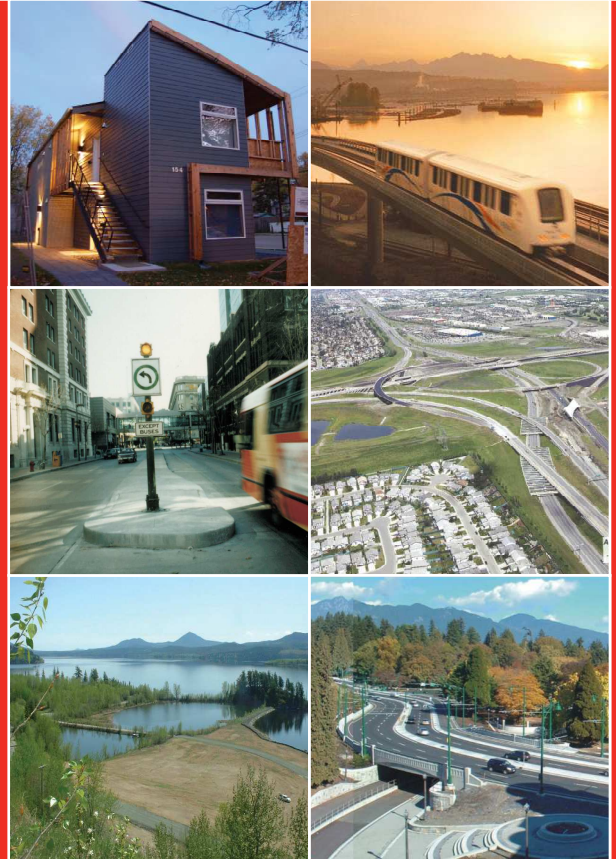


# MMM Group Limited



## Point Grey Private Hospital Vancouver, BC

Traffic and Parking Study (DRAFT)

COMMUNITIES  
TRANSPORTATION  
BUILDINGS  
INFRASTRUCTURE



November 2013 | 5011001-033



## STANDARD LIMITATIONS

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Prepared by:

\_\_\_\_\_  
Becky Pui Kiu Lai, EIT

Reviewed by:

\_\_\_\_\_  
Floris van Weelderren, P.Eng., PTOE

Approved by:

\_\_\_\_\_  
Floris van Weelderren, P.Eng., PTOE

## **PROJECT TEAM MEMBER LIST**

Project Manager:

Becky Pui Kiu Lai, EIT

Technical Staff:

Julio Wong, P.Eng.

Sam Young, P.Eng.

Drewry Wang

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## APPENDICES

Appendix A – Staff Questionnaire Template

Appendix B – AutoTURN Analysis

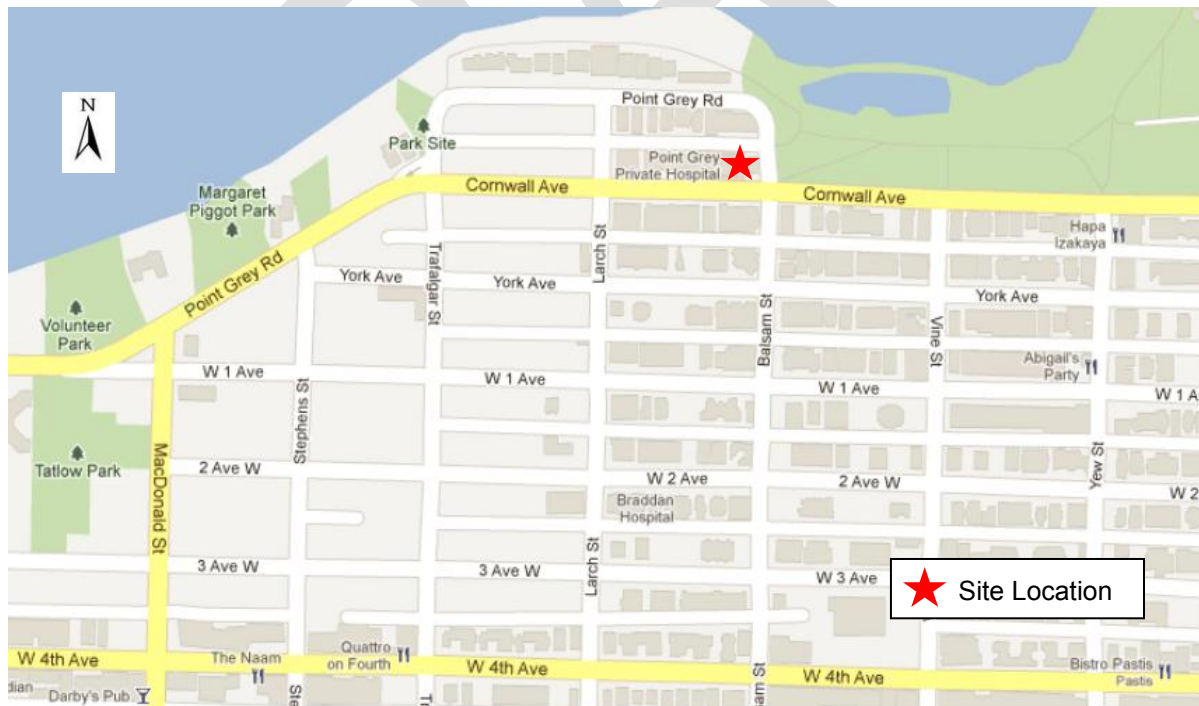
Appendix C – Loading Management Plan

# 1. INTRODUCTION

Point Grey Private Hospital (PGPH) – located at 2423 Cornwall Avenue within the Kitsilano neighbourhood of Vancouver – is a 76-bed residential care facility providing 24-hour professional care services to its residents. The expansion plan would add 77 new beds by constructing two new wings on adjacent properties. A new underground parkade is also proposed under the new east wing. The site location is illustrated in **Figure 1**.

MMM Group was retained by The Care Group to undertake a traffic and parking study for the proposed development in support of the rezoning application. Specifically, the objectives of this study are to:

- Document the existing traffic generation of PGPH and assess the travel modes of the facility’s users;
- Document the existing parking supply and utilization at PGPH;
- Compare PGPH’s trip generation and parking demand with comparable residential care facilities within Vancouver;
- Review circulation of the front porte-cochere and loading area; and
- Develop a Loading Management Plan (LMP) that aims to reduce traffic impact.



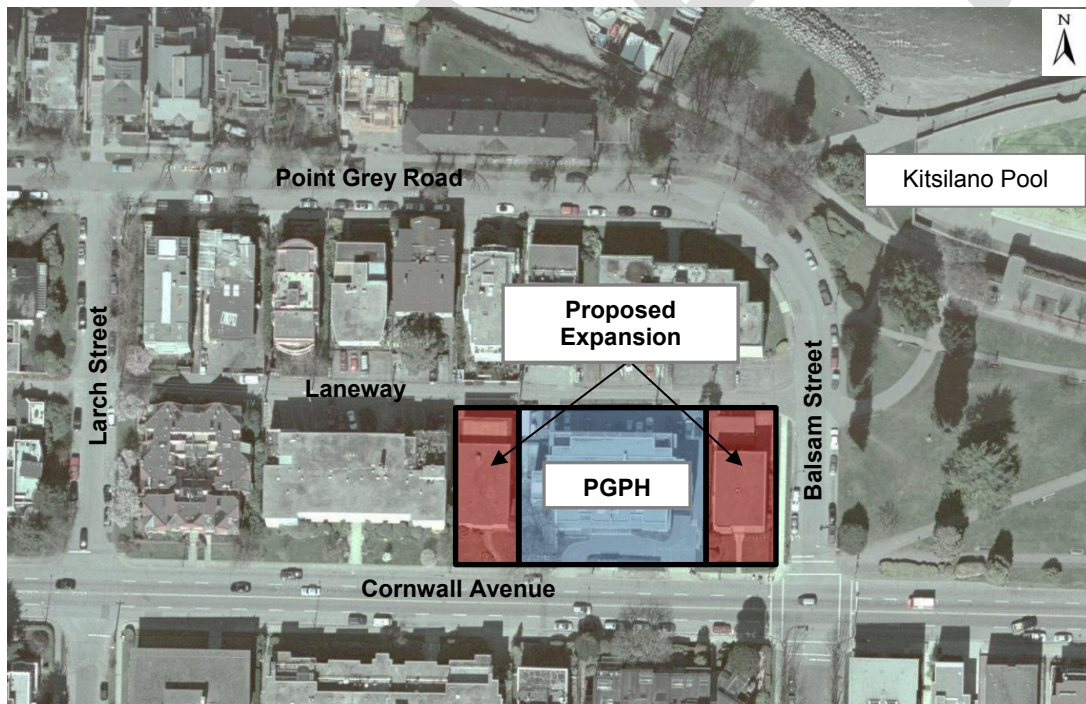
**Figure 1 – Site Location**  
(Source: Google Maps)

