



**To:** Planning Committee **Date:** September 15, 2016  
**From:** Wayne Craig **File:** RZ 12-603040  
Director, Development  
**Re:** **Application by YuanHeng Seaview Developments Ltd & YuanHeng Seaside Developments Ltd for Rezoning at 3031, 3211, 3231, 3291, 3311, 3331, 3351 No. 3 Road, 8151 Capstan Way, and 8051 and 8100 River Road from Auto-Oriented Commercial (CA), Marina (MA2), and Hotel Commercial (ZC160 – Capstan Village (City Centre) to Residential / Limited Commercial and Community Amenity (ZMU30) – Capstan Village (City Centre) (ZMU30) and School and Institutional Use (SI)**

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#### Staff Recommendation

1. That Official Community Plan Amendment Bylaw 9593, including:
  - a) In Schedule 1 of Official Community Plan Bylaw 9000, to redesignate 8051 River Road from "Mixed Use" to "Park" and 8100 River Road from "Park" to "Mixed Use" in Attachment 1; and
  - b) In Schedule 2.10 (City Centre Area Plan), to amend the existing land use designation in the Generalized Land Use Map (2031), Specific Land Use Map: Capstan Village (2031), and reference maps throughout the Plan to relocate park and road within the area bounded by Sea Island Way, No. 3 Road, Capstan Way, and the Middle Arm of the Fraser River and designate the subject site as "Institution", together with related minor map and text amendments;be introduced and given first reading.
2. That Bylaw 9593, having been considered in accordance with OCP Bylaw Preparation Consultation Policy 5043, is hereby found not to require further consultation.
3. That Bylaw 9593, having been considered in conjunction with:
  - the City's Financial Plan and Capital Program;
  - the Greater Vancouver Regional District Solid Waste and Liquid Waste Management Plans;

is hereby found to be consistent with said program and plans, in accordance with Section 477(3)(a) of the Local Government Act.

- 4. That Richmond Zoning Bylaw 8500, Amendment Bylaw 9594 to create the “Residential / Limited Commercial and Community Amenity (ZMU30) – Capstan Village (City Centre) (ZMU30)” zone, and to rezone 3031, 3211, 3231, 3291, 3311, 3331, 3351 No. 3 Road, 8151 Capstan Way, and 8051 and 8100 River Road from “Auto-Oriented Commercial (CA)”, “Marina (MA2)”, and “Hotel Commercial (ZC160 – Capstan Village (City Centre))” to “Residential / Limited Commercial and Community Amenity (ZMU30) – Capstan Village (City Centre) (ZMU30)” and “School and Institutional Use (SI)”, be introduced and given first reading.
- 5. That the YuanHeng Riverfront Park Conceptual Plan, as described in the report, dated September 15, 2016, from the Director of Development, be approved.

  
 Wayne Craig  
 Director, Development

WC:sch  
 Att.

REPORT CONCURRENCE		
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER
Affordable Housing	<input checked="" type="checkbox"/>	
Community Social Development	<input checked="" type="checkbox"/>	
Parks Services	<input checked="" type="checkbox"/>	
Engineering	<input checked="" type="checkbox"/>	
Finance	<input checked="" type="checkbox"/>	
Law	<input checked="" type="checkbox"/>	
Transportation	<input checked="" type="checkbox"/>	

## Staff Report

### Origin

YuanHeng Seaview Developments Ltd & YuanHeng Seaside Developments Ltd have applied to the City of Richmond for permission to rezone lands at 3031, 3211, 3231, 3291, 3311, 3331, 3351 No. 3 Road, 8151 Capstan Way, and 8051 and 8100 River Road, from Auto-Oriented Commercial (CA), Marina (MA2), and Hotel Commercial (ZC160 – Capstan Village (City Centre) to Residential / Limited Commercial and Community Amenity (ZMU30) – Capstan Village (City Centre) (ZMU30) and School and Institutional Use (SI), to permit the construction of a three-phase, high-rise, high density, mixed use development and City park in the City Centre's Capstan Village area (Attachments 1, 2 & 3). The proposed development includes the following key features:

- a) Three phases (Attachment 4), including:
  - Phase 1 (Seaside South / new Lot A) at the corner of No. 3 Road and Capstan Way;
  - Phase 2 (Seaside North / new Lot B) at the corner of No. 3 Road and Sea Island Way; and
  - Phase 3 (Seaview / new Lot C) along the riverfront;
- b) A combined total floor area of 113,131.8 m<sup>2</sup> (1,217,740.7 ft<sup>2</sup>), including a maximum of:
  - 88,836.0 m<sup>2</sup> (956,222.4 ft<sup>2</sup>) of residential uses in all three phases, containing at least 4,441.8 m<sup>2</sup> (47,811.1 ft<sup>2</sup>) of affordable (low-end market rental) housing constructed to a turnkey level of finish at the developer's sole cost in the development first and second phases and secured with a Housing Agreement (i.e. 5% of total residential floor area, as per the City's Affordable Housing Strategy); and
  - 24,295.8 m<sup>2</sup> (261,518.4 ft<sup>2</sup>) of non-residential uses in Seaside South and North (i.e. none in Seaview), containing a City-owned community centre, 3,106.6 m<sup>2</sup> (33,439.0 ft<sup>2</sup>) in size, constructed to a turnkey level of finish at the developer's sole cost in the development's second phase (Seaside North), together with parking and ancillary uses;
- c) A maximum of 850 dwelling units, including:
  - +/-791 market units distributed across all three phases; and
  - +/- 59 affordable housing units distributed across the development's first two phases;
- d) A 4,276.6 m<sup>2</sup> (1.06 ac) riverfront park (the first stage of Capstan Village's riverfront linear park, which will eventually link south to the Middle Arm Park and Richmond Olympic Oval and north to Bridgeport Village), together with a \$2.6 million voluntary developer contribution towards future City construction of a pier and water access along the park's Middle Arm frontage;
- e) Road network and engineering improvements, including the establishment of a new "East-West Street" linking Corvette Way to No. 3 Road, together with special pedestrian crossing features at No. 3 Road to enhance access to the future Capstan Canada Line station planned for No. 3 Road's east side; and
- f) Voluntary developer contributions for future construction of the Capstan Canada Line station, which contributions will be submitted, phase-by-phase, prior to Building Permit (BP) issuance, based on the approved number of dwellings and the City rate in effect at the time. (Based on the 2016 rate and 850 units, the total contribution is estimated as \$7 million.)

## Staff Report

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## Findings of Fact

A Development Application Data Sheet and Conceptual Development Plans providing details about the subject development proposal are attached (Attachment 5 & 6).

The subject site is comprised of two parts, both of which are vacant. The site was formerly occupied by a hotel (Comfort Inn), a variety of low density, auto-oriented commercial and industrial businesses, and marina parking. As a result of these former uses, both parts of the site required contaminant removal. This work will be completed prior to rezoning adoption and any land or facility transfers to the City. A Tree Removal Permit (T3) was issued by the City on August 12, 2016 to facilitate contaminant removal. Tree replacement security (\$30,000) was submitted by the developer and will be applied to tree replacement in Phase 1 (Seaside South).

## Surrounding Development

To the North: Sea Island Way, a designated Provincial highway, and highway-oriented commercial properties designated under the CCAP for future development with high-rise, high density hotel, office, and accessory retail.

To the South: Capstan Way, beyond which are low density, commercial properties and marinas zoned Auto-Oriented Commercial (CA) and Marina (MA2) and designated under the CCAP for medium and high density, mid- and high-rise, residential and mixed use development, park, and marina.

To the East: No. 3 Road, beyond which is the proposed location of the future Capstan Canada Line station, a new neighbourhood park (under construction), and the recently completed first phase of a five-phase, high density, high-rise, mixed use development (RZ 10-544729 / RZ 12-610011 / Pinnacle International).

To the West: Middle Arm of the Fraser River and a three-tower, mixed hotel/residential development at 3099, 3111, and 3333 Corvette Way (Wall Centre). This development was constructed prior to the 2009 update to the CCAP; nevertheless, its zoning, Residential/Hotel (ZMU5) – Capstan Village (City Centre), allows for the same height as the CCAP (45 m) and a similar maximum density (3.4 floor area ratio (FAR) versus CCAP 3.5 FAR).

NOTE: At the time Wall Centre was rezoned, the developer agreed to register a legal agreement on title in favour of the Comfort Inn hotel for parking purposes. As this hotel has been demolished, the legal agreement can be discharged. This is addressed in the attached Rezoning Considerations (Attachment 7).

In addition to the above, located between the two parts of the subject site is 8091 Capstan Way. This property, which is vacant, is the subject of a separate rezoning application (RZ 15-699647 / GBL Architects), currently under review, to permit a two-tower, mixed use development (i.e. hotel, retail, office, and residential), generally as per CCAP policy (i.e. 3.5 FAR and 45 m maximum height).

## Related Policies & Studies

Development of the subject site is affected by the City Centre Area Plan (CCAP) and other City policies (e.g., affordable housing). An overview of these considerations is provided in the “Analysis” section of this report.

## Public Consultation

A rezoning sign has been installed on the subject property. Staff have not received any comments from the public about the rezoning application in response to the placement of the rezoning sign on the property.

Should the Planning Committee endorse this application and Council grant 1<sup>st</sup> reading to the rezoning bylaw, the bylaw will be forwarded to a Public Hearing, where any area resident or interested party will have an opportunity to comment.

Staff have reviewed the proposed OCP and zoning amendments, with respect to the BC Local Government Act and the City’s OCP Consultation Policy No. 5043 requirements, and recommend that this report does not require referral to external stakeholders. The table below clarifies this recommendation as it relates to the proposed OCP.

Public notification for the Public Hearing will be provided as per the Local Government Act.

Stakeholder	Referral Comment (No Referral necessary)
BC Land Reserve Co.	No referral is necessary, as the Land Reserve is not affected.
Richmond School Board	No referral is necessary, as it does not have the potential to generate 50 or more school aged children. (See below)
The Board of the Greater Vancouver Regional District (GVRD)	No referral is necessary, as the Regional District is not affected.
The Councils of adjacent Municipalities	No referral is necessary, as adjacent municipalities are not affected.
First Nations (e.g., Sto:lo, Tsawwassen, Musqueam)	No referral is necessary, as First Nations are not affected.
TransLink	No referral is necessary, as the proposed amendment does not result in road network changes.
Port Authorities (Vancouver Port Authority and Steveston Harbour Authority)	No referral is necessary, as the proposed amendment does not affect port or related uses.
Vancouver International Airport Authority (VIAA) (Federal Government Agency)	No referral is necessary, as the proposed amendments are consistent with the OCP Aircraft Noise Sensitive Development (ANSD) policy.
Richmond Coastal Health Authority	No referral is necessary, as the Health Authority is not affected.
Community Groups and Neighbours	No referral is necessary, but the public will have an opportunity to comment on the proposed amendment at the Public Hearing
All relevant Federal and Provincial Government Agencies	The Ministry of Transportation and Infrastructure (MOTI) has granted preliminary approval for the development for one year as of August 23, 2016. Final MOTI approval is required prior to rezoning adoption.

Richmond Official Community Plan Bylaw 9000, Amendment Bylaw 9494, having been considered in accordance with OCP Bylaw Preparation Consultation Policy 5043, is hereby found to not require further consultation.

## School District

According to OCP Bylaw Preparation Consultation Policy 5043, which was adopted by Council and agreed to by the School District, residential developments which generate less than 50 school aged children do not need to be referred to the School District (e.g., typically around 295 multiple-family dwellings). This application only involves 174 more multi-family dwellings than the approximately 676 achievable under existing CCAP policy (i.e. the proposed site specific zone, ZMU30, limits the maximum number of dwellings on the subject site to 850), which is equivalent to 30 additional school-aged children. (Staff will refer the proposed OCP amendment to the School District as a courtesy.)

## Analysis

YuanHeng Seaview Developments Ltd & YuanHeng Seaside Developments Ltd have applied to rezone a 3.29 ha (8.12 ac) site in Capstan Village comprised of 10 commercial, industrial, and marina lots (all currently vacant) to permit the construction of a three-phase, high density, high-rise development with a total floor area of 113,131.8 m<sup>2</sup> (1,217,740.7 ft<sup>2</sup>), including a 3,106.6 m<sup>2</sup> (33,439.0 ft<sup>2</sup>) City-owned community centre and a City riverfront park. The City Centre Area Plan (CCAP) designates the subject site and surrounding area for pedestrian/transit-oriented, medium and high density, residential and mixed use development, with an emphasis on projects that support City objectives for funding the construction of the future Capstan Canada Line station and the area's growth as the social and recreational hub for the Capstan Village community. A recent rezoning along the east side of No. 2 Road (RZ 12-610011 / Pinnacle), adjacent to the future transit station, has taken a first step towards the area's establishment as a community hub with the approved development of a neighbourhood park and early childhood development centre. The subject development, as proposed, will provide approximately \$7 million towards Capstan station's construction (as per 2016 City-approved rates and 850 dwellings, which numbers will be confirmed at Building Permit stage) and will enhance the area's role as a hub with a proposed community centre, improved vehicle and pedestrian links to the river, and a new riverfront park.

### A. CCAP Amendment

To facilitate the subject development, the applicant has proposed two key amendments to the CCAP, together with corresponding land use designation changes in the OCP and related minor map and text changes in the CCAP. If approved, the proposed amendments would provide for the following:

- a) 25,972.2 m<sup>2</sup> (279,562.4 ft<sup>2</sup>) of additional residential floor area, of which 49% will be located on Seaview, 12,843.2 m<sup>2</sup> (138,243.2 ft<sup>2</sup>), and 51% will be spread across the two Seaside lots, 13,129.0 m<sup>2</sup> (141,319.2 ft<sup>2</sup>);
- b) A 3,106.6 m<sup>2</sup> (33,439.0 ft<sup>2</sup>) City-owned community centre, constructed to a turnkey level of finish in the project's second phase, at the developer's sole cost, to the City's satisfaction, of which 1,849.3 m<sup>2</sup> (19,906 ft<sup>2</sup>) will be provided by the developer over and above what is required under current CCAP policy; and
- c) A 4,276.6 m<sup>2</sup> (1.06 ac) City-owned park and dike, designed and constructed via the City's standard Servicing Agreement processes in the project's third phase, at the developer's sole cost, to the City's satisfaction, as per the YuanHeng Riverfront Park Conceptual Plan (Attachment 7 – Schedule H) and Servicing Agreements requirements with respect to the dike

set out in the Rezoning Considerations (Attachment 7), together with a \$2.6 million voluntary developer contribution (submitted prior to rezoning adoption) for future City construction of a pier and water access along the park's Middle Arm frontage.

The key proposed amendments to the CCAP are as follows:

- a) Amendment #1: On the west portion of the site (Seaview), to redesignate 8051 River Road (i.e. dike lot) from "Marina" to "Park" and 8100 River Road (i.e. upland lot) from "Park" to "Urban Centre T5 (45 m)".
- It is the City's aim to provide continuous public riverfront access along the Middle Arm of the Fraser River; however, achieving this in the vicinity of the subject site is difficult, as existing marinas need the dike for parking and service uses. In recognition of these competing needs, the CCAP currently designates the dike (including 8051 River Road) as "Marina" and "Waterfront Dike Trail" and designates small, upland areas nearby (including 8100 River Road) as "Park".
  - The developer's acquisition of both 8051 and 8100 River Road presents the opportunity to move the designated "Park" to the dike (without any loss in park area) and provide for an enhanced City-owned, public open space amenity. Furthermore, as the developer does not intend on operating a marina, the river in front of the park will be unoccupied, which will provide for unobstructed views of the river and, if so desired by the City, future marina or water recreation uses (subject to the City or others, with the City's approval, entering into a water lease with the Province).
  - As a result of moving the "Park" to the dike, the upland lot is made available for development. The proposed CCAP land use designation for this lot, "Urban Centre T5 (45 m)", will permit multi-family uses to a maximum of 2.0 FAR (plus 0.5 FAR for the Capstan Station Bonus, as per all Capstan Village development sites) and a typical height of 45 m (148 ft.). This designation is similar to that of other Capstan Village lots situated between the dike (existing River Road) and the former railway right-of-way (future road), except that the typical height permitted on those other lots is 25 m (95 ft.). Greater height is appropriate on the subject site because it is located at a point where lower (future) riverfront development will transition to meet the area's three existing riverfront towers (i.e. Wall Centre) and the high-rise, high density development encouraged near the future Capstan Canada Line station. Moreover, the proposed design of Seaview provides for slender towers, underground parking, and a low podium roof deck (i.e. roughly level with the proposed dike crest), which will open up lower-level public and private views across the site, increase sunlight to surrounding streets, and introduce a new built form that will add variety and visual interest to the riverfront.
- b) Amendment #2: On the east portion of the site (Seaside), to add "Institution" to the existing CCAP land use designations (i.e. no existing designations will be removed or revised).
- The CCAP aims to foster a transit-oriented downtown by, among other things, encouraging higher density, mixed use development near the City Centre's existing and proposed Canada Line stations. For this reason, the CCAP currently designates the Seaside portion of the subject site for a maximum density of 3.5 FAR, including a 1.0 FAR Village Centre Bonus (VCB) for commercial uses. Developers utilizing the VCB must design and construct 5% of the Bonus density as community amenity space, to a turnkey level of finish, at the developer's sole cost.

- Through the subject rezoning review process, it was determined that, based on the VCB 5% contribution policy, the developer would be required to construct approximately 1,257.28 m<sup>2</sup> (13,533 ft<sup>2</sup>) of community amenity space, to a turnkey level of finish, at the developer's sole cost (i.e. 5% x 25,145.51 m<sup>2</sup> (270,664 ft<sup>2</sup>)); however, the most pressing City need in the vicinity of the subject site is a community centre for Capstan Village, West Cambie, and Sea Island residents, requiring approximately 3,106.59 m<sup>2</sup> (33,439 ft<sup>2</sup>) of indoor space (i.e. roughly 2.5 times the size of the developer's VCB 5% contribution).
- Under CCAP policy, by designating Seaside as "Institution", together with density bonus provisions in the subject development's proposed site specific zone, ZMU30, and legal agreements registered on title prior to rezoning adoption, the developer will:
  - i. Provide the proposed 3,106.59 m<sup>2</sup> (33,439 ft<sup>2</sup>) City-owned community centre, to the City's satisfaction, at the developer's sole cost; and
  - ii. Be permitted bonus residential floor area (over and above existing CCAP policy).
- The subject Seaside development, including the proposed community centre and bonus residential floor area, is well designed and attractively accommodates the increased floor area and important amenity program requirements, while complying with the intent of the CCAP Development Permit Guidelines and related objectives for urban design, livability, public open space, and other considerations.

## **B. Proposed Zoning**

To facilitate the subject development, including the special community amenity features arising through the proposed CCAP amendment, it is proposed that two zones are applied to the site:

- a) "School and Institutional Use (SI)", which zone will be applied to the proposed City-owned park, as per the City's standard practice; and
- b) "Residential / Limited Commercial and Community Amenity (ZMU30) – Capstan Village (City Centre) (ZMU30)", to be applied to the residential and mixed use portions of the site. ZMU30 is a site specific zone (prepared solely for the subject site), based on a standard zone, "Residential / Limited Commercial (RCL5)", that provides for the densities and other features typical of Capstan Village development (e.g., Affordable Housing Bonus, Capstan Station Bonus), together with:
  - An additional "Institution" bonus for the provision of the proposed 3,106.6 m<sup>2</sup> (33,439.0 ft<sup>2</sup>) City-owned community centre; and
  - Site specific parking and loading requirements.

## **C. Community Centre**

A new community centre within the Capstan Village area is a much needed amenity for the City Centre community of today and the future. Currently, just one community centre, located in Lansdowne Village (at Minoru Boulevard and Firbridge Way), serves the entirety of the City Centre and the provision rate for City Centre community centre space is only 0.45 m<sup>2</sup> (0.5ft<sup>2</sup>) per resident (i.e. half the City's standard community centre provision rate of 0.9 m<sup>2</sup> (1.0 ft<sup>2</sup>) per resident). To address this, the 2009 Corporate Facilities Implementation Plan (CFIP) and the CCAP call for one or more additional City Centre community centres, specifically including one to serve the planning area's north end.

The Capstan Village neighbourhood is currently small, but growing rapidly and expected to reach approximately 16,000 residents by build out. The community centre, proposed as part of the subject development's second phase, is targeted for completion in 2020, by which time Capstan Village is projected to have over 2,500 dwellings and more than 5,250 residents. A community centre in the Capstan Village neighbourhood will be able to serve this growing population, as well as residents in nearby West Cambie and others on Sea Island. In addition, as the proposed facility will be situated close to the future Capstan Canada Line station, it will be able to serve residents from throughout the City Centre.

In order to clarify the value the proposed amenity offers the City, program development has been completed, taking into consideration the following key factors:

- Projected demographics;
- Geographic context;
- Local amenities;
- Trends and best practises in recreation facility design; and
- Feedback from past community consultations, including the extensive community consultation programs conducted for the existing City Centre Community Centre and the Minoru Complex.

Based on this, a Vision, Program Plan, Program Details, and Conceptual Plan have been prepared for the proposed community centre. Details of this information are provided in the Community Centre Terms of Reference and Community Centre Conceptual Plan contained in the Rezoning Considerations attached to this report (Attachment 7 – Schedules F & G), together with supporting reference documents. A summary of this information is as follows:

- a) Vision: The facility is envisioned as a “Village Square” that will facilitate programs and services for all ages and abilities for Capstan Village and surrounding neighbourhoods. Moreover, it will:
  - Become the heart of the community;
  - Provide a unique gathering place;
  - Contribute towards the development of a vibrant, active urban community; and
  - Meet the recreation program and service needs of a growing and diverse population.
- b) Program Plan: Building on the “Village Square” concept, the Program Plan is comprised of a broad range of community recreation programs and services, including:
  - Sport activities, such as volleyball, basketball, parkour training, indoor soccer, and walking;
  - Dance programs, including ballet, hip hop, ballroom, and Bhangra;
  - Community events, including indoor movie nights, markets, and exhibitions;
  - Creative pursuits, including multi-media production, music, robotics, painting, ceramics, and 3D modeling;
  - Informal activities such as cooking, reading, homework clubs, and internet browsing; and
  - Opportunities to meet and socialize with neighbours, friends, and the broader community.
- c) Program Details: The proposed facility will include the following spaces:
  - Village Square /Sports Hall (gymnasium);
  - Activity track and activity room;
  - Three multipurpose rooms of varying sizes and finishes;
  - Wet art studio and creativity lab;

- Children's exploration room;
  - Kitchen;
  - Community gathering spaces; and
  - Circulation and support spaces.
- d) Conceptual Plan: The proposed community centre is envisioned as a two-storey, "stand-alone" facility located just off No. 3 Road, on the south frontage of the development's northern block (Seaside North), where it will have good visibility and easy pedestrian access to the future Canada Line station, while enjoying the benefits of being on a quieter side street with proximity to the proposed riverfront park. Key features of the Conceptual Plan include:
- A large gymnasium with 9.1 m (30 ft.) clear ceilings and support spaces (e.g., kitchen, change rooms, multi-purpose rooms, lobby, plaza) enabling it to host a broad range of sports, recreation, and community activities and events;
  - Special facilities (e.g., children's exploration room, activity track, creativity lab and wet art room) that will contribute towards the community centre becoming as a unique recreational amenity, complementary to other City Centre facilities;
  - 74 parking spaces reserved for community centre use, including 54 for exclusive use and 20 for shared use (e.g., community centre use after 6 pm weekdays and all day on weekends);
  - High performance building standards, as per City policy for new City buildings, including LEED Gold certification;
  - Public art, funded by the developer through the City's voluntary developer contribution program, based on a budget of 1% of estimated facility construction costs; and
  - City ownership of the community centre in the form of an Air Space Parcel, together with easements and statutory right-of-ways to secure parking, loading, and related features.

#### **D. Riverfront Park & Dike**

The proposed 4,276.6 m<sup>2</sup> (1.06 ac) riverfront park and dike are an extension of the City's approved trail and park strategy for the Middle Arm of the Fraser River from Terra Nova to Duck Island. The design and construction of the park, together with raising of the dike crest to 4.7 m (15.4 ft.) GSC, environmental mitigation and compensation, and related government and regulatory approvals, will be undertaken in the development's third phase, at the developer's sole cost, to the satisfaction of the City via the City's standard Servicing Agreement processes. In addition, prior to rezoning adoption, the developer proposes to provide a \$2.6 million voluntary cash-in-lieu contribution for future City construction of a pier and water access in association with the park. (No Development Cost Charge credits will apply for land or design/construction with respect to the park or pier.)

A conceptual plan, including a terms of reference, for the riverfront park, are included in the attached Rezoning Considerations (Attachment 7 – Schedule H). Additional requirements specific to the dike are included in the Engineering Servicing Agreement requirements (Attachment 7). Key features of the conceptual plan include:

- a) A paved pedestrian and cycling path on the dike crest;
- b) A separated pedestrian path below the dike crest (i.e. closer to the water's edge) affording seating and views of the river's edge;
- c) Plazas at each end with access to the adjacent streets (Capstan Way and Corvette Way), together with seating and other site furnishings to facilitate informal gathering and viewing;

- d) Public piers at each end at the dike crest elevation, together with a viewing tower at the pier at the terminus of Capstan Way, which will create a highly visible destination;
- e) A floating walkway that connects between the two piers;
- f) Universally accessible routes to the adjacent streets;
- g) Native planting to enhance habitat on the Fraser River foreshore; and
- h) For buildings outside the park, setbacks of at least 30.0 m (98.4 ft.) to the High Water Mark.

The implementation of the proposed YuanHeng Riverfront Park Conceptual Plan and the developer's voluntary contributions proposed as part of the subject rezoning application are an important step towards establishing the public waterfront amenities envisioned for the Middle Arm of the Fraser River and an important contribution to the livability of the Capstan Village and for all City Centre residents. To date, public consultation has not been undertaken for this plan since there are relatively few residences in the area. There will be opportunities for public comment on the proposed plan in the future during the development of the detailed design.

As part of the subject rezoning application, staff are seeking Council's approval of the YuanHeng Riverfront Park Conceptual Plan. (Attachment 7 – Schedule H)

#### E. Affordable Housing Strategy

The developer proposes to provide 4,441.8 m<sup>2</sup> (47,811.1 ft<sup>2</sup>) of affordable (low-end market rental) housing, approximately 59 units, which housing will be constructed to a turnkey level of finish at the developer's sole cost and secured with a Housing Agreement.

The proposed floor area represents 5% of the development's combined total maximum residential floor area on Seaside (North and South) and Seaview, as per the City's Affordable Housing Strategy. Occupants of the affordable housing units will enjoy full and unlimited access to and use of all on-site indoor and outdoor amenity spaces provided on the lot upon which they are located, as per OCP and CCAP requirements. Parking, "Class 1" bike storage, and related electric vehicle (EV) charging stations shall be provided by the developer/owner at no additional charge to the affordable housing occupants. All of the affordable housing units shall meet Richmond Basic Universal Housing (BUH) standards or better.

The number of units and unit mix targeted for the project, as indicated in the table below, may be updated to the satisfaction of the City on a Development Permit-by-Development Permit basis.

Unit Type	Affordable Housing Strategy Requirements			Project Targets (2)	
	Minimum Unit Area	Maximum Monthly Unit Rent (1)	Total Maximum Household Income (1)	Unit Mix	# of Units
Bachelor	37 m <sup>2</sup> (400 ft <sup>2</sup> )	\$850	\$34,000 or less	10%	5
1-Bedroom	50 m <sup>2</sup> (535 ft <sup>2</sup> )	\$950	\$38,000 or less	30%	18
2- Bedroom	80 m <sup>2</sup> (860 ft <sup>2</sup> )	\$1,162	\$46,500 or less	30%	18
3-Bedroom	91 m <sup>2</sup> (980 ft <sup>2</sup> )	\$1,437	\$57,500 or less	30%	18
TOTAL	4,443.5 m <sup>2</sup> (47,820 ft <sup>2</sup> )	N/A	N/A	100%	59

(1) May be adjusted periodically, as provided for under adopted City policy.

(2) 100% of affordable housing units shall meet Richmond Basic Universal Housing (BUH) standards or better.

The developer proposes to modify the delivery of the affordable housing units such that:

- a) A minimum of 25% of the development’s total affordable housing floor area (i.e. +/-15 units) shall be located on Seaside South (Phase 1), a maximum of 75% (i.e. +/-44 units) shall be on Seaside North (Phase 2), and none will be on Seaview (Phase 3); and
- b) The affordable housing units will be distributed among the development’s residential towers in the form of unit clusters, which may occupy entire tower floors or parts thereof.

While the developer’s proposal is a departure from City policy encouraging that affordable units are dispersed and delivered lot-by-lot at a rate of 5% of residential floor area, staff are supportive of the developer’s proposal on the basis that the phasing of the affordable housing units will accelerate their overall delivery (i.e. 100% constructed by occupancy of Phase 2, instead of Phase 3), and the form, size, unit mix, and location of each affordable housing cluster will be determined to the satisfaction of the City through the Development Permit\* review and approval processes.

**F. Transportation**

- a) Capstan Station Bonus (CSB) – Funding: The CCAP’s Capstan Station (density bonus) funding strategy seeks to raise approximately \$25 million for the construction of the Capstan Canada Line Station by providing a 0.5 floor area ratio (FAR) residential density bonus to Capstan Village developers who voluntarily contribute towards the Capstan Station Reserve at a rate of \$8,242.79 per dwelling unit (2015/2016 rate, to be adjusted annually as per the Consumer Price Index). Based on a City agreement with TransLink, construction of the station will begin when adequate funding is secured. The subject development is consistent with Richmond’s station funding strategy in regard to voluntary developer contributions to the Capstan Station Reserve, together with requirements for the developer’s provision of additional public open space and a transit-oriented transitional parking strategy, as follows:

Phase	Lot	No. of Dwelling Units <i>Preliminary estimate</i>	Capstan Station Reserve Voluntary Contribution <i>Preliminary estimate (1)</i>
1	A (Seaside South)	570	\$4,698,390
2	B (Seaside North)	225	\$1,854,628
3	C (Seaview)	55	\$453,354
<b>TOTAL</b>		<b>850</b>	<b>\$7,006,372</b>

(1) Estimate based on the City rate in effect as of October 1, 2015 (i.e. \$8,242.79/dwelling). Actual contributions shall be in accord with Zoning Bylaw rates in effect phase-by-phase at the time of Building Permit\* approval.

- b) Capstan Station Bonus (CSB) – Public Open Space: As per the CSB policy and the subject development’s proposed site specific zone, ZMU30, the developer proposes to voluntarily transfer at least 4,250.0 m<sup>2</sup> (45,746.6 ft<sup>2</sup>) of land to the City, at no cost to the City, in a combination of fee simple, dedication, and statutory right-of-ways for public open space use at a rate of 5.0 m<sup>2</sup> (53.82 ft<sup>2</sup>) per dwelling unit. (Attachment 7 - Schedule C). The land transferred will, in part, be consolidated with other lands being developed, via the subject development, for riverfront park purposes (e.g., River Road). All CSB public open space areas will be designed and constructed to the City’s satisfaction, at the developer’s sole cost, through the City’s standard Servicing Agreement and/or Development Permit processes.

- c) Transitional Parking Strategy & Transportation Demand Management (TDM): The Zoning Bylaw provides for parking reductions in Capstan Village from Zone 1A to Zone 1 (the City Centre Zone with the lowest rates), together with a possible further 10% reduction, for developments that incorporate TDM measures and demonstrate that they are well designed to meet the parking and transportation demands of Capstan Village today and in the future when the Capstan Canada Line station is operational.

In light of this, the developer's transportation strategy provides for various road network improvements, TDM measures, and related features, all at the developer's sole cost. In brief, this includes, among other things:

- Road widening along No. 3 Road, Capstan Way, and Corvette Way to accommodate cycling and pedestrian improvements, together with related road upgrades;
- A new east-west street bisecting the site, together with a new intersection at No. 3 Road, to improve access to the community centre and other on-site and neighbouring uses, enhance pedestrian access between the future Canada Line station, the community centre, and the surrounding area, and create smaller, more walkable blocks;
- River Road upgrades north of Seaview, including a new connection to Corvette Way, to facilitate existing neighbouring marina operations;
- Improved access to/from Sea Island Way at Corvette Way (approved by MOTI);
- Service vehicle access to the improved dike;
- \$200,000 towards pedestrian crossing improvements along Sea Island Way;
- End-of-trip cycling facilities (e.g., showers, change rooms) co-located with Class 1 (i.e. secured) bike storage for commercial tenants and employees on Seaside South and North;
- Car-share facilities on Seaside North, including 4 parking spaces, secured with a statutory right-of-way (SRW) and equipped with electrical vehicle (EV) charging equipment, 2 car-share vehicles, and a 3-year contract with a car-share operator;
- Commercial parking covenants on Seaside South and North requiring that at least 50% of required commercial parking (excluding community centre parking) will be designated for short-term use (i.e. hourly) by the general public; and
- Installation of Level 2 (240V) "quick charge" EV charging equipment at the rate of:
  - For chargers: 2% of community centre parking and 3% of hourly "public" parking;
  - For plug-ins: 20% of "assignable" (e.g., leased) commercial parking and 25% of resident parking; and
  - For rough-ins (for the future installation of EV equipment): 25% of resident parking.

#### **G. Engineering Infrastructure**

The developer shall be responsible for the design and construction of required water, storm sewer, and sanitary sewer upgrades and related public and private utility improvements, as determined to the satisfaction of the City. The developer's design and construction of the required improvements shall be phased over three Servicing Agreements (SA), each secured with a Letter of Credit, as set out in the attached Rezoning Considerations. (Attachment 7) Prior to rezoning adoption, the developer will enter into the first Servicing Agreement (SA #1), which generally shall include:

- a) Sanitary Sewer: Relocation of the existing Skyline Pump Station above grade equipment in order to facilitate the construction of cycling and pedestrian improvements along Capstan

Way along the south side of Seaside South, together with all sanitary upgrades required with respect to Seaside South and North;

- b) Storm Sewer: All drainage upgrades required with respect to Seaside South and North; and
- c) Water: All water upgrades required with respect to Seaside South and North.

#### **H. Built Form and Architectural Character**

The developer proposes to construct a high-rise, high density, mixed use development and City park on a large site near the future Capstan Canada Line Station and prominent No. 3 Road/Sea Island Way “gateway” to Richmond’s City Centre. As per the CCAP, through the proposed rezoning, the subject site will be subdivided with a new street to create smaller blocks that are more appropriately scaled and configured for pedestrian/transit-oriented urban development. Likewise, the developer’s proposed form of development, which is a combination of articulated streetwall buildings and towers, generally conforms to the CCAP and its Development Permit (DP) Guidelines and is well-suited to the demands and opportunities of the site. In particular, the development has successfully demonstrated:

- a) A strong urban concept providing for a high-density, pedestrian-friendly environment;
- b) Variations in building height and massing contributing towards skyline interest, solar access to usable rooftops, and upper- and mid-level views across the site for residents and neighbours;
- c) A mid-rise building typology that aims to break the streetwall into a series of coordinated, yet distinct, buildings, providing for visually engaging streetscapes, a human scale, and opportunities for interesting community amenity and retail identities at grade; and
- d) Strong public open space and on-site landscape strategies, especially with respect to the proposed riverfront park.

Development Permit (DP) approval to the satisfaction of the Director of Development for the first phase of the subject development (i.e. Seaside South) will be required prior to rezoning adoption. Additional DP applications will be considered on a phase-by-phase basis for the development’s subsequent two phases (i.e. one per phase).

#### **I. Additional Sustainable Development Measures**

The CCAP encourages the coordinated planning of private development and City infrastructure with the aim of advancing opportunities to implement environmentally responsible services. Areas undergoing significant change, such as Capstan Village, are well suited to this endeavour. In light of this, staff recommend and the developer has agreed to the following:

- a) District Energy Utility (DEU): The developer will design and construct 100% of the subject development to facilitate its connection to a DEU system. (The utility will be constructed by others).
- b) Leadership in Energy and Environmental Design (LEED): The CCAP requires that all rezoning applications greater than 2,000.0 m<sup>2</sup> (21,527.8 ft<sup>2</sup>) in size demonstrate compliance with LEED Silver (equivalency) or better, paying particular attention to features significant to Richmond (e.g., green roofs, urban agriculture, DEU, storm water management/quality). The developer has agreed to comply with this policy and will demonstrate this on a phase-by-

phase basis through the City's standard Development Permit and Servicing Agreement design and approval processes.

- c) Flood Management Strategy: The CCAP encourages measures that will enhance the ability of developments to respond to flood plain management objectives and adapt to the effects of climate change (e.g., sea level rise). To this end, the Plan encourages City Centre developers to build to the City's recommended Flood Construction Level of 2.9 m (9.5 ft) GSC and minimize exemptions, wherever practical. The developer has agreed to comply and, in addition, proposes to raise the grade along the north side of Capstan Way, adjacent to Seaview, to facilitate improved dike connections for the public and City operations.
- d) Aircraft Noise Sensitive Development (ANSD): The subject site is situated within ANSD "Area 3", which permits all ANSD uses (i.e. residential, child care, hospital, and school) provided that a restrictive covenant is registered on title and appropriate noise attenuation measures are implemented. The required covenant(s) will be registered prior to rezoning adoption, and other requirements will be satisfied prior to Development Permit and Building Permit issuance, as required.
- e) Accessible Housing: Richmond's OCP seeks to meet the needs of the city's aging population and people facing mobility challenges by encouraging the development of accessible housing that can be approached, entered, used, and occupied by persons with physical or sensory disabilities. To address the City's policy, 100% of the development's affordable housing units will be designed to comply with Richmond's Basic Universal Housing (BUH) standards. In addition, through the phase-by-phase Development Permit review and approval processes, staff will work with the developer to ensure that additional BUH units are provided, together with, among other things, barrier-free access to all building lobbies and amenities and aging in place features in all dwellings.

### **Financial Impact or Economic Impact**

- a) Community Centre: Acceptance of the developer's proposed voluntary amenity contribution will provide the City with a two-storey, 3,106.6 m<sup>2</sup> (33,439.0 ft<sup>2</sup>) community centre. As with any facility development, there are typical costs associated with the program, including operating budget impacts and furnishings, fixtures and equipment (FF&E). Estimates for these costs are identified below, but are not part of the developer's amenity contribution. If the proposed amenity contribution is approved, the costs for a community centre of this size are expected to be as follows:
  - Capital budget for FF&E is estimated to be between \$875,000 and \$1,311,000 (in 2019 dollars) to be considered during the annual capital budget process.
  - The Tenant Improvement portion of the community centre is protected with an allowance of \$308.30/ft<sup>2</sup> based on the City's current scope needs and predicted cost escalation to 2020. Staff believe that this is a suitable allowance and do not anticipate the need for any further funding. Should cost escalation be higher than what is predicted and/or there are scope changes to the Tenant Improvement needs, there may be a future request for additional funding, which would be presented to Council at the appropriate time.
  - Preliminary operating budget impact of approximately \$1,420,000 (in 2019 dollars), which will be subject to Council approval during the annual budget process and accompanied by a business plan for the facility; consideration could be given in the

business plan for phasing in of operations. An OBI of this amount results in an approximately 0.65% tax impact.

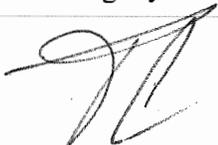
- b) Park: The anticipated operating budget impact for the ongoing maintenance of the proposed park is \$43,790. This will be considered as part of future operating budgets.
- c) Engineering: As a result of the proposed development, the City will take ownership of developer contributed assets such as road works, waterworks, storm sewers, sanitary sewers, street lights, street trees and traffic signals. The anticipated operating budget impact for the ongoing maintenance of these assets is \$47,000.00. This will be considered as part of the 2018 Operating budget.

### Conclusion

YuanHeng Seaview Developments Ltd & YuanHeng Seaside Developments Ltd have applied to rezone a 3.29 ha (8.12 ac) site in Capstan Village to a site specific zone, "Residential / Limited Commercial and Community Amenity (ZMU30) – Capstan Village (City Centre) (ZMU30)", and "School and Institutional Use (SI)" to permit the construction of a three-phase, high density, high-rise development with a total floor area of 113,131.8 m<sup>2</sup> (1,217,740.7 ft<sup>2</sup>). To facilitate the subject development, the applicant has proposed to amend the OCP and CCAP to permit 25,972.2 m<sup>2</sup> (279,562.4 ft<sup>2</sup>) of additional residential floor area, together with a new 4,276.6 m<sup>2</sup> (1.06 ac) City-owned riverfront park and a 3,106.6 m<sup>2</sup> (33,439.0 ft<sup>2</sup>) community centre, designed and constructed at the developer's sole cost.

An analysis of the developer's proposal shows it to be well designed and capable of attractively accommodating the increased floor area and community centre program requirements, while complying with the intent of the CCAP Development Permit Guidelines and related objectives for urban design, livability, public open space, and other considerations. Furthermore, a new community centre is much needed in the Capstan Village area, where it will be well located to meet the needs, today and in the future, of local residents and the West Cambie and Sea Island communities.

On this basis, it is recommended that Official Community Plan Amendment Bylaw 9593 and Zoning Bylaw 8500, Amendment Bylaw 9594, be introduced and given first reading.



Terry Crowe  
Manager, Policy Planning



Suzanne Carter-Huffman  
Senior Planner/Urban Design

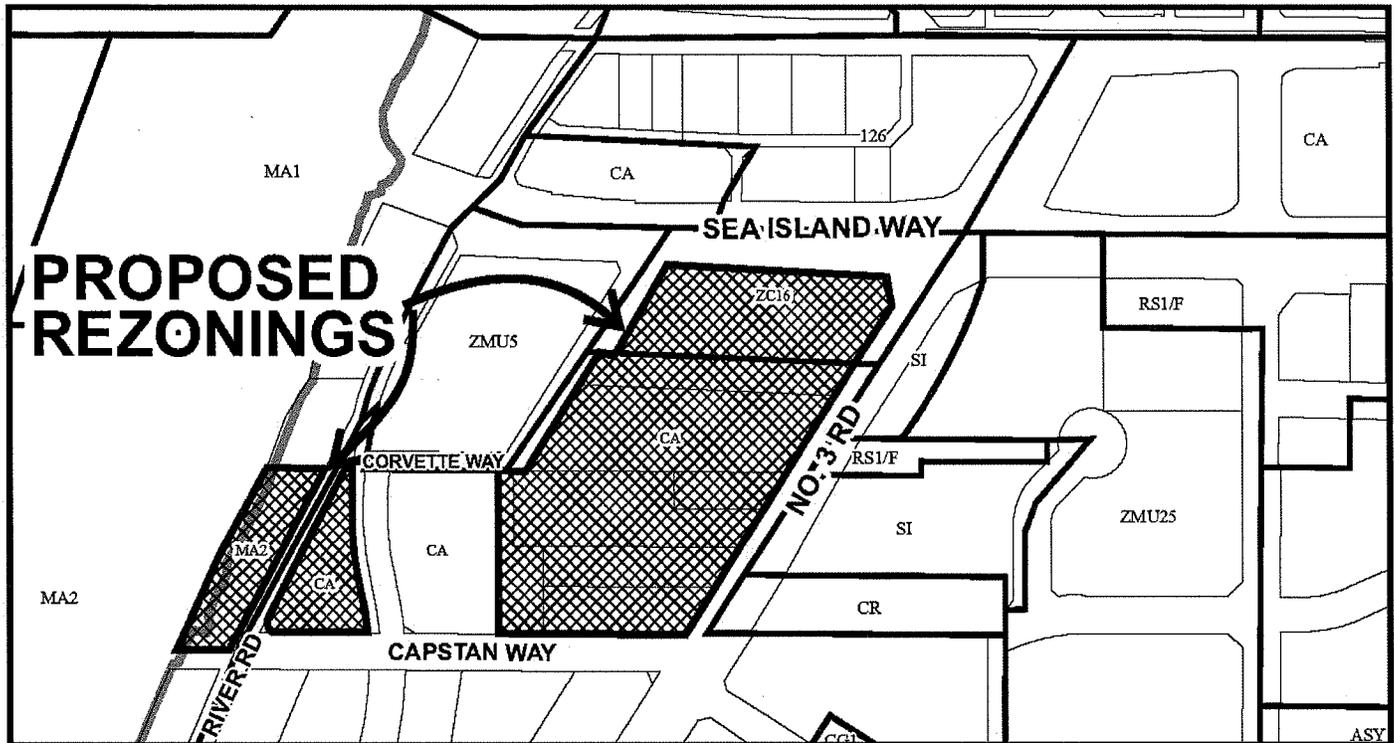
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#### Attachments:

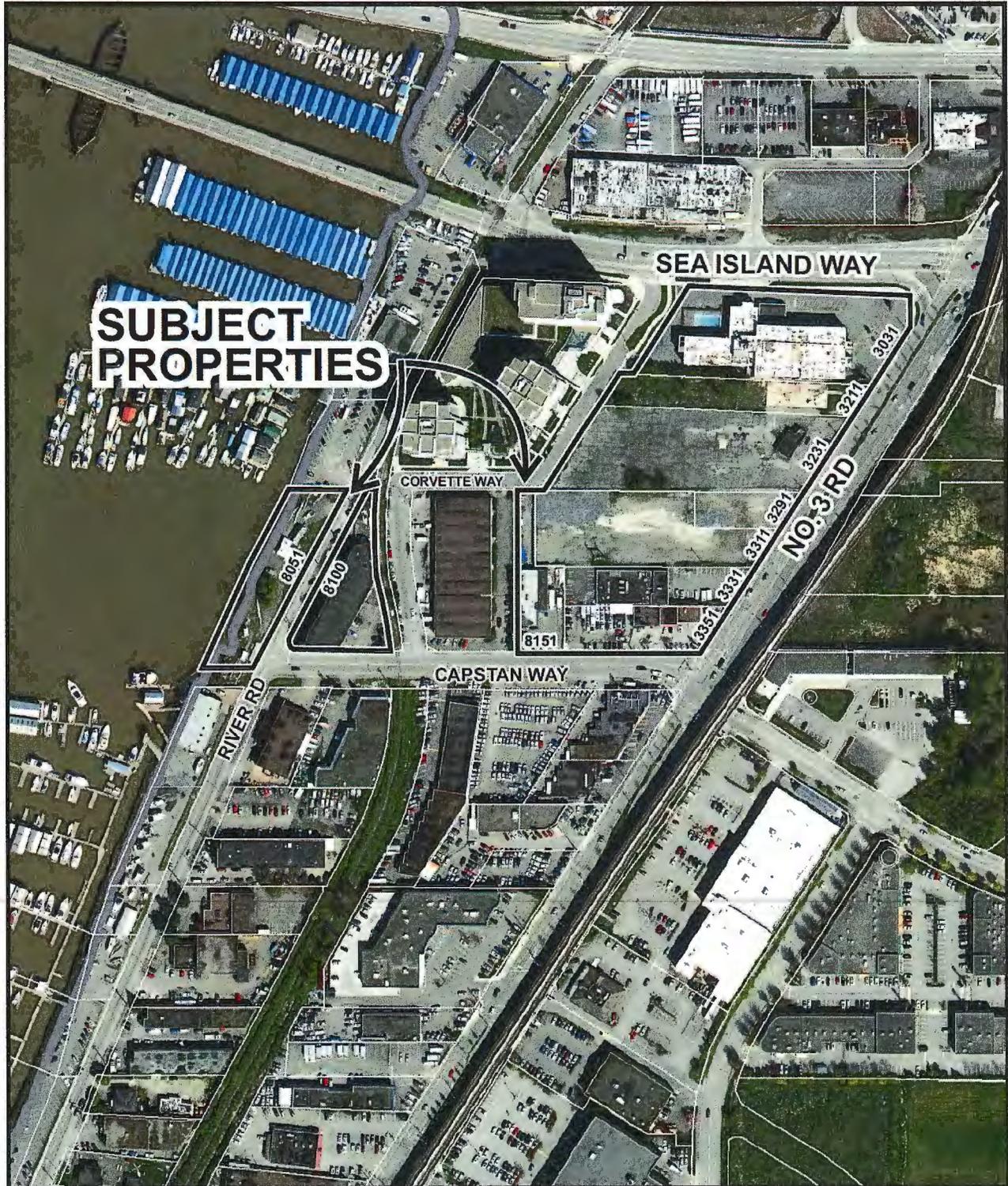
- 1) Location Map
- 2) Aerial Photograph
- 3) City Centre Area Plan (CCAP) Specific Land Use Map: Capstan Village (2031)
- 4) Key Plan
- 5) Development Application Data Sheet
- 6) Conceptual Development Plans

7) Rezoning Considerations

- Schedule A – Preliminary Subdivision Plan
- Schedule B – Preliminary Statutory Right-of-Way Plan
- Schedule C – Capstan Station Bonus – Public Open Space (Fee Simple, Dedication & SRW) Location Map
- Schedule D – Phasing Key Plan
- Schedule E – Preliminary Functional Roads Plan (REDMS #564211 & 564212)
- Schedule F – Community Centre Terms of Reference (REDMS #5163571)
- Schedule G – Community Centre Conceptual Plan (REDMS #5166710)
- Schedule H – YuanHeng Riverfront Park Conceptual Plan



	<p>RZ 12-603040</p>	 <p>City of Richmond</p>
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RZ 12-603040

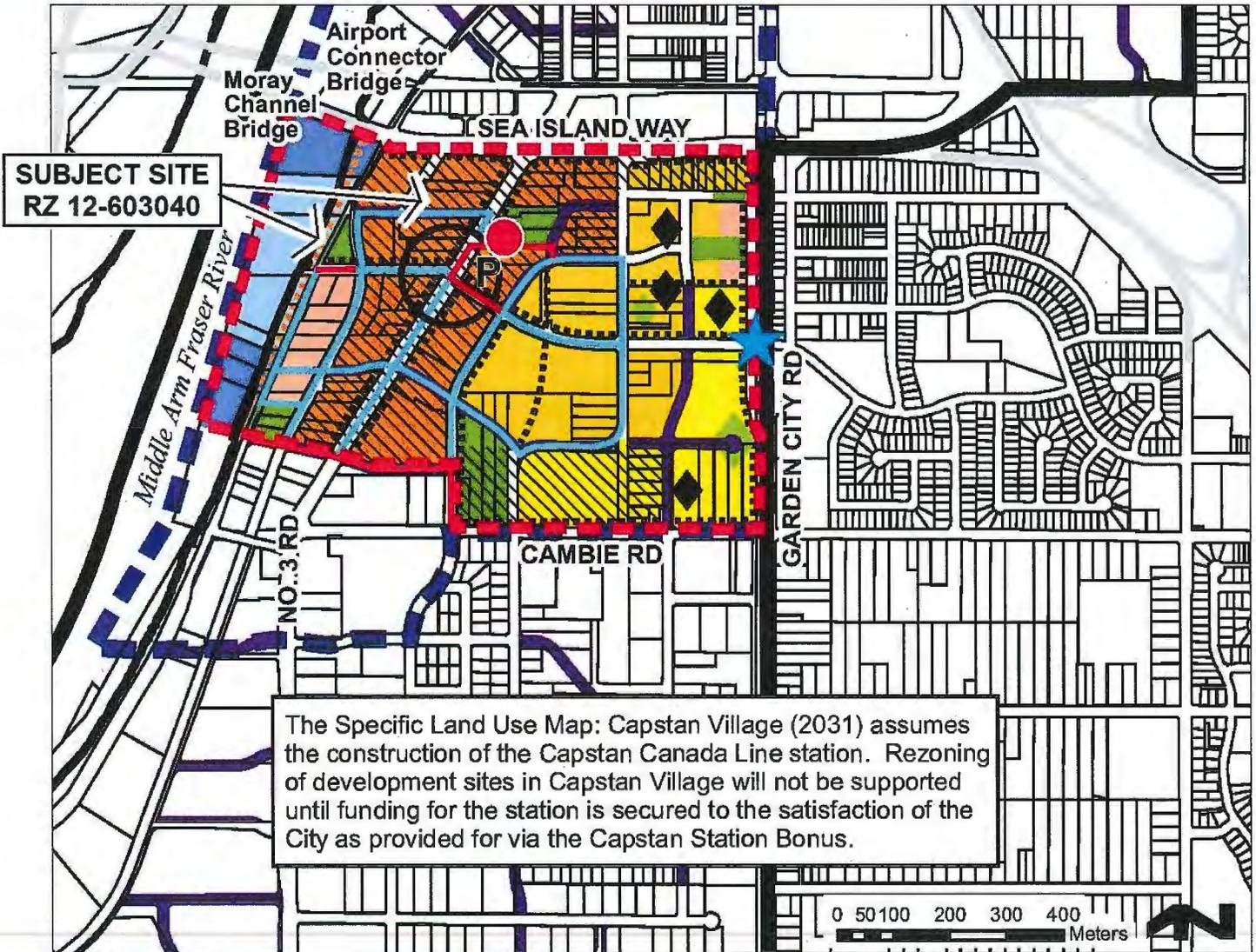
Original Date: 03/29/12

Amended Date: 08/02/16

Note: Dimensions are in METRES

Specific Land Use Map: Capstan Village (2031)

Bylaw 9041  
2016/07/25



The Specific Land Use Map: Capstan Village (2031) assumes the construction of the Capstan Canada Line station. Rezoning of development sites in Capstan Village will not be supported until funding for the station is secured to the satisfaction of the City as provided for via the Capstan Station Bonus.

