



**To:** Planning Committee  
**From:** Wayne Craig  
Director of Development

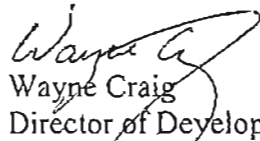
**Date:** June 21, 2013

**File:** RZ 13 - 631467

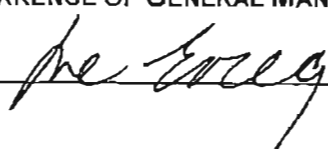
**Re:** Application by Johnny W.W. Leung Architect for Rezoning at 6433 Dyke Road from Single Detached (ZS6) - London Landing (Steveston) to Heritage Two-Unit Dwelling (ZD4) - London Landing (Steveston)

**Staff Recommendations:**

1. That Richmond Zoning Bylaw 8500 Amendment Bylaw 9028, to create the "Heritage Two-Unit Dwelling (ZD4) - London Landing (Steveston)" and for the rezoning of 6433 Dyke Road from "Single Detached (ZS6) - London Landing (Steveston)" to "Heritage Two-Unit Dwelling (ZD4) - London Landing (Steveston)", be introduced and given first reading.

  
Wayne Craig  
Director of Development

WC:bk  
Att. 5

REPORT CONCURRENCE		
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER
Affordable Housing	<input checked="" type="checkbox"/>	
Sustainability	<input checked="" type="checkbox"/>	
Law	<input checked="" type="checkbox"/>	

## Staff Report

### Origin

Johnny W.W. Leung, Architect has applied to the City of Richmond for permission to rezone the property at 6433 Dyke Road (**Attachment 1**) from “Single Detached (ZS6) - London Landing (Steveston)” to “Heritage Two-Unit Dwelling (ZD4) - London Landing (Steveston)” to permit the development of a two-unit dwelling on the subject property. The proposed zone would be a new site-specific zoning for the subject property.

### Findings of Fact

A Development Application Data Sheet providing details about the development proposal is attached (**Attachment 2**).

### Surrounding Development

To the North: Existing Multiple-family development, zoned “Town Housing (ZT43) – London Landing (Steveston)”;

To the East: Existing Two-Unit Dwelling, zoned “Heritage Two-Unit Dwelling (ZD1) – London Landing (Steveston)”;

To the South: Foreshore of the Fraser River (across Dyke Road) zoned “School & Institutional Use (SI)”;

To the West: Existing Multiple-family development, zoned “Town Housing (ZT43) – London Landing (Steveston)”

### Related Policies & Studies

#### Steveston Area Plan

The subject property is located within the Steveston Area Plan, Schedule 2.4 of the Official Community Plan (OCP). The Land Use Map in the Steveston Area Plan designates the subject property for “Heritage Residential”. This designation is intended to accommodate “...residential structures of recognized importance, or new structures designed to a distinctive heritage appearance reflective of Steveston’s character.”

Under the guidelines for this area, new development in the “Heritage Residential” area should:

1. Exhibit a similar scale, form, massing, character, architectural details and features (e.g., porches), and materials as that of London Farm, the McKinney House, and any other relocated houses;
2. Where buildings front Dyke Road, exhibit a strong single-family home character regardless of the number of units contained within a single structure; and
3. Use colour to reinforce the intended “heritage appeal” of this area and its image on the waterfront.

The proposed two-unit dwelling meets these criteria, and staff supports the design.

#### Floodplain Management Implementation Strategy

The applicant is required to comply with the Flood Plain Designation and Protection Bylaw No.8204. In accordance with the Floodplain Management Implementation Strategy, a Restrictive Covenant for Flood Indemnity specifying the minimum flood construction level of 2.9 m geodetic survey datum is required prior to final adoption of Zoning Amendment Bylaw No. 9028. A 6.0 m wide statutory right-of-way for dyke access will be required over the south portion of the site.

#### Affordable Housing Strategy

The Richmond Affordable Housing Strategy a cash-in-lieu contribution of \$1.00 per square foot of total building area toward the Affordable Housing Reserve Fund for single-family rezoning applications. The applicant has agreed to provide a voluntary cash contribution for affordable housing based on \$1 per square foot of building area for this development (i.e. \$3,745.00). This contribution has been reviewed and is endorsed by Community Services.

#### **Public Input**

A rezoning notice sign was placed on the property the first week of May 2013. In response to the signage, staff has received:

Two emails from residents in support of the pathway proposal; and

One email seeking additional information on the proposed rezoning.

Staff responded to the latter email with the requested information. No additional correspondence was received.

#### **Consultation**

##### Heritage Commission

The proposed rezoning was referred to the Heritage Commission for review as the subject property is designated for "Heritage Residential" use. The proposal reviewed at the May 15 2013 meeting of the Commission, and was endorsed. The Chair of the Commission made a motion to bring the item back for review at the June 16 2013 meeting for further review. Staff were able to provide updated house designs at the meeting, and the revised proposal was supported as being consistent with the Steveston Area Plan guidelines and the "Heritage Residential" land use designation. Draft minutes of the June 16, 2013 meeting of the Heritage Commission are provided (**Attachment 3**).

## Staff Comments

### Analysis

#### Previous Development Application (RZ 02 – 207804)

A development application to amend the CD50 zone for the subject property was submitted in 2002, in order to increase the maximum house size permitted under the CD50 zone to a maximum FAR (Floor Area Ratio) of 1.0. Bylaw No. 7721 to amend CD50 zone for the subject site received third reading on November 15, 2004. Subsequent to the Public Hearing the owner did not actively pursue resolution of condition of Final Adoption, and the file was closed and the bylaw was abandoned in November of 2009.

#### Proposed Use

The proposed two-unit dwelling is consistent with the Neighbourhood Residential designation in the Official Community Plan, and the “Heritage Residential” designation in the Steveston Area Plan. The adjacent site to the north and west is designated is similarly designated and is occupied by single family dwellings to the west and townhouses to the north. The property to the east at 6461 / 6463 Road is occupied by an existing two-unit dwelling, which was approved under Rezoning Application RZ 03 -237482. The proposed two-unit dwelling for the subject property would be compatible with these uses.

#### Heritage Character

The general heritage residential character of the area is defined by two existing single family homes, both of which are designated heritage resources: the McKinney House at 6471 Dyke Road, and the Abercrombie House at 13333 Princess Street. We note that both the McKinney House and the Abercrombie House were relocated to their current locations from elsewhere in Richmond.

As a component of the rezoning application, staff has undertaken a review of the character of the proposed two-unit dwelling, and have worked with the project architect to ensure that the proposed building design would be compatible with existing heritage residential character of the surrounding area. As the subject lot is the last un-developed parcel in the area, ensuring design compatibility has been a key component of the review of the proposal.

The proposed design of the two-unit dwelling meets several guidelines of the Steveston Area Plan: the face of the house oriented towards Dyke Road has the appearance of a single family dwelling; a wrap-around porch has been proposed for the two-unit dwelling, which is a feature found on a number of houses to the west; proposed building materials include horizontal hardie-plank siding and hardie shingles for the gable ends, also consistent with materials used on surrounding homes; accent materials include a cultured stone base, high profile asphalt roof shingles, wooden railings and posts, double wood painted columns; and window detailing is consistent with the intended heritage character of the area.

The rezoning considerations include a requirement for the owner to submit a set of building permit-ready building design drawings, in accordance with the house plans attached as Attachment 4 to this report.

### Proposed Zoning

In order to accommodate the proposed two-unit dwelling, the applicant has applied to rezone the site from "Single Detached (ZS6) - London Landing (Steveston)" to a new site-specific "Heritage Two-Unit Dwelling (ZD4) - London Landing (Steveston)" zone. This zone is similar to the site specific "Heritage Two-Unit Dwelling (ZD1) – London Landing (Steveston)" zone for the adjacent property at 6461 and 6463 Dyke Road, but has been tailored for the subject application.

Details of the proposed zone are provided in the following table:

	Proposed ZD4	Existing ZD1 (east adjacent two-unit dwelling)
<b>FAR</b>	0.7	1.0 - .76 for building; .24 for covered areas open on one side
<b>Building Coverage</b>	50%	50%
<b>Height</b>	12.5 m No more than two habitable storeys	15.0 m

The proposed site-specific zone will be an effective transition from the larger two-unit dwelling to the east to the lower density single family homes west of the subject property.

### Road Dedication

Dedication of a 1.5 m wide portion of the site at the north-east corner has been identified as a requirement of the rezoning. The dedication will provide the additional road width to facilitate access to and from the subject property and from the two-unit dwelling to the east at 6461 and 6463 Dyke Road. A statutory right-of-way of 0.6 m along the east property line is also required for boulevard widening.

### Driveway Access

The subject property was included in the rezoning application of the west adjacent property. Under this rezoning, a Section 219 Restrictive Covenant was registered on the title of the subject property, prohibiting any direct access to Dyke Road and requiring access only from Princess Lane. The proposed site access satisfies the requirements of this covenant.

### Parking

Richmond Zoning Bylaw No. 8500 requires that a two-unit dwelling provide 2.0 parking spaces per dwelling unit. The proposed design (**Attachment 4**) illustrates that the east-most unit will feature a side-by-side two-car garage, and the west-most unit would provide parking in a single car garage. A second parking space for the west-most unit is proposed at-grade, along the west side of the house. Although this portion of the site is encumbered with a statutory right-of-way for storm drainage, the terms of the right-of-way allow the area to be used for vehicle parking. With the combination of garage parking spaces and at-grade parking, the proposed two-unit dwelling would meet the bylaw requirements for off-street parking.

### Riparian Setback Requirements

The subject property is adjacent to a watercourse which falls within the City's Riparian Management Area network. This watercourse is classified as fish habitat as it contributes water flow to downstream habitat (Fraser River).

Under the requirements of the provincial Riparian Areas Regulation, variances to established riparian setbacks require assessment by a Qualified Environmental Professional (QEP). The owners have provided a QEP report (**Attachment 5**) which assessed a variance to the established 15 metre Riparian Management Area (measured from the top of the bank) on the adjacent watercourse. The QEP recommendation is for a 10 m setback with reductions in some areas to 8 m. The variance has been approved by the Department of Fisheries and Oceans (DFO), subject to the owner installing compensatory plantings in the yard of the proposed two-unit dwelling and within the Riparian Management Area. Submission of a Landscape Plan for the compensatory plantings and a landscape security for the provision of the compensation plantings, in accordance with **Attachment 5** of this report is a condition of rezoning adoption.

### Walkway

The adjacent residential development to the west was approved in April 2003, and features a meandering pedestrian path along the south property line, which ends at the east property line of the subject property. The subject property has been vacant since that time, and residents have accessed Princess Lane and Dyke Road by walking through the property, creating an informal 'walkway'.

In order to ensure that a pedestrian access is maintained to Princess Lane and Dyke Road, the owner will provide a pedestrian connection from the existing walkway to the west across the frontage of the property. This pedestrian connection will be located within the road dedication for Dyke Road.

Provision of the pathway meets the policy objective of the Steveston Area Plan (London / Princess Node) to link publicly-oriented and residential uses via an informal network of pedestrian routes. The Steveston Area Plan also provides a design guideline for the development of the area to provide linear open spaces, trails and pedestrian routes linking residents and local amenities and the river, and providing an informal network of narrow, interesting routes through the mixed use area.

