



**Musson
Cattell
Mackey
Partnership**

Architects
Designers
Planners

A Partnership
Of Corporations

Oceanic Plaza
1066 West Hastings Street
Suite 1900
Vancouver, British Columbia
Canada V6E 3X1

T 604. 687. 2990
F 604. 687. 1771
www.mcmparchitects.com

December 21, 2018

City of Vancouver
515 West 10th Avenue
Vancouver, BC V5Z 4A8

Attention: **Jennifer Catarino**
Project Facilitator
Jennifer.Catarino@vancouver.ca

Dear Jennifer,

Re: **REZONING: 1444 ALBERNI STREET AND 740 NICOLA STREET**
OUR PROJECT NUMBER – 216012 – 6
RESPONSE TO CONDITIONS OF APPROVAL

Please accept the following as our response to the City of Vancouver Rezoning Conditions of Approval.

4. REZONING: 1444 Alberni Street and 740 Nicola Street

Summary: To rezone 1444 Alberni Street and 740 Nicola Street from DD (Downtown District) to CD-1 (Comprehensive Development) District to permit the development of two residential towers containing 314 market strata units, 129 market rental units and a 56-space childcare centre. A maximum height of 135.2 metres (443.5 feet) and a floor space ratio (FSR) of 14.48 are proposed.

Applicant: Musson Cattell Mackey Partnership in partnership with Robert A.M. Stern Architects

Referral: This item was referred to Public Hearing at the Regular Council Meeting of July 24, 2018.

Recommended Approval: By the General Manager of Planning, Urban Design and Sustainability, subject to the following conditions as proposed for adoption by resolution of Council:

- A. THAT the application, by Musson Cattell Mackey Partnership in partnership with Robert A.M. Stern Architects, on behalf of Alberni Street Nominee Ltd., the registered property owner, to rezone 1444 Alberni Street and 711 Broughton Street [PID 007-561-938; Lot I (Explanatory Plan 10081) Block 43 District Lot 185 Plan 92] and 740 Nicola Street [PID 009-175-105; Lot 16 Block 43 District Lot 185 Plan 92], from DD (Downtown District) to CD-1 (Comprehensive Development) District to increase the permitted floor space ratio (FSR) from 6.00 to 14.48 and the building height from 91.4 m to 135.2 m to permit the development of two residential towers containing 314 market strata units, 129 market rental units and a 56-space childcare centre, generally as presented in Appendix A of the Policy Report dated July 16, 2018, entitled “CD-1 Rezoning: 1444 Alberni Street and 740 Nicola Street”, be approved subject to the following conditions:



Musson
Cattell
Mackey
Partnership

Architects
Designers
Planners

A Partnership
Of Corporations

CONDITIONS OF APPROVAL OF THE FORM OF DEVELOPMENT

- a) That the proposed form of development be approved by Council in principle, generally as prepared by Musson Cattell Mackey Partnership and received September 1, 2017, provided that the Director of Planning may allow minor alterations to this form of development when approving the detailed scheme of development as outlined in (b) below.
- b) That, 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:

Urban Design

- 1. Design development to the overall proportions of both tower forms to minimize their apparent bulkiness, particularly in the east-west dimension.

Notes to Applicant: Design development is needed for the towers to appear more slender. This can be achieved by: sculpting the facades to enhance overall verticality; increasing the depths of the step-backs in massing; and lowering the shoulders of the tower base to better emphasize the shaft. Maintain a minimum of 24 m (80 ft.) separation between tower faces.

The average floor plates of the proposal are 615 sq. m (6,623 sq. ft.) for the east tower and 617 sq. m (6,643 sq. ft.) for the west tower, while the maximum tower floor plate under the West End Community Plan is 603.9 sq. m (6,500 sq. ft.). The increase in floor plate sizes is to account for the Passive House ventilation system and extra wall thickness. Should the ventilation and extra wall thickness no longer be required, the maximum floor plate of 603.9 sq. m (6,500 sq. ft.) outlined under the Plan shall be adhered to.

Applicant Response

To reduce the bulkiness and improve the slenderness of the towers, the overall floor area was reduced and the height / width ratio was visually reconfigured. The two towers were shifted so as not to align with the podium below and "pavilions" were added above the podium to decrease the perception of the towers' height. The shoulder of the two towers was lowered from the 22nd floor to the 13th floor along with relocating the corner balconies creates additional vertical folds on the east-west facades. To further enhance the verticality, 3 story balcony groupings with metal spandrels syncopate the corners, and V shape striation and pilasters were employed to give more depth to the surface of the facades. To lighten the overall form, the stone corner columns at the balconies were made smaller to provide extra visual permeability. "Columns" of metal bay windows were designed to help "slim" the façade and pull the eye up the building to the culminating crown.

- 2. Design development to the upper portion of the towers to further refine and enhance their architectural contribution to the city skyline and the public view cone.

Note to Applicant: Further sculpting of the tower crowns by lowering the shoulders of the shaft will enhance the tower tops as distinct elements.

Applicant Response

Additional floor area was also carved away at the upper portion of two towers to create a dramatic cascading form. The resultant terraces allow for landscaped roof gardens that visually connect with the green of the parks at the street level. The shifting setbacks also allow an opportunity to incorporate sculptural stone details as well as metal railings and panels, providing a level of delicacy in contrast to the stone. Large metal bay windows were incorporated on the east and west elevations and similar large scale was achieved by combinations of punch windows and balconies which also enrich the composition. The interplay of scales and materiality achieve variety, bring sophistication to the facades and helps reprise the residential townhouse scale below connecting the new building to the existing neighborhood.

3. Design development to rework the massing of the east face of the building to provide a sense of depth and variation and to provide massing relief to the Broughton Street frontage.

Note to Applicant: The intent is to reduce the massing impact of the uninterrupted shear face of the east façade. This can be achieved by stepping the east face of the tower back from the east face of the podium, and by finessing the proportions and depths of step-backs to integrate the tower into the podium, rather than producing an abrupt horizontal seam between tower and podium.

Applicant Response

Above the podium, the east tower was setback providing relief to the street and establishing a charming townhouse scale that fits well within the neighbouring fabric. At the street level, the exterior wall was located 5ft back from the property line allowing a green buffer to shield the rental units from the street as well as bringing additional greenery to be enjoyed by passing pedestrians.

The Broughton façade is treated like the front elevation on Alberni street with a comparable use of classical proportion, symmetry and attention to detail. The façade consists of a one-story height sculptural stone wall, continued around from Alberni street, and is combined with a variety of window and balcony types, and decorative metal railing and garden fences. The low 4 story townhouse will enrich the pedestrian visual experience on Broughton street and will fit well within the neighboring fabric.

4. Design development to the south face of the residential podium to improve the livability of south-facing rental units and to enhance the rear elevation of the podium.

Note to Applicant: Improve the sense of privacy for street-level units facing onto the lane with increased setbacks and landscaping, and by raising the interior floor level relative to the grade of the lane. Balconies of upper-level podium units should be increased for usability. Reduce the apparent bulk of the rear elevation by increasing setbacks and stepping in the massing.



Musson
Cattell
Mackey
Partnership

Architects
Designers
Planners

A Partnership
Of Corporations

Applicant Response

The lane services the loading, garage and other back of house operations. To change the perception of this lane as a “back alley” to a “front street” the building façade was pulled back from the street. By adding an extra 9 ft. of width to the street level, this arrangement allows more natural light and additional street trees. To further engage the lane, the daycare entry is marked with a canopy; the building amenity spaces and the outdoor agricultural garden were also located along the lane to activate the lane. Bay windows and decorative metal work was also added to enhance architecture on the lane.

- 5. Design development to enhance the laneway interface at grade level as much as possible.

Note to Applicant: Consider pedestrian lighting, landscaping, seating, and other public realm improvements such as high quality paving treatments.

Applicant Response

Enhanced laneway interface at grade will be provided as per precedence set by the Landmark redevelopment project, as the daycare and strata amenity is accessed off of the lane, as suggested in the West End Plan directions to enhance public laneways. Lighting would easily be incorporated as building and landscape integrated elements, such as outside walls, lower portions of walls along walkways and the weather protection canopy at the daycare. Planting strips along the recessed building walls will be provided where possible including seating elements.

- 6. Design development to consolidate the amenity spaces and ensure that indoor amenity spaces are co-located with sufficiently sized and well-proportioned outdoor amenity spaces.

Note to Applicant: Reduce the number of amenity spaces to improve their scale, configuration, and usability. Consider shared amenity spaces for the entire development.

Applicant Response

Amenity space consolidation, see Architectural Drwgs for Level 02, Level 03, Level 05, and Level 07.

Amenity spaces have been consolidated into the following:

- A 2,600 SF amenity space on Level 05 for the rental component with a 1,020 SF outside space directly adjacent.
- A 838 SF amenity space on Level 07 with a total of 3,000 SF of outdoor amenity for strata occupants.
- A contiguous strata lobby with amenity spaces on Level 02 is located adjacent to a courtyard open space.
- A 1,400 SF strata amenity space on Level 03 opening onto open space.

- 7. Design development to maintain the high quality materials, and to maintain the level of detailing implied and necessary to accomplish and construct the proposed design aesthetic. (This includes Haddington stone, granite accents, the bronze

entry doors, metal railings, and sculpted stone panel detailing.)

Applicant Response

1468 Alberni building provides an excellent opportunity for the West End to reconnect to the long tradition of masonry residential buildings in Vancouver. Limestone is preferred material because of its warmth and visual richness, and its ability to reflect light differently during the course of a day. Inspired by historic Vancouver's masonry architecture such as the Marina Building, the Hotel of Vancouver, an array of stone details and decorative metal work were added to give a strong residential character. Adding to this material richness, three metal finishes are utilized to accent the entrances and various bay window and balcony types.

Both the rental and condo lobbies have bronze screen doors and canopies to create distinct entrances that will invigorate the street. The central entrance courtyard with archways to the condo lobby will give residents and visitors alike the feeling of entering a grand house. The maisonnette units with detailed stone porches and the garden fence will offer a residential scale street facade.

Three potential limestone for the ownership were selected:

1. Indiana limestone sandblasted (full color blend)
2. Indiana Limestone sandblasted (silver shadow)
3. Dietfurt Limestone sandblasted

The specification of exact stone cladding and accents are to be confirmed.

8. Design development to ensure service equipment including window washing infrastructure, and cell tower and antennae elements do not protrude into the public view cone(s).