	General Urban T4 (25m)		Marina (Residential Prohibited)		Proposed Streets
	Urban Centre T5 (45m)		Marina (Waterborne Residential Permitted)		Pedestrian-Oriented Retail Precincts-High Street & Linkages
	Urban Centre T5 (35m)		Village Centre Bonus		Pedestrian-Oriented Retail Precincts-Secondary Retail Streets & Linkages
	Urban Centre T5 (25m)		Institution		Richmond Arts District
	Park		Pedestrian Linkages		Capstan Station Bonus
	Park-Configuration & location to be determined		Enhanced Pedestrian & Cyclist Crossing		Canada Line Station
	Village Centre: No. 3 Road & Capstan Way Intersection				Transit Plaza





**RZ 12-603040**

Address: 3031, 3211, 3231, 3291, 3311, 3331, 3351 No 3 Road, 8151 Capstan Way & 8051 and 8100 River Road

Applicant: YuanHeng Seaview Developments Ltd & YuanHeng Seaside Developments Ltd

Planning Area(s): City Centre (Capstan Village)

	<b>Existing</b>	<b>Proposed</b>
<b>Owner</b>	<ul style="list-style-type: none"> <li>YuanHeng Seaview Developments</li> <li>YuanHeng Seaside Developments</li> </ul>	<ul style="list-style-type: none"> <li>YuanHeng Seaview Developments</li> <li>YuanHeng Seaside Developments</li> <li>City of Richmond</li> </ul>
<b>Site Size</b>	<ul style="list-style-type: none"> <li>32,871.0 m<sup>2</sup> (8.12 ac)</li> </ul>	<ul style="list-style-type: none"> <li>24,643.0 m<sup>2</sup> (265,255.0 ft<sup>2</sup>), excluding the proposed park</li> </ul>
<b>Land Uses</b>	<ul style="list-style-type: none"> <li>Vacant</li> </ul>	<ul style="list-style-type: none"> <li>High density, high-rise, mixed use &amp; multi-family development &amp; park</li> </ul>
<b>OCP Designation</b>	<ul style="list-style-type: none"> <li>Mixed Use &amp; Park</li> </ul>	<ul style="list-style-type: none"> <li>Mixed Use &amp; Park (Revised locations)</li> </ul>
<b>City Centre Area Plan (CCAP) Designation</b>	<ul style="list-style-type: none"> <li>Capstan Station Bonus</li> <li>Urban Centre T5 (45 m)</li> <li>Village Centre Bonus</li> <li>Pedestrian-Oriented Retail Precincts</li> <li>Waterfront Dike Trail</li> <li>Pedestrian Linkage</li> <li>Proposed Street</li> <li>Park</li> <li>Marina</li> </ul>	<p>As existing, EXCEPT:</p> <ul style="list-style-type: none"> <li>Marina is replaced with Park</li> <li>Park is replaced with Urban Centre T5 (45 m)</li> <li>Institution (bonus) is added</li> </ul>
<b>Zoning</b>	<ul style="list-style-type: none"> <li>Auto-Oriented Commercial (CA)</li> <li>Marina (MA2)</li> <li>Hotel Commercial (ZC160 – Capstan Village (City Centre))</li> </ul>	<ul style="list-style-type: none"> <li>Residential / Limited Commercial and Community Amenity (ZMU30) – Capstan Village (City Centre) (ZMU30)</li> <li>School &amp; Institutional Use (SI)</li> </ul>
<b>Number of Units</b>	<ul style="list-style-type: none"> <li>Nil</li> </ul>	<ul style="list-style-type: none"> <li>Max. 850 (as per the proposed ZMU30 zone)</li> </ul>
<b>Aircraft Noise Sensitive Development (ANSD) Policy</b>	<ul style="list-style-type: none"> <li>Moderate Aircraft Noise "Area 3" – All uses may be considered. (Covenant, acoustic report, noise mitigation, mechanical ventilation, air conditioning capacity, etc. required.)</li> </ul>	<ul style="list-style-type: none"> <li>As required</li> </ul>

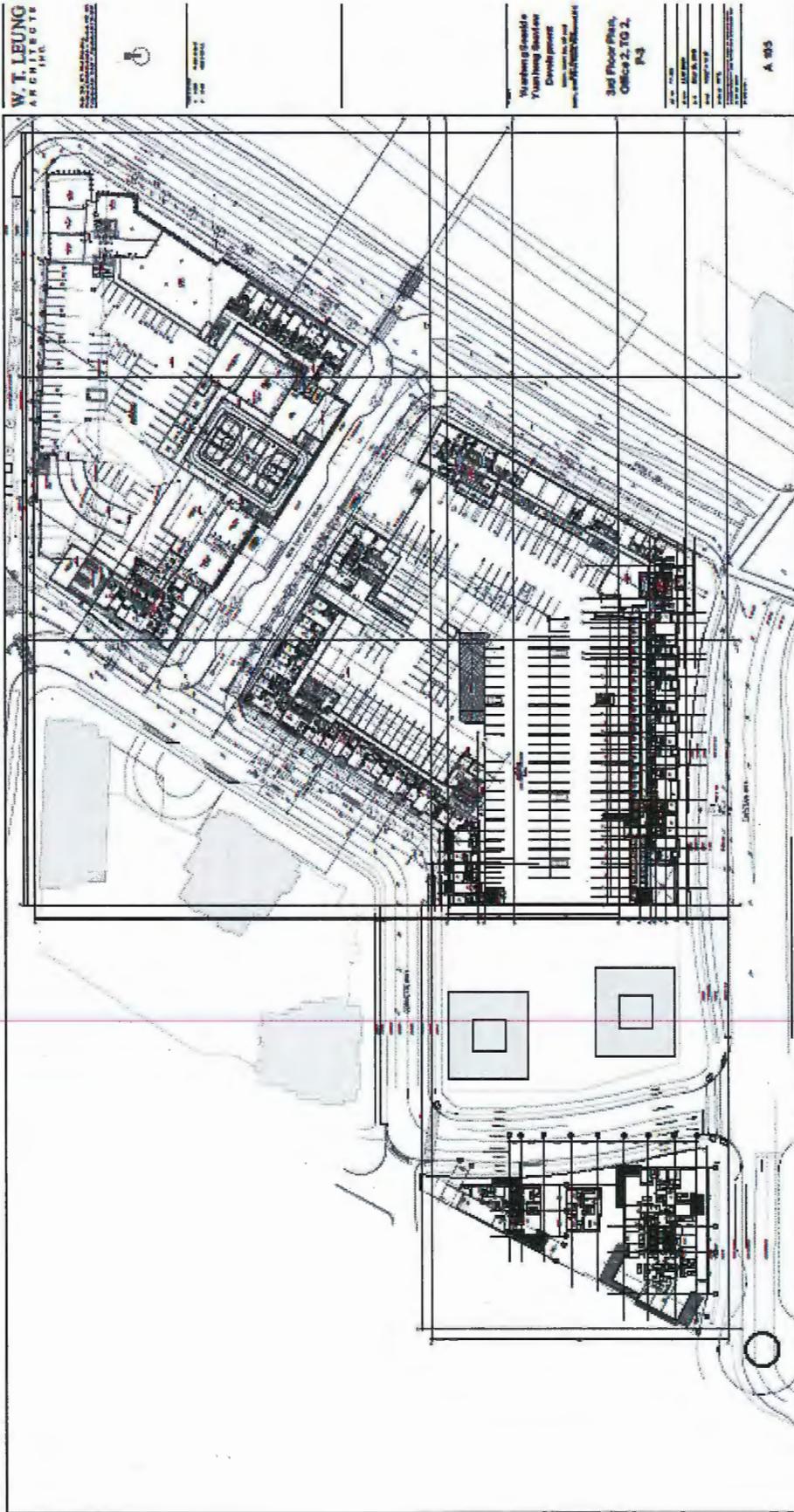
<b>On Future Subdivided Lots</b>	<b>Proposed ZMU30 Zone</b>	<b>Proposed</b>	<b>Variance</b>
Buildable Floor Area (max.)	<ul style="list-style-type: none"> <li>Area A: 57,108.8 m<sup>2</sup> (614,713.8 ft<sup>2</sup>)</li> <li>Area B: 43,179.8 m<sup>2</sup> (464,783.7 ft<sup>2</sup>)</li> <li>Area C: 12,843.2 m<sup>2</sup> (138,243.2 ft<sup>2</sup>)</li> </ul>	<ul style="list-style-type: none"> <li>As permitted</li> </ul>	None permitted
Lot Coverage (max.)	<ul style="list-style-type: none"> <li>Building: 90%</li> </ul>	<ul style="list-style-type: none"> <li>As permitted</li> </ul>	None
Lot Size (min.)	<ul style="list-style-type: none"> <li>Area A: 13,202.0 m<sup>2</sup> (142,105.1 ft<sup>2</sup>)</li> <li>Area B: 9,177.0 m<sup>2</sup> (98,780.4 ft<sup>2</sup>)</li> <li>Area C: 2,264.0 m<sup>2</sup> (24,369.5 ft<sup>2</sup>)</li> </ul>	<ul style="list-style-type: none"> <li>As permitted</li> </ul>	None

On Future Subdivided Lots	Proposed ZMU30 Zone	Proposed	Variance
Setbacks (min.)	<ul style="list-style-type: none"> <li>▪ Residential @ Sea Island Way: 20.0 m (66 ft)</li> <li>▪ Road &amp; Park: Min. 3.0 m (10 ft), but may be reduced if proper interfaces are provided</li> <li>▪ Interior Side: Nil</li> <li>▪ Parts of the building below finished grade: Nil</li> </ul>	<ul style="list-style-type: none"> <li>▪ As permitted</li> </ul>	None
Height (max.)	<ul style="list-style-type: none"> <li>▪ 47 m (154 ft) GSC</li> </ul>	<ul style="list-style-type: none"> <li>▪ As permitted</li> </ul>	None
Off-street Parking Rates with TDM Measures Applied	<ul style="list-style-type: none"> <li>▪ Community Centre: 74, including 20 shared with non-residential uses</li> <li>▪ Commercial (first 2 floors): 3.375 spaces/100 m<sup>2</sup> gla</li> <li>▪ Office (above 2<sup>nd</sup> floor): 1.1475 spaces/100 m<sup>2</sup> gla</li> <li>▪ Other commercial uses above the 2<sup>nd</sup> floor: As per Parking Zone 1 (No TDM reduction applies)</li> <li>▪ Affordable Housing: 0.81 spaces/unit</li> <li>▪ Market Housing: 1.0 space/unit</li> <li>▪ Residential Visitors: 0.18 spaces/unit, but may be reduced by sharing with commercial on Areas A &amp; B</li> </ul>	<ul style="list-style-type: none"> <li>▪ As permitted</li> </ul>	None
Off-Street Parking – Total	<ul style="list-style-type: none"> <li>▪ Seaside South: 663 min.</li> <li>▪ Seaside North: 485 min.</li> <li>▪ Seaview: 65 min.</li> <li>▪ Total: 1,213 min.</li> </ul>	<ul style="list-style-type: none"> <li>▪ As required</li> </ul>	None
Tandem Parking Spaces	<ul style="list-style-type: none"> <li>▪ Permitted for residential uses only</li> </ul>	<ul style="list-style-type: none"> <li>▪ Nil</li> </ul>	None
Off-Street Loading	<ul style="list-style-type: none"> <li>▪ Area A: 4 medium-size trucks</li> <li>▪ Area B: 4 medium-size trucks</li> <li>▪ Area C: 1 medium-size truck</li> </ul>	<ul style="list-style-type: none"> <li>▪ As required</li> </ul>	None
CCAP Indoor Amenity Space (min.)	<ul style="list-style-type: none"> <li>▪ 2.0 m<sup>2</sup>/dwelling</li> <li>▪ 1,700 m<sup>2</sup> (18,299 ft<sup>2</sup>) based on 850 dwellings</li> </ul>	<ul style="list-style-type: none"> <li>▪ As required</li> </ul>	None
OCP Outdoor Amenity Space (min.)	<ul style="list-style-type: none"> <li>▪ 6.0 m<sup>2</sup>/dwelling</li> <li>▪ 5,100 m<sup>2</sup> (1.26 ac) based on 850 dwellings</li> </ul>	<ul style="list-style-type: none"> <li>▪ As required</li> </ul>	None
CCAP Outdoor Amenity Space (min.)	<ul style="list-style-type: none"> <li>▪ CCAP: 10% of net site</li> <li>▪ 2,464.3 m<sup>2</sup> (26,525.5 ft<sup>2</sup>)</li> </ul>	<ul style="list-style-type: none"> <li>▪ As required</li> </ul>	None
Capstan Station Bonus – Public Open Space (min.)	<ul style="list-style-type: none"> <li>▪ 5.0 m<sup>2</sup>/dwelling</li> <li>▪ 4,250 m<sup>2</sup> (1.05 ac) based on 850 dwellings</li> </ul>	<ul style="list-style-type: none"> <li>▪ As required</li> </ul>	None

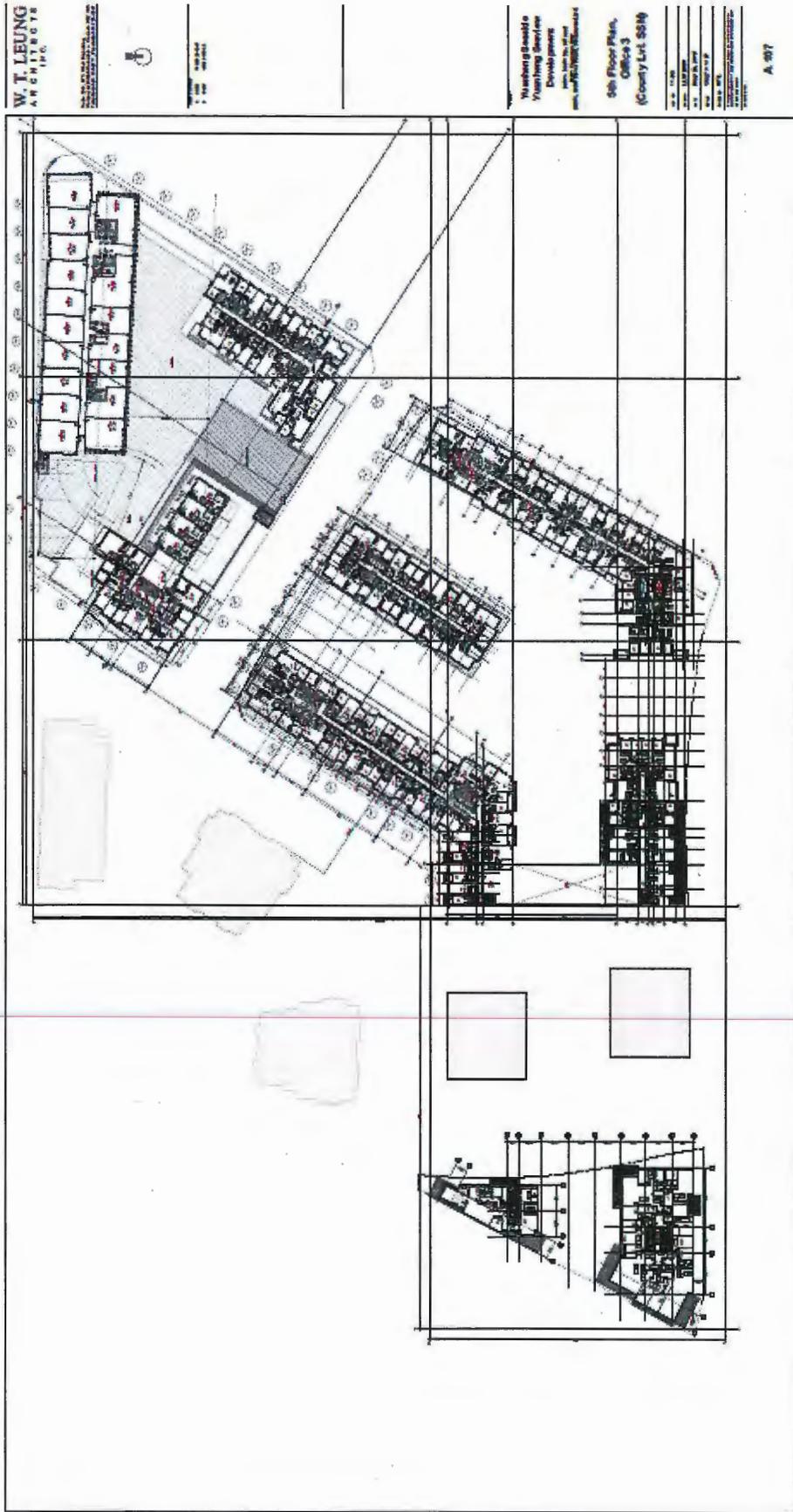








PLN - 53



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www.wtleung.com



1/8" = 1'-0"

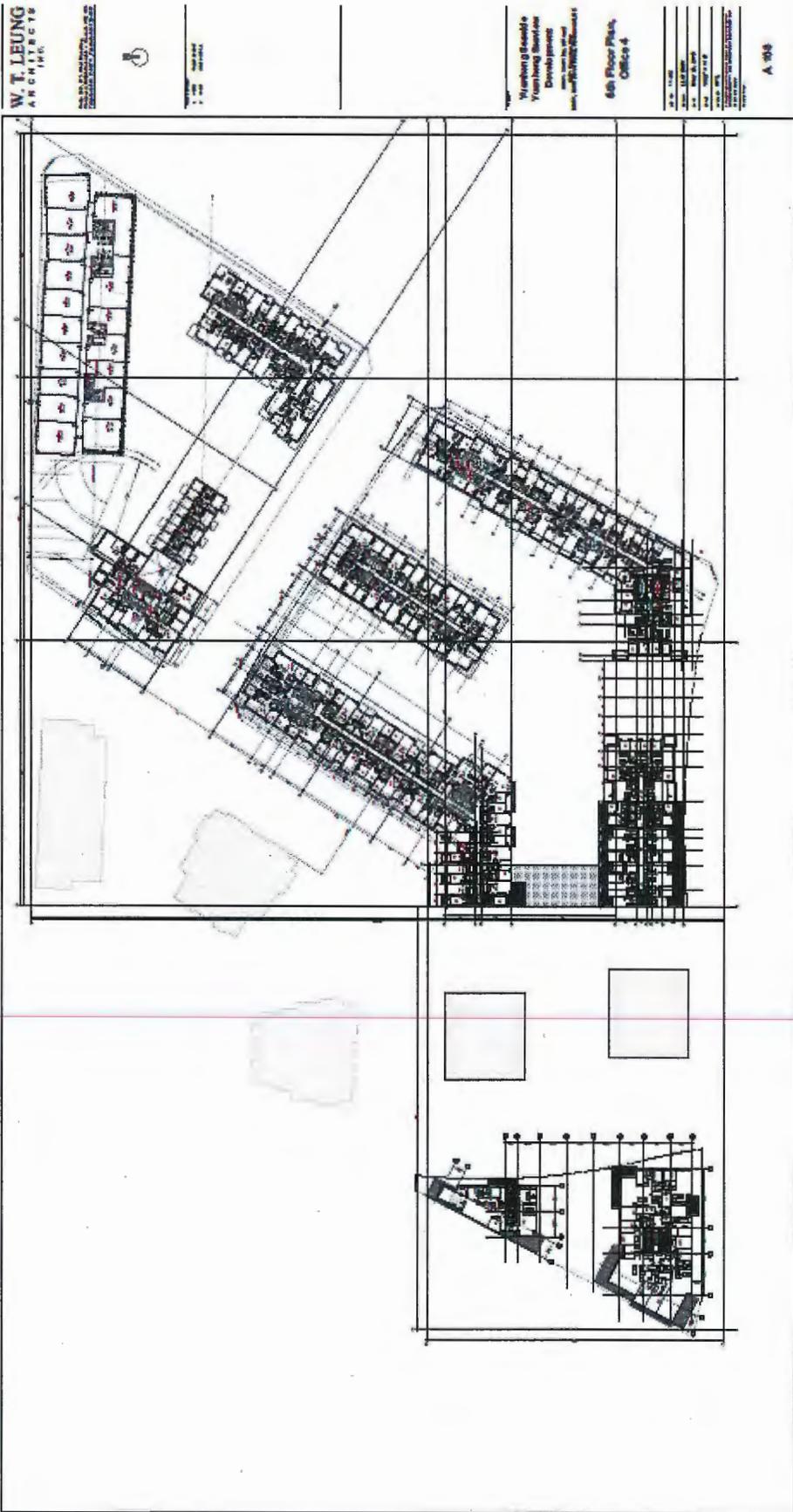
Wuhsberg & Buehler  
Vignelli Group  
Daywide partners  
www.wuhsberg.com

6th Floor Plan,  
Office 3  
(County Lot 8818)

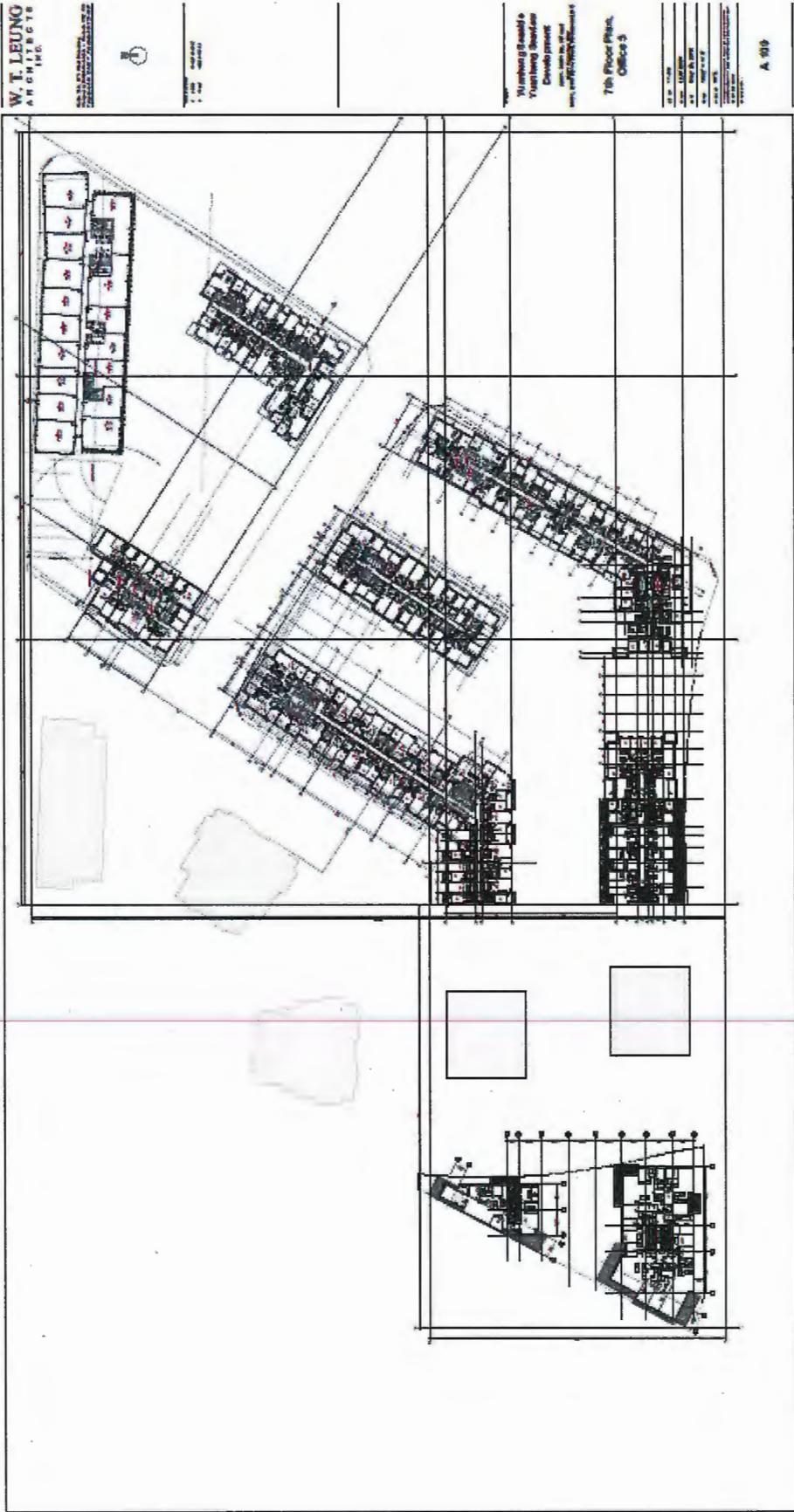
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BY	WTL
CHK	WTL
APP	WTL
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PROJECT	1000 West Broadway, Suite 200
OWNER	Wuhsberg & Buehler
ARCHITECT	W. T. Leung Architects, Inc.
DATE	11/11/08

A-017

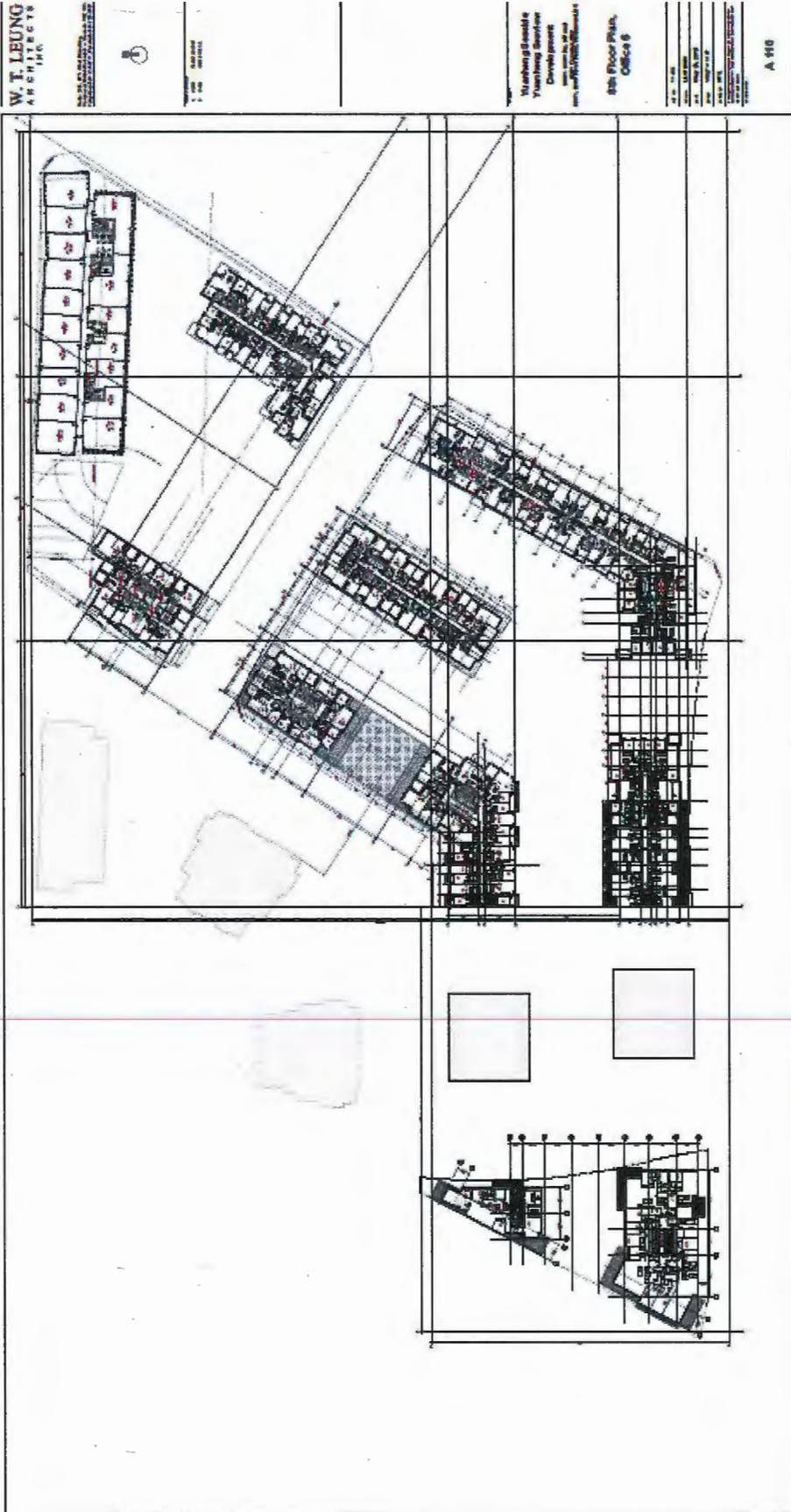
PLN - 54



PLN - 55

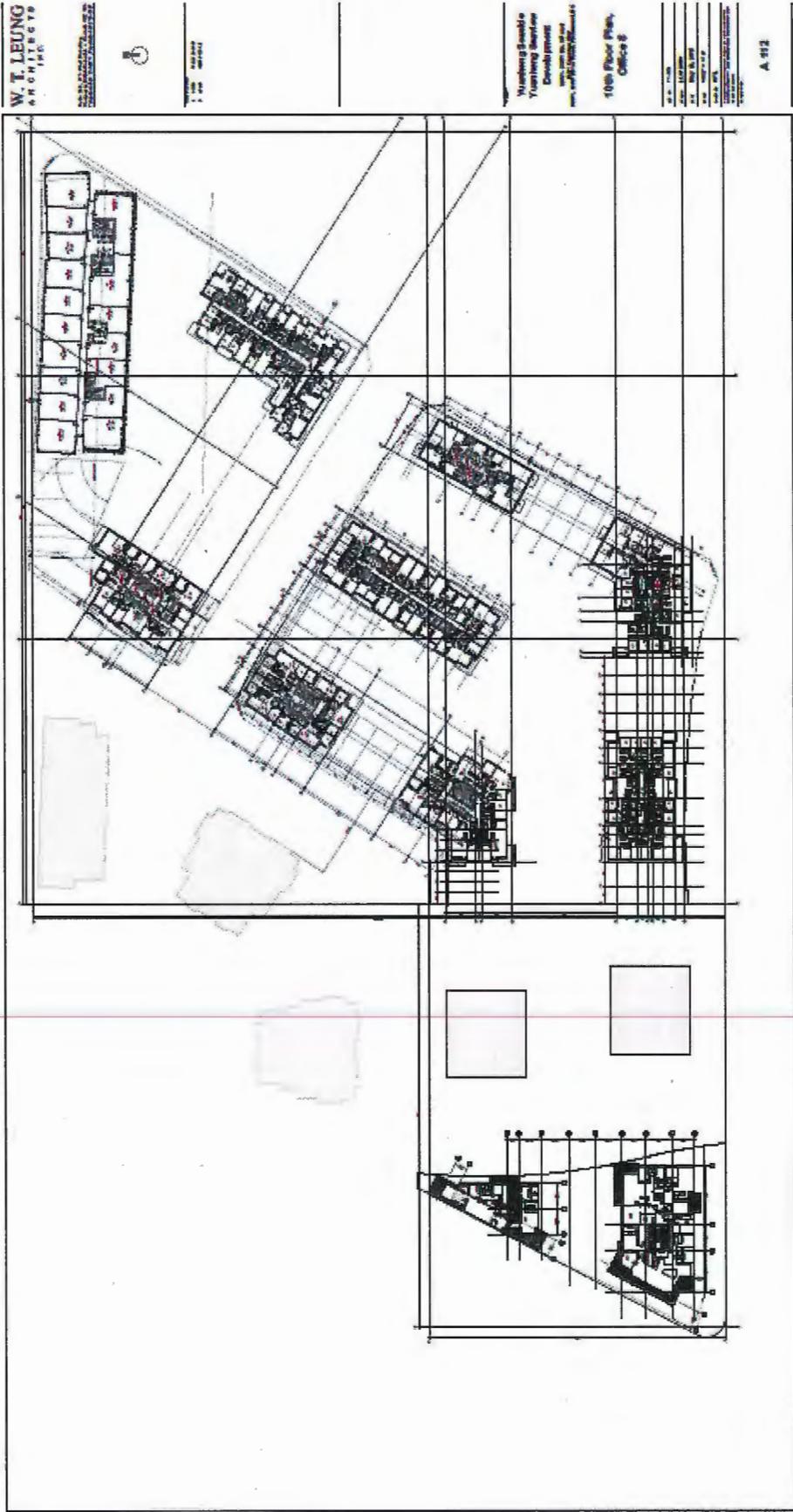


PLN - 56



PLN - 57





W. T. LEUNG  
ARCHITECTS  
INC.

1000 BAYVIEW  
SUITE 1000  
VICTORIA, B.C. V8W 2E2  
TEL: (250) 383-8888  
FAX: (250) 383-8889  
WWW.WTLEUNG.COM



1:100

Working & Sealed  
Final & Sealed  
Date Issued  
Date of Issue  
Date of Revision

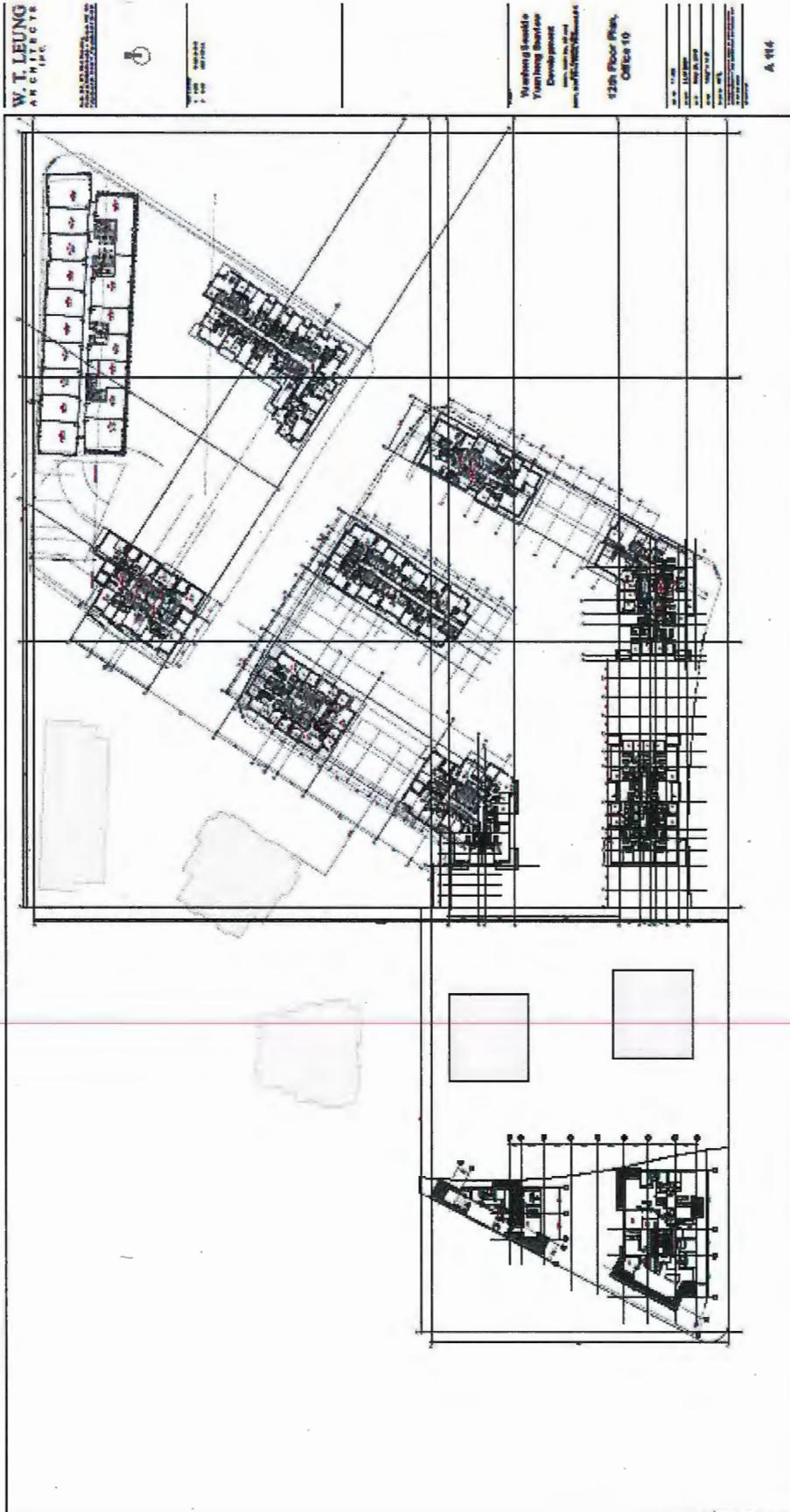
10th Floor Plan,  
Office 8

NO.	DATE
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3	10/10/08
4	10/10/08
5	10/10/08
6	10/10/08
7	10/10/08
8	10/10/08
9	10/10/08
10	10/10/08

A 112

PLN - 59





PLN - 61



W. T. LEUNG  
ARCHITECTS  
INC.

1000 10th Street  
San Francisco, CA 94103  
Tel: 415.774.8888  
Fax: 415.774.8889  
www.wtleung.com



1:100  
DATE: 10/10/01

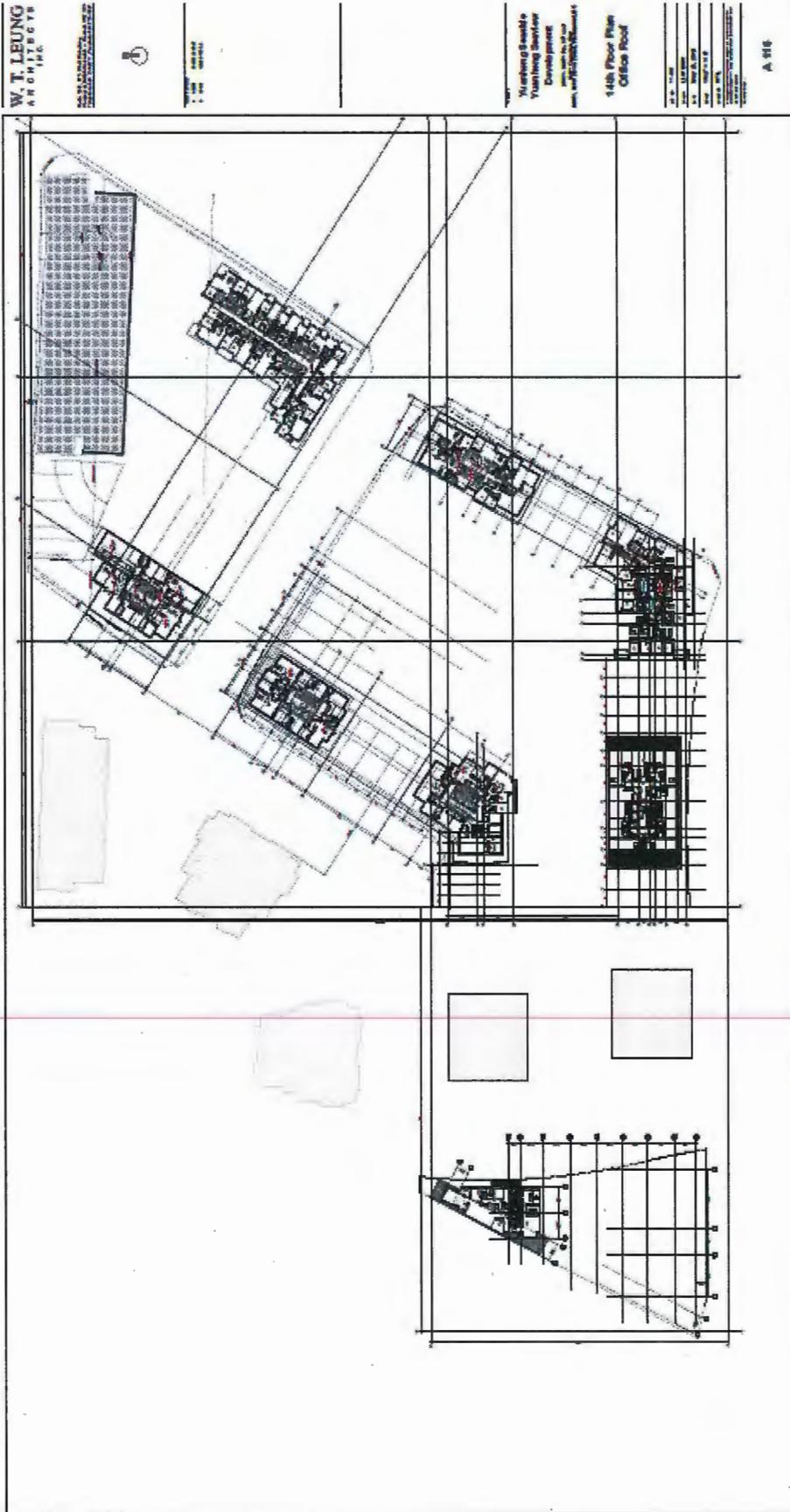
Washington Building  
Washington Building  
Detailed ground  
plan, showing all  
columns and beams

11th Floor Plan,  
Office 11

DATE: 10/10/01
BY: W. T. LEUNG
CHK: W. T. LEUNG
APP: W. T. LEUNG
SCALE: 1:100
PROJECT: 11th Floor Plan, Office 11
NO. OF SHEETS: 1
SHEET NO.: 1

A 115

PLN - 62



W. T. LEUNG  
ARCHITECTS

100, 102, 104, 106, 108, 110, 112, 114, 116, 118, 120, 122, 124, 126, 128, 130, 132, 134, 136, 138, 140, 142, 144, 146, 148, 150, 152, 154, 156, 158, 160, 162, 164, 166, 168, 170, 172, 174, 176, 178, 180, 182, 184, 186, 188, 190, 192, 194, 196, 198, 200, 202, 204, 206, 208, 210, 212, 214, 216, 218, 220, 222, 224, 226, 228, 230, 232, 234, 236, 238, 240, 242, 244, 246, 248, 250, 252, 254, 256, 258, 260, 262, 264, 266, 268, 270, 272, 274, 276, 278, 280, 282, 284, 286, 288, 290, 292, 294, 296, 298, 300, 302, 304, 306, 308, 310, 312, 314, 316, 318, 320, 322, 324, 326, 328, 330, 332, 334, 336, 338, 340, 342, 344, 346, 348, 350, 352, 354, 356, 358, 360, 362, 364, 366, 368, 370, 372, 374, 376, 378, 380, 382, 384, 386, 388, 390, 392, 394, 396, 398, 400, 402, 404, 406, 408, 410, 412, 414, 416, 418, 420, 422, 424, 426, 428, 430, 432, 434, 436, 438, 440, 442, 444, 446, 448, 450, 452, 454, 456, 458, 460, 462, 464, 466, 468, 470, 472, 474, 476, 478, 480, 482, 484, 486, 488, 490, 492, 494, 496, 498, 500, 502, 504, 506, 508, 510, 512, 514, 516, 518, 520, 522, 524, 526, 528, 530, 532, 534, 536, 538, 540, 542, 544, 546, 548, 550, 552, 554, 556, 558, 560, 562, 564, 566, 568, 570, 572, 574, 576, 578, 580, 582, 584, 586, 588, 590, 592, 594, 596, 598, 600, 602, 604, 606, 608, 610, 612, 614, 616, 618, 620, 622, 624, 626, 628, 630, 632, 634, 636, 638, 640, 642, 644, 646, 648, 650, 652, 654, 656, 658, 660, 662, 664, 666, 668, 670, 672, 674, 676, 678, 680, 682, 684, 686, 688, 690, 692, 694, 696, 698, 700, 702, 704, 706, 708, 710, 712, 714, 716, 718, 720, 722, 724, 726, 728, 730, 732, 734, 736, 738, 740, 742, 744, 746, 748, 750, 752, 754, 756, 758, 760, 762, 764, 766, 768, 770, 772, 774, 776, 778, 780, 782, 784, 786, 788, 790, 792, 794, 796, 798, 800, 802, 804, 806, 808, 810, 812, 814, 816, 818, 820, 822, 824, 826, 828, 830, 832, 834, 836, 838, 840, 842, 844, 846, 848, 850, 852, 854, 856, 858, 860, 862, 864, 866, 868, 870, 872, 874, 876, 878, 880, 882, 884, 886, 888, 890, 892, 894, 896, 898, 900, 902, 904, 906, 908, 910, 912, 914, 916, 918, 920, 922, 924, 926, 928, 930, 932, 934, 936, 938, 940, 942, 944, 946, 948, 950, 952, 954, 956, 958, 960, 962, 964, 966, 968, 970, 972, 974, 976, 978, 980, 982, 984, 986, 988, 990, 992, 994, 996, 998, 1000



1. See sheet

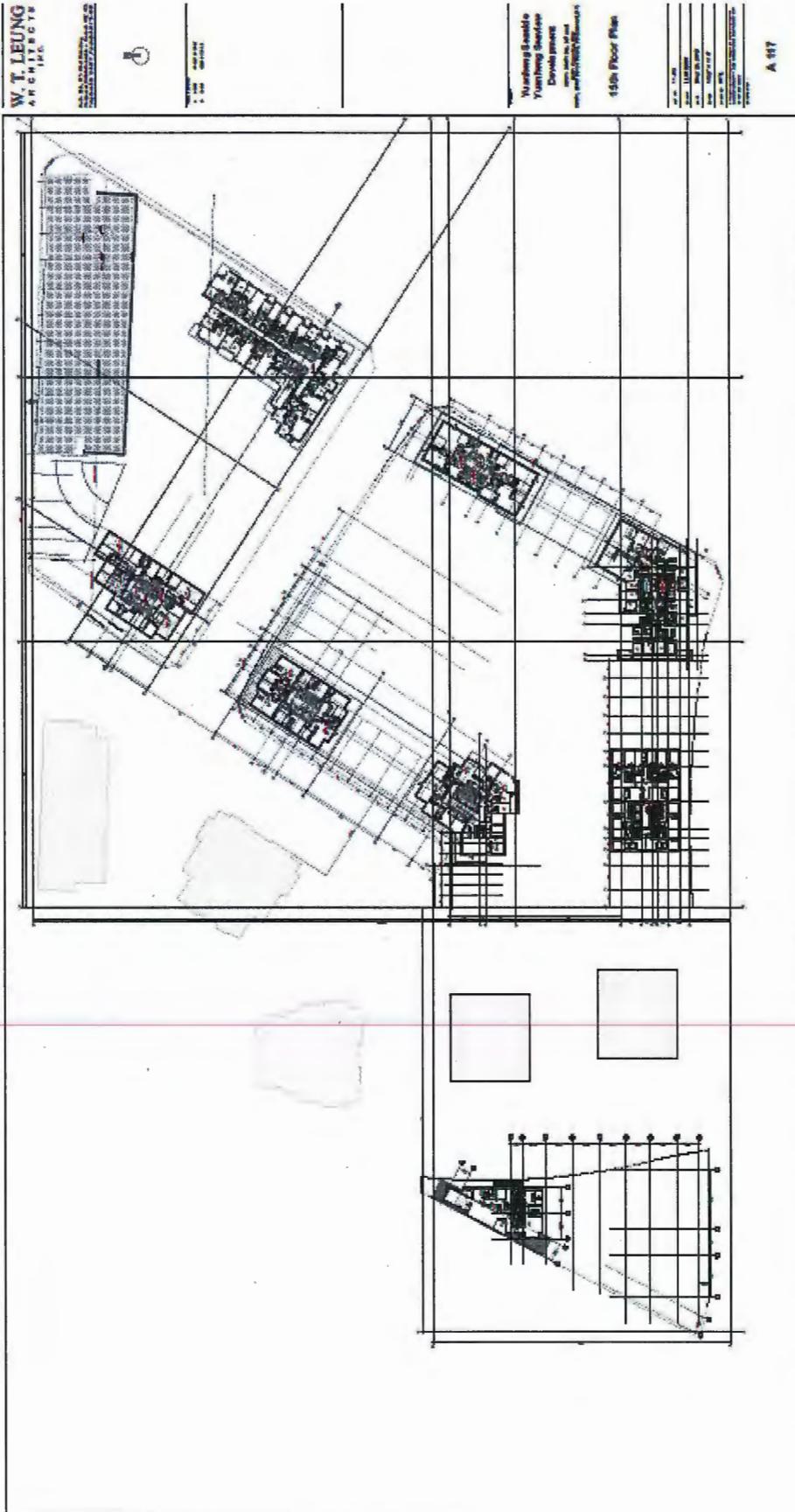
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Drawing Scale:  
Drawing Date:  
Drawing No.:

14th Floor Plan  
Office Roof

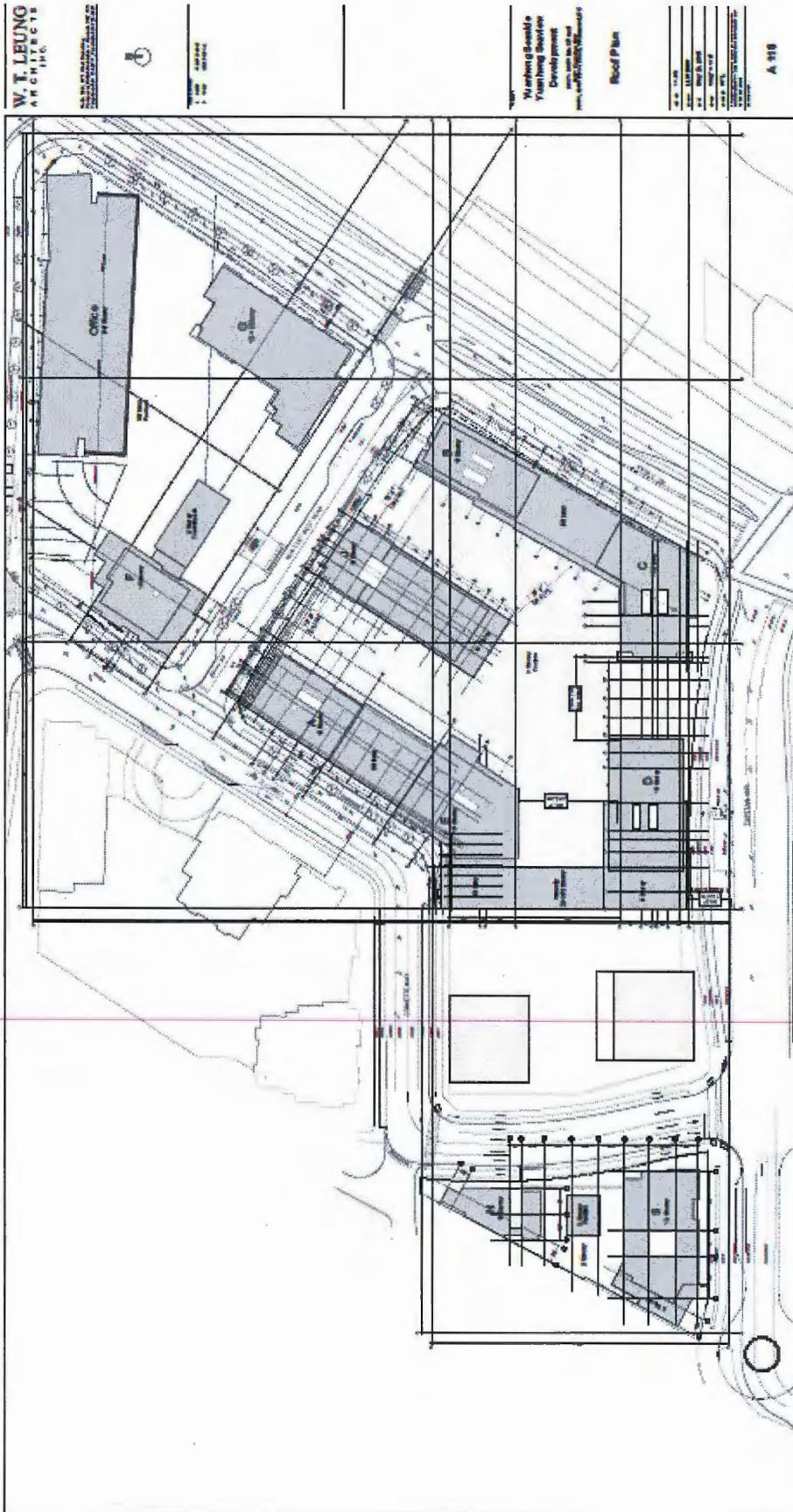
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BY	W.T.L.
CHECKED	W.T.L.
SCALE	1/1
PROJECT	14th Floor Plan Office Roof
NO.	1401
DATE	1/1/00
BY	W.T.L.
CHECKED	W.T.L.
SCALE	1/1
PROJECT	14th Floor Plan Office Roof
NO.	1401

A 116

PLN - 63



PLN - 64



W. T. LEUNG  
ARCHITECTS

1000 EAST 10TH AVENUE  
SUITE 1000  
DENVER, CO 80202  
TEL: 303.733.1111  
WWW.WTLEUNG.COM



1" = 100'

