
105 KEEFER STREET (COMPLETE APPLICATION)
DP-2017-00681 - HA-1A

DW/JMB/AW

DEVELOPMENT PERMIT STAFF COMMITTEE MEMBERS

Present:

J. Greer (Chair), Development Services
C. Joseph, Engineering Services
T. White, Park Board

Also Present:

D. Wiley, Urban Design & Development Planning
J. Bosnjak, Development Services
A. Wroblewski, Development Services
C. Fong, Development Services
R. Co, Engineering Services

APPLICANT:

Merrick Architecture
#300-839 Cambie Street
Vancouver, BC
V6B-2P4

PROPERTY OWNER:

Beedie (Keefer Street) Holdings Ltd
3030 Gilmore Divers
Burnaby BC
V5G 3B4

EXECUTIVE SUMMARY

- **Proposal:** To develop a 9 storey mixed used building with one level Retail (1st floor), including a cultural amenity space, and 8 levels of residential (2nd to 9th floors) containing 111 dwelling units all over three levels of underground parking, having vehicular access from the lane.

See Appendix A Standard Conditions

Appendix B Standard Notes and Conditions of Development Permit

Appendix C Building Review Branch Comments

Appendix D Plans and Elevations

Appendix E Applicant's Design Rationale

● **Issues:**

1. Improvement to the common indoor and outdoor amenities;
2. Design development of the atrium and double-fronting commercial units;
3. Refinement of the building elevations;

- **Urban Design Panel:** Support with recommendations
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DEVELOPMENT PERMIT STAFF COMMITTEE RECOMMENDATION: APPROVE

THAT the Board APPROVE Development Application No. DP-2017-00681 submitted, the plans and information forming a part thereof, thereby permitting the development of a 9 storey mixed-use building with commercial uses at grade, including a cultural/community space, over 3 levels of underground parking, subject to 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 design development to improve livability, as follows:

- a) expand and improve the common amenities, by converting Suite 8 on Level 9 and its contiguous rooftop terrace to common space. (The proposed common rooftop patio at Level 10 should also be retained.);
- b) delete internalized rooms and ensure that all bedrooms have sufficient natural light, ventilation and privacy (refer to Standard condition A.1.2); and
- c) provide balconies or patios (minimum 4ft. clear depth) for all dwelling units with 1 or more bedrooms, at Levels 3 through 9;

Note to Applicant: Given the reduced provision of private outdoor space, enhanced common amenities should be provided. A larger common amenity room is required and should comply with the High-Density Housing for Families with Children guidelines, including provision of a kitchenette, an accessible washroom with a baby change table, and a contiguous outdoor space with good solar access. Bedrooms in units 1 and 11 (Level 8), and units 1 and 7 (Level 9) have poor access to light and/or insufficient privacy from shared circulation corridors; further design development is required. The “den” in Unit 7 (Level 8) must be deleted. Balconies may be omitted at Level 2 to achieve a “mezzanine” expression consistent with the Chinatown historic character, and, on Levels 3 to 8, Juliette balconies may be provided for studio units. The east courtyard should be accurately dimensioned on the floorplans. This condition will result in a reduction in floor area.

1.2 design development to improve the public realm and retail storefront, as follows:

- a) increase the building setback for the south portion of the Columbia St frontage to 14ft, for the full height of the building (refer to Standard Engineering condition A.2.3);
- b) demonstrate how the double-fronting retail spaces will function, by providing floorplans with potential tenant layouts;
- c) refine the design of interior atrium space, and provide interior elevation drawings and/or 3-D model views; and
- d) consideration to increase the atrium ceiling height to 16ft. (from 14ft.), and to increase the width of the atrium around the circulation core;

Note to Applicant: The requested drawings should demonstrate a) how a successful interior public space will be achieved and the atrium, and b) how storage, shelving, washrooms, cashier stations, etc. in the retail units can be provided without

obstructing either the street or atrium frontage. Further conditions may follow from the information provided. This condition will result in a reduction in floor area.

1.3 design development to improve the building elevations, as follows:

- a) increase the setback to Suite 04 on Level 9 to 12ft. (3.7m), to accentuate the sawtooth profile of the Keefer St elevation;
- b) strengthen and simplify the “corner” element at the Keefer and Columbia St, to better anchor the building;
- c) provide a more consistent, refined expression for the glazed “bays” on both street elevations, with further consideration of solar orientation;
- d) improve and refine the architectural expression of the two-storey massing at the upper north-west corner (Levels 8 and 9), to be more consistent and integrated into the overall building design;
- e) provide a stronger parapet or cornice feature(s) for a more formal finish to the building roofline;
- f) provide retractable awnings as weather protection along both street frontages, with a minimum depth of 8ft. (2.4m) (except at the atrium entries, where a demountable canopy is noted);
- g) improve and refine the colour palette, window patterns, railings, and other detailed ornamentation of the building elevations; and
- h) provide improved laneway lighting to facilitate lane activation for pedestrians (refer to Standard Engineering Condition A.2.1 viii);

Note to Applicant: It’s recommended that the number of architectural vocabularies on the elevations be reduced to create a stronger building expression overall. The corner element may be improved via more consistent fenestration and storefront design on both street elevations. While the common amenity room at Level 8 may be expressed as a stand-alone glass pavilion on the rooftop, the residential units at that level should be better integrated into the base building. Consider retaining a professional artist for the detailed development of the building’s ornamentation (decorative panels, fritting, railings and brickwork) and public art component of the project. For further requirements for the public realm and lane treatments, refer to Standard Engineering Condition A.2.12.

1.4 design development of the accessible rooftop above Level 9; as follows:

- a) relocate the roof hatches for units 903 and 905 away from the parapet and towards elevator core;
- b) clarify access and exits for the common roof patio;
- c) clearly illustrate roof hatches and exit stairs on the elevation and section drawings;
- d) indicate (in plan and elevation) the location of any and all mechanical spaces and equipment, including future telecommunications infrastructure; and

- e) provide either an extensively- or intensively-planted roof, per the ‘Roof-Mounted Energy Technologies and Green Roofs’ Bulletin;

Note to Applicant: A discretionary height relaxation is required to accommodate green roof infrastructure that exceeds the maximum 90ft. height, including guardrails and access hatches. Refer to Standard Condition A.1.1.

- 1.5 design development and provision of more information on the architectural detailing, by providing large-scale details of the following:

- a) retail storefront (ie. garage door in “frames”, entry doors, lighting, etc.);
- b) retractable awnings and fixed canopies;
- c) window patterning (typical of each 25-foot “bay”);
- d) balcony railings (typical of each “bay”); and
- e) decorative panels;

- 1.6 identification on the architectural and landscape drawings of any built features intended to create a bird friendly design; and

Note to Applicant: Refer to the Bird Friendly Design Guidelines for examples of built features that may be applicable, and provide a design rationale for the features noted. For more information, see the guidelines at <http://former.vancouver.ca/commsvcs/guidelines/B021.pdf>.