## 2. EXISTING CONDITIONS

### 2.1 The Site and Surroundings

As illustrated in **Figure 2**, PGPH is bounded by Cornwall Avenue to the South, Laneway to the north and low-rise apartments to the east and west. The site is located within the RM-4 zoning district (Multiple Dwelling District Zone) in a residential neighbourhood consisting mostly of low-rise apartments, condos, townhouses and single-family homes. The closest landmarks include Kitsilano Pool (200m away) and Kitsilano Beach (450m away).

Current access to the site is provided via the Laneway, in addition to two driveways on Cornwall Avenue which connects to a porte-cochere pick-up / drop-off area (**Figure 3**). There are currently 17 parking spaces on-site, with 16 spaces along the Backlane and one space adjacent to the porte-cochere. The nearest signalized intersection is at Cornwall Avenue / Balsam Street.



**Figure 2 – Study Area**  
(Source: Google Maps)





Figure 3 – Existing Driveways and Porte-Cochere

## 2.2 Road Network

**Cornwall Avenue** is an east-west primary arterial with a four-lane cross-section within the vicinity of the study area. Cornwall has a posted speed limit of 50km/hr and has sidewalks on both sides. On-street parking is typically permitted on both sides of the street except at locations with signed parking restrictions. Cornwall is also a bus route, with the closest bus stop located between the two PGPH driveways on Cornwall. The following Coast Mountain Bus Company routes provide service along Cornwall Avenue.

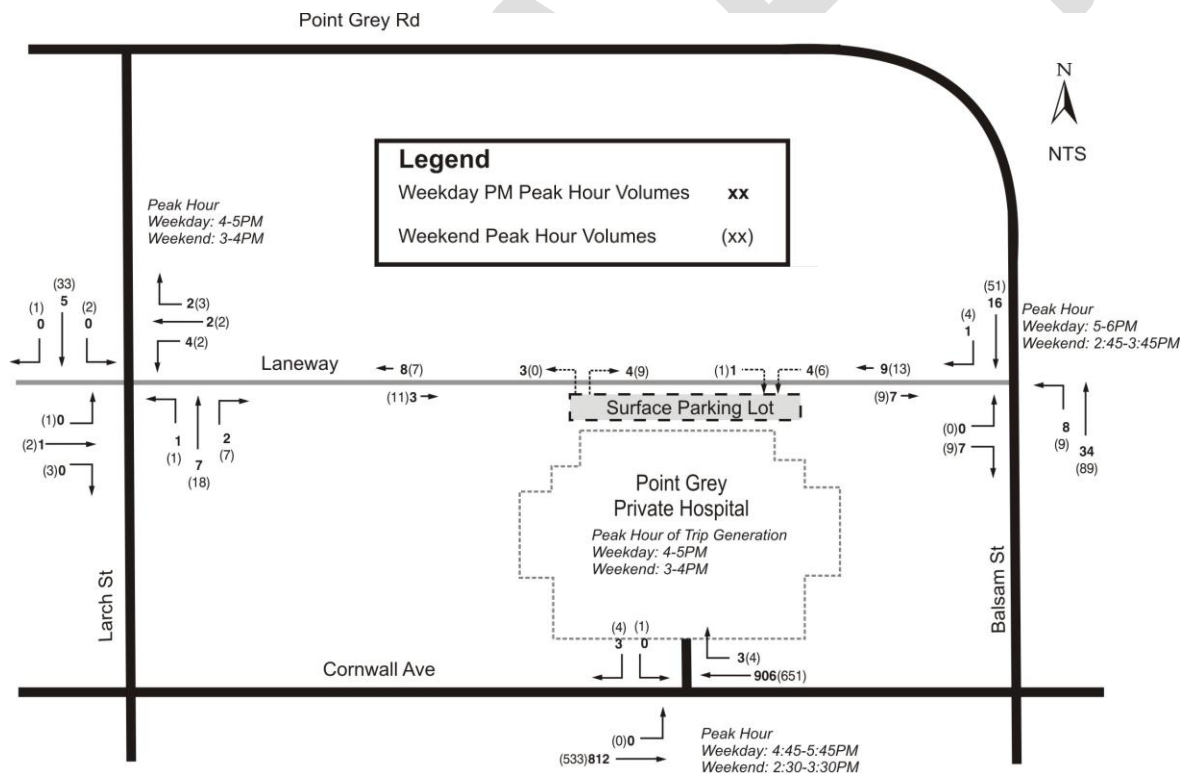
- #2 – Macdonald - 16<sup>th</sup> Ave/Burrard Station
- #22 – Knight/Macdonald
- #32 – Dunbar/Downtown
- #N22 – Downtown/Dunbar Nightbus

**Balsam Street** is a north-south local street with a two-lane cross-section and a posted speed limit of 50km/hr. Parking is typically permitted on both sides of the street except at locations with signed parking restrictions. Balsam is part of the Seaside Bicycle Route that runs along the shore from Kitsilano Beach and connects to Point Grey Road. Bike ridership is in the order of 150 cyclists per hour during the summer.

**The Laneway** has a two-lane cross-section and connects Balsam Street with Larch Street. Its main purpose is to provide vehicle access to properties along the Laneway, including PGPH.

### 2.3 Traffic

Traffic volumes at study area intersections were collected by MMM staff during the peak periods of visitor activity at PGPH (i.e. 4-6 p.m. on a weekday and 2-4 p.m. on a Saturday). The data was collected during the week of September 12, 2011. Count results are shown in **Figure 4**.



Key findings include:

- PGPH generates approximately 19 vehicle trips (8 inbound and 11 outbound) during the weekday PM peak hour and 25 trips (11 inbound and 14 outbound) during the Saturday PM peak hour.
- Laneway volumes were observed to be very low, with generally less than 25 trips per direction per hour.
- PGPH traffic accounts for approximately 50-70% of the laneway traffic in the peak hours.

**Table 1** compares the observed trip generation at PGPH with ITE's published rate and comparable residential care facilities in Vancouver. Trip generation and parking demand studies were conducted by MMM staff at Arbutus Care Centre and Braddan Private Hospital on Thursday, September 15, 2011 and Saturday, September 17, 2011. As shown, site-generated traffic volumes are similar for all three facilities, with the highest amount of traffic observed during the Saturday afternoon peak hour. Note that the trip generation analyses account for visitors who park on-street and walk into the facilities.