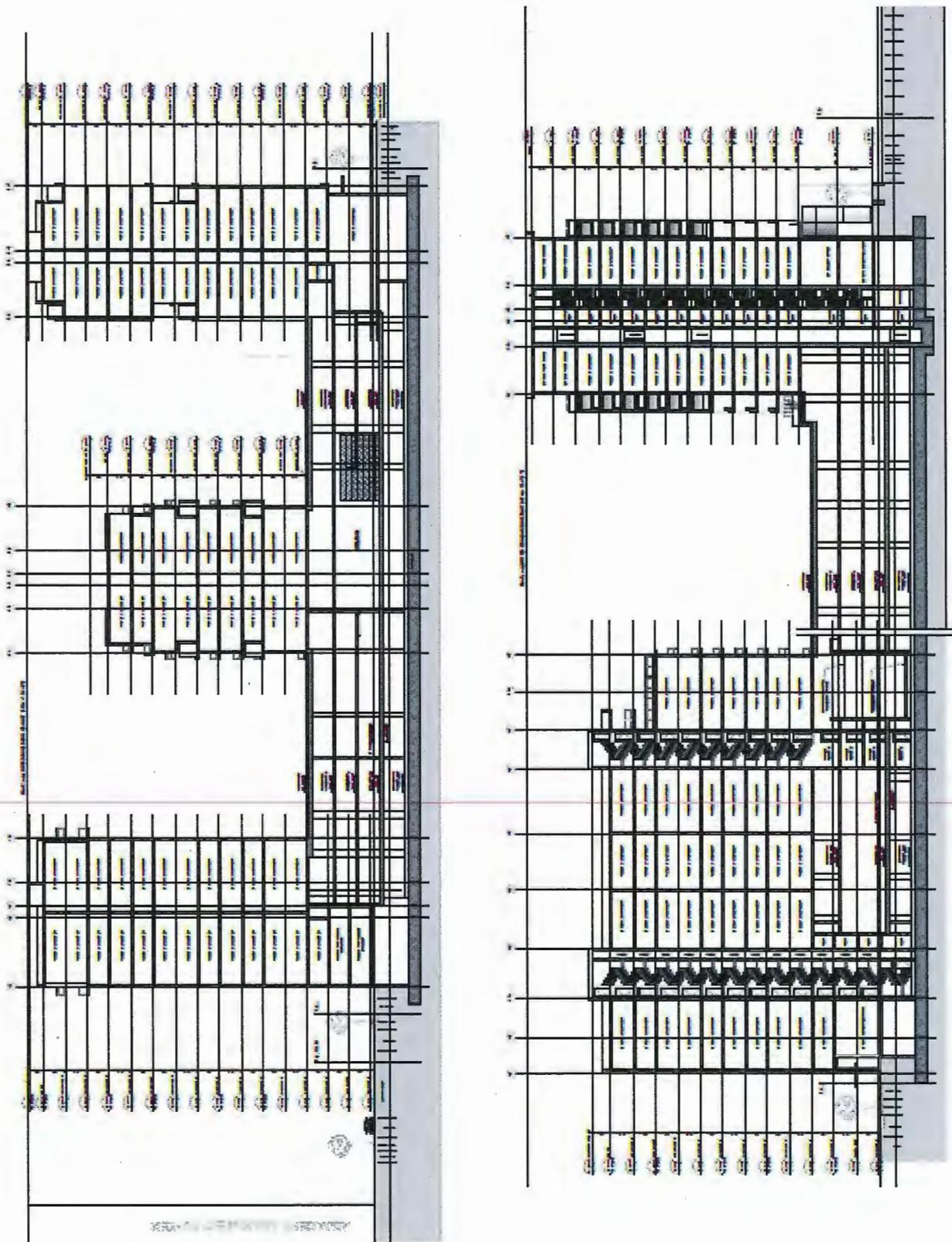
W. T. LEUNG ARCHITECTS  
1000 EAST 10TH AVENUE  
SUITE 1000  
DENVER, CO 80202  
TEL: 303.733.1111  
WWW.WTLEUNG.COM

Roof Plan

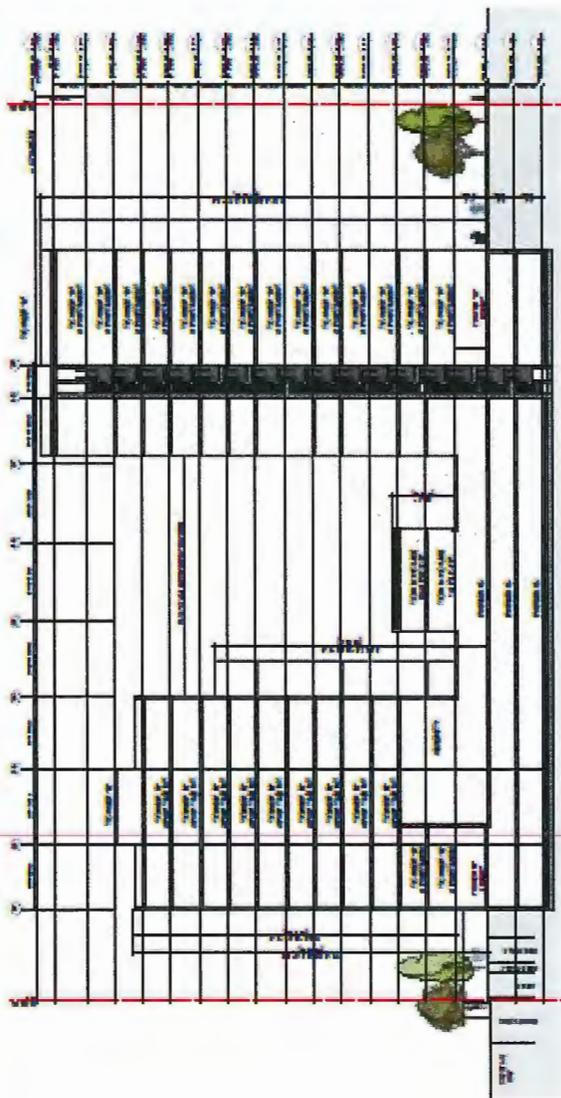
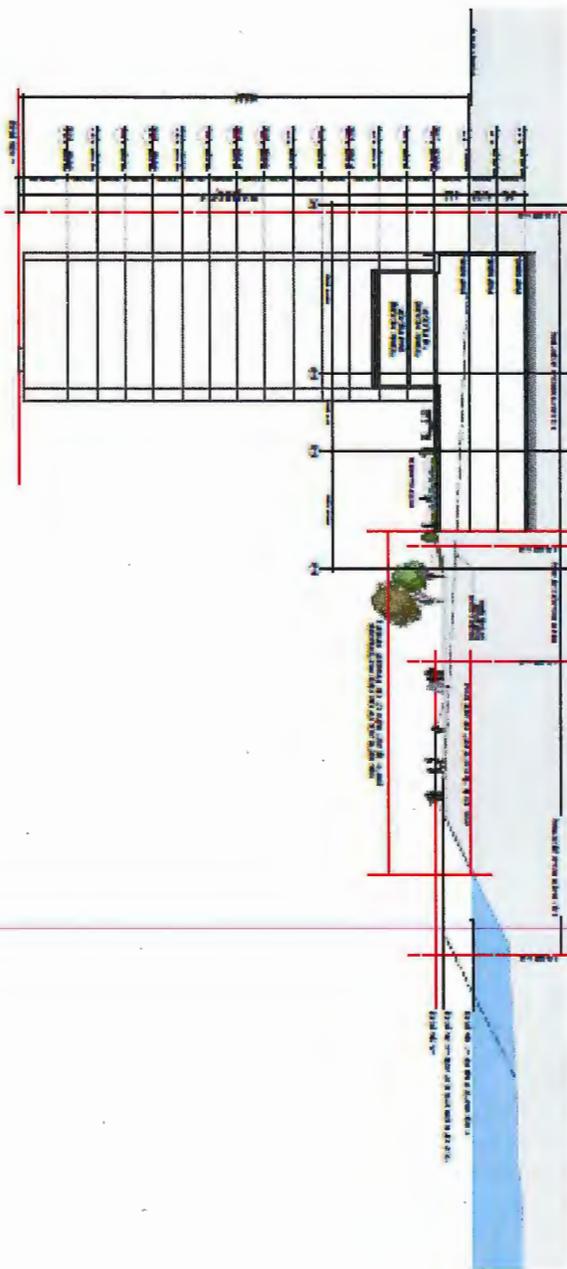
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A 118

PLN - 65



PLN - 66



PLN - 67



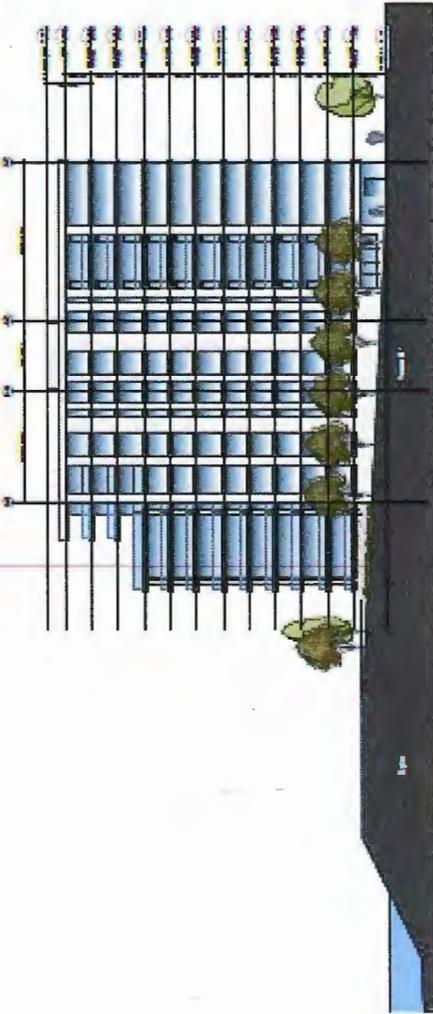




**W. T. LEUNG**  
ARCHITECTS  
INC.

1000 BAYVIEW BLVD., SUITE 100  
DUBLIN, CALIFORNIA 94568  
TEL: (925) 835-1000  
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1/10/07 09:10:00



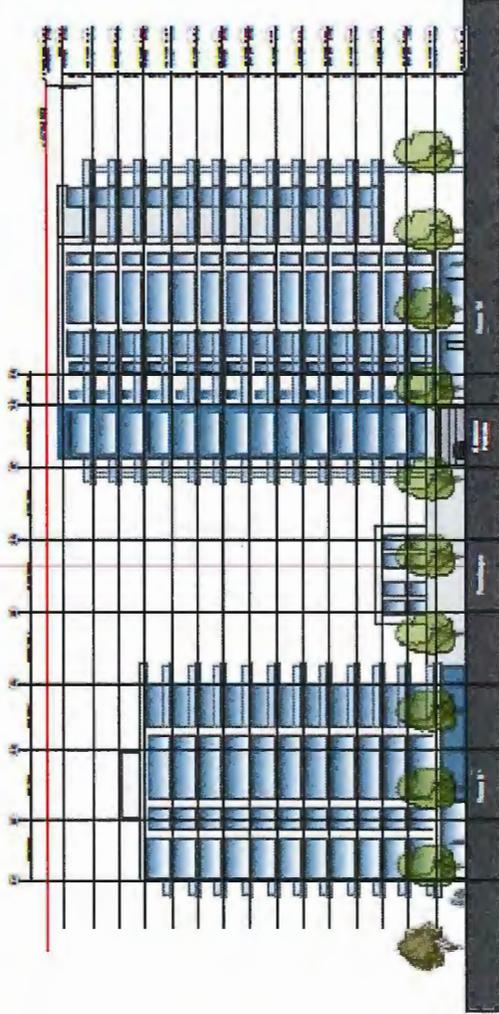
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A210



A210



PLN - 72













City of  
Richmond

September 15, 2016  
**Rezoning Considerations**  
Development Applications Department  
6911 No. 3 Road, Richmond, BC V6Y 2C1

**Address:** 3031, 3211, 3231, 3291, 3311, 3331, 3351 No. 3 Road,  
8151 Capstan Way, and 8051 and 8100 River Road

**File No.:** RZ 12-603040

**Prior to final adoption of Richmond Zoning Bylaw 8500, Amendment Bylaw 9594, the developer is required to complete the following:**

1. OCP Bylaw: Final Adoption of OCP Amendment Bylaw 9593.
2. Ministry of Transportation & Infrastructure (MOTI): Final MOTI Approval.

NOTE: Preliminary approval and a subsequent extension from MOTI have been received and are on file. (REDMS #5143264) Expiration date: August 23, 2017.

3. Ministry of Environment (MOE): Certificate of Compliance or alternative approval to proceed granted from MOE regarding potential site contamination issues.

NOTE: This approval is required prior to the dedication or fee simple transfer of any land or road to the City.

4. Subdivision: Registration of a Subdivision Plan for the subject site, to the satisfaction of the City.

***Prior to the registration of a Subdivision Plan, the following conditions shall be satisfied:***

4.1. Dedications:

4.1.1. Riverfront Park and Dike: Transfer of 8051 River Road in its entirety, 2,963.0 m<sup>2</sup> (31,893.5 ft<sup>2</sup>), to the City as fee simple for park, dike, and related purposes, as per the Preliminary Subdivision Plan (**Schedule A**). The primary business terms of the required land transfer shall be to the satisfaction of the Manager of Real Estate Services, the City Solicitor, the Director of Engineering, and the Director of Development. All costs associated with the land transfer shall be borne by the developer.

4.1.2. Road: Dedication of 5,132.0 m<sup>2</sup> (55,240.4 ft<sup>2</sup>) for road purposes, as per the Preliminary Subdivision Plan (**Schedule A**), including:

- a) **East-West Street**: 1,956.0 m<sup>2</sup> (21,054.2 ft<sup>2</sup>) in the form of a linear strip of land for the establishment of a new East-West Street linking No. 3 Road with Corvette Way, together with corner cuts at all intersections and related landscape features;  
NOTE: 123.0 m<sup>2</sup> (1,324.0 ft<sup>2</sup>) of the East-West Street, where it provides for an expanded public pedestrian area adjacent to the proposed Community Centre, shall be included in the calculation of the developer's Capstan Station Bonus Public Open Space contribution.
- b) **No. 3 Road**: 1,289.0 m<sup>2</sup> (13,874.7 ft<sup>2</sup>) in the form of a strip of land of varying width along the west side of No. 3 Road for road widening and related landscape features, plus 8.0 m<sup>2</sup> (86.1 ft<sup>2</sup>) for a corner cut at Sea Island Way;
- c) **Capstan Way**: 1,243.0 m<sup>2</sup> (13,379.6 ft<sup>2</sup>) in the form of strips of land of varying widths along the north side of Capstan Way for road widening and related landscape features, including:
  - Within 3.5 m (11.5 ft) of the back of the proposed curb (i.e. ultimate alignment, excluding curb extensions), 320.0 m<sup>2</sup> (3,444.5 ft<sup>2</sup>) west of Corvette Way and 78.0 m<sup>2</sup> (839.6 ft<sup>2</sup>) east of Corvette Way; and

- More than 3.50 m (11.48 ft) from the back of the proposed curb (i.e. measured to the back of the proposed City sidewalk), 559.0 m<sup>2</sup> (6,017.0 ft<sup>2</sup>) west of Corvette Way and 286.0 m<sup>2</sup> (3,078.5 ft<sup>2</sup>) east of Corvette Way; and
- d) **Corvette Way:** 636.0 m<sup>2</sup> (6,845.9 ft<sup>2</sup>) in the form of two strips of land of varying width along the east and south sides of Corvette Way for road widening and related landscape features, including one north of the proposed East-West Street (37.0 m<sup>2</sup> / 398.3 ft<sup>2</sup>) and one to the south (599.0 m<sup>2</sup> / 6,447.6 ft<sup>2</sup>).

4.1.3. **Former Railway Right-of-Way:** Dedication of the portion of the City-owned, former railway right-of-way located between Capstan Way and Sea Island Way for road purposes (e.g., a new road linkage between River Road and Corvette Way, widening of the existing south leg of Corvette Way, and widening of the existing portion of River Road situated north of 8051 and 8100 River Road) and related landscape features.

**NOTE:** Regarding section 4.1, the eligibility of the required dedications for use with respect to floor area calculations, Capstan Station Bonus (CSB) public open space requirements (**Schedule C**), and Development Cost Charge (DCC) credits vary as generally indicated in Table 1 below.

**TABLE 1**

Dedications		Eligible for Floor Area Calculation as per Zoning District ZMU30	Eligible as CSB Public Open Space	Eligible for DCC (Land) Credits
4.1.1	Riverfront Park & Dike	Yes	Yes	No
4.1.2(a)	Road – East-West Street	Yes (CCAP "Minor Street")	Limited portion	No
4.1.2(b)	Road – No 3 Road	No	No	Yes
4.1.2(c)	Road – Capstan Way: (i) Within 3.5 m of back of curb (ii) Beyond 3.5 m of back of curb	(i) No (ii) Yes	(i) No (ii) Yes	(i) Yes (ii) No
4.1.2(d)	Road – Corvette Way	No	No	No
4.1.2(d)	Road – Sea Island Way	No	No	No
4.1.3	Former Railway Right-of-Way	No	No	No

4.2. **Lot Consolidation and Subdivision:** The creation of three (3) lots for development purposes, as per the Preliminary Subdivision Plan (**Schedule A**), including:

4.2.1. **Lot A (Seaside South):** 13,202.0 m<sup>2</sup> (142,105.1 ft<sup>2</sup>);

4.2.2. **Lot B (Seaside North):** 9,177.0 m<sup>2</sup> (98,780.4 ft<sup>2</sup>); and

4.2.3. **Lot C (Seaview):** 2,264.0 m<sup>2</sup> (24,369.5 ft<sup>2</sup>).

4.3. **No Separate Sale:** Registration of legal agreements on the two (2) lots created for the purpose of the subject development (i.e. Lot A and Lot B, Seaside South and North), as per the Preliminary Subdivision Plan (**Schedule A**), and Lot C (Seaview) requiring that the three (3) lots may not be sold or otherwise transferred separately without prior approval of the City, to ensure that legal agreement and business terms related to financial, legal, development, and other obligations assigned to each of the lots as a result of the subject rezoning are transferred and secured to the satisfaction of the Director of Development and City Solicitor.

4.4. **Right-of-Ways (SRWs):**

**NOTE:**

- Only the required SRW areas for the Community Centre Plaza, section 4.4.1(a) and Capstan Way Plaza, section 4.4.1(d), are eligible for use with respect to Capstan Station Bonus (CSB) public open space requirements (as provided for via the subject development’s proposed site specific zone) (**Schedule C**); and

- The subject development is not eligible for Development Cost Charge (DCC) credits with respect to SRWs areas or works undertaken by the developer within SRW areas.

4.4.1. Public Rights of Passage: Registration of SRWs, as per the Preliminary Statutory Right-of-Way Plan (**Schedule B**), to facilitate public access and related landscaping and infrastructure as generally described below.

- a) **Community Centre Plaza North & South**: A SRW area comprised of two areas of varying dimensions along north and south sides of the proposed East-West Street, including the frontage of the Community Centre on Lot B and the northeast corner of Lot A, to accommodate public access and activities complementary to the programming and operation of the Community Centre and related landscape features. The combined total size of the SRW area shall be a minimum of 183.0 m<sup>2</sup> (1,969.8 ft<sup>2</sup>), including 125.0 m<sup>2</sup> (1,345.5 ft<sup>2</sup>) on Lot B and 58.0 m<sup>2</sup> (624.3 ft<sup>2</sup>) on Lot A, as indicated in the Preliminary Statutory Right-of-Way Plan (**Schedule B**). The ultimate size and configuration of the SRW area shall be confirmed to the satisfaction of the City via the Development Permit\* review and related approval processes for the Lot A, Lot B, and the Community Centre.
- The right-of-way shall provide for:
  - i) 24 hour-a-day, universally accessible, public access in the form of paved walkway and related landscape features, which may include, but may not be limited to, lighting, furnishings, street trees and planting, decorative paving, and innovative storm water management measures, to the satisfaction of the City;
  - ii) Public access to the Community Centre and other fronting, on-site uses (e.g., commercial retail units, residential lobby);
  - iii) Community Centre-related programming, classes, events, movable furnishings and planting, displays and exhibits (e.g., artworks), and related features and formal and informal activities on a temporary and/or permanent basis provided that public access to adjacent commercial retail units, residential lobby, and other on-site uses is not obstructed.
  - iv) Emergency and service vehicle access, City bylaw enforcement, and any related or similar City-authorized activities;
  - v) The owner-developer's ability to close a portion of the right-of-way to public access to facilitate maintenance or repairs to the right-of-way or the fronting uses, provided that adequate public access is maintained and the duration of the closure is limited, as approved by the City in writing in advance of any such closure;
  - vi) Design and construction, via a Development Permit\*, at the sole cost and responsibility of the developer, as determined to the satisfaction of the City; and
  - vii) Maintenance at the sole cost of the owner-developer, except for any City sidewalks, utilities, streetlights, street trees, and furnishings.
- In addition, the right-of-way shall provide for:
  - i) Building encroachments, provided that such encroachments do not conflict with the design, construction, or intended use or operation of the SRW area (e.g., tree planting, pedestrian access, public activities), as specified in a Development Permit\* approved by the City, including building encroachments situated:
    - Fully below the finished grade of the right-of-way; and
    - Above the finished grade of the right-of-way, limited to pedestrian weather protection, architectural appurtenances, and signage, provided that any such encroachments do not project into the right-of-way beyond that which would be otherwise permitted under the Zoning Bylaw (had the right-of-way not been in effect) and there is a clear distance of at least 2.3 m between the finished grade of the right-of-way and the underside of any such encroachment;
  - ii) Public art; and

- iii) City utilities, traffic control (e.g., signals), and/or related equipment; and
- The right-of-way shall not provide for:
  - i) Driveway crossings or vehicle access, except as provided for above.
- b) **Sea Island Greenway:** A right-of-way along the subject site's Sea Island Way frontage (i.e. Lot B) for the establishment of a landscaped area complementing the multi-use (shared pedestrian/bike) path and related landscape features proposed within the fronting dedicated City road right-of-way (Sea Island Way). The SRW area shall provide for a landscaped area measuring at least 3.0 m (9.84 ft) from the south edge of the multi-use path to the building face (a portion of which width may be within the dedicated road right-of-way) and shall have a minimum area of 50.0 m<sup>2</sup> (538.2 ft<sup>2</sup>), as indicated in the Preliminary Statutory Right-of-Way Plan (**Schedule B**). The ultimate size and configuration of the SRW area shall be confirmed to the satisfaction of the City via the Development Permit\* review and related approval processes for Lot B.
- The right-of-way shall provide for:
  - i) 24 hour-a-day, universally accessible, public access in the form of paved walkway, off-street bike path, and related landscape features, which may include, but may not be limited to, lighting, furnishings, street trees and planting, decorative paving, and innovative storm water management measures, to the satisfaction of the City;
  - ii) Public access to fronting on-site uses;
  - iii) Emergency and service vehicle access, City bylaw enforcement, and any related or similar City-authorized activities;
  - iv) The owner-developer's ability to close a portion of the right-of-way to public access to facilitate maintenance or repairs to the right-of-way or the fronting uses, provided that adequate public access is maintained and the duration of the closure is limited, as approved by the City in writing in advance of any such closure;
  - v) Design and construction, via a Development Permit\* or Servicing Agreement\*, at the sole cost and responsibility of the developer, as determined to the satisfaction of the City; and
  - vi) Maintenance at the sole cost of the owner-developer, except for any City sidewalks, utilities, streetlights, street trees, and furnishings.
- In addition, the right-of-way shall provide for:
  - i) Building encroachments, provided that such encroachments do not conflict with the design, construction, or intended use or operation of the SRW area (e.g., tree planting, pedestrian access), as specified in a Development Permit\* approved by the City, including building encroachments situated:
    - Fully below the finished grade of the right-of-way; and
    - Above the finished grade of the right-of-way, limited to pedestrian weather protection, architectural appurtenances, and signage, provided that any such encroachments do not project into the right-of-way beyond that which would be otherwise permitted under the Zoning Bylaw (had the right-of-way not been in effect) or as otherwise determined to the satisfaction of the City as specified in an approved Development Permit\* and there is a clear distance of at least 2.3 m between the finished grade of any portion of the right-of-way intended as a pedestrian or bicycle route (path) and the underside of any encroachment;
  - ii) Public art; and
  - iii) City utilities, traffic control (e.g., signals), and/or related equipment; and
- The right-of-way shall not provide for:
  - i) Driveway crossings or vehicle access, except as provided for above.

- c) **River Road Park Entrance:** A roughly rectangular area at the north end of Lot C (Seaview) for the establishment of a small plaza area accommodating pedestrian and bike access to/from the proposed riverfront dike/park and related landscape features, in coordination with the establishment of the proposed road linkage between River Road and Corvette Way. The size of the SRW area shall be a minimum of 67.0 m<sup>2</sup> (721.2 ft<sup>2</sup>), as indicated in the Preliminary Statutory Right-of-Way Plan (**Schedule B**). The ultimate size and configuration of the SRW area shall be confirmed to the satisfaction of the City via the Development Permit\* review and related approval processes for Lot C.
- The right-of-way shall provide for:
    - i) 24 hour-a-day, universally accessible, public access in the form of paved walkway, off-street bike path, and related landscape features, which may include, but may not be limited to, lighting, furnishings, street trees and planting, decorative paving, and innovative storm water management measures, to the satisfaction of the City;
    - ii) Public access to fronting on-site uses;
    - iii) Emergency and service vehicle access, City bylaw enforcement, and any related or similar City-authorized activities;
    - iv) The owner-developer's ability to close a portion of the right-of-way to public access to facilitate maintenance or repairs to the right-of-way or the fronting uses, provided that adequate public access is maintained and the duration of the closure is limited, as approved by the City in writing in advance of any such closure;
    - v) Design and construction, via a Development Permit\* or Servicing Agreement\*, at the sole cost and responsibility of the developer, as determined to the satisfaction of the City; and
    - vi) Maintenance at the sole cost of the owner-developer, except for any City sidewalks, utilities, streetlights, street trees, and furnishings.
  - In addition, the right-of-way shall provide for:
    - i) Vehicle loading, waste pick-up, and related activities required with respect to proposed on-site residential uses, provided that such features and activities do not conflict with the design, construction, or intended use or operation of the SRW area (e.g., loading area must be clearly demarcated; loading activities and vehicles must be clear of public pedestrian and bicycle movements; waste carts and bins must not be stored within the SRW area; the area must be safe and attractive at all times), as specified in a Development Permit\* approved by the City;
    - ii) Building encroachments, provided that such encroachments do not conflict with the design, construction, or intended use or operation of the SRW area (e.g., tree planting, pedestrian/bike access, utilities), as specified in a Development Permit\* approved by the City, including building encroachments situated:
      - 7.0 m or more above the finished grade of the SRW area; and
      - Less than 7.0 m above the finished grade of the SRW area, provided that such encroachments are limited to columns and structural elements, pedestrian weather protection, architectural appurtenances, and signage;
    - iii) Public art; and
    - iv) City utilities, traffic control (e.g., signals), and/or related equipment; and
  - The right-of-way shall not provide for:
    - i) Building encroachments situated below finished grade; or
    - ii) Driveway crossings or vehicle access, except as provided for above.
- d) **Capstan Way Plaza:** A SRW area of varying width along the Capstan Way frontage of Lot A (Seaview), near No. 3 Road, for sidewalk widening. The size of the SRW area shall be a minimum of 136.0 m<sup>2</sup> (1,463.9 ft<sup>2</sup>), as indicated in the Preliminary Statutory Right-of-Way Plan (**Schedule B**). The ultimate size and configuration of the SRW area shall be confirmed

to the satisfaction of the City via the Development Permit\* review and related approval processes for Lot A.

- The right-of-way shall provide for:
  - i) 24 hour-a-day, universally accessible, public access in the form of paved walkway, off-street bike path, and related landscape features, which may include, but may not be limited to, lighting, furnishings, street trees and planting, decorative paving, and innovative storm water management measures, to the satisfaction of the City;
  - ii) Public access to fronting on-site uses;
  - iii) Emergency and service vehicle access, City bylaw enforcement, and any related or similar City-authorized activities;
  - iv) The owner-developer's ability to close a portion of the right-of-way to public access to facilitate maintenance or repairs to the right-of-way or the fronting uses, provided that adequate public access is maintained and the duration of the closure is limited, as approved by the City in writing in advance of any such closure;
  - v) Design and construction, via a Development Permit\* or Servicing Agreement\*, at the sole cost and responsibility of the developer, as determined to the satisfaction of the City; and
  - vi) Maintenance at the sole cost of the owner-developer, except for any City sidewalks, utilities, streetlights, street trees, and furnishings.
- In addition, the right-of-way shall provide for:
  - i) Building encroachments, limited to pedestrian weather protection, architectural appurtenances, and signage, provided that any such encroachments do not project into the right-of-way beyond that which would be otherwise permitted under the Zoning Bylaw (had the right-of-way not been in effect) or as otherwise determined to the satisfaction of the City as specified in an approved Development Permit\* and there is a clear distance of at least 2.3 m between the finished grade of any portion of the right-of-way intended as a pedestrian or bicycle route (path) and the underside of any encroachment;
  - ii) Public art; and
  - iii) City utilities, traffic control (e.g., signals), and/or related equipment; and
- The right-of-way shall not provide for:
  - i) Driveway crossings or vehicle access, except as provided for above.

4.4.2. Utilities: Registration of SRWs to facilitate City utilities and related infrastructure as generally described below.

- a) ***Skyline Pump Station Equipment***: A SRW area comprised of a minimum 4.0 m by 15.0 m (13.1 ft. by 49.2 ft.) SRW area behind the building face for aboveground and underground equipment, together with a 15.0 (49.2 ft.) wide SRW area between the building face and the property line for access and underground equipment. The SRW shall accommodate the current and future aboveground structures relating to the pump station, including, but not limited to, a generator, utility kiosk, and pad-mounted transformer (PMT). No underground structures are permitted within the SRW, and there must be a minimum 5.0 m (16.4 ft.) of vertical clearance to any overhanging structures. The SRW details are to be finalized via the developer's first Servicing Agreement\* (SA #1). The SRW details for the PMT shall be coordinated with BC Hydro and conform to their specifications, to the satisfaction of the City.

4.4.3. Additional Right-of-Ways: As determined to the sole satisfaction of the City via the Servicing Agreement\* and/or Development Permit\* processes.

5. Driveway Crossings: Registration of a legal agreement(s) on title requiring that vehicle access to the subject site shall be limited to the following:
  - 5.1. Lot A (Seaside South):
    - 5.1.1. One driveway crossing along the south side of the proposed East-West Street; and
    - 5.1.2. One driveway along the east side of Corvette Way;
  - 5.2. Lot B (Seaside North): One driveway crossing along the north side of the proposed East-West Street; and
  - 5.3. Lot C (Seaview):
    - 5.3.1. One driveway crossing along the west side of Corvette Way; and
    - 5.3.2. One driveway at River Road at the north end of the lot, the use of which driveway shall be limited to loading, waste pick-up, and related activities only (as per the River Road Park Entrance SRW, section 4.4.1(c)).
6. Flood Construction: Registration of a flood indemnity covenant(s) on title, as per Flood Plain Designation and Protection Bylaw, Area "A" (i.e. minimum flood construction level of 2.9 m GSC).
7. Aircraft Noise Sensitive Development (ANSD): Registration of the City's standard aircraft noise sensitive use covenants on title to Lot A, Lot B, and Lot C, as applicable to sites with aircraft noise sensitive uses. The owner-developer shall notify all initial purchasers of the potential aircraft noise impacts. Furthermore, on a phase-by-phase basis, prior to each Development Permit\* and Building Permit\* issuance, the owner-developer shall submit a report(s) and/or letter(s) of assurance prepared by an appropriate registered professional, which demonstrates that the interior noise levels and thermal conditions comply with the City's Official Community Plan and Noise Bylaw requirements. The standard required for air conditioning systems and their alternatives (e.g. ground source heat pumps, heat exchangers and acoustic ducting) is the ASHRAE 55-2004 "Thermal Environmental Conditions for Human Occupancy" standard and subsequent updates as they may occur. Maximum interior noise levels (decibels) within dwelling units must achieve CMHC standards follows:

TABLE 2

Portions of Dwelling Units	Noise Levels (decibels)
Bedrooms	35 decibels
Living, dining, recreation rooms	40 decibels
Kitchen, bathrooms, hallways, and utility rooms	45 decibels

Applicable ANSD covenants shall include:

- 7.1. Lot A (Seaside South): Mixed use covenant;
- 7.2. Lot B (Seaside North): Mixed use covenant; and
- 7.3. Lot C (Seaview): Residential covenant.
8. Canada Line: Registration of a legal agreement(s) on title to Lot A and Lot B only requiring that the proposed development on the lots must be designed and constructed in a manner that mitigates potential Canada Line impacts (e.g., noise from trains and public areas, vibration, overlook, light spillage) on proposed adjacent dwelling units and other potential sensitive uses. The owner-developer shall notify all initial purchasers of the potential Canada Line impacts. Furthermore, on a phase-by-phase basis, prior to each Development Permit\* and Building Permit\* issuance, the owner-developer shall submit a report(s) and/or letter(s) of assurance prepared by an appropriate registered professional, which demonstrate that, among other things, for residential uses the interior noise levels and thermal conditions comply with City objectives including, for air conditioning systems and their alternatives (e.g. ground source heat pumps, heat exchangers and acoustic ducting), compliance with the ASHRAE 55-2004 "Thermal Environmental Conditions for Human Occupancy" standard and subsequent updates as they may occur and, for maximum interior noise levels (decibels) within dwelling units, CMHC standards as per **Table 2** (above).

9. View and Other Development Impacts: Registration of a restrictive covenant(s) on title to Lot A, Lot B, and Lot C, to the satisfaction of the City, requiring that the proposed development on the lots must be designed and constructed in a manner that mitigates potential development impacts including without limitation view obstruction, increased shading, increased overlook, reduced privacy, increased ambient noise, increased ambient night-time light potentially, and increased public use of fronting streets, sidewalks, and open spaces caused by or experienced as a result of, in whole or in part, development on the lands and future development on or the use of surrounding properties. In particular, the covenant shall notify residential tenants in mixed use buildings of potential noise and/or nuisance that may arise due to proximity to retail, restaurant, other commercial, and community centre uses and activities. The owner-developer shall notify all initial purchasers of the potential development impacts. Furthermore, on a phase-by-phase basis, prior to each Development Permit\* and Building Permit\* issuance, the owner-developer shall submit a report(s) and/or letter(s) of assurance prepared by an appropriate registered professional, which demonstrates that adequate development impact mitigation measures are incorporated into the building design.
10. Phasing Covenant: Registration of a restrictive covenant(s) and/or alternative legal agreement(s), to the satisfaction of the City, securing that “no development” will be permitted on the subject site and restricting Development Permit\* issuance (together with various Building Permit\* and occupancy restrictions, as determined to the satisfaction of the City), until the developer satisfies the following:
  - 10.1. General Requirements: Development must proceed on the following basis:
    - 10.1.1. The subject development shall include a maximum of three phases, the comprehensive design and development of each of which shall be addressed by one Development Permits\* (i.e. three in total), unless otherwise determined to the satisfaction of the Director of Development;
    - 10.1.2. The construction of the three phases shall proceed in order starting with Lot A (Seaside South), followed by Lot B (Seaside North), and ending with Lot C (Seaview), as generally illustrated in the Phasing Key Plan (**Schedule D**);
    - 10.1.3. Development Permit\* issuance, Building Permit\* issuance, and final Building Permit\* inspection granting occupancy of sequential phases (e.g., Phases 1 and 2) may proceed concurrently, but a later phase may not advance, in whole or in part, ahead of an earlier phase (e.g., Phase 2 shall not receive Building Permit\* issuance ahead of Phase 1); and
    - 10.1.4. Building Permit\* issuance for Lot B (Seaside North), including the Community Centre, affordable housing, and all ancillary uses and spaces, must proceed ahead of final Building Permit\* inspection granting occupancy for Lot A (Seaside South), in whole or in part.
  - 10.2. Off-Site Works: The developer shall enter into a series of Servicing Agreements\* (SA) for the design and construction of the Engineering (i.e. water, drainage, sanitary, Skyline pump station, and dike), Transportation, and Parks off-site works set out in the Servicing Agreement\* requirements contained in these Rezoning Considerations, to the satisfaction of the City. The required works are described as comprising SA #1, SA #2, and SA #, which Servicing Agreements\* must be entered into by the developer and secured with Letters of Credit as follows:
    - 10.2.1. SA #1: Prior to rezoning adoption, the developer must enter into the first Servicing Agreement(s)\*, secured with a Letter(s) of Credit, which works shall be complete to the City’s satisfaction prior to final Building Permit\* inspection granting occupancy for Lot A (Seaside South);
    - 10.2.2. SA #2: Prior to Development Permit\* issuance for Lot B (Seaside North), the developer must enter into the second Servicing Agreement(s)\*, secured with a Letter(s) of Credit, which works shall be complete to the City’s satisfaction prior to final Building Permit\* inspection granting occupancy for Lot B (Seaside North); and

10.2.3. SA #3: Prior to Development Permit\* issuance for Lot C (Seaview), the developer must enter into the third Servicing Agreement(s)\*, secured with a Letter(s) of Credit, which works shall be complete to the City's satisfaction prior to final Building Permit\* inspection granting occupancy for Lot C (Seaview).

NOTE: For the dike and park (which works will be the subject of SA #3), the developer shall be solely responsible for all necessary governmental approvals, environmental mitigation and compensation, and related requirements, to the satisfaction of the City.

11. District Energy Utility (DEU): Registration of a restrictive covenant(s) and/or alternative legal agreement(s), to the satisfaction of the City, securing the owner's commitment to connect to DEU, which covenant(s) and/or legal agreement(s) will include, at minimum, the following terms and conditions:
- 11.1. "No building" will be permitted on the subject site and restricting Building Permit\* issuance for the subject site, in whole or in part, unless the building is designed with the capability to connect to and be serviced by a DEU and the owner has provided an energy modelling report satisfactory to the Director of Engineering;
  - 11.2. If a DEU is available for connection, no final Building Permit\* inspection permitting occupancy of a building will be granted until the building is connected to the DEU and the owner enters into a Service Provider Agreement on terms and conditions satisfactory to the City and grants or acquires the Statutory Right-of-Way(s) and/or easements necessary for supplying the DEU services to the building; and
  - 11.3. If a DEU is not available for connection, then the following is required prior to the earlier of subdivision\* (stratification) or final Building Permit\* inspection permitting occupancy of a building:
    - 11.3.1. The City receives a professional engineer's certificate stating that the building has the capability to connect to and be serviced by a DEU;
    - 11.3.2. The owner enters into a covenant and/or other legal agreement to require that the building connect to a DEU when a DEU is in operation;
    - 11.3.3. The owner grants or acquires the Statutory Right-of-Way(s) and/or easements necessary for supplying DEU services to the building; and
    - 11.3.4. If required by the Director of Engineering, the owner provides to the City a letter of credit, in an amount satisfactory to the City, for costs associated with acquiring any further Statutory Right of Way(s) and/or easement(s) and preparing and registering legal agreements and other documents required to facilitate the building connecting to a DEU when it is in operation.

12. Capstan Station Bonus (CSB): Registration of a restrictive covenant(s) and/or alternative legal agreement(s), to the satisfaction of the City, securing that "no building" will be permitted on the subject site and restricting Building Permit\* issuance for the subject site, in whole or in part, until the developer, on a phase-by-phase basis, contributes to the Capstan station reserve or as otherwise provided for via the Zoning Bylaw.

12.1. Capstan Station Reserve: Preliminary estimated developer contributions are as indicated in the following table; however, the actual value of developer contributions shall vary, determined on a phase-by-phase basis, based on the actual number of dwelling units in each phase and the City-approved Capstan Station Reserve Voluntary Contribution rate in effect at the date of Building Permit\* approval.

**TABLE 3**

Phase	Lot	No. of Dwelling Units <i>Preliminary estimate</i>	Capstan Station Reserve Voluntary Contribution <i>Preliminary estimate (1)</i>
1	A (Seaside South)	570	\$4,698,390
2	B (Seaside North)	225	\$1,854,628
3	C (Seaview)	55	\$453,354
<b>TOTAL</b>		<b>850</b>	<b>\$7,006,372</b>

(1) Estimate based on the City rate in effect as of October 1, 2015 (i.e. \$8,242.79/dwelling). Actual contributions shall be in accord with Zoning Bylaw rates in effect phase-by-phase at the time of Building Permit\* approval.

12.2. **Public Open Space:** The developer is required to provide public open space in compliance with the CSB policy and ZMU30 zone at a rate of 5.0 m<sup>2</sup> (53.82 ft<sup>2</sup>) per dwelling unit or 4,250.0 m<sup>2</sup> (45,746.7 ft<sup>2</sup>), whichever is greater. The ZMU30 zone permits a maximum of 850 dwellings (i.e. the combined total number of dwellings on Lot A, Lot B, and Lot C). Based on this, prior to rezoning adoption, the developer shall provide at least 4,250.0 m<sup>2</sup> (45,746.7 ft<sup>2</sup>) of public open space with respect to this requirement in a combination of fee simple (park) transferred to the City, road dedication expressly intended for public open space purposes, and Public Rights of Passage SRW areas. **(Schedule C)** If the combined total number of dwellings on Lot A, Lot B, and Lot C is less than 850, no reduction shall be permitted in the amount of public open space required.

13. **River Road Widening:** Registration of a restrictive covenant(s) and/or alternative legal agreement(s) on title requiring that no development shall be permitted on Lot C (Seaview), restricting Development Permit\* issuance for Lot C until the developer enters into the City’s standard Servicing Agreement to design and construct (at the developer’s sole cost) road widening and related improvements along the portion of River Road and the former railway right-of-way located north of Lot C as generally indicated in the Preliminary Functional Roads Plan **(Schedules E)** and described in these Rezoning Considerations with respect to Servicing Agreement works required to satisfy the subject rezoning application, together with all necessary modifications to existing vehicle and pedestrian access to fronting properties, all as determined to the satisfaction of the Director of Development, Director of Transportation, Director of Engineering, and Senior Manager, Parks.

14. **Transitional Parking and Transportation Demand Management (TDM) Strategy:** City acceptance of the developer’s offer to voluntarily contribute improvements, cash-in lieu of improvements, and the registration of legal agreements on title to ensure that the subject development proceeds in conformance with Zoning Bylaw requirements with respect to Parking Zone 1A (Capstan Village) and specific TDM measures.

**NOTE:**

- Based on the developer’s voluntary contributions, the applicable parking rates shall be the “ZMU30 (Reduced) Minimum Rate” as indicated in the table below.
- If the development’s number of parking spaces exceeds the reduced minimum rate (as determined based on an approved Development Permit(s)\* and/or Building Permit(s)\*), the developer’s obligation to provide the agreed transitional parking and TDM measures set out below shall be undiminished.
- Development Cost Charge credits shall not apply.

**TABLE 5**

Use	Zoning Bylaw (Unreduced) Minimum Rate	ZMU30 (Reduced) Minimum Rate
Community Centre	<ul style="list-style-type: none"> <li>▪ For exclusive use (1): 60 spaces</li> <li>▪ For shared use (2): 22 spaces</li> <li>▪ Total: 82 spaces</li> </ul>	<ul style="list-style-type: none"> <li>▪ For exclusive use (1): 52 spaces</li> <li>▪ For shared use (2): 20 spaces</li> <li>▪ For program/service vehicle use (3): 2 spaces</li> <li>▪ Total: 74 spaces</li> </ul>
Commercial (4)	<ul style="list-style-type: none"> <li>▪ For 1<sup>st</sup> storey: 4.2 spaces/100 m2 gla</li> <li>▪ For above 2<sup>nd</sup> storey: City-wide parking rates for retail, restaurant, and office LESS 5%</li> </ul>	Parking Zone 1 rate LESS 10% (5): <ul style="list-style-type: none"> <li>▪ For 1<sup>st</sup> &amp; 2<sup>nd</sup> storeys: 3.375 spaces/100 m2 gla (i.e. 3.75 spaces/100 m2 gla LESS 10%)</li> <li>▪ For above 2<sup>nd</sup> storey: 1.1475 spaces/100 m2 gla (i.e. 1.5 spaces/100 m2 gla LESS 15% LESS 10%)</li> </ul>
Residents	<ul style="list-style-type: none"> <li>▪ For Market Housing: 1.2 spaces/unit</li> <li>▪ For Affordable Housing: 0.9 spaces/unit</li> </ul>	<ul style="list-style-type: none"> <li>▪ For Market Housing: 1.0 space/unit (i.e. Parking Zone 1 rate without any further reduction)</li> <li>▪ For Affordable Housing: 0.81 spaces/unit (i.e. Parking Zone 1 rate LESS 10%)</li> </ul>
Residential Visitors	<ul style="list-style-type: none"> <li>▪ For Lots A &amp; B (Seaside South &amp; North): 0.2 spaces/unit, but may be reduced to nil based on City- approved design (i.e. shared with commercial parking)</li> <li>▪ For Lot C (Seaview): 0.2 spaces/unit</li> </ul>	<ul style="list-style-type: none"> <li>▪ For Lot A (Seaside South): 0.054 spaces/unit (i.e. Parking Zone 1 rate LESS 10% LESS 70% shared with “Public” Commercial Parking)</li> <li>▪ For Lot B (Seaside North): Nil (100% shared with “Public” Commercial Parking)</li> <li>▪ For Lot C (Seaview): 0.18 spaces/unit (i.e. Parking Zone 1 rate LESS 10%)</li> </ul>

(1) Community Centre “exclusive” spaces shall be located on Lot B (Seaside North) and reserved 24/7 for the exclusive use of Community Centre staff, guests, visitors, and related activities and secured with legal agreements registered on title.

- (2) Community Centre "shared" parking spaces shall be located on Lot B (Seaside North) and be reserved for exclusive use during specified days and hours to the satisfaction of the City and secured with legal agreements registered on title. (When not reserved for Community Centre use, the shared spaces shall be "Assigned" Commercial Parking spaces.)
- (3) Community Centre "program/service vehicle" spaces shall be located on Lot B (Seaside North) and reserved 24/7 for the exclusive use of Community Centre for program, operations, maintenance, and related activities and secured with legal agreements registered on title.
- (4) On Lots 1 and 2 (Seaside South and North), for non-residential uses other than office that are permitted above the second floor (as per the ZMU30 zone), Parking Zone 1 parking rates shall apply (i.e. TDM reductions shall not apply). No commercial use will be permitted on Lot C (Seaview).
- (5) Commercial parking shall include the car-share parking spaces described below as one of the developer's voluntary contributions.

14.1. Cash-in-Lieu Contribution: City acceptance of the developer's voluntary contribution in the amount of \$200,000.00 towards special pedestrian crossing(s) of Sea Island Way and related improvements, to the satisfaction of the City. (MOTI approval required for City design/construction of proposed features.)

14.2. End-of-Trip Cycling Facilities & "Class 1" Bike Storage for Non-Residential Uses: Registration of a restrictive covenant(s) on Lot A (Seaside South) and Lot B (Seaside North) for the purpose of requiring that the developer/owner provides, installs, and maintains end-of-trip cycling facilities and "Class 1" bike storage on Lot A (Seaside South) and Lot B (Seaside North) (i.e. facilities and bike storage must be located on both lots) for the use of the non-residential tenants of the buildings on those lots, to the satisfaction of the City as determined via the applicable lot-by-lot Development Permit\* review/approval processes. More specifically:

14.2.1. The developer/owner shall, at its sole cost, design, install, and maintain on each lot:

- a) One end-of-trip cycling facility for each gender for the shared use of the development's non-residential tenants and, as applicable, affordable housing building staff (i.e. not residents of market or affordable housing units); and
- b) "Class 1" bike storage spaces for non-residential tenants of the building and, as applicable, affordable housing building staff (i.e. not residents of market or affordable housing units), as per the Zoning Bylaw, which storage must include 120V electric vehicle (EV) charging stations (i.e. duplex outlets) for the shared use of cyclists at a rate of 1 charging station for each 10 bike storage spaces or as per the Zoning Bylaw and Official Community Plan rates in effect at the time of Development Permit\* approval, whichever is greater;

14.2.2. An end-of-trip cycling facility shall mean a handicapped-accessible suite of rooms containing a change room, toilet, wash basin, shower, lockers, and grooming station (i.e. mirror, counter, and electrical outlets) designed to accommodate use by two or more people at one time;

14.2.3. For ease of use and security, the required end-of-trip cycling facilities shall be located immediately adjacent to the building's non-residential "Class 1" bike storage and the building's elevator/stair core, as determined to the satisfaction of the City via an approved Development Permit\*;

14.2.4. "No development" shall be permitted on Lot A (Seaside South) or Lot B (Seaside North), restricting Development Permit\* issuance for a building on the lot, in whole or in part (exclusive of parking), until, on a lot-by-lot basis, the developer provides for the required end-of-trip cycling facilities and "Class 1" bike storage for non-residential uses to the satisfaction of the City;

14.2.5. No Building Permit\* shall be issued for a building on Lot A (Seaside South) or Lot B (Seaside North), in whole or in part (exclusive of parking), until, on a lot-by-lot basis, the developer provides for end-of-trip cycling facilities and "Class 1" bike storage for non-residential uses and a Letter of Assurance is submitted by the architect confirming that the facilities satisfy the City's objectives; and

- 14.2.6. "No occupancy" shall be permitted on Lot A (Seaside South) or Lot B (Seaside North), restricting final Building Permit\* inspection granting occupancy for any building on the lot, in whole or in part (except for parking), until, on a lot-by-lot basis, the required end-of-trip cycling facilities and "Class 1" bike storage for non-residential uses are completed to the satisfaction of the City and have received final Building Permit\* inspection granting occupancy. Notwithstanding the afore mentioned statement, in the event that occupancy of the building on a lot is staged, "no occupancy" shall be permitted of any non-residential uses on the lot (excluding the Community Centre and parking), in whole or in part, until 100% of the end-of-trip cycling facilities and "Class 1" bike storage for non-residential uses required with respect to the lot receive final Building Permit\* inspection granting occupancy.
- 14.3. Car-Share Parking: Registration of a restrictive covenant(s) and/or alternative legal agreement(s) on title requiring that no development shall be permitted on Lot B (Seaside North), restricting Development Permit\* issuance for Lot B, until the developer provides for parking for 4 car-share vehicles within Lot B's designated Commercial "Public" Parking spaces (as per the required Commercial Parking covenant set out in section 15), together with electric vehicle (EV) charging stations, to the satisfaction of the City. More specifically, the car-share parking requirements for Lot B shall include the following.
- 14.3.1. The 4 car-share spaces shall be consolidated on the ground floor of Lot B's Commercial "Public" Parking area, immediately adjacent to the Community Centre's rear (i.e. parkade) patron entrance and the building's publicly-accessible breezeway/corridor linking the Commercial "Public" Parking area with Lot B's No 3 Road frontage, and provide for safe, convenient, universally-accessible public pedestrian use/access.
- 14.3.2. The car-share spaces shall be equipped with 2 electric vehicle (EV) quick-charge (240 V) charging stations for the exclusive use of the car-share vehicles (or as otherwise determined by the City), which charging stations shall be situated to provide for convenient use by vehicles parked in any of the 4 car share spaces.
- 14.3.3. The car share spaces (like all parking spaces within Lot B's designated Commercial "Public" Parking area) shall be available to the general public on a daily basis, the duration of which shall be equal to or greater than the greater of the operating hours of the Community Centre, transit services within 400 m (5 minute walk) of the lot, businesses located on Lot B, or as otherwise determined by the City.
- 14.3.4. Users of the car-share spaces shall not be subject to parking fees, except as otherwise determined at the sole discretion of the City.
- 14.3.5. "No development" shall be permitted on Lot B, restricting Development Permit\* issuance for a building on Lot B, in whole or in part (excluding parking), until the developer, to the City's satisfaction:
- a) Designs Lot B to provide for the car-share facility including 4 car-share spaces within the designated Commercial "Public" Parking area, access to/from the spaces for vehicles and pedestrians, and related features (e.g., EV 240V chargers, signage);
  - b) Secures the car-share facility via a statutory right-of-way(s) and easement(s) registered on title and/or other legal agreements;
  - c) Enters into a contract with a car-share operator for the operation of the car-share spaces for a minimum term of 3 years, which contract shall require, among other things, that:
    - The developer provides 2 car-share cars at no cost to the operator;
    - Electric vehicles shall comprise at least 50% of the car-share vehicles provided by the developer or as otherwise determined to the satisfaction of the operator and the City; and

- The required car-share facilities and vehicles will be 100% available for use upon Building Permit issuance granting occupancy of the first building on Lot B or as otherwise determined to the satisfaction of the operator and the City;
  - d) Provides a Letter of Credit (LOC) to the City to secure the developer's commitment to the provision of the car-share vehicles, the value of which shall be the estimated value of the 2 car-share cars or as otherwise determined to the satisfaction of the Director of Transportation and Director of Development; and
  - e) Registers legal agreement(s) on title requiring that, unless otherwise agreed to in advance by the City, in the event that the car-share facilities are not operated for car-share purposes as intended via the subject rezoning application (e.g., operator's contract is terminated or expires), control of the car-share facilities shall be transferred to the City, at no cost to the City, and the City at its sole discretion, without penalty or cost, shall determine how the facilities shall be used going forward.
- 14.3.6. No Building Permit\* shall be issued for a building on Lot B (Seaside North), in whole or in part (exclusive of parking), until the developer provides for the required car-share facilities to the satisfaction of the City.
- 14.3.7. "No occupancy" shall be permitted of Lot B, restricting final Building Permit\* inspection granting occupancy for any building on Lot B, in whole or in part (except for parking), until the required car-share facilities are completed to the satisfaction of the City and have received final Building Permit\* inspection granting occupancy.
15. Commercial Parking: Registration of a restrictive covenant(s) and/or alternative legal agreement(s) on title on Lot A (Seaside South) and Lot B (Seaside North) restricting the use of parking provided on-site in respect to non-residential uses (as per the Zoning Bylaw). More specifically, Commercial Parking requirements for the lots shall include the following.
- 15.1. Commercial Parking shall mean any non-residential parking spaces (excluding parking intended for the exclusive use of the Community Centre) as determined to the satisfaction of the City through an approved Development Permit(s)\*, including spaces required for the use of:
- 15.1.1. The general public;
  - 15.1.2. Businesses and tenants on the lots, together with their employees, visitors, and guests; and
  - 15.1.3. Residential visitors (including both those parking spaces that the ZMU30 zone permits to be calculated on a shared basis with non-residential uses and those that are not permitted to be calculated on a shared basis).
- 15.2. Commercial Parking shall include, on a lot-by-lot basis:
- 15.2.1. No less than 50% Public Parking spaces, which spaces shall be designated by the owner/operator exclusively for short-term (e.g., hourly) parking by the general public; and
  - 15.2.2. No more than 50% Assignable Parking spaces, which spaces may be designated, sold, leased, reserved, signed, or otherwise assigned by the owner/operator for the exclusive use of employees or specific persons or businesses.
- 15.3. Public Parking spaces shall:
- 15.3.1. Include, but may not be limited to, 85% of the commercial parking spaces located at the entry level of each lot's parking structure or as otherwise determined to the satisfaction of the Director of Transportation;
  - 15.3.2. Include the 4 car-share parking spaces and related features required to satisfy the subject development's Transitional Parking and Transportation Demand Management (TDM) Strategy requirements (as per section 14) with respect to the subject rezoning application;

- 15.3.3. Include residential visitor parking (in the form of shared parking as approved through a Development Permit\*), which residential visitors shall be permitted to use the Public Parking on the same terms as members of the general public; and
- 15.3.4. Be available for use 365 days per year for a daily duration equal to or greater than the greater of the operating hours of the Community Centre, transit services within 400 m (5 minute walk) of the lot, businesses located on the lot, or as otherwise determined by the City.
- 15.4. Commercial Parking shall not include tandem parking.
- 15.5. Commercial Parking must, on a lot-by-lot basis, with respect to both Public Parking and Assignable Parking, include a proportional number of handicapped parking spaces, small car parking spaces, and spaces equipped with electric vehicle charging equipment, as per the Zoning Bylaw and legal agreements registered on title with respect to the subject rezoning.
- 15.6. “No development” shall be permitted on Lot A (Seaside South) or Lot B (Seaside North), restricting Development Permit\* issuance for a building on the applicable lot, in whole or in part (exclusive of parking), until, on a lot-by-lot basis, the developer provides for the required Commercial (Public and Assignable) Parking and related features to the satisfaction of the City.
- 15.7. No Building Permit\* shall be issued for a building on Lot A (Seaside South) or Lot B (Seaside North), in whole or in part (exclusive of parking), until, on a lot-by-lot basis, the developer provides for the required Commercial (Public and Assignable) Parking and a Letter of Assurance is submitted by the architect confirming that the facilities satisfy the City’s objectives.
- 15.8. “No occupancy” shall be permitted on Lot A (Seaside South) or Lot B (Seaside North), restricting final Building Permit\* inspection granting occupancy for any building on the applicable lot, in whole or in part (except for parking), until the required Commercial (Public and Assignable) Parking and related features are completed to the satisfaction of the City and have received final Building Permit\* inspection granting occupancy. Notwithstanding the afore mentioned statement, in the event that occupancy of the building on a lot is staged, “no occupancy” shall be permitted of the building (excluding parking), in whole or in part, until, on a lot-by-lot basis, 100% of the Public Parking spaces required with respect to the lot receive final Building Permit\* inspection granting occupancy.
- 16. Electric Vehicle (EV) Charging Equipment for Vehicles and “Class 1” Bike Storage: Registration of legal agreement(s) on Lot A (Seaside South), Lot B (Seaside North), and Lot C (Seaview) requiring that the developer/owner provides, installs, and maintains electrical vehicle (EV) charging equipment within the building for the use of building residents, commercial tenants, guests, customers, and other users as determined to the satisfaction of the City on a Development Permit\*-by-Development Permit\* (lot-by-lot) basis. More specifically:
  - 16.1. Electrical vehicle (EV) equipment shall be provided as indicated in the table below or in compliance with the City-approved rates in effect at the time of Development Permit\* issuance, on a Development Permit\* -by- Development Permit\* basis, whichever is greater.

