



2713 QUADRA STREET

Parking Study

Prepared for: Eight Diamond Holdings Ltd

Prepared by: **Watt Consulting Group**

Our File: 2389

Date: February 13, 2019

TABLE OF CONTENTS

1.0	INTRODUCTION	1
1.1	Subject Site.....	1
1.2	Site Characteristics	2
1.3	City Planning Policy	3
1.4	Current Land Use.....	4
2.0	PROPOSED DEVELOPMENT	4
2.1	Land Use	4
2.2	Parking Supply.....	4
3.0	PARKING REQUIREMENT	5
4.0	EXPECTED PARKING DEMAND	5
4.1	Travel Survey.....	5
4.2	Parking Demand at Other Ballet Studios.....	7
4.3	Bicycle Parking	7
4.4	Bicycle sharing.....	7
4.5	Summary of Expected Parking Demand	7
5.0	ON-STREET PARKING	8
6.0	PARKING MANAGEMENT	9
6.1	Passenger Drop-off Zone.....	9
6.2	Leasing Parking from Nearby Businesses.....	10
7.0	SUMMARY	11
7.1	Recommendations	11

APPENDIX A. ON-STREET PARKING SUMMARY

1.0 INTRODUCTION

Watt Consulting Group ("WATT") was retained by Eight Diamond Holdings Limited to conduct a parking study for the proposed Victoria Academy of Ballet at 2713 Quadra Street in the City of Victoria. The purpose of this study is to assess the adequacy of the proposed parking supply by considering parking demand at the existing Victoria Academy of Ballet and other ballet / dance studios in Victoria. The study also reviews City transportation policy to understand how the proposed development fits within the larger planning policy context.

1.1 SUBJECT SITE

The subject site is located at 2713 Quadra Street in the City of Victoria. See **Figure 1**.

FIGURE 1. SUBJECT SITE



1.2 SITE CHARACTERISTICS

The following describes transportation options and services in proximity to the site.



SERVICES

The site is located within the City of Victoria's Quadra Village, which is one of eight Large Urban Villages in the City. The site benefits from immediate access to a variety of commercial and retail amenities. Within 200m (about a 3-minute walk) of the site, there are a number of amenities and services including a grocery store, financial services, restaurants, and cafés.



TRANSIT

There are four bus stops within a 2-minute walk of the subject site. The bus stops are served by route 6 (Royal Oak / Downtown) and route 4 (UVic / Downtown). These bus routes provide service to and from various destinations within the region including downtown Victoria, Brentwood Village (Saanich), the University of Victoria, and a number of residential neighbourhoods in the City of Victoria and District of Saanich.

The Victoria Region Transit Future Plan (TFP)¹ provides guidance on future transit networks in the Victoria Region. The subject site is located at Quadra Street and Hillside Avenue, both of which are identified as "Frequent Corridors" on the Frequent Transit Network (FTN). The FTN is intended to provide medium to high density mixed land use corridors with frequent and reliable transit service of 15 minutes or better between 7:00am to 10:00pm, seven days a week.²

Frequent Corridors will achieve faster travel times through fewer bus stops and transit priority measures, which, coupled with enhanced bus stops, will improve the overall appeal of transit. Transit service to the subject site is expected to improve significantly as the Victoria Region TFP becomes implemented.



WALKING

The subject site can be described as very walkable with a walk score of 91.³ Sidewalks are available on both sides of Quadra Street and Hillside Avenue, which would directly serve future clients of the ballet academy. The traffic signal at Quadra Street and Hillside Avenue facilitates safe crossings at this intersection.

¹ BC Transit. (2011). Transit Future Plan Victoria Region. Executive Summary. Available online at: <https://bctransit.com/servlet/documents/1403641054491>

² Ibid.

³ More information about walk score is available online at: <https://www.walkscore.com/score/2713-quadra-st-victoria-bc-canada>



CYCLING

There are no existing bike facilities on Quadra Street or Hillside Avenue; however, the site is less than 200m (1-minute bike ride) from Kings Road and less than 100m from Fifth Street, both of which are identified “All Ages and Abilities” (AAA) bike routes in the City of Victoria’s long-term bike network.⁴ These proposed AAA bike routes will enhance the cycling conditions (and safety) in proximity of the subject site and Quadra Village more broadly, which will directly benefit future clients of the subject site.