**Table 1 – Trip Generation Comparison**

| Location                              | Number of Occupied Beds | Trip Generation (veh/hr) |           |           | Trip Rate (veh/hr/bed) |
|---------------------------------------|-------------------------|--------------------------|-----------|-----------|------------------------|
|                                       |                         | Inbound                  | Outbound  | Total     |                        |
| <b>Weekday PM Peak Hour</b>           |                         |                          |           |           |                        |
| ITE (Land Use 620) <sup>1</sup>       | --                      | N/A                      | N/A       | N/A       | 0.22                   |
| Arbutus Care Centre <sup>2</sup>      | 162 Beds                | 14                       | 14        | 28        | 0.17                   |
| Braddan Private Hospital <sup>3</sup> | 51 Beds                 | 7                        | 9         | 16        | 0.31                   |
| <b>PGPH</b>                           | <b>76 Beds</b>          | <b>8</b>                 | <b>11</b> | <b>19</b> | <b>0.25</b>            |
| <b>Saturday PM Peak Hour</b>          |                         |                          |           |           |                        |
| ITE (Land Use 620) <sup>1</sup>       | --                      | N/A                      | N/A       | N/A       | 0.40                   |
| Arbutus Care Centre <sup>2</sup>      | 162 Beds                | 25                       | 29        | 54        | 0.33                   |
| Braddan Private Hospital <sup>3</sup> | 51 Beds                 | 9                        | 8         | 17        | 0.33                   |
| <b>PGPH</b>                           | <b>76 Beds</b>          | <b>11</b>                | <b>14</b> | <b>25</b> | <b>0.33</b>            |

Notes: 1. Based on published data by the Institute of Transportation Engineers (ITE) - Land Use 620 Nursing Homes. (Trip Generation, 9<sup>th</sup> Edition (Washington, DC: ITE, 2012))

2. Arbutus Care Centre is a two-storey 162 bed residential care facility located at 4505 Valley Drive, Vancouver. Arbutus Care Centre is located close to bus routes, and similar in size to the expanded PGPH.

3. Braddan Private Hospital is a 51 bed residential care facility located at 2450 2nd Avenue, approximately 400m south of PGPH. The site layout is similar to PGPH in that parking spaces are provided along the backlane.

## 2.4 Travel Behavior

PGPH currently has about 35 to 40 full-time / part-time staff caring for up to 76 residents. The staff work in shifts with a maximum of 13 employees on-site at any given time.

MMM administered a questionnaire to PGPH staff to determine travel mode share (questionnaire template can be found in **Appendix A**). The questionnaire was distributed during the week of September 19, 2011. A total of 35 staff participated in the questionnaire, and their travel mode shares are summarized in **Figure 5**.

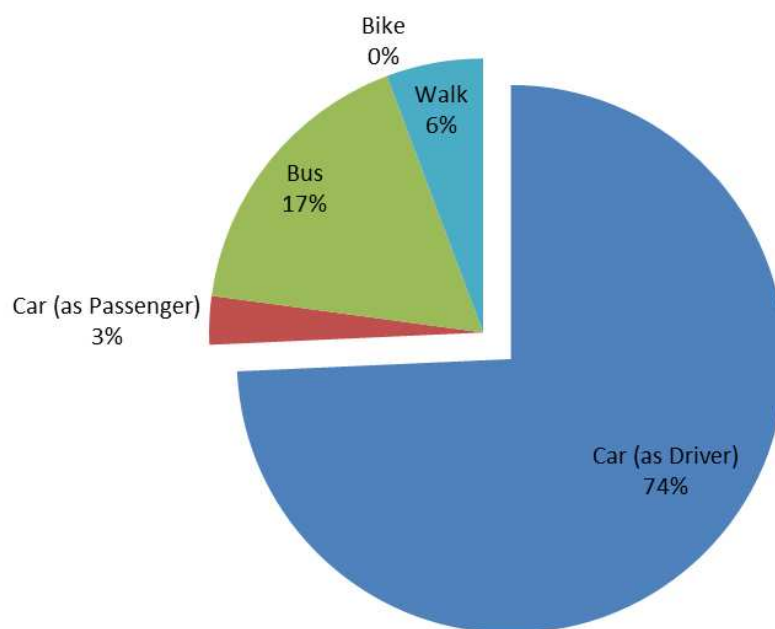


Figure 5 – Existing Staff Mode Share

Key findings from the staff questionnaire include:

- The majority of staff - almost 75% - arrive to work by driving, with an additional 3% arriving by carpooling
- Approximately 17% of staff arrive to work by transit
- The remaining staff – approximately 5% - arrive to work by foot
- Staff do not typically bike to work
- Staff typically arrive or depart PGPH during the following shift changes:
  - morning shift (6:30-7:30am)
  - afternoon shift (2:30-3:30pm)
  - late night shift (9:30-10:30pm)

MMM also administered a travel questionnaire to visitors in order to determine visitor mode share; however, results are not included in this report due to low participation. Anecdotal information suggests that approximately 85% of visitors drive or are dropped off in a vehicle, depending on weather conditions.

## 2.5 Parking

As mentioned previously, PGPH currently provides 17 parking stalls for staff and visitors; 16 of which are located at the Backlane (see **Figure 6**) and one at the portecochere. All parking demand is generated by staff and visitors, as residents do not drive or store vehicles on-site. As illustrated in **Figure 7**, more than 90% of staff who typically drive to PGPH would park at spaces along the Backlane.



**Figure 6 – On-Site Parking along Backlane**

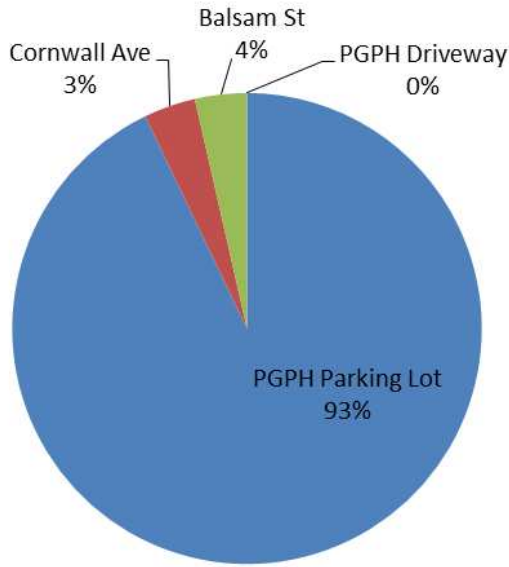


Figure 7 – Existing Staff Parking Location

Figure 8 summarizes the observed on-site parking usage at PGPH. As shown, there appears to be additional parking capacity during the weekday and Saturday peak periods. However, parking is approaching capacity on Saturday between 3:30 to 4:30 p.m.

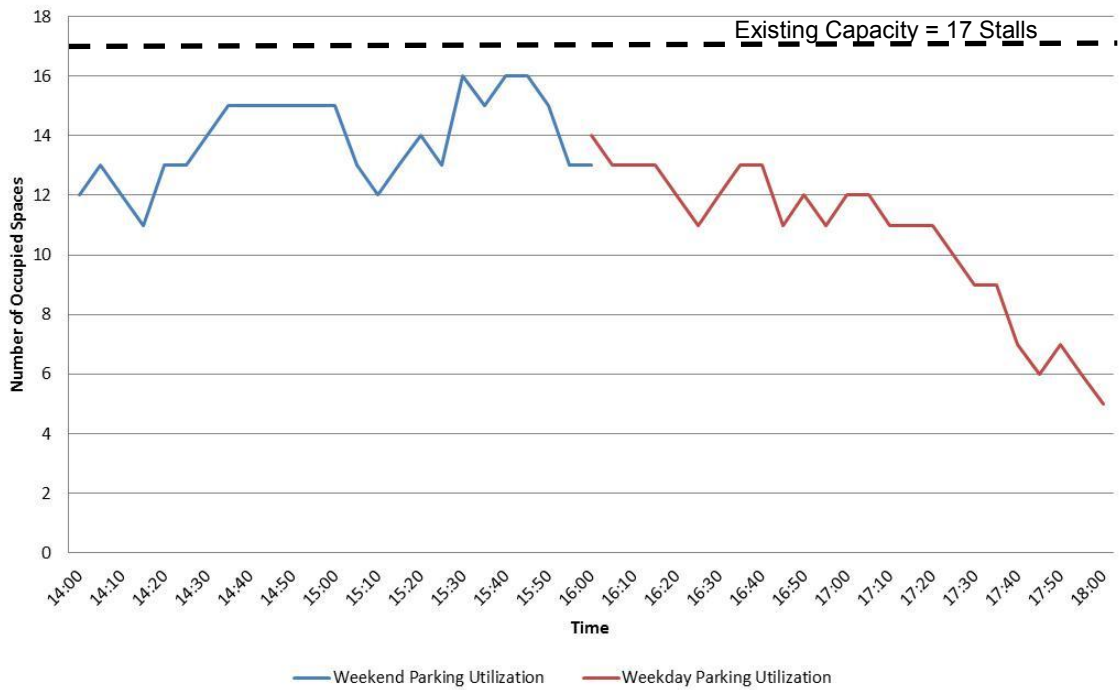


Figure 8 – Existing On-Site Parking Utilization

Analysis of on-street parking is beyond the scope of this study; however, there appears to be significant use of on-street parking during the summer weekend by visitors to the Kitsilano beach and Kitsilano pool. Some visitors to PGPH were also observed to park along Cornwall Avenue or Balsam Street.

