City of Richmond

Agenda

Development Permit Panel

Council Chambers, City Hall
6911 No. 3 Road

Wednesday, November 26, 2014
3:30 p.m.

Minutes

Motion to adopt the minutes of the Development Permit Panel meeting held on Wednesday, November 12, 2014.

1. Development Permit 13-645579
(REDMS No. 4377650)

APPLICANT: NSDA Architects on behalf of the Pacific Autism Family Centre Foundation

PROPERTY LOCATION: 1001 Hudson Avenue

Director's Recommendations

That a Development Permit be issued which would:

1. ***permit the construction of a 5,752 m^2 (gross floor area) building for treatment of, and education about, Autism Spectrum Disorder at 1001 Hudson Avenue on a site zoned "Auto Oriented Commercial (ZC10) – Airport and Aberdeen Village"; and***
2. ***vary the provisions of Richmond Zoning Bylaw 8500 to reduce the minimum commercial parking spaces setback (Zoning Bylaw S. 7.5.17) from 1.5 metres to zero metres along the northern lot line.***

2. Development Permit 14-665485
(REDMS No. 4388882)

APPLICANT: Yamamoto Architecture Inc.

ITEM

PROPERTY LOCATION: Eastern Portion of 7120, 7140, 7160, 7180, 7200, 7220, 7240 and 7260 Bridge Street and 7211, 7231 and 7271 No. 4 Road

Director's Recommendation

That a Development Permit be issued which would permit the construction of seventy-eight (78) 2 and 3-storey townhouses on the eastern portion of 7120, 7140, 7160, 7180, 7200, 7220, 7240 and 7260 Bridge Street and 7211, 7231 and 7271 No. 4 Road on a site zoned "Town Housing (ZT70) - South McLennan."

3. Development Permit 14-672669

(REDMS No. 4402671)

APPLICANT: S-8135 Holdings Ltd.

PROPERTY LOCATION: 9191 and 9231 Alexandra Road

Director's Recommendation

That a Development Permit be issued which would permit the construction of a development with forty (40) town housing units and nine (9) live/work dwelling units at 9191 and 9231 Alexandra Road on a site zoned "Residential/Limited Commercial (ZMU28) – Alexandra Neighbourhood (West Cambie)."

4. Development Variance 14-676341

(REDMS No. 4411201) (File Ref No. Xr: TE 14-672413)

APPLICANT: Rogers Communications Inc.

PROPERTY LOCATION: 11771 Fentiman Place

Director's Recommendations

1. ***That a Development Variance Permit be issued which would vary the provisions of Richmond Zoning Bylaw 8500 to increase the maximum accessory structure height in the "Health Care (HC)" zoning district from 12 m (39.3 ft.) to 21 m (68.9 ft.) in order to permit the installation of a temporary telecommunications antenna pole at 11771 Fentiman Place; and***

ITEM

2. That Richmond City Council grant concurrence to the proposed temporary telecommunications antenna pole installation for the site located at 11771 Fentiman Place for period of time extending up until December 31, 2017.

5. Development Permit 13-652010

(REDMS No. 4308100)

APPLICANT: Zhao XD Architect Ltd.

PROPERTY LOCATION: 8400 General Currie Road and 7411/7431 St. Albans Road

Director's Recommendations

That a Development Permit be issued which would:

1. permit the construction of 12 three-storey townhouse units at 8400 General Currie Road and 7411/7431 St. Albans Road on a site zoned "High Density Townhouses (RTH2)"; and

2. vary the provisions of Richmond Zoning Bylaw 8500 to increase the rate of tandem parking spaces from 50% to 67% to allow a total of sixteen (16) tandem parking spaces in eight (8) three-storey townhouse units.

6. New Business

7. Date of Next Meeting: Wednesday, December 10, 2014

8. Adjournment

City of Richmond

Minutes

Development Permit Panel
Wednesday, November 12, 2014

Time:	3:30 p.m.
Place:	Council Chambers Richmond City Hall
Present:	Joe Erceg, Chair John Irving, Director, Engineering Victor Wei, Director, Transportation

The meeting was called to order at 3:30 p.m.

Minutes

It was moved and seconded
That the minutes of the meeting of the Development Permit Panel held on Wednesday, October 15, 2014, be adopted.

CARRIED

1. Development Permit 13-652010
(File Ref. No.: DP 13-652010) (REDMS No. 4308100)

APPLICANT: Zhao XD Architect Ltd.

PROPERTY LOCATION: 8400 General Currie Road and 7411/7431 St. Albans Road

INTENT OF PERMIT:

1. Permit the construction of 12 three-storey townhouse units at 8400 General Currie Road and 7411/7431 St. Albans Road on a site zoned "High Density Townhouses (RTH2)"; and
2. Vary the provisions of Richmond Zoning Bylaw 8500 to increase the rate of tandem parking spaces from 50% to 67% to allow a total of sixteen (16) tandem parking spaces in eight (8) three-storey townhouse units.

Applicant's Comments

Xuedong Zhao, Zhao XD Architect Ltd., provided a brief overview of the proposed application regarding (i) urban design, (ii) the location of the driveway, (iii) landscape design, and (iv) architectural form and character.

Panel Discussion

In reply to queries from the Panel, Mr. Zhou noted that the landscape architect was not in attendance.

Mr. Zhao spoke of the conditions of adjacency and advised that the architectural form and character of the proposed development is consistent with other properties in the neighbourhood and that the adjacent townhouse properties are two storeys.

Staff Comments

In reply to queries from the Panel, Wayne Craig, Director, Development, advised that (i) the proposed development will require a servicing agreement for frontage improvements, (ii) a development variance is proposed to increase the number of tandem parking spaces, (iii) the proposed variance enables the site to provide 27 parking spaces which exceeds the bylaw requirements for the site, (iv) the proposed development is anticipated to achieve an EnerGuide rating of 82, and (v) there will be one convertible unit.

Panel Discussion

Discussion ensued with regard to the amenity area and in reply to queries from the Panel, Mr. Zhou advised that landscaping the area will include bushes and that benches will be located outside of the landscaped perimeter to maximize the amenity area. He added that the landscaping will consist of low vegetation to maximize visibility of the play area.

Correspondence

None.

Gallery Comments

None.

Panel Discussion

Discussion ensued with respect to the Applicant's presentation and it was noted that the presentation was not comprehensive; therefore the Panel was not provided with sufficient information to consider the proposed recommendation.

Discussion then ensued regarding the conditions of adjacency and the Panel requested that the applicant provide more information regarding the adjacent properties and the potential impact of the proposed development in the area.

As a result of the discussion, the following **referral** was introduced:

It was moved and seconded
That the staff report titled Application by Zhao XD Architect Ltd. for a Development Permit at 8400 General Currie Road and 7411/7431 St. Albans Road, dated November 4, 2014, from the Director, Development, be referred to the November 26, 2014 Development Permit Panel meeting.

CARRIED

2. Development Permit 14-663402

(File Ref. No.: DP 14-663402) (REDMS No. 4371832)

APPLICANT: Christopher Bozyk Architects Ltd.

PROPERTY LOCATION: 3200 Sweden Way

INTENT OF PERMIT:

1. Permit the construction of 1,765.16 m² (19,000 ft²) one-storey building consisting of one (1) commercial retail unit (CRU) for a furniture showroom located at 3200 Sweden Way on a site zoned Industrial Retail (IR1); and
2. Vary the provisions of Richmond Zoning Bylaw 8500 to reduce the required number of parking spaces from 61 to 46.

Applicant's Comments

Sinéad Hugh, Christopher Bozyk Architects Ltd., gave an overview of the proposed development regarding (i) the showroom design, (ii) the proposed reduction in parking spaces, (iii) the shared vehicle access with the Ikea store, (iv) the pedestrian access to the site, (v) the totem pole feature, (vi) architectural form and character, (vii) water features, and (viii) landscape design.

Panel Discussion

Discussion ensued with respect to the proposed parking variance to decrease the number of parking spaces from 61 to 46. In reply to queries from the Panel, Ms. Hugh advised that the store would primarily be a showroom and the number of proposed parking spaces was based on anticipated customer behaviour. She added that three stores sites similar to the proposed development were studied to assess the anticipated parking demand.

In reply to queries from the Panel, Ms. Hugh noted that the north-south walkway on the eastern edge of the site will not have any vegetation planted. She added that the portion of the walkway within the property will be 1.2 metres in width.

Staff Comments

In reply to queries from the Panel, Mr. Craig noted that the zoning bylaw would only allow warehouse sales, not general retail uses to be on the site.

Discussion ensued regarding the shared access to the site. In reply to queries from the Panel, Mr. Craig advised that staff reviewed the access to the site when the Ikea application was brought forward. He added that the primary customer vehicle access will be the same as the Ikea store. The access located near the Sweden Way intersection will be restricted for loading vehicles and will be a controlled exit. Also, he noted that some modifications to the site access may be required to ensure clearance for emergency vehicles.

In reply to queries from the Panel, Mr. Craig advised that vehicles coming from Knight Street would have to exit onto Bridgeport Road and turn left on Sweden Way to access the site's main entrance. He added that another vehicle access option would be through Jacombs Road via the new connector road to Knight Street, Mannini Way.

Panel Discussion

Discussion ensued with regard to the totem pole feature. In reply to queries from the Panel, Ms. Hugh noted that the totem pole feature can be used as a landmark and will be located on the plaza.

Discussion then ensued regarding the proposed development's access and landscaping. Ms. Hugh noted that pedestrians can access the building from the north or south and that the landscaping was coordinated with the adjacent development.

Staff Comments

Mr. Craig advised that frontage improvements will be completed through a servicing agreement.

Correspondence

None.

Gallery Comments

None.

Panel Discussion

Discussion ensued with regard to (i) the proposed frontage improvements, (ii) the totem pole feature, and (iii) the development's design.

Panel Decision

It was moved and seconded
That a Development Permit be issued which would:

1. ***permit the construction of 1,765.16 m² (19,000 ft²) one-storey building consisting of one (1) commercial retail unit (CRU) for a furniture showroom located at 3200 Sweden Way on a site zoned Industrial Retail (IR1); and***
2. ***vary the provisions of Richmond Zoning Bylaw 8500 to reduce the required number of parking spaces from 61 to 46.***

CARRIED

3. Development Permit 14-666057

(File Ref. No.: DP 14-666057) (REDMS No. 4376137)

APPLICANT: Madison Pacific Properties Inc.

PROPERTY LOCATION: 3200 Sweden Way

INTENT OF PERMIT:

Permit the construction of 866 m² (9,320 ft²) gross leasable floor space in a 1-storey building consisting of three (3) commercial retail units (CRU) including a White Spot restaurant located at 3200 Sweden Way on a site zoned Industrial Retail (IR1).

Applicant's Comments

Glen Bury, Madison Pacific Properties Inc., Aaron Vornbrock, Urban Design Group Architects Ltd., and Landscape Architect, Cheryl Bouwmeester, ETA Landscape Architecture, gave a brief overview of the proposed development with respect to (i) rezoning and subdividing the site, (ii) urban design, (iii) architectural form and character, and (iv) landscape design.

Mr. Vornbrock spoke of the proposed development and noted the following:

- vehicle access to the site will be through the Ikea parking lot;
- tenants for the proposed development will primarily be restaurants;
- the proposed building is positioned along Bridgeport Road and will act as a screen to the parking lot;
- the applicant anticipates low pedestrian traffic on the north side of the site and the proposed north-south walkway would direct pedestrian flow onto the site;
- building height and setbacks all meet bylaw requirements;
- the proposed building is elevated approximately one metre from the Bridgeport Road elevation;

- patios are proposed along the wide section of sidewalk on the south side of the site; and
- exterior features would include, building articulation, glazing and metal siding.

Ms. Bouwmeester spoke of the landscape design and noted the following:

- similar plant species used in the adjacent properties will be used on-site;
- signs and landscaping will direct pedestrians to the proposed north-south walkway;
- trees will be planted along the Bridgeport Road frontage;
- the open area in front of the proposed building will include planters;
- landscaping within the parking lot is limited due to turning radius requirements for large loading vehicles;
- the parking lot will include stamped paving features; and
- the east side of the site will include a staggered row of trees.

Panel Discussion

In reply to queries from the Panel, Ms. Bouwmeester commented on the proposed north-south walkway and noted that (i) a vehicle overhang will occur on a limited portion of the walkway but will not impact the function, (ii) trees will be planted in between parking stalls, (iii) pedestrian lamps will be installed, (iv) the total width of the walkway is three metres, (v) a marked crossing will be installed from the north-south walkway to the proposed building, and (vi) the north side of the CRUs will have service access.

Mr. Vornbrock spoke of the building's façade along the north side of the site and noted that there will be a landscaped berm with trees and that the CRU section will include some glazing.

In reply to queries from the Panel, Mr. Vornbrock advised that there are no pedestrian connections on the eastern edge of the site. He added that the proposed north-south walkway aligns with the walkway to the Ikea store. Also, Mr. Vornbrock noted that signs will be installed advising pedestrians of the ending northern sidewalk and directing pedestrian traffic to the north-south walkway.

Discussion ensued with regard to the installation of lights and trees along the proposed north-south walkway. Mr. Vornbrock and Mr. Bury noted that the trees will be offset and vehicle wheel stops will be installed.

Discussion then ensued regarding the turning radius and addition of landscaping in the parking lot. In reply to queries from the Panel, Mr. Bury advised that adding a landscaped median on the parking lot is not possible due to turning radius requirements for large loading vehicles.

Discussion continued regarding the potential extension of the northern sidewalk along Bridgeport Road until the Knight Street on-ramp. In reply to queries from the Panel, Mr. Bury noted that a reconfiguration of the building's entrance to face the north side in order to connect to an extended northern sidewalk would not be advisable due to the potential loss of patio space for the tenant and a lack of pedestrian connections along Knight Street.

Staff were then directed to examine options to finish the extension of the sidewalk along Bridgeport Road to the Knight Street on-ramp as part of the servicing agreement process.

Correspondence

None.

Gallery Comments

None.

Panel Decision

It was moved and seconded
That a Development Permit be issued which would permit the construction of 866 m² (9,320 ft²) gross leasable floor space in a 1-storey building consisting of three (3) commercial retail units (CRU) including a White Spot restaurant located at 3200 Sweden Way on a site zoned Industrial Retail (IR1).

CARRIED

4. New Business

5. Date Of Next Meeting: Wednesday, November 26, 2014

6. Adjournment

It was moved and seconded
That the meeting be adjourned at 4:24 p.m.

CARRIED

Certified a true and correct copy of the Minutes of the meeting of the Development Permit Panel of the Council of the City of Richmond held on Wednesday, November 12, 2014.

Joe Erceg
Chair

Evangel Biason
Auxiliary Committee Clerk

City of Richmond

Report to Development Permit Panel

To:	Development Permit Panel	**Date:**	November 5, 2014
From:	Wayne Craig Director of Development	**File:**	DP 13-645579
Re:	**Revised Development Permit Application by NSDA Architects on behalf of the Pacific Autism Family Centre Foundation for a Development Permit at 1001 Hudson Avenue**		

Staff Recommendation

That a Development Permit be issued which would:

1. Permit the construction of a 5,752 m^2 (gross floor area) building for treatment of, and education about, Autism Spectrum Disorder at 1001 Hudson Avenue on a site zoned "Auto-Oriented Commercial (ZC10)) – Airport and Aberdeen Village"; and
2. Vary the provisions of Richmond Zoning Bylaw 8500 to reduce the minimum commercial parking spaces setback (Zoning Bylaw S. 7.5.17) from 1.5 metres to zero metres along the northern lot line.

Wayne Craig
Director of Development

WC:dcb

Staff Report

Origin

NSDA Architects, on behalf of The Pacific Autism Family Centre Foundation, has applied to the City of Richmond for permission to develop 1001 Hudson Avenue in order to construct a 4,917 m2 (52,931 ft^2 net floor area) building for treatment of, and education about, Autism Spectrum Disorder. The site is currently zoned "Auto-Oriented Commercial (ZC10) – Airport and Aberdeen Village". The development site is currently vacant.

A previous version of this Development Permit was reviewed and endorsed by Development Permit Panel on May 14, 2014, but has not yet been reviewed by Council. A copy of the original staff report from the Director of Development (dated April 28, 2014) is provided in Attachment 2. The site plan and building elevation plans from the previously reviewed submission are included in Attachment 2 for your reference.

Subsequent to the Development Permit Panel's review, funding issues have arisen for the applicant and they have undertaken a value engineering assessment of the project. As a result of their analysis, the proponents have reworked their design so that it is now proposed to be constructed in two phases, with only Phase 1 proceeding at this time. In addition to the phasing changes, a number of substantive changes to the site and building designs are being proposed, and the revised proposal is being brought forward for the Development Permit Panel's review.

Development Information

The applicant has provided the following information on the two proposed construction phases.

Phase 1 of the project (the current application) is proposed to include the following components:

- Knowledge Centre;
- Information Centre;
- Lifespan Centre;
- Clinic and Research Centre;
- Treatment Centre; and
- Province-wide Satellite Centres enabling communications with facilities located elsewhere in the Province.

Phase 1 of the facility will total approximately 4,917 m^2 (52,931 ft^2).

Phase 2 of the project is proposed for completion an undetermined date and will require a separate Development Permit in order to proceed. Phase 2 is anticipated to include the following components:

- Recreation Centre (gymnasium, fitness area, changing facilities and an exterior open space); and
- Additional province-wide Satellite Centres.

These components were included in the original plan submission reviewed by Development Permit Panel and would be 490 m^2 (5,274 ft^2) in floor area.

Adjustments have been made to the Phase 1 plans in the locations where the recreation centre and other facilities were originally designed to be placed but have now been removed. The new facades will be finished in the a similar manner to the rest of the building. The space previously occupied by the recreation and satellite centres is now proposed to be outdoor space surrounded by vegetation (shrubs and trees).

Specific Site and Building Design Changes
In addition to the above changes, the applicant has identified the following modifications from the original plans:

Massing and Fenestration

- The original submission had three elevators. One of the elevators adjacent to the entry lobby has been eliminated.
- Two portions of the covering over the main courtyard (east and north sides) walkway have been removed.
- A lamp standard is shown on PAFC property close to the new concrete access stairs from Cessna Drive to the dyke. This is to temporarily provide the desired lighting originally intended to be mounted on the south wall of the Recreation Centre.
- The rooftop mechanical equipment screening enclosure has been reduced in size and the mechanical/electrical rooms have been modified.
- The articulation on the west facade has been simplified.
- A portion of the retaining wall between rows of parking on the north side of the site has been removed.
- The east projection of the third floor boardroom has been removed.
- The exterior balcony off the executive director's office on the third floor has been removed and replaced by a window.
- All the third floor windows that had been shown to continue up to the roof parapet have been changed to windows with their head at 2,135 mm above the finished floor.
- Bands of metal panels have been introduced in the west facing glazing of the corridors on all three levels to provide opportunities for fastening the supports for vertical sun shades.
- The multi-purpose room glazing facing north has been reduced and the east and west side glazing has been increased.
- Previously continuous areas of glazing have been divided into smaller portions using a 200 mm wide metal connector.
- The interior double height volume over the open area next to the cafeteria has been eliminated and the roof lowered to the third floor level.
- An exterior deck has been added from the boardroom onto the roof.

Mechanical and Electrical Systems

- The gas meter location has changed to the south end of the building subject to Fortis approval.

Garbage and Recycling Facility

- The internal organization of the garbage and recycling carts have been rearranged and a new garden shed feature added to the area.

Landscape Design

- The space to be occupied by Phase 2 will be temporarily landscaped for use as an outdoor supervised play area. It will be partially enclosed by a hedge.
- The number of proposed trees will be increased to 62 from the original 56 trees.
- The overall quantity of shrub and ground cover plants will be reduced by 510 plants with the 4,183 plants being redistributed. The species mix has also been revised.
- Seven bollard lights have been removed from the site plan.
- A dry creek swale originally planned along the perimeter fence adjacent to the east dike has been replaced with a grass swale.
- Model changes for garbage receptacles.

A revised Development Application Data Sheet is provided in Attachment 1, with Phase 1 construction statistics.

Analysis

Design Intent

The changes outlined in this report are significant but necessitated by funding concerns experienced by the proponents of the PAFC facility. In making the changes the proponents have made efforts to retain many aspects of the original design intent of the project. Specifically:

- Accessibility and Orientation;
- Flexibility and Adaptability;
- Expression and Materials;
- Opportunities and support for chance meeting/discussion;
- Energy, Sustainability and Environmental goals; and
- Durability and Maintenance.

The Architect has advised that the range of exterior materials originally selected will remain unchanged. The overall layout of the project in terms of building orientation, parking layout, general massing and operation will remain generally the same, with the noted exception that the recreation centre's construction will be undertaken at an as yet undetermined date and a separate Development Permit application will be required.

The proposed revisions, which include the elimination of the recreation centre, will be addressed, with extensions of wood siding on the exposed facade that will blend in with the rest of the building. Additional perimeter landscaping will be planted to create a more defined edge to the interim space.

Development Permit Considerations

The Development Permit Considerations originally agreed to by the applicant through the original staff report dated April 28, 2014 remain unchanged and the proponent has completed and registered the required legal agreements for landscaping requirements, aircraft noise indemnification, and provision of Transportation Demand Measures with the Provincial Land Titles Office. A legal agreement has been registered on title to ensure that no final Building Permit inspection is granted until the required landscaping has been installed or a $226,193.00 landscape security has been submitted.

No additional Development Permit requirements will be required as a result of the changes outlined in this report and the accompanying plans.

Conclusions

Staff recommend support for the amended Development Permit to allow the construction of the Pacific Autism Family Centre as outlined in the accompanying plan submission.

David Brownlee
Planner 2

DCB:cas

City of Richmond

Development Application Data Sheet

Development Applications Division

DP 13-645579 **Attachment 1**

Address: 1001 Hudson Avenue

Applicant: NSDA Architects on behalf of the Pacific Autism Family Centre Foundation

Owner: Pacific Autism Family Centre Foundation

Planning Area(s): Sea Island

Floor Area Gross: 5,262 m^2 (56,642 ft^2) Floor Area Net: 4917.4 m2 (52,931.1 ft^2 Ph 1 only)

	Existing	Proposed
Site Area:	9,310 m^2	9,310 m^2
Land Uses:	Office Parking	Health Service, Minor
OCP Designation:	Commercial	No change
Zoning:	Auto-Oriented Commercial (ZC10) – Airport and Aberdeen Village	No change

	Bylaw Requirement	Proposed	Variance
Floor Area Ratio:	0.85	0.53 (net Phase 1 only)	none permitted
Lot Coverage:	Max. 55%	24.3%	None
Setback – West Property Line: (no other building setbacks are required)	Min. 7.0 m	7.0 m	None
Parking Setback from a lot line (Zoning Bylaw sec. 7.5.17)	Min. 1.5 m	0 m along a portion of the northern property line.	Variance from 1.5 m to 0 m
Building Height (m):	Max. 20.0 m	17.9 m	None
Lot Size:	No minimums	9,310 m^2	None
Off-street Parking Spaces – Accessible:	2 spaces (2% of 95)	2 spaces	None
Off-street Parking Spaces – Regular/Commercial:	101 spaces	95 plus Transportation Demand Measures (TDM)	None since supply is within 10% and TDM measures will be applied per Zoning Bylaw
Loading Stalls	Medium: 2 Large: 1	Medium: 2 in shared configuration Large: 1	None
Bicycle Stalls	Class 1: 14 Class 2: 10	Class 1: 14 Class 2: 16	None

City of Richmond

Report to Development Permit Panel

To:	Development Permit Panel	**Date:**	April 28, 2014
From:	Wayne Craig Director of Development	**File:**	DP 13-645579
Re:	**Application by NSDA Architects on behalf of the Pacific Autism Family Centre Foundation for a Development Permit at 1001 Hudson Avenue (formerly part of 3600 Lysander Lane)**		

Staff Recommendation

That a Development Permit be issued which would:

1. Permit the construction of a 5,553m^2 building for treatment of, and education about, Autism Spectrum Disorder at 1001 Hudson Avenue on a site zoned "Auto-Oriented Commercial (ZC10)) – Airport and Aberdeen Village"; and
2. Vary the provisions of Richmond Zoning Bylaw 8500 to reduce the minimum commercial parking spaces setback (Zoning Bylaw s 7.5.17) from 1.5 metres to zero metres along the northern lot line.

Wayne Craig
Director of Development

WC:dcb

Staff Report

Origin

NSDA Architects, on behalf of The Pacific Autism Family Centre Foundation, has applied to the City of Richmond for permission to develop 1001 Hudson Avenue in order to construct a 5,553 m^2 building for treatment of and education about Autism Spectrum Disorder. The site is currently zoned "Auto-Oriented Commercial (ZC10) – Airport and Aberdeen Village". The development site is currently vacant of any structures.

The proposed development will be a purpose built facility that seeks to address the significant needs of their clients.

"The Pacific Autism Family Centre (PAFC) is designed to respond to the challenge of Autism Spectrum Disorder (ASD) in British Columbia. Its core purpose is to be a provincial knowledge centre that incorporates state of the art resources for research, information, learning assessment, treatment and support in order to build capacity for addressing the lifespan needs of individuals with ASD and their families across British Columbia. The concept for this centre involves both a new building in Richmond and services in regions across the province through a 'hub, spoke and satellite' framework." (NSDA, Advisory Design Panel Submission Oct 16, 2013).

The Richmond facility will include:

• Knowledge centre	Training, meeting and counselling rooms, video conference facilities etc.;
• Information centre	Counselor and advisor work spaces, education programs, information resources, etc.;
• Lifespace centre	Skills classrooms, computer training lab for youths and adults, etc.;
• Recreation centre	A half court gym, fitness area, changing facilities, etc.;
• Clinic & research centre	Medical and psychological assessment, observation rooms, a laboratory and other research resources, family meeting rooms, etc.; and
• Treatment centre	Space for 30 children ages 3 to 10 for assessment, motor training, music/art, observation, etc.

The facility will also contain a cafeteria, staff facilities, administration areas, partner agency rooms and a multipurpose room that will facilitate evening lectures or events.

The PAFC proponents have funding commitments totalling approximately $28 million dollars from private and government sources for this project. The PAFC concept was presented by a delegation to General Purposes Committee on June 3, 2013.

Development Information

Please refer to attached Development Application Data Sheet (Attachment 1) for a comparison of the proposed development data with the relevant Bylaw requirements.

The 9,310 m^2 development site was recently subdivided (SD 13-634340) from the parent property (3600 Lysander Lane) and is located between Cessna Drive and the middle arm of the Fraser River and between Hudson Avenue to the north and Boeing Avenue to the south. The subject site is now owned by the Pacific Autism Family Centre (PAFC) Foundation- a non-profit organization. The development site had previously been used as a parking lot.

The site's existing grade varies from approximately 2.6 m GSC to 4.42 m GSC. As the minimum habitable floor elevation at the subject location is 4.35 m GSC the applicant proposes to raise the site's grade to bring the main floor of the new facility up to 4.7 m GSC. This will also create a better transition between the proposed building and the adjacent outdoor courtyards, play areas and a future dike that will be built along the foreshore area of the property.

The wood frame building will be oriented in a north-south direction and will have somewhat of a stepped massing appearance with the two ends of the structure more closely representing two storeys in height, while the central portion of the building will be a full three storeys in height. The building's appearance will be visually broken up through articulation and variations in the facade materials and glazing.

Secure vegetated court yards and play areas will be located only on the eastern side of the building to reduce traffic and aircraft noise to these areas.

The proposed 5,553 m^2 building is being designed to LEED silver equivalency and incorporates numerous sustainability features to maximize heating and water use efficiencies, conserve electrical energy, provide a high quality interior air supply and ensure a good indoor environmental quality.

Two primary pedestrian entrances to the building are proposed;

- One oriented toward Hudson Avenue closest to temporary parking and a covered drop off area provided by a second floor building projection; and
- One off the main parking area between the building and Cessna Drive that provides more direct access to treatment and education areas.

Two vehicle access entrances are provided to the site, both connecting to Hudson Avenue. A large loading space, shared with two medium loading spaces, is located at the north-eastern corner of the building.

The first two floors of the building will be oriented to the needs of the autism clients while the third floor will be designed for administration and staff facility uses. Interior spaces will be child-friendly with features such as reduced risers on steps and lower height handrails, soft rounded corners on furnishings in play areas, etc. Extensive use of various glazing materials will serve to provide soft, non-glare natural lighting complimenting more neutral colors to create calming, inviting interior spaces.

As a principle source of funding stems from the Provincial Government, the building is being designed to pay close attention to the requirements of the Province's Wood First program. Exterior materials will use combinations of stained wood, laminate panels, metal panels and various forms of translucent and clear glazing. Interior spaces will also make extensive use of wood in structures such as laminated beams and wood columns.

The key structural components and the exterior building envelope will be designed for a 60 year service life.

The proposed Pacific Autism Family Centre (PAFC) is classified as a "minor health service" use which is permitted under the site's existing "Auto-Oriented Commercial (ZC10) – Airport and Aberdeen Village" zoning – consequently a Rezoning is not required.

Background

Development surrounding the subject site is as follows:

- To the north, a 19.28 m high office building at 3600 Lysander Lane on a 20,555 m^2 site zoned "Auto-Oriented Commercial (ZC10)". North of Lysander Lane is the Delta Vancouver Airport Hotel on a 3.04 ha. site zoned "Auto-Oriented Commercial (CA)";
- To the east, Fraser River – middle arm;
- To the south, Boeing Avenue and the 4.94 ha. BC Institute of Technology Sea Island aerospace campus (zoned "Education (ZIS6 – BCIT at Airport)" and;
- To the west is Cessna Drive, Russ Baker Way then the Burkeville residential area (typically large lot single family residential zoned "Single Detached (RS1/E)").

Parent Property Subdivision and Offsite Requirements
As previously noted, the PAFC site was subdivided off the parent property (3600 Lysander Lane) under a separate Subdivision application (SD 13-634340) by PC Urban Properties Corp. on behalf of the original land owner, Lysander Holdings Ltd. Through that Subdivision all the off-site improvements and on-site dike right of way and dike construction provisions were addressed.

The improvements resulting from the Subdivision include:

- A new 1.5 m asphalt walkway and grass boulevard along the entire parent property frontage with Cessna Drive with a step connection to the dike trail at Boeing Avenue;
- Storm, sanitary and water connection installations for the PAFC site;
- Registration of public passage to extend access from Hudson Avenue eastward up to the proposed dike right of way;
- The existing 10m wide dike right of way along the Fraser River foreshore has been increase to approximately 17.5 m between Boeing Avenue and Lysander Lane allowing for future dike expansion;
- A new 10 m wide dike right of way placed in parallel with Boeing Avenue to create a link between the foreshore dike and an existing dike that runs through the BCIT Aerospace campus to the south;

- New dike construction is to be undertaken on the PAFC site within both the foreshore dike and the 10m wide dike SRW paralleling Boeing Avenue; and
- A new public trail will run the entire length of the dike right of way between Cessna Drive and Lysander Lane.

Impacts to the perimeter foreshore trees resulting from the proposed dike construction have been addressed through a separate Environmentally Sensitive Area (ESA) Development Permit (DP13-637525 – approved by Council November 12, 2013). Compensation planting for ESA impacts related to the proposed dike construction has been secured through that application.

Dike Setback and Construction Requirements
Having considered the addition of the two proposed dike SRWs, the raising of the development site behind the dike and the PAFC's proposed building placement, the Provincial Diking Authority has agreed to waive the standard 7.5m building setback required under the Province's "Flood Hazard Area Land Use Management Guidelines" (correspondence January 24, 2014).

A site specific exemption under Part Five of the City's "Flood Plain Designation and Protection Bylaw 8204" has also been granted by the Senior Manager, Building Approvals under the Bylaw's site specific exemption provisions reducing the required dike setback from the two new SRWs from 7.5m to zero metres. Both these actions were undertaken as part of the Subdivision approval process and are reflected in the proponent's current Development Permit submission.

On March 12, 2014, the Provincial Deputy Inspector of Dikes with the Ministry of Forests, Lands and Natural Resource Operations issued an approval of the dike design for this site under the Dike Maintenance Act.

Rezoning and Public Hearing Results

As the proposed use conforms to the existing "Auto-Oriented Commercial (ZC10) – Airport and Aberdeen Village" zoning, neither a Rezoning nor a Public Hearing are required for this project.

Staff Comments

The proposed scheme attached to this report has satisfactorily addressed the urban design issues and other staff design comments identified as part of the review of the subject Development Permit application. In addition, it complies with the intent of the applicable sections of the Official Community Plan and is generally in compliance with the "Auto-Oriented Commercial (ZC10) – Airport and Aberdeen Village" zoning schedule except for the zoning variances noted below.

Zoning Compliance/Variances (staff comments in **bold**)

The applicant requests to vary the provisions of Richmond Zoning Bylaw 8500 to:

1) Reduce the minimum commercial parking spaces setback (Zoning Bylaw s 7.5.17) from 1.5 metres to zero metres along the property's northern lot line.

Staff supports the variance to reduce the minimum parking spaces setback from the northern lot line as this allows perpendicular parking off the public access drive aisle

provided by the property to the north. The resulting parking layout allows for the entire building to be shifted northward away from the lot's southern property boundary and the 10 m wide dike right of way required by the City. Staff note that the public access drive aisle is not a through road since it terminates at the dike and therefore the only traffic using the drive aisle will be vehicles accessing the Pacific Autism Family Centre facility. Transportation staff have reviewed and agreed to the site design.

Advisory Design Panel Comments

The Advisory Design Panel supported moving the application to the Development Permit Panel subject to the applicant giving consideration to the comments of the Panel. A copy of the relevant excerpt from the Advisory Design Panel Minutes from October 23, 2013 is attached for reference (Attachment 2). The design response from the applicant has been included immediately following the specific Design Panel comments and is identified in '***bold italics***'.

Analysis

Conditions of Adjacency

- As proposed, the general building form and massing will comply with OCP form and character guidelines.
- The overall appearance of the building will complement the office building to the north (Lysander Holdings Ltd. office building) and the aerospace educational facility the south (BCIT Aerospace facility). Representatives from both Lysander Holdings and BCIT have advised City staff that they support the proposed design and use.
- With respect to the dike to the east, the facility's main floor and the assorted open space areas will be set at the same level of the dike. This provides a friendlier interface with the dike.
- With respect to the development to the south, there is a significant distance between the two developments and includes a dike trail connection as well as a thick forest along Boeing Avenue.
- To the west, neither Russ Baker Way nor Cessna Drive will be impacted by the proposed development. Landscape screening using tall evergreen shrubs and trees (i.e. Russian Laurel and Red Sunset Maples) will be provided.
- Sensitive natural habitat located between the subject site and the Middle Arm of the Fraser River will be retained and enhanced under a separate Development Permit (DP 13-637525) – approved by Council November 12, 2013. Protective fencing has been required prior the undertaking of dike works as part of that Development Permit.
- The building has been setback from Cessna Drive by 7 m addressing Zoning Bylaw requirements. It will also be setback 7 m from the northern property line, 10 m from the southern property line and generally respects a 17.5 m dike right of way along its eastern side.

Urban Design and Site Planning

- The layout of the site in terms of pedestrian and vehicular access, building placement, open space, parking and loading locations and the overall relationship to the dike is supported by staff. Although the design guidelines suggest that parking should be located at the rear of the property, in this case, it is preferable to locate the parking as proposed because:
    - The dike experience will be more attractive bordered by the open spaces and the proposed building than bordered by surface parking;

  - The proposed building is being used to screen the adjacent open spaces from the noise of the airport operations and Russ Baker Way – this is a more desirable situation from the perspective of the facility's clients; and
  - Parking is the site use that is least impacted by noise from the airport and Russ Baker Way.
- Vehicle access will be provided directly from Hudson Avenue and secondarily through a public access area shared with the property to the north (3600 Lysander Lane). The two vehicle accesses will provide an alternative access in the event of an emergency.
- A pedestrian walkway will link the PAFC building to the frontage sidewalk along Cessna Drive allowing safe and convenient access to the nearby bus stop.

Parking and Loading

- Off-street parking rates relevant to the specific and unique uses proposed for the subject site are not covered by the Zoning Bylaw (Bylaw 8500). To facilitate an understanding of the parking rates that would appropriately apply to this project the applicant retained Bunt and Associates to conduct a parking study for this development. Transportation staff reviewed the study and support it findings and the associated Transportation Demand Management (TDM) measures outlined below.
- The site's parking requirements will be met through provision of 95 parking stalls plus implementation of Traffic Demand Measures (TDM).
- The Transportation Demand Measures (TDM) package is being provided to include the following:
  - An electrical outlet in the Class 1 (employee) bike storage for electric bicycle/scooter charging.
  - End of trip cycling facilities for employees - lockers, changing room and shower.
  - Installation of 120 volt receptacles for electric vehicle charging equipment will be provided in 5 parking spaces (approximately 5% of parking spaces).
- Four handicapped stalls will be located in close proximity to the building entrances.
- Fourteen Class 1 and sixteen Class 2 bike stalls are proposed meeting Zoning Bylaw 8500 requirements. The long term (Class 1) bicycle parking will be accommodated in secure storage rooms within the building while the short term (Class 2) bicycle parking will be accommodated with bicycle racks – typically outside.
- The proposed site plan will meet the City's Zoning Bylaw (No. 8500) requirements for a minimum of fifty percent standard parking spaces.
- A single large sized loading space will be provided on site that can be shared by two medium sized loading spaces. During the site's normal operations the large loading stall would only occasionally be used with the majority of the loading needs being met by the medium stalls.
- A consolidated trash and recycling area has been located in the vicinity of the facility's loading bay. Containers will be pulled out from the covered roof when being picked up for disposal.
- The proposed overall parking and loading configuration and vehicle stall numbers are supported by Bunt's transportation assessment of the proposed uses within the facility.

Architectural Form and Character

The building massing, formed from a number of stacked and colliding boxes, articulates the different building functions and provides visual interest when viewed from all angles. These

"boxes" will be clad and detailed using a variety of materials and colours further enhancing the visual interest of the building.

The extensive use of wood as cladding material will also provide a facade that is more appropriate for the use of the proposed building. In addition it will provide a pleasant counterpoint to the adjacent developments which are primarily clad in glass and metal.

Additional features that contribute to the building's form and character include the following:

- The building will be oriented in a north-south orientation with the main mass reaching17.5 m in height and the gymnasium section dropping to approximately 6.75 m in height.
- Low building extensions are to be placed to enhance three court yards / outdoor play spaces.
- Two multimedia rooms on the second floor of the north end of the building have been extended over the internal drive aisle creating a covered drop off area near the main entrance.
- The building will be well articulated incorporating projections, varying setbacks and variations in height and materials to create a distinctive character and form.
- The exterior materials palate is proposed to include several shades of stained wood cladding, metal siding, five different types of glass (both clear and translucent) and engineered wood panels. Metal and wood sunshades will be employed at key locations around the building and prefinished metal louvers are used to screen rooftop mechanical structures when viewed from all sides.
- Demountable sunshades project 1.2 m into the western side yard setback along a portion of gymnasium and along the eastern side of the building. These projections are permitted under the Zoning Bylaw (sec 4.12.3) and have been accommodated within the registered dike Right Of Way agreement.
- Considerable attention has been paid to orient the design to its client's needs. Interior design will be kept free of patterns and ornamental detail preferring instead to calming neutral colours, sound absorbing finishes, and an abundance of natural, non-glare lighting. Child friendly features such as low height hand rails on stairs with reduced height risers and contained play areas are all incorporated into the design. Play areas will be furnished with soft rounded corners and the building and the exterior areas will be secured to ensure that children cannot leave the facility unattended.

Landscape Design and Open Space Design

An Arborist's report was prepared by Diamond Head Consulting Ltd. (updated August 29, 2013) and is on file. Forty-nine onsite trees were identified through the site survey. The species mix included Black Cottonwood (36), Black Pine (5), Cherry (1), Norway maple (3), Paper birch (1) and Red Alder (3). Of these, 17 trees were non-Bylaw sized trees and 2 Bylaw sized trees were classed as hazard trees. All of the trees were identified as needing to be removed due to conflicts with the proposed building, parking area or the dikes.

A variety of landscape measures are proposed to both enhance the development and contribute to the surrounding area. Included are:

- Twenty six bylaw sized trees will be removed from the subject site. Fifty two replacement trees are proposed – the majority of the replacements are to be 6 cm calliper or greater for deciduous and 3.5m high or greater for coniferous – the only exceptions being 3 Fireglow

Japanese Maples and 2 Colorado Blue Spruce which will both be 2.5 m high. The OCP tree replacement requirement ratio of 2:1 will be met.

- A detailed landscaping plan is provided incorporating trees, shrubs groundcovers perennials and grasses. The landscaping scheme will line the site perimeter, break up extended parking areas and accentuate the three outdoor sitting/play areas along the south side of the building.

Open space for the facility will be provided as outdoor gardens:

- The outdoor gardens will be arranged to accommodate different uses including;
- A family courtyard inclusive of a raised agricultural garden, benches and tables, deciduous trees, etc. as a quiet space for all users;
- An outdoor courtyard for tots ages 3-5 inclusive of an active play structure, resilient rubber surfacing safe play areas, shade trees and quiet zones;
- An outdoor courtyard for children ages 5 -10 inclusive of active play equipment, activity panels, plant materials selected for colour, texture, fragrance and seasonal change;
- An outdoor gym court providing gym and fitness activities outside when weather permits;
- An outdoor rooftop cafeteria patio with views to the Fraser River foreshore.

Perimeter fencing along the east side of the property is proposed to have articulated sections to avoid long runs. This will be enhanced with vegetation strips along both sides of the fence. Visual breaks into the site will be incorporated at key locations along the perimeter fence. This perimeter fencing is necessary for both security and safety reasons.

Sustainability Features

The applicant has prepared the following sustainability measures which address the sustainability objectives of the OCP:

- The building is proposed to be built to LEED silver equivalent standards and will include features such as a high efficiency boiler plant, electrical energy conservation measures, a central heat recovery ventilation system, radiant floor heating/cooling, low flow faucets, low flush toilets, etc.
- A storm water management plan will be developed for the site (still under development).
- Plumbing fixtures will be selected to reduce indoor potable water use by at least 30%.
- Drought tolerant plant materials and a water efficient landscaping design will aim to reduce outdoor water use by 50%.
- A high-performance building envelope will be incorporated to assist in achieving energy efficiency 40% better than the ASHRAE 90.1 (2007) standard.
- The proponent has committed to diverting at least 75% of the demolition, land-clearing and construction waste from the landfill.
- Five parking stalls are proposed to be equipped with 120 volt electric vehicle charging plug-ins (this is a TDM measure).
- An electrical outlet is proposed in the Class 1 (employee) bike storage for electric bicycle/scooter charging (this is a TDM measure).

Crime Prevention Through Environmental Design(CPTED)

Staff believe CPTED objectives are being met by the following measures:

- Secured entry doors will be used around the building.
- All parking areas will be visible from within the building and the main entrance ways.

- A combination of solid wood and metal fencing will be installed adjacent to the dike right of way along the east side of the building. This will allow some open space areas to be selectively screened from passersby while other areas will have view lines through. The fencing will afford secure areas for autistic children to play and interact with others.
- A mixture of post top lighting, bollard lighting and soffit lighting will be used to illuminate the parking areas. Cut-offs may be employed to prevent glare to the adjacent roadway if required.
- The main entrances to the building will be highly visible to the adjacent parking areas.

Aircraft Noise

- Richmond's Official Community Plan does not identify the subject property as being subject to the City's aircraft noise policies. Irrespective, the proponent's have had an analysis undertaken by an acoustics specialist who has assessed the site and determined that the aircraft noise levels are acceptable for the proposed use.
- Sound absorbing finishes will be incorporated into the building to attenuate a variety of extraneous noise.
- Mechanical systems will be separated from structures and will be acoustically lined.
- Acoustic insulation will be used in the building to address exterior aircraft noise.
- Registration of a aircraft noise covenant on title is included in the Development Permit considerations.

Flood Construction Level

- A flood construction level of 4.35m GSC is required for habitable areas on the subject site. The proposed plans indicate that the minimum floor elevation of the buildings will be 4.7 m GSC in order to match the proposed dike construction elevation.

Conclusions

Considerable effort has been made by the proponent to design a facility that will address the specific needs of their future clients and provide an attractive addition to the area. The design has been well received by Richmond's Advisory Design Panel and specific concerns identified through the review process have all been appropriately addressed.

The variance being sought allowing an elimination of the parking spaces setback along the northern lot line has been reviewed by Transportation staff specifically and has been determined to be acceptable given the road end scenario and the limited number of vehicles that will access that location.

Staff recommend support for the Development Permit to allow construction of a new Autism care facility as outlined in this report and the accompanying plan submission.

David Brownlee
Planner 2
DCB:cas

The following are to be met prior to forwarding this application to Council for approval:

- Registration of a legal agreement on Title to ensure that no final Building Permit inspection is granted until the required landscaping as outlined in DP 13-645579 has been installed to the satisfaction of the Director of Development or a landscape security in the amount of $226,193.00 inclusive of a 10% contingency cost based on the Landscape Architect's estimate dated January 29, 2014, has been submitted to the City.
- Registration of an aircraft noise indemnity covenant on title.
- Registration of a legal agreement for the provision of TDM measures as outlined in the staff report for DP 13-645579 and identified below:
  - An electrical outlet in the Class 1 (employee) bike storage for electric bicycle/scooter charging.
  - End of trip cycling facilities for employees - lockers, changing room and shower.
  - Installation of 120 volt receptacles for electric vehicle charging equipment will be provided in 5 parking spaces (approximately 5% of parking spaces).

Prior to future Building Permit issuance, the developer is required to complete the following:

- The applicant is to provide a letter of assurance that the site specific sustainability measures as identified at Development Permit will be incorporated/ provided. A LEED silver equivalent checklist is to be submitted.

- The applicant is to provide a letter of assurance that the Transportation Demand Measures as identified below will be incorporated/ provided:
  - An electrical outlet in the Class 1 (employee) bike storage for electric bicycle/scooter charging.
  - End of trip cycling facilities for employees - lockers, changing room and shower.
  - Installation of 120 volt receptacles for electric vehicle charging equipment will be provided in 5 parking spaces (approximately 5% of parking spaces).

- The applicant is required to obtain a Building Permit for any construction hoarding associated with the proposed development. If construction hoarding is required to temporarily occupy a street, or any part thereof, or occupy the air space above a street or any part thereof, additional City approvals and associated fees may be required as part of the Building Permit. *For further information on the Building Permit, please contact Building Approvals Division at 604-276-4285.*

- 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.

- Submission of a construction traffic and parking management plan to the satisfaction of the City's Transportation Division (http://www.richmond.ca/services/ttp/special.htm).

City of Richmond

Development Application Data Sheet

Development Applications Division

DP 13-645579 **Attachment 1**

Address: 1001 Hudson Avenue

Applicant: NSDA Architects on behalf of the Pacific Autism Family Centre Foundation

Owner: Pacific Autism Family Centre Foundation

Planning Area(s): Sea Island

Floor Area Gross: 5,553 m^2

	Existing	Proposed
Site Area:	9,310 m^2	9,310 m^2
Land Uses:	Office Parking	Health Service, Minor
OCP Designation:	Commercial	Same
Zoning:	Auto-Oriented Commercial (ZC10) – Airport and Aberdeen Village	Same

	Bylaw Requirement	Proposed	Variance
Floor Area Ratio:	0.85	0.58	none permitted
Lot Coverage:	Max. 55%	29.2%	None
Setback – West Property Line: (no other building setbacks are required)	Min. 7.0 m	7.0 m	None
Parking Setback from a lot line (Zoning Bylaw sec. 7.5.17)	Min. 1.5 m	0 m along a portion of the northern property line.	Variance from 1.5m to 0m
Building Height (m):	Max. 20.0 m	17.9 m	None
Lot Size:	No minimums	9,310 m^2	None
Off-street Parking Spaces – Accessible:	2 spaces (2% of 95)	2 spaces	None
Off-street Parking Spaces – Regular/Commercial:	101 spaces	95 plus Transportation Demand Measures (TDM)	None since supply is within 10% and TDM measures will be applied per Zoning Bylaw
Loading Stalls	Medium: 2 Large: 1	Medium: 2 in shared configuration Large: 1	None
Bicycle Stalls	Class 1: 14 Class 2: 10	Class 1: 14 Class 2: 16	None

Attachment 2

Excerpt from the Minutes from

The Design Panel Meeting

Wednesday, October 23, 2013 – 4:00 p.m.
Rm. M.1.003
Richmond City Hall

4. DP 13-645579 – THE PACIFIC AUTISM FAMILY CENTRE FOUNDATION PROPOSES TO CONSTRUCT A 61,270 SQ.FT. BUILDING FOR TREATMENT AND EDUCATION OF AUTISM

APPLICANT: NSDA Architects

PROPERTY LOCATION: 3600 Lysander Lane

Applicant's Presentation

Larry Adams and Garth Ramsey, NSDA Architects, and Rob Barnes presented the project and answered queries from the Panel on behalf of the applicant.

Panel Discussion

Comments from the Panel were as follows:

- very clever plan; like the massing, articulation and materials; concern on how the facility will operate;
- appreciate the details provided on the electrical and mechanical aspect of the project;
- applicant has incorporated sustainable features in the building; building is energy efficient and has a good passive design; LEED Silver standard objective may be too conservative;
- good architecture; challenging program of the centre has been addressed well by the architecture of the building; the building would be a welcome addition to the neighbourhood;
- challenges facing the proposed development are handled well;
- great addition to the area; hope that the actual development will reflect the renderings more than the model;
- like the use of diffuse lighting and different types of glazing to create a softer lighting;
- good view of the Fraser River makes the location of the building suitable for its intended use;

- the proposed development is close to the airport and fire hall; however, it fits well into the neighbourhood;
- the landscape is well resolved;
- good architecture; hope that the building will function well; appreciate the energy efficiency of the building;
- concern on the back roof and the parkade in front; consider screening to isolate the building from the asphalt; and
- good use of the site; would be a good addition to the area; hope that the proposed development functions well.

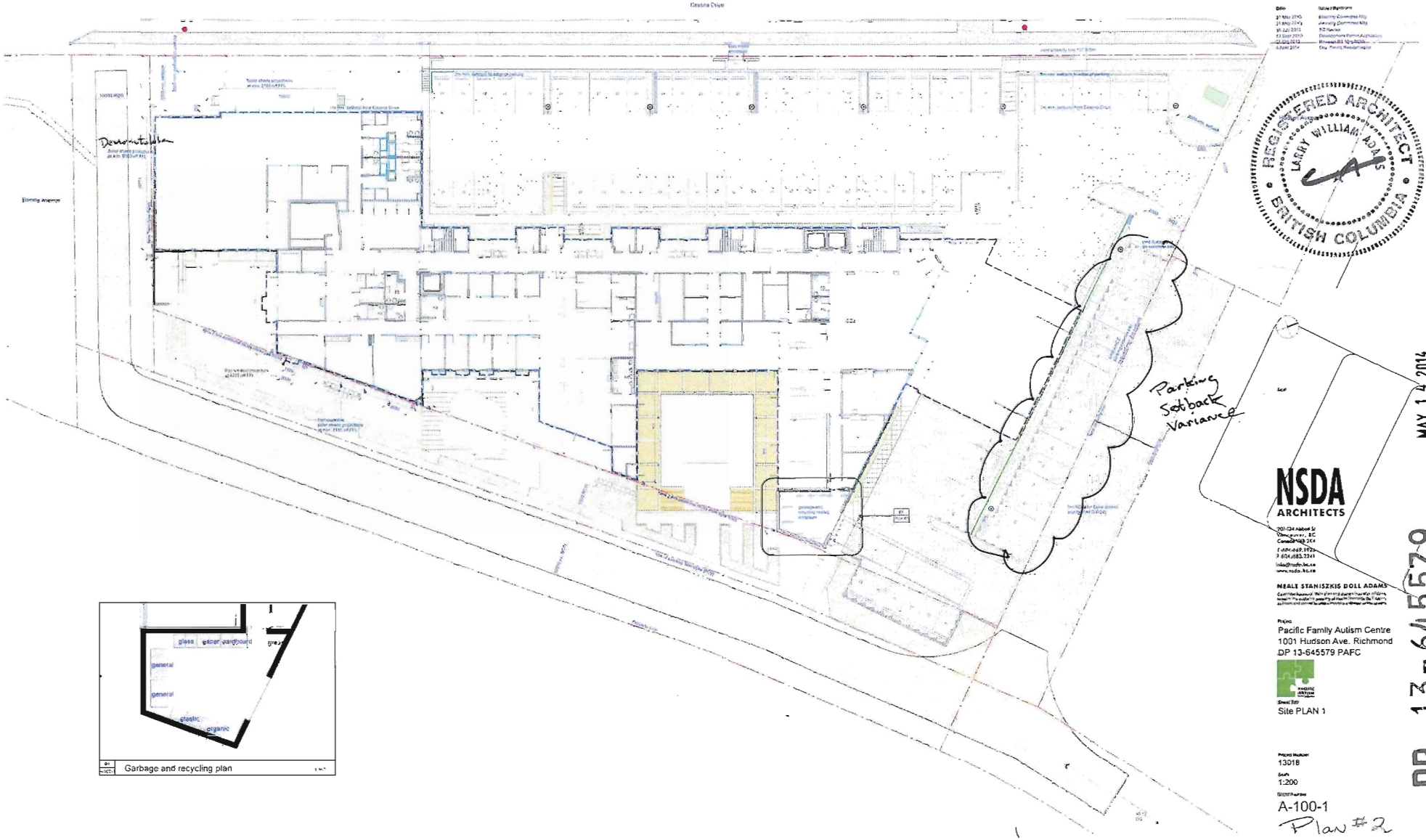
Panel Decision

It was moved and seconded
That DP 13-645579 be supported to move forward to the Development Permit Panel subject to the applicant giving consideration to the comments of the Panel.

CARRIED

NSDA response to Design Panel comments:

The project use and overall design characteristics seem to have been well received by the panel. Screening of parking and the adjacent Russ Baker Way has been incorporated as mentioned.



Garbage and recycling plan

REGISTERED ARCHITECT
LARRY WILLIAM ADAMS
BRITISH COLUMBIA

MAY 14 2014

DP 13-645579

NSDA
ARCHITECTS

NEALE STANISZKIS DOLL ADAMS

Project
Pacific Family Autism Centre
1001 Hudson Ave. Richmond
DP 13-645579 PAFC

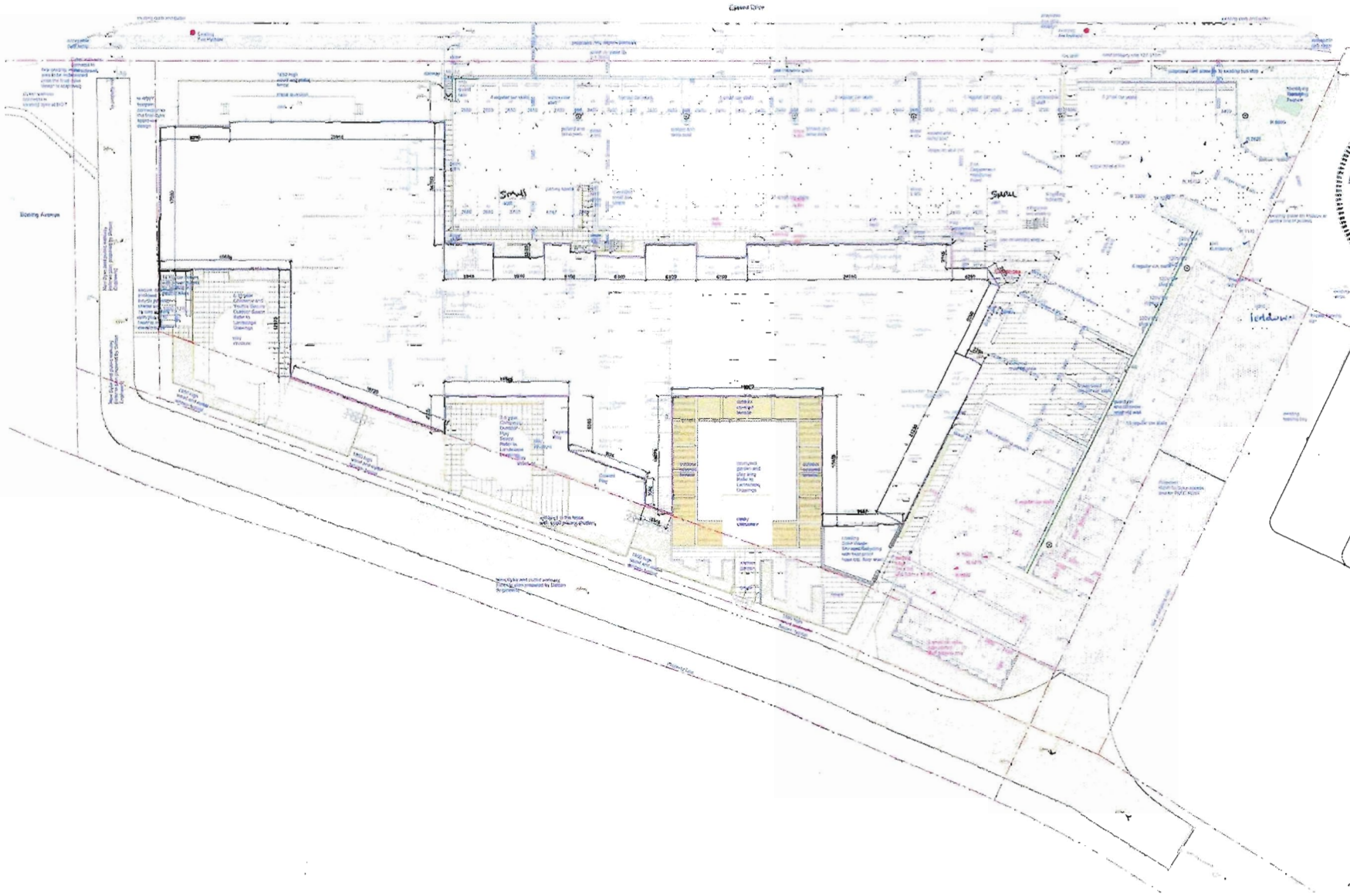
Sheet Title
Site PLAN 1

Project Number
13018

Scale
1:200

Sheet Number
A-100-1

Plan #2



REGISTERED ARCHITECT
LARRY WILLIAM ADAMS
BRITISH COLUMBIA

MAY 14 2014

NSDA
ARCHITECTS

NEALE STANISZKIS DOEL ADAMS

Pacific Family Autism Centre
1001 Hudson Ave. Richmond
DP 13-645579 PAFC

Site PLAN 2

13018

1:200

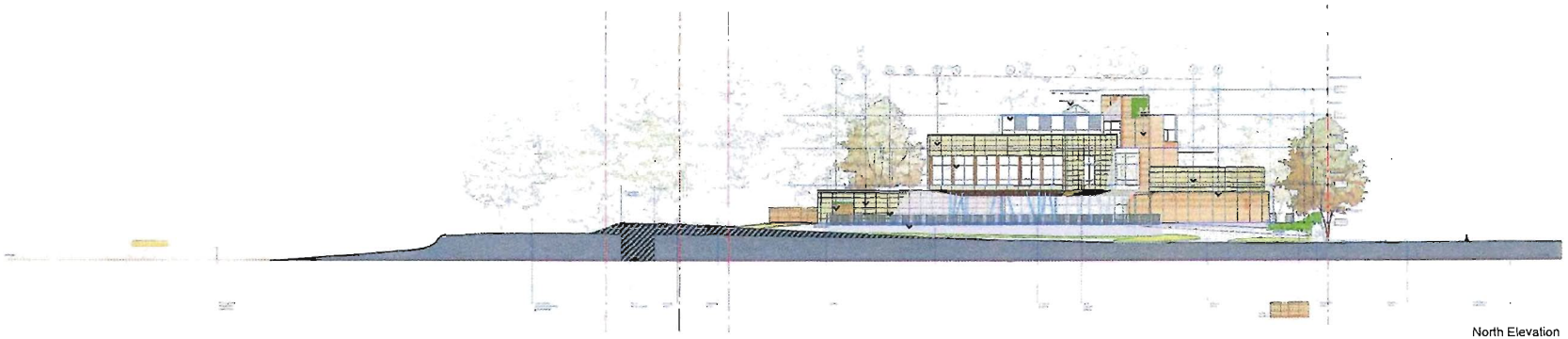
A-100-2

Plan #3

DP 13-645579



East [Fraser River] Elevation



North Elevation

Consultants

Date	Issues / Revisions
21 May 2013	Steering Committee Mtg.
23 May 2013	Advisory Committee Mtg.
23 July 2013	Steering Committee Mtg.
3 September 2013	Development Permit Application
1 October 2013	South ROW revisions
4 April 2014	Revised for Development Permit

MATERIALS

1	Metal Siding
2	Engineered Wood Panels
3	Stained Wood
4	Anodized Aluminum Frames
5	Clear Glass
6	Translucent glazing
7	Patterned Glass (possibly Etched)
8	Spandrel Glass
9	Obscure Glass
10	Translucent insulated panels
11	Galvanized Steel Railing
12	Metal Sunshade
13	Wood Sunshade
14	Prefinished Metal Louvres
15	Architectural Concrete

Note:
Finishes were generally allowed below
final location for the benefit of clarity

MAY 14 2014

REGISTERED ARCHITECT
LARRY WILLIAM ADAMS
BRITISH COLUMBIA

NSDA
ARCHITECTS
201-134 Abbott St
Vancouver, BC
Canada V6B 2K4
T 604.669.1976
F 604.683.3343
info@nsda.bc.ca
www.nsda.bc.ca

NORTH STAMFORD DEVELOPMENT
Copyright Reserved. This plan and design is and at all times remains the exclusive property of North Stamford Development and cannot be used without the consent of the architect.

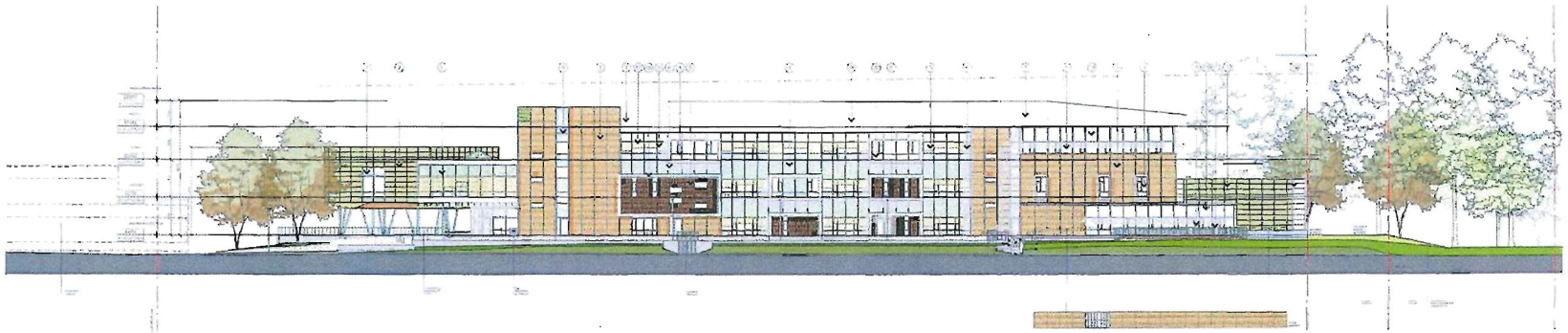
Project
Pacific Autism Family Centre
Cessna Drive Richmond
DP 13-645579 PAFC

Sheet Title
East and North
Elevations

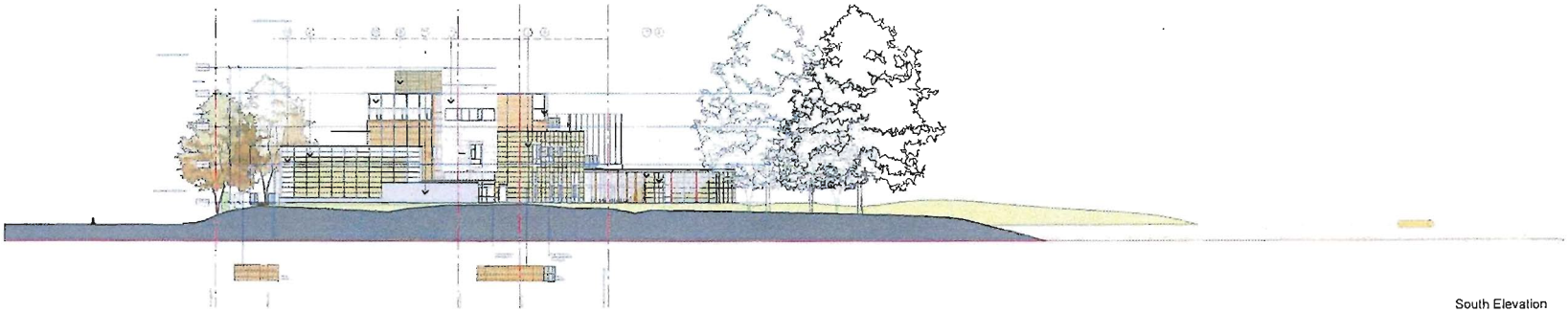
Project Number
13018
Scale
1:250
Sheet Number
A-401

Plan #4

DP 13-645579



West [Cessna Drive] Elevation



South Elevation

Consultants

Date	Issue / Revisions
2	May 2013 Steering Committee Mtg
31	May 2013 Advisory Committee Mtg
26	July 2013 Steering Committee Mtg
3	September 2013 Development Permit Application
1	October 2013 South ROW revisions
4	April 2014 Resubmit for Development Permit

MATERIALS

1	Metal Siding
2	Engineered Wood Panels
3	Stained Wood
4	Anodized Aluminum Frames
5	Clear Glass
6	Translucent glazing
7	Patterned Glass (possibly knted)
8	Spandrel Glass
9	Obscure Glass
10	Translucent insulated panels
11	Galvanized Steel Railing
12	Metal Sunshade
13	Wood Sunshade
14	Prefinished Metal Louvres
15	Architectural Concrete

Note:
Finishes are generally shown below
Shell location for the benefit of clarity

MAY 14 2014

REGISTERED ARCHITECT
LARRY WILLIAM ADAMS
BRITISH COLUMBIA

NSDA
ARCHITECTS
201-134 Abbott St
Vancouver, BC
Canada V6B 2K4
T 604.669.1976
F 604.682.2741
info@nsda.bc.ca
www.nsda.bc.ca

NEALE STASTNEY DOLL ADAMS
Copyright Reserved. This plan and design is and at all times remains the exclusive property of Neale Stastney Doll Adams and cannot be used without the author's written consent.

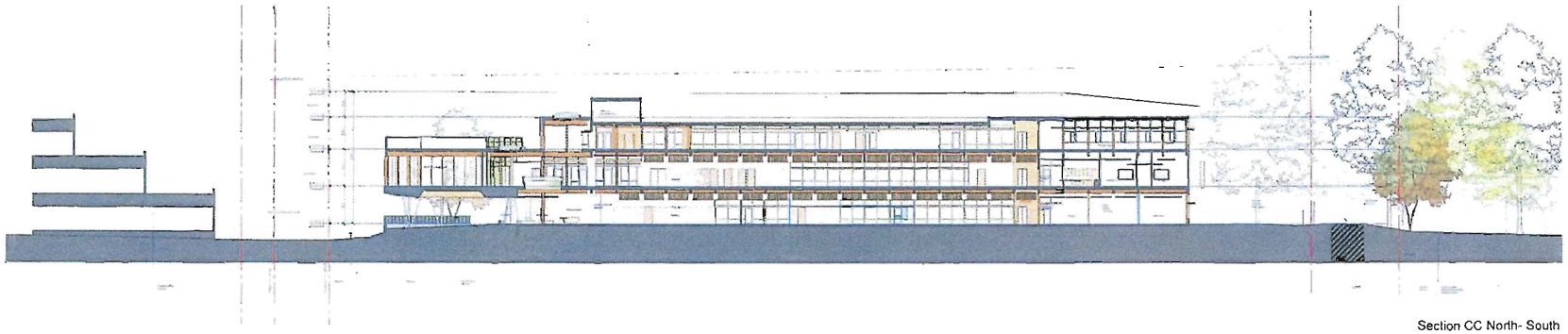
Project
Pacific Autism Family Centre
Cessna Drive Richmond
DP 13-645579 PAFC

Sheet Title
West and South Elevations

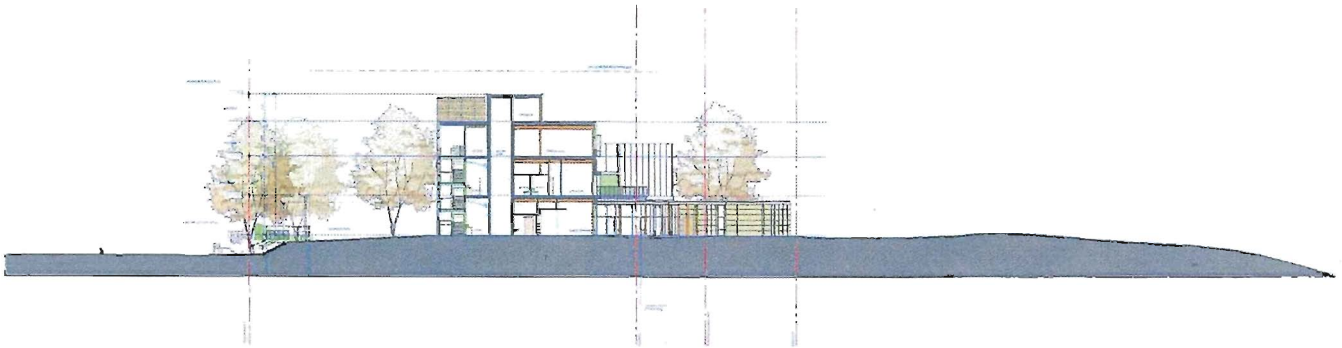
Project Number
13018
Scale
1:250
Sheet Number
A-402

DP 13-645579

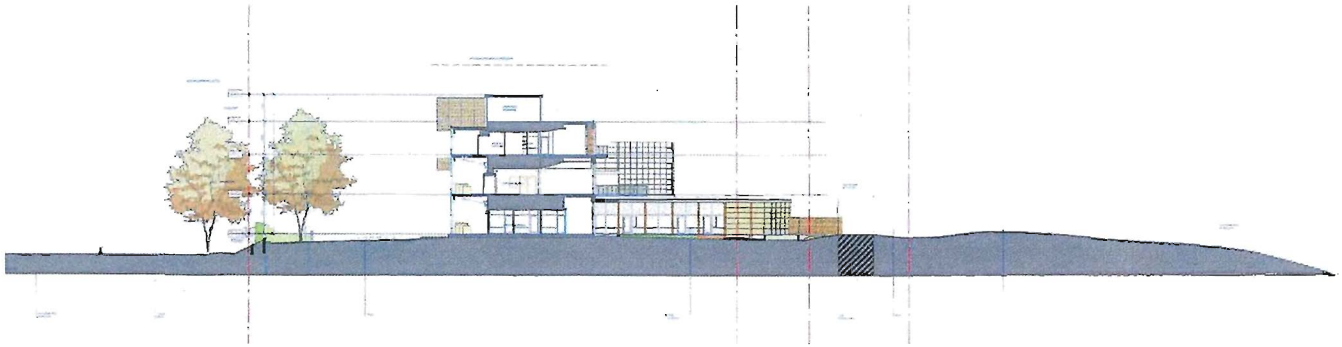
Plan #5



Section CC North- South



Section AA East- West



Section BB East- West

Consultants

Date	Issue / Revisions
31 May 2013	Steering Committee Mtg
31 May 2013	Advisory Committee Mtg
29 July 2013	Steering Committee Mtg
3 September 2013	Development Permit Application
1 October 2013	South ROW revisions
4 April 2014	Revised for Development Permit

MATERIALS

1	Metal Siding
2	Engineered Wood Panels
3	Stained Wood
4	Anodized Aluminum Frames
5	Clear Glass
6	Translucent glazing
7	Patterned Glass (possibly fritted)
8	Spandrel Glass
9	Obscure Glass
10	Translucent insulated panels
11	Galvanized Steel Railing
12	Metal Sunshade
13	Wood Sunshade
14	Prefinished Metal Louvres
15	Architectural Concrete

Note:
Fences are generally not shown for the benefit of clarity

MAY 1 4 2014

REGISTERED ARCHITECT
LARRY WILLIAM ADAMS
PROVINCE OF BRITISH COLUMBIA

NSDA
ARCHITECTS
300-134 Abbott St
Vancouver, BC
Canada V6B 2K4
T 604.669.1928
F 604.683.2241
info@nsda.ca
www.nsda.ca

Copyright Reserved. This plan and design is and at all times remains the exclusive property of Nicola Sinclair Davis Architects and cannot be used without the Architects consent.

Project
Pacific Autism Family Centre
1001 Hudson Avenue Richmond
DP 13-645579 PAFC

Sheet title
Building Sections

Project Number
13018
Scale
1:250
Sheet number
A-403

DP 13-645579

Plan #6

City of Richmond

Development Permit

No. DP 13-645579

To the Holder:	NSDA ARCHITECTS ON BEHALF OF THE PACIFIC AUTISM FAMILY CENTRE FOUNDATION
Property Address:	1001 HUDSON AVENUE
Address:	C/O NSDA ARCHITECTS 201-134 ABBOTT STREET VANCOUVER, BC V6B 2K4

1. This Development Permit is issued subject to compliance with all of the Bylaws of the City applicable thereto, except as specifically varied or supplemented by this Permit.
2. This Development Permit applies to and only to those lands shown cross-hatched on the attached Schedule "A" and any and all buildings, structures and other development thereon.
3. The "Richmond Zoning Bylaw 8500" is hereby varied to:
    a) Reduce the minimum commercial parking spaces setback (per Zoning Bylaw s.7.5.17) from 1.5 metres to zero metres along the northern lot line.
4. Subject to Section 692 of the Local Government Act, R.S.B.C.: buildings and structures; off-street parking and loading facilities; roads and parking areas; and landscaping and screening shall be constructed generally in accordance with Plans #1 to #14 attached hereto.
5. Sanitary sewers, water, drainage, highways, street lighting, underground wiring, and sidewalks, shall be provided as required.
6. As a condition of the issuance of this Permit, a legal agreement is to be registered on Title to ensure that no final Building Permit inspection is granted until the required landscaping as outlined in DP 13-645579 has been installed to the satisfaction of the Director of Development or a landscape security in the amount of $226,193.00 has been submitted to the City. Once received, the security is held to ensure that development is carried out in accordance with the terms and conditions of this Permit. Should any interest be earned upon the security, it shall accrue to the Holder if the security is returned. The condition of the posting of the security is that should the Holder fail to carry out the development hereby authorized, according to the terms and conditions of this Permit within the time provided, the City may use the security to carry out the work by its servants, agents or contractors, and any surplus shall be paid over to the Holder. Should the Holder carry out the development permitted by this permit within the time set out herein, the security shall be returned to the Holder. The City may retain the security for up to one year after inspection of the completed landscaping in order to ensure that plant material has survived.
7. If the Holder does not commence the construction permitted by this Permit within 24 months of the date of this Permit, this Permit shall lapse and the security shall be returned in full.

Development Permit
No. DP 13-645579

To the Holder:	NSDA ARCHITECTS ON BEHALF OF THE PACIFIC AUTISM FAMILY CENTRE FOUNDATION
Property Address:	1001 HUDSON AVENUE
Address:	C/O NSDA ARCHITECTS 201-134 ABBOTT STREET VANCOUVER, BC V6B 2K4

8. The land described herein shall be developed generally in accordance with the terms and conditions and provisions of this Permit and any plans and specifications attached to this Permit which shall form a part hereof.

   This Permit is not a Building Permit.

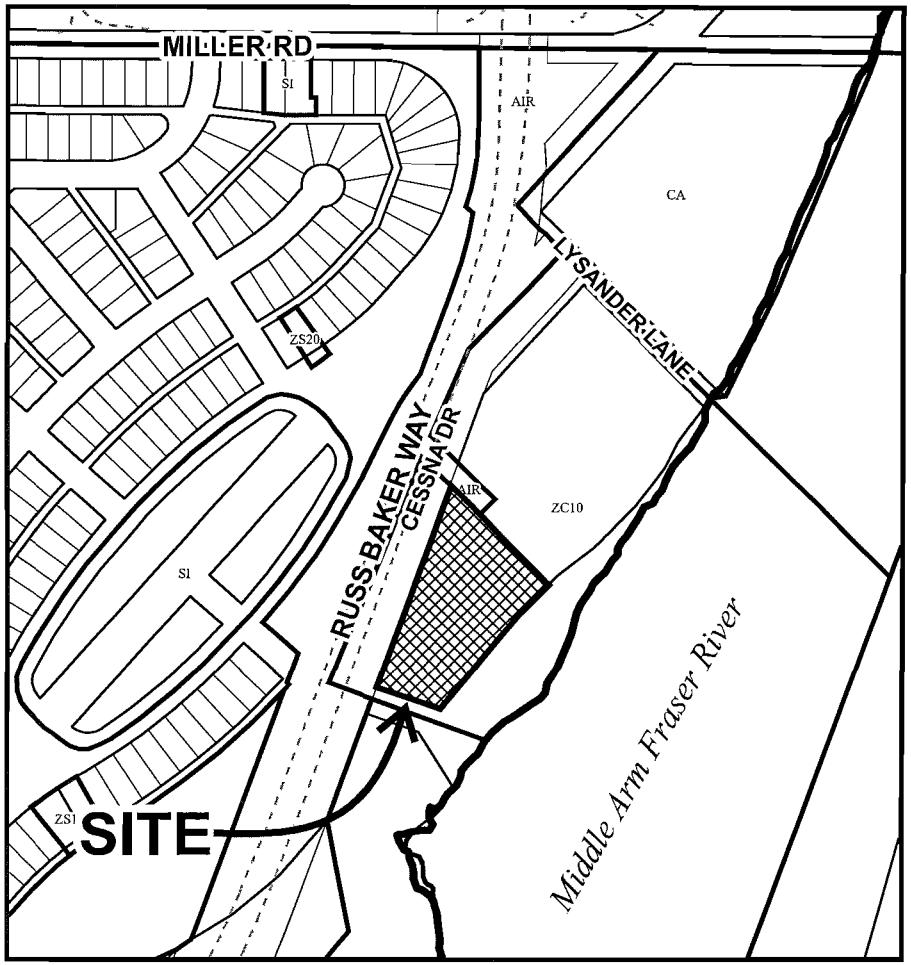
AUTHORIZING RESOLUTION NO. ISSUED BY THE COUNCIL THE DAY OF , .

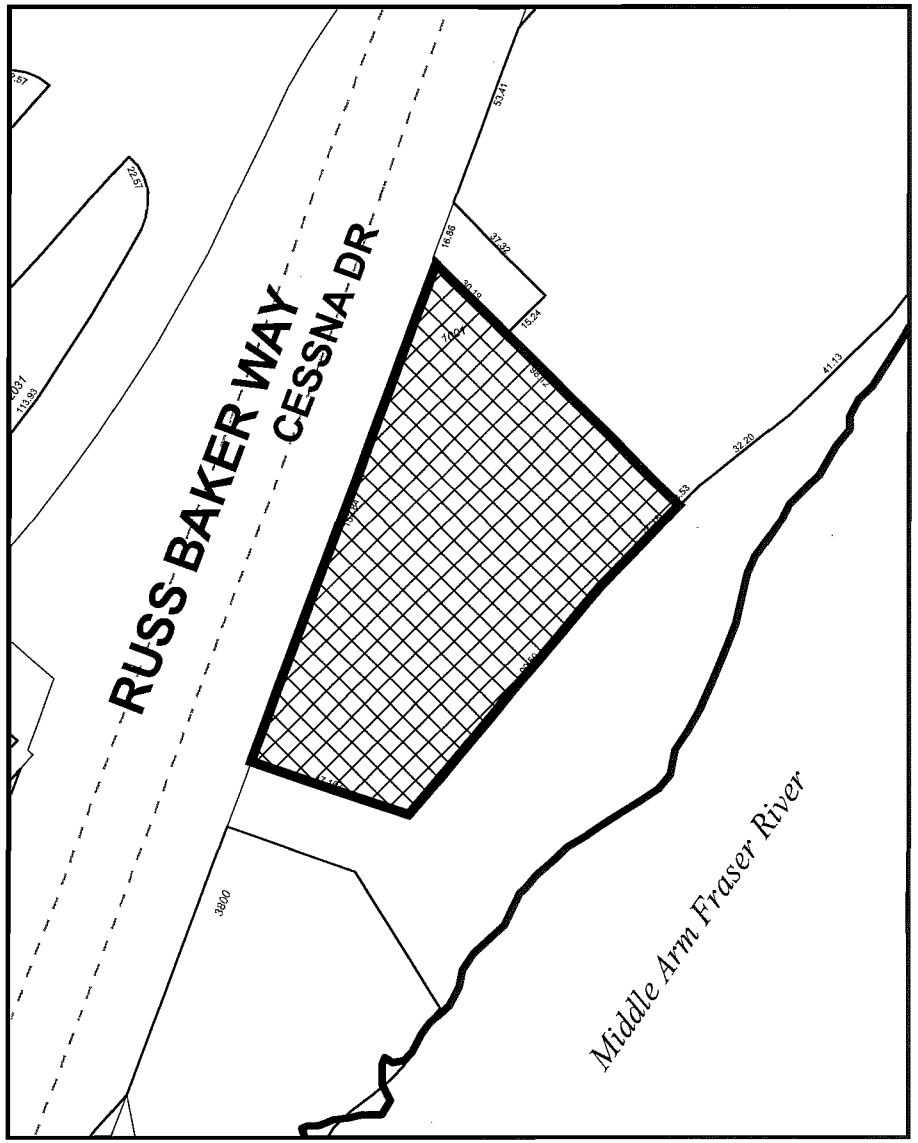
DELIVERED THIS DAY OF , .

