

Harbour Towers Renovation Victoria, BC Parking Demand Study

Final Report

Prepared for
Omicron

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EXECUTIVE SUMMARY

Omicron is proposing to convert the existing 13 storey 189 unit Harbour Towers Hotel and Suites, located at 345 Quebec Street, into 219 residential rental apartment units. Harbour Towers Hotel and Suites currently also has a street level restaurant; this restaurant will not be retained. All of the public spaces within the building will be converted to residential units and supporting amenities.

City of Victoria zoning for rental attached dwellings require an off-street parking supply of 1.4 spaces per unit (based on Zoning Bylaw Schedule C, Residential A.13) for the proposed residential rental use of this property. Applying this parking rate to the proposed 219 units results in a bylaw required parking supply of 307 vehicle parking spaces.

The purpose of this study is to determine a suitable off-street parking supply for the proposed residential rental project that is specific for this development and location. The intent is to determine an off-street parking supply that would provide a balance between promoting the City's policies and goals of reducing automobile use while not negatively impacting the neighbourhood's on-street parking supply.

The location of the subject Harbour Towers site is within walking distance to numerous social, shopping, and employment opportunities, and is approximately 800m from Victoria's Downtown business area. It is also approximately 800m from the James Bay Village commercial area, the Government Precinct, the Inner Harbour and is well serviced by existing transit, walking and cycling infrastructure. The site is on the border of Victoria's downtown core area which would allow for a 0.7 spaces per unit parking rate.

Bunt collected ICBC vehicle ownership data and conducted an in-depth parking analysis at 13 similar James Bay residential rental buildings in 2012. These 13 apartment complexes are all expected to have similar parking needs as the subject site. That data calculation program included observations regarding the amount of on-street and off-street parking being utilized at the specified buildings during peak resident and visitor parking times. Building / property managers of each apartment complex were also interviewed to discuss the parking supply and parking utilization of their building. It should be noted that the surveyed apartments are all well established complexes with few, if any, TDM measures in place. The average vehicle parking rate for these 13 locations was 0.66 spaces per rental unit. The data shows a range of vehicle ownership from 0.52 to a high of 0.81 vehicles per unit.

The subject site at 345 Quebec Street has a higher proportion of smaller (studio and 1-bedroom) suites in comparison to most apartment complexes reviewed in this study, indicating the subject site may have a lower parking demand than the average rate of 0.66 vehicles per unit.

Considering the dataset of similar rental buildings, and the site's location we suggest that, without any TDM measures being implemented, the tenant related parking demand of the subject project will be

satisfied with 0.65 vehicle spaces per unit with an additional 0.05 spaces per unit for 'visitor' parking. This would translate to an overall 'off-street' parking demand of 153 spaces.

This estimated parking rate for 345 Quebec Street suggests that the City of Victoria's downtown (CA-Central Areas) residential parking rate is likely applicable to other areas within an approximate 500m range of downtown, when they are also near transit and amenities.

Sixty-eight of the 219 units (31%) at Harbour Towers will be studio/ bachelor units. 102 units (47%) will be one bedroom suites and the remaining 49 units (22%) will be 1.5 or 2 bedroom units. If the City of Victoria prefers to forecast parking demand by apartment size we would recommend a parking rate of 0.6 spaces per unit for studio and one-bedroom units, and 1.0 spaces per unit for 1.5 or 2-bedroom units. This calculation method results in a similar estimated parking demand of 151 spaces for residents plus another 11 spaces for visitors, for an overall total of 162 spaces.

To further reduce auto dependency we suggest that the following Transportation Demand Management (TDM) measures be implemented:

- Provide secure on-site bicycle parking for residents and visitors of the 219 rental units that exceed City of Victoria bicycle parking requirements for multiple dwellings; that is provide at minimum one 'Class 1' space per unit (i.e. secure parking for 219 bicycles) and one 'Class 2' – 6 space rack at the east entrance to the apartment building, on Oswego Street;
- Provide a bicycle repair station within the buildings' Class 1 bicycle parking area; and,
- Implement a monthly charge for vehicle parking spaces (parking spaces unbundled from unit rental) at market rate.