**TABLE 6**

Electric Vehicle (EV) Charging Equipment by Use	Parking (240V) Minimum Rate			Class 1 Bike Storage (120V) Minimum Rate
	Charger (1)	Plug-In (2)	Rough-In (3)	
<b>RESIDENTIAL</b>				10% Plug-In (4)
▪ Residential – Market Units	0	25%	25%	
▪ Residential – Affordable Housing (5)	0	25%	25%	

Electric Vehicle (EV) Charging Equipment by Use	Parking (240V) Minimum Rate			Class 1 Bike Storage (120V) Minimum Rate
	Charger (1)	Plug-In (2)	Rough-In (3)	
<b>NON-RESIDENTIAL</b>				10% Plug-In (4)
▪ Commercial – “Public”	3% (6)	0	0	
▪ Commercial – “Assignable”	0	20%	0	
▪ Community Centre	2%	0	0	

- (1) An operating “AC Level 2” 240V electrical vehicle charging station.
- (2) An operating “AC Level 2” 240V electrical receptacle.
- (3) This configuration includes conduit and related electrical equipment to facilitate the cost-effective future installation of EV charging equipment; sufficient physical space in the electrical room to accommodate additional electric infrastructure in the future to supply electric service to the parking spaces; space at the parking stall to accommodate future installation of EV charging stations; and an electric service connection conduit from the electric grid to the building, sized to accommodate future electric service upgrades sufficient to provide EV charging stations in all parking spaces in the future.
- (4) An operating 120V duplex electrical outlet
- (5) For Affordable Housing, if a non-profit housing operator will operate the entirety of the affordable housing units contained within a lot (e.g., Seaside North) and parking required with respect to the affordable housing units is consolidated together within a secure compound managed by the non-profit housing operator (excluding visitor parking), then, as determined to the sole satisfaction of the City via an approved DP\*, the minimum EV equipment rate applicable to the affordable housing parking may be reduced such that 8% of the required parking spaces shall be equipped with an “AC Level 2” 240V charging station (1) (i.e. no plug-in(2) or rough-in(3)).
- (6) For Commercial – “Public” parking, the required chargers shall include those required by the City via legal agreement for car-share use.

- 16.2. “No development” shall be permitted on the lot, restricting Development Permit\* issuance for a building on the lot, in whole or in part (exclusive of parking), until, on a lot-by-lot basis, the developer provides for the required electric vehicle (EV) charging infrastructure for vehicles and “Class 1” bike storage and related features (e.g., permanent signage to facilitate the intended uses of the EV equipment and way-finding, pedestrian access routes, proportional distribution) to the satisfaction of the City.
- 16.3. No Building Permit\* shall be issued for a building on the lot, in whole or in part (exclusive of parking), until, on a lot-by-lot basis, the developer provides for the required electric vehicle (EV) charging infrastructure for vehicles and “Class 1” bike storage and related features as determined through the approved Development Permit\* and a Letter of Assurance is submitted by the architect confirming that the facilities satisfy the City’s objectives and complies with this legal agreement(s).
- 16.4. “No occupancy” shall be permitted on the lot, restricting final Building Permit\* inspection granting occupancy for any building on the lot, in whole or in part (exclusive of parking), until the required electric vehicle (EV) charging equipment for vehicles and “Class 1” bike storage and related features as determined through the approved Development Permit\* are completed to the satisfaction of the City and have received final Building Permit\* inspection granting occupancy. Notwithstanding the afore mentioned statement, in the event that occupancy of the building on a lot is staged, “no occupancy” shall be permitted of the first stage of building occupancy on a lot, in whole or in part (excluding parking), until 100% of the electric vehicle (EV) charging equipment for vehicles and “Class 1” bike storage and related features required with respect to the lot receive final Building Permit\* inspection granting occupancy.
- 17. Residential Tandem Parking: Registration of a legal agreement(s) on title on Lots A and B (Seaside South and North) and Lot C (Seaview) requiring that where two parking spaces are provided in a tandem arrangement for the use of resident parking (not including residential visitor parking), as per the Zoning Bylaw, both parking spaces must be assigned to the same dwelling unit.
- 18. Affordable Housing: The City’s acceptance of the developer’s offer to voluntarily contribute affordable (low-end market rental) housing constructed to a turnkey level of finish on Lot A (Seaside South) and Lot B (Seaside North) at the sole cost of the developer, the terms of which voluntary contribution shall include, but will not be limited to, the registration of the City’s standard Housing Agreement and Covenant(s) to secure the

affordable housing units. The form of the Housing Agreement and Covenant(s) shall be agreed to by the developer and the City prior to final adoption of the subject rezoning; after which time, only the Housing Covenant(s) may be amended or replaced and any such changes will only be permitted for the purpose of accurately reflecting the specifics of the Development Permits\* for Lot A (Seaside South) and Lot B (Seaside North) and other non-materials changes resulting thereof and made necessary by the Lot A (Seaside South) and Lot B (Seaside North) Development Permit\* approval requirements, as determined to the satisfaction of the Director of Development, and Manager, Community Social Development. The terms of the Housing Agreement and Covenant(s) shall indicate that they apply in perpetuity and provide for, but will not limited to, the following:

18.1. The required minimum floor area of the affordable (low-end market rental) housing shall be:

18.1.1. Equal to a combined habitable floor area of at least 4,441.8 m<sup>2</sup> (47,811.1 ft<sup>2</sup>), excluding standard Floor Area Ratio (FAR) exemptions, as determined based on 5% of the subject development's total maximum residential floor area permitted on Lot A (Seaside South), Lot B (Seaside North), and Lot C (Seaview) under the proposed ZMU30 zone (i.e. 5% of 88,836.0 m<sup>2</sup> / 956,222.4 ft<sup>2</sup>); and

18.1.2. Distributed such that at least 1,110.5 m<sup>2</sup> (11,953.3 ft<sup>2</sup>) or 25% of the required affordable housing habitable floor area, whichever is greater, is located on Lot A (Seaside South) and the balance (i.e. 3,331.3 m<sup>2</sup> / 35,857.8 ft<sup>2</sup> or 75% of the required affordable housing habitable floor area, whichever is less) is located on Lot B (Seaside North).

NOTE: No affordable housing will be constructed on Lot C (Seaview).

18.2. The developer shall, as generally indicated in the table below:

18.2.1. Ensure that the types, sizes, rental rates, and occupant income restrictions for the affordable housing units are in accordance with the City's Affordable Housing Strategy and guidelines for Low End Market Rental housing, unless otherwise agreed to by the Director of Development and Manager, Community Social Development;

18.2.2. Achieve the Project Targets for the total number of affordable housing units and unit mix or as otherwise determined to the satisfaction of the Manager, Community Social Development through the project's lot-by-lot Development Permit\* processes; and

18.2.3. Design and construct 100% of the affordable housing units to comply, at a minimum, with Richmond Zoning Bylaw requirements for Basic Universal Housing (BUH) units.

**TABLE 7**

Unit Type	Affordable Housing Strategy Requirements			Project Targets (2)	
	Minimum Unit Area	Maximum Monthly Unit Rent (1)	Total Maximum Household Income (1)	Unit Mix	# of Units
Bachelor	37 m <sup>2</sup> (400 ft <sup>2</sup> )	\$850	\$34,000 or less	10%	10
1-Bedroom	50 m <sup>2</sup> (535 ft <sup>2</sup> )	\$950	\$38,000 or less	30%	18
2- Bedroom	80 m <sup>2</sup> (860 ft <sup>2</sup> )	\$1,162	\$46,500 or less	30%	18
3-Bedroom	91 m <sup>2</sup> (980 ft <sup>2</sup> )	\$1,437	\$57,500 or less	30%	18
TOTAL	4,441.8 m <sup>2</sup> (47,811.1 ft <sup>2</sup> )	N/A	N/A	100%	59

(1) May be adjusted periodically, as provided for under adopted City policy.

(2) 100% of affordable housing units shall meet Richmond Basic Universal Housing (BUH) standards or better.

18.3. The affordable housing units shall be distributed among the development's residential towers in the form of unit clusters, which may occupy entire tower floors or part thereof, on Lot A (Seaside South) and Lot B (Seaside North), as determined to the satisfaction of the City through the Development Permit\* review and approval processes.

- 18.4. Occupants of the affordable housing units on each lot shall, to the satisfaction of the City (as determined prior to Development Permit\* approval), enjoy full and unlimited access to and use of all on-site indoor and outdoor amenity spaces provided on the lot as per OCP and City Centre Area Plan (CCAP) requirements (i.e. Lot A(Seaside South) residents will have unlimited to Lot A (Seaside South) amenities).
  - 18.5. Parking, "Class 1" bike storage, and related electric vehicle (EV) charging stations shall be provided for the use of affordable housing occupants as per the OCP, Zoning Bylaw, and legal agreements registered on title with respect to the subject rezoning at no additional charge to the affordable housing tenants (i.e. no monthly rents or other fees shall apply for the casual, shared, or assigned use of the parking spaces, bike storage, EV charging stations, or related facilities by affordable housing tenants), which features may be secured via legal agreement(s) on title prior to Development Permit\* issuance on a lot-by-lot basis or as otherwise determined to the satisfaction of the City.
  - 18.6. The affordable housing units, related uses (e.g., parking, garbage/recycling, hallways, amenities, lobbies), and associated landscaped areas shall be completed to a turnkey level of finish, at the sole cost of the developer, to the satisfaction of the Manager, Community Social Development.
  - 18.7. "No development" shall be permitted on Lot A (Seaside South) or Lot B (Seaside North), restricting Development Permit\* issuance for a building on Lot A (Seaside South) or Lot B (Seaside North), in whole or in part (excluding parking), until the developer, to the City's satisfaction:
    - 18.7.1. Designs the lot to provide for the affordable housing units and ancillary spaces and uses;
    - 18.7.2. Amends or replaces the Housing Covenant to accurately reflect the specifics of the affordable housing units and ancillary spaces and uses as per the approved Development Permit\*; and
    - 18.7.3. As required, registers additional legal agreements on title to facilitate the detailed design, construction, operation, and/or management of the affordable housing units and/or ancillary spaces and uses (e.g., parking) as determined by the City via the Development Permit\* review and approval processes.
  - 18.8. No Building Permit\* shall be issued for a building on Lot A (Seaside South) or Lot B (Seaside North), in whole or in part (excluding parking), until, on a lot-by-lot basis, the developer provides for the required affordable housing units and ancillary spaces and uses to the satisfaction of the City.
  - 18.9. "No occupancy" shall be permitted on Lot A (Seaside South) or Lot B (Seaside North), restricting final Building Permit\* inspection granting occupancy for any building on Lot A (Seaside South) or Lot B (Seaside North), in whole or in part (except for parking), until, on a lot-by-lot basis, the required affordable housing units and ancillary spaces and uses are completed to the satisfaction of the City and have received final Building Permit\* inspection granting occupancy.
19. Community Centre: The City's acceptance of the developer's offer to voluntarily contribute a Community Centre, the terms of which voluntary contribution shall include the developer's transfer of a minimum of 3,106.59 m<sup>2</sup> (33,439.00 ft<sup>2</sup>) of indoor floor area in the form of an Air Space Parcel (ASP) on Lot B (Seaside North), together with outdoor program space, parking, and related features secured via easements and/or statutory right-of-ways as required, all constructed at the developer's sole cost to a turnkey level of finish, to the satisfaction of the City, for use as a recreational, social, educational, and cultural community amenity and event space, as provided for under the subject rezoning application's proposed ZMU30 zone.

Prior to rezoning adoption, as determined to the satisfaction of the City, the developer shall enter into legal agreements and provide other security in accordance with the following and the Community Centre Terms of Reference (**Schedule F** and REDMS #5163571) and Community Centre Conceptual Plan (**Schedule G**), together with an additional reference document provided to the developer:

- City Centre North Community Centre, August 30, 2016 (REDMS #5165254).

The cost of the Community Centre to be borne by the developer shall include, among other things, Tenant Improvement (TI) works, the scope of which TI works shall be as generally described in the above documents (exclusive of the base building, outdoor areas, the parking structure, and related features) and shall have a

value of \$3,318.51/m<sup>2</sup> (\$308.30/ft<sup>2</sup>) based on 3,106.59 m<sup>2</sup> (33,439.00 ft<sup>2</sup>) of indoor floor area. (TI costs in excess of this amount shall be borne by the City.) If all tendering is not complete in a timeframe to enable final Building Permit\* inspection granting occupancy and the City's acceptance of the works by December 2020, the value of the TI works (i.e. \$3,318.51/m<sup>2</sup> / 308.30/ft<sup>2</sup>) shall be increased (but not decreased) according to a mutually agreed upon independent cost consultant escalation factor reflective of local conditions.

- 19.1. Submission of security in the form of a Letter of Credit (LOC) for \$2,810,500, to secure the developer's commitment to design, construct, and transfer the Community Centre to the City, all to the City's satisfaction. The LOC shall not be reduced or released until 1 year after the Community Centre has received final Building Permit\* inspection granting occupancy and the City has accepted the Community Centre works. The LOC may be used, at the sole discretion of the City, to rectify deficiencies in the Community Centre works and ensure that the ASP is free and clear of builder's liens and other encumbrances.
- 19.2. Submission of cash-in-lieu contributions towards the following, which cash-in-lieu contributions shall be understood to constitute a portion of the cost of the Community Centre borne by the developer:
  - 19.2.1. City's project management costs for the Community Centre (\$300,000);
  - 19.2.2. City's construction management costs for the Community Centre (\$150,000); and
  - 19.2.3. Installation of fibre communication equipment by the City or its designate (\$150,000).

NOTE: If required, at the sole discretion of the City, the developer shall grant statutory right-of-way(s) and/or enter into legal agreements to facilitate the installation and operation of the City's fibre communication equipment.

- 19.3. Registration of legal agreement(s), which may include, but may not be limited to, the following:
  - 19.3.1. A construction agreement setting out requirements with respect to the design, construction, supply, installation, approval, and warranty of the Community Centre and related works to the satisfaction of the City, which agreement may include a statutory right-of-way(s) and/or rent charge.
  - 19.3.2. An Air Space Parcel (ASP) subdivision agreement to facilitate the future creation of an ASP containing the Community Centre, together with easement(s) and/or statutory right-of-way(s) registered on title to secure parking, bike storage, loading, waste management facilities, and/or related access, uses, and spaces and terms with respect to cost sharing between the ASP owner (the City) and the Remainder owner, all in a form and content satisfactory to the City.
  - 19.3.3. A purchase and sale agreement to facilitate the transfer of the Community Centre ASP to the City, which transfer shall not occur until the City has, at its sole discretion, accepted the Community Centre works (which acceptance shall not relieve the developer of any outstanding obligations). The agreement shall include an option to purchase.
  - 19.3.4. "No development" shall be permitted on Lot B (Seaside North), restricting Development Permit\* issuance for a building on Lot B (Seaside North), in whole or in part (excluding parking), until the developer designs the Community Centre to the satisfaction of the City, as generally described in the Community Centre Terms of Reference (**Schedule F**), Community Centre Conceptual Plan (**Schedule G**), and related reference documents and providing for, among other things:
    - a) A fully-functional, fully-finished, two-storey Community Centre with at least 3,106.6 m<sup>2</sup> (33,439.0 ft<sup>2</sup>) of habitable indoor area (together with parking and other ancillary uses and spaces), which habitable indoor area shall include:
      - 100% of exterior perimeter walls (i.e. along the street frontage), interior walls within the Community Centre, service rooms, spaces, and vertical ducts intended for the exclusive use of the Community Centre and situated within the perimeter walls of the Community

Centre (i.e. not in the parking structure), and vertical circulation (i.e. stairs and elevators shall be counted twice, once on each floor);

- 50% of interior perimeter walls shared with the parking structure or commercial or residential uses (i.e. measured to the centreline of the wall); and
- 0% of uses/spaces contained within the parking structure (e.g., parking, garbage room, bike parking, service rooms and ducts) and “open to below” spaces within the lobby and gymnasium (i.e. floor area shall be counted only in the affected areas).

NOTE: Service spaces/ducts and other building features that are NOT intended to exclusively serve the needs of the Community Centre shall not be located with the Community Centre’s perimeter walls, except with the City’s express permission, as determined at the City’s sole discretion. In the event that the City grants permission for any such penetrations, the affected building features and any associated structure, spaces, or uses must be excluded from the Community Centre’s habitable indoor area.

- b) A variety of program and support spaces including, but not limited to, a large “village square” for sports and community events (i.e. a clear-span gymnasium with a sprung wood floor), an indoor activity track, an Exploratorium (i.e. a children’s exploration room with a depressed slab to accommodate special play opportunities), a creativity lab and wet art studio, and multipurpose rooms;
- c) Clear ceiling heights, unobstructed by structure, lighting, ventilation, piping, signage, or other features, of at least 9.14 m (30.0 ft.) in the “village square” (i.e. gymnasium) and as noted in each of the room data sheets for other rooms, are required. The Children’s Exploration Room requires a clear height of 4.27 m (14.0 ft.) as per the room data sheet and a 1.22 m (4.0 ft.) depression for a portion of the room. The depression shall only sit over spaces/uses that can accommodate a lower ceiling height.
- d) Direct, level public access to fronting grade-level public sidewalks and plaza areas along No. 3 Road and the proposed East-West Street;
- e) Secure, dedicated vertical circulation connecting the Community Centre’s two floors, including a large elevator able to accommodate strollers and equipment, none of which shall be shared with other tenants or uses on Lot B (Seaside North);
- f) Parking on Lot B (Seaside North) for visitors, staff, guests, and related activities to the satisfaction of the City and secured with legal agreements registered on title (which shall include, among other things, provisions that the rates charged to the users by the owner shall not exceed the rate(s) charged for Commercial Parking on Lot B (Seaside North) and any rate(s) must be to the satisfaction of the City), including:
  - 2 loading/parking spaces for the exclusive (24/7) use of the Community Centre for operations and program purposes (e.g., program vehicles, couriers, maintenance vehicles), which spaces shall be:
    - i) Clearly signed;
    - ii) Clustered together;
    - iii) Immediately adjacent to the Community Centre’s rear (parkade) entrance or alternative access acceptable to the City;
    - iv) Sized to comply with the Zoning Bylaw requirements for parking for disabled persons (i.e. Handicapped Space); and
    - v) Equipped with one electric vehicle (EV) “Level 2” 240V electrical outlet together with an installed vehicle charger.
  - 52 spaces for the exclusive (24/7) use of the Community Centre, which spaces shall be:
    - i) Clearly signed;
    - ii) Clustered together;

- iii) Convenient to the parkade driveway and near the building's "Public" Commercial Parking (as per legal agreements registered on title), to facilitate easy way-finding and overflow in the event that the Community Centre parking is fully occupied;
  - iv) Next to the Community Centre's rear (parkade) entrance or next to an elevator and stair that provide direct access to the rear entrance;
  - v) Designated for specific uses/users as determined by the City (e.g., drop-off/pick-up, staff spaces, family spaces); and
  - vi) Provided in compliance with the Zoning Bylaw, including a proportional share of spaces for disabled persons (i.e. Handicapped Space); and
- 20 spaces for the shared use of the Community Centre, which spaces shall be reserved for exclusive Community Centre use during specified days and hours (e.g., weekdays after 6 pm and all-day on weekends) and exclusive "Assignable" Commercial Parking use (as per legal agreements registered on title) at all times (e.g., weekdays before 6 pm) and shall be:
    - i) Clearly signed;
    - ii) Clustered together and, if possible, co-located with the Community Centre's 52 exclusive parking spaces;
    - iii) Convenient to the parkade driveway and near the building's "Public" Commercial Parking (as per legal agreements registered on title), to facilitate easy way-finding and overflow in the event that the Community Centre parking is fully occupied; and
    - iv) Provided in compliance with the Zoning Bylaw, including a proportional share of spaces for disabled persons (i.e. Handicapped Space);
- g) Secured (Class 1) bike storage for exclusive staff and Community Centre use within the parking structure and unsecured (Class 2) bike racks for visitor and guests near the entrance(s) to the Community Centre, which secured and unsecured bike parking shall be provided (and, as applicable, equipped with electric vehicle (EV) charging equipment) in compliance with the Zoning Bylaw and related legal agreements registered on title;
  - h) Waste storage room (i.e. for garbage, recyclables, and organics) for the shared use of the Community Centre and the building's commercial tenants, conveniently located near the facility's rear (parkade) entrance; and
  - i) Loading and waste holding and pick-up facilities shared with non-residential uses on Lot B (Seaside North).

19.3.5. No Building Permit\* shall be issued for a building on Lot B (Seaside North), in whole or in part (excluding parking), until:

- a) The developer submits all architectural and landscape designs, structural, mechanical, and electrical drawings, and related specifications to the City, makes necessary changes as directed by the City, and receives written approval from the Director of Development, Manager of Real Estate Services, Director of Engineering, and Manager of Community Social Services on behalf of the City as the future owner of the Community Centre (i.e. not in its regulatory capacity); and
- b) The required Community Centre and related features are incorporated in the Lot B (Seaside North) Building Permit\* drawings and specifications, generally as determined via the rezoning and the Development Permit\* processes for Lot B (Seaside North), to the satisfaction of the City.

19.3.6. "No occupancy" shall be permitted on Lot B (Seaside North), restricting final Building Permit\* inspection granting occupancy for a building on Lot B (Seaside North), in whole or in part (excluding parking), until the required Community Centre and related features (e.g., parking, loading, service facilities, landscaping) on Lot B (Seaside North) are completed to the

satisfaction of the City and have received final Building Permit\* inspection granting occupancy, the City has accepted the works, and the Community Centre ASP has been transferred to the City free and clear of any encumbrances (except as permitted by the City in its sole discretion).

20. **Public Art:** City acceptance of the developer’s offer to voluntarily contribute towards Public Art, the terms of which voluntary developer contribution shall include:

20.1. Prior to rezoning adoption, the developer shall provide for the following:

20.1.1. Submission of a Public Art Plan that:

- a) Includes the entirety of the subject site, prepared by an appropriate professional and based on the Richmond Public Art Program, City Centre Public Art Plan, and any relevant supplementary public art and heritage planning undertaken by the City for Capstan Village, to the satisfaction of the Director of Development and Director, Arts, Culture, and Heritage Services (including review(s) by the Public Art Advisory Committee and presentation for endorsement by Council, as required by the Director, Arts, Culture, and Heritage Services);
- b) Is based on the full value of the developer’s voluntary public art contribution, which is estimated to be at least \$833,877, based on a minimum rate of \$0.81/ft<sup>2</sup> for residential uses and \$0.43/ft<sup>2</sup> for non-residential uses and the maximum buildable floor area permitted under the subject site’s proposed ZMU30 zone, excluding affordable housing and Community Centre uses, as determined on a phase-by-phase basis, as indicated in the table below; and
- c) Allocates a portion of the developer’s voluntary contribution, equal to at least 1% of the estimated construction budget for the proposed Community Centre, to public artwork(s) that will be designed and implemented in coordination with the Community Centre (i.e. in Phase 2), to the satisfaction of the City.

**TABLE 8**

Phase	Maximum Permitted Floor Area as per ZMU30 Zone	Public Art Floor Area Exemptions (1)	Minimum Developer Contribution Rates	Min. Voluntary Developer Contributions (2)
1 (Seaside South)	(R) 54,977.8 m2 (591,775.6 ft2 ) (NR) 2,131.0 m2 (22,938.3 ft2)	(R) 1,110.5 m2 (11,953.3 ft2)	(R) \$0.81/ft <sup>2</sup> (NR) \$0.43/ft <sup>2</sup>	\$479,519
2 (Seaside North)	(R) 21,015.0 m2 (226,203.6 ft2) (NR) 22,164.8 m2 (238,580.1 ft2)	(R) 3,331.3 m2 (35,857.8 ft2) (NR) 3,106.6 m2 (33,439.0 ft2)	The greater of the Phase1 rate or the City rate in effect at Development Permit* approval	\$242,391
3 (Seaview)	(R) 12,843.2 (138,243.2 ft2) (NR) Nil	Nil		\$111,977
<b>TOTAL</b>	(R) 88,836.0 m2 (956,222.4 ft2) (NR) 24,295.8 m2 (261,518.4 ft2)	(R) 4,441.8 m2 (47,811.1 ft2) (NR) 3,106.6 m2 (33,439.0 ft2)	Varies	\$833,887

NOTE: (R) means residential and (NR) means non-residential.

(1) Rates do not apply to affordable housing or Community Centre uses.

(2) Estimated minimum contributions are based on the maximum permitted floor area permitted under the subject site’s proposed ZMU30 zone and the contribution rates in effect at the time of writing these Rezoning Considerations. Actual contributions may be greater, as determined based on the rates in effect prior to Development Permit\* issuance on a phase-by-phase basis.

20.1.2. Registration of legal agreement(s) on title to facilitate the multi-phase implementation of the City-approved Public Art Plan.

20.2. “No development” shall be permitted on the subject site, restricting Development Permit\* issuance on a lot-by-lot (phase-by-phase) basis, until the developer:

20.2.1. Enters into any additional legal agreement(s) required to facilitate the multi-phase implementation of the City-approved Public Art Plan, which may require that, prior to entering into any such additional agreement, a Detailed Public Art Plan is submitted by the developer for the lot (phase)

and/or an artist is engaged, to the satisfaction of the City (as generally set out in the legal agreement entered into and the Public Art Plan submitted prior to rezoning adoption); and

- 20.2.2. Submits a Letter of Credit or cash (as determined at the sole discretion of the City) with respect to the applicable lot (phase) of the Plan's implementation, the value of which contribution shall be at least the value indicated for the applicable lot (phase) in the table above.

NOTE: If the Plan requires that a voluntary contribution for a particular lot (phase) exceeds the value in the above table, it shall be understood that the developer is "pre-paying" some of all of his/her contribution for a future phase or phases and the "pre-paid" portion will be credited towards future voluntary contribution(s) as set out in the Plan.

- 20.3. "No occupancy" shall be permitted on the subject site, restricting final Building Permit\* inspection granting occupancy of the building (exclusive of parking), in whole or in part, on a lot or phase for which the City-approved Public Art Plan requires the developer's implementation of a public artwork until:

20.3.1. The developer, at his/her expense, commissions an artist(s) to conceive, create, manufacture, design, and oversee or provide input about the manufacturing of the public artwork, and causes the public artwork to be installed on City property, if expressly permitted by the City, or within a statutory right-of-way on the developer's lands (which right-of-way shall be to the satisfaction of the City for rights of public passage, public art, and related purposes, in accordance with the City-approved Public Art Plan);

20.3.2. The developer, at his/her expense and within thirty (30) days of the date on which the public art is installed, executes and delivers to the City a transfer of all of the developer's rights, title, and interest in the public artwork to the City if on City property or to the subsequent Strata or property owner if on private property (including transfer of joint world-wide copyright) or as otherwise determined to be satisfactory by the City Solicitor and Director, Arts, Culture, and Heritage Services; and

NOTE: It is the understanding of the City that the artist's rights, title, and interest in the public artwork will be transferred to the developer upon acceptance of the artwork based on an agreement solely between the developer and the artist. These rights will in turn be transferred to the City, subject to approval by Council to accept the donation of the artwork.

20.3.3. The developer, at his/her expense, submits a final report to the City promptly after completion of the installation of the public art in respect to the City-approved Public Art Plan, which report shall, to the satisfaction of the Director of Development and Director, Arts, Culture, and Heritage Services, include:

- a) Information regarding the siting of the public art, a brief biography of the artist(s), a statement from the artist(s) on the public art, and other such details as the Director of Development and Director, Arts, Culture, and Heritage Services may require;
- b) A statutory declaration, satisfactory to the City Solicitor, confirming that the developer's financial obligation(s) to the artist(s) have been fully satisfied;
- c) The maintenance plan for the public art prepared by the artist(s); and
- d) Digital records (e.g., photographic images) of the public art, to the satisfaction of the Director of Development and Director, Arts, Culture, and Heritage Services.

## 21. Discharge of Legal Agreements:

- 21.1. Off-Site Parking on 3099, 3111, and 3333 Corvette Way: Discharge of the Wall Centre Westin Hotel Section 219 Covenant over Common Property and Strata Lots and Statutory Right-of Way over Common Property for off-site parking purposes in favour of the Comfort Inn (hotel), formerly located at 3031 No 3 Road (BB1753844-48). As the Comfort Inn has been demolished and the property is a subject of this rezoning application (RZ 12-603040), the covenant is no longer required and can be discharged.

- 21.2. Additional Discharges: As determined to the sole satisfaction of the City via the rezoning, Servicing Agreement\*, and/or Development Permit\* processes.
22. Pier Funding: The City's acceptance of the developer's voluntary cash-in-lieu contribution in the amount of \$2.6 million towards the design and construction of a public pier and related features along the river frontage of the proposed park.
- NOTE: If the developer elects to design and construct the pier, to the satisfaction of the City, through the City's standard Servicing Agreement\* (SA) processes in coordination with the design and construction of the park and Park SA\*, then the City will direct the developer's voluntary \$2.6 million cash-in-lieu contribution to fund the City-approved works.
23. Community Planning: The City's acceptance of the developer's voluntary contribution in the amount of \$284,122, based on \$0.25/ft<sup>2</sup> of maximum permitted buildable floor area as per the proposed ZMU30 zone excluding affordable housing and community centre uses (i.e. 1,136,490.6 ft<sup>2</sup> x \$0.25/ft<sup>2</sup>) to future City community planning studies, as set out in the City Centre Area Plan
24. Development Permit\* – Lot A (Seaside South): The submission and completion of processing of a Development Permit\* for Lot A (Seaside South), the developer's first phase of development, to a level deemed acceptable by the Director of Development.
25. Servicing Agreement\* (SA): Enter into a Servicing Agreement(s)\* for the design and construction, at the developer's sole cost, of full upgrades across the subject site's street frontages, together with various engineering, transportation, and parks works, to the satisfaction of the City.

Except as expressly provided for and in compliance with the subject development's Phasing Covenant (i.e. SA #1, SA #2, and SA #3), related legal agreement(s), and security, to the satisfaction of the Director of Development, Director of Engineering, Director of Transportation, Senior Manager, Parks, and Manager, Environmental Sustainability:

- Prior to rezoning adoption, all works identified via the subject development's SA\* must be secured via a Letter(s) of Credit;
- All works shall be completed prior to final Building Permit\* inspection granting occupancy of the first building on the subject site (exclusive of parking), in whole or in part; and
- Development Cost Charge (DCC) credits may apply.

Servicing Agreement\* works will include, but may not be limited to, the following:

25.1. Engineering Servicing Agreement \* Requirements:

25.1.1. Water Works:

**SA #1 - Seaside South (3231/3291/3311/3331/3351 No 3 Rd, 8151 Capstan Way)**

- a) Using the OCP Model, there is 259 L/s of water available at a 20 psi residual at the Corvette Way frontage, 567 L/s of water available at a 20 psi residual at the No 3 Road frontage, and 191 L/s of water available at a 20 psi residual at the Capstan Way frontage. Based on your proposed development, your site requires a minimum fire flow of 220 L/s.
- b) The Developer is required to:
  - Submit Fire Underwriter Survey (FUS) or International Organization for Standardization (ISO) fire flow calculations to confirm development has adequate fire flow for onsite fire protection. Calculations must be signed and sealed by a Professional Engineer and be based on Building Permit Stage Building designs.
  - Upgrade approximately 108 m of existing 150 mm diameter water main to 200 mm along the Capstan Way frontage from the west property line to No 3 Rd.
  - Install approximately 130 m of 200 mm diameter water main along the new road bisecting the two newly subdivided lots of the Seaside development, complete with fire hydrants to achieve City spacing requirements.

- Install 2 new water service connections, complete with meters and meter boxes, off of the proposed water main along the new road to service the two newly subdivided lots of the Seaview development.
  - Review hydrant spacing along all frontages for the Seaside development (as in, both phase 1 and 2), and install new hydrants as required to achieve City spacing requirements.
  - Review the impact of the proposed works on the existing 300 mm diameter AC water main on the No 3 Rd frontage via a geotechnical assessment. If the works will impact the existing AC water main, replacement/relocation shall be at the Developer's cost.
- c) At Developer's cost, the City is to:
- Complete all tie-ins for the proposed works to existing City infrastructure.
  - Cut and cap all existing water service connections.

**SA #2 - Seaside North (3031/3211/3231 No 3 Rd)**

- a) Using the OCP Model, there is 259 L/s of water available at a 20 psi residual at the Corvette Way frontage, and 567 L/s of water available at a 20 psi residual at the No 3 Road frontage. Based on your proposed development, your site requires a minimum fire flow of 220 L/s.
- b) The Developer is required to:
- Submit Fire Underwriter Survey (FUS) or International Organization for Standardization (ISO) fire flow calculations to confirm development has adequate fire flow for onsite fire protection. Calculations must be signed and sealed by a Professional Engineer and be based on Building Permit Stage Building designs.
  - Review the impact of the proposed works on the existing 300 mm diameter AC water main on the No 3 Rd frontage via a geotechnical assessment. If the works will impact the existing AC water main, replacement/relocation shall be at the Developer's cost.
- c) At Developer's cost, the City is to:
- Cut and cap all existing water service connections.

**SA #3 - Seaview (8051/8100 River Road)**

- a) The Developer is required to:
- Submit Fire Underwriter Survey (FUS) or International Organization for Standardization (ISO) fire flow calculations to confirm development has adequate fire flow for onsite fire protection. Calculations must be signed and sealed by a Professional Engineer and be based on Building Permit Stage Building designs.
  - Install approximately 110m meters of minimum 200mm diameter water main complete with fire hydrants along the east side of the north-south aligned Corvette Way. The new water main shall be tied-in to the existing water mains along Capstan Way and the east-west aligned Corvette Way.
  - Extend the existing water main along the east-west aligned Corvette Way to the west to facilitate tie-in of the new water main along the north-south aligned Corvette Way.
  - Install a new water service connection, complete with meter and meter box, off of the proposed water main along the Corvette Way frontage.
  - Remove and legally dispose offsite the existing AC water main along old River Road between the east-west aligned Corvette Way and Capstan Way, after completion of cutting and capping by City crews.

- Relocate to the ultimate location the existing fire hydrant on the River Road frontage.
  - Review hydrant spacing along all frontages and install new hydrants as required to achieve City spacing requirements.
- b) At Developer's cost, the City is to:
- Complete all tie-ins for the proposed works to existing City infrastructure.
  - Cut and cap the existing water main along old River Road between the east-west aligned Corvette Way and Capstan Way.

25.1.2. Storm Sewer Works:

**SA #1 - Seaside South (3231/3291/3311/3331/3351 No 3 Rd, 8151 Capstan Way)**

- a) The Developer is required to:
- Cut, cap, abandon and fill, per MMCD specifications, the existing 375mm and 450mm diameter storm sewer along the north-south aligned Corvette Way.
  - Install approximately 120 meters of 600mm diameter storm sewer along the north-south aligned Corvette Way. Tie-in to the south shall be to the existing ditch along the west side of the new River Road just south of Capstan Way via a new manhole and headwall. Tie-in to the north shall be to the existing storm sewers along the east-west aligned Corvette Way via a new manhole.
  - Extend the existing storm sewer along the east-west aligned Corvette Way up to 15 meters to the west to facilitate tie-in (via a new manhole) of the new storm sewer along the north-south aligned Corvette Way.
  - Review the capacity and condition of the existing ditch along the west side of the new River Road from Capstan Way to the Cambie Road box culvert and provide a capacity analysis within the first SA submission. In order to facilitate drainage from this development, the Developer may be required to widen and re-grade the existing ditch. The existing headwall at the Cambie Road box culvert shall be upgraded to MMCD specifications by the Developer.
  - Install two new storm service connections off of the existing 600 mm storm sewer along Corvette Way, complete with inspection chambers, to serve the both phases of the Seaside development.
  - Cut and cap all existing storm service connections for both phases of the Seaside development, and remove inspection chambers.
  - Install approximately 130 m of 200 mm diameter lane drainage along the new road bisecting the two newly subdivided lots of the Seaside development, complete with catch basins to meet City spacing requirements. The main shall be graded to drain towards Corvette Way. No service connections are permitted to connect to lane drainage.
- b) At Developer's cost, the City is to:
- Complete all tie-ins for the proposed works to existing City infrastructure.

**SA #2 - Seaside North (3031/3211/3231 No 3 Rd)**

- a) The Developer is required to: N/A

**SA #3 - Seaview (8051/8100 River Road)**

- a) The Developer is required to:
- Cut, cap, and remove the existing storm main along old River Road between the east-west aligned Corvette Way and Capstan Way.

- Install a new storm service connection off of the proposed 600 mm storm sewer along Corvette Way, complete with inspection chamber.
  - Cut and cap all existing storm service connections, and remove inspection chambers.
- b) At Developer's cost, the City is to:
- Complete all tie-ins for the proposed works to existing City infrastructure.

25.1.3. Sanitary Sewer Works:

**SA #1 - Seaside South (3231/3291/3311/3331/3351 No 3 Rd, 8151 Capstan Way)**

- a) The Developer is required to:
- Cut, cap, and remove the existing sanitary connections and inspection chambers for both phases of the Seaview development.
  - Cut, cap, and remove the sanitary mains located within the development sites for both phases of the Seaside development:
    - i) Between the Skyline pump station and SMH5413
    - ii) Between SMH52188 and SMH5455
  - Coordinate with the City to discharge applicable statutory right-of-ways
  - Abandon and fill, per MMCD specifications, the existing 200 mm sanitary main along the north-south aligned Corvette Way frontage. Portions of the abandoned sanitary main may be required to be removed to facilitate the construction of the proposed water main; this should be reviewed before filling to prevent conflicts.
  - Install approximately 120 meters of 375 mm diameter sanitary main at an alignment located west of the road centerline along the north-south aligned Corvette Way frontage. Removal of the existing railway tracks may be required to facilitate the sanitary sewer construction along the west side of Corvette Way. The new sanitary sewers shall tie-in to the existing sanitary sewers along the south side of Capstan Way and along the east-west aligned Corvette Way via new manholes. Tie-in shall be at the south side of Capstan Way, west of the Metro Vancouver trunk sewers.
  - Upgrade approximately 80 meters of existing 300 mm diameter FRP sanitary main along Capstan Way between Corvette Way and SMH5508 to 375 mm.
  - Install two new sanitary service connection off of the existing 300 mm PVC sanitary main along the north-south aligned Corvette Way frontage, to serve both phases of the Seaside development. The service connections may be installed directly off of the existing manholes if the connection is not oriented against the flow in the main and hydraulic requirements are achieved; otherwise, they should be installed complete with inspection chamber.
- b) At Developer's cost, the City is to:
- Complete all tie-ins for the proposed works to existing City infrastructure.

**SA #2 - Seaside North (3031/3211/3231 No 3 Rd)**

- a) The Developer is required to:
- N/A

**SA #3 - Seaview (8051/8100 River Road)**

- a) The Developer is required to:
- Cut, cap, and remove the existing sanitary main along old River Road between the east-west aligned Corvette Way and Capstan Way.

- Install a new sanitary service connection, complete with inspection chamber, off of proposed 375 mm diameter sanitary main along the north-south aligned Corvette Way frontage.
  - Cut and cap all existing sanitary service connections, and remove inspection chambers.
- b) At Developer's cost, the City is to:
- Complete all tie-ins for the proposed works to existing City infrastructure.

25.1.4. Skyline Pump Station:

**SA #1 - Seaside South (3231/3291/3311/3331/3351 No 3 Rd, 8151 Capstan Way)**

- a) The Developer is required to:
- Relocate the existing pump station kiosk in order to facilitate the construction of the proposed bike path. The kiosk's new location should be out of the boulevard and in a statutory right-of-way (SRW) as described below. The kiosk location within the SRW should consider the location of the ultimate above-ground structures; preference is given to a layout plan that allows the future kiosk to be constructed while existing kiosk remains in service (for example, relocating the existing kiosk into the ultimate location of the pump station generator).
  - Provide working plans for both the existing and future Skyline pump stations, within the first Servicing Agreement submission, containing:
    - i) Space within the boulevard for a F450 service truck (approximately 7.5 m by 2.5 m with 1.3 m-wide stabilizers) to park and access the existing and future wet well, while minimizing impact to the flow of foot or bike traffic. The vehicle should be off the road and able to park without damaging the boulevard, as well as allowing for enough space for the pumps to be removed by the service vehicle's crane for maintenance.
    - ii) Space within the boulevard for both the existing and future wet well, so that the existing pump station can remain in service when the future pump station is constructed. The space allocation for the future pump station shall accommodate the construction of a 3.6 m diameter wet well, and may be within the interim parking space for the maintenance vehicle. For the future pump station plan, the existing wet well may be converted to a manhole to route flows to the future wet well.

25.1.5. Dike Improvements:

**SA #3 - Seaview (8051/8100 River Road)**

- a) The Developer is required to satisfy the following in terms of dike design:
- The dike design shall be done by a Professional Geotechnical Engineer.
  - The elevation of the dike crest shall be raised to minimum 4.7 m geodetic, and shall be designed to accommodate a future elevation of 5.5 m. On the waterside of the dike, the slope shall be maximum 2:1. On the landside of the dike, the slope shall be maximum 3:1.
  - The crest of the dike shall be minimum 4.0 m wide. The dike shall be designed so that the service vehicles and equipment can access the entire length of the dike, and the design shall provide adequate space for the service vehicles to enter and exit, which shall be based on the Transportation Associate of Canada's standard SU turning templates and approved by the City's Transportation department.
  - The design shall provide for access of service vehicles off of Capstan Way. In addition, opportunities to provide for a second ramp at the north end of the dike works shall be

investigated in coordination with the design of the park and road improvements in the vicinity of the proposed River Road/Corvette Way intersection. Access ramps shall be designed to accommodate the TAC's SU vehicle and at no more than 10% grade. Any ramp at the dike's north end shall be designed to accommodate driveway access to 8171 River Road.

- There shall be a minimum building setback of the greater of 30.0 m from the dike's high water mark or 7.5 m from the landside toe of the future 5.5 m dike.
- The dike along the frontage of the development site shall be tied in to the adjacent dikes to the north and south at a maximum slope of 3:1. Developer to be responsible to locate the dike to the north and south for a smooth transition. Tie-in shall be within the development site and shall not encroach into the adjacent lots. No retention walls within the dike crest or slope area are allowed.
- As per Dike Design and Construction Guide – Best Management Practices for British Columbia (2003), the landside slope shall be kept clear of vegetation other than trimmed grass, including a minimum 3 meter strip beyond the landside toe and minimum 2 meter strip beyond the waterside toe.
- All dike construction shall be in conformance with City standard drawing MB-98 or MB-99, Dike Design and Construction Guide – Best Management Practices for British Columbia (2003), and Environmental Guidelines for Vegetation Management on Flood Protection Works to Protect Public Safety and the Environment (1999).
- The design and construction of the dike shall be done to the satisfaction of the General Manager, Engineering and Public Works, and any other relevant dike approving authorities.

25.1.6. Frontage Improvements:

**SA #1 - Seaside South (3231/3291/3311/3331/3351 No 3 Rd, 8151 Capstan Way)**

- a) The Developer is required to:
  - Coordinate with BC Hydro, Telus and other private communication service providers
    - i) When relocating/modifying any of the existing power poles and/or guy wires within the property frontages.
    - ii) To underground the existing overhead lines along the Capstan Way frontage and along No 3 Rd between Capstan Way and Sea Island Way. The Developer is to ensure that the Skyline pump station continues to be serviced after the undergrounding, which may require the installation of above-ground structures, such as a PMT. Any pump station structures shall be located within the SRW as described with the "Skyline Pump Station" requirements section.
    - iii) To pre-duct for future hydro, telephone and cable utilities along all road frontages.
    - iv) To determine if above ground structures are required and coordinate their locations (e.g. Vista, PMT, LPT, Shaw cabinets, Telus Kiosks, etc). These shall be located onsite, as described below.
  - Locate all above ground utility cabinets and kiosks required to service the proposed development within the developments site (see list below for examples). A functional plan showing conceptual locations for such infrastructure shall be included in the Rezoning staff report and the development process design review. Please coordinate with the respective private utility companies and the project's lighting and traffic signal consultants to confirm the right of ways dimensions and the locations for the aboveground structures. If a private utility company does not require an aboveground structure, that company shall confirm this via a letter to be submitted to the City. The

following are examples of SRWs that shall be shown in the functional plan and registered prior to SA design approval:

- i) BC Hydro PMT – 4mW X 5m (deep)
- ii) BC Hydro LPT – 3.5mW X 3.5m (deep)
- iii) Street light kiosk – 1.5mW X 1.5m (deep)
- iv) Traffic signal kiosk – 1mW X 1m (deep)
- v) Traffic signal UPS – 2mW X 1.5m (deep)
- vi) Shaw cable kiosk – 1mW X 1m (deep) – show possible location in functional plan
- vii) Telus FDH cabinet - 1.1mW X 1m (deep) – show possible location in functional plan

- Provide street lighting along the Capstan Way frontage.
- Review street lighting levels along all frontages for both phases of the Seaside development and upgrade lighting as required.
- Set the location of the new curb line along Capstan Way with reference to a geotechnical engineer's assessment of the impact of traffic vibration on the Skyline pump station's fiberglass wet well.
- Other frontage improvements as per Transportation's requirements. Improvements shall be built to the ultimate condition wherever possible.

**SA #2 - Seaside North (3031/3211/3231 No 3 Rd)**

a) The Developer is required to:

- N/A

**SA #3 - Seaview (8051/8100 River Road)**

a) The Developer is required to:

- Coordinate with BC Hydro, Telus, and other private communication service providers
  - i) When relocating/modifying any of the existing power poles and/or guy wires within the property frontages.
  - ii) To relocate and underground existing private utility poles and overhead lines along the old River Road frontage between east-west aligned Corvette Way and Capstan Way to the north-south aligned Corvette Way between the east-west aligned Corvette Way and Capstan Way.
  - iii) To pre-duct for future hydro, telephone and cable utilities along all road frontages.
  - iv) To determine if above ground structures are required and coordinate their locations (e.g. Vista, PMT, LPT, Shaw cabinets, Telus Kiosks, etc). These shall be located onsite, as described below.
- Locate all above ground utility cabinets and kiosks required to service the proposed development within the developments site (see list below for examples). A functional plan showing conceptual locations for such infrastructure shall be included in the Rezoning staff report and the development process design review. Please coordinate with the respective private utility companies and the project's lighting and traffic signal consultants to confirm the right of ways dimensions and the locations for the aboveground structures. If a private utility company does not require an aboveground structure, that company shall confirm this via a letter to be submitted to the City. The following are examples of SRWs that shall be shown in the functional plan and registered prior to SA design approval:
  - i) BC Hydro PMT – 4mW X 5m (deep)
  - ii) BC Hydro LPT – 3.5mW X 3.5m (deep)

- iii) Street light kiosk – 1.5mW X 1.5m (deep)
- iv) Traffic signal kiosk – 1mW X 1m (deep)
- v) Traffic signal UPS – 2mW X 1.5m (deep)
- vi) Shaw cable kiosk – 1mW X 1m (deep) – show possible location in functional plan
- vii) Telus FDH cabinet - 1.1mW X 1m (deep) – show possible location in functional plan

- Provide street lighting along all frontages.
- Other frontage improvements as per Transportation's requirements. Improvements shall be built to the ultimate condition wherever possible.

25.1.7. General Items:

**All Servicing Agreements**

- a) The Developer is required to:
  - Provide, within the first SA submission, a geotechnical assessment of preload and soil preparation impacts on the existing utilities fronting or within the development sites and provide mitigation recommendations. A pre- and post-preload and soil preparation survey and video inspection of the City storm & sanitary system is required.
  - Enter into, if required, additional legal agreements, as determined via the subject development's Servicing Agreement(s) and/or Development Permit(s), and/or Building Permit(s) to the satisfaction of the Director of Engineering, including, but not limited to, site investigation, testing, monitoring, site preparation, de-watering, drilling, underpinning, anchoring, shoring, piling, pre-loading, ground densification or other activities that may result in settlement, displacement, subsidence, damage or nuisance to City and private utility infrastructure.

- 25.2. Transportation Servicing Agreement \* Requirements: The developer is responsible for the design and construction of the frontage improvements shown on the Preliminary Functional Roads Plan (REDMS #564211 & 564212), supported in principle by the City staff, subject to review and approval of the detailed SA designs, which shall include, but may not limited to, the following. Final MOTI approval is required prior to rezoning adoption.

NOTE: In addition to the following, landscape features are required to the satisfaction of the City, as determined via the SA and Development Permit review and approval processes. Landscape improvements may include, but shall not be limited to, street trees, landscaped boulevards, hard- and soft-scape features, street furnishings, decorative paving (e.g., split face stone sets in buffer strips), and innovative storm management features.

**SA #1 - Seaside South & SA #2 – Seaside North**

- 25.2.1. No. 3 Road, from Sea Island to Capstan Way (from east to west):
- a) Maintain two existing northbound lanes
  - b) 3.25m wide northbound-to-westbound left-turn lane at the proposed east-west street
  - c) Minimum 1.6m wide raised landscaped median with decorative fencing
  - d) 3.25m wide southbound-to-eastbound left-turn lane at Capstan Way
  - e) 6.35 m wide southbound travel lanes
  - f) 0.15m wide roll-over curb
  - g) 1.8m wide raised bike lane
  - h) 0.45m wide Richmond urban curb
  - i) 1.5m wide boulevard\*
  - j) 2.0m wide sidewalk\*

NOTE: \* Along the Seaside North frontage (i.e., from east-west street to Sea Island Way), these road elements can be deferred until Phase 2 (Seaside North) of the development but an interim 2m wide asphalt walkway should be provided instead.