Applicant Response

All service equipment for maintenance and window washing is situated within the roof structure below the view cone. No cell tower or antennae elements are proposed.

9. Design development to the entries of street-level units facing onto Alberni Street to better address the public realm.

Note to Applicant: Entrances should be enhanced through the use of elements such as low walls, steps, special paving, special planting features, architecturally integrated canopies projecting from the building and special lighting. Entry steps should be simplified as shorter straight runs perpendicular to the street. Reduce the differential between the height of entry level and adjacent sidewalk elevation as much as possible. No unit entry should be greater than 0.6 m (2 ft.) below the grade of the adjacent sidewalk.

Applicant Response

Our design concept was to both build-upon the existing residential character of the West End neighborhood and provide a greener public realm.

The low-rise facades are emphasized by utilizing setbacks above the fourth floor. This move, along with the ground floor apartments individual garden entrances, provide a distinct town-house presence on the street. The "maisonette character" of the podium in combination with the set back from the property line, provides the opportunity for private gardens and additional street planting amenity for the public.

These private gardens are framed by low metal fences allowing the public to enjoy views of these gardens. Gates, placed rhythmically along the sloping streets, in combination with two rows of street trees, form a picturesque public pedestrian walk.

The ground floor apartment entrances are just below the grade of the adjacent sidewalk, enhancing continuity with the street. Together, the stone paved garden paths, the detailed stone porches and decorative metal work, marry the landscape and architecture, promotes an appropriate scaled residential character. In the end, these combinations provide an experience and perception of a truly residential scale appropriate for the public realm of the West End neighborhood.

10. Design development to provide direct circulation to edible landscaping without conflicting with other uses such as the child day care facility.

Applicant Response

A direct outside route is provided from the amenity space to the edible landscape location. See Architectural drawing DP213.

11. Submission of a bird friendly strategy for the design of the building and landscape is encouraged with the development permit application.

Note to Applicant: The strategy should identify any particular risks with regard to the Bird Friendly Design Guidelines and propose design features or to reduce these risks. For more information, see the guidelines at

<http://former.vancouver.ca/commsvcs/guidelines/B021.pdf>

Applicant Response

The metal pickets of the daycare enclosure fence should address landscape considerations for bird-friendly approach. I would think the overall facade composition with limited glass should address much of the larger set of concerns.

The solid nature of the exterior architecture of the proposal, with punched windows and masonry accents, eliminates the primary risk of bird strike by reflection.

All ventilation grilles will have openings smaller than 1"x1" to eliminate entrapment risk.

Landscape

12. Design development to increase the long-term suitability of the proposed at-grade landscape by lowering and/or sloping the underground parking structure as follows:
- (i) Provide a minimum 0.9 m (3 ft.) depth of growing medium for all landscape along the ground level. This growing medium should be uninterrupted from underground utilities, walls, structures, drainage layer, etc. Raised Planters cannot be accepted within the central courtyard.
 - (ii) The portions of the underground parking garage that are underneath landscaped areas should be designed and constructed to have a high level of structural integrity to accommodate trees for their entire lifespan without cracking or needing replacing.

Applicant Response

A planting depth of 3 ft (0.9m) is available to all planting areas at grade. See Landscape Ground Level Plan L2.00.

13. Design development to provide a central courtyard that is more representative of the West End's character by providing:
- (i) a minimum of five 'Part 1' additional trees from Schedule D of the Protection of Trees By-law; and
 - (ii) a diverse mix of medium to large statured evergreen and deciduous shrubs.

Note to Applicant: The West End is known for having green, leafy and inviting streetscapes which are composed of large, statured trees planted amongst a range of shrubs in an informal fashion. A proposal that has low plantings arranged in a formal manner, segregated from the public realm with walls and fences, cannot be supported. Features such as the walls and wrought iron fences should be designed to be less formal or be deleted.

Applicant Response

Consolidated planting areas with maximized soil volumes to accommodate trees (likely 4) and mixed evergreen and deciduous shrubs are provided in the entry courtyard. See Landscape Ground Level Plan L2.00.

14. Design development to improve the expression of the townhomes along Alberni Street by, as much as possible, limiting the stairs needed to enter each unit.

Note to Applicant: Explore using grade alterations within the interior of the building to limit the amount of stairs needed outside the building.

Applicant Response

A landscape strategy has been applied to provide both hard and soft landscape spaces with architecturally integrated walls, fences, stairs and lighting. See Landscape Ground Level Plan L2.00.

15. Design development to provide substantial planting along the perimeter of the 7th floor mezzanine.

Note to Applicant: Provide evergreen arching shrubs or trees along the north and south perimeters of the 7th floor mezzanine. To ensure long-term vitality of the landscape screen, the size of the planters will need to be expanded in order to meet or exceed BCSLA standards.

Applicant Response

Perimeter planting has been provided to reflect architecture and refinements in configuration. See drawing L2.03.

16. Design development to provide substantial planted landscaping along the Broughton Street streetscape in order to soften the massing of the building.

Note to Applicant: Consider small, statured trees between windows which will allow natural light into units yet prevent direct views from the sidewalk into the units.

Applicant Response

Broughton street landscape has been enhanced at the pedestrian level. See Landscape Ground Level Plan L2.00.

17. Design development to increase the planted landscaping along the lane with small statured trees, shrubs and planted laneway bulges.

Note to Applicant: Explore having a landscape feature between the 'Class B' Loading Bay and the opening for the underground parking garage.

Applicant Response

Shrubs will be applied to any available laneway bulges, and between driveway as noted. See Landscape Ground Level Plan L2.00.

18. Design development to coordinate with staff from the Vancouver Parks and Recreation regarding what should be shown on the proposed plans within the minimum 6.1 m (20 ft.) dirt site to be transferred to the City, adjacent to Nicola Street.

Note to Applicant: Staff requires that this site left blank on the plans as it is part of the future park proposed within the Nicola Street right of way.



Musson
Cattell
Mackey
Partnership

Architects
Designers
Planners

A Partnership
Of Corporations

Applicant Response

All indication of landscape treatment has been removed from Nicola R.O.W. and setback zone and shown as blank, other than as indicated in the Arborist report and Tree Retention and Removal Plan (Diamond Head Arborist Drawing No. 001).

- 19. Design development to delete water features.

Note to Applicant: Water features should be replaced with landscaping.

Applicant Response

Water features have been removed.

- 20. Design development to provide cross-section details of all landscape planters.

Note to Applicant: Planted areas at grade should show the specified growing medium of the planters as required in previous conditions. All other planted areas should meet or exceed BCSLA standards.

Applicant Response

Planter details have be provided, with soil volumes of primary planters (and planting areas in entry courtyard) noted. See drawing L???.

Engineering

- 21. The owner or representative is advised to contact Engineering Services to acquire the project’s permissible street use. Prepare a mitigation plan to minimize street use during excavation and construction (i.e. consideration to the building design or sourcing adjacent private property to construct from) and be aware that there is 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.

Applicant Response

Noted. Applicant will work with City’s Engineering department and endeavor to minimize street use during construction where possible. The Applicant notes there may be instances where this is not possible in which case, the team will engage closely with Engineering to mitigate disruptions to the public.

- 22. 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.

Applicant Response

The gas connection is situated within the building at Level 02 grid reference 10/GA.

23. 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.

Applicant Response

This condition is noted and a response will be initiated at the Building Permit Pre-Application stage.

24. Delete what appear to be curb returns in the lane. There is existing roll-over curb that runs the length of the lane which is to be maintained.

Applicant Response

Please refer to response to Urban Design Condition No. 5 above.

25. Please place the following statement on the landscape plan: This plan is "NOT FOR CONSTRUCTION" and is to be submitted for review to Engineering Services a minimum of 8 weeks prior to the start of any construction proposed for public property. No work on public property may begin until such plans receive "For Construction" approval and related permits are issued. Please contact Engineering, Development Services and/or your Engineering, Building Site Inspector for details."

Applicant Response

Note indicated. See drawing L2.00.

26. Please update the landscape and/or site plan to reflect the public realm changes including all of the off-site improvements sought for this rezoning, where a design or detail is not available please make note of the improvement on the site and/or landscape plans. Please submit a copy of the updated plan to Engineering Services for review.

Applicant Response

Updated site plan will be submitted to engineering.

27. Delete the portions of balconies and projecting window surround which encroach into the lane (pages A102-105).

Applicant Response

These encroachments have been deleted.

28. Deletion of balcony encroachments into the 20-foot setback.

Applicant Response

The character of the architecture is enhanced by the sculptural qualities of the west façade. To optimize this, minor encroachments remain.

29. Deletion of the existing planters on Nicola Street that are being considered for retention within the 20-foot setback area.

Applicant Response

These planters have been deleted.

30. Deletion of the bike racks proposed to be located within the setbacks on Alberni Street and Nicola Street.

Applicant Response

These bike racks have been deleted and relocated to the entry court.

31. Deletion of landscape proposed within the 20-foot setback area on Nicola Street.

Applicant Response

This proposed landscape has been deleted.

32. Deletion of the sidewalks and specialty treatments in the lane. Provision of standard treatment in the lane.

Applicant Response

Please refer to response to Urban Design Condition No. 5 above.

33. Clarify garbage pick-up operations. Confirmation that a waste hauler can access and pick up from the locations shown is required. Pick-up operations should not require the use of public property for storage, pick up or return of bins to the storage location. Applicant is showing garbage/recycling rooms on L1 and L2.

Applicant Response

Garbage and Recycling Rooms are located on Level 02 adjacent to the parkade entry complete with pick up staging area.

34. Provide automatic door openers at all doors leading to and providing access to the bicycle room(s).

Applicant Response

Notation for automatic door openers to the rooms specified has been added to the plans. See Architectural drawings DP206, DP207, and DP208.

35. Compliance with the Parking and Loading Design Supplement to the satisfaction of the General Manager of Engineering Services, as follows:

Tech Table

- (i) Note to Applicant: Calculations for required daycare spaces should reference the City's Childcare Design Guidelines, Section 4.1.6.

Applicant Response

Calculations have been revised to conform with the Guidelines. See Architectural drawing DP log.

Drawings

- (ii) Provision of a section drawing showing parking level elevations, vertical clearances, security gates including mechanical projections for the main ramp, and through the loading bays.

Note to Applicant: This is to confirm vertical clearances for same. Minimum 2.3 m clearance is required to access Class A loading and disability spaces; minimum 3.8 m clearance is required to access Class B loading spaces.