- 1.7 make arrangements to the satisfaction of the Director of Legal Services and the Director of Cultural Services to enter into a 219 covenant to limit the use of the ground floor unit labelled “Cultural” on the drawings, as a cultural amenity, for a minimum of 10 years;

Note to Applicant: See Standard Condition A.1.6 for clarification of use.

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:**

	PERMITTED (MAXIMUM)	MINIMUM	PROPOSED
Site Size ¹	-	-	121.93 ft. x 149.93 ft.
Site Area ¹	-	-	18,278 sq.ft.
Height ²	89.90 ft.		Top of Guard/Parapet 88.86 ft. Top of Elevator/Stair 101.95 ft.
Floor Area ³	-	-	Commercial 13,152 sq.ft. Dwelling Units 106,247 sq.ft. Total 119,399 sq.ft.
FSR ³	-	-	Commercial 0.72 Dwelling Units 5.81 Total 6.53
Balconies	-	-	6,190 sq.ft.
Amenity	-	-	342 sq.ft.
Frontage ⁴	24.93 ft. per tenancy		Corner unit exceeds on Columbia St (40ft)
Front Yard		Keefer St. N/A	0 ft.
Side Yards		East N/A West N/A	East 0 ft. West 0 ft.
Rear Yard ⁵		Main Floor 3.28 ft. Residential 22.97 ft.	Main Floor 3.50 ft. Residential 3.25 ft. & 23.00 ft.
External Design ⁶			- See Commentary on Page 9;
Parking ⁷	Commercial 11 Space	Commercial 8 Spaces Disability 1 Spaces Residential 53 Spaces Disability 5 Spaces	Commercial 10 Spaces Disability 2 Spaces Residential 74 Spaces Disability 2 Spaces
Loading ⁸		Class A Total 0 Class B 3	Total Class A 2 Class B 2
Bicycle Parking ⁹		Class A Total 141 Class B 12	Total Class A 171 Class B 0
Use			- Retail Store - Dwelling Uses
Unit Type			Studio 38 (34%) One Bed 30 (27%) Two Bed 34 (31%) Three Bed 9 (8%) Total: 111 (100%)

Notes:

¹ **Note of Site Size and Site Area:** The proposed site size and site area is based on the properties being consolidated. See Standard Condition A.2.2

² **Note on Height:** Discretionary height increases required to achieve barrier-free access to this space will be considered as per the City of Vancouver bulletin on 'Roof Mounted Energy Technologies and

Green Roofs - Discretionary Height Increases'. Recommended Condition 1.4 seeks confirmation of meeting this bulletin.

³ **Note of Floor Area and FSR:** There is no current limitation for floor space ratio in this zone. Floor area has been calculated using all habitable floor space including amenity and storage rooms. The parking area and open balconies have been excluded.

⁴ **Note of Frontage:** Requires relaxation for storefront width. Staff supports relaxation for corner unit, as the unit meets the frontage requirement on Keefer St. To achieve a functional retail unit, a greater depth is required on the Columbia St elevation. Overall, the proposal achieves the regulation's intent: providing small-frontage retail units to support local business and an active pedestrian realm.

⁵ **Note on Rear Yard:** Staff support relaxation of rear yard for residential portion of building at Northwest corner as this creates a strong street wall along Columbia Street.

⁶ **Note on External Design:** See Discussion on Page 9.

⁷ **Note on Parking:** Standard Condition A.1.3 seeks compliance with Section 4.8.4 - Disability Spaces of the Parking Bylaw.

⁸ **Note on Loading:** Standard Condition A.2.7 seeks compliance with Section 5 - Off-Street Loading Space Regulations of the Parking bylaw or, alternatively, to enter into a shared loading agreement. See Standard Condition A.2.7.

⁹ **Note on Bicycle Parking:** Standard Condition A.1.4 seeks compliance with Section 6 - Off-street Bicycle Space Regulations of the Parking bylaw;

• **Legal Description**

Lot: 1 & 2
Block: A
District Lot: 196 & 2037
Plan: VAP7362

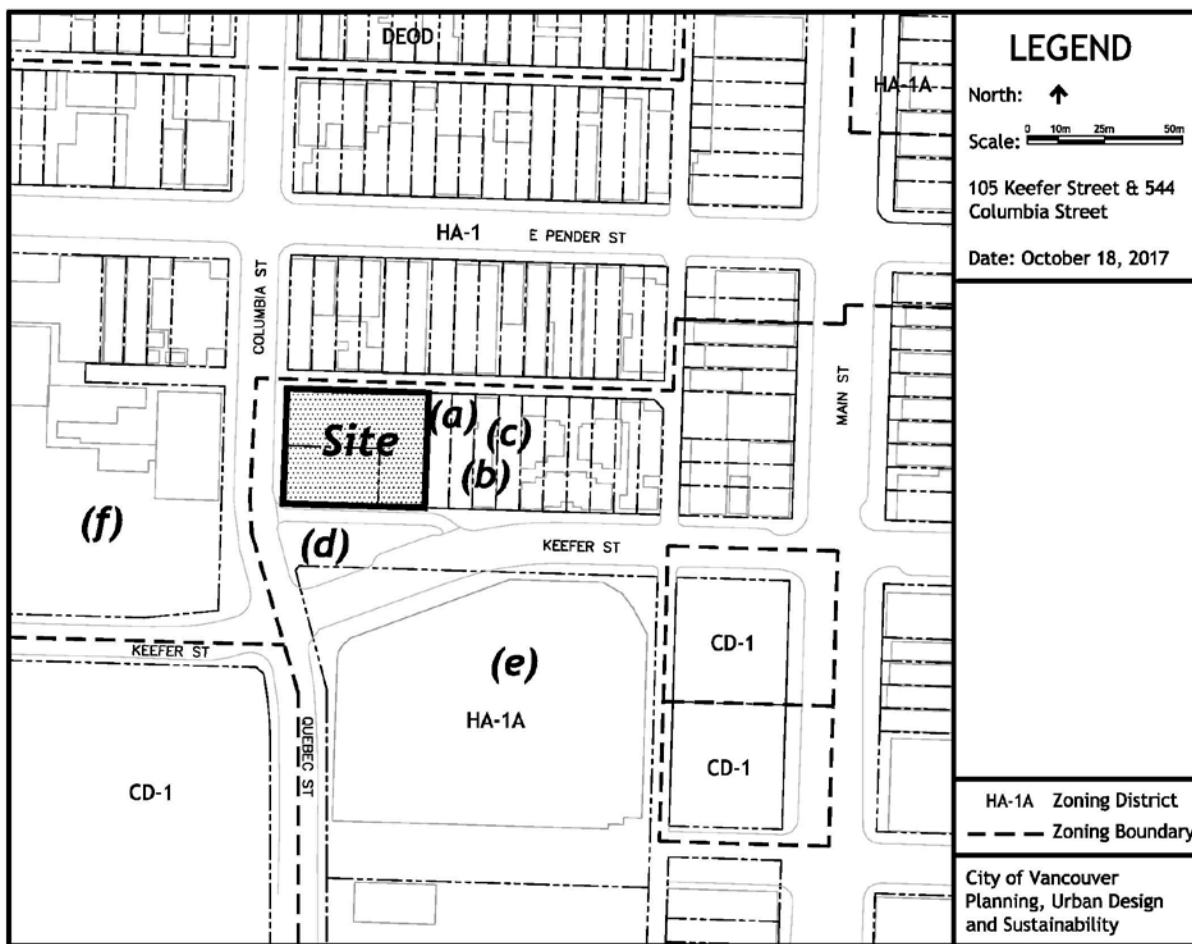
• **History of Application:**

17 06 27 Complete DE submitted
17 08 09 Urban Design Panel
17 10 12 Chinatown Historic Planning Committee
17 10 18 Development Permit Staff Committee

• **Site:** The site is located at the Northeast corner of Keefer Street and Columbia. The site consists of two legal lots and the development site fronts along Keefer Street for 150 feet and along Columbia Street for 122 feet, with vehicular access from the lane. The site is located in the Chinatown Historic Area and is regulated by both the HA-1A District Schedule and the HA-1A Design Guidelines.