DRAFT

### 3. PROPOSED EXPANSION

PGPH is proposing to expand the facility by constructing new wings east and west of the existing building. The expansion will require the demolition of two adjacent residential buildings. Key aspects of the expansion include:

- Preservation of the existing three-storey building plus basement to expand to the east wing with a three-storey building plus basement and parking garage. The west wing will also have three floors plus basement and sub-basement.
- 77 new beds for an expanded total of 153 beds.
- Provision of two at-grade Class B loading spaces accessed from the Backlane.
- Provision of two at-grade Class B passenger spaces provided at the front entry at Cornwall Avenue.
- Provision of 29 off-street parking stalls arranged in the following configuration:
  - 12 parking stalls along the Backlane; and
  - 17 parking stalls (inclusive of one disability parking stall which counts as two regular stalls per allowance within the City of Vancouver *Parking By-law*<sup>1</sup>) in the new underground parkade.
- Maximum of 18 employees on-site during peak periods.

The proposed site plan is illustrated in **Figure 9a** (Ground Floor) and **Figure 9b** (Sub-Basement Level).

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<sup>1</sup> *Parking By-law* (No.6059) (Vancouver: City of Vancouver, 2009)



Balsam Street

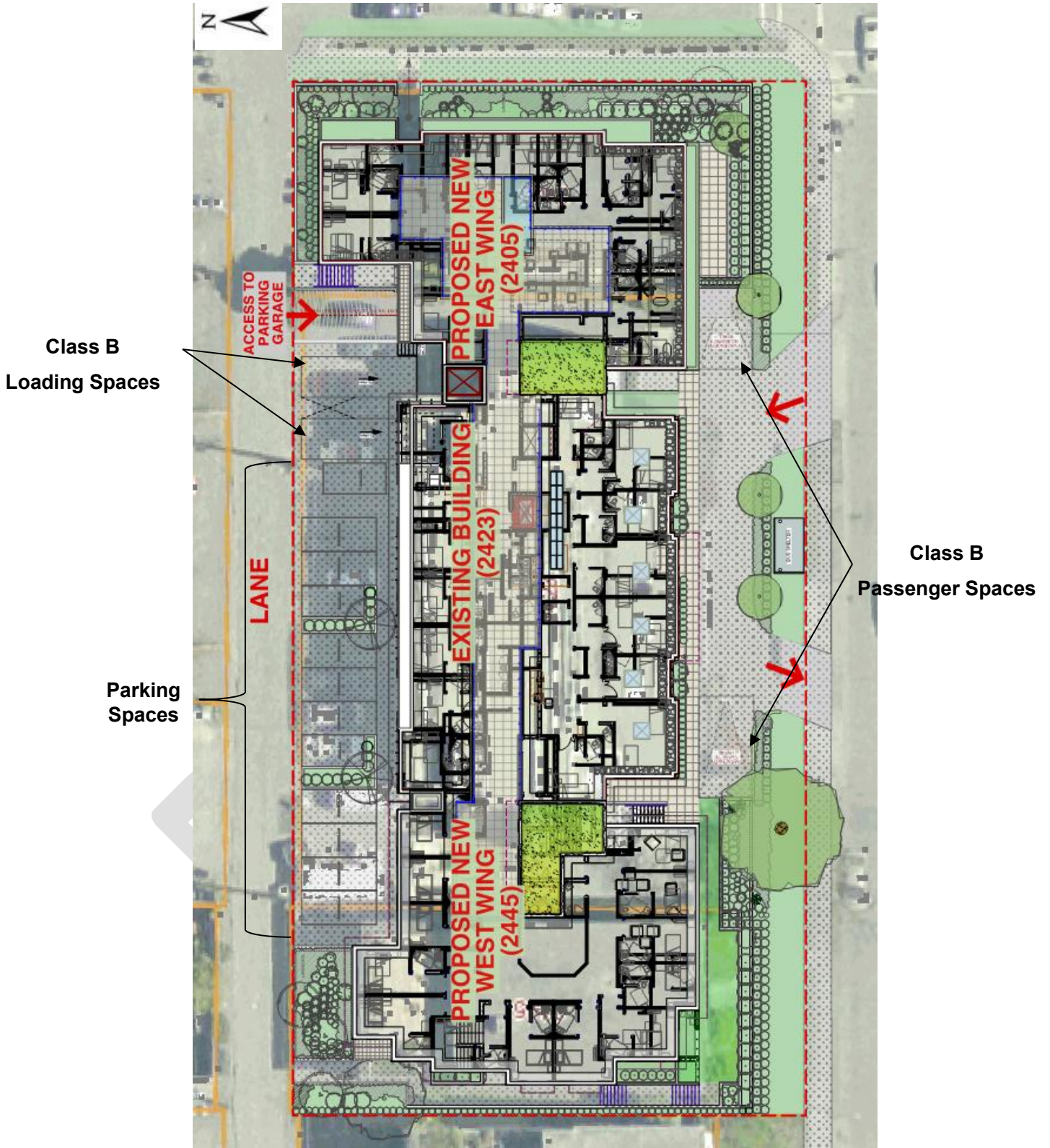


Figure 9a – Proposed Site Plan (Ground Level)

(Source: Stuart Howard Architect)



Figure 9b – Proposed Site Plan (Sub-Basement Level)  
 (Source: Stuart Howard Architect)

### 3.1 Site-Generated Traffic Volumes

Future traffic generated by the expansion is calculated based on the existing rates observed at PGPH. The estimated peak hour trip generation is provided in **Table 2**.

**Table 2 – PGPH Trip Generation**

| Land Use Type                | Unit            | Trip Rate (vph/unit) |            |             | Traffic Volumes (vph) |           |           |
|------------------------------|-----------------|----------------------|------------|-------------|-----------------------|-----------|-----------|
|                              |                 | In (%)               | Out (%)    | Total       | In                    | Out       | Total     |
| <b>Weekday PM Peak Hour</b>  |                 |                      |            |             |                       |           |           |
| PGPH (Existing)              | 76 Beds         | 42%                  | 58%        | 0.25        | 8                     | 11        | 19        |
| PGPH (Expansion)             | <u>77 Beds</u>  | 42%                  | 58%        | 0.25        | <u>8</u>              | <u>11</u> | <u>19</u> |
| <b>Total</b>                 | <b>153 Beds</b> | <b>42%</b>           | <b>58%</b> | <b>0.25</b> | <b>16</b>             | <b>22</b> | <b>38</b> |
| <b>Saturday PM Peak Hour</b> |                 |                      |            |             |                       |           |           |
| PGPH (Existing)              | 76 Beds         | 44%                  | 56%        | 0.33        | 11                    | 14        | 25        |
| PGPH (Expansion)             | <u>77 Beds</u>  | 44%                  | 56%        | 0.33        | <u>11</u>             | <u>14</u> | <u>25</u> |
| <b>Total</b>                 | <b>153 Beds</b> | <b>44%</b>           | <b>56%</b> | <b>0.33</b> | <b>22</b>             | <b>28</b> | <b>50</b> |

When completed, the expansion is expected to generate 19 additional vehicle trips (= 8 inbound + 11 outbound) during the weekday PM peak and 25 additional vehicle trips (=11 inbound + 14 outbound) during the Saturday PM peak. The total peak vehicle trip generation would be in the order of one car per two minutes in the PM peak hour and one car per minute in the Saturday PM peak hour. The analysis is conservative as it does not discount for the trips currently generated by the two adjacent apartment buildings (11 units and 15 units), which would be demolished for the expansion.