These TDM measures would contribute to ensuring that the parking needs of the development are met and there is minimal impact on the neighbourhood's adjacent on-street parking supply.

Our analysis indicates a parking variance from bylaw is justified for the proposed 219 unit rental residential development at 345 Quebec Street with a minimum vehicle parking provision of 153 vehicle spaces. This vehicle parking demand is expected to decrease further with the implementation of recommended TDM measures.

1. BACKGROUND

The subject site is located to the west of Oswego Street on Quebec Street in the James Bay neighbourhood area. The site's location is presented in **Exhibit 1.1**.

Omicron is proposing to convert the existing 189 unit Harbour Towers Hotel and Suites into 219 rental apartments. The existing restaurant use will be replaced with residential units. The 259 rental units are proposed to be supported with 163 parking spaces, 24 of these are at-grade located to the immediate west of the 345 Quebec Street building, the remaining 139 spaces would be in the existing underground parkade, which is accessed from Oswego Street.

Secure bicycle parking will be provided (219 Class 1 spaces) in the parkade.

The building's garbage and recycling loading areas will remain in the parkade.

2. EXISTING CONDITIONS

The site is located along the edge of Victoria's downtown core area (Inner Harbour District). If the site was located on the north side of Quebec Street rather than the south side a 0.7 space per unit parking rate would apply (visitor inclusive).

The site's local area walking, transit and cycling networks are discussed below. At the time of this study (June 2016) Zipcar has two vehicles within a two block radius of the site. MODO also has one vehicle parked in the vicinity of the site.

These site location factors increase the likelihood that many of the tenants of the proposed conversion will not find it necessary to own a vehicle.

2.1 Transportation Context

According to the 2011 CRD Origin and Destination Household Travel Survey¹, when Victoria South residents are travelling within the South Victoria area during the AM peak hour, 39% of respondents drove, 39% walked and 22% using other travel modes. When travelling within the area during the PM peak hour, 41% drove, 43% walked and 16% used other travel modes. This data indicates that the South Victoria area has the lowest vehicle driver mode split of all CRD subareas; Oak Bay was second where 43% of internal trips were driven in the PM peak hour.

¹ <https://www.crd.bc.ca/docs/default-source/regional-planning-pdf/transportation/crd-od-survey-dailytravelcharacteristicsreportfinal.pdf?sfvrsn=2>

The City of Victoria has set substantial goals for cycling mode increase, including a shift in transportation mode share to increase biking from its current 4% mode share to the goal of 25% by 2038². The City's commitment to increase the cycling mode share and prioritizing bike infrastructure is vested in its Official Community Plan and the Strategic Plan 2015-2018, CRD Pedestrian and Cycling Master Plan, and the recent Biketoria Bicycle Master Plan.

2.1.1 Walking

The site is located within walking distance to employment, commercial, recreational services, and the abundance of services provided in the downtown area; it is also in close proximity to the local amenities available in James Bay and near the Fisherman's Wharf area.

The site is close to various walkable amenities and transit bus service. According to the Walk Score³ website, 345 Quebec Street's location receives a walk score of 81 (out of 100), placing it in the website's "Very Walkable" category.

All roadways adjacent to the site have sidewalks on each side and pedestrian crossing amenities at major intersections. Areas within a 400m and 800m radius are illustrated in **Exhibit 2.1**.

² City of Victoria website: <http://www.victoria.ca/EN/main/community/sustainability/environmental/transportation-initiatives.html>

³ Walk Score is a method of evaluating a location's walkability by using an algorithm that awards points based on the distance to amenities such as grocery stores, schools, shops, recreation opportunities, banks and restaurants. www.walkscore.com