We note that this location would also fall within the required riparian setback from the top of the bank, as shown on the riparian compensation plan (**Attachment 5**). The proposed walkway would taper from 2.0 m to 1.4 m in width, and would be a pervious gravel surface. The walkway to the west has been finished with paving stones, a surface treatment which – under current requirements and policy – is not supported in such close proximity to a watercourse. Staff in the Sustainability Division have recommended the gravel surface for better water infiltration and flow in the adjacent watercourse.

The provision of the walkway increases the impacts on the required 10 m riparian setback from the top of the bank of the ditch, which has been addressed through additional compensation planting along the bank, both in front of the adjacent site and in front of the the adjacent development at 6400 Princess Lane. The additional plantings in front of adjacent development would be planted within the road allowance for Dyke Road and would not impact the on-site plantings associated with that project. The walkway proposal and habitat compensation plantings has been reviewed and endorsed by the Department of Fisheries and Oceans (DFO), Sustainability staff, and by the Parks Division.

### Trees

There are no trees on the subject property, but there is a tree located on the adjacent townhouse site. The branches of this tree overhang the property line, and the site plan provided indicates that minimal pruning of this tree will be required. In addition, the proposed parking area on the west side of the building will utilize hand-laid paving stones, to minimize damage to the existing root system of this tree. The project architect advises staff that no excavation within the root zone of this tree will be required.

### Existing Utility Right-of-Way

There is an existing 3.0 m wide utility right-of-way (ROW) along the western portion of the subject site. The applicants have been advised that no encroachment into the ROW is permitted, including no building construction, and planting of trees, but the ROW area may be used for vehicle parking.

### Discharge of Existing Restrictive Covenant

The subject lot was created as part of the rezoning and development of the adjacent (west) properties, and through the rezoning process, a Restrictive Covenant (under charge Number BP005925) was registered on the title of the lot to specify a minimum habitable elevation of 2.6 m geodetic survey datum. Since that time, the current flood protection elevation for this area has been set at 2.9 m geodetic survey datum. It is recommended that Restrictive Covenant BP005925 be discharged from the title of the lot. A new covenant will be registered to require the current flood protection standard for habitable floor area be built at 2.9 m geodetic survey datum.

### **Conclusion**

This rezoning application to permit a two-unit dwelling complies with applicable policies and land use designations contained within the Official Community Plan and the Steveston Area

Plan. The proposed two-unit dwelling is consistent with the established land uses and urban design in the surrounding area.

The list of rezoning considerations is included as **Attachment 6**, which has been agreed to by the applicant (signed concurrence is on file).

On this basis, staff recommends support for the application.

A handwritten signature in black ink, appearing to read 'Barry Konkin', with a large, stylized 'K' at the end.

Barry Konkin  
Planner 2

BK:cas

- Attachment 1: Location Map
- Attachment 2: Development Application Data Sheet
- Attachment 3: Draft Minutes - June 16, 2103 Richmond Heritage Commission Meeting
- Attachment 4: Conceptual Development Plans
- Attachment 5: Riparian Assessment Report and Addendum
- Attachment 6: Rezoning Considerations Concurrence



Original Date: 03/08/13

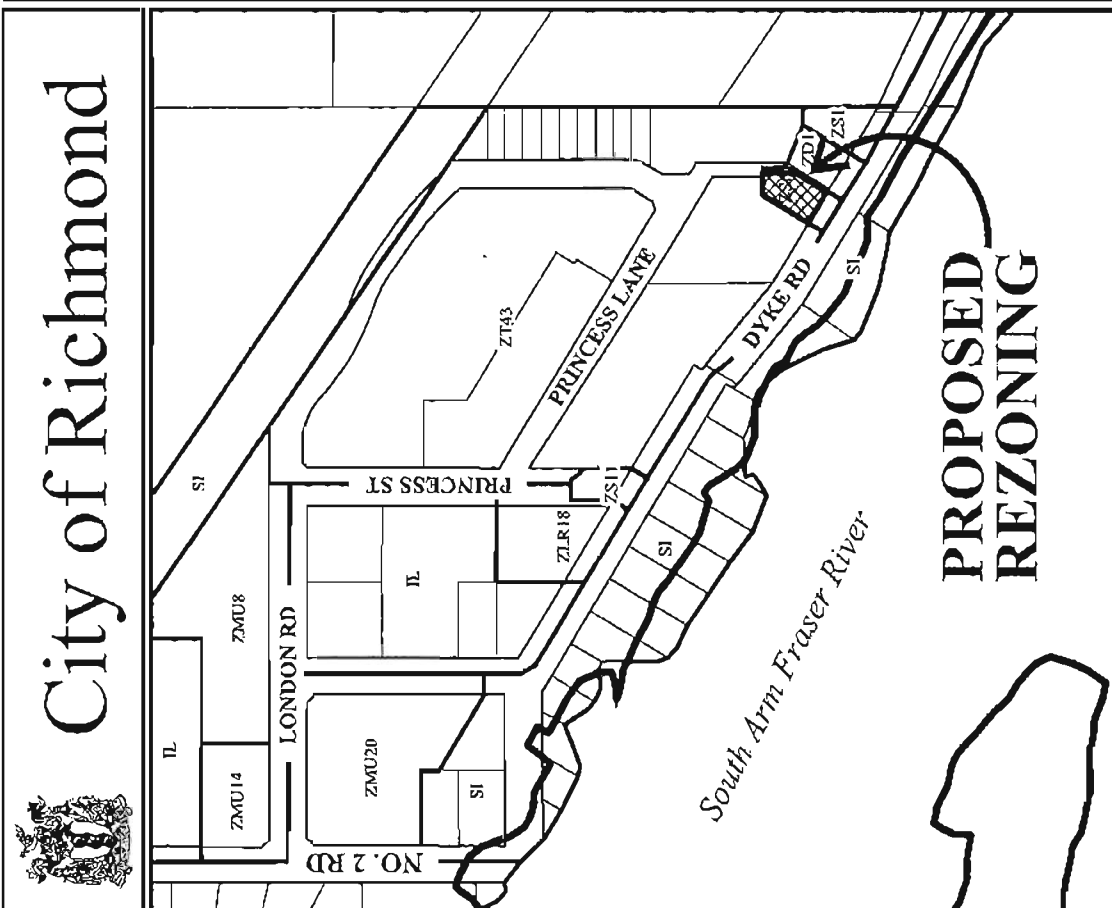
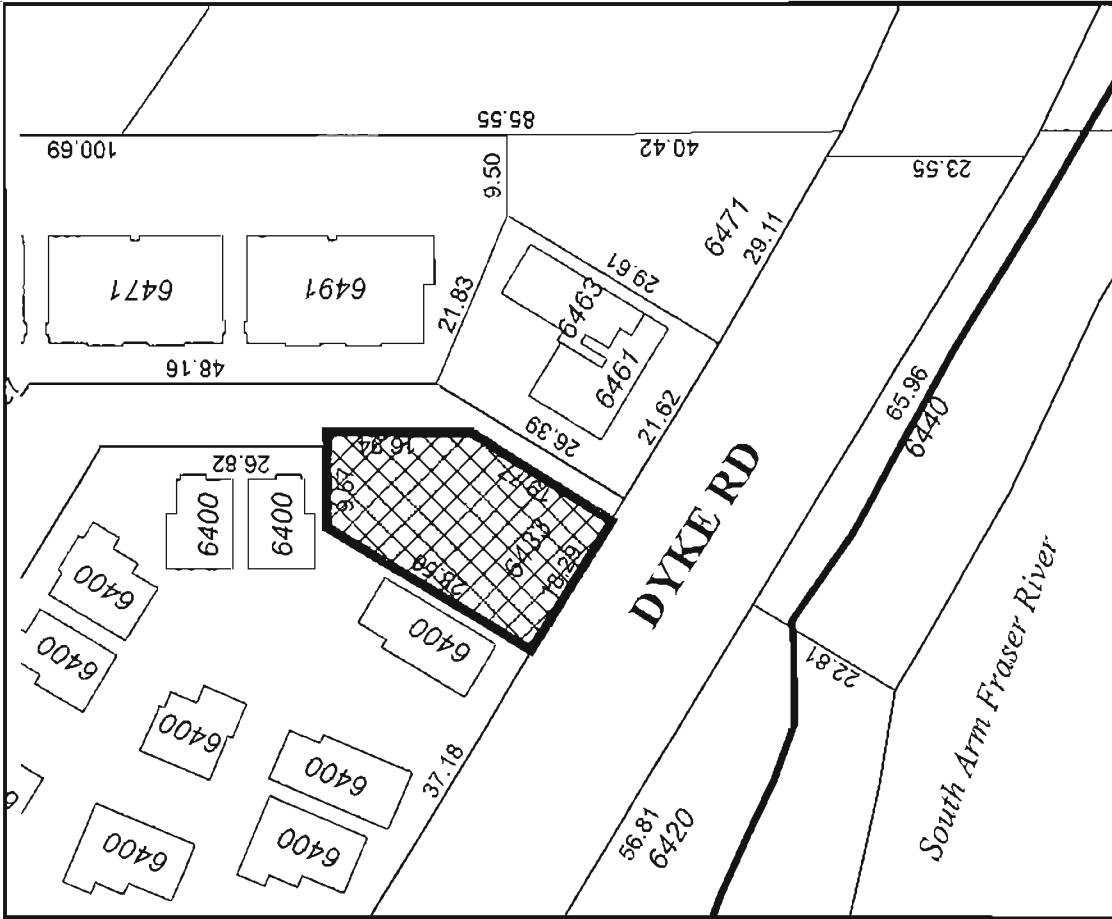
Revision Date:

Note: Dimensions are in METRES

RZ 13-631467



City of Richmond





RZ 13-631467

Original Date: 03/08/13

Amended Date:

Note: Dimensions are in METRES

PLN - 218



**RZ 13 - 631467**

**Attachment 2**

Address: 6433 Dyke Road

Applicant: Johnny W.W. Leung Architect

Planning Area(s): OCP - Steveston Area Plan – London-Princess Sub-Area

	<b>Existing</b>	<b>Proposed</b>
<b>Owner:</b>	Hui Y Li, Sui K Li, Wing H Li, Wing O Li	No change
<b>Site Size (m<sup>2</sup>):</b>	536 sq.m (5,769 sq.ft)	508 sq.m (5,479 sq.ft) after road dedication
<b>Land Uses:</b>	Vacant	Housing, Two-Unit
<b>OCP Designation:</b>	Neighbourhood Residential	No change
<b>Area Plan Designation:</b>	Heritage Residential	No change
<b>702 Policy Designation:</b>	NA	NA
<b>Zoning:</b>	Single Detached (ZS6) – London Landing (Steveston)	Heritage Two-Unit Dwelling (ZD4) – London Landing (Steveston)
<b>Number of Units:</b>	Vacant	2

	<b>Bylaw Requirement</b>	<b>Proposed</b>	<b>Variance</b>
<b>Density (units/acre):</b>	N/A	15.4 upa	none permitted
<b>Floor Area Ratio:</b>	0.7	0.7	none permitted
<b>Lot Coverage – Building:</b>	Max. 50%	50%	none
<b>Lot Size (min. dimensions):</b>	500 m <sup>2</sup>	508.96 m <sup>2</sup>	none
<b>Setback – Front Yard (m):</b>	Min. 6.5 m	6.5 m Min.	none
<b>Setback –</b>			
Side (east) (m)	Min. 2.2 m	Min. 2.2 m	none
Side (west) (m)	Min 3.0 m	Min 3.0 m	
Side (north-east)	Min 1.5 m	Min 1.5 m	
Rear Yard (m):	Min 6.0 m	Min 6.0 m	
<b>Height (m):</b>	12.5 m	12.5 m	none

**RICHMOND HERITAGE COMMISSION**  
**Wednesday, June 19, 2013**

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**4. BUSINESS ARISING****a. Garden City Lands Open House**

Mr. Virani noted that he attended this Open House which was attended by stakeholder groups in Richmond to make recommendations on potential uses for the Garden City lands. Mr. Virani noted his recommendation to make a heritage park and have heritage houses moved here. It was noted that the land is under the ALR and is over 130 acres in size.