Road capacity analysis is beyond the scope of this report. However, it would be reasonable to conclude that the changes in traffic associated with the proposed development would be within the normal range of traffic fluctuation along Cornwall Avenue and would hence not pose a significant traffic impact.

### 3.2 Parking

Application of the City of Vancouver *Parking By-law* (under Section 4.2.3.1 - Community Care Facilities / Group Residence) would require a minimum of one parking space for every four beds. Other similar land uses within the bylaw – such as “Dwelling Housing Units dedicated solely for Senior Citizens” and “Senior Supportive or Assisted Housing” – do not apply to PGPH as both uses are housing intended for seniors who can independently support themselves and require little or no assistance for their daily activities.

**Table 3** compares the parking demand ratios of the observed sites with the City’s bylaw requirement and the published data by ITE.

**Table 3 – Parking Demand Comparison (Saturday Peak)**

| Source                             | Parking Demand (spaces / bed) | Parking Spaces to Provide at PGPH |
|------------------------------------|-------------------------------|-----------------------------------|
| <b>Vancouver Bylaw</b>             | 0.250                         | 38                                |
| ITE <sup>1</sup>                   | 0.210                         | 32                                |
| <b>PGPH (Current)</b>              | 0.211                         | 32                                |
| <b>Braddan Private Hospital</b>    | 0.176                         | 27                                |
| <b>Arbutus Care Centre</b>         | 0.173                         | 26                                |
| <b>PGPH (Proposed)<sup>2</sup></b> | <b>0.187</b>                  | <b>29</b>                         |

Notes: 1. Based on published data by the Institute of Transportation Engineers (ITE) - Land Use 620 Nursing Homes. (*Parking Generation, 3<sup>th</sup> Edition* (Washington, DC: ITE, 2004))  
 2. Based on the averaged parking demand rates at the existing PGPH, Braddan Private Hospital and Arbutus Care Centre.

Key findings of Table 3 include:

- The proposed parking demand at the expanded PGPH is 0.187, and would yield a parking requirement of 29 stalls.
- While the proposed parking supply of 29 stalls at PGPH post-expansion is 9 stalls less than the required 38 stalls per the City’s Bylaw, it would meet the estimated parking demand.

Note that of the 29 stalls, staff would require 14 stalls based on the current mode share (18 staff on-site x 75% driving mode share). The remaining 15 stalls can be used for short-term visitor parking. The parking supply will likely accommodate most of the needs of the expanded facility. During high levels of visitations, parking may overflow to on-street parking on nearby streets.

### 3.3 Review of Front Driveway

Field observations indicate that less than 5 cars per hour currently use the front porte-cochere during the peak of activity at PGPH. Most vehicles would drive in, quickly drop-off or pick-up passengers, and then drive out. Vehicles needing longer loading / unloading times (i.e. passengers with wheelchair needs) tend to park at the available spaces within the porte-cochere and unload.

Due to low volumes, at no time did two vehicles use the porte-cochere at the same time for pick-up / drop-off (i.e. no queues). Vehicles were also observed to enter via the east driveway, and exit via the west driveway at all times.

Based on existing volumes and driveway usage, the one-lane porte-cochere should be adequate in serving future volumes. The existing 30 feet long canopy would help shelter visitors during rain or snow conditions. Provision of bollards or planters could protect the building and doorway of errant vehicles.

## 4. LOADING MANAGEMENT PLAN

Loading Management Plans (LMP) seek to identify and manage loading operations with a view to reducing, if not eliminating traffic impacts. In order to develop an effective plan that ensures the safe and efficient movement of goods at PGPH, an LMP (see **Appendix C**) has been developed that:

- Reviews the proposed loading facilities;
- Identifies loading activities and schedules;
- Confirms truck entering and exiting routes;
- Reviews on-site circulations; and
- Develops measures to optimize loading operations.

## 5. SUMMARY

- The Care Group is proposing to expand the existing Point Grey Private Hospital (PGPH) at 2423 Cornwall Avenue (at Balsam). PGPH is currently a 76-bed Residential Care facility that provides 24-hour professional care services to its residents. The proposed expansion involves demolishing two adjacent low-rise residential apartment buildings to allow the construction of two new wings, which will house 77 new beds – for an expanded total of 153 beds.
- Currently, staff travels to PGPH by the following modes: car as driver (74%), carpool (3%), transit (17%) and walk (6%).
- When completed, the expansion is expected to generate 19 additional vehicle trips during the weekday PM peak and 25 additional vehicle trips during the Saturday PM peak. The total peak vehicle trip generation would be in the order of one car per two minutes in the PM peak hour and one car per minute in the Saturday PM peak hour. The analysis is conservative as it does not discount for the trips currently generated by the two adjacent apartment buildings, which would be demolished for the expansion.
- Changes in traffic associated with the proposed development would be within the normal range of traffic fluctuation along Cornwall Avenue and would hence not pose a significant traffic impact.
- On-site parking will increase from 17 stalls to 29 stalls, including 17 new stalls located in the proposed underground parkade. A maximum 18 Staff will be on-site at any given time.
- The proposed supply of 29 stalls should be adequate in serving most of the future parking demand based on data collected at similar facilities. Staff would require approximately 14 stalls, which leaves up to 15 stalls for short-term visitor parking. During high levels of visitations, some parking may overflow to on-street parking on nearby streets.
- Based on existing volumes and driveway usage, the one-lane porte-cochere should be adequate in serving future volumes. The existing overhead canopy helps shelter visitors during rain or snow conditions. Provision of bollards or planters could protect the building and doorway from errant vehicles.
- A Loading Management Plan is included in this report which seeks to identify and manage loading operations at PGPH with a view to reducing, if not eliminating traffic impacts.







**Point Grey Private Hospital Expansion – Staff Travel Survey**

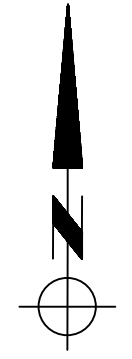
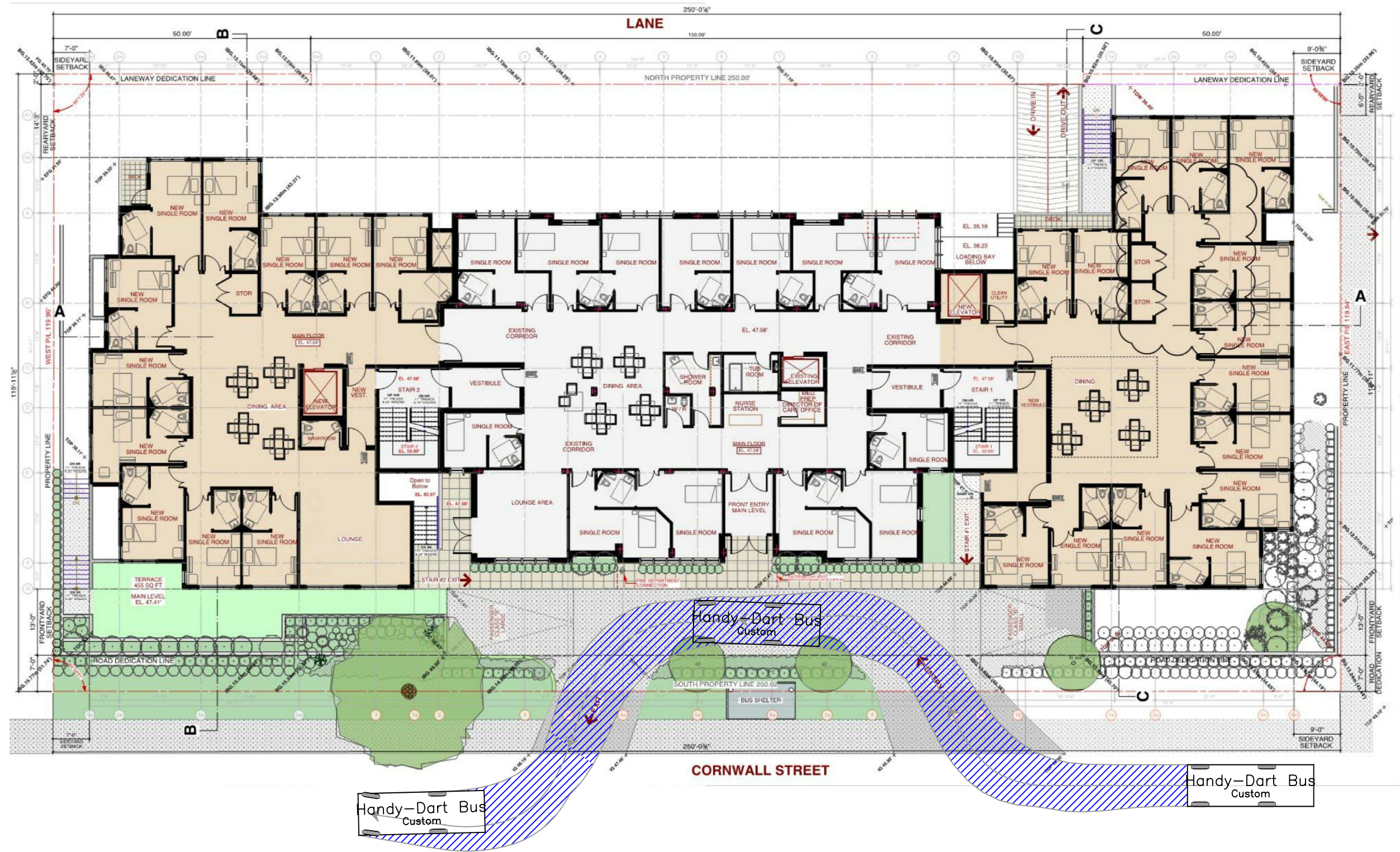
This questionnaire focuses on your travel to and from Point Grey Private Hospital. The information gathered here will be incorporated into a Transportation Study for the expansion project.