1.3 CITY PLANNING POLICY

The City of Victoria’s Official Community Plan (OCP) provides policies and objectives to guide decisions on planning and land management. Updated in 2017, the OCP contains a number of 30-year goals in 17 distinct topic areas that give expression to Victoria’s sustainability commitment and work toward the achievement of long-term sustainability goals.⁵

As indicated above, according to the OCP’s Urban Place designations, Quadra Village has been designated as a “Large Urban Village”, defined as follows:

“low to mid-rise mixed-use buildings that accommodate ground-level commercial, offices, community services, visitor accommodation, and multi-unit residential apartments, with a public realm characterized by wide sidewalks, regularly spaced street tree planting and buildings set close to the street frontage, anchored by a full service grocery store or equivalent combination of food retail uses, serving either as a local, rapid or frequent transit service hub.”⁶

The City’s 30-year growth management goals are to concentrate 40% of the overall population growth in Town Centres and Large Urban Villages, resulting in approximately 8,000 new residents by 2041. Some of the key policy objectives for Large Urban Villages are as follows:

- To accommodate 40% of Victoria’s anticipated population growth in the Town Centres and Large Urban Villages to encourage a mix of commercial and community services primarily serving the surrounding residential uses.
- To revitalize areas of commercial use into complete Large Urban Villages through human-scale design of buildings, streets, squares and other public spaces to increase vibrancy and strengthen commercial viability.
- To design all Large Urban Villages in a manner that encourages pedestrian and cycling use and enhances the experience of pedestrians and cyclists.

⁴ City of Victoria. (2018). #Biketoria Focused Routes. Available online at: <http://www.victoria.ca/EN/main/residents/transportation/cycling/our-cycling-network/types-of-bike-routes/-biketoria-focused-routes.html>

⁵ City of Victoria. (2012). Official Community Plan. Available online at: <http://www.victoria.ca/EN/main/residents/community-planning/official-community-plan.html>

⁶ Ibid, pg. 35.

Based on the policy objectives outlined above, the proposed ballet academy at the subject site is aligned with the City's vision of a Large Urban Village.

Section 7 of the OCP (Transportation and Mobility)⁷ has clear policy objectives to advance sustainable transportation in the City. There are at least two policies that support the proposed development, as follows:

- Policy 7.14.1 – Encouraging residential and employment growth to concentrate in the Urban Core, Large Urban Villages, Town Centres and Employment areas along rapid and frequent transit corridors.
- Policy 7.16.3 – Strengthening greenway connections between the Urban Core, Town Centres, Urban Villages, Employment areas, major parks, institutions and recreation and cultural facilities.

Policy 7.11 also directs the City to consider parking management strategies including sharing parking facilities, reducing parking requirements, and overall parking and mobility management. In general, these policies, and the larger policies in Section 7 of the OCP, direct the City to move toward sustainable transportation, which is broadly focused on increasing the share of overall trips by walking, cycling and public transit.

1.4 CURRENT LAND USE

The site is currently zoned C1-QV, Quadra Village District. According to the permitted uses in the C1-QV zone, “clubs for social or recreational purposes” are permitted, which is the use that most closely resembles the proposed ballet academy.

2.0 PROPOSED DEVELOPMENT

2.1 LAND USE

The proposed development is to re-purpose the existing 7,500 square foot (697m²) building at 2713 Quadra Street to accommodate the Victoria Academy of Ballet, a dance studio that offers specialized dance instruction for children ages three through to professional level. The Victoria Academy of Ballet (henceforth referred to as the “applicant”) is not planning to expand its business in the near future and as such, it does not envisage operating more classes or growing its clientele in the short-term.⁸

2.2 PARKING SUPPLY

The proposed parking supply includes seven existing surface parking spaces at the subject site, which results in approximately 1 space per 100m² gross floor area. The applicant is also proposing two six-rack bicycle racks adjacent to the entrance of the building for patrons.