**b. Application Referral Process**

Discussion ensued on how the referral process can be improved. Commission members expressed interest in having a clearer process to bring things to the table and give Commission members ample time to circulate information and research before the meetings.

Discussion ensued on changing the Commission's procedure, ensuring applications are relevant to the Commission's mandate, and electronic vs. courier for distributing information. It was decided that the Commission's preference is for electronic delivery of information unless stated to staff otherwise on a case-by-case basis.

It was moved and seconded

*That the Richmond Heritage Commission accept item number 4 as written, with the amendment to electronic capability instead of courier.*

**CARRIED**

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It was moved and seconded

*That the Richmond Heritage Commission bring back to committee the rezoning application reviewed at last meeting to further review in more detail.*

**CARRIED**

The Commission looked at this rezoning with the amendments made to accommodate more heritage detail on this structure. It was noted that changes have been made to the type of shingle, windows, door, and columns to keep the heritage feel. Staff also provided an update on the scale, height, pedestrian boulevard, landscaping, and enforcement procedures of certain design elements.

It was moved and seconded

*That the Richmond Heritage Commission support this rezoning with the proposed changes.*

**CARRIED**

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**c. 2014 Commission Meeting Dates**

It was noted that the Commission meeting dates for 2014 will be January 15, February 19, March 19, April 16, May 21, June 18, July 16, with no meeting in August, September 17, October 15, November 19, and December 17, in keeping with the third Wednesday of the month format.

**d. Distribution of Maps of Heritage Areas**

Mr. Konkin distributed maps of the character area key map and other maps relevant to the Commission.

**RICHMOND HERITAGE COMMISSION**  
**Wednesday, May 15, 2013**

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**5. NEW BUSINESS**

- a. Discussion ensued on the Commission's mandate and current workplan. Discussion ensued on specific objectives that Commission members would like to see in the workplan including updating the heritage inventory. Commission members discussed ways of coordinating within the recourses available to create a comprehensive workplan. Staff agreed to put together a summary of discussion and staff costs as well as lay the groundwork to take this to the next step.

It was moved and seconded

*That the Heritage Commission enter into a workplan process with an in-house staff facilitator, while keeping in consideration cost and staff resources to establish a medium to long-term workplan.*

**CARRIED**

- b. Discussion ensued on a recent rezoning in Steveston at Moncton and No. 2 Rd.
- c. The Commission received the invoice for their contributions to the Doors Open event.

It was moved and seconded

*That the Heritage Commission will pay the invoice for their contribution to the Doors Open event.*

**CARRIED**

- d. Staff noted that there will be a Heritage 101 workshop being put on for the Facilities division. Any Commission members who have not gone to this course yet are welcome to come. It will be from 8-3 at the Chinese Bunkhouse in Britannia. Interested Commission members are encouraged to contact Mr. Konkin.

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- e. Rezoning Application RZ 13 -631467

Discussion ensued on a rezoning occurring in London Landing along the dyke near to the McKinney house. It was noted that this area is in the Steveston Area Plan and has been recognized as in an area of historical significance. The character of the area and proposed changes were discussed. Members are encouraged to send feedback through staff. It was noted that the Commission encourages this new building to be of heritage character in its look and feel.

It was moved and seconded

*That the Heritage Commission support this project in keeping with the heritage guidelines for the area and the keeping the heritage character of the London Princess node and strongly encourage selecting a colour from the Vancouver "True Colours" palette, and be consistent to the colours used on the properties to the west.*

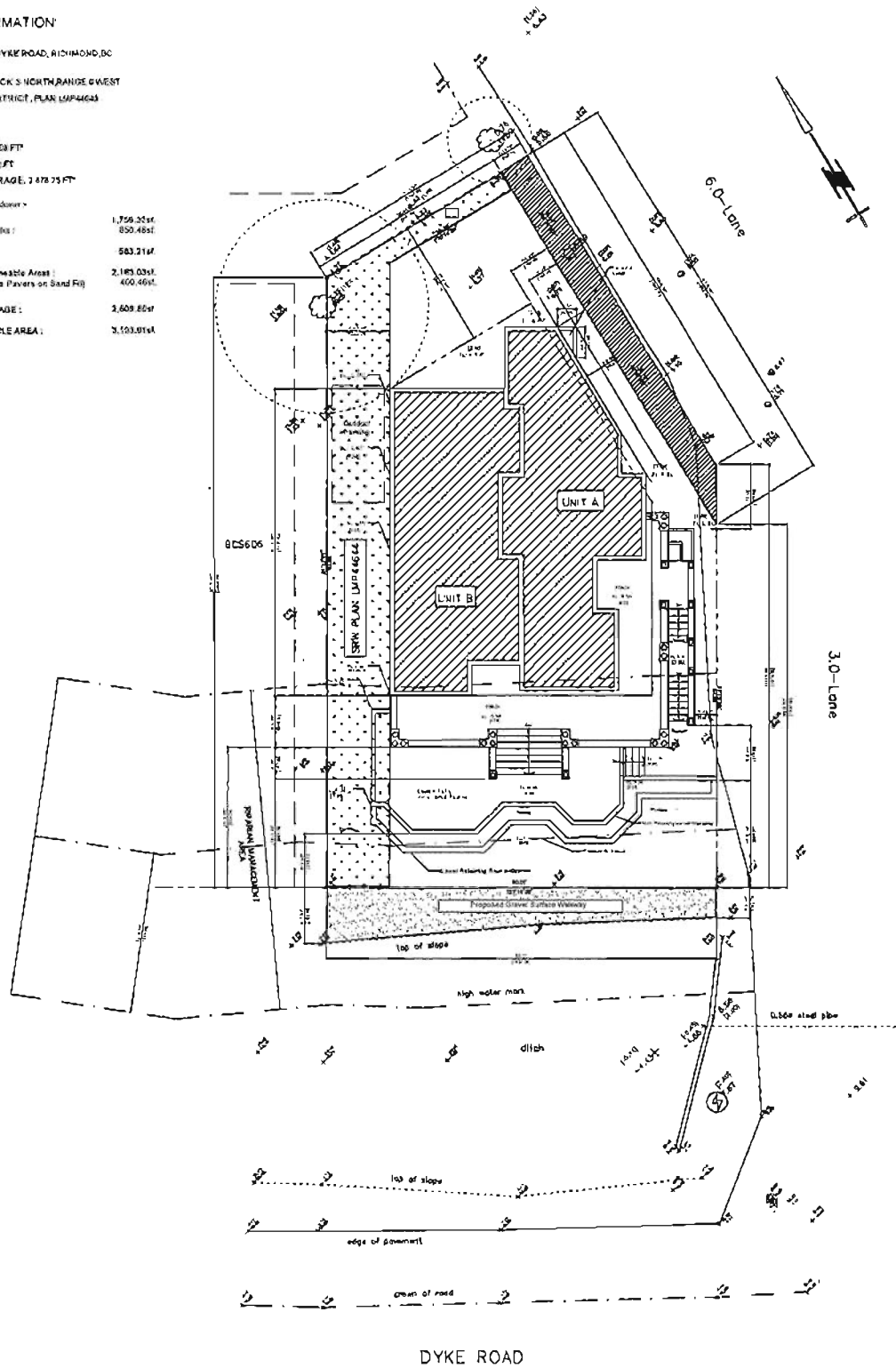
**CARRIED**

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PROJECT INFORMATION

EMC ADDRESS: 6433 DYKE ROAD, RICHMOND, DC  
 LEGAL DESCRIPTION:  
 LOT 4, SECTION 14, BLOCK 3 NORTH RANGE QWEST  
 NEW WESTMINSTER DISTRICT, PLAN LMP44643  
 ZONE: Z01  
 LOT AREA: 9,762.5 FT<sup>2</sup>  
 ALLOWABLE FAR: 3,165.03 FT<sup>2</sup>  
 PROPOSED FAR: 302 FT<sup>2</sup>  
 ALLOWABLE LOT COVERAGE: 2,478.75 FT<sup>2</sup>

Lot Coverage Breakdown:	
Building Footprint:	1,759.25sf
Deck, Stair and Walks:	850.46sf
Driveway:	583.21sf
Landscapes and Permeable Areas:	2,185.03sf
Lower Pads: (Loose Pavers on Sand Fill)	400.46sf
PROPOSED LOT COVERAGE:	3,608.86sf
PROPOSED IMPERMEABLE AREA:	3,103.91sf



Site Plan

Scale: 1/16" = 1' - 0"