• **Context:** Significant adjacent development includes:

- a) 129 Keefer Street: portion of 50'x122' surface parking lot (DP application in progress);
- b) The Keefer - 133 Keefer Street: 5-storey mixed-use building (Heritage 'C');
- c) 137 Keefer Street: future 9-storey mixed use building (DP approved May 2017);
- d) Memorial Square;
- e) Chinatown EasyPark - 180 Keefer Street: 5-storey parking garage;
- f) Sun Yat-Sen Gardens, 89 Expo Boulevard, 0.83h park.



• **Background:**

A development permit was submitted on June 27, 2017 for a redevelopment of this site on the “Keefer Street Triangle” in Chinatown, under the provisions of HA-1A zoning and design guidelines. The proposal comprises a 9-storey mixed-use, mid-rise building with underground parking. Commercial/retail use and a community amenity space (secured by a 219 covenant) are provided at grade, with market residential units above. A public Open House was held on Sep 5, 2017. The proposal was reviewed by the Urban Design Panel on August 9, 2017, and was supported with recommendations. It was also reviewed by the Chinatown Historic Planning Committee on Oct 12, 2017, and was not supported (see further comments below).

The application is generally in line with the objectives of the HA-1A regulations and guidelines.

• **Applicable By-laws and Guidelines:**

HA-1 and HA-1A Districts Schedule (Chinatown Historic Area)

The intent of this District Schedule is to encourage the preservation and rehabilitation of significant early buildings, while also regulating land use and building form to achieve “contextual” new development.

To ensure appropriate fit of new development in this distinct community, all new buildings in HA-1A require review and approval of the Development Permit Board or the Director of Planning, based on the consideration of the following:

- (a) the intent of this Schedule and all applicable policies and guidelines adopted by Council; and
- (b) the submission of any advisory group, property owner or tenant;

The height (90ft.) and uses (Dwelling Uses and Retail Store) that are proposed in this development are outright allowances in HA-1A. The *achievement* of this height and use, with respect to massing, density, external design, and livability, however, are subject to discretionary approval.

Chinatown HA-1A Design Guidelines

The intent of these guidelines, for new buildings, is to encourage contemporary new development that is responsive to the Chinatown community’s established cultural and historic identity. They describe a historic architectural context with which new development must be compatible, in terms of scale and neighbourliness, architectural language and design quality. Furthermore, the guidelines provide standards of public realm design, and livability for residential development.

High Density Housing Guidelines for Families with Children

While Council policy does not require that development permit applications include 35% family units, this unit mix remains a recommended target. Where 2 and 3 bedroom units are provided, developments should adhere to these guidelines, which address issues of site planning, unit design and amenity spaces, to provide for improved residential livability for families with children.

• **Response to Applicable By-laws and Guidelines:**

HA-1 and HA-1A Districts Schedule (Chinatown Historic Area)

The application generally meets the intents and regulations of the HA-1A zoning, including height (90ft.) and use (dwelling uses and commercial/retail). Note that the regulations do not limit floor space, but do require discretionary review and approval of overall massing and design

Chinatown HA-1A Design Guidelines

The application meets the intent of the guidelines, with respect to achieving new development that is compatible with the historic architecture and urban fabric of the neighbourhood.

Neighbourhood and Street Character

The proposal is located on a key site in Chinatown, as it fronts onto Chinatown Memorial Square, and is directly across the street from Dr. Sun Yat Sen Garden. The massing is sculpted at the west side, stepping down from 9 to 7 storeys, to minimize views from the garden and provide an appropriate backdrop to the Chinatown Memorial monument. The development will not cast shadows on the square or park.

The proposal responds to the historic parcelization pattern of Chinatown, by breaking up the Keefer street frontage into 25ft “bays” and a “sawtooth” roofline. Both street frontages are built to the front property line, with commercial shopfronts at grade. In another reference to the vernacular architecture, there is a semi-public passageway that intersects the site, and opens onto small forecourts on both street frontages. The passageway also creates unique double-fronting commercial spaces; these require some design development to ensure their success (see Recommended Condition 1.2).

Scale and Form of Development

The proposed 9-storey (90ft.) massing is expressed with a prominent saw-tooth profile, and well-articulated street facades and a prominent saw-tooth profile, consistent with the guidelines. To achieve continuous streetwalls, as is prescribed, no front yard is provided - although small forecourts are provided on both street frontages to indicate the semi-public atrium at the ground level.

A small internal courtyard at the east interior property line provides light and ventilation to residential units, and also introduces skylights into the passageway/atrium. Staff recommend further design development to ensure that units on this courtyard have appropriate privacy and access to light and ventilation (see Recommended Condition 1.2).

The building contributes to a vibrant public realm by providing commercial/retail units along both street frontages and on the lane. One unit is proposed for a cultural/community use, as described below.

Architectural Components

The proposal responds to guidelines’ intent of responding to the distinctive “balcony-style” architecture of historic Chinatown facades, without replicating them. The proposal offers small-width storefronts with fabric awnings. Above the awnings, “transom” windows at Level 2 suggest a commercial mezzanine (although, in fact, residential units are located at this level). The longer façade on Keefer St. is broken into 25-foot vertical bays, which are framed in dark masonry. Each bay has a distinct pattern of balconies, window bays with clear and spandrel glass, and ornamental railings and screens. At the street corner, a masonry corner-piece in a lighter colour helps to anchor the building. While a richness of ornamentation is consistent with the guidelines, Staff has recommended further refinements to achieve a more coherent architectural expression (see Recommended Conditions 1.3 and 1.5).

Public Realm and Community Amenity

The proposal will restore an existing slip lane, thus expanding Chinatown Memorial Square. The design will adhere to the Council-approved streetscape treatments for the public realm in Chinatown (ie. granite cobblestone tree surrounds, sidewalk paver design, etc.).

The applicant has also voluntarily offered to provide an amenity cultural space in one of the ground floor units for the use of a community group, for a minimum of 10 years (see Recommended Condition 1.7).

