EXECUTIVE SUMMARY

● Proposal: This application is for Phase One of the development at Shannon Mews. The project includes the construction of two multiple dwelling buildings and one mixed use building (commercial and residential) all over underground parking; together with a public park; the restoration of three designated heritage buildings, landscaping elements and the perimeter walls; and the development of a local energy system.

See Appendix A Standard Conditions
Appendix B Standard Notes and Conditions of Development Permit
Appendix C Processing Centre - Building comments
Appendix D Plans and Elevations
Appendix E Applicant’s Design Rationale
Appendix F Applicant’s Rezoning Response to the site wide conditions.
Appendix G Heritage Commission Resolution of June 4, 2012

● Issues:
1. Vehicle movement through parkade to access Granville Street and 57th Avenue
2. Design of new buildings as they relate to heritage buildings and landscape

● Urban Design Panel: Support
DEVELOPMENT PERMIT STAFF COMMITTEE RECOMMENDATION: APPROVE

THAT the Board APPROVE Development Application No. DE415627 submitted, the plans and information forming a part thereof, thereby permitting the development of two multiple dwelling buildings and one mixed use building (commercial and residential) all over underground parking; the application includes a public park; the restoration of three designated heritage buildings, landscaping elements and the perimeter walls; and the development of a local energy system, subject to Council’s approval of the Form of Development and the following conditions:

1.0 Prior to the issuance of the development permit, revised drawings and information shall be submitted to the satisfaction of the Director of Planning, clearly indicating:

1.1 Arrangements to be made to the satisfaction of the General Manager of Engineering Services and Director of Legal Services for the interconnection of the parking for Blocks A, B and C to provide a direct north-south connection, and to provide unfettered and direct access to all driveways and security gates for all residential vehicles to both West 57th Avenue and Granville Street;

Note to Applicant: A legal agreement is required to insure the necessary rights for access between Blocks A, B, and C parking.

1.2 Design development to Blocks A, B and C to ensure the prominence of the designated heritage buildings and gardens and the recreated rose garden are emphasized;

Note to Applicant: The expression and composition of the new buildings in phase 1 should be simplified to be more complementary to the heritage buildings and heritage features on the site. Response should address the comments of the Urban Design Panel and the Vancouver Heritage Commission. Particular emphasis should be given the façades of Blocks B and C as they relate to the views of the Mansion and Rose Garden from Granville Street.

1.3 Design development to Block A to prevent overlook to the neighbouring properties;

Note to Applicant: This can be accomplished through the features noted in condition A.1.18 and edge planters similar to those at the north side of Block B.

1.4 Provision of a design to reduce perceived noise in the open areas located within 50 m (165 ft.) of Granville Street, with reference to specific features illustrated and noted on the drawings;

Note to Applicant: The open spaces adjacent to the retail space and the new Rose Garden will both require attention, and may need different strategies. Consider the use of water features to mask noise, transparent barriers at wall openings, and sound absorbing materials.

1.5 Provision of plans, elevations, sections and enlarged drawings for each access point in Phase One, coordinated between landscape and architectural drawings, to show how the design integrates walls, lamps, maps, gates, signs, landscaping, buildings and other features noted in the application to support the appropriate condition:

a) a welcoming and open public entry point;

b) new view lines to the historical buildings or open spaces;

c) reinforcement of the historical perimeter screen; or

d) demarcation of private property;
Note to Applicant: In particular, show edge conditions such as gates and paths that cross over property lines or through the perimeter wall. Include section drawings at ¼” = 1’-0” or better, and detailed drawings at ½” = 1’-0” scale or better. Gates intended to provide public access should be signed accordingly, and wall openings should be at least six feet to ensure a visually open character. The north gate or a similar wall opening should be aligned with the north pathway to continue the sight line. Response should reflect the comments of the Urban Design Panel, CPTED principles, and historical compatibility. See also Landscape Conditions and Standard Condition A.2.1

1.6 provision of an interpretive system to inform residents and visitors about the retained and restored features across the site, especially those of historical and social significance;

Note to Applicant: The response to this condition should be integrated with the previous condition, especially as a feature that could draw visitors through the property. Historical features should be located on the maps provided for the public, along with the location of other features such public urban agriculture, public pathways, gates, sustainable design features, car share vehicles, main building entries, and visitor parking. Consider providing additional information through online or other electronic media to supplement conventional installations.

2.0 That the conditions set out in Appendix A be met prior to the issuance of the Development Permit.

3.0 That the Notes to Applicant and Conditions of the Development Permit set out in Appendix B be approved by the Board.
### Technical Analysis: Phase 1/Existing (Blocks D - G)

<table>
<thead>
<tr>
<th></th>
<th>PERMITTED (MAXIMUM)</th>
<th>REQUIRED</th>
<th>PROPOSED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Size</td>
<td>-</td>
<td>-</td>
<td>790 ft. x 550 ft. (nominal)</td>
</tr>
<tr>
<td>Site Area</td>
<td>-</td>
<td>-</td>
<td>434,236 ft.² (survey)</td>
</tr>
<tr>
<td>Use</td>
<td>Dwelling Uses, limited to One Family Dwelling, Multiple Conversion Dwelling existing on June 18, 1956, and Multiple Dwelling Retail Uses</td>
<td>-</td>
<td>Multiple Dwellings</td>
</tr>
<tr>
<td>FSR¹</td>
<td>Combined 1.60</td>
<td>-</td>
<td>Retail Store</td>
</tr>
<tr>
<td></td>
<td>Dwelling Uses 1.58</td>
<td></td>
<td>Residential 0.86</td>
</tr>
<tr>
<td>Floor Area¹</td>
<td>Combined 694,778 ft.²</td>
<td>-</td>
<td>Total 0.88+</td>
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<tr>
<td></td>
<td>Dwelling Uses 686,093 ft.²</td>
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</tr>
<tr>
<td>Balconies²</td>
<td>8% x 376,245 ft.² = 30,100 ft.²</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Amenity³</td>
<td>20,000 ft.²</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

| FSR¹                   | Combined 1.60        | -        | 4,435 ft.² |
|                        | Dwelling Uses 1.58  |          | rubble     |

| Phase 1                | Mansion 19,438 ft.² | Coach House 8,067 ft.² | Gate House 2,668 ft.² | Block A 40,982 ft.² | Block B 19,274 ft.² | Block C 146,530 ft.² | Subtotal 236,959 ft.² |
| Block D                | 32,220 ft.²         |
| Block E                | 16,701 ft.²         |
| Block F                | 44,260 ft.²         |
| Block G                | 43,876 ft.²         |
| Subtotal               | 137,057 ft.²        |

| Existing (future Phase 2) | Mansion 6,465 ft.² | Coach House 2,082 ft.² | Gate House  \(\ldots\) | Block A 1,774 ft.² | Block B 298 ft.² | Block C 6,385 ft.² | Subtotal 8,547 ft.² |
| Phase 2 - existing buildings to be demolished and redeveloped at a later time | |

| Balconies²             | 8% x 376,245 ft.² = 30,100 ft.² | - | |
| Amenity³               | 20,000 ft.² | - | |

| Phase 1                | Open 1,670 | Enclosed \(\ldots\) | Total 1,670 ft.² |
| Mansion                | 321 | \(\ldots\) | 321 ft.² |
| Gate House             | 238 | \(\ldots\) | 238 ft.² |
| Block A                | 1,774 | \(\ldots\) | 1,774 ft.² |
| Block B                | 298 | \(\ldots\) | 298 ft.² |
| Block C                | 6,385 | 1,869 | 8,254 ft.² |
| Total                  | 10,686 | 1,869 | 12,555 ft.² |

| Phase 2 - existing buildings to be demolished and redeveloped at a later time | |

| Amenity³               | 20,000 ft.² | - | |

| Phase 1                | Mansion 6,465 ft.² | Block C 2,082 ft.² | Total 8,547 ft.² |

---

1. Floor Area
2. Balconies
3. Amenity
### Phase 2 - existing buildings to be demolished and redeveloped at a later time

<table>
<thead>
<tr>
<th>Site Coverage</th>
<th>34% x 434,236 ft.² = 147,640 ft.²</th>
<th>-</th>
<th>Phase 1</th>
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<tbody>
<tr>
<td>Mansions</td>
<td>10,061 ft.²</td>
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<tr>
<td>Coach House</td>
<td>4,040 ft.²</td>
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</tr>
<tr>
<td>Gate House</td>
<td>1,564 ft.²</td>
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<tr>
<td>Block A</td>
<td>9,252 ft.²</td>
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</tr>
<tr>
<td>Block B</td>
<td>6,331 ft.²</td>
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</tr>
<tr>
<td>Block C</td>
<td>27,987 ft.²</td>
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<tr>
<td>Subtotal</td>
<td>59,235 ft.²</td>
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<td></td>
</tr>
<tr>
<td>Block D (existing)</td>
<td>16,110 ft.²</td>
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<tr>
<td>Block E (existing)</td>
<td>8,808 ft.²</td>
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<tr>
<td>Block F (existing)</td>
<td>22,141 ft.²</td>
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<tr>
<td>Block G (existing)</td>
<td>22,190 ft.²</td>
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<tr>
<td>Total</td>
<td>128,484 ft.²</td>
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<table>
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<th>Phase 2</th>
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<td>Block D (new)</td>
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<td>Block E (new)</td>
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<tr>
<td>Block F (new)</td>
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<tr>
<td>Block G (new)</td>
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<tr>
<td>Phase 1</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

### Height

| Block A | 50 ft. |
| Block B | 50 ft. |
| Block C | 80 ft. |
| Phase 2 |
| Block D | 80 ft. |
| Block E | 70 ft. |
| Block F | 90 ft. |
| Block G | 70 ft. |

### Phase 1

| Block A | 50.6 ft. |
| Block B | 48.1 ft. |
| Block C | 67.4 ft. |
| Mansion | existing |
| Coach House | existing |
| Gate House | existing |

### Phase 2 - existing buildings to be demolished and redeveloped at a later time

| Block A facing residential | 30.0 ft. |
| Block B not facing residential | 24.5 ft. |
| Block C | 39.2 ft. |

### Setbacks

30 ft., except existing buildings and portions of Block A building which does not face residential development

| Block A | 30.0 ft. |
| Block B | 24.5 ft. |
| Block C | 39.2 ft. |

### Horizontal Angle of Daylight

50°/78.7 ft. or 2 angles with sum of 70°/78.7 ft.

<p>| Mansion - 1st floor bedroom | 50°/77.5 ft. |
| 2nd floor bedroom | 25.5° |
| Coach House-1st floor living/dining | 70°/64.3 ft. |
| 1st floor living | 70°/42 ft. |
| 1st floor family | 20°/49.8 ft. |
| 1st floor family | 21°/43.6 ft. |
| Gate House - 1st floor dining | 43.2° |
| 1st floor family | 22.5°/73.5 ft. |
| 1st floor kitchen | 30°/60 ft. |
| Block C - North L01-L06 bedroom | 34.5° |
| South L02 den | 32.8° |
| South L03-L05 bedroom | 32.8° |</p>
<table>
<thead>
<tr>
<th>Vertical Angle of Daylight</th>
<th>40 ft./45°</th>
<th>Block A Lane 55°</th>
<th>Block C West 57th Avenue 55°</th>
<th>Granville Street 87°</th>
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<td>Parking</td>
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<td>Lot 1</td>
<td>Lot 1</td>
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<td></td>
<td>Residential Block A 39</td>
<td>Residential Block A Standard 49</td>
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<td></td>
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<td>Block B 9</td>
<td>Block C Standard 136</td>
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<tr>
<td></td>
<td></td>
<td>Mansion 8</td>
<td>Visitor 21</td>
<td></td>
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<td></td>
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<td>Coach House 5</td>
<td>Retail Store Block C 5</td>
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</tr>
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<td></td>
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<td>Gate House 2</td>
<td>Subtotal 162</td>
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</tr>
<tr>
<td></td>
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<td>Visitor 6</td>
<td>Total 69 + 162 = 231</td>
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<td>Subtotal 69</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Total 69 + 162 = 231</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Lot 2</td>
<td>Heritage Garages 8</td>
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<tr>
<td></td>
<td></td>
<td>Visitor 22</td>
<td>Visitor 6</td>
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</tr>
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<td></td>
<td></td>
<td>Subtotal 195</td>
<td>Subtotal 195</td>
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<tr>
<td></td>
<td></td>
<td>Total 105 + 195 = 300 (324 including 1:5 ratio for shared vehicle)</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Small Car 3</td>
<td>Visitor 6</td>
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<tr>
<td></td>
<td></td>
<td>Disability 4</td>
<td>Subtotal 105</td>
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<td>56</td>
<td>Total 105 + 195 = 300 (324 including 1:5 ratio for shared vehicle)</td>
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<tr>
<td></td>
<td></td>
<td>Visitor 22</td>
<td>Visitor 22</td>
<td></td>
</tr>
<tr>
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<td></td>
<td>Retail Store</td>
<td>Visitor 6</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Standard 3</td>
<td>Subtotal 195</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Total 105 + 195 = 300 (324 including 1:5 ratio for shared vehicle)</td>
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</tr>
<tr>
<td>Bicycle Parking</td>
<td>-</td>
<td>Class A</td>
<td>Class B</td>
<td>Class A</td>
</tr>
<tr>
<td>Retail Store</td>
<td>1</td>
<td>0</td>
<td>Residential 334</td>
<td>12</td>
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</table>
| Total | 335 | 12 | Total | 340 | 18 
| Horizontal (50%) | 173 | | Horizontal | to be clarified |
### Loading

<table>
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<tr>
<th>Phase</th>
<th>Class A</th>
<th>Class B</th>
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<tr>
<td>Retail</td>
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<td>1</td>
</tr>
<tr>
<td>Residential</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>4</td>
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<tr>
<td>Phase 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential</td>
<td>?</td>
<td></td>
</tr>
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</table>

### Acoustics

- **Report required**: in progress

### Unit Area

<table>
<thead>
<tr>
<th>Block</th>
<th>Unit Type CA</th>
<th>Block C</th>
<th>Unit Type CN</th>
<th>Unit Type CZ</th>
<th>Guest Suite (amenity)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>303 ft.²</td>
<td>2</td>
<td>353 ft.²</td>
<td>374 ft.²</td>
<td>276 ft.²</td>
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<tr>
<td>2</td>
<td>500 ft.²</td>
<td>6</td>
<td>600 ft.²</td>
<td>700 ft.²</td>
<td>700 ft.²</td>
</tr>
<tr>
<td>4</td>
<td>700 ft.²</td>
<td>8</td>
<td>800 ft.²</td>
<td>900 ft.²</td>
<td>900 ft.²</td>
</tr>
</tbody>
</table>

### Unit Type

- **Mansion**
  - One-bedroom 1
  - Two-bedroom 5
  - Three-bedroom (TH) 2
  - Subtotal 8
- **Coach House**
  - One-bedroom (TH) 1
  - Two-bedroom (TH) 2
  - Three-bedroom (TH) 1
  - Subtotal 4
- **Gate House**
  - Three-bedroom (TH) 1
  - Subtotal 1
- **Block A**
  - One-bedroom 10
  - One-bedroom + den 5
  - Two-bedroom 19
  - Two-bedroom (TH) 5
  - Three-bedroom (TH) 2
  - Subtotal 41
- **Block B**
  - Three-bedroom (TH) 6
  - Subtotal 6
- **Block C**
  - Studio 10
  - One-bedroom 144
  - One-bedroom + den 13
  - Two-bedroom 27
  - Three-bedroom 1
  - Two-bedroom (TH) 10
  - Three-bedroom (TH) 2
  - Subtotal 207
- **Mansion** 8
- **Coach House** 4
- **Gate House** 1
- **Block A** 41
- **Block B** 6
- **Block C** 207
- **Total** 267
Note on FSR/Floor Area: The total FSR/Floor Area includes existing buildings in Phase 2 which will be demolished and redeveloped at a later time. Floor area summaries of the existing buildings in Phase 2 are provided by McElhanney Associates Land Surveying Ltd. (dated November 2, 2011). Storage rooms (Block C) larger than 40 ft.², stairs and mechanical rooms on the roof must be included in the FSR. Phase 1 and 2 must not exceed the maximum FSR (see Appendix F for the indicative final FSR).

