 spaces per unit 2br - 1.3 spaces per unit 3+ br - 2.0 spaces per unit No visitor requirement	121	-17%
City of New Westminister	Secured Rental Units (>500m from SkyTrain and outside of downtown)	01br- .8 per unit 2br - 1.0 per unit 3br - 1.25 spaces per dwelling unit 0.1 spaces per dwelling unit for visitor parking	96	-35%
City of Delta	Apartment buildings	1br or fewer - 1.3 spaces per unit 2br or more - 1.5 spaces per unit 0.2 per unit for visitors	154	5%

Land Use		Rental Residential Minimum	Minimum Difference	
Township of Langley	Apartments	Studio - 1 per unit 1 or more br - 1.5 per unit 10% of requirement as visitor	141	-4%
City of Coquitlam	Purpose built rental (away from SkyTrain)	1 space per unit plus 0.2 per unit for visitors	118	-20%
City of Richmond	Market Rental apartments (excludes city center reductions)	1.2 per unit plus 0.2 per unit for visitors	137	-7%
City of White Rock	Apartment	1.2 per dwelling unit, plus 0.3 per dwelling unit for visitor parking, for a total of 1.5 spaces per dwelling unit	147	

Of nearby cities, only the City of Delta has higher overall parking requirements with some cities having parking requirements as much as 35% lower. Note that the comparable land uses here exclude any reduced requirements for transit-oriented areas (eg. New Westminster, Richmond).

Of note, no cities require as much visitor parking as White Rock. Other cities require between 0.1 and 0.2 spaces per unit for visitors in comparable locations away from rapid transit.

Several cities include parking requirements specific to rental housing. Table 3 summarizes the four nearby cities with separate parking requirements for rental housing and compares these requirements to those for other apartments.

Table 3 - Rental vs Non-Rental Parking Requirements in Nearby Cities

	General Apartment Parking Rate	Required for Development Plan (Excluding Visitors)	Rental Parking Rate	Required for Development Plan (Excluding Visitors)	Difference to rental specific requirement
Surrey	1.3 per unit with 1 or no bedrooms, 1.5 per unit for 2 or more bedrooms, plus 0.2 per unit for visitors	154	1.0 per unit, plus 0.1 per unit for visitors	108	-30%
City of New Westminster	studio/1br - 0.9 /unit 2br 1.25 /unit 3br+ 1.5/unit +0.1 spaces per dwelling unit for visitor parking	111	01br- .8 per unit 2br - 1.0 per unit 3br - 1.25 spaces per dwelling unit 0.1 spaces per dwelling unit for visitor parking	96	-14%
City of Coquitlam	1br or fewer - 1/unit 2+br - 1.5/unit 0.2/unit for visitors	136	1 space per unit plus 0.2 per unit for visitors	118	-14%
City of Richmond	1.5 per unit plus 0.2 per unit for visitors	167	1.2 per unit plus 0.2 per unit for visitors	137	-18%
Average		142		115	-19%

Requirements for rental developments are about 15%-30% lower than comparable requirements for non-rental developments in the same location. The City of White Rock requirement for apartments at 147 spaces is similar to non-

rental parking rates for comparable cities. However, based on comparable regulations for rental housing, a 15%-30% reduction in parking appears reasonable for the North Bluff Road project.

PARKING DEMAND

Parking demand has been examined from a number of perspectives with data from several sources.

- Institute of Transportation Engineers (ITE) data
- The Regional Parking Study
- Surveys of existing rental buildings

ITE DATA

The institute of transportation engineers publishes parking demand data from across North America as part of their parking generation manual. Relevant data from this manual is summarized in Table 4.

Table 4 - ITE Parking Demand Data

Land Use	Location	Average Rate	Implied Project Demand
Multifamily Housing - 2+ BR (Mid-Rise)	Not Close to Rail Transit - Dense Multi-Use Urban	0.93	91

The data suggests that parking demand is likely to be about 91 spaces. Note that these observations include visitor and resident parking within the sites. This amount is lower than the number of spaces required by any nearby cities for a comparable development.

While ITE data is a useful reference point, it can be biased towards American data, and can often represent more auto oriented contexts. Parking needs in this relatively more amenity rich location may be lower.