High Density Housing Guidelines for Families with Children

The application generally meets the policy recommendations for private outdoor spaces and common indoor and outdoor amenities. Most units have balconies with minimum 4ft clear depth. Units at Level 2, however, are not provided with balconies so that this level can be expressed as a “mezzanine”, as is typical of the local vernacular architecture. Staff are, however, seeking full-size balconies for units with one or more bedroom for Levels 3 through 9 (see Recommended Condition 1.1) for Levels 3 through 9. A common amenity room and patio are provided at Level 7, but are under-sized and have poor solar access. To improve livability, staff recommend the provision of a larger amenity room and roof terrace at Level 9 (see Recommended Condition 1.1).

• Conclusion:

This application has generally addressed the applicable policies, and will contribute high-quality housing, commercial space, and community space to the neighbourhood, within a form of development that is compatible with its context. Staff support the application, subject to the conditions noted.

URBAN DESIGN PANEL

The Urban Design Panel reviewed this application on August 9, 2017, and provided the following comments:

EVALUATION: SUPPORT WITH RECOMMENDATION

Introduction: Tim Potter, Development Planner, introduced the project by reviewing the site, its context and the related zoning and sought advice from the Panel on this application sought by asking the following questions:

1. Given the parameters of the HA-1A zone (i.e. 105 foot height; FSR based on urban design performance), is the massing appropriate for the site and context?
2. Are the pedestrian realm and retail storefront on the street frontages successfully resolved?
3. Please comment on the success of the atrium as an extension of the public realm, and on the functionality of the double-fronted retail.
4. Is the composition of the building elevations, including corner expression, successful?
5. Are the architectural articulation, material quality, and ornamentation successful and appropriate for the Chinatown context?

Mr. Potter then took questions from the panel.

- **Applicant’s Introductory Comments:** The applicant acknowledged that a previous rezoning application was not supported. Refinements in current DP proposal include a 3-storey reduction in height, and sculpting the massing at the west end of the building. The cultural facilities are retained in the same location as in the rezoning application. The building design is broken down into 25-foot “bays” varying in colour and material to provide variety in the massing. The layering of

patterns in the exterior elevations speaks to the character of Chinatown. The ground floor is organized to serve the double fronted retail. The vertical signage is intended for public art work.

The public realm and landscape design are a continuation of the rezoning proposal. The entrance ways are mosaic patterned, the sidewalk is concrete with glass detailing. The lane is granite with a smooth surface. The upper level outdoor space is intended to be 'semi-private'. The upper roof deck has a play area and urban garden. The tree selection is a response to Sun Yet Sen and a nod to Chinatown.

The applicant team took questions from the panel.

- **Panel Consensus:** Having reviewed the project it was moved by Ms. Avini Besharat and seconded by Mr. Sharma and was the decision of the Urban Design Panel:

THAT the Panel SUPPORT the project with the following recommendations to be reviewed by City Staff:

- Reconsider the design of the glazed massing (upper storeys) to be more in keeping with vocabulary of the building
- Reconsider the glazed divider units (between the 25ft bays) to better address solar orientation
- Examine and enhance an articulation of the building corner (at Keefer and Columbia St)
- Add vibrancy to colour choice and refine the language of the ornamentation

Related Commentary: The panel noted the composition is very strong and the articulation and material is successful. Panel members noted the atrium needs further design development to ensure that it will be functional. The detailing of the glazing needs refinement in vocabulary and character. The retail units should more strongly address Columbia Street.

Bikes storage and travel should be studied. There should be a professional artist on board to look at the fritting, decorative panels, and public art and materials. The design needs development at the scale of small patterning/ornamentation. The retail side requires rain protection.

- **Applicant's Response:** The applicant team thanked the panel for their detailed comments.

CHINATOWN HISTORIC AREA PLANNING COMMITTEE

The Chinatown Historic Area Planning Committee reviewed this application on October 12, 2017, and provided the following comments:

EVALUATION: NON-SUPPORT

Committee Commentary: The Committee recognized the efforts put forward by the applicant in proposing this Development Permit application under HA-1A zoning, following an unsuccessful rezoning application. The Committee opposed the application and recommended improvements to the following:

- Scale and massing;
- Reinstatement of seniors/social housing;
- Livability (inclusion of more 2- and 3- bedroom family-oriented units);
- Detailed architectural expression, to be more in keeping with the historic vernacular of Chinatown;
- Sensitive response to the site context (memorial plaza); and
- More robust public consultation.

Staff Response: The proposed height complies with the HA-1A regulations, and massing generally adheres to the guidelines, including breaking up longer facades into 25' "bays", providing a sawtooth roofline, and setting back massing above 70ft. The application also complies with policies regarding unit mix. Staff are seeking further design development to improve livability and detailed architectural expression (see Recommended Conditions 1.1 and 1.3).

ENGINEERING SERVICES

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

HOUSING POLICY & PROJECTS

Urban Agriculture Design Guidelines for 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" encourage edible landscaping and shared gardening opportunities in private developments. Design development is required to include opportunities for edible landscaping in the outdoor amenity space for both the market and social housing units (see Standard Condition A.1.14). Consistent with the guidelines, plans include accessible planters suitable for urban agricultural activity on the common rooftop outdoor amenity area, along with supporting infrastructure including a potting bench / tool storage chest a compost bin for yard waste and provision of an irrigation system and hosebib.

NOTIFICATION

Two site signs were placed on site, one facing Keefer Street and the other facing Columbia Street. On August 1, 2017, 2154 notification postcards were sent to neighbouring property owners advising them of the application, and offering additional information on the City's website. The postcard and the development application materials were posted online at vancouver.ca/devapps. In addition, an open house was advertised on the postcard, signs and online, and was hosted on the evening of September 5, 2017. The postcard was also e-mailed to interested community members through a list administered by the Chinatown Area Planners. On September 12, 2017, new postcards were sent out and website was updated informing the public of the change of the Development Permit Board date.

Open House

The open house was held on September 5, 2017 and 159 people signed in as attending. The comments received at the open house generally match the comments later received by email. Comments in opposition to the project were related to neighbourhood gentrification, housing unaffordability for seniors, architectural fit, proximity to the memorial plaza, non-compliance the proposed amendments to HA-1A zoning, and desire for the site to be put to a different use, such as social housing. Comments in support were related to its inclusion of a senior's centre, potential economic contribution to the neighbourhood, its higher-value use compared to the existing surface parking, compliance with the zoning, and support of the architectural design.

Notification responses

There were 180 individual responses to the notification: 141 responses in opposition and 39 in support. A petition of 2,812 digital signatures was received from Chinatown Concern Group under the heading: "*Protect the heart of Vancouver's Chinatown by: 1) Reject Beedie's 105 Keefer Development*"

Application and 2) Acquire the 105 Keefer St. site and 3) Develop the site to meet community's needs, including low-income seniors housing and an intergenerational community space!"

Comments received in opposition expressed concern for the following:

Concerns of gentrification of the neighbourhood:

- Residential units would be luxury condos
- Increased property values and taxes
- Displacement of residents and businesses

Staff Response: The development permit application is for a mixed-use development with market residential units, which is an allowable use under the HA-1A district schedule. It may be expected that dwelling units will be sold at current market values. No residents or businesses will be directly displaced by this development, as the existing site is a surface parking lot.