Note on Balconies: Porches are not listed as exclusions from FSR. Balcony areas in the existing buildings of Phase 2 have not been provided since the buildings will be demolished and redeveloped at a later time.

Note on Amenities: Amenity areas, if any, in the existing buildings of Phase 2 have not been provided since the buildings will be demolished and redeveloped at a later time.

Note on Site Coverage: Site coverage of the new buildings in Phase 2 is approximate and intended to demonstrate that the project is well within the site coverage allowed. Site coverage of the existing buildings in Phase 2 is provided by McElhanney Associates Land Surveying Ltd. using the largest floorplate of each building.

Note on Height: Pursuant to Sections 10.10.2 and 10.10.3 of the Zoning and Development By-law, height of the new buildings in Phase 1 has been determined using a combination of City building grades and existing grades due to the site’s rolling topography and vast area. Block A building exceeds the maximum height by 0.6 ft. Standard Condition A.1.1 seeks a reduction in height to not exceed the maximum height of 50 ft. The CD-1 By-law established maximum heights without provision for relaxation to reflect the importance attached to this aspect of the form of development during rezoning.

Note on Horizontal Angle of Daylight: Pursuant to Section 11.6 of the CD-1 By-law, the Development Permit Board may relax the requirements of the horizontal angle of daylight after considering the livability of the dwelling units and all applicable Council guidelines and policies. Staff have evaluated the proposed design and feel that in limited cases, typically for secondary rooms in dwelling units which offer alternate access to daylight in other rooms, the distance of the horizontal angle of daylight may be reduced as permitted in the CD-1 By-law. Internal habitable rooms with no access to natural light and ventilation must be revised to comply. Standard Condition A.1.2 seeks compliance with the horizontal angle of daylight for all habitable rooms.

Note on Vertical Angle of Daylight: Blocks A and C project above the vertical angle of daylight requirements. Standard Condition A.1.3 seeks compliance with the 45° angle for Block A. Pursuant to Section 12.2 of the CD-1 By-law, the Development Permit Board may relax the requirements of vertical angle of daylight for a building adjacent to Granville Street after considering all applicable Council policies and guidelines. For Block C, which is located next to Granville Street without any intervening building, staff support the relaxation for Block C because the impact of the relaxation is less to Granville Street than to a neighbouring property or open space, and because the relaxation facilitates a reduction in maximum height, which was identified as a major point of concern. For Block A, which is not located next to Granville Street and overlooks residential neighbours, staff would not support a relaxation of this regulation.

Note on Parking: Parking for the retail store is deficient. Standard Condition A.1.4 seeks the provision of 2 additional parking spaces. The two tandem surface parking spaces adjacent to the Gate House can only be counted as one parking space. The required parking calculated by the applicant was based on “gross” unit floor area which includes a storage room and/or enclosed balcony. Pursuant to Section 4.1.10 of the Parking By-law, where gross floor area is used to calculate the number of required parking spaces, it shall be calculated in the same manner as the floor space ratio of the applicable district schedule. The actual required number of parking spaces will be less than what is shown for the residential use. Standard Condition A.1.5 seeks a revision of the required number of parking spaces.

Note on Bicycle Parking: Class B bicycle spaces, electrical outlets and clothing lockers are required. Standard Condition A.1.6 seeks compliance and clarification.

Note on Loading: Pursuant to Section 10 of the CD-1 By-law, eight Class A loading spaces are required on the site. Four Class A loading spaces will be provided in the Phase 2 redevelopment.

Note on Unit Area: Pursuant to Section 10.21.2 of the Zoning and Development By-law, the floor area of each dwelling unit must be at least 398 ft.². Standard Condition A.1.7 seeks compliance with the minimum dwelling unit floor area. Guest amenity suites not designed as dwellings are not required to meet this standard.
Legal Description
Lot: BB
Plan: Ref Plan 808
District Lot: 526

History of Application:
12 04 13 Complete DE submitted
12 05 09 Urban Design Panel
12 06 20 Development Permit Staff Committee

Site: The site is located at the northwest corner of the intersection of Granville Street and 57th Avenue in Kerrisdale. The site is bounded on the west by Adera Street. To the north of the property is a city lane. To the north and west of the site, the zoning is RS-6 (One-Family) District, which limits buildings to about 0.64 FSR, 10.7 m (35 ft) in height and 40 percent site coverage. To the east and south, the zoning is RS-1 (One-Family) District, which limits buildings to about 0.64 FSR, 9.5 m (31 ft.) in height and 40 percent site coverage.

Context: Significant adjacent development includes:
(a) St. Stephen’s United Church

All other sites in the adjacent context are developed as single-family housing.
● Background:

This site was rezoned in July, 2011 from RS-6 (One-Family) District to CD-1 (Comprehensive Development) District to permit an increase in density from 0.60 FSR to 1.60 FSR, and to permit an increase in the maximum height permitted from 10.7 m (35 ft.) to 27.4 m (90 ft.). Rezoning enabled redevelopment of the property with approximately 735 residential units, including 202 rental units, in seven new buildings and three heritage buildings, and required the retention and restoration of the historic Shannon Mansion, Coach House, Gatehouse and perimeter wall, as well as creation of a new public park, restoration of the Italian Garden and recreation of the Rose Garden, and the retention of the stand of Copper beech trees in the northwest portion of the site.

● Applicable By-laws and Guidelines:

- CD-1 (521) 7101 - 7201 Granville Street, amended July, 2012

● Response to Rezoning Conditions:

The application generally meets the requirements of the CD-1 By-law that establishes the permitted uses, height, density and setback for the site, except as noted within the technical review. The application also generally meets the recommendations of the rezoning, except as noted below.

The majority of design development conditions recommended in Appendix A of this report flow from the recommended conditions of approval at rezoning. Some of the recommended conditions in this report also reflect the advice of the Urban Design Panel or the Vancouver Heritage Commission on the design in this development permit application. The applicants provided a response to each of the recommended conditions of rezoning in their development permit application, and the following commentary is a staff assessment of these responses to the site-wide design conditions. Other site-wide conditions of rezoning, such as landscape, are assessed at the beginning Appendix F. Finally, the applicant responses to all other conditions of rezoning are included for reference at the end of Appendix F.

Some of the design conditions, such as item 1. (i) below, apply to the Phase One work which is the subject of this development permit application. In other cases, such as item 1. (ii), the response will apply to future Phase Two work. The applicant’s responses to Phase Two are included here as a reference to illustrate potential solutions, but staff do not recommend any further design of Phase Two at this time. These responses do not create regulatory limits on future applications, except for the limits in the CD-1 by-law. Further design development is expected to occur during the review of development permit applications for Phase Two, and changes may be sought by staff at that time.

Prior to approval by Council of the form of development, the applicant shall obtain approval of a development application by the Director of Planning, who shall have particular regard to the following:

**Overall Form of Development - The following are site-wide conditions to be addressed at the time of submission of the first Development Application**

**Urban Design**

1. Design development to reduce building heights as follows:

   1. (i) the maximum height of Block C to no more than eight storeys;
Response to Rezoning Conditions (cont.)

Note to Applicant: While acknowledging the intensity of commuter traffic on Granville Street and the width of the roadway, this must be balanced against the low intensity and scale of development in the immediate area.

Applicant’s Response: Block C building massing has been refined and simplified, the reduction in the stepping forms results in a reduced building height as viewed from Granville Street, from 9 to 7 storeys. The Granville façade has also been recessed in areas to create a layered effect. The introduction of a contrasting cladding colour provides further articulation to create visual variety while reducing the apparent bulk of the building form.

Staff Assessment: The building has been reduced below the lower height required at rezoning. Staff concur with the applicant’s response for this Phase One building on Granville Street, which more than meets the intent of this condition. The loss of building articulation as expressed onto Granville Street will likely be mitigated by the substantial trees retained along this frontage and the novel lighting feature proposed. The related relaxation of the vertical angle of daylight for this block is addressed in the Technical review.

1. (ii) the maximum height of Block D shall be no more than eight storeys;

Note to Applicant: Given the proximity of this proposed ten-storey building to the Mansion and Italianate Garden to the east, and its position southeast of the Copper Beech area, some reduction is required to reduce the visual scale of the highest mid-rise portions of this building relative to the three-storey Mansion and adjacent gardens, and to reduce shadowing. The other portions of the building should step down to lower forms at 57th Avenue in the range of three to seven storeys. Response should reflect the advice of the Urban Design Panel to “calm” the massing and simplify the forms with less stepping in plan and less terracing.

Applicant’s Response: Building heights have been adjusted in accordance with staff recommendations. The reduced number of floors provides a calmer massing of Block D. This difference in height between the highest terrace of block D and the mansion is reduced to approximately 1 ½ storeys. Plan articulation is reduced where possible. The designation of the heritage landscape and extents of Shannon Green require same Block D stepping in plan.

Staff Assessment: Staff confirm that the maximum height in storeys meets the requirement for this Phase Two building, located to the southwest of the Mansion. Further design development may be sought in the review of a future development permit application for Phase Two.

1. (iii) the maximum height of Block G shall be no more than seven storeys;

Note to Applicant: Given the proximity of this proposed eight-storey building to the residential neighbours to the north and to the Mansion immediately to the east, and the higher elevation of this part of the site, some reduction is required to reduce the visual scale and potential overlook from the mid-rise portion toward the existing residences and to reduce the prominence of this new building relative to the Mansion.

Applicant’s Response: Building heights have been adjusted in accordance with staff recommendations. This reduced number of floors simplifies the building
Response to Rezoning Conditions (cont.)

massing and the number of terrace levels, reducing the height difference of Block G to the Mansion to approximately 1 ½ storeys.

**Staff Assessment:** As with condition (ii), the maximum height in storeys meets the requirement for this Phase Two building to the northwest of the Mansion. Design development may be sought in a future development permit application for Block G, especially where the massing must create a considerate interface to single-family properties to the north and west.

1. (iv) the maximum height of Block F shall be no more than nine storeys.

**Applicant’s Response:** Building heights have been adjusted in accordance with staff recommendations. This reduced number of floors simplifies the building massing and the number of terrace levels.

**Staff Assessment:** The maximum height in storeys meets the requirement for this Phase Two building located on Adera Street. Design development may be sought in a future development permit application to address the massing of the building, especially in relation to Adera Street.

2. Reduction in the height of other building portions not noted above in Condition 1, to step down from seven to three storeys at the site perimeter.

**Applicant’s Response:** Building heights have been adjusted in accordance with staff recommendations as illustrated in this submission. The intention is to make the massing of the new buildings appropriate to those across the street and strike a balance between density and building height.

**Staff Assessment:** Block A does not step down to three stories at the site perimeter. Noting part of Block A runs parallel to a non-residential use and a parking lot, and the retained trees in this area, staff do not recommend a reduction in storey height in this instance. Instead, a lesser reduction in the vertical height of Block A is recommended along with design development to the terrace edges to reduce overlook (see Recommended Condition 1.3 and Standard Condition A.1.1). Design development may be sought for Block E in a future development permit application.

3. Provision of setback distances from new building portions above four storeys to the property line, to achieve the optimal balance of new development with the preservation of privacy, visual scale and tree retention, in the opinion of the Director of Planning.

Note to Applicant: This can be accomplished by setting these higher building portions below the view line of a pedestrian on the south side of 57th Avenue, the west side of Adera Street, and a similar distance on the north side, as compared to four storey buildings building over the existing townhouses on the site. Consideration will be given to the screening effects of retained trees, which should be included in view, studies of the revised proposal. Distances are to be noted on the site plans.

**Applicant’s Response:** As well as a general reduction to the overall massing for all blocks as required by the rezoning, the buildings are also terraced back as the building height increases. Along Adera Street a plan for the strategic
replacement of trees which are nearing the end of their viable lifespan has been developed and will be incorporated during the first phase of development on this site; this will ensure the health of the site’s perimeter screen of trees. Approximately 40% of these new trees are coniferous which will allow for year-round screening of buildings on the Shannon Estate as viewed by neighbours across the street. Please refer to Appendix C, landscape drawings, for an illustration of the strategy.

The stepped back terracing of these buildings above the fourth floor is intended to reduce the appearance of building mass from neighbouring homes as well as provide residents with outdoor space - both private and communal. These outdoor spaces will animate the street elevations and provide a residential scale to the taller buildings. In general, the stepping of the upper floors fits within the envelope described in the “Note to Applicant”, however, in some cases the narrow dimension of the taller mass extends within the City of Vancouver proposed envelope. In these cases, the units face into the site rather than across the street to single family homes. We believe this proposal strikes an appropriate balance between new development and preservation of privacy within the neighbourhood.