Johnny w.w. Leung Architect

Project:  
 Custom Duplex

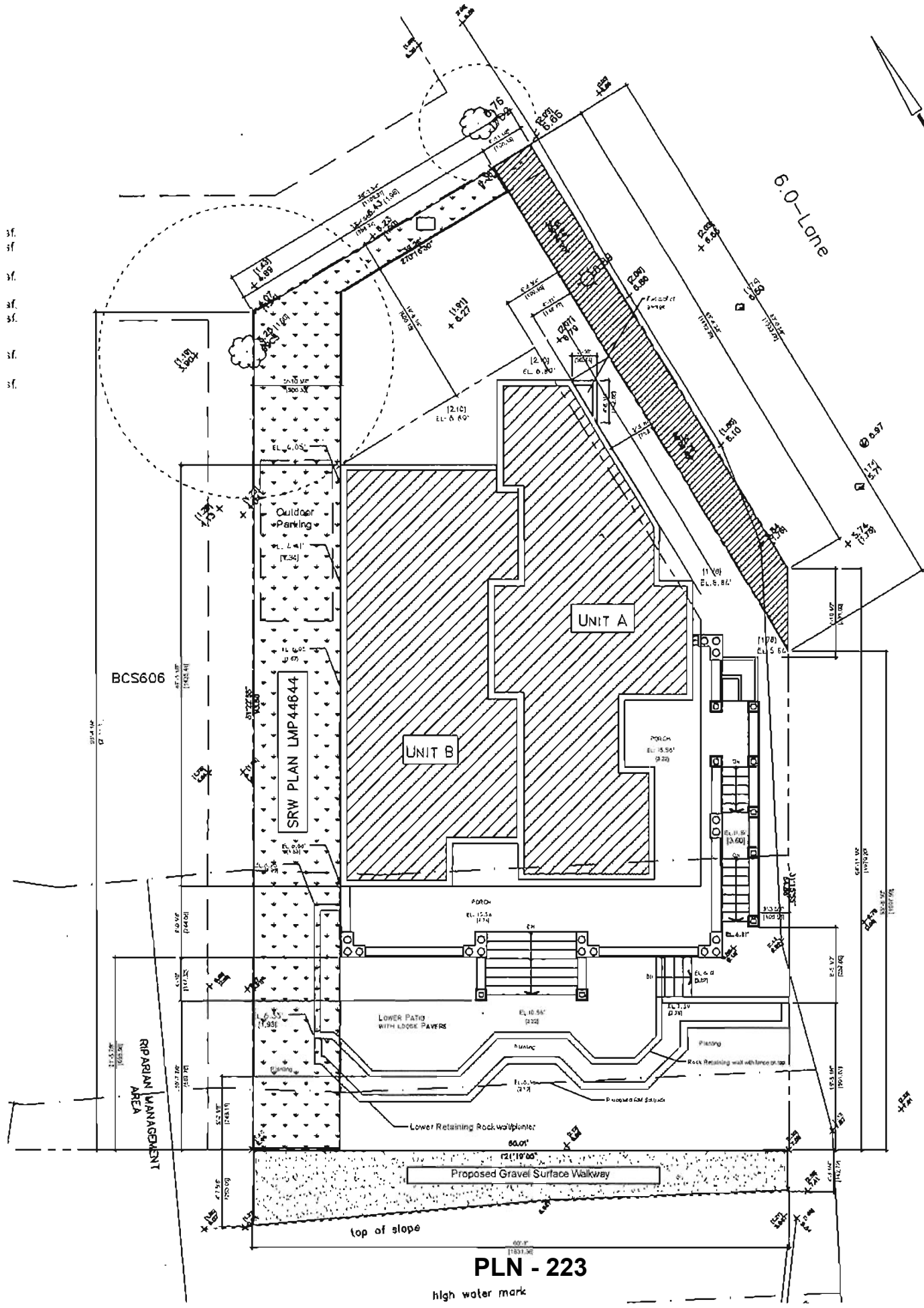
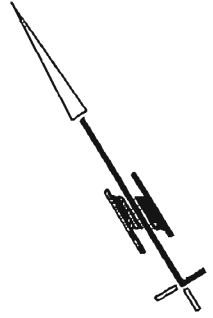
Address:  
 6433 Dyke Road,  
 Richmond, VA

Site Plan  
 PN-222

April 8th 2013  
 April 12th 2013  
 April 18th 2013  
 June 17th 2013

A-0  
 Sheet 1 of 7

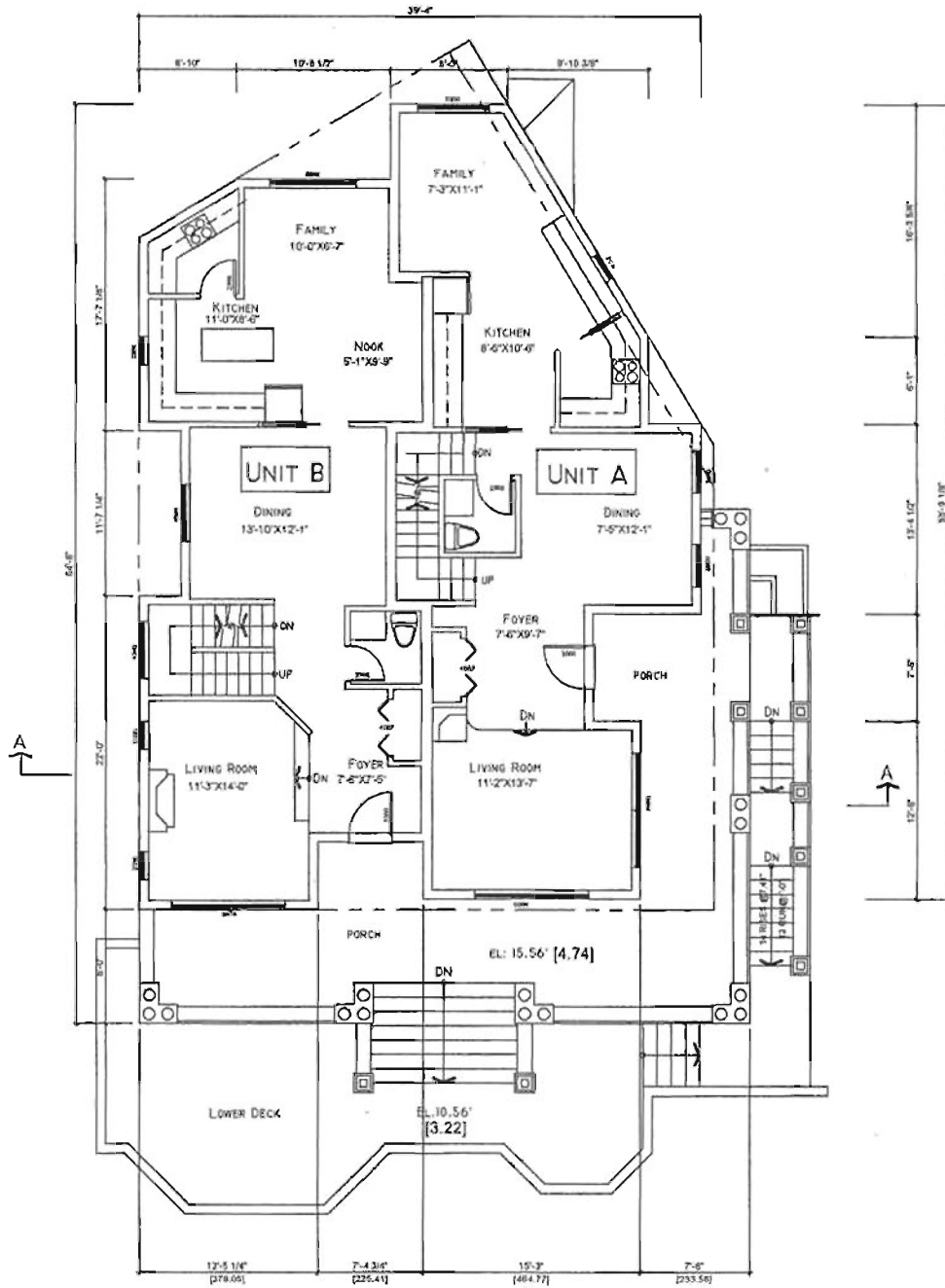
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# PLN - 223

high water mark

3.0-Lane



FLOOR AREA:  
 UNIT A 871.00SF.  
 UNIT B 888.32SF. Total Area: 1,759.32sf.

Main Level

Scale: 1/8" = 1'-0"



**Johnny w.w. Leung Architect**

Project:  
 Custom Duplex

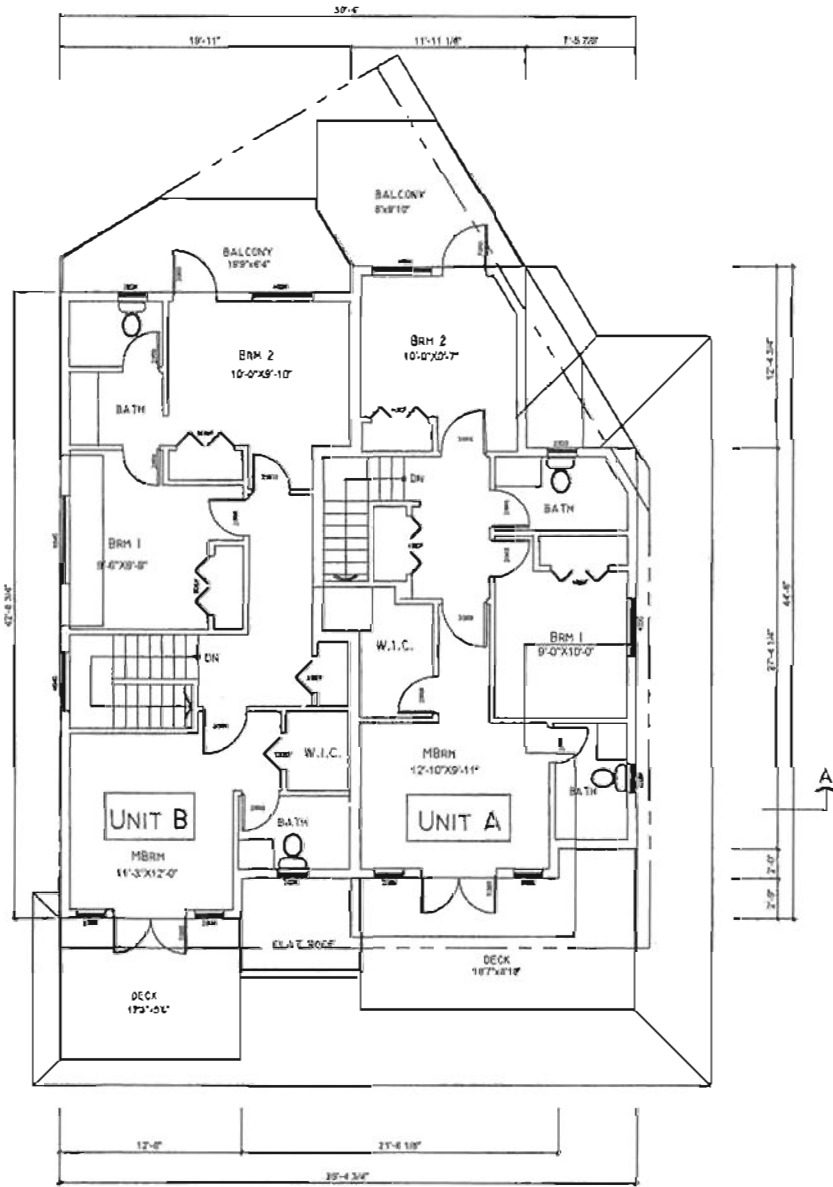
Address:  
 6433 Dyke Road  
 Richmond, B.C.