Concerns the proposal does not meet the current district schedule:

- Retail frontages exceed the 7.6m (25') maximum prescribed by the district schedule

Staff Response: Section 5 of the HA-1A District Schedule allows the Development Permit Board or the Director of Planning to relax retail frontage, providing he/she first considers all applicable policies and guidelines. In this application, all commercial retail units meet the 25ft maximum frontage, except the corner unit which exceeds the limit on the Columbia Street elevation only. Staff supports a relaxation for this corner unit, as a greater depth than 25ft. is required to achieve a functional retail space. Overall, the proposal meets the intent of creating small-scale retail to support local business and an animated pedestrian environment.

Concerns the proposal does not meet the proposed/future Chinatown policies in regards to:

- Frontage maximum of 75'
- Density of 5.35 FSR
- Number of storeys limited to 8
- Second storey office use

Staff Response: Staff are required to assess this application under current policies, and is unable to apply proposed/future policies which have not been approved by Council.

Concerns that the project does not architecturally fit with Chinatown:

- Massing and height does not fit in with surrounding buildings
- Bland colours do not fit with Chinatown's character
- Red boxes and glass enclosures at top of building seem out of context
- Public art should be approved under a separate process

Staff Response: The proposed form of development adheres to the HA-1A guidelines, in terms of height (maximum 90ft.) and massing expression (25ft. "bays", a double-height storefront with a "mezzanine" expression, and a sawtooth roofline). The brick exterior cladding and ornamental metal guardrails and decorative screens are sympathetic to the local vernacular. Staff have conditions to improve the expression of the "glass boxes" at the upper storeys, and to further refine the material detailing and colour palette. Spaces designated for public art appeared on the information boards at the open house, as well as the Urban Design and CHAPC booklets. The submitted Development permit architectural drawings do not show any references to any proposed Public Art. There is no requirement for a public art contribution under this application. If an art piece is voluntarily included, it will require

a separate, future, DP. application.

Concerns that the project is not a cultural fit with the neighbourhood:

- Placement of market residential units too close to memorial plaza and Dr. Sun Yat-Sen Gardens
- The proposed cultural space is too small
- New commercial units will gentrify businesses in the area
- Social housing desired by the community

Staff Response: Building massing has been set back at the upper storeys to mitigate views from Dr. Sun Yat-Sen Gardens, and the Keefer St elevation has been composed to be a complementary backdrop to the memorial plaza. The cultural space is a voluntary community contribution by the applicant, and would not typically be secured under a Development Permit application. There is no requirement under the HA-1A regulations and policies to provide social housing.

Many who wrote in suggested alternative uses for the site:

- Social housing
- Park
- Community Centre
- Intergenerational community/cultural space
- Extension of the memorial plaza
- Smaller-scale, narrower, buildings (ie. multiple developments)

Staff Response: The proposed uses - “Dwelling Use” and “Retail” - are both outright uses in the HA-1A District Schedule. In principle, the alternative uses listed above could also be considered on this site, but they are not required to be included in the DP application.

DEVELOPMENT PERMIT STAFF COMMITTEE COMMENTS:

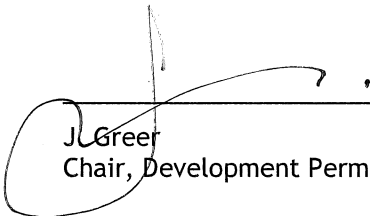
The Staff Committee has considered the approval sought by this application and concluded that with respect to the Zoning and Development By-law and Downtown Official Development Plan it requires decisions by both the Development Permit Board and the Director of Planning.

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.

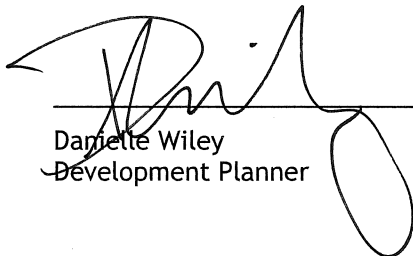
With respect to the Parking By-law, the Staff Committee has considered the approval sought by this application and concluded that it seeks a relaxation of loading. The Staff Committee supports the relaxations proposed, as outlined in the proposed conditions of approval but supports options for compliance as noted in Standard Condition A.2.7

Staff Committee has considered this proposal under the existing HA-1A regulations and guidelines.

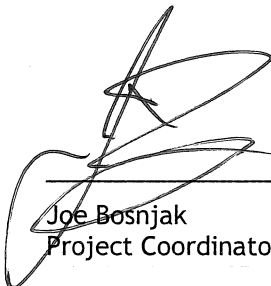
Staff Committee supports the proposal with the conditions contained in the report.



J. Greer
Chair, Development Permit Staff Committee



Danielle Wiley
Development Planner



Joe Bosnjak
Project Coordinator

Project Facilitator: Andrew Wroblewski

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 4.3 - Height, of the HA-1A District Schedule of the Zoning and Development By-law;

Note to Applicant: Discretionary height increases required to achieve barrier-free access to this space will be considered as per the City of Vancouver bulletin on 'Roof Mounted Energy Technologies and Green Roofs - Discretionary Height Increases'. See Recommended Condition 1.4.

- A.1.2 compliance with Section 4.10 - Horizontal Angle of Daylight, of the HA-1A District Schedule of the Zoning and Development By-law;

Note to Applicant: There are internal habitable rooms on levels 4 to 9.

- A.1.3 compliance with Sections 4.8.1 and 4.8.4 - Disability Spaces, of the Parking By-law, to the satisfaction of the General Manager of Engineering Services;

Note to Applicant: A total of five spaces are required for the residential area and one space for the commercial area.

- A.1.4 compliance with Section 6 - Bicycle parking in accordance with the Parking By-law;

Note to Applicant: A total of 12 Class B bicycle spaces are required.

- A.1.5 provision of details of bicycle rooms, in accordance with Section 6 of the Parking By-law, which demonstrates the following:

- i. a minimum of 20 percent of the bicycle spaces to be secured via lockers;
- ii. a maximum of 30 percent of the bicycle spaces to be vertical spaces;
- iii. a provision of one electrical receptacle per two bicycle spaces for the charging of electric bicycles; and
- iv. notation on the plans that, "Construction of the bicycle rooms to be in accordance with Section 6.3 of the Parking By-law";

- A.1.6 provision of a letter, to the satisfaction of the Director of Planning, outlining the intended use of the space labelled "Cultural" on the plans;

Note to Applicant: The Director of Planning may permit uses similar to those listed in the HA-1A District schedule under clause 3.2z. Also see Recommended Condition 1.7.

- A.1.7 labelling of all rooms on the floor plans including the storage rooms;

- A.1.8 detailed floor and roof elevations for each floor and roof level in the building, as related to the existing grades on site;
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Note to Applicant: Top of stairwells, guard rails, parapets, etc. are all to be shown clearly on the roof plan and all elevation/section plans.

- A.1.9 provision of section showing the glass hatch on roof;

Note to Applicant: Top of glass hatch is to be no greater than 3' - 11" from top of roof slab to top of hatch. If it is over the height then that area will be counted in floor area as well as overall height (is not a relaxation under Section 10.11).