Exhibit 1.1
Site Location

Harbour Towers Parking
June 2016

6141.01



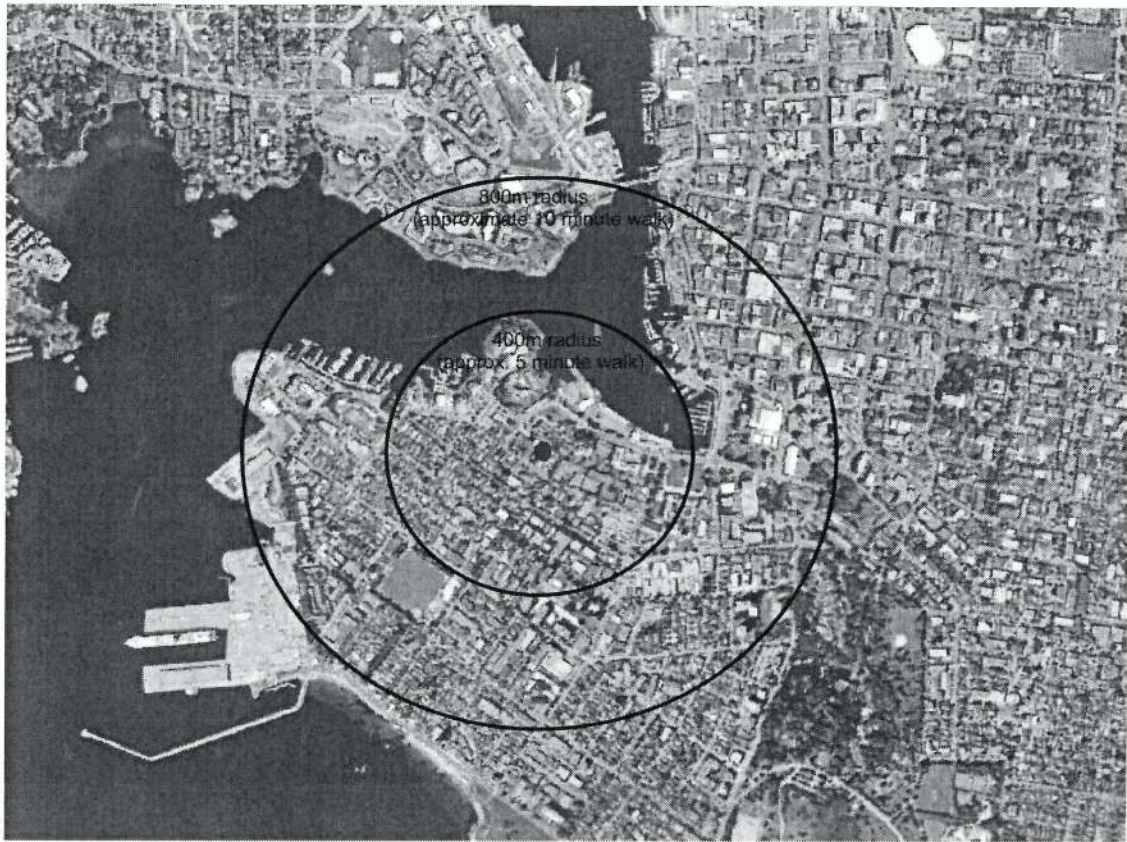


Exhibit 2.1
Walking Radius

6141.01 Harbour Towers Parking
June 2016

2.1.2 Transit

The site is 500m (approximate 5-10 minute walk) from the Legislature BC Transit bus hub. This bus hub provides access to 13 bus routes which provide connections throughout the Capital Regional District. Importantly these bus routes, typically have headways of approximate 5 – 15 minutes during the peak morning and afternoon commute periods.

In addition to excellent local transit service, the Harbour Towers site is also within short walking distance to inner harbour transportation hubs that service further distances, including:

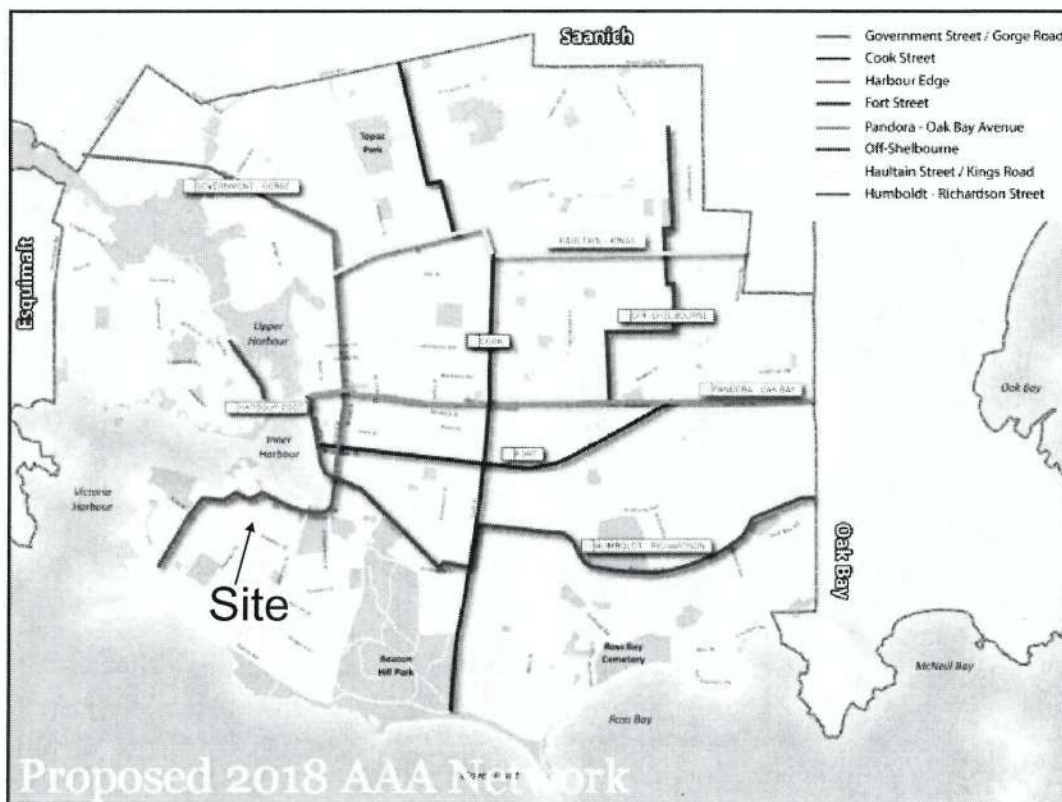
- Pacific Coach Line bus depot, located on lower Douglas Street (approximately 700m to east of the site), provides transportation to destinations on the Vancouver Island and on the Lower Mainland;
- Harbour Air, Kenmore Air, and Westcoast Air Seaplane terminals are 1km to the northeast (to Seattle, Vancouver and the other BC mainland destinations); and,
- Coho/Clipper ferry terminals support travelers going to the United States (located approximately 250m to the northeast).

2.1.3 Cycling

Cycling is one of the most sustainable modes of transportation; displacement of auto trips by cycling helps to reduce traffic congestion and reduces noxious emissions. The main market segment for journey-to-work trips by bicycle as the primary mode of transportation are less than 8km in length. Cycling can be combined with other travel modes, such as transit.

Belleville Street located one block north of the subject site has been designated as a future All Ages and Abilities (AAA) cycling facility as per the 2016 Biketoria plan⁴. This insinuates cycling facilities that are separated from motorized vehicle traffic. The introduction of AAA cycling route on Belleville Street is expected to significantly increase area cycling. This new AAA route will provide connections to Victoria's vehicle protected cycling network. This will promote local area cycling and also potentially the use of electric bicycles and scooters. The following **Exhibit 2.2** illustrates the City of Victoria's proposed bike route network.

⁴ <http://www.victoria.ca/EN/main/community/cycling.html>



<https://victoria.civicweb.net/FileStorage/AD4BDBA6E36241E9B83DF5697255798C->

Exhibit 2.2 Proposed 2018 Cycling Network (Biketoria)

6141.01 Harbour Towers Parking
June 2016

2.2 Existing On and Off-Street Vehicle Parking Supply

There are currently four on-street 3-minute loading spaces immediately fronting the 345 Quebec Street site. To the west of these loading spaces there are six 1 Hour, Monday to Friday on-street spaces fronting the development site.