_____

MAYOR

City of Richmond





DP 13-645579
SCHEDULE "A"

Original Date: 09/16/13

Revision Date: 04/22/14

Note: Dimensions are in METRES

Pacific Autism Family Centre

1001 Hudson Avenue

Location Plan





View from the North West

Consultants

Survey
Chapman Land Surveying Ltd
107- 100 Park Royal South
West Vancouver, B.C. V7T 1A2
Tel: 604-926-7311 Fax: 604-926-6923

Structural
Fast + Epp Structural Engineers
201 1672 West 1st Avenue
Vancouver, B.C. V6J 1G1
Tel: 604-731-7412 Fax: 604-731-7820

Geotechnical
Horizon Engineering
114 - 2433 Dollarton Hwy.
North Vancouver, B.C. V7H 0A1
Tel: 604-990-0546 Fax: 604-990-0583

Electrical
MMM Group Ltd.
Suite 700 - 1045 Howe Street
Vancouver, B.C. V6Z 2A9
Tel: 604-263-7232 Fax: 604-263-9141

Mechanical
MMM Group Ltd.
Suite 700 - 1045 Howe Street
Vancouver, B.C. V6Z 2A9
Tel: 604-685-9381 Fax: 604-683-8655

Building Code
LMDG Building Code Consultants, Ltd.
4th Floor, 780 Beatty Street
Vancouver, B.C. V6B 2M1
Tel: 604-682-7146 Fax: 604-682-7149

Sustainability
PHH ARC
Suite 200 - 13775 Commerce Parkway
Richmond, B.C. V6V 2V4
Tel: 604-244-8101 Fax: 604-244-8491

Transport / Traffic
Bunt & Associates Engineering
1550 - 1050 West Pender
Vancouver, B.C. V6E 4T3
Tel: 604-685-6427 Fax: 604-685-6579

Drawing List

Architectural
NSDA Architects
201-134 Abbott Street, Vancouver, BC V6B 2K4
Tel: 604-669-1926 Fax: 604-683-2241

A-000	Location Plan/Project Information	re-submitted
A-002	Site Photos	submitted April 2014
A-003	Revised Survey	submitted April 2014
A-004	Context Plan	submitted April 2014
A-005	Perspectives	submitted April 2014
A-006	Perspectives	submitted April 2014
A-007	Perspective	submitted April 2014
A-100-1	Site Plan - Plan #1	re-submitted
A-100-2	Parking Plan - Plan #2	re-submitted
A-101	Main Floor Plan	re-submitted
A-102	Second Floor Plan	re-submitted
A-103	Third Floor Plan	re-submitted
A-104	Roof Plan	re-submitted
A-401	East & North Elevations/Section	re-submitted
A-402	West & South Elevations/Section	re-submitted
A-403	East Elevation and Rendering	re-submitted
A-404	Material Sample Board	submitted April 2014
FAR-001	Area Overlays Main and Second Floors	re-submitted
FAR-002	Area Overlay Third Floor/Site Coverage	re-submitted

Landscape
Perry + Associates Landscape Architecture
200 - 1558 West 8th Avenue
Vancouver B.C. V6J 1R2
Tel: 604-738-4118 Fax: 604-738-4118

L 1.0	Landscape Layout Plan Level 1	re-submitted
L 1.1	Landscape Layout Plan Level 2	submitted April 2014
L 1.2	Landscape Tree Management Plan	submitted April 2014
L 1.3	Landscape Lighting Coordination Plan	submitted April 2014
L 2.0	Landscape Planting Plan	re-submitted
L 3.0	Landscape Sections	re-submitted
L 3.1	Landscape Details	re-submitted
L 4.0	Landscape Materials & Precedent Images	submitted April 2014

Statistics

Address	1001 Hudson Avenue
Legal Description	PART OF PARCEL A, SECTION 29, BLOCK 5 NORTH RANGE 6 WEST, NEW WESTMINSTER DISTRICT, PLAN BCP 22413
Previous Street Address	Part of 3600 Lysander Lane, Richmond

	sq. feet	sq. metres
Site Area	100,213	9,310
Zone	ZC10	

FAR

[measured to City of Richmond requirements]	sq. feet	sq. metres
Main Floor	20,047.4	1,862.5
Second Floor	19,630.3	1,823.7
Third Floor	13,253.4	1,231.3
FAR Phase 1	52,931.1	4,917.4
Phase 2	5,274.4	490.0
FAR Phases 1&2	58,205.5	5,407.4
	Allowable	Proposed
Phase 1 FAR	0.85	0.53
Phase 1&2 FAR	0.85	0.58

Coverage	sq. feet	sq. metres
Building footprint exc. outdoor roof overhangs- Phases 1 and 2 combined	29,651	2,756
Building footprint exc. outdoor roof overhangs- Phase 1 only	24,388	2,266
Site Coverage [Phase 1]	55.0%	24.3%

	Allowable	Proposed
Building Height	20.0m	18m

Gross Building Area [Phase 1] [measured to the sheathing or face of mullions]	sq. feet	sq. metres
Main Floor	20,477.0	1,902.4
Second Floor	20,209.0	1,877.5
Third Floor	13,744.0	1,276.8
Roof [mechanical, electrical, elevator m/c rooms]	2,212.0	205.5
Total Floors Area [Phase 1]	56,642	5,262

Major Components	sq. feet	sq. metres
Main Floor		
Information Centre	2,280	211.8
Treatment Centre total	9,212	855.6
Young Children component	4,679	434.7
Older Children component	2,619	243.3
Music room component	710	66.0
Sensory Motor room component	552	51.3
Toys and gadgets	595	55.3
Information Resources [library]	1,591	147.8

Second floor	sq. feet	sq. metres
Cafeteria & Kitchen [excluding exterior deck]	1,489	138.3
Multipurpose rooms [inc. storage and AV]	3,224	299.5
Multi purpose room A [west]	*1,356*	*126.0*
Multi purpose room B [east][including AV]	*1,420*	*131.9*
Lifespan Centre total	4,468	415.1
Lifeskills classroom	*615*	*57.1*
Computer lraing component	*340*	*31.6*
Residential lifeskills component	*661*	*61.4*
Clinic & Research total	5,023	466.6
Accession and laboratory component	*396*	*36.8*
Research/ visiting consultant work stations component	*399*	*37.1*
Typical assessment room component	*226*	*21.0*

Third floor	sq. feet	sq. metres
Board/ meeting room	841	78.1
Administration	2,153	200.0
Audio Visual IT	764	71.0
Staff Facilities	1,293	120.1
Partners	4,800	445.9

Roof	sq. feet	sq. metres
Elevator m/c Rooms	845	78.5
Mechanical/ electrical room.	1,367	127.0

Common/ Shared Areas (Phase 1 only)	sq. feet	sq. metres	Main Fl. [sf]	2nd Fl. [sf]	3rd Fl. [sf]	Roof [sf]
Common Meeting & Calm Rooms	1,236	114.8	413	408	417	
Circulation, Stairs, Elevators, Waiting/ Seating Areas	13,175	1,224.0	5585	4858	2472	230
Copier & Workrooms	426	39.6	156		230	
Washrooms accessed from Public Areas	825	76.9	140.6	575	112.5	
Building workshop and storage	305	28.3	304.5			
Recycling and garbage enclosure	377	35.0	377			
Bicycle locker room	324	30.1	324			
Mechanical and Electrical	1,866	173.3	271.5	155	71	1,367

Parking	Required	Proposed
No. of Spaces	see report	95
Small Car stalls (max. 50%)		47
Regular Car stalls		46
Regular Accessible stalls		2

Loading	Required	Proposed
Medium- 3m x 9m x 3.8mH	2	2 shared
Large- 3.5m x 18.4m x 4.3mH	1	1

Bicycle Spaces office ratios (see "for spaces included)		
Class 2	0.27	
Outdoor racks	8.7	18
Class 1	0.4	
Bicycle room lockers c/w charging outlet	12.9	14

Date	Issue / Revisions
02 Sept 2013	Issued for Development Permit
01 Oct 2013	Revision R1 10mROW
16 Oct 2013	Submission to Advisory Design Panel
04 Apr 2014	Resubmission for Development Permit
02 Oct 2014	Submission for Amendment to DP

Consultants

Seal

RECEIVED
NOV 1 2 2014

DP 13-645579

NSDA ARCHITECTS
201-134 Abbott St
Vancouver, BC
Canada V6B 2K4
T 604.669.1926
F 604.683.2241
info@nsda.bc.ca
www.nsda.bc.ca

NEALE STANISZKIS DOLL ADAMS
Copyright Reserved. This plan and design is and at all times remains the exclusive property of Neale Staniszkis Doll Adams Architects and cannot be used without the architects' written consent.

Project
Pacific Autism Family Centre
1001 Hudson Avenue Richmond
DP 13-645579 PAFC

Sheet Title
Location Plan
Project Information

Project Number
13018

Scale
NTS

Sheet Number
A-000

Plan #1

File: 13018 A-000 Cover.pln Plotted: 10/2/14 at: 4:59 PM

Date	Issue / Revisions
02 Oct 2014	Submission for Amendment to DP

Cessna Drive

Boeing Avenue

Hudson Avenue

10000 ROW

lamp post as requested by the City of Richmond to illuminate adjacent stair

7500 min. setback

2000 min. setback to parking

Phase 2

2m min. setback to edge of parking

west property line 127.915m

7m min. setback from Cessna Drive

7000 min. setback

bay window projections

Gas meter enclosure

15816

Unit Substation on concrete pad

Building Outline

garbage and recycling roofed enclosure

001 A-100-1

9m ROW for Dyke access and for PAFC ROW

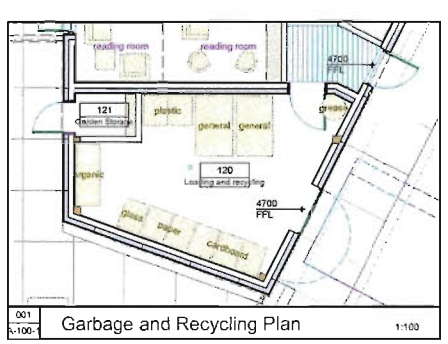
New 7.5m additional ROW from Dyke ROW

7500 ROW

Line of existing 18m Dyke ROW

Property Line

Seal



001 A-100-1 Garbage and Recycling Plan 1:100

NSDA
ARCHITECTS

201-134 Abbott St
Vancouver, BC
Canada V6B 2K4

T 604.669.1926
F 604.683.2241
info@nsda.bc.ca
www.nsda.bc.ca

NEALE STANISZKIS DOLL ADAMS

Copyright Reserved. This plan and design is and at all times remains the exclusive property of Neale Staniszkis Doll Adams Architects and cannot be used without the architects' written consent.

Project
Pacific Autism Family Centre
1001 Hudson Ave. Richmond
DP 13-645579 PAFC

Sheet Title
Site Plan
Plan #1

Project Number
13018

Scale
1:200

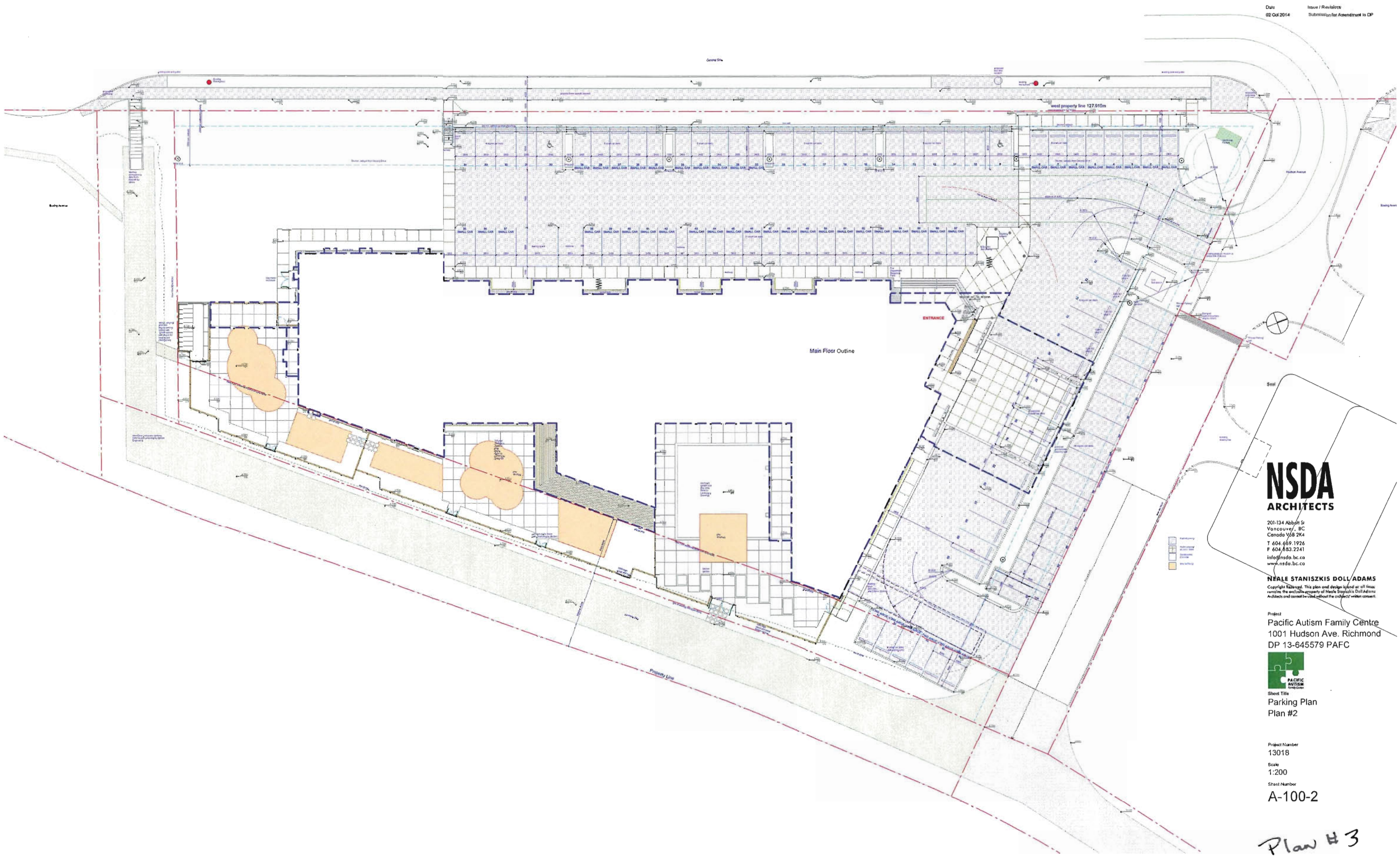
Sheet Number
A-100-1

Plan #2

NOV 1 2 2014

DP 13-645579

Date	Issue / Revisions
02 Oct 2014	Submission for Amendment to DP



NOV 1 2 2014

DP 13-645579 DP

NSDA
ARCHITECTS
201-134 Abbott St
Vancouver, BC
Canada V6B 2K4
T 604.669.1926
F 604.683.2241
info@nsda.bc.ca
www.nsda.bc.ca

NEALE STANISZKIS DOLL ADAMS
Copyright Reserved. This plan and design is and at all times remains the exclusive property of Neale Staniszkis Doll Adams Architects and cannot be used without the architects' written consent.

Project
Pacific Autism Family Centre
1001 Hudson Ave. Richmond
DP 13-645579 PAFC

Sheet Title
Parking Plan
Plan #2

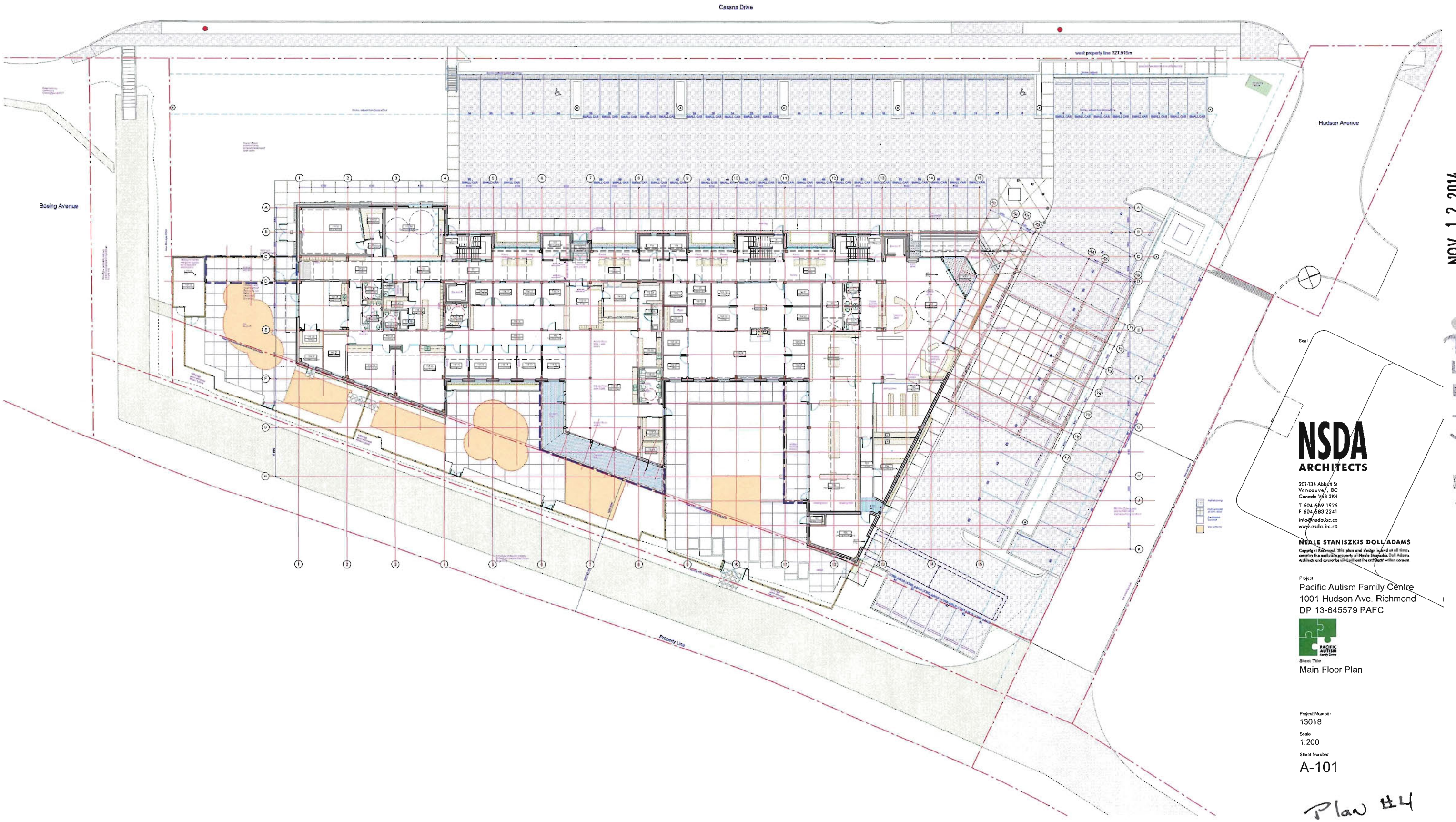
Project Number
13018

Scale
1:200

Sheet Number
A-100-2

Plan #3

Date	Issue / Revisions
02 Oct 2014	Submission for Amendment to DP



NOV 1 2 2014

DP 13-645579

NSDA
ARCHITECTS

201-134 Abbott St
Vancouver, BC
Canada V6B 2K4
T 604.669.1926
F 604.683.2241
info@nsda.bc.ca
www.nsda.bc.ca

NEALE STANISZKIS DOLL ADAMS

Copyright Reserved. This plan and design is and at all times remains the exclusive property of Neale Staniszkis Doll Adams Architects and cannot be used without the architects' written consent.

Project
Pacific Autism Family Centre
1001 Hudson Ave. Richmond
DP 13-645579 PAFC

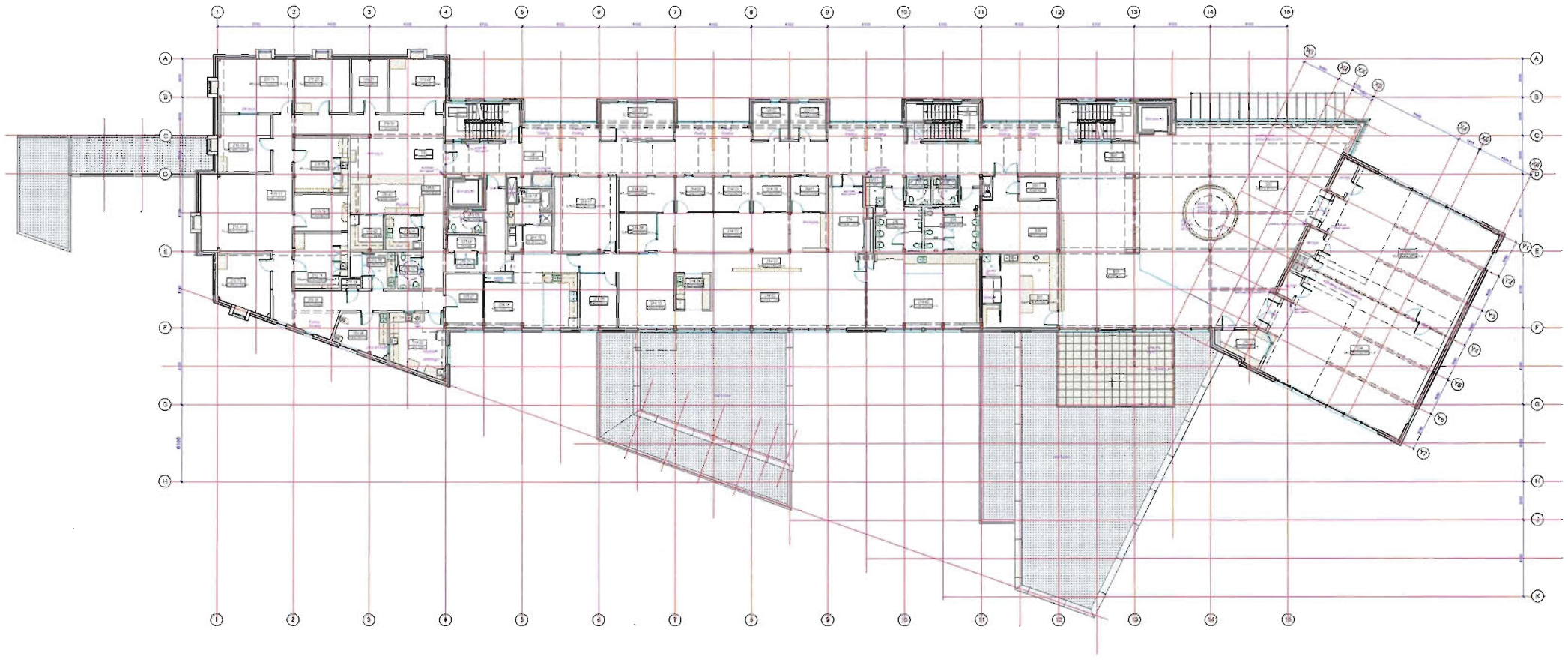
Sheet Title
Main Floor Plan

Project Number
13018

Scale
1:200

Sheet Number
A-101

Plan #4



Date	Issue / Revisions
02 Oct 2014	Submission for Amendment to DP

Seal

NOV 1 2 2014

DP 13-645579

NSDA
ARCHITECTS

201-134 Abbott St
Vancouver, BC
Canada V6B 2K4

T 604.669.1926
F 604.683.2241
info@nsda.bc.ca
www.nsda.bc.ca

NEALE STANISZKIS DOLL ADAMS

Copyright Reserved. This plan and design is and at all times remains the exclusive property of Neale Staniszkis Doll Adams Architects and cannot be used without the architects' written consent.

Project
Pacific Autism Family Centre
1001 Hudson Ave. Richmond
DP 13-645579 PAFC

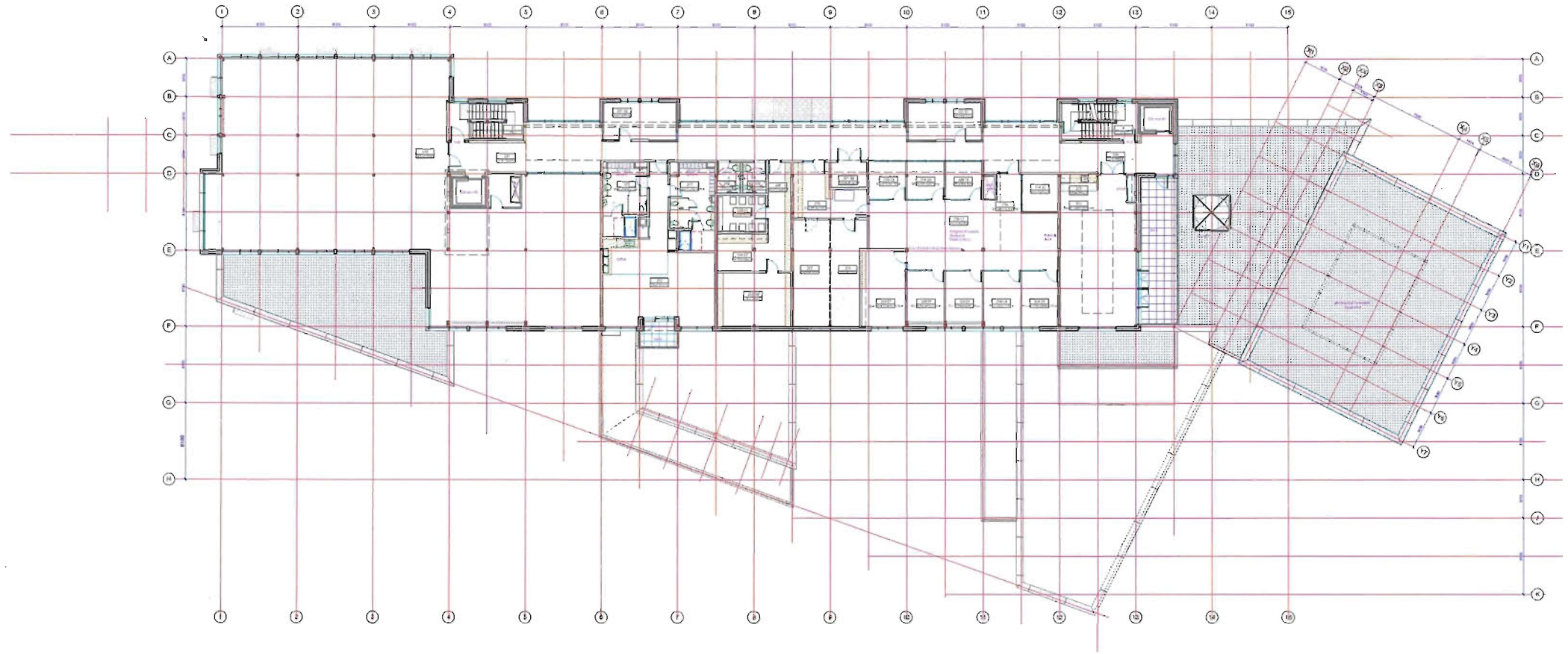
Sheet Title
Second Floor Plan

Project Number
13018

Scale
1:200

Sheet Number
A-102

Plan #5



Date	Issue / Revisions
02 Oct 2014	Submission for Amendment to DP

Seal

NSDA
ARCHITECTS

201-134 Abbott St
Vancouver, BC
Canada V6B 2K4

T 604.669.1926
F 604.683.2241
info@nsda.bc.ca
www.nsda.bc.ca

NEALE STANISZKIS DOLL ADAMS

Copyright Reserved. This plan and design is and at all times remains the exclusive property of Neale Staniszkis Doll Adams Architects and cannot be used without the architects' written consent.

Project
Pacific Autism Family Centre
1001 Hudson Ave. Richmond
DP 13-645579 PAFC

Sheet Title
Third Floor Plan

Project Number
13018

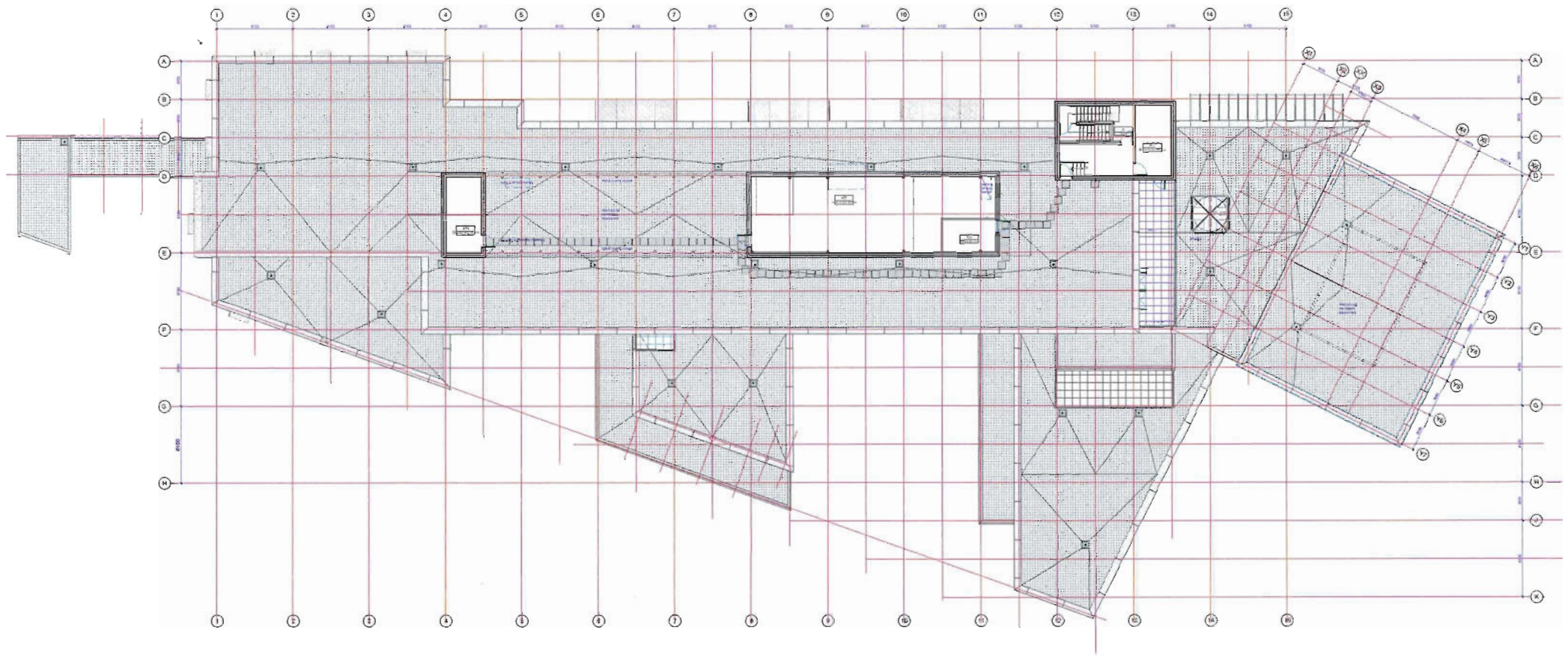
Scale
1:200

Sheet Number
A-103

Plan #6

NOV 1 2 2014

DP 13-645579



Date	Issue / Revisions
02 Oct 2014	Submission for Amendment to DP

Seal

NOV 1 2 2014

NSDA
ARCHITECTS

201-134 Abbott St
Vancouver, BC
Canada V6B 2K4

T 604.669.1926
F 604.683.2241

info@nsda.bc.ca
www.nsda.bc.ca

NEALE STANISZKIS DOLL ADAMS

Copyright Reserved. This plan and design is and at all times remains the exclusive property of Neale Staniszkis Doll Adams Architects and cannot be used without the architects' written consent.

Project
Pacific Autism Family Centre
1001 Hudson Ave. Richmond
DP 13-645579 PAFC

Sheet Title
Roof Plan

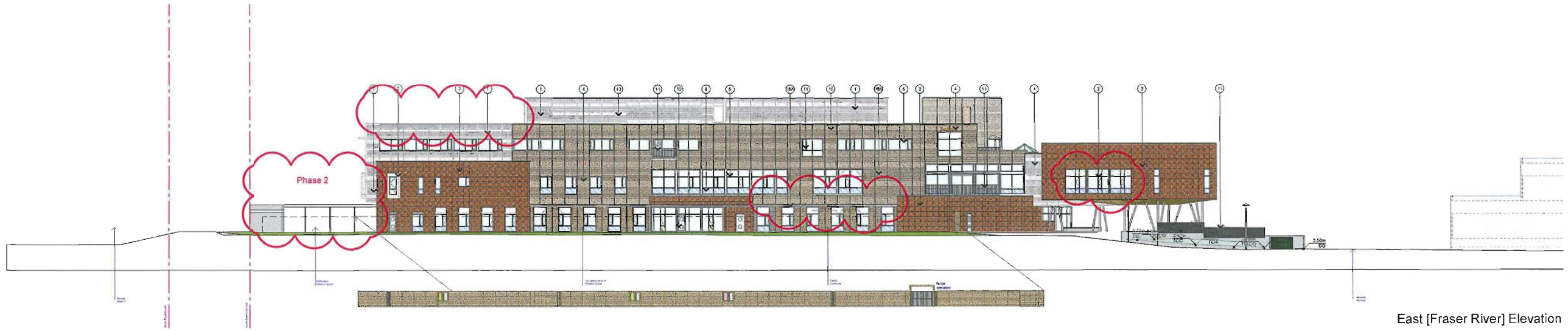
Project Number
13018

Scale
1:200

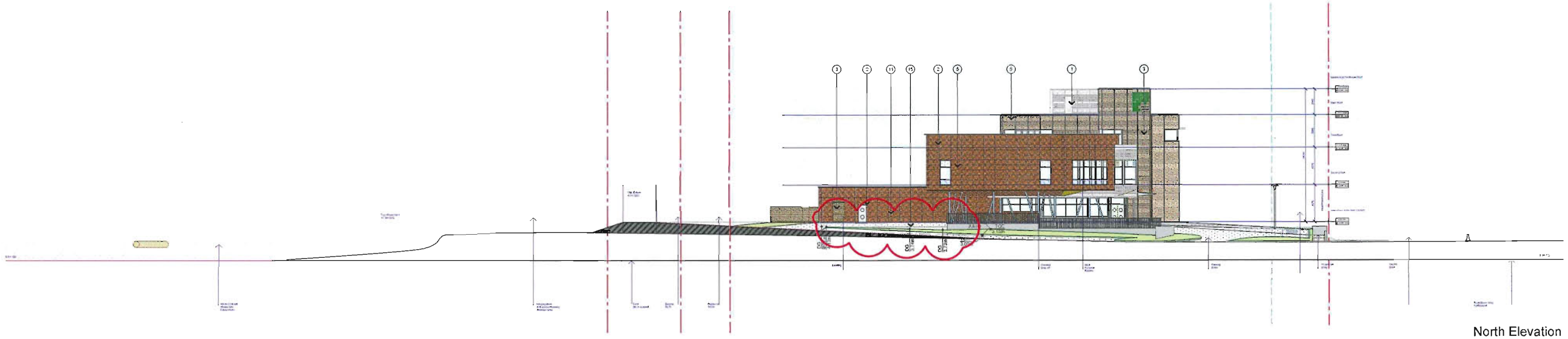
Sheet Number
A-104

DP 13-645579

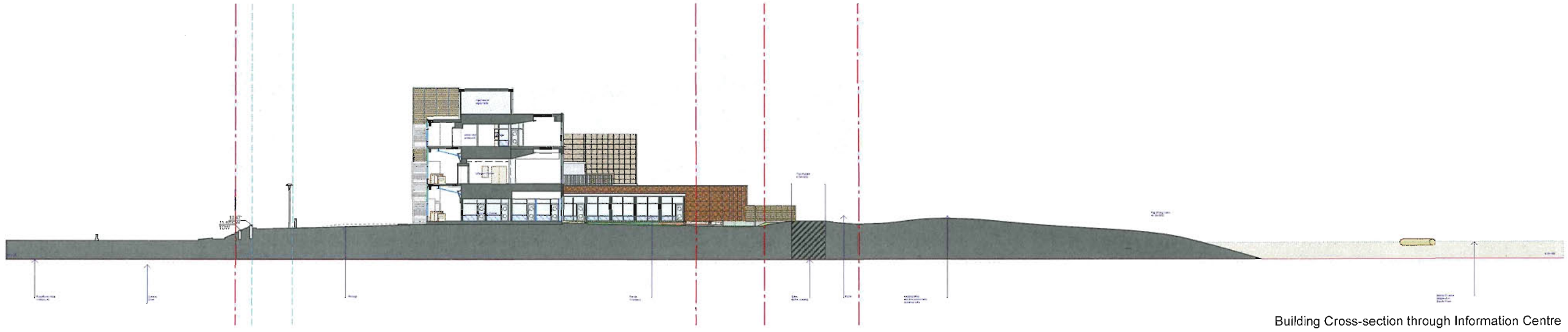
Plan #7



East [Fraser River] Elevation



North Elevation



Building Cross-section through Information Centre

Consultants

Date	Issue / Revisions
02 Oct 2014	Submission for Amendment to DP

MATERIALS

1. Metal Siding
2. Metal Panels
3. Laminated Panel Rainscreen
4. Painted Cementitious Fibre Siding
5. Anodized Aluminium Frames
6. Clear Laminated Glass
7. Translucent Laminated Glass
8. Patterned Tinted Glass [1]
9. Patterned Tinted Glass [2]
10. Patterned Tinted Glass [3]
11. Powder Coated Aluminium Railing
12. Vertical Wood Sunshade
13. Prefinished Metal Louvres
14. Architectural Concrete

Note:
Fences are generally shown below their location for the benefit of clarity

Revision cloud

Seal

NSDA
ARCHITECTS

201-134 Abbott St
Vancouver, BC
Canada V6B 2K4

T 604.669.1926
F 604.683.2241

info@nsda.bc.ca
www.nsda.bc.ca

NEALE STANISZKIS DOLL ADAMS

Copyright Reserved. This plan and design is and at all times remains the exclusive property of Neale Staniszkis Doll Adams Architects and cannot be used without the architects' written consent.

Project

Pacific Autism Family Centre
Cessna Drive Richmond
DP 13-645579 PAFC

Sheet Title

East and North Elevations
Building Section

Project Number
13018

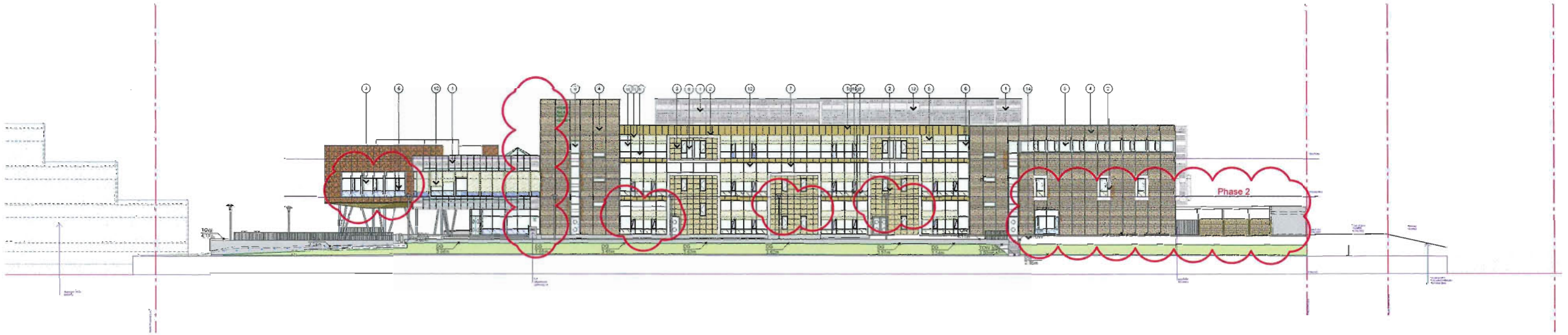
Scale
1:250

Sheet Number
A-401

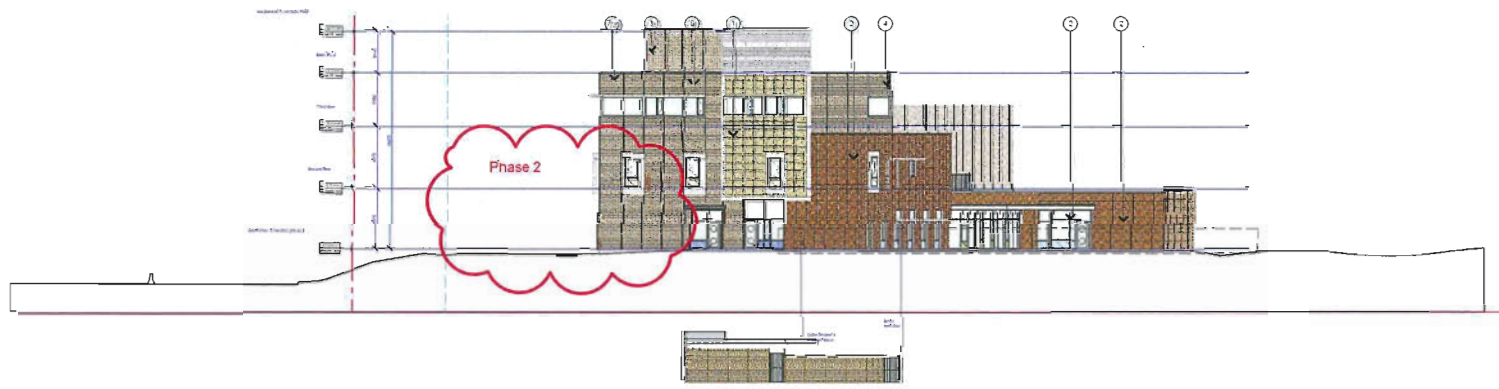
Plan # 8

DP 13-645579
NOV 12 2014
DP 13-645579

File: *13018 A-401-402 Sections DP3.vwx* Plotted: 10/29/14 at 10:59:59 AM



West [Cessna Drive] Elevation



South Elevation



Building Cross-section through Stair C

Consultants

Date	Issue / Revisions
02 Oct 2014	Submission for Amendment to DP

MATERIALS

1. Metal Siding
2. Metal Panels
3. Laminated Panel Rainscreen
4. Painted Cementitious Fibre Siding
5. Anodized Aluminium Frames
6. Clear Laminated Glass
7. Translucent Laminated Glass
8. Patterned Tinted Glass [1]
9. Patterned Tinted Glass [2]
10. Patterned Tinted Glass [3]
11. Powder Coated Aluminium Railing
12. Vertical Wood Sunshade
13. Prefinished Metal Louvres
14. Architectural Concrete

Note:
Fences are generally shown below their location for the benefit of clarity

Revision cloud

Seal

NSDA
ARCHITECTS
201-134 Abbott St
Vancouver, BC
Canada V6B 2K4
T 604.669.1926
F 604.683.2241
info@nsda.bc.ca
www.nsda.bc.ca
NEALE STANISZKIS DOLL ADAMS

Copyright Reserved. This plan and design is and at all times remains the exclusive property of Neale Staniszkis Doll Adams Architects and cannot be used without the architect's written consent.

Project
Pacific Autism Family Centre
Cessna Drive Richmond
DP 13-645579 PAFC

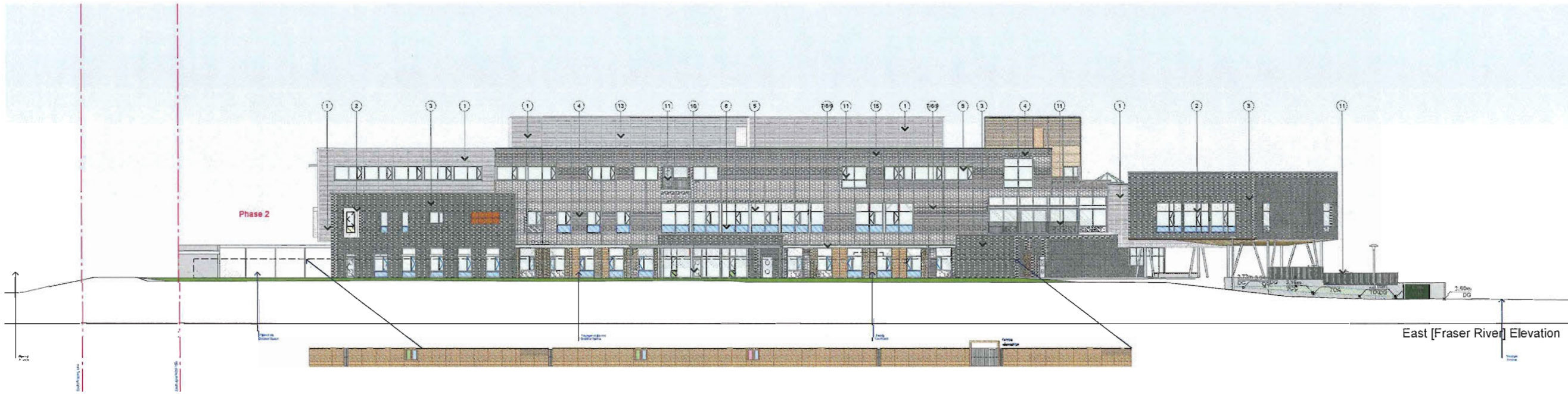
Sheet Title
West and South Elevations
Building Section

Project Number
13018
Scale
1:250
Sheet Number
A-402

Plan #9A

NOV 12 2014
DP 13-645579

File: "13018 A-401-402 Sections DP3.vwx" Plotted: 10/27/14 at: 10:59:50 AM



East [Fraser River] Elevation



View from the North West

Consultants

Date	Issue / Revisions
02 Oct 2014	Submission for Amendment to DP

MATERIALS

1. Metal Siding
2. Metal Panels
3. Laminated Panel Rainscreen
4. Painted Cementitious Fibre Siding
5. Anodized Aluminium Frames
6. Clear Laminated Glass
7. Translucent Laminated Glass
8. Patterned Tinted Glass [1]
9. Patterned Tinted Glass [2]
10. Patterned Tinted Glass [3]
11. Powder Coated Aluminium Railing
12. Vertical Wood Sunshade
13. Prefinished Metal Louvres
14. Architectural Concrete

Note.
Fences are generally shown below their location for the benefit of clarity

Revision cloud

Seal

NSDA
ARCHITECTS
201-134 Abbott St
Vancouver, BC
Canada V6B 2K4
T 604.669.1926
F 604.683.2241
info@nsda.bc.ca
www.nsda.bc.ca

NEALE STANISZKIS DOLL ADAMS
Copyright Reserved. This plan and design is and at all times remains the exclusive property of Neale Staniszkis Doll Adams Architects and cannot be used without the architects' written consent.

Project
Pacific Autism Family Centre
Cessna Drive Richmond
DP 13-645579 PAFC

Sheet Title
East and North Elevations
Building Section

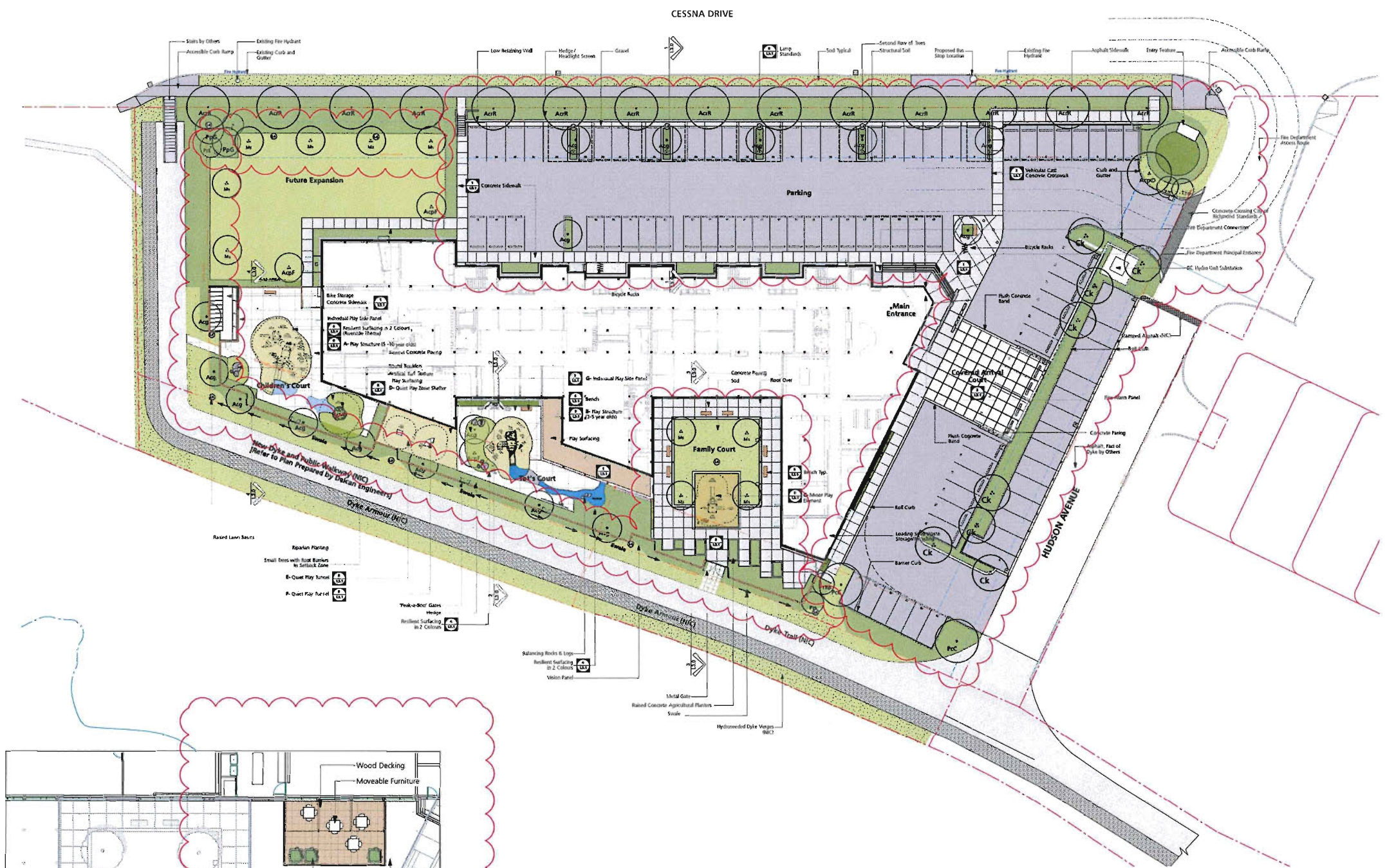
Project Number
13018
Scale
1:200
Sheet Number
A-403

Plan #9B

NOV 1 2 2014

DP 13-645579

File: "13018 A-401-402 Sections DP3.vwx" Plotted: 10/8/14 at: 2:27:39 PM



Landscape Layout Plan, Level 2

P·A
Landscape Architecture
Site Planning

R. Kim Perry & Associates Inc.
200 - 1528 W 6th Avenue
Vancouver, BC V6J 1R2

T 604 738 4118
F 604 738 4116
www.perrylandarch.ca

5	Issue for DP Amendment	10/02/14
4	Issue for 50% Cost Estimate	06/18/14
3	Reissue for DP	03/28/14
2	Issue for DP-Rev1-10m ROW	10/09/13
1	Issued for DP	09/03/13
Revision No.		Date

COPYRIGHT RESERVED
This drawing is and shall remain the property of R. Kim Perry & Associates Inc., and R. Kim Perry & Associates Inc. shall retain the copyright therein. This document shall not be reproduced or used for additions or alterations to the project or for the purpose of any other work, without the prior written consent of R. Kim Perry & Associates Inc.

Client:

PACIFIC AUTISM family centre

Project Title:
Pacific Autism Family Centre
1001 Hudson Ave. Richmond
DP 13-645579 PAFC

Drawing Title:
Landscape Layout Plan, Level 1 and 2

Project North:

Drawn By: OS
Checked By: RB

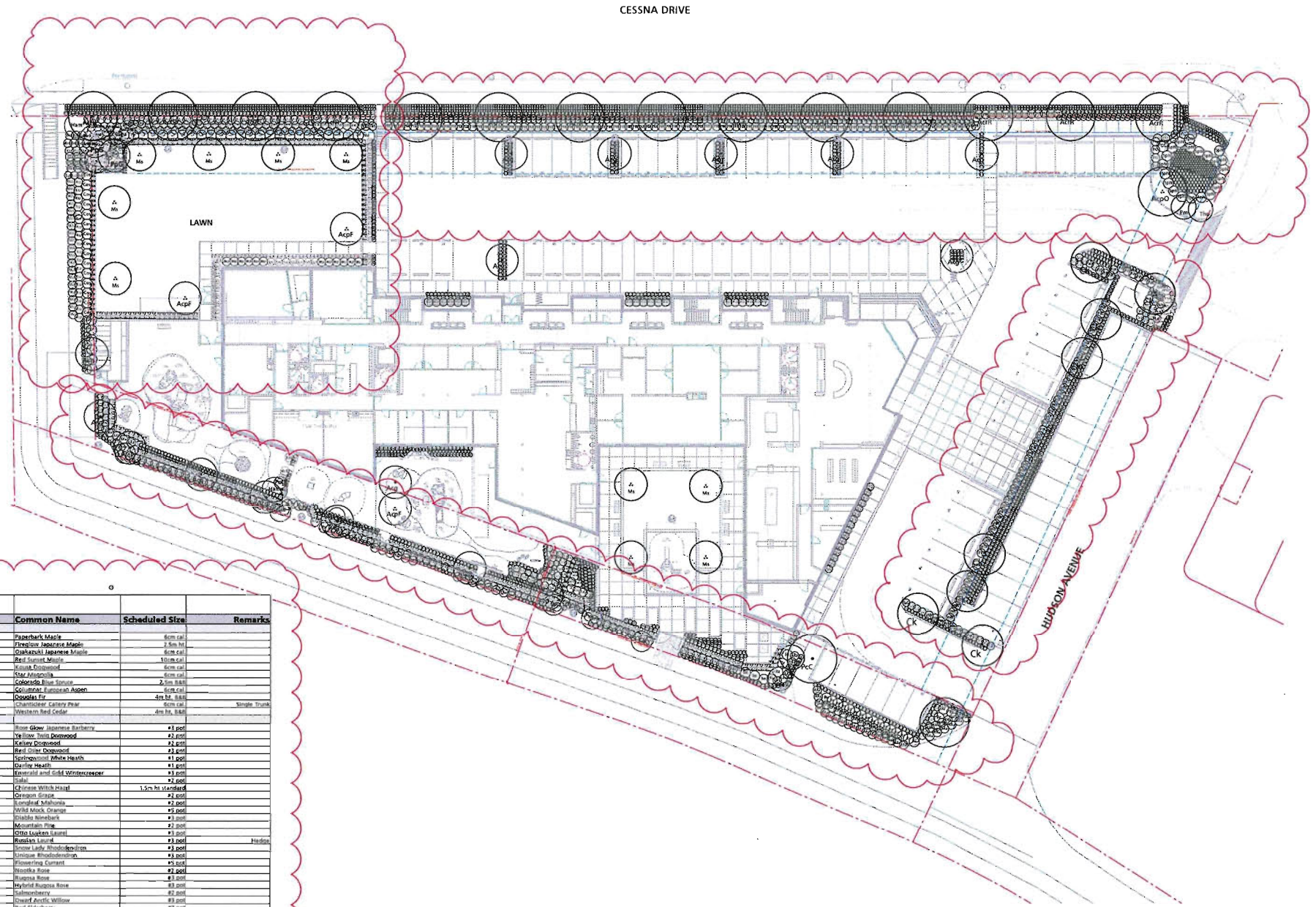
Scale: 1:200
Job No.: 13-027

Sheet No.: L1.0

NOV 1 2 2014

DP 13-645579

Plan #10



Plant List

Symbol	Qty.	Botanical Name	Common Name	Scheduled Size	Remarks
Trees					
AcgL	9	**Acer griseum**	Paperbark Maple	6cm cal	
AcgF	1	**Acer palmatum 'Ringlow'**	Ringlow Japanese Maple	2.5m ht	
AcpO	1	**Acer palmatum 'Orakazuki'**	Orakazuki Japanese Maple	6cm cal	
AcrR	14	**Acer rubrum 'Red Sunset'**	Red Sunset Maple	10cm cal	
Ck	8	**Cornus kousa**	Kousa Dogwood	6cm cal	
Ms	10	**Magnolia stellata**	Star Magnolia	6cm cal	
PgG	7	**Picea pungens 'Glauca'**	Colorado Blue Spruce	2.5m ht	
PtE	7	**Populus tremula 'Erecta'**	Columnar European Aspen	6cm cal	
Pm	2	**Pseudotsuga menziesii**	Douglas Fir	4m ht, B&B	
PsC	2	**Pyrus calleryana 'Chanticleer'**	Chanticleer Callery Pear	6cm cal	Single Trunk
Thp	7	**Thuja plicata**	Western Red Cedar	4m ht, B&B	
Shrubs					
Bnh	61	**Berberis thunbergii 'Rose Glow'**	Rose Glow Japanese Barberry	#1 pot	
Cof	11	**Cornus sericea 'Flaviramea'**	Yellow Twig Dogwood	#2 pot	
CsK	57	**Cornus sericea 'Kelseyi'**	Kelsey Dogwood	#2 pot	
Csn	15	**Cornus stolonifera**	Red Osier Dogwood	#3 pot	
ErWf	31	**Erica carnea 'Springwood White'**	Springwood White Heath	#1 pot	
Eda	4	**Erica x darleyensis**	Darley Heath	#1 pot	
EvE	30	**Euonymus fortunei 'Emerald 'n Gold'**	Emerald and Gold Wintercreeper	#1 pot	
Gs	69	**Gaultheria shallon**	Salal	#2 pot	
Hvm	1	**Hamamelis mollis**	Chinese Witch Hazel	1.5m ht standard	
Ma	74	**Mahonia aquifolium**	Oregon Grape	#2 pot	
Mn	27	**Mahonia nervosa**	Longleaf Mahonia	#2 pot	
Phl	3	**Philadelphus lewisii**	Wild Mock Orange	#5 pot	
PoD	1	**Physocarpus opulifolius 'Diablo'**	Diablo Ninebark	#3 pot	
Pm	14	**Prunus mume**	Mountain Plum	#2 pot	
PlO	10	**Prunus laurocerasus 'Otto Luyken'**	Otto Luyken Laurel	#1 pot	
Rrk	170	**Prunus laurocerasus 'Reynvaanii'**	Reinkes Laurel	#3 pot	Hedge
RSL	9	**Rhododendron 'Snow Lady'**	Snow Lady Rhododendron	#2 pot	
RU	59	**Rhododendron 'Unique'**	Unique Rhododendron	#3 pot	
RuK	35	**Ribes sanguineum 'King Edward VII'**	Flowering Currant	#5 pot	
Rn	1	**Rosa nutkana**	Nootka Rose	#2 pot	
Rr	3	**Rosa rugosa**	Rugosa Rose	#3 pot	
RxB	24	**Rosa rugosa 'Blanc Double de Coubert'**	Hybrid Rugosa Rose	#3 pot	
Rs	6	**Rubus spectabilis**	Salmonberry	#2 pot	
SpN	21	**Salix purpurea 'Nana'**	Dwarf Arctic Willow	#3 pot	
Sne	5	**Sambucus racemosa**	Red Elderberry	#7 pot	
Sh	135	**Sarcococca hookeriana var. humilis**	Dwarf Sweet Box	#2 pot	
Sr	1	**Sarcococca ruscifolia**	Fragrant Sarcococca	#3 pot	
Sd	25	**Spiraea douglasii**	Hardhack	#3 pot	
SnG	21	**Spiraea japonica 'Goldmound'**	Goldmound Spirea	#3 pot	
SmP	1	**Syringa meyeri 'Palibin'**	Palibin Meyer Lilac	#3 pot	
ToS	297	**Thuja occidentalis 'Smaragd'**	Emerald Green Cedar	6' ht, B&B	Hedge
Vo	1	**Vaccinium ovatum**	Evergreen Huckleberry	#2 pot	
Groundcovers, Vines, Ferns, Perennials and Grasses					
BsR	12	**Bergenia cordifolia 'Rotblum'**	Red Bloom Elephant Ears	#1 pot	
Bs	139	**Blechnum spicant**	Deer Fern	#1 pot	
CaK	28	**Calamagrostis x acutiflora 'Karl Foerster'**	Feather Reed Grass	#2 pot	
Cdi	83	**Carex buchananii**	Leatherleaf Sedge	#1 pot	
Cv	35	**Carexsatis varilobifolia**	Threadleaf Carexsatis	#1 pot	
Hfs	23	**Helictotrichon sempervirens**	Blue Oat Grass	#5 pot	
Is	15	**Iris sibirica**	Siberian Iris	#1 pot	
Kt	37	**Knautia 'Crimsonia'**	Pincush Scrabby	#1 pot	
LaM	21	**Lavandula angustifolia 'Munstead'**	English Lavender	#1 pot	
LmS	781	**Liriope muscari 'Silvery Sunproof'**	Variegated Lilyturf	#1 pot	
MnV	48	**Miscanthus sinensis 'Variegatus'**	Variegated Maiden Grass	#3 pot	
PaH	113	**Pennisetum alopecuroides 'Hameln'**	Hamelin Fountain Grass	#1 pot	
PsD	47	**Polystichum setiferum 'Divisilobum'**	Soft Shield Fern	#2 pot	
Ro	18	**Rosmarinus officinalis**	Rosemary	#2 pot	
Rh	133	**Rudbeckia hirta**	Black-eyed Susan	#1 pot	
SnE	16	**Salvia nemorosa 'East Friesland'**	Perennial Sage	#1 pot	
SbA	527	**Sedum telephium 'Autumn Joy'**	Autumn Joy Sedum	#1 pot	

PLANTING NOTES

1. All planting and landscape installation to conform to as a minimum the standards set forth in the latest edition of the BCSLA/BCNTA landscape standards.
2. Plants in this plant list are specified according to the CNTA standards for nursery stock and the BCLNA standards for container grown plants. Plant material search to extend to Washington, Oregon, California and British Columbia. Nursery to provide proof of search before substitutions can be considered.
3. Sizes on the planting plan shall be considered minimum sizes.
4. Root balls to be free of pernicious weeds.
5. Soils to be tested for a micronutrient analyses and the test reviewed and approved by the consultant prior to installing on site. Top soil mixtures for the project shall be tested for particle size, pH, and nutrient levels and recommendations provided and amendments made to bring the soil up to acceptable horticultural quality for the desired plant material, trees, or turf planting. Minimum soil depths are as follows: 600mm around rootballs of trees, 450mm for shrubs and groundcovers, 150mm for lawn areas.
6. Install min. 50mm of composted bark mulch on all shrub beds after planting and rake smooth. Mulch to be "8.5mm screened composted bark mulch".
7. Contractor to ensure all plant material delivered to site is from nurseries certified to be free from the *Phytophthora ramorum* virus (Sudden Oak Death). Removal and replacement of plant material found to contain the virus to be at the contractor's expense.
8. Contractor to report any discrepancies in plant numbers immediately to Landscape Architect.
9. All on-site landscape to be irrigated with an automatic irrigation system.

* **Note:**
Minimum 48 bylaw trees required for Tree Management Plan

P+A
Landscape Architecture
Site Planning

K. Kim Perry & Associates Inc.
200 - 1444 W 8th Avenue
Vancouver, BC V6J 1K2

T 604 736 4118
F 604 736 4116
www.perryandassociates.ca

Revision No.	Date
5 Issue for DP Amendment	10/02/14
4 Issue for 50% Cost Estimate	06/18/14
3 Reissue for DP	03/28/14
2 Issue for DP-Rev1-10m ROW	10/09/13
1 Issued for DP	09/03/13

COPYRIGHT RESERVED
This drawing is and shall remain the property of K. Kim Perry & Associates Inc., and K. Kim Perry & Associates Inc. shall retain the copyright therein. The drawing may not be used, reproduced, revised or additions or alterations to the project or for the purpose of any other project without the prior written consent of K. Kim Perry & Associates Inc.

Client:

PACIFIC AUTISM FAMILY CENTRE

Project Title:

Pacific Autism Family Centre
1001 Hudson Ave. Richmond
DP 13-645579 PAFC

Drawing Title:

Landscape Planting Plan

Project North:

Drawn By: DS

Checked By: RB

Scale: 1:200

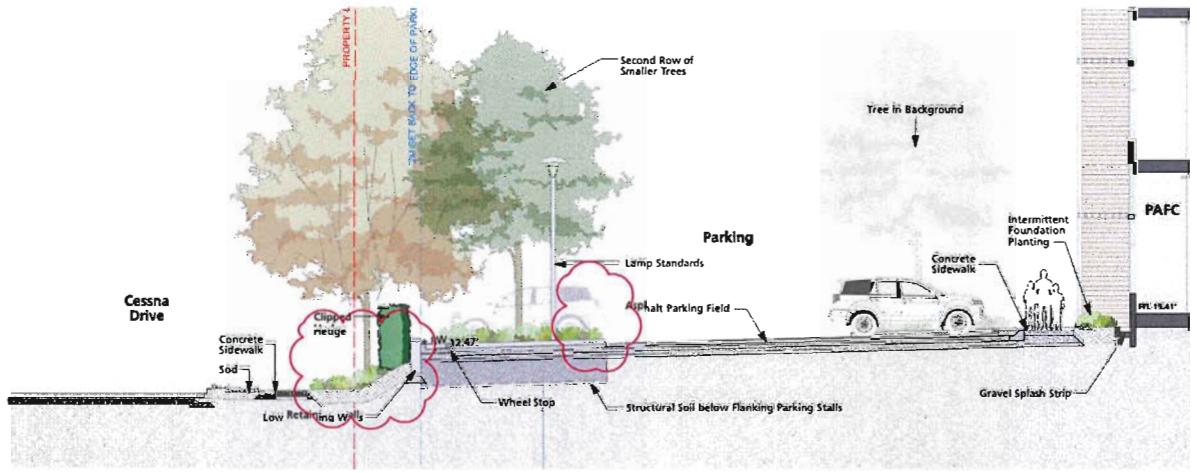
Job No: 13-027

Sheet No.: L2.0

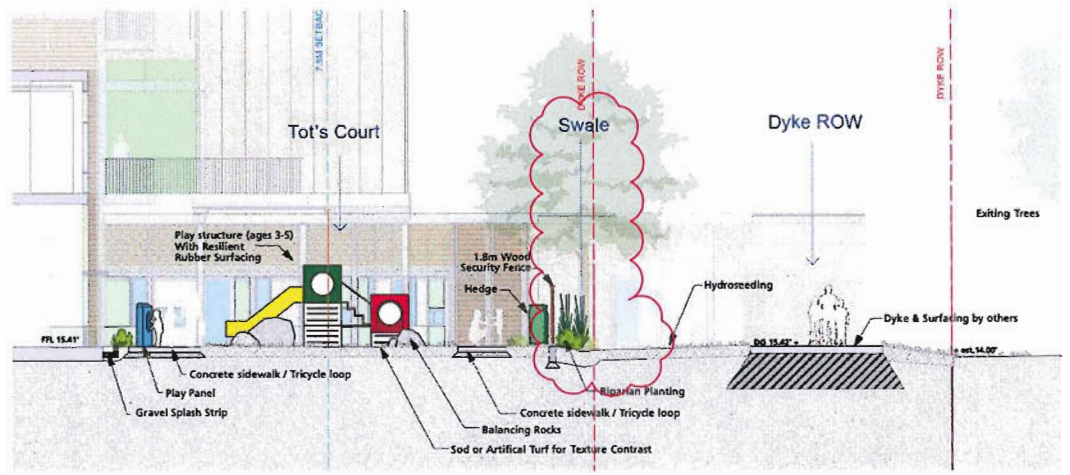
DP 13-645579

NOV 12 2014

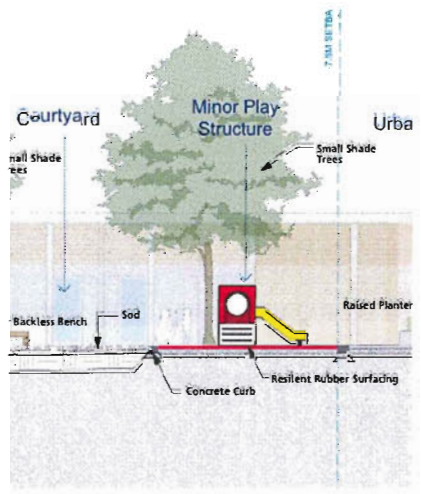
Plan # 11

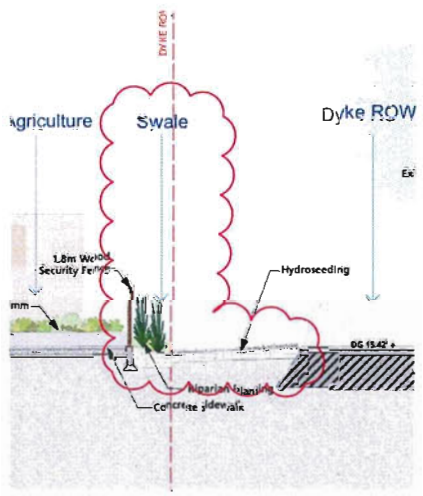


1 L3.0 **Typical Parking Lot Section**
Scale 1:100

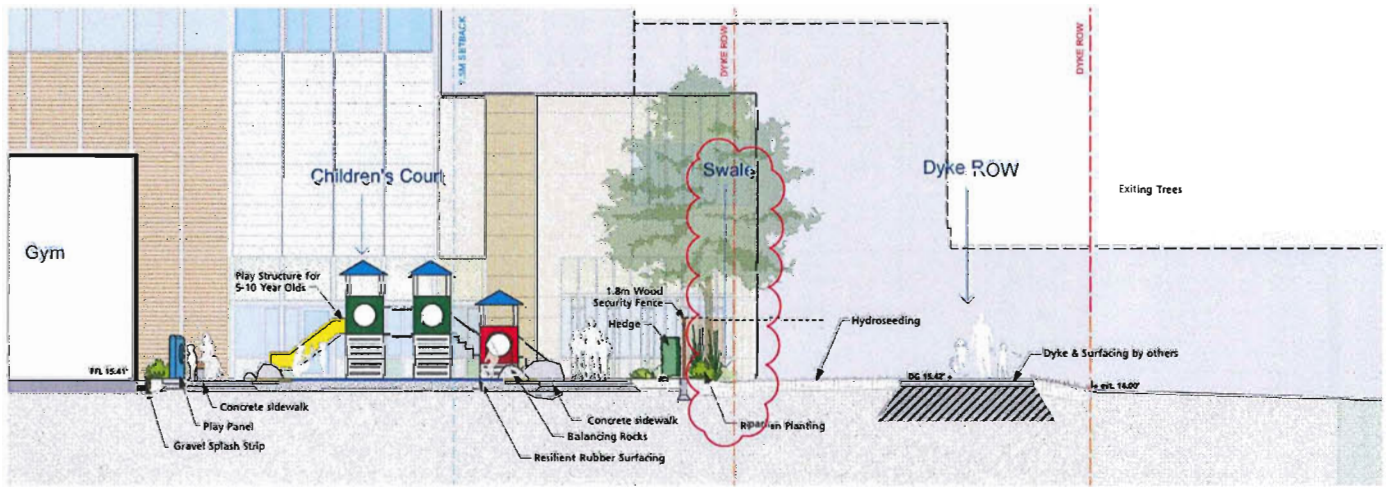


2 L3.0 **Tot's Court Section**
Scale 1:100





3 L3.0 **Family Courtyard Section**
Scale 1:100



4 L3.0 **Children's Court Section**
Scale 1:100

P+A

Perry + Associates
Landscape Architecture
Site Planning

Suite 200-1558 W 6th Avenue
Vancouver, B.C. V6J 1R2

T 604.738.4118
F 604.738.4116
www.perryandassociates.ca

Revision No		Date
5	Issue for DP Amendment	10/02/14
4	Issue for 50% Cost Estimate	06/18/14
3	Reissue for DP	03/28/14
2	Issue for DP-Rev1-10m ROW	10/09/13
1	Issued for DP	09/03/13

COPYRIGHT RESERVED
This drawing is and shall remain the property of R. Kim Perry & Associates Inc., and R. Kim Perry & Associates Inc. shall retain the copyright therein. This document shall not be reproduced or used for additions or alterations to the project or for the purpose of any other project without the prior written consent of R. Kim Perry & Associates Inc.

Client:

PACIFIC AUTISM

Project Title:

Pacific Autism FamilyCentre
1001 Hudson Ave. Richmond
DP 13-645579

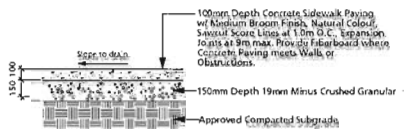
Drawing Title:

Plan #3e:
Landscape Sections

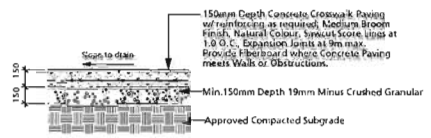
Project North:	Drawn By: MG
	Checked By: RB
Scale: As Noted	Job No.: 13-027
Sheet No.: L3.0	

Plan #12

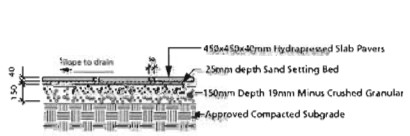
NOV 12 2014
DP 13-645579



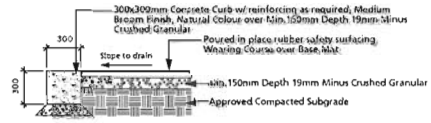
1 L3.1 CONCRETE PEDESTRIAN PAVING
Scale 1:20



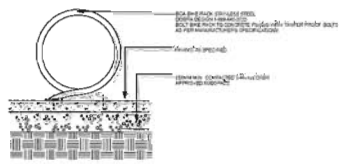
2 L3.1 CONCRETE VEHICULAR PAVING
Scale 1:20



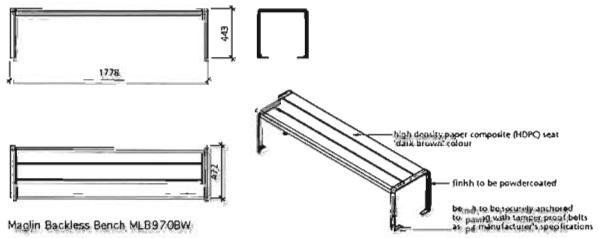
3 L3.1 HYDRAPRESSED SLAB PEDESTRIAN PAVING
Scale 1:20



4 L3.1 POURED IN PLACE RESILIENT RUBBER PLAY SURFACE
Scale 1:20



5 L3.1 Bike Rack
Scale 1:20



Maglin Backless Bench MLB970BW

NOTE:
Benches available at: MAGLIN SITE FURNITURE INC.
275 Tecumseh Street
Woodstock, Ontario Canada
N4S 7W1
Telephone: 519 539-6776 Toll Free: 800-716-5506
Fax: 877-260-9393
E-Mail: sales@maglin.com Internet: www.maglin.com

6 L3.1 Backless Bench
Scale 1:20

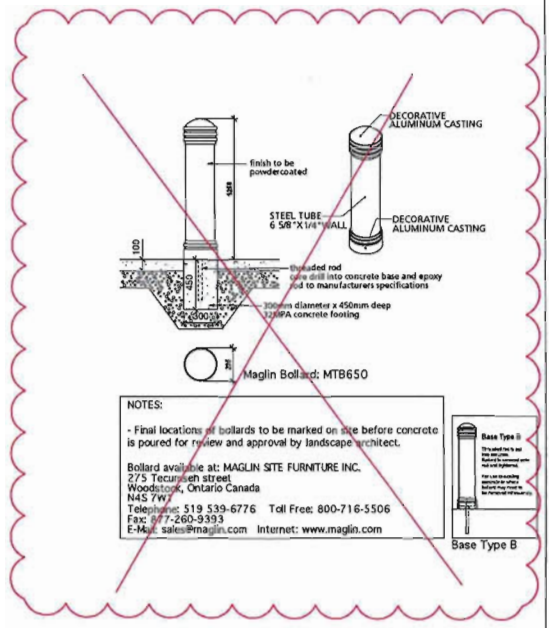


LANDSCAPE FORMS Grabage Receptacle: PETOSKEY

NOTE:
Garbage Can available at: LANDSCAPE FORMS

Telephone: 604-987-7461 Toll Free: 866-987-7461
Fax: 866-268-9191
E-Mail: jwar@landscapeforms.com
Internet: www.landscapeforms.com

7 L3.1 Garbage Receptacle
Scale 1:20



NOTES:

- Final locations of bollards to be marked on site before concrete is poured for review and approval by landscape architect.

Bollard available at: MAGLIN SITE FURNITURE INC.
275 Tecumseh street
Woodstock, Ontario Canada
N4S 7W1
Telephone: 519 539-6776 Toll Free: 800-716-5506
Fax: 877-260-9393
E-Mail: sales@maglin.com Internet: www.maglin.com

Base Type B

8 L3.1 Bollard
Scale 1:20

A - Landscape Structures Design 77346-1-1 5-12yrs

5" Round Aluminum Posts
Vibe roofs (12 Gauge Perforated Steel)
179050 Vibe Marble Panel (2" Glass Marbles)

B - Landscape Structures Design 77346-1-1 2-5yrs

5" Round Aluminum Posts
Vibe Roofs (12 Gauge Perforated Steel)
12339 40" Rollerslide With 43 'Tt Coated Rollers
079045 Vibe Fun Mirror
179053 Vibe Xylofun Mirror

C - Landscape Structures Design 77346-1-1 C

5" Round Aluminum Posts
Vibe Roof
179051 Optigear Vibe panel.

D - 168099 Cozy Dome Climber

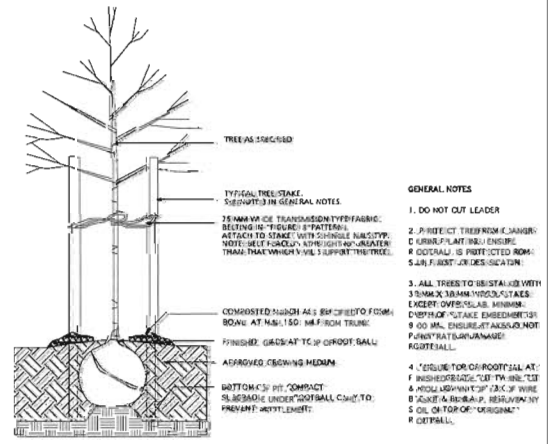
E - 100005 90ø Curved Tunnel

F - 100005 Straight Tunnel

G - Side Pannel

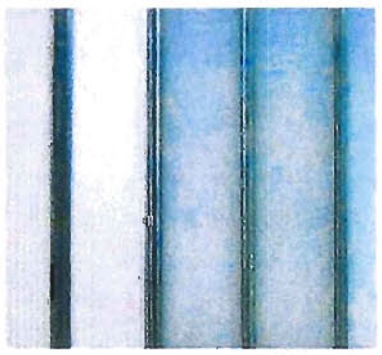
124739 Navigator Reach Panel @Grade
164094 Bongo Reach Panel @Grade
164148 Ring-A-Bell Reach Panel @Grade

9 L3.1 Play Structure - Habitat Syrtams Inc. - www.habitat-systems.com - Tel# 604-294-4224
Scale 1:20


TREE AS STAKED/STAID
TYPICAL TREE/STAKE SPECIFICATION IN GENERAL NOTES
25 MM MESH TRANSMISSION TYPE FABRIC BELONG IN "FIGURE 8" PATTERN ATTACH TO STAKE WITH SUITABLE SUBSTITUTE NOTE: SELF FORCED WITH RIGHT ANGLE KNEES THAN THAT WHICH WILL SUPPORT THE TREE.
CORROSTED BURLAP AS IS SPECIFIED TO FORM BOWL AT NECK LEG 1M FROM TRUNK
FINISHED GRADE AT TOP OF ROOT BALL
APPROVED GROWING MEDIUM
BOTTOM OF PIT COMPACT SUBGRADE UNDER ROOTBALL COMPACTED TO PREVENT SETTLEMENT
GENERAL NOTES
1. DO NOT CUT LEADER
2. PROTECT TREE FROM DAMAGE
C CROWN PLANT IRRIGATION
P OUTRIGHT IS PROTECTED FROM
S AIR FLIGHT OBSTRUCTION
3. ALL TREES TO BE STAKED WITH 3 50MM X 50MM WOOD STAKES EXCEPT OVER SLAB. MINIMUM DEPTH OF STAKE EMBEDMENT 90 MM. ENSURE STAKES DO NOT PENETRATE ROOTBALL.
4. "ENSURE TOP OF ROOTBALL AT FINISHED GRADE." "DO NOT PLANT TOO DEEP" "DO NOT MULCH HIGHER THAN 25MM" "DO NOT PLANT TOO HIGH" "DO NOT PLANT ABOVE ROOTBALL" "DO NOT PLANT ABOVE ROOTBALL" "DO NOT PLANT ABOVE ROOTBALL

Pacific Autism Family Centre

REGISTERED ARCHITECT
LARRY WILLIAM ADAMS
BRITISH COLUMBIA

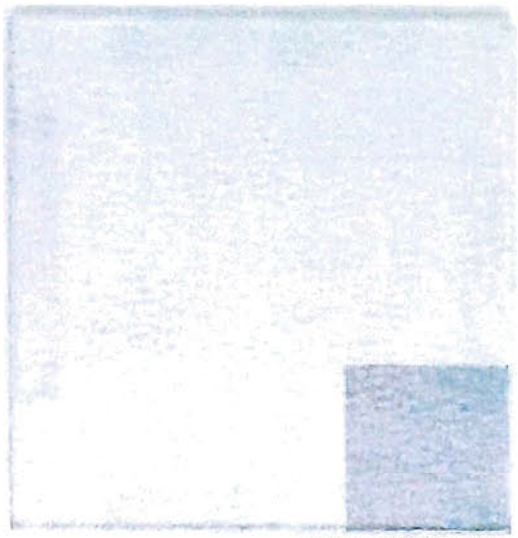


6- glazing CHANNEL GLASS



4- anodized aluminum WINDOW FRAMES

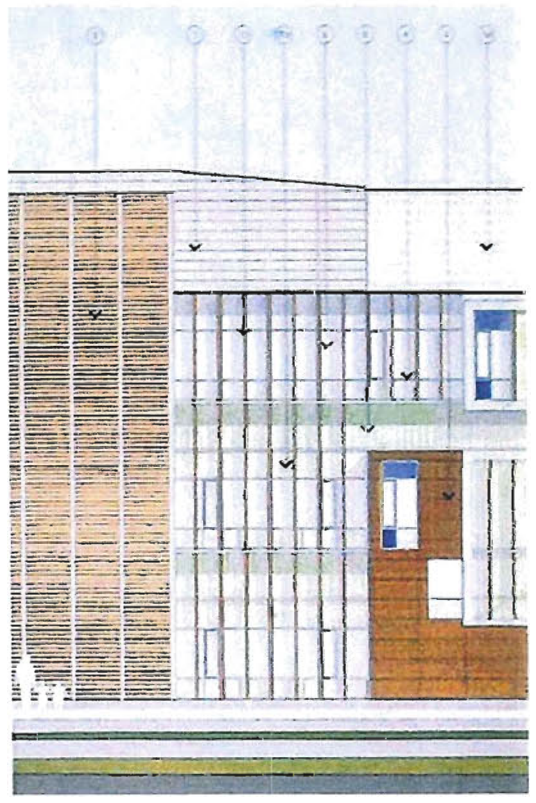
1- exterior cladding METAL SIDING



7- glazing PATTERNED GLASS



3- exterior cladding STAINED WOOD



Metal Siding 1
Engineered Wood Panels 2
Stained Wood 3
Anodized Aluminum Frames 4
Clear Glass 5
Channel Glass 6
Patterned Glass (possibly tinted) 7
Spandrel Glass 8
Obscure Glass 9
Translucent Panels 10
Galvanized Steel Railing 11
Metal Sunshade 12
Wood Sunshade 13
Prefinished Metal Louvres 14



galvanized steel RAILING



7- glazing PATTERNED GLASS



7- glazing PATTERNED GLASS



EXTERIOR MATERIAL SAMPLE BOARD

NSDA
ARCHITECTS

NOV 1 2 2014
DP 13-645579
Plan #14

City of Richmond

Report to Development Permit Panel

To:	Development Permit Panel	**Date:**	October 31, 2014
From:	Wayne Craig Director of Development	**File:**	DP 14-665485
Re:	**Application by Yamamoto Architecture Inc., for a Development Permit on the eastern portion of 7120, 7140, 7160, 7180, 7200, 7220, 7240 and 7260 Bridge Street and 7211, 7231 and 7271 No. 4 Road**		

Staff Recommendation

That a Development Permit be issued which would:

1. Permit the construction of seventy-eight (78) 2 and 3-storey townhouses on the eastern portion of 7120, 7140, 7160, 7180, 7200, 7220, 7240 and 7260 Bridge Street and 7211, 7231 and 7271 No. 4 Road on a site zoned "Town Housing (ZT70) - South McLennan".

Wayne Craig
Director of Development

WC:bg
Att.

Staff Report

Origin

Yamamoto Architecture Inc., has applied to the City of Richmond for permission to develop seventy-eight (78) 2 and 3-storey townhouses on the eastern portion of 7120, 7140, 7160, 7180, 7200, 7220, 7240 and 7260 Bridge Street and 7211, 7231 and 7271 No. 4 Road on a site zoned "Town Housing (ZT70) - South McLennan". While this overall development proposal would also result in the creation of seven (7) single detached residential lots fronting on Bridge Street, this Development Permit application deals solely with the townhouse portion of the development site. The proposed development site is currently vacant with the exception of two (2) single detached residential dwellings remaining from the original eleven (11) residential lots. The subject site also includes remnant trees and shrubs from the former residential use.

Prior to issuance of the Building Permit the owner/developer is required to enter into a Servicing Agreement, which would require the following:

- Extend Sills Avenue and Lechow Street;
- Construct a new East-West Connector Road;
- Install frontage improvements along Bridge Street; and
- Improve various City infrastructure; and
- Make site servicing connections.

Development Information

Please refer to attached Development Application Data Sheet (Attachment 1) for a comparison of the proposed development data with the relevant Bylaw requirements.

Background

Development surrounding the subject site is as follows:

To the north:
- across Sills Avenue along the west half of the north property is a 45 unit 2-storey townhouse complex located at 9699 Sills Avenue zoned "Low Density Townhouses (RTL3)"; and
- immediately adjacent along the east half of the north property line are 2 single detached dwellings located at 7195 and 7191 No. 4 Road zoned "Single Detached (RS1/F)";

To the east:
- across No. 4 Road at 7220, 7240, 7260 and 7280 No. 4 Road are single detached dwellings zoned Agriculture (AG1).

To the south:
- at 7280 and 7300 Bridge Street, 2-storey single detached dwellings, zoned "Single Detached (RS1/F)";
- at 7311 and 7315 No. 4 Road, single detached dwellings zoned "Single Detached (RS1/F)"; and
- at 7331 No. 4 Road, a 22-unit, 2-storey townhouse complex, zoned "Town Housing (ZT16) – South McLennan and St. Albans Sub-Area (City Centre)".

To the west:
- across Bridge Street at 7171, 7191, 7211, 7231 and 7251 No. 4 Road are single detached dwellings zoned "Single Detached (RS1/F)".

Rezoning and Public Hearing Results

During the rezoning process, staff identified the following design issues to be resolved at the Development Permit stage:

- Overall appropriateness to the form and character of the proposed townhouse units and the indoor amenity building:

  The architectural style for the amenity building would be different from the design of the proposed townhouse units to better separate and distinguish this facility.

- Detailed architectural, landscaping and open space design.

  The applicant has advanced the design of the each townhouse character type incorporating details consistent with the intent of each architectural style.

- Detailed design of road cross sections, including alignment of sidewalks, curbs, and boulevards.

  The applicant has submitted the layout of both the interim and ultimate road design (Attachment 2A and 2B) for fronting streets. The revised site plan and landscape design would extend the boulevard sidewalk along the west side of Lechow Street to create a continuous pedestrian connection.

- Referral of the landscape design to the City's Agricultural Advisory Committee for review of the No. 4 landscape scheme and buffering of lots in the Agricultural Land Reserve (ALR) on the east side of No. 4 Road.

  This development proposal was presented to the Agricultural Advisory Committee (AAC) on July17, 2014 regarding the proposed landscape buffer to the Agricultural Land Reserve (ALR) on the east side of No. 4 Road. The ACC recommended that: "That the development permit application at 7211 No. 4 Road be supported subject to meeting all the conditions outlined in the materials attached to the July 17, 2014 AAC meeting agenda." See Attachments 3A and 3B for the details.

The Public Hearing for the rezoning of this site was held on April 22, 2014. At the Public Hearing, the following concerns about rezoning the property were expressed:

- The owner and resident of 9682 Shields Avenue objected to the rezoning application in an online submission based on increased traffic congestion, lack of parking and increased noise impacts.
- The owner of the single detached dwelling at 7191 No. 4 Road expressed a concern that their property would become an 'orphaned lot' and difficult to redevelop as a result of the proposed development and that Shields Avenue is too narrow.
- The owner of the single detached dwelling at 7280 Bridge Street voiced privacy concerns regarding the proximity of the proposed townhouses and the 'ring road' had been moved.

Staff worked with the applicant to address these issues in the following ways:

- ***Transportation, Engineering and Planning staff have carefully reviewed the proposed interim and ultimate road pattern as part of this development proposal. The currently proposed road network would provide an interim connection between Bridge Street and No. 4 Road via Sills Avenue, Lechow Street and the new East-West Connector Road but there would only be a pedestrian connection linking Shields Avenue with Lechow Street. Ultimately there would be a road connection linking Shields Avenue and Lechow Street as***

envisioned in the McLennan South Sub-Area Plan, however this road cannot be constructed until the adjacent lands to the south of the land assembly redevelop.