THE REGIONAL PARKING STUDY

The 2018 Regional Parking Study (RPS) is a regional scale apartment parking study reviewing parking supply and demand for apartment buildings throughout the region. Data includes information from a household survey, which looks at vehicle ownership rates as opposed to counting on-site parking. This reduces the potential for undercounting vehicles that are parked on-street. The study also differentiated between parking demands for rental and strata buildings.

Table 5 - Vehicle Ownership for Strata and Rental Units

Unit Size	Strata Vehicles per Unit	Rental Vehicles per Unit	Difference
0-bedroom	0.88	0.47	-47%
1-bedroom	1.05	1.02	-3%
2-bedroom	1.37	1.26	-8%
3-bedroom	1.69	Insufficient sample	n/a

This data includes buildings from across the region, and shows that aggregate parking demand for rental buildings is lower than for strata buildings. Applying the unit rates to the proposed Development, we would expect a 9% reduction in owned vehicles, and an ownership rate of 1.04 vehicles per unit.

This study also finds that parking demand decreased with access to transit. Rental sites within 800m of rapid transit (SkyTrain) had only 0.53 vehicles parked within a building, sites within 400m of frequent bus service only had 0.80 vehicles, and those away from the Frequent Transit Network (FTN) had 1.21 vehicles parked. The site is about 800m from the FTN, which is often considered the upper limit of transit-oriented development. Additionally, the site is served by adjacent all-day frequent bus service and has good transit connections. Therefore, parking demand somewhere between that of sites within 400m of the FTN and those away from the FTN is expected.

Finally, the study finds parking is generally oversupplied in all forms of residential housing. Within the South of Fraser area, which includes White Rock, resident parking was provided at a rate of 1.46 spaces per unit with only 1.00 spaces used. This is an oversupply of 45%. Looking at only market rental buildings in the region, there were 0.97 spaces provided per unit, with 0.72 spaces used. For only strata buildings the rates were 1.31 spaces provided per unit and 0.92 used.

Overall, the RPS shows that rental parking demand is lower than for strata, that rental parking provided greatly exceeds observed demand, and that locations near transit can be expected to have significantly lower parking needs than other locations.

RENTAL BUILDING SURVEY

We surveyed parking supply and demand for rental buildings in the White Rock and South Surrey area to better understand local parking characteristics. Parking data for five buildings was obtained from property managers and is summarized below.

Table 6 - Rental Building Parking Survey

Building	Units	Rented Units	Res. Parking	Vis. Parking	Rented Parking	Rented Rate/Unit	Visitor Parking/Unit	Monthly Cost
Bayview Gardens - 1371 Blackwood Street, White Rock	93	93	102	8	93	1.00	0.09	\$45
Barclay Arms - 1635 Martin Dr, Surrey	180	175	195	13	190	1.09	0.07	\$50
Vinewood - 14980 Vine Ave, White Rock	59	57	52	0	44	0.77	0	\$30
Martin Village - 1589 Martin St, White Rock	48	46	52	0	29	0.63	0	\$30
Blackwood Village - 1550 Blackwood St, White Rock	63	62	52	0	43	0.69	0	\$29
Alden - 1881 152 St, Surrey, BC V4A 9Y9	118	116	133	4	122	1.05	0.03	\$45
Total	561	549	575	25	521			
Average						0.95	0.04	\$50

Based on this sample of over 500 occupied units, unit weighted demand was 0.95 spaces per unit. Unit sizes were similar to the proposed development, with about 43% of unit being two-bedroom or larger. In discussions with property managers at the buildings, all indicated that there was sufficient parking provided on site and no issues with parking for visitors. Bayview Gardens indicated occasional challenges with visitor parking supply on holidays like Christmas.

PARKING SUPPLY DISCUSSION

Optimizing parking provisions is complex and is influenced by numerous factors including marketability of units with and without parking, expected cost of parking construction and operations, market price of rental residential parking, target demographics of a building, risk tolerance of the building owner, and project financing terms. Parking demand, constructions costs, market acceptance of prices, rental vacancy, and other relevant factors can change over time. The data and recommendations presented here consider several of the above factors but is not intended to be an exhaustive assessment.