- A.1.10 confirmation of number of parking spaces for both the non-residential parking area and residential parking area;

Note to Applicant: These numbers are to be clearly labelled and noted as either non-residential or residential.

- A.1.11 provision of a minimum of 5.7 m (200 cu. ft.) of useable storage space for each dwelling unit for the storage of bulky items such as winter tires, ski and barbecue equipment, excess furniture, etc.;

Note to Applicant: The storage area[s] may be below grade with individual lockers in a common space or may be provided in suite; however, laundry facilities should not be located inside such storage areas. Refer to Bulk Storage - Residential Development bulletin for more information. Windows are not permitted in a storage room.

- A.1.12 deletion of all references to the proposed signage, or notation on plans confirming that: "All signage is shown for reference only and is not approved under this Development Permit. Signage is regulated by the Sign By-law and requires separate approvals. The owner assumes responsibility to achieve compliance with the Sign By-law and to obtain the required sign permits.";

Note to Applicant: The Sign By-law Coordinator should be contacted at 604.871.6714 for further information.

Standard Landscape Conditions

- A.1.13 design development to integrate elements of the memorial plaza, such as paving pattern, into the ground level common outdoor space;

Note to Applicant: This is intended to acknowledge and preserve the memorial plaza as a significant community element.

- A.1.14 design development to expand programming to include urban agriculture plots in common outside areas;

Note to Applicant: This should follow the City's Urban Agriculture Guidelines for the Private Realm and include infrastructure required, such as potting benches, hose bibs, etc. Garden plots should be wheelchair accessible.

- A.1.15 provision of improved sustainability by the provision of additional edible plants, in addition to urban agriculture plots.

Note to Applicant: Edible plants can be used as ornamentals as part of the landscape design. Shared gardening areas should reference and be designed to adhere to Council's Urban Agriculture Guidelines for the Private Realm and should provide maximum solar exposure,

universal accessibility and provided with amenities such as, raised beds, water for irrigation, potting bench, tool storage and composting.

- A.1.16 design development to expand programming to include Children's Play Areas, including benches for parent supervision;

Note to Applicant: This should be located in proximity of an indoor amenity room, where visual access for adult supervision of children can take place.

- A.1.17 provision of section details at a minimum scale of 1/2"=1'-0" scale to illustrate typical proposed landscape elements including planters on structures, benches, fences, gates, arbours and trellises, and other features;

Note to Applicant: Planter section details must confirm depth of proposed planting on structures exceeds BCSLA Landscape Standard, in order to be deep enough to accommodate rootballs of proposed trees and shrubs well into the future.

- A.1.18 provision of typical sections (1/4"=1') illustrating the building to public realm interface facing the street, confirming a delineated private to public transition of spaces;

Note to Applicant: : The section should include the building façade, as well as any steps, retaining walls, guardrails, fences and planters, through to the memorial plaza. The location of the underground parking slab should be included in the section.

- A.1.19 design development to locate, integrate and fully screen lane edge gas meters and parking garage vents in a manner which minimizes their impact on the architectural expression and the project's open space and public realm;

- A.1.20 deletion of standard tree protection barriers for street trees planted in concrete grates;

Note to Applicant: Coordinate with parks and Engineering Services for appropriate tree protection measures.

- A.1.21 provision of a high-efficiency automatic irrigation system to be provided for all planters on parkade slab;

- A.1.22 provision of a Landscape Lighting Plan to be provided for security purposes.

Note to Applicant: Lighting details can be added to the landscape drawings; all existing light poles should be shown.

- A.1.23 provision of coordinated plans to a proper scale, with correct scale on Title Block;

- A.1.24 provision of confirmed trenching locations for utility connections, avoiding conflict with tree root zones and addition of the following note:

"Trenching for utility connections to be coordinated with Engineering Department to ensure safe root zones of retained trees. Methods of tree protection for street trees to be approved by Park Board".

Note to Applicant: Methods of tree protection for street trees (as approved by Park Board) to be shown on plan. Relocation of trenching locations are required if in conflict with tree protection.

A.1.25 provision of compliance with the COV Bird Strategy, by providing plants which include bird-friendly habitat;

A.2 Standard Engineering Conditions

A.2.1 provision of a Services Agreement to detail the on and off-site works and services necessary or incidental to the servicing of the site (collectively called “the services”) such that they are designed, constructed and installed at no cost to the City and all necessary street dedications and rights of way for the services are provided. No development permit for the site will be issued until the security for the services are provided. The following improvements are required to public property:

- i. provision of geometric changes adjacent the site to allow for removal of the service road to the satisfaction of the General Manager of Engineering Services. Changes will include but are not limited to the following:
 - a) removal of the service road and related curb, sidewalk and pavement and reconstruction of the sidewalks and curb to meet adjacent sidewalk and pavement treatments and/or Chinatown sidewalk patterns;
 - b) removal of the existing concrete bollards on both sides of the service road; and
 - c) provision of improved lighting.

Note to Applicant: Confirmation must be provided that the service road is not required for firefighting access. Changes to the slip lane may require coordination with a future redesign of Memorial Plaza.

- ii. provision of new sidewalks consistent with the Chinatown sidewalk patterns adjacent the site;
 - iii. provision of a standard concrete lane crossing, new curb returns and curb ramps on the east side of Columbia St. at the lane south of Pender St. Please ensure that the modified curb returns at the lane accommodates SU9 trucks;
 - iv. provision of street trees adjacent the site where space permits;
 - v. provision of adequate water service to meet the fire flow demands of the project. The current application lacks the details to determine if water main upgrading is required. Please supply project details including projected fire flow demands as determined by the applicant’s mechanical consultant to determine if water system upgrading is required. Should upgrading be necessary then arrangements to the satisfaction of the General Manager of Engineering Services and the Director of Legal Services will be required to secure payment for the upgrading. The developer is responsible for 100% of any water system upgrading that may be required;
 - vi. upgrading of approximately 80m of the existing 200mm sanitary sewer on L/N Keefer St to a 375mm sewer to accommodate the flows from the site at 100% the developer’s expense. Should the applicant wish to connect their storm and sanitary connections to the separated sewers on Columbia St, no sewer upgrades will be required. Confirmation from the applicant’s mechanical engineer that they can achieve a connection to the Columbia St. sewer is required. No upgrades are required for the storm sewers that will serve the site;
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- vii. for building fixtures, install Energy Star rated appliances (e.g. clothes washers) and meet the January 1, 2018 Vancouver building code plumbing fixture rates. See <http://council.vancouver.ca/20170412/documents/cfsc4.pdf>; and
 - viii. arrangements to the satisfaction of the General Manager of Engineering Services for the provision of laneway lighting.
- A.2.2 make arrangements to the satisfaction of the General Manager of Engineering Services and the Director of Legal Services for the consolidation of Lots 1 and 2, Block A, DL 196 and 2037, Plan 736 to create a single parcel;
- A.2.3 provision of a building setback and a surface SRW to achieve a distance of up to 4.3m (14ft.) from the back of the City curb to the building face on the 14.8m (48.6ft) southerly portion of the Columbia St. frontage.