- ***The applicant has submitted potential redevelopment scenarios for the 3 separate pairs of residential lots including 7195 and 7191 No. 4 Road, 7311 and 7315 No. 4 Road as well as 7280 and 7300 Bridge Street. The scenarios demonstrate that the remaining residential lots can be redeveloped as townhouses in the future. Copies of these scenarios are located in the file.***
- ***The applicant proposes to retain 3 existing spruce trees (28 to 55 cm in caliper size) approximately 15 m tall located adjacent to the north property line of 7280 Bridge Street. The proposed 1-storey amenity building would be located behind these spruce trees approximately 7 m (23 ft) north of the 7280 Bridge Street property line. The proposed 2-storey townhouses (Building 18) immediately east of 7280 Bridge Street would have a 4.5 m (15 ft) side yard setback with a 22 m (72 ft) separation between the existing and proposed dwellings. The proposed landscape design of this side yard setback includes raised (0.3 m) garden plots adjacent to the rear property line of 7280 Bridge Street.***

Staff Comments

The proposed scheme attached to this report has satisfactorily addressed the significant urban design issues and other staff comments identified as part of the review of the subject Development Permit application. In addition, it complies with the intent of the applicable sections of the Official Community Plan and is generally in compliance with the Richmond Zoning Bylaw 8500.

Land, Legal and Financial Requirements

The land and legal requirement prior to Council consideration of Development Permit issuance include:

1. Adoption of the rezoning (RZ 12-605038 including all required land dedications/transfers.
2. Provision of a legal agreement for an agricultural landscape buffer along the entire No. 4 Road property line. The landscape buffer will ensure the landscape is maintained and provide notification that the site is adjacent to the Agricultural Land Reserve (ALR).
3. Provision of a variable width Statutory Right-of-Way along the west side of Lechow Street extending from the south property line of the west townhouse parcel to the south side of the new East-West Connector Road for road and boulevard purposes that ensures a continuous 1.5 m wide landscape boulevard strip and 1.5 m wide concrete sidewalk.
4. Provision of an easement over the west parcel for the benefit of the east parcel residents to permit access and use of the proposed amenity building and related facilities on the west parcel, if two (2) separate lots are created (i.e., separated by Lechow Street).
5. Provision of an easement over the east parcel for the benefit of 7311 and 7315 No. 4 Road to permit vehicle and pedestrian access to these two (2) lots in the future, if they are redeveloped as townhouses in the future.
6. Provision of an easement over the west parcel for the benefit of 7280 and 7300 Bridge Street to permit vehicle and pedestrian access to these two (2) lots in the future, if they are redeveloped as townhouses.

7. Submission of a Contract between the applicant and a Certified Arborist for supervision of any on-site works conducted within the tree protection zone of the trees to be retained.
8. Registration of a legal agreement(s) regarding the developer's commitment to construct all townhouse units in accordance with EnerGuide 82 including the pre-ducting of all townhouse unit for future solar hot water heating.
9. Receipt of a Letter of Credit in the amount of $422,350.00 for landscape and on-site improvements.

Advisory Design Panel Comments

The Advisory Design Panel (ADP) was conditionally supportive of this development proposal subject to the applicant taking in consideration the ADP comments. A copy of the relevant excerpt from the Advisory Design Panel Minutes from October 8, 2014 is attached for reference (Attachment 4). The design response from the applicant has been included immediately following the specific Design Panel comments and is identified in '***bold italics***'.

Analysis

Conditions of Adjacency

1. The proposed development responds to the surrounding context in the following ways:
   - The overall proposed development would also include 7 residential lots fronting Bridge Street with maximum 2 ½ storey future building heights. While not part of this Development Permit application, these single family lots would create an appropriate interface between the existing neighbourhood and the proposed townhouses.
   - The proposed townhouses along the west property line of the west parcel would be 2½ storey buildings to create a height transition with the proposed residential lots.
   - The proposed townhouses in the west development parcel are primarily duplex units with smaller building footprints that more closely resemble the size of single detached dwellings and townhouses that surround this portion of the development site.
   - The proposed townhouses along the west side of No. 4 Road would be 2-storeys, which approximate the height of existing residential dwellings on the east side of No. 4 Road.
   - The proposed townhouses along the south property line of the east parcel would be 2-storey buildings, which approximate the height of existing houses and townhouses along this property line.
   - This proposal includes smaller building forms to better fit with the smaller size of surrounding single family residential dwellings. In addition, all the proposed townhouse units adjacent to the existing and newly created single family lots would be 2-storeys units.
   - The proposed development would have existing or new road frontages along Bridge Street, Sills Avenue, Lechow Street, the East-West Connector Road and No. 4 Road representing more than 75% of the site perimeter and these roads would increase the separation of the proposed development from the existing surrounding residential development.
2. The applicant has submitted cross-sections that illustrate the proximity of immediately adjacent residential development surrounding the proposed development (see Attachment 5A

and 5B). The separation between existing and proposed dwellings would range between 5 and 22 m. Retaining walls would be minimized to the following 2 locations:

- A 0.6 m high retaining wall with a 1.5 m high fence is proposed along the south property line of the subject site adjacent to the side yard of the existing dwelling at 7300 Bridge Street. This would allow for the future construction of townhouse garages on the adjacent property at the appropriate flood plain elevation and eliminate the need for stairs between the garages and the future townhouses on the adjacent lot; and
- A 0.6 m high retaining wall with a 1.5 m high fence is proposed along the south property line of the subject site adjacent to the existing dwelling at 7311 No. 4 Road. This retain wall would be approximately 7 m long adjacent to the end of the north-south driveway on the east townhouse parcel. This would allow for the proposed driveway on the subject site to be extended onto the adjacent lot (7311 No. 4 Road) at the appropriate elevation, if this adjacent lot was redeveloped for townhouses in the future.

3. The 1.5 m wide landscape buffer consisting of tree and shrub planting is proposed along the west side of No. 4 Road which would be secured by a legal agreement to ensure the landscape is maintained and to provide notice that the site is adjacent to the Agricultural Land Reserve (ALR).

Urban Design and Site Planning

1. Design Character: This development proposal would create 3 separate architectural character areas including the:
   - Georgian-style units on the west townhouse parcel with shallow roof slopes, 'Juliette' balconies and decorative roof vents along fronting streets and brick cladding at the base of these buildings and extending up the box-out window projections;
   - Craftsman-style units on the east townhouse parcel with steeply pitched roofs and extended height curving gable elements, hardie-plank shiplap-like cladding on the base of buildings with hardie-panel shake-like cladding on the upper floors; and
   - Alpine resort-type architectural character for the amenity building at the southwest corner of the west townhouse parcel including a big pitched roof, stone-like cladding, an extended roofline with support columns and gable-end brackets.
2. Site Planning: The proposed site plan would:
   - Locate the 3-storey multi-unit buildings along new roads (Lechow Street and the East-West Connector Road) or internally within the development site which will provide greater separation and better buffering for adjacent existing residential development;
   - Situate the majority of proposed duplex townhouses on the western portion of the site, which better resemble approximate size of single family dwellings in the surrounding neighbourhood;
   - Provide all but 6 townhouse units with side by side parking garages resulting in only 12 tandem parking spaces; and
   - Shift perimeter fencing approximately 1.5 m inside the property lines along fronting streets to increase the apparent boulevard width along public roads.

Transportation and Parking

1. Site Access: Vehicle access for both townhouse parcels would be from Lechow Street. The applicant has adjusted the site plan to ensure the access driveways for both parcels are aligned and has shifted visitor parking and the garbage/recycling enclosure away from the respective entry areas. A separate emergency vehicle access/egress location for each townhouse parcel, which would be gated to screen views into the development and preclude the use by general traffic.
2. Vehicle Parking: A total of 172 parking spaces are required and will be provided including 156 (2 spaces x 78 units) resident spaces and 16 (0.2 spaces x 78 units) visitor spaces. Seventy-two (72) of proposed units would provide side-by-side parking spaces in garages while 6 proposed units would incorporate tandem garage parking. Tandem parking would be approximately 8% of the total proposed residential parking spaces.
3. Bike Parking: The applicant proposes 121 bike parking spaces including 105 resident spaces and 16 (0.2 spaces x 78 units) visitor spaces, which is 7 more than the required 114 bike parking spaces including 98 (1.25 x 78) resident spaces and 16 (0.2 spaces x 78 units) visitor spaces.

Architectural Form and Character

1. Built Form: The proposed built form massing would create 2 distinct areas including:
   a) West Townhouse Parcel: The applicant proposes 2 and 3-storey units on with west townhouse parcel. These townhouse units would generally increase in height from west to east with the 3-storey units generally located along Lechow Street; and
   b) East Townhouse Parcel: The applicant proposes 2 and 3 storey units on the east townhouse parcel. These townhouse units would generally decrease in height from west to east and from north to south with the 3-storey units generally located along the East-West Connector Road or within the interior of the site.
2. Building Articulation: Additional architectural variety and visual interest are introduced by:
   a) Breaks in building walls that front public or private roads, since the majority of the proposed townhouses are duplex units;
   b) Jogs in the longer 3 and 4-unit townhouse buildings, which would interrupt long building wall views along streets and internal driveways;
   c) Separations between the duplex buildings, which would create multiple slot views through the site for the units located within the interior of the site; and
   d) Facade articulations such as box projections that extend from the ground floor to the roof that would create additional visual interest.
3. Facade Design: Key features of the facade designs include:
   a) Individually designed single detached units, which should introduce some architectural design variety and visual interest to the Bridge Street streetscape;
   b) Different building types in the 2 townhouse parcels, typically duplex units in the west parcel and row housing in the east parcel;
   c) Low-pitched roofs in the west parcel and high steep-pitched roofs in the east parcel;
   d) Unique facade features in the 2 townhouse parcels, such as the bay window or box-out panels in the west parcel and the exaggerated gable end in the west parcel; and

e) Variations in cladding materials and colours would include:

- West Parcel: Brick or cultured-stone along the base of buildings and extending up the vertical box-out elements, with hardie-shake and hardie-panel accents plus hardie-plank siding and asphalt shingle roofs;
- East Parcel: Brick or hardie-plank siding at the base of the buildings and hardie-shake or hardie-plank siding on the upper floors with the hardie-shake on the large gable ends that extend the full height of the buildings and asphalt shingle roofs; and
- Additional subtle colour variations to the building facades as suggested by the ADP including the following colours 'Gray Mirage', 'Cotton Balls White' 'Monterey Taupe' and 'Dry Sage' with white trim, black metal doors and a charcoal roof.

Landscape Design and Open Space Design

1. Existing Tree Retention and Compensation: The arborist report indicates that there are a total of 254 existing trees on or adjacent to the subject site (i.e., 242 on-site and 12 off-site). The applicant proposes to retain 9 existing on-site trees and incorporate them into the design of the outdoor amenity space (i.e., southwest corner of west parcel). Therefore, the applicant proposes to remove 233 existing on-site trees however 57 trees are located within proposed road dedications thus 176 existing on-site trees would be removed and require replacement. The replacement ratio of 2 new trees planted for every 1 tree proposed for tree removal results in the requirement for 352 (176 x 2) replacement trees. The landscape plan proposes 215 replacement trees on-site or along adjacent boulevards (192 on the proposed townhouse site and 23 on the proposed single detached lots). The 137 shortfall in the number of replacement trees would be provided as a contribution to the street tree planting reserve fund and would require a cash contribution in the amount of $68,500.00 (137 trees x $500.00/tree). This is less than the $75,000.00 indicated during the rezoning application since the applicant is now proposing to locate more trees on site now than anticipated at the rezoning stage.
2. Boulevard Enhancements: In general, the applicant proposes to set back perimeter fences along fronting streets to create more apparent space along public boulevards as indicated below:
   a) 1.5 m wide boulevard landscape strip with large (minimum 10 cm caliper) street trees and grass below behind the curb;
   b) 1.75 m and 1.8 m wide concrete sidewalks behind the boulevard landscape strip;
   c) An additional 1.5 m wide landscape strip with street trees and shrub planting that would straddle property lines extending onto private property with a low (1.2 m high) wood fence behind;
   d) Where possible, entry gates to private yards would be set back 1.0 m from the fence line;
   e) 1.5 m wide ALR landscape buffer strip would be provided along No. 4 Road; and
   f) Views into the site from the emergency vehicle access driveway along Sills Avenue would be partially screened with a low wood gate designed to be compatible with the perimeter fences to partially screen the adjacent long garage door lined driveway.
3. Pedestrian Circulation: The proposed on-site pedestrian circulation would consist of:
   a) 1.5 m wide band of concrete unit pavers along 1 side of all on-site driveways/roads; and
   b) 1.5 m wide walkways with CIP concrete or unit paver walkways through landscape areas.

4. Shared Indoor and Outdoor Amenities: The amenity building and outdoor amenity area are proposed at the southwest corner of the site to retain and incorporate existing trees into the landscape design of the communal open space. This location would also take best advantage of solar exposure for the outdoor amenity space. The amenity area would offer multiple activity options for a variety of age groups including a child's play area, a community garden area, outdoor patio area and a ping pong table. Seating areas would be provided for surveillance and community interaction. A 1.5 m high "good neighbour" wood fence is proposed to buffer the existing residential development along the south property line.
5. Private Outdoor Amenity Space: All the proposed dwellings along the fronting roads and the internal walkway mews corridors would have semi-private yards with their front door and amenity area facing the mews or the street. The front yards of these dwellings would be defined with a combination of low (1.2 m high) wood fences and low hedges to better separate and define the public and private realms.

Accessibility

1. The site is generally flat and all on-site walkways are accessible.
2. The proposed development includes three (3) convertible units that would be designed to be easily renovated to accommodate a future resident in a wheelchair (Buildings 6, 25 and 26). The potential conversion of these units will require installation of an elevator but the design incorporates a vertically stacked space for this purpose temporarily used as closet space.
3. All of the proposed units incorporate aging in place features to accommodate mobility constraints associated with aging. These features include:
   - Stairwell hand rails;
   - Lever-type handles for plumbing fixtures and door handles; and
   - Solid blocking in washroom walls to facilitate future grab bar installation beside toilets, bathtubs and showers.

Sustainability

1. The proposed development would meet the EnerGuide 82 standards (see Attachment 6 – EnerGuide Summary Report).
2. In addition, the applicant has committed to high efficiency combination gas boilers for space heating and hot water which will reduce dependency on the electrical grid.
3. The indoor amenity facility would be heated with geo-thermal energy according to the rezoning.
4. The proposed cladding materials would include long-life and low maintenance properties such as brick and stone.
5. Construction materials such as the following are proposed to reduce energy consumption:
   a) High performance doors (solid wood and steel with polyurethane insulation core);
   b) Walls (2" x 6" studs at 16" on-centre with R40 batt insulation); and
   c) Upgraded windows (double glazed, soft coat low-e, argon filled, insulated spacer, slider windows with vinyl frames).

Crime Prevention Through Environmental Design (CPTED)

The proposed CPTED features include:

a) A logical and legible site organization with clear sightlines to most areas within the site;
b) Passive surveillance from the residential units of all pedestrian and amenity areas;
c) A well defined hierarchy of open space on-site between public areas and private yards;
d) Informal surveillance of public boulevards from inside the units and private yards;
e) Surface wall mounted lighting on buildings to illuminate pedestrian areas and drive aisles;
f) Bollard lighting to be provided in landscaped areas but.

Garbage and Recycling

There would be separate garbage and/or recycling areas for both the townhouse parcels. The enclosures would not be located along property lines with existing, adjacent development. The design of the enclosures would be coordinated with the architectural design and large enough to accommodate the appropriate number of garbage and recycling containers.

Conclusion

The proposed built form and architectural character of this proposed development would fit within the surrounding neighbourhood and provide adequate separation and buffering to the adjacent existing residential development. The proposed development would also permit the completion of the local road network as envisioned in the McLennan South Sub-Area Plan.

Staff recommend support for this Development Permit application.

Brian Guzzi, RPP, BCSLA
Senior Planner/Urban Design

BG:cas

Attachment 1: Development Application Data Sheet
Attachment 2: Interim and Ultimate Road Alignment
Attachment 3: Agricultural Advisory Committee (AAC) Submission Package
Attachment 4: Advisory Design Panel Comments and Applicant Responses
Attachment 5: Cross-Sections - Separation between Existing and Proposed Development
Attachment 6: EnerGuide 82 Summary Report

Prior to forwarding this Development Permit application to Council for issuance consideration, the owner/developer is required to complete the following requirements:

1. Adoption of the rezoning (RZ 12-605038) including all required land dedications/transfers.
2. Provision of an appropriate legal agreement for an agricultural landscape buffer along the entire No. 4 Road property line to ensure the landscape buffer is maintained and to provide notification that the site is adjacent to the Agricultural Land Reserve (ALR). The design, construction and maintenance of the ALR landscape buffer will be the sole responsibility of the owner/developer subject to the approval of Richmond's Director of Development.

3. Provision of a variable width Statutory Right-of-Way along the west side of Lechow Street extending from the south property line of the west townhouse parcel to the south side of the new East-West Connector Road for road and boulevard purposes that ensures a continuous 1.5 m wide landscape boulevard strip and 1.5 m wide concrete sidewalk. The final width and alignment of the landscape boulevard strip and the sidewalk shall be determined by a Functional Plan prepared by the owner/developer to the approval of the Director of Development, the Director of Transportation and the Director of Engineering. The design and construction of this road and sidewalk SRW shall be the sole responsibility of the owner/developer subject to the approval of the Director of Development, Director of Transportation and the Director of Engineering. The maintenance for this road and sidewalk SRW shall be the sole responsibility of the City, after final acceptance by the City.
4. Registration of the appropriate legal agreement (i.e., cross access easement) on title in the Land Title Office over the west parcel for the benefit of the east parcel residents to permit access and use of the proposed amenity building and related facilities on the west parcel, if two (2) separate lots are created (i.e., separated by Lechow Street).
5. Registration of the appropriate legal agreement (i.e., Statutory Right-of-Way) on title in the Land Title Office over the east parcel driveway for the benefit of 7311 and 7315 No. 4 Road to permit vehicle and pedestrian access to these two (2) lots in the future, if they are redeveloped as townhouses in the future.
6. Registration of the appropriate legal agreement (i.e., Statutory Right-of-Way) on title in the Land Title Office over the southern west parcel driveway for the benefit of 7300 Bridge Street to permit vehicle and pedestrian access to this lot in the future, if it is redeveloped as townhouses.
7. Submission of a Contract entered into between the applicant and a Certified Arborist for supervision of any on-site works conducted within the tree protection zone of the trees to be retained. The Contract should include the scope of work to be undertaken, including: the proposed number of site monitoring inspections, and a provision for the Arborist to submit a post-construction assessment report to the City for review.
8. Registration of a legal agreement(s) regarding the developer's commitment to construct all townhouse units in accordance with EnerGuide 82 including the pre-ducting of all townhouse unit for future solar hot water heating.
9. Receipt of a Letter of Credit in the amount of $422,350.00 for landscape and on-site improvements. The value of the landscape Letter of Credit is to be based on the landscape cost estimate prepared by a BC registered landscape architect and acceptable to the Director of Development.

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

1. Enter into a Servicing Agreement* for the design and construction of works on the Bridge Street, No.4 Road frontage, Sills Avenue frontage, and Lechow Street. Any items under the Servicing Agreement (SA) which may be eligible for DCC credits will be determined through the SA review and approval process. Should a subdivision of the single family lots fronting onto Bridge Street be submitted prior to a building permit for the townhouse site, a separate Servicing Agreement (SA) application will be required for servicing of those lots and the works required on Bridge Street. Works include, but may not limited to:

    A. Transportation Requirements: Prior to issuance of a Building Permit the developer is responsible for the following:

        1. New Traffic Signal at No. 4 Road and New East-West Collector Road: Upgrade the intersection of No. 4 Road and the new collector road (min.11.2 m pavement width) with traffic signals to include but not limited to the following:
            a) Signal pole, controller, base and hardware;
            a) Pole base (City Centre decorative pole and street light fixture);

b) Video Detection, conduits (Electrical and Communications) and signal indications, and communications cable, electrical wiring and service conductors; and
c) APS (Accessible Pedestrian Signals).

2. Sills Avenue: Roadworks include, but not limited to the design and construction of the following:
   a) Curb extension at the intersection with Bridge Street on the north side of Sills Avenue;
   b) Removal of the existing north curb and gutter with possible sidewalk alteration; and
   c) Dedicate 10m along the entire north edge of 7120 Bridge Street to complete Sills Avenue with 4m x 4m corner cuts at Bridge Street and Lechow Street. Also a proper corner radius curve (approx. 14m to be confirmed by Servicing Agreement design connecting Sills Avenue to Lechow Street);
   d) 1.5m wide grass and tree boulevard (north side);
   e) 11.2 m pavement width;
   f) Concrete curb and gutter (south side);
   g) 1.5 m wide grass and treed boulevard (south side); and
   h) 1.8 m concrete sidewalk (south side).
   NOTE: Works may also include upgrade of street lighting to Sills Avenue frontage

3. Bridge Street: Along the entire site frontage from Sills Avenue to Shields Avenue, widen Bridge Street pavement to 8.5 m, construct new curb and gutter with 1.75 m concrete sidewalk at property line and remaining to new curb to be grass and treed boulevard. Frontage works to extend past site to south property line of 7300 Bridge Street.

4. No. 4 Road: Restore No. 4 Road frontage to standard 1.5 m concrete sidewalk at property line with min. 1.5 m grass and treed boulevard, where existing driveways are to be closed and/or substandard cross section exists. Upgrade street lighting as part of signal work and may also be required as part of frontage works along No. 4 Road.

5. Lechow Street (north): based on the functional plan, dedicate 10.65m (to be confirmed at SA stage) across the entire east edge of the development sites abutting Lechow Street from Sills Avenue to the new East-West Collector road on the north end and at the south from Shields Avenue along the east property lines of 7260/7300 Bridge Street. Roadworks include but not limited to the following, for the ultimate cross section (from Sills Avenue to north property line of 7191 No. 4 Road:

   From East property line:
   a) 1.75 m concrete sidewalk;
   b) 1.5 m wide grass and treed boulevard;
   c) Concrete curb and gutter;
   d) Minimum 11.2 m wide pavement;
   e) Concrete curb and gutter;
   f) 1.5 m wide grass and treed boulevard; and
   g) 1.75 m concrete sidewalk.

   From this point South, Interim Lechow Street works to include:

   From west property lines of 7191 and 7195 No. 4 Rd:
   a) 1 m gravel shoulder;
   b) minimum 6 m asphalt pavement;
   c) Temporary curb and gutter; and
   d) 1.5 m clear and unobstructed temporary asphalt walkway.
   Note re 7180/7200 Bridge Street: Additional road dedication will be required along the east property lines for the proper curve radius required to connect Lechow Street to the future East-West Collector road. See 'bulge' area on functional plan. The additional

dedication is required to make the road functional for two-way vehicular traffic turning movements.

6. Lechow Street (south): Dedicate 7.5 m along the entire east property line of the development properties fronting Lechow Street (southern end connecting to Shields Avenue)

7. To accommodate vehicular and pedestrian connectivity, the interim design for the south end of Lechow Street will be constructed as a pedestrian facility and once 7300 Bridge Street is redeveloped, the ultimate design will allow for vehicles. The interim works from Shields Avenue to the site entry include:

   From the west property line of 7331 No. 4 Road:
   a) 1.5 m concrete sidewalk at property line, not in ROW;
   b) 1.5 m grass and treed boulevard;
   c) curb and gutter;
   d) 8.5 m pavement width or interim pavement width south of 7300 Bridge Street;
   e) new curb and gutter;
   f) 1.5 m grass and treed boulevard; and
   g) 1.5 m concrete sidewalk.

   As much as possible of the above works are required to be constructed from Shields Avenue to the site entry, to facilitate pedestrian access.

8. East-West Collector Road: Road dedication varies from 16.95 m to 20 m based on functional plan, along north edge of development sites fronting the new East-West Collector Road

9. Provision of a 4 m x 4 m corner cut at the intersection of No. 4 Road. Roadworks include, but not limited to the following:

   From the north property line:
   a) minimum 1 m gravel shoulder;
   b) 11.2 m pavement width;
   c) curb and gutter (south side);
   d) 1.5 m grass and treed boulevard; and
   e) 1.75 m concrete sidewalk.

10. Lechow Street (within site): Dedicate 12m of road between the proposed East-West Collector Road and the proposed development's south property line. Roadworks include, but not limited to the following:

    Install street name signs at the corner of Lechow Street and the East-West Connector Road

    From the East property line of the road:
    a) 1.5 m concrete sidewalk;
    b) 1.5 m grassed and treed boulevard;
    c) 0.15 m curb and gutter;
    d) 7.7 m pavement width;
    e) 0.15 curb and gutter; and
    f) variable width tree and grass boulevard
    g) 1.5 m concrete sidewalk.

B. Transportation Requirements: Prior to issuance of a Building Permit the developer is responsible for the following:

1. Storm: The developer is responsible for the following frontage works:
   a) Bridge Street - Upgrade existing storm sewer from existing manhole STMH5174 (south property line of 7280 Bridge Street) to existing manhole STMH113666 (Sills Ave) with a length of approximately 174 m to a min. 600 mm.

a) "East-West Connector" - Construct a min. 600 mm storm sewer from Lechow Street to No. 4 Road and connect to new system on Lechow Street and existing system on No. 4 Road.

b) Lechow Street - Construct a min. 600 mm storm sewer from Sills Avenue to Shields Avenue and connect to existing system on Sills Avenue at existing manhole STMH 113669 and Shields Avenue with a manhole and new system on "East-West Connector" with a manhole. Approximately 15 m of existing 300 mm storm sewer from existing manhole STMH 113669 to existing manhole STMH 113671 is to be removed.

Note: the pipe size may be reduced along Lechow Street between "East-West Connector" and Shields Avenue to due to design parameters and site constraints; to be determined during the review of the Servicing Agreement design.

2. Sanitary: The developer is responsible for the following:

a) The developer is responsible for constructing sanitary sewers as required to service the development site within the dedicated roads (Sills Avenue, Lechow Street and "East-West Connector") and connect to the existing sanitary sewer system. Sizing is to be based on the greater of a) 200 mm and b) OCP size, as per City requirements. Calculations for sizing the proposed sanitary sewers are to be included in the Servicing Agreement design.

a) The east half of the development site (i.e. east of Lechow Street) is to connect to the sanitary sewer along the No. 4 Road frontage.

b) Existing 3.0 m wide R.O.W along No. 4 Road frontage to be discharged and replaced with a 5.0 m wide R.O.W along the entire No. 4 Road frontage.

3. Water: The developer is responsible for the following:

a) Using the OCP Model, there is 577 L/s available at 20 psi residual on No. 4 Road and 294 L/s available at 20 psi residual on Bridge Street Based on your proposed rezoning, your site requires a minimum fire flow of 220 L/s.

a) The developer is responsible for constructing a "looped" water system consisting of 200 mm diameter watermains within the dedicated roads (Sills Avenue, Lechow Street and "East-West Connector") and connection to the existing watermains on No. 4 Road, Bridge Street and Shields Avenue will be required.

b) Once you have confirmed your building design at the Building Permit stage, you must submit fire flow calculations signed and sealed by a professional engineer based on the Fire Underwriter Survey to confirm that there is adequate available flow.

4. Additional Engineering Requirements: The developer is also responsible for the following:

a) 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.

b) The developer is responsible for the under-grounding of the existing private utility pole line and/or the installation of pre-ducting for private utilities, subject to concurrence from the Private Utility Companies. Thru the Servicing Agreement and detail design, Private Utility Companies may require additional space for their infrastructure (kiosks, vista, transformers, LPTs. PMTs); this may include rights-of-ways on the development site to minimize impact on public space.

c) Given the soil conditions in the area, the following is required:

d) Geotechnical assessment for all Servicing Agreement works; and

e) A minimum 2 year maintenance period for Servicing Agreement.

f) Proposed City infrastructure (road, curb and gutter, boulevard, sidewalk, street lighting and utilities) to be located within road dedications.

g) Street lighting is required for all interim and permanent road and sidewalk works, the extent of which is to be assessed by the developer's consultants during the service agreement process.

h) The configuration for the "Ultimate" layout of Lechow Street, "East-West Connector" and Shields Avenue to be shown on the key plan of the Servicing Agreement drawings.

i) The developer is required to provide cash in lieu for the removal of the "Interim" works and construction of the "Ultimate" works along the development site frontage of Lechow Street and "East-West Connector".

j) The developer is required to design and construct works within the existing Lechow Street road dedication, just north of Shields Avenue.

Note: Alterations maybe required to existing curb and gutter on Shields Avenue

2. 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.

3. Incorporation of accessibility measures in Building Permit (BP) plans as determined via the Rezoning and/or Development Permit processes.

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.

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.

- 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 contains 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.

An executed copy of the DP considerations is located in the DP file.

Signed Date

City of Richmond

Development Application Data Sheet

Development Applications Division

DP 14-665485 **Attachment 1**

Address: 7120, 7140, 7160, 7180, 7200, 7220, 7240 and 7260 Bridge Street, and 7211, 7231 and 7271 No. 4 Road

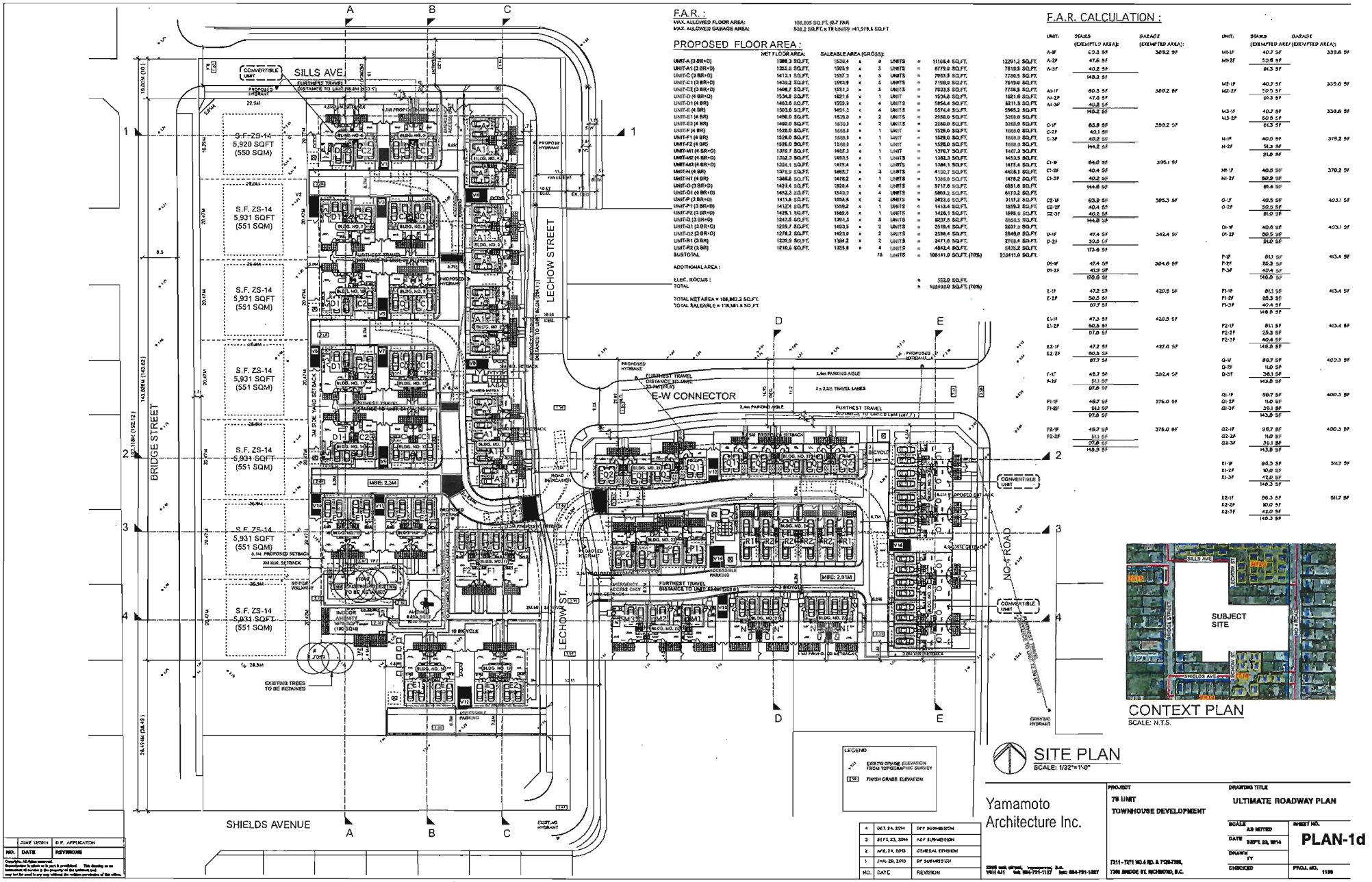
Applicant: Yamamoto Architecture Inc. Owner: Hui Yuan Investments (Canada) Ltd. and Mao Hua Chen

Planning Area(s): City Centre – McLennan South

Floor Area: Gross: 11,017 m² (118,586 ft²) Net: 10,114 m² (108,862.2 ft²)

	Existing	Proposed
Gross/Net Site Area	Gross 18,293 m² (196,904.2 ft²)	Net: 14,400 m² (155,000.3 ft²) for 2 townhouse lots and 3,906 m² (42,043.8 ft²) for 7 detached lots
Land Uses	Single Family Residential	Single Detached and Townhouse Residential
OCP Designation	Mixed Employment	no change
Zoning:	"Single Detached (RS1/F)"	"Single Detached (ZS14) – South McLennan (City Centre)" and "Town Housing (ZT70) - South McLennan"

	Bylaw Requirement	Proposed	Variance
Floor Area Ratio (FAR)	Max. 0.72 FAR	0.70 FAR	None
Lot Coverage	Max. 40%	39%	None
Setback – No. 4 Road	Min. 6.0 m (9.84 ft)	Min. 6.0 m (9.84 ft)	None
Setback – East-West Connector	Min. 3.0 m (9.84 ft)	Min. 4.5 m (9.84 ft)	None
Setback – Lechow Street	Min. 3.0 m (9.84 ft)	Min. 3.0 m (9.84 ft)	None
Setback – Shields Avenue	Min. 3.0 m (9.84 ft)	Min. 3.0 m (9.84 ft)	None
Setback – Sills Avenue	Min. 4.5 m (9.84 ft)	Min. 4.5 m (9.84 ft)	None
Setback – Exterior Side Yard	Min. 3.0 m (9.84 ft)	Min. 3.0 m (9.84 ft)	None
Setback – Interior Side Yard	Min. 3.0 m (9.84 ft)	Min. 3.0 m (9.84 ft)	None
Setback – Rear Yard	Min. 3.0 m (9.84 ft)	Min. 3.0 m (9.84 ft)	None
Height (m)	12.0 m² (39.37 ft²)	12.0 m² (39.37 ft²)	None
Height (storeys)	Max. 3 storeys	2 and 3 storeys	None
Off-street Parking Spaces	Residential (2.0 x 78) 156 Visitor (0.2 x 78) 16 Total Parking Spaces 172	Residential (2.0 x 78) 156 Visitor (0.2 x 78) 16 Total Parking Spaces 172	None
Small Car Parking Spaces	Max. 50%	43 spaces or 25%	None
Tandem Parking Spaces	Max. 50%	12 spaces (6 units) or 7%	None
Accessible Parking Spaces	Min. 4 spaces	4 spaces	None
Loading Spaces	1 medium size (SU9)	1 medium size (SU9)	None
Bike Parking Spaces – Class 1 & 2	(C1 = 98 + C2 = 16) Total 114	(C1 = 103 + C2 = 16) Total 119	None
Convertible Units	Min. 2 Units	2 Units	None
Aging-in-Place Units	Min. 78 Units	Min. 78 Units	None
Indoor Amenity Space	Min. 100 m² (1,076.4 ft²)	100 m² (1,076.4 ft²)	None
Private Outdoor Space	30 m²/unit (322.9 ft²/unit) minimum	38.2 m²/unit (411.2 ft²/unit) average	None
Children's Play Area	Min. 3 m² / unit (32.3 ft² / unit)	3 m² / unit (32.3 ft² / unit)	None



F.A.R. :

MAX. ALLOWED FLOOR AREA: 108,895 SQ.FT. (0.7 FAR)
MAX. ALLOWED GARAGE AREA: 538.2 SQ.FT. x 78 UNITS = 41,979.6 SQ.FT.

PROPOSED FLOOR AREA :

	NET FLOOR AREA:	SALEABLE AREA (GROSS):						
UNIT-A (2 BR+D)	1388.3 SQ.FT.	1538.4	x	8	UNITS	=	11105.4 SQ.FT.	12291.2 SQ.FT.
UNIT-A1 (3 BR+D)	1355.8 SQ.FT.	1509.9	x	5	UNITS	=	6779.0 SQ.FT.	7519.5 SQ.FT.
UNIT-C (3 BR+D)	1412.1 SQ.FT.	1557.3	x	5	UNITS	=	7053.5 SQ.FT.	7786.5 SQ.FT.
UNIT-C1 (3 BR+D)	1430.2 SQ.FT.	1593.9	x	5	UNITS	=	7159.0 SQ.FT.	7919.5 SQ.FT.
UNIT-C2 (3 BR+D)	1408.7 SQ.FT.	1551.3	x	5	UNITS	=	7033.5 SQ.FT.	7756.5 SQ.FT.
UNIT-D (4 BR+D)	1534.8 SQ.FT.	1621.6	x	1	UNIT	=	1534.8 SQ.FT.	1621.6 SQ.FT.
UNIT-D1 (4 BR)	1463.6 SQ.FT.	1592.9	x	4	UNITS	=	5854.4 SQ.FT.	6211.5 SQ.FT.
UNIT-E (4 BR)	1393.6 SQ.FT.	1491.3	x	4	UNITS	=	5965.2 SQ.FT.	6965.2 SQ.FT.
UNIT-E1 (4 BR)	1496.0 SQ.FT.	1639.0	x	2	UNITS	=	2992.0 SQ.FT.	3278.0 SQ.FT.
UNIT-E2 (4 BR)	1496.0 SQ.FT.	1639.0	x	2	UNITS	=	2992.0 SQ.FT.	3278.0 SQ.FT.
UNIT-F (4 BR)	1528.0 SQ.FT.	1668.8	x	1	UNIT	=	1528.0 SQ.FT.	1668.8 SQ.FT.
UNIT-F1 (4 BR)	1528.0 SQ.FT.	1668.8	x	1	UNIT	=	1528.0 SQ.FT.	1668.8 SQ.FT.
UNIT-F2 (4 BR)	1528.0 SQ.FT.	1668.8	x	1	UNIT	=	1528.0 SQ.FT.	1668.8 SQ.FT.
UNIT-M1 (4 BR+D)	1370.7 SQ.FT.	1456.3	x	1	UNIT	=	1370.7 SQ.FT.	1456.3 SQ.FT.
UNIT-M2 (4 BR+D)	1352.3 SQ.FT.	1453.5	x	1	UNITS	=	1352.3 SQ.FT.	1453.5 SQ.FT.
UNIT-M3 (4 BR+D)	1304.1 SQ.FT.	1473.4	x	1	UNITS	=	1304.1 SQ.FT.	1473.4 SQ.FT.
UNIT-N (4 BR)	1379.9 SQ.FT.	1468.7	x	3	UNITS	=	4139.7 SQ.FT.	4406.1 SQ.FT.
UNIT-N1 (4 BR)	1366.8 SQ.FT.	1478.2	x	1	UNITS	=	1366.8 SQ.FT.	1478.2 SQ.FT.
UNIT-O (3 BR+D)	1429.4 SQ.FT.	1528.4	x	4	UNITS	=	5717.6 SQ.FT.	6081.6 SQ.FT.
UNIT-O1 (4 BR+D)	1452.3 SQ.FT.	1543.3	x	4	UNITS	=	5809.2 SQ.FT.	6173.2 SQ.FT.
UNIT-P (3 BR+D)	1411.8 SQ.FT.	1558.5	x	2	UNITS	=	2823.6 SQ.FT.	3117.2 SQ.FT.
UNIT-P1 (3 BR+D)	1412.4 SQ.FT.	1559.2	x	1	UNITS	=	1412.4 SQ.FT.	1559.2 SQ.FT.
UNIT-P2 (3 BR+D)	1426.1 SQ.FT.	1588.6	x	1	UNITS	=	1426.1 SQ.FT.	1588.6 SQ.FT.
UNIT-Q (3 BR+D)	1247.5 SQ.FT.	1391.3	x	5	UNITS	=	6237.5 SQ.FT.	6956.5 SQ.FT.
UNIT-Q1 (3 BR+D)	1259.7 SQ.FT.	1403.5	x	2	UNITS	=	2519.4 SQ.FT.	2807.0 SQ.FT.
UNIT-Q2 (3 BR+D)	1278.2 SQ.FT.	1423.9	x	2	UNITS	=	2556.4 SQ.FT.	2848.0 SQ.FT.
UNIT-R1 (3 BR)	1235.9 SQ.FT.	1384.2	x	2	UNITS	=	2471.8 SQ.FT.	2768.4 SQ.FT.
UNIT-R2 (3 BR)	1210.6 SQ.FT.	1359.9	x	4	UNITS	=	4842.4 SQ.FT.	5439.2 SQ.FT.
SUBTOTAL				78	UNITS	=	100141.0 SQ.FT. (70%)	250411.0 SQ.FT.
ADDITIONAL AREA :								
ELEC. ROOMS :						=	322.0 SQ.FT.	
TOTAL						=	100463.0 SQ.FT. (70%)	

TOTAL NET AREA = 108,863.2 SQ.FT.
TOTAL SALEABLE = 118,581.5 SQ.FT.

F.A.R. CALCULATION :

UNIT:	STAIRS (EXEMPTED AREA):	GARAGE (EXEMPTED AREA):	UNIT:	STAIRS (EXEMPTED AREA):	GARAGE (EXEMPTED AREA):
A-1F	60.3 SF	328.2 SF	M1-1F	40.7 SF	339.6 SF
A-2F	47.6 SF		M1-2F	52.6 SF	
A-3F	40.2 SF			93.3 SF	
	148.2 SF		M2-1F	40.7 SF	339.6 SF
A1-1F	60.3 SF	328.2 SF	M2-2F	52.6 SF	
A1-2F	47.6 SF			93.3 SF	
A1-3F	40.2 SF		M3-1F	40.7 SF	339.6 SF
	148.2 SF		M3-2F	52.6 SF	
C-1F	65.8 SF	288.2 SF		93.3 SF	
C-2F	40.1 SF		N-1F	40.5 SF	378.2 SF
C-3F	40.2 SF		N-2F	53.3 SF	
	144.2 SF			93.8 SF	
C1-1F	64.0 SF	396.1 SF			
C1-2F	40.4 SF		M1-1F	40.5 SF	378.2 SF
C1-3F	40.2 SF		M1-2F	52.9 SF	
	144.6 SF			93.4 SF	
C2-1F	63.8 SF	385.3 SF	G-1F	40.5 SF	403.1 SF
C2-2F	40.4 SF		G-2F	50.9 SF	
C2-3F	40.2 SF			91.0 SF	
	144.8 SF		G1-1F	40.5 SF	403.1 SF
D-1F	47.4 SF	342.4 SF	G1-2F	50.5 SF	
D-2F	39.5 SF			91.0 SF	
	173.6 SF		P-1F	61.1 SF	413.4 SF
D1-1F	47.4 SF	364.6 SF	P-2F	25.3 SF	
D1-2F	41.9 SF		P-3F	40.4 SF	
	178.6 SF			146.8 SF	
E-1F	47.2 SF	420.5 SF	P1-1F	61.1 SF	413.4 SF
E-2F	50.5 SF		P1-2F	25.3 SF	
	97.7 SF		P1-3F	40.4 SF	
E1-1F	47.2 SF	420.5 SF		146.8 SF	
E1-2F	50.5 SF		P2-1F	61.1 SF	413.4 SF
	97.7 SF		P2-2F	25.3 SF	
E2-1F	47.2 SF	427.6 SF	P2-3F	40.4 SF	
E2-2F	50.5 SF			146.8 SF	
	97.7 SF		G-1F	80.7 SF	400.3 SF
F-1F	48.7 SF	302.4 SF	G-2F	11.0 SF	
F-2F	51.1 SF		G-3F	36.1 SF	
	97.8 SF			143.8 SF	
F1-1F	48.7 SF	376.0 SF	G1-1F	80.7 SF	400.3 SF
F1-2F	51.1 SF		G1-2F	11.0 SF	
	97.8 SF		G1-3F	36.1 SF	
F2-1F	48.7 SF	376.0 SF		143.8 SF	
F2-2F	51.1 SF		G2-1F	80.7 SF	400.3 SF
	97.8 SF		G2-2F	11.0 SF	
	148.5 SF		G2-3F	36.1 SF	
				143.8 SF	
			K1-1F	86.3 SF	511.7 SF
			K1-2F	10.0 SF	
			K1-3F	42.0 SF	
				148.3 SF	
			K2-1F	86.3 SF	511.7 SF
			K2-2F	10.0 SF	
			K2-3F	42.0 SF	
				148.3 SF	

LEGEND
- EXISTING GRADE ELEVATION FROM TOPOGRAPHIC SURVEY
- FINISH GRADE ELEVATION

NO.	DATE	REVISION
4	OCT. 24, 2014	DP SUBMISSION
3	SEPT. 23, 2014	ADP SUBMISSION
2	APR. 24, 2013	GENERAL REVISION
1	JAN. 28, 2013	RP SUBMISSION

NO.	DATE	REVISIONS
	JUNE 12/2014	D.P. APPLICATION

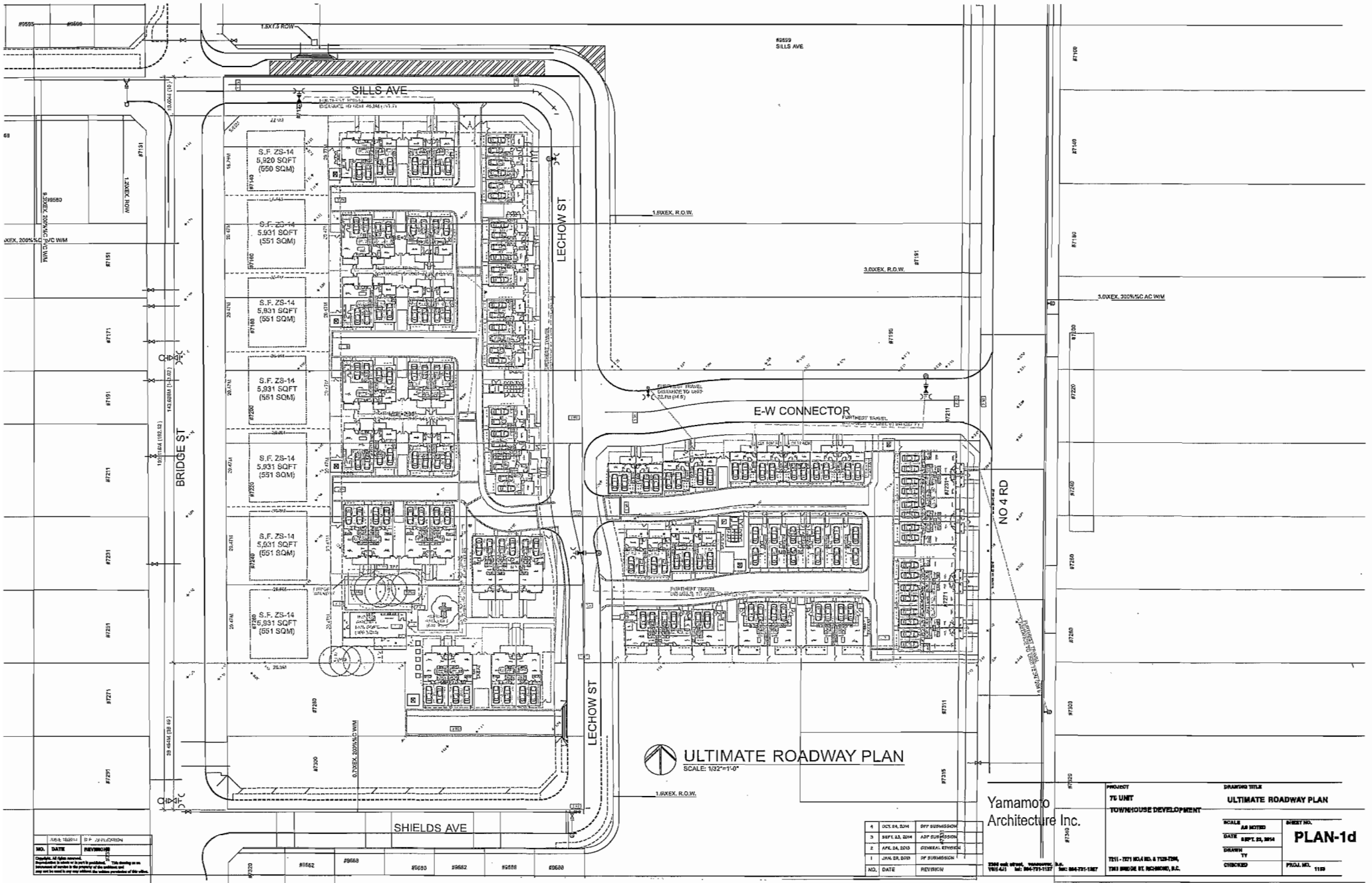
Copyright. All rights reserved. This drawing is and at all times is the property of the architect and may not be used for any purpose without the written permission of the author.

Yamamoto Architecture Inc.
#308 oak street, vancouver, b.c. V6H 4J1 tel: 604-731-1157 fax: 604-731-1897

PROJECT: 78 UNIT TOWNHOUSE DEVELOPMENT
7311 - 7371 NO.4 RD. & 7120-7200, 7300 BRIDGE ST. RICHMOND, B.C.

DRAWING TITLE: ULTIMATE ROADWAY PLAN
SCALE: AS NOTED
DATE: SEPT. 23, 2014
DRAWN: TY
CHECKED:
SHEET NO.: PLAN-1d
PROJ. NO.: 1130

ATTACHMENT 2A – INTERIM ROAD LAYOUT



NO.	DATE	REVISION
4	OCT. 24, 2014	DPP SUBMISSION
3	SEPT. 23, 2014	ADP SUBMISSION
2	APR. 24, 2013	GENERAL REVISION
1	JAN. 28, 2013	RF SUBMISSION

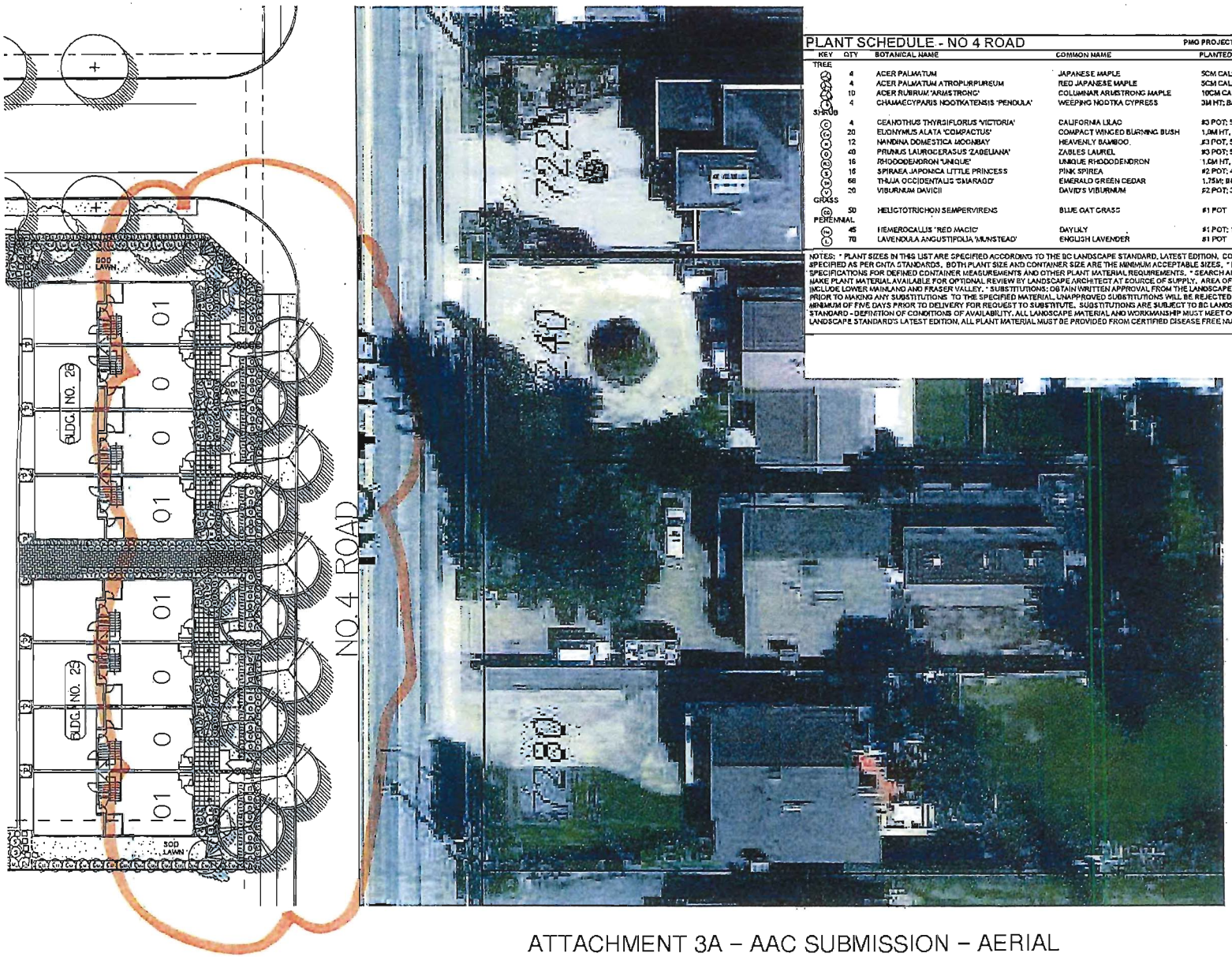
Yamamoto Architecture Inc.

PROJECT
76 UNIT
TOWNHOUSE DEVELOPMENT
7211 - 7271 NO.4 RD. & 7120-7200,
7303 BRIDGE ST. RICHMOND, B.C.

DRAWING TITLE
ULTIMATE ROADWAY PLAN

SCALE AS NOTED
DATE SEPT. 23, 2014
DRAWN TY
CHECKED
SHEET NO. PLAN-1d
PROJ. NO. 1139

ATTACHMENT 2B – ULTIMATE ROAD LAYOUT



PLANT SCHEDULE - NO 4 ROAD

PMG PROJECT NUMBER: 14061

KEY	QTY	BOTANICAL NAME	COMMON NAME	PLANTED SIZE / REMARKS
TREE				
	4	ACER PALMATUM	JAPANESE MAPLE	5CM CAL; 1.2M STD; B&B
	4	ACER PALMATUM ATROPURPUREUM	RED JAPANESE MAPLE	5CM CAL; 1.2M STD; B&B
	10	ACER RUBRUM 'ARMSTRONG'	COLUMNAR ARMSTRONG MAPLE	10CM CAL; 2M STD; B&B
	4	CHAMAECYPARIS NOOTKATENSIS 'PENDULA'	WEEPING NOOTKA CYPRESS	3M HT; B&B
SHRUB				
	4	CEANOTHUS THYRSIFLORUS 'VICTORIA'	CALIFORNIA LILAC	#3 POT; 50CM
	20	EUONYMUS ALATA 'COMPACTUS'	COMPACT WINGED BURNING BUSH	1.0M HT, B&B
	12	NANDINA DOMESTICA 'MOONBAY'	HEAVENLY BAMBOO	#3 POT, 50CM
	40	PRUNUS LAUROCERASUS 'ZABELIANA'	ZABLES LAUREL	#3 POT; 50CM
	16	RHODODENDRON 'UNIQUE'	UNIQUE RHODODENDRON	1.0M HT, B&B
	16	SPIRAEA JAPONICA LITTLE PRINCESS	PINK SPIREA	#2 POT; 45CM
	68	THUJA OCCIDENTALIS 'SMARAGD'	EMERALD GREEN CEDAR	1.75M; B&B
	20	VIBURNUM DAVICII	DAVID'S VIBURNUM	#2 POT; 30CM
GRASS				
	50	HELICTOTRICHON SEMPERVIRENS	BLUE OAT GRASS	#1 POT
PERENNIAL				
	45	HEMEROCALLIS 'RED MAGIC'	DAYLILY	#1 POT; 1-2 FAN
	70	LAVENDULA ANGUSTIFOLIA 'MUNSTEAD'	ENGLISH LAVENDER	#1 POT

NOTES: * PLANT SIZES IN THIS LIST ARE SPECIFIED ACCORDING TO THE BC LANDSCAPE STANDARD, LATEST EDITION. CONTAINER SIZES SPECIFIED AS PER CNTA STANDARDS. BOTH PLANT SIZE AND CONTAINER SIZE ARE THE MINIMUM ACCEPTABLE SIZES. * REFER TO SPECIFICATIONS FOR DEFINED CONTAINER MEASUREMENTS AND OTHER PLANT MATERIAL REQUIREMENTS. * SEARCH AND REVIEW: MAKE PLANT MATERIAL AVAILABLE FOR OPTIONAL REVIEW BY LANDSCAPE ARCHITECT AT SOURCE OF SUPPLY. AREA OF SEARCH TO INCLUDE LOWER MAINLAND AND FRASER VALLEY. * SUBSTITUTIONS: OBTAIN WRITTEN APPROVAL FROM THE LANDSCAPE ARCHITECT PRIOR TO MAKING ANY SUBSTITUTIONS TO THE SPECIFIED MATERIAL. UNAPPROVED SUBSTITUTIONS WILL BE REJECTED. ALLOW A MINIMUM OF FIVE DAYS PRIOR TO DELIVERY FOR REQUEST TO SUBSTITUTE. SUBSTITUTIONS ARE SUBJECT TO BC LANDSCAPE STANDARD - DEFINITION OF CONDITIONS OF AVAILABILITY. ALL LANDSCAPE MATERIAL AND WORKMANSHIP MUST MEET OR EXCEED BC LANDSCAPE STANDARD'S LATEST EDITION. ALL PLANT MATERIAL MUST BE PROVIDED FROM CERTIFIED DISEASE FREE NURSERY

© Copyright reserved. This drawing and design is the property of PMG Landscape Architects and may not be reproduced or used for other projects without their permission.

pmg LANDSCAPE ARCHITECTS
Suite C100 – 4185 Still Creek Drive
Burnaby, British Columbia, V5C 6G9
p: 604 294-0011 ; f: 604 294-0022

SEAL:

NO.	DATE	REVISION DESCRIPTION	DR.
1	14.MAY.30	NO. 4 ROAD SUBMISSION	

CLIENT:

PROJECT:

78 UNIT TOWNHOUSE DEV.

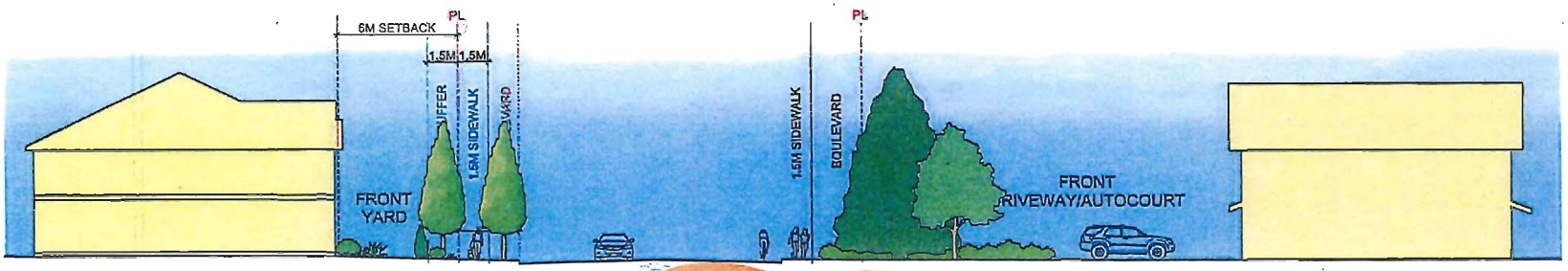
7211 - 7271 NO. 4 ROAD &
7120 - 7260, 7300 BRIDGE STREET
RICHMOND, BC

DRAWING TITLE:

NO. 4 ROAD FRONTAGE

DATE:	14.MAY.30	DRAWING NUMBER:
SCALE:	1/128	**3e**
DRAWN:	DG	
DESIGN:		
CHKD:	MCY	OF 4
PMG PROJECT NUMBER:		14-061

ATTACHMENT 3A – AAC SUBMISSION – AERIAL



NO.4 ROAD

BLDG. 25

SECTION THROUGH NO.4 ROAD

EXISTING HOUSE



BLDG. 25 BLDG. 26 E-W CONNECTOR

EAST ELEVATION STREETSCAPE (NO.4 ROAD)



BLDG. 25 BLDG. 26 E-W CONNECTOR

EAST ELEVATION STREETSCAPE (NO.4 ROAD)

Attachment 4

Excerpt from the Minutes from
The Design Panel Meeting

Wednesday, October 8, 2014 – 4:00 p.m.
Rm. M.1.003
Richmond City Hall

This Development Permit application was presented to the Advisory Design Panel (ADP) on Wednesday, October 8, 2014. The Advisory Design Panel indicated conditional support for this Development Permit application subject to the applicant giving consideration to the ADP comments. The design response from the applicant has been included immediately following the specific Design Panel comments and is identified in '***bold italics***'.

DP 14-665485 – 78-UNIT TOWNHOUSE COMPLEX 10,113.63 m² (108,862.2 ft²)

APPLICANT:	Yamamoto Architecture Inc.
PROPERTY LOCATION:	7120, 7140, 7160, 7180, 7200, 7220, 7240 and 7260 Bridge St.; 7211, 7231 and 7271 No. 4 Road

Applicant's Presentation

Taizo Yamamoto, Yamamoto Architecture Inc., and Landscape Architect Mary Chan Yip, PMG Landscape Architects Inc., presented the project and answered queries from the Panel on behalf of the applicant.

Panel Discussion

Comments from the Panel were as follows:

- site is handled well considering that several roadways need to be taken into consideration; roadways and drive aisles limit the potential for green spaces in the proposed development; ***we appreciate the Panel's comment***
- massing and site planning is well handled; the applicant's approach to create two parcels with slightly different character is a positive step; ***we appreciate the Panel's comment***
- variation of colours is good; however, also consider varying the materials; ***further material variation introduced in west portion of the site. Hardie-panel replaced in upper level box outs and gables to add more variety of texture and colour. Additional stone type introduced to create more variation in colour. Brick added to Sills and Lechow fronting units. Juliette balconies and decorative roof vents added on streetscape buildings to add more visual interest and depth to the facades.***

- eastern parcel is generally more successful than the three-storey elements in the western parcel, e.g. roof lines are better in the eastern parcel than in the western parcel; look at opportunities to bring these characteristics to the western parcel; ***per comments from the panel, a gable form has been introduced to replace the hip roof presented at Advisory Design Panel. Hardie-panel within the gable and at the top of the box-out to add more variety in texture and colour. Brick and additional colour schemes introduced to create more variety within the palette of the western parcel.***
- proposed indoor amenity space is successful in terms of placement and orientation; outdoor amenity space is nicely located, well-lit and functional; ***we appreciate the Panel's comment***
- concern on the pedestrian flow through the development especially in the western parcel; clusters of buildings are accessed from the drive aisle; consider realigning some of the buildings to create a more direct alignment of mews directly to the street in order to provide a safer approach for visitors and pedestrians; ***Of the 46 units provided on the western portion of the site, only 16 units require pedestrians to walk on the pedestrian walkway shared with the drive aisle. The remaining units have access directly from the sidewalk or from the walkways in the amenity area cluster. Walkway crossings from these two clusters of 8 duplexes are located in the middle of the cluster and as far as possible from the intersection of the drive aisles. In this way, there is good visibility at the crossings of the pedestrian walkways with the drive aisles. These crossings are also marked with pavers as a visual indication for drivers.***
- stamped asphalt walkway on the drive aisle at the eastern parcel is better suited at the southern edge of the drive aisle where the front doors of units are being accessed; not suitable at the northern edge of the drive aisle which is adjacent to the garage; ***Walkway shifted to the south side as suggested***
- agree that the character of the eastern parcel is nicer than the western parcel; consider design development to the building roofs in the western parcel; ***As mentioned above, the roofs of the western portion have been modified to be gables that are more consistent with the rooflines of the eastern portion. Decorative roof vents added to create more texture and visual interest.***
- roadways consume a lot of the site, can the patios be larger; agree with the comment that the indoor and outdoor amenity spaces are well handled; ***Patio sizes are balanced with the requirement for planted boulevards and green space.***
- agree with the previous comments of the Panel; applicant made a good presentation of the project; ***we appreciate the Panel's comment***
- consider more variation in the colours for the proposed development; ***Further material and colour variation introduced in west portion of the site. Hardie-panel replaced in upper level box outs and gables to add more variety of texture and colour. Brick added in addition to stone to introduce another variation in colour and texture. Juliette balconies added on streetscape buildings to add more visual interest and depth to the facades. Increased variation in colour added for a total of 3 main colour schemes with 3 variations.***

- cluster of homes around the indoor and outdoor amenity spaces are well done and could be repeated throughout the development; consider reorganizing other clusters of homes to allow more pockets of shared space; ***Layout of internal drive aisles and the substantial roadway dedications require an efficiently laid out site. Pockets of space are provided in the form of pedestrian mews located between the rows of duplex buildings where the grouping of private yards and public walkways maximizes the size of the open space.***
- pleased to know that the applicant has a public art plan; applicant needs to identify the location of public art and ensure that it will be functional and experienced by the public; look forward to seeing the public art plan; ***The team is considering different options and locations for the public art***
- commend the applicant for the design of the convertible unit; appreciate the use of pocket doors; look at the potential for pocket doors in Unit-O washrooms opposite the den; ***Pocket door incorporated into the Unit-O washroom opposite the den***
- appreciate the amenity spaces and community garden plots; consider raising the level of soil plots up to 12 inches to facilitate the planting activities of people with disabilities; ***Plots will be raised to provide more accessibility***
- pleased to see the wheelchair accessible ping-pong table; ***we appreciate the Panel's comment***
- could not support the project as only two convertible units are being proposed for the 78-unit development; look at precedent in other projects reviewed by the Panel, e.g. a 63-unit townhouse development providing 20 convertible units; look at the potential for convertible units in the two-storey units of the subject development to enhance their usability; ***One additional "O" type convertible unit has been added.***
- appreciate the applicant's energy study; concur that a geothermal system is not viable in view of the scale of the project; however, the applicant could still consider a central power plant to maintain energy efficiency throughout the development in the long-run; ***The team has determined that central power is not viable for this project. There are several reasons why it is not advisable in incorporate centralized boilers in a townhome development. There is no room on the site to house mechanical rooms for such boilers. Especially since multiple boilers would be required, since one large central boiler would require an easement across LeChow Street for distribution pipes. Furthermore, since the distribution network would running outdoors, all of the pipes would need to be insulated (unpractical and costly), furthermore the distances traveled for the distribution network are very far (townhomes having less density and thus are more spread out than apartment units). Finally, townhome buyers expect certain features when they invest in this type of dwelling, individual metering is one example. With centralized boilers, people wouldn't have individual metering, instead they would likely pay pro rata portions of strata fees for their utilities based on their unit area (not consumption) which is incongruous with buyer expectations. The fact that centralized boilers are instead used in low-rise apartments is indicative of these considerations.***
- support the recommendation of City staff to extend the proposed walkway along the east side of Building 19 to the north to connect with the main entry road of the west development parcel; ***The sidewalk east of building 19 has been extended north along the west side of Lechow Street***

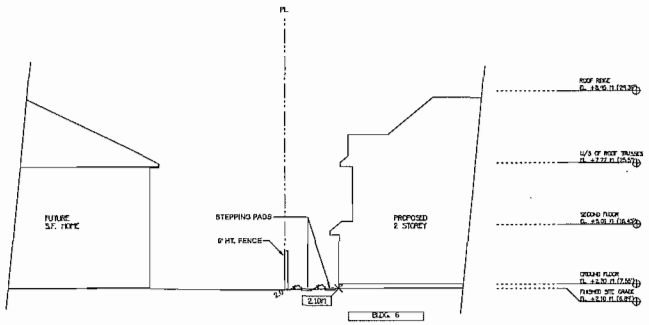
- stamped asphalt is not advisable; consider unit pavers to announce the clarity of pedestrian circulation; and ***pavers have been incorporated to replace stamped asphalt***
- the applicant has done a good job in a challenging site. ***We appreciate the Panel's comment***
- *(In addition, the Chair read the following comments submitted by Panel member Grant Brumpton)*
- consider increased safety and clarity in the definition of the internal pedestrian routes, e.g. the pedestrian link off No. 4 Road which is in conflict with the visitor parking; and ***Pedestrian link shifted to the south of building 25.***
- appreciate the planting in the parking areas; however, review the proposed plant species. ***Our Landscape Architect Mary Chan Yip clarified this question with the Panel Chair. She had proposed the Prunus lusitanica because we could not fit any trees in the auto court and the Prunus lusitanica is an evergreen shrub to give some greenery. This plant can withstand pruning to allow the Strata to control the height and shape. The Chair said he understood and said it was acceptable.***

Panel Decision

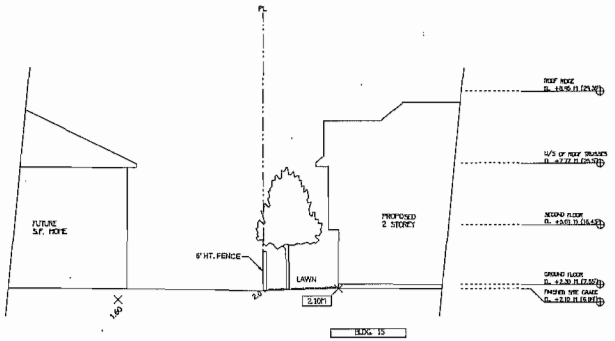
It was moved and seconded
That DP 14-665485 be supported to move forward to the Development Permit Panel subject to the applicant giving consideration to the comments of the Panel.

CARRIED

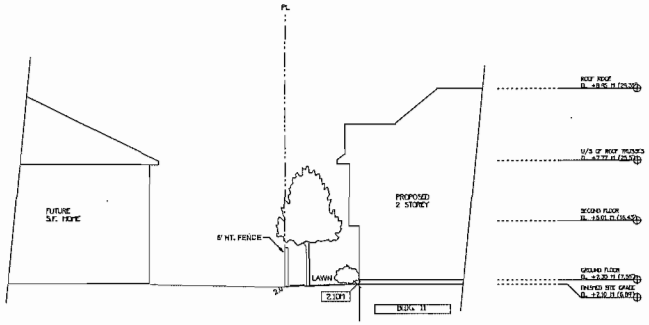
Opposed: Tom Parker



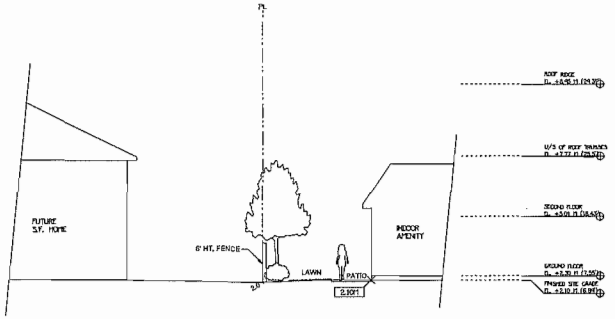
SECTION 1



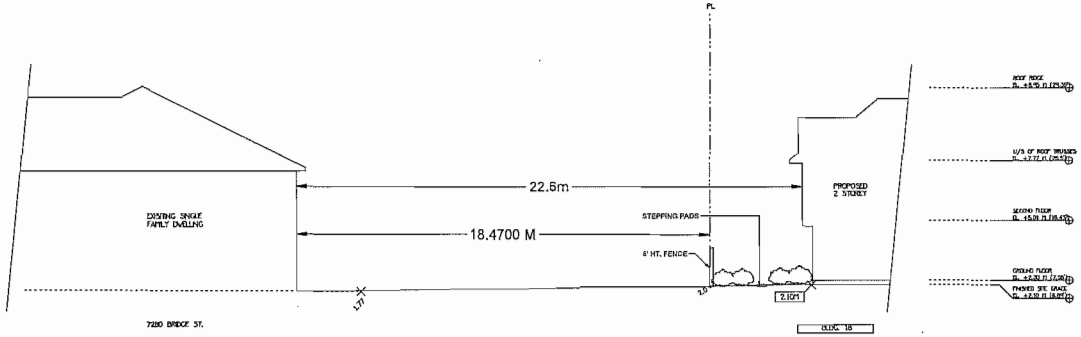
SECTION 3



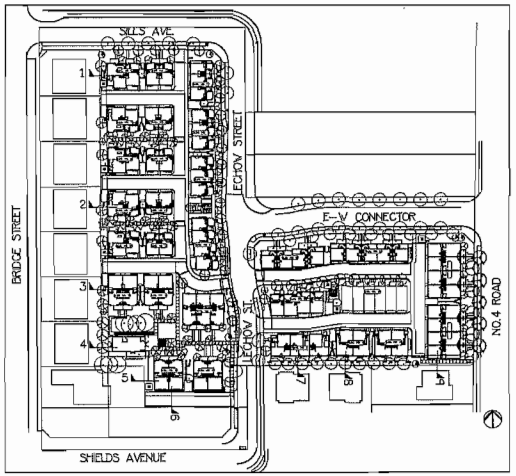
SECTION 2



SECTION 4



SECTION 5



14061-3.ZIP

©Copyright reserved. This drawing and design is the property of PMG Landscape Architects and may not be reproduced or used for other projects without their permission.

pmg LANDSCAPE ARCHITECTS
Suite C100 - 4185 Still Creek Drive
Burnaby, British Columbia, V5C 6G9
p: 604 294-0011 ; f: 604 294-0022

SEAL:

NO.	DATE	REVISION DESCRIPTION	DR.
1	14.OCT.19	SECTION 5	

CLIENT:

PROJECT:

78 UNIT TOWNHOUSE DEV.

7211 - 7271 NO. 4 ROAD &
7120 - 7260, 7300 BRIDGE STREET
RICHMOND, BC

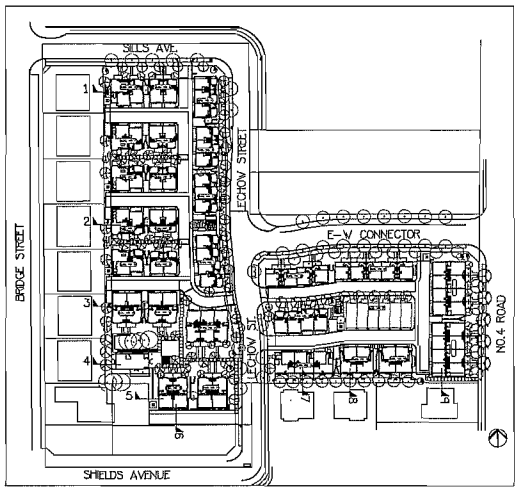
DRAWING TITLE:

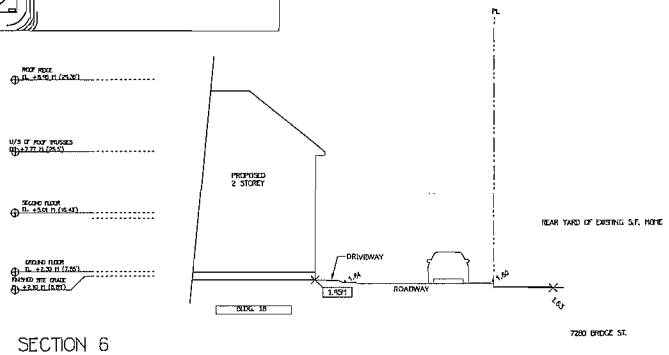
LANDSCAPE SECTIONS

DATE:	14.OCT.23	DRAWING NUMBER:
SCALE:	1:100	**3g**
DRAWN:	DD	
DESIGN:		OF 6
CHK'D:	MCY	

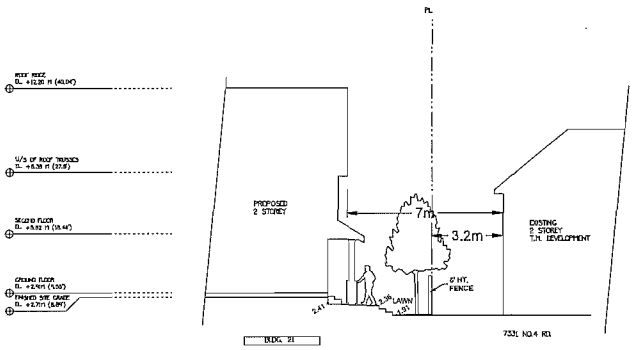
PMG PROJECT NUMBER: 14-061

ATTACHMENT 5A – SEPARATION TO EX. ADJACENT RESIDENTIAL – SHEET 1

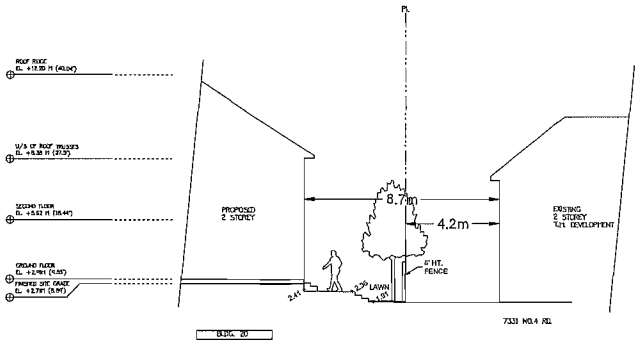




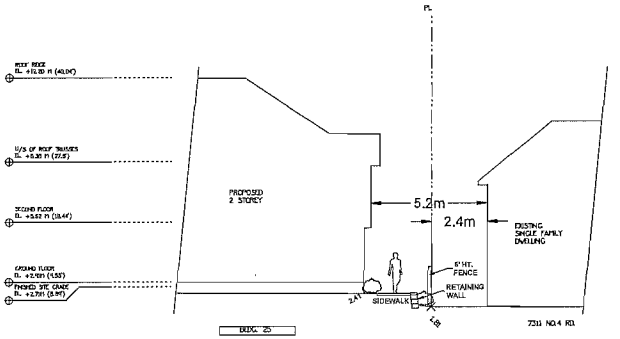
SECTION 6



SECTION 8



SECTION 7



SECTION 9

ATTACHMENT 5B – SEPARATION TO EX. ADJACENT RESIDENTIAL – SHEET 2

©Copyright reserved. This drawing and design is the property of PMG Landscape Architects and may not be reproduced or used for other projects without their permission.

pmg LANDSCAPE ARCHITECTS
Suite C100 – 4185 Still Creek Drive
Burnaby, British Columbia, V5C 6G9
p: 604 294-0011 ; f: 604 294-0022

SEAL:

NO.	DATE	REVISION DESCRIPTION	DR.

CLIENT:

PROJECT:

78 UNIT TOWNHOUSE DEV.

7211 - 7271 NO. 4 ROAD &
7120 - 7260, 7300 BRIDGE STREET
RICHMOND, BC

DRAWING TITLE:

LANDSCAPE SECTIONS

DATE:	14.OCT.23	DRAWING NUMBER:	
SCALE:	1:100		**3h**
DRAWN:	DD		
DESIGN:			
CHKD:	MCT		OF 6

14061-3.ZIP

PMG PROJECT NUMBER: 14-061

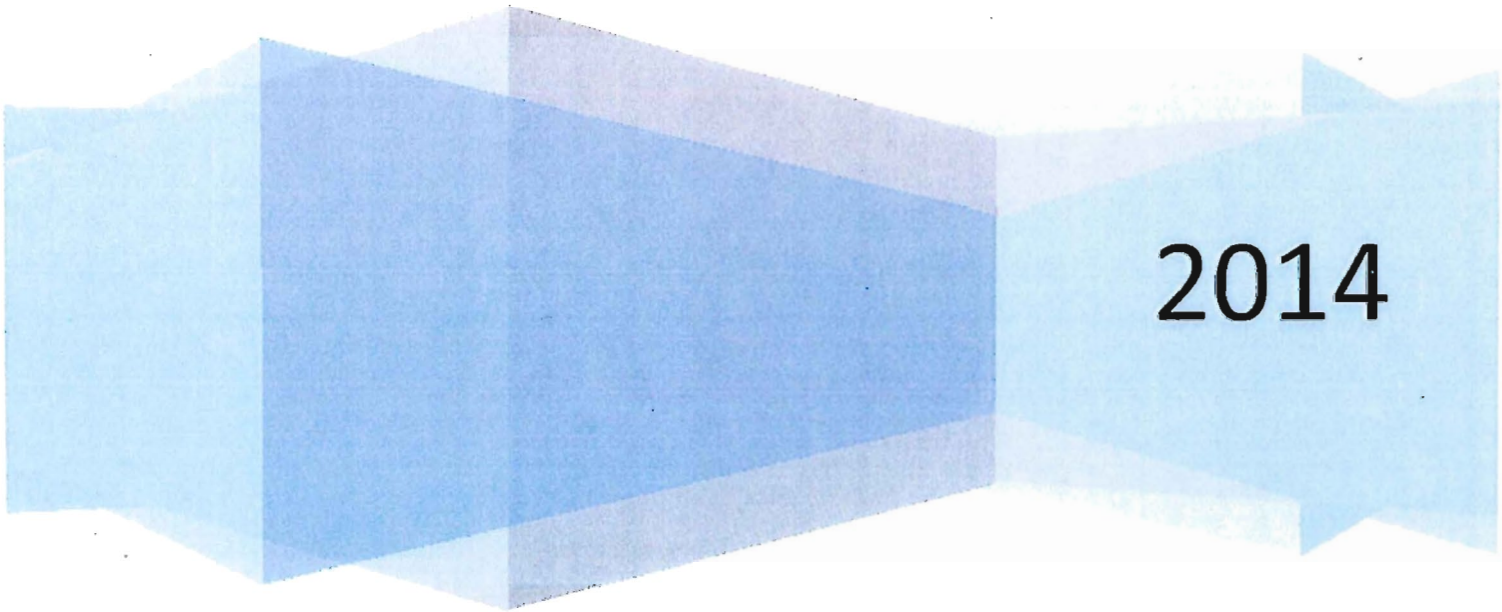


E3 Eco Group Inc.

Report for Hui Yuan Investments (Canada) Inc.

Revised Energy Evaluation Review and Recommendations for Unit A, Bldg 5, Bridge Street townhouses, Richmond, BC

10 April 2014



Introduction:

E3 ECO GROUP Inc. was asked to perform HOT2000 energy evaluation on a plan addressed as **Unit A, Bldg 5, Bridge Street townhouses, Richmond, BC.** The modeling was carried out according to the format defined by the EnerGuide Rating System for New Homes evaluation procedures.

Weather Location: Vancouver

Base Case Review: Townhouse, end unit

Foundation	R12 insulation under entire slab
Above Grade Wall Construction	2x6 @ 16"o.c. R20 batt insulation & R20 headers
Roof Construction	Engineered truss @ 24"o.c with R 40 batt insulation
Window Specification	Double glazed, soft coat low-e, metal spacer, slider windows with vinyl frames
Door Specification	Solid Wood (front) & Steel with polyurethane insulation core (garage & storage rm)
Ventilation Specification	BC Building Code minimum: bathroom fans
Air Tightness	5.5 ACH@50Pa; an estimate based on typical local construction
Space Heating System	Natural Gas Combi system, AFUE 95%
Domestic Hot Water	Indirect fired storage tank supplied by space heating boiler, 30 US gal. tank
Energy Credits:	
Drainwater Heat Recovery	0
Low energy lighting	0
Energy Star appliances	95kWh/yr (dishwasher, clothes washer & fridge)
Predicted EnerGuide Rating (ERS)	**79**
Design Heat Loss: BTU/hr	**21159 BTU/hr**
Estimated Annual Space Heating + DHW Energy Consumption (kWh)	**13315 kWh**

Bridge St th – Yamamoto – basecase.hse

Upgrade Recommendations:

The Base Case model was reviewed and the following upgrades have been recommended to increase the predicted EnerGuide rating to 82:

Upgrade 1:

Foundation	R12 insulation under entire slab
Above Grade Wall Construction	2x6 @ 16"o.c. R20 batt insulation & R20 headers
Roof Construction	Engineered truss @ 24"o.c with R 40 batt insulation
Window Specification	Double glazed, soft coat low-e, **argon fill, insulated spacer,** slider windows with vinyl frames
Door Specification	Solid Wood (front) & Steel with polyurethane insulation core (garage & storage rm)
Ventilation Specification	BC Building Code minimum: bathroom fans
Air Tightness	5.5 ACH@50Pa; an estimate based on typical local construction
Space Heating System	Natural Gas Combi system, AFUE 95%
Domestic Hot Water	Indirect fired storage tank supplied by space heating boiler, 30 US gal. tank
Energy Credits:	
Drainwater Heat Recovery	0
EnergyStar lighting	1450kWh/yr
Energy Star appliances	95kWh/yr (dishwasher, clothes washer & fridge)
Predicted EnerGuide Rating (ERS)	**82**
Design Heat Loss: BTU/hr	**19663 BTU/hr**
Estimated Annual Space Heating + DHW Energy Consumption (kWh)	**12232 kWh**

Notes:

1. Design Heat loss calculation is based on design conditions assumed. This figure can be used to size the heating system, although unit size will have to take into account system efficiency, operating conditions and provide a margin for quick recovery.
2. The calculated energy consumption estimates are based on data entered and assumptions made within the computer program based on standard user profiles. The estimates may not reflect actual energy requirements of this house due to variations in weather, actual construction details used, performance of equipment, lifestyle and number of occupants.

If you have any questions regarding this report, please contact me at your earliest convenience.