⁷ City of Victoria. (2012). Official Community Plan, Section 7: Transportation and Mobility. Available online at: http://www.victoria.ca/assets/Departments/Planning-Development/Community-Planning/OCP/Replaced/OCP_Sec7_Jul2017_web.pdf

⁸ Email correspondence with Victoria Academy of Ballet Artistic Director on March 22, 2018.

3.0 PARKING REQUIREMENT

Schedule C of the City's Zoning Regulation Bylaw determines the minimum parking supply requirement. WATT worked with the City of Victoria to review and update its off-street parking requirements (Schedule C) to align regulations with actual parking demand, current trends, and community planning objectives.⁹ The Schedule C off-street parking regulations was adopted recently by Council in 2018.

According to the updated Schedule C off-street parking regulations, the proposed use would fall under "Assembly" and be required to provide 1 space per 20m² of floor area. Therefore, the total required parking spaces based on the updated Schedule C requirement is 35 spaces.

4.0 EXPECTED PARKING DEMAND

Expected parking demand for the site is estimated in the following sections to determine if the proposed supply will adequately accommodate demand. Expected parking demand is based on [a] a travel survey of the applicant's clientele at the existing studio (716 Johnson Street), and [b] research on the travel characteristics of other dance / ballet studios in Victoria.

4.1 TRAVEL SURVEY

A travel survey was conducted with the applicant's existing clientele to understand how students typically travel to the ballet academy. The survey was developed by WATT and administered by Victoria Academy of Ballet staff / students. When patrons arrived at the academy, they were asked how they travelled to the studio. An employee survey was not conducted; it was reported that two employees regularly drive and require parking and up to four part-time staff drive to the ballet academy on a part-time basis. Overall, peak employee parking demand was determined to be three vehicles.¹⁰

The Victoria Academy of Ballet offers three programs including [a] General Program, [b] Professional Training Program, and [c] Post Graduate Bridge Program, which results in a total of approximately 70-75 classes per week. The travel survey was conducted at three unique times to capture the travel characteristics for each respective program during its busiest time. A survey was not conducted for the students in the Post Graduate Bridge Program, who were reported to commute by transit exclusively.¹¹ The surveys were conducted at the following times:

- **Thursday April 5th, 4:00-5:00pm** | Captures students in the General Program (approximately 15 students)

⁹ The updated Schedule C is available online at:

<https://www.victoria.ca/assets/Departments/Planning-Development/Development-Services/Zoning/Bylaws/Schedule%20C.pdf>

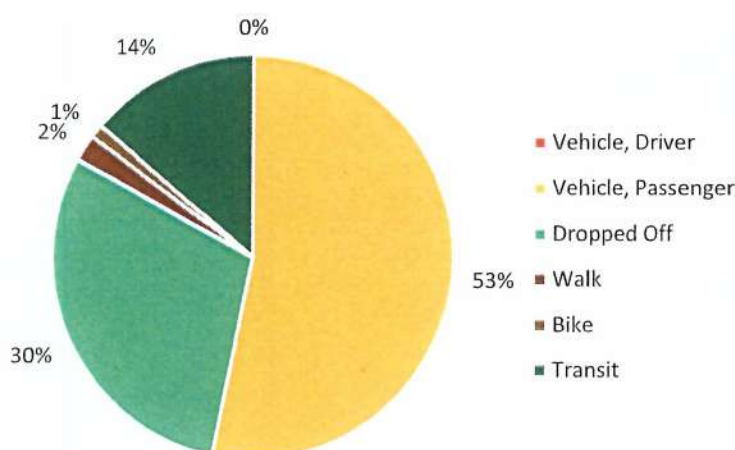
¹⁰ Email correspondence with Victoria Academy of Ballet Artistic Director on March 22, 2018.

¹¹ Phone conversation with Artistic Director of the Victoria Academy of Ballet on April 3, 2018.