Note to Applicant: A legal survey of the existing dimensions from the back of the City curb to the existing property line is required to determine the final setback/SRW dimension. Landscaping, door swings, stairs, structure, planters and walls are not to encroach into the final SRW area;

- A.2.4 confirmation from the City of Vancouver Sewers Design Engineer that right of way 62003M does not contain an active sewer or is necessary for other purposes and may be abandoned, if so release of Statutory Right of Way 62003M (for sewer and drainage purposes) prior to building occupancy is required;
- A.2.5 provision of costs for abandonment of the City sewer in right of way 62003M;

Note to applicant: Arrangements are to be secured prior to development permit issuance, with release to occur prior to issuance of an Occupancy Permit for the site. Provision of a letter of commitment will satisfactorily address this condition. Prior to building occupancy the applicant is to supply a written request to the City, a fresh title search and a copy of the documents along with executable discharge documents to affect the release.

- A.2.6 city building grades are to be shown on the site plan. Design elevations are required on both sides of all new entrances. Ensure that all design elevations are located on property line adjacent to all entrances;

Note to Applicant: One building grade is missing on Columbia Street (3.76m). See BG130103.

- A.2.7 provision of the required loading or make arrangements to the satisfaction of the General Manager of Engineering Services and Director of Legal Services to enter into a shared use (loading) agreement;

Note to Applicant: label one Class B loading space as (shared) residential and one as (shared) commercial with a note 'refer to shared use agreement'

- A.2.8 a canopy application for all new canopies and awnings that encroach onto City property is required.

Note to Applicant: Note that canopies must be fully demountable and drained to the buildings internal drainage systems. Please submit a copy of the site and elevation drawings of the proposed canopy for review. Existing street lamp is shown conflicting with the proposed awning

along Keefer St.

- A.2.9 provision of separate rooms for residential and commercial garbage is required. Clarify garbage pick-up operations. Confirmation that a waste hauler can access and pick up from the location shown is required.

Note to Applicant: Pick up operations should not require the use of public property for storage, pick up or return of bins to the storage location;

- A.2.10 delete the small projection which encroaches over Keefer Street above the 2nd level (A3.02 & A3.04);
- A.2.11 provision of a separate application to the General Manager of Engineering Services for street trees and or sidewalk improvements is required. Please submit a copy of the landscape plan directly to Engineering for review;
- A.2.12 confirmation that the existing wood pole in conflict with the parking access can be relocated to avoid access conflicts or confirm no conflict with the parkade entry. Please provide written confirmation from effected utility companies that the pole and related services can be relocated.

Note to Applicant: Please show new pole location on the development permit plans;

- A.2.13 provision of automatic door openers on the doors providing access to the bicycle room(s) and note on plans;
- A.2.14 provision of drawings A2.02, A2.03, A2.04, and A2.05 at 1/8 scale with gridlines;
- A.2.15 provision of an improved plan showing 12 Class B bicycle spaces on private property;

Note to Applicant: Locate the bike rack in close proximity to the lobby and commercial entrances with 'stairs free' access. Ensure that bicycles locked to the rack do not encroach over the property line.

- A.2.16 modification to the access of the Class A bicycle parking to provide an alcove for the bike room access off the parking ramp and maneuvering aisle;
- A.2.17 provision of individual Class A bicycle lockers;
- A.2.18 improve visibility around corners of the parkade by providing a convex mirrors, including across the maneuvering aisle from the bicycle access to improve visibility of vehicles on the ramp;
- A.2.19 design development to provide internal loading access to all CRUs;
- A.2.20 compliance with the Parking and Loading Design Supplement to the satisfaction of the General Manager of Engineering Services as follows:

- i. provision of design elevations on both sides of the parking ramp at all breakpoints, both sides of the loading bay, and within the parking area;

Note to Applicant: This is required to calculate the slope and crossfall.

- ii. provision of numbering, labelling and dimensions of all parking and loading spaces;
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- iii. provision of dimensions on ramps and maneuvering aisle widths;
- iv. provision of additional dimension for all types of columns that encroach into parking stalls (width, length and setback);

Note to Applicant: The disability stalls require 4m of stall width.

- v. modification of the parking ramp design to address the following:
 - a) the slope must not exceed 10% for the first 20' from the property line. The slope must not exceed 12.5% after the first 20' from the property line. Using the design elevations of 12.67' at the top of the ramp and 2.92' at P1, the ramp slope calculates to 12.8% with a 10% slope for the first 20' of the ramp. Slopes up to 15% may be acceptable if a 7.5% to 10% transition ramp is provided at the bottom for at least 4m in length; and
 - b) provision of a 22' ramp width and the required transitions for the card reader on the ramp.
- vi. provision of reflective paint markings on the outbound corner of the main transformer room on P1 as it encroaches into the maneuvering aisle;
- vii. provision of loading access and loading spaces, clear of column encroachments;

Note to Applicant: Columns are shown encroaching into the westerly Class B loading space. Provide a 20' width from the loading spaces to the property line for both spaces.

- viii. provision of a section drawing showing elevations, vertical clearances, and security gates for the main ramp and through the loading bay;

Note to Applicant: 2.3m of vertical clearance is required for access and maneuvering to all disability spaces and 3.8m of vertical clearance is required for Class B loading spaces and maneuvering.

- ix. provision of column placement to comply with the requirements of the Engineering Parking and Loading Design Supplement as follows:
 - a) a column 2' in length must be set back 2' from either the opening to or the end of the parking space;
 - b) a column 3' long may be set back 1';
 - c) provide additional parking stall width for stalls adjacent to walls or stalls with columns set back more than 4' from the end of the stall; and
 - d) provide a minimum 0.3m (1') setback from the drive aisle for all columns.

Note to Applicant: Dimension the car-share stalls to confirm the required width is being provided.

- x. dimension the width of the O/H gate on P1;

Note to Applicant: A 20' width is required.

- xi. provision of an improved plan showing the access route from the Class A bicycle spaces to reach the outside.

Note to Applicant: The route must be 'stairs free' and confirm the use of the parking ramp, if required.