Staff Assessment: Portions of Block C do not respond to the recommended envelope, which the applicant acknowledges. However, these portions occur close to Granville Street and are balanced by the conforming portions of the building that continue west along 57th Avenue, and the reduction in the maximum height of Block C as noted in item 1. (i). Portions of Block D do not meet the recommended step back from 57th Avenue, and this issue should be revisited in Phase Two when the effect of tree removals on the site and new trees on the site and on 57th Avenue can be better assessed.

4. Design development to the site-wide aspects of the design through plans and other drawings, including:

4.(i) a creative strategy to blend new taller buildings into the new and retained landscape at the perimeter of the site;

Note to Applicant: Staff acknowledge the mitigation provided by increased setbacks and tree retention. Intent is to support the “hidden garden” character of the site identified in the application, and to help mitigate some of the visual effect of new mid-rise development in this low-density context. Examples include the use of green walls and other vertical planting, special cladding treatments, and other measures not typically found in standard development. In addition to an overall strategy, specific measures should be identified and located on the drawings. Consider in conjunction with separate condition regarding privacy and overlook.

Applicant’s Response: The stepped back terracing of these buildings above the fourth floor is intended to reduce the appearance of building mass from neighbouring homes as well as provide residents with outdoor space - both private and communal. These outdoor spaces will animate the street elevations and provide a residential scale to the taller buildings and provide the potential for private planting. In general, the stepping of the upper floors fits within the envelope described in the “Note to Applicant”, however, in some cases the narrow dimension of the taller mass extends within the City of
Response to Rezoning Conditions (cont.)

Vancouver proposed envelope. In these cases, the units will generally face into the site rather than across the street to single family homes. We believe this proposal strikes an appropriate balance between new development and preservation of privacy within the neighbourhood.

Staff Assessment: This response relates to condition 3. However, the main new building proposed in Phase One is lower than expected. Staff recommend that this condition be revisited in Phase Two, which includes buildings up to nine storeys in height.

4.(ii) further design development through plans and enlarged drawings that illustrate how the new perimeter treatment will create new views or reinforce the historical screening effect;

Note to Applicant: Response should show how the recommendation of the Urban Design Panel to “play up the hidden aspects and mystery behind how the site is perceived from outside its property, while also revealing important views into the project” will be met.

Applicant’s Response: Through the retention and protection of the perimeter screen of trees and the retention of the heritage wall, the “hidden garden” aspect of the site is being protected. New openings are strategically introduced including two gated pedestrian openings, in line with the north and south sidewalks, which frame the re-built rose garden. There will be two new openings along the north wall, one private and one public, both of which incorporate iron gates which discretely provide access to the site. We have reduced the wall height along 57th Avenue at the new Shannon Green and at the retail exposure, to provide essential visual and physical access to these community amenities. Other openings lead directly to building entrances and do not expose any more of the interior garden than the current wall.

The proposed openings provide glimpses into the interior gardens and views to the heritage buildings. Through the placement of the openings in the heritage wall and the placement of new trees on site, the view from the street is focused towards the heritage buildings and not the new buildings. Glimpses of the new courtyard gardens, such as the French Garden in the Block C courtyard, will be visible when one enters the public areas of the site which will add to the visual delight of the site and add another layer to the existing hidden garden nature of the site.

Staff Assessment: Staff concur with the general approach described in the response and recommend development of the design and drawings (See Recommended Condition 1.5).

4. (iii) consideration to develop a greater variety of architectural expression at the perimeter of the site, to be more responsive to the single-family buildings nearby;

Applicant’s Response: The architectural expression of the proposed buildings will have a single language throughout the development however will also provide variety as building will respond to their particular context. In Phase 1 of the Shannon Estate redevelopment, only Block C has significant facades which address the street, in this case, Granville Street and 57th Avenue. While
Response to Rezoning Conditions (cont.)

the overall massing responds to the urban nature of these major arterial streets, a human scale is created through the use of alternating solid and glazed walls; open and enclosed balconies; multiple façade planes which utilize contrasting cladding colours; the use of canopies and sun shades; and the introduction of five light features along Granville Street which will provide night-time animation and variety to the Granville Street façades. New buildings within the Heritage Precinct at the northeast corner of the site utilize a finer scaled cladding material through the introduction of brick, it is anticipated that brick cladding will also be introduced in the townhome elevations along Adera street in keeping with the more intimate nature of this quiet neighbourhood street. Along 57th. Avenue, the building scale will be slightly larger than on Adera, and where in Block C the building accommodates a double height retail component, on Blocks D & E the buildings incorporate a 3 storey townhome form which provides a rhythm and scale appropriate to the street.

Staff Assessment: Staff generally concur with the variety of expression shown at the perimeter of the site in Phase One. Design development may be sought in future development permit applications.

4. (iv) development of a strategy to identify and locate the appropriate extent and use of the proposed materials and forms for new buildings;

Note to Applicant: The proposed materials palette and the form and composition of built precedents are indicated in a general way in the application, as is appropriate for a rezoning. Noting the way the grades, heritage context, neighbouring buildings and other qualities of the site vary significantly around the site, further design development is recommended to indicate where and how these should be different or varied for each block. For example, the strategy should indicate whether brick should be employed consistently at all buildings, or only those adjacent to the Mansion, and to what extent of the façade. The use of precedents should indicate whether buildings facing Adera Street are to rely on different forms than those facing Granville Street. The composition of building façades as primarily punched openings should be confirmed. The specific design of each building is not required.

Applicant’s Response: Through a strategic use of a limited material palette the buildings all relate to one another yet are not homogeneous. Each building will remain sensitive to its position on the site and its context in the neighbourhood.

The proposed material palette includes brick cladding for the row house structures and a panelized Swiss Pearl panel on the larger building elevations. We have selected to limit our material palette on the new buildings in an effort to create a quiet architectural background which defers to the rich red brick and ornately detailed architecture of the heritage buildings at the centre of the site.

The module of the materials will vary, being smaller on the row-homes and larger on the midrise buildings. Glazing will have a soft grey tint and window mullions will be a bronzy grey, in some cases this will highlight the “punched
Response to Rezoning Conditions (cont.)

"window" expression and in other areas where we are seeking a more solid expression, will match the darker cementitious panel cladding.

Accents - such as coloured Swiss Pearl and glass screens are introduced to provide visual relief and variety.

Through extensive design development it has been decided to treat the northeast portion of the site which houses the three heritage buildings as a Heritage Precinct within the larger site. As a result, Blocks A & B will have a different material expression than many of the other new building on site. Within the Heritage Precinct we are introducing a number of row-house units. These units will be clad in an iron-spot brick which provides a material connection to the three heritage buildings on site though their expression will be distinctly modern.

Elements, such as the stone skirt on all buildings, are introduced as a way of acknowledging the heritage structure on site without slavishly copying the heritage structures architectural expression.

**Staff Assessment:** *Staff feel that the strategy shown meets the intent of this condition.*

4.(v) development of a strategy to mitigate traffic noise from Granville Street as heard from inside buildings and from open spaces on the site, with reference to specific design features to be located and noted on the drawings;

Note to Applicant: In addition to the general requirements of the Noise By-law that relate to interior living spaces, provide an indicative design to reduce perceived noise in the areas located within 50 m (165 ft.) of the roadway. Consider the use of water features to mask noise, transparent barriers at wall openings, and exterior sound absorption panels in selected locations to augment the acoustic barrier provided by the heritage wall.

**Applicant’s Response:** The strategies developed with the Acoustical consultant to mitigate traffic noise from Granville are addressed in the design of the envelope of the building - with high performance windows and enclosed balconies on the units facing Granville street. A letter prepared by the acoustical consultant confirming the project (indoor and exterior spaces) will be designed to meet the City's design noise level criteria has been included in Appendix L. Further evaluation is being undertaken to meet the design noise level criteria in the open spaces.

**Staff Assessment:** *Staff recommends the development of a design to mitigate noise in open spaces (see Recommendation Condition 1.4).*

4.(vi) further development of the design of the interface between public and private landscapes;

Note to Applicant: Consider the comments of the Urban Design Panel, CPTED principles, historical compatibility, and the opportunity to create a unique and distinctive solution for this site. Response should include indicative designs that guide subsequent development permit applications and establish a high quality of materials.
Response to Rezoning Conditions (cont.)

Applicant’s Response: A developed proposal regarding the interface between the public and private landscapes has been included in the attached Landscape documents. Large scale plans, elevations and sections illustrate the detailed treatment of the projects public and private landscape interfaces, which includes planter walls, and other landscape features. (Please refer to Appendix C). The design responds in an appropriate manner as required by the various conditions found around the site area. Some townhouses are set in a more pastoral setting and others a slightly more urban setting, each responds in an appropriate manner to its context.

Regarding the issues of Crime Preventions through Environmental Design (CPTED), our focus has been on two strategies: 1. The creation of clear sightlines in and out of the private gardens and 2., the provision for good light levels including lighting in the planting so there are no dark corners, particularly in the internal Block C courtyard and in the space between the buildings and the heritage wall.

Staff Assessment: Staff recommend design development to show how the general goals and strategies identified above will be implemented in their specific locations (see Recommended Condition 1.5).

5. Design development to limit the gross floor area of each new block, before exclusions and after responding to the conditions of approval, to those sizes shown in the application.

Applicant’s Response: The gross floor area of Phase 1 does not exceed that of the Rezoning permit. There have been minor adds and deducts from the original building massings which have been vetted with City planning staff to ensure the DP proposal meets the intent of the RZ application.

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<thead>
<tr>
<th>Block</th>
<th>Approved Rezoning</th>
<th>Phase 1 DP</th>
<th>Difference in %</th>
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<tbody>
<tr>
<td>Block A</td>
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<td>42,424</td>
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<tr>
<td>Block B</td>
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<td>Block C</td>
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<th>Approved Rezoning</th>
<th>Phase 1 DP</th>
<th>Difference in %</th>
</tr>
</thead>
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<td>Block E</td>
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<td><strong>707,511</strong></td>
<td><strong>-2.10%</strong></td>
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</table>
Response to Rezoning Conditions (cont.)

Staff Assessment: Staff concur with the response for Phase 1. Design development may be required for Phase 2 buildings in future development permit applications.

Sustainability:

This re-zoned site is subject to the Rezoning Policy for Greener Buildings. As a condition of rezoning, this development permit application was required to show a design that would achieve LEED® Gold, with a minimum of 3 optimize energy performance points, 1 water efficiency point and 1 storm water point. LEED Gold requires at least 60 points. The application includes a LEED Scorecard indicating a total of 66 points, 2 water efficiency points, and 2 stormwater points. The condition also required the applicant to demonstrate how the project would achieve the target points. Staff recommend that the features needed to accomplish these points be shown on the drawings in Standard Condition A.1.28.

This site is also subject to the Rezoning Policy for Greener Larger Sites. The policy is designed to achieve higher sustainability outcomes on large site development through the exploration and implementation of district and renewable energy opportunities, sustainable site design, green mobility and clean vehicle strategies, sustainable rainwater management, solid waste diversion strategies and strategies to achieve sustainable housing affordability and housing mix. The continuums of these rezoning objectives, as part of the detailed design are summarized below.

Sustainable Site Design: Typical approaches to site design, such as orienting buildings on an east-west axis, are somewhat restricted in the case of Shannon Mews because of the need to retain Heritage buildings and other resources, such as the Rose and Italian Gardens, and to build new the new public park space. Nonetheless, one of the basic premises of this site design, to limit building footprints, has helped preserve open space for use as urban agriculture and other green, planted areas. Limits on building height have also helped to reduce the shadow cast onto these open spaces, increasing their solar access. The applicant has also indicated an extensive green roof system, accessible urban agriculture throughout the site and on rooftops, and a Rainwater Management Plan; and provided an analysis of solar access for daylight and thermal energy at each building. Staff support the response to this Larger Sites goal.

Green Mobility and Clean Vehicle Strategies: The public walkway system throughout the site will provide better overall pedestrian connectivity and permeation through this 10 acre site. The project will also deliver a signalized pedestrian connection across Granville Street at either W 55th Avenue or W 54th Avenue making it easier for pedestrians to connect to transit service heading to the north. The application also provides references to a number of strategies that prioritize sustainable modes of travel however falls short of exceeding many of the existing by-law requirements that are already applicable to the site. Standard Condition A.2.12 requires the applicant to provide clarity around some of the strategies proposed and offers other transit improvements that would complete the needs of this strategy and respond to topics brought forward from previous public meetings.

Sustainable Rainwater Management: The application proposes to provide local, indigenous, drought tolerant plants in new landscape plantings, garden plots for urban agriculture and cisterns to collect rainwater for re-use as irrigation water. The site’s existing 2,897 m2 of impervious paving is also being proposed to be replaced with pervious paving. Standard Conditions A.2.13 and A.2.14 require the applicant to confirm that the sustainable measures taken on-site results in meeting target goals for the post development runoff water quality levels and volumes that discharge into the City’s sewer system.

Solid Waste Diversion Strategies: The application proposes to provide additional dedicated recycling space far beyond the minimum requirements referenced within LEED guidelines. The project will encourage source separation through the use of informative and educational signage, bench space for
sorting of materials, and specified areas for other materials such as clothing, electronics, batteries, and other hazardous materials that can be diverted from the waste stream.

District and renewable energy Opportunities: The applicant has provided a District Energy Pre-Feasibility Study in support of the rezoning application, followed by a draft District Energy Feasibility Study in support of the development permit application. Results of the latest study suggest that a renewable energy system utilizing air source heat pumps for space heating, cooling, and domestic hot water preheating, with solar thermal for pool heating, and supplemental natural gas boilers for peaking and backup requirements, is feasible at costs below a typical business as usual approach. Such a system is expected to reduce greenhouse gas emissions by 55% (505 tCO2e reduction) and electricity usage by 39% (1.1 GWh/yr reduction). Staff support the development and operation of a low carbon energy solution for the development as detailed above. As such, renewable energy prior-to conditions and conditions of development permit are provided in Appendices A and B, respectively.

Some of outcomes of the Rezoning Policy for Greener Larger Sites have been secured through conditions of enactment, assessment and delivery of the rezoning sustainability conditions, cannot in some cases, be confirmed at the development permit stage but rather will be assessed and secured through the building permit stage, occupancy stage and post occupancy phases of development. See also Appendix C.