Applicant Response

Sections have been included as requested. See Architectural drawings DP405 and DP407.

- (iii) Provision of design elevations on both sides of the parking ramp at all breakpoints, both sides of the loading bays, and at all entrances. Include width of the main ramp and distance between all breakpoints.

Note to Applicant: This is to calculate and confirm slopes and crossfalls throughout the parking areas.

Applicant Response

Design elevations have been added as requested. See Architectural drawings DP201 to DP208.

Parking Ramps

- (iv) Clarify use of small ramp west adjacent to parkade access ramp. Include dimensions and ramp slopes.

Note to Applicant: Where there is a curved ramp, provide grades two feet from the wall on the inside radius. The slope and length of the ramp sections must be shown on the submitted drawings.

Applicant Response

This ramp has been removed.

- (v) Provide corner cuts at right-angle turns for improved two-way vehicle visibility and maneuvering.



Note to Applicant: Corner cuts in the southeast corner of P1 through P3 would be acceptable.

Applicant Response

Corner cuts have been added including mirrors to assist with visibility. See Architectural drawings DP202 to DP208.

Parking Spaces

- (vi) All types of parking and loading spaces to be numbered, dimensioned and labelled on the drawings as daycare or residential spaces.

Applicant Response

All parking spaces have been numbered, dimensioned, and labelled as requested. See Architectural drawings DP201 to DP208.

- (vii) Provide a 6.6 m (21.7 ft.) maneuvering aisle width or provide 2.74 m (9 ft.) stall widths.

Applicant Response

The parkade has been redesigned to comply. See Architectural drawings DP201 to DP208.

- (viii) Dimension all columns encroaching into parking stalls.

Applicant Response

All column encroachments have been dimensioned. See Architectural drawings DP201 to DP208.

- (ix) Improved wheelchair access from disability parking spaces to the elevators is required.

Note to Applicant: Note space 81 on P2 through P4, and space 83 on P5.

Applicant Response

All disability spaces have been relocated close to the appropriate vertical circulation with flat access. See Architectural drawings DP201 to DP208.

Loading Bays

- (x) Provision of 0.30 m (1 ft.) additional width for the Class A loading spaces adjacent to wall.

Applicant Response

The additional width has been provided. See Architectural drawings DP207.



- (xi) Provide convenient, internal, stair-free access to/from all site uses and towers.

Applicant Response

Access and circulation from loading to tower uses has been improved through redesign. See Architectural drawings DP207 and DP 208.

Bicycle Room, Bike Racks, and Bikeways

- (xii) Provision of an updated 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 or elevator, if required.

Applicant Response

A stairs free access route is delineated on the plans. A bicycle elevator is proposed. See Architectural drawings DP206, DP207, and DP208.

- (xiii) Include Class B bicycle parking on architectural drawings, in addition to those shown on landscape plans

Applicant Response

Class B bicycle spaces have been added to the Architectural drawings. See Architectural drawings DP208 and DP209.

Sustainability

- 36. All new buildings in the development will meet the requirements of the Green Buildings Policy for Rezoning (amended February 7, 2017), including all requirements for Near Zero Emissions Buildings (i.e. Passive House certified or alternate near zero emissions standard approved by the Director of Sustainability), or Low Emissions Green Buildings. The requirements for Low Emissions Green Buildings are summarized at <http://guidelines.vancouver.ca/G015.pdf>.

Note to Applicant: The applicant will be required to demonstrate that the development is on track to achieve the above requirements at each stage of permit. For phased developments, it is expected that the individual development permits will meet the requirements of the Green Buildings Policy for Rezoning in effect at the time of development permit application. For more detail on the above requirements and what must be submitted at each stage, refer to the most recent bulletin Green Buildings Policy for Rezoning – Process and Requirements (amended April 28, 2017 or later).

Applicant Response

According to Green Buildings Policy for Rezoning (amended February 7, 2017) including all requirements for Near Zero Emissions Buildings (i.e. Passive House certified or alternate near zero emissions standard approved by the Director of Sustainability), or Low Emissions Green Buildings, project is on track to meet Passive House certification requirements at all stages, as per the attached A2M letter dated November 12, 2018.



Musson
Cattell
Mackey
Partnership

Architects
Designers
Planners

A Partnership
Of Corporations

- 37. The applicant commits the proposed development to exceed the sustainable design and emissions improvements required by the Green Buildings Policy for Rezoning and the Rezoning Policy for Sustainable Large Developments, and to demonstrate leadership in sustainable design as required by the General Policy for Higher Buildings, through the following:
 - (i) Passive House Design: the development shall be designed to certify under the Passive House standard, including a thermal energy demand of no more than 15 kWh/sq. m annually.

Applicant Response

According to Green Buildings Policy for Rezoning (amended February 7, 2017) including all requirements for Near Zero Emissions Buildings (i.e. Passive House certified or alternate near zero emissions standard approved by the Director of Sustainability), or Low Emissions Green Buildings, project is on track to meet Passive House certification requirements at all stages, as per the attached A2M letter dated November 12, 2018.

Crime Prevention Through Environmental Design (CPTED)

- 38. Design development to respond to CPTED principles, having particular regards for:
 - (i) theft in the underground parking;
 - (ii) residential break and enter;
 - (iii) mail theft; and
 - (iv) mischief in alcove and vandalism, such as graffiti.

Note to Applicant: Building features proposed in response to this condition should be noted on the plans and elevations. Consider use of a legend or key to features on the drawings. Consultation with the social housing operators and Park Board staff with experience of the more specific CPTED risks in this area is recommended, and should be included the response to this condition.

Applicant Response

1488 Alberni is designed with CPTED strategies to deter criminal behavior by influencing offender decisions that precede criminal acts.

NATURAL SURVEILLANCE

1. Streets, courtyards, and the spaces between buildings are designed to increase pedestrian and bicycle traffic.
2. Windows are placed overlooking sidewalks, courtyards, park, and semi-public walkways.
3. Curved paths, between buildings create multiple view points to multiple townhome entrances.
4. All points of entry into the site have natural surveillance through multiple residential lobbies and ground oriented units.
5. The central courtyard has surveillance on the ground floor by three building lobbies, and from above through windows.
6. All weather vestibules will be transparent.

7. The pedestrian passageway through building D4 will be surveilled by the highly transparent lobby of building D4.
8. The public realm lighting will be placed along pathways, private, and semi-private areas.
9. Lighting will be placed at proper heights for lighting the faces of people.

NATURAL ACCESS CONTROL

1. Each building component has a clearly identifiable point of entry, well lit, and transparent
2. Private townhome patios will be separated by planters with low planting and a waist level gate to control access and encourage surveillance.
3. The parking garage will have a zone at the bottom of the ramp for visitor and daycare parking.
4. Exiting from the visitor/daycare parking will directly exit to the exterior of the buildings.
5. Private parking will be access controlled.

NATURAL TERRITORIAL REINFORCEMENT

1. Maintained landscape and premises will communicate an alert and active presence
2. Trees will be provided in and around the development
3. Security signage will be displayed
4. Seating will be placed in common outdoor areas to encourage people to gather.

Activity in and around the development increases the safety of the built environment. All sidewalks, entrances, and interior courtyard spaces will be highly articulated with lighting, seating, and generous landscaping. We are building an environment which beautifies the existing context, as well as encourages people to utilize the outdoor areas.

Housing/Tenant Relocation

39. Provide a completed Tenant Relocation Application Form which includes a list outlining the name of each tenant, the number of the tenant's unit, the size of unit, the type of unit, and their rent, as per Section 6.1(a) of the Tenant Relocation and Protection Guidelines.

Note to Applicant: An updated list of tenants must be submitted at the time of development permit application.

Applicant Response

Noted. Applicant has been actively engaged with City's Housing department to provide information when requested. Applicant will continue to engage with Housing to fulfill this condition.



Musson
Cattell
Mackey
Partnership

Architects
Designers
Planners

A Partnership
Of Corporations

40. Provide a letter stating the property address and legal description of the site, and providing the names and mailing addresses of all tenants.

Applicant Response

Noted. Applicant has been actively engaged with City’s Housing department to provide information when requested. Applicant will continue to engage with Housing to fulfill this condition however due to the sensitivity of the information, this would subject to further discussion with the tenants.

41. Provide a notarized declaration, prior to issuance of a development permit which demonstrates that each tenant has been given written notice of the intent to redevelop the property; that indicates the number of units occupied on the date of the notice; includes information on posting of notice regarding the intent to redevelop as per Section 6.1(c); and includes copies of a letter addressed to each tenant summarizing the Tenant Relocation Plan offer and signed as received by each tenant.

Applicant Response

Noted. Applicant will provide the information as noted in the above condition.

42. Provide a final Tenant Relocation Report to be submitted prior to issuance of the occupancy permit which outlines the names of tenants; indicates the outcome of their search for alternate accommodation; summarizes the total monetary value given to each tenant (moving costs, rent, any other compensation); and includes a summary of all communication provided to the tenants.

Applicant Response

Noted. Applicant will provide the information as noted in the above condition.

43. Provide residential amenity spaces as follows:

(i) Indoor Amenity – Design development to include a common indoor amenity room for residents with kitchenette, storage closet and accessible washroom equipped with baby change table adjacent to an outdoor amenity area.

Applicant Response

Amenity spaces with the noted facilities for both rental and strata components are delineated on the plans. See Architectural drawings DP211 and DP213.

(ii) Outdoor Amenity – Design development to include an outdoor common area for residents including an area suitable for a range of opportunities for creative and motor-skills developing play for children with a range of ages (play equipment is neither necessary nor encouraged, but landscape features which encourage creative play and motor skills development such as boulders, logs, pathways, water-play elements, sand-play, etc. are encouraged).

Note to Applicant: The amenity spaces for the market rental and strata housing should comply with the High Density Housing for Families with Children Guidelines.



**Musson
Cattell
Mackey
Partnership**

Architects
Designers
Planners

A Partnership
Of Corporations

Applicant Response

See Architectural drawings Level 02, Level 05, and Level 07 and associated Landscape drawings.

Child Day Care Facility

- 44. Design development to ensure that the 56-space childcare centre is licensable by Community Care Facilities Licensing and meets the intent of the City's Childcare Design Guidelines and Childcare Technical Guidelines. Each program within the childcare centre is required to have an adequate amount of contiguous indoor and outdoor space.

Note to Applicant: Based on the City's Childcare Design Guidelines a 56-space childcare centre will require a minimum gross indoor area of 7,320 sq. ft. and an approximate outdoor area of 7,590 sq. ft.