Main Level Plan  
 224

April 8th 2013  
 April 18th 2013  
 June 17th 2013

**A-1**  
 Sheet 2 of 7





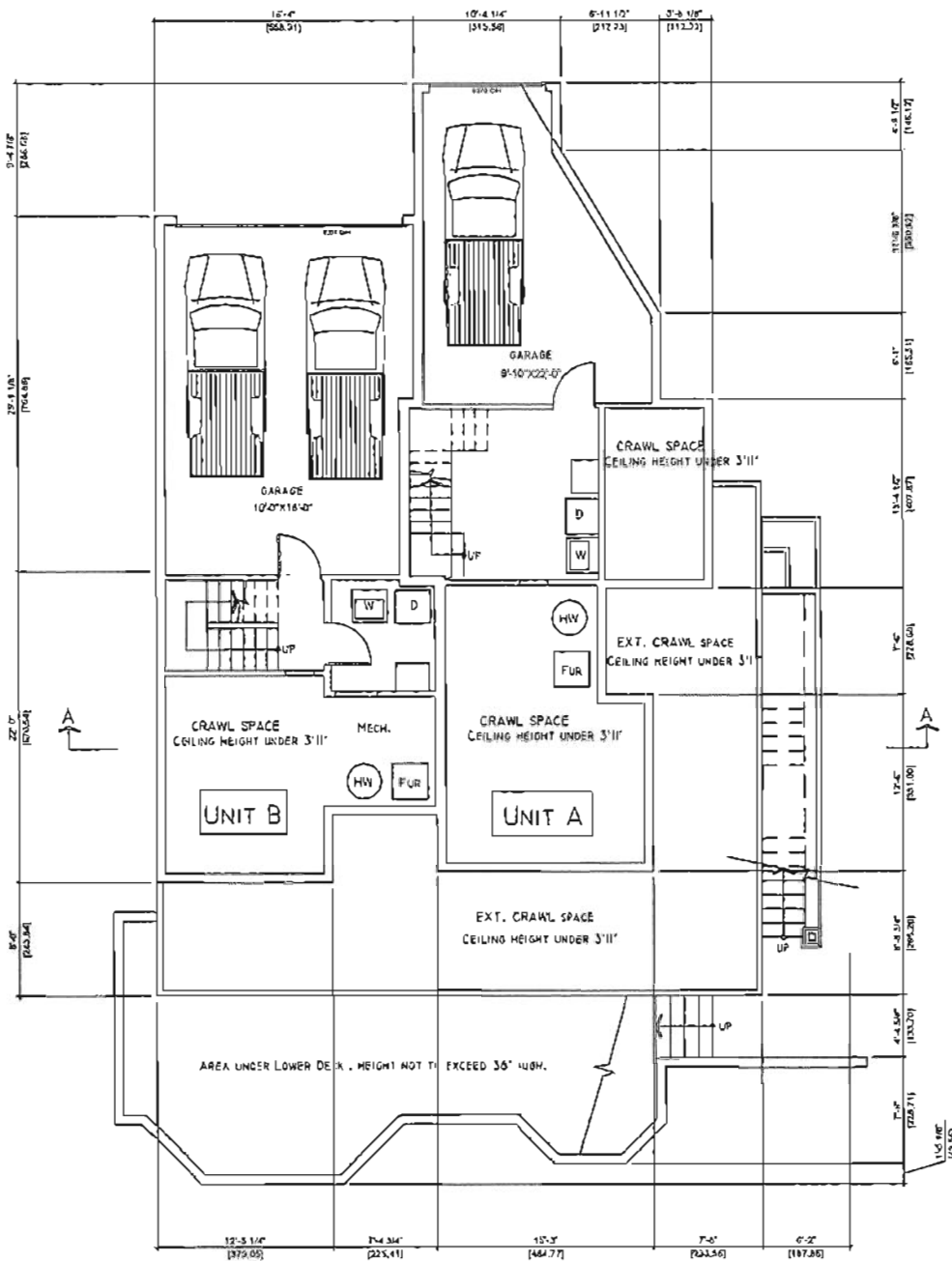
FLOOR AREA:  
 UNIT A 734.49sf.  
 UNIT B 797.64sf. Total Area: 1,532.13sf.

Upper Level

Area: 1,759.08sf.

Scale: 1/8" = 1'-0"





FLOOR AREA:  
 UNIT A 154.08SF.  
 UNIT B 271.43SF. Total Area: 425.51sf.

Basement Level

Scale: 1/8" = 1'-0"



Johnny w.w. Leung Architect

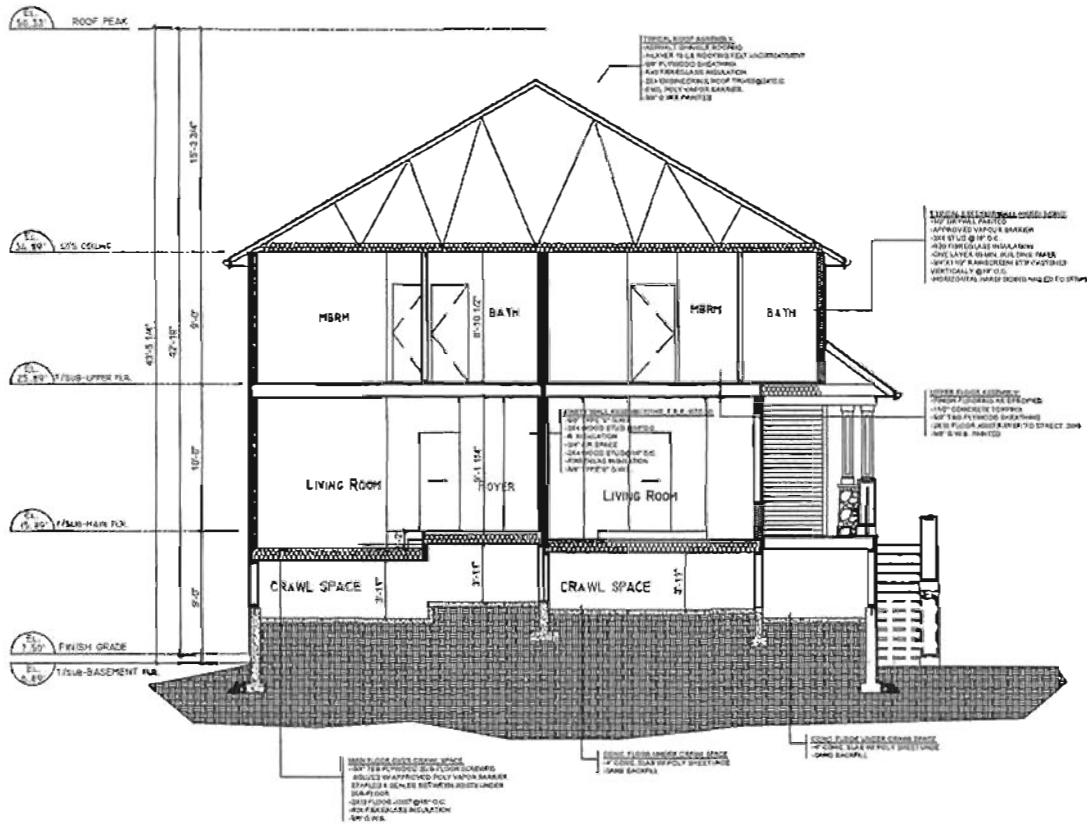
Project  
 Custom Duplex

Address:  
 6433 Dyke Road  
 Richmond, BC

Elevations  
 226

April 8th 2013  
 April 18th 2013  
 June 17th 2013

A-3  
 Sheet 4 of 7



### Color and Exterior Finish Schedule

Material Description	Color	Specification	Supplier
<b>Sidings/Claddings</b>			
Horizontal Hardie Siding	Desert Wood	SW3030	Sherwin Williams
Hardie Shingles	Desert Wood	SW3030 - half tone	Sherwin Williams
Column Base	Cultured Stone/Veneer	Dressed Fieldstone-Chardonay	Borals - BC Bricks
<b>Trim Work</b>			
Trims	Cape Cod Red	SW3020	Sherwin Williams
Facia	Cape Cod Red	SW3020	Sherwin Williams
Wood Columns	Desert Wood	SW3030 - 3/4 tone	Sherwin Williams
<b>Metals</b>			
Gutter and Downpipe	Dark Brown	196 Stewart House Brown	ICI Paints
Wood Railing	Dark Brown	196 Stewart House Brown	ICI Paints
<b>Openings</b>			
Wood Cladded Window	Dark Brown		
Exterior Doors	Cape Cod Red	SW3020 - half tone	Sherwin Williams
<b>Fence and Barriers</b>			
Masonry Retaining Wall	Dry Stack Rocks	8" to 24" size natural rocks	Northern Landscape Supplies
Cedar Fence	Century Red Wood	1904 Semi-Transparent Stain	Superdeck
<b>Roofing</b>			
Asphalt Shingles	Aged Redwood	Cambridge AR Pramium Series	IKO - Roof Man
Flashings	Dark Brown	196 Stewart House Brown	ICI Paints