Kristi Owens,CEA,SBA,AT
E3 ECO GROUP INC.
e: kristi@e3ecogroup.com

END

City of Richmond

Development Permit

No. DP 14-665485

To the Holder:	Yamamoto Architecture Inc.,
Property Address:	7120, 7140, 7160, 7180, 7200, 7220, 7240 and 7260 Bridge Street and 7211, 7231 and 7271 No. 4 Road
Address:	2386 Oak Street Vancouver BC V6H 4J1

1. This Development Permit is issued subject to compliance with all of the Bylaws of the City applicable thereto, except as specifically varied or supplemented by this Permit.
2. This Development Permit applies to and only to those lands shown cross-hatched on the attached Schedule "A" and any and all buildings, structures and other development thereon.
3. Subject to Section 692 of the Local Government Act, R.S.B.C.: buildings and structures; off-street parking and loading facilities; roads and parking areas; and landscaping and screening shall be constructed generally in accordance with Plans #1 to #35 attached hereto.
4. Sanitary sewers, water, drainage, highways, street lighting, underground wiring, and sidewalks, shall be provided as required.
5. As a condition of the issuance of this Permit, the City is holding the security in the amount of $422,350.00 to ensure that development is carried out in accordance with the terms and conditions of this Permit. Should any interest be earned upon the security, it shall accrue to the Holder if the security is returned. The condition of the posting of the security is that should the Holder fail to carry out the development hereby authorized, according to the terms and conditions of this Permit within the time provided, the City may use the security to carry out the work by its servants, agents or contractors, and any surplus shall be paid over to the Holder. Should the Holder carry out the development permitted by this permit within the time set out herein, the security shall be returned to the Holder. The City may retain the security for up to one year after inspection of the completed landscaping in order to ensure that plant material has survived.
6. If the Holder does not commence the construction permitted by this Permit within 24 months of the date of this Permit, this Permit shall lapse and the security shall be returned in full.

Development Permit
No. DP 14-665485

To the Holder:	Yamamoto Architecture Inc.,
Property Address:	7120, 7140, 7160, 7180, 7200, 7220, 7240 and 7260 Bridge Street and 7211, 7231 and 7271 No. 4 Road
Address:	2386 Oak Street Vancouver BC V6H 4J1

7. The land described herein shall be developed generally in accordance with the terms and conditions and provisions of this Permit and any plans and specifications attached to this Permit which shall form a part hereof.

   This Permit is not a Building Permit.

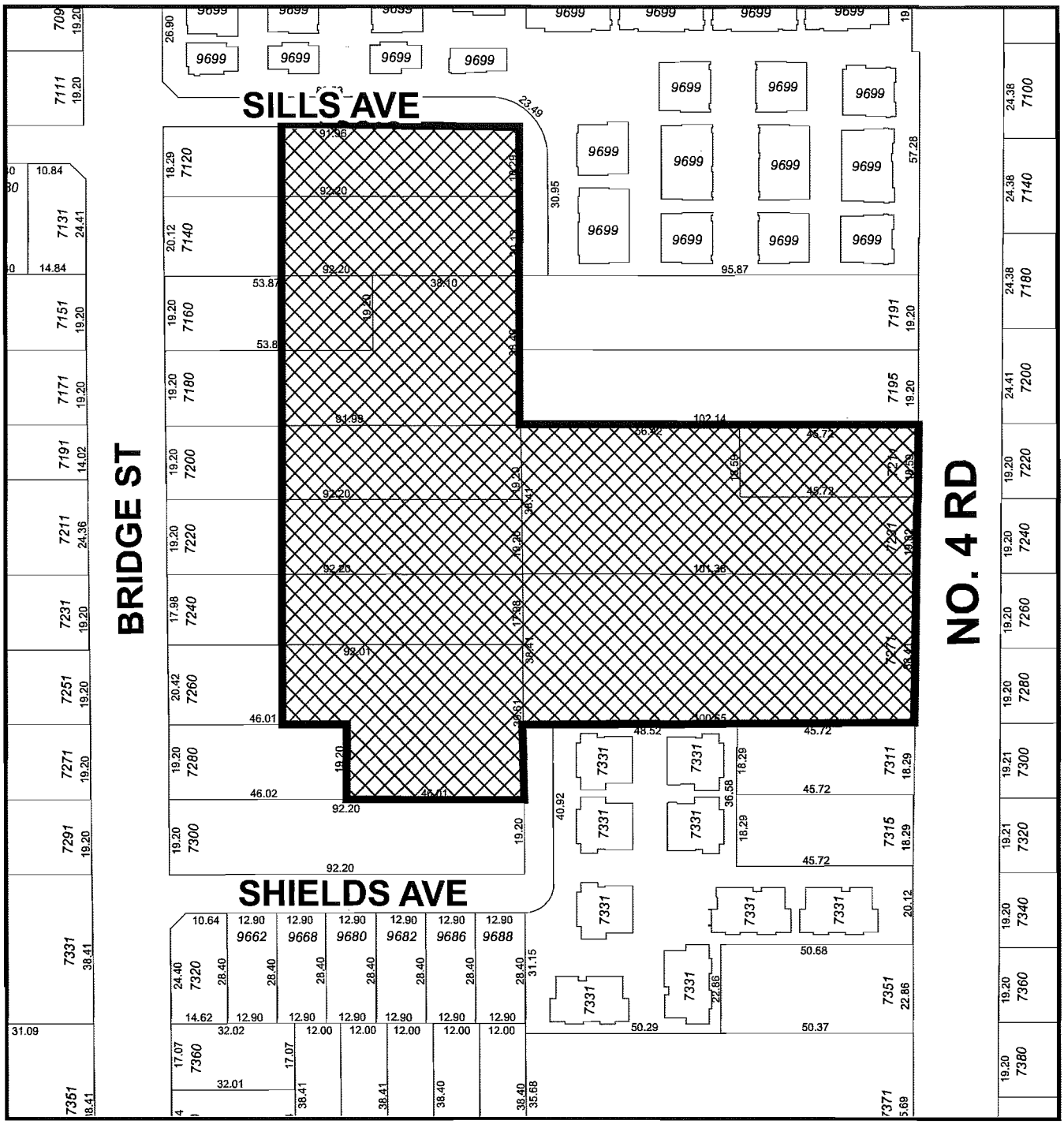
AUTHORIZING RESOLUTION NO. ISSUED BY THE COUNCIL THE DAY OF , .

DELIVERED THIS DAY OF , .

_____

MAYOR

City of
Richmond

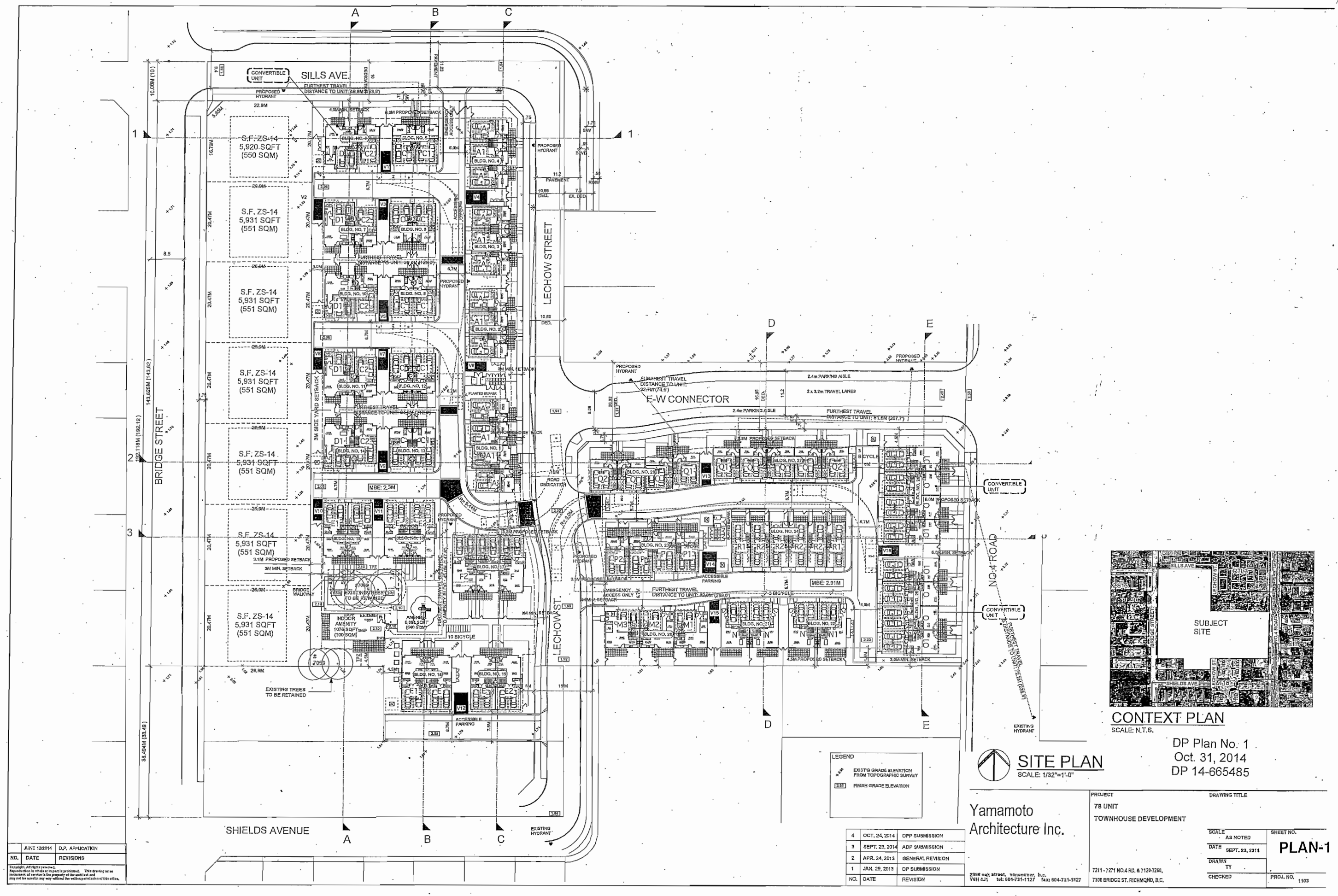


DP 14-665485
SCHEDULE "A"

Original Date: 02/07/14

Revision Date: 11/06/14

Note: Dimensions are in METRES



CONTEXT PLAN

SCALE: N.T.S.

SITE PLAN

SCALE: 1/32"=1'-0"

DP Plan No. 1
Oct. 31, 2014
DP 14-665485

LEGEND

- EXISTG GRADE ELEVATION FROM TOPOGRAPHIC SURVEY
- FINISH GRADE ELEVATION

NO.	DATE	REVISION
4	OCT. 24, 2014	DPP SUBMISSION
3	SEPT. 23, 2014	ADP SUBMISSION
2	APR. 24, 2013	GENERAL REVISION
1	JAN. 29, 2013	DP SUBMISSION

NO.	DATE	REVISIONS
	JUNE 12/2014	D.P. APPLICATION

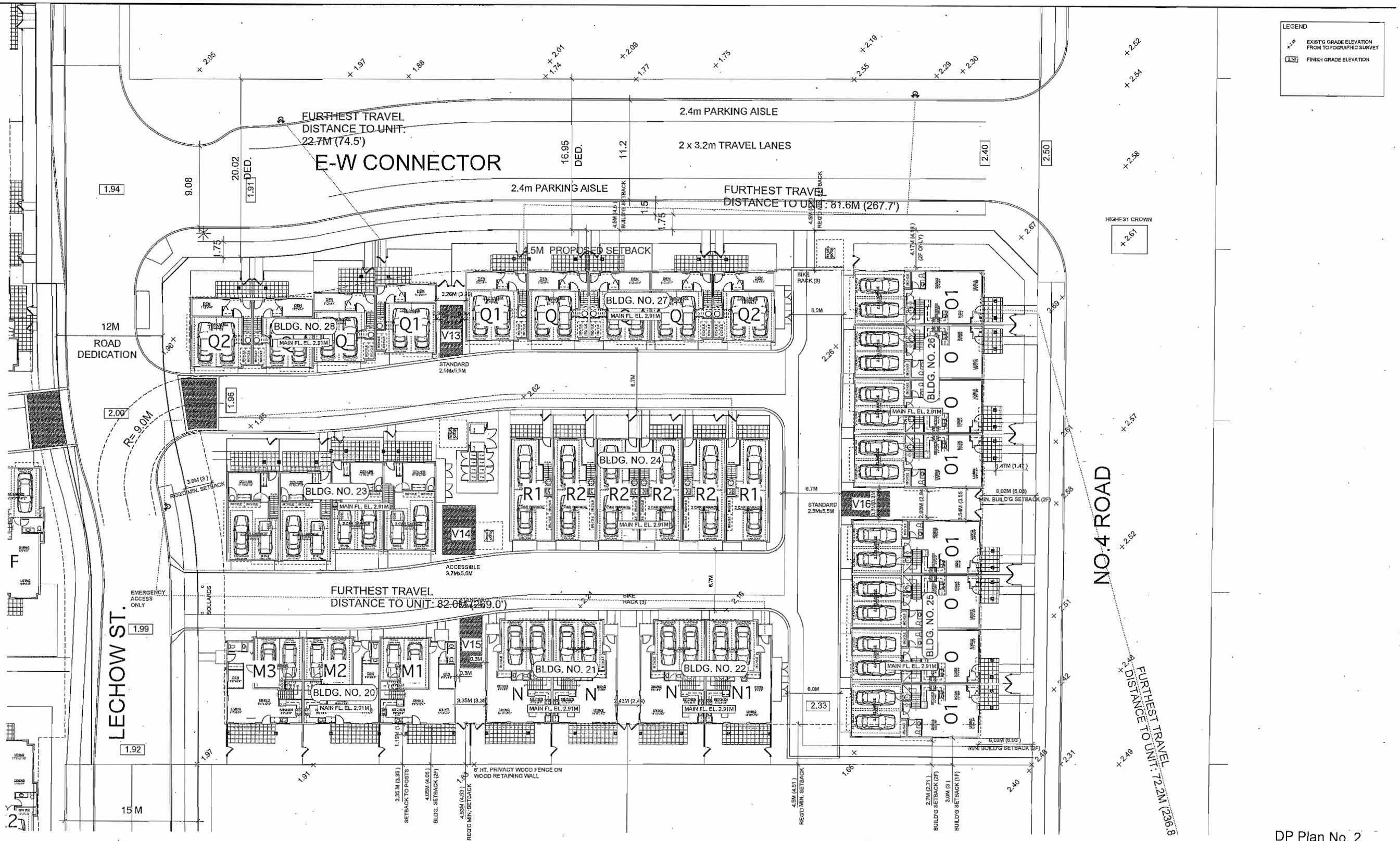
Copyright. All rights reserved.
Reproduction in whole or in part is prohibited. This drawing as an instrument of service is the property of the architect and may not be used in any way without the written permission of this office.

Yamamoto Architecture Inc.
2386 oak street, vancouver, b.c. V6H 4J1
tel: 604-731-1127 fax: 604-731-1927

PROJECT
78 UNIT
TOWNHOUSE DEVELOPMENT
7211 - 7271 NO.4 RD. & 7120-7260,
7300 BRIDGE ST. RICHMOND, B.C.

DRAWING TITLE

SCALE	AS NOTED
DATE	SEPT. 23, 2014
DRAWN	TY
CHECKED	
SHEET NO.	PLAN-1
PROJ. NO.	1103



SITE PLAN (EAST SIDE)

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

DP Plan No. 2
Oct. 31, 2014
DP 14-665485

NO.	DATE	REVISIONS
	JUNE 12/2014	D.P. APPLICATION

Copyright. All rights reserved.
Reproduction in whole or in part is prohibited. This drawing as an instrument of service is the property of the architect and may not be used in any way without the written permission of this office.

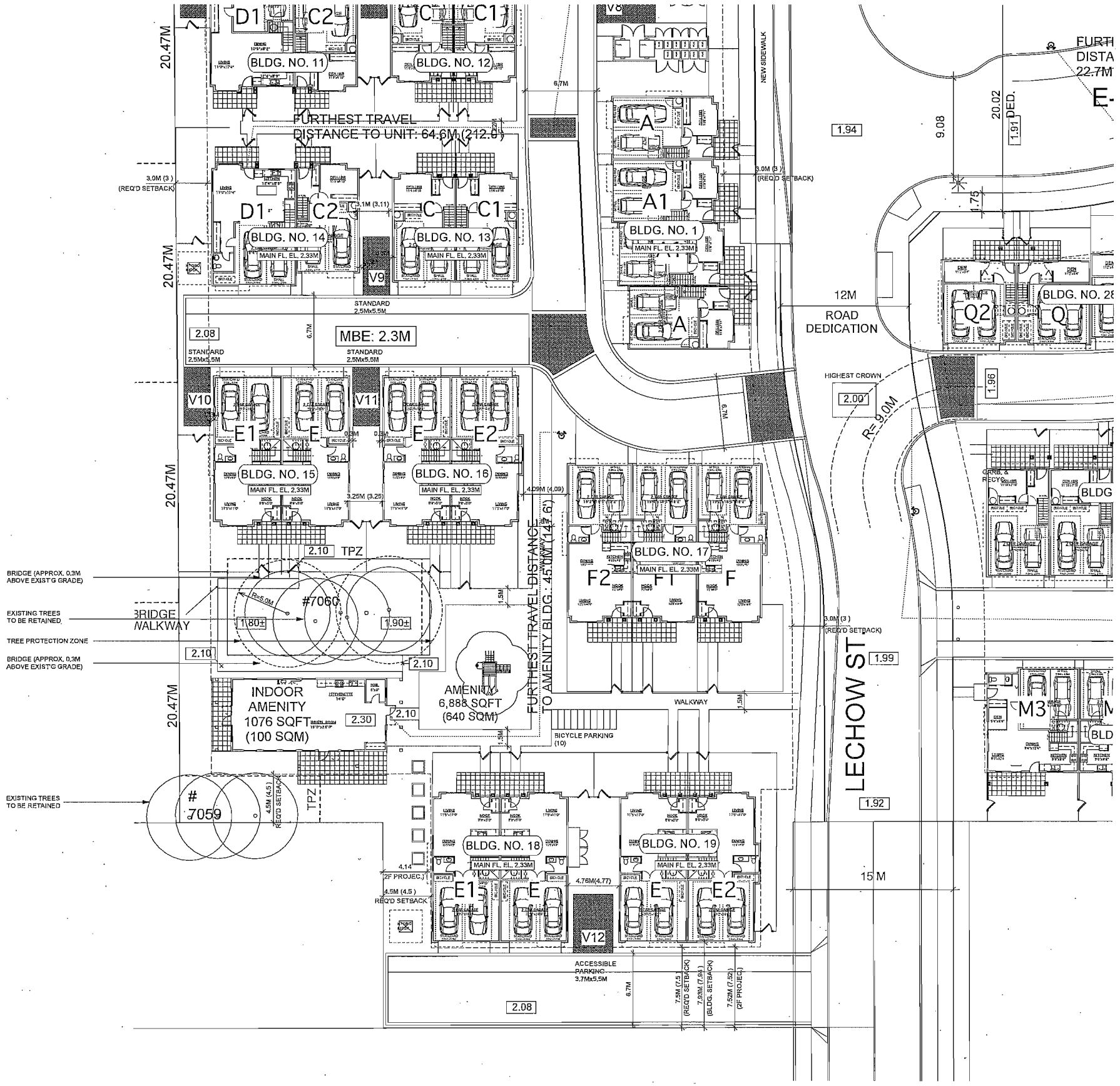
NO.	DATE	REVISION
4	OCT. 24, 2014	DPP SUBMISSION
3	SEPT. 23, 2014	ADP SUBMISSION
2	APR. 24, 2013	GENERAL REVISION
1	JAN. 29, 2013	DP SUBMISSION

Yamamoto Architecture Inc.
2386 oak street, vancouver, b.c. V6H 4J1 tel: 604-731-1127 fax: 604-731-1327

PROJECT: TOWNHOUSE DEVELOPMENT
7211 - 7271 NO.4 RD. & 7120-7260, 7300 BRIDGE ST, RICHMOND, B.C.

DRAWING TITLE: SITE PLAN (EAST SIDE)

SCALE 1/32"=1'-0"	SHEET NO. PLAN-1a
DATE SEPT. 23, 2014	
DRAWN TY	
CHECKED	PROJ. NO. 1103



LEGEND

- EXIST'G GRADE ELEVATION FROM TOPOGRAPHIC SURVEY
- 2.50 FINISH GRADE ELEVATION

DP Plan No. 3
Oct. 31, 2014
DP 14-665485

SITE PLAN (WEST / SOUTH SIDE)

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

NO.	DATE	REVISIONS
	JUNE 12/2014	D.P. APPLICATION

NO.	DATE	REVISION
4	OCT. 24, 2014	DPP SUBMISSION
3	SEPT. 23, 2014	ADP SUBMISSION
2	APR. 24, 2013	GENERAL REVISION
1	JAN. 29, 2013	DP SUBMISSION

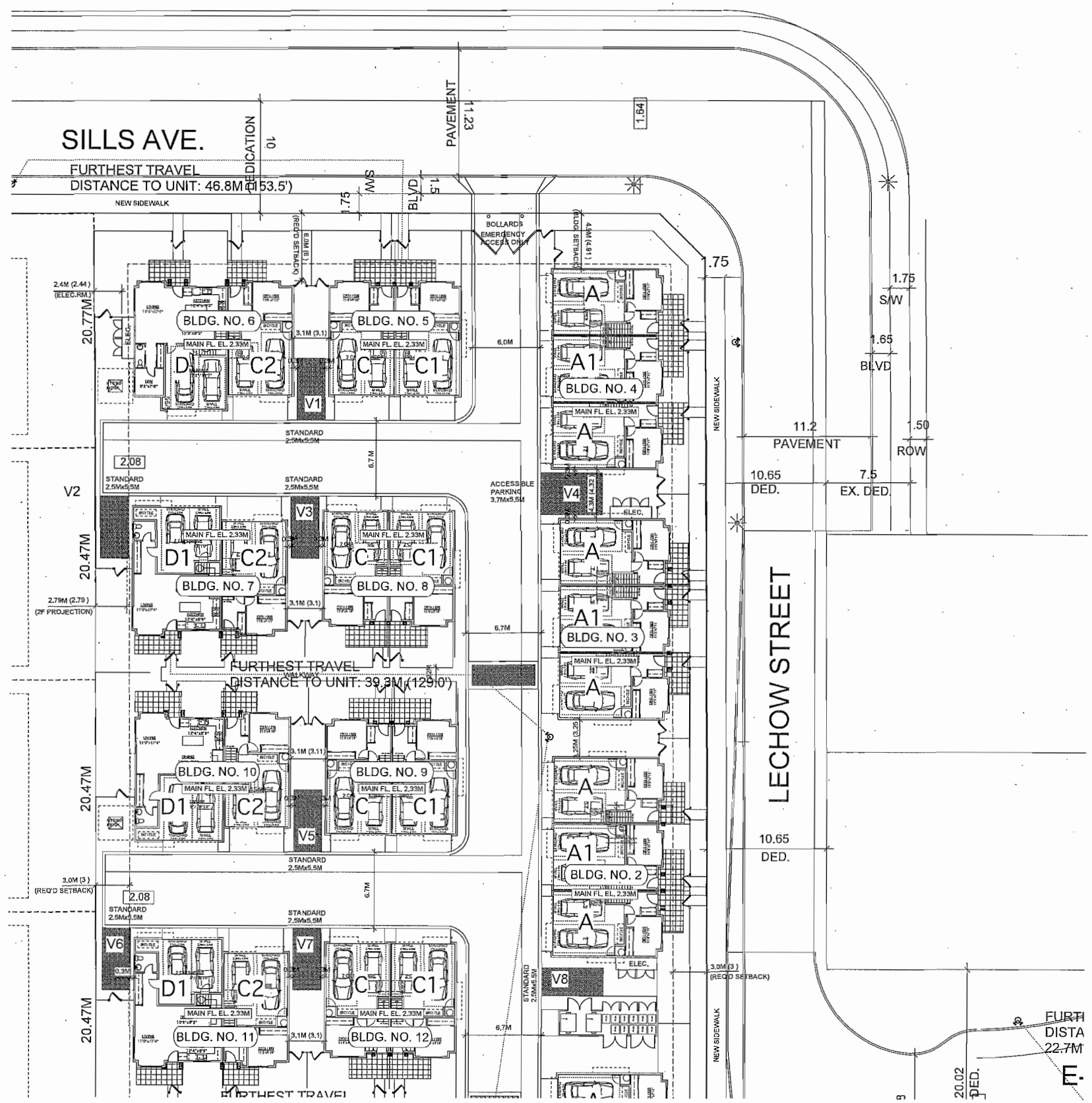
Copyright. All rights reserved.
Reproduction in whole or in part is prohibited. This drawing as an instrument of service is the property of the architect and may not be used in any way without the written permission of this office.

Yamamoto Architecture Inc.
2386 oak street, vancouver, b.c. V6H 4J1 tel: 604-731-1127 fax: 604-731-1327

PROJECT: TOWNHOUSE DEVELOPMENT
7211 - 7271 NO.4 RD. & 7120-7260, 7300 BRIDGE ST, RICHMOND, B.C.

DRAWING TITLE: SITE PLAN (WEST / SOUTH SIDE)

SCALE	1/32"=1'-0"
DATE	SEPT. 23, 2014
DRAWN	TY
CHECKED	
SHEET NO.	PLAN-1b
PROJ. NO.	1103



LEGEND

EXIST'G GRADE ELEVATION FROM TOPOGRAPHIC SURVEY

1.50 FINISH GRADE ELEVATION

DP Plan No. 4
Oct. 31, 2014
DP 14-665485

SITE PLAN (WEST / NORTH SIDE)

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

NO.	DATE	REVISIONS
	JUNE 12/2014	D.P. APPLICATION

Copyright. All rights reserved. Reproduction in whole or in part is prohibited. This drawing as an instrument of service is the property of the architect and may not be used in any way without the written permission of this office.

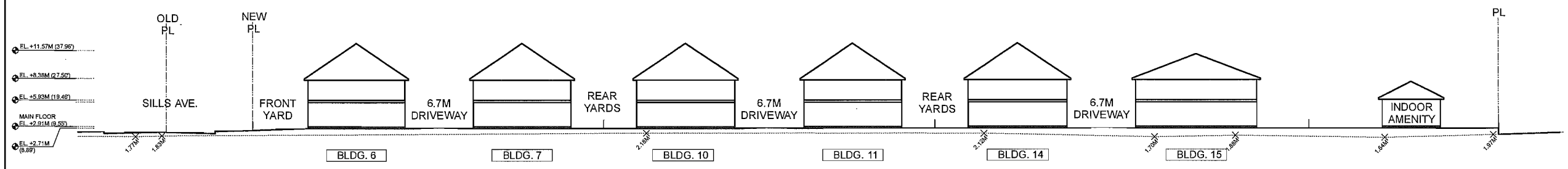
NO.	DATE	REVISION
4	OCT. 24, 2014	DPP SUBMISSION
3	SEPT. 23, 2014	ADP SUBMISSION
2	APR. 24, 2013	GENERAL REVISION
1	JAN. 29, 2013	DP SUBMISSION

Yamamoto Architecture Inc.
2386 oak street, vancouver, b.c. V6H 4J1 tel: 604-731-1127 fax: 604-731-1327

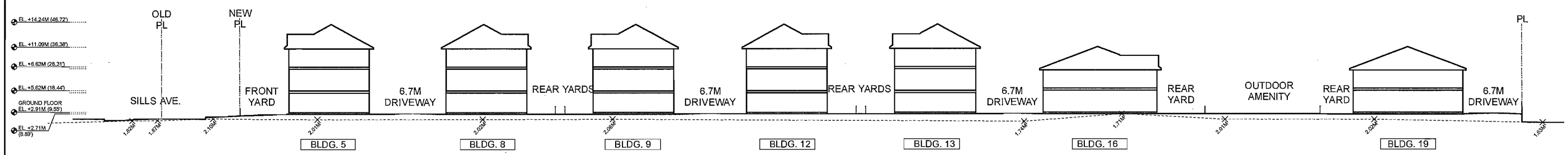
PROJECT: TOWNHOUSE DEVELOPMENT
7211 - 7271 NO.4 RD. & 7120-7250, 7300 BRIDGE ST, RICHMOND, B.C.

DRAWING TITLE: SITE PLAN (WEST / NORTH SIDE)

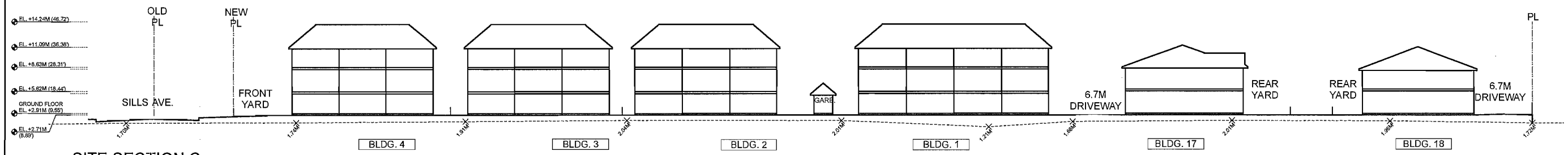
SCALE	1/32"=1'-0"
DATE	SEPT. 23, 2014
DRAWN	TY
CHECKED	
SHEET NO.	PLAN-1c
PROJ. NO.	1103



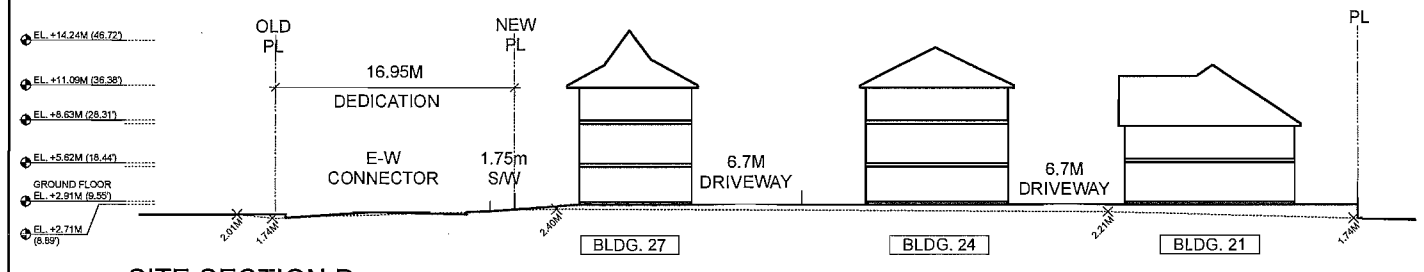
SITE SECTION A



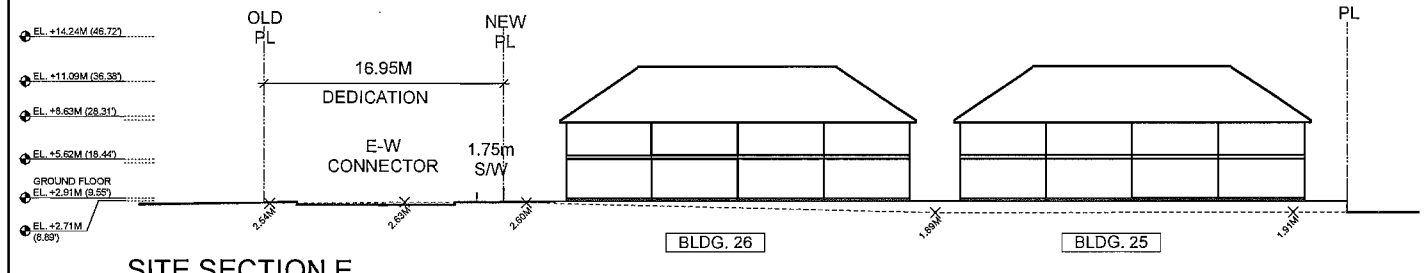
SITE SECTION B



SITE SECTION C



SITE SECTION D



SITE SECTION E

DP Plan No. 5
Oct. 31, 2014
DP 14-665485

NO.	DATE	REVISIONS
4	OCT. 24, 2014	DPP SUBMISSION
3	SEPT. 23, 2014	ADP SUBMISSION
2	APR. 24, 2013	GENERAL REVISION
1	JAN. 29, 2013	DP SUBMISSION

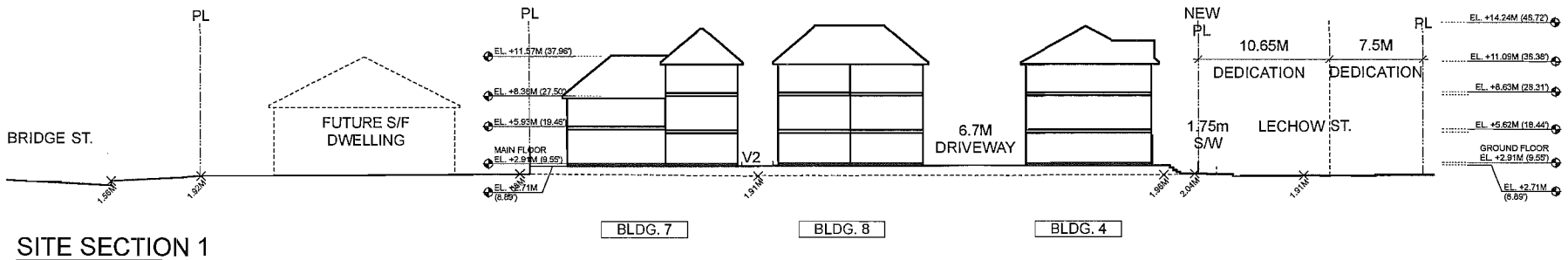
Copyright. All rights reserved. Reproduction in whole or in part is prohibited. This drawing as an instrument of service is the property of the architect and may not be used in any way without the written permission of this office.

Yamamoto Architecture Inc.
2386 oak street, vancouver, b.c. V6H 4J1 tel: 604-731-1127 fax: 604-731-1827

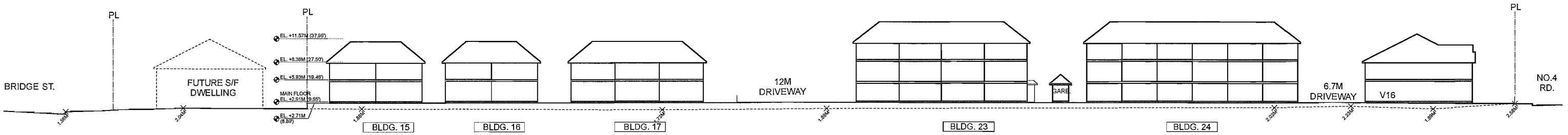
PROJECT
TOWNHOUSE DEVELOPMENT
7211 - 7271 NO.4 RD. & 7120-7260, 7300 BRIDGE ST. RICHMOND, B.C.

DRAWING TITLE
SITE SECTIONS

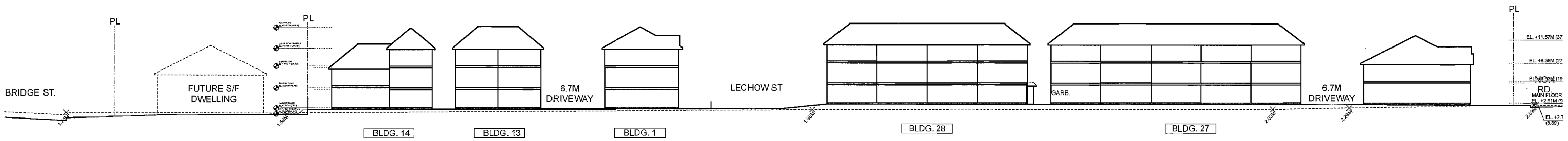
SCALE 1"=20'
DATE JUN. 12, 2014
DRAWN KM
CHECKED
SHEET NO. PLAN-1h
PROJ. NO. 1103



SITE SECTION 1

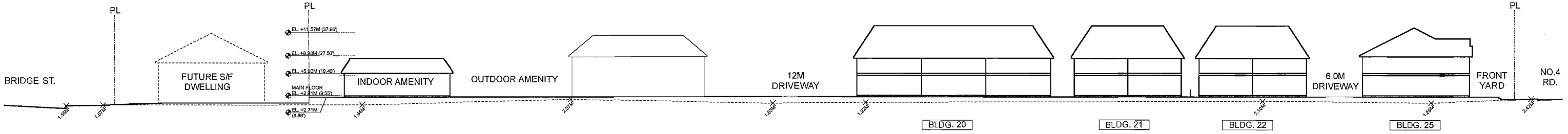


SITE SECTION 2



SITE SECTION 3

DP Plan No. 6
Oct. 31, 2014
DP 14-665485



SITE SECTION 4

NO.	DATE	REVISIONS

Copyright. All rights reserved. Reproduction in whole or in part is prohibited. This drawing is an instrument of service is the property of the architect and may not be used in any way without the written permission of this office.

Yamamoto Architecture Inc.

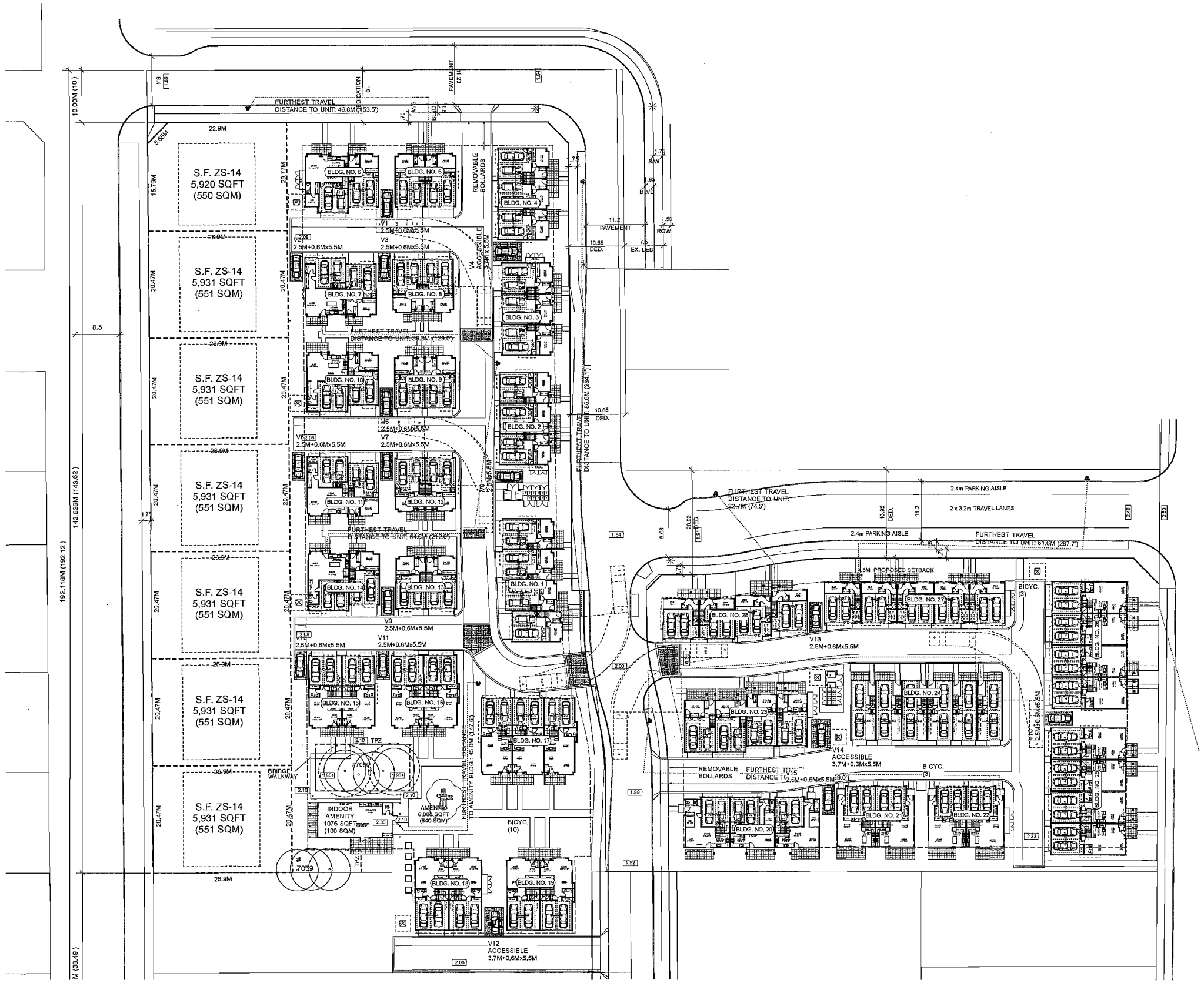
2388 oak street, vancouver, b.c. V6H 4J1 tel: 604-731-1127 fax: 604-731-1927

PROJECT
TOWNHOUSE DEVELOPMENT

7211 - 7271 NO.4 RD. & 7120-7260, 7300 BRIDGE ST. RICHMOND, B.C.

DRAWING TITLE
SITE SECTIONS

SCALE 1"=20'	SHEET NO. PLAN-1i
DATE JUN. 12, 2014	
DRAWN KM	
CHECKED	PROJ. NO. 1103



PARKING LEGEND

STANDARD PARKING SPACE
2.5M x 5.5M

BICYCLE — CLASS 1
HORIZONTAL BICYCLE SPACE
1.8M x 0.6M

BICYCLE — CLASS 1
VERTICAL BICYCLE SPACE
1.0M x 0.6M

CLASS 2 BICYCLE SPACE

SMALL PARKING SPACE
2.5M x 4.6M

STANDARD VISITOR PARKING SPACE
2.5M x 5.5M

PARKING

REQUIRED	2.0 SPACES x 78 UNITS	=	156 SPACES	(RESIDENTS)
	0.2 SPACES x 78 UNITS	=	16 SPACES	(VISITORS)
	TOTAL	=	172 SPACES	
	ACCESSIBLE PARKING : 4 SPACES			
	RESIDENTS/ SMALL CAR : MAX. 78 SPACES			
	(RESIDENTS / SMALL CAR : MAX. 78 SPACES (50%))			
PROVIDED	2 CAR x 78 UNITS	=	156 SPACES	(RESIDENTS)
	SMALL CAR PARKING SPACES	=	43 SPACES	
	OPEN VISTORS PARKING	=	16 SPACES	(VISITORS)
	TOTAL	=	172 SPACES	
	ACCESSIBLE PARKING : 4 SPACES PROVIDED (VISITORS)			
	RESIDENTS/ SMALL CAR : 70 SPACES PROVIDED			

BICYCLE PARKING

REQUIRED	1.25 SPACES x 78 UNITS	=	97.5 SPACES	(CLASS 1)
	0.2 SPACES x 78 UNITS	=	15.6 SPACES	(CLASS 2)
	TOTAL	=	113.1 SPACES	
PROVIDED	RESIDENTS	=	105 SPACES	(CLASS 1)
	VISITORS	=	16 SPACES	(CLASS 2)
	TOTAL	=	121 SPACES	

PARKING PLAN

SCALE: 1/32"=1'-0"

DP Plan No. 7
Oct. 31, 2014
DP 14-665485

NO.	DATE	REVISIONS
		D.P. APPLICATION

NO.	DATE	REVISION
4	OCT. 24, 2014	DPP SUBMISSION
3	SEPT. 23, 2014	ADP SUBMISSION
2	APR. 24, 2013	GENERAL REVISION
1	JAN. 29, 2013	DP SUBMISSION

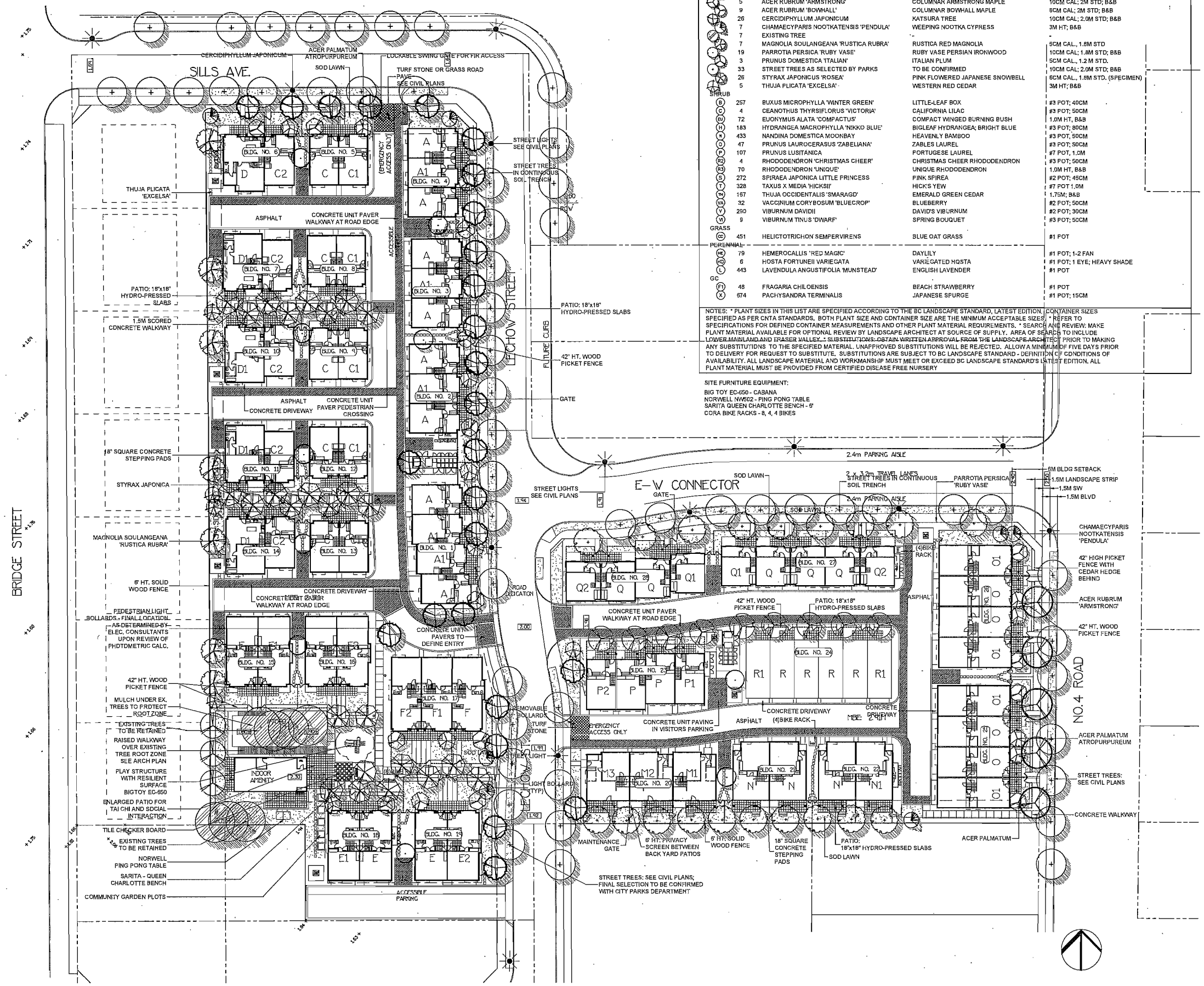
Copyright. All rights reserved.
Reproduction in whole or in part is prohibited. This drawing as an instrument of service is the property of the architect and may not be used in any way without the written permission of this office.

Yamamoto Architecture Inc.
2388 oak street, vancouver, b.c. V6H 4J1 tel: 604-731-1127 fax: 604-731-1927

PROJECT
78 UNIT
TOWNHOUSE DEVELOPMENT
7211 - 7271 NO.4 RD. & 7120-7260,
7300 BRIDGE ST. RICHMOND, B.C.

DRAWING TITLE
PARKING PLAN

SCALE AS NOTED	SHEET NO. PLAN-2
DATE SEPT. 29, 2014	
DRAWN TY	
CHECKED	PROJ. NO. 1103



PLANT SCHEDULE

PMG PROJECT NUMBER: 14061

KEY	QTY	BOTANICAL NAME	COMMON NAME	PLANTED SIZE / REMARKS
TREE				
	10	ACER CIRCINATUM	VINE MAPLE	2.5M HT; B&B; 3 STEM CLUMP - WELL BRANCHED
	14	ACER PALMATUM	JAPANESE MAPLE	5CM CAL; 1.2M STD; B&B
	13	ACER PALMATUM ATROPURPUREUM	RED JAPANESE MAPLE	5CM CAL; 1.2M STD; B&B
	5	ACER RUBRUM 'ARMSTRONG'	COLUMNAR ARMSTRONG MAPLE	10CM CAL; 2M STD; B&B
	9	ACER RUBRUM 'BOWHALL'	COLUMNAR BOWHALL MAPLE	6CM CAL; 2M STD; B&B
	26	CERCIDIPHYLLUM JAPONICUM	KATSURA TREE	10CM CAL; 2.0M STD; B&B
	7	CHAMAECYPARIS NOOTKATENSIS 'PENDULA'	WEEPING NOOTKA CYPRESS	3M HT; B&B
	7	EXISTING TREE	-	-
	7	MAGNOLIA SOULANGEANA 'RUSTICA RUBRA'	RUSTICA RED MAGNOLIA	5CM CAL., 1.8M STD
	19	PARROTIA PERSICA 'RUBY VASE'	RUBY VASE PERSIAN IRONWOOD	10CM CAL; 1.8M STD; B&B
	3	PRUNUS DOMESTICA 'ITALIAN'	ITALIAN PLUM	5CM CAL., 1.2 M STD.
	33	STREET TREES AS SELECTED BY PARKS	TO BE CONFIRMED	10CM CAL; 2.0M STD; B&B
	25	STYRAX JAPONICUS 'ROSEA'	PINK FLOWERED JAPANESE SNOWBELL	6CM CAL., 1.8M STD. (SPECIMEN)
	5	THUJA PLICATA 'EXCELSA'	WESTERN RED CEDAR	3M HT; B&B
SHRUB				
B	257	BUXUS MICROPHYLLA 'WINTER GREEN'	LITTLE-LEAF BOX	#3 POT; 40CM
C	4	CEANOTHUS THYRSIFLORUS 'VICTORIA'	CALIFORNIA LILAC	#3 POT; 50CM
EU	72	EUONYMUS ALATA 'COMPACTUS'	COMPACT WINGED BURNING BUSH	1.0M HT, B&B
H	183	HYDRANGEA MACROPHYLLA 'NIKKO BLUE'	BIGLEAF HYDRANGEA; BRIGHT BLUE	#3 POT; 80CM
N	433	NANDINA DOMESTICA 'MOONBAY'	HEAVENLY BAMBOO	#3 POT, 50CM
O	47	PRUNUS LAUROCERASUS 'ZABELIANA'	ZABLES LAUREL	#3 POT; 50CM
P	107	PRUNUS LUSITANICA	PORTUGESE LAUREL	#7 POT, 1.0M
R2	4	RHODODENDRON 'CHRISTMAS CHEER'	CHRISTMAS CHEER RHODODENDRON	#3 POT; 50CM
R3	70	RHODODENDRON 'UNIQUE'	UNIQUE RHODODENDRON	1.0M HT, B&B
S	272	SPIRAEA JAPONICA LITTLE PRINCESS	PINK SPIREA	#2 POT; 45CM
T	328	TAXUS X MEDIA 'HICKSII'	HICK'S YEW	#7 POT 1.0M
W	157	THUJA OCCIDENTALIS 'SMARAGD'	EMERALD GREEN CEDAR	1.75M; B&B
VA	32	VACCINIUM CORYBOSUM 'BLUECROP'	BLUEBERRY	#2 POT; 50CM
V	250	VIBURNUM DAVIDII	DAVID'S VIBURNUM	#2 POT; 30CM
VI	9	VIBURNUM TINUS 'DWARF'	SPRING BOUQUET	#3 POT; 50CM
GRASS				
PC	451	HELICTOTRICHON SEMPERVIRENS	BLUE OAT GRASS	#1 POT
PERENNIAL				
HI	79	HEMEROCALLIS 'RED MAGIC'	DAYLILY	#1 POT; 1-2 FAN
HO	6	HOSTA FORTUNEII VARIEGATA	VARIEGATED HOSTA	#1 POT; 1 EYE; HEAVY SHADE
L	443	LAVENDULA ANGUSTIFOLIA 'MUNSTEAD'	ENGLISH LAVENDER	#1 POT
GC				
F1	48	FRAGARIA CHILOENSIS	BEACH STRAWBERRY	#1 POT
X	674	PACHYSANDRA TERMINALIS	JAPANESE SPURGE	#1 POT; 15CM

NOTES: * PLANT SIZES IN THIS LIST ARE SPECIFIED ACCORDING TO THE BC LANDSCAPE STANDARD, LATEST EDITION. CONTAINER SIZES SPECIFIED AS PER CNTA STANDARDS. BOTH PLANT SIZE AND CONTAINER SIZE ARE THE MINIMUM ACCEPTABLE SIZES. * REFER TO SPECIFICATIONS FOR DEFINED CONTAINER MEASUREMENTS AND OTHER PLANT MATERIAL REQUIREMENTS. * SEARCH AND REVIEW: MAKE PLANT MATERIAL AVAILABLE FOR OPTIONAL REVIEW BY LANDSCAPE ARCHITECT AT SOURCE OF SUPPLY. AREA OF SEARCH TO INCLUDE LOWER MAINLAND AND FRASER VALLEY. * SUBSTITUTIONS: OBTAIN WRITTEN APPROVAL FROM THE LANDSCAPE ARCHITECT PRIOR TO MAKING ANY SUBSTITUTIONS TO THE SPECIFIED MATERIAL. UNAPPROVED SUBSTITUTIONS WILL BE REJECTED. ALLOW A MINIMUM OF FIVE DAYS PRIOR TO DELIVERY FOR REQUEST TO SUBSTITUTE. SUBSTITUTIONS ARE SUBJECT TO BC LANDSCAPE STANDARD - DEFINITION OF CONDITIONS OF AVAILABILITY. ALL LANDSCAPE MATERIAL AND WORKMANSHIP MUST MEET OR EXCEED BC LANDSCAPE STANDARD'S LATEST EDITION. ALL PLANT MATERIAL MUST BE PROVIDED FROM CERTIFIED DISEASE FREE NURSERY

SITE FURNITURE EQUIPMENT:

BIG TOY EC-650 - CABANA
NORWELL NW662 - PING PONG TABLE
SARITA QUEEN CHARLOTTE BENCH - 6'
CORA BIKE RACKS - 8, 4, 4 BIKES

©Copyright reserved. This drawing and design is the property of PMG Landscape Architects and may not be reproduced or used for other projects without their permission.

pmg LANDSCAPE ARCHITECTS
Suite C100 - 4185 Still Creek Drive
Burnaby, British Columbia, V5C 6G9
p: 604 294-0011 ; f: 604 294-0022

SEAL:

DP Plan No. 8
Oct. 31, 2014
DP 14-665485

NO.	DATE	REVISION DESCRIPTION	DR.
4	14.NOV.05	LECHOW WEST SIDEWALK	
3	14.OCT.23	REVISE PAVING, WALKWAYS	DO
2	14.SEP.19	NEW SITE / COMMENTS	DO
1	14.JUL.08	NO.4 ROAD BUFFER	

CLIENT:

PROJECT:

78 UNIT TOWNHOUSE DEV.

7211 - 7271 NO. 4 ROAD &
7120 - 7260, 7300 BRIDGE STREET
RICHMOND, BC

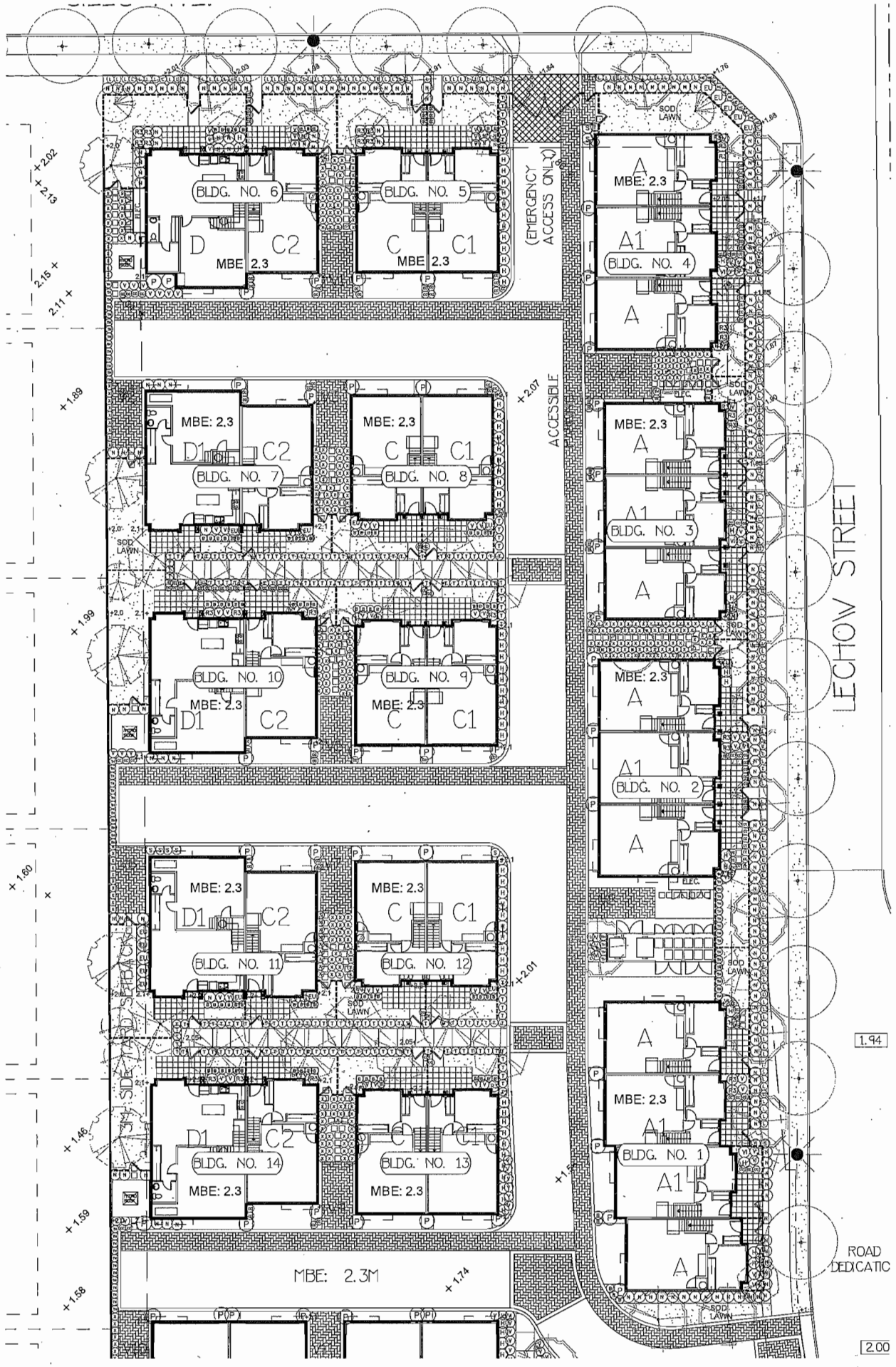
DRAWING TITLE:

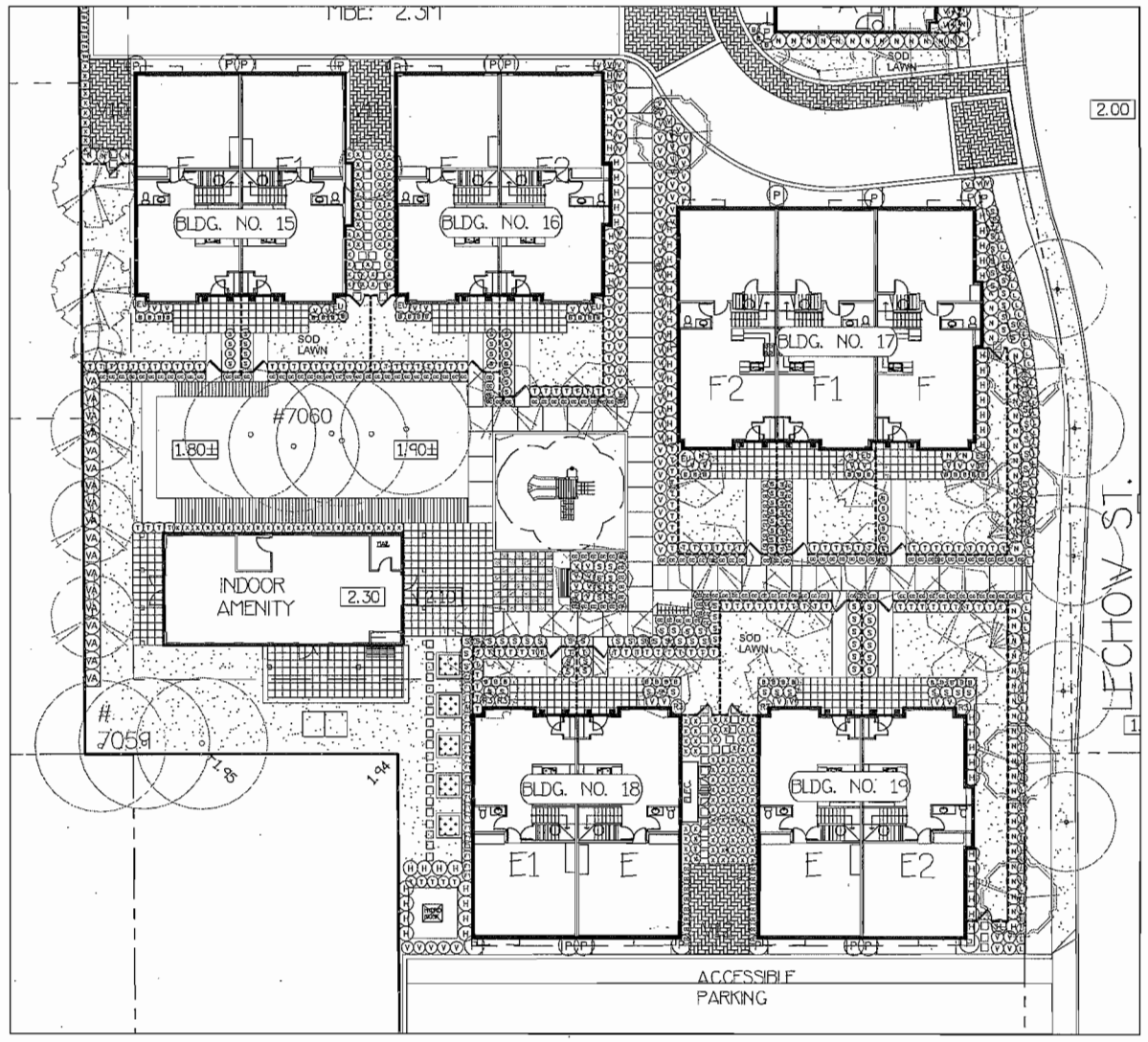
LANDSCAPE PLAN

DATE:	14.MAY.30	DRAWING NUMBER:
SCALE:	1"=30'-0"	**3a**
DRAWN:	DO	
DESIGN:		
CHK'D:	MCY	OF 6

14061-3.ZIP

PMG PROJECT NUMBER: **14-061**





©Copyright reserved. This drawing and design is the property of PMG Landscape Architects and may not be reproduced or used for other projects without their permission.

pmg LANDSCAPE ARCHITECTS
Suite C100 - 4185 Still Creek Drive
Burnaby, British Columbia, V5C 6G9
p: 604 294-0011 ; f: 604 294-0022

SEAL:

DP Plan No. 9
Oct. 31, 2014
DP 14-665485

NO.	DATE	REVISION DESCRIPTION	DR.
3	14.OCT.23	REVISE PAVING, WALKWAYS	DO
2	14.SEP.19	NEW SITE / COMMENTS	DO
1	14.JUL.08	NO 4 ROAD BUFFER	

CLIENT:

PROJECT:

78 UNIT TOWNHOUSE DEV.

7211 - 7271 NO. 4 ROAD &
7120 - 7260, 7300 BRIDGE STREET
RICHMOND, BC

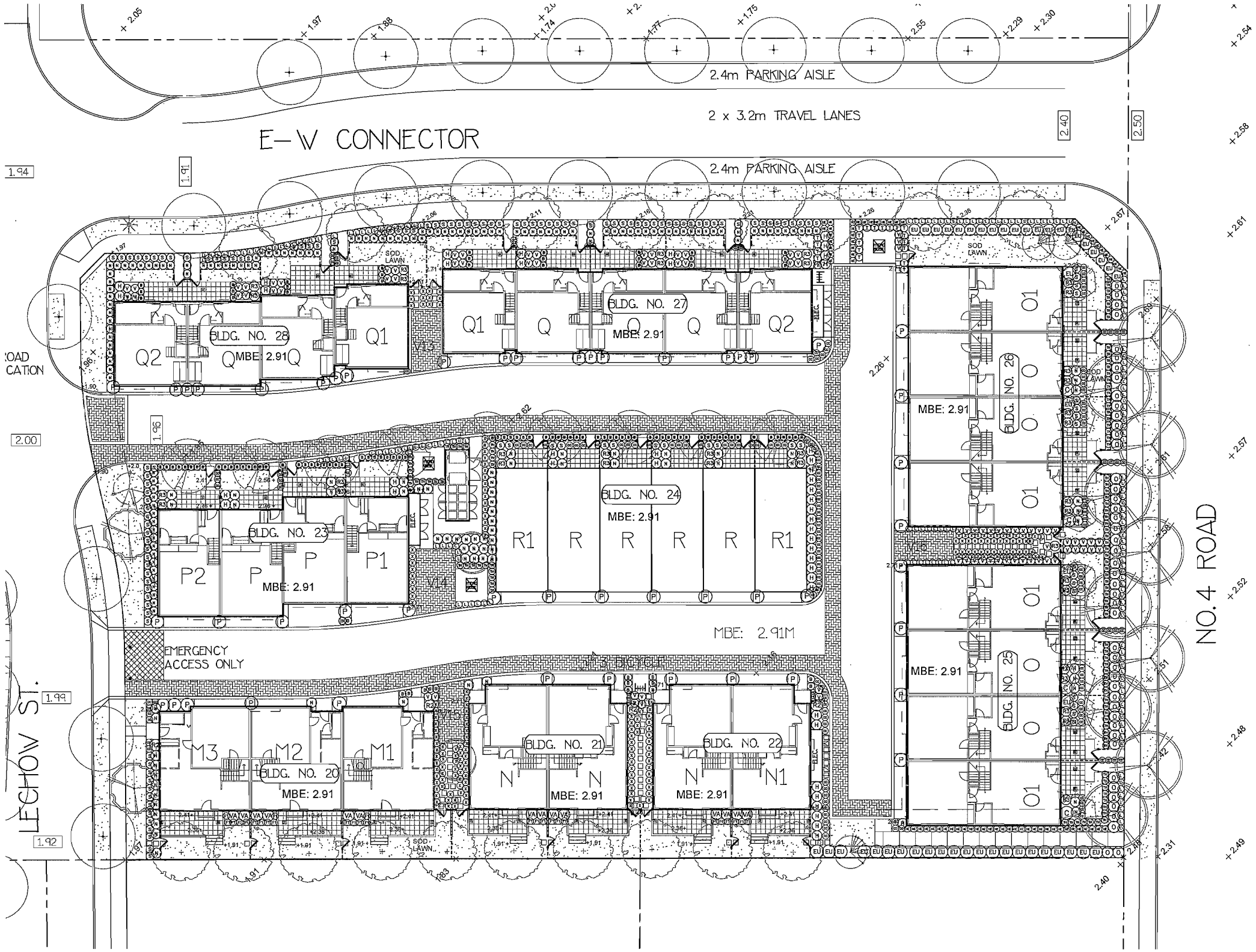
DRAWING TITLE:

LANDSCAPE SHRUB PLAN

DATE:	14.MAY.30	DRAWING NUMBER:
SCALE:	1/16"=1'-0"	**3b**
DRAWN:	DO	
DESIGN:	MCY	
CHK'D:	MCY	OF 6

14061-3.ZIP

PMG PROJECT NUMBER: **14-061**



©Copyright reserved. This drawing and design is the property of PMG Landscape Architects and may not be reproduced or used for other projects without their permission.

pmg LANDSCAPE ARCHITECTS
Suite C100 - 4185 Still Creek Drive
Burnaby, British Columbia, V5C 6G9
p: 604 294-0011 ; f: 604 294-0022

SEAL:

NO.	DATE	REVISION DESCRIPTION	DR.
3	14.OCT.28	REVISE PAVING, WALKWAYS	DO
2	14.SEP.19	NEW SITE / COMMENTS	DO
1	14.JUL.08	NO 4 ROAD BUFFER	

CLIENT:

DP Plan No. 10
Oct. 31, 2014
DP 14-665485

PROJECT:

78 UNIT TOWNHOUSE DEV.

7211 - 7271 NO. 4 ROAD &
7120 - 7260, 7300 BRIDGE STREET
RICHMOND, BC

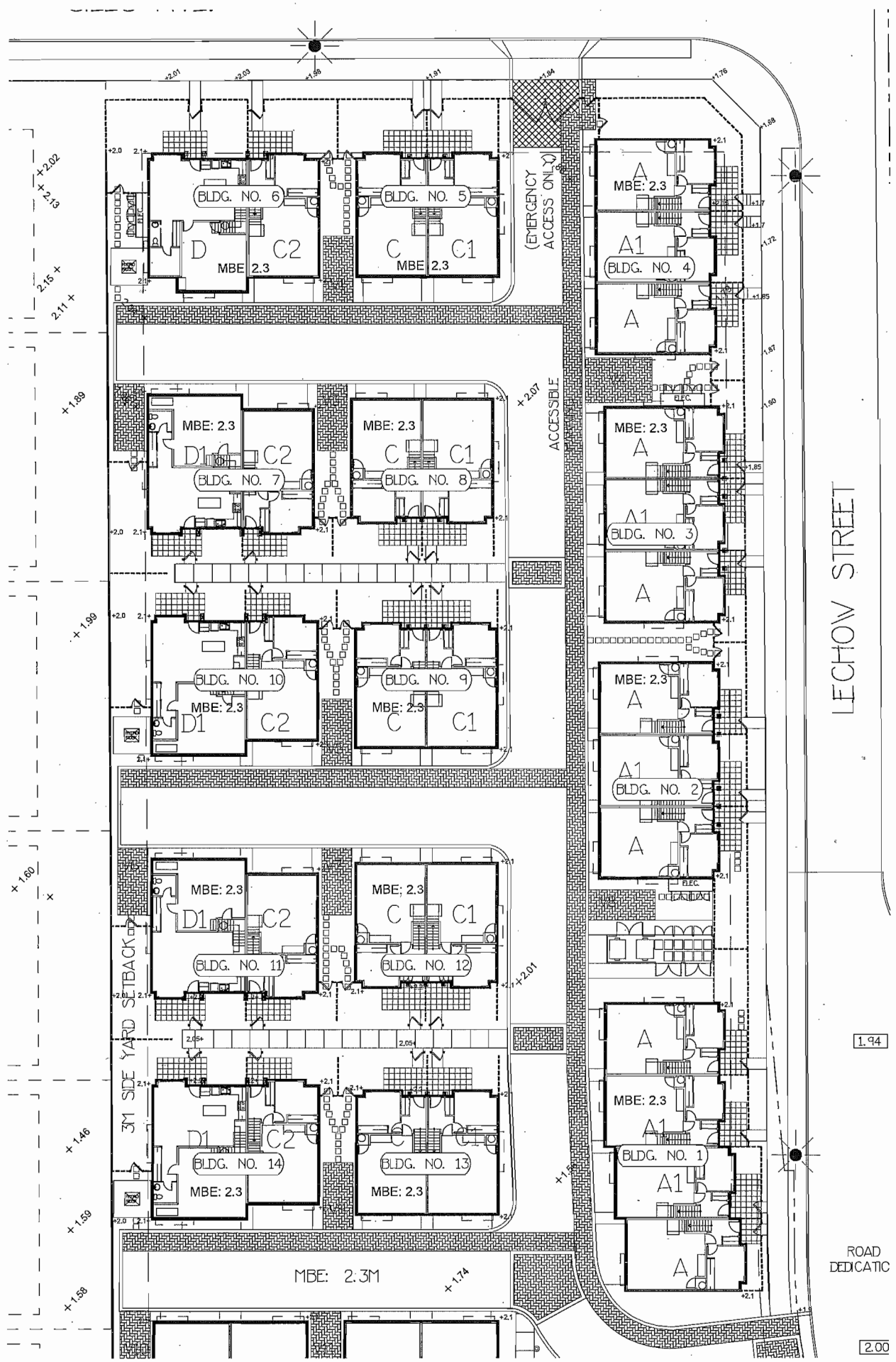
DRAWING TITLE:

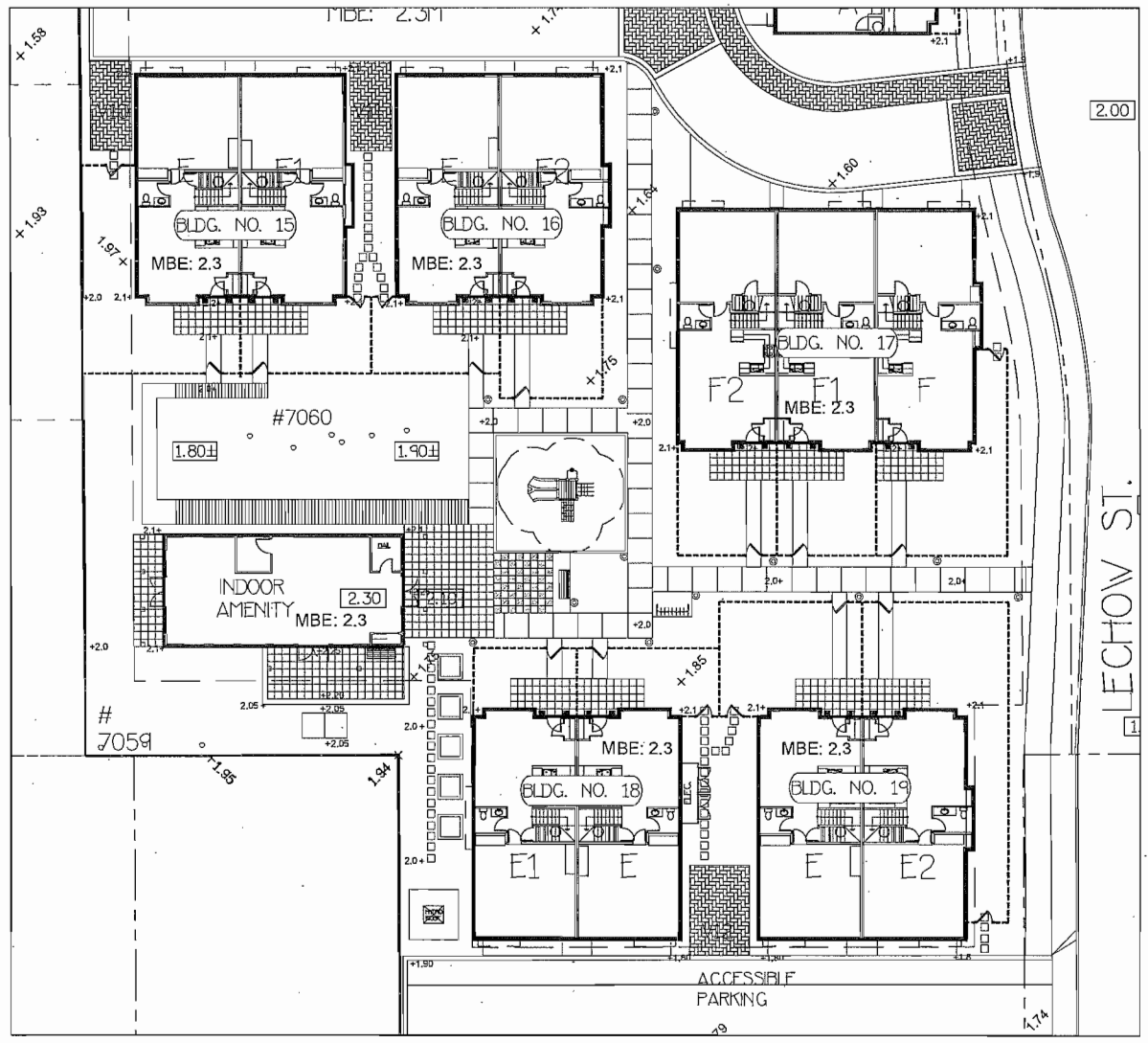
LANDSCAPE SHRUB PLAN

DATE:	14.MAY.30	DRAWING NUMBER:
SCALE:	1/15"=1'-0"	**3c**
DRAWN:	DO	
DESIGN:	MCY	
CHK'D:	MCY	**OF 8**

14061-3.ZIP

PMG PROJECT NUMBER: **14-061**





©Copyright reserved. This drawing and design is the property of PMG Landscape Architects and may not be reproduced or used for other projects without their permission.

pmg LANDSCAPE ARCHITECTS
Suite C100 - 4185 Still Creek Drive
Burnaby, British Columbia, V5C 6G9
p: 604 294-0011 ; f: 604 294-0022

SEAL:

NO.	DATE	REVISION DESCRIPTION	DR.
3	14.OCT.23	REVISE PAVING, WALKWAYS	DO
2	14.SEP.19	NEW SITE / COMMENTS	DO
1	14.JUL.08	NO 4 ROAD BUFFER	

CLIENT:

DP Plan No. 11
Oct. 31, 2014
DP 14-665485

PROJECT:

78 UNIT TOWNHOUSE DEV.

7211 - 7271 NO. 4 ROAD &
7120 - 7260, 7300 BRIDGE STREET
RICHMOND, BC

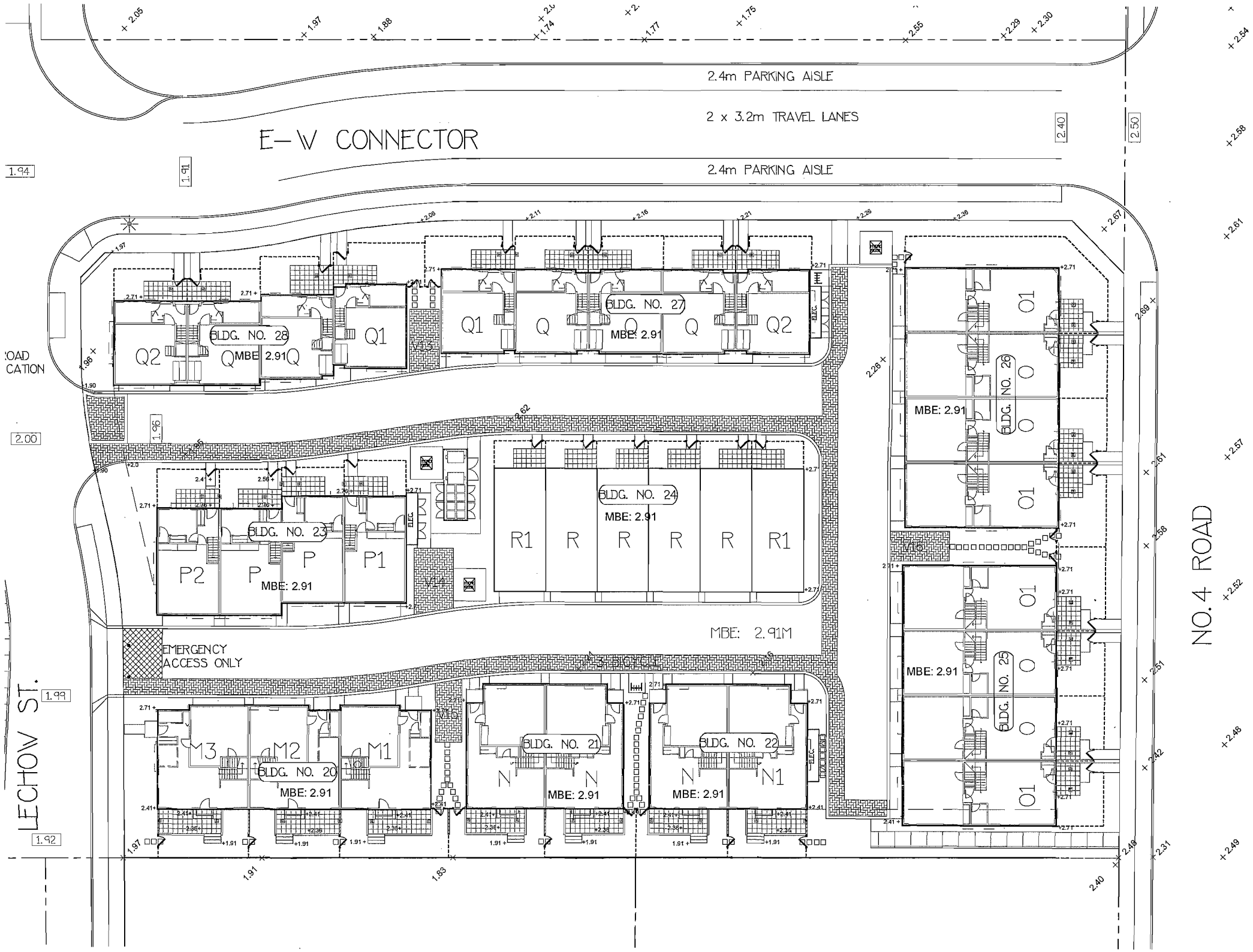
DRAWING TITLE:

LANDSCAPE GRADING PLAN

DATE:	14.MAY.30	DRAWING NUMBER:
SCALE:	1/16"=1'-0"	**3d**
DRAWN:	DO	
DESIGN:	MCY	
CHK'D:	MCY	OF 6

14061-3.ZIP

PMG PROJECT NUMBER: **14-061**



© Copyright reserved. This drawing and design is the property of PMG Landscape Architects and may not be reproduced or used for other projects without their permission.

pmg LANDSCAPE ARCHITECTS
Suite C100 – 4185 Still Creek Drive
Burnaby, British Columbia, V5C 6G9
p: 604 294-0011 ; f: 604 294-0022

SEAL:

NO.	DATE	REVISION DESCRIPTION	OR.
3	14.OCT.23	REVISE PAVING, WALKWAYS	DO
2	14.SEP.19	NEW SITE / COMMENTS	DO
1	14.JUL.08	NO 4 ROAD BUFFER	

CLIENT:

DP Plan No. 12
Oct. 31, 2014
DP 14-665485

PROJECT:

78 UNIT TOWNHOUSE DEV.

7211 - 7271 NO. 4 ROAD &
7120 - 7260, 7300 BRIDGE STREET
RICHMOND, BC

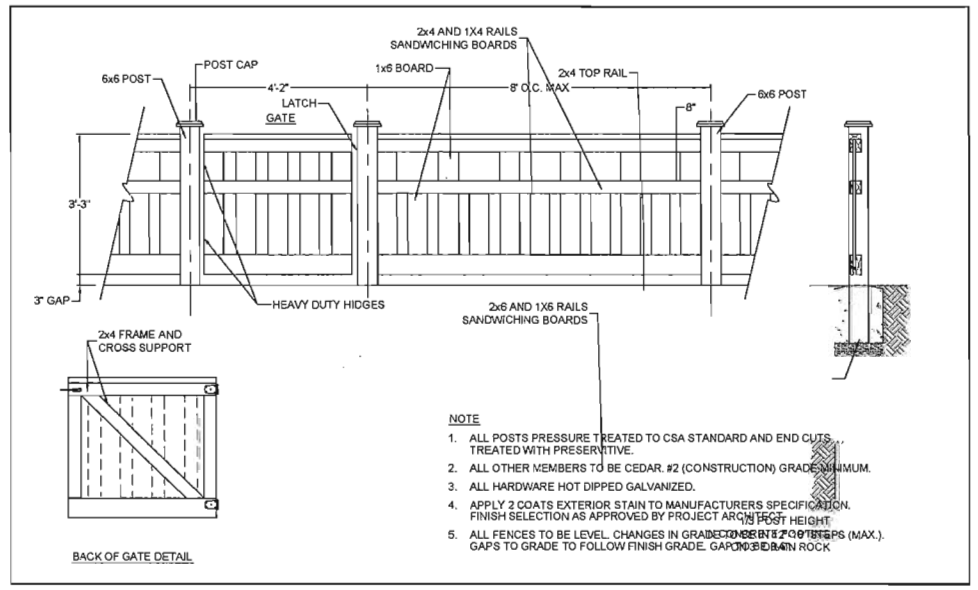
DRAWING TITLE:

LANDSCAPE GRADING PLAN

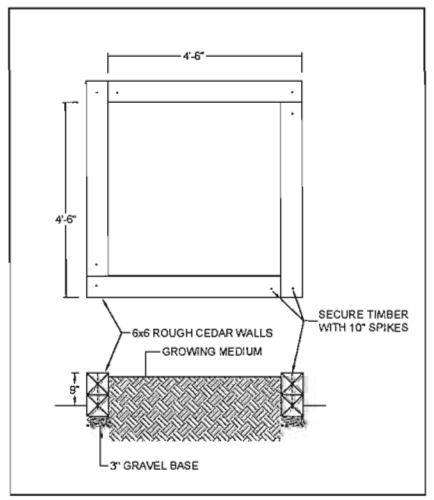
DATE:	14.MAY.30	DRAWING NUMBER:
SCALE:	1/16"=1'-0"	**3e**
DRAWN:	DO	
DESIGN:	MCY	
CHKD:	MCY	**OF 8**

14061-3.ZIP

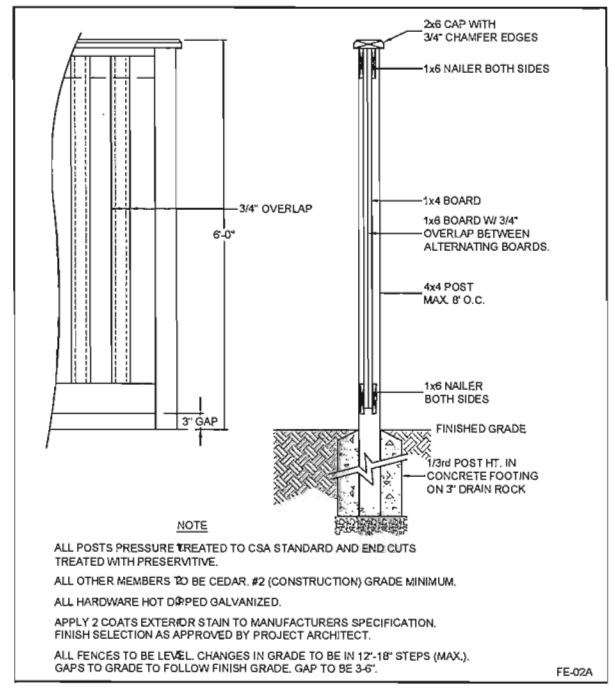
PMG PROJECT NUMBER: **14-061**



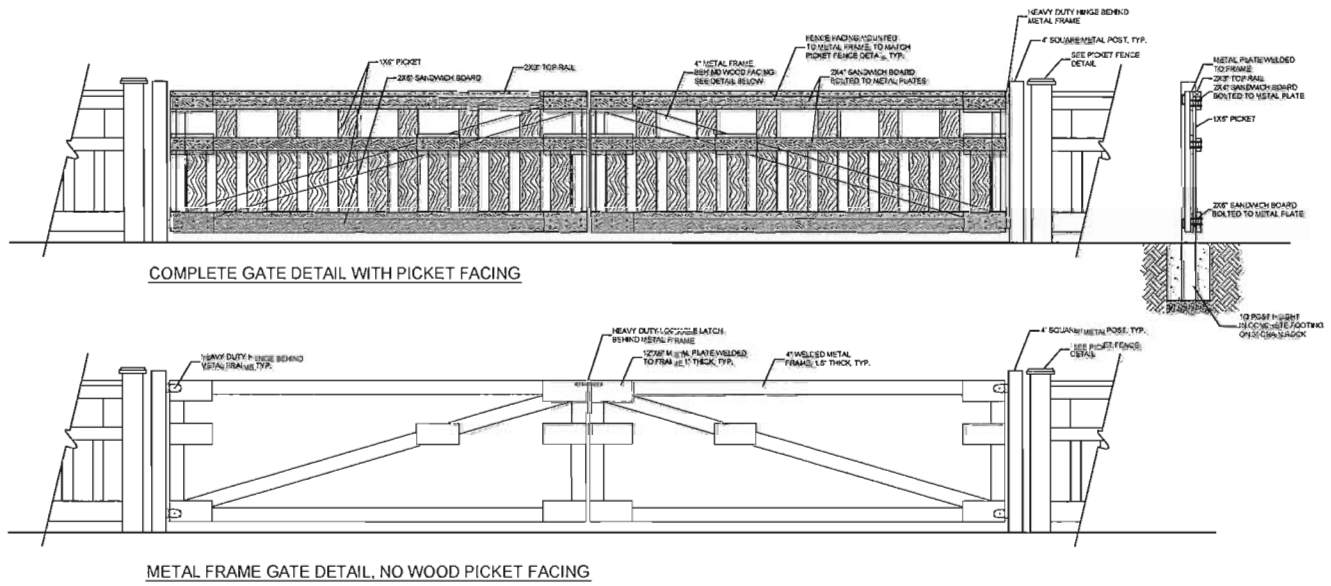
1 **PICKET FENCE AND GATE**
1/2"=1'-0"



2 **GARDEN PLOT**
1/2"=1'-0"



3 **6'-0" HEIGHT SOLID WOOD FENCE**
3/4"=1'-0"



4 **EMERGENCY ACCESS LOCKABLE GATE WITH PICKET FACING**
1/2"=1'-0"


SARITA QUEEN CHARLOTTE BENCH


BIG TOY CABANA PLAY STRUCTURE


NORWELL PING PONG TABLE

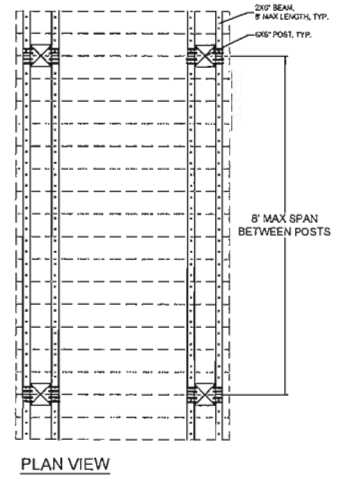

RESIDENT COMMUNITY GARDEN PLOTS


LUMEC LIGHT STANDARD


LUMEC LIGHT BOLLARD


PAVER TRAFFIC CALMING


CORA BIKE RACK



5 **ELEVATED WOOD WALKWAY NEAR EXISTING RETAINED TREES**
1/2"=1'-0"

14061-3.ZIP

©Copyright reserved. This drawing and design is the property of PMG Landscape Architects and may not be reproduced or used for other projects without their permission.

pmg LANDSCAPE ARCHITECTS
Suite C100 - 4185 Still Creek Drive
Burnaby, British Columbia, V5C 6G9
p: 604 294-0011 ; f: 604 294-0022

SEAL:

NO.	DATE	REVISION DESCRIPTION	DR.
1	OCT 23, 2014	CITY RESUBMISSION	

CLIENT:

DP Plan No. 13
Oct. 31, 2014
DP 14-665485

PROJECT:

78 UNIT TOWNHOUSE DEV.

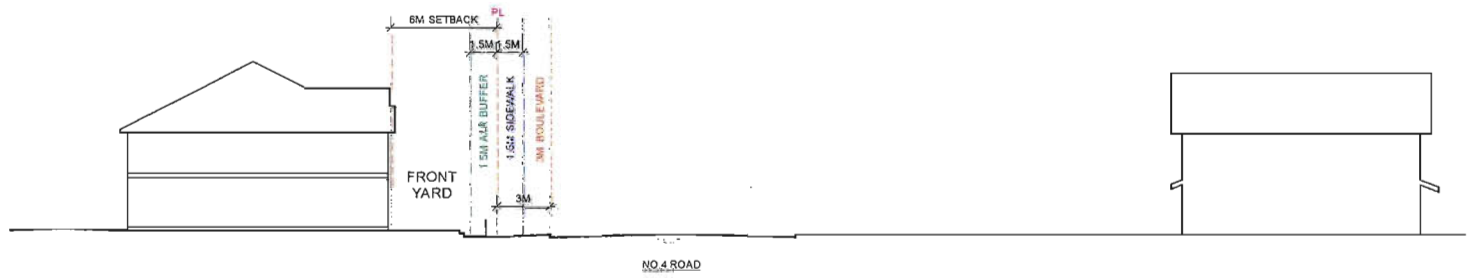
7211 - 7271 NO. 4 ROAD &
7120 - 7260, 7300 BRIDGE STREET
RICHMOND, BC

DRAWING TITLE:

LANDSCAPE DETAILS

DATE:	14.MAY.30	DRAWING NUMBER:	
SCALE:	AS SHOWN		**3f**
DRAWN:	DO		
DESIGN:			
CHKD:	MCY		OF 8

PMG PROJECT NUMBER: 14-061



BLDG. 25

SECTION THROUGH NO.4 ROAD

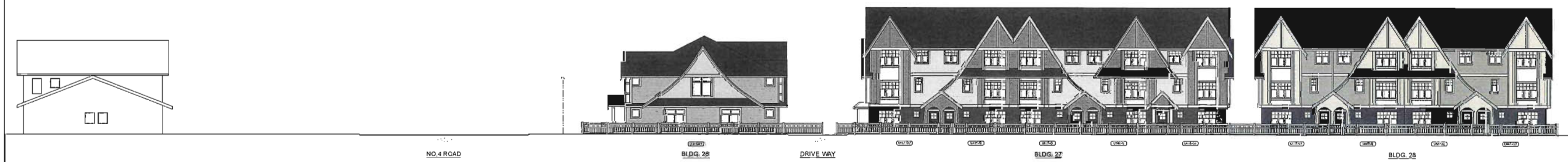
EXISTING HOUSE



EAST ELEVATION STREETSCAPE (LECHOW STREET)



NORTH ELEVATION STREETSCAPE (SILLS AVENUE)



NORTH ELEVATION STREETSCAPE (E-W CONNECTOR)



EAST ELEVATION STREETSCAPE (NO.4 ROAD)

DP Plan No. 14
Oct. 31, 2014
DP 14-665485

NO.	DATE	REVISIONS
4	OCT. 24, 2014	DPP SUBMISSION
3	SEPT. 23, 2014	ADP SUBMISSION
2	APR. 24, 2013	GENERAL REVISION
1	JAN. 29, 2013	DP SUBMISSION

CONSULTANT

Copyright. All rights reserved.
Reproduction /remote use in part is prohibited. This drawing as an instrument of service is the property of the architect and may not be used in any way without the written permission of this office.