| Name                    | Which days do you typically work? (e.g. Mon-Fri) | What is your Start Time Today? | What is your End Time Today? | What is your residential postal code? | How do you normally travel to work? (Check One) |                          |                          |                          |                          |                          | Would you consider a 12-month commitment to the TransLink Employer Pass Program? (15% off monthly transit passes) | If you Drive, where do you typically park your vehicle? (Circle One)                             |
|-------------------------|--|--------------------------------|------------------------------|---------------------------------------|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|---|--|
|                         |  |                                |                              |                                       | Car (as Driver)                                 | Car (as Passenger)       | Bus                      | Bike                     | Walk                     | Other Please specify     |   |  |
| 1<br>Example – John Doe | Sat, Sun, Mon-Wed                                | 8:00 a.m.                      | 4:00 p.m.                    | V7E 4G3                               | <input checked="" type="checkbox"/>             | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Yes / No  | Backlane<br>Cornwall Avenue<br>Other (please specify): _____<br>Balsam Street<br>Point Grey Road |
| 2                       |  |                                |                              |                                       | <input type="checkbox"/>                        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Yes / No  | Backlane<br>Cornwall Avenue<br>Other (please specify): _____<br>Balsam Street<br>Point Grey Road |
| 3                       |  |                                |                              |                                       | <input type="checkbox"/>                        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Yes / No  | Backlane<br>Cornwall Avenue<br>Other (please specify): _____<br>Balsam Street<br>Point Grey Road |
| 4                       |  |                                |                              |                                       | <input type="checkbox"/>                        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Yes / No  | Backlane<br>Cornwall Avenue<br>Other (please specify): _____<br>Balsam Street<br>Point Grey Road |

| Name | Which days do you typically work? (e.g. Mon-Fri) | What is your Start Time Today? | What is your End Time Today? | What is your residential postal code? | How do you normally travel to work? (Check One) |                    |     |      |      |                      | Will you consider a 12-month commitment to the TransLink Employer Pass Program? (15% off monthly transit passes) | If you Drive, where do you typically park your vehicle? (Circle One) |
|------|--|--------------------------------|------------------------------|---------------------------------------|---|--------------------|-----|------|------|----------------------|--|--|
|      |  |                                |                              |                                       | Car (as Driver)                                 | Car (as Passenger) | Bus | Bike | Walk | Other Please specify |  |  |
| 5    |  |                                |                              |                                       |   |                    |     |      |      | Yes / No             | Backlane<br>Cornwall Avenue<br>Other (please specify): _____   |  |
| 6    |  |                                |                              |                                       |   |                    |     |      |      | Yes / No             | Backlane<br>Cornwall Avenue<br>Other (please specify): _____   |  |
| 7    |  |                                |                              |                                       |   |                    |     |      |      | Yes / No             | Backlane<br>Cornwall Avenue<br>Other (please specify): _____   |  |
| 8    |  |                                |                              |                                       |   |                    |     |      |      | Yes / No             | Backlane<br>Cornwall Avenue<br>Other (please specify): _____   |  |
| 9    |  |                                |                              |                                       |   |                    |     |      |      | Yes / No             | Backlane<br>Cornwall Avenue<br>Other (please specify): _____   |  |





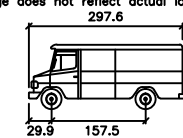


MMM Group Limited  
 Suite 700, 1045 Howe Street  
 Vancouver, BC V6Z 2A9  
 t. 604.685.9381  
 f. 604.683.8655  
 www.mmm.ca

Point Grey Private Hospital, Vancouver  
 Turning Movement Analysis - Handy-Dart Bus

SCALE: NTS      DATE: Nov 27, 2013      Project No. 5011001-021-DWG-01-Rev5

(Image does not reflect actual look of vehicle)

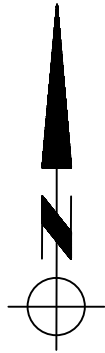


Handy-Dart Bus inches  
 Width : 98.4  
 Track : 98.4  
 Lock to Lock Time : 6.0  
 Steering Angle : 29.8

LEGEND

- ACCOMMODATED
- CONFLICT

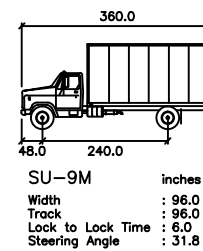
**PRELIMINARY**



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 Suite 700, 1045 Howe Street  
 Vancouver, BC V6Z 2A9  
 t. 604.685.9381  
 f. 604.683.8655  
 www.mmm.ca

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 Turning Movement Analysis - SU-9M  
 Class B Loading Bay 1 (Inbound)

|               |                       |  |
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LEGEND

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- CONFLICT

**PRELIMINARY**



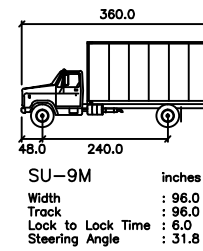
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 Suite 700, 1045 Howe Street  
 Vancouver, BC V6Z 2A9  
 t. 604.685.9381  
 f. 604.683.8655  
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 Class B Loading Bay 2 (Inbound)