25.2.2. New East-West Street, from Corvette Way to No. 3 Road (from south to north):

- a) 2m wide sidewalk
- b) 1.65m wide boulevard
- c) 0.15m wide curb and gutter
- d) 7.0m wide driving surface
- e) 2.7m wide on-street parking / curb extension\*\*
- f) 0.15m wide curb and gutter\*\*
- g) 1.65m wide boulevard\*\*
- h) 2m wide sidewalk\*\*

NOTE: \*\* Along the Seaside North frontage (i.e., north side of the new east-west street), these road elements can be deferred until Phase 2 (Seaside North) of the development but an interim 1.5m wide paved shoulder should be provided instead.

25.2.3. Corvette Way, from Sea Island to east/west portion of Corvette Way (from west to east):

- a) Maintain existing curb and gutter along the west side
- b) Widen to achieve 12.0m wide asphalt surface as the parking and travel lanes
- c) 0.15m wide curb and gutter
- d) 1.85m wide boulevard\*\*\*
- e) 2m wide sidewalk\*\*\*

NOTE: \*\*\* Along the Seaside North frontage (i.e., from east-west street to Sea Island Way), these road elements can be deferred until Phase 2 (Seaside North) of the development but an interim 2m wide asphalt walkway should be provided instead.

25.2.4. Capstan Way, from No 3 Road to the western limit of the Seaside frontage (from south to north):

- a) Maintain existing curb and gutter along the south side
- b) Widen along the north side of the roadway to accommodate the northern half of the ultimate road cross-section along Capstan Way
- c) 0.15m wide curb and gutter
- d) A boulevard/hard surface area ranging from 1.5m wide to 6.0m wide
- e) 2.5m wide off-road bike path
- f) 1.0m wide buffer
- g) 2.0m wide sidewalk

25.2.5. Sea Island Way, from No 3 Road to Corvette Way (from north to south):

- a) Maintain existing traffic lanes and on-street bike lane
- b) New curb and gutter along the south side, including the new channelized island on Corvette Way at Sea Island Way
- c) 2.5m wide boulevard\*\*\*\*
- d) 3.0m wide multi-use pathway\*\*\*\*

NOTE: \*\*\*\* These road elements can be deferred until Phase 2 (Seaside North) of the development but an interim 2m wide asphalt walkway should be provided instead.

25.2.6. Provide new / upgrade existing traffic signals at the following locations. Work to include but not limited to provide new / upgrade existing signal poles, controller, base and hardware, pole base, detection, conduits (electrical & communications), signal indications, communications cable, electrical wiring, service conductors, video cameras, APS, and UPS (uninterrupted power supply).

- a) No. 3 Road / new east-west street: provide a new pedestrian signal
- b) No. 3 Road / Capstan Way: upgrade existing traffic signal

c) No. 3 Road / Sea Island Way: upgrade existing traffic signal

25.2.7. Construction phasing: all work noted above to be completed prior to the opening of Phase 1 (Seaside South), unless otherwise noted which can be deferred until prior to the opening of Phase 2 (Seaside North).

**SA #3 - Seaview**

25.2.8. Corvette Way, from east/west portion of Corvette Way to Capstan Way (from west to east):

- a) 2m wide sidewalk at the new property line
- b) 1.5m wide boulevard
- c) 0.15m wide curb and gutter
- d) Min. 10.3m wide asphalt surface as parking and travel lanes
- e) Min. 1.5m wide shoulder

25.2.9. Capstan Way, from Corvette Way to existing River Road:

- a) Maintain existing curb and gutter along the south side
- b) 9.0m wide driving surface
- c) 0.15m wide curb and gutter
- d) 4.5m wide landscaped slope / boulevard
- e) 2.5m wide off-road bike path
- f) 1.0m wide buffer
- g) 2.5m wide sidewalk

25.2.10. Construction phasing: all work noted above for Seaview to be completed prior to the opening of Phase 3 (Seaview).

**All Servicing Agreements**

25.2.11. Street Lights: The following shall be confirmed through the SA processes.

- a) Sea Island Way (South side of street)
  - Pole colour: Grey
  - Roadway lighting @ back of curb: As determined to the satisfaction of MOTI
  - Pedestrian lighting (to be installed between sidewalk & bike path): Type 8 (LED) INCLUDING 2 pedestrian luminaires (set perpendicular to the direction of travel), but EXCLUDING any duplex receptacles, banner arms, flower basket holders, and irrigation.
- b) No. 3 Road (West side of street)
  - Pole colour: Grey
  - Roadway lighting @ back of curb: N/A
  - Pedestrian lighting: Type 8 (LED) INCLUDING 2 pedestrian luminaires (set perpendicular to the direction of travel), duplex receptacles, banner arms, flower basket holders, and irrigation.
- c) Capstan Way (North side of street)
  - Pole colour: Grey
  - Roadway lighting @ back of curb: Type 7 (LED) INCLUDING 1 street luminaire, but EXCLUDING any pedestrian luminaires, banner arms, flower basket holders, irrigation, or duplex receptacles.
  - Pedestrian lighting between sidewalk & bike path: Type 8 (LED) INCLUDING 2 pedestrian luminaires set perpendicular to the roadway, but EXCLUDING any flower basket holders, irrigation, or duplex receptacles.
- d) East-West Street (Both sides of new street)
  - Pole colour: Grey

- Roadway lighting @ back of curb: Type 7 (LED) INCLUDING 1 street luminaire and duplex receptacles, but EXCLUDING any pedestrian luminaires, banner arms, flower basket holders, or irrigation.
  - Pedestrian lighting (Must be confirmed/ revised in coordination with the Community Centre design): Type 8 (LED) INCLUDING 2 pedestrian luminaires (set perpendicular to the direction of travel), duplex receptacles, banner arms, flower basket holders, and irrigation.
- e) Corvette Way (East and south sides of street @ Seaside & west side @ Seaview)
- Pole colour: Grey
  - Roadway lighting @ back of curb: Type 7 (LED) INCLUDING 1 street luminaire and duplex receptacles, but EXCLUDING any pedestrian luminaires, banner arms, flower basket holders, or irrigation.

25.3. Parks Servicing Agreement \* Requirements: Prior to Development Permit\* issuance for Phase 3 (Seaview), the developer is required to enter into SA#3 for the design and construction of the riverfront park, at the developer's sole cost, to the satisfaction of the City. The park design shall be consistent with the YuanHeng Riverfront Park Conceptual Plan attached to these Rezoning Considerations (**Schedule H**) and approved by Council as part of the subject rezoning application. Public consultation (e.g., information open house) may be required during the park's design development.

NOTE: Prior to rezoning adoption, the developer shall provide a \$2.6 million voluntary cash-in-lieu contribution for future City construction of a pier and water access in association with the park. If the developer elects to design and construct the pier, to the satisfaction of the City, through the City's standard Servicing Agreement processes in coordination with the design and construction of the park and Park SA, then the City will direct the developer's voluntary \$2,600,000 cash-in-lieu contribution to fund the City-approved works.

**For Lot A (Seaside South) (i.e. Phase 1), prior to a Development Permit (DP)\* being forwarded to the Development Permit Panel for consideration, the developer is required to:**

1. Legal Agreements: Satisfy the terms of legal agreements registered on title prior to rezoning adoption (RZ 12-603040) with respect to the subject Lot A (Seaside South) Development Permit\*.
2. Additional Requirements: Discharge and registration of additional right-of-way(s) and/or legal agreements, as determined to the satisfaction of the Director of Development, Director of Transportation, Director of Engineering, Manager of Real Estate Services, Manager of Community Social Services, and Senior Manager of Parks.
3. DP Landscape Letter of Credit: A Tree Removal Permit (Rezoning in Process – T3) was issued by the City on August 12, 2016 (Permit #16-741470) to facilitate contaminant removal within the proposed boundaries of Lot A (Seaside South), Lot B (Seaside North), and the East-West Street. Tree replacement security in the amount of \$30,000.00 was submitted by the developer. This security will be applied towards future tree replacement, proposed and approved as part of the landscape plan for the developer's first Development Permit\* application (i.e. Lot A / Seaside South), which plan will be secured with the City's standard Development Permit\* landscape Letter of Credit.
4. NAV Canada Building Height: Submit a Letter of Assurance from a surveyor confirming that the proposed building heights are in compliance with Transport Canada regulations.

**For Lot A (Seaside South) (i.e. Phase 1), prior to Building Permit Issuance, the developer must complete the following requirements:**

1. Legal Agreements: Satisfy the terms of legal agreements registered on title prior to rezoning adoption (RZ 12-603040) and/or Development Permit\* issuance with respect to the Lot A (Seaside South) Building Permit\*.
2. Construction Traffic Management Plan: Submission of a Construction Parking and Traffic Management Plan to the Transportation Department. Management Plan shall include location for parking for services, deliveries,

workers, loading, application for any lane closures, and proper construction traffic controls as per Traffic Control Manual for works on Roadways (by Ministry of Transportation) and MMCD Traffic Regulation Section 01570.

3. Accessibility: Incorporation of accessibility measures in Building Permit (BP) plans as determined via the Rezoning and/or Development Permit processes.
4. Construction Hoarding: Obtain a Building Permit (BP) for any construction hoarding. If construction hoarding is required to temporarily occupy a public street, the air space above a public street, or any part thereof, additional City approvals and associated fees may be required as part of the Building Permit. For additional information, contact the Building Approvals Department at 604-276-4285.

**NOTE:**

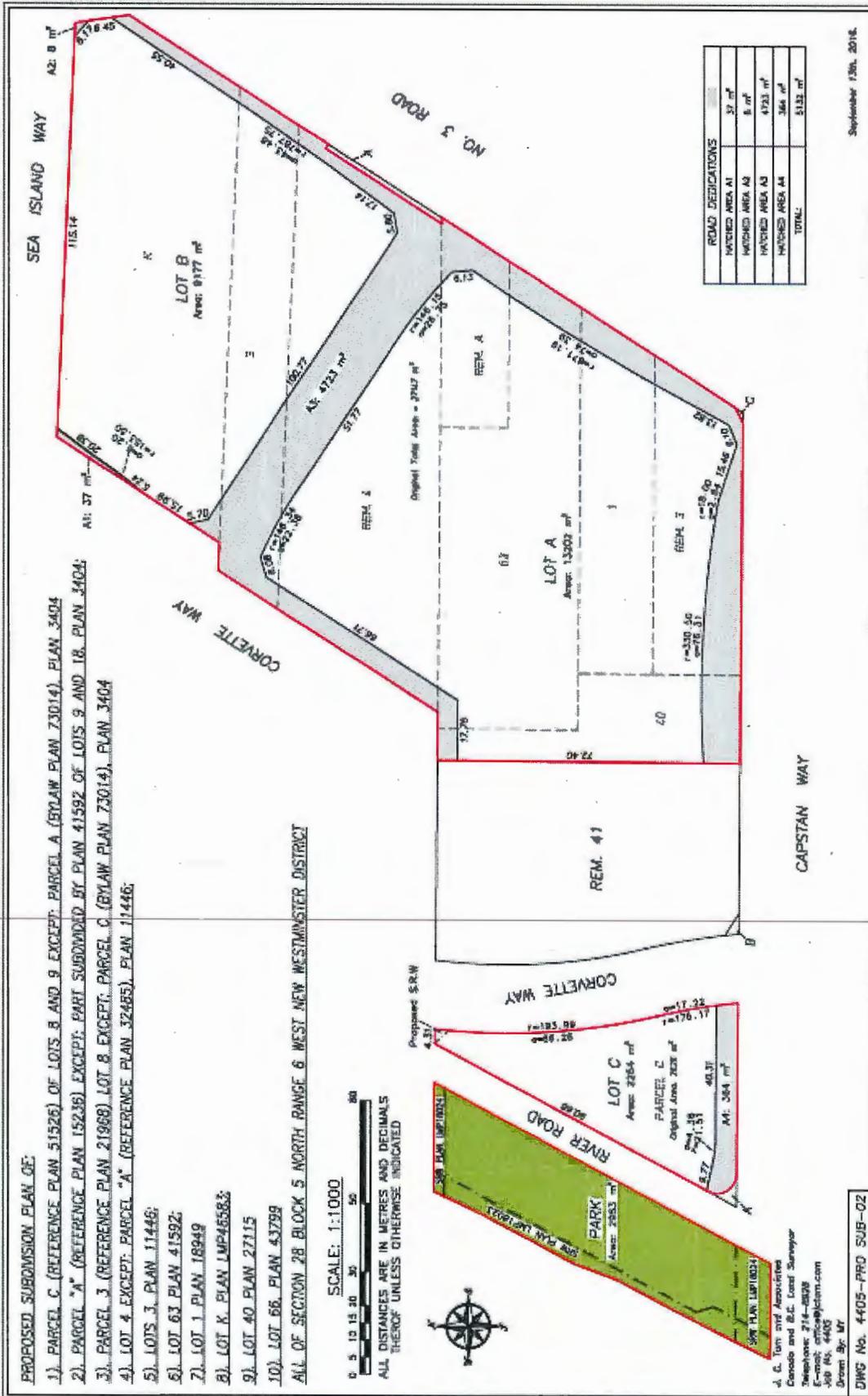
- *Items marked with an asterisk (\*) require a separate application.*
  - *Where the Director of Development deems appropriate, the preceding agreements are to be drawn not only as personal covenants of the property owner but also as covenants pursuant to Section 219 of the Land Title Act.*
- All agreements to be registered in the Land Title Office shall have priority over all such liens, charges and encumbrances as is considered advisable by the Director of Development. All agreements to be registered in the Land Title Office shall, unless the Director of Development determines otherwise, be fully registered in the Land Title Office prior to enactment of the appropriate bylaw.*
- The preceding agreements shall provide security to the City including indemnities, warranties, equitable/rent charges, letters of credit and withholding permits, as deemed necessary or advisable by the Director of Development. All agreements shall be in a form and content satisfactory to the Director of Development.*
- *Additional legal agreements, as determined via the subject development's Servicing Agreement(s) and/or Development Permit(s), and/or Building Permit(s) to the satisfaction of the Director of Engineering may be required including, but not limited to, site investigation, testing, monitoring, site preparation, de-watering, drilling, underpinning, anchoring, shoring, piling, pre-loading, ground densification or other activities that may result in settlement, displacement, subsidence, damage or nuisance to City and private utility infrastructure.*
  - *Applicants for all City Permits are required to comply at all times with the conditions of the Provincial Wildlife Act and Federal Migratory Birds Convention Act, which contain prohibitions on the removal or disturbance of both birds and their nests. Issuance of Municipal permits does not give an individual authority to contravene these legislations. The City of Richmond recommends that where significant trees or vegetation exists on site, the services of a Qualified Environmental Professional (QEP) be secured to perform a survey and ensure that development activities are in compliance with all relevant legislation.*

*SIGNED COPY ON FILE*

Signed \_\_\_\_\_

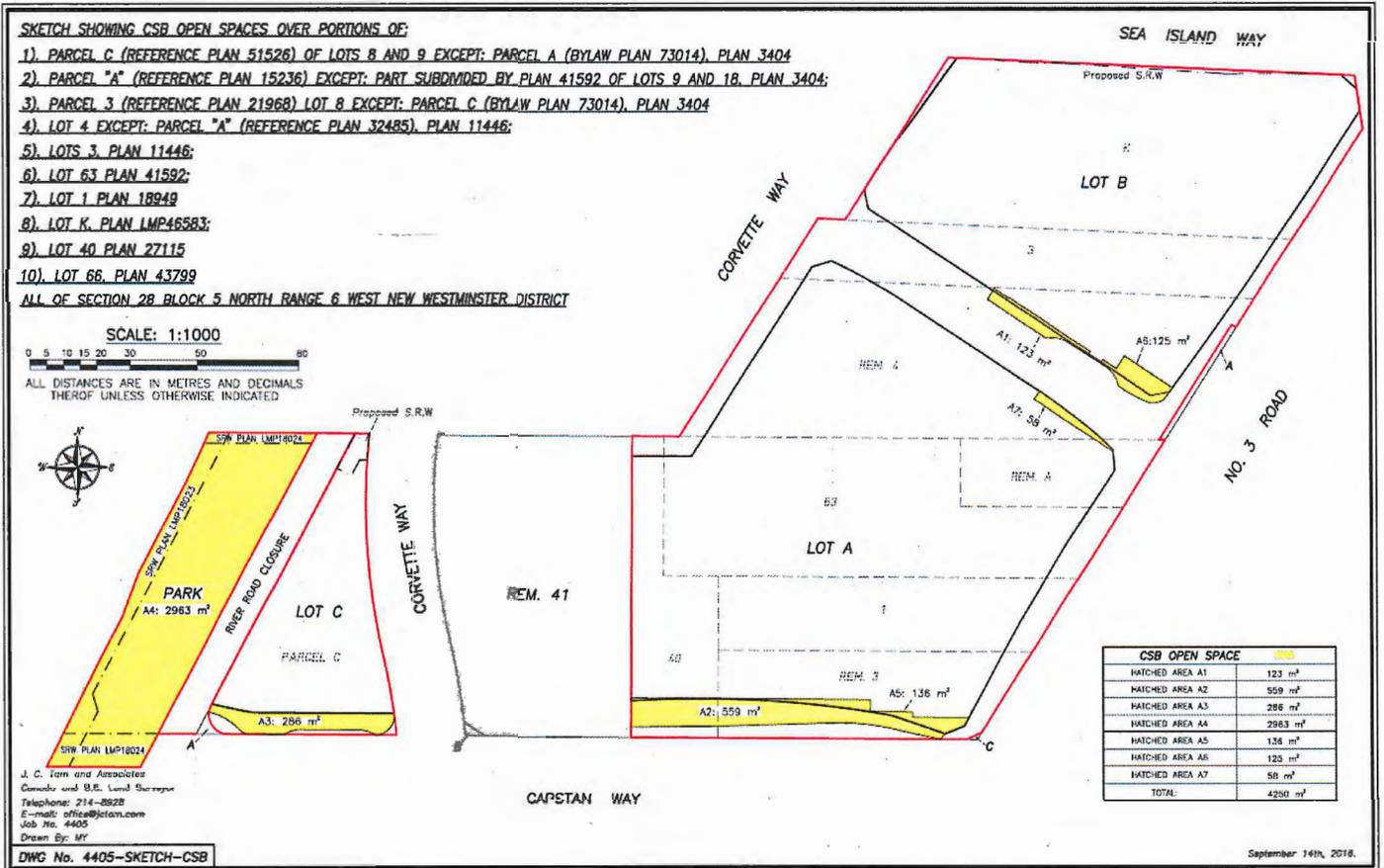
Date \_\_\_\_\_

SCHEDULE A  
Preliminary Subdivision Plan





**SCHEDULE C**  
**Capstan Station Bonus – Public Open Space (Fee Simple, Dedication & SRW) Location Map**



RZC #	Capstan Station Bonus (CSB) Public Open Space Features (1)	CSB Voluntary Public Open Space Contribution (2)		
		Fee Simple	Dedication (Road)	SRW
4.1.1	Riverfront Park & Dike	2,963.0 m2 (31,893.5 ft2)	Nil	Nil
4.1.2(a)	East-West Street – Expanded sidewalk adjacent to the Community Centre	Nil	123.0 m2 (1,324.0 ft2)	Nil
4.1.2(c)	Capstan Way – Portions located more than 3.5 m behind the back of curb	Nil	845.0 m2 (9,095.5 ft2)	Nil
4.4.1(a)	Community Centre Plaza	Nil	Nil	183.0 m2 (1,969.8 ft2)
4.4.1(d)	Capstan Way Plaza	Nil	Nil	136.0 m2 (1,463.9 ft2)
	Sub-Total	2,963.0 m2 (31,893.5 ft2)	968.0 m2 (10,419.5 ft2)	319.0 m2 (3,433.7 ft2)
	<b>TOTAL</b>		<b>4,250.0 m2 (45,746.7 ft2)</b>	

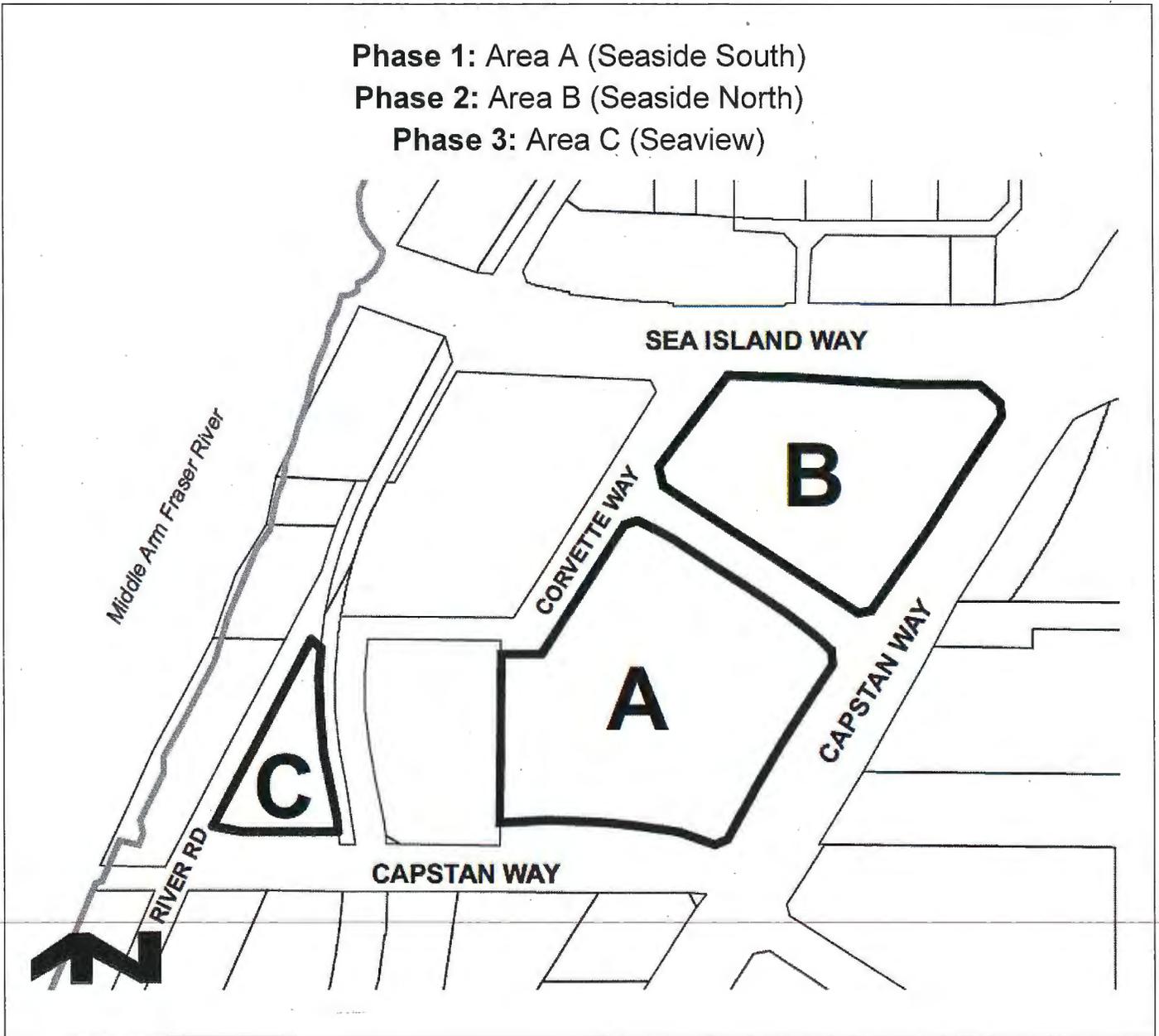
- (1) CSB public open space features are NOT eligible for Development Cost Charge (DCC) credits for park or road acquisition or park or road construction; however, as per the ZMU30 zone, the developer may use the area of CSB public open space features for density calculation purposes.
- (2) The developer is required to provide public open space in compliance with the ZMU30 zone. If the combined total number of dwellings on Lot A, Lot B, and Lot C exceeds 850, additional public open space must be provided to the satisfaction of the City as provided for under the ZMU30 zone prior to issuance of the applicable Development and Building Permits. (No adjustment shall be made if the combined total number of dwellings is less than 850.)

Initial \_\_\_\_\_

**Phase 1: Area A (Seaside South)**

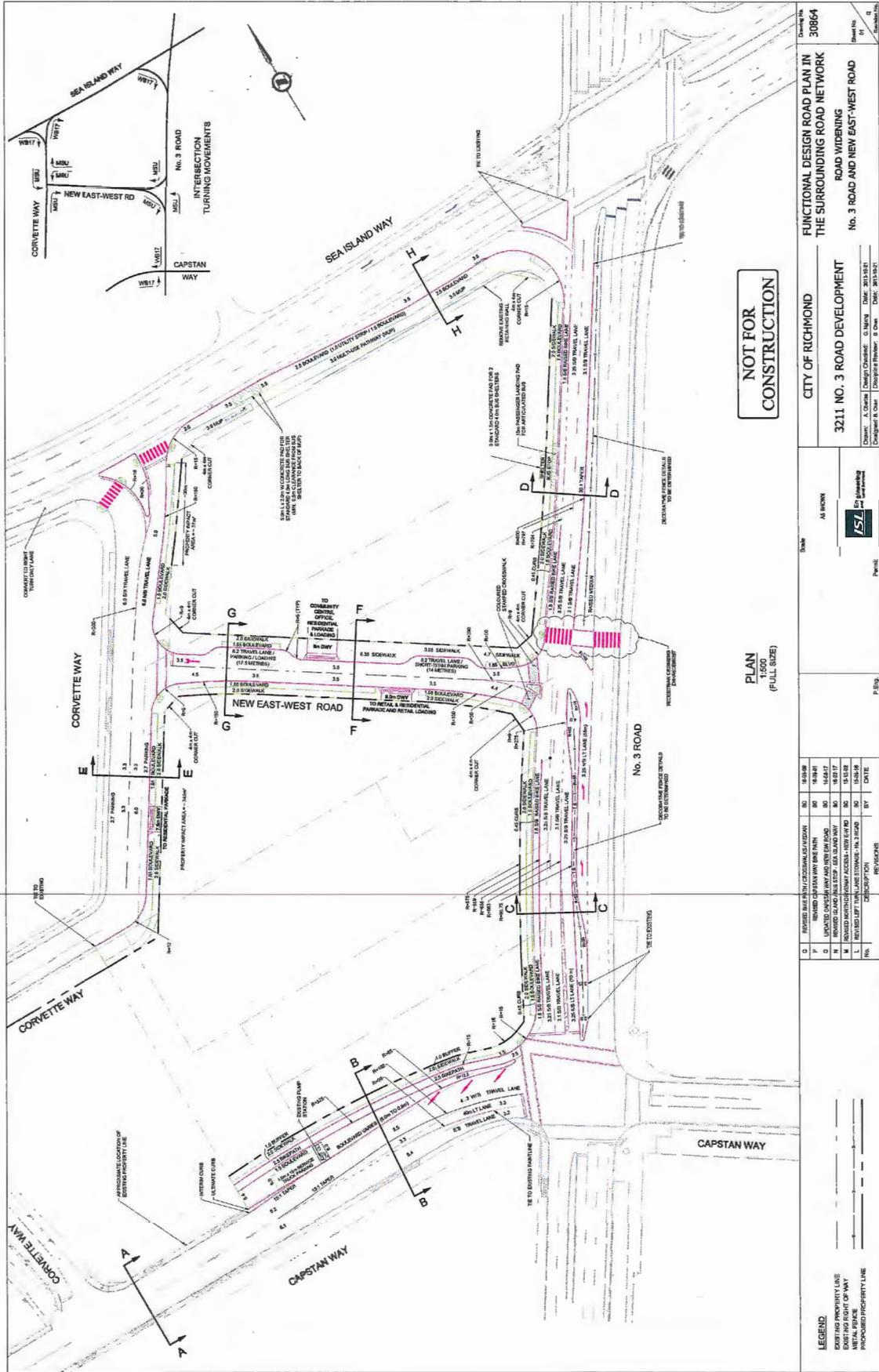
**Phase 2: Area B (Seaside North)**

**Phase 3: Area C (Seaview)**



Initial \_\_\_\_\_

**SCHEDULE E**  
 Preliminary Functional Roads Plan (REDMS #564211 & 564212)



**NOT FOR CONSTRUCTION**

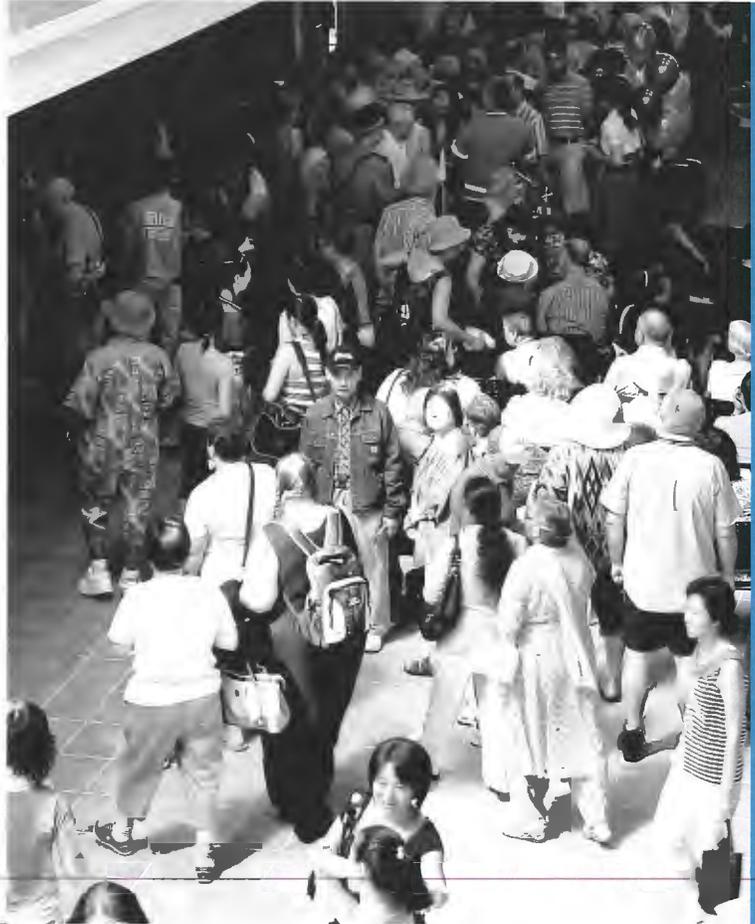
**PLAN 1:5000 (FULL SIZE)**

Drawing No. 30864 <b>FUNCTIONAL DESIGN ROAD PLAN IN THE SURROUNDING ROAD NETWORK</b> ROAD WIDENING No. 3 ROAD AND NEW EAST-WEST ROAD	
City of Richmond <b>3211 NO. 3 ROAD DEVELOPMENT</b>	Drawn: A. O'Connell Design Checked: G. Murray Date: 2013-05-31 Designer: P. O'Connell Designer: B. O'Connell
Scale: AS SHOWN	P. Eng.
Project:	Date:
No.	REVISIONS
G. REVISED BUDGET/COST ESTIMATE	00 16-08-09
F. REVISED CAPTAIN WAY BRIDGE	00 16-08-01
D. UNLIMITED CAPTAIN WAY AND NEW EAST-WEST ROAD	00 16-08-17
K. REVISED ISLAND WALKWAY AND SEA ISLAND WAY	00 16-02-17
L. REVISED TRAVEL LANE DIMENSIONS AND TRAVEL LANE WIDTHS	00 16-08-08
M. REVISED TRAVEL LANE DIMENSIONS AND TRAVEL LANE WIDTHS	00 16-08-08
N. REVISED TRAVEL LANE DIMENSIONS AND TRAVEL LANE WIDTHS	00 16-08-08
O. REVISED TRAVEL LANE DIMENSIONS AND TRAVEL LANE WIDTHS	00 16-08-08

**PLN - 116**

Initial: \_\_\_\_\_





Prepared by:  
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500 - 1500 West Georgia Street  
Vancouver, BC V6G 2Z6  
604.687.1898

# City Centre Community Centre North

## Terms of Reference

SEPTEMBER 9, 2016



## Contents

Introduction	01
Overview of Facility	02
Specifications and Interior Finishes	06

### **APPENDIX A**

**City of Richmond Policy 2306 – Sustainable  
Facilities “High Performance” Building Policy –  
City Owned Facilities**

### **APPENDIX B**

**City of Richmond Building Equipment,  
Monitoring, and Integration Requirements**

### **APPENDIX C**

**City of Richmond Building Lighting Guidelines**

### **APPENDIX D**

**City of Richmond Direct Digital Control (for  
Buildings) and Energy Monitoring Guidelines**



## Introduction

This document summarizes the program and building specifications for a community centre to be built within the YuanHeng Seaside Development. The Developer is responsible for generally meeting the program and specifications provided in the report titled, "City Centre Community Centre North," dated August 30, 2016.

The City Centre Community Centre North is envisioned to be a leading edge community centre in the heart of the rapidly growing and diverse Capstan Village. The facility will provide community recreation programs and services for all ages and abilities. This facility will include a large "village square" or gymnasium for both sports and community events, an indoor activity track, children's Exploratorium, creativity lab, wet art studio as well as a variety of multipurpose spaces.

The program developed for this community centre requires a minimum indoor facility size of 32,000 sq ft, exclusive of uses contained within the parking structure. The Developer and City have agreed that a facility size of 33,439 sq ft (exclusive of uses contained within the parking structure) is required to meet the program in its proposed location due to the facility's configuration and its fit within the larger development.

The Community Centre Conceptual Plan for a 33,439 sq ft facility generally meets the program specifications that follow. The City and the Developer will continue to refine the design to ensure that it fully meets the program outlined while remaining within the foot print of the building provided.

# Overview of Facility

## Space Design Considerations

Key design characteristics identified as important to the success of the new community centre include spaces that are:

### Welcoming:

- will encourage the passerby to enter
- engages the interest of and is inclusive of persons of all ages and cultures, genders and identities
- is lively, bustling, and busy
- is family oriented with spaces and concurrent programs for children, parents and grandparents alike
- is a destination for those living outside of the immediate neighbourhood but also a community living room for those living in the immediate vicinity
- maximizes natural light
- respects eastern and western cultures alike

### Flexible:

- will accommodate a multitude of programs
- evolves as the community changes or when new programs are introduced
- has room finishes that facilitates flexible uses
- has storage capacities that allow for movable equipment and furniture to be stored to allow for different programs within one room

### Connected:

- physically connected indoor and outdoor spaces such that programming is not limited to the confines of the building envelope
- physically connected indoor and outdoor spaces to accommodate large event activities
- visually connected by building facade transparency both during the day and at night when activities within the building can be easily seen
- visible from the future skytrain station such that the new centre is not hidden among the new developments

### Sustainable:

- is contemporary and will not be quickly outdated
- will address the programming needs of the Capstan Village community
- will act as a regional facility while the immediate neighbourhood grows but in ambiance will represent the character of the Capstan Village
- will utilize modern building systems to effectively manage energy and water usage
- will be financially sustainable



PLN - 121

## Program

Upon confirmation of the vision for the new community centre, the room by room program was developed through an iterative process with City Staff. The rooms are summarized in the table below. The detailed space requirements follow under the separate section "Room Data Sheets".

Room Type	Key Ideas, Uses	Adjacency	Area
"Village Square" Sports Hall	Active gathering space, flexible, "Garage" concept Ample connection to the exterior Ground level connection for hosting activities such as markets, exhibitions, trade shows, etc. that can spill outside of the facility Sized for physical activity, sports Sprung wood floor May or may not have sport court lines – exploration of current technology to provide this functionality is required Folding wall to divide space into two separate rooms Inclusive	Exterior Green Space Multipurpose Room Kitchen	6,500 s.f.
	"Village Square" Storage		600 s.f.
Activity Track	Indoor 2-Lane Running Track within "Village Square" for walking during months of rainy weather or for short track training 4' wide lanes Elevated within the Village Square enclosure	Village Square	2800 s.f.
Multipurpose Room 1	Connectivity to one side of the "Village Square" for use as a green room to support performances or demonstrations Alternate use as a breakout room or multipurpose room	Village Square	1500 s.f.
	Multipurpose Room Storage		150 s.f.
Multipurpose Room 2	Flexible space to support all types of programs	Multipurpose 1	1500 s.f.
	Multipurpose Room Storage		150 s.f.
Multipurpose Room 3/ Meeting Room	Size suited for use as a meeting room, flexible space for uses other than meetings		600 s.f.
Active Studio	Dance classes, wellness programs, sprung wood floor; extra high ceiling for creative dance		2000 s.f.
	Active Studio Storage		200 s.f.
Wet Art Room	Arts Education for multi-generations Dedicated room that creates awareness and brings arts community into a community facility		1100 s.f.

Room Type	Key Ideas, Uses	Adjacency	Area
	Enhanced ventilation for activities such as oil painting, glazing of hand built ceramics; daylighting		
	Art Room Storage		220 s.f.
Creativity Lab	Technology room Facilitates “maker” activities such as art, electronics, robotics, music, crafts, kinetic sculptures, fine art, computers, quilting, farming, engineering, and more Use of room for groups working on media projects, inventions, etc		1200 s.f.
	Creativity Lab Storage		200 s.f.
Children’s Exploration Room	Fun, Interactive, Mini Exploratorium Connected to the Lobby Accommodates after hours (7-9pm) children’s programming Zoned areas for young children and older children	Lobby	2000 s.f.
Kitchen	Support space for multiple rooms. Facilitates in-person social networking Square or close to square in proportions to allow for groups to gather within the room Possible use for culinary arts/teaching programs	Multipurpose Rooms Village Square	500 s.f.
Administration and Reception	Welcoming, visual connections to lobby	Lobby Comm Room	
	Reception including RFC and Cash		700 s.f.
	Staff/First Aid		200 s.f.
	Meeting Room		200 s.f.
	Shared Office for 8		450 s.f.
	AC		100 s.f.
Lobby	Unique gathering space or spaces to encourage “pods of interaction” Connectivity to adjacent surroundings and possible connection to River via views, programs, streetscape Creates context for the community, houses the community living room Exhibition space, 3D public art	Reception/ Administration Children’s Exploration Room	2400 s.f.
Support Spaces	Washrooms including showers, each within an universal change/shower cubicle 5 total showers (includes 1 barrier free) Mechanical, electrical and communications rooms, janitors closets, small non-designated storage room for emergency programs, elevator		6730 s.f.

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Room Type	Key Ideas, Uses	Adjacency	Area
Public Exterior Plaza	Water, gas, electricity. This is a space that will be activated and that should connect inside and outside. Ideally is seen to have garage type or doors that open to the interior creating a fluid and continuous space.		
Feature Stairs	Stairs should be front and centre, encourage people to use them		
Total Area			32000 s.f.



## Specifications and Interior Finishes

Minimum base building requirements, reference finishes specifications, as well as detailed room data sheets are provided below for the Community Centre to provide direction and outline base expectations for the design, development, and construction of the facility. It is understood that as the design is evolved that every effort will be made to design and construct a facility that represents best practices in the development of recreation facilities. As such, construction methods, systems and finishes will be chosen that meet the design principles outlined both in this document and the full program document titled "City Centre Community Centre North," dated August 30, 2016, though they may vary from the specifications provided should a more appropriate solution be identified. The City will sign off on all finishes and systems prior to construction.

## Minimum Base Building Requirements & Facility Wide Infrastructure

### Stand-alone facility

The community centre facility shall be constructed as independent from the rest of the YuanHeng development. The intent of the separation is to allow the facility to function as a stand-alone facility (exclusive of uses contained within the parking structure). Mechanical, electrical, communications, life safety and security system shall all be independent and thereby allow for energy and usage monitoring of the community centre and maintenance of systems without affecting other areas of the development and vice versa. This will also allow the City to have control of the systems.

In addition, no systems or their components which are not for the sole use of the community centre (exclusive of uses contained within the parking structure) shall be physically located within the community centre footprint.

### Parking

A total of 52 dedicated parking stalls are to be provided by the Developer for use by the Community Centre 24 hrs per day, seven days per week, plus 2 loading/parking spaces for the exclusive use of the City for program and other community centre vehicles. In addition, a total of 20 spaces will be available for shared use between the office spaces and the Community Centre. The City will be permitted to designate the use of the spaces (e.g., staff, families, pick-up/drop-off) as it sees fit and the rate charged for use of these spaces by the owner shall be to the City's satisfaction.

The parking spaces shall be reasonably located in proximity to direct access point(s) to the Community Centre.

A drop-off zone close to the front entrance of the facility will be provided to facilitate access by those with limited mobility.

### LEED Performance

The project shall achieve LEED Gold Certification based on LEED BD+C New Construction Version 4. The project at a minimum is to adhere to ASHRAE 90.1-2010

The City of Richmond will provide an Owner's Project Requirements and Basis of Design document. City of Richmond Policy 2306 – Sustainable Facilities – High Performance Building Policy is to be followed.

### Corner Plaza

A corner plaza, to the south east of the facility, shall be provided with high quality, durable finishes with plaza surfaces that are easy to maintain and prevent a trip hazard from happening over time. The purpose of the corner plaza is to extend the interior lobby space to the exterior. Within the corner plaza and/or elsewhere along the frontage of the community centre, permanent tables and seating shall be provided (generally in 4 groups of 4 seats each for a total seating capacity of 16). Tables shall be designed to entice patrons to stay. An example would be chess boards permanently imprinted into the table tops. Electrical receptacles for power with USB ports shall be provided at each table.

Allowance to be made for bicycle racks and waste and recycling receptacles.

An overhead canopy which provides shelter to rain for at least two of the seating groups is strongly desired.

A free-standing concrete pylon housing a gas connection for portable BBQs is required. Final location within the plaza to be determined.

### Floor to Floor Heights and Special Construction

Clear ceiling heights, unobstructed by structure, lighting, ventilation, piping, signage, or other features, of at least 9.14 m (30.0 ft.) in the "village square" (i.e. gymnasium) and as noted in each of the room data sheets for other rooms are required. The Children's Exploration room requires a clear height of 4.26m (14.0 ft.) per the room data sheet and a 1.22m (4.0 ft.) depression for a portion of the room. The depression shall only sit over areas below, which can accommodate a lower ceiling height.

Floor depressions shall be provided elsewhere as required for specialty flooring such that all floor finishes are flush from room to room. (Flooring types that require slab depressions include sprung wood floors, pulastic floors and playtile floors.)

### Acoustic Requirements

It's extremely important to minimize sound transfer between the community centre and any nearby residential uses. Horizontal wall STC rating between any community centre space and any adjacent residential living spaces

needs to be a minimum of STC-62 and a minimum of STC-65 for bedrooms. Minimize horizontal sound transfer between the community centre floor slabs and residential construction with structural breaks in the floor slabs at the edge of the community centre.

Floor construction and finishes in the community centre should proactively manage any structural impact noise input from the Activity Room, Activity Track, or Sports Hall that might affect the residential structure.

### **Column Locations**

Column free spaces are required for all program rooms. In addition the Village Square Sports Hall, Activity Track and Children's Exploration room must be column free and cannot have protrusions within the wall surfaces. For other program rooms, columns may be permitted around the perimeter of the room with consultation and prior agreement from the City.

### **Floor Openings**

Make provision for a large floor opening to connect the lower and upper lobby areas. Tempered and laminated glass guardrails to be provided around the opening. Other options could be considered at the discretion of the City.

### **Entry Vestibules**

Entry vestibules are to be provided at the main entrance from the street and also at the parkade entrance. These vestibules shall be designed to meet ASHRAE 90.1-2010 and shall be equipped with automatic doors suitable for barrier free access.

### **Elevator**

3500lb hydraulic passenger elevator shall be provided. Cab size to suit stretchers. Flooring to match lobby flooring. Stainless steel doors and plastic laminate interior cab finish. Specifications will need to be pre-approved by the City .

### **Exits**

Sufficient width of exits to be provided per the BC Building Code such that upper floor occupancy can be accommodated without limitations. Occupancy of each room space shall be based on the occupancy load factors detailed in the BC Building Code and/or Fire Code.

Main exit stair which serves the dual function of exit and convenience access from main and upper floors shall be glazed. Fire protection shall be via window washing sprinklers. Alternate solution for this sprinkler type to be provided to the City of Richmond Building Department.

### **Heating and Cooling**

Heating and cooling systems shall be designed to meet temperature requirements listed in the room data sheets and also contribute to the energy credits for LEED and meet the requirements of the current edition of the BC Building Code. Equipment type/manufacturer will have to be approved by City of Richmond.

Ensure low noise levels of all units. HVAC ducting for supply and return air must be configured to eliminate sound transfer through the ducts between individual rooms, or control breakout from the ducts to the receiving spaces.

Maximum noise levels in NC shall be as follows:

- Village Square Sports Hall: 40
- Multipurpose, Art, Creativity Lab and Activity Rooms: 25
- Staff Areas: 25
- Children's Exploration Room: 35
- Lobby and circulation spaces: 40

The Village Square Sports Hall, Activity Track, Activity Room shall have the ability to heat up and cool down rapidly.

Control of the community centre's systems shall be from City of Richmond's DDC system.

### **Ventilation**

Typically air changes shall be designed to meet the requirements of the current edition of the BC Building Code and ASHRAE 62.1-2010.

In washrooms, double the BCBC requirement shall be provided, however demand-control ventilation in washrooms is permitted.

Extra exhaust requirements have been noted in the room data sheets.

Provide exhaust air heat recovery.

## Plumbing

All plumbing fixtures shall be of the low-flow type. Water use reduction shall contribute to LEED credits.

Two chilled water fountains with bottle fillers shall be provided, one per floor.

Exterior tamper proof, non-freezing hose bibb shall be provided at the plaza.

## Fire Protection

Fire protection systems shall be provided to meet NFPA requirements and the current BC Building code.

## Envelope Energy Performance

Building envelope shall meet the requirements of the current BC Building code and ASHRAE 90.1-2010.

## Solar Control

Solar control shall be provided throughout the building's south-facing spaces. Sunlight is not permitted to reach the court floor surfaces within the Village Square. Solar control can be mitigated with exterior sun shades however it is anticipated that roller blinds will be required for specific days/months of the year. Interior roller blinds will likely be damaged from ball use within the Sports Hall, for this reason an exterior roller shade system is preferred.

## Metering

Separate metering for the community centre shall be provided for HVAC, gas, water and electricity.

## Power, Lighting & Controls

Building equipment monitoring and integration guidelines (attached).

Building lighting guidelines (attached).

DDC requirements (attached).

## Emergency Power

Building equipment monitoring and integration guidelines (attached)

## Exterior Building Signage

Illuminated signs shall be provided in two locations on or near the exterior of the building. Signage shall include letters "CITY CENTRE COMMUNITY CENTRE NORTH" (or any other name of similar length as approved by Richmond City Council) together with any City-approved logo as appropriate.

Freestanding illuminated sign pylon (which may include a read-o-graph or other form of moving script) shall be provided within the plaza area. Pylon shall receive a data connection.

Building signage and/or the pylon sign shall be visible and readable from the proposed Capstan Canada Line station.

Building number sign shall be provided at the main entrance.

Signage illumination/operation shall be controlled based on a time schedule that will be confirmed by the City.

## Communications

Cat6 cables (desk typical of 3 data/tel/aux) for Data/Tel/Wifi/Camera/TV signage, Commscope Gigaspeed XL. Commscope Visipatch 360 Cable termination in Comm room(s). 4 post rack for Audiovisual, 2 x 2 post racks for Network Switches, Security, Fibre from outside (by others). 2kva Liebert network attached UPS in audiovisual rack and one 2 post rack for Network & Security. Generator power, if available (dedicated circuits regardless). Entrance communications conduits for Telus, Shaw & City Fibre. Main Comm room minimum 10 ft x 10 ft useable space, open ceiling with ohd cabletrays, plywood all walls floor to 9ft. Provide TELUS HSPA & LTE In-Building coverage for the Community Centre spaces. 95% of the target locations in City spaces will have both adequate radio coverage and a good cellular communication being provided. Note Telus will require execution of Real Estate Agreement and/or Amendment (for their equipment and services in private facility). Telus agreement should indicate all services installed are to support Community Centre needs, not to include transmission for other uses.

## **Fire Alarm**

Fire alarm wiring and zone designation shall be provided for the community centre.

## **Exterior Lighting**

Adequate lighting levels shall be provided in the plaza area to prevent undesirable activity and give a sense of security to visitors. Exterior lighting shall be controlled based on a time schedule that will be confirmed by the City.

LED lighting is preferred.

## **Security**

Security camera system to be provided for entire facility (internal and external), according to current industry best practices for community centres. Display cameras to be linked back to a central location that will be integrated with the City's monitoring/security system.

Door alarms at all exterior operable doors and motion detector for spaces adjacent to the exterior walls on the ground level is required. City of Richmond Honeywell system to be considered for base building as well as TI.

## **Doors and Hardware**

Alarmed doors will be required at exit corridors. Exterior doors and parkade doors shall be equipped with proximity card reader.

Main entry door and parkade door shall be equipped with a handicapped door operator.

All door hardware shall be institutional quality. Access control should be compatible with the City's specified system.

## **Maintenance**

Building equipment monitoring and integration guidelines (attached).

Building lighting guidelines (attached).

DDC requirements (attached).

## **Interior Finishes Level**

The finishes for the City Centre Community Centre North interior will be equivalent to or better than the finishes found in the recently built City Centre Community Centre located at 105-5900 Minoru Boulevard.

## **Room Data Sheets**

Detailed space requirements for each of the rooms listed in the program were established and are included in room data sheets that follow.

ROOM DATA

# "VILLAGE SQUARE" / SPORTS HALL

## PROGRAM

PROGRAM INFORMATION	Active gathering space, flexible for various uses, sized for physical activity and sports as well as hosting of events such as markets, exhibitions, trade shows, etc; "Garage" concept which is based on the idea that empty garages allow for all sorts of impromptu activities including garage bands, hanging out, table tennis, art creation, etc. Inclusive space Divisible into half via a divider curtain
KEY ADJACENCIES	Ample connection to exterior at ground level plaza via operable glazed wall to allow activities to spill outdoors; adjacent to Multipurpose Room 1; close proximity and visual connection to change rooms; close proximity to loading area (sidewalk) to service large dry floor events, loading access via over-height doors; houses track at upper level
TECHNICAL NEEDS/ CONSIDERATIONS	Regulation high school basketball court, standard volleyball court, 3 badminton courts. Portable basketball hoops to suit 1 full court and 2 cross courts; Provision for 4 wall mounted side-swing hoops to be installed by Owner after occupancy. LED projection system for sports regulation lines (ABS GlassFloor)/sprung wood floor
OTHER	This space must include all of the technical requirements for sports but also appeal to non-sport users to allow for maximizing of rentals and programming; Sports include basketball, volleyball, badminton, pickleball, indoor tennis and indoor soccer

## FUNCTION

AREA	6650 s.f.
STORAGE	600 s,f. Storage to suit required equipment for gymnasiums sports use as well as optional seating in case of events
CEILING HEIGHT	30'-0" (9.1m) minimum clear height to underside of structure to accommodate team sports (particularly volleyball & badminton); typically requires 40'-0" floor to floor to allow for long span structural joists
OCCUPANT LOAD	100 for sports and programs; up to 600 for special events
SPECIAL CONSIDERATIONS	Adequate crush space for sports courts; non-rectangular room should be considered; Special attention to natural daylight and direct sunlight when concerning sports (eg. Badminton): Provide sun studies on request; long span, column free space: no protrusions; over-head doors to storage room, exterior sliding glass doors at sidewalk

## FINISHES

FLOOR	Sprung Wood Floor: Robbins Sportwood Ultra Star Flooring with minimum 60 durometer black EPDM bio-pad and second grade and better maple; or alternate GlassFloor System; Pulastic finish on sprung system for a depth of 2'-0" along exterior wall
BASE	Vented Base
WALLS	All glazing: tempered laminated glass; glazed interior walls along east side into stairs and lobby extends from finished floor to 8'-0" a.f.f.; glazed exterior wall to sit on 2'-0" a.f.f. concrete curb.
CEILING	Acoustic Treatment: horizontal panels to contribute to meeting STC requirements of room. Hanging baffles are not acceptable.
DOORS	Fully glazed tempered laminated aluminum doors typical; 9'-0" wide x 12'-0" high (clear opening) thermally broken exterior folding door at exterior wall: Corflex, Nanowall, Euro-Wall; for access of public and delivery of equipment and bleachers; card reader at entrance to room
MISC. SPECIALTIES	8'-0" high stained veneered plywood wall protection from top of floor base; motorized gym divider to divide the room in half (including portion of room under track): Draper Fold-Up Gym Divider with solid 10'-0" bottom vinyl coated polyester and mesh fabric top; exterior roller shade system FM41 by SunProject or equal if roller blinds are required for sun control; Scoreboard, shot clocks; wallet lockers recessed in wall
ACOUSTICS	Acoustical treatments (wall/ceiling panels); to suit community performances; sound separation from adjacent rooms  Reverberation time: 1.2 seconds unoccupied (500-2000Hz) Ambient or background noise level (all sources): NC-40 Door STC rating: To lobby, STC-35; to Multipurpose room 1, STC-35 Minimum wall STC Rating: To lobby, STC-52; to Multipurpose room 1, STC-53 Minimum IIC rating to MP Room 1: IIC-60
SPECIAL REQUIREMENTS	Use of wood on walls is desired to give warmth to room; finishes to appeal to all users; integrate and conceal scoreboard into wall so that it is not visible when the room is not used for sports activities; All interior components must be durable and withstand ball use, be tamper-proof from the interior and exterior ie. exterior mounted window blinds if required for sun control is preferred on the exterior of the building so it cannot be damaged from sports participants within the room

ROOM DATA

**"VILLAGE SQUARE" / SPORTS HALL**

\* Wifi cabling by contractor, hardware/software by City of Richmond to ensure compatibility with City System; AV equipment to be purchased by City of Richmond (FF&E)

**MECHANICAL/ELECTRICAL**

MECHANICAL	HVAC	Heating set points 18 C / Cooling set point 20 C / Relative humidity 50% / Ventilation Rate 25 cfm/person
	PLUMBING	Chilled water fountain with water bottle filler immediately outside room
	OTHER	-
ELECTRICAL	POWER	Score clock, shot clocks, motorized projection screen and projector and sound system; Gym divider; Outlets required at perimeter; LED projection system for sports regulation lines (if using alternate GlassFloor System); event power on exterior wall; water fountain; All components to be protected from ball use.  Wall data jacks required at reasonable intervals around room.
	LIGHTING	Minimum 3 levels of lighting; suspension system for specialty lighting
	COMMUNICATION	Wifi*
	SECURITY	Door alarms, motion detector, card reader
	AUDIO/VISUAL	Sound System, PA system, Provision for large projection screen suspended at the upper level at north end of room

None Required

**MILLWORK**

**ACTIVITY TRACK****PROGRAM****PROGRAM INFORMATION**

Indoor two lane running/walking track around the perimeter of the Village Square  
 4' wide lanes  
 Use for walking during months of rainy weather, for short track training and for active programs such as bootcamp, interval training, etc.  
 Elevated

**KEY ADJACENCIES**

Within Village Square; alternate locations may be considered

**TECHNICAL NEEDS/ CONSIDERATIONS**

Location of track to not interfere with required clearances for sports within Village Square; no free-standing columns permitted for supporting the track from below

**OTHER**

-

**FUNCTION****AREA**

2800 s.f.