PROJECT

78 UNIT TOWNHOUSE DEVELOPMENT

NO.4 & BRIDGE ST.
RICHMOND, B.C.

Yamamoto Architecture Inc.

2386 oak street, van., b.c.
V6H 4J1 tel: 731-1327 fax: 731-1327

DRAWING TITLE

STREETSCAPE

SCALE 1/16" = 1'-0"	SHEET NO. PLAN-4a
DATE SEPT. 19, 2014	
DRAWN WC	
CHECKED	PROJ. NO. 1103



BLDG. 1: EAST ELEVATION - LECHOW STREET

SCHEME A2

GARBAGE BLDG.1: EAST ELEVATION

BLDG. 2: EAST ELEVATION - LECHOW STREET

SCHEME A1

ELEVATION KEY 1 - WEST LOT:

GENERAL:

1. ASPHALT ROOF SHINGLES - CHARCOAL
2. 6.5" ALUMINUM GUTTER ON 2X8 FASCIA - PAINTED TO MATCH TRIM
3. VINYL WINDOW - OFF-WHITE
4. METAL CLAD ENTRY DOOR - PAINTED "BM BLACK TAR"
5. METAL CLAD GARAGE DOOR - PAINTED "COTTON BALLS"
6. WOOD WINDOW TRIM, POST, HORIZ.BAND, BRACKET, DECORATIVE VENTE - PAINTED "BM STONE CUTTER"
7. METAL GUARD RAIL - BLACK

BRICK SCHEME A1:

8. BRICK - NEO. BROWN / RED
9. HARDIE PANEL - "MONTEREY TAUPE"
10. 5" HARDIE-SHAKE SIDING - PAINTED "FAIRVIEW TAUPE"

BRICK SCHEME A2:

11. HARDIE PANEL - "MONTEREY TAUPE"
12. 5" HARDIE-SHAKE SIDING - "CHESTNUT BROWN"

STONE SCHEME B1:

13. CULTURED STONE - "NATURAL GRANITE"
14. HARDIE PANEL - "MONTEREY TAUPE"
15. 5" HARDIE-SHAKE SIDING - PAINTED "BM AMHERST GRAY"

STONE SCHEME B2:

16. HARDIE PANEL - PAINTED "BM AMHERST GRAY"
17. 5" HARDIE-SHAKE SIDING - "MONTEREY TAUPE"

STONE SCHEME C1:

18. HARDIE PANEL - "MONTEREY TAUPE"
19. 5" HARDIE-SHAKE SIDING - PAINTED "FAIRVIEW TAUPE DARK"

STONE SCHEME C2:

20. HARDIE PANEL - PAINTED "BM FAIRVIEW TAUPE"
21. 5" HARDIE-SHAKE SIDING - "MONTEREY TAUPE"



BLDG. 2: WEST ELEVATION

SCHEME A1

GARBAGE BLDG. 1: WEST ELEVATION

BLDG. 1: WEST ELEVATION

SCHEME A2

BLDG. 1: SOUTH ELEVATION

SCHEME A2



BLDG. 1: NORTH ELEVATION

SCHEME A2

BLDG. 2: SOUTH ELEVATION

SCHEME A1

BLDG. 2: NORTH ELEVATION

SCHEME A1

GARBAGE BLDG. 1: NORTH ELEVATION

GARBAGE BLDG. 1: SOUTH ELEVATION

DP Plan No. 15
Oct. 31, 2014
DP 14-665485

NO.	DATE	REVISIONS
4	OCT. 24, 2014	DPF SUBMISSION
3	SEPT. 23, 2014	ADP SUBMISSION
2	APR. 24, 2013	GENERAL REVISION
1	JAN. 29, 2013	DP SUBMISSION

CONSULTANT

Copyright. All rights reserved. Reproduction in whole or in part is prohibited. This drawing as an instrument of service is the property of the architect and may not be used in any way without the written permission of this office.

PROJECT

78 UNIT TOWNHOUSE DEVELOPMENT

NO.4 & BRIDGE ST.
RICHMOND, B.C.

Yamamoto Architecture Inc.

2386 oak street, van., b.c.
V6H 4J1 tel: 731-1327 fax: 731-1327

DRAWING TITLE

ELEVATIONS

SCALE 1/8" = 1'-0"	SHEET NO. **PLAN-4b**
DATE SEPT. 19, 2014	
DRAWN WC	
CHECKED	PROJ. NO. 1103

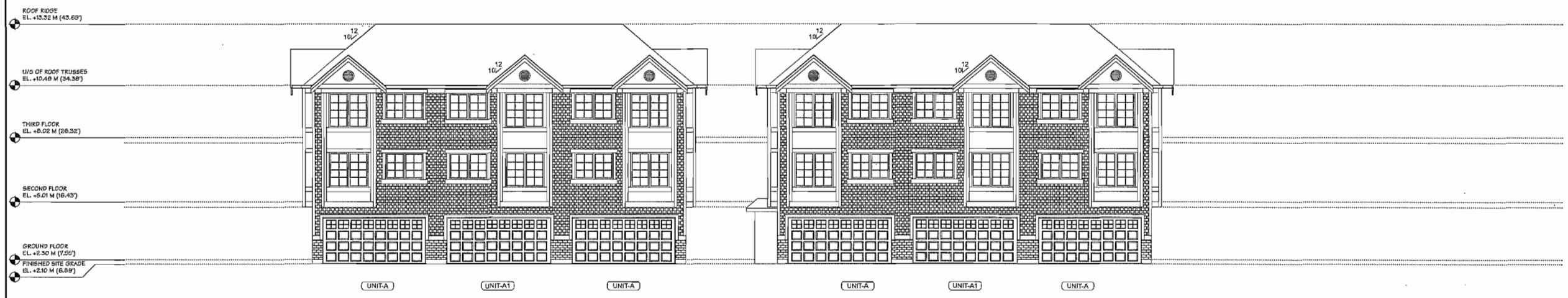


BLDG. 3: EAST ELEVATION - LECHOW STREET

SCHEME A2

BLDG. 4: EAST ELEVATION - LECHOW STREET

SCHEME A1

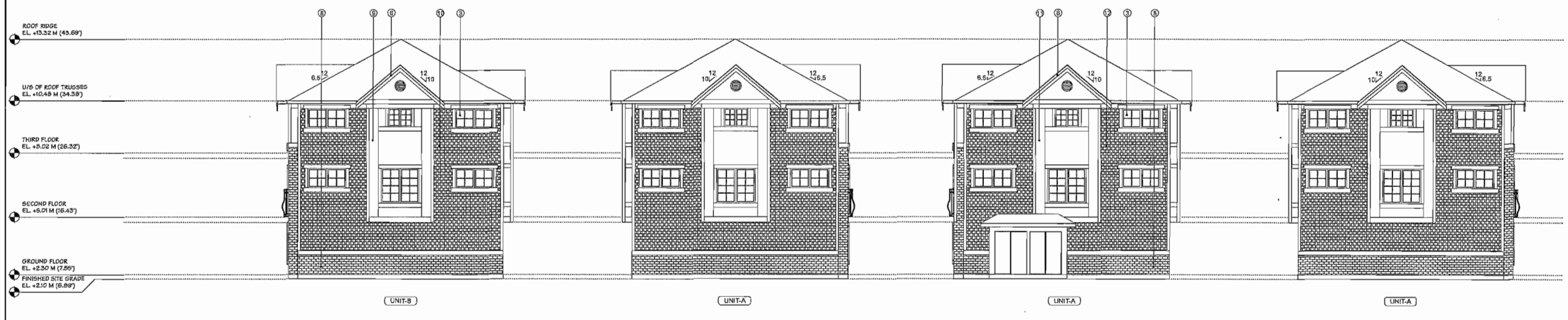


BLDG. 4: WEST ELEVATION

SCHEME A1

BLDG. 3: WEST ELEVATION

SCHEME A2



BLDG. 4: NORTH ELEVATION - SILLS AVE.

SCHEME A1

BLDG. 4: SOUTH ELEVATION

SCHEME A1

BLDG. 3: NORTH ELEVATION

SCHEME A2

BLDG. 3: SOUTH ELEVATION

SCHEME A2

ELEVATION KEY 1 - WEST LOT:

GENERAL:

1. ASPHALT ROOF SHINGLES - CHARCOAL
2. 5.5" ALUMINIUM GUTTER ON Z5 FASCIA - PAINTED TO MATCH TRIM
3. VINYL WINDOW - OFF-WHITE
4. METAL CLAD ENTRY DOOR - PAINTED "BM: BLACK TAR"
5. METAL CLAD GARAGE DOOR - PAINTED "COTTON BALLS"
6. WOOD WINDOW TRIM, POST, HORIZ.BAND, BRACKET, DECORATIVE VENTS - PAINTED "BM: STONE CUTTER"
7. METAL GUARD RAIL - BLACK

BRICK SCHEME A1:

8. BRICK - MED. BROWN / RED
9. HARDIE PANEL - "MONTEREY TAUPE"
11. 5" HARDIE-SHAKE SIDING - PAINTED "FAIRVIEW TAUPE"

BRICK SCHEME A2:

11. HARDIE PANEL - "MONTEREY TAUPE"
12. 5" HARDIE-SHAKE SIDING - "CHESTNUT BROWN"

STONE SCHEME B1:

13. CULTURED STONE - "NATURAL GRANITE"
12. HARDIE PANEL - "MONTEREY TAUPE"
13. 5" HARDIE-SHAKE SIDING - PAINTED "BM: AMHERST GRAY"

STONE SCHEME B2:

18. HARDIE PANEL - PAINTED "BM AMHERST GRAY"
17. 5" HARDIE-SHAKE SIDING - "MONTERREY TAUPE"

STONE SCHEME C1:

19. HARDIE PANEL - "MONTEREY TAUPE"
17. 5" HARDIE-SHAKE SIDING - PAINTED "FAIRVIEW TAUPE DARK"

STONE SCHEME C2:

20. HARDIE PANEL - PAINTED "BM: FAIRVIEW TAUPE"
17. 5" HARDIE-SHAKE SIDING - "MONTERREY TAUPE"

DP Plan No. 16
Oct. 31, 2014
DP 14-665485

NO.	DATE	REVISIONS
4	OCT. 24, 2014	DPP SUBMISSION
3	SEPT. 23, 2014	ADP SUBMISSION
2	APR. 24, 2013	GENERAL REVISION
1	JAN. 28, 2013	DP SUBMISSION

CONSULTANT

Copyright. All rights reserved.
Reproduction in whole or in part is prohibited. This drawing as an instrument of service is the property of the architect and may not be used in any way without the written permission of this office.

PROJECT

78 UNIT TOWNHOUSE DEVELOPMENT

NO.4 & BRIDGE ST.
RICHMOND, B.C.

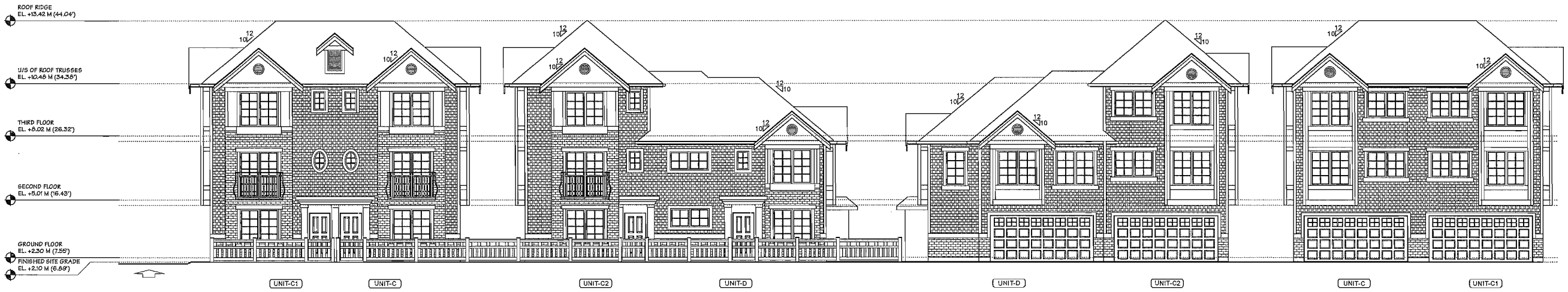
Yamamoto Architecture Inc.

2386 oak street, van., b.c.
V6H 4J1 tel: 731-1327 fax: 731-1327

DRAWING TITLE

ELEVATIONS

SCALE 1/8" = 1'-0"	SHEET NO. **PLAN-4c**
DATE SEPT. 19, 2014	
DRAWN WC	
CHECKED	PROJ. NO. 1103



BLDG. 5: NORTH ELEVATION - SILLS AVENUE

SCHEME A2

BLDG. 6: NORTH ELEVATION - SILLS AVENUE

SCHEME A1

BLDG. 6: SOUTH ELEVATION

SCHEME A1

BLDG. 5: SOUTH ELEVATION

SCHEME A2



BLDG. 5: EAST ELEVATION

SCHEME A2

BLDG. 5: WEST ELEVATION

SCHEME A2

BLDG. 6: EAST ELEVATION

SCHEME A1

BLDG. 6: WEST ELEVATION

SCHEME A1



BLDG. 7: SOUTH ELEVATION

SCHEME B1

BLDG. 8: SOUTH ELEVATION

SCHEME B1

BLDG. 8: NORTH ELEVATION

SCHEME B1

BLDG. 7: NORTH ELEVATION

SCHEME B1

ELEVATION KEY 1 - WEST LOT:

GENERAL:

1. ASPHALT ROOF SHINGLES - CHARCOAL
2. 6.5" ALUMINIUM GUTTER ON 2X8 FASCIA - PAINTED TO MATCH TRIM
3. VINYL WINDOW - OFF-WHITE
4. METAL CLAD ENTRY DOOR - PAINTED "BM: BLACK TAR"
5. METAL CLAD GARAGE DOOR - PAINTED "COTTON BALLS"
6. WOOD WINDOOR TRIM, POST,HORIZ.BAND, BRACKET, DECORATIVE VENTS - PAINTED "BM: STONE CUTTER"
7. METAL GUARD RAIL - BLACK

BRICK SCHEME A1:

8. BRICK - MED. BROWN / RED
9. HARDIE PANEL - "MONTEREY TAUPE"
10. 5" HARDIE-SHAKE SIDING - PAINTED "FAIRVIEW TAUPE"

BRICK SCHEME A2:

11. HARDIE PANEL - "MONTEREY TAUPE"
12. 5" HARDIE-SHAKE SIDING - "CHESTNUT BROWN"

STONE SCHEME B1:

13. CULTURED STONE - "NATURAL GRANITE"
14. HARDIE PANEL - "MONTEREY TAUPE"
15. 5" HARDIE-SHAKE SIDING - PAINTED "BM: AMHERST GRAY"

STONE SCHEME B2:

16. HARDIE PANEL - PAINTED "BM: AMHERST GRAY"
17. 5" HARDIE-SHAKE SIDING - "MONTEREY TAUPE"

STONE SCHEME C1:

18. HARDIE PANEL - "MONTEREY TAUPE"
19. 5" HARDIE-SHAKE SIDING - PAINTED "FAIRVIEW TAUPE DARK"

STONE SCHEME C2:

20. HARDIE PANEL - PAINTED "BM: FAIRVIEW TAUPE"
21. 5" HARDIE-SHAKE SIDING - "MONTEREY TAUPE"

DP Plan No. 17
Oct. 31, 2014
DP 14-665485

NO.	DATE	REVISIONS
4	OCT. 24, 2014	DPP SUBMISSION
3	SEPT. 23, 2014	ADP SUBMISSION
2	APR. 24, 2013	GENERAL REVISION
1	JAN. 29, 2013	DP SUBMISSION

CONSULTANT

Copyright. All rights reserved.
Reproduction in whole or in part is prohibited. This drawing as an instrument of service is the property of the architect and may not be used in any way without the written permission of this office.

PROJECT

78 UNIT TOWNHOUSE DEVELOPMENT

NO.4 & BRIDGE ST.
RICHMOND, B.C.

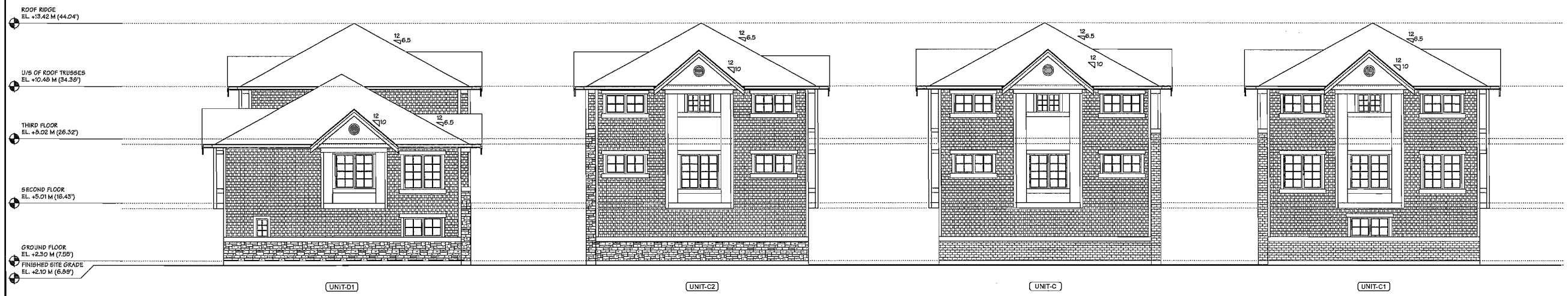
Yamamoto Architecture Inc.

2386 oak street, van., b.c.
V6H 4J1 tel: 731-1927 fax: 731-1927

DRAWING TITLE

ELEVATIONS

SCALE 1/8" = 1'-0"	SHEET NO. **PLAN-4d**
DATE SEPT. 19, 2014	
DRAWN WC	
CHECKED	PROJ. NO. 1103



BLDG. 7: WEST ELEVATION

SCHEME B1

BLDG. 7: EAST ELEVATION

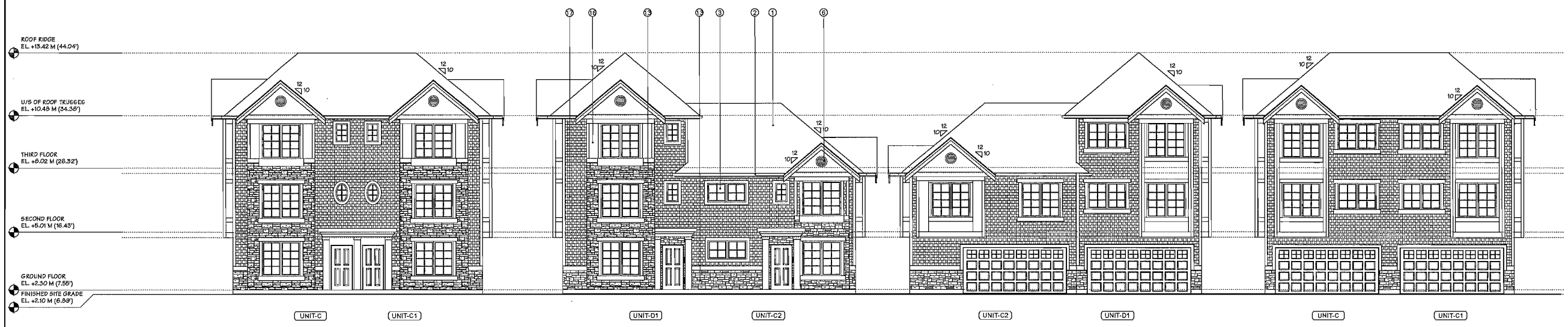
SCHEME B1

BLDG. 8: WEST ELEVATION

SCHEME B1

BLDG. 8: EAST ELEVATION

SCHEME B1



BLDG. 9: NORTH ELEVATION

SCHEME B2

BLDG. 10: NORTH ELEVATION

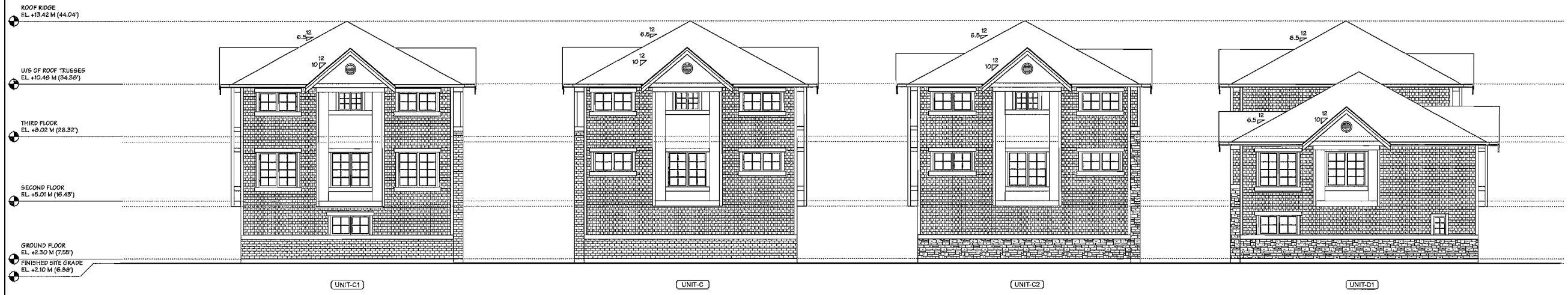
SCHEME B2

BLDG. 10: SOUTH ELEVATION

SCHEME B2

BLDG. 9: SOUTH ELEVATION

SCHEME B2



BLDG. 9: EAST ELEVATION

SCHEME B2

BLDG. 9: WEST ELEVATION

SCHEME B2

BLDG. 10: EAST ELEVATION

SCHEME B2

BLDG. 10: WEST ELEVATION

SCHEME B2

ELEVATION KEY 1 - WEST LOT:

GENERAL:

1. ASPHALT ROOF SHINGLES - CHARCOAL
2. 6.5" ALUMINUM GUTTER ON 2X6 FASCIA - PAINTED TO MATCH TRIM
3. VINYL WINDOW - OFF-WHITE
4. METAL CLAD ENTRY DOOR - PAINTED "BM: BLACK TAR"
5. METAL CLAD GARAGE DOOR - PAINTED "COTTON BALL"
6. WOOD WINDOOR TRIM, POST, HORIZ.BAND, BRACKET, DECORATIVE VENTS - PAINTED "BM: STONE GUTTER"
7. METAL GUARD RAIL - BLACK

BRICK SCHEME A1:

8. BRICK - MED. BROWN / RED
9. HARDIE PANEL - "MONTEREY TAUPE"
10. 5" HARDIE-SHAKE SIDING - PAINTED "FAIRVIEW TAUPE"

BRICK SCHEME A2:

11. HARDIE PANEL - "MONTEREY TAUPE"
12. 5" HARDIE-SHAKE SIDING - "CHESTNUT BROWN"

STONE SCHEME B1:

13. CULTURED STONE - "NATURAL GRANITE"
14. HARDIE PANEL - "MONTEREY TAUPE"
15. 5" HARDIE-SHAKE SIDING - PAINTED "BM: AMHERST GRAY"

STONE SCHEME B2:

16. HARDIE PANEL - PAINTED "BM: AMHERST GRAY"
17. 5" HARDIE-SHAKE SIDING - "MONTEREY TAUPE"

STONE SCHEME C1:

18. HARDIE PANEL - "MONTEREY TAUPE"
19. 5" HARDIE-SHAKE SIDING - PAINTED "FAIRVIEW TAUPE DARK"

STONE SCHEME C2:

20. HARDIE PANEL - PAINTED "BM: FAIRVIEW TAUPE"
21. 5" HARDIE-SHAKE SIDING - "MONTEREY TAUPE"

DP Plan No. 18
Oct. 31, 2014
DP 14-665485

NO.	DATE	REVISIONS
4	OCT. 24, 2014	DPP SUBMISSION
3	SEPT. 23, 2014	ADP SUBMISSION
2	APR. 24, 2013	GENERAL REVISION
1	JAN. 23, 2013	DP SUBMISSION

CONSULTANT

Copyright. All rights reserved.
Reproduction in whole or in part is prohibited. This drawing as an instrument of service is the property of the architect and may not be used in any way without the written permission of this office.

PROJECT

78 UNIT TOWNHOUSE DEVELOPMENT

NO.4 & BRIDGE ST.
RICHMOND, B.C.

Yamamoto Architecture Inc.

2386 oak street, van., b.c.
V6H 4J1 tel: 731-1327 fax: 731-1327

DRAWING TITLE

ELEVATIONS

SCALE 1/8" = 1'-0"	SHEET NO. **PLAN-4e**
DATE SEPT. 19, 2014	
DRAWN WC	
CHECKED	PROJ. NO. 1103



BLDG. 11: SOUTH ELEVATION

SCHEME C1

BLDG. 12: SOUTH ELEVATION

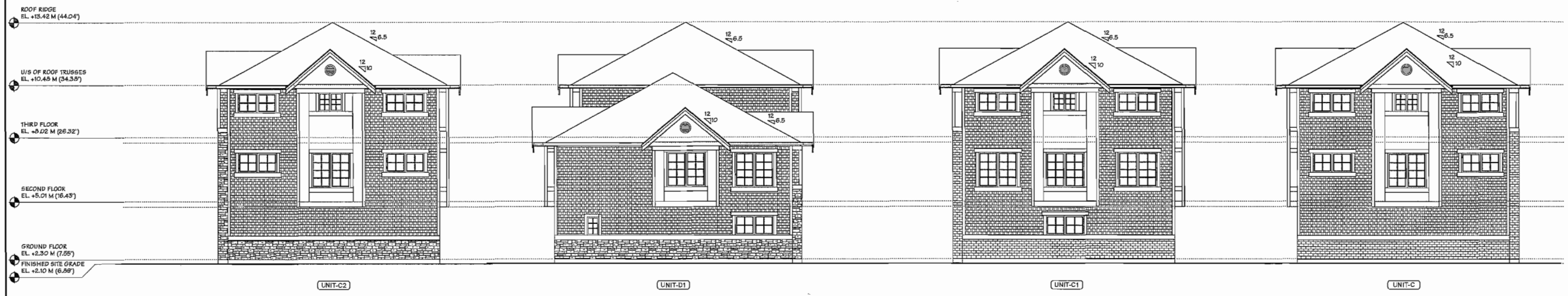
SCHEME C1

BLDG. 12: SOUTH ELEVATION

SCHEME C1

BLDG. 11: NORTH ELEVATION

SCHEME C1



BLDG. 11: EAST ELEVATION

SCHEME C1

BUILDING 11: WEST ELEVATION

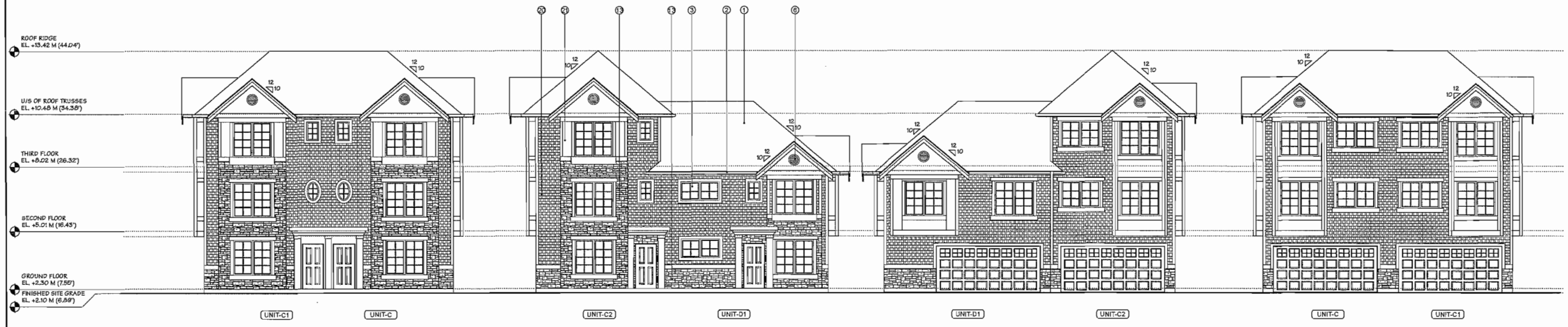
SCHEME C1

BLDG. 12: EAST ELEVATION

SCHEME C1

BLDG. 12: WEST ELEVATION

SCHEME C1



BLDG. 13: NORTH ELEVATION

SCHEME C2

BLDG. 14: NORTH ELEVATION

SCHEME C2

BLDG. 14: SOUTH ELEVATION

SCHEME C2

BLDG. 13: SOUTH ELEVATION

SCHEME C2

ELEVATION KEY 1 - WEST LOT:

GENERAL:

1. ASPHALT ROOF SHINGLES - CHARCOAL
2. 6.5" ALUMINUM GUTTER ON 2X8 FASCIA - PAINTED TO MATCH TRIM
3. VINYL WINDOW - OFF-WHITE
4. METAL CLAD ENTRY DOOR - PAINTED "SW: BLACK TAR"
5. METAL CLAD GARAGE DOOR - PAINTED "COTTON BALLS"
6. WOOD WINDOW TRIM, POST, NOSE BAND, BRACKET, DECORATIVE VENTS - PAINTED "SW: STONE CUTTER"
7. METAL GUARD RAIL - BLACK

BRICK SCHEME A1:

8. BRICK - MED. BROWN / RED
9. HARDIE PANEL - "MONTEREY TAUPE"
10. 5" HARDIE-SHAKE SIDING - PAINTED "FAIRVIEW TAUPE"

BRICK SCHEME A2:

11. HARDIE PANEL - "MONTEREY TAUPE"
12. 5" HARDIE-SHAKE SIDING - "CHESTNUT BROWN"

STONE SCHEME B1:

13. CULTURED STONE - "NATURAL GRANITE"
14. HARDIE PANEL - "MONTEREY TAUPE"
15. 5" HARDIE-SHAKE SIDING - PAINTED "SW: AMHERST GRAY"

STONE SCHEME B2:

16. HARDIE PANEL - PAINTED "SW: AMHERST GRAY"
17. 5" HARDIE-SHAKE SIDING - "MONTEREY TAUPE"

STONE SCHEME C1:

18. HARDIE PANEL - "MONTEREY TAUPE"
19. 5" HARDIE-SHAKE SIDING - PAINTED "FAIRVIEW TAUPE DARK"

STONE SCHEME C2:

20. HARDIE PANEL - PAINTED "SW: FAIRVIEW TAUPE"
21. 5" HARDIE-SHAKE SIDING - "MONTEREY TAUPE"

DP Plan No. 19
Oct. 31, 2014
DP 14-665485

NO.	DATE	REVISIONS
4	OCT. 24, 2014	DPP SUBMISSION
3	SEPT. 23, 2014	ADP SUBMISSION
2	APR. 24, 2013	GENERAL REVISION
1	JAN. 28, 2013	DP SUBMISSION

CONSULTANT

Copyright. All rights reserved.
Reproduction in whole or in part is prohibited. This drawing as an instrument of service is the property of the architect and may not be used in any way without the written permission of this office.

PROJECT

78 UNIT TOWNHOUSE DEVELOPMENT

NO.4 & BRIDGE ST.
RICHMOND, B.C.

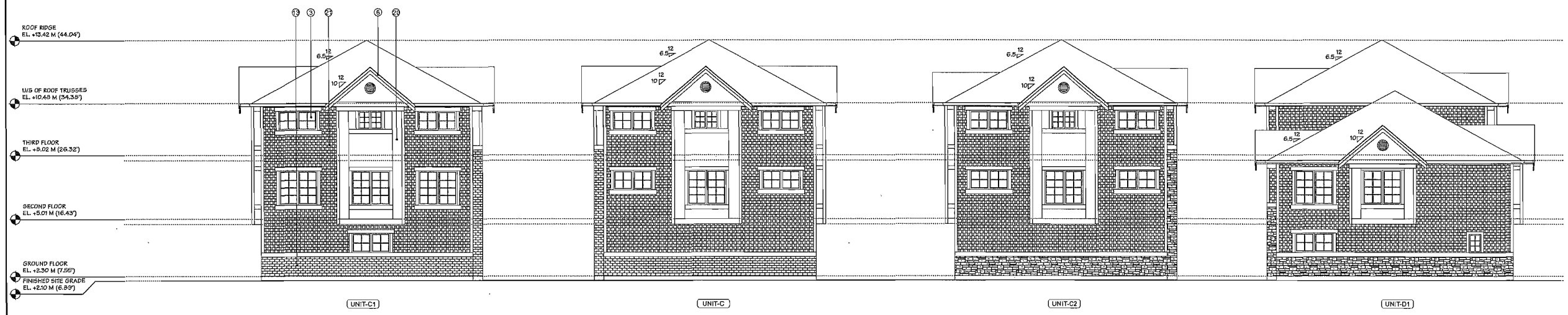
Yamamoto Architecture Inc.

2386 oak street, van., b.c.
V6H 4J1 tel: 731-1327 fax: 731-1327

DRAWING TITLE

ELEVATIONS

SCALE 1/8" = 1'-0"	SHEET NO. PLAN-4f
DATE SEPT. 19, 2014	
DRAWN WC	
CHECKED	PROJ. NO. 1103



BLDG. 13: EAST ELEVATION

SCHEME C2

BLDG. 13: WEST ELEVATION

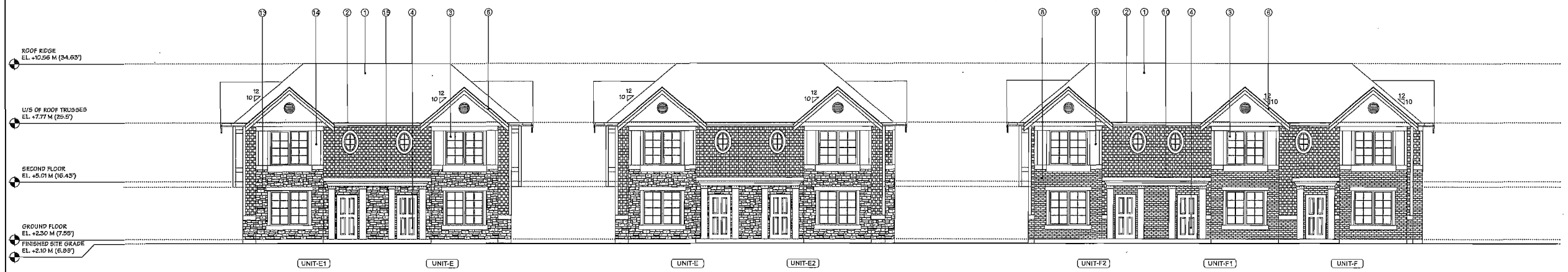
SCHEME C2

BLDG. 14: EAST ELEVATION

SCHEME C2

BLDG. 14: WEST ELEVATION

SCHEME C2



BLDG. 15: SOUTH ELEVATION

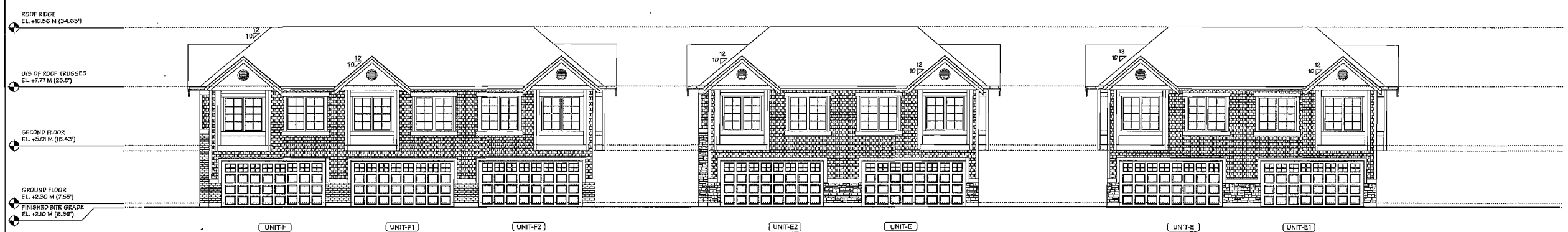
SCHEME B1

BLDG. 16: SOUTH ELEVATION

SCHEME B1

BLDG. 17: SOUTH ELEVATION

SCHEME A1



BLDG. 17: NORTH ELEVATION - DRIVEWAY

SCHEME A1

BLDG. 16: NORTH ELEVATION - DRIVEWAY

SCHEME B1

BLDG. 15: NORTH ELEVATION - DRIVEWAY

SCHEME B1

ELEVATION KEY 1 - WEST LOT:

GENERAL:

1. ASPHALT ROOF SHINGLES - CHARCOAL
2. 5" ALUMINUM GUTTER ON 2X8 FASCIA - PAINTED TO MATCH TRIM
3. VINYL WINDOW - OFF-WHITE
4. METAL CLAD ENTRY DOOR - PAINTED "BM: BLACK TAN"
5. METAL CLAD GARAGE DOOR - PAINTED "COTTON BALLS"
6. WOOD WINDOW TRIM, POST, HORIZ.BAND, BRACKET, DECORATIVE VENTS - PAINTED "BM: STONE CUTTER"
7. METAL GUARD RAIL - BLACK

BRICK SCHEME A1:

8. BRICK - MED. BROWN / RED
9. HARDIE PANEL - "MONTEREY TAUPE"
10. 5" HARDIE-SHAKE SIDING - PAINTED "FAIRVIEW TAUPE"

BRICK SCHEME A2:

11. HARDIE PANEL - "MONTEREY TAUPE"
12. 5" HARDIE-SHAKE SIDING - "CHESTNUT BROWN"

STONE SCHEME B1:

13. CULTURED STONE - "NATURAL GRANITE"
14. HARDIE PANEL - "MONTEREY TAUPE"
15. 5" HARDIE-SHAKE SIDING - PAINTED "BM: AMHERST GRAY"

STONE SCHEME B2:

16. HARDIE PANEL - PAINTED "BM: AMHERST GRAY"
17. 5" HARDIE-SHAKE SIDING - "MONTEREY TAUPE"

STONE SCHEME C1:

18. HARDIE PANEL - "MONTEREY TAUPE"
19. 5" HARDIE-SHAKE SIDING - PAINTED "FAIRVIEW TAUPE DARK"

STONE SCHEME C2:

20. HARDIE PANEL - PAINTED "BM: FAIRVIEW TAUPE"
21. 5" HARDIE-SHAKE SIDING - "MONTEREY TAUPE"

DP Plan No. 20
Oct. 31, 2014
DP 14-665485

NO.	DATE	REVISIONS
4	OCT. 24, 2014	DPP SUBMISSION
3	SEPT. 23, 2014	ADP SUBMISSION
2	APR. 24, 2013	GENERAL REVISION
1	JAN. 28, 2013	DP SUBMISSION

CONSULTANT

Copyright. All rights reserved.
Reproduction in whole or in part is prohibited. This drawing as an instrument of service is the property of the architect and may not be used in any way without the written permission of this office.

PROJECT

78 UNIT TOWNHOUSE DEVELOPMENT

NO.4 & BRIDGE ST.
RICHMOND, B.C.

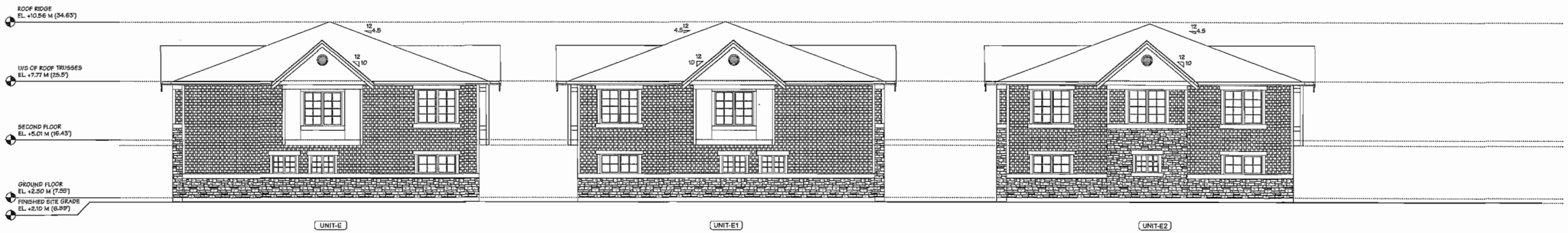
Yamamoto Architecture Inc.

2386 oak street, van., b.c.
V6H 4J1 tel: 731-1327 fax: 731-1327

DRAWING TITLE

ELEVATIONS

SCALE 1/8" = 1'-0"	SHEET NO. **PLAN-4g**
DATE SEPT. 19, 2014	
DRAWN WC	
CHECKED	PROJ. NO. 1108



BLDG. 15: EAST ELEVATION

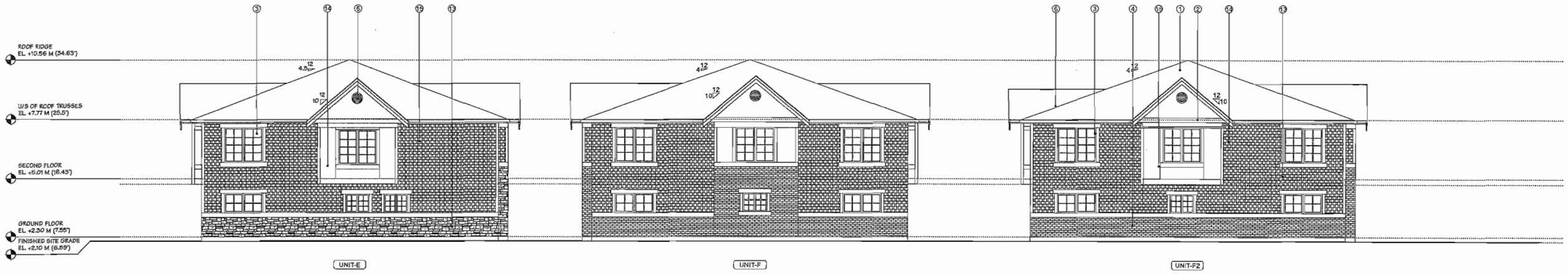
SCHEME B1

BLDG. 15: WEST ELEVATION

SCHEME B1

BLDG. 16: EAST ELEVATION

SCHEME B1



BLDG. 16: WEST ELEVATION

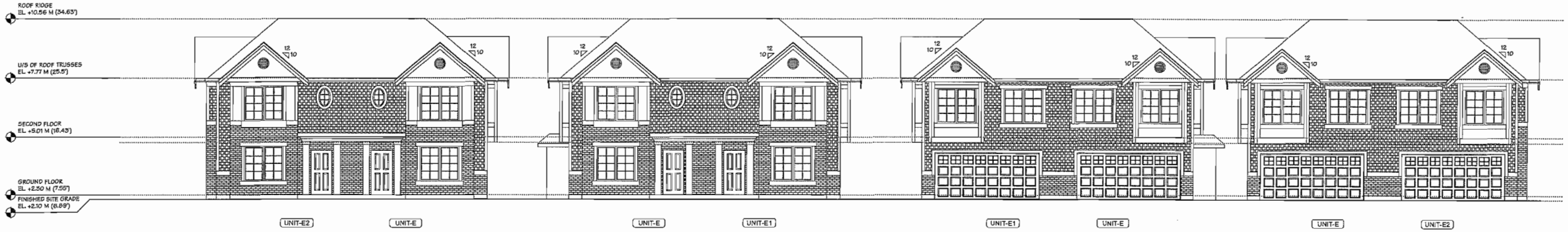
SCHEME B1

BLDG. 17: EAST ELEVATION

SCHEME A1

BLDG. 17: WEST ELEVATION

SCHEME A1



BLDG. 19: NORTH ELEVATION

SCHEME A2

BLDG. 18: NORTH ELEVATION

SCHEME A1

BLDG. 18: SOUTH ELEVATION

SCHEME A1

BLDG. 19: SOUTH ELEVATION

SCHEME A2

ELEVATION KEY 1 - WEST LOT:

GENERAL:

1. ASPHALT ROOF SHINGLES - CHARCOAL
2. 5.5" ALUMINUM GUTTER ON 2X8 FASCIA - PAINTED TO MATCH TRIM
3. VINYL WINDOW - OFF-WHITE
4. METAL CLAD ENTRY DOOR - PAINTED "SW: BLACK TAR"
5. METAL CLAD GARAGE DOOR - PAINTED "COTTON BALLS"
6. WOOD WINDOOR TRIM, POST, HORIZBAND, BRACKET, DECORATIVE VENTS - PAINTED "SW: STONE CUTTER"
7. METAL GUARD RAIL - BLACK

BRICK SCHEME A1:

8. BRICK - MED. BROWN / RED
9. HARDIE PANEL - "MONTEREY TAUPE"
10. 5" HARDIE-SHAKE SIDING - PAINTED "FAIRVIEW TAUPE"

BRICK SCHEME A2:

11. HARDIE PANEL - "MONTEREY TAUPE"
12. 5" HARDIE-SHAKE SIDING - "CHRISTMAS BROWN"

STONE SCHEME B1:

13. CULTURED STONE - "NATURAL GRANITE"
14. HARDIE PANEL - "MONTEREY TAUPE"
15. 5" HARDIE-SHAKE SIDING - PAINTED "SW: AMHERST GRAY"

STONE SCHEME B2:

16. HARDIE PANEL - PAINTED "SW: AMHERST GRAY"
17. 5" HARDIE-SHAKE SIDING - "MONTEREY TAUPE"

STONE SCHEME C1:

18. HARDIE PANEL - "MONTEREY TAUPE"
19. 5" HARDIE-SHAKE SIDING - PAINTED "FAIRVIEW TAUPE DARK"

STONE SCHEME C2:

20. HARDIE PANEL - PAINTED "SW: FAIRVIEW TAUPE"
21. 5" HARDIE-SHAKE SIDING - "MONTEREY TAUPE"

NO.	DATE	REVISIONS
4	OCT. 24, 2014	DPP SUBMISSION
3	SEPT. 23, 2014	ADP SUBMISSION
2	APR. 24, 2013	GENERAL REVISION
1	JAN. 23, 2013	DP SUBMISSION

CONSULTANT

Copyright. All rights reserved.
Reproduction in whole or in part is prohibited. This drawing as an instrument of service is the property of the architect and may not be used in any way without the written permission of this office.

PROJECT

78 UNIT TOWNHOUSE DEVELOPMENT

NO.4 & BRIDGE ST.
RICHMOND, B.C.

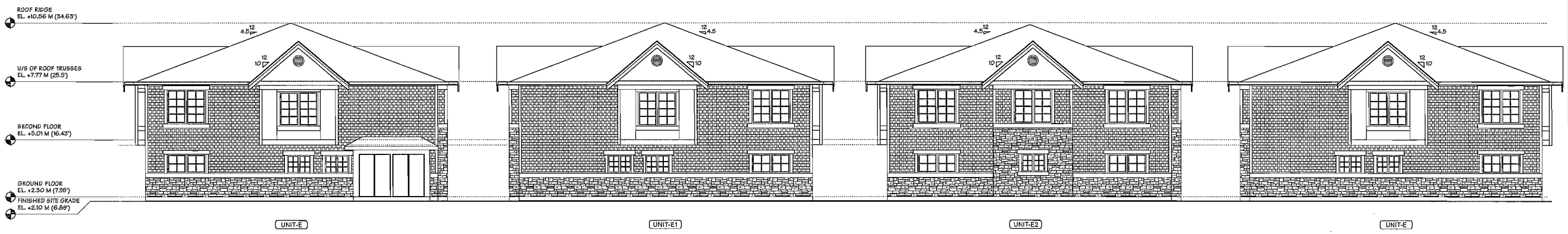
Yamamoto Architecture Inc.

2386 oak street, van., b.c.
V6H 4J1 tel: 731-1327 fax: 731-1327

DRAWING TITLE

ELEVATIONS

SCALE 1/8" = 1'-0"	SHEET NO. **PLAN-4h**
DATE SEPT. 19, 2014	
DRAWN WC	
CHECKED	PROJ. NO. 1103



BLDG. 18: EAST ELEVATION

SCHEME A1

BLDG. 18: WEST ELEVATION

SCHEME A1

BLDG. 19: EAST ELEVATION

SCHEME A2

BLDG. 19: WEST ELEVATION

SCHEME A2

ELEVATION KEY 2 - EAST LOT:

GENERAL:

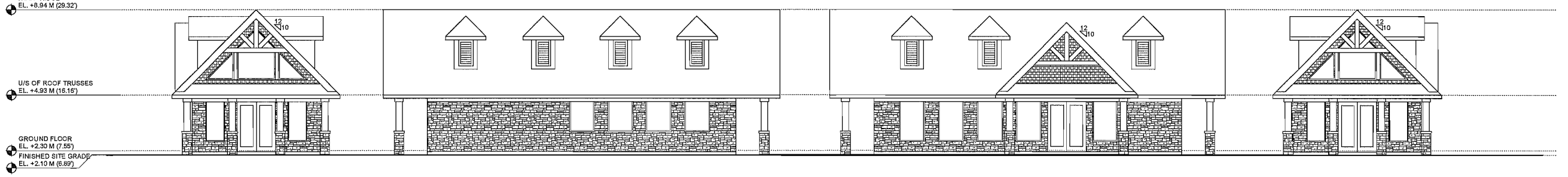
1. ASPHALT ROOF SHINGLES - CHARCOAL
2. 6.5" ALUMINUM GUTTER ON 2X8 FASCIA - PAINTED TO MATCH TRIM
3. VINYL WINDOW - OFF-WHITE
4. HARDIE PANEL - PAINTED "COTTON BALLS"
5. WOOD WAINSCOT TRIM, POST, HORIZ.BAND, BRACKET, DECORATIVE VENTS - PAINTED "BM; COTTON BALLS"
6. METAL CLAD ENTRY DOOR - PAINTED "BM; BLACK TAR"
7. METAL CLAD GARAGE DOOR - PAINTED "BM; COTTON BALLS"

SCHEME M1:

8. BRICK - CHARCOAL
9. 4" HARDIE-PLANK SIDING / 5" HARDIE-SHAKE SIDING - PAINTED "BM; GRAY MIRAGE"
10. 6" EXPOSURE HARDIE-PLANK SIDING - "MONTERAY TAUPE"

SCHEME M2:

11. BRICK - MEDIUM BROWN
12. 6" HARDIE-SHAKE SIDING - "BM; DRY DRY SAGE"
13. 6" EXPOSURE HARDIE-PLANK SIDING - "GRAY MIRAGE"

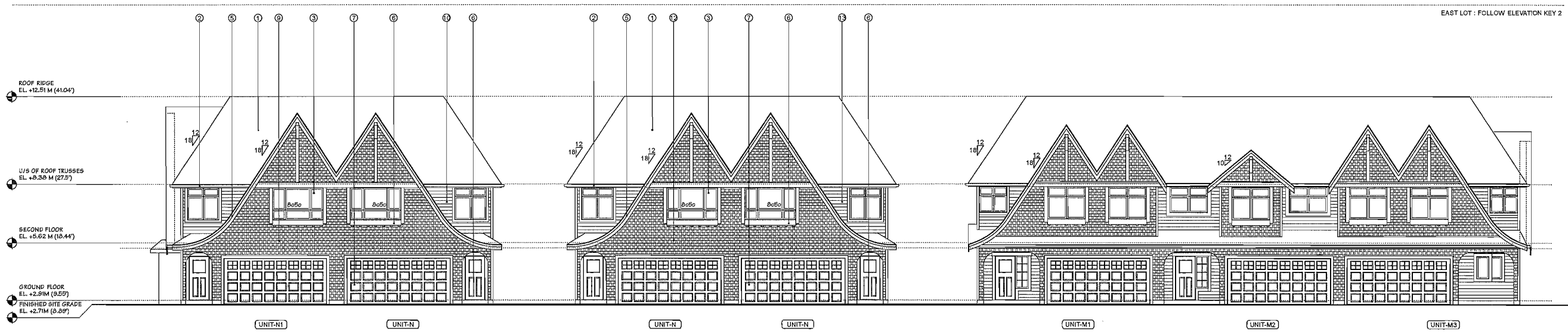


INDOOR AMENITY: EAST ELEVATION

INDOOR AMENITY: NORTH ELEVATION

INDOOR AMENITY: SOUTH ELEVATION

INDOOR AMENITY: WEST ELEVATION



BLDG 22: NORTH ELEVATION

SCHEME M1

BLDG 21: NORTH ELEVATION

SCHEME M2

BLDG. 20: NORTH ELEVATION

SCHEME M1

DP Plan No. 21
Oct. 31, 2014
DP 14-665485

NO.	DATE	REVISIONS
4	OCT. 24, 2014	DPP SUBMISSION
3	SEPT. 23, 2014	ADP SUBMISSION
2	APR. 24, 2013	GENERAL REVISION
1	JAN. 29, 2013	DP SUBMISSION

CONSULTANT

Copyright. All rights reserved.
Reproduction in whole or in part is prohibited. This drawing as an instrument of service is the property of the architect and may not be used in any way without the written permission of this office.

PROJECT

78 UNIT TOWNHOUSE DEVELOPMENT

NO.4 & BRIDGE ST.
RICHMOND, B.C.

Yamamoto Architecture Inc.

2388 oak street, van., b.c.
V6H 4J1 tel: 731-1927 fax: 731-1927

DRAWING TITLE

ELEVATIONS

SCALE 1/8" = 1'-0"	SHEET NO. **PLAN-4i**
DATE SEPT. 19, 2014	
DRAWN WC	
CHECKED	PROJ. NO. 1103



BLDG. 20 - SOUTH ELEVATION

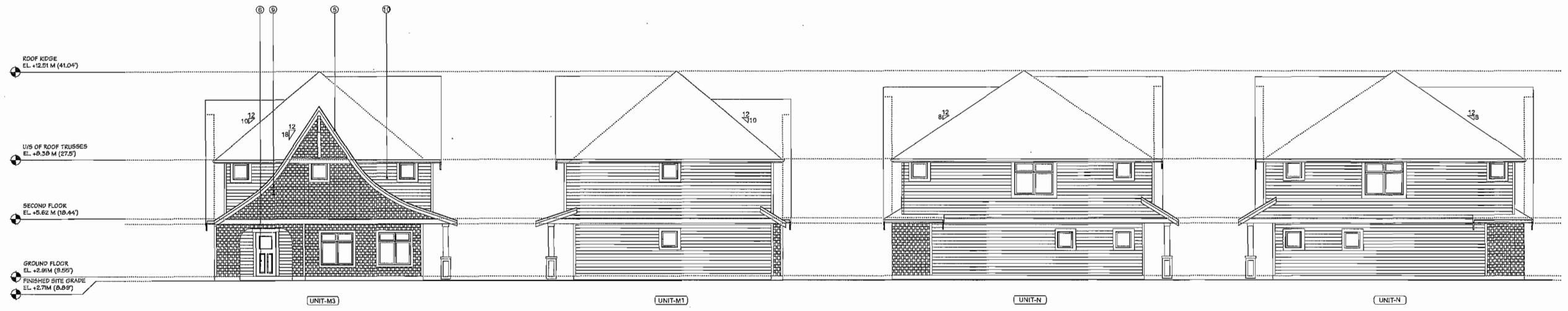
SCHEME M1

BLDG. 21: SOUTH ELEVATION

SCHEME M2

BLDG. 22: SOUTH ELEVATION

SCHEME M1



BLDG. 20 - WEST ELEVATION

SCHEME M1

BLDG. 20 - EAST ELEVATION

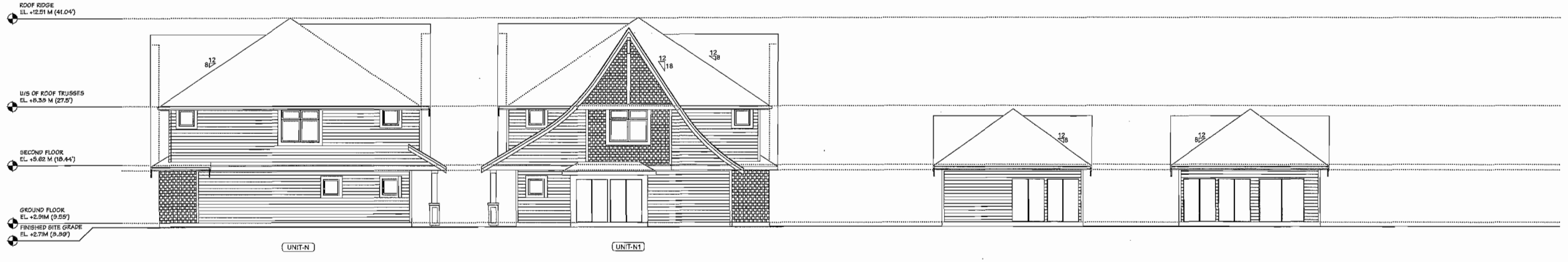
SCHEME M1

BLDG. 21: WEST ELEVATION

SCHEME M2

BLDG. 21: EAST ELEVATION

SCHEME M2



BLDG. 22: WEST ELEVATION

SCHEME M1

BLDG. 22: EAST ELEVATION

SCHEME M1

GARBAGE BLDG. 2: WEST ELEVATION

GARBAGE BLDG. 2: EAST ELEVATION

ELEVATION KEY 2 - EAST LOT:
GENERAL:
(1) ASPHALT ROOF SHINGLES - CHARCOAL
(2) 5.5" ALUMINIUM GUTTER ON 2X6 FASCIA - PAINTED TO MATCH TRIM
(3) VINYL WINDOW - OFF-WHITE
(4) HARDIE PANEL - PAINTED "COTTTON BALLS"
(5) WOOD WINDOOR TRIM, POST, HOWE BAND, BRACKET, DECORATIVE VENTS - PAINTED "BM, COTTON BALLS"
(6) METAL CLAD ENTRY DOOR - PAINTED "BM, BLACK TAN"
(7) METAL CLAD GARAGE DOOR - PAINTED "BM, COTTON BALLS"
SCHEME M1:
(8) BRICK - CHARCOAL
(9) 4" HARDIE-PLANK SIDING / 5" HARDIE-SHAKE SIDING - PAINTED "BM, GRAY MIRAGE"
(10) 5" EXPOSURE HARDIE-PLANK SIDING - "MONTEREY TAUPE"
SCHEME M2:
(11) BRICK - MEDIUM BROWN
(12) 5" HARDIE-SHAKE SIDING - "BM, DRY CREEK SAGE"
(13) 5" EXPOSURE HARDIE-PLANK SIDING - "GRAY MIRAGE"

DP Plan No. 22
Oct. 31, 2014
DP 14-665485

NO.	DATE	REVISIONS
4	OCT. 24, 2014	DPP SUBMISSION
3	SEPT. 23, 2014	ADP SUBMISSION
2	APR. 24, 2013	GENERAL REVISION
1	JAN. 29, 2013	DP SUBMISSION

CONSULTANT

Copyright. All rights reserved.
Reproduction in whole or in part is prohibited. This drawing as an instrument of service is the property of the architect and may not be used in any way without the written permission of this office.

PROJECT

78 UNIT TOWNHOUSE DEVELOPMENT

NO.4 & BRIDGE ST.
RICHMOND, B.C.

Yamamoto Architecture Inc.

2386 oak street, van., b.c.
V6H 4J1 tel: 731-1327 fax: 731-1327

DRAWING TITLE

ELEVATIONS

SCALE	1/8" = 1'-0"	SHEET NO.
DATE	SEPT. 19, 2014	**PLAN-4j**
DRAWN	KP	
CHECKED		PROJ. NO. 1103



BLDG. 23: SOUTH ELEVATION

GARBAGE BLDG. 2: SOUTH ELEVATION

BLDG. 24: SOUTH ELEVATION

SCHEME M2

SCHEME M1



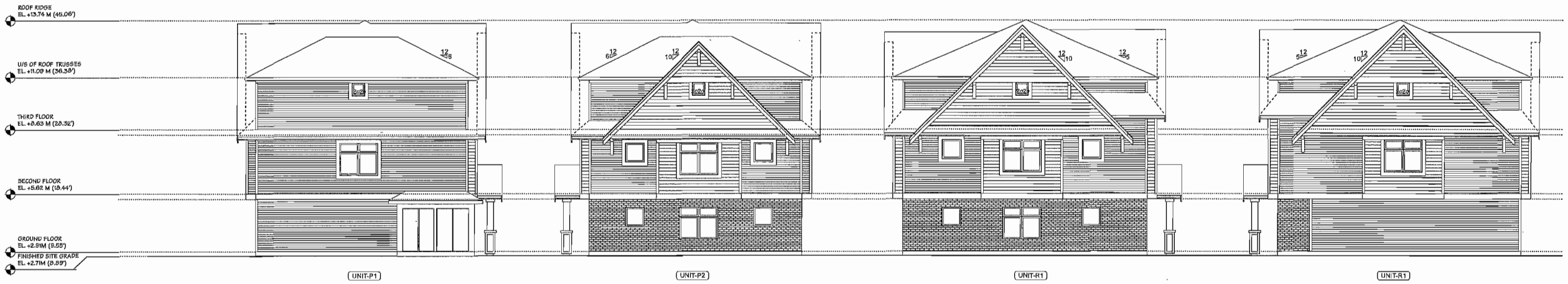
BLDG. 24: NORTH ELEVATION

GARBAGE BLDG. 2: NORTH ELEVATION

BLDG. 23: NORTH ELEVATION

SCHEME M1

SCHEME M2



BLDG. 23: EAST ELEVATION

BLDG. 23: WEST ELEVATION

BLDG. 24: EAST ELEVATION

BLDG. 24: WEST ELEVATION

SCHEME M2

SCHEME M2

SCHEME M1

SCHEME M1

ELEVATION KEY 2 - EAST LOT:

GENERAL:

1. ASPHALT ROOF SHINGLES - CHARCOAL
2. 6.5" ALUMINUM GUTTER ON 2X8 FASCIA - PAINTED TO MATCH TRIM
3. VINYL WINDOW - OFF-WHITE
4. HARDIE PANEL - PAINTED "COTTON BALLS"
5. WOOD WINDOOR TRIM, POST, HORIZ.BAND, BRACKET, DECORATIVE VENTS - PAINTED "BM; COTTON BALLS"
6. METAL CLAD ENTRY DOOR - PAINTED "BM; BLACK TAR"
7. METAL CLAD GARAGE DOOR - PAINTED "BM; COTTON BALLS"

SCHEME M1:

8. BRICK - CHARCOAL
9. 4" HARDIE-PLANK SIDING / 5" HARDIE-SHAKE SIDING - PAINTED "BM; GRAY MIRAGE"
10. 8" EXPOSURE HARDIE-PLANK SIDING - "MONTERAY TAUPE"

SCHEME M2:

11. BRICK - MEDIUM BROWN
12. 5" HARDIE-SHAKE SIDING - "SW; DRY DRY SAGE"
13. 8" EXPOSURE HARDIE-PLANK SIDING - "GRAY MIRAGE"

DP Plan No. 23
Oct. 31, 2014
DP 14-665485

NO.	DATE	REVISIONS
4	OCT. 24, 2014	DPP SUBMISSION
3	SEPT. 23, 2014	ADP SUBMISSION
2	APR. 24, 2013	GENERAL REVISION
1	JAN. 29, 2013	DP SUBMISSION

CONSULTANT

Copyright. All rights reserved.
Reproduction in whole or in part is prohibited. This drawing as an instrument of service is the property of the architect and may not be used in any way without the written permission of this office.

PROJECT

78 UNIT TOWNHOUSE DEVELOPMENT

NO.4 & BRIDGE ST.
RICHMOND, B.C.

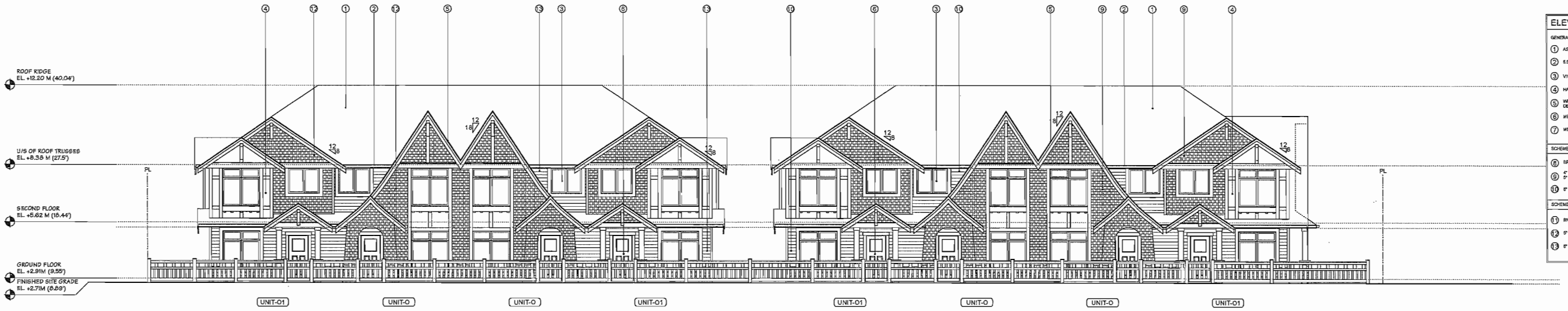
Yamamoto Architecture Inc.

2386 oak street, van., b.c.
V6H 4J1 tel: 731-1327 fax: 731-1327

DRAWING TITLE

ELEVATIONS

SCALE 1/8" = 1'-0"	SHEET NO. **PLAN-4k**
DATE SEPT. 19, 2014	
DRAWN YK	
CHECKED	PROJ. NO. 1103



BLDG. 25: EAST ELEVATION - NO. 4 ROAD

SCHEME M2

BLDG. 26: EAST ELEVATION - NO. 4 ROAD

SCHEME M1

ELEVATION KEY 2 - EAST LOT:

GENERAL:

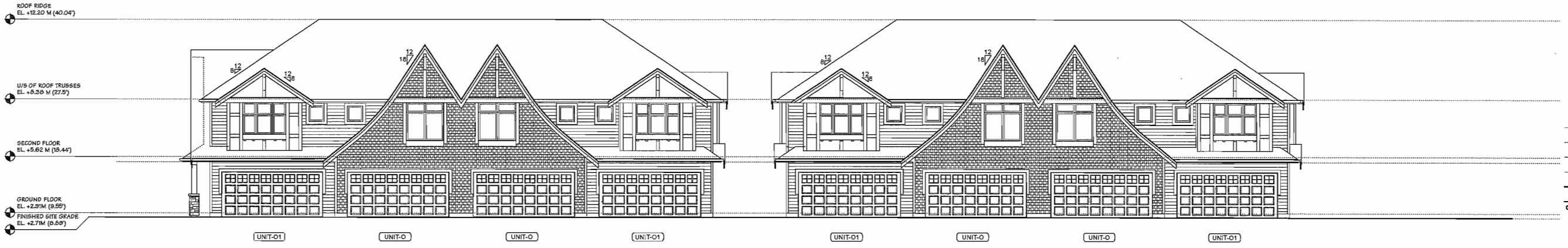
1. ASPHALT ROOF SHINGLES - CHARCOAL
2. 5.5" ALUMINUM GUTTER ON 2X8 FASCIA - PAINTED TO MATCH TRIM
3. VINYL WINDOW - OFF-WHITE
4. HARDIE PANEL - PAINTED "COTTON BALLS"
5. WOOD WINDOOR TRIM, POST, HORIZ.BAND, BRACKET, DECORATIVE VENTS - PAINTED "SW: COTTON BALLS"
6. METAL CLAD ENTRY DOOR - PAINTED "SW: BLACK TAR"
7. METAL CLAD GARAGE DOOR - PAINTED "SW: COTTON BALLS"

SCHEME M1:

8. BRICK - CHARCOAL
9. 4" HARDIE-PLANK SIDING / 5" HARDIE-SHAKE SIDING - PAINTED "SW: GRAY MIRAGE"
10. 8" EXPOSURE HARDIE-PLANK SIDING - "MONTERAY TAUPE"

SCHEME M2:

11. BRICK - MEDIUM BROWN
12. 5" HARDIE-SHAKE SIDING - "SW: DRY DRY SAGE"
13. 8" EXPOSURE HARDIE-PLANK SIDING - "GRAY MIRAGE"

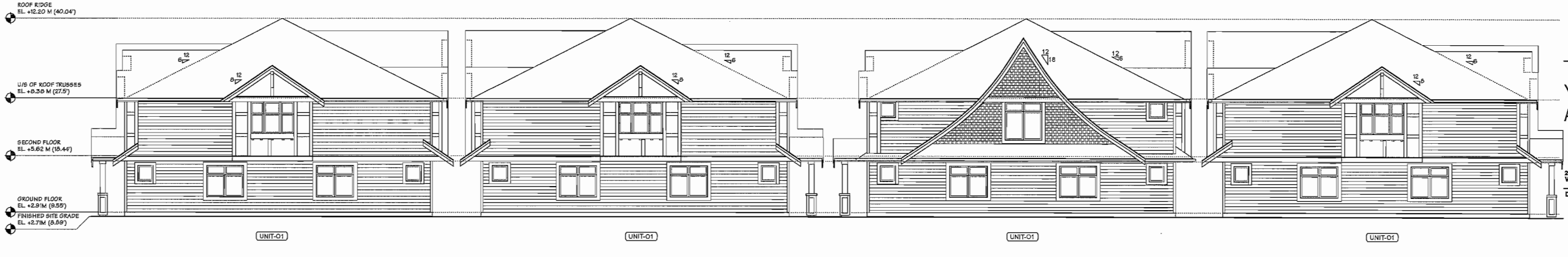


BLDG. 26: WEST ELEVATION

SCHEME M1

BLDG. 25: WEST ELEVATION

SCHEME M2



BLDG. 25: NORTH ELEVATION

SCHEME M2

BLDG. 25: SOUTH ELEVATION

SCHEME M2

BLDG. 26: NORTH ELEVATION

SCHEME M1

BLDG. 26: SOUTH ELEVATION

SCHEME M1

DP Plan No. 24
Oct. 31, 2014
DP 14-665485

NO.	DATE	REVISIONS
4	OCT. 24, 2014	DPP SUBMISSION
3	SEPT. 23, 2014	ADP SUBMISSION
2	APR. 24, 2013	GENERAL REVISION
1	JAN. 28, 2013	DP SUBMISSION

CONSULTANT

Copyright. All rights reserved.
Reproduction in whole or in part is prohibited. This drawing as an instrument of service is the property of the architect and may not be used in any way without the written permission of this office.

PROJECT

78 UNIT TOWNHOUSE DEVELOPMENT

NO.4 & BRIDGE ST.
RICHMOND, B.C.

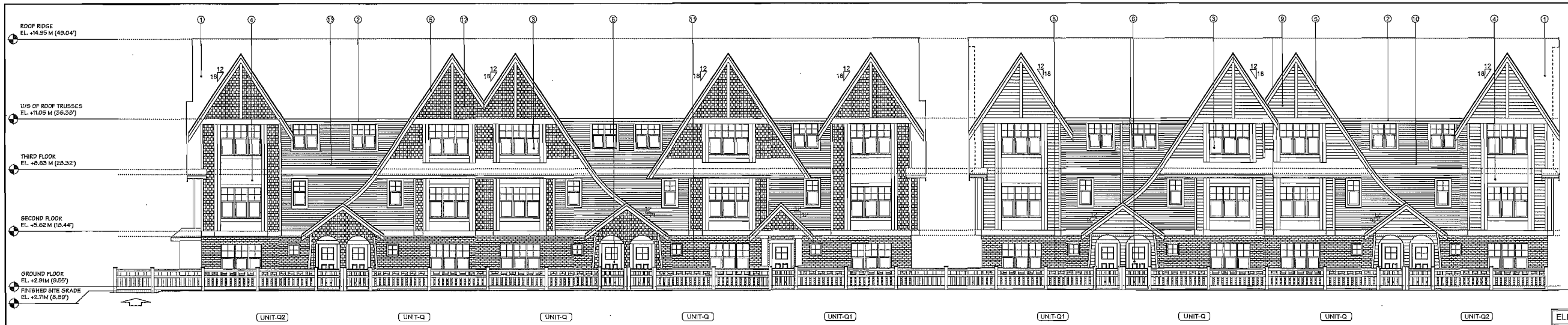
Yamamoto Architecture Inc.
2386 oak street, van., b.c.
V6H 4J1 tel: 731-1927 fax: 731-1927

DRAWING TITLE

ELEVATIONS

SCALE 1/8" = 1'-0"	SHEET NO. **PLAN-4I**
DATE SEPT. 19, 2014	
DRAWN KP	
CHECKED	PROJ. NO. 1103

DP Plan No. 25
Oct. 31, 2014
DP 14-665485

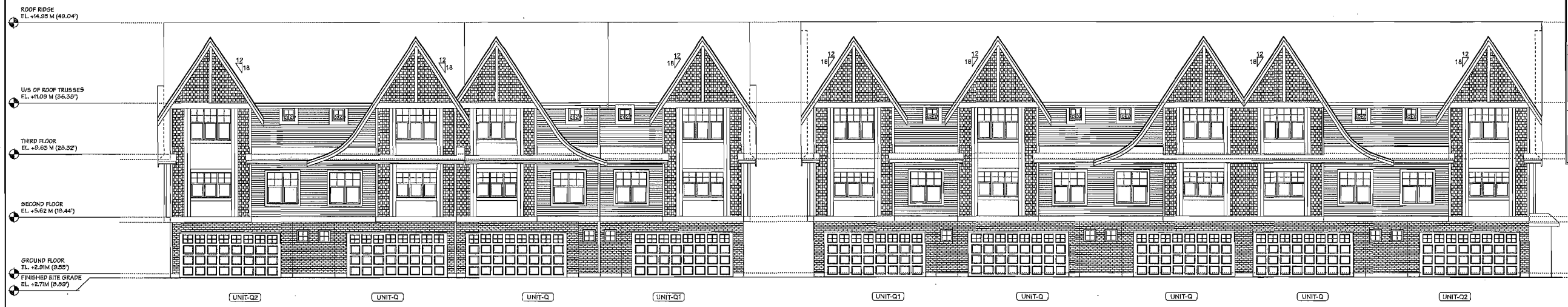


BLDG. 27: NORTH ELEVATION - E-W CONNECTOR

SCHEME M2

BLDG. 28: NORTH ELEVATION - E-W CONNECTOR

SCHEME M1



BLDG. 28: SOUTH ELEVATION

SCHEME M1

BLDG. 27: SOUTH ELEVATION

SCHEME M2



BLDG. 27: EAST ELEVATION

SCHEME M2

BLDG. 27: WEST ELEVATION

SCHEME M2

BLDG. 28: EAST ELEVATION

SCHEME M1

BLDG. 28: WEST ELEVATION

SCHEME M1

ELEVATION KEY 2 - EAST LOT:

GENERAL:

1. ASPHALT ROOF SHINGLES - CHARCOAL
2. 5.0" ALUMINUM GUTTER ON 2X8 FASCIA - PAINTED TO MATCH TRIM
3. VINYL WINDOW - OFF-WHITE
4. HARDIE PANEL - PAINTED "COTTON BALLS"
5. WOOD WINDOW TRIM, POST, HORZ BAND, BRACKET, DECORATIVE VENTS - PAINTED "BM: COTTON BALLS"
6. METAL CLAD ENTRY DOOR - PAINTED "BM: BLACK TAR"
7. METAL CLAD GARAGE DOOR - PAINTED "BM: COTTON BALLS"

SCHEME M1:

8. BRICK - CHARCOAL
9. 4" HARDIE-PLANK SIDING / 9" HARDIE-SHAKE SIDING - PAINTED "BM: GRAY MIRAGE"
11. 6" EXPOSURE HARDIE-PLANK SIDING - "MONTERAY TAUPE"

SCHEME M2:

12. BRICK - MEDIUM BROWN
13. 5" HARDIE-SHAKE SIDING - "BM: DRY DRY SAGE"
13. 6" EXPOSURE HARDIE-PLANK SIDING - "GRAY MIRAGE"

NO.	DATE	REVISIONS
4	OCT. 24, 2014	DPP SUBMISSION
3	SEPT. 23, 2014	ADP SUBMISSION
2	APR. 24, 2013	GENERAL REVISION
1	JAN. 29, 2013	DP SUBMISSION

CONSULTANT

Copyright. All rights reserved.
Reproduction in whole or in part is prohibited. This drawing as an instrument of service is the property of the architect and may not be used in any way without the written permission of this office.

PROJECT

78 UNIT TOWNHOUSE DEVELOPMENT

NO.4 & BRIDGE ST.
RICHMOND, B.C.

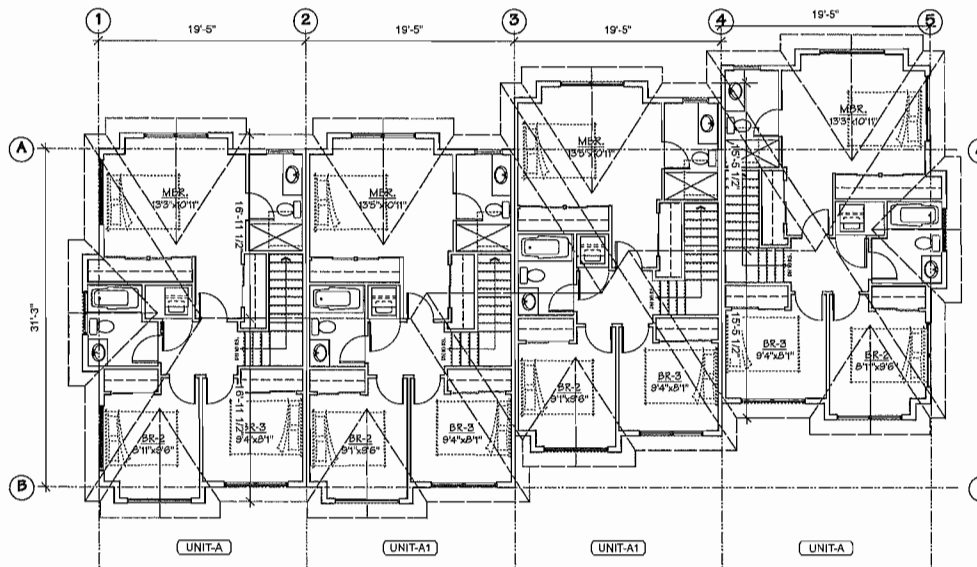
Yamamoto Architecture Inc.