Applicant Response

The 56 Child Daycare layout has been designed according to the requirements of the City's Childcare Design Guidelines and Childcare Technical Guidelines. According to the minimum and average areas requirements defined by the City the project proposes a combined Gross Indoor Area of 727m2/7836 sq. ft. and a Total Outdoor Area of 657m2/7067 sq. ft. (TO CONFIRM.)

See Architectural Drwg for Daycare Level 07 - DP213.

Proposed Individual Group Daycare Indoor area exceeds Minimum gross area required . Total area of 7823 sq . ft proposed. See ID01.

CCFL regulations of minimum usable area of 3.7 sqm per child have been met.

All net area recommendations per Childcare Design Guidelines have been met or exceeded. See ID 02/03.

Fixture counts & locations meet CCFL requirements.

Support spaces, art area, kitchens, Diapering & Nap areas meet CCFL , CDG, & Childcare Tech guidelines.

- 45. Design development to ensure that the indoor and outdoor spaces of the childcare centre are designed to maximize opportunities for healthy child development while ensuring an operationally sustainable facility for the non-profit operator.

Applicant Response

The 56 Child Daycare layout for each of the programs provides contiguous indoor and outdoor space, from the designated Indoor Activity Areas to views to the outdoors, primarily to the South and the Central Playground area situated between the towers on Level 07.



Musson
Cattell
Mackey
Partnership

Architects
Designers
Planners

A Partnership
Of Corporations

There playground perimeter is trimmed with a green roof and various planted shrubs at the building perimeter.

Indoor wet / art/ messy activity zone and cubby areas located adjacent to outdoor areas per Childcare Design Guidelines. (CDG). Most support spaces provided open to activity areas to support operational sustainability. Circulation spaces minimized.

- 46. Design development of the outdoor childcare space to maximize solar access and to ensure that the full outdoor area is supervisable and licensable. Storage must be accommodated on site for program equipment and strollers (for both parents' use and for the program's use).

Note to Applicant: All work pertaining to the design, construction, fit, furnish, equip and supply for the childcare center shall be to the satisfaction of the City's Managing Director of Social Policy and Projects, the City's Director of Facilities Planning and Development, and to the Regional Manager of Community Care Facilities Licensing.

Applicant Response

The 56 Child Daycare has been designed to maximize solar access throughout the year and special attention has been given to the ease of supervision of the playground area. Stroller Storage has been designated at the street level entrance from the Lane on L03.

See Architectural Dwg for Daycare Level 07 - DP209.

Interior response:

Stroller storage provided at entry level . Indoor storage areas meet Childcare Design Guidelines. Indoor Natural daylight penetration maximized by provision of perimeter and interior glazing.

All equipment, Finishes and Fixturing provided to meet and exceed requirements set forth in Childcare Technical Guidelines & Child Care Licensing Regulations.

- 47. Design development to minimize the number of balconies overhanging the outdoor play space and to ensure mitigation of fallen or thrown objects from any remaining overhanging balconies.

Applicant Response

Location of a daycare within a high-rise neighborhood, whether adjacent to or integrated with, high-rise residential will result in risks associated with outdoor play space and overhead elements. In this design, mitigation factors include:

- Proposed balcony area of less than 50% of the maximum allowed.
- Most balconies at the corners of the floorplate, away from daycare below.
- Protective canopies for both towers directly outside daycare interior access points.



48. Clarify the intended use of daycare garbage spaces on L01 and L03.

Note to Applicant: Note that daycare garbage room should be large enough to accommodate garbage and recycling for the childcare, and should be located in an area easily accessible by daycare staff (close to the daycare elevator).

Applicant Response

The daycare dedicated garbage space is as per City of Vancouver daycare requirements. It has been relocated close to the daycare elevator and is adjacent to the facility garbage and recycling system.

49. Provide seven pick-up/drop-off parking spaces, and two staff parking spaces, dedicated and signed to the childcare.

Applicant Response

The daycare parking and drop off is delineated on the plans. See Architectural drawings DP207 and DP209.

50. Clarify that the childcare is situated no higher than 24.4 m (80 ft.) via evacuation routes.

Applicant Response

A sectional dimension shows that the daycare is less than 80 feet from grade. See Architectural drawings DP401, DP402, and DP403.

51. Provide plans outlining how access to and use of the residential outdoor amenity spaces will be entirely separate from access to the daycare and that there would be minimal impact on the safety, security and daily operations of the daycare.

Note to Applicant: Staff are concerned that the close proximity of the outdoor amenity space will impact either the privacy of the childcare activities, and/or the access to natural light should a privacy barrier be erected. If there is access to the daycare level by residents, additional security measures will be required.

Note to Applicant: A provincially licensed childcare facility must be secured at all times, with access granted only to staff, children enrolled in the childcare, and their caregivers at pick-up/drop-off.

Applicant Response

See Architectural drawing for Daycare Level 07 DP213. See Landscape drawing L2.03.

Public Park

52. Delete any features on the plans shown within the future park, including within the dedicated land along the western edge of the subject site offered by the applicant.



**Musson
Cattell
Mackey
Partnership**

Architects
Designers
Planners

A Partnership
Of Corporations

Note to Applicant: The design, construction and programming of the future park, including on the dedicated land, are to be determined through a separate, Park Board led process. The Park Board led process will confirm the amenities to be included in the park including on the dedicated land. Elements such as bike racks, landscaping, trees, planters or structures related to private development, as well as potential public art, as shown in the rezoning application, are not supported in the 6.1 m (20 ft.) dedicated land.

Further, site grading of the park, including the dedicated area, will be determined by the Park Board during the design of the park in order to best accommodate the park design and proposed park programming. The proposed westerly building elevation cannot limit any future possibility for park grades. A consistent, even grade from lane to the street must remain possible. Final grading, which may include a series of terraces, would be further explored and determined through the future park design process.

Applicant Response

All elements and features within the park have been deleted.

- 53. Delete any sidewalk or pathway locations through the future park.

Note to Applicant: Sidewalk and pathway locations through the future park will be determined by the General Manager of Parks and Recreation and the General Manager of Engineering Services, and cannot be as shown in the development permit application without consultation with staff.

Applicant Response

All sidewalks and paths within the park have been deleted.

- 54. Design development to ensure that, other than subsurface drainage associated with the building, no subsurface building structure or infrastructure shall be located within the park or the dedicated area.

Applicant Response

Noted. No subsurface building or structure or infrastructure will be located within the park or the dedicated area.

- 55. Design development to ensure no building encumbrances or encroachment to the air space above the park including the dedicated area, e.g. no overhanging structures/balconies/window bays within the dedicated area.

Note to Applicant: Any building encroachment into the 6.1 m (20 ft.) park dedication area is not permitted. The intent of this space is for park use. If additional space is required to accommodate the building façade, including balconies, water tables, or cornice projections, all these features must be accommodated within the rezoning site, not within the 6.1 m (20 ft.) park dedication that is to be transferred to the City.



Musson
Cattell
Mackey
Partnership

Architects
Designers
Planners

A Partnership
Of Corporations

Applicant Response

All encroachments in the park have been removed.

56. Design development to ensure no direct building access into the dedicated area.

Note to Applicant: A collector pathway would be required within private property.

Applicant Response

No direct access is shown into the dedicated area.

57. Ensure Park Board arborist approval is obtained for the tree protection plan for all trees within the park and street trees. Plans to be submitted for Park Board approval.

Applicant Response

Tree Protection Plan will be supplied to Parks for approval. Please note we should assume protection for existing Nicola street trees, but this is in conflict with leaving west context blank.

CONDITIONS OF BY-LAW ENACTMENT

c) That, prior to enactment of the CD-1 By-law, the registered owner shall on terms and conditions satisfactory to the Director of Legal Services and to the General Manager of Planning and Development, the Managing Director of Social Development, the General Manager of Engineering Services, the Managing Director of Cultural Services, the Director of Facility Design and Management and Approving Officer, as necessary, and at the sole cost and expense of the owner/developer, make arrangements for the following:

Engineering

1. Subdivision of Lot I (Explanatory Plan 10081) and Lot 16, Block 43, District Lot 185, Plan 92 to create a single parcel for the development site and a new 20 foot wide park parcel adjacent to Nicola Street. The new park parcel is to be transferred ("dedicated") to the City for park purposes.

Note to Applicant: This 20-foot wide park site is to be transferred to City in Fee Simple Ownership and shall:

Applicant Response

Noted. Applicant will subdivide the Lot as noted in the above condition.

(i) be a dirt site (no parking structure or other infrastructure underneath);

Applicant Response

Noted. Applicant will provide Lot as per above condition.

(ii) be transferred to City ownership, free and clear of any financial charges, liens and other encumbrances; and



Applicant Response

Noted. Applicant will provide Lot as per above condition.

- (iii) meet all environmental conditions/remediation requirements for park use (verified by appropriate written documentation/certification).

Applicant Response

Noted. Applicant will provide Lot as per above condition.

- 2. Release of Easement & Indemnity Agreements 469603M (support), E36923 & 440228M (commercial crossings) prior to building occupancy.

Note to applicant: Arrangements are to be secured prior to zoning enactment, 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.

Applicant Response

Noted. Applicant has reviewed, and approved this agreement with City Legal.

- 3. Provision of statutory right of way (SRW) for public pedestrian use of an expanded sidewalk over the area of the site adjacent to the north property line to give an overall distance of 4.5 m (14.8 ft.) from the existing back of curb. The SRW is to be free of any encumbrance such as structure, stairs, door-swings and benches at-grade, but the SRW agreement will accommodate underground parking Levels P1 to P6 and portions of building levels 1 and 2 within the SRW area.

Applicant Response

Noted. Applicant is working with City Legal to arrive at an Agreement and acknowledges the SRW requirements set out in the above condition.

- 4. Provision of a shared use agreement to the satisfaction of the General Manager of Engineering Services for the loading spaces between the daycare and residential uses.

Note to Applicant: The shared use agreement should specify allocated time periods for shared use by residential vs. daycare units. Label the space as "Residential and Daycare Loading".

Applicant Response

Note. Applicant has submitted a draft agreement to City Legal with allocated time periods for shared use by residential and daycare uses. This agreement is currently being reviewed by City's Engineering department.