**STORAGE**

N/A

**CEILING HEIGHT**

Min. 8'-0" clear from track floor to underside of structure above; or observe clear height requirements for sports if track overlaps courts

**OCCUPANT LOAD**

60

**SPECIAL CONSIDERATIONS**

Provide adequate space around running track to accommodate stretching/resting

**FINISHES****FLOOR**

Fluid applied athletic floor: Robbins Pulastic Classic 110 (no substitutions)

**BASE**

Rubber base

**WALLS**

Tempered glass interior walls from finished floor to 8'-0" a.f.f.; tempered laminated glass guardrails around track

**CEILING**

See Village Square requirements

**DOORS**

Tempered glass aluminum doors; card reader at entrance to room

**MISC. SPECIALTIES**

Corner guards

**ACOUSTICS**

Acoustical requirements as per Village Square

**SPECIAL REQUIREMENTS**

-

**MECHANICAL/ELECTRICAL****MECHANICAL****HVAC**

As per Village Square requirements

**PLUMBING**

Chilled Water fountain w/ bottle filler outside of room in Upper Lobby adjacent to washrooms

**OTHER**

-

**ELECTRICAL****POWER**

Outlets for housekeeping

**LIGHTING**

As per Village Square requirements

**COMMUNICATION**

As per Village Square requirements, Wifi\*

**SECURITY**

Card reader

**AUDIO/VISUAL**

As per Village Square requirements

## ROOM DATA

**MULTIPURPOSE ROOM 1 & 2****PROGRAM**

## PROGRAM INFORMATION

Flexible space to support a variety of programs including active programs, yoga, games, discussion groups, children's programs and banquets  
One Multipurpose room to house a universal washroom to support Seniors programming.

## KEY ADJACENCIES

Both rooms adjacent to each other is preferred  
One room to be adjacent to Village Square to allow for use as a green room to support performances within the Village Square  
Adjacent to kitchen

## TECHNICAL NEEDS/ CONSIDERATIONS

FM Listening assistance system for hearing impaired in MP room with unit washroom; daylighting; clear span, column-free space for usability and flexibility of space

## OTHER

Wall adjacent to Village Square to allow for door openings and glazing into the Village Square; MP1 to be divisible into two equal spaces via folding wall; MP1 to open to lobby via glazed sliding wall front: Kawneer 1040 or equal

**FUNCTION**

## AREA

1500 s.f.

## STORAGE

150 s.f.

## CEILING HEIGHT

10'-0" clear minimum

## OCCUPANT LOAD

30 for Yoga; 120 for Banquets; 140 for lectures (final occupant load will depend on room configuration)

## SPECIAL CONSIDERATIONS

Storage for tables and chairs

**FINISHES**

## FLOOR

Sheet Vinyl (wood grain pattern) with resilient backing / or just sheet vinyl pattern to be confirmed.

## BASE

Stained wood base

## WALLS

Gypsum Board; tempered glass interior walls for daylighting from finished floor to 8'-0" a.f.f.

## CEILING

Acoustic Ceiling Tile

## DOORS

Wood, Stained; card reader at entrance to room

## MISC. SPECIALTIES

Window Blinds (blackout blinds for MP Room 1), wall protection, corner guards; folding wall in Multipurpose 1: manual top supported with STC rating of 56: Modernfold or equal, white board

## ACOUSTICS

Reverberation time: 0.5 seconds unoccupied (500-2000Hz)  
Ambient or background noise level (all sources): NC-35  
Door STC rating Multipurpose Room 1: To Sports Hall, STC-40; to Hallway, STC-35  
Minimum wall STC Rating Multipurpose Room 1: To Sports Hall, STC-53; to hallway, STC-52  
  
Minimum wall STC Rating Multipurpose Room 2: To Hallway, STC-50; to Children's Exploration Room, STC-53  
Minimum IIC rating of Multipurpose Room 2 to lower floor offices and MP Room 1: IIC-60

## SPECIAL REQUIREMENTS

All walls between community centre activity rooms must be full height to the structure, and any penetrations of the walls, or gaps at the ceilings should be caulked, filled or fire stopped to maintain STC ratings. Hallways/Corridors Reverberation time: 0.5 seconds unoccupied (500-2000Hz) typical.

ROOM DATA

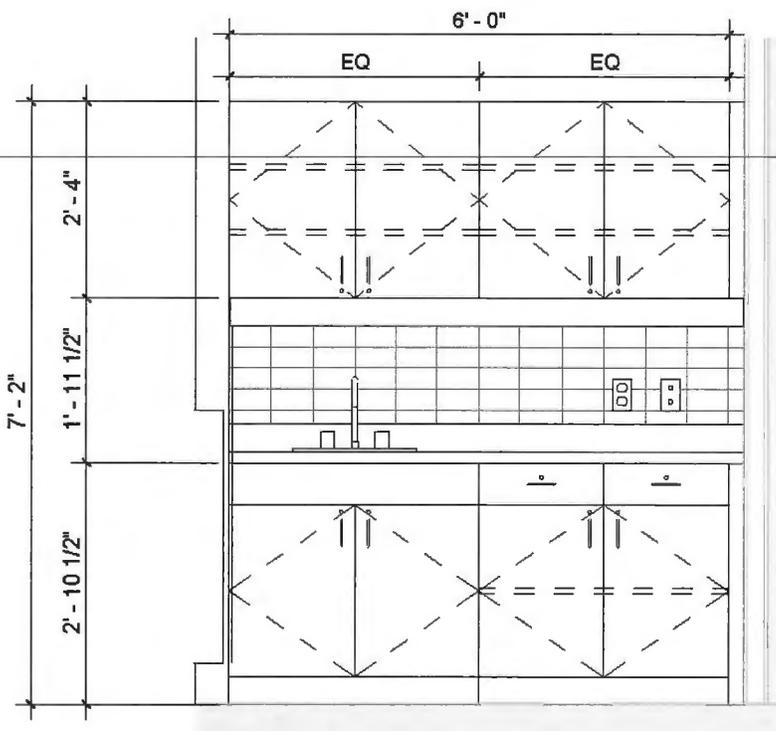
# MULTIPURPOSE ROOM 1 & 2

## MECHANICAL/ELECTRICAL

MECHANICAL	HVAC	20C to 24C temperature range
	PLUMBING	Sink in both MP rooms, universal washroom in one MP room (see typical washroom for details)
	OTHER	-
ELECTRICAL	POWER	Ceiling mounted projection screen, ceiling mounted projector, in-floor and wall outlets
	LIGHTING	Two levels of lighting
	COMMUNICATION	Wifi*, in-floor and wall data outlets; rough-in outside entry door for room schedule information panel; outlets above counter; telephone
	SECURITY	Card reader
	AUDIO/VISUAL	FM listening assistance system for hearing impaired in MP room with unit washroom, sound system, ceiling mounted LED/Laser projector and motorized projection screen; PA System, AV control wall panel; Wall AV inputs

## MILLWORK

Upper and lower plastic laminate on plywood cabinets and drawers complete with under cabinet light valance and ceramic tile backsplash  
Provide 3 units in total, one in each half of MP1 and one in MP2; alternatively provide one double unit in MP1



ROOM DATA

# MULTIPURPOSE ROOM 3

## PROGRAM

PROGRAM INFORMATION	Flexible space to support a variety of programs including meetings This room is the lowest in priority and may not be able to be accommodated in the layout
KEY ADJACENCIES	Can be located on upper level Close proximity to upper level washrooms
TECHNICAL NEEDS/ CONSIDERATIONS	Daylighting
OTHER	Column-free space for usability and flexibility of space

## FUNCTION

AREA	600 s.f.
STORAGE	Within millwork in room
CEILING HEIGHT	9'-0" clear minimum
OCCUPANT LOAD	30; group classes for up to 12
SPECIAL CONSIDERATIONS	-

## FINISHES

FLOOR	Linoleum
BASE	Rubber Base
WALLS	Gypsum Board, tempered glass interior walls for daylighting from finished floor to 8'-0" a.f.f.
CEILING	Acoustic Ceiling Tile
DOORS	Wood, Stained; card reader at entrance to room
MISC. SPECIALTIES	Window Blinds, wall protection, corner guards; chair rail; whiteboard
ACOUSTICS	Sound separation from adjacent rooms; requirements similar to MP 1 and MP 2
SPECIAL REQUIREMENTS	Millwork and sink counter: Refer to Multipurpose 1 & 2 for millwork requirements

## MECHANICAL/ELECTRICAL

MECHANICAL	HVAC	20C to 24C temperature range
	PLUMBING	Sink
	OTHER	-
ELECTRICAL	POWER	TV, in-floor outlets, additional wall outlets
	LIGHTING	Two levels of lighting
	COMMUNICATION	Wifi*, in-floor and wall data outlets; rough-in outside entry door for room schedule information panel; outlets above counter; telephone
	SECURITY	Card reader
	AUDIO/VISUAL	Sound system, fully integrated display system with wall mounted TV; PA System, AV control wall panel; Wall AV inputs

ROOM DATA

# ACTIVITY ROOM

## PROGRAM

PROGRAM INFORMATION	Medium impact recreational programs such as dance, yoga, fitness, pilates, some martial arts
KEY ADJACENCIES	Can be located on the upper level
TECHNICAL NEEDS/ CONSIDERATIONS	Sprung wood floors; Visual privacy required and may be achieved with roller blinds; Adjustable height ballet barres and mirrors; extra high ceiling for creative dance
OTHER	Column-free space for usability and flexibility of space

## FUNCTION

AREA	2000 s.f.
STORAGE	200 s.f.
CEILING HEIGHT	12'-0" clear
OCCUPANT LOAD	195; 20 for dance; 45 for fitness classes; 16 for martial arts
SPECIAL CONSIDERATIONS	Storage with either roll up doors or mirrored doors; Storage of mats, fit balls, body bars, steps, bosu balls and resistance equipment, etc.

## FINISHES

FLOOR	Sprung Wood Floor: Robbins Bio-Cushion system with bio-pads and second grade and better maple
BASE	Vented Base
WALLS	Gypsum Board, tempered glass interior walls to allow for daylighting of adjacent spaces from finished floor to 8'-0" a.f.f.
CEILING	Acoustic Ceiling Tile
DOORS	Glazed Aluminum doors, Aluminum Overhead Doors at Storage Room; card reader at entrance to room
MISC. SPECIALTIES	Entire wall (approximately 50' length) of mirrors from 6" a.f.f. to 8'-0" a.f.f., Adjustable height ballet barres, Roller blinds
ACOUSTICS	Treatment for reverberation, sound separation from adjacent rooms  Reverberation time: 0.5 seconds unoccupied (500-2000Hz) Ambient or background noise level (all sources): NC-35 Door STC rating: To Hallway, STC-40 Minimum wall STC Rating: To Hallway, STC-53; to Activity Track/Sports Hall, STC-53 Floor STC Rating to Truck/Garbage area, STC-60
SPECIAL REQUIREMENTS	-

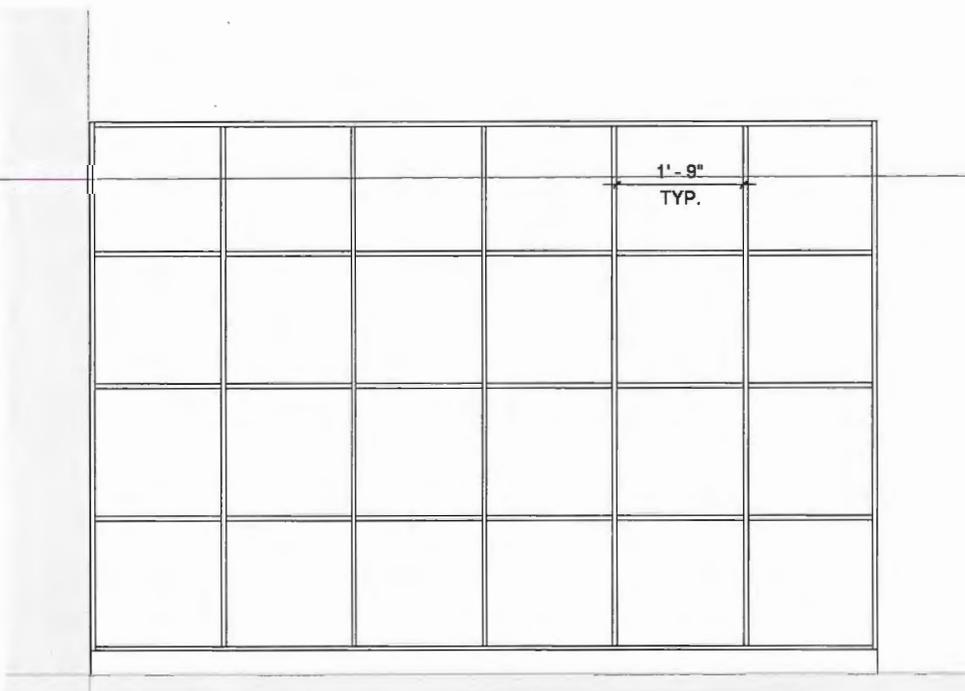
# ACTIVITY ROOM

## MECHANICAL/ELECTRICAL

MECHANICAL	HVAC	Temperature range 25-16 degrees, in-room temperature control
	PLUMBING	-
	OTHER	-
ELECTRICAL	POWER	Housekeeping outlets, sound system. Wall data jacks at several locations in room.
	LIGHTING	Variable lighting levels ideally in different zones to create ambience
	COMMUNICATION	Wifi*; telephone
	SECURITY	Card reader
	AUDIO/VISUAL	Sound System with stronger output speakers for fitness classes, include speed variable CD player with blue-tooth; Ipod and AV inputs, ability to connect to wireless/remote microphone for teaching classes, AV control wall panel; PA system

## MILLWORK

Plastic laminate on plywood bag cubbies - 24 cubbies



ROOM DATA

# WET ART STUDIO

## PROGRAM

**PROGRAM INFORMATION**

Arts Education for multi-generations; Dedicated room that creates awareness and brings arts community into the facility  
 Daylighting  
 Children and adult art programs; wet arts including painting, sculpture, clay hand-building, etc; 2-D art including drawing; Fabric arts such as sewing, felting, knitting; drying rack located in room; display system required for artwork (cable & clip)  
 Multipurpose and flexible space

**KEY ADJACENCIES**

Close proximity to washrooms allow for children to have safe access without supervision by instructor  
 Can be located on the upper level

**TECHNICAL NEEDS/ CONSIDERATIONS**

Hard wearing non staining floor (durable, good quality, low maintenance); Additional wall outlets and in-floor outlets for sewing machines; Two sinks (one BF); Reinforced walls for white boards, display boards; enhanced ventilation to create opportunities for oil painting and glazing of hand-built clay projects

**OTHER**

Storage room must be sized to fit tables and 20 chairs, especially if adjustable tables aren't purchased; Large drying rack; 32 easels; Art supplies including paper storage on rack/shelving system; Column-free space for usability and flexibility of space

## FUNCTION

**AREA**

1100 s.f.

**STORAGE**

220 s.f.

**CEILING HEIGHT**

9'-0" clear

**OCCUPANT LOAD**

55 total capacity; Up to 20 students plus one instructor and one volunteer for drop-in club use; 15 children to one instructor for regular programs; 12 adults to one instructor for regular programs

**SPECIAL CONSIDERATIONS**

Clay hand building only, not a pottery studio

## FINISHES

**FLOOR**

Linoleum

**BASE**

Rubber Base

**WALLS**

Gypsum Board, tempered glass interior walls to allow for daylighting of adjacent spaces from finished floor to 8'-0" a.f.f.

**CEILING**

Acoustic Ceiling Tile

**DOORS**

Wood, Stained; card reader at entrance to room

**MISC. SPECIALTIES**

Display system for hanging 2-D art on walls; paper towel dispenser; wall protection, corner guards

**ACOUSTICS**

Reverberation time: 0.7 seconds unoccupied (500-2000Hz)  
 Ambient or background noise level (all sources): NC-35  
 Door STC rating: To Hallway, STC-30  
 Minimum wall STC Rating: To Hallway, STC-50; to Creativity Lab, STC-53  
 Floor STC Rating to Truck/Parkade area, STC-60

**SPECIAL REQUIREMENTS**

Washable surfaces and easy to clean flooring; Solid surface countertop and backsplash  
 Specialty millwork to house a variety of supplies required and stainless steel sink counter (regular height and barrier free height)  
 Reinforced walls for display boards

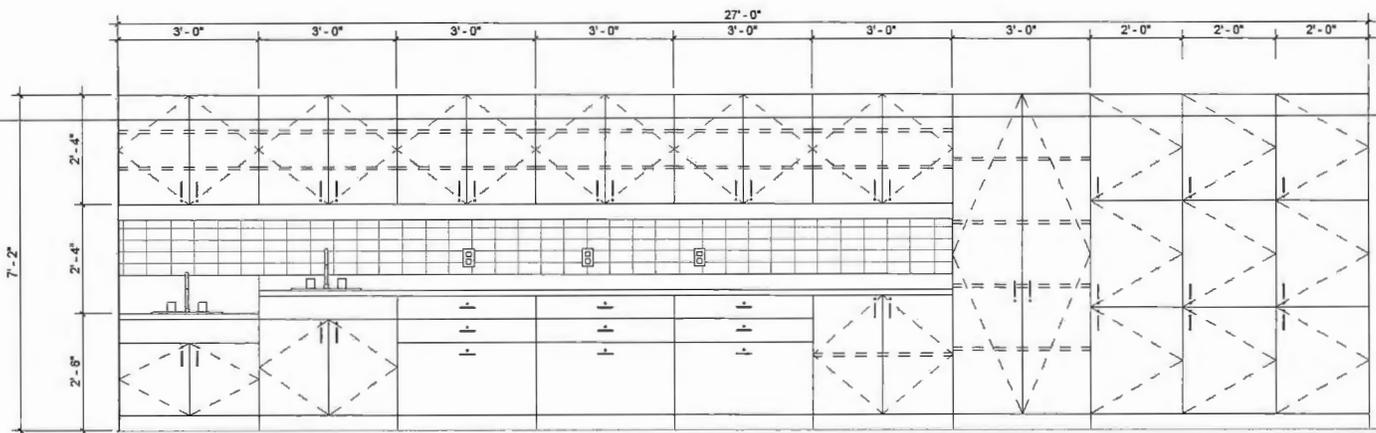
# WET ART STUDIO

## MECHANICAL/ELECTRICAL

MECHANICAL	HVAC	Enhanced Ventilation for art activities ie. pottery glazing, oil painting
	PLUMBING	2 Sinks (1BF height), Interceptors for sinks
	OTHER	-
ELECTRICAL	POWER	In-floor outlets and 20 additional wall outlets at various heights
	LIGHTING	Multiple lighting controls
	COMMUNICATION	Wifi*, in-floor and wall data outlets, outlets above counter, telephone
	SECURITY	Card reader
	AUDIO/VISUAL	Sound system, AV control wall panel, Wall AV inputs; PA system; Wall mounted TV

## MILLWORK

Full height, upper and lower plastic laminate on plywood cabinets and drawers complete with under cabinet light valance, ceramic tile backsplash and stainless steel countertops; one sink at barrier free height



ROOM DATA

# CREATIVITY LAB

## PROGRAM

PROGRAM INFORMATION	Technology room that facilitates "Maker" activities such as art, electronics, robotics, music, crafts, kinetic sculptures, fine art, computers, quilting, farming, engineering and more. Use of room for groups working on media projects, inventions, etc.
KEY ADJACENCIES	Can be located on upper level
TECHNICAL NEEDS/ CONSIDERATIONS	Hard wearing non staining floor (durable, good quality, low maintenance); Additional wall outlets and in-floor outlets, sink, enhanced ventilation; counter for electronics and soldering
OTHER	Storage room must be sized to fit tables and 20 chairs, especially if movable tables aren't purchased; Column-free space for usability and flexibility of space

## FUNCTION

AREA	1200 s.f.
STORAGE	200 s.f.
CEILING HEIGHT	9'-0" clear
OCCUPANT LOAD	60
SPECIAL CONSIDERATIONS	-

## FINISHES

FLOOR	Linoleum
BASE	Rubber Base
WALLS	Gypsum Board, tempered glass interior walls for daylighting from finished floor to 8'-0" a.f.f.
CEILING	Acoustic Ceiling Tile
DOORS	Wood, Stained; aluminum overhead doors at storage room; card reader at entrance to room
MISC. SPECIALTIES	Paper towel dispenser, wall protection, corner guards

ACOUSTICS	Sound separation from adjacent rooms Reverberation time: 0.5 seconds unoccupied (500-2000Hz) Ambient or background noise level (all sources): NC-35 Door STC rating: To Hallway, STC-30 Minimum wall STC Rating: To Hallway, STC-50; to Wet Art Studio, STC-53 Floor STC Rating to Truck/Parkade area, STC-60
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SPECIAL REQUIREMENTS	Washable surfaces and easy to clean flooring; stainless steel countertop and backsplash
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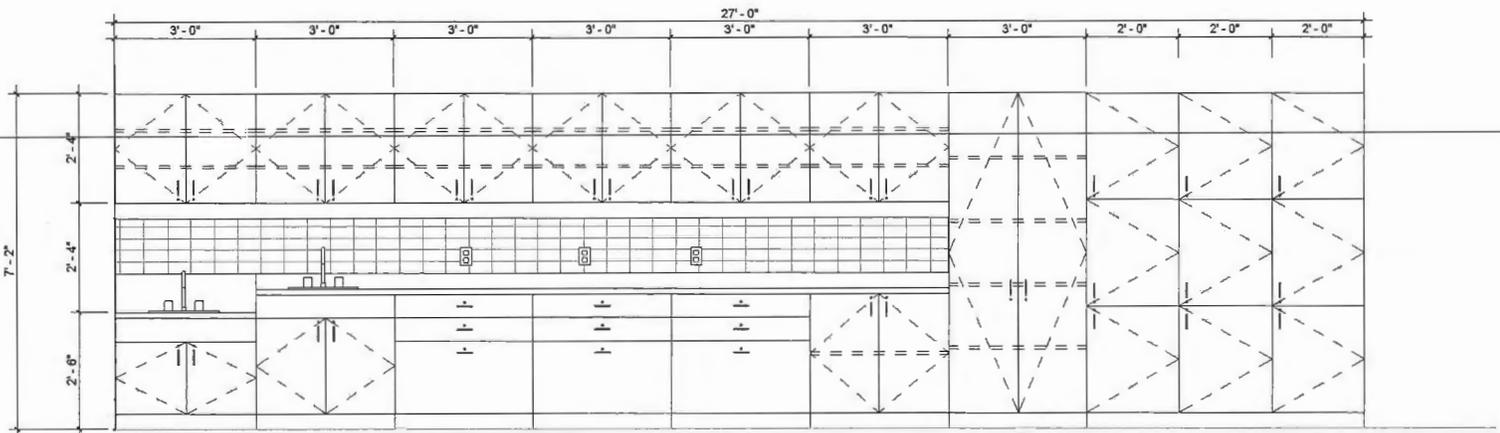
# CREATIVITY LAB

## MECHANICAL/ELECTRICAL

MECHANICAL	HVAC	Enhanced Ventilation
	PLUMBING	Sink, Interceptors for sink
	OTHER	-
ELECTRICAL	POWER	In-floor outlets and additional wall outlets; USB outlets for Maker Users, outlets above counter
	LIGHTING	Multiple lighting controls
	COMMUNICATION	Wifi* 2x density; In-floor data and wall outlets; telephone
	SECURITY	Card reader
	AUDIO/VISUAL	Sound system, PA system; Wall mounted TV for Maker class demos of media projects; AV control wall panel; Wall AV inputs

## MILLWORK

Similar to Wet Art Room with Full height, upper and lower plastic laminate on plywood cabinets and drawers complete with under cabinet light valance, stainless steel backsplash and stainless steel countertops; one sink at barrier free height



**CHILDREN'S EXPLORATION ROOM****PROGRAM**

PROGRAM INFORMATION	Fun, interactive mini Exploratorium with fixed play equipment to teach physical literacy to young children Separate zoned area for older youth Dedicated room for these programs, allowing for day and evening use Consideration for linking to a more extensive exterior Exploratorium along the streetscape that can provide a connection to the river Natural light is desired
KEY ADJACENCIES	Adjacent to Lobby and seating areas Adjacent to Stroller parking areas Preferred adjacency to exterior and location on ground level
TECHNICAL NEEDS/ CONSIDERATIONS	Highly visible from lobby but acoustically separated; 4'-0" depression in floor overtop of the main floor offices/admin area (approximately 1/3 of total room area) to allow for lower playing area; North and east walls to be structurally designed for climbing apparatus; Soundproofing to spaces below
OTHER	Flooring to suit falls from up to 8', walls to support wall mounted play structures; stroller parking at south wall in upper lobby

**FUNCTION**

AREA	2000 s.f.
STORAGE	N/A
CEILING HEIGHT	14'-0" clear to accommodate play structures
OCCUPANT LOAD	50
SPECIAL CONSIDERATIONS	Millwork bench cubbies for seating and shoes; Seating for up to 12 people in 2-3 tables; Provision to allow for picnics; Social area for parents, family, guardians and caregivers to watch / view the activity

**FINISHES**

FLOOR	Robbins Pulastic surface (no substitutions) over playground rubber tiles: Dinoflex PlayTiles or equal for fall height up to 8'
BASE	Rubber Base
WALLS	Gypsum Board, tempered laminated glass interior walls for daylighting from 2'-0" a.f.f. to 8'-0" a.f.f.; structural backing to supporting climbing walls
CEILING	Acoustic Ceiling Tile
DOORS	Tempered laminated glazed aluminum double doors; card reader at entrance to room
MISC. SPECIALTIES	Wood veneer on plywood wall protection up to 12'-0" a.f.f.

ACOUSTICS	Sound separation from adjacent rooms and rooms below  Reverberation time: 0.5 seconds unoccupied (500-2000Hz) Ambient or background noise level (all sources): NC-35 Door STC rating: To Hallway, STC-35 Minimum wall STC Rating: To Hallway, STC-50; to Multipurpose Room 2, STC-53 Minimum IIC rating to lower floor offices and MP Room 1: IIC-60
SPECIAL REQUIREMENTS	Recessed floor slab to accommodate PlayTiles such that there is no change in height transition at entryways; Allow for multiple colours and patterns in flooring; play-structures will be bolted to the floor

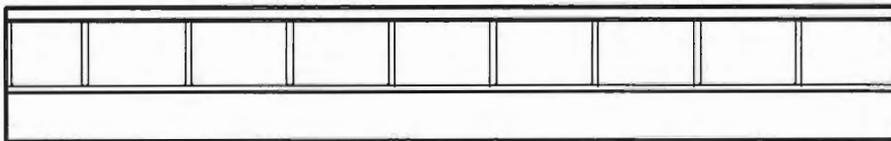
# CHILDREN'S EXPLORATION ROOM

## MECHANICAL/ELECTRICAL

MECHANICAL	HVAC	Temperature range 25-16 degrees, in-room temperature control
	PLUMBING	-
	OTHER	-
ELECTRICAL	POWER	Housekeeping outlets
	LIGHTING	Daylighting is preferred, with backup room lighting; recessed lights, hanging lights not permitted
	COMMUNICATION	Wifi*; counter or wall telephone outlets
	SECURITY	Emergency intercom to front desk; security camera; card reader
	AUDIO/VISUAL	Sound System; PA System

## MILLWORK

Millwork benches complete with plastic laminate on plywood complete with shoe cubbies below  
 Bench length to accommodate 40 cubbies



ROOM DATA  
**KITCHEN**

**PROGRAM**

PROGRAM INFORMATION

Support space for multiple rooms. Facilitates in-person social networking  
 Square or close to square in proportions to allow for groups to gather within the room  
 Possible use for culinary arts/teaching programs, class size up to 12 persons  
 Food prep/support space

KEY ADJACENCIES

Adjacent to Village Square and adjacent or close to Multipurpose rooms; Direct access to corridor allows for easy access to room for deliveries and use of room without disrupting adjacent programs; adjacent to Janitor Closet

TECHNICAL NEEDS/ CONSIDERATIONS

Pass through window to adjacent Village Square and possibly Multipurpose rooms

OTHER

Kitchen equipment requirements and NFPA code requirements; Accessible grease interceptor; Lockable millwork; Double BCBC/ Canadian Electrical Code for required electrical outlets on separate circuits

**FUNCTION**

AREA

500 s.f.

STORAGE

N/A

CEILING HEIGHT

8'-6"

OCCUPANT LOAD

12

SPECIAL CONSIDERATIONS

Commercial Kitchen, upper and lower millwork cabinets, stainless steel countertops preferred

**FINISHES**

FLOOR

Sheet Vinyl with cove base, non slip

BASE

Sheet vinyl cove base

WALLS

Gypsum Board, tile or stainless steel behind sinks and dishwasher (areas of high moisture)

CEILING

Moisture Resistant Gypsum Board

DOORS

Wood, stained, dutch door; card reader at entrance to room

MISC. SPECIALTIES

Paper towel dispenser, soap dispenser, aluminum coiling counter shutter on wall between Kitchen and Multipurpose room or Sports Hall depending on final room location

ACOUSTICS

Refer to adjacent rooms

SPECIAL REQUIREMENTS

Durable, washable finishes; light colours

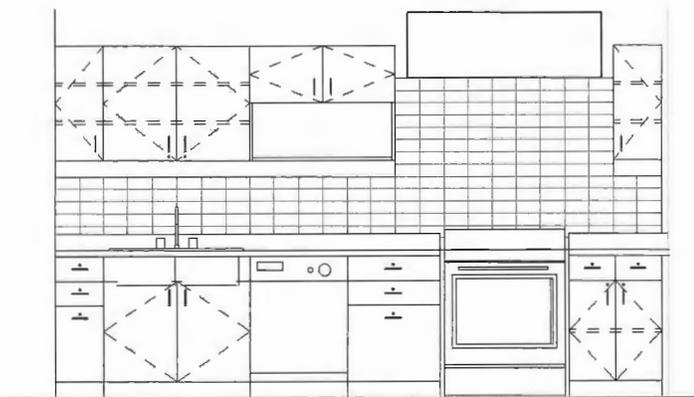
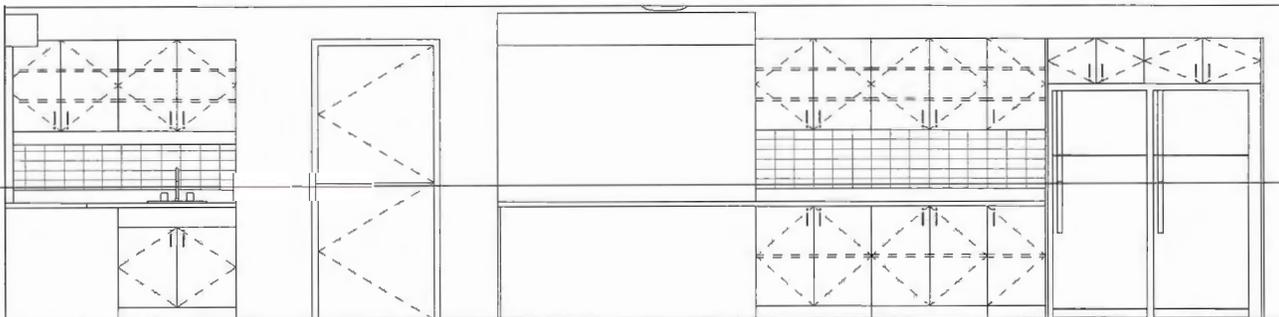
ROOM DATA  
**KITCHEN**

**MECHANICAL/ELECTRICAL**

MECHANICAL	HVAC	Smoke exhaust system per BCBC/ NFPA
	PLUMBING	3 Sinks, Commercial dishwasher, Commercial coffee maker, Accessible grease interceptor; secondary location for washer/dryer
	OTHER	-
ELECTRICAL	POWER	Appliances, Outlets above counters; Commercial sized refrigerator and freezer; Alternate location for washer/dryer; electric stove, oven
	LIGHTING	To meet health act requirements
	COMMUNICATION	Wifi*, telephone
	SECURITY	Card reader
	AUDIO/VISUAL	PA system, Wall mounted TV for teaching use

**MILLWORK**

Upper and lower plastic laminate on plywood cabinets and drawers complete with under cabinet light valance, ceramic tile backsplash and stainless steel counter-tops; microwave shelf, open areas under counter for storage of carts; Millwork island is preferred if space allows; drawing below are example illustrations



**RECEPTION INCLUDING RFC AND CASH****PROGRAM**

PROGRAM INFORMATION	Welcoming Reception Area for meeting and greeting the public, registration for programs, information desk Space for 3-4 staff at reception desk Recreation Facility Clerk (RFC) to be located within the reception area, away from view of the public; RFC has direct visual contact with the reception desk Cash counting area with safe is located in a private space away from view of the public but within hearing range of the reception desk
KEY ADJACENCIES	Direct connection to facility entrance; view of front doors from the desk Adjacent to Lobby, connected to programming staff offices and staff in open office/workstations area Close proximity to communication room or alternatively a communications closet
TECHNICAL NEEDS/ CONSIDERATIONS	Open administration area to facilitate staff work area
OTHER	Reception millwork to facilitate power and data and cable sharing between staff/POS locations

**FUNCTION**

AREA	700 s.f.
STORAGE	N/A
CEILING HEIGHT	8'-6" Clear
OCCUPANT LOAD	6
SPECIAL CONSIDERATIONS	Total 6 workstations: 4 at reception desk, 2 in the reception area but not within sight of public; Must be able to be secured and locked down after hours; Accessible counter

**FINISHES**

FLOOR	Linoleum/carpet
BASE	Rubber Base
WALLS	Gypsum Board
CEILING	Acoustic Ceiling Tile and Feature Ceiling over reception desk
DOORS	Wood, Stained
MISC. SPECIALTIES	White board, tack boards; Full height security grille, retractable into wall pocket: Mobilflex Aeroflex or equal 30 wallet lockers within view of front desk staff: Allmar stainless steel wallet lockers or equal
ACOUSTICS	Sound separation from adjacent rooms  Reverberation time: 0.8 seconds unoccupied (500-2000Hz) Ambient or background noise level (all sources): NC-40 max Door STC rating: To Sports Hall, STC-35; to Multipurpose room 1, STC-35 Minimum wall STC Rating: To Sports Hall, STC-52; to Multipurpose room 1, STC-52
SPECIAL REQUIREMENTS	Custom reception desk with work area solid surface counters, upper and lower millwork cabinets, pullout drawers for printers, accessible location for PC's in millwork, Reception area will require a high degree of detailed design and customization to be functional

**RECEPTION INCLUDING RFC AND CASH****MECHANICAL/ELECTRICAL**

MECHANICAL	HVAC	Staff access to heating controls; Exhaust for photocopier; Ensure adequate heat for staff at reception desk during winter months with time-out controls
	PLUMBING	-
	OTHER	-
ELECTRICAL	POWER	Dedicated outlets for computer equipment, dedicated outlet for photocopier, AV equipment, Information display boards; outlets at front millwork desk for all required systems including receipt printers, debit machines
	LIGHTING	General lighting and pendant lights over reception desk
	COMMUNICATION	Wifi*, data wall outlets and data outlets under millwork, 4 POS stations; Ability to lock/unlock rooms-visual monitor; Telephones
	SECURITY	Public display of CCTV monitor
	AUDIO/VISUAL	Controls for facility Sound System, facility displays and PA System; Fully integrated display system with wall mounted displays for public information

**MILLWORK**

Reception desk for four staff with the following characteristics:

- 4 computers/monitors
- Standing height counter for staff
- Keyboard trays for each station
- Cash drawers for two stations
- Solid Surface Transaction top
- Barrier free desk
- ~~Two below counter printer drawers~~
- Additional countertop space for security monitor
- Wire management below counter
- Minimum 2 Drawer units for storage, shared between two staff

Work Area to support reception:

Combination of upper and lower cabinets and drawers with plastic laminate countertops and space for two workstations for staff

ROOM DATA

# STAFF ROOM WITH FIRST AID

## PROGRAM

PROGRAM INFORMATION	Space for staff lunches and breaks for up to 8 staff at one time; Location for first aid supplies This space may provide passive supervision of other spaces if desired via windows This space is not intended as a treatment space for the public in case of injury
KEY ADJACENCIES	Located within administration area, away from reception
TECHNICAL NEEDS/ CONSIDERATIONS	No dedicated storage room; some storage available in millwork cabinets; Typical staff room requirements including metal lockers
OTHER	-

## FUNCTION

AREA	200 s.f.
STORAGE	N/A
CEILING HEIGHT	8'-0"
OCCUPANT LOAD	6-8
SPECIAL CONSIDERATIONS	Staff lunch room; houses first aid equipment; glazing into room

## FINISHES

FLOOR	Linoleum
BASE	Rubber Base
WALLS	Gypsum Board, tempered glass interior walls for daylighting from finished floor to 8'-0" a.f.f.
CEILING	Acoustic Ceiling tile
DOORS	Wood, Stained
MISC. SPECIALTIES	6 metal lockers with hasp, paper towel dispenser, soap dispenser
ACOUSTICS	Reverberation time: 0.5 seconds unoccupied (500-2000Hz) Ambient or background noise level (all sources): NC-35 Door STC rating: To Hallway, STC-30 Minimum wall STC Rating: To Hallway, STC-50
SPECIAL REQUIREMENTS	Millwork upper and lower cabinets, plastic laminate countertop

# STAFF ROOM WITH FIRST AID

## MECHANICAL/ELECTRICAL

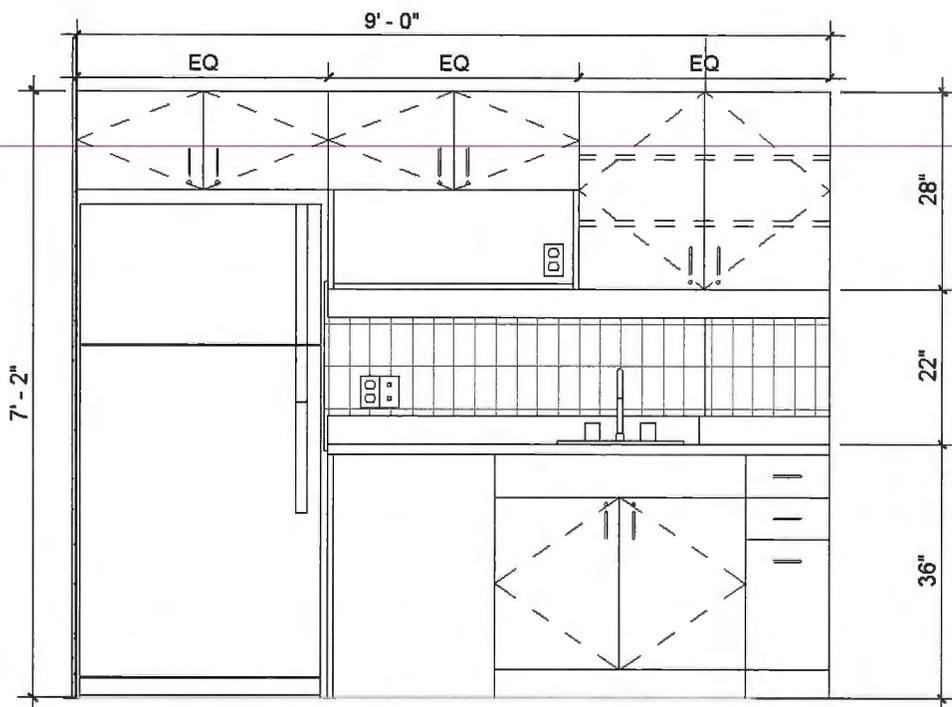
MECHANICAL	HVAC	20C to 24C temperature range
	PLUMBING	Sink with garburator, Small apartment sized dishwasher
	OTHER	Room temperature control
ELECTRICAL	POWER	Appliances including refrigerator, apartment sized dishwasher, microwave, over counter outlets; small Kitchenette setup
	LIGHTING	Occupancy sensor
	COMMUNICATION	Wifi*, Data wall outlet above counter, USB outlets
	SECURITY	-
	AUDIO/VISUAL	PA System

## MILLWORK

Upper and lower plastic laminate on plywood cabinets and drawers complete with under cabinet light valance and ceramic tile backsplash

Microwave shelf

Space for full height fridge and under counter dishwasher



ROOM DATA

# MEETING ROOM

## PROGRAM

PROGRAM INFORMATION | Multi-use meeting room for staff meetings, informal discussions, training, one on one meetings; space for up to 8 people

KEY ADJACENCIES | Preferred location within administration area; alternate locations may be considered

TECHNICAL NEEDS/ CONSIDERATIONS | Glazed door and optional glazed screen recommended  
No storage within this room, items must be stored in alternate location

OTHER | -

## FUNCTION

AREA | 200 s.f.

STORAGE | N/A

CEILING HEIGHT | 8'-6" Clear

OCCUPANT LOAD | 8

SPECIAL CONSIDERATIONS | Meeting space for up to 8 people

## FINISHES

FLOOR | Linoleum

BASE | Rubber Base

WALLS | Gypsum Board, tempered glass interior walls for daylighting from finished floor to 8'-0" a.f.f.

CEILING | Acoustic Ceiling Tile

DOORS | Wood, Stained; card reader at entrance to room

MISC. SPECIALTIES | Blinds; Chair rail; White board

ACOUSTICS | Sound separation from adjacent rooms  
Reverberation time: 0.5 seconds unoccupied (500-2000Hz)  
Ambient or background noise level (all sources): NC-35  
Door STC rating: To Hallway, STC-30  
Minimum wall STC Rating: To Hallway, STC-50

SPECIAL REQUIREMENTS | -

# MEETING ROOM

## MECHANICAL/ELECTRICAL

MECHANICAL	HVAC	20C to 24C temperature range
	PLUMBING	Plumb for future sink at millwork counter
	OTHER	Room temperature control
ELECTRICAL	POWER	AV equipment; wall outlets
	LIGHTING	-
	COMMUNICATION	Wifi*, data wall outlets; Rough-in outside entry door for room schedule information panel; Telephone
	SECURITY	Card reader
	AUDIO/VISUAL	PA System, Fully integrated display system with wall mounted TV; AV control wall panel; Wall AV inputs; Smart-board

## MILLWORK

Plumb for future water / sink. At this point we don't think millwork will be required due to size of room, would like option in future.

ROOM DATA

# SHARED OFFICE

## PROGRAM

PROGRAM INFORMATION	Shared office space with 8 workstations Programming staff; Building Service Workers (BSW)
KEY ADJACENCIES	Within administration area, connectivity to reception desk
TECHNICAL NEEDS/ CONSIDERATIONS	Glazed door and optional glazed screen recommended Storage within cabinets, large items must be stored in alternate location
OTHER	-

## FUNCTION

AREA	450 s.f.
STORAGE	N/A
CEILING HEIGHT	8'-6" Clear
OCCUPANT LOAD	8
SPECIAL CONSIDERATIONS	Ensure access to all power and data with systems furniture design

## FINISHES

FLOOR	Linoleum/carpet
BASE	Rubber Base
WALLS	Gypsum Board, tempered glass interior walls for daylighting from finished floor to 8'-0" a.f.f.
CEILING	Acoustic Ceiling Tile
DOORS	Wood, Stained; card reader at entrance to room
MISC. SPECIALTIES	Systems furniture
ACOUSTICS	Sound separation from adjacent rooms; systems furniture design to promote sound isolation within each cubicle; possible requirement for noise cancelation system  Reverberation time: 0.5 seconds unoccupied (500-2000Hz) Ambient or background noise level (all sources): NC-35 Door STC rating: To Hallway, STC-30 Minimum wall STC Rating: To Hallway, STC-50
SPECIAL REQUIREMENTS	-

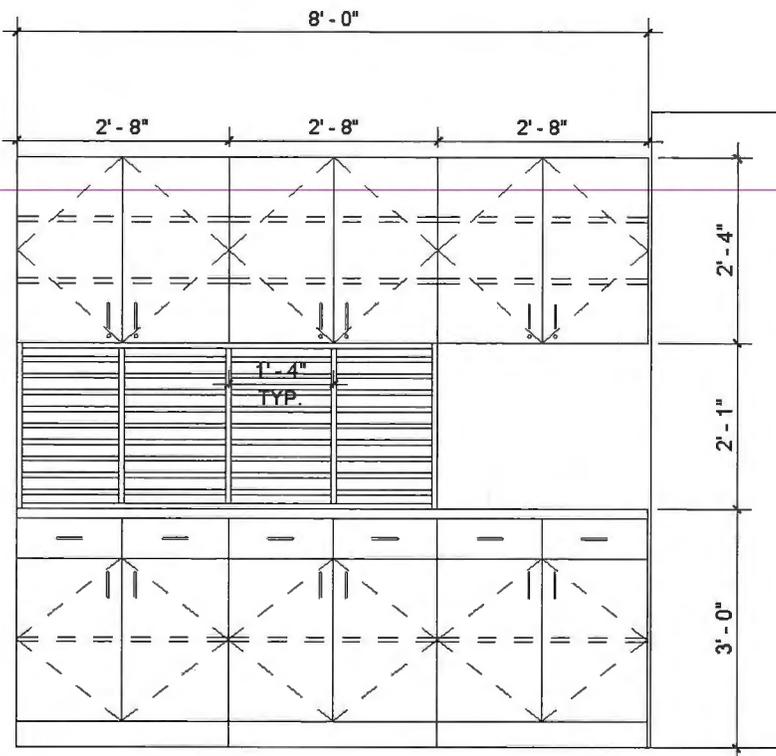
# SHARED OFFICE

## MECHANICAL/ELECTRICAL

MECHANICAL	HVAC	20C to 24C temperature range
	PLUMBING	-
	OTHER	Room temperature control
ELECTRICAL	POWER	Outlets for computers plus additional outlets, telephone, dedicated printer
	LIGHTING	General room lighting and task lighting
	COMMUNICATION	Wifi*, data wall outlets: minimum 3 Cat6 per desk plus additional outlets, telephone
	SECURITY	Card reader on entry door
	AUDIO/VISUAL	PA System

## MILLWORK

Upper and lower plastic laminate on plywood cabinets with mail slots and drawers



ROOM DATA

# AREA COORDINATOR OFFICE

## PROGRAM

PROGRAM INFORMATION	Single office for one occupant Space for visitors
KEY ADJACENCIES	Within administration area, connectivity to shared office
TECHNICAL NEEDS/ CONSIDERATIONS	Glazed door and optional glazed screen recommended Storage within cabinets, large items must be stored in alternate location
OTHER	-

## FUNCTION

AREA	100 s.f.
STORAGE	N/A
CEILING HEIGHT	8'-6" Clear
OCCUPANT LOAD	1 typical, up to 3
SPECIAL CONSIDERATIONS	-

## FINISHES

FLOOR	Linoleum/carpet
BASE	Rubber Base
WALLS	Gypsum Board, tempered glass interior walls for daylighting from finished floor to 8'-0" a.f.f.
CEILING	Acoustic Ceiling Tile
DOORS	Wood, Stained

MISC. SPECIALTIES	Systems furniture
-------------------	-------------------

ACOUSTICS	Sound separation from adjacent rooms  Reverberation time: 0.5 seconds unoccupied (500-2000Hz) Ambient or background noise level (all sources): NC-35 Door STC rating: To Hallway, STC-30 Minimum wall STC Rating: To Hallway, STC-50
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SPECIAL REQUIREMENTS	-
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# AREA COORDINATOR OFFICE

## MECHANICAL/ELECTRICAL

MECHANICAL	HVAC	-
	PLUMBING	-
	OTHER	Room temperature control
ELECTRICAL	POWER	Outlets for computers plus additional outlets, telephone, dedicated printer
	LIGHTING	General room lighting and task lighting
	COMMUNICATION	Wifi*, data wall outlets, telephone
	SECURITY	-
	AUDIO/VISUAL	PA System

## MILLWORK

None required

ROOM DATA  
**LOBBY**

**PROGRAM**

PROGRAM INFORMATION	Unique gathering space or spaces within a larger room to encourage "pods of interaction"; Creates context for the community, houses the community living room; Exhibition space, 3D public art Casual meeting/social space for non-programmed interaction; Addresses an expressed desire to use facility to assist in nurturing and developing sense of community; Room that provides 'identity' to the community centre Feature Internal stair to encourage public use
KEY ADJACENCIES	Adjacent to reception area to facilitate use as a program and/or un-programmed space; Connectivity to Children's Exploration Room; Connectivity to adjacent surroundings and possible connection to River via views, programs, streetscape Connected to exterior plaza that can support indoor/outdoor activities such as open houses in good weather
TECHNICAL NEEDS/ CONSIDERATIONS	Surfacing to suit primarily street shoe programming functions, good slip resistance required; fireplace is recommended as a focal point; Typically limited wall space; No storage requirements
OTHER	-

**FUNCTION**

AREA	2400 s.f.
STORAGE	N/A
CEILING HEIGHT	10'-0"
OCCUPANT LOAD	60
SPECIAL CONSIDERATIONS	Casual meeting/social space for approximately 60; non-program area and spill out space to exterior plaza; special events; Space to be divided into "nodes" via furniture, artwork, etc

**FINISHES**

FLOOR	Terrazzo, polished concrete or porcelain floor tile; Permanent walk-off mat at vestibules
BASE	Aluminum or porcelain floor tile
WALLS	Gypsum Board with specialty paneling
CEILING	Combination Acoustic Ceiling Tile with Gypsum Board Bulkheads and featured wood ceilings
DOORS	Automatic Glazed Aluminum doors at main entrance and parking entrance within vestibules; Sliding Glass wall opening to plaza: Narrow wall preferred
MISC. SPECIALTIES	Specialty paneling ie. Resin panels, Wood Paneling, etc.
ACOUSTICS	Noise Reduction Acoustic Panels; See also requirements noted on Reception Room Data Sheet
SPECIAL REQUIREMENTS	-

**MECHANICAL/ELECTRICAL**

MECHANICAL	HVAC	HVAC tied to exterior sliding doors
	PLUMBING	Chilled drinking fountain with bottle filler
	OTHER	-
ELECTRICAL	POWER	Charging stations for electronic devices; Fireplace; Television; Additional power to support events. Wall data jacks at regular intervals.
	LIGHTING	Potlights; specialty lighting to give living room feel
	COMMUNICATION	Wifi*, USB outlets
	SECURITY	Door alarms, motion detectors, etc.
	AUDIO/VISUAL	Television, PA system, Sound System, Electronic displays

**WASHROOM/CHANGE ROOM/SHOWERS****PROGRAM**

PROGRAM INFORMATION	Promotes inclusivity for special populations with gender free shower cubicles complete with private change benches. 5 shower cubicles to be located between Men's and Women's Change room/washroom and accessed from both rooms One wheelchair accessible universal toilet room located on each level
KEY ADJACENCIES	Access close to lobby and good visibility for patrons upon entry; Proximity and/or sight lines to reception areas Washrooms/Change rooms and Shower to have close proximity and visibility to Village Square Provide Men's and Women's washrooms on both levels
TECHNICAL NEEDS/ CONSIDERATIONS	No doors (airport style) entry to washrooms are recommended; Typical washrooms fixtures; motion sensors for lighting; accessibility requirements; hand dryers
OTHER	-

**FUNCTION**

AREA	TBD
STORAGE	N/A
CEILING HEIGHT	8'-0"
OCCUPANT LOAD	N/A
SPECIAL CONSIDERATIONS	-

**FINISHES**

FLOOR	Ceramic Tile
BASE	Ceramic Tile
WALLS	Ceramic Tile
CEILING	Gypsum Board
DOORS	N/A
MISC. SPECIALTIES	Typical washroom accessories including baby change table; Phenolic ceiling hung cubicle partitions; Solid surface countertops; 24 two-tiered Bradley Lenox Plastic Lockers: 48 lockers total
ACOUSTICS	-
SPECIAL REQUIREMENTS	Ceramic wall tile to 5'-0" AFF minimum; Aquaboard ceilings in washrooms with showers; 2"x2" tile in showers, 6"x6" in washrooms; floors to slope to drain

**MECHANICAL/ELECTRICAL**

MECHANICAL	HVAC	Double BCBC requirement for ventilation
	PLUMBING	Sinks, WC, Showers; Toto Ecopower flush valves and faucets or equivalent; floor drains
	OTHER	-
ELECTRICAL	POWER	Dysan Airblade Hand dryers or equivalent; Above counter outlets at sinks
	LIGHTING	Valance lighting; Occupancy sensors
	COMMUNICATION	-
	SECURITY	-
	AUDIO/VISUAL	-

ROOM DATA

# MAIN JANITOR ROOM + SECONDARY JANITOR CLOSET

## PROGRAM

PROGRAM INFORMATION	Support program spaces; stores cleaning supplies and maintenance equipment Janitor Closet is also required on the upper level and houses second mop sink for the community centre; approximately 40 s.f.
KEY ADJACENCIES	Accessed from primary circulation and /or lobby
TECHNICAL NEEDS/ CONSIDERATIONS	Size to suit janitorial supplies, floor scrubber machine; floor mounted mop/slop sink; outlet for floor scrubber @ 3'-0" AFF; additional hand sink is preferred; Optional location for washer/dryer
OTHER	-

## FUNCTION

AREA	80 s.f. minimum
STORAGE	N/A
CEILING HEIGHT	8'-0"
OCCUPANT LOAD	N/A
SPECIAL CONSIDERATIONS	Storage of cleaning supplies and maintenance equipment

## FINISHES

FLOOR	Sealed Concrete
BASE	Rubber Base
WALLS	Gypsum board or concrete block; ceramic tile to 5'-0" around mop sink
CEILING	Exposed ceiling is acceptable
DOORS	Painted Hollow Metal
MISC. SPECIALTIES	Mop/broom holder, wall protection is required to 5'-0" a.f.f. if walls are gypsum board
ACOUSTICS	-
SPECIAL REQUIREMENTS	Slope floor to drain

## MECHANICAL/ELECTRICAL

MECHANICAL	HVAC	-
	PLUMBING	Mop sink, hand sink, floor drain; Optional location for washer/dryer
	OTHER	-
ELECTRICAL	POWER	Outlet for floor scrubber at 36" AFF; Preferred location for washer/dryer
	LIGHTING	Occupancy sensor
	COMMUNICATION	-
	SECURITY	-
	AUDIO/VISUAL	-

# COMMUNICATIONS

## PROGRAM

### PROGRAM INFORMATION

Service room specific to the community centre

### KEY ADJACENCIES

Central location within the community centre TBC with electrical consultant  
Communications room to have close proximity to administration area and ideally central within the community centre to service all areas under gom travel distance to avoid need of a second room. Access from corridor or staff space, not through a program space.