2386 oak street, van., b.c.
V6H 4J1 tel: 731-1327 fax: 731-1327

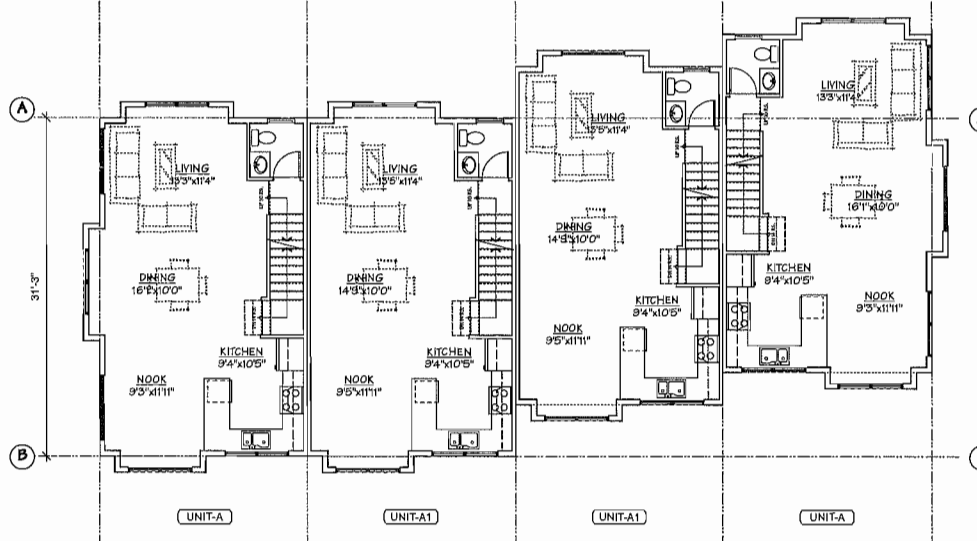
DRAWING TITLE

ELEVATIONS

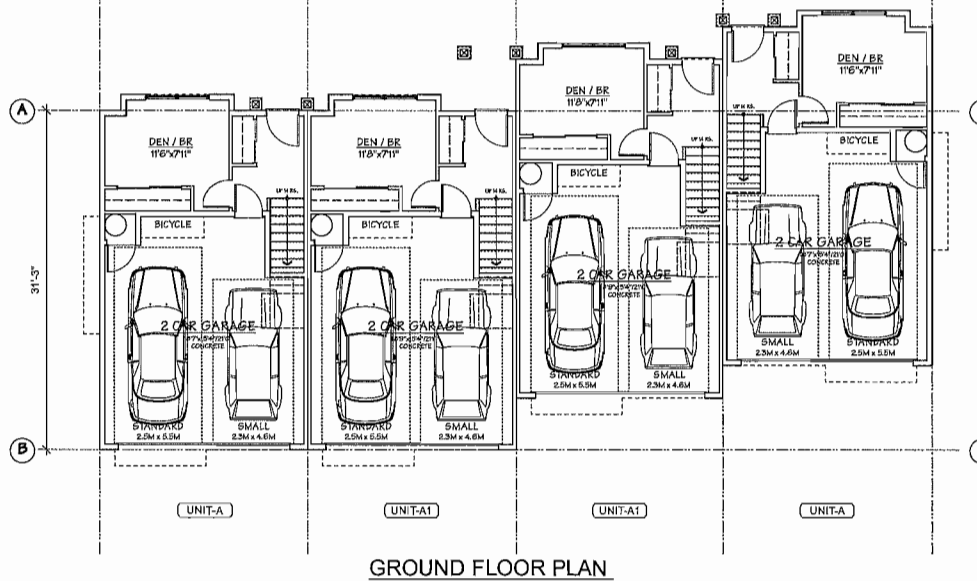
SCALE 1/8" = 1'-0"	SHEET NO. **PLAN-4m**
DATE SEPT. 18, 2014	
DRAWN YK	
CHECKED	PROJ. NO. 1103



THIRD FLOOR PLAN
SCALE : 1/8" = 1'-0"

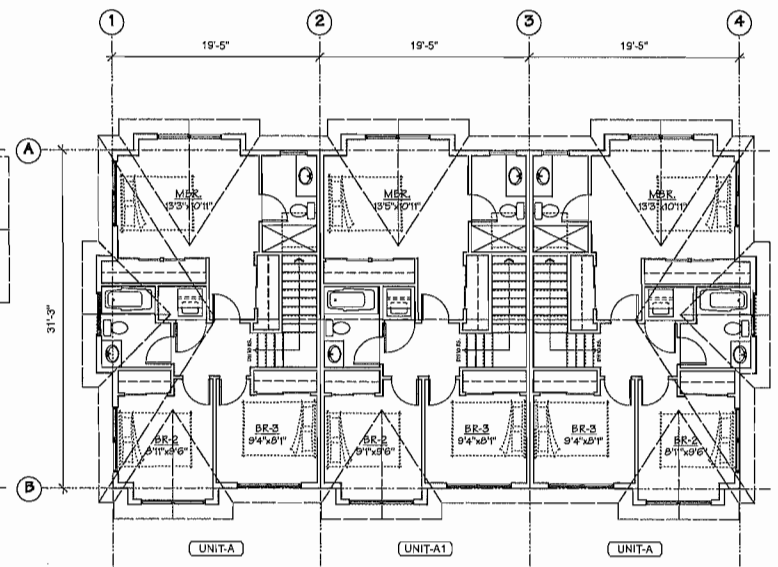


SECOND FLOOR PLAN
SCALE : 1/8" = 1'-0"

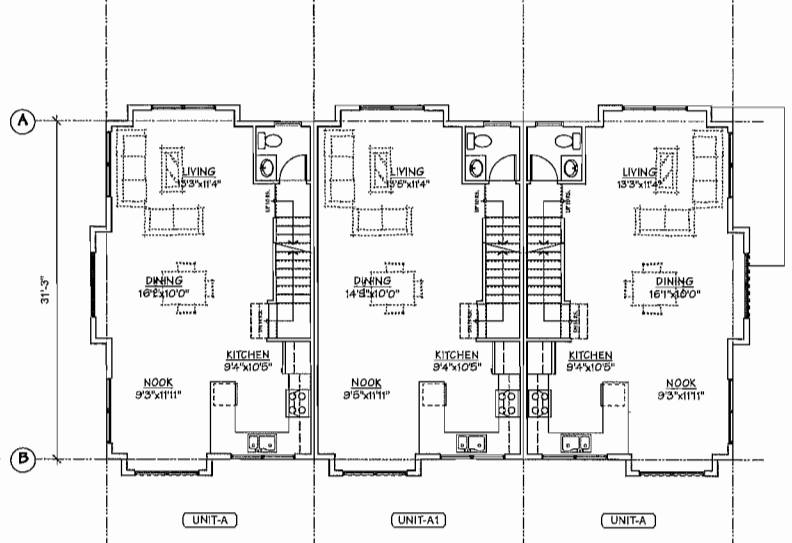


GROUND FLOOR PLAN
SCALE : 1/8" = 1'-0"

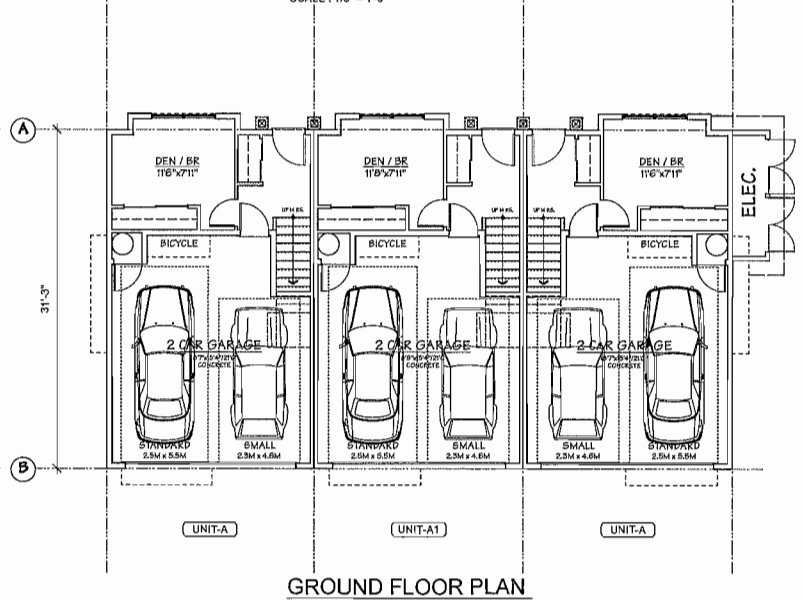
BUILDING NO. 1



THIRD FLOOR PLAN
SCALE : 1/8" = 1'-0"

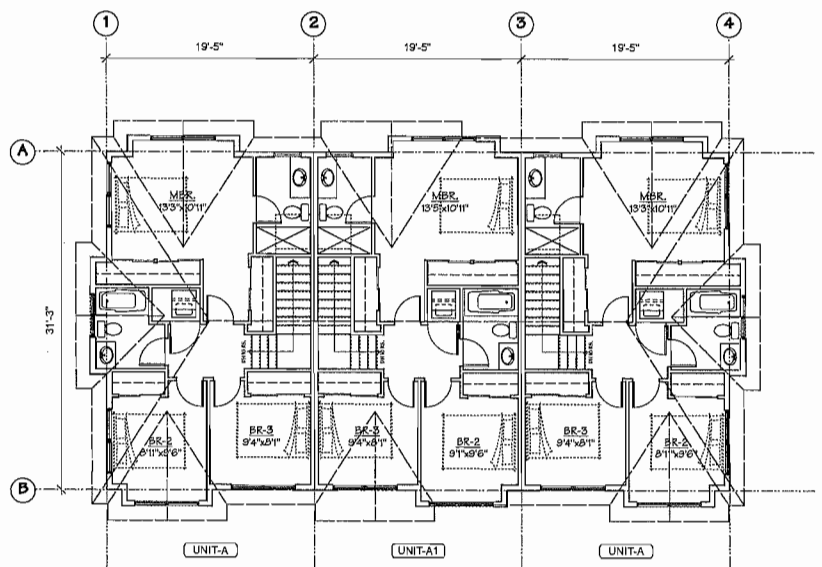


SECOND FLOOR PLAN
SCALE : 1/8" = 1'-0"

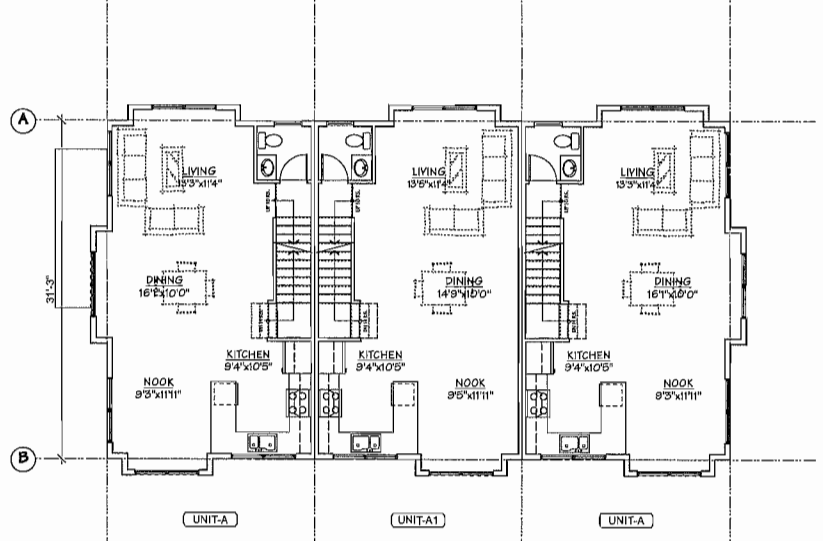


GROUND FLOOR PLAN
SCALE : 1/8" = 1'-0"

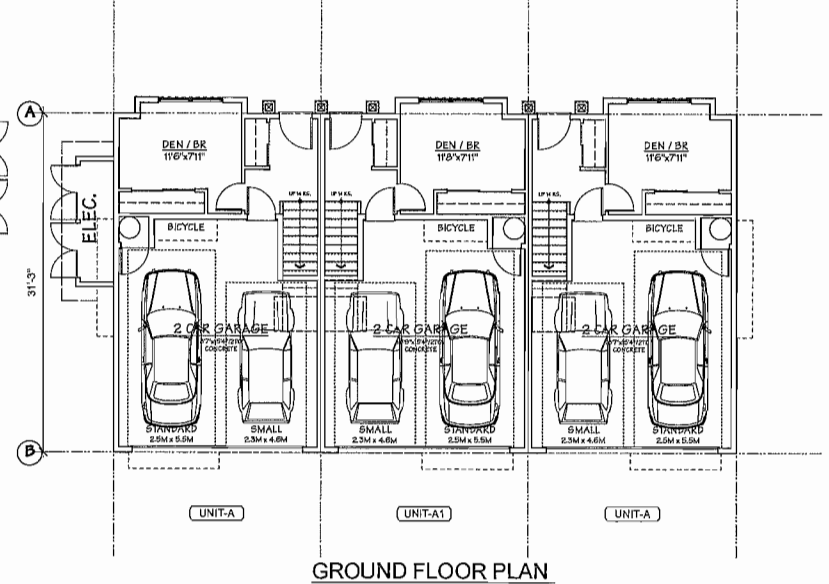
BUILDING NO. 2



THIRD FLOOR PLAN
SCALE : 1/8" = 1'-0"



SECOND FLOOR PLAN
SCALE : 1/8" = 1'-0"



GROUND FLOOR PLAN
SCALE : 1/8" = 1'-0"

BUILDING NO.3

AGING IN PLACE FEATURES
(TO BE PROVIDED IN ALL UNITS) :

- SOLID BLOCKING IN WASHROOM WALLS TO FACILIATE FUTURE GRAB BAR INSTALLATION
- LEVER-TYPE HANDLES FOR PLUMBING AND DOOR HANDLES

SUSTAINABILITY MEASURES
(TO BE PROVIDED IN ALL UNITS) :

ENERGUIDE 82 REQUIREMENTS:

- HIGH PERFORMANCE WINDOWS (LOW E DOUBLE GLAZED VINYL WINDOWS W/ ARGON FILL AND INSULATED SPACER)
- UNDER SLAB INSULATION (R-12 INSULATION)
- SOLID WOOD AND/OR STEEL W/ POLYURETHANE INSULATION CORE DOORS
- ENERGY STAR LIGHTING (420kWh/yr) & APPLIANCES (95kWh/yr)
- HIGH EFFICIENCY HEATING (NATURAL GAS COMBI SYSTEM, AFUE 95%)
- HIGH EFFICIENCY HOT WATER (INDIRECT TANK BOILER, 30 US gal.)
- LOCAL MATERIALS

DP Plan No. 26
Oct. 31, 2014
DP 14-665485

NO.	DATE	REVISIONS
4	OCT. 24, 2014	DPP SUBMISSION
3	SEPT. 23, 2014	ADP SUBMISSION
2	APR. 24, 2013	GENERAL REVISION
1	JAN. 29, 2013	DP SUBMISSION

CONSULTANT

Copyright. All rights reserved.
Reproduction in whole or in part is prohibited. This drawing as an instrument of service is the property of the architect and may not be used in any way without the written permission of this office.

PROJECT

TOWNHOUSE
DEVELOPMENT

NO.4 & BRIDGE ST.
RICHMOND, B.C.

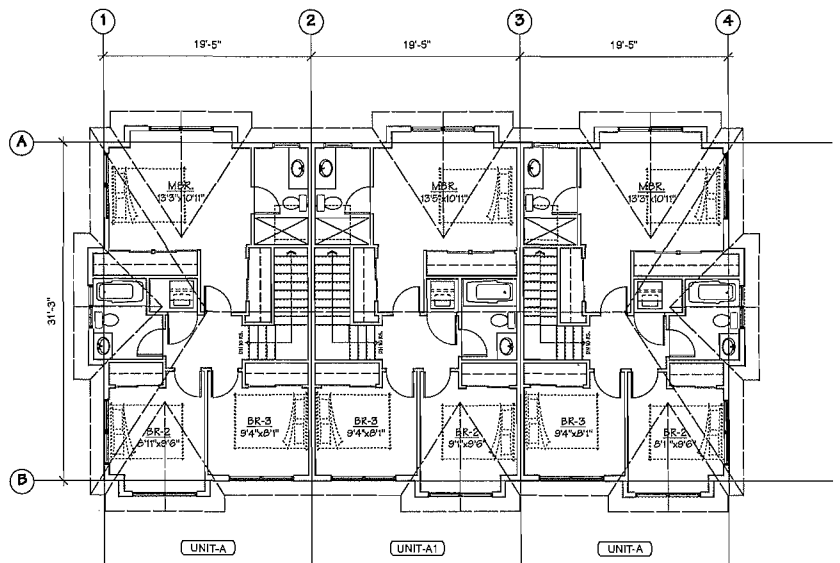
Yamamoto
Architecture Inc.

2386 oak street, van., b.c.
V6H 4J1 tel: 731-1927 fax: 731-1927

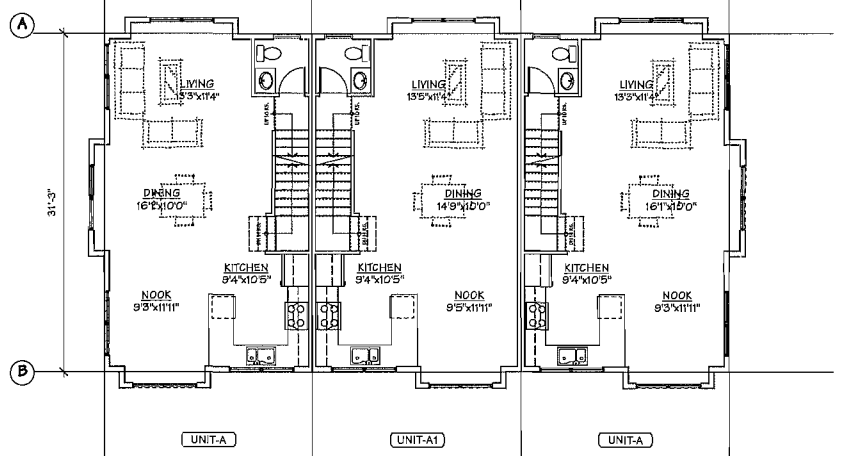
DRAWING TITLE

FLOORPLANS

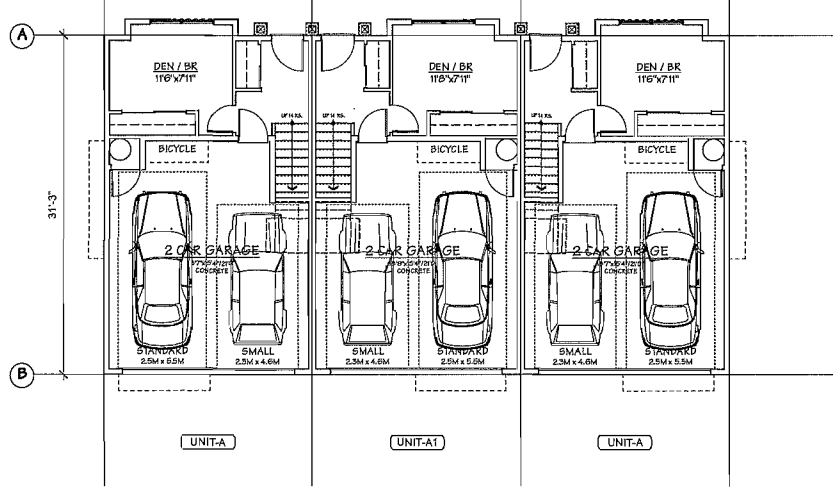
SCALE 1/8" = 1'-0"	SHEET NO. PLAN-5
DATE SEPT. 19, 2014	
DRAWN WC	
CHECKED	PROJ. NO. 1108



THIRD FLOOR PLAN
SCALE : 1/8" = 1'-0"

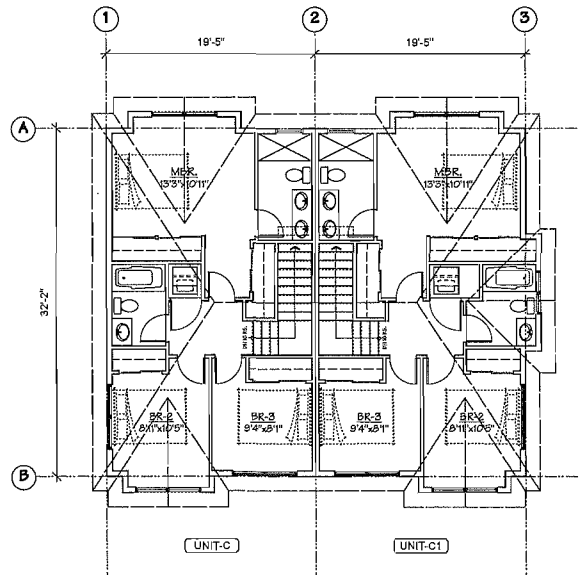


SECOND FLOOR PLAN
SCALE : 1/8" = 1'-0"

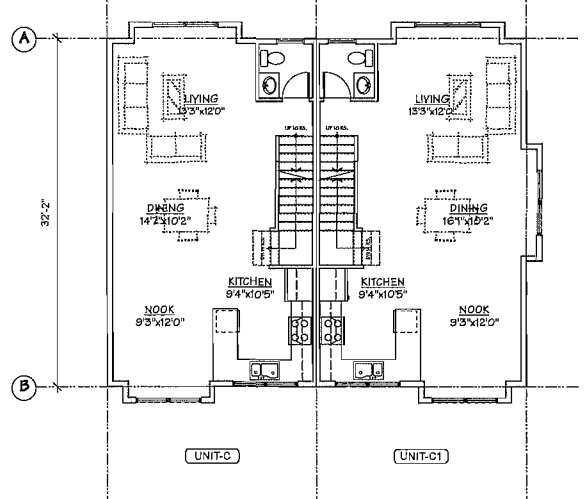


GROUND FLOOR PLAN
SCALE : 1/8" = 1'-0"

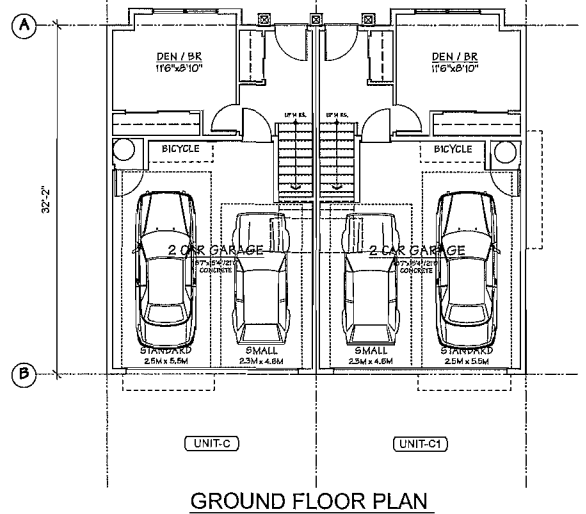
BUILDING NO. 4



THIRD FLOOR PLAN
SCALE : 1/8" = 1'-0"

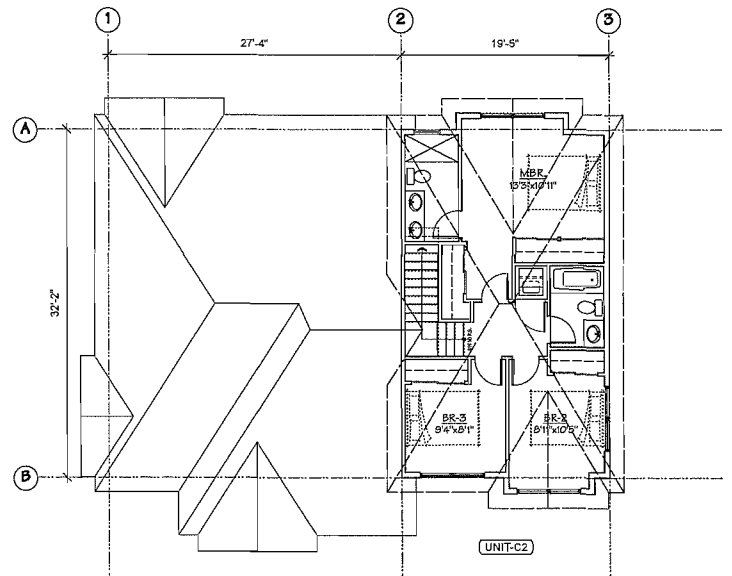


SECOND FLOOR PLAN
SCALE : 1/8" = 1'-0"

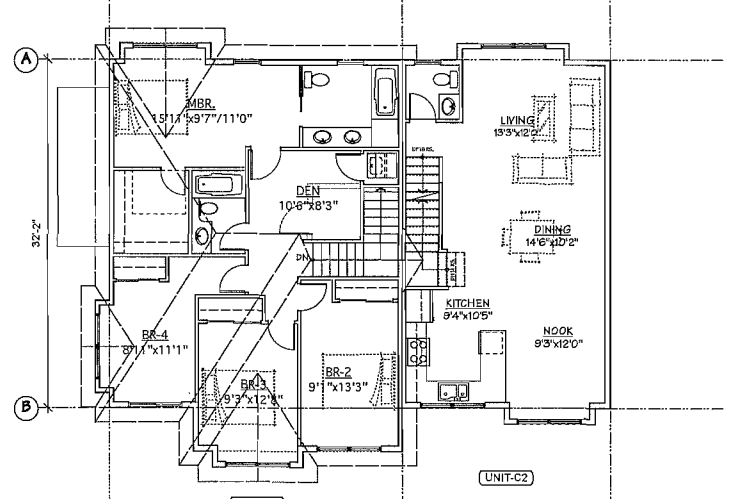


GROUND FLOOR PLAN
SCALE : 1/8" = 1'-0"

BUILDING NO. 5,9,13 BUILDING 8,12 REVERSED

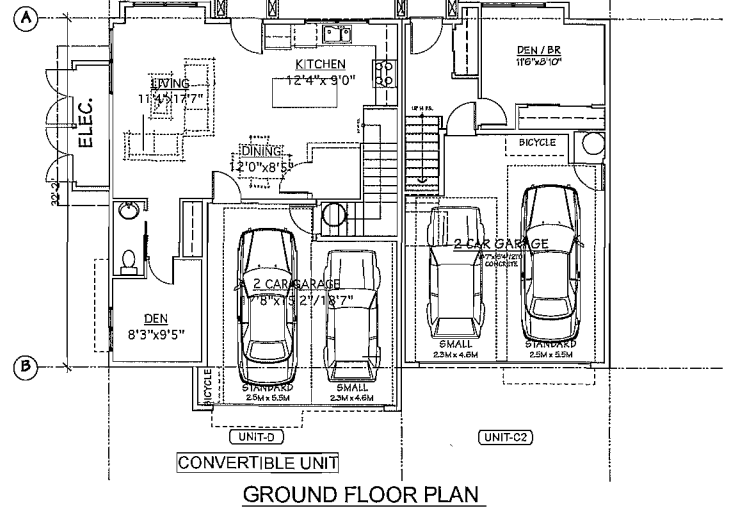


THIRD FLOOR PLAN
SCALE : 1/8" = 1'-0"



CONVERTIBLE UNIT

SECOND FLOOR PLAN
SCALE : 1/8" = 1'-0"



CONVERTIBLE UNIT

GROUND FLOOR PLAN
SCALE : 1/8" = 1'-0"

BUILDING NO. 6

AGING IN PLACE FEATURES
(TO BE PROVIDED IN ALL UNITS) :

- SOLID BLOCKING IN WASHROOM WALLS TO FACILIATE FUTURE GRAB BAR INSTALLATION
- LEVER-TYPE HANDLES FOR PLUMBING AND DOOR HANDLES

SUSTAINABILITY MEASURES
(TO BE PROVIDED IN ALL UNITS) :

ENERGUIDE 82 REQUIREMENTS:

- HIGH PERFORMANCE WINDOWS (LOW E DOUBLE GLAZED VINYL WINDOWS W/ ARGON FILL AND INSULATED SPACER)
- UNDER SLAB INSULATION (R-12 INSULATION)
- SOLID WOOD AND/OR STEEL W/ POLYURETHANE INSULATION CORE DOORS
- ENERGY STAR LIGHTING (420kWh/yr) & APPLIANCES (95kWh/yr)
- HIGH EFFICIENCY HEATING (NATURAL GAS COMBI SYSTEM, AFUE 95%)
- HIGH EFFICIENCY HOT WATER (INDIRECT TANK BOILER, 30 US gal.)
- LOCAL MATERIALS

DP Plan No. 27
Oct. 31, 2014
DP 14-665485

NO.	DATE	REVISIONS
4	OCT. 24, 2014	DPP SUBMISSION
3	SEPT. 23, 2014	ADP SUBMISSION
2	APR. 24, 2013	GENERAL REVISION
1	JAN. 29, 2013	DP SUBMISSION

CONSULTANT

Copyright. All rights reserved.
Reproduction in whole or in part is prohibited. This drawing as an instrument of service is the property of the architect and may not be used in any way without the written permission of this office.

PROJECT

TOWNHOUSE
DEVELOPMENT

NO.4 & BRIDGE ST.
RICHMOND, B.C.

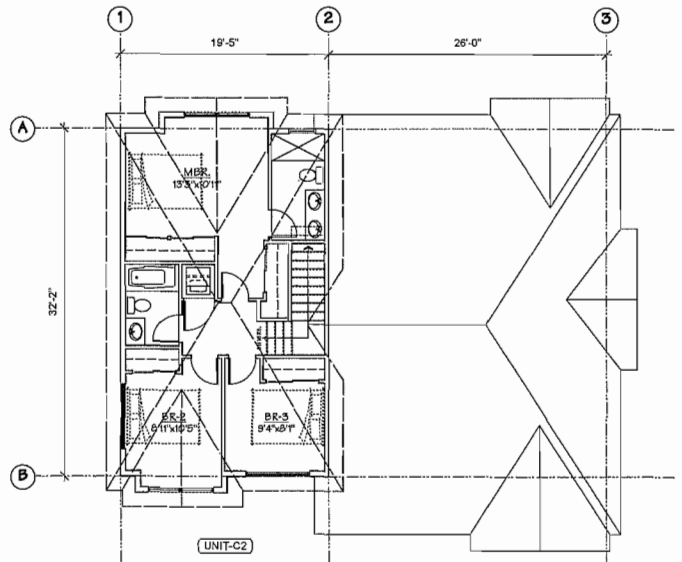
Yamamoto
Architecture Inc.

2388 oak street, van., b.c.
V6H 4J1 tel: 731-1927 fax: 731-1927

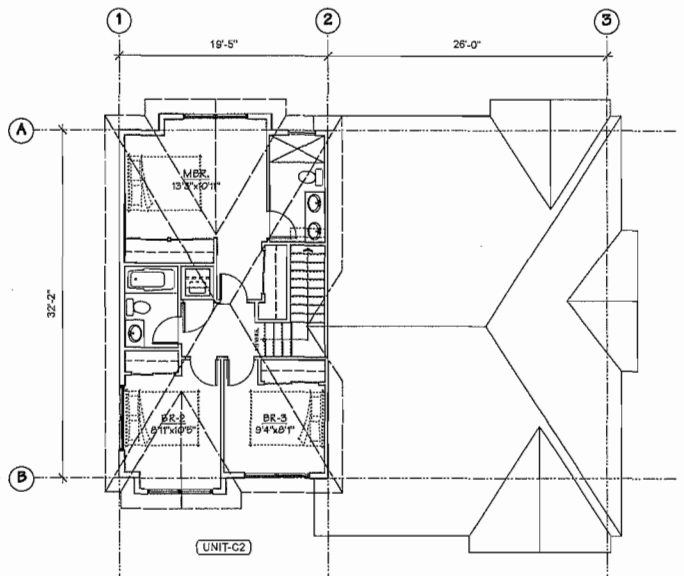
DRAWING TITLE

FLOORPLANS

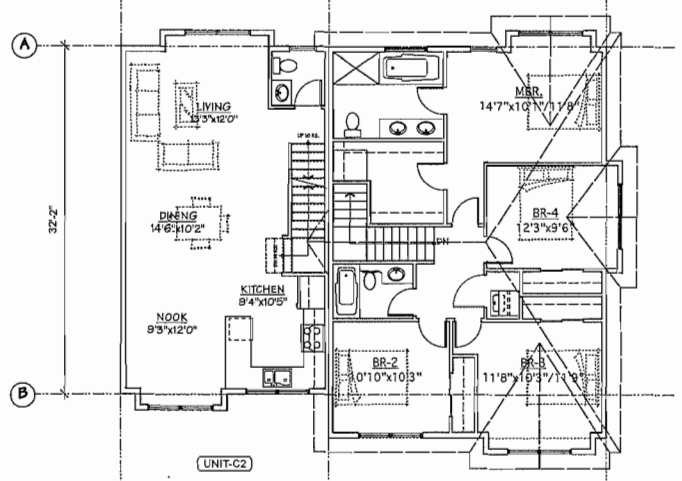
SCALE 1/8" = 1'-0"	SHEET NO. PLAN-5a
DATE SEPT. 10, 2014	
DRAWN WC	
CHECKED	PROJ. NO. 1103



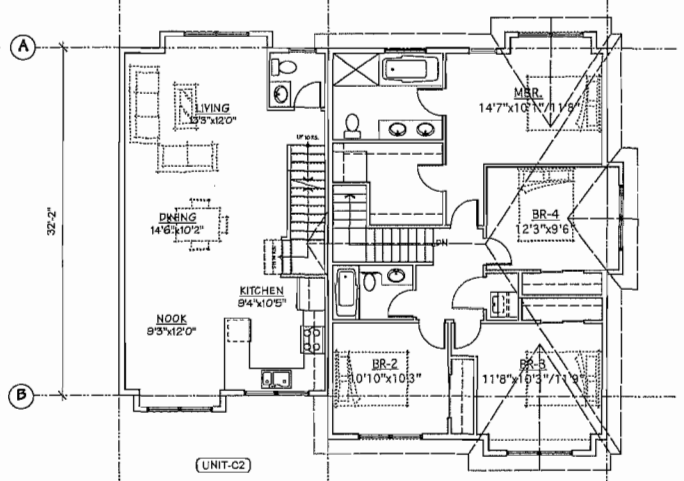
THIRD FLOOR PLAN
SCALE : 1/8" = 1'-0"



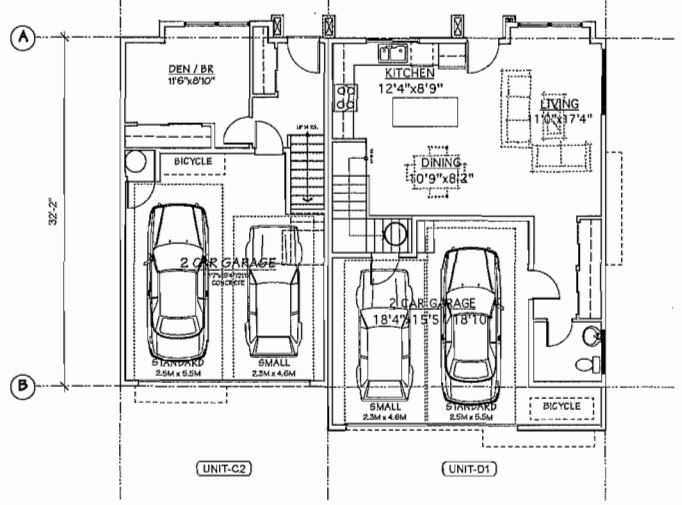
THIRD FLOOR PLAN
SCALE : 1/8" = 1'-0"



SECOND FLOOR PLAN
SCALE : 1/8" = 1'-0"

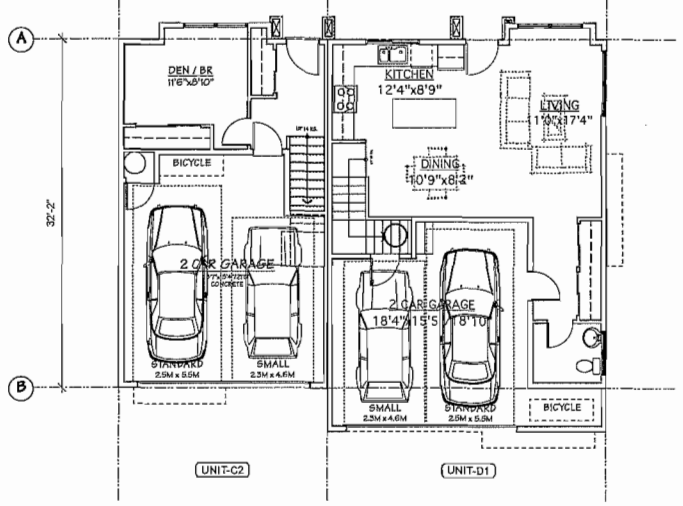


SECOND FLOOR PLAN
SCALE : 1/8" = 1'-0"



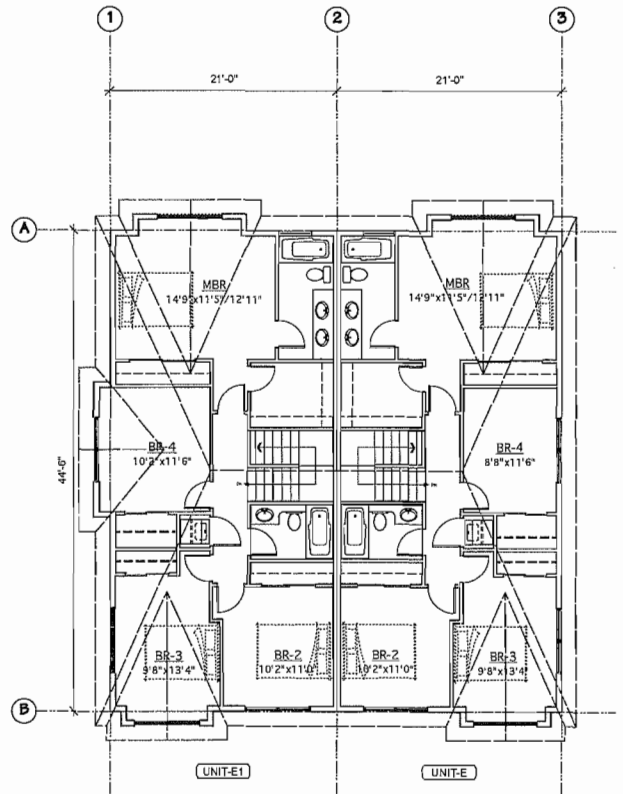
GROUND FLOOR PLAN
SCALE : 1/8" = 1'-0"

BUILDING NO. 7 BUILDING NO. 10&14 REVERSED

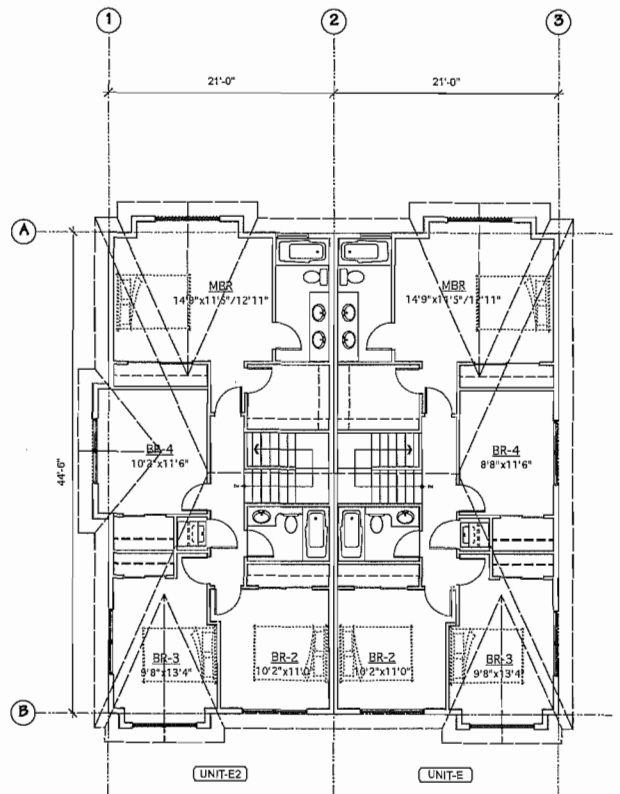


GROUND FLOOR PLAN
SCALE : 1/8" = 1'-0"

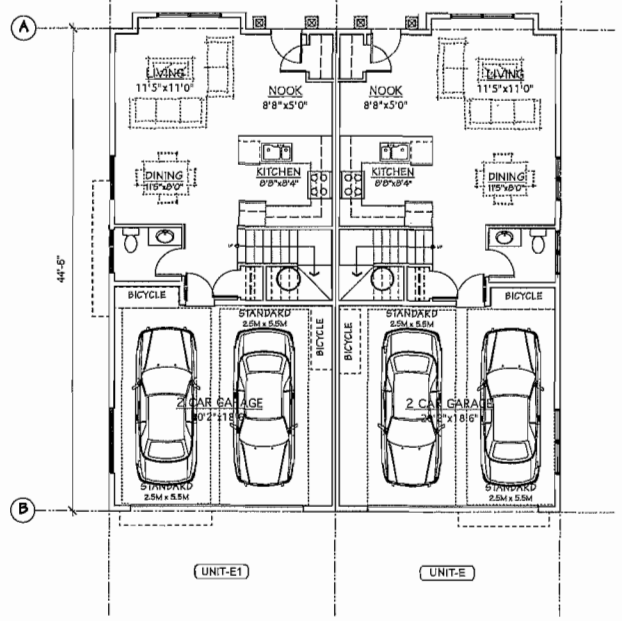
BUILDING NO. 11



SECOND FLOOR PLAN
SCALE : 1/8" = 1'-0"

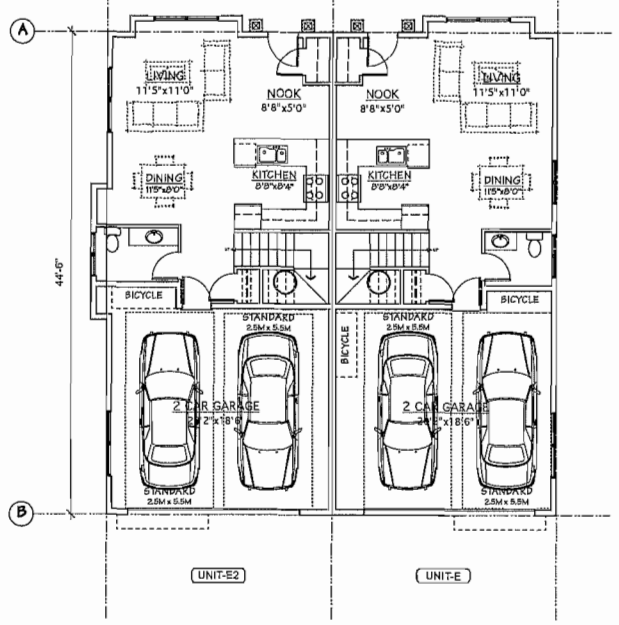


SECOND FLOOR PLAN
SCALE : 1/8" = 1'-0"



GROUND FLOOR PLAN
SCALE : 1/8" = 1'-0"

BUILDING NO. 15



GROUND FLOOR PLAN
SCALE : 1/8" = 1'-0"

BUILDING NO. 16 BUILDING NO 19 REVERSED

AGING IN PLACE FEATURES
(TO BE PROVIDED IN ALL UNITS) :

- SOLID BLOCKING IN WASHROOM WALLS TO FACILIATE FUTURE GRAB BAR INSTALLATION
- LEVER-TYPE HANDLES FOR PLUMBING AND DOOR HANDLES

SUSTAINABILITY MEASURES
(TO BE PROVIDED IN ALL UNITS) :

ENERGUIDE 82 REQUIREMENTS:

- HIGH PERFORMANCE WINDOWS (LOW E DOUBLE GLAZED VINYL WINDOWS W/ ARGON FILL AND INSULATED SPACER)
- UNDER SLAB INSULATION (R-12 INSULATION)
- SOLID WOOD AND/OR STEEL W/ POLYURETHANE INSULATION CORE DOORS
- ENERGY STAR LIGHTING (420kWh/yr) & APPLIANCES (95kWh/yr)
- HIGH EFFICIENCY HEATING (NATURAL GAS COMBI SYSTEM, AFUE 95%)
- HIGH EFFICIENCY HOT WATER (INDIRECT TANK BOILER, 30 US gal.)
- LOCAL MATERIALS

DP Plan No. 28
Oct. 31, 2014
DP 14-665485

NO.	DATE	REVISIONS
4	OCT. 24, 2014	DPP SUBMISSION
3	SEPT. 23, 2014	ADP SUBMISSION
2	APR. 24, 2013	GENERAL REVISION
1	JAN. 29, 2013	DP SUBMISSION

CONSULTANT

Copyright. All rights reserved.
Reproduction in whole or in part is prohibited. This drawing as an instrument of service is the property of the architect and may not be used in any way without the written permission of this office.

PROJECT
TOWNHOUSE
DEVELOPMENT

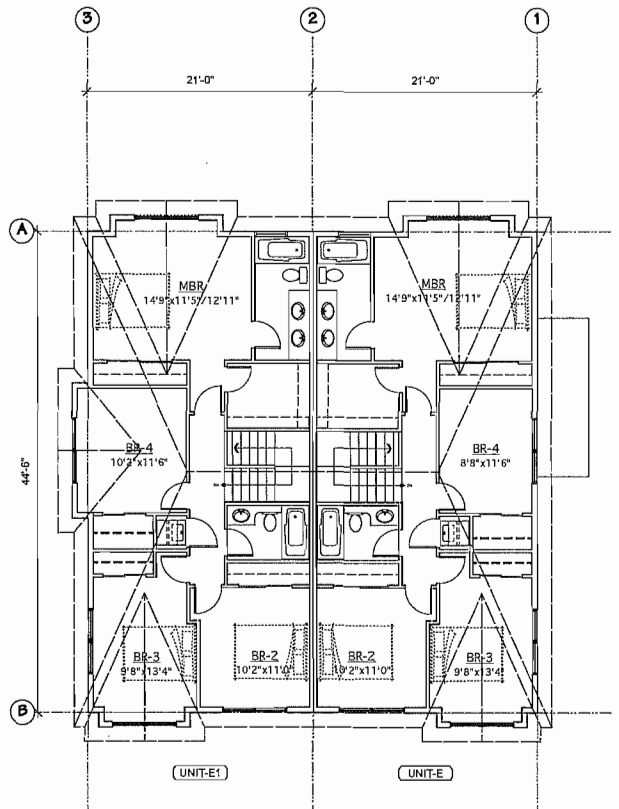
NO.4 & BRIDGE ST.
RICHMOND, B.C.

Yamamoto
Architecture Inc.

2388 oak street, van., b.c.
V6H 4J1 tel: 731-1827 fax: 731-1827

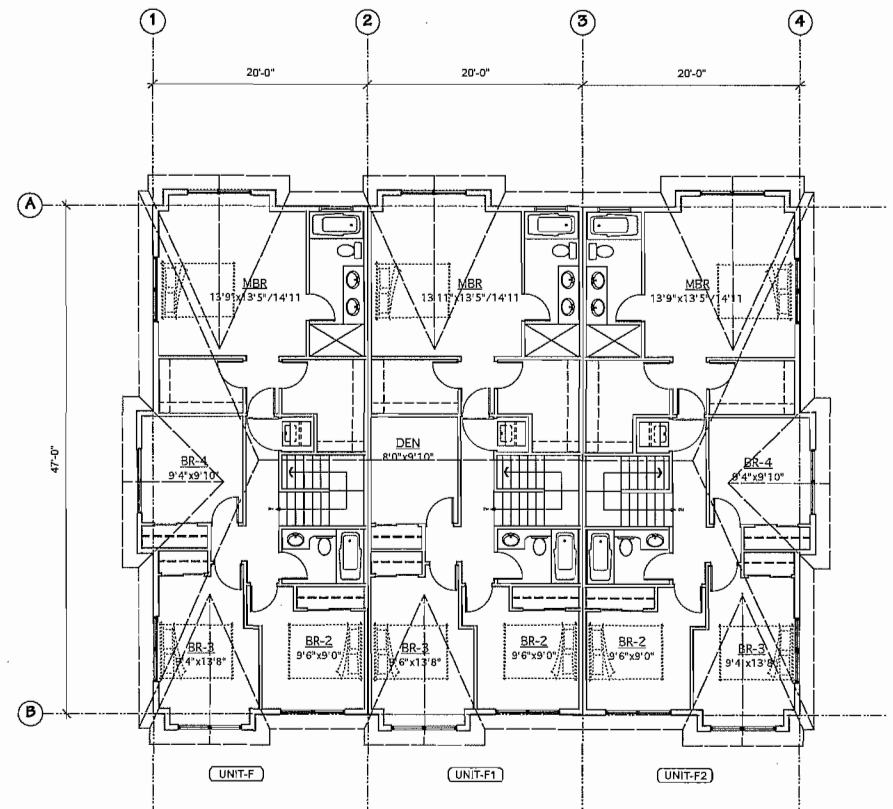
DRAWING TITLE
FLOORPLANS

SCALE 1/8" = 1'-0"	SHEET NO. PLAN-5b
DATE SEPT. 16, 2014	
DRAWN WC	
CHECKED	PROJ. NO. 1108



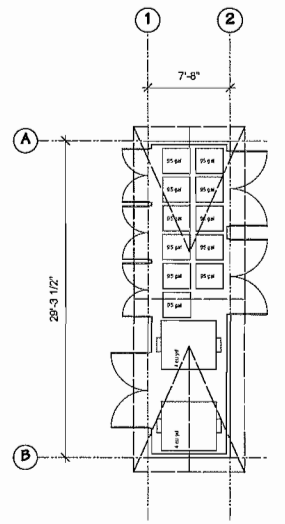
SECOND FLOOR PLAN

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



SECOND FLOOR PLAN

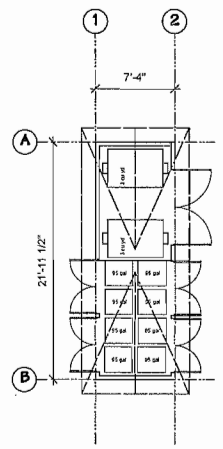
SCALE : 1/8" = 1'-0"



GROUND FLOOR PLAN

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

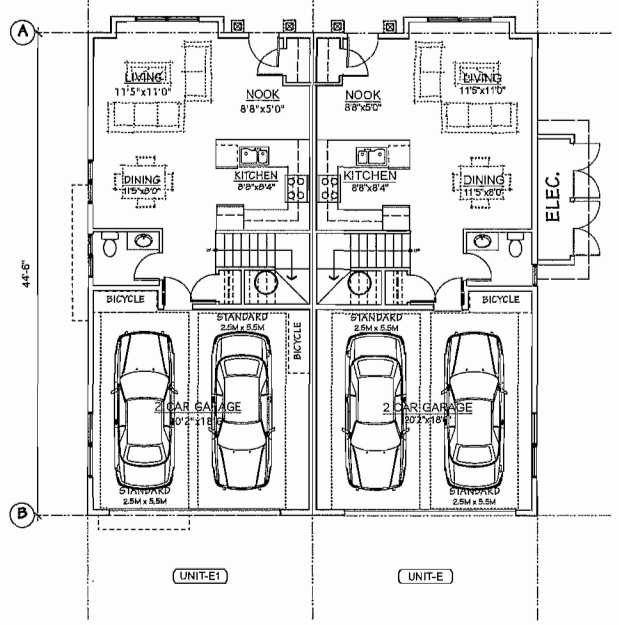
GARBAGE 1



GROUND FLOOR PLAN

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

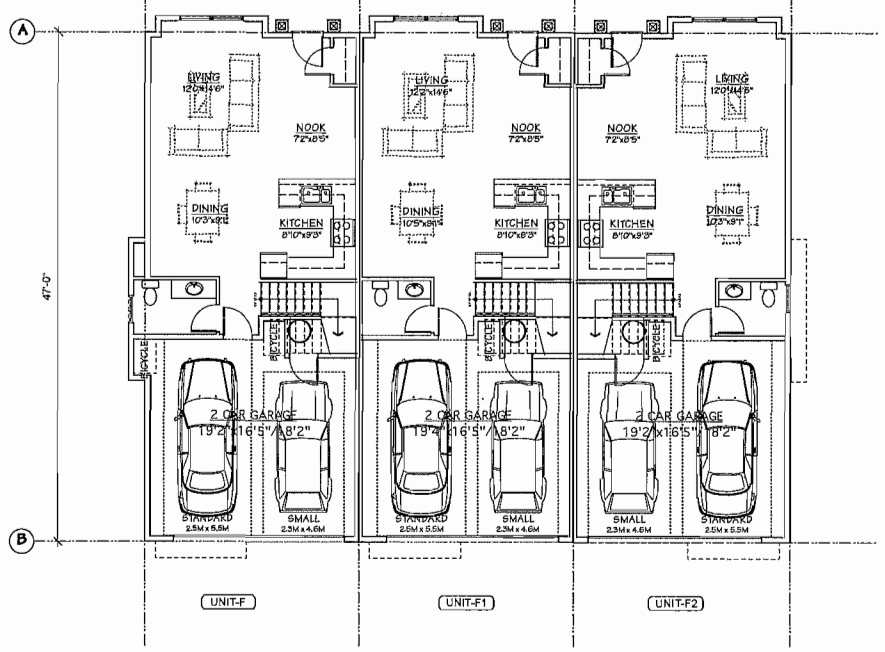
GARBAGE 2



GROUND FLOOR PLAN

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

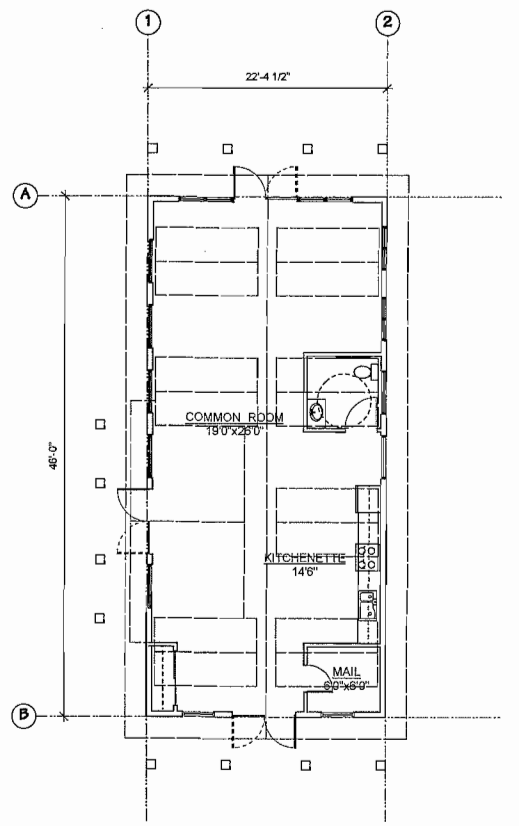
BUILDING NO. 18



GROUND FLOOR PLAN

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

BUILDING NO. 17



GROUND FLOOR PLAN

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

INDOOR AMENITY

AGING IN PLACE FEATURES
(TO BE PROVIDED IN ALL UNITS) :

- SOLID BLOCKING IN WASHROOM WALLS TO FACILIATE FUTURE GRAB BAR INSTALLATION
- LEVER-TYPE HANDLES FOR PLUMBING AND DOOR HANDLES

SUSTAINABILITY MEASURES
(TO BE PROVIDED IN ALL UNITS) :

ENERGUIDE 82 REQUIREMENTS:

- HIGH PERFORMANCE WINDOWS (LOW E DOUBLE GLAZED VINYL WINDOWS W/ ARGON FILL AND INSULATED SPACER)
- UNDER SLAB INSULATION (R-12 INSULATION)
- SOLID WOOD AND/OR STEEL W/ POLYURETHANE INSULATION CORE DOORS
- ENERGY STAR LIGHTING (420kWh/yr) & APPLIANCES (95kWh/yr)
- HIGH EFFICIENCY HEATING (NATURAL GAS COMBI SYSTEM, AFUE 95%)
- HIGH EFFICIENCY HOT WATER (INDIRECT TANK BOILER, 30 US gal.)
- LOCAL MATERIALS

DP Plan No. 29
Oct. 31, 2014
DP 14-665485

NO.	DATE	REVISIONS
4	OCT. 24, 2014	DPP SUBMISSION
3	SEPT. 23, 2014	ADP SUBMISSION
2	APR. 24, 2013	GENERAL REVISION
1	JAN. 23, 2013	DP SUBMISSION

CONSULTANT

Copyright. All rights reserved.
Reproduction in whole or in part is prohibited. This drawing as an instrument of service is the property of the architect and may not be used in any way without the written permission of this office.

PROJECT

TOWNHOUSE
DEVELOPMENT

NO.4 & BRIDGE ST.
RICHMOND, B.C.

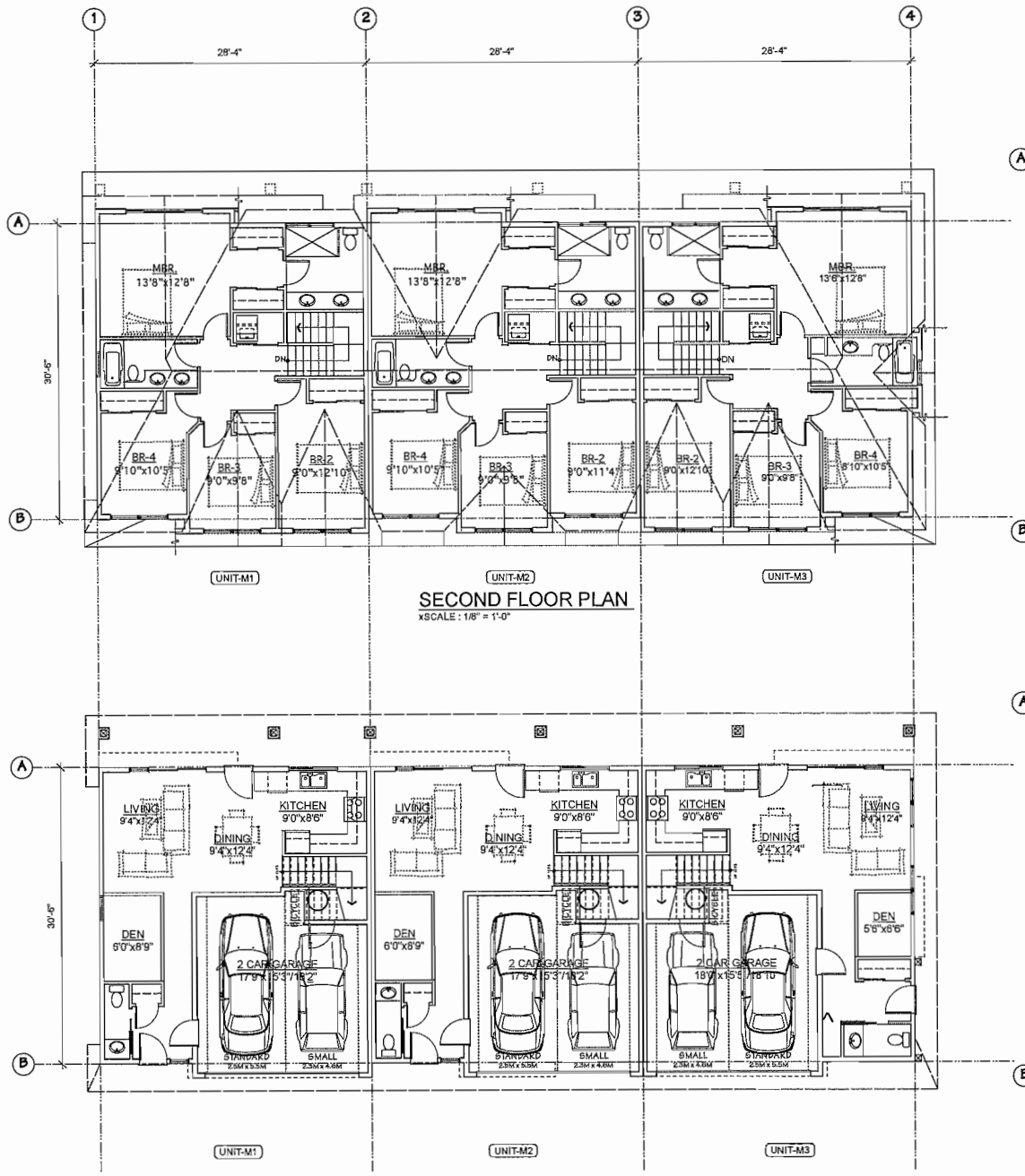
Yamamoto
Architecture Inc.

2388 oak street, van., b.c.
V6H 4J1 tel: 731-1927 fax: 731-1927

DRAWING TITLE

FLOORPLANS

SCALE 1/8" = 1'-0"	SHEET NO. PLAN-5c
DATE SEPT. 19, 2014	
DRAWN WC	
CHECKED	PROJ. NO. 1103

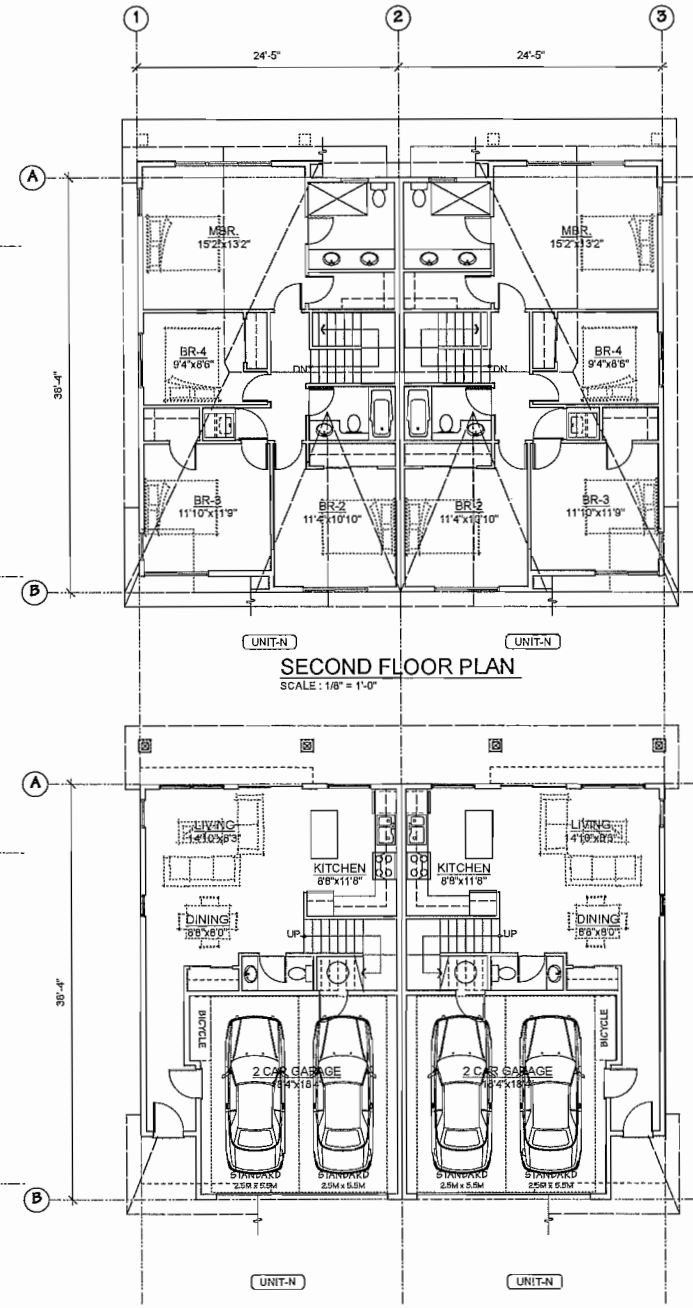


SECOND FLOOR PLAN
xSCALE : 1/8" = 1'-0"

SECOND FLOOR PLAN
SCALE : 1/8" = 1'-0"

GROUND FLOOR PLAN
SCALE : 1/8" = 1'-0"

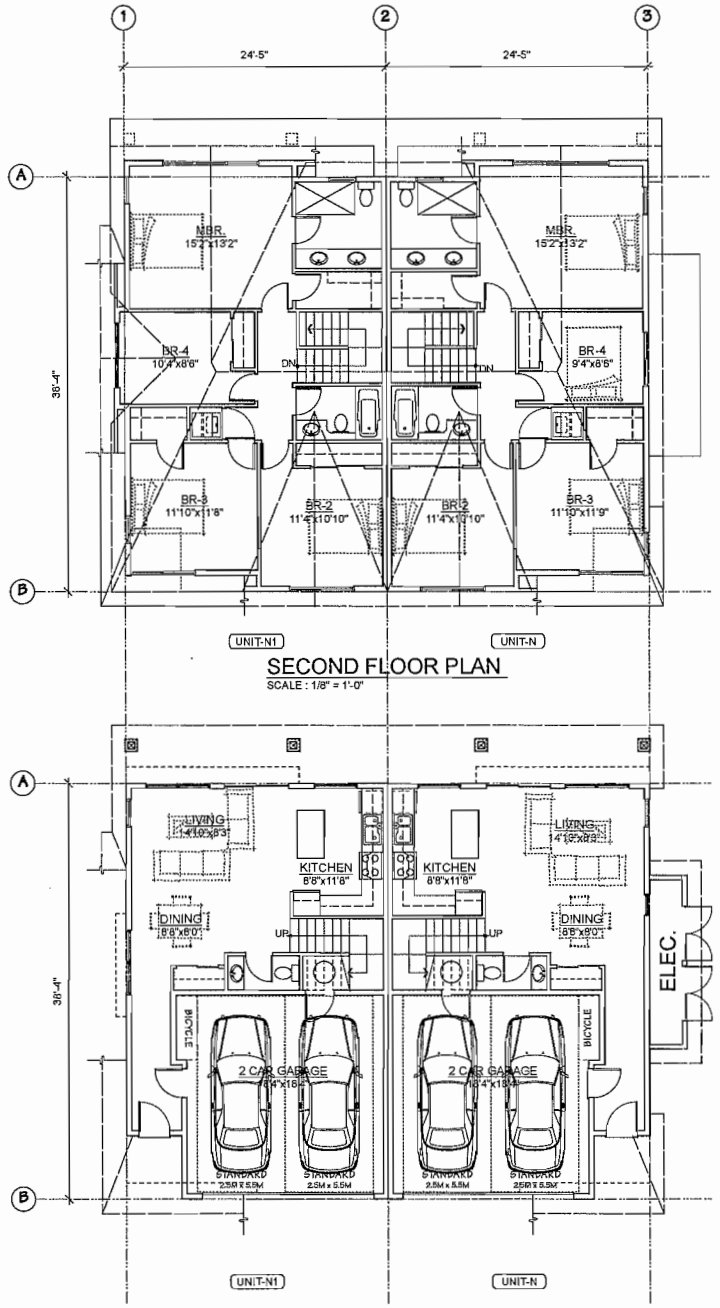
BUILDING NO. 20



SECOND FLOOR PLAN
SCALE : 1/8" = 1'-0"

GROUND FLOOR PLAN
SCALE : 1/8" = 1'-0"

BUILDING NO. 21



SECOND FLOOR PLAN
SCALE : 1/8" = 1'-0"

GROUND FLOOR PLAN
SCALE : 1/8" = 1'-0"

BUILDING NO. 22

AGING IN PLACE FEATURES
(TO BE PROVIDED IN ALL UNITS) :

- SOLID BLOCKING IN WASHROOM WALLS TO FACILIATE FUTURE GRAB BAR INSTALLATION
- LEVER-TYPE HANDLES FOR PLUMBING AND DOOR HANDLES

SUSTAINABILITY MEASURES
(TO BE PROVIDED IN ALL UNITS) :

ENERGUIDE 82 REQUIREMENTS:

- HIGH PERFORMANCE WINDOWS (LOW E DOUBLE GLAZED VINYL WINDOWS W/ ARGON FILL AND INSULATED SPACER)
- UNDER SLAB INSULATION (R-12 INSULATION)
- SOLID WOOD AND/OR STEEL W/ POLYURETHANE INSULATION CORE DOORS
- ENERGY STAR LIGHTING (420kWh/yr) & APPLIANCES (95kWh/yr)
- HIGH EFFICIENCY HEATING (NATURAL GAS COMBI SYSTEM, AFUE 95%)
- HIGH EFFICIENCY HOT WATER (INDIRECT TANK BOILER, 30 US gal.)
- LOCAL MATERIALS

DP Plan No. 30
Oct. 31, 2014
DP 14-665485

NO.	DATE	REVISIONS
4	OCT. 24, 2014	DPP SUBMISSION
3	SEPT. 23, 2014	ADP SUBMISSION
2	APR. 24, 2013	GENERAL REVISION
1	JAN. 29, 2013	DP SUBMISSION

CONSULTANT

Copyright. All rights reserved.
Reproduction in whole or in part is prohibited. This drawing as an instrument of service is the property of the architect and may not be used in any way without the written permission of this office.

PROJECT

TOWNHOUSE
DEVELOPMENT

NO.4 & BRIDGE ST.
RICHMOND, B.C.

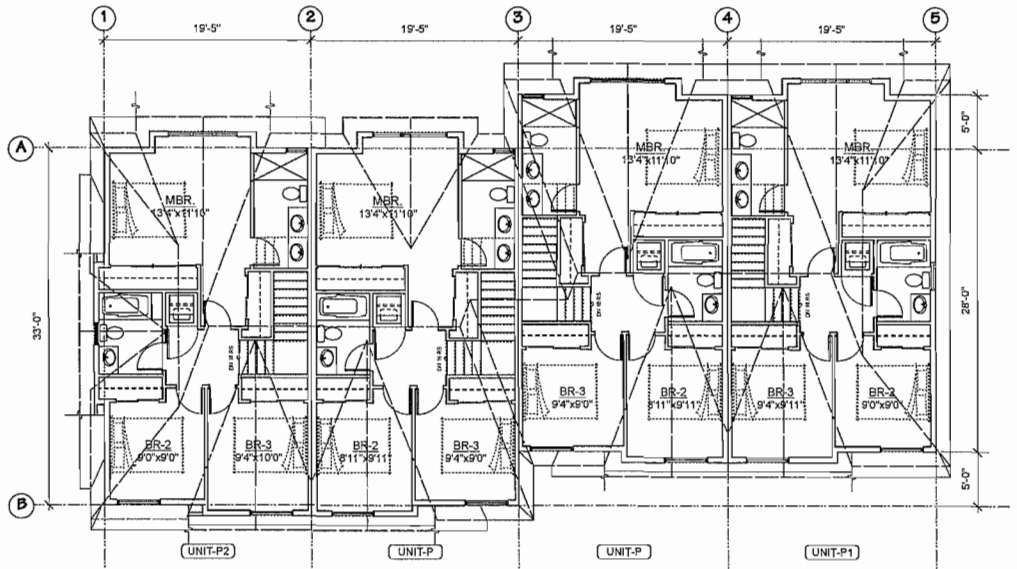
Yamamoto
Architecture Inc.

2386 oak street, van., b.c.
V6H 4J1 tel: 731-1927 fax: 731-1827

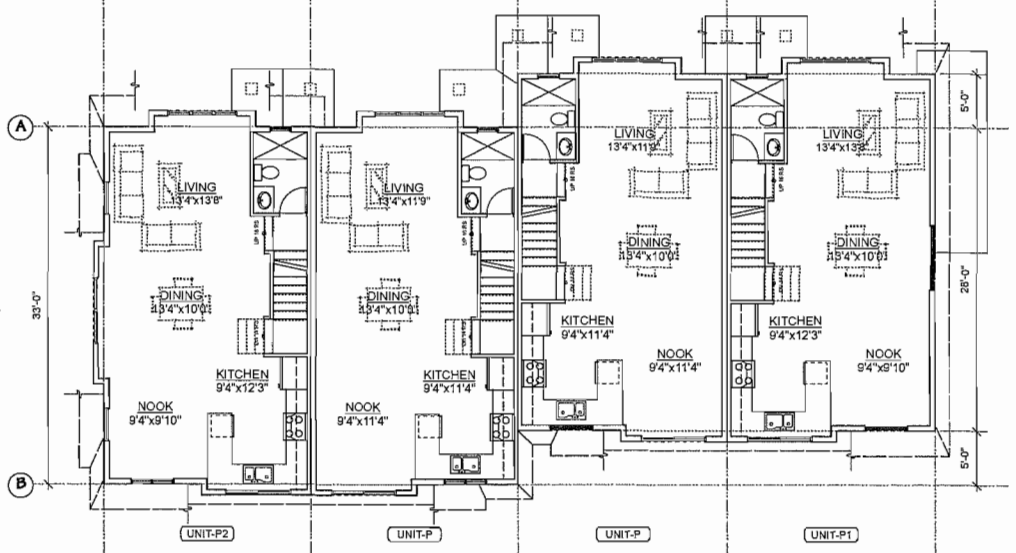
DRAWING TITLE

FLOORPLANS

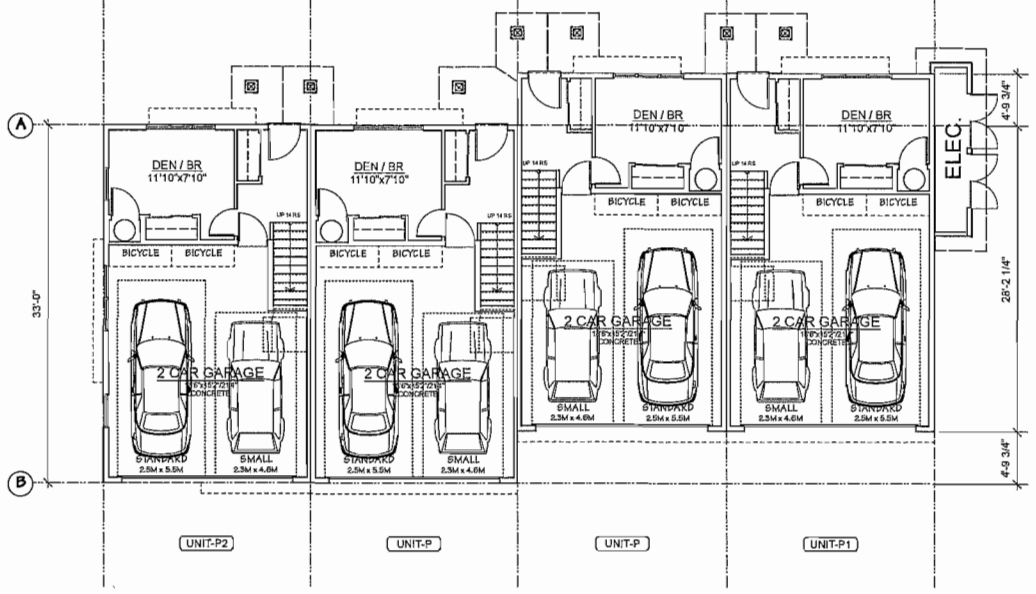
SCALE 1/8" = 1'-0"	SHEET NO. PLAN-5d
DATE SEPT. 10, 2014	
DRAWN KP	
CHECKED	PROJ. NO. 1103



THIRD FLOOR PLAN
SCALE : 1/8" = 1'-0"

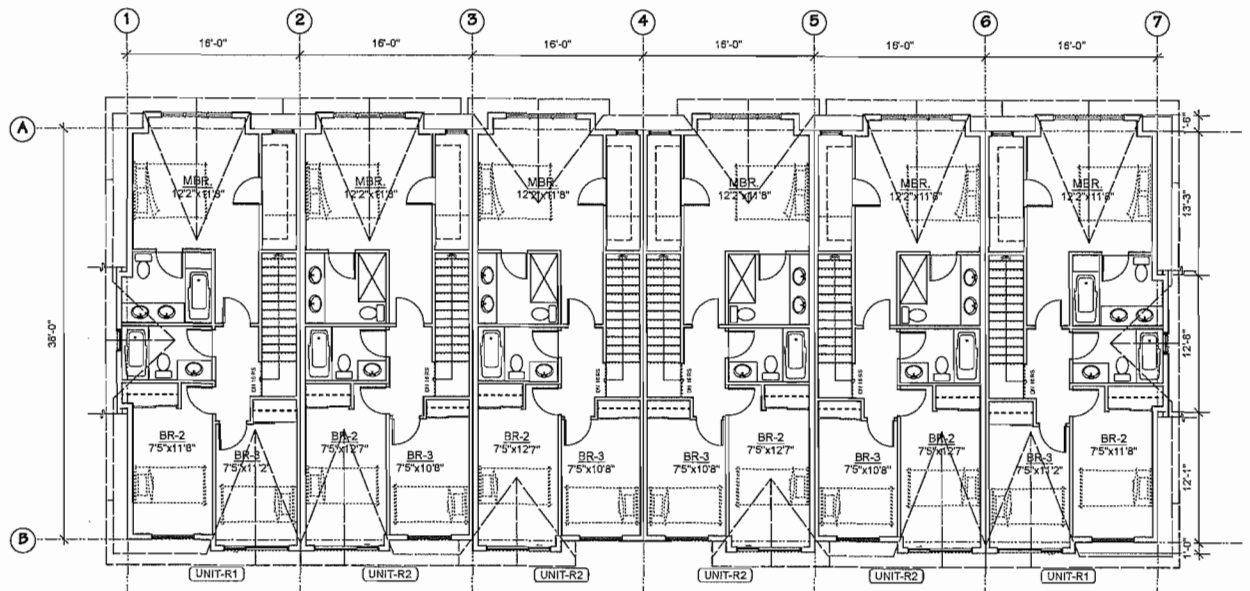


SECOND FLOOR PLAN
SCALE : 1/8" = 1'-0"

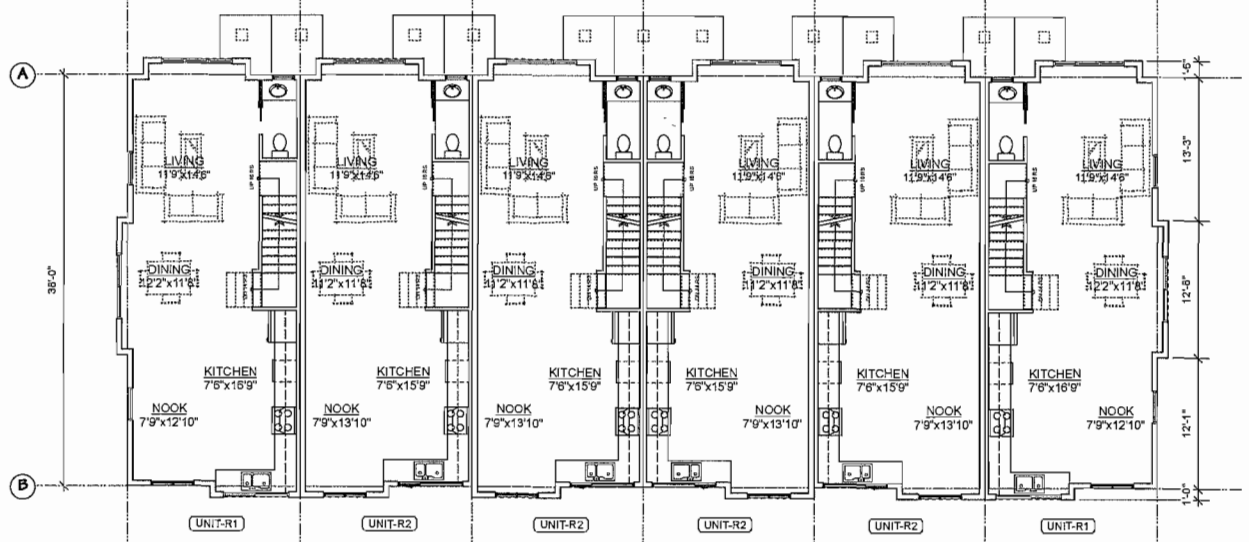


GROUND FLOOR PLAN
SCALE : 1/8" = 1'-0"

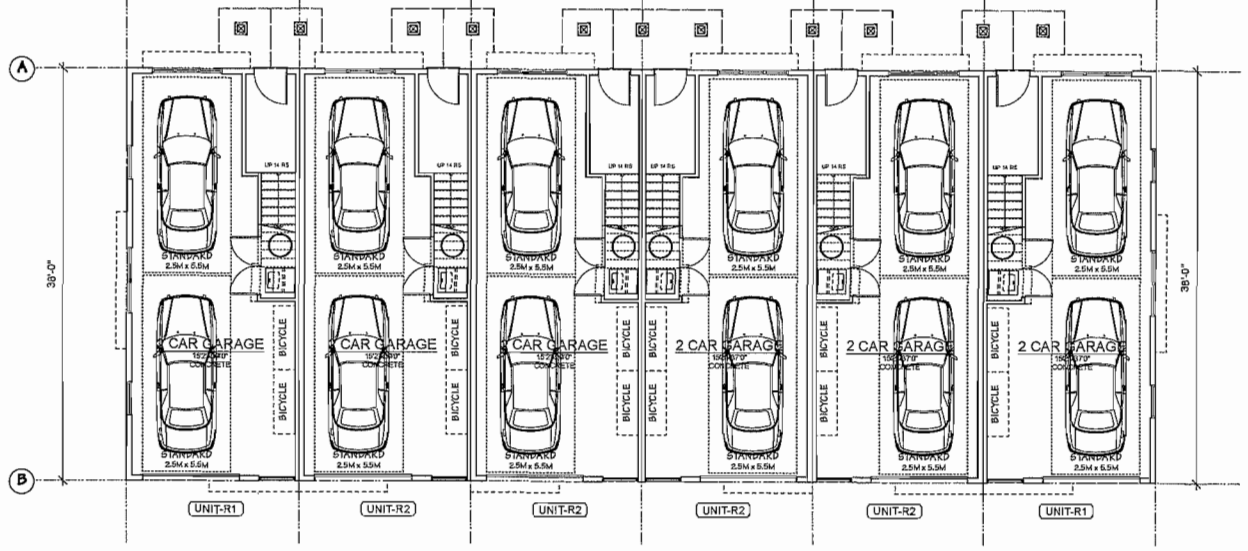
BUILDING NO. 23



THIRD FLOOR PLAN
SCALE : 1/8" = 1'-0"



SECOND FLOOR PLAN
SCALE : 1/8" = 1'-0"



GROUND FLOOR PLAN
SCALE : 1/8" = 1'-0"

BUILDING NO. 24

AGING IN PLACE FEATURES
(TO BE PROVIDED IN ALL UNITS) :

- SOLID BLOCKING IN WASHROOM WALLS TO FACILIATE FUTURE GRAB BAR INSTALLATION
- LEVER-TYPE HANDLES FOR PLUMBING AND DOOR HANDLES

SUSTAINABILITY MEASURES
(TO BE PROVIDED IN ALL UNITS) :

ENERGUIDE 82 REQUIREMENTS:

- HIGH PERFORMANCE WINDOWS (LOW E DOUBLE GLAZED VINYL WINDOWS W/ ARGON FILL AND INSULATED SPACER)
- UNDER SLAB INSULATION (R-12 INSULATION)
- SOLID WOOD AND/OR STEEL W/ POLYURETHANE INSULATION CORE DOORS
- ENERGY STAR LIGHTING (420kWh/yr) & APPLIANCES (95kWh/yr)
- HIGH EFFICIENCY HEATING (NATURAL GAS COMBI SYSTEM, AFUE 95%)
- HIGH EFFICIENCY HOT WATER (INDIRECT TANK BOILER, 30 US gal.)
- LOCAL MATERIALS

DP Plan No. 31
Oct. 31, 2014
DP 14-665485

NO.	DATE	REVISIONS
4	OCT. 24, 2014	DPP SUBMISSION
3	SEPT. 23, 2014	ADP SUBMISSION
2	APR. 24, 2013	GENERAL REVISION
1	JAN. 29, 2013	DP SUBMISSION

CONSULTANT

Copyright. All rights reserved.
Reproduction in whole or in part is prohibited. This drawing as an instrument of service is the property of the architect and may not be used in any way without the written permission of this office.

PROJECT

TOWNHOUSE
DEVELOPMENT

NO.4 & BRIDGE ST.
RICHMOND, B.C.