- 5. Provision of additional transportation demand management strategies in Green Mobility Plan, including:
 - (i) Provision of additional residential Class A bicycle spaces, for a minimum total of 1.8 spaces per unit;



Musson
Cattell
Mackey
Partnership

Architects
Designers
Planners

A Partnership
Of Corporations

Applicant Response

Noted. Applicant has provided for this ratio already in the current drawings.

- (ii) Provision of Class A and Class B bicycle spaces for the daycare; and

Applicant Response

Noted.

- (iii) Provision of 100% EV-ready vehicle parking spaces.

Note to Applicant: Additional information regarding the proposed private shared bicycle fleet must be provided to determine its suitability in meeting the requirements of the Green Mobility Plan. Contact John Turecki in Engineering Services for further information.

Applicant Response

Noted. Applicant will provide access to an energized EV outlet for 100% of residential parking spaces.

- 6. Provision of a letter of commitment to post occupancy monitoring of the Transportation Demand Management (TDM) measures proposed. Including provision of a limited TDM plan update to be delivered approximately 1 year after occupancy outlining the following:
 - (i) Travel mode survey for the all employees;
 - (ii) Current and future TDM measures being implemented and the uptake; and
 - (iii) Each update to capture summer and winter data for the mode split and TDM uptake.

Note to Applicant: A \$10,000 Letter of Credit will be required to secure the studies. Completed studies are to be submitted to the Parking Management Branch of the City.

Applicant Response

The requested study will be provided one year after occupancy. A Letter of Credit of \$10,000 will also be provided to the City to secure the study.

- 7. Provision of a Services Agreement to detail the on-site 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.



Applicant Response

The Applicant notes the Services Agreement has been submitted to Engineering by our Lawyer and is currently with the City to review. We will continue to work with the City as we move forward.

- (i) 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, sprinkler demand, hydrant load, and domestic water demands to determine if water main 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.

Applicant Response

The Applicant will engage a Civil engineer to work with City’s Engineering department to meet this condition.

- (ii) Upgrade the existing 150 mm sanitary sewer along Alberni Street, from the development to Nicola Street (approximately 54 m). The estimated size of the upgraded sanitary sewer is 250 mm.

Applicant Response

The Applicant agrees to upgrade the sanitary sewer connecting directly to the Project site however the upgrade of existing sanitary sewer along Alberni Street over the extent of 54m should be a City endeavour. The recent increase of developments taking place along Alberni would warrant an upgrade of the sanitary system which the City could presumable allocate some funds for.

- (iii) RAINWATER MANAGEMENT PLAN – Provision of a comprehensive site-wide Rainwater Management Plan (RMP) prepared by a subject matter expert (Engineer), that demonstrates how the project will meet the requirements for peak flow control, volume retention, and treatment, and which will address the following:

Applicant Response

See attached Williams Engineering’s Rainwater Management Strategy.

- a. Peak Flow Rate Control:
 - 1. The peak flow rate from the 2-year post- development storm event shall be maintained at the pre-development level.

Applicant Response

The project is designed to limit interference with natural hydrology by maximizing pervious cover, increasing on-site infiltration opportunities, limiting runoff generation, and reducing pollution. The project is designed with various landscape areas on ground level, accessible roof garden on podium, and possible garden to increase pervious cover for the building.

A storm water detention system is designed to achieve equivalent runoff rate and volume between post-development and pre-development for the two-year 24-hour duration storm. The system contains a flow control orifice and regulates the storm water discharge rate to the city system. The calculation of the peak flow rate is in progress and will be confirmed by a Professional Engineer.

2. The pre-development estimate shall utilize the 2014 IDF curve, whereas the post-development estimate shall utilize the 2100 IDF curve to account for climate change.

Applicant Response

For the pre-development estimate, the 2014 IDF curve will be utilized. For the post-development estimate, the 2100 IDF curve will be utilized to account for climate change.

Based on the preliminary assessment, the storm detention system contains a tank sized between 80 cubic meters to 120 cubic meters depending on the final landscape design. A storm detention tank is allowed in the parkade to store the rainwater before it discharge to the City connection.

b. Treatment and Volume Retention:

1. Runoff from the first 24 mm of rainfall from all areas, including rooftops, paved areas, and landscape must be retained and treated on site (landscapes over native subsoils with appropriately sized topsoil meets the 24 mm retention requirement);

Applicant Response

Runoff from the first 24 mm of rainfall from all areas indicated above will be retained and treated on site.

2. Surfaces designed for motor vehicle use and other high pollutant generating surfaces require an additional 24 mm of treatment beyond the first 24 mm retained (for a total of 48 mm treated).

Applicant Response

The surfaces design for motor vehicle use and other high pollutant generating surface will include drainage connected to the parkade drainage treatment system (PDTS) to filter out the vehicle oil and other pollutant. The PDTS is located at the bottom of the parkade, and the outlet will tie to the building sanitary sump, which is then pumped to the City sanitary connection.

3. Water quality volume (24 mm for low pollutant generating surfaces like roofs and 48 mm for high pollutant generating surfaces like driveways) that leaves the site must be treated to a standard of 80% TSS removal by mass by using either individual BMPs that meet the standard or treatment trains of BMPs that, when combined, meet the standard. For proprietary treatment devices:



Applicant Response

The rainwater management plan will contain a stormwater treatment system. With the landscape filtration and storm treatment system, 90% of the average runoff volume will be treated, and the system is capable to remove 80% of the total suspended solids (TSS). Preliminary filtration includes a stormceptor incorporated in the detention system.

- (i) Provide product information for all treatment practices.

Applicant Response

Concrete sediment sump, concrete storm detention tank, storm filtration Jellyfish system will be used as the storm treatment practices. The sediment sump will be pre-cast, and the storm detention tank will be cast in place, and the filtration system will be custom designed to suit the project.

- (ii) Products need to be certified by TAPE - The Technology Assessment Protocol – Ecology Program, Washington State Department of Ecology’s process for evaluating and approving emerging rainwater treatment BMPs. The applicant may propose other technologies but must provide supporting information that shows the technology meets the standard.

Applicant Response

Imbrium Jellyfish Filtration System will be used as a stormwater quality treatment technology featuring pretreatment and membrane filtration in a compact stand-alone system. Jellyfish Filter removes floatables, trash, oil, debris, TSS, fine silt-sized particles, and a high percentage of particulate-bound pollutants; including phosphorus and nitrogen, metals and hydrocarbons.

The Jellyfish Filter has been verified through the ISO 14034 Environmental Management – Environmental Technology Verification (ETV) program and certified by the Washington State DOE process.

- 4. The applicant must prioritize methods of retention according to the three tiers below. Justification must be provided for using a lower tier retention option. The tiers are as follows:

Applicant Response

Different measures of storm retention and filtration are being utilized.

- (i) 1st tier priority green infrastructure practices: Provide volume reducing green infrastructure practices. For example, rainwater can be kept on site for rainwater harvesting for re-use, green roofs, and soil infiltration;

Applicant Response

As the majority of the site is on structure, opportunities for ground based treatments, including infiltration will be limited. A possible new park on Nicola Street would reduce storm water runoff rates due to the new green space and associated soil filtration.

- (ii) 2nd tier priority green infrastructure practices: Provide treatment and retention in non-infiltrating landscapes. For example, rainwater can be directed to absorbent landscape on slab, closed bottom planter boxes, and lined bio retention systems;

Applicant Response

Second tier priority green infrastructure will be considered, including the absorbent landscape on slab and closed bottom planter boxes.

- (iii) 3rd tier priority green infrastructure practices: Provide treatment and detention as per the rate control requirement.

Applicant Response

As described above, storm treatment system and storm detention tank will be design as per the rate control requirement.

- c. Submission requirements for development permit stage must include the following elements:
 1. Pre-development site plan showing orthophoto and existing drainage areas and appurtenances.

Applicant Response

A pre-development site plan showing orthophoto and existing drainage areas will be provided.

2. A proposed site plan that delineates drainage areas, including the area measurements for pervious/impervious areas, and identifies appropriately sized green infrastructure practices for each of those areas.

Applicant Response

A proposed site plan that delineates drainage areas will be provided, which includes measurements for previous / impervious areas and the green infrastructure practices.

3. Hydrologic and hydraulic analysis prepared by a qualified professional in the area of rainwater management showing how the site will meet the requirements.

Applicant Response

Hydrologic and hydraulic analysis will be prepare by a qualified professional in the area of rainwater management.

4. If lower tier green infrastructure options are chosen, then justifications must be included in the RMP report.

Applicant Response

This project will have a mix of all three tiers of green infrastructure, which will also in included in the RMP report.

5. Details on how the targets set out above will be achieved through the development phases and once all development phases are complete.

Applicant Response

The calculations, analysis, and design will be updated through the design process. Once all development phases are complete, there will be commissioning process to ensure all targets set out will be achieved.

6. Include supplementary documentation for any proprietary products that clearly demonstrates how they contribute to the targets.

Applicant Response

The specification sheet of the Imbrium Jellyfish filtration system will be provided.

7. The plan and report must demonstrate that access has been provided for maintaining the rainwater management system, such as providing truck access for pumping out sediment traps.

Applicant Response

Truck access and maintenance manholes will be provided to service the sediment sump, storm detention tank, and the Jellyfish filtration system.

8. Maintenance and operation guide for the rainwater management system that will be provided to the eventual owner or party responsible for maintenance.

Note to Applicant: On-site drainage is required to be treated on site; it cannot be treated on public property (i.e. on the future park site).

Note to Applicant: The Development to be serviced to the upgraded 250 mm sanitary sewer along Alberni Street.

Note to Applicant: Legal arrangements may be required to ensure ongoing operations of certain storm water storage, rainwater management and green infrastructure systems.

Applicant Response

The maintenance and operation guide will be part of the Operation & Maintenance Manuals which will be turned over to the future owner or strata.

- (iv) Provision of new or replacement duct banks adjacent the development site that meet current City standards. Duct banks are to consist of electrical and communication ducts sized to meet City needs in a configuration acceptable by the General Manager of Engineering Services and in conformance with applicable electrical codes and regulations. A detailed design will be required prior to the start of any associated street work. Note: as-constructed documentation will be required that includes photographic and measured evidence of the installed number of conduits, their final

locations and depths.

Applicant Response

The duct bank design will meet the current City standards and will comply in coordination with BC Hydro, Telus and Shaw. Detailed design will be provided prior to the start of any associated street work.

- (v) Provision of a new 1.524 m (5 ft.) sod lawn front boulevard and light broom finish saw cut concrete sidewalks between the front boulevard and the property line along the Alberni Street frontage of the site.