For the staff assessment of the response to other site wide rezoning conditions, see Appendix F.

● Conclusion:

Staff feel the applicants have responded to the complex requirements of this site in a comprehensive manner and support the proposed application, subject to the conditions noted.

URBAN DESIGN PANEL

The Urban Design Panel reviewed this application on May 9, 2012, and provided the following comments.

EVALUATION: SUPPORT (5-3)

● Introduction: Sailen Black, Development Planner, introduced the proposal for a site at the corner of West 57th Avenue and Granville Street. The proposal is for the removal of the Massey Erickson townhouses which will be replaced with a range of buildings from three to nine storeys in height. The site coverage currently is relatively low and the proposal is to preserve the garden-like nature of the original estate. Mr. Black noted that it is the intent of the applicant to retain the trees notably a copse of three Copper Beech trees with some removal in other areas. They are also planning to retain a number of listed and unlisted heritage elements and will be improving the quality of the Rose Garden. A new public park aligned with the Italian Garden is planned. The current vehicle entry will remain off Granville Street with new parkade access from West 57th Avenue.

Mr. Black noted the site’s Development Guiding Principles as approved by Council in September of 2009, which included goals to:

- Pursue best practices in sustainable design for large sites
- Use creative design to address the visual impact of development on residential neighbours
- Respect the historic values of the site and explore maximum retention and conservation
- Maintain and improve the garden character of the whole site
• Respect the various eras of the site's history while offering architectural variety and a contemporary interpretation

Advice from the Panel on this application was sought on the following topics:

1. The new opening on the south wall and the new park creates a publicly owned outdoor space and reveals a significant new view toward the Mansion. At the same time, other edges of the site are being preserved in place. Does the proposed design show how it will reinforce the hidden aspects and mystery of the site as seen from outside the property?

2. Do the heights and setbacks of the perimeter buildings create a sensitive transition to the lower scale houses and streets around the edges of the site?

3. Blocks A, B, and C are intended to reflect, without imitating, the Heritage elements on the site. Could the Panel comment on how effective the exterior detailing and composition of each building is in addressing this goal?

4. Are the revised forms of Block D and other buildings around the Mansion successful in calming down the massing and simplifying the forms with less stepping in plan and less terracing, as recommended?

5. Block C has been changed in both form and articulation to remove upper floors while preserving floor area. Is the exterior detailing and composition shown on the drawings and model sufficiently developed to create an appropriate interface onto the Park (west) and street (east)?

6. The character and context facing each side of the site changes from lanes to arterial streets, and from quiet private properties to pedestrian intersections. Are the landscapes, building materials and details identified for each part of the site appropriately and well-resolved responses to these different site adjacencies?

7. The site must accommodate a range of users, spaces and activities ranging from personal and private to commercial, active and public. Is the interface between the public and private landscapes clearly shown and fully developed?

8. The applicant team was asked as a condition of rezoning to identify a site-wide strategy that would visually blend new, taller buildings in the landscape of the perimeter through examples such as green walls and special cladding. Is the overall strategy and specific treatments shown effective in this regard?

9. Do the sustainable design features on the drawings and model show a focus on passive design, rather than mechanical or other powered systems?

Mr. Black took questions from the Panel.

• Applicant's Introductory Comments: David Dove, Architect, explained that due to the number of materials and the complexity of the project they decided to give a brief PowerPoint presentation. He noted that the project will be in two phases with a number of different parcels. There is a park dedication, Block C is a rental building and as well in Phase 2 is the existing heritage house and market housing. In Phase 1 there are 267 units of market and rental housing. The rest of the development will include another 477 units.

Mr. Dove addressed the Panel’s previous comments noting that they simplified the massing and reduced the height in some of the buildings. He explained the differences between the
presentation at rezoning and their current proposal. He said they looked at opportunities to address the nature of the various portions of the site. In the northeast corner of the site there are three heritage buildings; the Mansion, the Coach House and the Gate House all of which are being retained and restored. They are looking at this portion as a heritage precinct. There are number of trees along Granville Street and West 57th Avenue as well as along the north side of the site. They have set the buildings back to protect the root balls of the trees. The trees that aren’t in good shape will be removed and replaced. Adera Street has single family homes to the west so they decided on a different character along that face, with townhomes that will fit better into the context. The park space will have both public and private spaces. There are internal courtyards giving a second layer of “secret gardens” to continue the lineage of hidden gardens. The heritage gates will be retained at the Granville Street entrance. He said there are elements of the heritage that will be illustrated through the architecture. Mr. Dove described the material and colour palette noting that they plan to use brick and to introduce a marble skirt at the bottom of the buildings to reflect the heritage. A water feature is planned to run down the face of the building on Granville Street. He noted that the balconies on Block C are a little more fun and have some colour. There are two places for retail; one in Block C and the other proposed is a coffee kiosk in the park. Mr. Dove described the sustainability strategy noting that they have focused on having a district energy system, having useable roofs with urban agriculture, capturing water for irrigation and introducing solar panels for domestic hot water. As well co-op cars are planned for the project.

Ken McKillop, Arborist, noted that most of the trees were planted at the time the Mansion was built so they are about 100 years old. There are 429 trees on the site. He said that they have looked at the viability and health of the trees and will be retaining the best of them. The trees along Granville Street will be retained and on the north side of the site they will also be retained for the most part. There are some overly mature trees poplar trees on Adera Street that probably will be removed and will have to be replaced. Mr. McKillop noted they plan to design the parking garage so there is a generous root protection around the trees. The City has asked that for the trees that are removed that they be replaced on a 1.6 to 1 ratio which means they will be adding 344 new trees.

Jane Durante, Landscape Architect, described the landscape plans noting that a lot has been said about a hidden garden and they are trying to keep the hidden aspects while opening the site up to some views. She noted that the Italian Garden will be restored and so will the Rose Garden. There are a number of outdoor rooms planned around the site all of which will have a different character. The only non-permeable surface is the circular piece in the park which the Park Board wanted as asphalt where children can ride their bicycles. Private areas will be gated and fenced with decorative arches covered in plantings. Ms. Durante noted that they have done a lighting plan that is very subtle with lighting on the trees and walkways. As well the buildings will be highlighted. She noted that they will exceed the City’s formula for urban agriculture. There will be a couple of children’s play area on the roofs. They have been able to use the original owner’s plant list for their plant choices. She added that they intend to plant more street trees along Adera Street.

The applicant team took questions from the Panel.

• Panel’s Consensus on Key Aspects Needing Improvement:
  ▪ Design development to architectural expression to better complement the historical aspects of the site;
  ▪ Design development to improve the clarity of public routes;
  ▪ Design development to reduce blockiness of massing;
  ▪ Consider adding an interpretive public amenity component to the site;
• **Related Commentary:** The Panel supported the proposal and thought the applicant had done a good job in responding to the Panel’s commentary from the previous review.

In answering Staff’s questions the Panel thought that the proposed design did not reinforce the aspects of mystery physically even though it did visually. They felt that opening the site to see the Mansion was effective but that getting around the site was not as successful as it could be. They felt there was more of a hidden aspect along the Granville Street frontage but not so much along West 57th Avenue. They felt the site needed to be seen as a park but that it was important to separate the private and public spaces.

Most of the Panel thought the heights and setbacks of the perimeter buildings did not create a fully sensitive transition to the lower scale houses and streets around the edges of the site. They noted that there wasn’t a need for transition along Granville Street but that along West 57th Avenue and Adera Street, there needed to be some smaller moves to transition better to the residential. One Panel member noted that along Adera Street there wasn’t any apparent relationship to the Mansion. Another Panel member thought the townhouses had a very rigid approach to Adera Street and needed more attention to fineness facing onto the narrowest street.

Regarding Blocks A and C the Panel thought the scale and expression weren’t sensitive to the heritage aspects of the site. Several Panel members noted that it should be all about the heritage buildings and the gardens and that the new buildings needed to be sensitive without overtly referencing the historical buildings. They felt there was a need to quiet down the massing particularly along the Rose Garden frontages. As well they thought the architectural expression including the use of the frames seemed to overpower the landscape and needed to be complementary to the landscaping and the Mansion.

The Panel agreed that lowering the profile of Block C was a positive move but it was not entirely respectful to the history of the site with several Panel members noting that in reducing the height the building has become blocky.

Several Panel members were concerned with the viability of the commercial space.

Regarding the landscaping, building materials and details, the Panel had some mixed feelings about the sense of open space and publicness across the site. As well they thought there was an ambiguity between the public and private spaces and that there should be a benefit to the public which is the park. They would like to see an increase in the natural flow and a sense of invitation into the public components of the site.

A number of the Panel members were concerned with the livability of the Gate House as a private residence.

Several Panel members thought that there should be a way to honour the history of the site and that a museum or art gallery could be an addition to the project. A couple of Panel members thought the Gate House or a room in the Mansion could be used for this purpose.

The Panel was concerned with the vehicle access off and onto Granville Street thinking it might be hazardous considering the amount of fast moving traffic along that roadway. They suggested that perhaps “right in only” may be the way to go.

The Panel felt the sustainable strategy had been improved but several members thought there was a need for improvement. One Panel member hoped that the project would not have to use mechanical cooling. Another Panel member noted that Block C did not respond fully to its orientation.
Applicant’s Response: Mr. Dove thanked the Panel for their comments. He said the project was not an easy challenge considering the garden and heritage aspects of the site. He added that they wanted the new buildings to have a quiet and calm architecture with a 4-storey shoulder to blend with the heritage buildings. The buildings around the Mansion are only fifteen feet higher but some are also lower. They didn’t want them to tower over the Mansion. He noted that the concern about building frames on the face of the garden were something that came out of the feedback from the public. Regarding the Granville Street entrance, Mr. Dove said he would leave that to Engineering.

Ms. Durante said their intention was to have a visual orientation at the entries of the property so that people would know where the residential units were located and how to access them. As well they wanted to have a balance between the mystery of the gardens and accessibility.

ENGINEERING SERVICES

The development site is approximately 10 acres in size and located on the northwest corner of Granville Street and West 57th Avenue. Through the development process, residents raised concerns over traffic circulation and congestion, parking spillover and impacts during a lengthy construction phase. Staff have worked closely with the applicant and their transportation consultant to address these concerns.

Of particular importance is the requirement for free circulation for all residential vehicles to all access points to the development (both driveways on W 57th Ave and one on Granville Street). This will ensure a more efficient distribution of trips, less traffic on local streets and provides alternatives where required. Furthermore, as contingency, Engineering has required funds to convert the right-in/right-out access at Granville Street to a fully signalized driveway access should the proposed access arrangements prove insufficient. While Engineering does not object to security gates to separate different parking uses, all residential vehicles must have free and convenient access to drive aisles and driveways for this contingency to be effective. This multi-building development therefore requires the underground parkades to be conveniently interconnected and to allow residents to have access to any of the entry and exit points (see Recommended Condition 1.1). Way finding signs for visitor parking, car share, loading spaces and exits are also required to further facilitate these movements (see Condition A.2.7).

Staff acknowledge that this large site is adjacent to a single-family neighbourhood and is uniquely challenged due to heritage constraints on-site, including buildings and the perimeter stone wall, creating additional hardship for construction access and operations. As part of building permits, projects requesting use and access from City streets for construction purposes require an approved construction management plan that prescribes specific conditions such as truck movements, site access locations, use of streets and traffic management measures. Staff will continue to work with the applicant and its contractor to support a plan that maximizes construction activity on-site and mitigates traffic and parking impacts when street use is necessary.

The recommendations of Engineering Services are contained in the prior-to conditions noted in Appendix B attached to this report.

CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN (CPTED)

The recommendations of the Planning Department are contained in the prior-to conditions noted in Appendix A attached to this report.
HERITAGE PLANNING

There are a number of heritage buildings and features on the site that are designated (protected) by by-law including the following:

1. Mansion
   a. Exterior
   b. Interior
      i. Vestibule with stone lining;
      ii. Main Hallway with wood paneling, arched ceiling, and four light fixtures;
      iii. Stair Hall with stone lining, Palladian window and bronze light fixture;
      iv. Great Hall with fireplace surround, wall wainscoting paneling, and ceiling beams;
      v. Drawing (Living/Music) Room with plastered walls, trim and arched ceiling, and parquet floor;
      vi. Conservatory with stone and tile trim, tiled fountain, and stone coffered ceiling; and
      vii. Dining room with wood paneling, fireplace surround, and plaster ceiling.

2. Gate House
3. Coach House
4. Perimeter Brick and Stone Wall
5. Italian Garden (located south of the Mansion)
   a. East, West and Central Terraces
   b. Steps, grotto, pond, curved concrete bench, two small concrete benches, concrete walls, balustrades, urns and light standards.
6. Three Copper Beech trees.

The development permit application proposes retention, restoration and rehabilitation of the three heritage buildings on the property - the Mansion, Gate House and Coach House and the Italian Garden. A comprehensive Heritage Conservation Plan has been submitted including extensive historic documentation, condition assessments, as found drawings, and proposed conservation procedures and measures which are consistent with the Standards and Guidelines for the Conservation of Historic Places in Canada. The detail and level of information in the Conservation Plan is of a high standard and the conservation approach proposed includes a high degree of restoration and rehabilitation and is supported by staff and the Vancouver Heritage Commission (VHC).

The VHC reviewed the application over several meetings including one that was held on site. On June 5th the Commission passed a resolution supporting the conservation plan and development permit application (See Appendix G for motion). The Commission also commented on the need for further consideration of the proposed design of the new buildings in phase 1 to ensure the prominence of the mansion and rose garden are maintained particularly when viewed from Granville Street (see Recommended Condition 1.2).

Work to the brick and stone wall will include repair and rehabilitation, new openings along West 57th Avenue where the wall will be lowered to provide seating and new access points to the site. The changes proposed in the development permit application are acceptable.

SOCIAL DEVELOPMENT

High Density Housing for Families with Children Guidelines
The proposed development includes 267 units, of which 83 units are 2 or more bedrooms. Given that 31% of the units may be suitable for families, the High Density Housing for Families with Children Guidelines applies.

Outdoor Amenity Space

The development includes two children’s play areas at grade on ground level with many natural elements that provide ample active play opportunities. At the children’s play area near the French Courtyard consideration should be given to replace the rubber surfacing with a more natural material such as pea gravel, fibar or sand (see Standard Condition A.1.41). This material provides a soft surface as well as the material itself provides play value for the children. The play area near the French Garden includes sand and water play activities which are consistent with the Guidelines’ encouragement of natural elements. Level 7, 6 and 5 of Block C includes an outdoor amenity terraces with lawn, outdoor kitchen, features and space for children’s play. The Shannon Green Public Park also provides play space for the residents of the development.