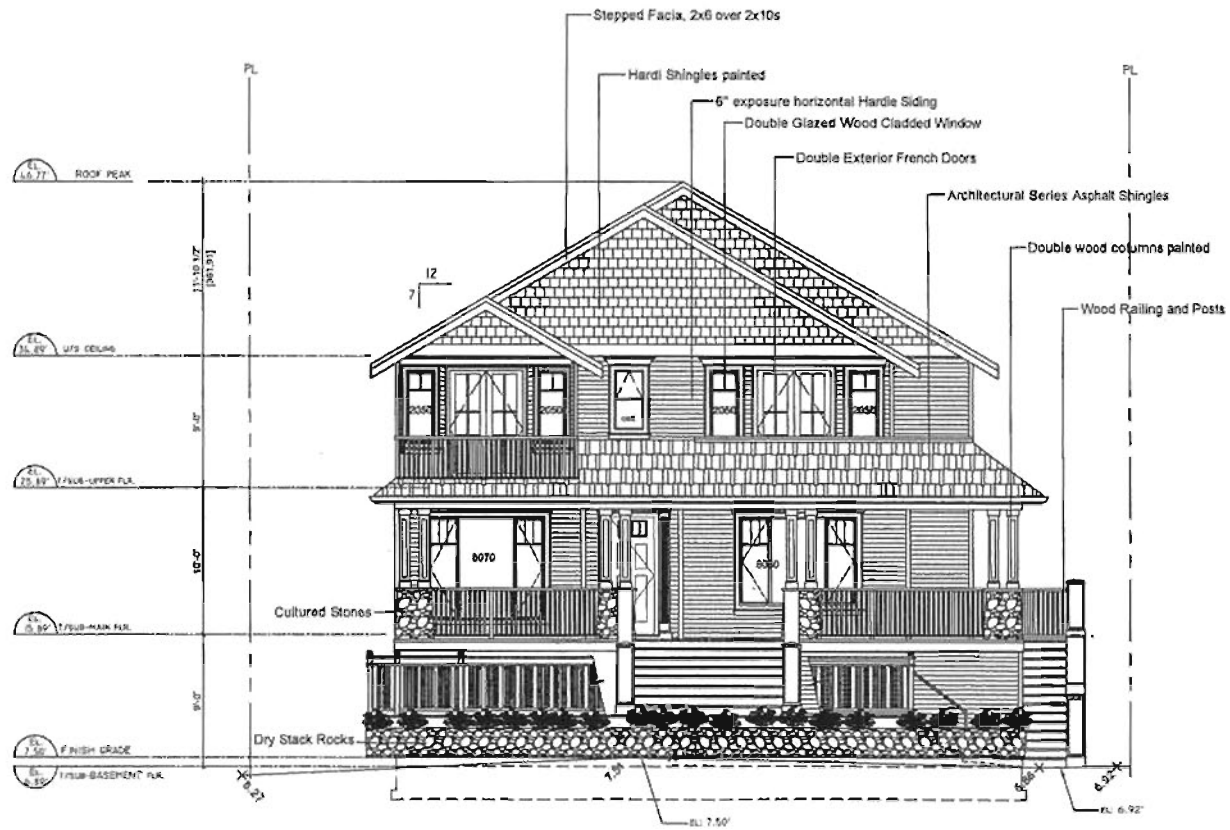
**Johnny w.w. Leung Architect**

Project: Custom Duplex  
 Address: 6433 Dyke Road, Richmond, BC V6V 2G7

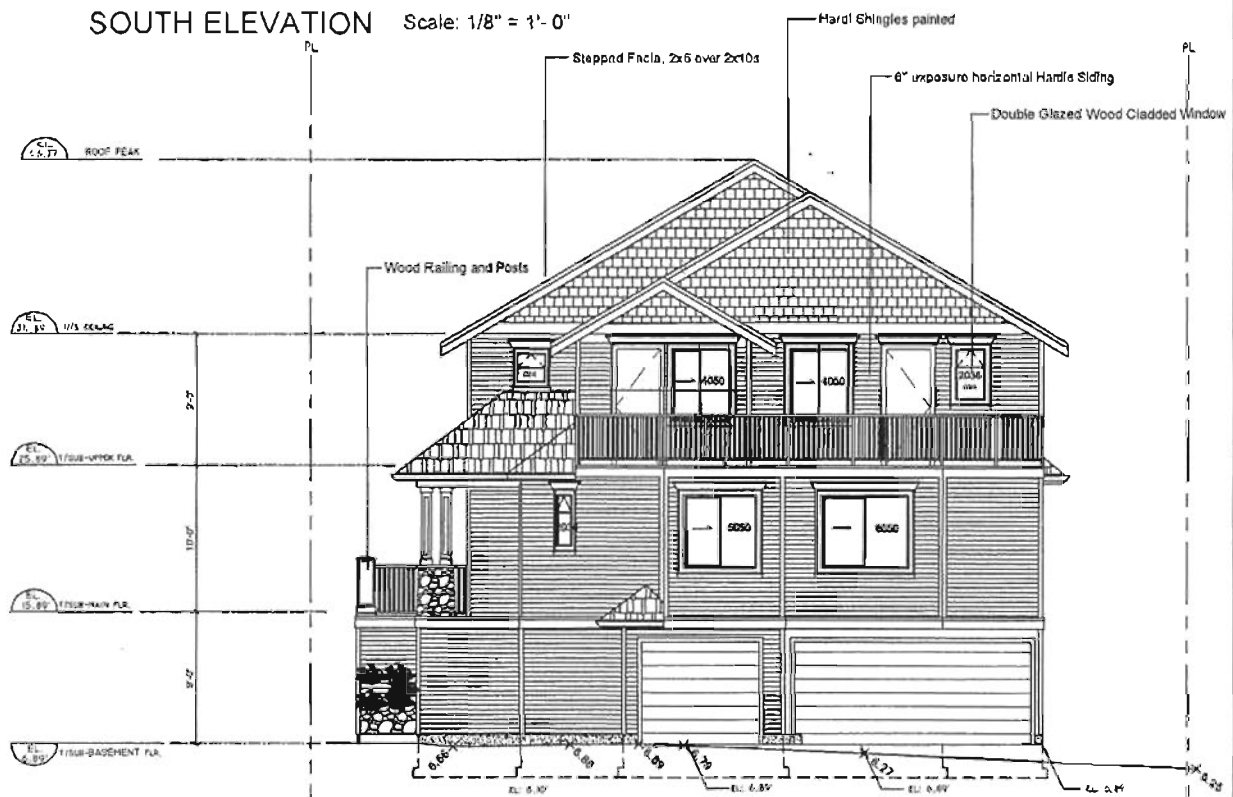
Section 227

April 8th 2013  
 April 18th 2013  
 June 17th 2013

A-4  
 Sheet 5 of 7



**SOUTH ELEVATION** Scale: 1/8" = 1'-0"



**NORTH ELEVATION**

Scale: 1/8" = 1'-0"



**Johnny w.w. Leung Architect**

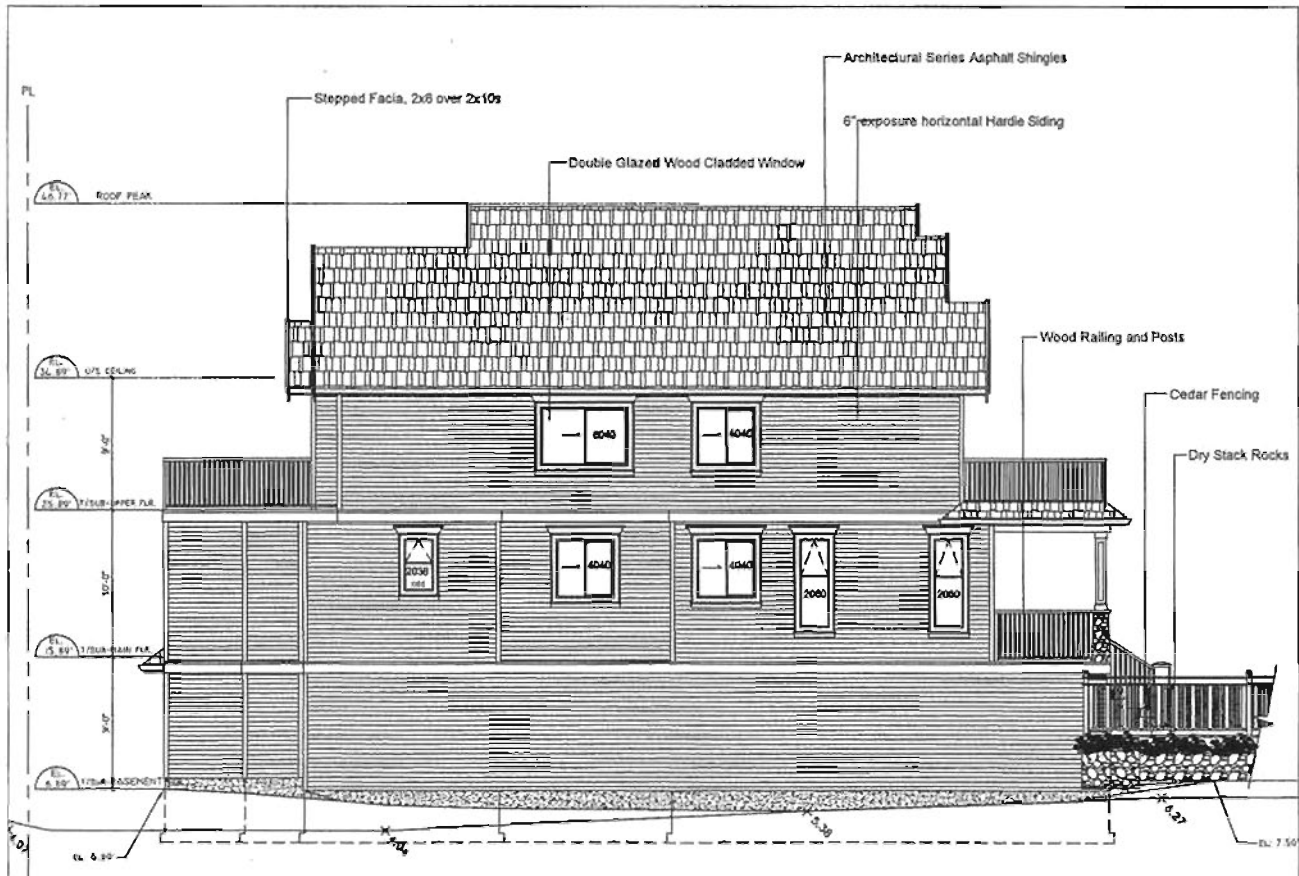
Project:  
Custom Duplex

Address:  
6433 Dyke Road  
Richmond, BC

Elevations  
228

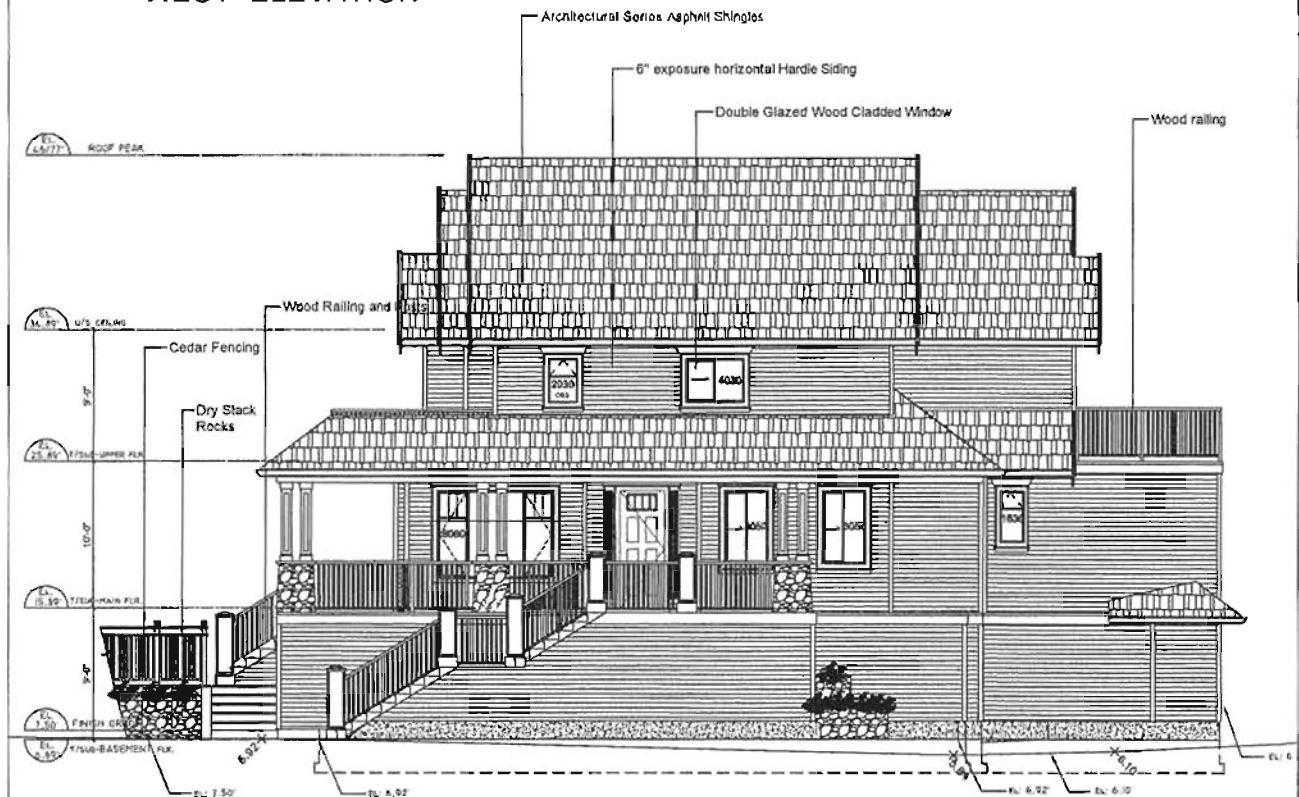
April 8th 2013  
April 18th 2013  
June 17th 2013

**A-5**  
Sheet 5 of 7



WEST ELEVATION

Scale: 1/8" = 1'-0"



EAST ELEVATION

Scale: 1/8" = 1'-0"



**Johnny w.w. Leung Architect**

Project:  
Custom Duplex

Address:  
6433 Dyke Road  
Richmond, BC

Elevations  
PLN - 229

April 8th 2013  
April 12th 2013  
April 18th 2013

A-6  
Sheet 7 of 7



envirowest consultants inc.

Suite 130 - 3700 North Fraser Way  
Burnaby, British Columbia  
Canada V5J 5H4

office: 604-451-0505  
facsimile: 604-451-0557

December 05, 2012

Andrew Appleton  
City of Richmond  
6911 No. 3 Road  
Richmond, BC V6Y 2C1

Dear Mr. Appleton,

**RE: PROPOSED RESIDENTIAL DEVELOPMENT AT 6433 DYKE ROAD,  
RICHMOND  
PROPOSED SETBACKS AND RIPARIAN ENHANCEMENT**

Envirowest Consultants Inc. (Envirowest) has been retained by Johnny Leung Consultants and Associates (Proponent) to provide environmental consulting services associated with the proposed residential development at the referenced address (Property). The Property occurs adjacent to a channelized stream. This correspondence provides proposed setbacks from the drainage and associated habitat enhancements to maintain and augment ecological integrity of the drainage adjacent to the development parcel.