A simple approximation of the value of a parking space in a rental building would value a space at \$15,000. This is based on a typical \$50/monthly charge (\$600/year) and 4% capitalization rate. Higher expected capitalization rates would lower this value. The value is much less than the typical costs of parking construction at between \$60,000 and \$80,000 per space and excludes operating costs. This significant cost disparity is why minimum parking requirements have been associated with reduced construction of housing in the past, and recent research demonstrating that parking minimums can make housing projects unviable, especially rental.

Because parking construction costs are expected to significantly exceed their rental value, projects should seek to minimize parking where possible. Our recommendation seeks to minimize parking provisions while still meeting expected average demand.

RENTAL PARKING SUPPLY VS STRATA PARKING SUPPLY

The discussion in this letter shows that rental parking requirements are lower than for strata. This is reflected by local regulations which allow for 15%-30% lower parking provisions for rental than for strata in several cities and observed parking demand. There are several reasons parking requirements for rental buildings may be lower than for comparable strata titled buildings. There are three mechanisms highlighted here that help explain this difference.

First, the market for parking in rental buildings allows for parking supply and parking demand to be more effectively matched than in strata buildings. Because a property manager controls the pool of parking spaces, renters who require a parking space can generally rent one for a monthly fee as needed. Rental property owners have little incentive to keep spaces vacant, and are incentivised to meet demand. Parking spaces are typically fungible, allowing flexibility in allocating spaces as needed over time.

Conversely, in strata buildings, parking spaces are typically sold with units. Because of this, someone wishing to use a parking space must usually already have one assigned to their unit. Some owners own parking spaces which are not typically used, potentially because they find it convenient, or because they (correctly) believe that having parking improves the resale value of their units. Because of this, more parking spaces are required to ensure that supply meets demand. There must be enough parking for the actual number of vehicles, as well as parking that is unused but still owned and unavailable for others. While some larger strata buildings have secondary markets for parking rental, these are not reliable or efficient ways to reallocate parking spaces.

Second, in strata buildings, initial saleability of units is important for developers. A developer may be risk averse, and seek to provide ample parking to ensure all units are able to be sold. This abundant parking can be used as a purchase incentive, and is often considered a requirement for saleability of larger units (reflecting strata owner preferences regarding convenience and resale described above). This can lead to parking supply that is even greater than what would be preferred by future owners, further increasing overprovision. This consideration is reduced for rental buildings, where parking spaces can be assigned (or unassigned) to units as needed.

Finally, parking demand is demonstrably lower in rental buildings compared to strata buildings, this is shown in Table 5. Suggested reasons for lower vehicle ownership in rental buildings are often based on data that renter households have lower incomes than owner households, and that vehicle ownership is a function of household income.

Overall, the number of parking spaces provided in a rental building may be lower than for strata buildings, more closely matching expected rental vehicle ownership rates.

MINIMUM PARKING REQUIREMENT IMPACTS ON HOUSING SUPPLY

There is significant research demonstrating the impacts of minimum parking requirements on housing affordability and housing development viability. Minimum parking requirements can impact housing affordability and viability of housing development in several ways.

Mandating a minimum number of parking spaces per unit increases development costs. These costs arise from land acquisition (since more land is needed to accommodate parking), construction, and maintenance of parking facilities. These increased costs mean that development projects may not be viable, making housing less affordable by limiting supply. If parking spaces are likely to be unused, there is little benefit to these minimum requirements.

Parking requirements can limit the number of housing units that can be built on a given parcel of land. By dedicating a significant portion of land to parking, or requiring deep excavations, the potential for higher-density housing developments is reduced, which is especially problematic in urban areas where land is scarce and expensive. These are also areas where parking needs are reduced due to a more compact urban form.

In areas where land costs are high, the financial feasibility of new development projects can be undermined by parking requirements. This can lead to fewer housing projects being undertaken, exacerbating housing shortages and further driving up prices.

Finally, the need to include parking can make certain types of housing developments, such as market rental, affordable housing, or mixed income projects, less financially viable. This reduces the diversity of housing options available, which can particularly impact lower-income households.