Indoor Amenity Space

The first floor of the Mansion provides adequate indoor amenity space for residents. Design development is needed to create a kitchenette within this amenity space (see Standard Condition A.1.42). Consideration should be given to creating a kitchenette within the storage room. Level 1 of Block C has an indoor amenity space which includes a fitness centre and lounge, plus two meeting rooms at the south end of Level 1. Design development is needed to the lounge to create a multi-purpose room which includes a fully accessible washroom with diaper change table, a kitchenette and storage room (see Standard Condition A.1.43).

Urban Agriculture in the Private Realm

The City of Vancouver Food Policy identifies environmental and social benefits associated with urban agriculture and seeks to encourage opportunities to grow food in the city. The “Urban Agriculture Guidelines for the Private Realm” encourages edible landscaping and shared gardening opportunities in private developments. The proposed development incorporates many of the suggestions in the Guidelines.

Level 5 and 6 of Block C include raised garden plots, edible strawberries and fruit trees. Most supporting infrastructure has been included such as a tool shed, compost bins and a potting shed. Hose bibs locations need to be identified. (see Standard Condition A.1.44)

PARK BOARD

The proposed development includes tree protection of significant trees, public walkways through the precinct, restoration of heritage gardens, and the creation of new private green courtyards in addition to a public park that will be delivered in two phases. The park design as shown in the development permit application has evolved in a cooperative process including proponent and Park Board staff; it features typical neighbourhood park amenities like walking paths, seating areas, rich vegetation and children’s play. The design has to be considered conceptual at this stage because a public engagement process involving the neighbourhood in the programming and design of the park is anticipated to occur later in 2012. The park design will be finalized afterwards in response to the public input. The first phase of the park will be completed in time for occupancy of the first residential building as per the Rezoning Enactment Conditions established by City Council.
PROCESSING CENTRE - BUILDING

This Development Application submission has not been fully reviewed for compliance with the Building By-law. The applicant is responsible for ensuring that the design of the building meets the Building By-law requirements. The options available to assure Building By-law compliance at an early stage of development should be considered by the applicant in consultation with Processing Centre-Building staff.

To ensure that the project does not conflict in any substantial manner with the Building By-law, the designer should know and take into account, at the Development Application stage, the Building By-law requirements which may affect the building design and internal layout. These would generally include: spatial separation, fire separation, exiting, access for physically disabled persons, type of construction materials used, fire fighting access and energy utilization requirements.

Further comments regarding Building By-law requirements are contained in Appendix C attached to this report.

NOTIFICATION

On April 25, 2012, 1,663 notification postcards were sent to neighbouring property owners advising them of the application, and offering additional information on the city’s website and inviting individuals to attend an Open House on May 8, 2012.

Two site signs were installed on April 26, 2012.

Open House + Notification

An Open House was held on May 8, 2012 from 5:00pm to 8:00pm at the Shannon Mews site.

Twenty two (22) people signed in for the Open House. Each person attending was greeted and asked to sign-in and offered a quick orientation to the display materials.

To date, there has been six (6) responses to the notification postcard including the community group Shannon Mews Neighbours’ Association. Their comments are summarized below:

- Large number of construction vehicles to and from the site will cause disruption for the neighbourhood. Therefore worker should be parking on-site to minimize impacts to the neighbourhood or the neighbours should be provided with street parking permits.

  Staff Response: An approved construction management plan is required as part of building permit issuance. The construction management plan must identify the site’s construction needs and operations including truck routing, site access, and use of City street. The plan will look at ways to keep as much construction activity on-site as possible and mitigate traffic and parking impacts when street use is necessary.

- Larger trucks and vehicles should not be allowed on residential streets and access to the site would be better achieved thru West 57th Avenue.

  Staff Response: The construction management plan reviews truck routing, goods delivery, staging and site access locations that will have the least impact to City streets and surrounding neighbourhoods.
• The phasing of the Development (Phase I to Phase II) will cause the a semi-permanent exit to Adera Street and therefore traffic calming measures should be added.

  **Staff Response:** Phase I proposes that the remaining townhomes on the western portion of the site will use the existing driveway on Adera Street. Therefore additional vehicle activity on Adera Street is expected as the number of dwelling units using this access increases, though staff believe that this increase can be well served by a local street and note that the Adera Street driveway will be removed once Phase II is constructed. Staff will monitor vehicle activity on Adera Street pre and post-construction of Phase I and funds for traffic calming, should it be required, have been secured at rezoning.

• Density underutilized in Phase I being relocated to the Phase II site and the effect that it could have on these buildings.

  **Staff Response:** Relocation and its effects will be evaluated when an application for Phase II is received.

• Design elements such as limestone rectangles on the garden side, seem unimaginable “... putting lip stick on a pig”.

  **Staff Response:** Revision of the design is recommended in Condition 1.2.

• Evergreens along Adera Street where a deciduous tree might be more appropriate.

  **Staff Response:** Existing deciduous trees are to be retained along Adera Street and replacement trees are to enhance the natural existing pattern.

• Given the nature of the development there needs to be more parking on this site and a minimum of two spaces per unit and additional visitor parking should be required.

  **Staff Response:** The project is required to meet the minimum number of parking stalls as required by the Parking By-law. In addition to this minimum, visitor parking has also been required at a rate of 0.10 spaces per dwelling. The total parking requirement is consistent with observed parking demand for similar multifamily development (the basis for the bylaw requirement).

• Reconfiguration of the rental spaces tenure has created additional profits for the developer.

  **Staff Response:** After the hearing, the property owner presented an alternative offer to the City where they would convert 15 of the new strata units proposed in the development to rental secured for 60 years, in exchange for the 15 units in the mansion becoming strata units. The condition was to be fulfilled to the satisfaction of the Assistant Director of Social Infrastructure, who concluded that the housing benefit was improved by this change, as it was better to have 15 more rental units on the 60-year term than to have 15 that could be sold off after 20 years. The total number of rental units remains at 202 units. It was also concluded by staff that any additional value that may accrue to the developer by having higher value heritage units for immediate sale in the mansion, was countered by the long-term cost of having 15 more rental units encumbered by a 60-year agreement. Please see attached a memo explaining to Council the alteration to the housing agreement. This was provided by the Director of Planning to Council before they enacted the CD-1 By-law.
DEVELOPMENT PERMIT STAFF COMMITTEE COMMENTS:

The Staff Committee has considered the approval sought by this application and concluded that with respect to the Zoning and Development By-law it requires decisions by the Development Permit Board.

With respect to the decision by the Development Permit Board, the application requires the Development Permit Board to exercise discretionary authority as delegated to the Board by Council.

The Development Permit Staff Committee has considered this application and supports the proposal with the recommended conditions contained within the report.

J. Greer
Chair, Development Permit Staff Committee

S. Black, MAIBC
Development Planner

B. Mah
Project Coordinator

Project Facilitator: D. Autiero
DEVELOPMENT PERMIT STAFF COMMITTEE RECOMMENDATIONS

The following is a list of conditions that must also be met prior to issuance of the Development Permit.

A.1 Standard Conditions

A.1.1 compliance with Section 7.2 (Building Height) of the CD-1 By-law for Block A;

A.1.2 compliance with Section 11.1 and 11.2 (Horizontal Angle of Daylight) of the CD-1 By-law;

Note to Applicant: Internal habitable rooms with no windows must provide access to natural light and ventilation. Diagrams are incomplete and do not match the floor plans. Show the actual angles for Block C.

A.1.3 compliance with Section 12.1 (Vertical Angle of Daylight) of the CD-1 By-law for Block A;

Note to Applicant: There are no provisions to relax the 45˚ angle for Block A which is over 35 ft.

A.1.4 compliance with Section 4.2.5.1 (Required Parking Spaces - Commercial) of the Parking By-law for retail uses;

Note to Applicant: The retail store with a floor area of 4,337 ft.² requires a total of 5 parking spaces. The two tandem surface parking spaces adjacent to the Gate House can only be counted as one parking space.

A.1.5 compliance with Section 4.1.10 (Floor Area Calculation) of the Parking By-law;

Note to Applicant: Provide a summary of all unit floor areas, excluding storage room and/or enclosed balcony and grouped separately by units with a floor area of less than 538 ft.² and units with a floor area of 538 ft.² or more. Unit floor plans should be provided where the unit floor areas border on 538 ft.². A bold outline around the unit floor area with its calculated floor area should be included. The total floor area of units less than 538 ft.² must not be used to calculate the required number of parking spaces for units of 538 ft.² or more where floor area is an integral (secondary) part of that calculation. Provide a detailed summary of all parking spaces at each level and a total summary under the Project Information on drawing A-001.

A.1.6 compliance with Section 6 (Off-street Bicycle Space Regulations) of the Parking By-law;

Note to Applicant: Although the Project Information on drawing A-001 indicates 18 Class B bicycle spaces proposed, there are none shown on the site plan. One electrical outlet is required for every two Class A bicycle spaces. Two clothing lockers are required, one for each gender, for the retail use. Clarify the number of horizontal and vertical bicycle spaces, bicycle lockers in each room, including dimensions, and one space for retail use. Provide a detailed summary of all bicycle spaces at each level and a total summary under the Project Information on drawing A-001.

A.1.7 compliance with Section 10.21.2 (Dwelling Units) of the Zoning and Development By-law;

Note to Applicant: All dwelling units must meet the minimum required floor area of 398 ft.² measured from the inside of all outer walls, excluding any storage room and/or enclosed balcony.

A.1.8 clarification of on-site access from the retail stores to the loading spaces;
A.1.9 details of balcony enclosures;

Note to Applicant: To qualify for an exclusion from floor space ratio (FSR) calculations, an enclosed balcony must be a distinct space separated from the remainder of the dwelling unit by walls, glass, and glazed doors (hinged or sliding), have an impervious floor surface (tiles or stone), a flush threshold at the bottom of the door (for disabled access), large, openable windows for ventilation, and distinct exterior architectural expression. In addition, each dwelling unit should have no more than one enclosed balcony, and all balconies, both open and enclosed, should be clearly identified on the floor plans. Notation should also be made on the plans stating: “All enclosed balconies shall be designed and constructed in accordance with the Council-approved Balcony Enclosure Guidelines.” Limitations on the amount of exclusions and enclosures permitted are described within the regulations of the respective District Schedule or Official Development Plan that apply to the specific site. For further details and specifications on enclosure requirements, refer to the Council-approved Balcony Enclosure Guidelines.

A.1.10 provision of detailed and fully dimensioned floor plans, including updated floor area plans;

Note to Applicant: Add perimeter dimensions to all floor plans, dimensions on balconies (open and enclosed) and amenity spaces. Increase font size and shade of room labels/dimensions to improve legibility where needed. Label commercial spaces as “retail store” and clarify the use of and access to the mezzanine level. Provide a layout of the proposed amenity spaces, including details regarding type, finishing, equipment and/or furnishings. Clarify the use of all rooms in the parking levels. Update statistics (Project Information) to match the proposed project. Provide details of the rose garden arbor. Enclosed balconies and storage rooms that do not meet the intended purpose, such as those set flush to the glazed façade on Granville Street, must be included in floor area. For more information, see the relevant administration bulletins.

On FSR color-coded drawings, show correct key plans. Clarify wall types for all exterior wall exclusions. Exterior wall details do not match the wall schedule attached to the Building Envelope Professional’s letter.

A.1.11 provision of details of all parking spaces to comply with the applicable provisions of the Parking By-law, having particular regard to space sizes, maneuvering, height clearances, curbs, etc.;

Note to Applicant: Spaces located next to walls and structure require extra width. Column sizes, spacing and encroachment into parking spaces may be permitted, subject to compliance with the City Engineer’s guidelines.

A.1.12 design development to locate, integrate and fully screen any emergency generator, exhaust or intake ventilation, electrical substation and gas meters in a manner that minimizes their visual and acoustic impact on the building’s open space and the Public Realm;

Note to Applicant: In order to prevent contaminated air from being drawn into the building, all fresh-air intake portals must be located away from driveways, and parking or loading areas.

A.1.13 enlarged drawings for outdoor elements such as the elevator next to the Mansion;

Note to Applicant: Include plans and elevations at ¼” = 1’-0” or better and detailed drawings at ½” = 1’-0” scale or better.

A.1.14 provision of a design rationale that better differentiates the built features provided in Phase 1 that are large-site measures at a best practice level, from those provided in the service of existing policies or conditions of rezoning;
A.1.15 provision of a legend on the site, landscape and floor plans locating built features that support environmental best practices for large sites;

**Note to Applicant:** See rezoning condition 6(c) for more information. See also Sustainability conditions, which should be noted separately.

A.1.16 designation of the 20% of dwelling units designed to SAFER Homes standards;

**Note to Applicant:** See rezoning condition 7 for more information.

A.1.17 provision of detailed shadow studies, including retained stone walls, extending to nearby properties;

A.1.18 notation on the drawings of the exterior treatments and landscaping intended to reduce overlook and improve privacy between residential buildings on the site;

**Note to Applicant:** This can be accomplished through raised sill heights, obscuring glass at windows and guard rails, and planters at the perimeter of decks and patios. Design should preserve natural light.

A.1.19 notation on the drawings that all exterior and common area lamps are to be full cut-off fixtures, and provision of a design to ensure that there is no light trespass beyond the site;

**Note to Applicant:** Intent is to avoid light pollution and glare to neighbouring properties.

A.1.20 provision of enlarged details at ½” = 1’-0” or better for all significant building details visible from the Public Realm, such as soffits, canopies, railings, trim, and material transitions;

A.1.21 provision of an acoustic and visual enclosure for district energy equipment;

**Note to Applicant:** Intent is to avoid impacts from this multi-building facility to the residential neighbours, above and beyond the minimum requirements of the Noise Control By-law. Pumps and motors in particular should be located below grade and acoustically isolated to account for the quiet environment away from Granville Street.