- **Saturday April 7th, 9:00am-12:00pm** | Generally considered the busiest time for the academy with about 40 students on-site at any one time
- **Friday April 13th, 1:00-3:00pm** | Captures students in the Professional Training Program (approximately 20 students)

A total of 94 responses were received. Results from the three travel surveys were generally consistent; the majority of the academy's clientele either carpool or are dropped off. When combining the results of the three surveys to understand overall patron demand, the data show that 53% of trips are made by carpooling, 30% are dropped off, 14% are by transit, 2% are made by walking, and 1% by bike (see **Figure 2**).¹² Not a single patron reported to drive to the academy and therefore did not require parking.

FIGURE 2. VICTORIA ACADEMY OF BALLET, PATRON TRAVEL MODE SPLIT



The majority selected 'vehicle, passenger', indicating that they were a passenger and the driver required parking. Parking demand can be estimated based on the Saturday travel survey, which had the largest sample size. The Saturday survey showed that 45 patrons came as a passenger. Some vehicles carried more than two passengers, which was accounted for as part of calculating the total number of vehicles.

Therefore, over the three-hour period, approximately 45 vehicles required parking. Parents typically require parking during this period to either accompany their children (4-5 year olds) to class, or to complete errands while their children are in class.¹³

¹² As discussed, a travel survey was not conducted with Post Graduate Bridge Program who were reported to commute by transit exclusively. As such, the reported transit mode share (14%) may actually be higher if these students were included in the site's total mode share.

¹³ Email correspondence with Victoria Academy of Ballet Administration / Communications Manager on April 23, 2018.

The travel survey did not ask respondents to indicate where they parked their vehicle; however, it was confirmed that patrons typically park in the Johnson Street Parkade if parking is available.¹⁴

4.2 PARKING DEMAND AT OTHER BALLET STUDIOS

Outreach was conducted to other ballet / dance studios in Victoria to learn about their clientele's travel characteristics and parking demand. The Maple Leaf School of Russian Ballet was the only organization who responded and was willing to provide information. The school, located on Catherine Street in Victoria West, offers similar programs as the applicant. The school does not provide any off-street parking; all patrons who drive park on-street.¹⁵

The school is busiest during adult class offerings, which is typically on weekday evenings and Saturdays. During this time, there are approximately 15 vehicles parked on-street attributed to the school. The school's younger clients are either dropped off by their parents or take transit.

Overall, correspondence with the Maple Leaf School of Russian Ballet confirms that its clientele's travel characteristics are similar to that of the Victoria Academy of Ballet, but on a smaller scale.

4.3 BICYCLE PARKING

The applicant will provide 12 bicycle parking spaces designated for patrons of the ballet academy. The provision of end-trip facilities such as bicycle parking can potentially influence and allow for more patrons to commute with their bicycles to the ballet academy and therefore reduce parking demand.

4.4 BICYCLE SHARING

In October 2017, U-bicycle sharing service launched in the City of Victoria. As of November 1, 2018, U-bicycle updated from a dockless bike share to a virtual parking zone system with 135 virtual parking zones where users can pick-up and drop-off the bicycles.¹⁶ There is a virtual docking location within close proximity—at the intersection of Quadra Ave and Hillside Ave—to the site for patrons' use.

4.5 SUMMARY OF EXPECTED PARKING DEMAND

Results from the travel survey indicate that the ballet academy is expected to generate up to 48 vehicles (45 patrons, 3 staff) during peak conditions. It is assumed that up to seven vehicles can be accommodated in the subject site's off-street parking, resulting in up to 41 vehicles seeking on-street parking during the busiest time (Saturday morning, 9:00am-12:00pm).

¹⁴ Email correspondence with Victoria Academy of Ballet Artistic Director on March 22, 2018.

¹⁵ Phone conversation with Maple Leaf School of Russian Ballet manager on April 5, 2018.

¹⁶ More information about U-bicycle is available online at: <https://www.u-bicycle.ca/locations-vancouver-island/>

5.0 ON-STREET PARKING

On-street parking conditions were assessed on streets surrounding the subject site including Quadra Street, Market Street, Hillside Avenue, Wark Street, and Fifth Street. A total of six observations were conducted during the following periods:

- Wednesday April 11, 2018 at 9:00am, 1:30pm, and 4:30pm
- Saturday April 14, 2018 at 9:00am, 1:30pm, and 4:30pm

These observations reflect peak periods for the academy. See **Appendix A** for a summary of all on-street parking observations.