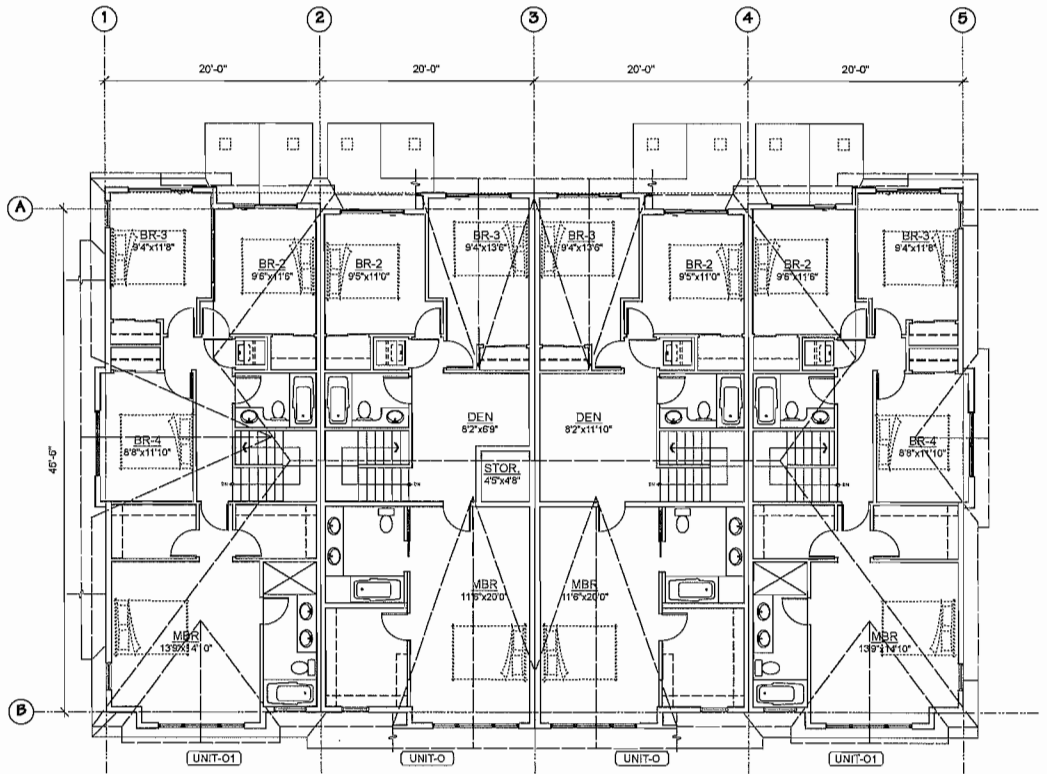
Yamamoto
Architecture Inc.

2386 oak street, van., b.c.
V6H 4J1 tel: 731-1927 fax: 731-1827

DRAWING TITLE

FLOORPLANS

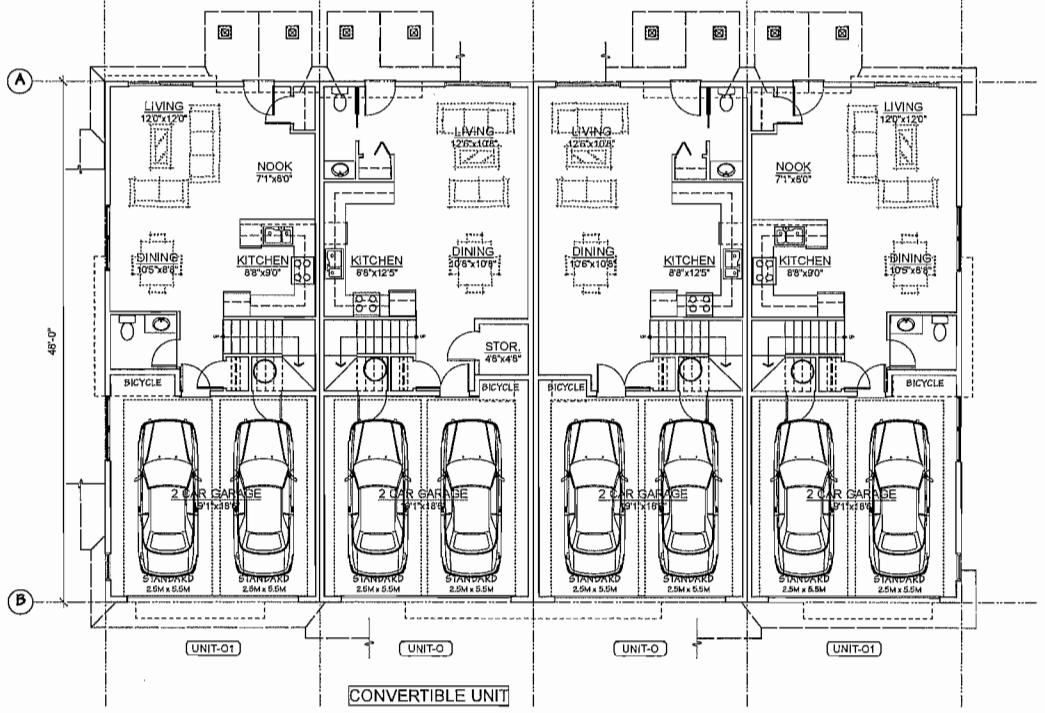
SCALE 1/8" = 1'-0"	SHEET NO. PLAN-5e
DATE SEPT. 19, 2014	
DRAWN KP	
CHECKED	PROJ. NO. 1103



CONVERTIBLE UNIT

SECOND FLOOR PLAN

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

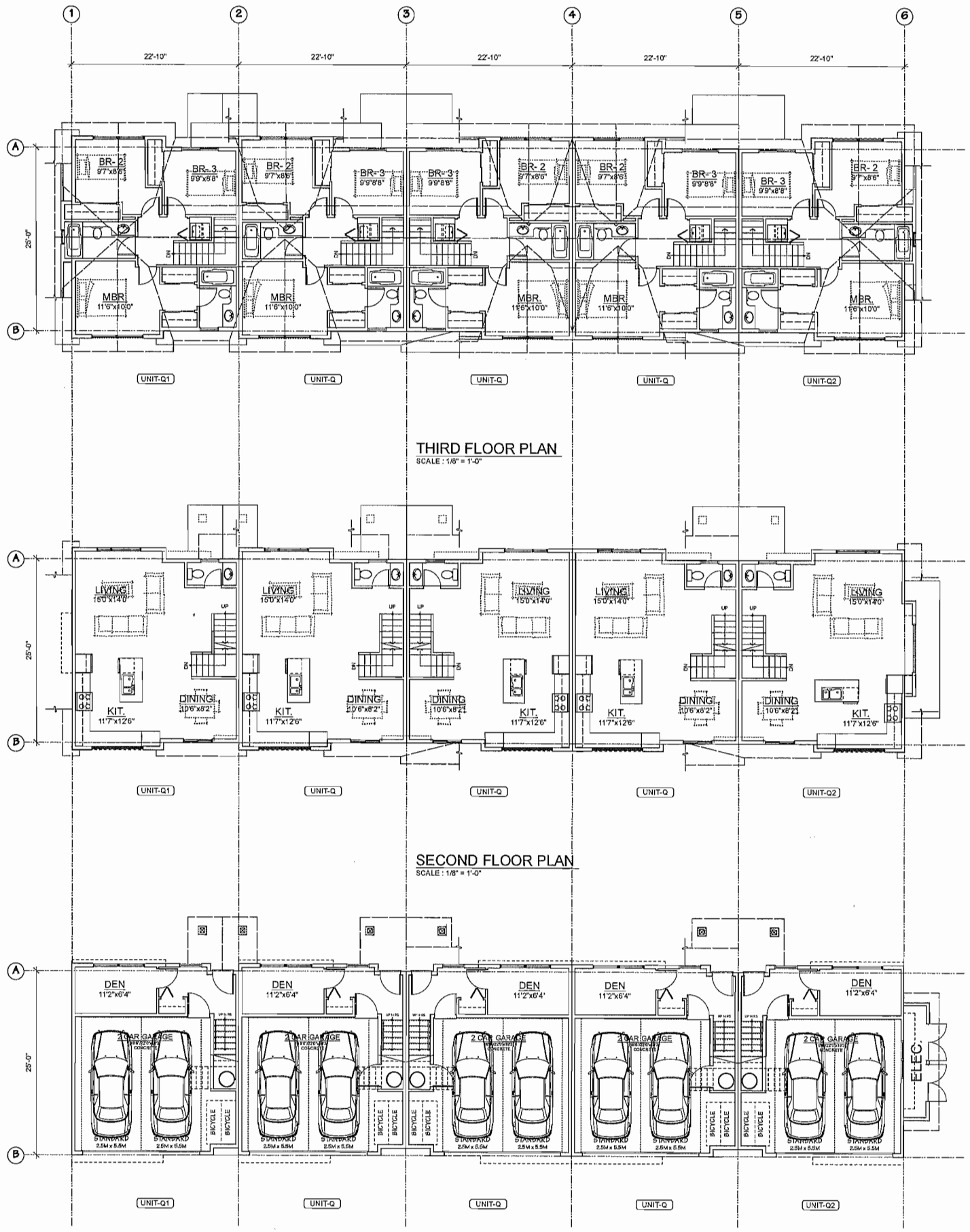


CONVERTIBLE UNIT

GROUND FLOOR PLAN

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

BUILDING NO. 25 & 26



THIRD FLOOR PLAN

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

SECOND FLOOR PLAN

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

GROUND FLOOR PLAN

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

BUILDING NO. 27

AGING IN PLACE FEATURES (TO BE PROVIDED IN ALL UNITS) :

- SOLID BLOCKING IN WASHROOM WALLS TO FACILIATE FUTURE GRAB BAR INSTALLATION
- LEVER-TYPE HANDLES FOR PLUMBING AND DOOR HANDLES

SUSTAINABILITY MEASURES (TO BE PROVIDED IN ALL UNITS) :

ENERGUIDE 82 REQUIREMENTS;

- HIGH PERFORMANCE WINDOWS (LOW E DOUBLE GLAZED VINYL WINDOWS W/ ARGON FILL AND INSULATED SPACER)
- UNDER SLAB INSULATION (R-12 INSULATION)
- SOLID WOOD AND/OR STEEL W/ POLYURETHANE INSULATION CORE DOORS
- ENERGY STAR LIGHTING (420kWh/yr) & APPLIANCES (95kWh/yr)
- HIGH EFFICIENCY HEATING (NATURAL GAS COMBI SYSTEM, AFUE 95%)
- HIGH EFFICIENCY HOT WATER (INDIRECT TANK BOILER, 30 US gal.)
- LOCAL MATERIALS

DP Plan No. 32
Oct. 31, 2014
DP 14-665485

NO.	DATE	REVISIONS
4	OCT. 24, 2014	DPP SUBMISSION
3	SEPT. 23, 2014	ADP SUBMISSION
2	APR. 24, 2013	GENERAL REVISION
1	JAN. 28, 2013	DP SUBMISSION

CONSULTANT

Copyright. All rights reserved.
Reproduction in whole or in part is prohibited. This drawing as an instrument of service is the property of the architect and may not be used in any way without the written permission of this office.

PROJECT

TOWNHOUSE DEVELOPMENT

NO.4 & BRIDGE ST.
RICHMOND, B.C.

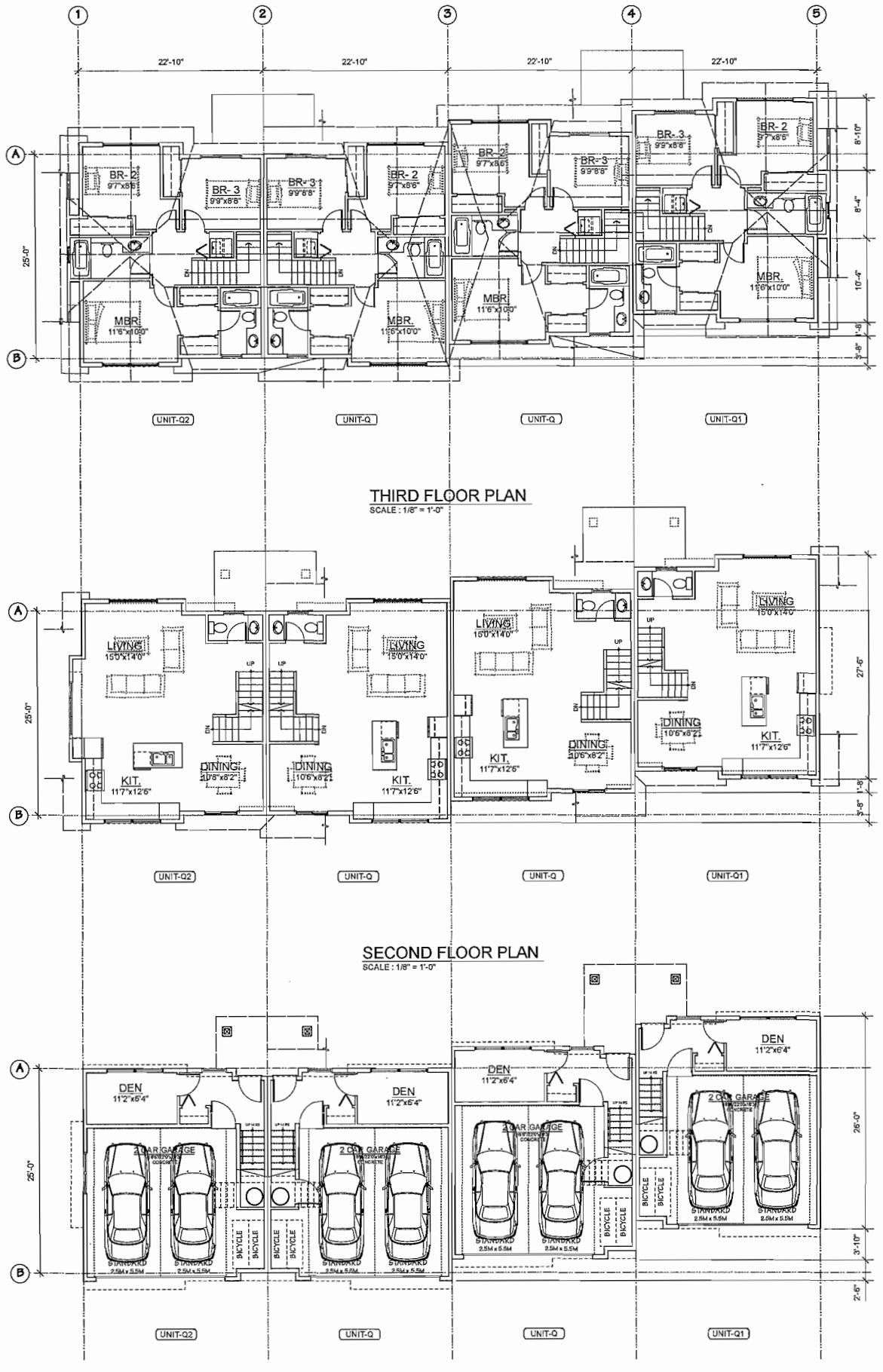
Yamamoto Architecture Inc.

2388 oak street, van., b.c.
V6H 4J1 tel: 731-1327 fax: 731-1327

DRAWING TITLE

FLOORPLANS

SCALE 1/8" = 1'-0"	SHEET NO. **PLAN-5f**
DATE SEPT. 10, 2014	
DRAWN KP	
CHECKED	PROJ. NO. 1103



AGING IN PLACE FEATURES
(TO BE PROVIDED IN ALL UNITS) :

- SOLID BLOCKING IN WASHROOM WALLS TO FACILIATE FUTURE GRAB BAR INSTALLATION
- LEVER-TYPE HANDLES FOR PLUMBING AND DOOR HANDLES

SUSTAINABILITY MEASURES
(TO BE PROVIDED IN ALL UNITS) :

ENERGUIDE 82 REQUIREMENTS:

- HIGH PERFORMANCE WINDOWS (LOW E DOUBLE GLAZED VINYL WINDOWS W/ ARGON FILL AND INSULATED SPACER)
- UNDER SLAB INSULATION (R-12 INSULATION)
- SOLID WOOD AND/OR STEEL W/ POLYURETHANE INSULATION CORE DOORS
- ENERGY STAR LIGHTING (420kWh/yr) & APPLIANCES (95kWh/yr)
- HIGH EFFICIENCY HEATING (NATURAL GAS COMBI SYSTEM, AFUE 95%)
- HIGH EFFICIENCY HOT WATER (INDIRECT TANK BOILER, 30 US gal.)
- LOCAL MATERIALS

DP Plan No. 33
Oct. 31, 2014
DP 14-665485

NO.	DATE	REVISIONS
4	OCT. 24, 2014	DPP SUBMISSION
3	SEPT. 23, 2014	ADP SUBMISSION
2	APR. 24, 2013	GENERAL REVISION
1	JAN. 29, 2013	DP SUBMISSION

CONSULTANT

Copyright. All rights reserved.
Reproduction in whole or in part is prohibited. This drawing is an instrument of service is the property of the architect and may not be used in any way without the written permission of this office.

PROJECT

TOWNHOUSE
DEVELOPMENT

NO.4 & BRIDGE ST.
RICHMOND, B.C.

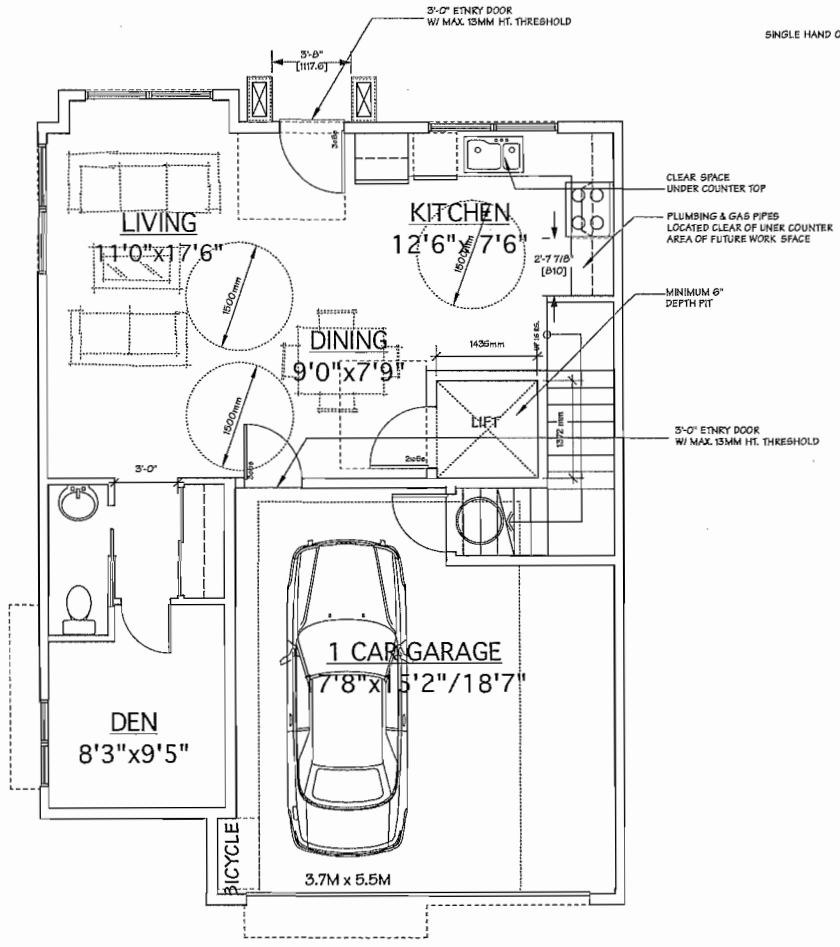
Yamamoto
Architecture Inc.

2386 oak street, van., b.c.
V6H 4J1 tel: 731-1927 fax: 731-1827

DRAWING TITLE

FLOORPLANS

SCALE 1/8" = 1'-0"	SHEET NO. PLAN-5g
DATE SEPT. 19, 2014	
DRAWN KP	
CHECKED	PROJ. NO. 1103

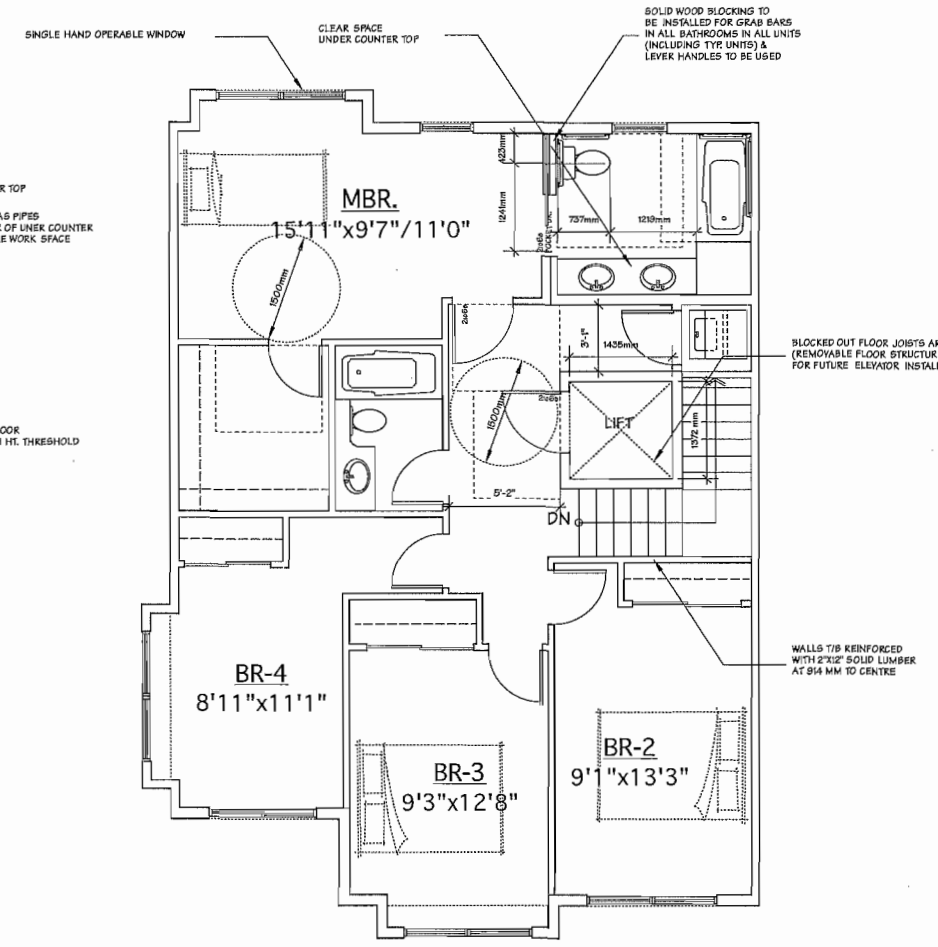


UNIT-D

BUILDING NO. 6

CONVERTIBLE UNIT
GROUND FLOOR PLAN

SCALE : 1/4" = 1'-0"



UNIT-D

BUILDING NO. 6

CONVERTIBLE UNIT
SECOND FLOOR PLAN

SCALE : 1/4" = 1'-0"

CONVERTIBLE UNIT CHECKLIST :

Doors & Doorways	Entry door min. 863 mm but ideally 914 mm and have clear access.	COMPLIES
	Entry door clear exterior floor space min. 1220 mm depth by door width plus 600 mm on latch side (not needed if rough in wiring provided for future automatic door opener)	COMPLIES
	Interior doors to main living areas, 1 bathroom and 1 bedroom, min. 800 mm clear opening with flush threshhold max. 13 mm height. Demonstrate wheelchair access between the hallway and rooms and widen hallway and/or doorway if necessary to secure access	COMPLIES
	Patio/balcony min. 860 mm clear opening. Note how accessed.	NOT APPLICABLE
	All interior thresholds within units comply with BC Building Code	
	Lever-type handles for all doors.	COMPLIES
Vertical Circulation	Stair lifts, staircase width, framing supports, and landings, as noted on floor plans in compliance with manufacturer specifications. OR	NOT APPLICABLE
	Vertical lifts, depressed slab area, and landings, as noted on floor plans in compliance with manufacturer specifications. Framing to accommodate shaft construction without impact to surrounding structure	COMPLIES
	At the top of all stairways, walls are reinforced with 2" x 12" solid lumber at 914mm to centre.	COMPLIES
Hallways	Min. 900 mm width	COMPLIES
Garages	Min. 1 accessible parking space with min. 4 m garage width	COMPLIES
	Access from garage to living area with min. 800 mm clear door opening.	COMPLIES
Bathrooms (Min. 1)	Toilet clear floor space min. 1020 mm at side and in front.	COMPLIES
	Wall blocking for future grab bar installation at toilet, tub, and shower. Reinforced with 2"x12" solid lumber in all bathtub, shower, and toilet locations.	COMPLIES
	Lever-type handles for plumbing fixtures.	COMPLIES
	Pressure and temperature control valves are installed on all shower faucets.	COMPLIES
	Cabinets underneath sink(s) are easily removed.	COMPLIES
	Demonstrate bath and shower controls are accessible (layout or fixture placement)	COMPLIES
Kitchen	Clear area needed under future work space. Plumbing and gas pipes (in-wall and in-floor) located clear of under counter area of future work space (stove, sink & min. 610 mm side counter)	COMPLIES
	All pipes are brought in no higher than 304 mm to 355 mm to the centre of the pipe from floor level,	COMPLIES
	Cabinets underneath sink are easily removed.	COMPLIES
	1500 mm turning diameter or turning path diagram	COMPLIES
	Lever-type handles for plumbing fixtures.	COMPLIES
Windows	Min. 1 window that can be opened with a single hand (bathroom, kitchen, living room)	COMPLIES
Outlets & Switches	Placement locations of electrical outlets: beside window, bottom of stairways, beside toilet, above external doors (outside and inside), on front face of kichen counter, within proximity of control centre for smart-home options.	TO BE LOOKED AT DURING THE BP STAGE
	Upgrade to four-plex outlets in master bedroom, home office, garage, and rereation.	COMPLIES

AGING IN PLACE FEATURES
(TO BE PROVIDED IN ALL UNITS) :

- SOLID BLOCKING IN WASHROOM WALLS TO FACILIATE FUTURE GRAB BAR INSTALLATION
- LEVER-TYPE HANDLES FOR PLUMBING AND DOOR HANDLES

SUSTAINABILITY MEASURES
(TO BE PROVIDED IN ALL UNITS) :

ENERGUIDE 82 REQUIREMENTS:

- HIGH PERFORMANCE WINDOWS (LOW E DOUBLE GLAZED VINYL WINDOWS W/ ARGON FILL AND INSULATED SPACER)
- UNDER SLAB INSULATION (R-12 INSULATION)
- SOLID WOOD AND/OR STEEL W/ POLYURETHANE INSULATION CORE DOORS
- ENERGY STAR LIGHTING (420kWh/yr) & APPLIANCES (95kWh/yr)
- HIGH EFFICIENCY HEATING (NATURAL GAS COMBI SYSTEM, AFUE 95%)
- HIGH EFFICIENCY HOT WATER (INDIRECT TANK BOILER, 30 US gal.)
- LOCAL MATERIALS

DP Plan No. 34
Oct. 31, 2014
DP 14-665485

NO.	DATE	REVISIONS
4	OCT. 24, 2014	DPP SUBMISSION
3	SEPT. 23, 2014	ADP SUBMISSION
2	APR. 24, 2013	GENERAL REVISION
1	JAN. 29, 2013	DP SUBMISSION

CONSULTANT

Copyright. All rights reserved.
Reproduction in whole or in part is prohibited. This drawing as an instrument of service is the property of the architect and may not be used in any way without the written permission of this office.

PROJECT

TOWNHOUSE DEVELOPMENT

NO.4 & BRIDGE ST.
RICHMOND, B.C.

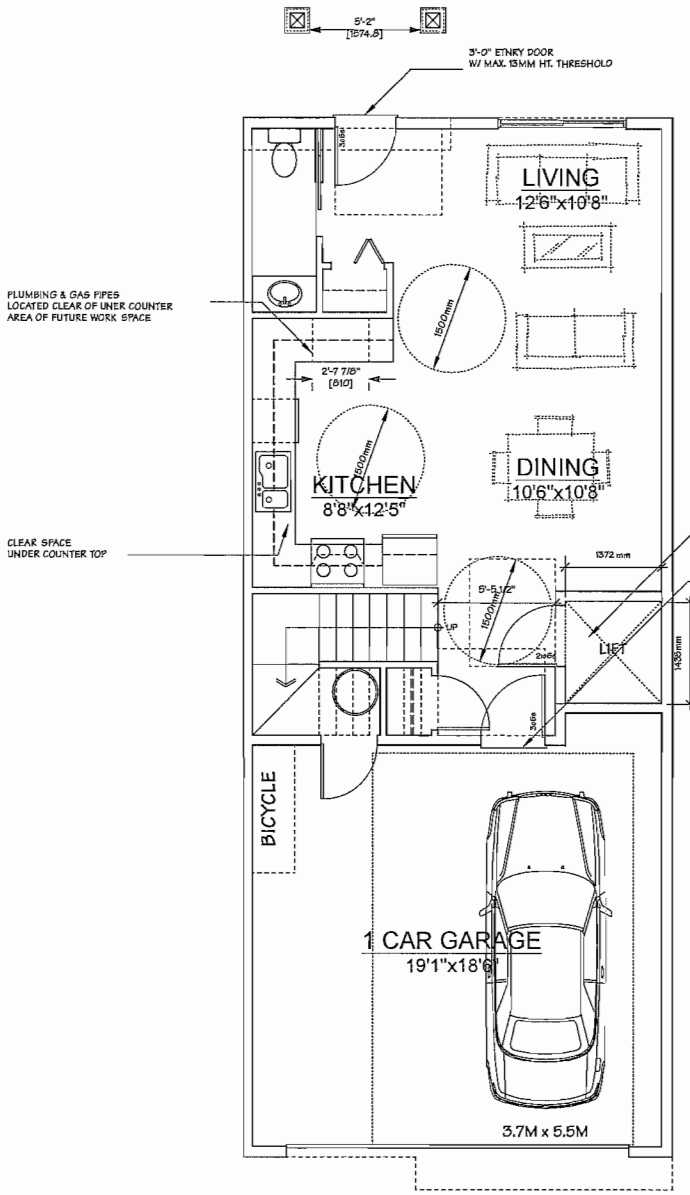
Yamamoto Architecture Inc.

2386 oak street, van., b.c.
V6H 4J1 tel: 731-1927 fax: 731-1927

DRAWING TITLE

FLOORPLANS

SCALE 1/4" = 1'-0"	SHEET NO. **PLAN-5h**
DATE SEPT. 19, 2014	
DRAWN WC	
CHECKED	PROJ. NO. 1108

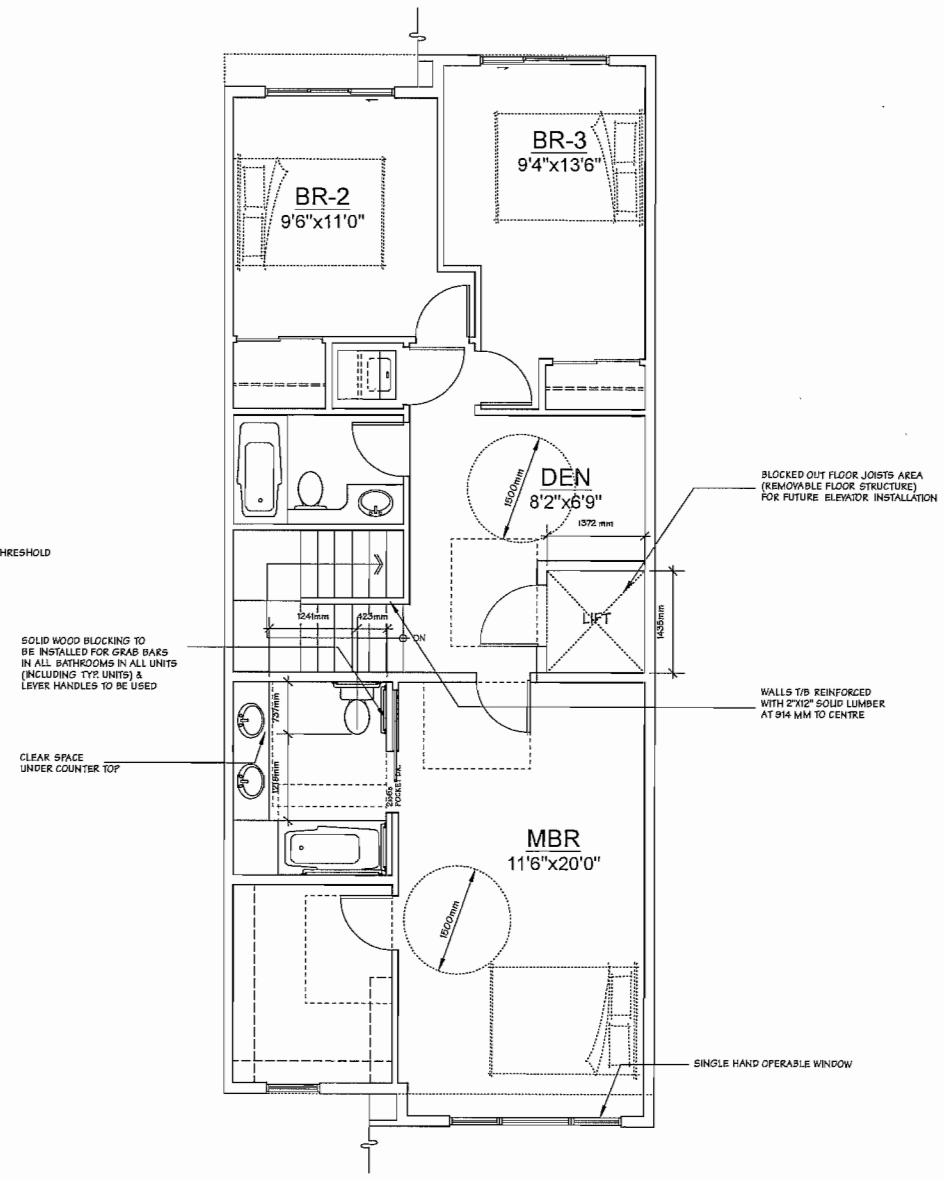


UNIT-O

BUILDING NO. 26

CONVERTIBLE UNIT
GROUND FLOOR PLAN

SCALE : 1/4" = 1'-0"



UNIT-O

BUILDING NO. 26

CONVERTIBLE UNIT
SECOND FLOOR PLAN

SCALE : 1/4" = 1'-0"

CONVERTIBLE UNIT CHECKLIST :

Doors & Doorways	Entry door min. 863 mm but ideally 914 mm and have clear access.	COMPLIES
	Entry door clear exterior floor space min. 1220 mm depth by door width plus 600 mm on latch side (not needed if rough in wiring provided for future automatic door opener)	COMPLIES
	Interior doors to main living areas, 1 bathroom and 1 bedroom, min. 800 mm clear opening with flush threshold max. 13 mm height. Demonstrate wheelchair access between the hallway and rooms and widen hallway and/or doorway if necessary to secure access	COMPLIES
	Patio/balcony min. 860 mm clear opening. Note how accessed.	COMPLIES
	All interior thresholds within units comply with BC Building Code	
	Lever-type handles for all doors.	COMPLIES
Vertical circulation	Stair lift, staircase width, framing supports, and landings, as noted on floor plans in compliance with manufacturer specifications. OR	NOT APPLICABLE
	Vertical lifts, depressed slab area, and landings, as noted on floor plans in compliance with manufacturer specifications. Framing to accommodate shaft construction without impact to surrounding structure	COMPLIES
	At the top of all stairways, walls are reinforced with 2" x 12" solid lumber at 914mm to centre.	COMPLIES
Hallways	Min. 900 mm width	COMPLIES
Garages	Min. 1 accessible parking space with min. 4 m garage width	COMPLIES
	Access from garage to living area with min. 800 mm clear door opening.	COMPLIES
Bathrooms (Min. 1)	Toilet clear floor space min. 1020 mm at side and in front.	COMPLIES
	Wall blocking for future grab bar installation at toilet, tub, and shower. Reinforced with 2"x12" solid lumber in all bathtub, shower, and toilet locations.	COMPLIES
	Lever-type handles for plumbing fixtures.	COMPLIES
	Pressure and temperature control valves are installed on all shower faucets.	COMPLIES
	Cabinets underneath sink(s) are easily removed.	COMPLIES
	Demonstrate bath and shower controls are accessible (layout or fixture placement)	COMPLIES
Kitchen	Clear area needed under future work space. Plumbing and gas pipes (in-wall and in-floor) located clear of under counter area of future work space (stove, sink & min. 810 mm wide counter)	COMPLIES
	All pipes are brought in no higher than 304 mm to 356 mm to the centre of the pipe from floor level.	COMPLIES
	Cabinets underneath sink are easily removed.	COMPLIES
	1500 mm turning diameter or turning path diagram	COMPLIES
	Lever-type handles for plumbing fixtures.	COMPLIES
Windows	Min. 1 window that can be opened with a single hand (bathroom, kitchen, living room)	COMPLIES
Outlets & Switches	Placement locations of electrical outlets: beside window, bottom of stairways, beside toilet, above external doors (outside and inside), on front face of kitchen counter, within proximity of control centre for smart home options.	TO BE LOOKED AT DURING THE BP STAGE
	Upgrade to four-plex outlets in master bedroom, home office, garage, and rrreation.	COMPLIES

AGING IN PLACE FEATURES
(TO BE PROVIDED IN ALL UNITS) :

- SOLID BLOCKING IN WASHROOM WALLS TO FACILIATE FUTURE GRAB BAR INSTALLATION
- LEVER-TYPE HANDLES FOR PLUMBING AND DOOR HANDLES

SUSTAINABILITY MEASURES
(TO BE PROVIDED IN ALL UNITS) :

ENERGUIDE 82 REQUIREMENTS:

- HIGH PERFORMANCE WINDOWS (LOW E DOUBLE GLAZED VINYL WINDOWS W/ ARGON FILL AND INSULATED SPACER)
- UNDER SLAB INSULATION (R-12 INSULATION)
- SOLID WOOD AND/OR STEEL W/ POLYURETHANE INSULATION CORE DOORS
- ENERGY STAR LIGHTING (420kWh/yr) & APPLIANCES (95kWh/yr)
- HIGH EFFICIENCY HEATING (NATURAL GAS COMBI SYSTEM, AFUE 95%)
- HIGH EFFICIENCY HOT WATER (INDIRECT TANK BOILER, 30 US gal.)
- LOCAL MATERIALS

DP Plan No. 35
Oct. 31, 2014
DP 14-665485

NO.	DATE	REVISIONS
4	OCT. 24, 2014	DPP SUBMISSION
3	SEPT. 23, 2014	ADP SUBMISSION
2	APR. 24, 2013	GENERAL REVISION
1	JAN. 29, 2013	DP SUBMISSION

CONSULTANT

Copyright. All rights reserved.
Reproduction in whole or in part is prohibited. This drawing as an instrument of service is the property of the architect and may not be used in any way without the written permission of this office.

PROJECT

TOWNHOUSE
DEVELOPMENT

NO.4 & BRIDGE ST.
RICHMOND, B.C.

Yamamoto
Architecture Inc.

2386 oak street, van., b.c.
V6H 4J1 tel: 731-1327 fax: 731-1327

DRAWING TITLE

FLOORPLANS

SCALE 1/8" = 1'-0"	SHEET NO. PLAN-5i
DATE SEPT. 19, 2014	
DRAWN WC	
CHECKED	PROJ. NO. 1103

City of Richmond

Report to Development Permit Panel

Planning and Development Department

To:	Development Permit Panel	**Date:**	November 4, 2014
From:	Wayne Craig Director of Development	**File:**	DP 14-672669
Re:	**Application by S-8135 Holdings Ltd. for a Development Permit at 9191 and 9231 Alexandra Road**		

Staff Recommendation

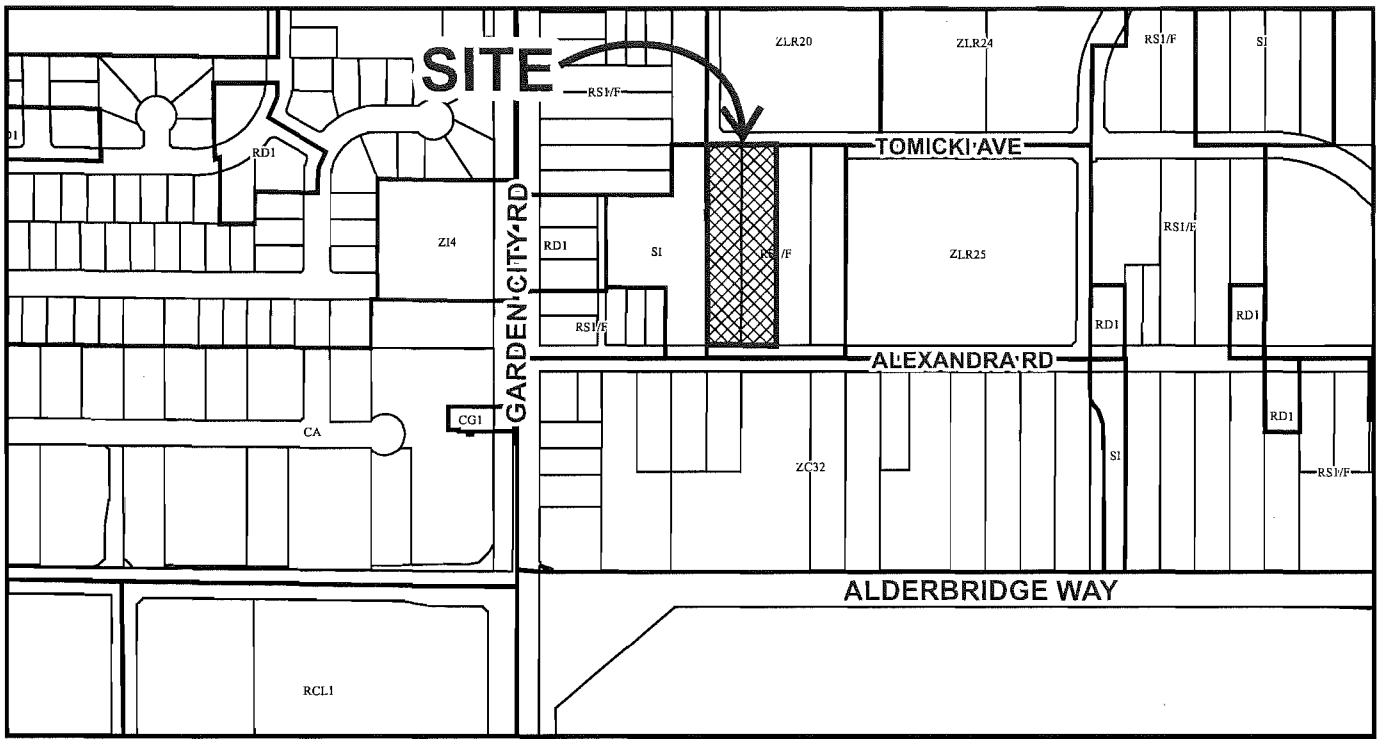
That a Development Permit be issued which would:

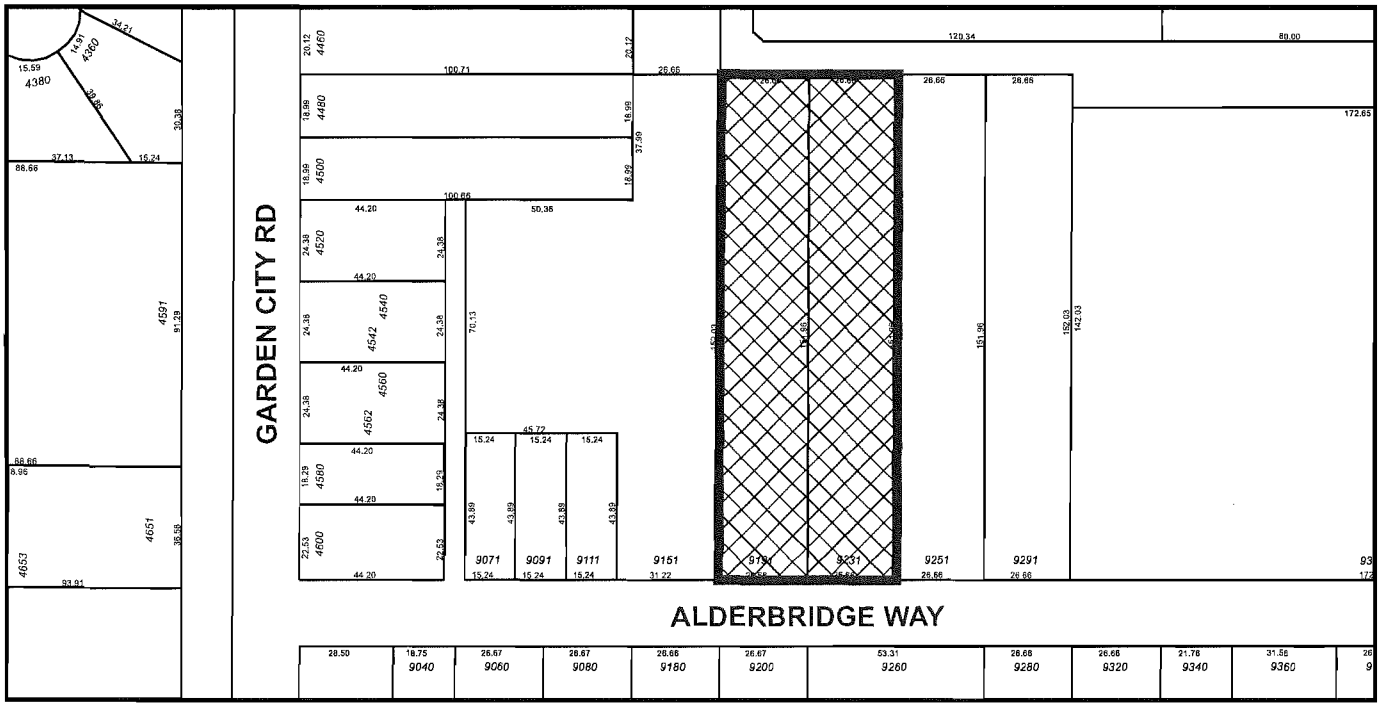
1. Permit the construction of a development with forty (40) town housing units and nine (9) live/work dwelling units at 9191 and 9231 Alexandra Road on a site zoned "Residential/Limited Commercial (ZMU28) – Alexandra Neighbourhood (West Cambie)".

Wayne Craig
Director of Development

JD:blg
Att.

City of Richmond





DP 14-672669

Original Date: 10/03/14

Revision Date:

Note: Dimensions are in METRES

Staff Report

Origin

S-8135 Holdings Ltd. has applied to the City of Richmond for permission to develop a townhouse project at 9191 and 9231 Alexandra Road on a site zoned "Residential/Limited Commercial (ZMU28) – Alexandra Neighbourhood (West Cambie)". The site is currently vacant.

The site is being rezoned from "Single-Detached (RS1/F)" to "Residential/Limited Commercial (ZMU28) – Alexandra Neighbourhood (West Cambie)" by Richmond Zoning Bylaw 8500, Amendment Bylaw 9163 (RZ 14-656219). The rezoning bylaw was given third reading following the Public Hearing on September 2, 2014. The rezoning was supported with Official Community Plan (OCP) amendments (Amendment Bylaw 9164) to accommodate low and medium density residential uses in addition to medium density mixed retail and residential uses on this site.

Frontage improvements are required on all three (3) street frontages (Alexandra Road, Dubbert Street and Tomicki Avenue) as part of the rezoning. A Service Agreement for the improvements is required prior to Building Permit issuance. As well, the project is required to connect to the Alexandra District Energy Utility (ADEU). Registration of a legal agreement regarding the DEU connection is a condition of rezoning.

Development Information

The site is located in the Alexandra Neighbourhood, just north of the proposed Smart Centres. It will be bordered by three roads: Alexandra Road to the south; the southward extension of Dubbert Street to the west; and Tomicki Avenue to the north.

The application proposes forty-nine (49) residential units, forty (40) of which will be townhouses and nine (9) of which are townhouses designated for live/work dwelling use. The proposed floor area ratio (FAR) is 0.891, resulting in a floor area of 5,466.2 m^2 (58,839.6 sq.ft.), and the proposed height is 10.74 m (35.2 ft.) and three (3) storeys.

The townhouses are grouped in six (6) buildings; with four (4) buildings fronting the streets to the south, west and north and two (2) buildings aligned with the east property line. Resident and visitor parking are accessed from an internal drive aisle, which is accessed from two locations on Dubbert Street. Common open space is provided toward the centre of the proposed development and private open space is provided with each unit in the form of yards and balconies or a combination of the two.

Please refer to the attached Development Application Data Sheet (Attachment 1) for a comparison of the proposed development data with the relevant bylaw requirements.

Background

Development surrounding the subject site is as follows:

To the north, across Tomicki Avenue, is a recently constructed, three-storey and four-storey, 259-unit, apartment-residential development.

To the east, currently under application (DP 12-613923), a four-storey development, with ground level retail fronting Alexandra Road and 132 apartments, is proposed.

To the south, across Alexandra Road, is the recently approved commercial development (Smart Centres), with approximately 35,952 m^2 (386,997 sq.ft.) of retail space.

To the west is an existing undeveloped lot, a part of which is expected to complete the extension of Dubbert Street. The remainder of the lot is likely to be consolidated with other properties and developed, per the West Cambie Area Plan, with a combination of retail, restaurant, office, education and recreational uses.

Rezoning and Public Hearing Results

During the rezoning process, staff identified the following technical requirements to be addressed at the Development Permit stage:

1. Submission of an acoustical and thermal report by an appropriately registered professional that addresses the requirements of the City's Aircraft Noise Sensitive Development Policy. ***(An acoustical report has been submitted and the proponent has committed to incorporating the recommendations into the development.)***
2. Submission of a Landscape Plan and deposit of a Landscaping Security. ***(The plan and a security of $117,004.36 have been provided by the applicant.)***

The Public Hearing for the rezoning was held on September 2, 2014. At the Public Hearing, no concerns about the proposed rezoning were expressed.

Staff Comments

The proposed scheme attached to this report has satisfactorily addressed the design issues and other staff concerns identified as part of the review of the subject Development Permit application. In addition, it complies with the intent of the applicable sections of the Official Community Plan (OCP) and with the provisions of the pending zoning, "Residential/Limited Commercial (ZMU28) – Alexandra Neighbourhood (West Cambie)".

Advisory Design Panel Comments

The Advisory Design Panel (ADP) reviewed the project on October 22, 2014 and expressed support for the proposal. A copy of the relevant excerpt from the Advisory Design Panel Minutes is attached for reference (Attachment 2). The applicant's response to each Panel issue is included and identified in '***bold italics***'. The applicant has addressed the Panel comments to the extent recommended by staff.

Analysis

Conditions of Adjacency

- The proposed development is bound by streets on three of its four sides. Staff have not identified any significant adjacency impacts on these streets or on the current and anticipated developments along these streets.
- The proposed development to the east of the subject site will be higher in density and height than the proposed development on the subject site. Staff have not identified any significant adjacency impacts. A potential grade transition issue along the common property line will be resolved by raising the rear yards of the subject site townhouses to meet the adjacent proposed grade. (This also provides more easily accessible outdoor space for the units.) Trees and fencing provide screening and visual interest between the proposed developments.

Urban Design and Site Planning

- This part of the Alexandra Neighbourhood is intended to have a "High Street" character and the proposal includes two measures that contribute to this objective. It will provide street-animating live/work uses along Alexandra Road and it will use a more urban form of townhouse development, with small front yards, a consistent build-to line and simple, repetitive townhouse forms.
- The townhouse buildings lining the shorter frontages along Tomicki Avenue and Alexandra Road will span most of the site width and create a consistent street presence.
- The townhouse buildings lining the longer Dubbert Street frontage (approximately 142 m) will be interspersed with open spaces (site entries and the common amenity space). This will provide rhythm and visual interest for pedestrians and those viewing it from the anticipated small floor plate retail, restaurant and other commercial uses across the street to the west.
- The proposed north/south internal driveway also benefits from the alternating placement of buildings and open spaces. To further reduce the potential "bowling alley" effect, the developer has agreed to meander the internal driveway, articulate the surface with pavers in key locations and provide staggered trees and soft landscape.
- The proposed mid-block open spaces are oriented in an east/west direction and have been situated to align visually with the proposed east/west walkway in the proposed development to the east. This central open space location also supports reasonably equitable access to and from all units in the development.
- Parking, loading and waste services have been provided in accordance with regulatory requirements. Visitor parking is located at the north and south ends of the site. A covenant limiting the use of the visitor parking areas to visitors and to the five (5) supplementary live/work parking spaces is required as a condition of Development Permit issuance.

Architectural Form and Character

- The three-storey townhouses are clustered in buildings of from seven (7) to nine (9) units. A common "kit of parts" (building shapes, roof shapes, fenestration, materials, detailing and colour) is used to bring cohesiveness to the project while allowing for differentiation depending on sub-context of each building. For example, the live/work dwellings along Alexandra Road use a flat, two-storey "base", with large windows on the ground floor, to signify a more commercial role.

- The front facades of each townhouse building have been well articulated using a variety of form, material, detailing and colour techniques. The developer has also improved the rear facades of the townhouse buildings in order to provide adequate visual interest on the interior of the project and facing the property to the east.
- The proposed "kit of parts" has been created with a semi-traditional character appropriate to the existing and anticipated contexts.
- The proposed materials include Hardie Board panelling, vinyl horizontal siding and shakes, brick and asphalt shingles. The proposed colour scheme includes white, light and dark greys, brick red and black.

Landscape Design and Open Space Design

- The proposed development offers a combination of soft landscaping and fencing of various heights. The design establishes public, semi-private and private open space areas.
- The common open spaces total 289 m^2 (3,111 sq.ft.) and are designed to include children's play, dog washing, grassed recreation, mail and quiet seating areas.
- Private open space varies from 13 m^2 to 66 m^2 per unit (140 sq.ft. to 710 sq.ft./unit). Although, in some cases, this is less than specified by the OCP Multi-Family Residential Guidelines for town housing (30 m^2 or 323 sq.ft. /unit), it is substantially more than the requirement for apartment units (6 m2 or 65 sq.ft. /unit). Given the inner city location of this development and the plans for nearby high-quality open spaces (Central Park, the North and South Park greenways and the Garden City Lands), staff believe the proposed private open space is adequate.
- Infrastructure equipment, such as electrical closets, hydro kiosks and the District Energy Utility (DEU) transfer station, have been located unobtrusively and screened where possible.
- As noted in the rezoning report, ten (10) replacement trees are required. Seventy-seven (77) news trees have been indicated on the landscape drawings.
- A cash-in-lieu contribution of $80,000.00 is being provided with respect to indoor amenity space as part of the rezoning considerations.

Sustainability

- The application proposes to address sustainability objectives and criteria by providing the following:

  Energy Efficiency

  - 6 mm outboard glazing, 4 mm inboard glazing with airspace dimension between.
  - The development will be connecting the Alexandra District Energy Utility, a renewable geothermic energy system. The DEU connection will allow for 70%+ of the space and water heating requirements to be heated by the DEU system itself.
  - Daylight + views from 90% of spaces.
  - Design allowing for controllability of lighting and thermal comfort.
  - Use of low-emission adhesives and sealants, paints and coatings, flooring systems, composite wood products.

  Water Conservation

  - Water efficient landscaping.

Rainwater Management
- Use of swales throughout to enhance water harvesting.
- Varying grades of gravel/soil around outdoor amenity to provide water filtration.

Health and Air Quality
- Use of low-emission: adhesives and sealants, paints and coatings, flooring systems, composite wood products.
- Providing minimum of one (1) tree planted/private amenity area (49 units).
- Seventy-seven (77) trees total provided on plan.

Urban Agriculture
- Units all provided with back or front yard space, which can accommodate vegetable gardens.

Accessible Housing
- The application proposes to address accessibility objectives and criteria by providing the following:

  - One (1) convertible dwelling unit (Unit E, Building 2) that is designed with the potential to be easily renovated to accommodate a future resident with mobility challenges.
  - All of the proposed units incorporate aging in place features to accommodate mobility constraints associated with aging, as delineated by the OCP.

Crime Prevention through Environmental Design (CPTED)
- The application proposes to address CPTED objectives and criteria by providing:

  - Private yards, with low fences, up to the sidewalk along all frontages.
  - Direct access between units and sidewalk.
  - Direct overlook onto the street from residential spaces and live/work spaces at grade level on Tomicki Street and Alexandra Road.
  - Well-lit common amenity space with direct vision lines to both the street and numerous surrounding units.
  - Well-lit internal drive aisle, directly visible from within the units.
  - Limited to two (2) site access points that front the same street.

Aircraft Noise Attenuation
- The application will address noise attenuation objectives and criteria (Aircraft Noise Sensitive Development Policy) by providing, consistent with the advice of the consulting professional, features such as the following:

  - 6 mm outboard glazing, 4 mm inboard glazing with airspace dimension between.
  - Bedrooms will meet a minimum acoustical rating of 29 – OITC – some units may be higher.
  - Wall and ceiling upgrades will be completed as required to meet standards.
  - Project is being designed to meet the OCP design criteria.

Affordable Housing

- An affordable housing contribution of approximately $303,091.00 is being provided in conjunction with rezoning.

Development Permit Considerations

- A list of Development Permit considerations is provided (Attachment 3).

Conclusions

The 49-unit townhousing and live/work dwelling development proposed by S-813 Holdings Ltd. at 9191 and 9231 Alexandra Road complies with the provisions of the "Residential/Limited Commercial (ZMU28) – Alexandra Neighbourhood (West Cambie)" zoning, which received third reading on September 3, 2014. The proposed design also satisfactorily addresses the relevant OCP Development Permit Guidelines and other Council Policy.

Staff support this Development Permit application and recommend its approval.

Janet Digby
Senior Planner 3-Urban Design
(604-247-4620)

JD:blg

Attachment 1

City of Richmond

Development Application Data Sheet

Development Applications Division

DP 14-672669

Address: 9191 and 9231 Alexandra Road

Applicant: S-8135 Holdings Ltd. Owner: S-8135 Holdings Ltd.

Planning Area(s): West Cambie - Alexandra

Floor Area Gross: 5,956.0 m^2 Floor Area Net: 5,466.2m^2

	Existing	Proposed
Site Area:	8,103.7 m^2	6,137.7 m^2 (net of road dedication)
Land Uses:	Single Detached Housing	Townhousing / Live/Work Dwelling
OCP Designation:	Mixed-Use (Alexandra)	Residential Mixed-Use (Alexandra)
Zoning:	RS1/F	Residential/Limited Commercial (ZMU28) – Alexandra Neighbourhood (West Cambie)
Number of Units:	0	49 Total (40 TH + 9 LWD)

	Required	Proposed	Variance
Floor Area Ratio:	0.90	0.891	none permitted
Lot Coverage:	Max. 45/70/20%	45/70/20%	none
Setback – Front Yard:	Min. 3 m	3 m	none
Setback – Side Yard:	Min. 3 m	3 m	none
Setback – Side Yard:	Min. 3 m	3 m	none
Setback – Rear Yard:	Min. 3 m	3 m	none
Height (m):	Lesser of 12.0 m or 3 storeys	10.74 m / 3 storeys	none
Lot Size:	Min. 0.60 ha	0.81 ha	none
Off Street Parking Spaces – Residential and Live/Work / Visitor:	74 and 10+5 (shared)	74 and 10+5 (shared)	none
Accessible Spaces Provided:	2	2	none
Total Off-Street Spaces:	84	84	none
Tandem Parking Spaces:	55% of the total units	55% of total units	none
Amenity Space – Indoor:	Min. 70 m^2	Cash-in Lieu	none
Amenity Space – Outdoor:	Min. 294 m^2	289 m^2	(guideline only)

Excerpt from the Minutes from

The Design Panel Meeting

Wednesday, October 22, 2014 – 4:00 p.m.
Rm. M.1.003
Richmond City Hall

2. DP- 14-672669 – 3-STOREY 49-UNIT TOWNHOUSE DEVELOPMENT

APPLICANT: Townline

PROPERTY LOCATION: 9191 and 9231 Alexandra Road

Applicant's Presentation

Architect Robert Ciccozzi, Robert Ciccozzi Architecture Inc., and Landscape Architect Meredith Mitchell, M2 Landscape Architecture, presented the project and answered queries from the Panel on behalf of the applicant.

Panel Discussion

Comments from the Panel were as follows:

- site planning is good; appreciate the live-work units facing the proposed Smart Centres commercial development to the south; commend the attention to detail at the rear elevation; ***We agree***
- building architecture is nice; appreciate the contrast in colours and breaking down of the façade with vertical elements; ***We agree***
- like the lower building form which is unique in the neighbourhood; appreciate the transition from the six-storey residential development to the east to the proposed four-storey residential mixed use development to the three-storey subject site; ***We agree***
- appreciate the simplicity of the roofs; consider matching the roof form of the north building to the south building to create a bookend effect; ***We agree***
- consider Hardie materials in lieu of vinyl; ***Hardie material is the main component enveloping the 1st level of each building.***
- aluminum railings appear relentless; consider further design development; ***Noted***

- landscaping is well resolved; planting is strong; look at how the raised individual backyards relate to each other; consider additional planting materials to help soften the overlook; ***Noted***
- appreciate the curvature in the internal drive aisle; consider introducing traffic calming measures around the outdoor amenity area; consider banding across the street to announce the arrival to the outdoor amenity area; ***Pavers are being introduced between the two common areas at the middle of the complex, and will act as a calming measure***
- investigate the feasibility of birch tree planting on the inside curve near the vehicular entry/exit; precedents in other projects have not been successful; ***Noted***
- the project is well designed; applicant is encouraged to incorporate public art in the project; ***We have gone out to a consultant for initial consultation/proposal. Will be providing public art on site if it is deemed feasible. Regardless funds will be provided to city prior to rezoning approval.***
- project is successful; site planning works well; building forms are broken up to appropriate scale; nice transition in the area from six to four storeys; ***We agree***
- architectural character is interesting and unique; proposed colours, materials and details add to the overall character of the proposed development; ***We agree***
- appreciate Building No. 6 which is fronting Alexandra Road; appreciate its simple gable form; the most successful building in the proposed development; ***We agree***
- live-work units relate well to the proposed development across Alexandra Road; ***We agree***
- appreciate the detailed unit design drawings; pleased to see angled walls in small rooms being used to create corridors; look at the possibility of using the angled wall as a door opening to provide more manoeuvring space; ***Noted***
- consider pocket doors in lieu of a swinging doors in the powder rooms of townhouse units and in the bathrooms of other residential units; ***Based on previous projects we have found pocket doors often result in significant maintenance/warranty issues. Therefore, we are hesitant to provide.***
- agree with previous comments that the project design is successful; appreciate the site lay-out and the siting of the outdoor amenity area and visitor parking; ***We agree***
- look at opportunity to introduce unit pavers in lieu of asphalt paving around the base of the buildings to break up the large expanse of asphalt paving on the internal drive aisle; and ***Noted***
- pleased to see the provision of one convertible unit and the potential addition of three convertible units. ***We will be providing one convertible unit.***

Panel Decision

It was moved and seconded

That DP 14-672669 be supported to move forward to the Development Permit Panel subject to the applicant giving consideration to the comments of the Panel.

CARRIED

Attachment 3

City of Richmond

Development Permit Considerations

Development Applications Division
6911 No. 3 Road, Richmond, BC V6Y 2C1

Address:

File No.: DP 14-672669

In addition to the rezoning, development permit and building permit requirements included in the considerations attached to the rezoning report for this property (RZ 14-656219):

Prior to approval of the Development Permit, the developer is required to complete the following:

1. Final adoption of the Zoning Amendment Bylaw 9163.
2. Registration of a legal agreement to prohibit the developer and future strata council from selling, leasing, assigning, or designating any of the shared visitor and supplementary live/work dwelling parking spaces to individual unit owners, renter occupants, or any other persons and requiring that the visitor parking spaces remain available for the common and shared use of residential and live/work dwelling visitors to this development.

Signed

Nov 5th, 2014
Date

City of Richmond

Development Permit

No. DP 14-672669

To the Holder:	S-8135 HOLDINGS LTD.
Property Address:	9191 AND 9231 ALEXANDRA ROAD
Holder Address:	C/O MR. ROSS MOORE # 120 - 13575 COMMERCE PARKWAY RICHMOND, BC V6V 2L1

1. This Development Permit is issued subject to compliance with all of the Bylaws of the City applicable thereto, except as specifically varied or supplemented by this Permit.
2. This Development Permit applies to and only to those lands shown cross-hatched on the attached Schedule "A" and any and all buildings, structures and other development thereon.
3. Subject to Section 692 of the Local Government Act, R.S.B.C.: buildings and structures; off street parking and loading facilities; roads and parking areas; and landscaping and screening shall be constructed generally in accordance with Plan # 1a to Plan # 3g attached hereto.
4. Sanitary sewers, water, drainage, highways, street lighting, underground wiring, and sidewalks, shall be provided as required.
5. As a condition of the issuance of this Permit, the City is holding the security in the amount of $117,004.36 to ensure that development is carried out in accordance with the terms and conditions of this Permit. Should any interest be earned upon the security, it shall accrue to the Holder if the security is returned. A condition of the posting of the security is that, should the Holder fail to carry out the development hereby authorized according to the terms and conditions of this Permit within the time provided, the City may use the security to carry out the work by its servants, agents or contractors, and any surplus shall be paid over to the Holder. Should the Holder carry out the development permitted by this Permit within the time set out herein, the security shall be returned to the Holder. The City may retain the security for up to one year after inspection of the completed landscaping in order to ensure that plant material has survived.
6. If the Holder does not commence the construction permitted by this Permit within 24 months of the date of this Permit, this Permit shall lapse and the security shall be returned in full.

Development Permit
No. DP 14-672669

To the Holder:	S-8135 HOLDINGS LTD.
Property Address:	9191 AND 9231 ALEXANDRA ROAD
Holder Address:	C/O MR. ROSS MOORE # 120 - 13575 COMMERCE PARKWAY RICHMOND, BC V6V 2L1

7. The land described herein shall be developed generally in accordance with the terms and conditions and provisions of this Permit and any plans and specifications attached to this Permit which shall form a part hereof.

   This Permit is not a Building Permit.

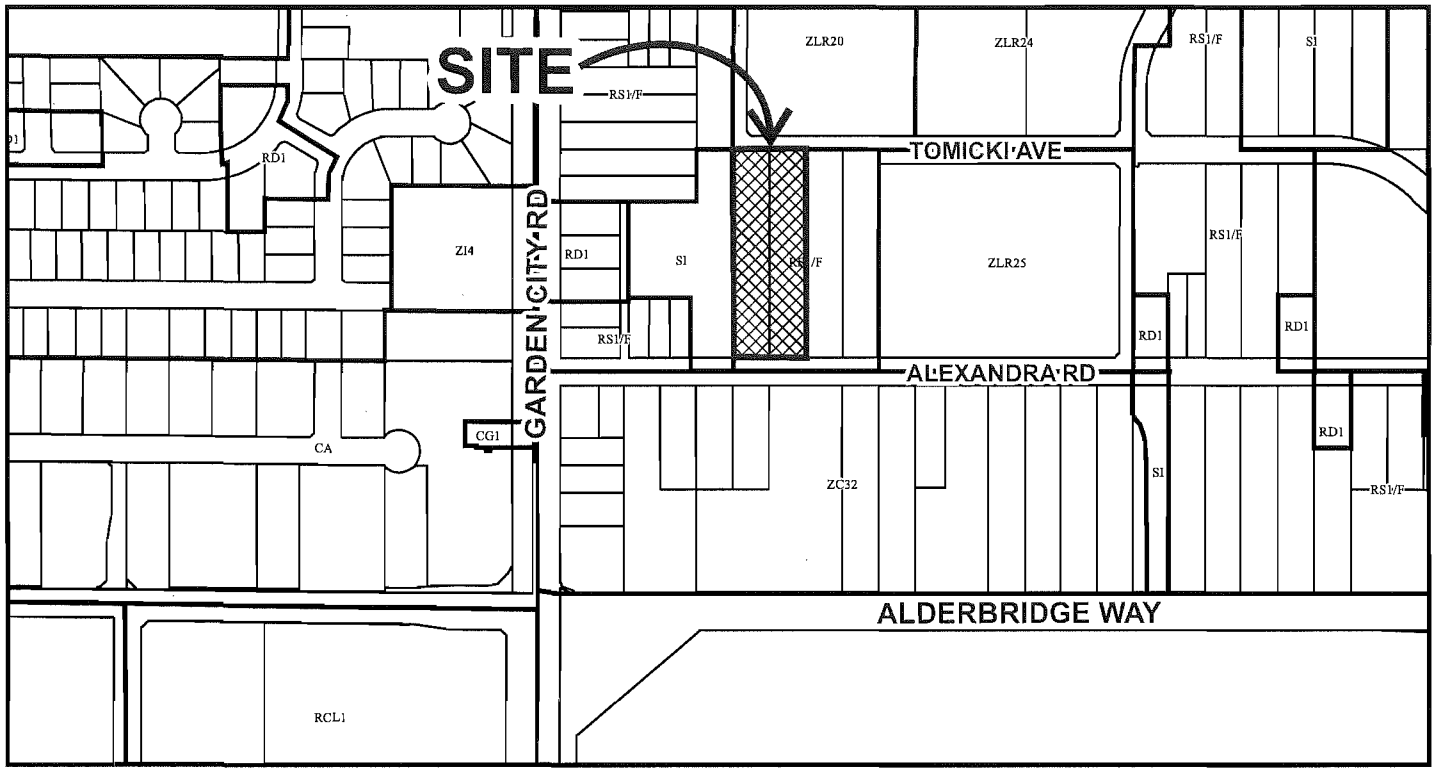
AUTHORIZING RESOLUTION NO. ISSUED BY THE COUNCIL THE DAY OF , .

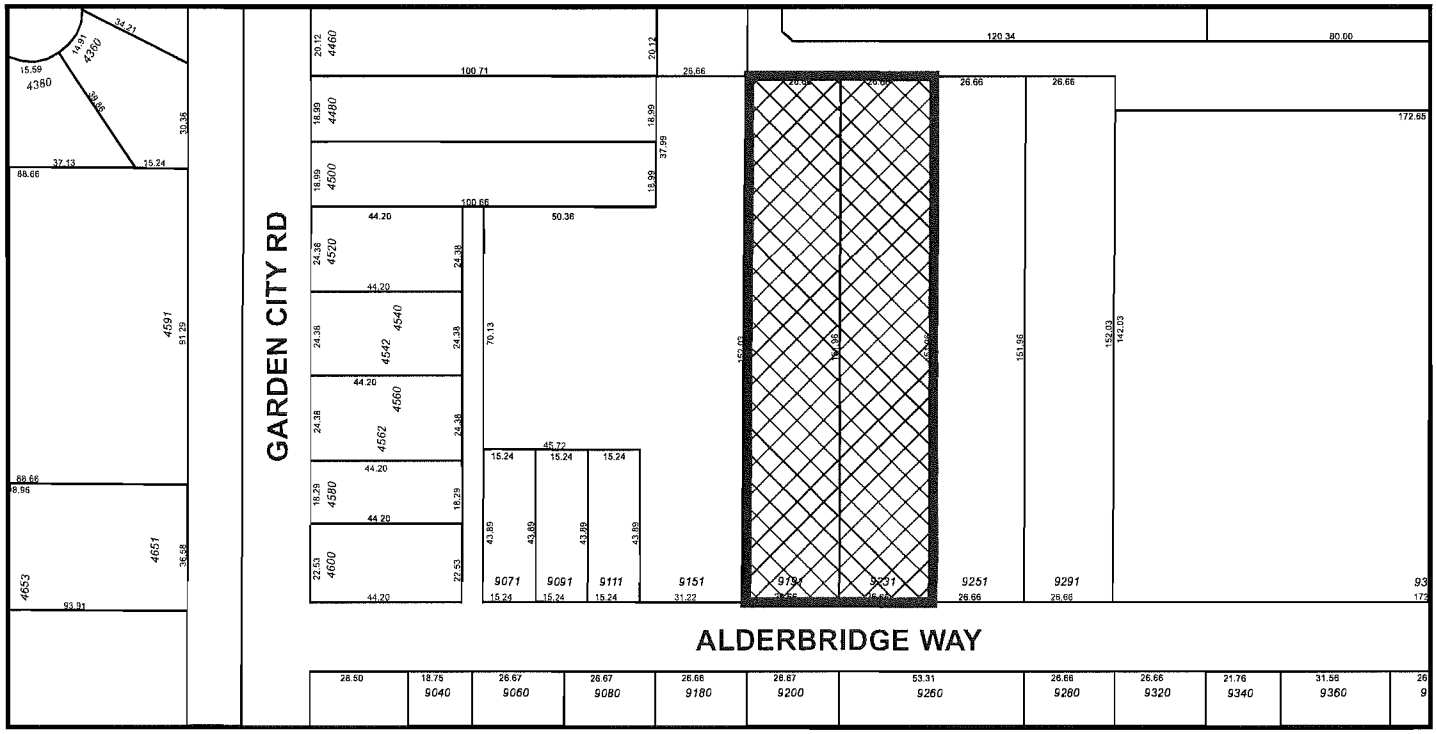
DELIVERED THIS DAY OF , .

_____

MAYOR

City of
Richmond





DP 14-672669
SCHEDULE "A"

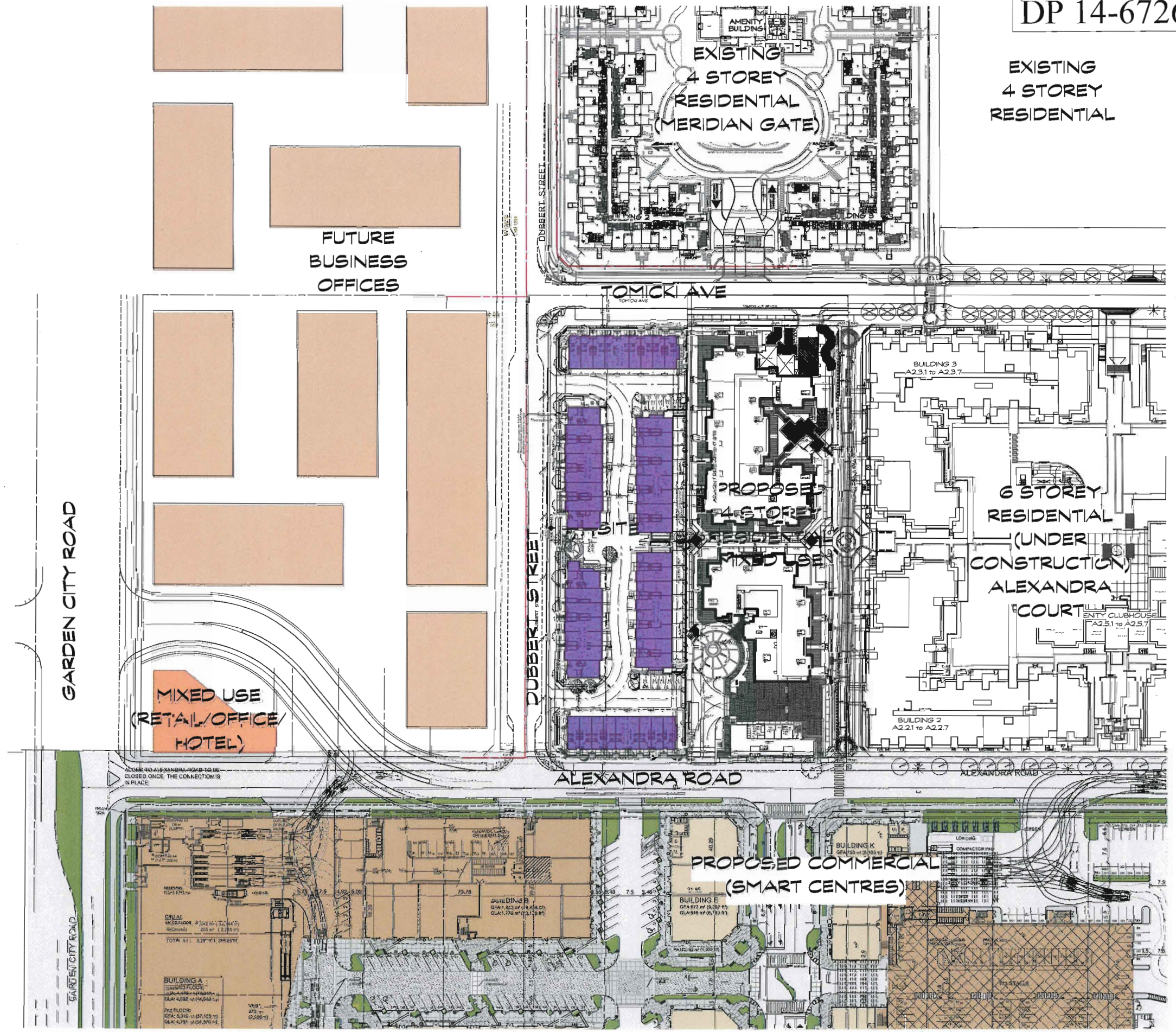
Original Date: 10/03/14

Revision Date:

Note: Dimensions are in METRES

Reference Plan Nov 03, 2014

DP 14-672669



COPYRIGHT RESERVED. THIS DRAWING MUST NOT BE SCALED. VARIATIONS AND MODIFICATIONS TO WORK SHOWN ON THESE DRAWINGS SHALL NOT BE CARRIED OUT WITHOUT WRITTEN PERMISSION FROM THE ARCHITECTS. THIS DRAWING IS THE EXCLUSIVE PROPERTY OF ROBERT CICCOZZI ARCHITECTURE INC. AND CAN BE REPRODUCED ONLY WITH THEIR WRITTEN PERMISSION.

REVISION:

NO.:	DATE:	DESCRIPTION:

ISSUE:

DATE:	DESCRIPTION:
26.03.14	ISSUED FOR REZONING
13.06.14	RE-ISSUE FOR REZONING
19.09.14	ISSUED FOR DP

SEAL:

RCA
Robert Ciccozzi Architecture Inc.
200 - 2339 Columbia Street
Vancouver, B.C.
Canada V5Y 3Y3
Tel: (604) 687-4741
Fax: (604) 687-4641
admin@ciccozziarchitecture.com

RECEIVED
NOV 03 2014

PROJECT:

OXFORD LANE
TOWNHOMES

9191 - 9231 Alexandra Rd.
Richmond BC

DRAWN:	CHECKED BY:
	KS
SCALE: 1" = 20'	PROJECT NO.: RCA301

SHEET TITLE:

Site Context

REVISION NO.:	SHEET NO.:
-	A0.2

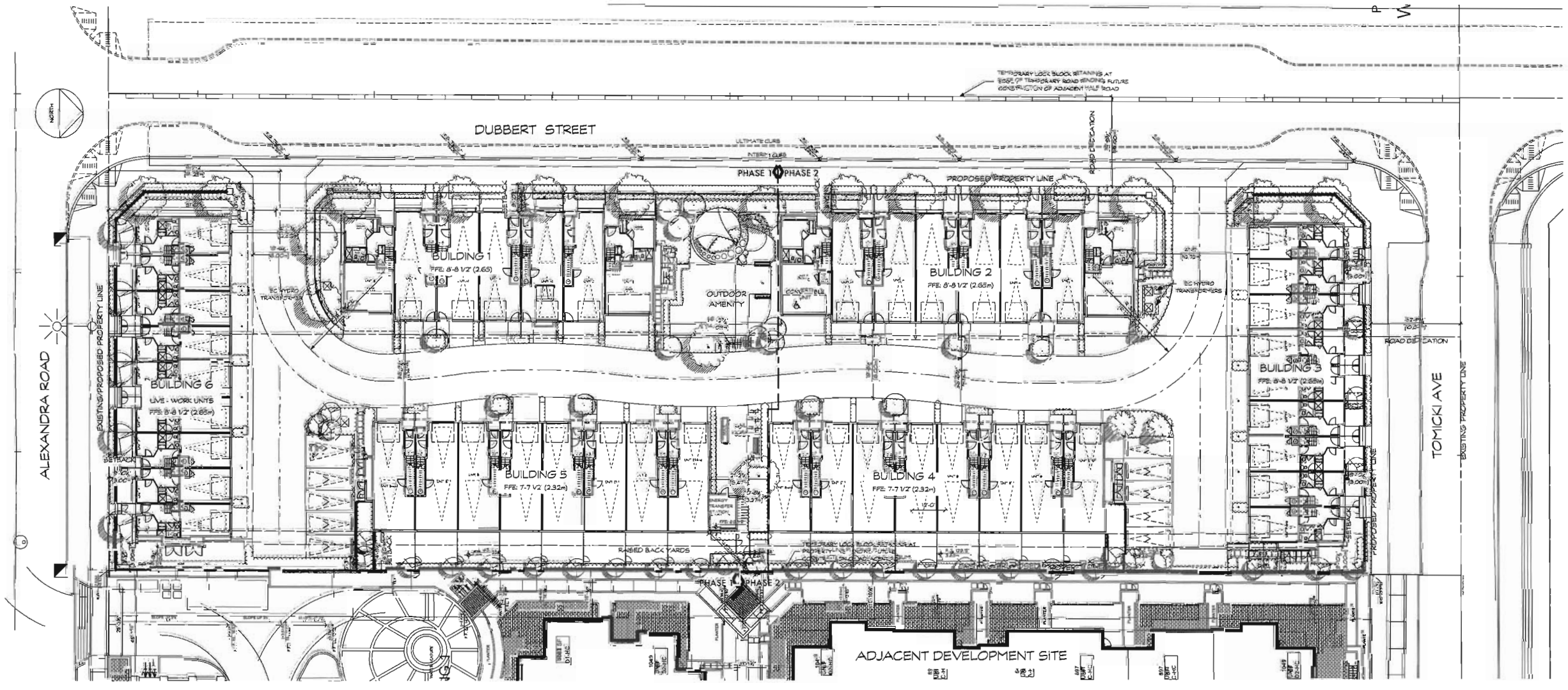
File: RCA301_Context Plan.vwx Printed: 19/09/14 at 8:18:54 PM

ALEXANDRA TOWNHOMES UNIT SUMMARY

		UNIT AREA			TOTAL AREA	
UNIT	DESCRIPTION	NET (FAR) AREA	GROSS AREA	UNIT COUNT	FAR TOTAL	GFA TOTAL
A	3 BEDROOM INTERLOCK 1	1,250.6 sq ft	1,358.2 sq ft	5	6,253.0 sq ft	6,791.0 sq ft
A1	3 BEDROOM INTERLOCK 2	1,260.6 sq ft	1,368.2 sq ft	5	6,303.0 sq ft	6,841.0 sq ft
B	3 BEDROOM INTERLOCK 1	1,241.8 sq ft	1,349.4 sq ft	6	7,450.8 sq ft	8,096.4 sq ft
B1	3 BEDROOM INTERLOCK 2	1,253.0 sq ft	1,360.6 sq ft	5	6,265.0 sq ft	6,803.0 sq ft
B-END	3 BEDROOM INTERLOCK 1 END	1,255.3 sq ft	1,363.0 sq ft	2	2,510.6 sq ft	2,726.0 sq ft
B1-END	3 BEDROOM INTERLOCK 2 END	1,266.8 sq ft	1,374.4 sq ft	3	3,800.4 sq ft	4,123.2 sq ft
D	2 BEDROOM	1,251.1 sq ft	1,358.7 sq ft	1	1,251.1 sq ft	1,358.7 sq ft
E	4 BEDROOM	1,534.0 sq ft	1,641.2 sq ft	3	4,602.0 sq ft	4,923.6 sq ft
E-C	4 BEDROOM (Convertible)	1,550.7 sq ft	1,658.8 sq ft	1	1,550.7 sq ft	1,658.8 sq ft
F	2 BEDROOM + OFFICE	1,042.9 sq ft	1,150.7 sq ft	7	7,300.3 sq ft	8,054.9 sq ft
F-END	2 BEDROOM + OFFICE END	1,057.8 sq ft	1,165.8 sq ft	2	2,115.6 sq ft	2,331.6 sq ft
F1	2 BEDROOM LIVE/WORK	1,041.6 sq ft	1,149.6 sq ft	7	7,291.2 sq ft	8,047.2 sq ft
F1-END	2 BEDROOM LIVE/WORK END	1,056.3 sq ft	1,163.7 sq ft	2	2,112.6 sq ft	2,327.4 sq ft
	TOTAL			49	58,806.3 sq ft	64,082.8 sq ft
	ELECTRICAL CLOSET	0.0 sq ft	46.5 sq ft	4	0.0 sq ft	186.0 sq ft
	ENERGY TRANSFER STATION	0.0 sq ft	131.5 sq ft	1	0.0 sq ft	131.5 sq ft
	TOTAL				58,806.3 sq ft	64,400.3 sq ft

ALEXANDRA TOWNHOMES PROJECT STATISTICS

GROSS SITE AREA		87226.9 sq ft	8103.7 m2	0.81 ha
DEDICATIONS		21193.7 sq ft	1969.0 m2	0.197 ha
NET SITE AREA		66033.2 sq ft	6134.7 m2	0.613 ha
PERMITTED FAR	0.9 FAR	59429.9 sq ft	5521.2 m2	
PROPOSED FAR	0.891 FAR	58806.3 sq ft	5463.3 m2	
COVERAGE	PERMITTED	40 - 50%		
	PROPOSED	43.469 %	28703.6 sq ft	
NET (FAR) FLOOR AREA		5466.2 m²		
GROSS FLOOR AREA		5956.0 m²		
UNIT COUNT	49	TOTAL UNITS		
OUTDOOR AREA	6 m2 /UNIT REQUIRED	64.6 sq ft/UNIT	3164.6 sq ft	
	PROVIDED		3108.5 sq ft	
RESIDENT PARKING	1.5/ UNIT	REQUIRED	73.5	
		PROPOSED	79	
SMALL CARS	MAX 50% REQD STALLS	4		
ACCESSIBLE	MIN 2% REQD STALLS	2		
VISTOR PARKING	0.2/ UNIT	REQUIRED	9.8	
		PROPOSED	10	
TANDEM PARKING	54	STALLS	68.354 %	
BIKE PARKING	1.25 STALLS/UNIT	REQUIRED	62	STALLS
		PROPOSED	64	STALLS



COPYRIGHT RESERVED. THIS DRAWING MUST NOT BE SCALED. VARIATIONS AND MODIFICATIONS TO WORK SHOWN ON THESE DRAWINGS SHALL NOT BE CARRIED OUT WITHOUT WRITTEN PERMISSION FROM THE ARCHITECTS. THIS DRAWING IS THE EXCLUSIVE PROPERTY OF ROBERT CICCOZZI ARCHITECTURE INC. AND CAN BE REPRODUCED ONLY WITH THEIR WRITTEN PERMISSION.