### TECHNICAL NEEDS/ CONSIDERATIONS

Back of house space with no windows is ideal for these service rooms; non public space; locate away from in-wall, in-floor or in-ceiling plumbing

### OTHER

-

## FUNCTION

### AREA

100 s.f. : 10'-0" x 10'-0" dimensions, usable space after gyproc + plywood installed

### STORAGE

N/A

### CEILING HEIGHT

10'-0" minimum exposed ceiling to allow room for overhead trays, racks and hvac

### OCCUPANT LOAD

N/A

### SPECIAL CONSIDERATIONS

Service room supporting communication systems for the community centre

## FINISHES

### FLOOR

Sealed Concrete

### BASE

Rubber base

### WALLS

Gypsum Board or Concrete Block

### CEILING

Exposed painted to reduce dust

### DOORS

Painted Hollow Metal

### MISC. SPECIALTIES

Fire treated plywood on all walls, 10'-0" high for anchoring equipment and overhead trays

### ACOUSTICS

-

### SPECIAL REQUIREMENTS

-

## MECHANICAL/ELECTRICAL

### MECHANICAL

HVAC Dedicated unit that runs 24/7

PLUMBING -

OTHER -

### ELECTRICAL

POWER Emergency generator power; 120V/20A dedicated circuits for IT/racks, audiovisual, security on walls.

LIGHTING -

COMMUNICATION -

SECURITY Card reader on door; central equipment in this room; central AV equipment on communications rack  
Facility shall be ready to have security cameras installed throughout and be building alarm monitored

AUDIO/VISUAL -

ROOM DATA

# MECHANICAL

## PROGRAM

PROGRAM INFORMATION	Service room specific to the community centre
KEY ADJACENCIES	Central location within the community centre TBC with mechanical consultants
TECHNICAL NEEDS/ CONSIDERATIONS	Back of house space with no windows is ideal for service rooms; non public space
OTHER	-

## FUNCTION

AREA	TBD
STORAGE	N/A
CEILING HEIGHT	Exposed
OCCUPANT LOAD	N/A
SPECIAL CONSIDERATIONS	Service room supporting mechanical systems for the community centre

## FINISHES

FLOOR	Sealed Concrete
BASE	Rubber base
WALLS	Gypsum Board or Concrete Block
CEILING	Exposed
DOORS	Paint
MISC. SPECIALTIES	-
ACOUSTICS	Reverberation time: 0.8 seconds unoccupied (500-2000Hz); Door STC rating: To Hallway, STC-40; Minimum wall STC Rating: To Hallway and Kitchen, STC-53
SPECIAL REQUIREMENTS	-

## MECHANICAL/ELECTRICAL

MECHANICAL	HVAC	-
	PLUMBING	Floor drain in mechanical room
	OTHER	-
ELECTRICAL	POWER	TBC
	LIGHTING	-
	COMMUNICATION	Data wall outlets for DDC and monitoring
	SECURITY	Consider access control for room doors
	AUDIO/VISUAL	-

ROOM DATA  
**ELECTRICAL**

**PROGRAM**

PROGRAM INFORMATION	Service room specific to the community centre
KEY ADJACENCIES	Central location within the community centre TBC with Electrical consultants
TECHNICAL NEEDS/ CONSIDERATIONS	Back of house space with no windows is ideal for service rooms; non public space
OTHER	-

**FUNCTION**

AREA	TBD
STORAGE	N/A
CEILING HEIGHT	Exposed
OCCUPANT LOAD	N/A
SPECIAL CONSIDERATIONS	Service room supporting electrical systems for the community centre

**FINISHES**

FLOOR	Sealed Concrete
BASE	Rubber base
WALLS	Gypsum Board or Concrete Block
CEILING	Exposed
DOORS	Paint
MISC. SPECIALTIES	Fire treated plywood on all walls 8'-0" tall for anchoring equipment
ACOUSTICS	Reverberation time: 0.8 seconds unoccupied (500-2000Hz); Door STC rating: To Hallway, STC-40; Minimum wall STC Rating: To Hallway and Kitchen, STC-53
SPECIAL REQUIREMENTS	-

**MECHANICAL/ELECTRICAL**

MECHANICAL	HVAC	-
	PLUMBING	-
	OTHER	-
ELECTRICAL	POWER	TBC
	LIGHTING	-
	COMMUNICATION	Data wall outlets for DDC and monitoring
	SECURITY	Consider access control for room doors
	AUDIO/VISUAL	-

ROOM DATA  
**PLAZA**

**PROGRAM**

PROGRAM INFORMATION

Active exterior gathering space, flexible for various uses, sized for physical activity and possibly sports as well as hosting of events such as markets, exhibitions, trade shows, etc;  
Inclusive space  
Connects interior to exterior via views and sliding glazed wall/doors  
Landscaped, seating areas

KEY ADJACENCIES

Ample connection to Village Square or Lobby via sliding glazed wall/doors to allow activities to spill outdoors; possible connection to Children's Exploration Room if this room is located on the main floor

TECHNICAL NEEDS/ CONSIDERATIONS

Plaza space to consider all aspects that would encourage the public to inhabit and use the space including reduction of vehicular noise, safety, lighting, seating, landscaping, covered areas, plaza materials, etc.; Consider conflict with circulation of patrons requiring access to residential lobby

OTHER

Consider zoning the plaza to encourage large and small group gathering; possible use as an exterior Exploratorium  
Prominent exterior illuminated sign identifying the community centre; Pylon sign located away from the building

**FUNCTION**

AREA

TBD

STORAGE

Some storage may be required to facilitate outdoor programs; consider sharing Village Square storage by providing door access to the plaza

CEILING HEIGHT

N/A

OCCUPANT LOAD

-

SPECIAL CONSIDERATIONS

Signage, bike racks

**FINISHES**

FLOOR

Scored and/or coloured concrete; differentiate from adjacent public sidewalk; smooth surface for wheelchair users

BASE

-

WALLS

-

CEILING

-

DOORS

Sliding glass wall or doors

MISC. SPECIALTIES

Concrete or stone tables and chairs which cannot be moved from the plaza; metal furniture bolted to the plaza slab may be considered

ACOUSTICS

-

SPECIAL REQUIREMENTS

Extension of building canopy to provide a sheltered area in the plaza. Canopy large enough to provide rain-cover for some of the seating area

**MECHANICAL/ELECTRICAL**

MECHANICAL

HVAC

-

PLUMBING

Water connection via hose bibb with lockable access panel

OTHER

Gas connection for BBQs at exterior wall or preferably concrete pylon freestanding in plaza

ELECTRICAL

POWER

Event power via minimum 4 exterior receptacles; power for two prominent exterior illuminated signs and for pylon sign; receptacle with USB port at each fixed table

LIGHTING

Human scale, adequate to give a sense of safety

COMMUNICATION

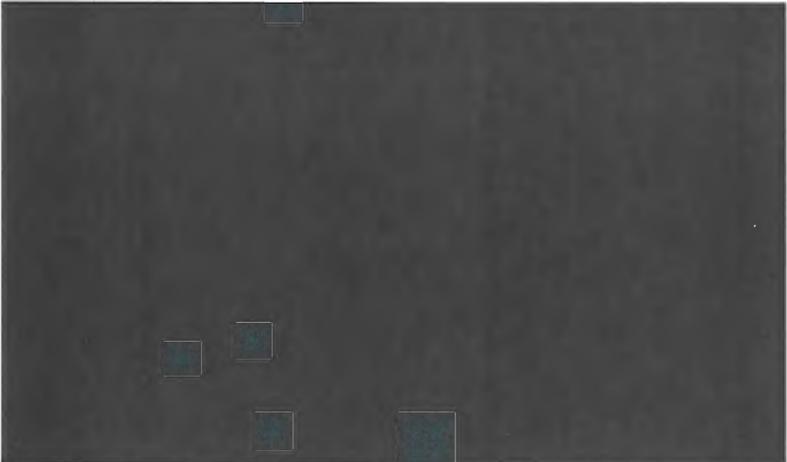
Wifi\*; Data to pylon sign

SECURITY

Door alarms on adjacent building doors

AUDIO/VISUAL

Sound System, PA system



## Appendix A

City of Richmond Policy 2306  
– Sustainable Facilities “High  
Performance” Building Policy –  
City Owned Facilities

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**POLICY 2306:**

It is Council policy to:

**1. Undertake Comprehensive Financial Consideration**

Projects for new buildings and major renovations will be evaluated based on considerations of life-cycle costing and initial financial investment requirements.

**2. Incorporate High Performance Attributes into Building Design and Construction to the Maximum Extent Possible**

- LEED® BC will be used as the standard by which to assess building performance.
- That LEED Gold accreditation be set as the desired standard of building performance for new City buildings greater than 2000 sq.m (approximately 20,000 sq.ft).
- The City will seek to meet the performance standards of LEED Silver certification as a minimum requirement for major renovations to existing facilities and new City Buildings smaller than 2000 sq.m (20,000 sq.ft), but may not necessarily seek formal accreditation.

**3. Pursue Continual Improvement Through Building Retrofit and Efficient Building Maintenance**

Existing facilities and equipment will be upgraded to higher efficiencies as budgets and circumstances allow, and where the change offers a simple payback of no more than five years.

Equipment will be maintained to energy-efficient standards.

**4. Foster Awareness and Innovation**

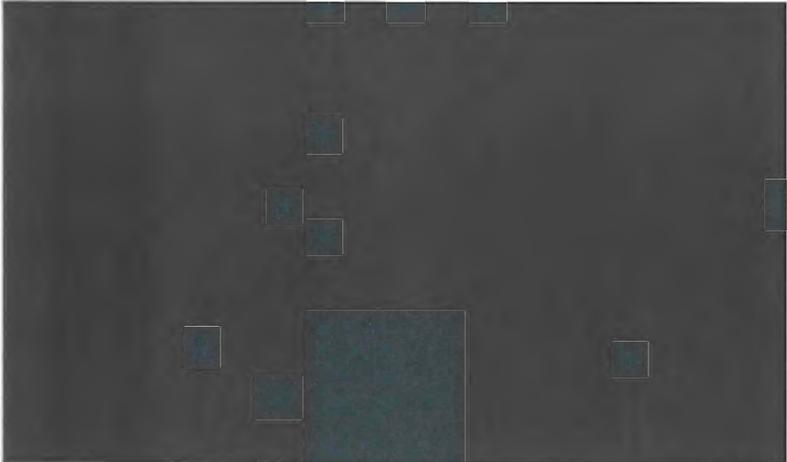
A continuous education program in resource efficiency procedures and practices will be maintained.

All employees will be encouraged to suggest and initiate projects that will save energy and optimize efficiencies in other resource areas (natural and financial).



**5. Undertake Regular Monitoring and Reporting**

Corporate energy consumption and extent to which the City has met its LEED building objectives will be monitored and reported on a regular basis using existing City reporting tools.



## Appendix B

City of Richmond Building  
Equipment, Monitoring, and  
Integration Requirements



# City of Richmond

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ADMINISTRATIVE PROCEDURE

File Ref:

City of Richmond Building Equipment, Monitoring, and Integration Requirements

## City of Richmond Building Equipment, Monitoring, and Integration Requirements

### 1. DEFINITIONS:

#### ASHRAE:

- The American Society of Heating, Refrigerating and Air-Conditioning (ASHRAE) is an international standards organization for numerous building related systems. It is the organization's mission to advance the arts and sciences of heating, ventilating, air conditioning and refrigerating to serve humanity and promote a sustainable world. The Society and its members focus on building systems, energy efficiency, indoor air quality, refrigeration and sustainability within the industry.

#### BACNet:

- Is an ANSI/ASHRAE standard communication protocol for direct digital control networks and automated building mechanisms. It was designed to be used for applications such as heating, ventilation, and air-conditioning control, lighting, access control, and fire detection systems and their associated equipment.

#### Canadian 2011 NECB:

- The National Energy Code of Canada for Buildings (NECB) 2011 provides minimum requirements for the design and construction of energy-efficient buildings and covers the building envelope, systems and equipment for heating, ventilating and air-conditioning, service water heating, lighting, and the provision of electrical power systems and motors.

#### Energy Star®:

- Is an international standard for energy efficient consumer products. The Energy Star® name and symbol are administered and promoted in Canada by Natural Resources Canada. Energy Star® qualified products meet strict technical specifications for energy performance—tested and certified. Devices carrying the Energy Star® identification, such as computer products and peripherals, kitchen appliances, buildings and other products, generally use 20–30% less energy than required by federal standards.

#### Energy Star® Certified

- Refers to Energy Star® certified products and buildings that meet strict North American energy performance standards. Typically these products and buildings use 20–30% less energy and cause fewer greenhouse gas emissions than comparable products and buildings.

#### Energy Star® Portfolio Manager™:

- Is an online tool you can use to measure and track energy use, water consumption, and greenhouse gas emissions, and benchmark your building's performance against similar type buildings in Canada. Portfolio Manager™ uses a 1-100 Energy Star® performance scale: a score of 50 indicates average energy performance (50<sup>th</sup> percentile) while a score of 75 or more indicates top performance (75<sup>th</sup> percentile). A score of 75 or more in a particular year allows for the facility to be Energy Star® Certified. The initial Canadian version of the



# City of Richmond

Page 2 of 15

## ADMINISTRATIVE PROCEDURE

File Ref:

City of Richmond Building Equipment, Monitoring, and Integration Requirements

benchmarking tool in 2014 in Canada is solely applicable to K-12 school and commercial office facilities, other building types, such as community centres, will be added over time.

### HVAC:

- Heating Ventilation and Air Condition (HVAC) is the technology of indoor environmental comfort. HVAC system design is a subdiscipline of mechanical engineering, based on the principles of thermodynamics, fluid mechanics, and heat transfer.

### HVI:

- Home Ventilating Institute (HVI) is a nonprofit association offering a variety of services for manufacturers including, but not limited to, test procedures, certification and verification programs for airflow, sound and energy performance, and market support. Its mission is to serve consumers and members by advancing residential ventilation for healthy, energy-efficient homes.

### IESNA:

- The Illuminating Engineering Society of North America (IESNA) is a non-profit organization that publishes standards for the lighting industry. The mission of the organization is to advance knowledge and disseminate information for the improvement of the lighted environment to the benefit of society. The IESNA lighting standards are developed through technical committees that include hundreds of qualified individuals from the lighting and user communities.

### MERV:

- The minimum efficiency reporting value (MERV), is an ASHRAE measurement scale designed to rate the effectiveness of air filters. The scale is designed to represent the worst case performance of a filter when dealing with particles in the range of 0.3 to 10 micrometres. The MERV rating is from 1 to 16. Higher MERV ratings correspond to a greater percentage of particles captured on each pass, with a MERV 16 filter capturing more than 95% of particles over the full range.

### MSTP:

- Multiple Spanning Tree Protocol (MSTP) is an open source communication protocol language connecting terminal controllers to main direct digital control processing system, and is defined by the applicable networking standard IEEE 802.1Q.

### NRCan

- Natural Resources Canada (NRCan) works with other government departments, the provinces and territories, and other Canadian and international partners to address energy needs and potential while considering new policies, practises, and technologies.
- NRCan's expertise in the areas of energy efficiency, and energy sources and distribution allows us to provide useful energy resources and help Canadians benefit economically, environmentally, and socially from the secure and sustainable production and use of Canada's energy resources.

### SEER:



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- The Seasonal Energy Efficiency Ratio (SEER) rating of a unit is the cooling output during a typical cooling-season divided by the total electric energy input during the same period. The higher the unit's SEER rating the more energy efficient it is. In North America, the SEER is the ratio of cooling in British thermal unit (BTU) to the energy consumed in watt-hours.

#### TCP/IP:

- Transmission Control Protocol/Internet Protocol (TCP/IP) is the principal communications protocol in the Internet protocol suite for relaying datagrams across network boundaries.

#### Virtual Metering:

- Refers to the function of monitoring energy use of specific systems or pieces of equipment, based on demand and run time, through a building's direct digital control system and analog current transducers.



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## **2. OPTIMIZE MAINTENANCE AND ENERGY PERFORMANCE:**

This section is intended to provide a basis by which corporate facilities can be maintained and monitored to maximize efficient resource use, and reduced maintenance and operational costs.

- i. Operation Plan: Each facility should have an operational plan developed that at a minimum includes an occupancy schedule, equipment run-time schedule, design set points for HVAC equipment, and design lighting levels. This plan should be regularly reviewed and optimized as needed.
- ii. Measuring Energy Efficiency: Two options can be used to measure energy efficiency performance in comparison to typical buildings of similar type and function:
  - a. *Option 1:* Target an Energy Star<sup>®</sup> rating of 75% or higher, if eligible to receive an energy performance rating using the U.S. EPA's Energy Star<sup>®</sup> Portfolio Manager Tool (Canadian edition).
  - b. *Option 2:* If a building is not eligible to receive an energy performance rating using the U.S. EPA's Energy Star<sup>®</sup> Portfolio Manager Tool (Canadian edition), target increased energy efficiency of 20% as compared to typical buildings of similar type and function using national average energy data (National Resources Canada, Energy Star, et al).
- iii. Measurement and Verification. Track the energy and water use of specific systems, end uses (i.e. lighting, HVAC, plug loads, etc), and the building overall, to allow for continuous optimization. If possible, accomplish this requirement using the building automation system.
- iv. Benchmarking and Tracking Building Energy Consumption. Regularly compare energy performance data with previous years' energy performance data, to ensure operational energy efficiency is being maintained.
- v. Ongoing Commissioning. Complete re-commissioning activities on an approximately five year cycle to address changes in facility occupancy, use, maintenance and repair. Make periodic adjustments and review of building operating systems and procedures essential for optimal energy efficiency and service provision.
- vi. Building Automation System. Employ full building automation system for increased control and programming capability of mechanical system and lighting systems. It is required that City of Richmond pre-qualified building automation system supply and install contractors be used for new and replacement installations. Please see Section 5.0 for more details.
- vii. Local Thermostat: If applicable, use programmable thermostat that include energy efficient options including but not limited to; night set back, programmability for each day, optimal start, and zones separated by function.
- viii. Heat Recovery Ventilation Systems: Heat recovery ventilation systems used in corporate facilities need to be Home Ventilating Institute (HVI) certified with 85% efficiency



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- ix. Air or Ground Source Heat Pumps: Air or ground source heat pumps used in corporate facilities should be Energy Star® certified with a minimum target for energy efficiency of SEER 16.
- x. Gas Fired Rooftop unit: Gas fired rooftop units used in corporate facilities will target a minimum energy efficiency rating of SEER 13.
- xi. Heat Pump Rooftop units: Heat Pump rooftop units used in corporate facilities will target a minimum energy efficiency rating of SEER 16.
- xii. Roof top units: Economizer should be used for all rooftop units 5 tons or greater. All rooftop units, air handling units, Energy recovery ventilators (ERV), Heat recovery ventilators (HRV) and makeup air units, and shall use industry standard sized filters.
- xiii. Natural Gas Boiler: Natural gas boilers used in corporate facilities will target a minimum efficiency rating of 95%.
- xiv. Air Conditioning: Air conditioning equipment used in corporate facilities should be Energy Star® certified.
- xv. Air Compressor: All pneumatic air compressors should be equipped utilizing automatic condensate drain system. Air compressors for corporate truck maintenance activities, require a minimum of 200 PSI operating pressure.
- xvi. Domestic Hot Water: Domestic natural gas hot water boilers used in corporate facilities should be Energy Star® certified with a target minimum efficiency rating of 80%. Domestic electric hot water boilers used in corporate facilities should be Energy Star® certified with a target minimum efficiency rating of 90%.
- xvii. Appliances: Appliances (refrigerators, laundry machines, stoves, et al) used in corporate facilities should be Energy Star® certified.
- xviii. Ozone Depleting Compounds. Refrain from using Ozone Depleting Substances. Ozone Depleting Substances include CFCs, HCGCs, halons and others used in refrigerants, fire extinguishing systems and chemicals (sterilants and solvents).
- xix. Electric motor and pump: Use high efficiency motors and pumps, whenever possible. Targeting 25% better than Canadian 2011 NECB performance curves for motors and pumps.
- xx. Improved Lighting Efficiency: As budgets allow, high efficiency lighting technology and controls is preferred for all new installations, please refer to Section 6.0 Optimize Lighting System for further guidance on lighting guidelines.
- xxi. Lighting Levels: Refer to the IESNA standards for target lighting levels depending on building type and room function. In addition, please refer to Section 6.0 Optimize Lighting System for further guidance on lighting guidelines.
- xxii. On-Site Renewable Energy. Implement renewable energy generation project, when lifecycle costs are effective at facilities to further reduce conventional energy purchases. Refer to NRCan website.



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- xxiii. Equipment: All equipment, devices, controls needs be well supported by a knowledgeable local technical support staff, local sales representatives and local field service/factory trained representatives to assist in the selection, application and servicing of all equipment. All replacement parts and components need to be readily available (preferred less than 10 day delivery wait time) and cost effective.



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### 3. OPTIMIZE WATER EFFICIENCY:

This section is intended to provide a basis by which corporate facilities can reduce indoor potable water use, reducing the burden on local water supply and wastewater.

- i. Water metering: New corporate facilities will include water meters. Where feasible, these meters will be remotely monitored by the building’s automation and monitoring system. Where possible, it is preferred that an additional water meter is installed to monitor the water consumption for outdoor activities, and that this meter also be monitored through the building’s automation system.
- ii. Indoor plumbing fixture and fitting efficiency: The following table outlines the targeted water fixture efficiency flush/flow rates for civic facilities for both new construction and replacement projects, and the maximum flush/flow rates as per current BC building codes. Where feasible, it is preferred that purchased fixture products water usage is on the lower end of the range to maximize water conservation.

Table 1 – Targeted Fixture Flush/Flow rates for the City of Richmond<sup>1</sup>

Fixture Type	Flow Rate
	(Litres per minute [LPM] or Litres per flush [LPF])
Dual-flush toilets	High flush = <b>6.0 LPF</b>
	Low flush = <b>3.4 to 4.1 LPF</b>
Urinals	<b>1.9 LPF</b>
Lavatory faucet	<b>1.9 to 8.3 LPM</b>
Kitchen faucet	<b>5.7 to 8.3 LPM</b>
Showers	<b>5.7 to 9.3 LPM</b>

- iii. Water-Efficient Products. Where applicable reduce the use of potable water through the use of fixtures with automatic controls. In addition, for water using appliances it is required that Energy Star® certified products are used where ever possible.
- iv. Water Harvesting. Whenever possible and practicable re-use storm water for landscaping and irrigation.

<sup>1</sup> These values are derived from LEED® for existing buildings water efficiency criteria, from the UBC LEED® implementation guide – 2014, and from the BC Water Conservation Amendments – Ministerial Order M105.  
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## **4. ENHANCE INDOOR ENVIRONMENTAL QUALITY:**

The intent of this section is to provide a basis for optimizing indoor environments to promote occupant comfort, health, and enjoyment of the space.

- i. Minimum IAQ Performance. Meet or exceed most current ASHRAE Standard 62.1, Ventilation for Acceptable Indoor Air Quality.
- ii. Ventilation and Thermal Comfort. Meet or exceed most current ASHRAE Standard 55, Thermal Environmental Conditions for Human Occupancy.
- iii. Filtration Media. Utilize Minimum Efficiency Reporting Value (MERV) of at least 11 for equipment that requires filtration material. Where applicable, GeoPleat or Mini-Pleat filter with MERV 13 must be used. Filter media used in all HVAC equipment needs to be of standard sizing.
- iv. Day lighting and lighting Controls. Automated lighting controls (occupancy/vacancy sensors with manual-off capability) are provided for appropriate spaces including restrooms, conference and meeting rooms, employee lunch room, training rooms and offices. Where ever possible and feasible there should be no on schedule for DDC controlled lighting and occupancy sensors should be used to solely recognize inactivity, with switches used to turn lights on.
- v. Low-Emitting Materials. Use low emitting materials for building modifications, maintenance, and cleaning. In particular, specify the following materials and products to have low pollutant emissions: composite wood products, adhesives, sealants, interior paints and finishes, solvents, carpet systems, janitorial supplies and furnishings.
- vi. Environmental Tobacco Smoke Control. Prohibit smoking within and in the vicinity of the building as per the City of Richmond Public Health Protection Bylaw, Worker Compensation Board (WCB) Occupational Health and Safety Regulations, and Vancouver Costal Health Authority regulations.



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## **5. INTEGRATE BUILDING AUTOMATION SYSTEMS:**

The intent of this section is to provide a basis for optimizing the City's building control and energy monitoring capacity to maximize maintenance and operational efficiency, and efficient building resource use. In addition, this section will be used to standardize the City's DDC systems and graphic interface in new and existing buildings.

- i. Prequalified Supply and Installation Contractors: One of the City's prequalified Supply and Installation Contractors for Direct Digital Controls (DDC) Systems must be used for the mechanical and lighting control of City owned and/or operated space.
- ii. Lighting Control: Lighting control is to be tied into separate DDC controllers (unless exempted by the City where in they may be tied in to HVAC DDC controllers), which will be provided by one of the prequalified contractors, with the location and number to be specified by the Electrical Design Consultant as part of the electrical design tender package.
- iii. DDC Graphics and Monitoring: Graphics for the operator interface must be prepared to meet City requirements, which highlight energy efficiency and comfort. Graphic functionality for energy use monitoring will include, but is not limited to, energy use breakdown between electricity and natural gas, further segregation of each fuel type by each functional end use (e.g. ventilation, cooling, heating, pumping, lighting, plug loads, etc. – note that this requires tagging of end use into multiple categories), and by specific systems and equipment. The operator interface for City will run on the City's web-servers. This work must be coordinated through the City's IT group to arrange loading of graphics, databases, and for security requirements.
- iv. Energy Data: All energy data collected will be stored on the City's Sequel Server. The City will provide connection credentials so that the supplied system can store the data. ~~The system must also be capable of delivering this data using BACnet over Ethernet, or BACnet of TCP/IP to third party data repositories capable of accepting BACnet data.~~
- v. DDC Access and Datapoints: The DDC system will be remotely accessed by the City's web based operator interface. Data will be collected at intervals not to exceed 15 seconds for all points during the commissioning process to ensure system stability and tuning. These data points must include measurable variable, manipulated variable, and setpoint variable for each loop, as well as other variable measurements and outputs. VPN network connectivity will be provided by the Supply and Installation Contractor for secure access of sufficient bandwidth to support this.
- vi. Energy Use Monitoring: Any energy use monitoring shall be done through sub-meters that are BACnet enabled, or through virtual metering.
- vii. Water Metering and Monitoring: A water meter will provide instantaneous and aggregated water consumption information of each mechanical makeup water system such as cooling tower, chilled water system, heating water system, heat pump system, Geo/ground loop and Solar system. The information will be delivered using BACnet over MSTP, BACnet over Ethernet, or BACnet over TCP/IP.



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- viii. Hydronic Monitoring: All hydronic loops that introduce or extract energy flows to the subject premises will be monitored. These will include measurement of flow and differential temperature. The calculation of energy and power will be performed at the meter. The flow, inlet and outlet temperatures will be transmitted along with the flow information to the DDC system. The information will be delivered using BACNet over MSTP, BACNet over Ethernet, or BACNet over TCP/IP.
- ix. Points List Review: Once the mechanical and lighting DDC points list has been initially defined, the City requests that they are provided to the City along with the mechanical and electrical specifications, to allow for the timely opportunity to review and comment before finalization.
- x. Segregated Electrical Panels: Lighting, mechanical, and plug loads need to be segregated on separate electrical panels for energy monitoring purposes.
- xi. Electrical Directory Review: Once the preliminary electrical directories for each electrical panel have been defined, the City requests that they are provided to the City, to allow for a timely opportunity to review and comment before finalization.
- xii. Inspections: City personnel or the City's DDC consultant will conduct its own inspections of the system design, installation and functionality, and will prepare its own deficiency lists during the construction process and final inspection. The deficiency lists will need to be corrected prior to City sign off on completion.



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## **6. OPTIMIZE BUILDING LIGHTING SYSTEMS:**

Corporate lighting guidelines and requirements are intended to provide the basis for optimizing building interior and exterior lighting controls and associated electrical use, and to standardize the type of lighting used depending on its function.

### **General Guidelines**

- i. All interior building lighting shall be supplied from 120 volt power systems.
- ii. Lighting design shall incorporate the principles of sustainability and its products and systems shall be energy conserving, long life, have a low cost of ownership and be accessible for service and maintenance.
- iii. For interior building lighting solutions, Light Emitting Diode (LED) lighting is preferred.
- iv. For exterior lighting applications (wall mounted fixtures, low mast light fixtures in parking lot), LED lighting is preferred.
- v. Daylight harvesting opportunities shall be implemented in areas where natural daylight is available.
- vi. Uniformity and low brightness contrast shall be achieved by judicious use of luminaires and their locations.
- vii. All lighting shall be designed to suit the task and task location rather than the general lighting. The most current ASHRAE 90.1, IESNA and WorkSafeBC standards shall be taken into consideration and photometric calculations submitted where requested.
- viii. The designer shall take into account 4 to 5 year fluorescent lighting group relamping program, if applicable. All maintenance factors shall be maximized in due respect to the anticipated clean environment in the facilities.
- ix. When mounting luminaires in high ceiling spaces, consideration must be given to ensure access for maintenance activities. Indoor lighting shall be accessible either from ladders on flat surfaces such as floors or stair landings or from powered lifts with a maximum lift of 6.1 m. Building access, floor construction, and elevators shall permit entry and use of existing standard lift equipment for proper and safe maintenance. If special equipment is required for lighting maintenance, then the consultant shall, prior to tender, prepare and submit a Lighting System Maintainability Plan to the City of Richmond for review and approval and it shall contain documentation describing the special equipment, access arrangements for special equipment, and a maintenance schedule and spare parts list.
- x. The lighting design proposed for all public areas such as corridors and stairways shall ensure the life safety of building occupants at all times and shall also minimize lighting energy required to zero, if possible, when the building is un-occupied. (i.e. lights off until occupancy has been detected or an emergency has occurred). A portion of the lighting fixtures shall be wired to an emergency power panel if an emergency generator is available. Lighting circuits fed from emergency power panels shall be arranged so that they may be switched or dimmed.



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- xi. In general, where feasible and economical LED lighting is preferred for all interior spaces. It is preferred for interior LED luminaires, such as troffers, that the driver be mounted in an easily accessible location i.e. not behind the luminaire, so as to reduce maintenance time if replacement is needed.

If there is not a strong business case for interior LED lighting, then linear fluorescent lighting is preferred. Linear fluorescent luminaires shall be equipped with 120 volt program start electronic ballasts and T8-25 watt lamps or with T8-32 watt lamps in low temperature locations. Bent 'U' tube fluorescent luminaires are not acceptable. Lighting solution proposals using T5 linear fluorescent systems are not acceptable. When required in high ceiling areas, T5 High Output (HO) solutions are acceptable. Suspended luminaires shall be direct/indirect. Full indirect suspended luminaires are not acceptable.

- xii. Non-linear specialty fixtures such as pot lights, cylinders, wall sconces, wall washers and other decorative lighting shall be minimized and shall not exceed 10% of the total quantity of fixtures in the building project. When used, it is preferred that these luminaires not be enclosed and incorporate vertically aligned medium base screw-in LED lamps.
- xiii. HID fixtures such as Metal Halide (MH) or High Pressure Sodium (HPS) are not acceptable.

## Lamp and Ballast Guidelines

- i. Use of LED lamps is encouraged and as substitutes for traditional applications involving CFL, MR-16, PAR 20, PAR 30, BR30, PAR 38 lamps, and linear fluorescent lamps. LED lamps shall be Energy Star rated.
- ii. Lamps shall be the longest life available. Preference will be given to lamps and lighting containing the lowest amount of mercury and other toxic components.
- iii. If applicable, it is preferred that T8 fluorescent lamps be extra-long life or extended life lamps rated for 40,000 hours operation with 3 hours per start
- iv. T8 - 25 watt lamps with 3500° K color temperature shall be the typical lamp used for linear fluorescent lighting.
- v. T8 – 32 watt High Lumen fluorescent or LED lamps shall be the typical lamp used in low temperature locations.
- vi. T5 HO fluorescent lamps shall be extra-long life or extended life lamps.
- vii. Where T5 HO lamps are used in enclosed fixtures, lamps rated for higher temperatures shall be used.
- viii. All fluorescent lighting ballasts shall operate from 120 volt input voltage and shall be program start electronic type with standard ballast factor. Ballasts shall have parallel lamp operation. Acceptable manufacturers are.
- ix. Ballast output frequency shall be greater than 42 kHz.



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- x. Dimming ballasts shall be program start with either line voltage or 0-10 volt control.
- xi. Ballasts shall have lamp end-of-life detection and shutdown circuitry that meets the most current ANSI standards.

### Energy Allowances

- i. All interior lighting shall not exceed the energy density limits as defined in the most current ASHRAE 90.1 lighting power densities standard, using either the whole building area method or the space by space evaluation method. For the whole building area evaluation method, the standard is currently 0.90 watt per square foot.
- ii. All exterior building lighting shall not exceed the lighting power density limits as defined in the most current ASHRAE 90.1 standard.

### Lighting Controls

- i. All interior lighting (including stairwells) shall have controls such that when the lighting is not needed, it will automatically be either turned off or dimmed to a low output condition, and shall conform to the most current relevant ASHRAE 90.1 standard.
- ii. All lighting control systems shall be fully tested and commissioned and a Lighting System Commissioning Report shall be prepared and certified by a responsible professional as per the most current relevant ASHRAE 90.1 standard.
- iii. As per the DDC integration requirements, where low voltage relay controls are provided for new building projects they shall include a BACnet compatible DDC interface device to allow for all scheduling functions related for the lighting systems to be controlled by the buildings DDC system.
- iv. All exterior building mounted lighting and exterior building area lighting shall be controlled by photocell or astronomical time clock. Lighting that may be powered from the building electrical system shall be controlled by the DDC.
- v. Occupancy sensors shall be dual technology type with both Passive Infrared (PIR) and acoustic/ultra-sonic sensors, and may be either line voltage or low voltage types. Low voltage occupancy sensors with 1 or 2 poles and local power packs are preferred. Slave power packs are not acceptable.
- vi. Offices shall have light control switches at all entrances, exits and vestibules. These interior spaces shall also have occupancy sensors integrated with the control switch or mounted at a high level in a corner and arranged for semi-automatic operation such that manual operation of the local switches is required to energize the lighting while occupancy sensors and local switches will de-energize the lighting. Large spaces may need more than one sensor.
- vii. Corridors, lobbies and similar public spaces shall have occupancy sensors, mounted at high levels, and arranged for full automatic operation.



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- viii. Occupancy sensors are not permitted in interior spaces that may be or may become hazardous, such as electrical and mechanical service rooms.
- ix. Where feasible, all offices, corridors, stairways and other public spaces shall incorporate daylight harvesting via use of interior mounted photocells and arranged to take advantage of free illumination while maintaining acceptable minimum illumination levels within the space.
- x. LED dimmers shall be compatible with the LED lamps used and their drivers.

## **Exit Signage**

- i. Exit lighting shall be provided in accordance with the BC Building Code and the Canadian Electrical Code as amended by BC Electrical Safety regulations.
- ii. All exit signs shall be illuminated by LED light sources and shall have an emergency power NiCad battery.
- iii. Exit signs shall be powered at 120 volts from emergency power panels, if available.
- iv. The "Running Man" style EXIT sign that conforms to the CAN/ULC-S572 standard is preferred.

## **Emergency Lighting**

- i. Emergency lighting must be installed in accordance with the latest revision of the B.C. Building Code and City of Richmond's Bylaw No. 8306 (Fire Protection and Life Safety).
- ii. Provide standby emergency generator if motor loads require emergency power.
- iii. All battery pack lighting, remote heads and exit lights shall be LED type and manufactured by 'Ready-Lite' or an approved equal. 'Ready-Lite' is available from local suppliers and shall be stocked by City of Richmond. It is important that City of Richmond have stock in standard sizes so that repairs can be done quickly and effectively as required for the life safety system.
- iv. The battery packs shall be long life type and either 12 volts DC or 24 volts DC and shall be in accordance with CSA C22.2 No. 141.
- v. All battery packs shall be mounted on the wall using anchors capable of supporting the weight, or mounted on an appropriately sized shelf, supplied from 'Ready-Lite' or an approved equal.
- vi. Generator and Electrical rooms shall be provided with an emergency battery lighting pack.
- vii. If a 12 volt DC battery lighting pack is used for emergency lighting power, it shall be rated for 36 watt to 360 watt and should not be self-testing.



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- viii. If a 24 volt DC battery lighting pack is used for emergency lighting power, it shall be either a 360 watt unit or a 720 watt unit, and should not be self-testing.
- ix. For both 12 volt DC and 24 volt DC systems, the heads and remote heads shall be 9 watts each.
- x. Battery packs that are fed from a 120 volt AC. source shall have a 120 volt duplex receptacle mounted adjacent so that the battery pack can be plugged into the receptacle, to facilitate testing and replacement when needed.



## Appendix C

City of Richmond Building  
Lighting Guidelines

**1.0 GENERAL**

**1.1 Related City of Richmond Guidelines**

- .1 High Performance Building Policy
- .2 City of Richmond Sustainable Operation and Maintenance Requirements

**1.2 Coordination Requirements**

- .1 City of Richmond Facilities
- .2 City of Richmond Project Development
- .3 City of Richmond Information Technology

**2.0 MATERIAL AND DESIGN REQUIREMENTS**

**2.1 General**

- .1 All interior building lighting shall be supplied from 120 volt power systems.
- .2 Lighting design shall incorporate the principles of sustainability and its products and systems shall be energy conserving, long life, have a low cost of ownership and be accessible for service and maintenance.
- .3 For interior building lighting solutions, preference shall be given to Light Emitting Diode (LED) and linear fluorescent light sources.
- .4 For exterior lighting applications (wall mounted fixtures, low mast light fixtures in parking lot), preference shall be given to LED light sources. Fluorescent light sources may be used selectively.
- .5 Daylight harvesting opportunities shall be implemented in areas where natural daylight is available.
- .6 Uniformity and low brightness contrast shall be achieved by judicious use of luminaires and their locations.
- .7 All lighting shall be designed to suit the task and task location rather than the general lighting. ASHRAE 90.1-2010, IESNA and WorkSafeBC guidelines shall be taken into consideration and photometric calculations submitted where requested.
- .8 The designer shall take into account 4 to 5 year fluorescent lighting group relamping program. All maintenance factors shall be maximized because of the expected clean environment in the facilities.
- .9 When mounting luminaires in high ceiling spaces, consideration must be given to ensure access for maintenance such as lamp and ballast changing. Indoor lighting shall be accessible either from ladders on flat surfaces such as floors or stair landings or from powered lifts with a maximum lift of 6.1 m. Building access, floor construction, and elevators shall permit entry and use of existing standard lift equipment for proper and safe maintenance. If special equipment is required for lighting maintenance, then the consultant shall, prior to tender, prepare and submit a Lighting System Maintainability Plan to the City of Richmond for review and approval and it shall contain documentation describing the special equipment, access arrangements for special equipment, and a maintenance schedule and spare parts list.

- .10 The lighting design proposed for all public areas such as corridors and stairways shall ensure the life safety of building occupants at all times and shall also minimize lighting energy required to zero, if possible, when the building is un-occupied. (I.e. lights off until occupancy has been detected or an emergency has occurred). A portion of the lighting fixtures shall be wired to an emergency power panel if an emergency generator is available. Lighting circuits fed from emergency power panels shall be arranged so that they may be switched or dimmed.
- .11 In general, where feasible and economical LED lighting is preferred for interior spaces. It is preferred for interior LED luminaires, such as troffers, that the driver be mounted in an easily accessible location i.e. not behind the luminaire, so as to reduce maintenance time if replacement is needed.
- If there is not a strong business case for interior LED lighting, then linear fluorescent lighting is preferred. Linear fluorescent luminaires shall be equipped with 120 volt program start electronic ballasts and T8-25 watt lamps or with T8-32 watt lamps in low temperature locations. Bent 'U' tube fluorescent luminaires are not acceptable. Lighting solution proposals using T5 linear fluorescent systems are not acceptable. When required in high ceiling areas, T5 High Output (HO) solutions are acceptable. Suspended luminaires shall be direct/indirect. Full indirect suspended luminaires are not acceptable.
- .12 Non-linear specialty fixtures such as pot lights, cylinders, wall sconces, wall washers and other decorative lighting shall be minimized and shall not exceed 10% of the total quantity of fixtures in the building project. When used, it is preferred that these luminaires not be enclosed and incorporate vertically aligned medium base screw-in LED lamps.
- .13 HID fixtures such as Metal Halide (MH) or High Pressure Sodium (HPS) are not acceptable.

## 2.2 Lamps

- .1 Lamps shall be the longest life available. Preference will be given to fluorescent lamps containing the lowest amount of mercury.
- .2 It is preferred that T8 fluorescent lamps be Extra Long Life or Extended Life lamps rated for 40,000 hours operation with 3 hours per start.
- Preferred manufacturers are: General Electric, Osram Sylvania, or Philips
- .3 T8 - 25 watt lamps with 3500° K color temperature shall be the typical lamp used for linear fluorescent lighting.
- .4 T8 – 32 watt High Lumen fluorescent or LED lamps shall be the typical lamp used in low temperature locations.
- .5 T5 HO fluorescent lamps shall be Extra Long Life or Extended Life lamps.
- Preferred manufacturers are: General Electric, Osram Sylvania, or Philips.
- .6 Where T5 HO lamps are used in enclosed fixtures, lamps rated for higher temperatures shall be used.
- Preferred manufacturers are Philips Extreme Temperature series or Sylvania Constant series.

- .7 Use of LED lamps is encouraged and as substitutes for traditional applications involving CFL, MR-16, PAR 20, PAR 30, BR30, PAR 38 lamps, and linear fluorescent lamps when economical. LED lamps shall be Energy Star rated.

### 2.3 Ballasts

- .1 All fluorescent lighting ballasts shall operate from 120 volt input voltage and shall be program start electronic type with standard ballast factor. Ballasts shall have parallel lamp operation. Acceptable manufacturers are: General Electric, Osram Sylvania, Philips/Advance or Universal.
- .2 Ballast output frequency shall be greater than 42 kHz.
- .3 Dimming ballasts shall be program start with either line voltage or 0-10 volt control.
- .4 Ballasts shall have lamp end-of-life detection and shutdown circuitry that meets ANSI standards.

### 2.4 Energy Allowances

- .1 All interior lighting shall not exceed the energy density limits as defined in ASHRAE 90.1-2010 section 9.5 (Building Area Method) or 9.6 (Space by Space Method).  
  
For the Building Area Method, the energy density limit is 0.90 watt per square foot.
- .2 All exterior building lighting shall not exceed the energy density limits as defined in ASHRAE 90.1-2010 section 9.4.3.

### 2.5 Lighting Controls

- .1 All interior lighting (including stairwells) shall have controls such that when the lighting is not needed, it will automatically be either turned off or dimmed to a low output condition, and shall conform to the new ASHRAE 90.1-2010 standard (sections 9.4.1, 9.4.2)
- .2 All lighting control systems shall be fully tested and commissioned and a Lighting System Commissioning Report shall be prepared and certified by a responsible professional as per ASHRAE 90.1-2010 standard (section 9.4.4)
- .3 Where low voltage relay controls are provided for new building projects they shall include a BACnet compatible Building Management System (BMS) interface device which shall be wired to the local BMS control panel. This will ensure that all scheduling functions related to lighting systems will be under the control of the BMS system.
- .4 All exterior building mounted lighting and exterior building area lighting shall be controlled by photocell or astronomical time clock. Lighting which may be powered from the building project electrical system shall be under the control of the BMS scheduling system.
- .5 Occupancy sensors shall be dual technology type with both Passive Infrared (PIR) and acoustic/ultra-sonic sensors, and may be either line voltage or low voltage types. Low voltage occupancy sensors with 1 or 2 poles and local power packs are preferred. Slave power packs are not acceptable.

Preferred manufacturers are Watt stopper, Sensor Switch, Leviton, or Hubbell

- .6 Offices shall have light control switches at all entrances, exits and vestibules. These interior spaces shall also have occupancy sensors integrated with the control switch or mounted at a high level in a corner and arranged for semi-automatic operation such that manual operation of the local switches is required to energize the lighting while occupancy sensors and local switches will de-energize the lighting. Large spaces may need more than one sensor.
- .7 Corridors, lobbies and similar public spaces shall have occupancy sensors, mounted at high levels, and arranged for full automatic operation.
- .8 Occupancy sensors are not permitted in interior spaces that may be or may become hazardous, such as electrical and mechanical service rooms.
- .9 All, offices, corridors, stairways and other public spaces shall incorporate daylight harvesting via use of interior mounted photocells and arranged to take advantage of free illumination while maintaining acceptable minimum illumination levels within the space.
- .10 LED dimmers shall be compatible with the LED lamps used and their drivers.

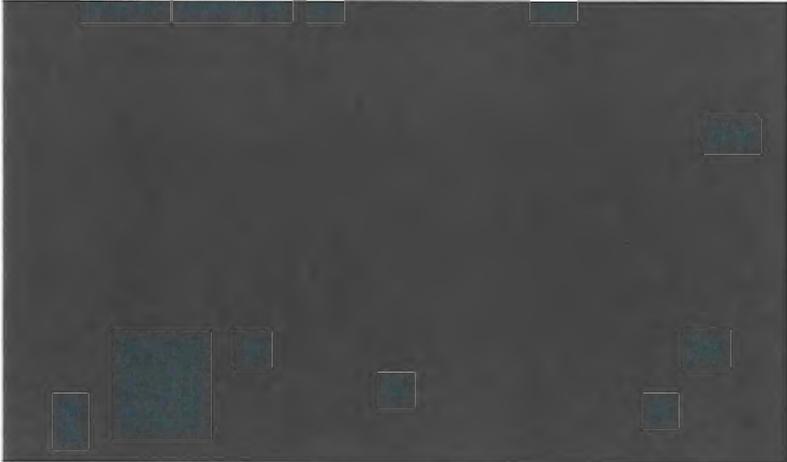
## **2.6 Exit Signage**

- .1 Exit lighting shall be provided in accordance with the BC Building Code and the Canadian Electrical Code as amended by BC Electrical Safety regulations.
- .2 All exit signs shall be illuminated by LED light sources and shall have an emergency power NiCad battery.
- .3 Exit signs shall be powered at 120 volts from emergency power panels, if available.
- .4 The "Running Man" style EXIT sign which conforms to the CAN/ULC-S572 standard shall be used.

## **2.7 Emergency Lighting**

- .1 Emergency lighting must be installed in accordance with the latest revision of the B.C. Building Code and City of Richmond's Bylaw No. 8306 (Fire Protection and Life Safety).
- .2 Provide standby emergency generator if motor loads require emergency power.
- .3 All battery pack lighting, remote heads and exit lights shall be LED type and manufactured by 'Ready-Lite' or approved equal. 'Ready-Lite' is available from local suppliers and shall be stocked by City of Richmond. It is important that City of Richmond have stock in standard sizes so that repairs can be done quickly and effectively as required for the life safety system.
- .4 The battery packs shall be long life type and either 12 volts DC or 24 volts DC and shall be in accordance with CSA C22.2 No. 141.
- .5 All battery packs shall be mounted on the wall using anchors capable of supporting the weight, or mounted on an appropriately sized shelf, supplied from 'Ready-Lite' or approved equal.

- .6 Generator and Electrical rooms shall be provided with an emergency battery lighting pack.
- .7 If 12 volt DC is used they shall be rated for 36 watt to 360 watt and should not be self testing as clients do not understand the self test and call in a trouble call unnecessarily.
- .8 If 24 volts DC are used they shall be either a 360 watt unit or a 720 watt unit only. They shall also be a basic model without meters or self testing.
- .9 For both 12 volt DC and 24 volt DC systems, the heads and remote heads shall be 9 watts each.
- .10 Battery packs that are fed from a 120 volt AC. source shall have a 120 volt duplex receptacle mounted adjacent so that the battery pack can be plugged into the receptacle. This is to facilitate testing and replacement when needed.



## Appendix D

City of Richmond Direct Digital  
Control (for Buildings) and Energy  
Monitoring Guidelines



# City of Richmond

Page 1 of 2

City of Richmond Direct Digital Control and Energy Monitoring Guideline – Non City managed new construction

## **City of Richmond Direct Digital Control (for Buildings) and Energy Monitoring Guidelines – Non City managed new construction for City owned spaces.**

### **1. REQUIREMENTS:**

- i. One of the City's two prequalified Supply and Installation Contractors for Direct Digital Controls (DDC) Systems must be used for the mechanical and lighting control of City owned and/or operated space – currently either ESC Automation or Control Solutions.
- ii. Lighting control is to be tied into separate DDC controllers, which will be provided by one of the prequalified contractors, with the location and number to be specified by the Electrical Design Consultant as part of the electrical design tender package.
- iii. Graphics for the operator interface must be prepared to meet City requirements, which highlight energy efficiency and comfort. Graphic functionality for energy use monitoring will include, but is not limited to, energy use breakdown between electricity and natural gas, further segregation of each fuel type into energy use of separate end uses, to further segregation of energy use of specific systems and equipment. The operator interface for City will run on the City's web-servers.
- iv. The DDC system will be remotely accessed by the City's web based operator interface. Data will be collected at a maximum of 15 second intervals for all points during the commissioning process to ensure system stability and tuning. VPN network connectivity will be provided by the Supply and Installation Contractor for secure access of sufficient bandwidth to support this.
- v. Any energy use monitoring and billing of a City space, which is located within a building that is not City owned and managed, will be done through sub-meters that are BACnet enabled and not on a pro-rated basis.
- vi. A water meter that is BACnet enabled is required to monitor use of any mechanical makeup water system such as cooling tower, chill water system, heating water system, heat pump system, Geo/ground loop and Solar system.
- vii. A BTU meter that is BACnet enabled is required for the heat pump loop to monitor the energy usage of City space.
- viii. Once the mechanical and lighting DDC points list for the space has been initially defined, the City requests that they are provided to the City along with the mechanical and electrical specifications, to allow for the timely opportunity to review and comment before finalization.
- ix. Lighting, mechanical, and plug loads need to be segregated on separate electrical panels for energy monitoring purposes.



# City of Richmond

Page 2 of 2

City of Richmond Direct Digital Control and Energy Monitoring Guideline – Non City managed new construction

- x. Once the preliminary electrical directories for each electrical panel have been defined, the City requests that they are provided to the City, to allow for a timely opportunity to review and comment before finalization.
- xi. City personnel or the City's DDC consultant will conduct its own inspections of the system design, installation and functionality, and will prepare its own deficiency lists during the construction process and final inspection. The deficiency lists will need to be corrected prior to City sign off on completion.