A.1.22 design development to locate, integrate and fully screen any emergency generator, exhaust or intake ventilation, electrical substation and gas meters in a manner that minimizes their visual and acoustic impacts on the building’s open space and the Public Realm;

A.1.23 an acoustical consultant’s report shall be submitted which assesses noise impacts on the site and recommends noise mitigation measures in order to achieve noise criteria;

**Note to Applicant:** Add notations on plans stating:

a) “Acoustical measures will be incorporated into the final design and construction based on the consultant’s recommendations.”;

b) “Adequate and effective acoustic separation will be provided between the commercial and residential portions of the building.”; and

c) “Mechanical equipment (ventilators, generators, compactors and exhaust systems) will be designed and located to minimize the noise impact on the neighbourhood and to comply with Noise By-law #6555.”;
A.1.24 notation on plans stating: “The design of the parking structure regarding safety and security measures shall be in accordance with Section 4.13 of the Parking By-law.”;

A.1.25 notation on plans stating: “The design of the bicycle spaces (including bicycle rooms, compounds, lockers and/or racks) regarding safety and security measures shall be in accordance with the relevant provisions of Section 6 of the Parking By-law.”;

Heritage

A.1.26 clarification on the conservation treatment of the heritage designated perimeter wall for Phase Two to indicate it will be restored;

    Note to Applicant: See rezoning condition 18. The application material indicates sections of the wall along West 57th Avenue, Adera Street and the lane will be retained in its current condition and no repairs to be completed. Confirmation that restoration of these portions of the wall will be completed in Phase 2 is required, and the drawings updated. Consideration should also be given to completing the restoration of the portion of the wall along the lane during Phase 1.

A.1.27 provision of enlarged drawings including sections and plans that illustrate the new additions/interventions to the heritage buildings with reference to the new rooftop lanterns to provide rooftop access to the mansion roof; glass balustrade on the mansion roof; glazed addition to the north elevation of the coach house; new balustrade and stairs to parkade at the coach house;

    Note to Applicant: Include section drawings at 1/4”= 1’-0” or better, and detailed drawings at ½”= 1’0” or better. Response should include architectural details and structural details and connections illustrating how additions are to be connected/attached to existing heritage materials.

Sustainability

A.1.28 identification on the plans and elevations of the built elements contributing to each building’s achievement of LEED® Gold, including at least three optimize energy performance points, one water efficiency point, and one storm water point; a LEED checklist confirming the requisite points; and a detailed written description of how the above-noted points have been achieved with reference to specific building features in the development;

    Note to Applicant: All three items are to be part of the drawing set. Refer to the rezoning policy for green building and associated bulletins regarding work required at future permit stages.

Standard Landscape Conditions

A.1.29 design development to reflect the shade conditions in the proposed location of the Rose Garden;

    Note to Applicant: This can be achieved by integrating a majority of shade tolerant plants in the Rose Garden, while still maintaining the historical structure and referencing symbolically the Rose Garden.

A.1.30 provision of updated street tree information along 57th Avenue;

    Note to Applicant: Small plum trees to be complemented or replaced by larger growing deciduous trees, with minimum 10 cm calipers at the time of planting. New proposed street
trees should be noted: “Final species, quantity and spacing to the approval of the City Engineering and Park Board”. Contact Ms. Eileen Curran, Streets Division of Engineering Services, at 604.871.6131 regarding street tree spacing and quantity. Contact Mr. Amit Gandha, of Park Board, at 604.257.8587 regarding street tree species.

A.1.31 provision of letter of assurance for arborist site supervision during construction activities to ensure safety of protected trees and methods of protection, stating that the arborist has been engaged for this purpose;

**Note to Applicant:** The letter is to be signed and dated by both owner and arborist.

A.1.32 provision of notations to ensure locations for off-site additional trees, as required to ensure that at least 1.6 replacement trees are provided for every tree removed;

**Note to Applicant:** Coordination with Park Board will be required to determine locations and species of trees.

A.1.33 provision of additional information shown on dimensioned and labeled sections, showing depth of soil, including the structure under planters and tree/plant root balls to scale;

**Note to Applicant:** Depth of soil for trees over parking structure to be confirmed at 3 ft.

A.1.34 provision of sectional details to further illustrate all proposed landscape elements;

**Note to Applicant:** The sections should be at a minimum of ¼”-1’0” scale and should illustrate materials and dimensions for planters on building structures, benches, fences, gates, arbors and trellises, posts and walls and water features.

A.1.35 provision of vines over the underground parking garage access ramp trellises and on garden trellises;

A.1.36 provision of locations for hose bibs in patio areas and at urban agriculture plots as needed;

A.1.37 location of emergency generators, transformers gas meters and bike lockers to be ideally integrated into buildings, and fully screened in a manner which minimizes their impact on the architectural expression and the building’s open space and public realm.

A.1.38 provision of dimensioned and labeled sections showing depth of soil, including the depth of the parking structure and tree/plant root balls;

**Note to Applicant:** Depth of soil for trees over parking structure to be confirmed at 3 ft.

A.1.39 provision of confirmed trenching locations for utility connections, coordination with Engineering Department for utility hookup locations to avoid conflict with tree barriers and approval of site access blockage; and confirmed approval by Park Board for method of street tree protection;

**Crime Prevention Through Environmental Design (CPTED)**

A.1.40 notation on the drawings of those built features that responds to CPTED principles, especially with regard to:

a) theft in the underground parking;
b) residential break and enter;
c) mail theft; and
d) mischief in alcoves and vandalism, such as graffiti;

Note to Applicant: As with any large development, the applicant must consider and design against uncommon but potential risks such as break and enter to property or vehicles, mail theft, the perceived safety of underground parking areas, mischief and vandalism. Provide a strategy that identifies the particular risks that may arise on this site and notes the specific features to mitigate them.

Social Development

A.1.41 design development to the outdoor play area to replace rubber surfacing with more a natural material (pea gravel, fibar or sand);

A.1.42 design development to add a kitchenette to the indoor amenity space in the Mansion;

A.1.43 design development to the lounge in Block C, Level 1 to create a multi-purpose space which includes a fully accessible washroom with diaper change table, a kitchenette and storage room;

A.1.44 design development to plans to identify hose bib locations to support urban agriculture and;

Park Board of Parks and Recreation

A.1.45 provision of a planting plan for off-site replacement trees and;

Note to Applicant: Coordination with Park Board will be required to finalize planting sites, planting specifications, and maintenance obligations/warranties.

A.1.46 deletion of reference to coffee pavilion/kiosk from all drawings

A.2 Standard Engineering Conditions

A.2.1 arrangements shall be made, to the satisfaction of the General Manager of Engineering Services and Director of Legal Services, for the replacement of the current encroachment agreement (Easement & Indemnity Agreement GD64124) for the landscaping and wall on Granville Street with a new agreement to include the existing wall and any modifications (i.e. new gates), plus any encroachments of the gatehouse roof onto Granville Street;

A.2.2 provision of letters of credit delivered to the General Manager of Engineering Services pursuant to the following agreements:

i. Public Access Agreement (public walkways), registered as BB4028110-113, and

ii. Services Agreement, registered as BB4028104-107;

Note to Applicant: The applicant is required to deliver the appropriate letters of credit upon issuance of the first development permit and to supply an estimate for the construction costs where appropriate to be used in establishing the letter of credit value.

A.2.3 deletion of the existing shed onto Granville Street in front of the Gate House and nearby proposed siamese fire connection from the existing encroaching stone pier;

Note to Applicant: relocation the fire connection to within the property lines is required;

A.2.4 confirmation that all portions of utility infrastructure are wholly on private property;
Note to Applicant: Pages H-PW-101 & L-01 indicate a vista chamber and a LPT encroaching over the south property line.

A.2.5 provision of all building grades and design elevations on Base Surface plan (sheet A-043) and on Site plan (sheet A-50);

A.2.6 provision of an improved plan showing the design elevations on both sides of the ramp at all breakpoints and within the parking areas to be able to calculate slopes and cross falls. Provide elevations on sections drawings;

Note to Applicant: Design elevations for the new parking ramp connections for the existing buildings in phase two should also be provided.

A.2.7 provision of way finding signs for blocks A, B and C parking, visitor parking, car share, loading spaces and exiting onto Granville Street and West 57th Avenue;

A.2.8 provision of an improved plan showing the cross section of the Granville Street ramp confirming the required 2.3 m (7.5 ft.) of vertical clearance;

A.2.9 clarification of the operation of the security gates on Granville Street;

Note to Applicant: If the gate is to open/close for each vehicle, the gate must be moved further west to provide space for vehicles to stop and wait without impacting the sidewalk or street.

A.2.10 consideration of providing a 4 m (13 ft.) flat transition between the 5.5% and 12% slopes on drawing AD-105 to prevent vehicles from bottoming out;

A.2.11 clarification of the desire to construct new curb and gutter on West 57th Avenue, including the mid-block bulge, crossings, lane lines and lane markings;

Note to Applicant: All modifications will be to the satisfaction of the General Manager of Engineering Services and are fully at the applicant’s expense. Transportation is working on the geometric design and will confirm what changes are possible once the design is approved.

A.2.12 improvement of the Green Mobility Strategy is required;

Note to Applicant: The response indicates the project will meet or exceed current by-law requirements for bicycle parking and electric vehicle charging, the goal of the Green Mobility Strategy is to exceed the by-law requirements and provide features beyond the basic by-law needs as a step toward meeting this policy. The applicant’s response to this condition also indicates the provision of 6 co-op vehicles for this phase of the development; please confirm that these co-op vehicles are not being counted at the 1:5 ratio to meet the parking standard for the project as they then cannot be counted towards the meeting of this policy. In addition to co-op vehicles and provision of bicycle parking and vehicle charging that exceeds by-law requirements, additional features should be provided to further enhance the Green Mobility Strategy. Improvements to the Public Realm through delivery of the extensive on-site walkway system are seen as a significant step towards meeting this strategy. At a public information meeting for this project, display boards had indicated improvements for transit users by supplying shelters at adjacent transit stops on Granville Street. Confirmation that these will be delivered would complete the needs for this strategy.

A.2.13 confirmation that post development runoff is treated for 80% Total Suspended Solid (TSS) removal before discharging into the City's stormwater infrastructure;
Note to Applicant: The applicant is encouraged to use effective landscaping measures such as a water quality treatment pond, vegetated filter strip or other 'green' measures rather than using underground filtration systems or other mechanical forms.

A.2.14 confirmation of the post development runoff discharging into the City's storm water infrastructure to the satisfaction of the General Manager of Engineering Services;

Note to Applicant: The volume of development runoff discharged from the site should not increase from its former site use. If pre-development runoff volumes are not achievable, the applicant needs to provide sufficient information showing the feasibility and recommend targets to the satisfaction of the General Manager of Engineering Services.

A.2.15 Provision of a finalized District Energy Feasibility Study, which incorporates staff comments, to the satisfaction of the General Manager of Engineering Services;

A.2.16 Provision for any further information and analysis required to confirm suitability and viability of the preferred form of the renewable energy system to the satisfaction of the General Manager of Engineering Services;

A.2.17 release of the No Development Covenant for the site;

Note to Applicant: The Owner is required to conclude all outstanding obligations prior to formally release of the No Development Covenant.

A.2.18 deletion of the proposed concrete benches on West 57th Avenue shown on drawing L-01;

Note to Applicant: Benches should be moved to private property.

A.2.19 arrangements shall be made, to the satisfaction of the General Manager of Engineering Services, for the design and locations of all crossings;

Note to Applicant: The Granville Street driveway access is to operate as right-in, right-out. Signage restricting left turns in and out of the site is required. Submission of a crossing application is required. Note: the intent is to operate as right in right out until the need for the traffic signal is determined for this location, at that time the crossing will need to be reconfigured to accommodate the additional turning movements. Provide vehicle turning swaths to clearly show an acceptable operation of this access points’ right in/right out design.

A.2.20 arrangements shall be made, to the General Manager of Engineering Services, for a separate application for street trees and/or sidewalk improvements;

Note to Applicant: Submit a copy of the landscape plan directly to Engineering Services for review.
B.1  **Standard Notes to Applicant**

B.1.1 The applicant is advised to note the comments of the Processing Centre-Building, Vancouver Coastal Health Authority and Fire and Rescue Services Departments contained in the Staff Committee Report dated June 20, 2012. Further, confirmation that these comments have been acknowledged and understood, is required to be submitted in writing as part of the “prior-to” response.

B.1.2 It should be noted that if conditions 1.0 and 2.0 have not been complied with on or before **January 31, 2013**, this Development Application shall be deemed to be refused, unless the date for compliance is first extended by the Director of Planning.

B.1.3 This approval is subject to any change in the Official Development Plan and the Zoning and Development By-law or other regulations affecting the development that occurs before the permit is issuable. No permit that contravenes the by-law or regulations can be issued.

B.1.4 Revised drawings will not be accepted unless they fulfill all conditions noted above. Further, written explanation describing point-by-point how conditions have been met, must accompany revised drawings. An appointment should be made with the Project Facilitator when the revised drawings are ready for submission.

B.1.5 A new development application will be required for any significant changes other than those required by the above-noted conditions.

B.1.6 Pursuant to Section 10.12.2 of the Zoning and Development By-law, where development necessitates the demolition of existing residential rental accommodation, no development permit shall be issued for the demolition unless and until a development permit for the new development has been issued.

The development permit for the new development shall not be issued unless and until all building permits for the new development and a building permit for the demolition are issuable.

B.1.7 Notwithstanding compliance with the foregoing condition no. 1.0, A.1 and A.2, the Development Permit for this application cannot be issued until Council has first approved the form of development.

B.1.8 This approval does not in any way constitute a representation or warranty that the necessary approval of the form of development will be granted by Council. All proceedings by the applicant prior to action by Council are therefore at his/her own risk.

B.2  **Conditions of Development Permit:**

B.2.1 All approved off-street vehicle parking, loading and unloading spaces, and bicycle parking spaces shall be provided in accordance with the relevant requirements of the Parking By-law prior to the issuance of any required occupancy permit or any use or occupancy of the proposed development not requiring an occupancy permit and thereafter permanently maintained in good condition.

B.2.2 All landscaping and treatment of the open portions of the site shall be completed in accordance with the approved drawings prior to the issuance of any required occupancy permit or any use or occupancy of the proposed development not requiring an occupancy permit and thereafter permanently maintained in good condition.
B.2.3 All approved street trees shall be planted in accordance with the approved drawings within six (6) months of the date of issuance of any required occupancy permit, or any use or occupancy of the proposed development not requiring an occupancy permit, and thereafter permanently maintained in good condition.