On-site the existing building has a total of 177 spaces, 153 of these are in the underground parkade and 24 are adjacent to the site in an at-grade parking lot immediately west of the building. These spaces are all reserved for hotel patron use.

3. ANALYSIS

3.1 On-Site Resident and Visitor Parking Supply/Design

Exhibit 3.1 illustrates the proposed parkade layout.

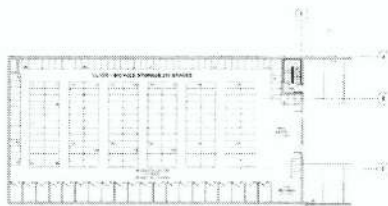
3.2 Bylaw Parking Rates

3.2.1 Vehicle Parking

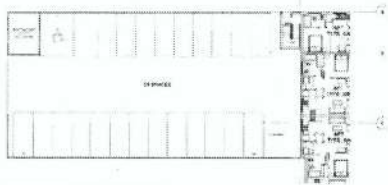
City of Victoria zoning for rental attached dwellings require an off-street parking supply of 1.4 spaces per unit, based on Zoning Bylaw Schedule C, Residential A.13 for the proposed residential rental use of this property. Of the 1.4 spaces per unit, 10% of the parking supply is to be assigned to visitors. Applying this parking rate to the proposed 219 units results in a bylaw required supply of 307 parking spaces. The proposed 163 parking spaces are therefore 144 spaces below bylaw required.

3.2.2 Bicycle Parking

The City of Victoria bicycle parking requirements for multiple dwellings is to provide one 'Class 1' space per unit (i.e. secure parking for 219 bicycles) and one 'Class 2' – 6 space rack at the entrance to the apartment building.