Applicant Response

Noted. Applicant will provide new sod lawn and concrete sidewalks as noted in this condition.

- (vi) Provision of a new 1.524 m (5 ft.) sod lawn front boulevard and Triangle West sidewalk treatment between the front boulevard and the property line along the Broughton Street frontage of the site.

Applicant Response

Noted. Applicant will provide new sod lawn and concrete sidewalks as noted in this condition.

- (vii) Provision of upgraded street lighting adjacent to the site to current standards including a review of the existing lighting to determine its adequacy and a lighting design as required.

Applicant Response

Provision of upgraded street lighting adjacent to the site to current standards will be reviewed. A lighting design will be provided if required.

- (viii) Removal of the existing driveway crossings and provision of new curb and gutter and sidewalks on Alberni Street adjacent the site.

Applicant Response

Noted. Applicant will remove the existing driveway crossings and provide for a new curb, gutter and sidewalk on Alberni Street consistent with the Project's Design intent.

- (ix) Deletion of the existing planters on Nicola Street that are being considered for retention within the 20-foot setback area.

Applicant Response

The planters have been deleted.

- (x) Provision of street to park design and re-construction on Nicola Street adjacent to the site or cash payment for street to park improvements within the Triangle West area including design. Improvements will generally include all park improvements within the existing street



Musson
Cattell
Mackey
Partnership

Architects
Designers
Planners

A Partnership
Of Corporations

right-of-way and 20-foot setback area, walking and cycling facilities, provisions for emergency access and improved street and pedestrian LED lighting including a lighting analysis and design, and adjustment to all existing infrastructure to accommodate the proposed improvements.

Applicant Response

The Applicant clarifies the provision of the 20' setback area will be a dirt site as noted in Engineering's Rezoning Conditions 1 (i) and as per negotiations with the City of Vancouver. The Applicant is not involved in the design of the park nor any of the design or construction of the substructure or infrastructure mentioned in this condition.

- (xi) Provision of a new full traffic signal at Alberni and Broughton streets.

Applicant Response

Noted. Applicant will fulfill this condition.

- (xii) Provision of \$400,000 for changes to existing signals due to future Nicola Park.

Applicant Response

It is the Applicant's position the changes to existing signals due to future Nicola Park is the City's responsibility since Nicola Park will be designed and built by the City of Vancouver. Further the Applicant has committed a CAC payment which the City may use to allocate toward this endeavor. The \$400,000 should not be charged to the Applicant.

- 8. Provision of all utility services to be underground from the closest existing suitable service point. 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.

In addition, there will 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.

Note to Applicant: Please ensure that in your consultation 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.

Applicant Response

Noted. Applicant is working with Williams Engineering to ensure compliance with BC Hydro and the above condition.



Musson
Cattell
Mackey
Partnership

Architects
Designers
Planners

A Partnership
Of Corporations

Childcare

- 9. Make arrangements to the satisfaction of the Director of Legal Services, in consultation with the Director of Real Estate, Managing Director of Social Policy and Projects and Director of Facility Planning and Development, for the turn-key delivery of an air space parcel with improvements on one level for the 56-space childcare facility, an adjacent outdoor space of contiguous dedicated childcare outdoor area as part of the development at this site, subject to the following provisions:

Applicant Response

Noted. Applicant is working with City Legal on these arrangements. Legal Agreement to be issued by the City of Vancouver for review.

- (i) The facility is to meet the City’s Childcare specifications, and comprises of a minimum of 8,778 sq. ft. interior space and a minimum of 7,590 sq. ft. of exterior space, located on the 7th floor of the development, fully fit-out and finished, equipped (FF&E), including storage and any additional amenity spaces and along with dedicated parking stalls required under the Parking By-law.

Note to Applicant: For information, FF&E is estimated at \$2,500 per childcare space. At 56 spaces, the total cost would be approximately \$140,000.

Applicant Response

Noted. Applicant and design team will work with the City to comply with the City’s Childcare requirements. Applicant understands the FF&E is an estimated amount only and is not a minimum contribution to be made to the facility. Applicant reserves the right to manage the procurement of FF&E at a cost approved by the Applicant contingent on it meeting the City’s Childcare requirements.

- (ii) All within a fee-simple Airspace Parcel (with shared systems maintained by the market residential airspace parcel strata or commercial airspace parcel strata/owner (as applicable), with fair and equitable sharing of costs related thereto), transferred to City ownership (free and clear of any financial charges, liens and other encumbrances);

Applicant Response

Noted. Applicant is working with City Legal on these arrangements. Legal Agreement to be issued by the City of Vancouver for review.

- (iii) Delivery Date: by Q1 2024 (with the goal to deliver as soon as possible, but under no circumstances later than end of Q4 2024);

Applicant Response

Given the Province’s new requirement to give Tenants an extra 2-months eviction notice (now a total of 4 months) and longer construction periods, it may not be realistic to deliver the Childcare Facility by Q4, 2024.



Musson
Cattell
Mackey
Partnership

Architects
Designers
Planners

A Partnership
Of Corporations

The Construction schedule is currently under development and will continue to evolve as the project progresses. The Applicant will review and advise the City on a reasonable completion date once determined, however the Applicant does not guarantee delivery of the facility by Q4, 2024. The Applicant will work closely with the City on this timeline.

- (iv) The delivery of the facility is to be secured by a Letter of Credit (LC), provided to the City prior to building permit issuance, the amount of which will be settled as part of the rezoning enactment documents; all LC's must be in compliance with and in the form set out in the City's Letter of Credit Policy AF-002-02: <https://policy.vancouver.ca/AF00202.pdf>

Applicant Response

Noted. Applicant will deliver an LC to the City of Vancouver. The amount to be discussed and confirmed by the City.

- (v) The facility is to achieve Passive House Certification, consistent with the rest of the development; and

Applicant Response

Noted. The Applicant has employed a strong team of Passive House Consultants, Architects and Engineers, who are invested in achieving Passive House Certification on this project.

- (vi) To the extent possible, the facility to be built with separate dedicated building systems so that its operating costs are accounted for and managed separately from the balance of the development.

Applicant Response

Noted. Applicant will design and construct with dedicated building systems in mind.

- 10. Prior to enactment, the City to provide a \$2,950,000 cash contribution towards the facility.

Applicant Response

Noted.

- 11. Total CAC Credit for this facility is \$7,050,000 based on a valuation of \$10,000,000 offset by the \$2,950,000 City contribution.

Applicant Response

Noted.

Housing

- 12. Make arrangements to the satisfaction of the General Manager of Arts, Culture and Community Services and the Director of Legal Services to enter into a Housing Agreement securing 129 rental housing residential units, as market rental housing, for the longer of 60 years and the life of the building, subject to the following additional conditions:



(i) a no separate-sales covenant;

Applicant Response

Noted. Applicant is working with City Legal on these arrangements.

Legal Agreement to be issued by the City of Vancouver for review.

(ii) a no stratification covenant;

Applicant Response

Noted. Applicant is working with City Legal on these arrangements.

Legal Agreement to be issued by the City of Vancouver for review.

(iii) that none of such units will be rented for less than one month at a time;

Applicant Response

Noted. Applicant is working with City Legal on these arrangements.

Legal Agreement to be issued by the City of Vancouver for review.

(iv) that a minimum of 13 units (10%) at approx. 7,704 sq. ft. of rentable floor area as secured market rental housing, plus related parking at moderate income rates as set out in the Moderate Income Rental Housing Pilot Program. See Figure 1 in Appendix B of the Policy Report dated July 16, 2018, entitled "CD-1 Rezoning: 1444 Alberni Street and 740 Nicola Street" for the general location of these units.

Applicant Response

Noted. Applicant is working with City Legal on these arrangements.

Legal Agreement to be issued by the City of Vancouver for review.

- a. The average starting monthly rents of the units secured at moderate income rates for the longer of 60 years and life of the building, will be at or below the following rates, applicable at the time of initial occupancy:
 - Five (5) studio units - \$950 per month
 - Five (5) one bedroom units - \$1,200 per month
 - Three (3) two bedroom units - \$1,600 per month

as set out in section 2a of the "Moderate Income Rental Housing Pilot Program: Application Process, Project Requirements And Available Incentives: Admin Bulletin" and rent increases will be capped at the Residential Tenancy Act maximum annual allowable increase, as published by the Province of British Columbia, regardless of a change in occupancy.



Musson
Cattell
Mackey
Partnership

Architects
Designers
Planners

A Partnership
Of Corporations

Note to Applicant: A rent roll indicating the agreed maximum average initial monthly rents for the units secured at moderate income rates will be required prior to Development Permit issuance, and again prior to issuance of an Occupancy Permit, to the satisfaction of the General Manager of Arts, Culture and Community Services (or successor in function) and the Director of Legal Services.

Applicant Response

Noted. Applicant is working with City Legal on these arrangements.

Legal Agreement to be issued by the City of Vancouver for review.

- b. The applicant will verify eligibility of new tenants for the units secured at moderate income rates:
 - 1. For new tenants, annual household income cannot exceed 4 times the annual rent for the unit (i.e. at least 25% of household income is spent on rent).

Applicant Response

Noted. Applicant is working with City Legal on these arrangements.

Legal Agreement to be issued by the City of Vancouver for review.

- 2. There should be at least one occupant per bedroom in the unit.

Applicant Response

Noted. Applicant is working with City Legal on these arrangements.

Legal Agreement to be issued by the City of Vancouver for review.

- c. The applicant will verify the ongoing eligibility of existing tenants in the units secured at moderate income rates every 5 years after initial occupancy:
 - 1. For such tenants, annual household income cannot exceed 5 times the annual rent for the unit (i.e. at least 20% of income is spent on rent).

Applicant Response

Noted. Applicant is working with City Legal on these arrangements.

Legal Agreement to be issued by the City of Vancouver for review.

- 2. There should be at least one occupant per bedroom in the unit.

Applicant Response

Noted. Applicant is working with City Legal on these arrangements.

Legal Agreement to be issued by the City of Vancouver for review.



**Musson
Cattell
Mackey
Partnership**

Architects
Designers
Planners

A Partnership
Of Corporations

- d. On an annual basis, or at the request of the City, the applicant will report to the City of Vancouver on the operation of the Moderate Income Rental Housing Units which will ensure that the City can confirm that the units are being operated as agreed, and will include a rent roll for the moderate income units, and a summary of the results of eligibility testing for all units.