B.2.4 The enclosed balconies are to be maintained at all times in accordance with the balcony enclosure details on the approved plans and are not to be used as an integral part of the interior space of the building.

B.2.5 All services, including telephone, television cables and electricity, shall be completely underground.

B.2.6 No exposed ductwork shall be permitted on the roof or on the exterior face of the building without first receiving approval of the Director of Planning.

B.2.7 Amenity spaces (meeting, fitness, lounge and guest suite) of 2,802 ft.², excluded from the computation of floor space ratio, shall not be put to any other use, except as described in the approved application for the exclusion. Access and availability of the use of all amenity facilities located in this project shall be made to all residents, occupants and/or commercial tenants of the building;

AND

Further, the amenity spaces and facilities approved as part of this Development Permit shall be provided and thereafter be permanently maintained for use by residents/users/tenants of this building complex.

B.2.8 Any phasing of the development, other than that specifically approved, that results in an interruption of continuous construction to completion of the development, will require application to amend the development to determine the interim treatment of the incomplete portions of the site to ensure that the phased development functions are as set out in the approved plans, all to the satisfaction of the Director of Planning.

B.2.9 The issuance of this permit does not warrant compliance with the relevant provisions of the Provincial Health and Community Care and Assisted Living Acts. The owner is responsible for obtaining any approvals required under the Health Acts. For more information on required approvals and how to obtain these, please contact Vancouver Coastal Health at 604-675-3800 or visit their offices located on the 12th floor of 601 West Broadway. Should compliance with the Health Acts necessitate changes to this permit and/or approved plans, the owner is responsible for obtaining approval for the changes prior to commencement of any work under this permit. Additional fees may be required to change the plans.

B.2.10 This site is affected by a Development Cost Levy By-law and levies will be required to be paid prior to issuance of Building Permits.
Processing Centre - Building comments

Processing Centre - Building and Fire Comments

The following comments are based on the architectural drawings prepared by Perkins + Will dated Apr.11/12 which have been submitted for Rezoning. This is a cursory review in order to identify issues which do not comply with 2007 Vancouver Building By-Law.

1. Lot 1
   a. Each principal entrance (addressed entrance) is to be within 15 m from a fire department access route (e.g., Heritage Mansion).
   b. Strata Titling requires full upgrade to the VBBL.
   c. * Max 45 m to an exit.
   d. P1: Min. 2 exits for each part of the floor area (e.g., both sides of the security gates)
   e. If high-rise components are connected to low-rise components, both will need to comply with the high-rise measures (or, provide an Alternative Solution).
   f. Block A:
      i. The building is to comply with the enhanced H/C accessibility requirements.
      ii. Provide exposure protection for the exit paths.
   g. Block B:
      i. * The roof floor space is considered a storey. For exiting, it is max. 2 storeys down to an exit within 1.5 m of grade.
      ii. Max. 6 m interconnected floor space (3.3.4.2.(3)(a)).

2. Lot 2
   a. * Max. path of travel from a F.Dept. access route to the entrance door of each dwelling unit is to comply with Article 3.2.5.5.
   b. P3: Min. 2 exits for each part of the floor area (e.g., south side of the security gate)
   c. * P3 and P2: Max 45 m to an exit.
   d. Block C:
      i. Exits discharging towards the west, central area are required to have a fire protected exit path to a public thoroughfare.

3. Lot 4
   a. Max. one horizontal exit is permitted.
   b. Exiting across a property line would require a legal agreement for access to a public thoroughfare.
   c. A fire separation is required at the property line.
   d. Min. 5 ft wide curbed pedestrian path beside the driveway.

4. Exterior Wall
   a. Confirmation of a structural engineer is required for the stability of the wall.
5. Use the following diagram for H/C clearances for doors into bicycle rooms, storage rooms in the parkade, doors to access the elevators from the H/C parking, etc.

* Items marked with an asterisk have been identified as serious non-conforming Building By-law issues.

Written confirmation that the applicant has read and has understood the implications of the above noted comments is required and shall be submitted as part of the “prior to” response.

The applicant may wish to retain the services of a qualified Building Code consultant in case of difficulty in comprehending the comments and their potential impact on the proposal. Failure to address these issues may jeopardize the ability to obtain a Building Permit or delay the issuance of a Building Permit for the proposal.

**Engineering - NEU comments**

The following comments have been provided by the Neighbourhood Energy Utility Projects (Engineering) and have identified requirements of the Rezoning Approval by Council at a Public Hearing on July 26, 2011, that will need to be satisfied as part of the Building Application process.

Prior to issuance of the Building Permit:

1. Where a geoexchange system is selected as the preferred low carbon energy approach, geoexchange site testing and detailed design shall be completed, summarized, and submitted at the time of building permit application and before issuance of building permit.

2. Detailed design of the Renewable Energy System, including low-carbon energy sources and any conventional heating and cooling infrastructure required to meet base load and peaking/backup energy demands, must be submitted to and approved by the General Manager of Engineering Services prior to issuance of building permit. Such as system shall supply at least 70% of annual heating requirements of the development through low-carbon sources(s) and reduce greenhouse gas emissions by at least 50% over a business as usual approach to heating and cooling.

3. Make arrangements, to the satisfaction of the General Manager of Engineering Services, for confirmation that the Renewable Energy System meets the required detailed design provisions. Such arrangements may include but are not limited to completion and certification by the design engineer of record, at the time of building permit application, of the City of Vancouver Confirmation of Low Carbon Energy System Detailed Design Requirements letter of assurance.
4. A proposed energy system *Performance Monitoring and Reporting Plan* shall be submitted at the time of building permit application and approved by the General Manager of Engineering Services prior to release of building permit. The Plan shall detail how system performance data will be collected and analyzed for the purpose of evaluating short- and long-term system performance, system efficiency, energy consumption, building energy demand, and opportunities for optimization of system operation and efficiency, and shall include a cost estimate for completion of all required monitoring and reporting works. The applicant shall refer to the City of Vancouver *Performance Monitoring and Reporting Requirements for Renewable Energy Systems* for further instructions on performance monitoring and reporting.

Prior to issuance of the Occupancy Permit:

5. Complete copies of all mechanical commissioning and testing reports shall be provided prior to issuance of occupancy permit, where energy system commissioning shall be completed under the supervision of a qualified registered professional. The ground loop portion of the Renewable Energy System, where applicable, shall be commissioned by a certified registered professional with expertise in the commissioning and inspection of closed-loop geoexchange systems.

6. For each building for which the owner is required to apply for an occupancy permit, the owner will include in its application a Confirmation of *Low Carbon Energy System Design, Installation, and Commissioning Requirements* letter of assurance, signed by the registered professional who is responsible for the design of the building mechanical system, stating that the building mechanical system is in compliance with the approved building permit application and the requirements of the Renewable Energy System, and that the building mechanical system is or will be fully capable of operating in accordance with the agreed-upon design and performance parameters.
SHANNON GREEN COFFEE PAVILION

As a further amenity to the community and residents of Shannon Estate, we are proposing the introduction of a small portable coffee pavilion located at the south entrance to Shannon Green. The Coffee Pavilion is located in the most visible area of the new public park, marking the 57th Avenue entrance to the park and is adjacent to the kids play area making it a natural meeting place for parents. The operator would provide a limited range of goods and would operate like many new food vendors throughout the city.
Perkins + Will

WALL FINANCIAL CORPORATION

ISSUED FOR: 21219-

Shannon Estate
Phase I

701 18th Street
Kensington, MD

Section Detail - Parapet

A-805

Appendix D: page III of 115
Executive Summary

Shannon Estate is located in the Kerrisdale community, bordering the Oakridge and Marpole neighbourhoods. The property is bounded by Granville Street to the east, 57th Avenue to the south, and Adera Street to the west.

The Shannon Estate property, a large 10-acre site, with its Beaux Arts brick mansion, formal Italianate gardens and mature landscape, stands out in this area of Vancouver. Located at 7101-7201 Granville Street, the site offers an opportunity for a comprehensive re-development that conforms to the City’s EcoCity Charter and other current council objectives. The re-development of the property as a contiguous parcel is an opportunity to achieve significant community benefits, civic objectives, and enhance the heritage value inherent in the estate.

The objective of this proposal is to apply for the Phase 1 Development Permit for a multi-family residential development, based on the Comprehensive Development District CD-1 rezoning approved by City Council in July of 2011 and enacted in January, 2012.

This application seeks approval for three new residential buildings; heritage restoration and conservation for the Mansion, Coach House, Gatehouse and other heritage assets; and two underground parking structures which will comprise Phase 1 of the total site development approved in the CD-1 rezoning. The following is a general description of the proposed new construction and heritage restoration within this application:

- Block A: 7 market townhomes and 34 market suites on five levels, totalling 42 424 sq.ft.
- Block B: 6 market townhomes in three levels, totalling 20 013 sq.ft.
- Block C: 207 rental units in seven levels, totalling 160 681 sq.ft.
- Mansion: The restoration of exterior and interior protected elements. The renovation of 3 market townhomes and 5 market suites.
- Coach House: Restored and redeveloped into 4 market townhomes.
- Gatehouse: Restored and redeveloped into a single market unit.

The site will be serviced by two separate underground parking structures covering the majority of the Phase 1 site, providing a total of 302 parking stalls. Lot 1, defined by the Mansion, Coach House, Gatehouse, and Blocks A and B, will have access to their underground parking via a ramp accessed from Granville Street. Ultimately the full build-out of the site will include an east-west connection in the parkade which will provide these residents access to both Granville Street and 57th Avenue. Block C residents and retail customers will be provided with a separate parking structure, accessible from 57th Avenue only.

The new buildings are refined and elegant, through the use of a limited materials palette and thoughtful detailing, they have been designed to create a quiet architectural backdrop against the rich landscape of the site. The northeast portion, which houses the three heritage buildings will be treated as a heritage precinct, and the introduction of brick on Blocks A and B, a different material expression than the other
new buildings, was chosen as a way of acknowledging and referencing the heritage structures, although the expression will be distinctly modern.

Building orientation and massing have been optimized to ensure key axial sight lines and discrete access points have been maintained. Through the implementation of a tree management plan, the high quality perimeter landscape will be preserved to reinforce the ‘secret garden’ aspect of the site. New residential gardens will be screened by the original estate wall or nestled within courtyards created by the new building forms. Shannon Green, the newly created public park, will be revealed through a generous opening in the perimeter wall along 57th Avenue.

The new development will incorporate green building strategies, including high performance glazing, storm water management, solar hot-water generation and a district energy system. Urban agriculture will be introduced throughout the site and on terraced roof tops, accessible to all residents of the development. This development permit application is in keeping with the intent of the CD-1 rezoning; provides greater housing opportunities and public amenities within this community, all in keeping with a triple bottom line approach of social, environmental and financial sustainability.

1.1 Context

The site is located on Granville Street, bounded by 57th Avenue and Adera Street. The site has frontages of 240.6m (789.37ft) along 57th Avenue and 167.5m (549.54ft) along Granville Street. The total site area is 40,340m² (9.97 acres/4.03 hectares).

The current site houses six two-storey buildings, developed in the early 1970s, as well as the following heritage-designated structures: the Mansion, Gatehouse, Coach House, and Perimeter Wall, all constructed between 1915 and 1925. The site coverage is 30% while the existing gross floor area is 22,789m² (245,299ft²). The buildings contain 162 market rental units.
• Response to Rezoning Conditions

For an assessment of the response to the site-wide conditions of rezoning that apply to design issues, please see the body of the report to which this Appendix is attached.

Sustainability

6. Development of a more sustainable design to establish best practices for large sites in response to the second Guiding Principle approved by Council for this property, including:

   (i) provision of a response to the terms and goals in this Principle;

   Note to Applicant: While the application responds to EcoCity policies, as required of all rezoning proposals, and many of the goals in the policies and principle overlap, there are also differences in goals, such as passive solar design, and the level of accomplishment as a best practise.

   **Applicant’s Response:** The architectural and landscape design of the project is strongly informed by the design principles established in the Rezoning document. Best practices and initiatives that support sustainable design for large sites are consistently pursued. We recognize that improving upon conventional standards and systems across a site of this size and character is a unique opportunity where the compounding effects of applying energy-efficient alternatives and strategies, both passive and active, will reap exponential benefits. Through both large and small design decisions we have established high standards that meet or exceed the city’s EcoCity policies while considering the health and thermal comfort of the occupants of the site. Features such as natural ventilation; hydronic heaters; solar shading; high performance envelope design detailed to minimize thermal bridging and heat loss; thoughtful space planning; solar hot water technology; heat-recovery ventilators; limiting the window to wall area ratio to approximately 45% on average; and further, choosing high performance glazing with low u values in combination with low-e coatings, and thermally broken frames, mitigate unwanted solar gains/heat loss.

Larger site wide gestures include the district energy air source heat pumps; the implementation of a site-wide stormwater water management plan; a significant reduction of impervious surfaces across the site; the collection, treatment and storage of stormwater to be re-used for irrigation; the choice of energy-efficient and non-polluting light fixtures; the inclusion of co-op cars on site and the inclusion of retail on site. Utilizing the density of the site and applying a rigorous design we hope to establish a high standard for both environmental sustainability and livability, across the site.

We have addressed specific issues pertaining to sustainable large sites as they relate to the EcoCity Policies of;

1. District Energy Screening and Feasibility
2. Sustainable Site Design
3. Green Mobility and Clean Vehicles
4. Rainwater Management
5. Solid Wast Diversion
6. Sustainable Housing Affordability and Housing Mix

   **Staff Assessment:** The applicants have identified a wide and commendable variety of sustainable design features which will help the project’s performance in terms of individual buildings and the requirements of the rezoning policies that apply to all large sites. Further work is recommended to identify the specific large-site measures that establish best practices, as distinct from building measures and basic requirements (see condition A.1.15).
(ii) provision of a strategy that responds to the principles of passive solar design;

Note to Applicant: Pursuing the incorporation of passive solar design is a specific goal of the Guiding Principles for this site. The application’s proposal to reduce solar heat gain with sun shades is acknowledged, and has the potential to reduce the electrical energy consumed by air conditioning units. However, there are several other goals that can be achieved through passive solar design, such as space heating, water heating, and building cooling. Determine which of the five other key passive solar concepts are best feasible on this site and where they may be located. Examples successfully employed in the Canadian context include the use of sunwalls for the preheating of air, the use of atria to improve building cooling through the stack effect, and the use of thermal storage through building mass. Other examples include the use of phase-change materials to slow indoor temperature swings, thermosiphon solar water heating, the arrangement of buildings on an east-west axis, the minimization of west facing window areas, the avoidance of a high glass to wall ratio, the avoidance of a high building surface area to volume ratio. Solar strategies that benefit the site as a whole with minimal use of mechanical means, such as solar heating of pool water, should also be employed wherever possible. Consider setting a specific goal such as 20% for the percentage of the required space and water heating load to be supplied on site from passive or primarily passive solar sources. Passive solar fixtures needed to meet the strategy should be identified and located on the plans.