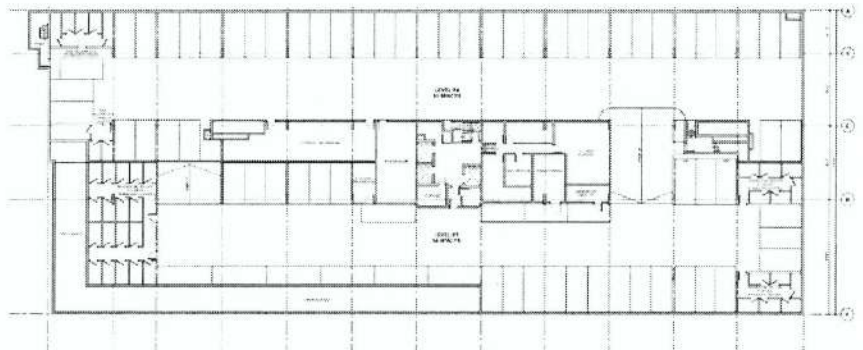


122. BASEMENT PARKING PLAN - PENDRAY ST, LOT 122

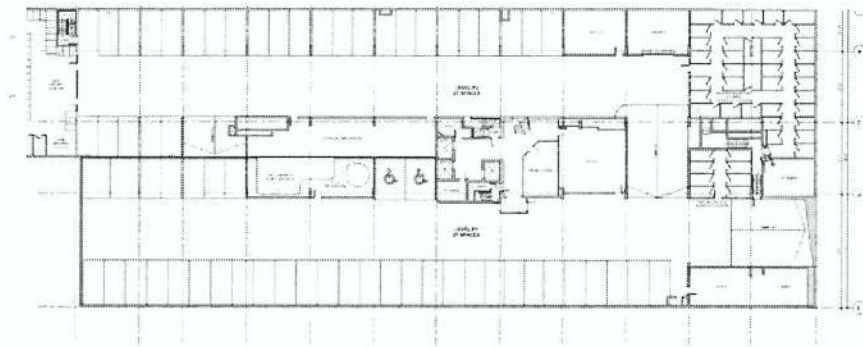


122. SURFACE PARKING PLAN - PENDRAY ST, LOT 122

PARKING FLOOR PLANS - PENDRAY ST, LOT 122



123. PARKING LEVEL P1 & P2 FLOOR PLANS



123. PARKING LEVEL P1 & P2 FLOOR PLANS



NICOLA CROSBY REAL ESTATE
HARBOUR TOWERS RENO, VICTORIA

PARKING LEVEL P1 & P2 FLOOR PLANS

Exhibit 3.1 Proposed Parking Layout

6141.01 Harbour Towers Parking
August 2016



3.3 Parking Supply Data for Similar City of Victoria Rental Apartment Complexes

In order to better understand the existing parking trends of similar nearby rental apartment complexes, an extensive survey and analysis was conducted. The data was derived from three key sources of information:

- Vehicle ownership information acquired from ICBC;
- Data collected in the field during resident and visitor peak parking periods (i.e. Wednesdays 10-11pm, Fridays 6-8pm, Saturdays 6-8pm, Sundays 9-11pm); and,
- Information gathered from building manager interviews.

The parking data collected in the field and via building manager interviews and questionnaires was used to verify the accuracy of the ICBC information and were aimed towards understanding how the available on and off-street parking supply was utilized and as to whether there was sufficient supply for residents and visitors at their respective rental apartment complexes. This information provided data in determining the unit mix of the buildings, how many units were currently occupied, how many off-street parking stalls are provided for residents and visitors, and whether there is a monthly charge for the on-site parking stalls.

Exhibit 3.2 displays the locations of the apartment complexes included in the study. **Table 1** on the following page, supplements the map, identifying (with the associated reference numbers in Exhibit 3.2) and summarizes the data collected from ICBC, on-site surveys, and building managers.



Exhibit 3.2
Location of 2012 Studied Rental Residential Buildings

6141.01 Harbour Towers Parking
 June 2016

Table 1 - Summary of Apartments Included in 2012 Parking Study

Map #	Name and Address	Total Units (Occupied/ Available)	# of Studio Units	# of 1 Bdr Units	# of 2 Bdr Units	# of On-Site Resident Parking Stalls	# of On-Site Visitor Parking Stalls	Parking Stall Cost (Monthly)	Vehicle Ownership Rate
1	805 Academy Close	9 / 10	0	10	0	0	0	N/A	0.7
2 & 3	360 Douglas Street, Goodacre Towers N. & S.	194 / 197	55	81	61	152	32	\$15 - \$20	0.68
4	240 Douglas Street, Beacon Tower Apartments	58/60	0	44	16	42	0	\$30	0.73
5	151 St. Andrews, Beacon Park Apartments	75/75	3	10	62	90	5	\$35	0.81
6	575 Marifield Ave, Kirkcauldy Apartments	43 / 43	7	28	8	28	3	\$20	0.53
7	562/566 Simcoe Street	104 / 108	6	78	24	75	12	\$20	0.54
8	576 Simcoe Street, Park Plaza	37 / 37	3	27	7	35	1	\$0	0.55
9	160 Government Street, Weybridge Manor	33/33	N/A	N/A	N/A	23	3	N/A	0.63
10	890 Academy Close	54 / 55	12	30	13	33	0	\$10-\$15	0.63
11	505 Quadra Street, Beacon Arms	34 / 34	2	21	11	26	1	\$15-\$30	0.68
12	955 Humbolt Street	43 / 43	0	37	6	40	3	\$45	0.72
13	976 Humbolt Street	23 / 23	6	13	4	15	0	\$45	0.52
Totals and Averages		98.5% occupancy	-	-	-	-	-	-	0.66

The table shows that on average the approximate vehicle ownership rate (i.e. residential parking demand) of the 13 rental apartment buildings is 0.66 vehicles per unit. This data correlates with the field observation counts and manager surveys. The table data reveals a range of vehicle ownership rates as low as 0.52 and as high as 0.81 vehicles per unit. It also illustrates the impact of unit size as the highest vehicle occupant buildings also have a higher proportion of 2 bedroom units (i.e. the Beacon Park Apartments). The majority (78%) of suites at 345 Quebec Street are proposed to be either bachelor or 1 bedroom apartments. The higher percentage of smaller units at 345 Quebec Street suggests the vehicle ownership rate for 345 Quebec Street will likely be lower than the average 0.66 vehicles per unit rate.