There are a total of 119 on-street parking spaces in proximity to the subject site. The majority of the spaces are restricted to either 1 or 2 hour parking, Monday to Friday. Parking directly adjacent the site on Quadra Street is restricted to 1 hour, 9am – 6pm, Monday – Saturday and no stopping, 7-9am, Monday to Friday. Parking on the north side of Market Street is unrestricted and parking along Quadra Street from Market Street to Topaz Avenue is a mix of no stopping at certain times of the day and 2 hour parking. **Figure 3** illustrates the on-street parking supply and parking restrictions.

FIGURE 3. SUMMARY OF ON-STREET PARKING SUPPLY & RESTRICTIONS



The weekday afternoon (Wednesday, April 11th, 1:30pm) observation represents the busiest of the six counts when 54% of all on-street parking spaces (64 spaces) were occupied. Parking occupancy for the streets immediately surrounding the subject site ranged from 70% (Quadra Street, east side, from Hillside Avenue to Topaz Avenue) to 94% (Market Street, north side). Parking occupancy along the west side of Quadra Street between Market Street and Topaz Avenue was 32%.

Overall, the on-street parking assessment indicates that during the busiest time for parking sampled (i.e. Wednesday afternoon), approximately 55 on-street parking spaces are vacant. Occupancy was found to be lower on Saturday at 9:00am (44%) when the ballet academy is expected to be busiest.

A hypothetical assessment was conducted to determine the impact of adding the expected parking demand of the site (41 vehicles) to the surrounding streets. During a weekday afternoon, it would increase peak occupancy from 54% to 88% (105 spaces) and from 44% to 78% (93 spaces) on a Saturday at 9:00am. Research has shown that a 75%-85% occupancy rate of on-street parking spaces is where parking supply meets demand—but is not over-supplied—along with minimizing congestion and “cruising” for parking.^{17,18}

Therefore, even though the surrounding on-street occupancy would significantly increase during peak conditions for the ballet academy, it would be for a short period of time (typically one hour) and still result in a few vacant spaces. This indicates that there is available on-street parking surrounding the site to accommodate patron parking demand.

6.0 PARKING MANAGEMENT

Given the limited off-street parking supply at the subject site, and the travel characteristics of the Victoria Academy of Ballet patrons, the section provides recommendations on how parking could be effectively managed at the site.

6.1 PASSENGER DROP-OFF ZONE

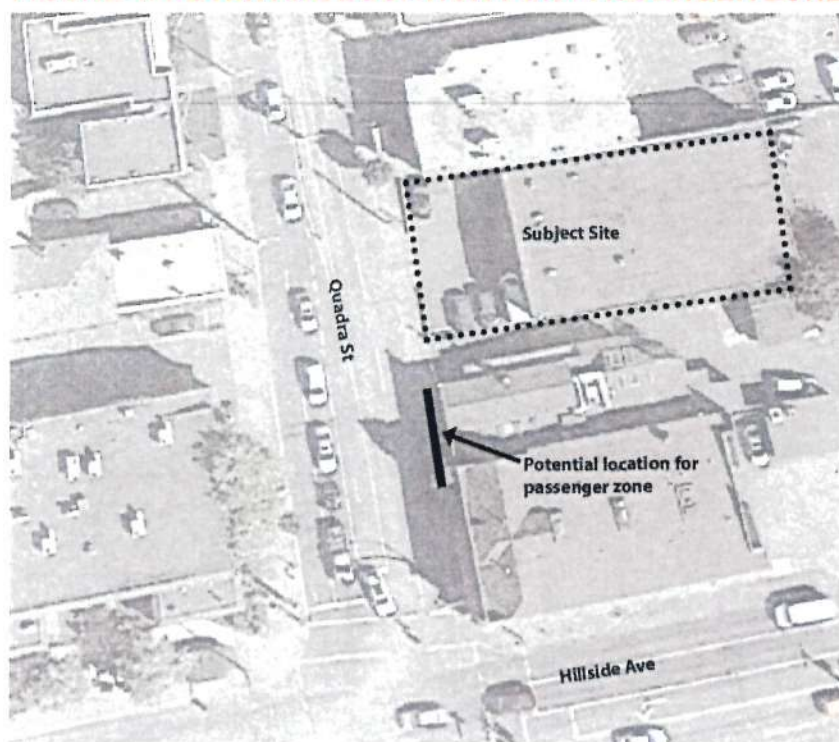
The travel survey revealed that approximately 30% of the patrons are dropped off. A potential parking management option for the proposed location is to obtain a ‘Passenger Zone’ parking restriction along a segment of the site’s frontage on Quadra Street. Per the City’s Streets and Traffic Bylaw, a Passenger Zone limits vehicles to 3-minutes and can only be used for loading and/or unloading passengers.