Applicant Response

Noted. Applicant is working with City Legal on these arrangements.

Legal Agreement to be issued by the City of Vancouver for review.

- e. Compliance with the City approved Tenant Relocation Plan, including provision of a final Tenant Relocation Report prior to issuance of the occupancy permit; and

Applicant Response

Noted. Applicant is actively working with our Property Manager and will continue to remain engaged throughout this process. Applicant is also working with City Legal on these arrangements. Legal Agreement to be issued by the City of Vancouver for review.

- f. Such other terms and conditions as the General Manager of Arts, Culture and Community Services and the Director of Legal Services may in their sole discretion require.

Note to Applicant: This condition will be secured by a Housing Agreement to be entered into by the City by by-law enacted pursuant to section 565.2 of the Vancouver Charter.

Applicant Response

Noted. Applicant is working with City Legal on these arrangements.

Legal Agreement to be issued by the City of Vancouver for review.

Sustainability

- 13. The applicant will enter into an agreement with the City, on terms and conditions acceptable to the Director of Sustainability and the Director of Legal Services, that requires the future owner of the building to report energy use data, on an aggregated basis, for the building as a whole and certain common areas and building systems. Such an agreement will further provide for the hiring of a qualified service provider to assist the building owner for a minimum of three years in collecting and submitting energy use data to the City.

Applicant Response

Noted. The City of Vancouver’s Legal Department to confirm whether any registered charges will be required in connection with the foregoing.



Community Benefit Agreement

- 14. Execute an Inner-City Local Employment and Procurement Agreement between the applicant and the City identifying and committing to targets across the life-cycle of the development project up to and potentially including post-occupancy.

Note to Applicant: Based on consultation with industry, community, and suppliers, the Community Benefit Agreement policy framework brings value by allowing for flexibility in terms of options for social hiring and social purchasing - this includes not limiting opportunities strictly to construction phase but including site prep, and possibly building and site services after build out is complete (janitorial, landscaping, gift baskets for new condo owners etc.)

Applicant Response

Noted. Applicant will work with the City on this endeavor however, the Applicant reserves the right to screen and ultimately employ individuals whom are qualified and fit to perform the work required. The City of Vancouver’s Legal Department to confirm whether any registered charges will be required in connection with the foregoing.

Social Policy

- 15. In lieu of providing three food assets on site, as described in the Rezoning Policy for Sustainable Large Developments, the following contributions to neighbourhood food assets are suggested. The owner shall, at its sole cost and on terms and conditions satisfactory to the Director of Legal Services, and the Managing Director of Social Policy and Projects, make arrangements for the following:

- (i) A \$50 gift certificate for each unit for the Vancouver Farmers Market is to be provided for the building residents to assist the new residents in connecting with this important local resource.

Note to Applicant: The City of Vancouver will require a letter of credit to ensure compliance.

Applicant Response

Noted. Applicant endeavours to meet these requirements.

Letter of Commitment and Letter of Credit will be issued prior to the rezoning enactment.

- (ii) A \$25,000 grant to the Gordon Neighbourhood House, a leader in sustainable food systems in the West End, to enhance and expand their food initiatives.

Note to Applicant: The City Vancouver will require a letter of credit to ensure compliance.

Applicant Response

Noted. Applicant endeavours to meet these requirements.

Letter of Commitment and Letter of Credit will be issued prior to the rezoning enactment.



Community Amenity Contribution (CAC) – Cash Payments

16. Pay to the City the cash CAC of \$67,982,700, to be allocated towards the achievement of public benefits in accordance with the West End Public Benefits Strategy.

Applicant Response

Noted.

- 17. Payment Terms are as follows:
 - (i) \$22,950,000 must be paid prior to enactment of the rezoning by- law;
 - (ii) \$20,000,000 must be paid on the earlier of the following dates:
 - a. the issuance of the first Development Permit; and
 - b. the date that is 12 months (measured in calendar days) following the date of rezoning enactment, with interest accruing at prime plus 3% (per Bank of Montreal daily prime rates) from the date that is 12 months following the date of rezoning enactment until the date that such amount is fully paid; and
 - (iii) \$25,032,700 (the “Outstanding Balance”) must be paid on the earlier of the following dates:
 - a. the issuance of the Building Permit; and

Applicant Response

Noted.

- b. the date that is 24 months (measured in calendar days) following the date of rezoning enactment, with interest accruing at prime plus 3% (per Bank of Montreal daily prime rates) from the date that is 24 months following the date of rezoning enactment until the date that such amount is fully paid.

However, if the Applicant wishes to build the project in two phases (i.e. obtain building permits for one tower first, and complete that tower first (with occupancy permits issued), before obtaining building permits for the other tower), the Outstanding Balance must be paid based on the pro rata percentage of the proportion of area approved via Building Permits, upon issuance of the Building Permit for each phase of the development.

For Phase 1, the pro rata percentage of the Outstanding Balance must be paid on the earlier of following dates:

Applicant Response

Noted.

- c. at issuance of the Building Permit of Phase 1; and

Applicant Response

Noted.

- d. 24 months following the date of the rezoning enactment (measured in calendar days) following the date of rezoning enactment, with interest accruing at prime plus 3% (per Bank of Montreal daily prime rates) from the date that is 24 months following the date of rezoning enactment until the date that such amount is fully paid.

The remaining balance of the Outstanding Balance must be paid on the earlier of the following dates:

Applicant Response

Noted.

- e. at issuance of the Building Permit for Phase 2; and

Applicant Response

Noted.

- f. 48 months following the date of the rezoning enactment (measured in calendar days) following the date of rezoning enactment, with interest accruing at prime plus 3% (per Bank of Montreal daily prime rates) from the date that is 24 months following the date of rezoning enactment until the date that such amount is fully paid.

Applicant Response

Noted.

- (iv) The deferred cash balance of \$45,032,700 will be secured via a letter of credit (LC), in the City's standard form, provided to the City prior to enactment of the rezoning by-law. This letter of credit (LC) will be used to pay the City, and will be drawn down by the City on the aforementioned due dates. However, if the development does not proceed to Development Permit stage or any portion thereof does not proceed to obtain building permits, the City will draw down the entire remaining balance of the LC by the date (or next business day) that is 2 years after the date of enactment of the rezoning by-law.

Applicant Response

Noted. The Letter of Credit will be provided prior to the Rezoning Enactment.

- (v) If the Applicant should sell (in whole or in part) its interest in the development on the Rezoning Lands or shares in the Applicant or corporations which hold legal or beneficial interest in the Applicant or this development, then the City may immediately draw down the entire remaining balance of the LC upon the closing of such sale transaction.



Musson
Cattell
Mackey
Partnership

Architects
Designers
Planners

A Partnership
Of Corporations

Applicant Response

Noted.

- (vi) The deferred payment and any interest, as applicable, will also be secured by a Development Permit hold and Building Permit hold, which will be registered on title prior to rezoning enactment and, if required, an additional Occupancy Permit hold for the development, to be released only on confirmation of receipt by the City of the full amount of the total cash CAC Offering (plus interest, if applicable).

Applicant Response

Noted. Applicant is working with City Legal on these arrangements.

- 18. The cash CAC payment is subject to the following conditions:
 - (i) The Applicant’s commitment to design and develop this project to achieve Passive House Certification for the entire development was fundamental in the pro forma analysis and resolution of the community benefits offering at this lower amount (relative to what would be expected for a development on Alberni Street in Vancouver). Achieving Passive House Certification for the entire development is considered a public benefit as it helps to achieve the City’s objectives for sustainability and meeting the City’s goal of being the “Greenest City” in the world. Therefore, the requirement for Passive House Certification will be secured through rezoning conditions, including agreements registered against title to the Rezoning Lands. If the Applicant chooses to make alterations to the elements of the development’s design which result in the removal of such Passive House premium cost items, then the City may require the applicant/owner to pay an additional cash CAC, based on the revised pro forma, prior to building permit issuance.

Note to Applicant: This condition will be secured by building permit hold and a Section 219 covenant.

Applicant Response

Noted.

- (ii) The Applicant agrees to provide complete transparency to the City with respect to all the costs for this development. Therefore, the Applicant will fully disclose its contracts and accounting of costs (with support documentation) for this development to the City (and/or its delegated staff/consultant(s)) so that the City is able to determine the incremental cost for developing a Passive House Project at this scale. This information is only for the City’s knowledge to assist in costing future Passive House Projects; the City will not seek recourse if such costs are determined to be lower than the estimated premium costs used in the pro forma analysis to determine the total public benefits package noted herein.

Applicant Response

Noted. However the Applicant proposes quarterly informal meetings prior to Occupancy Permit and full transparency after Occupancy Permit.



Musson
Cattell
Mackey
Partnership

Architects
Designers
Planners

A Partnership
Of Corporations

Other Public Benefits (not included in value of CAC offering)

- 19. Local Buyers First – The applicant’s voluntary commitment to support residents who live or work in Metro Vancouver by giving them the first opportunity to purchase new pre-sale homes in the new development on the subject site, which includes the following:
 - (i) For the first 30 calendar days after the launch of the “pre-sales marketing campaign” for this development (or each phase of the development, if applicable, the “Exclusive Local Buyer Period”), only those who live or work in Metro Vancouver will be eligible to purchase homes in this development, and all such buyers will be required by the applicant to sign a statutory declaration attesting that they live or work in Metro Vancouver, they do not intend to assign the Contract prior to completing the purchase of their unit, they intend for the title to the unit to be registered in their name in the Land Title Office upon the completion of the purchase of their unit and they intend to occupy the unit they are purchasing.

Applicant Response

Noted. Letter of Commitment to be provided prior to the Rezoning Enactment

- (ii) The text of the statutory declaration will be agreed upon in advance of the rezoning enactment by the Applicant and the City’s Director of Legal Services.

Applicant Response

Noted. Applicant has reviewed the Statutory Declaration drafted by City Legal and awaits approval.

- (iii) There shall be no foreign marketing during this Exclusive Local Buyer Period.

Applicant Response

Noted. Letter of Commitment to be provided prior to the Rezoning Enactment.

- (iv) No buyer shall be allowed to purchase more than one (1) unit within this Exclusive Local Buyer Period.

Applicant Response

Noted. Letter of Commitment to be provided prior to the Rezoning Enactment.

Public Art

- 20. Execute an agreement satisfactory to the Directors of Legal Services and Cultural Services for the provision of public art in accordance with the City’s Public Art Policy, such agreement to provide for security in a form and amount satisfactory to the aforesaid officials; and provide development details to the satisfaction of the Public Art Program Manager (a checklist will be provided).