SCHEDULE G  
Community Centre Conceptual Plan (REDMS #5166710)

**W. T. LEUNG ARCHITECTS INC.**  
 104-106, P.O. Box 100  
 Vancouver, B.C. V6P 4C1  
 Telephone: (604) 278-4711  
 Facsimile: (604) 278-1051

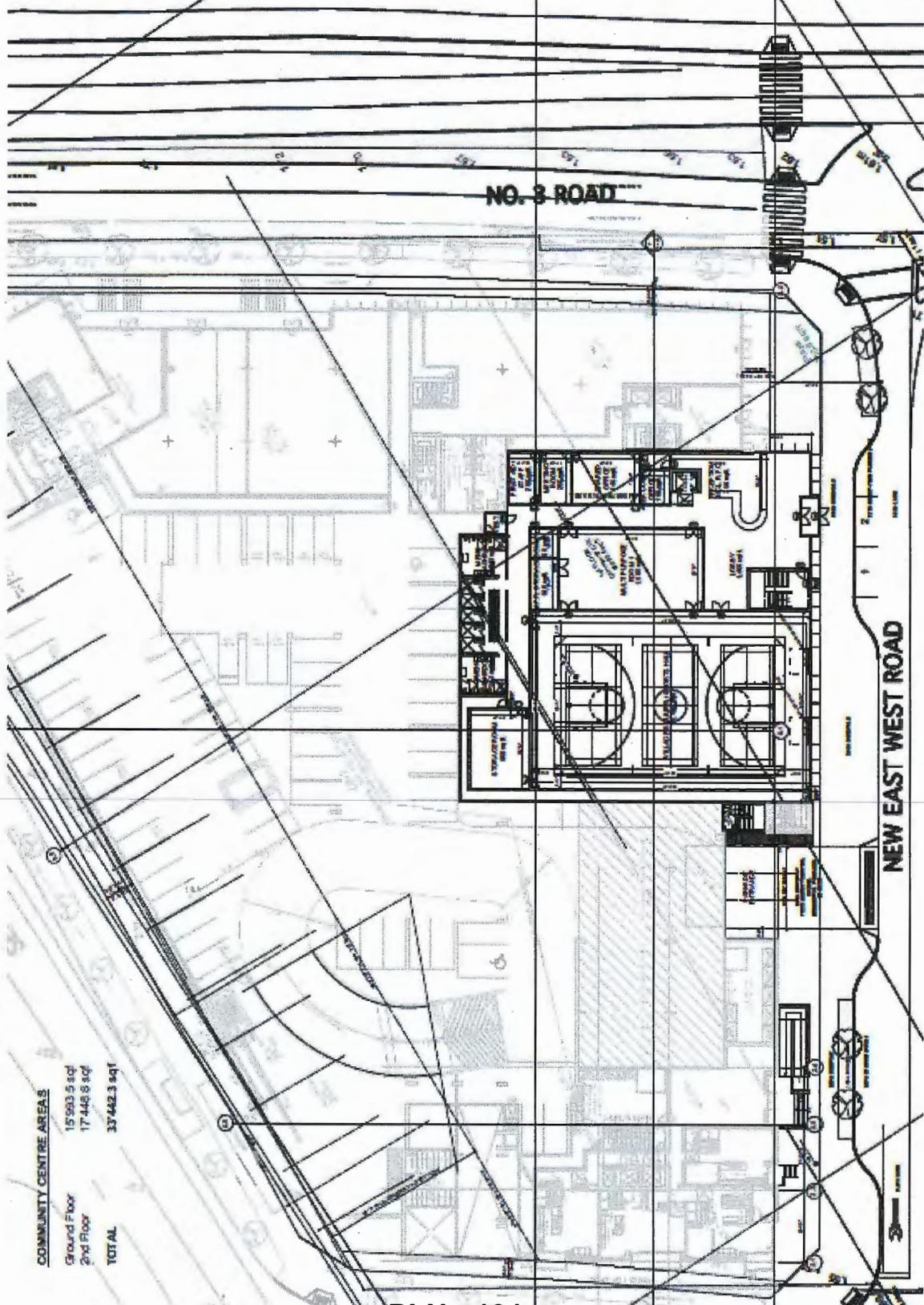


PROJECT  
A 16-11 INDUSTRIAL

PROJECT  
Yuanheng Seaside  
Yuanheng Seaside  
Development

337 No. 1 Road, Richmond, BC  
 1st Fl. Community Ctr.  
 Plan 1/32"

JSL INC.  
 DRAWN: WTLA  
 DATE: JUN 21, 2012  
 SCALE: 1/32" = 1'-0"  
 CHECKED:  
 PROJECT NO.: 171410-01  
 DRAWING NO.: CCA-201



**COMMUNITY CENTRE AREAS**

Ground Floor	15,993.5 sqf
2nd Floor	17,442.8 sqf
<b>TOTAL</b>	<b>33,442.3 sqf</b>

PLN - 191

Initial: \_\_\_\_\_

**W. T. LEUNG**  
ARCHITECTS

1000 W. 1st Street, Suite 100  
San Francisco, CA 94111  
Phone: 415.774.1111  
Fax: 415.774.1112



1/20/2002

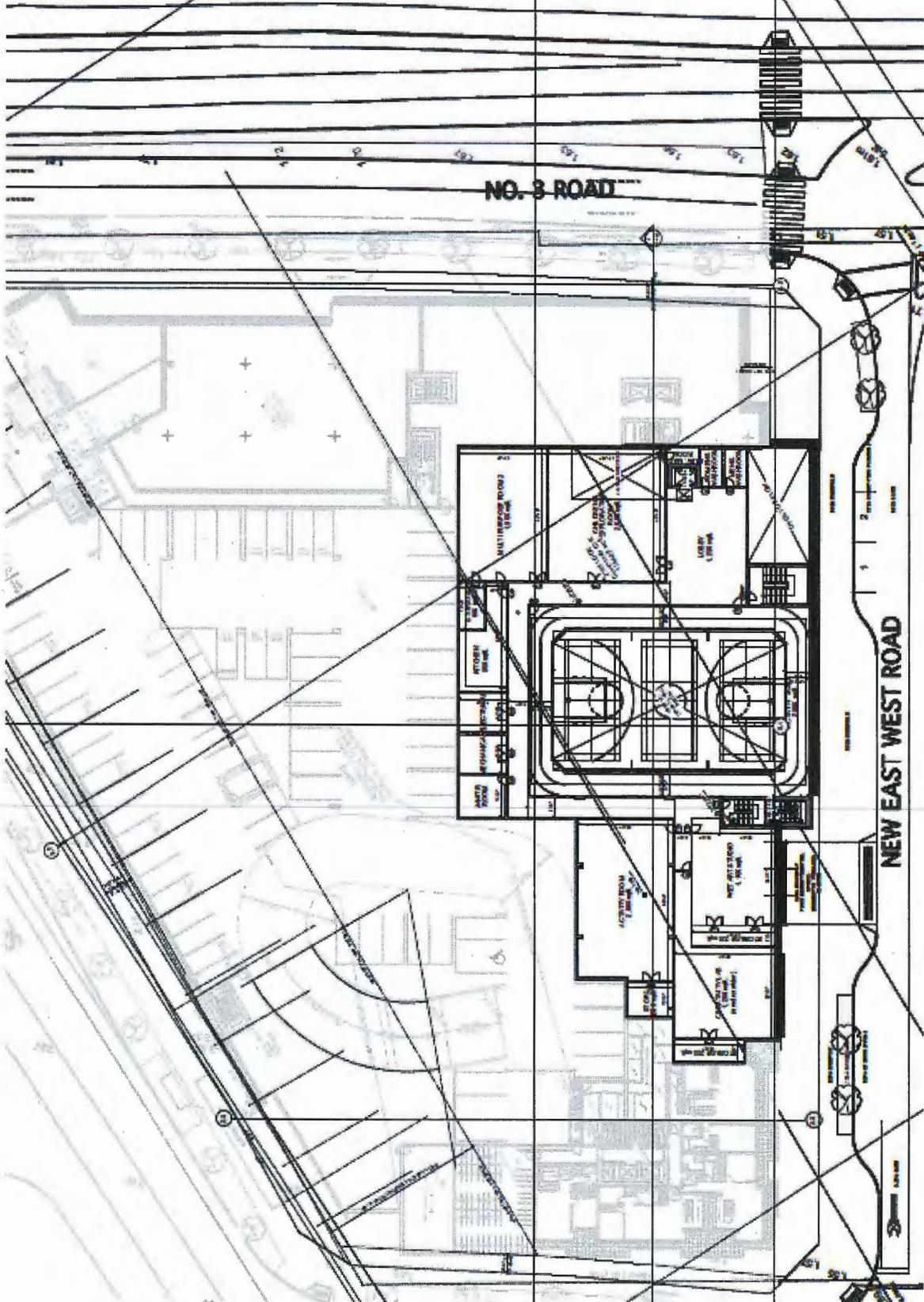
PROJECT  
Yueheng Seaside  
Yueheng Seaside  
Development  
2001 No. 1 Street, Fremont, CA

2nd Fl. Community Ctr  
Plan 1/22'

JOB NO.  
DRAWING NO.  
DATE  
SCALE

DATE  
BY  
CHECKED  
DATE

CC-A-202



PLN - 192

Initial: \_\_\_\_\_





## YuanHeng Riverfront Park Conceptual Plan

### Terms of Reference

#### 1. Intent

- a. The area of the waterfront park must be at least 4,276.6 m<sup>2</sup> (1.06 ac), including:
  - i. 8051 River Road;
  - ii. City-owned River Road right-of-way fronting the east side of 8051 River Road; and
  - iii. Unopened City-owned road right-of-way along the south side of 8051 River Road.
- b. The park will provide access to the waterfront to pedestrians and cyclists for circulation and recreational purposes.
- c. The park landscape will make a positive contribution to the Fraser River foreshore ecosystem.
- d. All park elements will be universally accessible.

#### 2. Park Program

- The park area will consist of the existing lot at 8051 River Road, which includes the existing dike, the area of existing River Rd. which will be developed for park purposes, and the unopened road end at the end of Capstan Way. In addition, piers and associated amenities are proposed to project into the river beyond the west lot line of 8051 River Road. The park will provide the following functions:
- a. A paved, 4.0 m. wide combined pedestrian and cycling path on the dike crest;
  - b. A 2.5 m. wide separated pedestrian path that:
    - i. Will provide seating, affording views of the river;
    - ii. May be located below the dike crest but not lower than the existing dike elevation (approximately 3.5 m GSC) in order to provide opportunities for the pedestrians to be closer to the river;
    - iii. May be constructed of a mix of hard surface and granular materials provided that it remains universally accessible.
  - c. Plaza nodes at each street end of sufficient size to allow for safe passage of cyclists and pedestrians and, at the same time, allow for seating and other site furnishings to serve informal gathering and viewing;
  - d. Viewing piers at each road end (Capstan Way and Corvette Way) accessed from the plaza nodes and at dike crest elevation with steel gangways accessing a floating walkway that will create a connection between them on the river;;
  - e. A steel lookout platform with stair access and an elevated covered area with benches;
  - f. Pedestrian and cyclist access to the new dike crest elevation from Capstan Way, River Road and Corvette Way, including interim and ultimate measures;
  - g. All park infrastructure necessary for efficient and effective operation and maintenance including, but not limited to, lighting, irrigation, storm drainage, power and water.

#### 3. Park Design

- a. The park design will be completed by the developer to the satisfaction of the City.
- b. Soft landscape design:
  - i. To provide screening and separation from the development site including trees;
  - ii. To reflect the context of the Middle Arm of the Fraser River including native planting;
  - iii. To include native riparian and intertidal planting in all areas below the new dike crest.
- c. Hard landscape design:
  - i. Detailed design of all elements and the materials used are to reflect and celebrate the waterfront location and character.
- d. Buildings situated outside the parking will be set back at least 30.0 m from the High Water Mark

#### 4. Park Maintenance

- a. The dike crest trail shall be of sufficient width to accommodate park maintenance vehicles.
- b. The interim condition shall allow vehicles the ability to safely enter and exit the park area.

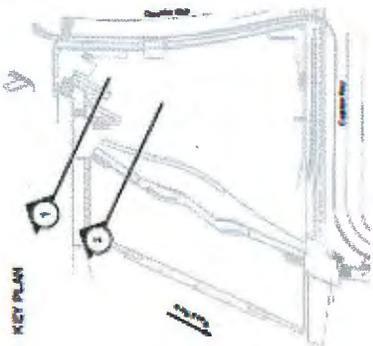
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# PLN - 197

Initial: \_\_\_\_\_

DATE	04/11/2018
BY	W. J. GIBSON
PROJECT	SWANWATER PARK
LOCATION	11000 SWANWATER PARK
SCALE	1/8" = 1'-0"



PROVISIONS

**eta**  
 Environmental Technology Associates  
 11000 SWANWATER PARK  
 SWANWATER, VA 22080  
 (703) 441-1100  
 www.etaenv.com

**Project**  
 Swanwater Park  
 11000 SWANWATER PARK  
 SWANWATER, VA

**Client**  
 Swanwater Park  
 Landscape Solutions

DATE	04/11/2018
BY	W. J. GIBSON
PROJECT	SWANWATER PARK
LOCATION	11000 SWANWATER PARK
SCALE	1/8" = 1'-0"



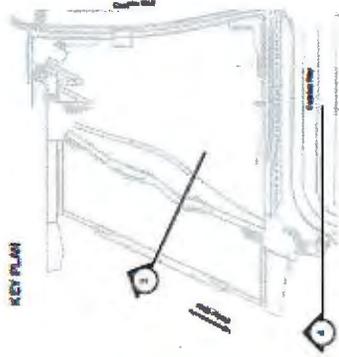
DATE OF THIS PLAN: 04/11/2018  
 DRAWN BY: W. J. GIBSON  
 CHECKED BY: W. J. GIBSON  
 SCALE: 1/8" = 1'-0"

DATE OF THIS PLAN: 04/11/2018  
 DRAWN BY: W. J. GIBSON  
 CHECKED BY: W. J. GIBSON  
 SCALE: 1/8" = 1'-0"

Project No.	198
Project Name	Seaview Park

Rev.	Date	Description
1	11/17	Initial Design
2	11/17	Revised Design



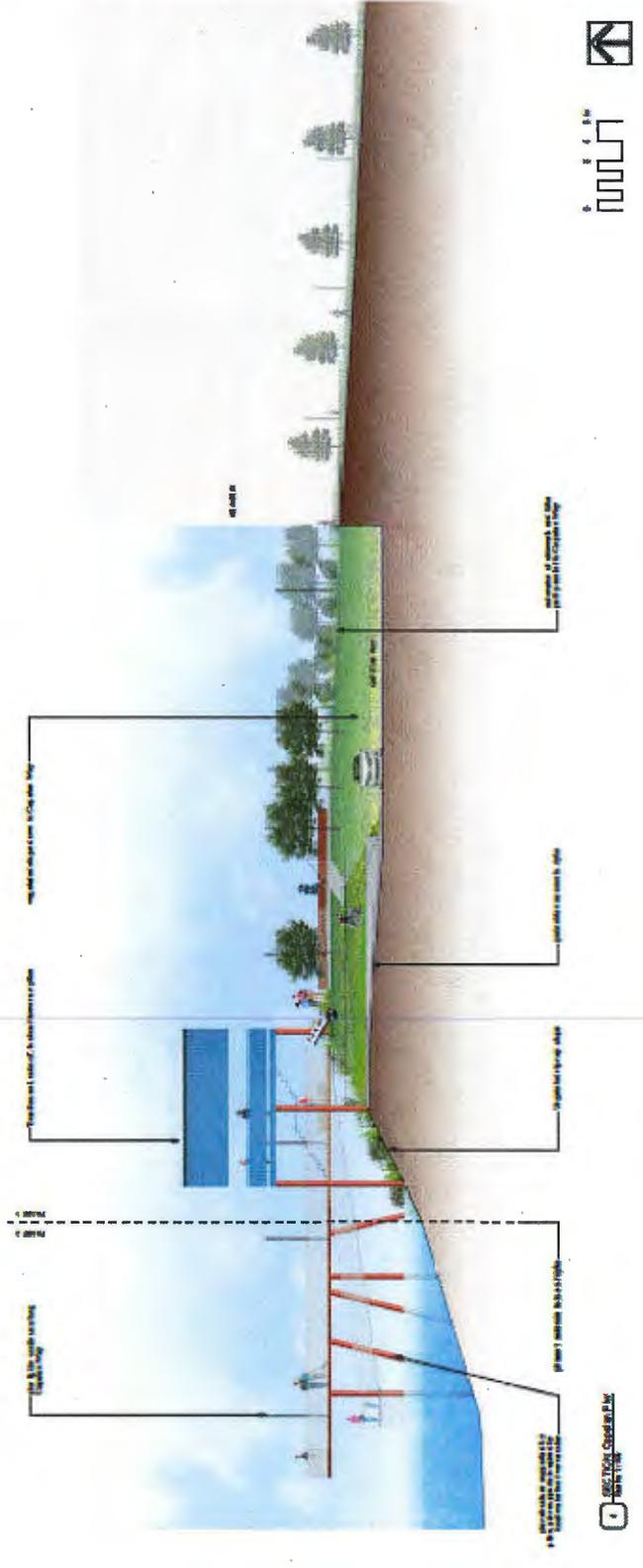
**eta** landscape architecture

1000 North 1st Street, Suite 100  
 Raleigh, NC 27601  
 Phone: 919.856.1111  
 Fax: 919.856.1112  
 Website: www.etalandscape.com

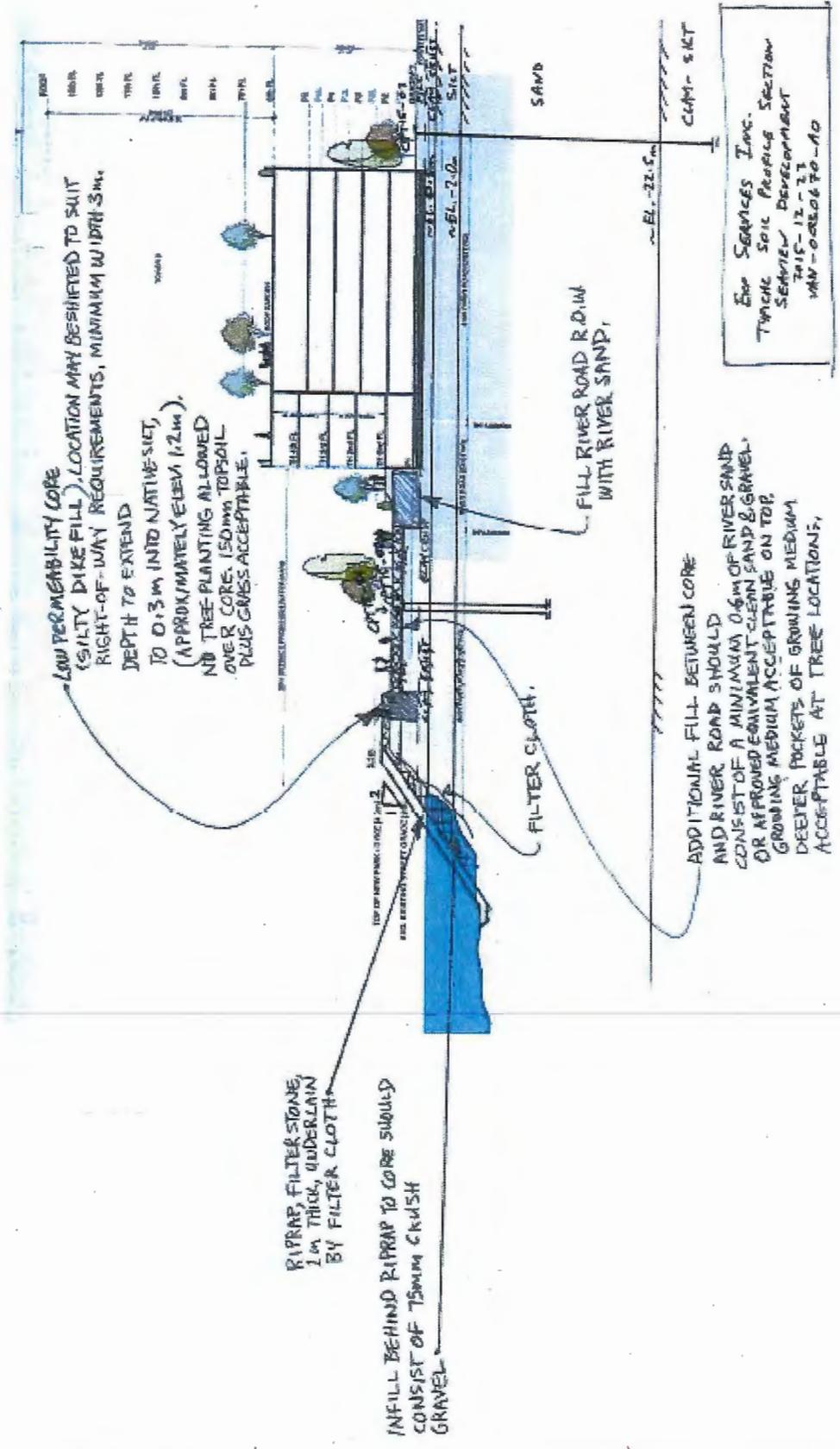
**Client**  
 Yurching Steele  
 201 W. 11th St  
 Raleigh, NC

**Project Name**  
 Seaview Park  
 Landscape Structure 2

Scale	1" = 10'
North Arrow	↑
Graphic Scale	0' 10' 20'



PROPOSED DIKE CROSS-SECTION (PRELIMINARY)  
 Dec. 23/2015. See email of Dec 23/2015 for material specs.



FOR SERVICES INC.  
 TYPICAL SOIL PROFILING SECTION  
 SEAWAY DEVELOPMENT  
 TAIS-12-23  
 VAN-0080670-AD

ADDITIONAL FILL BETWEEN CORE AND RIVER ROAD SHOULD CONSIST OF A MINIMUM 0.6m OF RIVER SAND OR APPROVED EQUIVALENT CLEAN SAND & GRAVEL GROWING MEDIUM ACCEPTABLE ON TOP. DEEPER POCKETS OF GROWING MEDIUM ACCEPTABLE AT TREE LOCATIONS.

RIPRAP, FILTER STONE, 1m THICK, UNDERLAIN BY FILTER CLOTH  
 INFILL BEHIND RIPRAP TO CORE SHOULD CONSIST OF 75mm CRUSH GRAVEL

Initial \_\_\_\_\_



**Richmond Official Community Plan Bylaw 9000 and Richmond Official  
Community Plan Bylaw 7100,  
Amendment Bylaw 9593 (RZ 12-603040)  
3031, 3211, 3231, 3291, 3311, 3331, 3351 No. 3 Road,  
8151 Capstan Way, and 8051 and 8100 River Road**

The Council of the City of Richmond, in open meeting assembled, enacts as follows:

1. Richmond Official Community Plan Bylaw 9000 is amended at Attachment 1 to Schedule 1, 2041 OCP Land Use Map, for those areas marked “A” and “B” on “Schedule A attached to and forming part of Bylaw 9593”, by designating area “A” as “Park” and area “B” as “Mixed Use”.
2. Richmond Official Community Plan Bylaw 7100, in Schedule 2.10 (City Centre Area Plan), is amended by:
  - 2.1 On page 2-6, on the City Centre Neighbourhoods & Village Areas Map, in the area bounded by Sea Island Way, No. 3 Road, Capstan Way and the Middle Arm of the Fraser River, repealing the “Existing Parks, Planned Parks & Open Space” designation and designating the land identified as “Park” on “Schedule B attached to and forming part of Bylaw 9593” as “Existing Parks, Planned Parks & Open Space”.
  - 2.2 On page 2-13, on the Jobs & Business Concept Map, in the area bounded by Sea Island Way, No. 3 Road, Capstan Way and the Middle Arm of the Fraser River, extending the “Key Mixed-Use Areas & Commercial Reserve” designation to include that area west of Corvette Way identified as “Urban Centre T5 (45 m)” on “Schedule B attached to and forming part of Bylaw 9593”.
  - 2.3 On page 2-17, on the Key Commercial Areas Map, in the area bounded by Sea Island Way, No. 3 Road, Capstan Way and the Middle Arm of the Fraser River, extending the “Mixed-Use Core” designation to include that area west of Corvette Way indicated as “Urban Centre T5 (45 m)” on “Schedule B attached to and forming part of Bylaw 9593”.
  - 2.4 On page 2-27, on the Street Network Map (2031), in the area bounded by Sea Island Way, No. 3 Road, Capstan Way and the Middle Arm of the Fraser River, revising the “Minor Streets” designation connecting Corvette Way and No. 3 Road as indicated on “Schedule B attached to and forming part of Bylaw 9593”.
  - 2.5 On page 2-32, on the Key Street Improvements Map (2031), in the area bounded by Sea Island Way, No. 3 Road, Capstan Way and the Middle Arm of the Fraser River, revising the “New East-West Streets” designation connecting Corvette Way and

- No. 3 Road as indicated on “Schedule B attached to and forming part of Bylaw 9593”.
- 2.6 On page 2-42, on the Goods Movement & Loading Map (2031), in the area bounded by Sea Island Way, No. 3 Road, Capstan Way and the Middle Arm of the Fraser River, revising the “Limited on-street” designation connecting Corvette Way and No. 3 Road as indicated on “Schedule B attached to and forming part of Bylaw 9593”.
- 2.7 On page 2-51, on the Public Art Opportunities Map, in the area bounded by Sea Island Way, No. 3 Road, Capstan Way and the Middle Arm of the Fraser River, repealing the “Neighbourhood Park (Future to 2031)” designation and designating the land identified as “Park” on “Schedule B attached to and forming part of Bylaw 9593” as “Neighbourhood Park (Future to 2031)”.
- 2.8 On page 2-60, on the A Base for Building a Living Landscape Map, in the area bounded by Sea Island Way, No. 3 Road, Capstan Way and the Middle Arm of the Fraser River, repealing the “Existing Greenways, Planned Greenways, Linear Parks & Green Links” designation and designating the land identified as “Park” on “Schedule B attached to and forming part of Bylaw 9593” as “Existing Greenways, Planned Greenways, Linear Parks & Green Links”.
- 2.9 On page 2-65, on the Base Level Parks & Open Space Map (2031), in the area bounded by Sea Island Way, No. 3 Road, Capstan Way and the Middle Arm of the Fraser River, repealing the “Neighbourhood Park (Future to 2031)” designation and designating the land identified as “Park” on “Schedule B attached to and forming part of Bylaw 9593” as “Neighbourhood Park (Future to 2031)”.
- 2.10 On page 2-68, on the Neighbourhood Parks Map, in the area bounded by Sea Island Way, No. 3 Road, Capstan Way and the Middle Arm of the Fraser River, repealing the “Neighbourhood Park (Future to 2031)” designation and designating the land identified as “Park” on “Schedule B attached to and forming part of Bylaw 9593” as “Neighbourhood Park (Future to 2031)”.
- 2.11 On page 2-109, on the Maximum Building Height Map, in the area bounded by Sea Island Way, No. 3 Road, Capstan Way and the Middle Arm of the Fraser River
- a) Repealing the “9 m (30 ft.)” designation and designating the land identified as “Park” on “Schedule B attached to and forming part of Bylaw 9593” as “Park”; and
  - b) Repealing the “Park” designation and designating the land identified as “Urban Centre T5 (45 m)” on “Schedule B attached to and forming part of Bylaw 9593” as “45 m (148 ft.)”.
- 2.12 On page 2-113, on the Tower Spacing & Floorplate Size Map, in the area bounded by Sea Island Way, No. 3 Road, Capstan Way and the Middle Arm of the Fraser River, extending the “24 m (79 ft.)” designation to include the area west of Corvette

Way and indicated as “Urban Centre T5 (45 m)” on “Schedule B attached to and forming part of Bylaw 9593”.

- 2.13 On page 3-3, on the Development Permit Sub-Areas Key Map, in the area bounded by Sea Island Way, No. 3 Road, Capstan Way and the Middle Arm of the Fraser River
- a) Repealing the “C2 Marina-Commercial & Waterborne Residential” designation and designating the land identified as “Park” on “Schedule B attached to and forming part of Bylaw 9593” as “Parks”; and
  - b) Repealing the “Parks” designation and designating the land identified as “Urban Centre T5 (45 m)” on “Schedule B attached to and forming part of Bylaw 9593” as “B3 Mixed-Use – High-Rise Residential, Commercial & Mixed-Use”.
- 2.14 On page 3-13, on the Park Frontage Enhancement Areas Map, in the area bounded by Sea Island Way, No. 3 Road, Capstan Way and the Middle Arm of the Fraser River, repealing the “Neighbourhood Park (Future to 2031)” designation and designating the land identified as “Park” on “Schedule B attached to and forming part of Bylaw 9593” as “Neighbourhood Park (Future to 2031)”.
- 2.15 On page 3-16, on the Designated Green Link & Linear Park Location Map, in the area bounded by Sea Island Way, No. 3 Road, Capstan Way and the Middle Arm of the Fraser River, repealing the “Park” designation and designating the land identified as “Park” on “Schedule B attached to and forming part of Bylaw 9593” as “Park”.
- 2.16 On page 3-48, extending Sub-Area B.3 Mixed Use - High-Rise Residential, Commercial & Mixed Use to include that area west of Corvette Way and identified as “Urban Centre T5 (45 m)” on “Schedule B attached to and forming part of Bylaw 9593”.
- 2.17 On page 4-7, on the Proposed New Transportation Improvements Map (2031), in the area bounded by Sea Island Way, No. 3 Road, Capstan Way and the Middle Arm of the Fraser River, revising the “Minor Street, New Street” designation connecting Corvette Way and No. 3 Road as indicated on “Schedule B attached to and forming part of Bylaw 9593”.
- 2.18 On page 4-11, on the Park & Open Spaces Map (2031), in the area bounded by Sea Island Way, No. 3 Road, Capstan Way and the Middle Arm of the Fraser River, repealing the “Neighbourhood Park (Future to 2031)” designation and designating the land identified as “Park” on “Schedule B attached to and forming part of Bylaw 9593” as “Neighbourhood Park (Future to 2031)”.
- 2.19 On the Generalized Land Use Map (2031), in the area bounded by Sea Island Way, No. 3 Road, Capstan Way and the Middle Arm of the Fraser River

- a) Repealing the “Marina” designation and designating the land identified as “Park” on “Schedule B attached to and forming part of Bylaw 9593” as “Park”; and
  - b) Repealing the “Park” designation and designating the land identified as “Urban Centre T5 (45 m)” on “Schedule B attached to and forming part of Bylaw 9593” as “Urban Centre T5”.
- 2.20 Revising the “Proposed Streets” designation connecting Corvette Way and No. 3 Road as indicated on “Schedule B attached to and forming part of Bylaw 9593” on the following maps:
- a) Overlay Boundary – Village Centre Bonus Map (2031);
  - b) Overlay Boundary – Capstan Station Bonus Map (2031);
  - c) Overlay Boundary – Commercial & Industrial Reserves Map (2031); and
  - d) Overlay Boundary – Richmond Arts District (RAD) Map (2031).
- 2.21 On the Specific Land Use Map: Capstan Village (2031), in the area bounded by Sea Island Way, No. 3 Road, Capstan Way and the Middle Arm of the Fraser River, replacing the land use designations as indicated on “Schedule B attached to and forming part of Bylaw 9593”.
- 2.22 Making various text and graphic amendments to accommodate the identified bylaw amendments and to ensure consistency with the Generalized Land Use Map (2031) and Specific Land Use Map: Capstan Village (2031) as amended.
3. This Bylaw may be cited as “**Richmond Official Community Plan Bylaw 9000 and Richmond Official Community Plan Bylaw 7100, Amendment Bylaw 9593**”.

FIRST READING

\_\_\_\_\_

PUBLIC HEARING

\_\_\_\_\_

SECOND READING

\_\_\_\_\_

THIRD READING

\_\_\_\_\_

OTHER CONDITIONS SATISFIED

\_\_\_\_\_

ADOPTED

\_\_\_\_\_

\_\_\_\_\_  
MAYOR

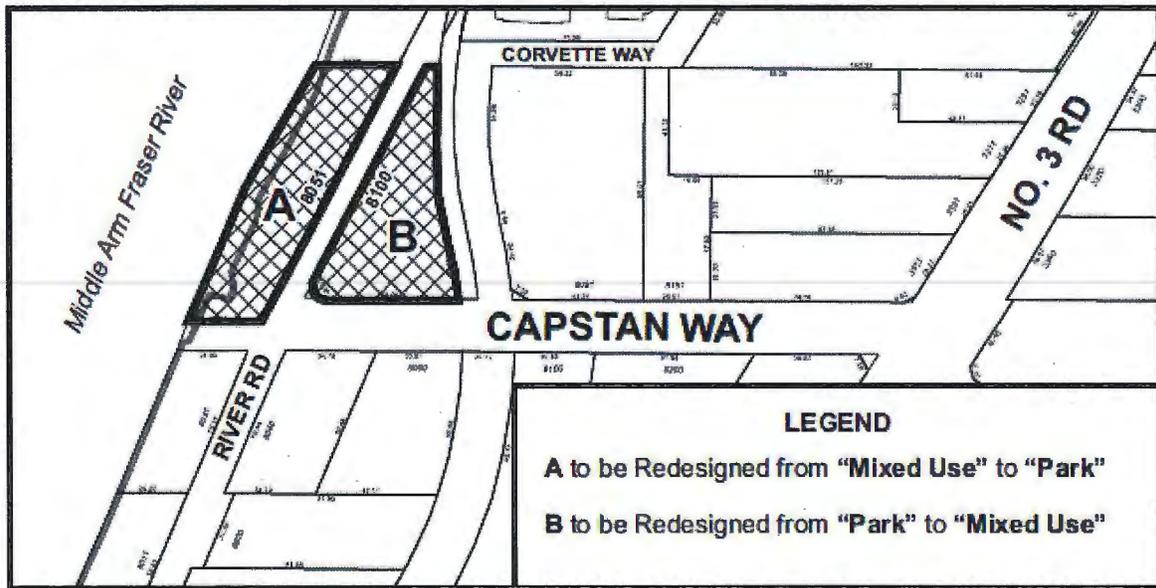
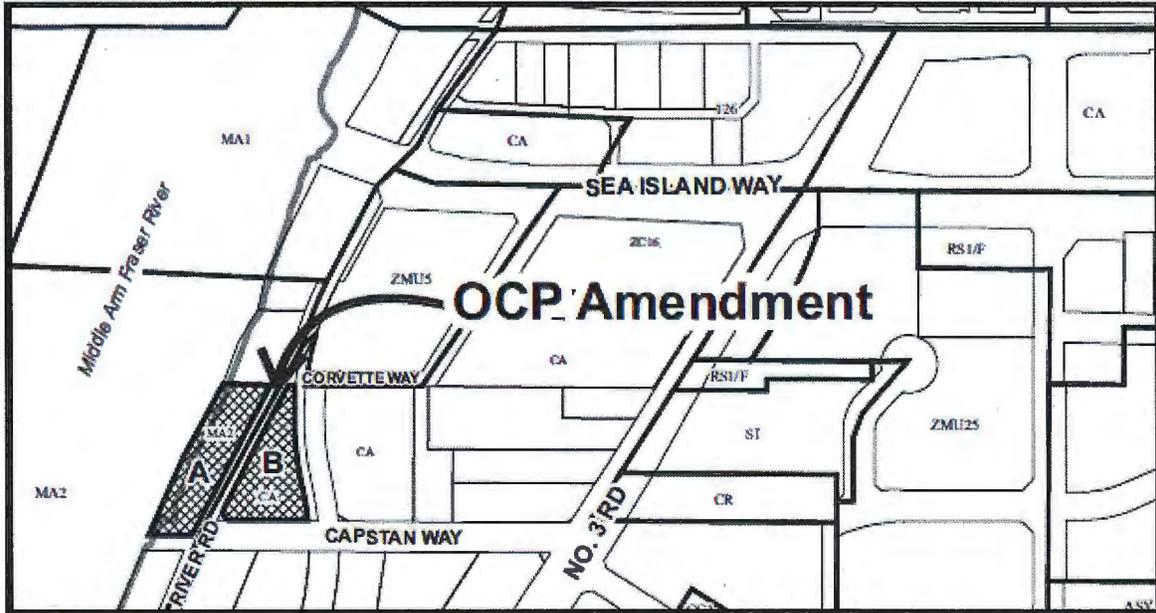
\_\_\_\_\_  
CORPORATE OFFICER



"Schedule A attached to and forming part of Bylaw 9593"

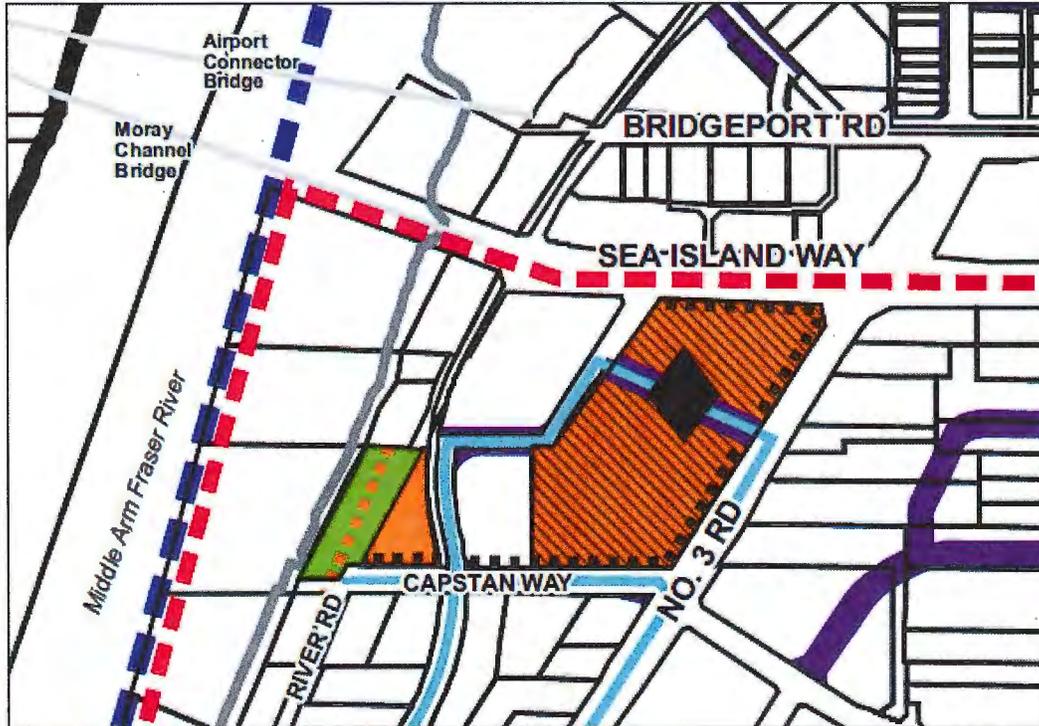


City of  
Richmond



	<p>OCP Amendment Bylaw 9593 (RZ 12-603040)</p>	<p>Original Date: 09/09/16 Revision Date: 09/15/16 Note: Dimensions are in METRES</p>
--	--	---

“Schedule B attached to and forming part of Bylaw 9593”



- |  |   |  |   |  |  |
|--|---|--|---|--|--|
|  | General Urban T4 (25m)                                |  | Marina (Residential Prohibited)           |  | Proposed Streets   |
|  | Urban Centre T5 (45m)                                 |  | Marina (Waterborne Residential Permitted) |  | Pedestrian-Oriented Retail Precincts-High Street & Linkages              |
|  | Urban Centre T5 (35m)                                 |  | Village Centre Bonus                      |  | Pedestrian-Oriented Retail Precincts-Secondary Retail Streets & Linkages |
|  | Urban Centre T5 (25m)                                 |  | Institution                               |  | Richmond Arts District   |
|  | Park  |  | Pedestrian Linkages                       |  | Capstan Station Bonus  |
|  | Park-Configuration & location to be determined        |  | Waterfront Dyke Trail                     |  | Canada Line Station  |
|  | Village Centre: No. 3 Road & Capstan Way Intersection |  | Enhanced Pedestrian & Cyclist Crossing    |  | Transit Plaza  |



**Richmond Zoning Bylaw 8500  
Amendment Bylaw 9594 (RZ 12-603040)  
3031, 3211, 3231, 3291, 3311, 3331, 3351 No 3 Road,  
8151 Capstan Way and 8051 and 8100 River Road**

The Council of the City of Richmond, in open meeting assembled, enacts as follows:

1. Richmond Zoning Bylaw 8500, as amended, is further amended by inserting the following as Section 20.30 thereof:

**“20.30 Residential / Limited Commercial and Community Amenity (ZMU30) – Capstan Village (City Centre)**

**20.30.1 Purpose**

The **zone** accommodates **community amenity space** within the **City Centre**, plus high-rise apartments and a limited amount of **commercial use**, and compatible **secondary uses**. Additional **density** is provided to achieve, among other things, **City** objectives in respect to **community amenity space**, **affordable housing units**, **commercial use**, and the Capstan Canada Line station.

**20.30.2 Permitted Uses**

- **amenity space, community**
- **congregate housing**
- **housing, apartment**

**20.30.3 Secondary Uses**

- **animal grooming**
- **boarding and lodging**
- **broadcast studio**
- **child care**
- **community care facility, minor**
- **education, commercial**
- **government service**
- **health service, minor**
- **home-based business**
- **hotel**
- **housing, town**
- **library and exhibit**
- **liquor primary establishment**

- **manufacturing, custom indoor**
- **office**
- **park**
- **parking, non-accessory**
- **private club**
- **recreation, indoor**
- **religious assembly**
- **restaurant**
- **retail, convenience**
- **retail, general**
- **retail, second hand**
- **service, business support**
- **service, financial**
- **service, household repair**
- **service, personal**
- **studio**
- **vehicle rental, convenience**
- **veterinary service**

#### 20.30.4 Permitted Density

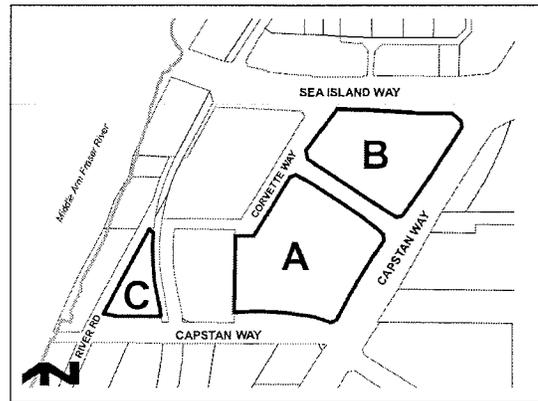
1. The maximum **floor area ratio** is 1.2, together with an additional 0.1 **floor area ratio** provided that it is entirely used to accommodate **amenity space**.
2. Notwithstanding Section 20.30.4.1, the reference to “1.2” is increased to a higher **floor area ratio** of “2.5” if:
  - a) the **site** is located in the Capstan Station Bonus Map area designated by the **City Centre Area Plan**;
  - b) the **owner** pays a sum into the **Capstan station reserve** as specified in Section 5.19 of this bylaw;
  - c) the **owner** grants to the **City**, via a statutory **right-of-way, air space parcel**, fee simple, or dedication, as determined at the sole discretion of the **City**, rights of public use over a suitably landscaped area of the **site** for **park** and related purposes at a rate of 5.0 m<sup>2</sup> per **dwelling unit** or 4,250.0 m<sup>2</sup>, whichever is greater;
  - d) the **owner** uses a minimum of 0.5 **floor area ratio** for residential purposes; and
  - e) prior to first occupancy of the **building**, the **owner**:
    - i. provides in the **building** not less than four **affordable housing units** and the combined **habitable space** of the total number of **affordable housing units** would comprise at least 5% of the total residential **building** area; and

- ii. enters into a **housing agreement** with respect to the **affordable housing units** and registers the **housing agreement** against title to the **lot** and files a notice in the Land Title Office.
3. If the **owner** has paid a sum into the **Capstan station reserve**, provided a suitably landscaped area of the **site** for **park** and related purposes, and provided **affordable housing units** under Section 20.30.4.2, an additional 1.0 **density bonus floor area ratio** shall be permitted, provided that:
    - a) the **lot** is located in the Village Centre Bonus Area designated by the **City Centre Area Plan**;
    - b) the **owner** uses the additional 1.0 **density bonus floor area ratio** only for non-residential purposes, which non-residential purposes shall provide, in whole or in part, for **office, convenience retail uses, minor health services, pedestrian-oriented general retail**, or other **uses** important to the viability of the City Centre as determined to the satisfaction of the **City**;
    - c) the **owner** uses a maximum of 49% of the **gross floor area** of the **building**, including the additional 1.0 **density bonus floor area ratio** (i.e. the **gross floor area** of the additional **building** area), for non-residential purposes; and
    - d) the **owner** grants to the **City**, via **air space parcel**, at least 5% of the additional 1.0 **density bonus floor area ratio** (i.e. the **gross floor area** of the additional **building** area) or 1,214.8 m<sup>2</sup>, whichever is greater, for **community amenity space** (e.g., community recreation), to the satisfaction of the **City**, and locates the entirety of the area granted to the **City** within the area indicated as “B” in Section 20.30.4.3, Diagram 2.

Diagram 1



Diagram 2



4. Notwithstanding Section 20.30.4.2, the reference to “2.5” is increased to a higher **floor area ratio** of “3.03” on the portion of the **site** located east of Corvette Way if:
  - a) the portion of the **site** located east of Corvette Way is designated Institution by the **City Centre Area Plan**;

- b) the **owner** has granted **community amenity space** to the **City** under Section 20.30.4.3; and
  - c) Notwithstanding Section 20.30.4.3(d), the reference to “1,214.8 m<sup>2</sup>” is increased to “3,106.59 m<sup>2</sup>”;
5. Notwithstanding Sections 20.30.4.2, 20.30.4.3, and 20.30.4.4, provided that the **owner** complies with the conditions set out in Sections 20.30.4.2, 20.30.4.3, and 20.30.4.4 and, within the area shown cross-hatched in Section 20.30.4.3, Diagram 1, the **owner** dedicates not less than 2,801.0 m<sup>2</sup> of land to the **City** as **road** and transfers not less than 2,963.0 m<sup>2</sup> of land to the **City** as fee simple for **park** purposes, then:
- a) the maximum total combined **floor area** for the **site** shall not exceed 113,131.8 m<sup>2</sup>, of which the **floor area** of residential **uses** shall not exceed 88,836.0 m<sup>2</sup>, including at least 4,441.8 m<sup>2</sup> for **affordable housing units**, and the **floor area** for other **uses** shall not exceed 24,295.8 m<sup>2</sup>, including at least 3,106.6 m<sup>2</sup> for **community amenity space**; and
  - b) the maximum **floor area** for the areas indicated as “A”, “B”, and “C” in Section 20.30.4.3, Diagram 2, shall not exceed:
    - i. for “A”: 54,977.8 m<sup>2</sup> for residential **uses**, including at least 1,110.5 m<sup>2</sup> of the **habitable space** for **affordable housing units** required under Section 20.30.5(d), and 2,131.0 m<sup>2</sup> for other **uses**;
    - ii. for “B”: 21,015.0 m<sup>2</sup> for residential **uses**, including 3,331.3 m<sup>2</sup> of **habitable space** for **affordable housing units** or the balance of the **habitable space** for **affordable housing units** required under Section 20.30.5(d) and not provided by the **owner** on “A”, whichever is less, and 22,164.8 m<sup>2</sup> for other **uses**, including at least 3,106.6 m<sup>2</sup> for **community amenity space**; and
    - iii. for “C”: 12,843.2 m<sup>2</sup> for residential **uses**, including nil for **affordable housing units**, and nil for other **uses**; and
  - c) the maximum combined total number of **dwelling units** for the areas indicated as “A”, “B”, and “C” in Section 20.30.4.3, Diagram 2, shall not exceed 850.

### 20.30.5 Permitted Lot Coverage

- 1. The maximum **lot coverage** for the areas indicated as “A”, “B”, and “C” in Section 20.30.4.3, Diagram 2, is 90% for **buildings** and **landscaped** roofs over **parking spaces**.

### 20.30.6 Yards & Setbacks

- 1. Minimum **setbacks** shall be:
  - a) for **road** and **park setbacks**, measured to a **lot line** or the boundary of an area granted to the **City** via a statutory **right-of-way** or **air space parcel** for **road** or **park** purposes: 3.0 m, but may be reduced if a proper interface is provided as specified in a Development Permit approved by the **City**;

- b) for **interior side yard setbacks**, measured to a **lot line**: 0.0 m; and
  - c) for parts of a **building** situated below finished **grade**, measured to a **lot line**: 0.0 m.
2. Notwithstanding Section 20.30.6.1, for residential **uses** the minimum setback to a **lot line** that abuts Sea Island Way shall be 20.0 m.

#### 20.30.7 Permitted Heights

1. The maximum **building height** shall be 47.0 m GSC.
2. The maximum **height** for **accessory structures** is 12.0 m.

#### 20.30.8 Subdivision Provisions

1. The minimum **lot** area for the areas indicated as “A”, “B”, and “C” in Section 20.30.4.3, Diagram 2, shall be:
  - a) for “A”: 13,000.0 m<sup>2</sup>;
  - b) for “B”: 9,000.0 m<sup>2</sup>; and
  - c) for “C”: 2,000.0 m<sup>2</sup>.

#### 20.30.9 Landscaping & Screening

1. **Landscaping** and **screening** shall be provided according to the provisions of Section 6.0.

#### 20.30.10 On-Site Parking and Loading

1. On-site **vehicle** and bicycle parking shall be provided according to the provisions of Section 7.0 and **City Centre** Parking Zone 1.
2. Notwithstanding Section 20.30.10.1, if the **owner** implements transportation demand management measures substantiated by a parking study approved by the **City**:
  - a) the minimum number of **parking spaces** for the following **uses** shall be:
    - i. for community centre: 74 spaces, except that 20 spaces may be shared with parking provided for other non-residential **uses** on the **lot** where the maximum demand for the parking spaces by the individual **uses** occurs at different periods of the day;
    - ii. for **convenience retail, general retail, restaurant, office**, and other commercial **uses** on the first two **storeys** of a **building** (which two **storeys** are above the finished **grade**): 3.375 spaces per 100.00 m<sup>2</sup> of **gross leasable floor area**;
    - iii. for **office** above the first two **storeys** of a **building** (which two **storeys** are above the finished **grade**): 1.1475 spaces per 100.00 m<sup>2</sup> of **gross leasable floor area**;

- iv. for **affordable housing units**: 0.81 spaces for residents per **dwelling unit**;
  - v. for **town housing, apartment housing, and mixed commercial/residential uses**: 1.0 space for residents per **dwelling unit**; and
  - vi. for residential visitors: 0.18 spaces per **dwelling unit**, except that a portion of the spaces may be shared with parking provided for non-residential **uses** on the **lot** for the areas indicated as “A” and “B” in Section 20.30.4.3, Diagram 2, as follows:
    - for “A”: maximum 70% shared; and
    - for “B”: maximum 100% shared.
3. On-site loading shall be provided according to the provisions of Section 7.0, except that the minimum number of **loading spaces** on the **lot** for the areas indicated as “A”, “B”, and “C” in Section 20.30.4.3, Diagram 2, shall be :
    - a) for “A”: 3 medium-size **loading spaces** for residential use and 1 medium-size **loading space** for non-residential use;
    - b) for “B”: 2 medium-size **loading spaces** for residential use and 2 medium-size **loading spaces** for non-residential use (including community centre use); and
    - c) for “C”: 1 medium-size **loading space**.

#### 20.30.11 Other Regulations

1. For the areas indicated as “A” and “B” in Section 20.30.4.3, Diagram 2, **uses** located above the first two **storeys** of a **building** (which **storeys** are above the finished **grade**) shall be limited to **health service, minor, office, private club, residential, restaurant, and service, personal**.
2. Signage must comply with the City of Richmond’s *Sign Bylaw 5560*, as it applies to **development** in the Downtown Commercial (CDT1) **zone**.
3. **Telecommunication antenna** must be located a minimum 20.0 m above the ground (i.e., on a roof of a **building**).
4. In addition to the regulations listed above, the General Development Regulations in Section 4.0 and the Specific Use Regulations in Section 5.0 apply.”

2. The Zoning Map of the City of Richmond, which accompanies and forms part of Richmond Zoning Bylaw 8500, is amended by repealing the existing zoning designation of the following area and by designating it:

**2.1. RESIDENTIAL / LIMITED COMMERCIAL AND COMMUNITY AMENITY (ZMU30) – CAPSTAN VILLAGE (CITY CENTRE).**

Those areas shown cross-hatched and indicated as “A” on “Schedule “A” attached to and forming part of Bylaw 9594”.

**2.2. SCHOOL & INSTITUTIONAL USE (SI).**

Those areas shown hatched and indicated as “B” on “Schedule “A” attached to and forming part of Bylaw 9594”.

3. This Bylaw may be cited as “**Richmond Zoning Bylaw 8500, Amendment Bylaw 9594**”.

FIRST READING

A PUBLIC HEARING WAS HELD ON

SECOND READING

THIRD READING

OTHER CONDITIONS SATISFIED

MINISTRY OF TRANSPORTATION AND INFRASTRUCTURE APPROVAL

ADOPTED

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CITY OF RICHMOND
APPROVED by <i>PK</i>
APPROVED by Director or Solicitor <i>JA</i>

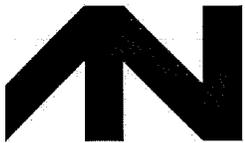
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MAYOR

\_\_\_\_\_  
CORPORATE OFFICER





City of  
Richmond



RZ 12-603040

Original Date: 03/05/14

Revision Date: 08/02/16

Note: Dimensions are in METRES