¹⁷ Smythe, L. (2012). Donald Shoup. *Traffic Technology International*. Available online at: <http://shoup.boi.ucla.edu/TrafficTechnologyInterview.pdf>

¹⁸ Shoup, D. (2007). Gone Parkin’. Available online at: <https://www.nytimes.com/2007/03/29/opinion/29shoup.html>

There is approximately eight metres of space along the eastside of Quadra Street in front of the San Remo restaurant (see **Figure 4**), which would allow one vehicle to park in the zone at one time. A passenger zone at this location would be particularly valuable if the seven off-street parking spaces are occupied and/or if parents are looking for more efficient pick-up and drop-off areas.

FIGURE 4. POTENTIAL LOCATION FOR PASSENGER ZONE



Correspondence with Ballet Victoria, which is another ballet studio in downtown Victoria, explained how a passenger zone along their site's frontage (680 Broughton Street) has been helpful for patrons.¹⁹ The passenger zone has been in place for the past five years and serves both churchgoers and parents who are looking to drop off their children at the studio. It has been particularly valuable for persons with mobility constraints as they can directly access the ramp at the building's entrance.

The implementation of a Passenger Zone could facilitate more efficient pick-up and drop-off of Victoria Academy of Ballet patrons.

6.2 LEASING PARKING FROM NEARBY BUSINESSES

As discussed, there are seven off-street parking spaces proposed at the subject site. It is recommended that these spaces be designated for patrons of the ballet academy. It was reported that only two staff currently drive and require parking.

The applicant should consider approaching nearby businesses to ascertain if there is any availability to lease parking spaces for the ballet academy's employees. With two staff regularly driving to the ballet academy, and up to four part-time staff requiring parking, the applicant should explore whether three to four parking spaces are available. Nearby businesses with off-street parking include Taco Time, the Boston Dance Collective, and the Fifth Street Bar & Grill, as well as at office/commercial buildings in the area and across Quadra Street from the site.

¹⁹ Phone conversation held with Ballet Victoria on April 23, 2018.

7.0 SUMMARY

The Victoria Academy of Ballet is proposing to re-locate its business from downtown to 2713 Quadra Street in the City of Victoria. The proposed parking supply at the subject site is seven parking spaces and two six space bike racks.

Parking demand was estimated for the site based on a travel survey of the applicant's clientele at the existing studio (716 Johnson Street), and research on the travel characteristics of other dance / ballet studios in Victoria. The subject site's expected peak parking demand was determined to be 48 vehicles (45 patrons, 3 staff). This is expected to occur during a Saturday morning.

The majority of patrons carpool or are dropped off by their parents. While carpooling presents a number of benefits—including reducing peak-period vehicle trips and congestion along with lowering crash risk and pollution emissions—it still requires a parking space. As such, it is anticipated that up to 41 vehicles will seek on-street parking during peak conditions.

The on-street parking assessment determined peak occupancy as 54% (weekday, afternoon) and 44% on a Saturday morning, indicating that the streets surrounding the subject site could accommodate patrons when the ballet academy is expected to be busiest, although this would significantly increase on-street occupancy. A hypothetical assessment was completed to demonstrate the impact of the site's parking spillover, which showed that on-street occupancy would increase to 87% and 77% during a Wednesday afternoon and Saturday morning, respectively. The target occupancy for on-street parking is 75%-85% where parking supply meets demand but is not over-supplied.