SCALE:  
 NTS

DATE:  
 Nov 27, 2013

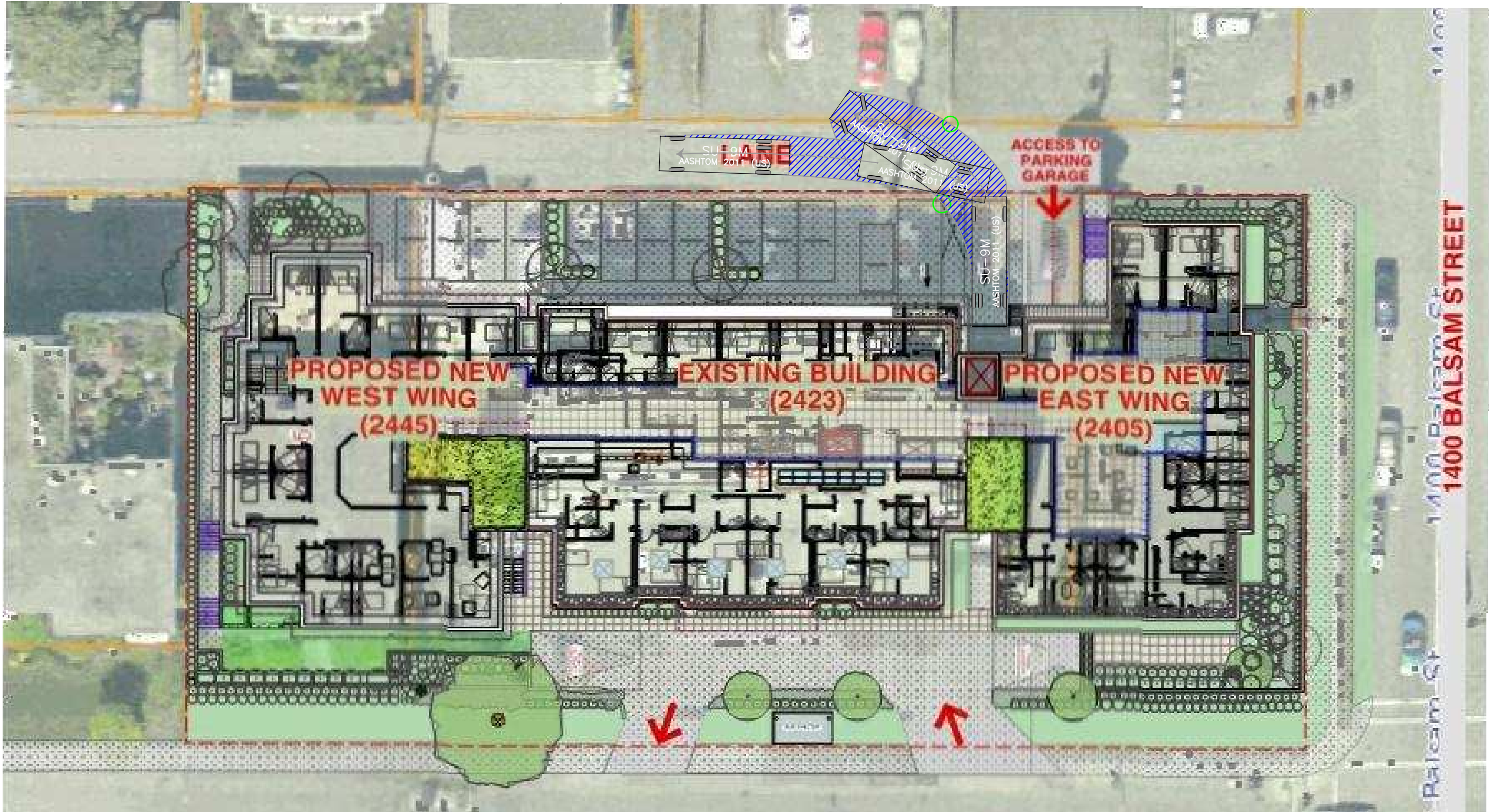
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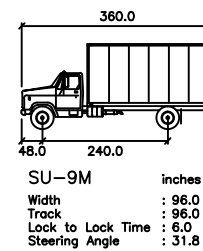
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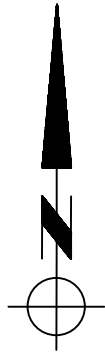
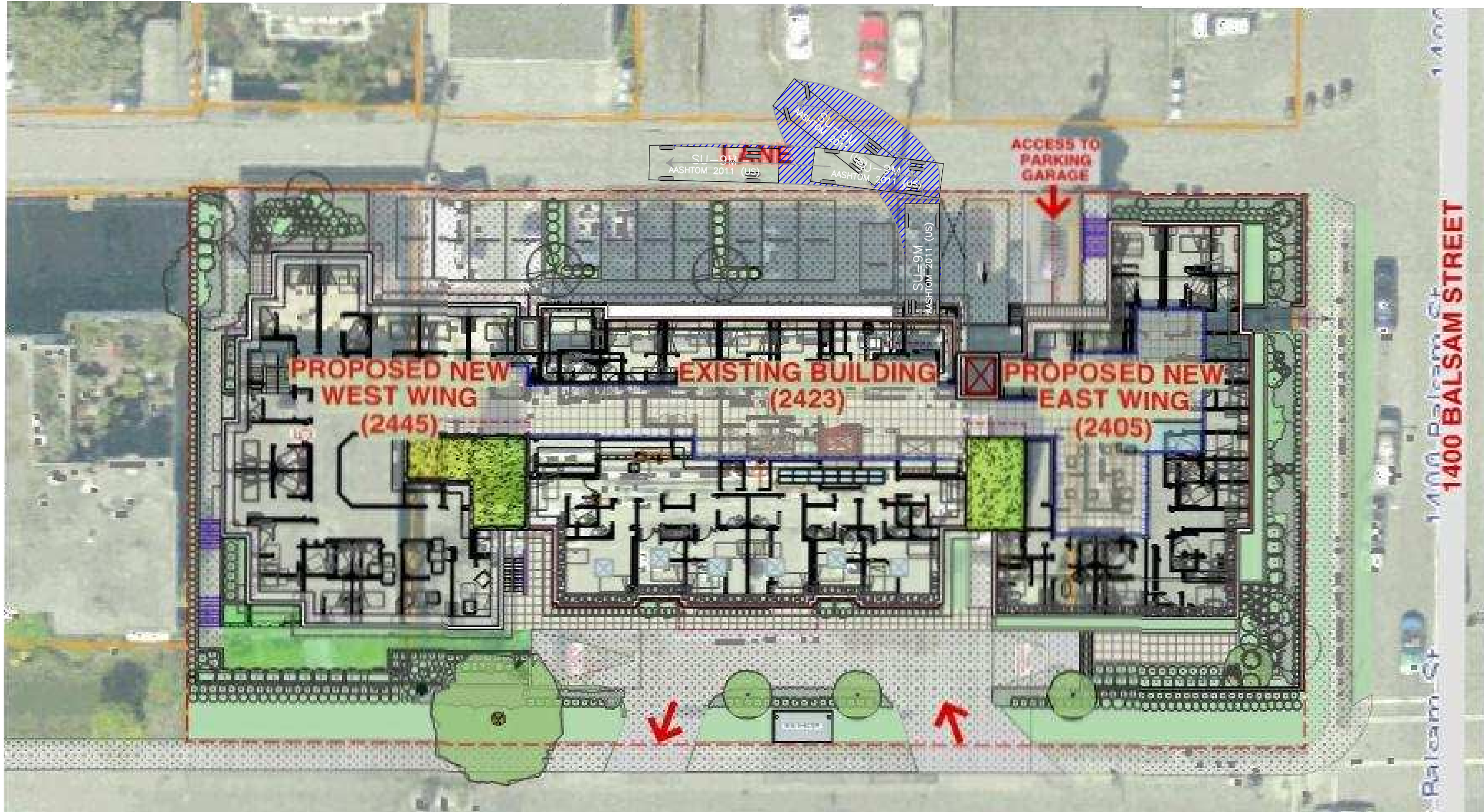


LEGEND

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**PRELIMINARY**

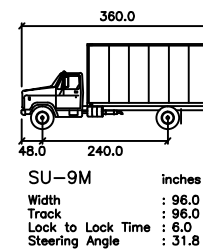




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## 1. LOADING MANAGEMENT PLAN

Loading Management Plans (LMP) seek to identify and manage loading operations with a view to reducing, if not eliminating traffic impacts. In order to develop an effective plan that ensures the safe and efficient movement of goods at PGPH, this LMP:

- Reviews the proposed loading facilities;
- Identifies loading activities and schedules;
- Confirms truck entering and exiting routes;
- Reviews on-site circulations; and
- Develops measures to optimize loading operations.