Based on this data we conservatively suggest a parking rate of 0.65 spaces per unit (142 spaces) for residents and an additional 0.05 spaces (11 spaces) for visitors, for a recommended minimum supply of 153 parking spaces.

4. TRANSPORTATION DEMAND MANAGEMENT

One strategy to achieve the goals highlighted in the previous section is to implement TDM measures with the potential to influence travel behaviour in the region. One such measure is to control the supply of parking as a disincentive to driving, as long as the infrastructure is in place to allow the use of alternative travel modes.

Recommended TDM measures specific to this site are to:

- Provide secure on-site bicycle parking, including a bicycle rack for short term and long term bicycle parking for residents and visitors of the 219 rental units that exceed City of Victoria bicycle parking requirements for multiple dwellings; that is provide at minimum one 'Class 1' space per unit (i.e. secure parking for 219 bicycles) and one 'Class 2' – 6 space rack at the east entrance to the apartment building, off Oswego Street;
- Provide a resident bicycle repair station within the buildings' Class 1 bicycle parking area (example image of a bicycle repair station provided below); and,
- Implementation of a monthly charge for parking spaces (parking spaces unbundled from unit rental) at market rate.

These TDM measures would contribute to ensuring that the recommended 153 off-street parking spaces will meet the needs of the subject development and result in minimal impact on the neighbourhood's on-street parking supply.



Image: Example of Bike Repair Station

5. CONCLUSIONS AND RECOMENDATIONS

5.1 Conclusions

Our recent 'project specific' research findings have determined that a parking variance is warranted for this project. The on-site parking supply is to be supported with the implementation of recommended TDM measures. Justification for the recommended parking variance is as follows:

- Proximity of the subject site to the Victoria's downtown core area, as well as the services available at James Bay and transit availability;
- Compatibility with 13 studied rental apartment complexes in the James Bay area, which had an average vehicle ownership rate of 0.66 vehicles per unit;
- A high proportion (i.e. 78%) of studio or 1 bedroom units;
- The subject site being well serviced by public transit, close to amenities and in close proximity to future AAA cycling facilities; and
- Compatibility with the City of Victoria and the CRD adopted strategies for encouraging travel modes other than automobile use.

In summary our research and analysis for this conversion project indicates that the proposed 153 off-street spaces, at an average parking ratio of 0.7 spaces per unit (total for residents and visitors), represents an appropriate supply of vehicle parking for the proposed 219 unit rental complex.

5.2 Recommendations

Based on this data we conservatively recommend a parking rate of 0.65 spaces per unit (142 spaces) for residents and an additional 0.05 spaces (11 spaces) for visitors, for a recommended supply of 153 parking spaces.

The proposed supply of 163 vehicle parking spaces is higher than our recommended parking supply of 153 spaces. We recommend the developer convert excess vehicle parking spaces into additional Class 1 bicycle parking. We recommend 11 of the 24 at-grade parking spaces be reserved for visitor use.

We recommend that the developer commit to providing the following TDM measures:

- Provide secure on-site bicycle parking, including a bicycle rack for short term and long term bicycle parking for residents and visitors of the 219 rental units that exceed City of Victoria bicycle parking requirements for multiple dwellings; that is provide at minimum one 'Class 1' space per unit (i.e. secure parking for 219 bicycles) and one 'Class 2' – 6 space rack at the east entrance to the apartment building, off Oswego Street;

- Provide a resident bicycle repair station within the buildings' Class 1 bicycle parking area; and,
- Implementation of a monthly charge for parking spaces (parking spaces unbundled from unit rental) at market rate.

As the on-street loading requirements of a residential building are expected to be lower than a hotel we also suggest that one of the three 3-minute on-street loading spaces immediately fronting the site be converted to 1-hour parking in continuation of curb-side regulation found west of the loading area.