**Applicant’s Response:** Through project specific modeling and study we will be incorporating the following passive solar concepts into the design;

- Low ratio of vision glazing to insulated wall, we are averaging approximately 55% of wall surface as solid.

- Balcony design provides shading to south and west facing walls of the buildings. A strategy utilizing deep inset balconies and random balcony extensions and privacy screens which provide shading on adjacent windows will be applied to the buildings across the site.

- High performance Low E glazing has been proposed and a premium is being paid for tempered glass which will allow us larger sheets of glass thus the ability to minimize the number of mullions which are a major contributor to thermal transmission of energy.

- All units have multiple operable window vents for natural ventilation.

- Extensive perimeter planting provides shading of lower floor windows (generally the bottom 4-5 floors).

- We have identified which units are unable to benefit from the shading of planting and are in greatest need of solar shading. The orientation, size, and dimensions of the shades are designed to optimally minimize solar heat gain, while not limiting the views and while working within a traditional construction budget.

- We are proposing a solar hot water strategy for heating the outdoor pool and for preheating domestic hot water. Hot water solar tubes will be located on the roof of Block A for the buildings in Lot 1, (including the Heritage structures) and then respectively, each building shall house its own hot water solar tubes. The amount of solar energy collected will fluctuate depending on the season but on average, over the course of the year, it is projected that 60% of the domestic hot water needs of the occupants shall be met.

**Staff Assessment:** Staff feel that the interconnected solar hot water system, in combination with the other measures noted, meets the intent of this condition.
(iii) development of a design that would establish best practices for a large site;

Note to Applicant: The response should reflect the opportunities on this site due to its unique size and character. For example, this site has better solar access than a typical downtown site, due to its significant south-facing slope and the very low buildings nearby, but less access to green mobility options. As noted in the application, a wider range of possibilities exists on this particular site. Consider the collection grey water for reuse on site. Consider more ambitious and concrete measures, such as a site-wide installation to collect Vancouver's plentiful rainwater in a visible and architecturally-integrated system of channels that takes advantage of the natural slope of the site to supply irrigation needs, create an opportunity for on-site art, activate a tipping bucket, animate children's play areas, slow surface runoff, provide stormwater retention, and then recharge groundwater supplies. Consider how this system could be connected to the on-site treatment of wastewater. Conventional examples from large sites in the Vancouver context include the provision of LED lighting for exterior lighting of common access pathways and open spaces, and the provision of on-site stormwater retention tanks. Full-cut-off or Dark Sky compliant fixtures should be a requirement across the site, in addition to each building, to reduce light pollution. For green mobility, consider the provision of shared bicycles for residents use, in combination with at-grade covered areas for bicycle parking. Consider establishing a specific goal for stockpiling a substantial portion of the building materials such as bricks and wood from the townhouses to be demolished to reduce construction waste, and establishing specific goals for their re-use in the new development. The location and type of built features should be indicated through notes and drawings, including the site plan. Provide an indicative design for best practise building envelope for new multiple dwellings. See also Landscape Conditions.

**Applicant's Response:** The unique size of this site will certainly provide us with some opportunities not seen on smaller more urban sites. The internal areas of this site will enjoy better solar access than more urban sites. We will be incorporating large rooftop private and public terraces some of which will incorporate urban agriculture.

Paved surfaces will be pervious and the storm water will be captured and conveyed to accessible cisterns located in the parking levels. This storm water will be stored and re-used for irrigation on the site. On Granville street, there are five locations where we express the collection of storm water as it runs off the building roofs and down vertical runnels on the building facades. These vertical rain water leaders will terminate in drains at grade which will highlight the collection and reuse of this storm water. At night these features will be illuminated transforming them into light monitors which will be visible through the screen of trees on Granville.

Exterior lighting design will be coordinated with the landscape architects and the electrical consultant to meet ASHRAE 90.1-2007 lighting power densities and comply with the project’s environmental zone as defined in IESNA RP-33. LED lighting with low power consumption will be used for exterior landscape lighting and will be controlled by photocell and astronomical time-clock.

The project is being designed to comply with Dark Sky design requirements and to eliminate the spill of artificial light beyond the boundaries of the site. Full cut-off luminaires will direct light downward where needed, e.g. pedestrian pathways, sidewalks and landscaped areas, are to be used. Photometric calculations and analysis will be performed for exterior lighting.

Green mobility is being encouraged through the provision of accessible bike parking accessible from grade in Block C rather than in the parkade as well as through the inclusion of 10 co-op cars which will be provided, 6 of which will be included in the Phase 1 of this Development.
Demolished brick will be salvaged for the continuous curved wall that weaves through Shannon Green.

**Staff Assessment:** Staff generally concur with the measures proposed, and recommend identifying these items in a separate legend on the drawings (see condition A.1.15).

7. Provision of 20% of all dwelling units designed to SAFER Homes standards, to facilitate aging in place and a diversity of ages on the site.

**Applicant’s Response:** We have committed to building at least 20% of dwelling units in both the rental and market buildings to the SAFER Homes standards:

Lot 1 = 20% of 64 units = 13 units
Lot 2 = 20% of 215 units = 43 units
Lot 3 = 20% of 477 units = 96 units

**Staff Assessment:** The units should be identified on the drawings (see condition A.1.22).

**Landscape**


Note to Applicant: The Landscape Plan should illustrate proposed plant materials (with common and botanical names, plant sizes and quantities), paving, walls, fences, light fixtures, site grading and other landscape features. Plant material should be listed on a Plant List that is clearly keyed to the Landscape Plan. The Plan should be at a minimum of 1:500 scale.

**Applicant’s Response:** See February 2012 Planting Plans L-010 through L-017, scale 1” = 20’-0” (1:240) when printed full size, approximately 1:500 in Development Permit report

**Staff Assessment:** The Landscape Plans are updated and contain information required, with the exception of the noted prior-to conditions.


Note to Applicant: The Landscape Lighting Plan is required for security purposes. Lighting details can also be added to the Landscape Plan. All existing light poles should also be shown.

**Applicant’s Response:** See February 2012 Landscape Lighting plan and related illustrations.

**Staff Assessment:** The Landscape Lighting Plan does not require any revisions at this time.


Note to Applicant: The Report must confirm the retention/relocation and provide specific safe distances to excavation from existing trees to be retained, as shown on the Landscape Plan, with particular attention to the retained Beech Trees.
Applicant’s Response: See Appendix F Tree Inventory and Management Plan by Bartlett Tree Experts and Summary of Tree Retention, Relocation and Removals by Durante Kreuk.

Staff Assessment: A detailed Arborist Report has been received, however, in addition we are asking for a letter of assurance for site supervision by the arborist during construction activities which may impact retained and protected trees.


Note to Applicant: The Plan should clearly indicate tree types and a schedule of tree types, sizes and quantities. The Plan must be cross referenced to the Arborist Report.

Applicant’s Response: See February 2012 Durante Kreuk Ltd. detailed Phase 1 Tree Protection Plans and Overall Tree Replacement and Management Plan.

Staff Assessment: A Tree plan has been received, however, it needs to include updated street tree information along 57th Avenue, i.e. larger growing deciduous trees with minimum 10 cm. caliper and to the approval of the Park Board and Engineering.

12. Provision of way-finding and access through the entire open space system and provision of details or images illustrating the proposed entry announcements at the main entries to the site.

Applicant’s Response: See Wayfinding and CPTED Strategy Plan and related illustrations included in the Landscape Drawing package.

Staff Assessment: Further design development should clarify public vs private spaces, including strong public entry demarcation and interpretive historical references. See also Development Planner Assessment, UDP evaluation and Design Conditions.

13. Provision of details of the intended use of the Play Area shown in “Shannon Green”.

Applicant’s Response: Details of the intended use of the Play Area shown within Shannon Green are being developed in consultation with Vancouver Parks staff.

Staff Assessment: See Social Development staff assessment.

14. Provision of planters to provide shared, on-grade gardening opportunities for residents.

Note to Applicant: While the proposed rooftop planters and on-grade fruit trees are appreciated, these may be isolated from each other and limited in soil depth. Given the site size, there is an additional opportunity to bring neighbours from different buildings or even nearby properties to share the work and rewards of gardening. A Kitchen Garden is labeled on the site plan northwest of the Mansion, and this may be the optimal location, but no design for planters or their accessibility is indicated as yet.

Applicant’s Response: Shannon Estate will meet the City of Vancouver’s Urban Agriculture Guidelines by providing a total of 2,076 sq ft of urban agriculture through 105 urban agriculture plots.
Ground level urban agriculture plots are designed for the kitchen garden and a dedicated urban agriculture area west northwest of the mansion. Edible plants (e.g. fruit-bearing trees and shrubs) will be included in planted areas at various locations around the site. All garden plots including those on rooftops will be provided with adequate soil depth. See February 2012 Landscape plans by Durante Kreuk Ltd., and Urban Agriculture diagram and details.

**Staff Assessment:** There are many Urban Agriculture opportunities provided. See also Social Development staff assessment.

15. Provision of a site-wide design for the planters, fruit trees, and supporting fixtures for neighbourhood access to urban agriculture.

Note to Applicant: Staff acknowledge the intent stated in the application to provide publicly accessible urban agriculture. This may be located on-site, or by the provision of planters and support to existing public areas off-site in coordination with civic staff. Where such measures or feasible, they should be pursued in connection with subsequent development applications. The privacy of on-site residents and practical requirements of access for gardening should be balanced through appropriate design features that are shown on the drawings.

**Applicant’s Response:** See above item 14. The most suitable location for publicly accessible urban agriculture from a privacy perspective is the area shown northwest of the mansion. Shannon Green (the dedicated park) will also include fruit-bearing shrubs.

**Staff Assessment:** Locations for Urban Agriculture have been provided, however we are also requesting sections and details for design of all landscape elements, provision of hose bibs and other supporting infrastructure and confirmation of adequate depth of soil for all planting over structures.

16. Provision of at least 1.6 replacement trees for every tree removed during construction.

Note to Applicant: Intent is to strengthen natural systems by balancing the loss of canopy cover and plant life in the immediate area. Guiding Principles for the site call for the replication of natural systems. A higher than 1:1 ratio is recommended to compensate for the replacement of mature trees with smaller specimens, and the reduced soil depths typically associated with higher density development. The replacement ratio is based on other large site redevelopments. Consider the opportunity for fruit trees in response to City policies promoting local food supply.

**Applicant’s Response:** See February 2012 Planting Plans. We acknowledge the rationale for a high ratio of replacement trees, however we do not want to plant trees too closely spaced. The design sets out to balance canopy cover and shade objectives with healthy environments for people and trees, i.e. sufficient light and space. Exact ratio of replacement trees to removed trees is evolving with the design; see summary on Tree Replacement and Management Plan.

As detailed in the Durante Kreuk Summary of Tree Removal/Retention, Appendix F, most of the replacement trees are larger than required at the time of planting, some to be planted as extra-large specimen feature trees. Existing Japanese Maples and large Rhododendrons are being relocated within the site. Wall Financial Corporation is open to further appropriate supplementary planting at off-site locations if necessary.

**Staff Assessment:** While we concur with the balance of light to canopy cover as being vital to livability, we are requesting the commitment to the higher ratio of replacement trees to be
followed through by alternative solutions, if necessary. Such solutions include the retention/protection of smaller trees and large shrubs, as well as providing a balance of trees for other off-site areas in Vancouver. The applicants have been in coordination with the Park Board for establishing the off-site areas. We are following up by asking for a letter of assurance and for the off-site locations to be specified with numbers and sizes of trees.

17. Provision of street trees in front of the site where space permits, especially along 57th Avenue, in coordination with Landscape and Park Board staff.

Note to Applicant: Intent is to increase the depth and variety of trees around the site perimeter beyond that which can be accommodated on private property, and to improve the visual and environmental quality of the public realm.

**Applicant’s Response:** Granville St. provides no opportunities for boulevard trees; 57th Ave. has existing small young trees. Adera has well established large Lindens which will be protected.

**Staff Assessment:** See above staff assessment for Response to Rezoning Condition #11, regarding updated street trees along W 57th Avenue.

Heritage

18. Provision of a Perimeter Wall Retention plan showing the construction, extent and treatment of each section, including removals.

Note to Applicant: The intent is to secure the design of this significant built (designated) feature, in the same way that a tree retention plan shows the design for natural features. Drawings should be provided at a larger scale to show how different sections, including the removal along 57th Avenue, is treated in coordination with Landscape staff. Consider marking the location of removed portions with evocative on-grade treatments integrated into the overall landscape design.

**Applicant’s Response:** The Perimeter Wall Retention Plan is included in the DP Submission Book under Section 5.0. Detailed Conservation Procedure of the Perimeter Wall can be found in this section as well.

Architectural Heritage drawings showing existing and proposed plans and elevations, including details and treatment proposals on a larger scale.

**Staff Assessment:** The heritage conservation plan includes details on the proposed restoration and rehabilitation of the perimeter wall consistent with good heritage practice. Further clarification that restoration and rehabilitation for portions of the wall included in phase 2 will be required.

Applicant responses to the remaining 37 condition are included in the Development Permit Application.
Resolution from the Heritage Commission meeting held on June 5, 2012:

THAT the Vancouver Heritage Commission (VHC) supports the Conservation Plan and the Development Permit Application for 7101-7201 Granville Street (Shannon Estate);

FURTHER THAT the VHC applauds the efforts of the applicant and the consultants for the detailed submission and attention to heritage values;

FURTHER THAT the VHC supports the applicant’s intent to calm the design of the building facades of Blocks B and C in order to emphasize the view of the mansion from the rose garden;

FURTHER THAT the VHC also supports the opening of the view of the mansion from West 57th Avenue and the public accessibility to the site; and

FURTHER THAT the VHC encourages the applicant to prepare an Interpretation Plan for the heritage precinct of the site.