Note to Applicant: Please call Eric Fredericksen, Public Art Program Manager, 604.871.6002, to discuss your application.

Applicant Response

Noted. The developer has engaged a Public Art Consultant – Ballard Fine Art to consult and assist with a fulfillment of this condition.

Environmental Contamination

21. If applicable:

- (i) Submit a site profile to the Environmental Protection Branch (EPB);

Applicant Response

Applicant has submitted a site profile to the City and has fulfilled this Condition.

- (ii) As required by the Manager of Environmental Protection and the Director of Legal Services in their discretion, do all things and/or enter into such agreements deemed necessary to fulfill the requirements of Section 571(B) of the Vancouver Charter; and

Applicant Response

Noted. Applicant is working with the City to fulfill this requirement. Further instructions to follow from the City of Vancouver's Legal Department

- (iii) If required by the Manager of Environmental Protection and the Director of Legal Services in their discretion, enter into a remediation agreement for the remediation of the site and any contaminants which have migrated from the site on terms and conditions satisfactory to the Manager of Environmental Protection, City Engineer and Director of Legal Services, including a Section 219 Covenant that there will be no occupancy of any buildings or improvements on the site constructed pursuant to this rezoning until a Certificate of Compliance satisfactory to the City for the on-site and off-site contamination, issued by the Ministry of Environment, has been provided to the City.

Note: Where the Director of Legal Services deems appropriate, the preceding agreements are to be drawn, not only as personal covenants of the property owners, but also as Covenants pursuant to Section 219 of the Land Title Act.

The preceding agreements are to be registered in the appropriate Land Title Office, with priority over such other liens, charges and encumbrances affecting the subject sites as are considered advisable by the Director of Legal Services, and otherwise to the satisfaction of the Director of Legal Services prior to enactment of the by-laws.

The preceding agreements shall provide security to the City including indemnities, warranties, equitable charges, letters of credit and withholding of permits, as deemed necessary by and in a form satisfactory to the Director of Legal Services. The timing of all required payments, if any, shall be determined by the appropriate City official having responsibility for each particular agreement, who may consult other City officials and City Council.



**Musson
Cattell
Mackey
Partnership**

Architects
Designers
Planners

A Partnership
Of Corporations

Applicant Response

Noted. Applicant is working with the City to fulfill this requirement. Further instructions to follow from the City of Vancouver’s Legal Department

- B. THAT, if Council approves in principle the rezoning and the Housing Agreement described in section (c) of Appendix B of the Policy Report dated July 16, 2018 entitled “CD-1 Rezoning: 1444 Alberni Street and 740 Nicola Street”, the Director of Legal Services be instructed to prepare the necessary Housing Agreement By-law, pursuant to Section 565.2 of the Vancouver Charter, for enactment prior to enactment of the zoning by-law, subject to such terms and conditions as may be required at the discretion of the Director of Legal Services and the General Manager of Arts, Culture and Community Services.
- C. THAT A and B be adopted on the following conditions:
 - (i) THAT the passage of the above resolutions creates no legal rights for the applicant or any other person, or obligation on the part of the City; any expenditure of funds or incurring of costs is at the risk of the person making the expenditure or incurring the cost;
 - (ii) THAT any approval that may be granted following the Public Hearing shall not obligate the City to enact a bylaw rezoning the property, and any costs incurred in fulfilling requirements imposed as a condition of rezoning are at the risk of the property owner; and
 - (iii) THAT the City and all its officials, including the Approving Officer, shall not in any way be limited or directed in the exercise of their authority or discretion, regardless of when they are called upon to exercise such authority or discretion.

[RZ – 1444 Alberni St and 740 Nicola St]

Yours truly

**MUSSON CATTELL MACKEY PARTNERSHIP
ARCHITECTS DESIGNERS PLANNERS**

Mark Thompson, ARCHITECT AIBC, ARCHITECT AAA, MRAIC, ANZIA, LEED AP BD + C
Mark E. B. Thompson Architect Ltd., Partner

MS:wm

Attachment: Williams Engineering’s Rainwater Management Strategy

\\mcmparchitects.com\MCMData\MCMP\Projects\2016\216012 - 1468 Alberni Street\6 Authorities\2018 11 14_1468_ Rezoning Conditions_Response Letter\2018 12_1468_ Rez Conditions (Response Letter)_Draft R2.docx

File No. 036684

April 3, 2017

MCMP
1600 – Two Bental Centre
555 Burrard Street, Box 264
Vancouver, BC V6X 1M9**Attention:** Monika Serrer**Subject:** 1488 Alberni – Response to Rezoning Policy for Sustainable Large Development

This letter is to provide a high level description to respond to City of Vancouver's Rezoning Policy for Sustainable Large Development regarding the Rainwater Management and Low Carbon Energy Supply.

RAINWATER MANAGEMENT STRATEGY

Objective

The City of Vancouver requires a Rainwater Management Plan that recognizes rainwater as a resource to enhance the community and environment. This will contribute to the Clean Water Greenest City target – to reduce per-capita residential water consumption by 20% by year 2020.

Intent

The intent is to reduce storm water discharge, reduce the generation of run off, treat surface runoff to reduce contaminants, and where possible, conserve portable water use.

Rainwater Management Concept

The project is designed to limit interference with natural hydrology by maximizing pervious cover, increasing on-site infiltration opportunities, limiting runoff generation, and reducing pollution.

The project is designed with various landscape areas on ground level, accessible roof garden on podium, and possible vegetation garden to increase pervious cover for the building.

In addition, a storm water detention system is designed to achieve equivalent runoff rate and volume between post-development and pre-development for the two-year 24-hour duration storm.

Based on the preliminary assessment, the storm detention system contains a tank sized between 80 cubic meters to 120 cubic meters depending on the final landscape design. The system contains a flow control orifice and regulates the storm water discharge rate to the city system.

Furthermore, a possible new park on Nicola Street contributes to the stormwater runoff rate reduction due to the new green space and soil filtration. The storm drain from the new park will tie into the building storm detention system.

The rain water management plan will also contain a stormwater treatment system. With the landscape filtration and storm treatment system, 90% of the average runoff volume will be treated, and the system is capable to remove 85% of the total suspended solids (TSS). Preliminary filtration includes a stormceptor incorporated in the detention system.

Rainwater Management Plan Components

The following elements will be included in the final rainwater management plan:

- Pre-development Site Plan
- Post-development Site Plan
- Hydrologic and Hydraulic Analysis
- Pre-manufactured Product
- Assurance Letter by Registered Professional

In addition, the final rainwater management plan will include:

- Strategy to retain existing healthy trees
- Strategy to use waterwise planting selections
- Adequate planting medium depth
- In-ground tree planting plan with sufficient medium area
- Rain garden to capture storm run-off
- Green roof planting

All above storm water management plan measure will meet the City of Vancouver Building By-law requirements.

LOW CARBON ENERGY SUPPLY

Objective

The City of Vancouver requires a low carbon energy supply strategy to contribute to the Greenest City target on Climate Leadership and target to reduce community-based greenhouse gas emissions by 33% from 2007 levels.

Intent

The intent is to establish a low carbon energy solution to the new development, which help to reduce greenhouse gas emission by using an energy source that has low carbon footprint. In addition, the new development will require a 45% lower energy consumption than ASHRAE 90.1 2010, and it will require 22% lower energy cost than the ASHRAE 90.1 2010 standard.

Low Carbon Energy Strategy

This project is currently intended to be connected to future district energy system (DES) when it is available. The energy source of the DES is supposed to meet the low carbon energy supply requirement set by City of Vancouver. The new development will contain a building mechanical system that is DES ready, and future connection can be easily established.

In addition, the project is currently being discussed as a potential passive house building, where the envelope has a high performance with increase insulation and thermally broken design. The building energy usage is expected to decrease with all the energy measures.

Mechanical System and Energy Measures

In order to be DES ready, the mechanical system selected will contain a hydronic system that utilize hot water as the heating source. The future DES room will contain heat exchangers, hydronic pumps, buffer tanks, expansion tanks, and hydronic piping to transfer heat from DES to the building mechanical system.

The potential mechanical systems include four-pipe fan coil system, hybrid heat pump system, water source VRF system, air source VRF with hot water coil, and hydronic baseboard heating system. All these potential mechanical system will be easily connected to DES in the future.

In addition, the project has a plan to implement earth tube or earth-air heat exchange system in order to pre-heat and pre-cool a part of ventilation air in the building. This will promote significant energy saving and lead to low-carbon target that is stated in City of Vancouver's Rezoning Policy. This will be achieved by creating narrow cavities in the interior of underground parkade wall which will used to draw outdoor air at end of the tunnel and extract at the other end. Mechanical ventilation system will consequently pick up the pre-heated and pre-cooled outdoor air to further distribute to the spaces in the building.

Preliminary energy modelling is performed to assist on building system design and envelope performance evaluation. High performance window glasses are being evaluated, and the thermally broken window frames are also essential to this project.

To reduce the energy consumption, the following energy measures are also considered:

- Optimized performance envelope system
- Reduced glazing percentage compared to typical Vancouver building
- Simultaneous heating and cooling heat recovery
- Individual air side heat recovery ventilator
- Building sewer heat recovery system
- Solar panel domestic hot water pre-heat system
- Underground parkade heat recovery system
- Low water consumption plumbing fixtures
- Enhanced building control system
- Energy monitor and metering system

Sustainability Approach

With the above mentioned energy measure implementation, it is expected to reduce the energy use intensity, greenhouse gas intensity, and thermal energy demand intensity, compared to other typical high rise buildings in Vancouver. Our intent to reduce these emission outcomes aligns with City of Vancouver's plan.

Other sustainability approaches include direct ventilation to residential suites, improved air tightness building envelope, energy use metering, improved indoor air quality, resilient water access, enhanced commissioning, and green storm water system. All above sustainability approach will meet the City of Vancouver Building By-law and rezoning requirements and help to achieve the energy saving targets.

Yours truly,

Williams Engineering Canada Inc.

Peter Kuo, P. Eng, PMP, LEED, AP BD+C
Mechanical Team Lead

O: 604.689.1915 **M:** 778.788.4925
E: peter.kuo@williamsengineering.com

X:\15-Vancouver\Projects\0036437.00\30_Design\06_Correspondence\letter\let01_kingsway_mechanical_system_description.docx