City policy was also identified highlighting how the proposed development is consistent with the vision of a Large Urban Village and with the City's sustainable transportation objectives. Finally, two parking management approaches were identified as strategies that could assist the applicant with more efficiently managing parking demand.

7.1 RECOMMENDATIONS

The applicant should commit to the following:

1. Work with the City of Victoria to implement a Passenger Zone on the site's frontage along Quadra Street to help facilitate smoother pick-up and drop-off of the ballet's clients; and
2. Approach nearby businesses to determine if any parking spaces are leasable for the ballet's employees.

APPENDIX A. ON-STREET PARKING SUMMARY

Victoria Academy of Ballet Parking Study - On-Street Parking Summary, Wednesday April 11, 2018

Road Segment		Side	Parking Restriction	Parking Supply	Wednesday April 11, 2018					
					9:00am		1:30pm		4:30pm	
					Observed	Occupancy	Observed	Occupancy	Observed	Occupancy
Quadra St	Market St - Topaz Ave	E	No Stopping (4-6pm, M-F) 2hr, 9am-4pm, M-F (9am-6pm, M-Sat)	25	10	40%	4	16%	0	0%
		W	No Stopping (7-9am, M-F)	27	22	81%	19	70%	20	74%
	Hillside Ave - Market St	E	No Stopping (4-6pm, M-F) 2hr, 9am-4pm, M-F (9am-6pm, M-Sat)	2	2	100%	1	50%	1	50%
		W	No Stopping (7-9am, M-F) 1hr, 9am-6pm, M-Sat	2	0	0%	0	0%	2	100%
Market St	Quadra St - Open Field	N	No Restrictions	16	16	100%	15	94%	16	100%
		S	1hr, 9am-6pm, M-Sat	14	5	36%	6	43%	7	50%
Wark St	Market St - Hillside Ave	E		8	2	25%	5	63%	5	63%
		W	1hr, 9am-6pm, M-F	10	2	20%	4	40%	3	30%
Hillside Ave	Quadra St - Fifth St	N	90min, 8am-6pm, M-Sat	6	1	17%	3	50%	2	33%
		S	1hr, 9am-6pm	3	0	0%	1	33%	1	33%
Fifth St	Hillside Ave - Vista Heights	E			RPO					
		W	1hr, 8am-6pm, M-Sat	6	1	17%	6	100%	2	33%
Total				119	61	51%	64	54%	59	50%

Victoria Academy of Ballet Parking Study - On-Street Parking Summary, Saturday April 14, 2018

Road Segment		Side	Parking Restriction	Parking Supply	Saturday April 14, 2018					
					9:00am		1:30pm		4:30pm	
					Observed	Occupancy	Observed	Occupancy	Observed	Occupancy
Quadra St	Market St - Topaz Ave	E	No Stopping (4-6pm, M-F) 2hr, 9am-4pm, M-F (9am-6pm, M-Sat)	25	8	32%	8	32%	8	32%
		W	No Stopping (7-9am, M-F) 1hr, 9am-6pm, M-Sat	27	14	52%	13	48%	9	33%
Market St	Hillside Ave - Market St	E	No Stopping (4-6pm, M-F) 2hr, 9am-4pm, M-F (9am-6pm, M-Sat)	2	0	0%	2	100%	0	0%
		W	No Stopping (7-9am, M-F)	2	0	0%	3	150%	1	50%
	Quadra St - Open Field	N	No Restrictions	16	13	81%	12	75%	12	75%
		S	1hr, 9am-6pm, M-Sat	14	4	29%	4	29%	6	43%
Wark St	Market St - Hillside Ave	E	1hr, 9am-6pm, M-F	8	6	75%	4	50%	2	25%
		W		10	5	50%	4	40%	2	20%
Hillside Ave	Quadra St - Fifth St	N	90min, 8am-6pm, M-Sat	6	0	0%	5	83%	5	83%
		S	1hr, 9am-6pm	3	0	0%	1	33%	0	0%
Fifth St	Hillside Ave - Vista Heights	E				RPO				
		W	1hr, 8am-6pm, M-Sat	6	2	33%	5	83%	3	50%
Total				119	52	44%	61	51%	48	40%