### 1.1 Site Context

The proposed site plan at PGPH includes two at-grade Class B Loading Bays accessed from the Backlane and two at-grade Class B Passenger Spaces provided at the front entry on Cornwall Avenue. A gated garbage and recycling area is located at the end of the Class B Loading Bays in the Backlane.

### 1.2 Loading Activities and Schedules

All loading and delivery vehicles accessing the Backlane are expected to enter from Balsam Street and exit to Larch Street. The design of the loading bays should not require trucks to back onto public loads.

Tractor-trailers would not typically serve the proposed site; consequently, the largest size truck that would serve the site would be a single unit truck which can typically be accommodated by the Class B Loading Spaces (8.5m x 3.0m).

Most truck activity is anticipated to occur during non-peak hours (i.e. between 9:00 a.m. and 12:00 noon and between 1:00 and 3:30 p.m.). Nonetheless, some truck activity would occur outside these hours, but within the hours of 7:00 a.m. and 8:00 p.m. Monday to Friday, and 10:00 a.m. and 8:00 p.m. on Saturday, Sunday or Holiday per the City's *Noise Control Bylaw 6555*; thereby minimizing disturbance to the neighbourhood.

**Table C-1** summarizes the identified loading activities and the corresponding schedule at PGPH.

**Table C-1 – PGPH Loading Activity Summary**

| Type of Loading Activity     | Company Name                               | Frequency                 | Location of Loading                        | Duration per Visit | Type of Vehicle Used                           | Entering / Exiting Route                           |
|------------------------------|--|---------------------------|--|--------------------|--|--|
| Passenger Pick-Up / Drop-Off | TransLink                                  | Varies, up to 4 times/day | Porte-Cochere and Class B Passenger Spaces | 10 to 15 min       | HandyDART (7.6m in length)                     | To and from westbound Cornwall Avenue              |
| Courier                      | Atlas                                      | 2 times/week              | Class B Passenger Spaces                   | 5 to 15 min        | Light Single Unit Truck (6.4m in length)       | To and from westbound Cornwall Avenue              |
| Food                         | Agropur / GFS / Sun Glow / Weston Bakeries | 4 times/week              | Class B Loading Spaces                     | 30 min             | Single Unit Truck (9.1m in length)             | Enter Backlane from Balsam; Exit Backlane to Larch |
| Medical Supplies             | CardinalHealth / Medical Mart / Praxair    | 2 times/week              | Class B Loading Spaces                     | 30 min             | Single Unit Truck (9.1m in length)             | Enter Backlane from Balsam; Exit Backlane to Larch |
| Prescription                 | Lancaster                                  | 1 time/day                | Class B Loading Spaces                     | 30 min             | Single Unit Truck (9.1m in length)             | Enter Backlane from Balsam; Exit Backlane to Larch |
| Office Supplies              | Staples                                    | 1 time/month              | Class B Loading Spaces                     | 30 min             | Single Unit Truck (9.1m in length)             | Enter Backlane from Balsam; Exit Backlane to Larch |
| Janitorial Supplies          | ClearTech                                  | 1 time/month              | Class B Loading Spaces                     | 30 min             | Single Unit Truck (9.1m in length)             | Enter Backlane from Balsam; Exit Backlane to Larch |
| Garbage                      | Waste Management                           | 2 times/week              | Backlane                                   | 15 min             | Front-Loading Garbage Truck (10.7m in length)  | Enter Backlane from Balsam; Exit Backlane to Larch |
| Recycling                    | Smithrite                                  | 2 times/week              | Backlane                                   | 15 min             | Side-Loading Recycling Truck (10.7m in length) | Enter Backlane from Balsam; Exit Backlane to Larch |

### 1.2.1 Passenger Pick-up / Drop-off

Most passenger pick-up / drop-off activities are expected to take place at the front entry with TransLink’s HandyDART shuttle buses identified as the largest size vehicles to be used (7.6m in length). Vehicles are expected to enter the porte-cochere via the east driveway and exit via the west driveway. Passenger pick-up and drop-off activities vary throughout the day, up to four times a day. HandyDART vehicles at the front entry will be prioritized over other deliveries, such as courier deliveries / pick-ups.

### 1.2.2 Courier Delivery

The two Class B Passenger Spaces can also accommodate most courier vehicles using passenger vehicles or Light Single Unit Trucks (LSU) up to two times a week for short-duration pick-ups and drop-offs. For larger vehicles or for deliveries or pick-ups that may require a longer duration, the Class B loading spaces in the Backlane may be used.

### 1.2.3 Food Delivery

Food is typically delivered by trucks no larger than a 9.1m Single Unit Truck (SU9) in the two Class B Loading Spaces. The arrival of food typically begins at 7:00 a.m. on weekdays; this would allow items such as produce, dairy and baked goods to be served fresh to hospital residents.

Gordon Food Service (GFS) currently delivers food in WB-12 semi-tractor trailers (13.7m in length). After the expansion, the vendor will be required to deliver in trucks no larger than a SU9, which may increase the frequency of delivery.

### 1.2.4 Medical Supply Delivery

Medical supplies are delivered up to two times a week in SU9 vehicles. Per current practice, vendors would typically arrive various times of the day, during off-peak hours. Similar arrival patterns are expected for the expanded PGPH.

### 1.2.5 Prescription Delivery

Prescriptions are delivered daily in the evenings during off-peak hours by SU9 vehicles. The two Class B Loading Spaces will be used for the delivery.

### 1.2.6 Office and Janitorial Supplies Delivery

Office and janitorial supplies are each delivered once a month in SU9 vehicles. These deliveries take place in the Backlane at the two Class B Loading Spaces. Deliveries will be coordinated so that they would arrive in the afternoon during non-peak hours.

### 1.2.7 Garbage and Recycling Pick-up

Garbage and recycling pick-ups would be conducted by trucks of approximately 10.7m in length. Garbage trucks are typically front-loaded; recycling trucks are typically side-loaded. As per current practice, the trucks would arrive at the site from Balsam Street to the east, have garbage and recycling bins towed from the storage room to empty, and exit the site via Larch Street to the west. Garbage and recycling trucks typically arrive at the site in the morning hours. Scheduling of garbage and recycling pick-ups will avoid other deliveries that require access to the loading spaces in the Backlane.

### 1.3 On-Site Loading Circulation

An AutoTURN analysis of on-site circulation for the identified trucks used for loading activities can be found in **Appendix B**. Key findings include:

- HandyDART vehicles appear to enter and exit the front porte-cochere without conflicts;
- The current design appears to accommodate SU9 trucks simultaneously entering and exiting the two Class B Loading Spaces;
- SU9 trucks would be required to back in to the Class B Loading Spaces by driving on adjacent driveways in the Backlane; and
- SU9 trucks would exit the Class B Loading Spaces using a three-point turn by driving on adjacent driveways in the Backlane.

### 1.4 Implementation Measures and Mechanisms

#### 1.4.1 Loading Area Manager

An appointed staff will act as a Loading Area Manager, who will be the single point-of-contact that manages and coordinates delivery schedules for the identified loading activities at PGPH. All vendors will provide schedules of their deliveries with the Loading Area Manager such that arrival conflicts can be prevented. Coordination should reduce, if not eliminate, the potential for loading conflict as well as queuing of trucks waiting to enter the site on Balsam Street and the Backlane.

In addition, the Loading Area Manager will be responsible for supervising on-site loading and delivery activities and ensuring safe manoeuvre and proper loading and delivery operations on site.

#### 1.4.2 Class B Loading Area

The gate at the proposed garbage / recycling storage room connecting to the west Class B Loading Space in the Backlane will remain open during office hours. This allows trucks to fully enter the loading space so as to not impact traffic flow in the Backlane.

### 1.4.3 Information Package

An information package will be forwarded to all vendors to inform of the expected loading operations at PGPH. The vendors will be responsible to have their drivers review this information package prior to arriving on site. The package will include:

- Primary and alternate Loading Area Manager contact information
- Vehicle dimension restrictions
- Turning maneuvers and restrictions
- Operating hours of the west Class B Loading Space

It will be clearly stated in the package that failure to comply with the loading requirements at PGPH may result in termination of contracts.