Please contact Dave Kim of the Parking Management Branch at 604-871-6279 for more information or refer to the Parking and Loading Design Guidelines at the following link: (<http://vancouver.ca/home-property-development/parking-policies-guidelines.aspx>)

A.3 Standard Licenses & Inspections (Environmental Protection Branch) Conditions:

- A.3.1 A qualified environmental consultant must be available to identify, characterize and appropriately manage any environmental media of suspect quality which may be encountered during any subsurface work.
- A.3.2 In the event, contamination of any environmental media are encountered, a Notice of Commencement of Independent Remediation must be submitted to the Ministry of Environment and a copy to the City of Vancouver.
- Upon completion of remediation, a Notification of Completion of Independent Remediation must be submitted to the Ministry of Environment and a copy to the City of Vancouver.
 - Dewatering activities during remediation may require a Waste Discharge Permit.
 - Submit a copy of the completion of remediation report with supporting data signed by an Approved Professional confirming the lands have been remediated to the applicable land use prior to occupancy permit issuance.
 - Must comply with all relevant provincial Acts and Regulations (e.g. Environmental Management Act, Contaminated Sites Regulation, Hazardous Waste Regulation) and municipal Bylaws (e.g. Fire Bylaw, Sewer and Watercourse Bylaw)
- A.3.3 Require written confirmation from an Approved Profession to verify the conditions outlined in the risk assessment of the Certificate of Compliance (November 5, 2012) will not be changed or impacted by the new development.
- A.3.4 Must comply with all relevant provincial Acts and Regulations (e.g. Environmental Management Act, Contaminated Sites Regulation, Hazardous Waste Regulation) and municipal Bylaws (e.g. Fire Bylaw, Sewer and Watercourse Bylaw)
- A.3.5 Erosion Sediment Control Plan is required at the Building application stage for Environmental Protection's review and acceptance.
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B.1 Standard Notes to Applicant

- B.1.1 The applicant is advised to note the comments of the Building Review Branch, Vancouver Coastal Health Authority and Fire and Rescue Services Departments contained in the Staff Committee Report dated September 20, 2017. 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 **December 12, 2017**, 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 Bylaw or other regulations affecting the development that occurs before the permit is issuable. No permit that contravenes the bylaw 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.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 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.2.4 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.2.5 The owner or representative is advised to contact Engineering to acquire the project’s permissible street use. Prepare a mitigation plan to minimize street use during excavation & construction (i.e. consideration to the building design or sourcing adjacent private property to
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construct from) and be aware that a minimum 60 days lead time for any major crane erection / removal or slab pour that requires additional street use beyond the already identified project street use permissions.

- B.2.6 The General Manager of Engineering Services will require all utility services to be underground for this “conditional” development. All electrical services to the site must be primary with all electrical plant, which include but not limited to System Vista, Vista switchgear, pad mounted transformers, LPT and kiosks (including non-BC Hydro kiosks) are to be located on private property with no reliance on public property for placement of these features.

The applicant is to provide confirmation that all required electrical plant is provided for on-site. There is to be no reliance on secondary voltage from the existing overhead electrical network on the street right-of-way. Any alterations to the existing overhead/underground utility network to accommodate this development will require approval by the Utilities Management Branch.

It is presumed with your consultation so far with B.C. Hydro that an area has been defined within the development footprint to accommodate such electrical plant. Please confirm that this space has been allocated and agreement between both parties has been met.

Provision of any gas service to connect directly to the building without any portion of the service connection above grade within the road right of way.

- B.2.7 Detailed design of the building HVAC and mechanical heating and cooling system must be submitted to and approved by the General Manager of Engineering Services prior to issuance of building permit.

- B.2.8 provision of construction details to determine ability to meet municipal design standards for shotcrete removal (Street Restoration Manual section 02596 and Encroachment By-law (#4243) section 3A) and access around existing and future utilities adjacent your site. Current construction practices regarding shotcrete shoring removals have put City utilities at risk during removal of encroaching portions of the shoring systems. Detailed confirmations of these commitments will be sought at the building permit stage with final design achievements certified and confirmed with survey and photographic evidence of removals and protection of adjacent utilities prior to building occupancy. Provision of written acknowledgement of this condition is required. Please contact Engineering Services for details

- B.2.9 Confirmation, prior to issuance of building permit, that all heating equipment for all buildings comprising the development shall be centralized within one common mechanical room at parkade level, and that a dedicated space not less than 225 ft² shall be allocated within the central mechanical room, or other dedicated space connected to the central mechanical room, to serve as the development’s future Energy Transfer Station (ETS) connecting buildings to the Neighbourhood Energy System. The dedicated ETS space should be clearly labelled.

- B.2.10 Completion of the *Confirmation of Neighbourhood Energy Connectivity Requirements* letter of assurance by the design engineer of record, prior to issuance of building permit, certifying that the mechanical design of all buildings within the development adheres to the *Neighbourhood Energy Connectivity Standards - Design Guideline*;

- B.2.11 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.
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Processing Centre - Building Comments

The following comments are based on the architectural drawings dated July 26, 2017 that have been submitted for Development Application DP-2017-00681. This is a cursory review in order to identify issues which do not comply with the 2014 Vancouver Building By-law #10908 (VBBL).

The above development drawings were reviewed with respect to the flood construction level (FCL) of this building as it is situated within the boundary of a designated flood plain. Additionally, comments were provided regarding compliance with the Building Bylaw as it appears to be significantly deficient, especially on the main floor level where the residential and commercial major occupancy shares this floor area. This floor level may require a full redesign.

The current FCL is 4.6m (GVRD Datum) and is approximately .80m (2.6ft) above your current finished floor elevation of 3.80m (12.5ft). The building design shall account for this requirement as it is situated within the designated flood plain. Vulnerable and below grade areas shall be designed in a manner that protects areas and services that are located below this prescribed elevation.

Additionally other consideration would include, but not limited to:

- Structural capacity to resist water pressures on the exterior wall of the buildings on the site.
- Sealing of service connections where located below the FCL.
- Fixed equipment, electrical panels/switchgear, service meters and building penetrations (eg: vents) to be located above the FCL.
- Any electrical systems or equipment located below the FCL shall be permitted if they are designed to be submersible or appropriate disconnection
- Installation of flood barriers on the building or within the property, where appropriate.
- Raise all supply or exhaust air grilles that serves below grade levels.
- Plugs or backflow preventers for drainage systems.
- Protection of critical services such as emergency generators, and other life-safety systems.

The reference Flood Plain Standards and Requirements provides general guidance on the intent and application of constructing in the City's designated flood plain.

The following are appears to be significantly non-conforming with respect to the Vancouver Building Bylaw and may require reconfiguration of the floor plans. Items marked with asterisk indicate significant code issues.

1. Level 1 Plan:

- a. Clarify if the internal corridor/passageway of the main floor serves as a residential or commercial corridor or both?
- b. The residential occupancy (Group C) shall be separated from the commercial occupancy (Group E) by a 2 hour fire separation. [**]
- c. Clarify what is the major occupancy for the "cultural" tenant. Is it an assembly, commercial or industrial use. Please note that there is a general prohibition of industrial use in conjunction with residential occupancies.
- d. The residential exit does not meet the requirements of Exits through Lobbies (3.4.4.2.). [**]
- e. The two central exit stairs cannot exit through the same area, which in essence creates a single exit condition. This may also have a detrimental affect on the high rise measures. [**]
- f. The two central exit stairs do not meet the Security for Storage Garage provisions (3.3.7.7.); where the exit stairs from the below grade level must terminate and exit directly to exterior. [**]
- g. An ASHRAE entry vestibule is required for the building.
- h. Retail #7 & #8 will not be provided with an address that orientates to the rear lane.
- i. Area of unprotected openings may be exceeded to retail #7 & #8 as the limiting distance is measured to the centerline of the lane. [**]

2. Below grade levels:

- a. If P3 and P2 are each considered a floor area, then P1 only have access to one exit and this one exit is could be cut off if smoke envelopes the P1 elevator lobby. This also eliminates access to all other exits on this level. [**]
-