---

**Property and Biophysical Overview**

Please refer to Attachment A for an aerial representation and Attachment B for site photographs.

The Property occurs immediately north of the south arm of the Fraser River, and is separated from the river by a constructed dyke running along the north shoulder of Dyke Road. The Property is further bounded by single family residential dwellings to its west and east.

Existing vegetation on the Property is predominantly grasses, Himalayan blackberry (*Rubus discolor*) and sapling black cottonwood (*Populus balsamifera* ssp. *trichocarpa*). The northeast corner of the Property is comprised of a gravel parking pad.

A channelized stream fronting Dyke Road occurs along the south extent of the Property and is bounded by a constructed dyke along its south bank. Vegetation within the drainage fronting the Property is predominantly grasses, cattail (*Typha latifolia*) and Himalayan blackberry, with occasional scotch broom (*Cytisus scoparius*). Adjacent residences to the west have constructed rock retaining walls along the channel banks, and have planted primarily non-native deciduous

ornamental vegetation and manicured lawns. A pedestrian pathway has been constructed along the top-of-bank on adjacent properties.

### **Proposed Works, Setbacks and Riparian Enhancements**

Please refer to the Landscape Plan, included as Attachment C.

The Proponent proposes to construct a residential duplex on the Property. The Property occurs within an Environmentally Sensitive Area (ESA) associated with the drainage along the south extent. As per the City of Richmond (City)'s Riparian Areas Regulation (RAR) Response Strategy, a 15 metre (m) Environmental Management Area (EMA) would be applied to this drainage. Instead, Envirowest proposes to utilize the detailed assessment methodology of the provincial RAR associated with a fish-bearing channelized stream, which applies a 10 m setback. A variance to the 10 m setback by approximately 2 m would be required. Habitat enhancements are proposed to offset the setback variance. Enhancements would comprise clearing of invasive blackberry and scotch broom and planting native shrubs within the proposed setback. As depicted in the planting plan, additional plantings east of the proposed building would further offset the 2 m variance to the proposed setback. Shrub species were selected in accordance with the provisions of the City's "Criteria for the Protection of Environmentally Sensitive Areas" design manual. The planted riparian assemblage would contribute nutrient inputs and temperature regulation to downstream reaches of the watercourse.

Additional measures to protect the EMA throughout the works would be followed. These include following Best Management Practices<sup>1</sup> for works adjacent to the watercourse.

---

<sup>1</sup> BC Ministry of Water, Land and Air Protection. 2004. Standards and Best Practices for Instream Works. Produced by Biodiversity Branch of the Ministry of Water, Land and Air Protection. Victoria, BC. 168p.

The proposed duplex at 6433 Dyke Road would occur within an Environmentally Sensitive Area associated with a channelized stream that delineates the south perimeter of the subject property. Consequently, a 10 metre (m) setback from the high-water mark is proposed, as per the detailed methodology of the provincial Riparian Areas Regulation. A 2 m variance to the 10 m setback is requested. To offset the 2 m setback loss, riparian habitat enhancements are proposed, comprising planting native shrubs, to contribute nutrients and temperature regulation to downstream fish habitat.

Please contact me at (604) 451-0505 or at [gibson@envirowest.ca](mailto:gibson@envirowest.ca) should you have comments or questions regarding this correspondence.

Sincerely,

**ENVIROWEST CONSULTANTS INC.**



Christie Gibson, B.I.T.  
Project Biologist

CWG

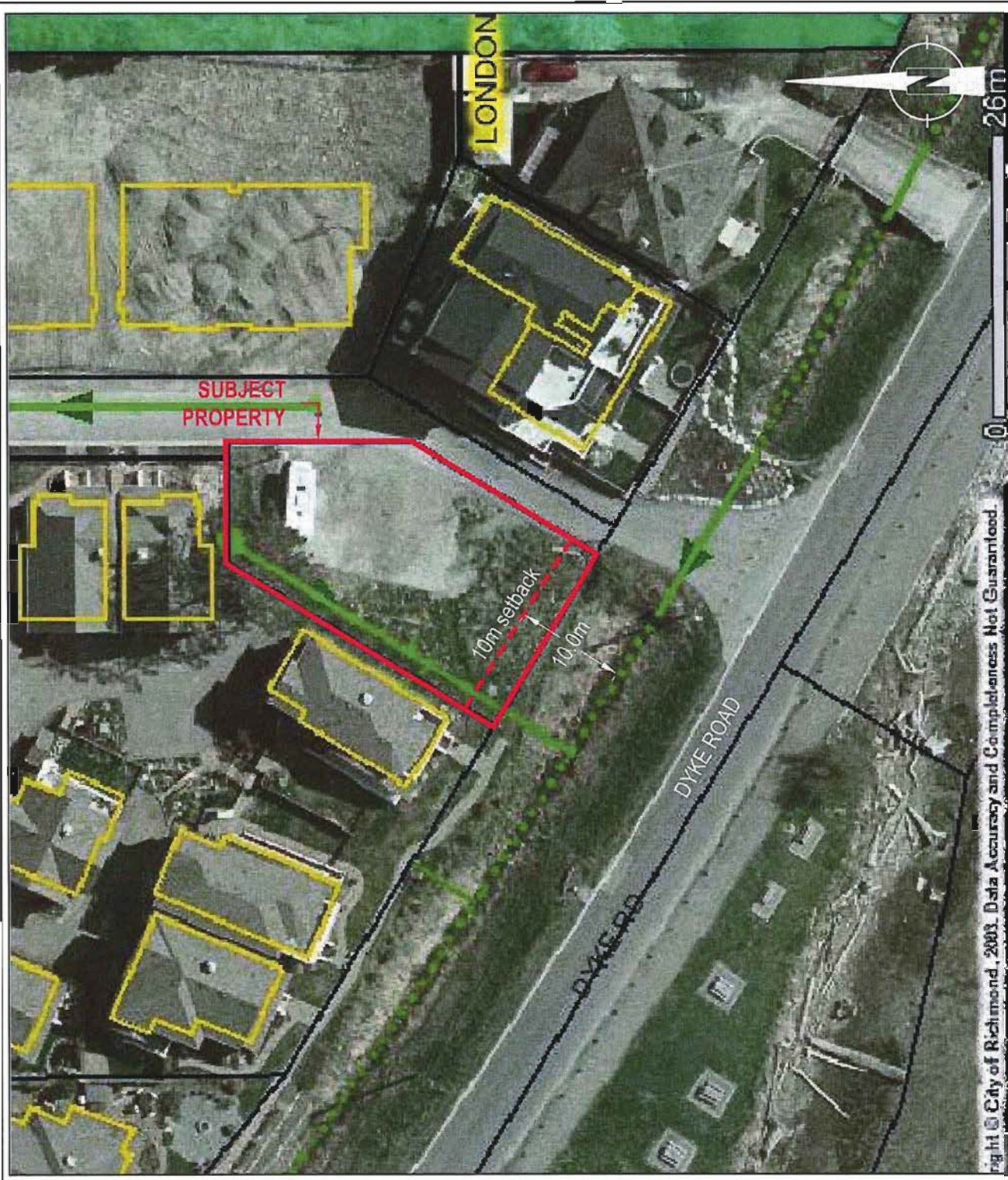
Attachments:

- A. Aerial Representation
- B. Site Photographs
- C. Envirowest Drawing No. 1750-01-01 "Landscape Plan" (December 04, 2012)

Copy: Johnny Leung



**ATTACHMENT A**  
**Aerial Representation**



Right © City of Richmond, 2003. Data Accuracy and Completeness Not Guaranteed.

REFERENCE DRAWINGS  
2003 Air photo From City of Richmond.

JOHNNY LEUNG CONSULTANTS AND ASSOCIATES

6433 DYKE ROAD  
Richmond, BC

**envirowest consultants inc.**  
 Suite 120 - 3700 North Fraser Way  
 Burnaby, British Columbia  
 Canada V5J 5H4  
 office: 604-451-0505  
 faxline: 604-451-0557  
 www.envirowest.ca

AERIAL PHOTO

DESIGN CJ	DRAWN SCM	CHECKED RW	DATE 00	REVISIONS
SCALE 1:500			DRAWN BY	
DATE December 04, 2012			FIGURE 1	

DATE: 2012-12-05 - 10:55 AM  
 PATH: \\envirowest\Projects\2012\20121205\120512\001\AerialPhoto\Figure 1.dwg  
 LAYOUT: Figure 1

**ATTACHMENT B**  
**Site Photographs**



Photograph 1. South view of east property line, taken from paved parking area in northeast corner; existing Himalayan blackberry within southeast corner proposed to be replaced with native shrubs (October 15, 2012).



Photograph 2. North view of property and frontage ditch; predominant vegetation within the property is Himalayan blackberry, grasses and black cottonwood saplings; ditch vegetation predominated by cattail (November 05, 2012).



Photograph 3. West view of frontage ditch; adjacent property has pedestrian pathway, manicured lawn and planted ornamental species within and adjacent to the ditch (November 05, 2012).



Photograph 4. East view of frontage ditch; predominance of Himalayan blackberry visible within southeast corner of property and extending around a headwall; this area proposed to be enhanced with native shrubs, in addition to areas within proposed setback (November 05, 2012).

---

**Attachment B: Site Photographs**

**Mr. Andrew Appleton, City of Richmond**  
**Proposed Residential Development at 6433 Dyke Road, Richmond**  
**Proposed Setbacks and Riparian Enhancement**

December 05, 2012

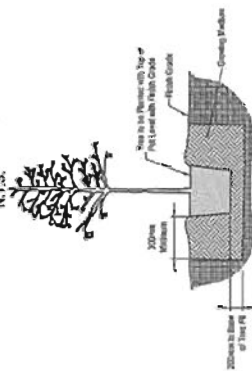
ATTACHMENT C  
Envirowest Drawing No. 1750-01-01 "Landscape Plan" (December 04, 2012)



**PLANT SPECIES LIST AND SPECIFICATIONS**

SYMBOL	COMMON NAME	Latin Name	NUMBER	COMMENTS
1	Aspen	<i>Populus tremula</i>	1	No. 2 pot, densely branched, well established
2	Black Hawthorn	<i>Crataegus douglasii</i>	7	No. 2 pot, densely branched, well established
3	Red-flowering Currant	<i>Ribes sanguineum</i>	3	No. 2 pot, densely branched, well established
4	Red-osier Dogwood	<i>Cornus stolonifera</i>	24	No. 2 pot, densely branched, well established
5	Salix	<i>Salix glauca</i>	21	No. 2 pot, densely branched, well established
6	Sparganium	<i>Sparganium angustifolium</i>	24	No. 2 pot, densely branched, well established
7	Sparganium	<i>Sparganium angustifolium</i>	24	No. 2 pot, densely branched, well established
8	Sparganium	<i>Sparganium angustifolium</i>	24	No. 2 pot, densely branched, well established
9	Sparganium	<i>Sparganium angustifolium</i>	24	No. 2 pot, densely branched, well established
10	Sparganium	<i>Sparganium angustifolium</i>	24	No. 2 pot, densely branched, well established
11	Sparganium	<i>Sparganium angustifolium</i>	24	No. 2 pot, densely branched, well established

**TYPICAL CONTAINER (No. 7 POT) TREE PLANTING DETAIL**  
N.T.S.

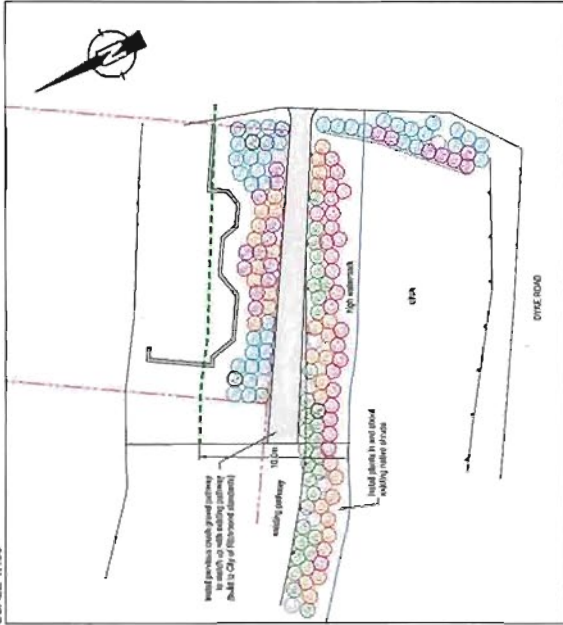


REFERENCE DRAWINGS  
EMUE - Propose Box, 10-15-12.pdf, Revisited October 23, 2012, Johnny W.X. Leung Architect.