Research indicates that reducing or eliminating minimum parking requirements can lead to more affordable and diverse housing options. By allowing market forces to play a role in determining parking supply, more housing may be able to be built and parking may be used more efficiently.

MINIMUM PARKING REQUIREMENT CLIMATE IMPACTS

The additional excavation, concrete, and rebar associated with underground parking infrastructure can account for 12-20% of a building's embodied emission. Reducing parking requirements can have significant benefits in reducing these embodied emissions, as well as reducing lifetime emissions related to operations.

ON STREET PARKING SUPPLY AND DEMAND

Parking is available on-street for residents and visitors in the area. Parking regulations for blocks within 200m of the site are shown in Figure 1, including the estimated number of parking spaces available, as well as the number of occupied spaces during an overnight count at 10:30pm on Tuesday February 27th, 2024 when resident parking demand would be expected to be highest.

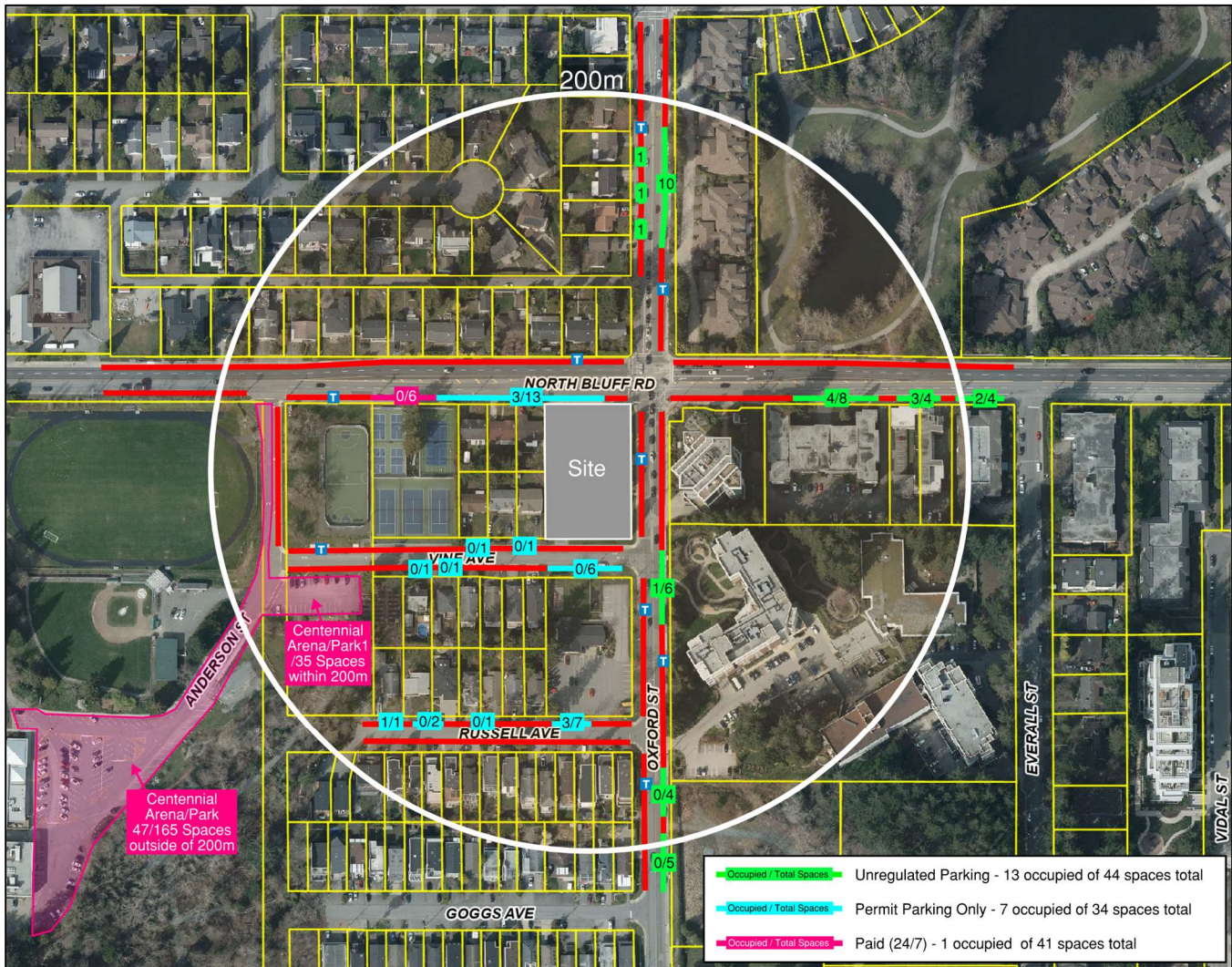


Figure 1 - Area Parking Regulations, Supply, and Overnight Demand

Much of the curb space on nearby local streets is unavailable for parking due to driveways and bus stops. However, there are still about 44 unregulated parking spaces and 32 permit parking spaces available. Both of these types of spaces are available for residents and their visitors (with a City parking permit where required and subject to restrictions on block

adjacencies) An additional 41 paid parking spaces are available within 200m of the site, with another 165 spaces at the Centennial Arena/Park within a short walk.

An overnight parking survey was conducted to better understand resident parking demand in the area. Overnight parking occupancy (10:30pm on February 27, 2024) within 200m of the site is summarized in Table 7.

Table 7 -Overnight Parking Occupancy

Space Type	Total Supply	Parked Vehicles	Occupancy	Available Spaces
Unregulated	44	13	30%	31
Permit Parking Only	34	7	21%	27
Paid	41	1	2%	40

Based on this survey, there appears to be low demand for on-street resident parking overnight. Therefore, neighbourhood impacts of any resident overflow parking from the proposed development are likely to be minimal. Up to resident 58 vehicles could theoretically be accommodated overnight. Regardless of available on-site parking supply, some residents will often elect to park on-street.

Additionally, there is significant paid parking in the neighbourhood. This would not be suitable for residents but may provide opportunities for visitors during peak visitor parking events, such as holidays when arena and park parking use is likely to be lower.

TRANSPORTATION DEMAND MANAGEMENT REQUIREMENTS

The City of White Rock often required TDM measures to be provided as part of a reduction to parking requirements. The Zoning bylaw allows for a maximum 10% reduction in parking with the provision of TDM measures, where supported by a parking study, and subject to the developer entering into a covenant to supply the TDM measures.

TDM measures may include additional bicycle parking, bicycle amenities like repair stations, car share vehicles and parking spaces, transit passes, or other measures designed to reduce reliance on personal auto transportation.

RECOMMENDATIONS

Based on available data, an overall parking supply as low as 1 space per unit is supported. Resident parking is recommended at a rate of 0.95 spaces per unit, with visitor parking supplied at 0.05 spaces per unit. Note that this recommendation would require a relaxation greater than the 10% reduction allowed for in the City’s Zoning by-law which would permit as low as 1.35 spaces per unit.

Resident parking recommendations are informed by the following factors:

- Average ITE observed parking demand for similar buildings is 0.93 spaces per unit including visitor parking,
- Surveyed demand for nearby rental buildings indicated resident parking demand of 0.95 per unit, and
- Observed on-street parking demand for residents is low, and some on-street parking can be accommodated without impacts to neighbours.

Policies to encourage efficient use of parking within the site may also be explored. For example, limiting units to a maximum of two parking spaces, and increasing the price of the second rented parking space. The recommended level of

parking anticipates that some households will not own vehicles or require parking due to transit accessibility, walkable neighbourhood characteristics, and provision of some smaller units which are associated with low parking needs.

The visitor parking recommendations is informed by surveyed, lower, visitor parking provisions in existing rental buildings which are operating successfully. Further, there is availability of on-street parking for visitors in the area (permitted, unregulated and paid).

Overall, the recommended parking rate aims to provide sufficient space to accommodate typical demands, while avoiding the provision of excess parking with associated costs and climate impacts.

Actual parking demand may change over time and may differ from what is presented here. Reducing parking below a certain threshold could impact marketability of units.

Please reach out with any questions or comments.

Sincerely,



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Project No. 043-004
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