**GENERAL LANDSCAPE SPECIFICATIONS**

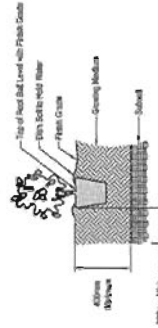
- Plant material and quantities of each material are to be in accordance with the British Columbia Landscape Planting Specification (LPS) published by the British Columbia Society of Landscape Architects and the British Columbia Landscape Nursery Association.
- Plant material to be supplied shall be of the highest quality and shall be supplied in accordance with the British Columbia Society of Landscape Architects and the British Columbia Landscape Nursery Association.
- All plant material to be supplied shall be inspected and approved by Environmental Services and the Department of Parks and Recreation of the City of Vancouver.
- Planting methods to be in accordance with the LPS and approved by Environmental Services.
- All plants and/or areas installed from landscape operations are to be installed and supported within its accordance with all applicable codes and regulations.
- Planting materials shall be inspected and approved by Environmental Services and the Department of Parks and Recreation of the City of Vancouver.
- Planting materials shall be inspected and approved by Environmental Services and the Department of Parks and Recreation of the City of Vancouver.
- Planting materials shall be inspected and approved by Environmental Services and the Department of Parks and Recreation of the City of Vancouver.
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- Planting materials shall be inspected and approved by Environmental Services and the Department of Parks and Recreation of the City of Vancouver.

PLAN SCALE 1:150



REVISED

**TYPICAL CONTAINER SHRUB AND No. 2 POT TREE PLANTING DETAIL**  
N.T.S.



JOHNNY LEUNG CONSULTANTS AND ASSOCIATES  
6433 DYKE ROAD  
Richmond, BC

envirowest consultants inc.

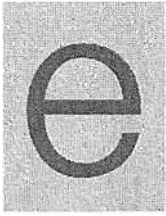


1515 Brackley Street  
Port Columbia, British Columbia  
Canada V3C 8M2  
office: 604-944-0527  
fax: 604-944-0527  
www.envirowest.ca

LANDSCAPE PLAN

DESIGN PAW	DESIGN SCM	REVISION 01	REVISION DATE June 08, 2013
SCALE As Shown	PROJECT NUMBER	1750-01-01	
DATE December 04, 2012			





# envirowest consultants inc.

Suite 101 - 1515 Broadway Street  
Port Coquitlam, British Columbia  
Canada V3C 6M2  
604-944-0502

June 19, 2013

Mr. Johnny Leung  
Johnny W.W. Leung Architect  
8879 Selkirk Street,  
Vancouver, B.C., V6P 4J6

Dear Sir,

**RE: 6433 DYKE ROAD, RICHMOND  
COST ESTIMATE – HABITAT AREA**

We have estimated costs associated with the landscaping of the Habitat Protection Area. Reference is made to Envirowest Drawings 1750-01-01 Revision 01 "Landscape Plan" (June 5, 2013). Items are summarized below not including taxes.

<u>Item</u>	<u>Quantity</u>	<u>Unit Cost</u>	<u>Total Cost</u>
Trees and Shrubs – No. 2	158	\$9.00	\$1,422.00
Labour – No. 2	158	\$5.00	\$790.00
Misc. (soil, seeding)	L/S	\$1,300.00	\$1,300.00
Gravel Pathway	L/S	\$3,000.00	\$3,000.00
Maintenance	2	\$1,000.00	\$2,000.00
Monitoring	2	\$500.00	\$1,000.00
<b>Sub Total</b>			<b>\$9,512.00</b>
Pathway including Pavers would require an additional \$800.00			
<b>Total</b>			<b>\$10,312.00</b>

I trust this information meets your needs. Please call me at 604-944-0502 should you have any questions.

Yours truly,  
**ENVIROWEST CONSULTANTS INC.**

Pete Willows  
Environmental Technician

PJW

copy Ian Whyte                      Envirowest Consultants Inc.  
Christie Gibson                      Envirowest Consultants Inc.



**Address:** 6433 Dyke Road

**File No.:** RZ 13 - 631467

**Prior to final adoption of Zoning Amendment Bylaw 9028 , the developer is required to complete the following:**

1. Dedication of 27.18 m<sup>2</sup> for road along the north-east frontage.
2. Registration of a 0.6 m wide statutory right-of-way for public access / boulevard along the east property line. The City of Richmond will assume maintenance and liability for the right-of-way area.
3. Submission of a Habitat Restoration Plan / Landscape Plan, prepared by a Registered Landscape Architect, to the satisfaction of the Director of Development, and deposit of a Landscaping Security based on 100% of the cost estimate provided by the Landscape Architect, including installation costs. The Landscape Plan should reflect the recommendations of the December 5, 2012 report as prepared by Envirowest Consulting, and match the recommended planting plans in the report.
4. Submission of a Contract entered into between the applicant and a Qualified Environmental Professional (QEP) for supervision of any on-site works conducted within the riparian setback / protection zone. The Contract should include the scope of work to be undertaken, including: the proposed number of site monitoring inspections, and a provision for the QEP to submit a post-construction assessment report to the City for review.
5. Submission of a Landscaping Survival Security to the City in the amount of \$10,312 for the gravel walkway and the planting to be done within the riparian area. The security shall be retained for two years. The City of Richmond Parks Department will assume maintenance and liability for the gravel walkway area.
6. Installation of appropriate tree protection fencing around all trees to be retained as part of the development prior to any construction activities, including building demolition, occurring on-site.
7. Discharge of Restrictive Covenant BP005925, which specifies a minimum habitable elevation of 2.6 m GSC for flood protection purposes.
8. Registration of a flood plain covenant on title identifying a minimum habitable elevation of 2.9 m GSC.
9. Registration of a 6.0 m wide statutory right-of-way for dike access along the south property line.
10. The City's acceptance of the applicant's voluntary contribution of \$1.00 per buildable square foot of the proposed two-unit developments (i.e. \$3,745) to the City's Affordable Housing Reserve Fund.
11. Submission of building permit-ready set of house plans, in accordance with the drawings attached as Attachment 4 to the Report to Committee dated June 21, 2013.

**Prior to Building Permit Issuance, the developer must complete the following requirements:**

1. Submission of a Construction Parking and Traffic Management Plan to the Transportation Division. 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.
2. Incorporation of accessibility measures in Building Permit (BP) plans as determined via the Rezoning and/or Development Permit processes.
3. Provide Service Connection Designs for the proposed water, storm & sanitary connections.
4. 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 Division at 604-276-4285.
5. A work order will be required for any improvements within the dedicated road area for Princess Lane.

Note:

- \* This requires 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.

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Signed

---

Date



**Richmond Zoning Bylaw 8500  
Amendment Bylaw 9028 (RZ 13 - 631467)  
6433 Dyke 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:
  - i. Inserting the following after Section 16.3:
    - 16.4 **Heritage Two-Unit Dwelling (ZD4) – London Landing (Steveston)**
      - 16.4.1 **Purpose**

The zone provides for a heritage-style two-unit dwelling.
      - 16.4.2 **Permitted Uses**
        - housing, two-unit
      - 16.4.3 **Secondary Uses**
        - boarding and lodging
        - home business
      - 16.4.4 **Permitted Density**
        1. The maximum density is one two-unit housing unit.
        2. The maximum floor area ratio is 0.70, together with 0.1 floor area ratio which must be used exclusively for covered areas of the principal building which are open on one or more sides.
      - 16.4.5 **Permitted Lot Coverage**
        1. The maximum lot coverage is 50% for buildings.
        2. No more than 80% of a lot may be occupied by buildings, structures and non-porous surfaces.
        3. 20% of the lot area is restricted to landscaping with live plant material.
      - 16.4.6 **Yards & Setbacks**
        1. The minimum front yard is 6.5 m, except that entry stairs may project into the front yard for a distance of no more than 1.5 m.
        2. The minimum west side yard is 3.0 m.
        3. The minimum east side yard is 2.2 m, except that entry stairs may project into the east side yard by no more than 1.0 m.

4. The minimum north-east **side yard** is 1.5 m.
5. The minimum **rear yard** is 6.0 m.
6. **Porches, balconies, bay windows, and cantilevered roofs** forming part of the **principal building** may project into the **exterior side yard** and **side yard** for a distance of not more than 0.6 m.

#### **16.4.7 Permitted Heights**

1. The maximum **height** for **principal buildings** is 12.5 m, but containing not more than 2 habitable **storeys**.
2. The **maximum height** for **accessory structures** is 4.0 m.

#### **16.4.8 Subdivision Provisions/Minimum Lot Size**

1. The minimum **lot area** is 500.0 m<sup>2</sup>.
2. There are no minimum **frontage, lot width** or **lot depth** requirements.

#### **16.4.9 Landscaping & Screening**

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

#### **16.4.10 On-site Parking & Loading**

1. On-site **vehicle** and bicycle parking and loading shall be provided according to the standards set out in Section 7.0.

#### **16.4.11 Other Regulations**

1. 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 **HERITAGE TWO-UNIT DWELLING (ZD4) – LONDON LANDING (STEVESTON)**.

P.I.D. 024-669-750

Lot 4 Section 18 Block 3 North Range 6 West New Westminster District Plan LMP44643

3. This Bylaw may be cited as "Richmond Zoning Bylaw 8500, Amendment Bylaw 9028".

FIRST READING

\_\_\_\_\_

A PUBLIC HEARING WAS HELD ON

\_\_\_\_\_

SECOND READING

\_\_\_\_\_

THIRD READING

\_\_\_\_\_

OTHER CONDITIONS SATISFIED

\_\_\_\_\_

ADOPTED

\_\_\_\_\_

\_\_\_\_\_  
MAYOR

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

CITY OF RICHMOND
APPROVED by <i>DC</i>
APPROVED by Director or Solicitor <i>ul</i>