REVISION:

NO.:	DATE:	DESCRIPTION:

ISSUE:

DATE:	DESCRIPTION:
13.02.14	ISSUED FOR REZONING
13.06.14	RE-ISSUE FOR REZONING
27.06.14	RE-ISSUE FOR REZONING
18.09.14	ISSUED FOR DP
31.10.14	RE-ISSUED FOR DP

SEAL:

Plan 1a Nov 03, 2014

DP 14-672669

RCA
Robert Ciccozzi Architecture Inc.
200 - 2339 Columbia Street
Vancouver, B.C.
Canada V5Y 3Y3
Tel: (604) 687-4741
Fax: (604) 687-4641
admin@ciccozziarchitecture.com

RECEIVED
NOV 03 2014

PROJECT:

OXFORD LANE TOWNHOMES

9191 - 9231 Alexandra Rd.
Richmond BC

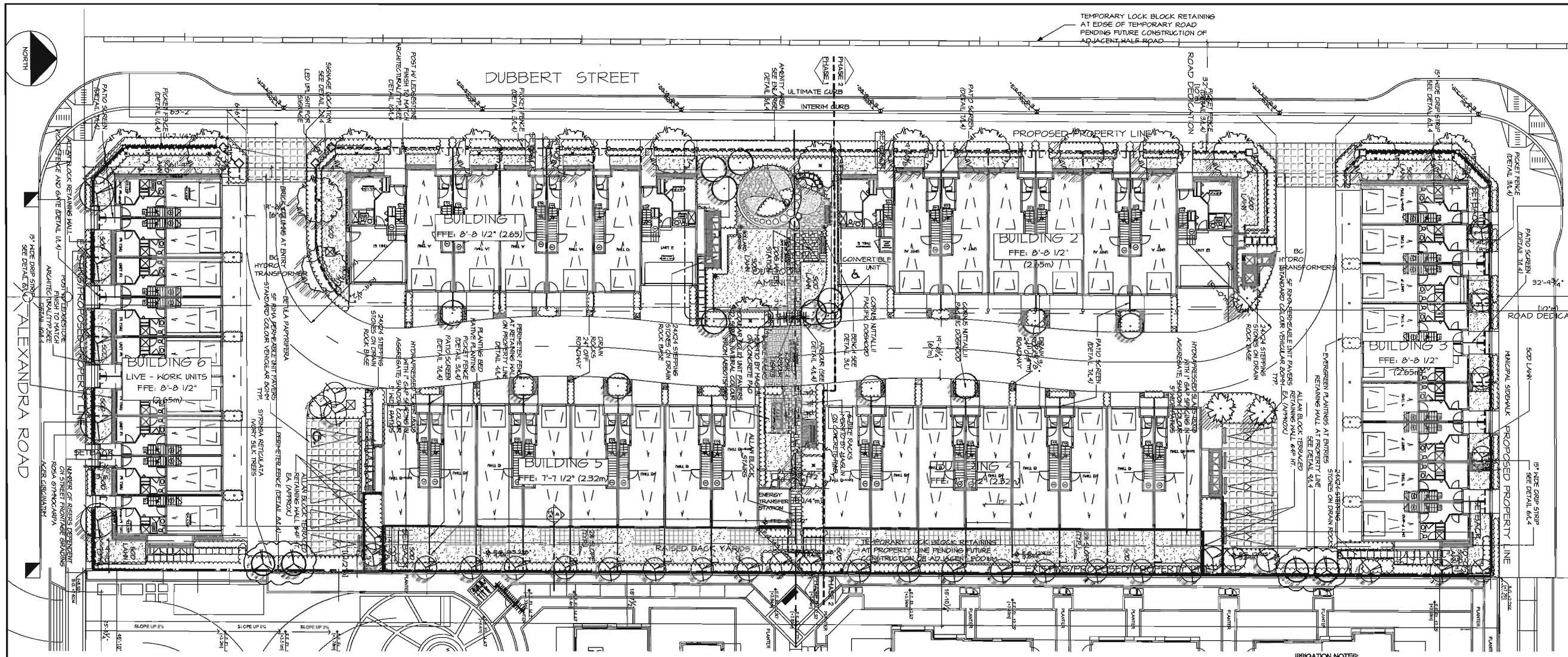
DRAWN:	CHECKED BY:
SCALE: 1" = 20'	PROJECT NO.: RCA301

SHEET TITLE:

Site Plan

REVISION NO.:	SHEET NO.:
-	A1.0

File: RCA301_A1.0DP-Site plan.vwx Printed: 10/31/14 at 8:53:34 AM



1 LANDSCAPE PLAN
SCALE: 1:200

IRRIGATION NOTES:

NOTE:
1. ALL COMMON LANDSCAPE AREAS TO BE AUTOMATICALLY IRRIGATED WITH DESIGN BUILD AUTOMATIC HIGH EFFICIENCY DRIP IRRIGATION SYSTEM.
2. ALL PRIVATE LANDSCAPE AREAS (WITHIN BARE LAND STRATA LOT BOUNDARIES) ARE TO BE MAINTAINED BY RESIDENT / PRIVATE OWNER. HOSE BIBS TO BE DESIGNED BY ARCHITECT ON SIDES OF UNITS.
3. IRRIGATION CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR REVIEW PRIOR TO INSTALLATION.

PLANT SCHEDULE

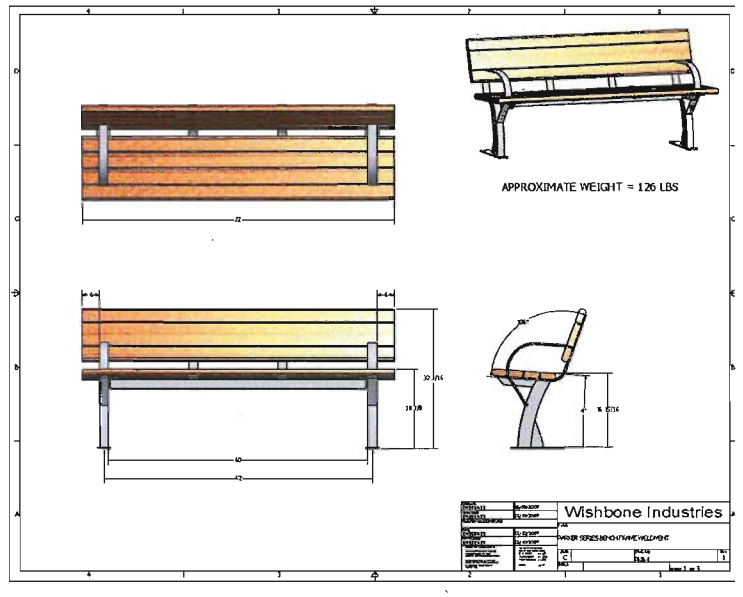
M2 JOB NUMBER: 13-070

KEY	QTY	BOTANICAL NAME	COMMON NAME	PLANTED SIZE / REMARKS
TREE				
	38	ACER CIRCINATUM	VINE MAPLE	2.5 M B&B MULTI STEM
	18	BETULA PAPYRIFERA	PAPER BIRCH	3M HT; B&B STANDARD
	14	CORNUS NUTTALLII	PACIFIC DOGWOOD	5CM CAL; 1.8M HT; 2M HT; B&B
	4	SYRINGA RETICULATA	IVORY SILK TREE	5CM CAL; 1.5M STD; B&B
	3	PICEA OMORIKA	SERBIAN SPRUCE	2.5M HT; B&B
SHRUB				
B	121	ARBUTUS UNEDO COMPACTA	COMPACT STRAWBERRY BUSH	#3 POT
C	216	CORNUS OSIER	RED OSIER DOGWOOD	#3 POT
H	204	MAHONIA AQUIFOLIUM	OREGON GRAPE HOLLY	#2 POT
I	39	PHILADELPHUS LEWISII	LEWISII MOCK ORNAGE	#2 POT
R	49	RHODODENDRON MINUS	RHODODENDRON PIEDMONT	#5 POT
K	70	ROSA SYMNOCARPA	BALDHIP ROSE	#2 POT
V	98	VACCINIUM DARROWII	DARROWS EVERGREEN BLUEBERRY	#3 POT
PERENNIAL				
RU 6C	70	RUDBECKIA FULGIDA LITTLE GOLDSTAR	DWARF BLACK EYED SUSAN	#1 POT
A	138	ARCTOSTAPHYLOS UVA-URSI 'VANCOUVER JADE'	KINNIKINNICK	#1 POT
L	28	EMPETRUM NIGRUM	BALCK CRONBERRY	#1 POT
GK	36	GAULTHERIA PROCUMBENS	WINTERGREEN	#1 POT;
S	544	GAULTHERIA SHALLON	SALAL	#1 POT; 20CM
P	116	POLYSTICHUM MUNITUM	WESTERN SWORD FERN	#1 POT;

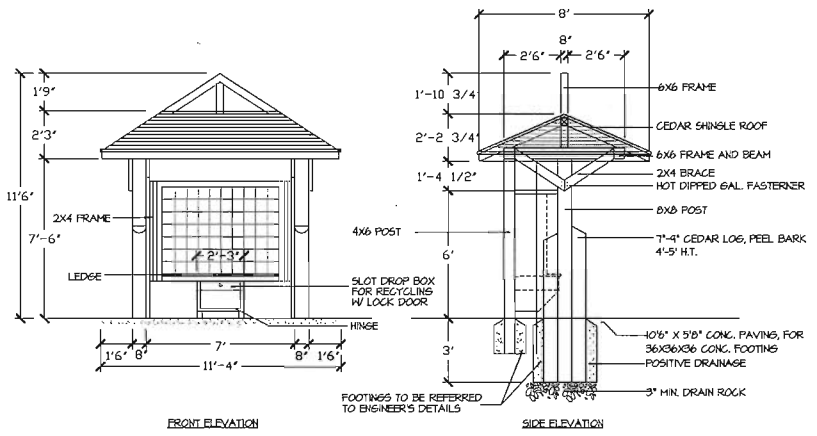
NOTES: * PLANT SIZES IN THIS LIST ARE SPECIFIED ACCORDING TO THE BC LANDSCAPE STANDARD, LATEST EDITION. CONTAINER SIZES SPECIFIED AS PER CNTA STANDARDS. BOTH PLANT SIZE AND CONTAINER SIZE ARE THE MINIMUM ACCEPTABLE SIZES. * REFER TO SPECIFICATIONS FOR DEFINED CONTAINER MEASUREMENTS AND OTHER PLANT MATERIAL REQUIREMENTS. * SEARCH AND REVIEW: MAKE PLANT MATERIAL AVAILABLE FOR OPTIONAL REVIEW BY LANDSCAPE ARCHITECT AT SOURCE OF SUPPLY. AREA OF SEARCH TO INCLUDE LOWER MAINLAND AND FRASER VALLEY. * SUBSTITUTIONS: OBTAIN WRITTEN APPROVAL FROM THE LANDSCAPE ARCHITECT PRIOR TO MAKING ANY SUBSTITUTIONS. TO THE SPECIFIED MATERIAL. UNAPPROVED SUBSTITUTIONS WILL BE REJECTED. ALLOW A MINIMUM OF FIVE DAYS PRIOR TO DELIVERY FOR REQUEST TO SUBSTITUTE. SUBSTITUTIONS ARE SUBJECT TO BC LANDSCAPE STANDARD - DEFINITION OF CONDITIONS OF AVAILABILITY.

ALL PLANT MATERIAL MUST BE PROVIDED FROM CERTIFIED DISEASE FREE NURSERY. PROVIDE CERTIFICATION UPON REQUEST.

2 PLANT LIST
SCALE: NTS



3 BENCH BY WISHBONE INDUSTRIES
SCALE: NTS



4 MAIL KIOSK DETAIL
SCALE: 1/4" = 1'-0"

13070-11-DP.zip

©Copyright reserved. This drawing and design is the property of M2 Landscape Architects and may not be reproduced or used for other projects without their permission.

M2
LANDSCAPE ARCHITECTURE
#220 - 26 Lorne Mews
New Westminster, British Columbia
V3M 3L7
Tel: 604.553.0044
Fax: 604.553.0045
Email: office@m2la.com

Plan 2a Nov 07, 2014
DP 14-672669

NO.	DATE	REVISION DESCRIPTION	DR.
11	14.DEC.15	REVISED DP	NHB
10	14.SEPT.19	REVISED DP	NHB
9	14.SEPT.10	ISSUED FOR DP	NHB
8	14.AUG.22	REV. PER CLIENT COMMENTS	NHB
7	14.AUG.8	PLANTS CHANGED TO NATIVE SPECIES	TK
6	14.JUL.31	REV PER ENERGY TRANSFER STATION	NHB
5	14.JUN.12	REV PER NEW SITE PLAN	NHB
4	14.MAY.28	REV PER AMENITY COMMENTS	NHB
3	14.MAY.07	REV. PER NEW SITE PLAN	NHB
2	14.MAR.6	ISSUE FOR REZONING	NHB
1	14.JAN.25	REV. PER CLIENT COMMENTS	MTLM

SEAL:

RECEIVED
NOV 0 6 2014

PROJECT:

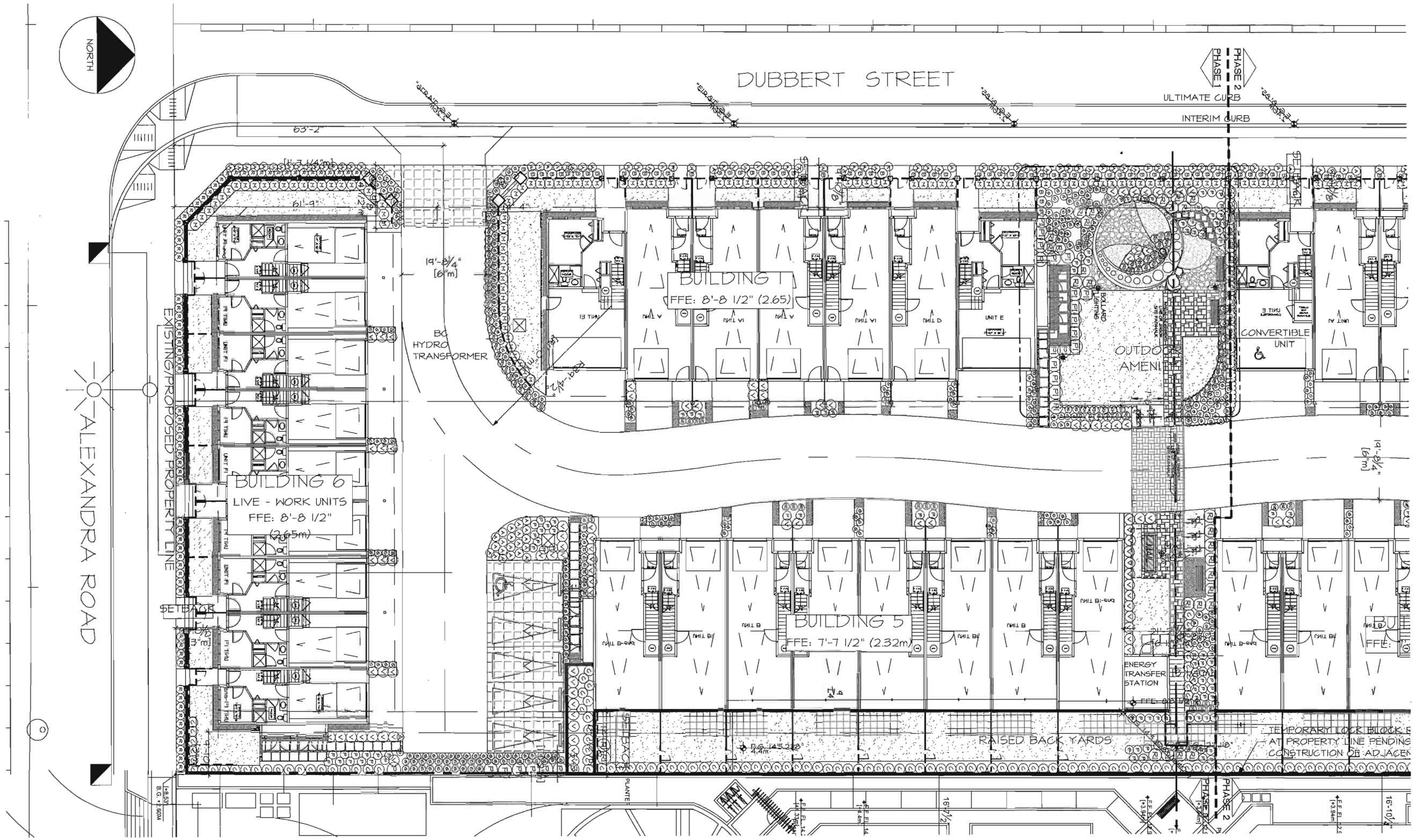
MULTIFAMILY RESIDENTIAL
OXFORD LANE
RICHMOND, B.C.

DRAWING TITLE:

LANDSCAPE PLAN

DATE: 13.DEC.11	DRAWING NUMBER:
SCALE: 1:200	L1
DRAWN: MTLM	
DESIGN: MTLM	OF 5
CHK'D:	
M2LA PROJECT NUMBER:	13-070

©Copyright reserved. This drawing and design is the property of M2 Landscape Architects and may not be reproduced or used for other projects without their permission.



1 SHRUB PLAN
SCALE: 3/32" = 1'-0"

13070-11-DP.zip

M2 LANDSCAPE ARCHITECTURE
#220 - 26 Lorne Mews
New Westminster, British Columbia
V3M 3L7
Tel: 604.553.0044
Fax: 604.553.0045
Email: office@m2la.com

Plan 2b Nov 07, 2014
DP 14-672669

NO.	DATE	REVISION DESCRIPTION	DR.
11	M.OCT.31	REVISED DP	NMB
10	M.SEPT.19	REVISED DP	NMB
9	M.SEPT.10	ISSUED FOR DP	NMB
8	M.AUG.22	REV. PER CLIENT COMMENTS	NMB
7	M.AUG.8	PLANTS CHANGED TO NATIVE SPECIES	TK
6	M.JUL.31	REV PER ENERGY TRANSFER STATION	NMB
5	M.JUN.12	REV PER NEW SITE PLAN	NMB
4	M.MAY.08	REV PER AMENITY COMMENTS	NMB
3	M.MAY.01	REV. PER NEW SITE PLAN	NMB
2	M.MAR.6	ISSUE FOR REZONING	NMB
1	M.JAN.22	REV. PER CLIENT COMMENTS	MTLM

SEAL:

RECEIVED
NOV 0 6 2014

PROJECT:

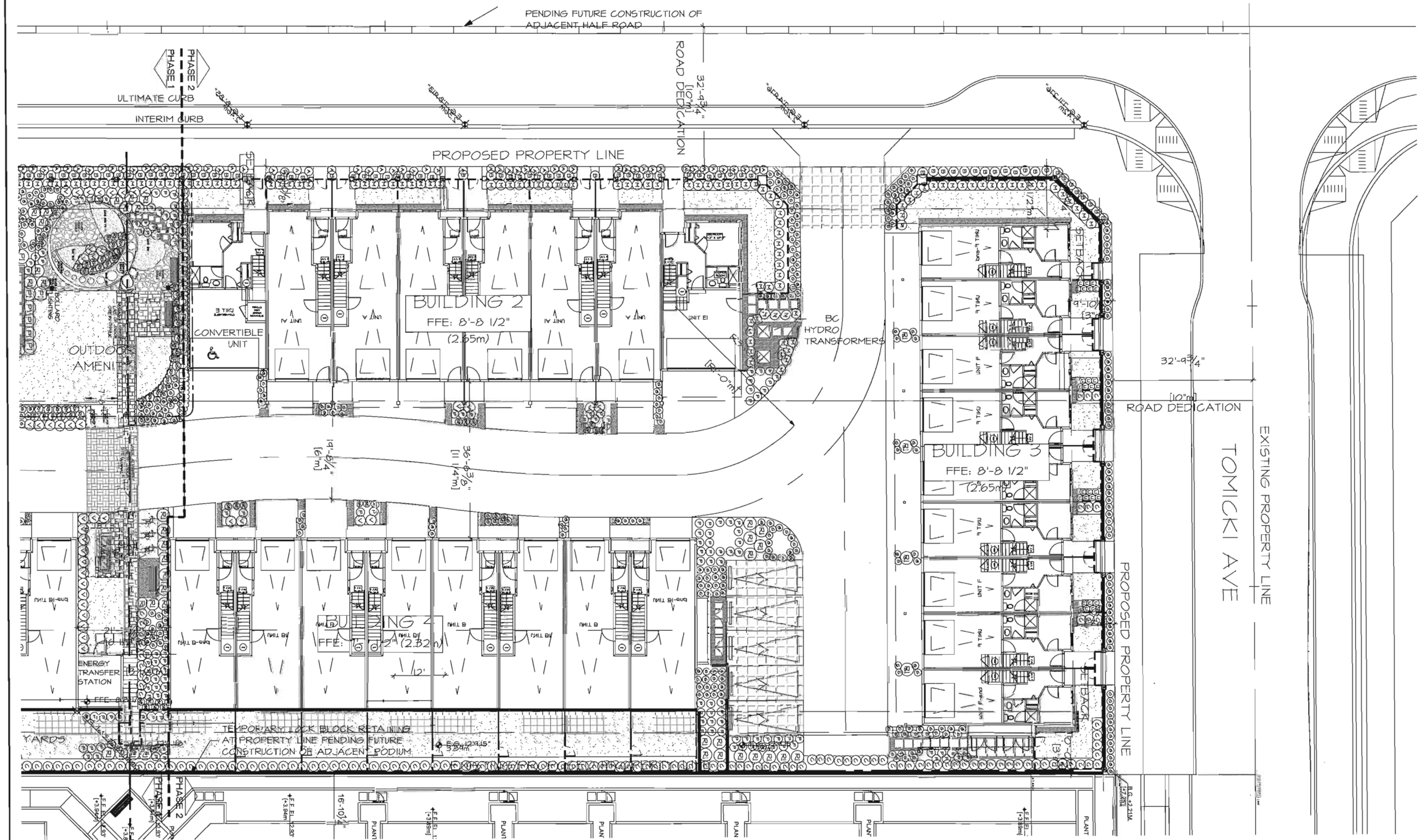
MULTIFAMILY RESIDENTIAL
OXFORD LANE
RICHMOND, B.C.

DRAWING TITLE:

SHRUB PLAN 1

DATE:	13.DEC.17
SCALE:	3/32" = 1'-0"
DRAWN:	MTLM
DESIGN:	MTLM
CHK'D:	
M2LA PROJECT NUMBER:	13-070

DRAWING NUMBER: L2 OF 5



1 SHRUB PLAN
SCALE: 3/32" = 1'-0"

13070-11-DP.zip

©Copyright reserved. This drawing and design is the property of M2 Landscape Architects and may not be reproduced or used for other projects without their permission.

M2
LANDSCAPE ARCHITECTURE
#220 - 26 Lorne Mews
New Westminster, British Columbia
V3M 3L7
Tel: 604.553.0044
Fax: 604.553.0045
Email: office@m2la.com

Plan 2c Nov 07, 2014
DP 14-672669

NO.	DATE	REVISION DESCRIPTION	DR.
11	14.OCT.31	REVISED DP	MHB
10	14.SEP.19	REVISED DP	MHB
9	14.SEP.10	ISSUED FOR DP	MHB
8	14.AUG.22	REV. PER CLIENT COMMENTS	MHB
7	14.AUG.8	PLANTS CHANGED TO NATIVE SPECIES	TK
6	14.JUL.31	REV PER ENERGY TRANSFER STATION	MHB
5	14.JUL.2	REV PER NEW SITE PLAN	MHB
4	14.MAY.26	REV PER AMENITY COMMENTS	MHB
3	14.MAY.07	REV. PER NEW SITE PLAN	MHB
2	14.MAR.6	ISSUED FOR REZONING	MHB
1	14.JAN.23	REV. PER CLIENT COMMENTS	MTLH

SEAL:

RECEIVED
NOV 0 6 2014

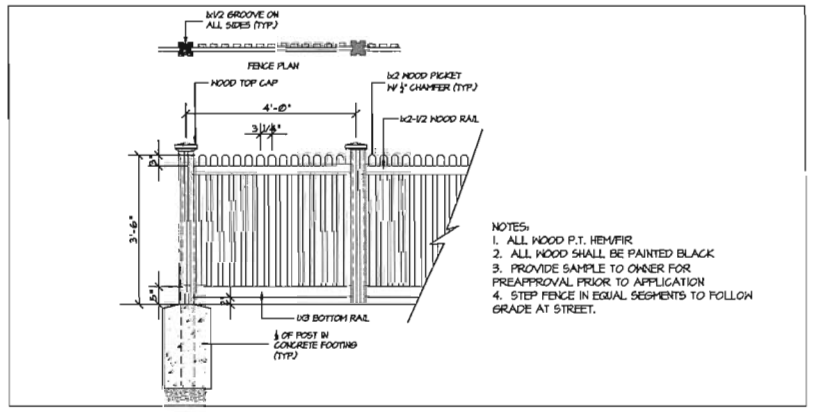
PROJECT:

MULTIFAMILY RESIDENTIAL
OXFORD LANE
RICHMOND, B.C.

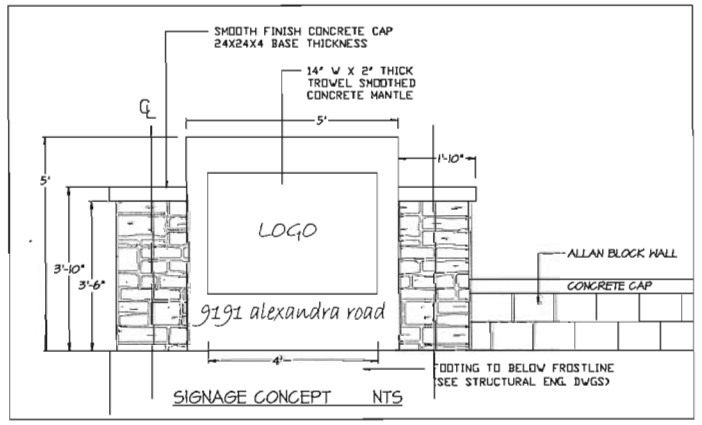
DRAWING TITLE:

SHRUB PLAN 2

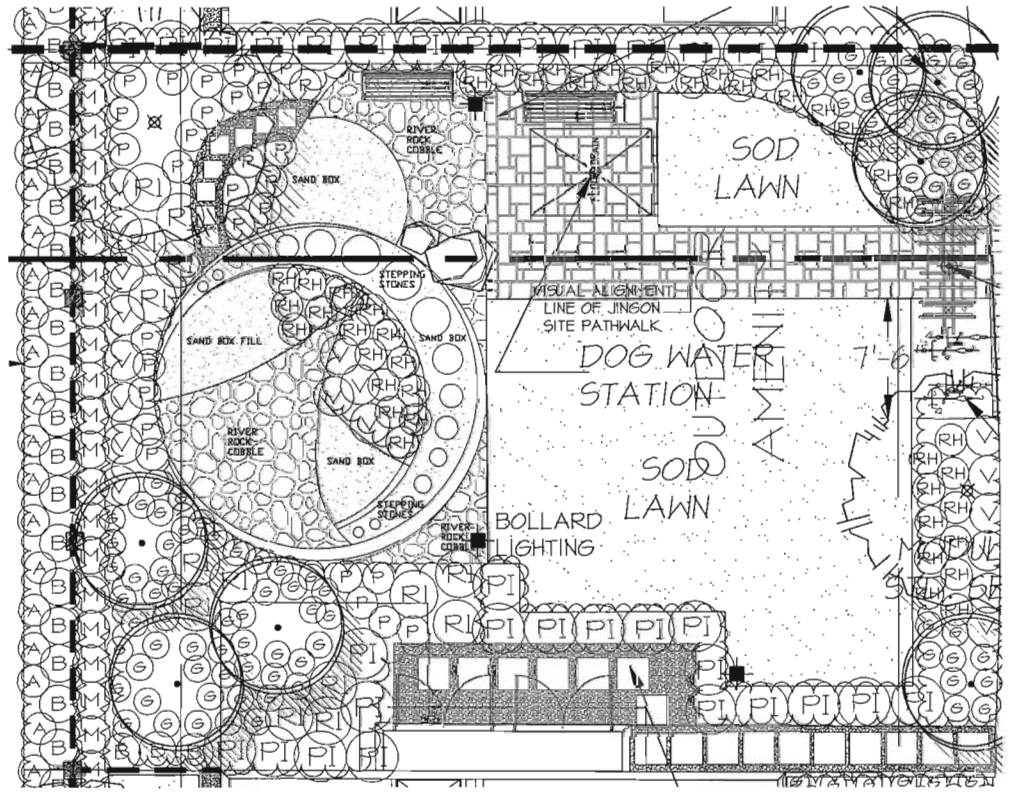
DATE: 13.DEC.17	DRAWING NUMBER: L3
SCALE: 3/32" = 1'-0"	
DRAWN: MTLH	
DESIGN: MTLH	
CHK'D:	OF 5
M2LA PROJECT NUMBER: 13-070	



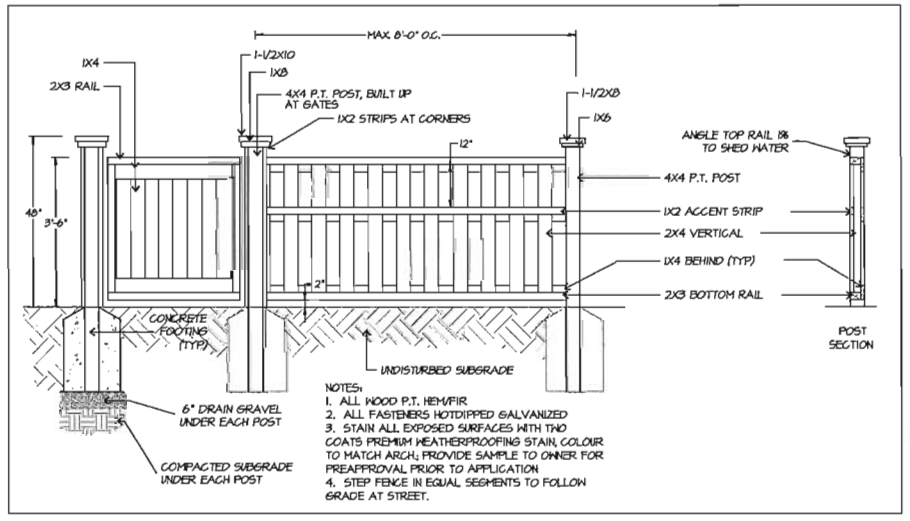
1 3.5FT HT PICKET FENCE — ALONG BUILDING 6; DUBBERT AND ALEXANDRA STREET FRONTAGE ONLY
SCALE: 1/2" = 1'-0"



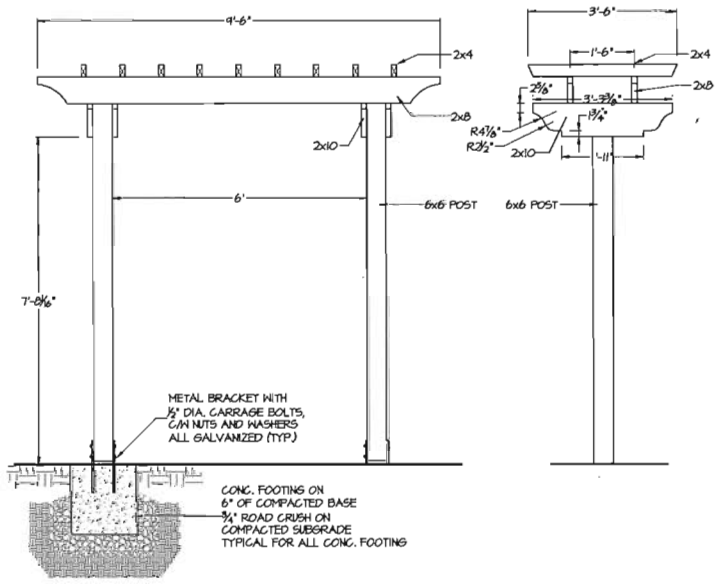
2 SIGNAGE CONCEPT
SCALE: 1/2" = 1'-0"



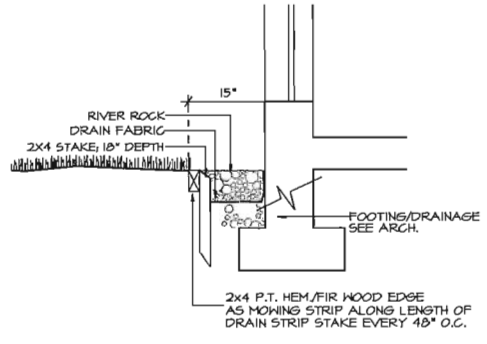
5 ENLARGED PLAN @AMENITY
SCALE: 3/16" = 1'-0"



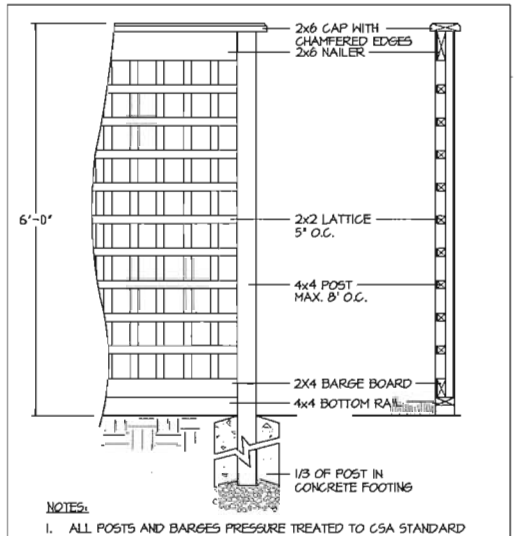
3 3.5FT HT PICKET FENCE — ALONG BUILDING 1, 2, & 3; BACK OF BLDGS 4 AND 5
SCALE: 1/2" = 1'-0"



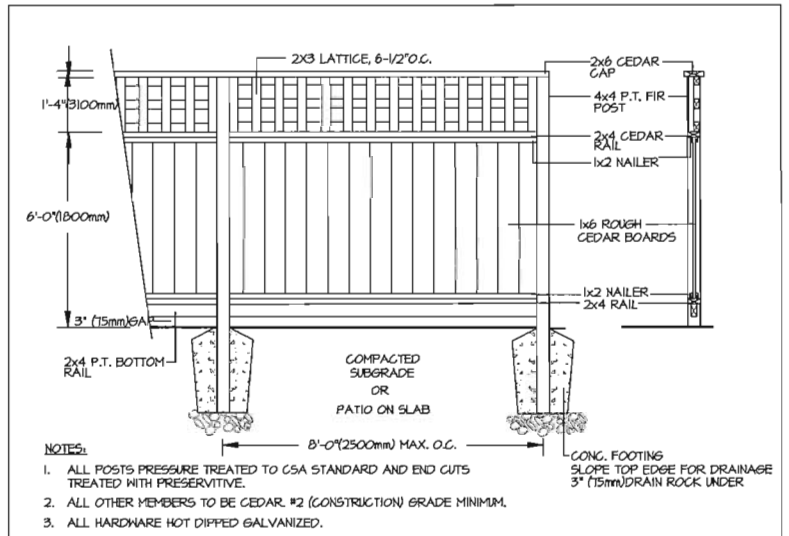
4 ARBOUR DETAIL
SCALE: 1/2" = 1'-0"



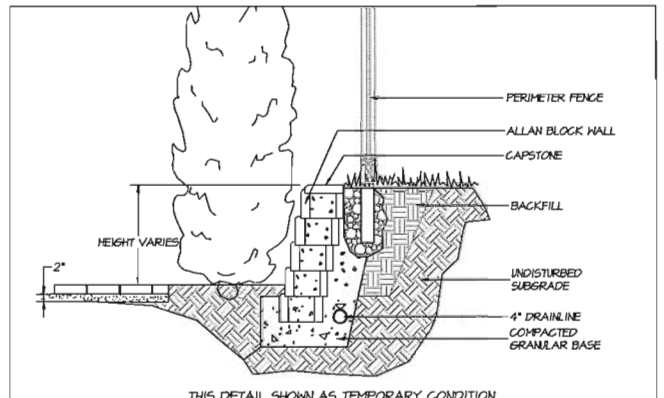
6 DRIP STRIP DETAIL (TYP.)
SCALE: 1:16



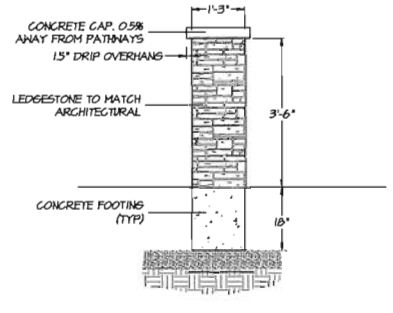
7 6FT HT PATIO SCREEN
SCALE: 1:16



8 6FT HT SOLID FENCE W/ LATTICE
SCALE: PERIMETER FENCE; NEIGHBOURING PROPERTY 1/2" = 1'-0"



9 ALLAN BLOCK WALL AT PROPERTY LINE
SCALE: 1/2" = 1'-0"



10 MASONRY POST DETAIL (TYP.)
SCALE: 1/2" = 1'-0"

13070-11-DP.zip

©Copyright reserved. This drawing and design is the property of M2 Landscape Architects and may not be reproduced or used for other projects without their permission.

M2
LANDSCAPE ARCHITECTURE
#220 - 26 Lorne Mews
New Westminster, British Columbia
V3M 3L7
Tel: 604.553.0044
Fax: 604.553.0045
Email: office@m2la.com

Plan 2d Nov 07, 2014
DP 14-672669

NO.	DATE	REVISION DESCRIPTION	DR.
11	14.OCT.31	REVISED DP	MMB
10	14.SEPT.19	REVISED DP	MMB
9	14.SEPT.10	ISSUED FOR DP	MMB
8	14.AUG.22	REV. PER CLIENT COMMENTS	MMB
7	14.AUG.8	PLANTS CHANGED TO NATIVE SPECIES	TK
6	14.JUL.31	REV PER ENERGY TRANSFER STATION	MMB
5	14.JUN.12	REV PER NEW SITE PLAN	MMB
4	14.MAY.08	REV PER AMENITY COMMENTS	MMB
3	14.MAY.07	REV. PER NEW SITE PLAN	MMB
2	14.MAR.6	ISSUED FOR REZONING	MMB
1	14.JAN.25	REV. PER CLIENT COMMENTS	MTLM

SEAL:

RECEIVED
NOV 06 2014

PROJECT:

MULTIFAMILY RESIDENTIAL
OXFORD LANE
RICHMOND, B.C.

DRAWING TITLE:

LANDSCAPE DETAILS

DATE: 13.DEC.17	DRAWING NUMBER:
SCALE: VARIED	L4
DRAWN: MTLM	
DESIGN: MTLM	
CHK'D:	OF 5
M2LA PROJECT NUMBER:	13-070

PART ONE GENERAL REQUIREMENTS

1.1 REFERENCES

.1 CCDC Doc 2 LATEST EDITION
Comply with all articles in the General Conditions of Contract in conjunction with this section unless superseded by other Contract Documents.

.2 B.C. Landscape Standard, LATEST EDITION, prepared by the B.C. Society of Landscape Architects and the B.C. Landscape & Nursery Association, jointly. All work and materials shall meet standards as set out in the B.C. Landscape Standard unless superseded by this specification or as directed by Landscape Architect with written instruction.

.3 MASTER MUNICIPAL SPECIFICATIONS & STANDARD DETAILS, LATEST EDITION, prepared by the Consulting Engineers of British Columbia, Roadbuilders and Heavy Construction Association, and the Municipal Engineers Division

.4 STANDARD FOR LANDSCAPE IRRIGATION SYSTEM, LATEST EDITION Prepared by the Irrigation Industry Association of British Columbia

.5 MUNICIPAL BYLAWS AND ENGINEERING SPECIFICATIONS WHERE NOTED.

1.2 TESTING

.1 A current (not more than one month) test for all growing medium to be used on this site is required. Provide and pay for testing by an independent testing facility pre-approved by the Landscape Architect. Deliver growing medium test results to Landscape Architect for review and approval prior to placement. Refer to Section 3.4 Growing Medium Testing for procedure.

.2 Owner reserves the right to test or re-test materials. Contractor responsible to pay for testing if materials do not meet specification.

1.3 SUBMITTALS

.1 Any alternate products differing from that contained in the contract documents must be pre-approved by the Landscape Architect.

.2 Submittals to consist of product sample or manufacturer's product description.

1.4 SITE REVIEW

.1 Under the terms of the Landscape Architect's Contract with the Owner and where the Landscape Architect is the designated reviewer, the Landscape Architect will observe construction as is necessary in their opinion to confirm conformance to the plans and specifications. Contact Owners Representative to arrange for site observation at the appropriate times. Allow two days notice. Observation schedule may include but will not be limited to the following.

.11 Start Up Site Meeting, General Contract: Prior to any site disturbance, a meeting with the general contractor to review tree preservation issues, general landscape issues and municipal requirements.

.12 Start Up Site Meeting, Landscape Contract (if separate): At the start of work with Owner's Representative, Site Superintendent and Landscape Contractor, a meeting is to be held to review expected work and to verify the acceptability of the subgrade and general site conditions by the Landscape Contractor. Provide growing medium test results for this meeting.

.13 Progress Site Visits: To observe materials and workmanship as necessary through the course of the work. Review of: Different aspects of the work may be dealt with on any single visit. Such elements may include: Site Layout, Rough Grading, Growing Medium - quality, depths, finish grading; Drainage and Drainage Materials; Lawns or Grass areas; Planting - plant material including negotiations with suppliers, nursery inspections, plant sizes, quality, quantity, planting practice and layout, tree support; Mulch; Irrigation Systems; Play Equipment; Site Furnishings, and other elements of the site development where the Landscape Architect is the designated reviewer such as: Pedestrian Paving, Fencing, Non-structural walls and slabs, Unit Paving.

.14 Substantial Performance: Review of all work, accounting of all subdivisions, deletions; plant counts, preparations of deficiency list, and recommendations for completion.

.15 Certificate of Completion: Upon the declaration of Substantial Performance, a recommendation for the issuance of the Certificate of Completion will be made to the Payment Certifier as defined in the contract.

.16 Deficiency Review Prior to the completion of the holdback period, check for completion of deficiencies. Once completed, a Schedule "C" will be issued where required.

.17 Warranty Review Prior to the completion of the warranty period (+/- 11 months after issuance of the Certificate of Completion), review all warranty material and report recommendations for warranty replacement.

1.5 WORKMANSHIP

.1 Unless otherwise instructed in the Contract Documents, the preparation of the subgrade shall be the responsibility of the General Contractor. Placement of growing medium constitutes acceptance of the subgrade by the Landscape Contractor. Any subsequent corrections to the subgrade required are the responsibility of the Landscape Contractor.

.2 All work and supervision done shall be performed by personnel skilled in landscape contracting. In addition, all personnel applying herbicides and/or pesticides shall hold a current license issued by the appropriate authorities.

.3 A site visit is required to become familiar with site conditions before bidding and before start of work.

.4 Confirm location of all services before proceeding with any work.

.5 Notify Landscape Architect of any discrepancies. Obtain approval from Landscape Architect prior to deviating from the plans.

.6 Take appropriate measures to avoid environmental damage. Do not dump any waste materials into water bodies. Conform with all federal, provincial and local statutes and guidelines.

.7 Collect and dispose of all debris and/or excess material from landscape operations. Keep paved surfaces clean and repair damage resulting from landscape work. Repairs are to be completed prior to final acceptance.

.8 Where new work connects with existing, and where existing work is altered, make good to match existing undisturbed condition.

1.6 WARRANTIES

.1 Guarantee all materials and workmanship for a minimum period of one full year from the date of Certificate of Completion.

.2 Refer to individual sections for specific warranties.

PART TWO SCOPE OF WORK

2.1 SCOPE OF WORK

.1 Other conditions of Contract may apply. Confirm Scope of Work at time of tender.

.2 Work includes supply of all related items and performing all operations necessary to complete the work in accordance with the drawings and specifications and generally consists of the following

.21 Retention of Existing Trees where shown on drawings.
.22 Finish Grading and Landscape Drainage.
.23 Supply and placement of growing medium.
.24 Testing of imported growing medium and/or site topsoil.
.25 Supply and incorporation of additives to meet requirements of soil test and Table One.
.26 Preparation of planting beds, supply of plant material and planting.
.27 Preparation of rough grass areas, WILDFLOWER SEED AREAS, supply of materials and seeding.
.28 Preparation of lawn areas, supply of materials and sodding.
.29 Supply and placement of bark mulch.
.210 Maintenance of planted and seeded/sodded areas until accepted by Owner.
.211 SEPARATE PRICE: Establishment Maintenance, Section 3.11.
.212 Other work: Work other than this list, not specified by Landscape Architect.

2.2 MATERIALS

.1 Growing Medium: Conform to BC Landscape Standard for definitions of imported and on-site topsoil. Refer to Table One below.

TABLE ONE: PROPERTIES OF GROWING MEDIUM FOR LEVEL 2 GROOMED AND LEVEL 3 MODERATE AREAS
Canadian System of Soil Classification Textural Class: "Loamy Sand" to "Sandy Loam".

Applications	Low Traffic Areas. Trees and Large Shrubs	High Traffic Lawn Areas	Planting Areas and Planters
Growing Medium Types:	ZL	ZH	ZP
Texture	Percent Of Dry Weight of Total Growing Medium		
Coarse Gravel: larger than 25mm	0 - 1%	0 - 1%	0 - 1%
Add Gravel: larger than 2mm	0 - 5%	0 - 5%	0 - 5%
	Percent Of Dry Weight of Growing Medium Excluding Gravel		
Sand: larger than 0.05mm smaller than 2.0mm	50 - 80%	70 - 90%	60 - 80%
Silt: larger than 0.002mm smaller than 0.05mm	10 - 25%	4 - 15%	10 - 25%
Clay: smaller than 0.002mm	0 - 25%	4 - 15%	8 - 25%
Clay and Silt Combined	maximum 35%	maximum 15%	maximum 35%
Organic Content (coast)	3 - 10%	3 - 5%	10 - 20%
Organic Content (interior)	3 - 5%	3 - 5%	15 - 20%
Acidity (pH)	6.0 - 7.0	6.0 - 7.0	6.5 - 6.5
Drainage	Percolation shall be such that no standing water is visible 60 minutes after at least 10 minutes of moderate to heavy rain or irrigation.		

.2 Fertilizer: An organic and/or inorganic compound containing Nitrogen (N), Phosphate (25), and Potash (sulfate 2) in proportions required by soil test.

.3 Lime: Ground agricultural limestone. Meet requirements of the B.C. Landscape Standard.

.4 Organic Additive: Commercial compost product to the requirements of the B.C. Landscape Standard, LATEST EDITION and pre-approved by the Landscape Architect. Recommended suppliers: Kanhewicks, The Amsterdam Garden Products, Fraser Richmond Soils & Fibre, Sitrem Organics Management.

.5 Sand: Clean, washed pump sand to meet requirements of the B.C. Landscape Standard.

.6 Composted Bark Mulch: Mesa (3/4") minus Fir/Hemlock bark chips and fines, free of chunks and sticks, dark brown in colour and free of all soil, stones, roots or other extraneous matter. Fresh orange in colour bark will be rejected.

.7 Herbicides and Pesticides: If used, must conform to all Federal, provincial and local statutes. Appliers must hold current licenses issued by the appropriate authorities in the area.

.8 Filter Fabric: A non biodegradable blanket or other filtering membrane that will allow the passage of water but not fine soil particles. (Such as MIRAFI 140 NL, GEOLON 6A6 OR AMOCO 4545 or alternate product pre-approved by Landscape Architect).

.9 Drainage Piping if required: Schedule 40 PVC nominal sizes.

.10 Drain Rock: Clean, round, inert, durable, and have a maximum size of 19mm and containing no material smaller than 12mm.

.11 Plant Material: To the requirements of the B.C. Landscape Standard. Refer to 3.9, Plants and Planting. All plant material must be provided from a certified disease free nursery. Provide proof of certification.

.12 Sod: Refer to individual sections in this specification.

.13 Supplier and Installers of segmental block walls to provide engineered drawings for all walls signed and sealed drawings for all walls, individually, in excess of 1.2m, or combinations of walls collectively in excess of 1.2m. Installations must be reviewed and signed off by Certified Professional Engineer; include cost of engineering services in Tender price.

.14 Miscellaneous: Any other material necessary to complete the project as shown on the drawings and described herein.

PART THREE SOFT LANDSCAPE DEVELOPMENT

3.1 RETENTION OF EXISTING TREES

.1 Prior to any work on site - protect individual trees or plant groupings indicated as retained on landscape plans as vegetation retention areas.

.11 In some instances the Landscape Architect will tag trees or areas to remain. (Eucana tree retention areas at a start-up meeting with the Landscape Architect.

.2 A physical barrier must be installed to delineate clearing boundaries. Refer to physical barrier detail. If detail not provided, comply with local municipal requirements.

.3 No machine travel through or within vegetation retention areas or under crowns of trees to be retained is allowed.

.4 Do not stockpile soil, construction materials, or excavated materials within vegetation retention areas.

.5 Do not park, fuel or service vehicles within vegetation retention areas.

.6 No debris fires, clearing fires or trash burning shall be permitted within vegetation retention areas.

.7 No excavations, drain or service trenches nor any other disruption shall be permitted within vegetation retention areas without a review of the proposed encroachment by the Landscape Architect.

.8 Do not cut branches or roots of retained trees without the approval of the Landscape Architect.

.9 Any damage to existing vegetation intended for preservation will be subject to evaluation by an I.S.A. Certified Arborist using the "Guide for Plant Appraisal", LATEST EDITION

.91 Replacement planting of equivalent value to the disturbance will be required. The cost of the evaluation and of the replacement planting will be the responsibility of the General Contractor and or the person(s) responsible for the disturbance.

.10 In municipalities with specific tree retention/replacement bylaws ensure compliance to bylaws.

.11 In situations where required construction may disturb existing vegetation intended for preservation, contact Landscape Architect for review prior to commencing construction.

3.2 GRADES

.1 Ensure subgrade is prepared to conform to depths specified in Section 3.5, Growing Medium Supply, below. Where planting is indicated close to existing trees, prepare suitable planting pockets for material indicated on the planting plan. Slope subgrade to eliminate free standing water and conform to the site grading and drainage plan.

.2 On slopes in excess of 3:1 finish subgrade across slope to 150mm (6") minimum at 15m (5 ft.) intervals minimum.

.3 Scarify the entire subgrade immediately prior to placing growing medium. Re-cultivate where vehicular traffic results in compaction during the construction procedures. Ensure that all planting areas are smoothly contoured after final compaction to finished grades.

.4 Eliminate standing water from all finished grades. Provide a smooth, fine and even surface and conform to grades shown on the Landscape Drawings. Do not exceed maximum and minimum gradients defined by the B.C. Landscape Standard.

.5 Construct swales true to line and grade, smooth and free of lumps or high points. Minimum slope 2%, maximum side slopes 1:3%. Assure positive drainage to collection points.

.6 Slope not to exceed the following maximums: Rough Grass 3:1, Lawn 4:1, Landscape plantings 2:1.

.7 Finished soil/earth elevation at building to comply with municipal requirements.

.8 Inform Landscape Architect of completion of finish grade prior to placement of seed, sod, plants or mulch.

3.3 LANDSCAPE DRAINAGE

.1 Related Work: Growing medium and Finish Grading, Grass areas, Trees Shrubs and Groundcovers, Planters, Crib Walls.

.2 Work included: Site finish grading and surface drainage. Installation of any drainage systems detailed on landscape plans. Note: Catch basins shown on landscape plans for coordination only, confirm scope of work prior to bid.

.21 Coordinate all landscape drainage work with rest of site drainage. Refer to engineering drawings and specifications for connections and other drainage work.

.22 Determine exact location of all existing shallow and structures and underground utilities prior to commencing work, which may not be located on drawings and conduct work so as to prevent interruption of service or damage to them. Protect existing structures and utility services and be responsible for damage caused.

.23 Plotter drains on slab: Refer to Section 3.14, Installing Landscapes on Structures.

.3 Execution

.31 Do trenching and backfilling in accordance with engineering details and specifications.

.32 Lay drains on prepared bed, true to line and grade with inverts smooth and free of sags or high points. Ensure barrel of each pipe is in contact with bed throughout full length.

.32 Commence laying pipe at outlet and proceed in upstream direction.

.34 Lay perforated pipes with perforations at 4pm and 1pm positions.

.35 Make joints tight in accordance with manufacturer's directions.

.36 Do not allow water to flow through the pipes during construction except as approved by Engineer.

.37 Make watertight connections to existing drains, new or existing manholes or catchbasins where indicated or as directed by Landscape Architect.

.38 Plug upstream ends of pipe with watertight clean cut caps.

.39 Surround and cover pipe with drain rock in uniform 150mm layers to various depths as shown in details, minimum 300mm.

.310 Cover drain rock with non-woven filter cloth lap all edges and seams minimum 150mm.

.311 Assure positive drainage.

.312 Back fill remainder of trench as indicated.

.313 Protect subdrains from flotation during installation.

3.4 GROWING MEDIUM TESTING

.1 Submit representative sample of growing medium proposed for use on this project to an independent laboratory. Provide test results to Landscape Architect prior to placing. Test results to include:

.11 Physical properties, % content of gravel, sand, silt, clay and organics.

.12 Acidity PH and quantities of lime or sulphur required to bring within specified range.

.13 Nutrient levels of principle and trace elements and recommendations for required soil amendments.

.14 Carbon/Nitrogen level.

3.5 GROWING MEDIUM SUPPLY AND PLACEMENT

.1 Supply all growing medium required for the performance of the Contract. Do not load, transport or spread growing medium when it is so wet that its structure is likely to be damaged.

.2 Supply all growing medium admixtures as required by the soil test. Amended growing medium must meet the specification for growing medium as defined in Table One for the various areas.

.21 Thoroughly mix required amendments into the full depth of the growing medium.

.22 Special mixes may be required for various situations. Refer to drawing notes for instructions.

.3 Place the amended growing medium in all grass and planting areas. Spread growing medium in uniform layers not exceeding 6" (150mm), over unfrozen subgrade free of standing water.

.4 Minimum depths of growing medium placed and compacted to 85%:
4.1 On-grade.
4.11 Seeded and sodded lawn ..... 6" (150mm)
4.12 Mass planted shrubs & groundcovers ..... 15" (400mm)
4.13 Groundcover only areas, if defined on plan ..... 9" (225mm)
4.14 Tree & large shrub pits ..... depth to conform to depth of rootball - width shall be at least twice the width of the root ball with saucer shaped sides.
4.2 On-Slab
4.21 Irrigated lawn ..... 9" (230mm)
4.22 Groundcover areas ..... 12" (300mm)
4.23 Lawn without automatic irrigation ..... 12" (300mm)
4.24 Shrub & groundcover areas ..... 15" (380mm)
4.25 Trees and specimen shrubs ..... 36" (1560mm) over columns and/or edge of slab (verify column locations on-site for tree locations)
4.26 Depth noted includes 1" to 2" (25-50mm) sand over filter fabric
4.27 Maximum 12" depth growing medium except where mounded for trees over column points.

.5 Manually spread growing medium/planting soil around existing trees, shrubs and obstacles.

.6 In perimeter seeded grass areas, feather growing medium soil to nothing at edges and blend into existing grades.

.7 Finished grades shall conform to the elevations shown on landscape and site plans.

3.6 BOULEVARD GRASS AREA - SEEDING

.1 General: Rough grass areas are noted on the drawings as "Rough Grass". Treat all areas defined as rough grass between all property lines of the project including all boulevards to edge of roads and lanes.

.2 Preparation of Surfaces: To B.C. Landscape Standard Class 3 Areas (Rough grass) Section 7.1.1.3
2.1 Clean existing soil by mechanical means of debris over 50mm in any dimension.
2.2 Roughly grade surfaces to allow for maintenance specified and for positive drainage.

.3 Time of Seeding: Seed from early spring (generally April 1st) to late fall (September 15th) of each year. Further extensions may be obtained on concurrence of the Landscape Architect.

.4 Seed Supply & Testing: All seed must be obtained from a recognized seed supplier and shall be No. 1 grass mixture delivered in containers bearing the following information
4.1 Analysis of the seed mixture
4.2 Percentage of each seed type

.5 Seed Mixture: All varieties shall be rated as strong performers in the Pacific Northwest and are subject to client approval.
70% Creeping Red Fescue
20% Annual Rye
5% Saltern Perennial Rye
5% Kentucky Bluegrass
For Wildflower Areas use a mixture of WILDFLOWER MIX (WESTCOAST SEEDS) with MIX OF Hard Fescue or pre-approved alternate.

.6 Fertilizer: Mechanical seeding: Apply a complete synthetic slow-release fertilizer with maximum 35% water soluble nitrogen and a formulation ratio of 18-18-18 - 51% sulphur urea coated, 150 kg/ha (200lbs/acre) using a mechanical spreader.

.7 Seeding: Apply WILDFLOWER MIX seed at a rate of 113.7N (10kGs /acre) with a mechanical spreader. Incorporate seed into the top 1/4" (6mm) of soil and lightly compact.

.8 Acceptance: Provide adequate protection of the seeded areas until conditions of acceptance have been met. Comply with Section 3.7 Hydroseeding.

3.7 HYDROSEEDING

.1 May be used as an alternate to mechanical seeding in rough grass areas.

.2 May not be used in areas of lawn unless pre-approved by the Landscape Architect prior to bidding.

.3 Preparation and Growing Medium
3.1 In areas of Rough Grass: Comply with Section 3.6 Rough Grass.
3.2 Where approved for use in areas of lawn, comply with Section 3.8 Lawn Areas: Sodding.

.4 Protection: Ensure that fertilizer in solution does not come in contact with the foliage of any trees, shrubs, or other susceptible vegetation. Do not spray seed or mulch on objects not expected to grow grass. Protect existing site equipment, roadways, landscaping, reference points, monuments, markers and structures from damage. Where contamination occurs, remove seeding slurry to satisfaction of and by means approved by the Landscape Architect

.5 Mulch shall consist of virgin wood fibre or recycled paper fibre designed for hydraulic seeding and dyed for ease of monitoring application. If using recycled paper material for wood fibre substitute use 120K (by weight). Conform to B.C. Landscape Standard for mulch requirements.

.6 Water: Shall be free of any impurities that may have an injurious effect on the success of seeding or may be harmful to the environment.

.7 Equipment: Use hydraulic standard hydraulic seeder/mulcher equipment with the tank volume certified by an identification plate or sticker affixed in plain view on the equipment. The hydraulic seeder/mulcher shall be capable of sufficient agitation to mix the material into a homogenous slurry and to maintain the slurry in a homogenous state until it is applied. The discharge pumps and gun nozzles shall be capable of applying the materials uniformly over the designated area.

PART THREE SOFT LANDSCAPE DEVELOPMENT - CONT

3.8 Application Rate:
8.1 Seed Mixture: (34 kg/ha (125 lbs/acre)
8.2 Fertilizer: 112 kg/ha (100 lbs/acre)
8.3 Wildflower Mix - where specified, apply AS PER DISTRIBUTORS SPECIFICATIONS
8.4 Mulch:
8.4.1 At the time of Tender provide a complete chart of all components of the mix proposed including mulch, fertilizer, water etc. Sloped sites require tackifier.
8.4.2 Fertilizer
8.4.2.1 Rough Grass: If a soil analysis is available, comply with results.
8.4.2.2 Lawn: Where hydroseeding is approved, comply with soil analysis recommendations.

.9 Accurately measure the quantities of each of the materials to be charged into the tank either by mass or by a commonly accepted system of mass-calibrated volume measurements. The materials shall be added to the tank while it is being filled with water, in the following sequence: seed, fertilizer. Thoroughly mix into a homogenous slurry. After charging, add no water or other material to the mixture. Do not leave slurry in the tank for more than four (4) hours.

.10 Distribute slurry uniformly over the surface of the area to be hydroseeded. Blend application into previous applications and existing grass areas to form uniform surfaces.

.11 Clean up: Remove all materials and other debris resulting from seeding operations from the job site.

.12 Maintenance: Begin maintenance immediately after seeding and continue for 60 days after Substantial Completion and until accepted by the Owner. Re-seed at three week intervals where germination has failed. Protect seeded areas from damage with temporary wire or twine fences complete with signage until grass area is taken over by the Owner. Water in sufficient quantities to ensure deep penetration and at frequent intervals to maintain vigorous growth until grass is taken over by the Owner. It is the Owner's responsibility to supply water at no extra cost to the Contract.

.13 Acceptance of the Rough Grass Areas: Proper germination of all specified grass species is the responsibility of the Landscape Contractor. The grass shall be reasonably well established with no apparent dead or bare spots and shall be reasonably free of weeds (to B.C. Landscape Standard, Section 13 Maintenance Level 4 (Open space)). Sixty days after substantial completion, areas meeting the conditions above will be taken over by the Owner. Areas seeded in Fall will be accepted in Spring one month after start of growing season, provided that the above conditions for acceptance are fulfilled.

3.8 LAWN AREAS - SODDING

.1 General: Treat all areas defined as lawn areas on the landscape plan between all property lines of the project including all boulevards to edge of roads and lanes.

.2 Growing Medium: Comply with Section 2.2.1, Growing Medium. Prior to sodding, request an inspection of the finished grade, and depth and condition of growing medium by the Landscape Architect.

.3 Time of Sodding: Sod from April 1st to October 1st. Further extensions may be obtained on concurrence of the Landscape Architect.

.4 Sod Supply & Testing: All sod must be obtained from a recognized sod supplier and shall be No. 1 grass mixture delivered in containers bearing the following information
4.1 Analysis of the sod mixture
4.2 Percentage of each sod type

.5 Specified Turfgrass by area: Refer to Table 2 below.

TABLE 2 SPECIFIED TURFGRASS BY AREA

Area	Description	Quality Grade	Major Species
CLASS 1	Lawn, all areas noted on drawings as lawn in urban development sites including boulevard grass	No. 1 Premium	Kentucky Blue for sun, Fescues for shade
CLASS 2	Grass - public parks, industrial and institutional sites	No. 2 Standard	same
CLASS 3	Rough Grass	see hydroseeding	
SPECIAL			

.6 Lime: The lime shall be as defined in Section 2.2.3, Materials. Apply at rates recommended in required soil test. Refer to Section 3.4 for method.

.7 Fertilizer: Refer to Section 2.2.2 Materials. Apply specified fertilizer at rates shown in the required soil test. Apply with a mechanical spreader. Cultivate into growing medium 48 hours prior to sodding. Apply separately from lime.

.8 Sodding: Prepare a smooth, fine, even surface for laying sod. Lay sod staggered with sections closely butted, without overlapping or gaps, uncuts and even with adjoining areas and not lightly. Water to obtain moisture penetration of 3" to 4" (75 - 100mm). Comply with requirements of BC Landscape Standard Section 8, BC Standard for Turfgrass Sod.

.9 Maintenance: Begin maintenance immediately after sodding and continue for 60 days after Substantial Completion and until accepted by the Owner. Protect sodded areas from damage with temporary wire or twine fences complete with signage until lawn is taken over by the Owner. Water to obtain moisture penetration of 3" to 4" (75-10cm) at intervals necessary to maintain sufficient growth. Keep grass cut at height of between 1-1/2" (40mm) and 2" (5cm). Provide adequate protection of sodded areas against damage until the lawn is taken over by Owner. Repair any damaged areas, re-grade as necessary. Aeration may be required if in the Landscape Architect's opinion, drainage through the sod base medium is impaired.

.10 Acceptance of Lawn Areas: The turf shall be reasonably well established, with no apparent dead spots or bare spots and shall be reasonably free of weeds (to B.C. Landscape Standard, Section 13 Maintenance Level 2 (Appearance)). Use herbicides if necessary for weed removal unless other conditions of contract forbid their use. After the lawn has been cut at least twice, areas meeting the conditions above will be taken over by the Owner.

3.9 PLANTS AND PLANTING

.1 Confirm to planting layout as shown on Landscape Plans.

.2 Obtain approval of Landscape Architect for layout and preparation of planting prior to commencement of planting operations.

.3 Make edge of beds with smooth clean defined lines.

.4 Time of Planting:
4.1 Plant trees, shrubs and groundcovers only during periods that are normal for such work as determined by local weather conditions when seasonal conditions are likely to ensure successful adaptation of plants to their new location.

.5 Standards:
5.1 All plant material shall conform to the requirements of the B.C. Landscape Standard, LATEST EDITION unless exceeded by drawing Plant Schedule or this specification.
5.11 Refer to B.C. Landscape Standard, Section 8, Plants and Planting and to Section 12, BCLNA Standard for Container Grown Plants for minimum standards.
5.12 Refer to Plant Schedule for specific plant and container sizes and comply with requirements.
5.2 Plant material obtained from areas with less severe climatic conditions shall be grown to withstand the site climate.

.6 Review:
6.1 Review at the source of supply and/or collection point does not prevent subsequent rejection of any or all planting stock at the site.

.7 Availability:
7.1 Area of search includes the Lower Mainland and Fraser Valley. Refer to Plant Schedule for any extension of area.
7.2 Supply proof of the availability of the specified plant material within 30 days of the award of the Contract.

.8 Substitutions
8.1 Obtain written approval of the Landscape Architect prior to making any substitutions to the specified material. Non-approved substitutions will be rejected.
8.2 Allow a minimum of 5 days prior to delivery for request to substitute.
8.3 Substitutions are subject to BC Landscape Standard - definition of Conditions of Availability.

.9 Plant Species & Location:
9.1 Plants shall be true to name and of the height, caliper and size of root ball as shown on the landscape/site plan plant schedule. Caliper of trees is to be taken 6" (150mm) above grade.
9.2 Plant all specified species in the location as shown on the landscape drawings. Notify Landscape Architect if conflicting rock or underground/overhead services are encountered.
9.3 Deviation of given planting location will only be allowed after review of the proposed deviation by the Landscape Architect.

.10 Excavation
10.1 Trees and large shrubs: Excavate a saucer shaped tree pit to the depth of the rootball and to at least twice the width of the rootball. Assure that finished grade is at the original grade the tree was grown at.

.11 Drainage at Planting Holes:
11.1 Provide drainage at planting pits where required, ie, on sloped conditions, break out the side of the planting pit to allow drainage down slope, and in flat conditions, mound to raise the rootball above impervious layer. Notify the Landscape Architect where the drainage of planting holes is limited.

.12 Planting and Fertilizing Procedures:
12.1 Plant all trees and shrubs with the roots placed in their natural growing position. If burlapped, loosen around the top of the ball and cut away or fold under. Do not pull burlap from under the ball. Carefully remove containers without injuring the rootballs. After settled in place, cut twine. For wire baskets, clip and remove top three rows of wire.
12.2 Fillthe planting holes by gently firming the growing medium around the root system in 6" (15cm) layers. Settle the soil with water. Add soil as required to meet finish grade. Leave no air voids. Where 2/3's of the topsoil has been placed, apply fertilizer as recommended by the required soil test at the specified rates.
12.3 Where planting is indicated adjacent to existing trees, use special care to avoid disturbance of the root system or natural grades of such trees.
12.4 Where trees are in lawn areas, provide a clean cut mulched 900mm (3 ft.) diameter circle centered on the tree.

.13 Staking of Trees:
13.1 Use two 2"x2"x5' stakes, unless superseded by municipal requirements. Set stakes minimum 2 ft. in soil. Do not drive stake through rootball.
13.2 Leave the tree carefully vertical.
13.3 Tie with pre-approved commercial, flat woven polypropylene fabric belt, minimum width 19mm (3/4"). Approved product: ArborTie - available from DeepRoot.
13.4 Coniferous Trees over 6 ft. height: Guy with three 2-strand wires (11 gauge). Drive three stakes equidistant around the tree completely below grade.
13.5 Trees 8 ft.+ on Wood or Concrete Decks: Guy as above using three deadmen (min. 2"x2"x4") buried to the maximum possible depth instead of stakes.
13.6 Mark all guy wires with visible flagging material.

.14 Pruning:
14.1 Limit pruning to the minimum necessary to remove dead or injured branches. Preserve the natural character of the plants, do not cut the leader. Use only clean, sharp tools. Make all cuts clean and cut to the branch collar leaving no stubs. Shape affected areas so as not to retain water. Remove damaged material.

.15 Mulching:
15.1 Mulch all planting areas with an even layer of mulch to 2-1/2 - 3" (65 - 75mm) depth. Confirm placement of mulch in areas labeled "Groundcover Area" on drawings. Mulch a 910 (900mm) diameter circle around trees in lawn areas, leave a clean edge.

.16 Acceptance:
16.1 The establishment of all plant material is the responsibility of the Landscape Contractor.

.17 Plant Material Maintenance:
17.1 Maintain all plant material for 60 days after landscape work has received a Certificate of Completion.
17.2 Watering: Conform to B.C. Landscape Standard, Section 13.3.2 - Watering and generally as follows:
17.2.1 Water to supplement natural rainfall such that the soil moisture content is kept to 50% to 100% of field capacity. Water to the full depth of the root zone each time. The Owner is responsible to supply water at no extra cost to the Contract. Confirm source of water prior to beginning work.
17.3 Use appropriate measures to combat pests or diseases damaging plant material. Comply with all local governing statutes and guidelines for chemical control.
17.4 Plant material which fails to survive shall be replaced in the next appropriate season as determined by the Landscape Architect.
17.5 Repair tree guards, stakes, and guy wires, when necessary.
17.6 Maintain areas relatively weed free. (Appearance level 2, B.C. Landscape Standard, Chapter 13).
17.7 Maintain mulch to specified depths.

.18 Plant Warranty:
18.1 Replace all unsatisfactory plant material except those designated "Specimen" for a period of one (1) year after the Certificate of Completion. Replace all unsatisfactory plant material designated "Specimen" for a period of two (2) years after the Certificate of Completion. Replace all unsatisfactory trees and shrubs and continue to replace these until the specified number is complete and satisfactory to the Landscape Architect. Such replacement shall be subject to the notification, inspection and approval as specified for the original planting, and shall not constitute an extra to the Contract.
18.2 These Plants, identified as hardy within one zone of the Canada Department of Agriculture zonal class for the area, specified by the Landscape Architect and installed by the Landscape Contractor which are killed through below normal temperatures (below the average of the extreme minimum temperatures officially recorded in the area concerned, in the last 10 years), will not be replaced without cost of replacement borne by the Owner.
18.3 A review may be requested during the latter part of the warranty growing season. All plant material showing well developed foliage, healthy growth and bud forming, will then be taken over.

PART THREE SOFT LANDSCAPE DEVELOPMENT - CONT

18.4 For all plant material, the Landscape Architect reserves the right to extend the Contractor's responsibility for another growing season if, in his opinion, leaf development and growth is not sufficient to ensure future satisfactory growth.
18.5 Where the Owner is responsible for plant maintenance and has not provided adequate maintenance, the plant replacement section of the contract may be declared void. The Landscape Architect shall determine whether maintenance has been satisfactory using the B.C. Landscape Standard, Section 13, Maintenance as the guide. The required maintenance standard is a minimum of Level Three - Medium. Refer to Section 3.11, Establishment Maintenance.
18.6 The Landscape Contractor is responsible to replace any plant material or repair any construction included in the Contract that is damaged or stolen until the issuance of the Certificate of Completion.
18.7 Deviation from the specifications may require extension of the Warranty Period as determined by the Landscape Architect.

3.10 INSTALLING LANDSCAPE ON STRUCTURES

.1 Verify that drainage and protection material is completely installed and acceptable before beginning work. Contact Landscape Architect for instructions if not in place.

.2 Coordinate work with construction of planters and planter drainage.
2.1 Verify that planter drains are in place and positive drainage to roof drains is present prior to placing any drain rock or soil.

.3 Provide clean out at all through-slab drain locations. Use 356mm min. dia. PVC Pipe filled with drain rock unless specific drawing detail shows.

.4 Install drain rock evenly to a minimum depth of 6" (150mm)or alternate sheet drain if specified. Install sheet drain as per manufacturer's recommendations.

.5 Cover drain rock for alternate sheet drain if specified on drawing details with filter fabric lapping 6" (150mm) at all edges. Obtain approval of drainage system prior to placing growing medium.

.6 Place an even layer of 25 - 50mm clean washed pump sand over filter fabric.

.7 Place growing medium to depths specified in Section 3.5 above for various surface treatments. Refer to Drawing details for any light weight filler required to alter grade. Use Styrofoam 604K over drain rock shaped to provide smooth surface transition at edges. Built each piece tightly together and cover with filter fabric to prevent soil from migrating downward.

3.11 ESTABLISHMENT MAINTENANCE (Provide a separate price for this section)

.1 Intent: The intent of "establishment" maintenance is to provide sufficient care to newly installed plant material for a relatively short period of time to ensure or increase the long term success of the planting. The objective is the adaptation of plants to a new site in order to obtain the desired effect from the planting while reducing the rate of failure and unnecessary work associated with improper establishment. Establishment of maintenance procedures apply to all new and retained vegetation including cultivated turfgrass areas and new trees and shrubs.

.2 Maintenance Period: Provide maintenance of installed landscaping for 12 months following substantial completion.

.3 Related Standards and Legislation: B.C. Landscape Standard, latest edition; Fertilizer Code., B.C. Fertilizer Control Act.

.4 Site Review: In addition to the inspections at substantial completion, at final progress draw application, and at the end of the guarantee period, there should be three other reviews during the 12 months attended by the Contractor and a designated representative of the Owner. Maintain a logbook and reporting procedures and submit to the designated representative.

.5 Scheduling: Prepare a schedule of anticipated visits and submit to designated representative at start-up. Maintenance operations shall be carried out predominately during the growing season between March 1st and November 30th, however visits at other times of the year may be required.

.6 Maintenance Levels: Comply with B. C. Landscape Standard, Section 13, Table 7, Maintenance Levels.

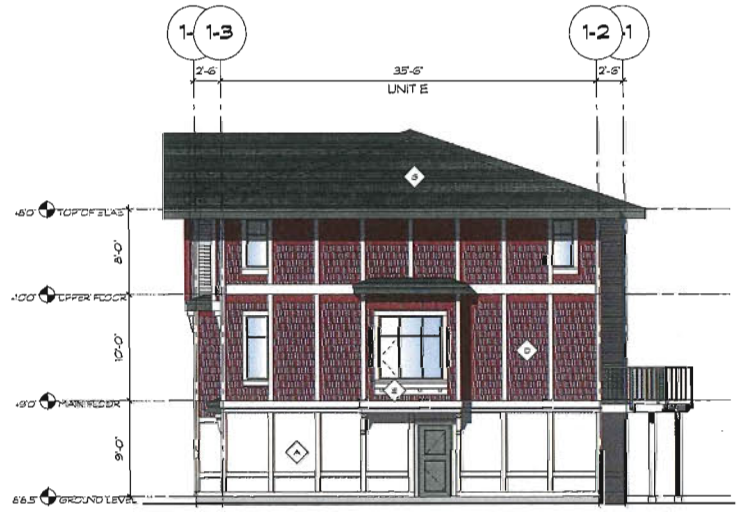
.7 Materials: Comply with Part Two of this specification.
7.1 Fertilizers: To the requirements of the B.C. Landscape Standard. Formulations and rates as required by soil testing.

.8 Plant Material Establishment:
8.1 Watering: During the first growing season, water new plants at least every ten (10) days between April 1st and July 31st, and every twenty (20) days between August 1st and September 30th. Minimum 25 gallons per tree per application. During the second growing season, water new plants at least every twenty days between April 1st and July 31 and once between August 1st and September 31st. Apply water at a rate and duration such that the water content reaches field capacity to the full depth of the growing medium. Apply water again when the water content reaches 25% of field capacity. Provide and irrigate with water in the event of any automatic irrigation system malfunctions or has not been completely installed. Scheduled applications of water shall be missed only when rainfall has penetrated the soil fully as required.
8.2 Mulch: Maintain mulches in the original areas and to the original depths.
8.3 Weed Control: Remove all weeds from all areas at least once per month during the growing season by hoeing or cultivation to a maximum depth of 50mm, hand-pulling, or, if necessary, by the use of herbicides.
8.4 Pest and Disease Control: Inspect all planted areas for pests and diseases periodically and at least every two months during the growing season by an experienced person. Carry out treatment for pests or diseases promptly and consistently for maximum effectiveness. Comply with B.C. Pesticide Control Act and municipal requirements.
8.5 Tree Support: Maintain stakes, guy wires and ties well tightened every two months to ensure that they are not causing a depression in the bark. Loosen, repair or replace ties as necessary. Remove all stakes guy wires and ties after the first growing season except where large trees require continuing support in the opinion of the Landscape Architect. All flagging of guy wires shall be visible and in good repair.
8.6 Pruning: Inspect all trees and shrubs at least every two months during the growing season; prune to remove all dead, weak or diseased wood. Maintain the natural shape of the plant. Carry out clipping or shaping only if required in the contract for specific varieties or conditions.
8.7 Fertilizing: Once during the twelve month period of establishment maintenance fertilize shrubs, trees and groundcovers according to soil analysis requirements.

.9 Grass Areas Establishment:
9.1 Watering: Use hoses and sprinklers, irrigation systems or other methods to apply water to Class 1 and Class 2 grassed areas (B.C. Landscape Standard, Section 7, Lawns and Grasses) such that the grass is maintained in a turgid condition. Supply and irrigate with water in the event of any irrigation system malfunction, or incomplete installation at no expense to the owner. Apply water to prevent pooling or erosion of the soil. Apply water at a rate and duration so that the water content in the growing medium reaches field capacity to the full depth of the growing medium. Apply water again when the water content reaches 25% of field capacity.
9.2 Weed, Insect and Disease Control: Inspect grass areas each time they are mowed for weeds, insect pests, and diseases and treat promptly when necessary by appropriate manual methods, or by the use of chemicals in compliance with the B.C.S.L.A./P.C.E.W.A. Landscape Standards latest edition. Kill broadleaved weeds in grassed areas by a general application of a suitable herbicide if the weed population exceeds 10 Broadleaf weeds or 50 annual weeds or weedy grasses per 40 square meters. This application shall reduce the weed population to zero.
9.3 Fertilizing: According to soil analysis.
9.4 Liming: According to soil analysis
9.5 Mowing and Trimming - All areas: The first four cuts shall be a sharp rotary type mower. Excess grass clipping sh



1 A4.0 FRONT (WEST) ELEVATION
SCALE: 1/8" = 1'-0"



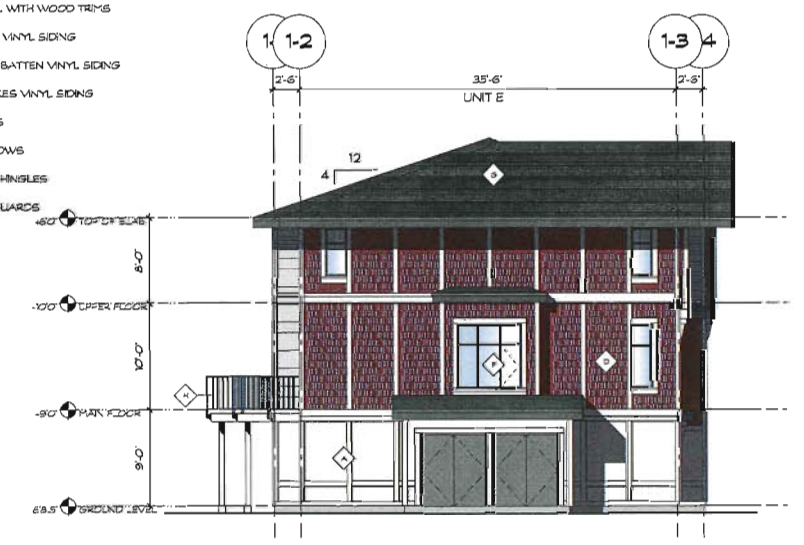
2 A4.0 SIDE (SOUTH) ELEVATION
SCALE: 1/8" = 1'-0"

MATERIAL KEY

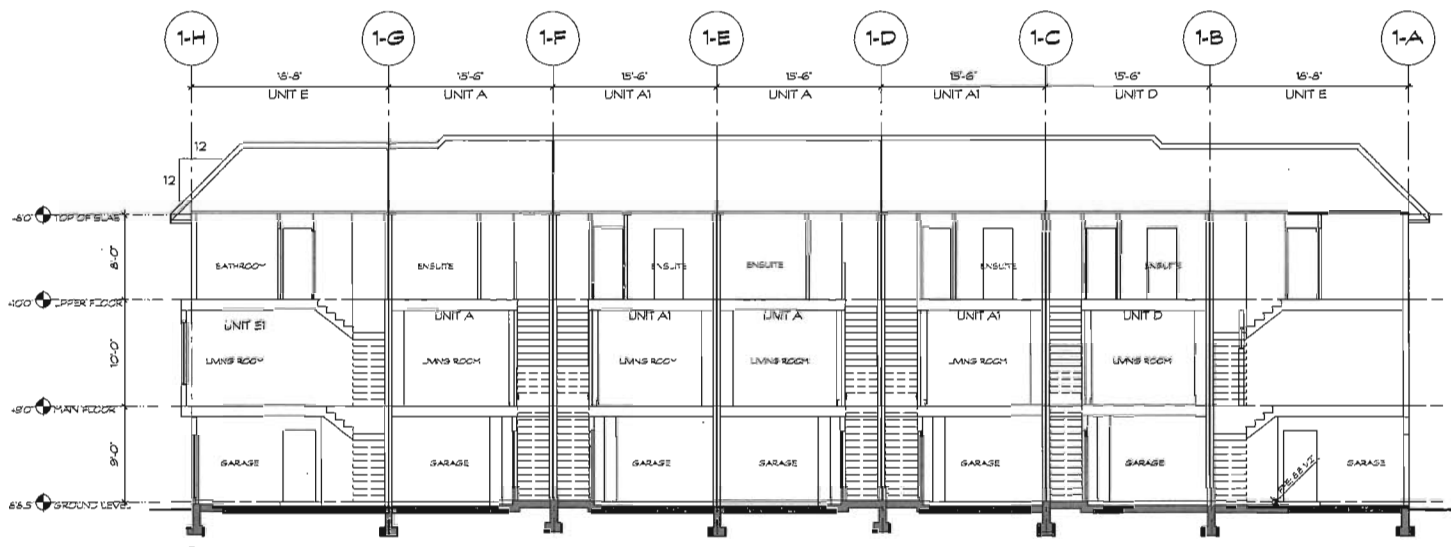
A. HARDI-PANEL WITH WOOD TRIMS
B. HORIZONTAL VINYL SIDING
C. BOARD AND BATTEN VINYL SIDING
D. CEDAR SHAKES VINYL SIDING
E. WOOD TRIMS
F. VINYL WINDOWS
G. ASHPHALT SHINGLES
H. ALUMINUM GUARDS



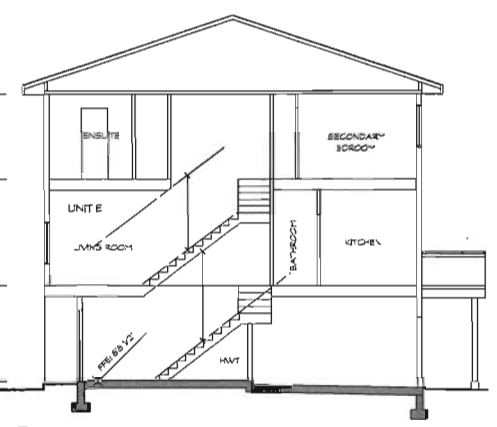
3 A4.0 BACK (EAST) ELEVATION
SCALE: 1/8" = 1'-0"



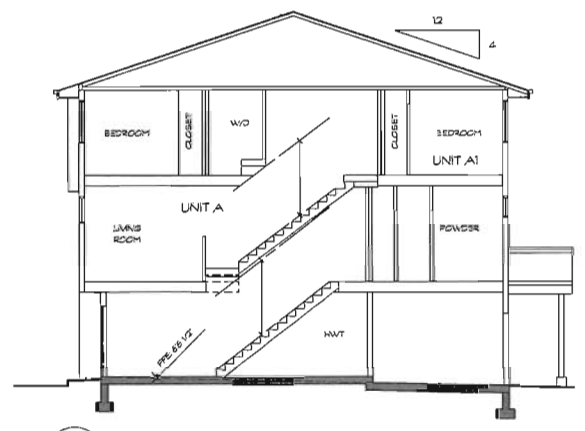
4 A4.0 SIDE (NORTH) ELEVATION
SCALE: 1/8" = 1'-0"



5 A4.0 LONGITUDINAL SECTION
SCALE: 1/8" = 1'-0"



6 A4.0 CROSS SECTION UNIT E
SCALE: 1/8" = 1'-0"



7 A4.0 CROSS SECTION UNIT A
SCALE: 1/8" = 1'-0"

COPYRIGHT RESERVED. THIS DRAWING MUST NOT BE SCALED. VARIATIONS AND MODIFICATIONS TO WORK SHOWN ON THESE DRAWINGS SHALL NOT BE CARRIED OUT WITHOUT WRITTEN PERMISSION FROM THE ARCHITECTS. THIS DRAWING IS THE EXCLUSIVE PROPERTY OF ROBERT CICCOZZI ARCHITECTURE INC. AND CAN BE REPRODUCED ONLY WITH THEIR WRITTEN PERMISSION.

REVISION:

NO.:	DATE:	DESCRIPTION:

ISSUE:

DATE:	DESCRIPTION:
13.02.14	ISSUED FOR REZONING
28.05.14	RE-ISSUED FOR REZONING
18.09.14	ISSUED FOR DP
31.10.14	RE-ISSUED FOR DP

SEAL:

Plan 3a Nov 03, 2014
DP 14-672669

RCA
Robert Ciccozzi Architecture Inc.
200 - 2339 Columbia Street
Vancouver, B.C.
Canada V5Y 3Y3
Tel: (604) 687-4741
Fax: (604) 687-4641
admin@ciccozziarchitecture.com

RECEIVED
NOV 03 2014

PROJECT:

OXFORD LANE TOWNHOMES

9191 - 9231 Alexandra Rd.
Richmond BC

DRAWN:	CHECKED BY:
SCALE: 1/8" = 1'-0"	PROJECT NO.: RCA 301

SHEET TITLE:

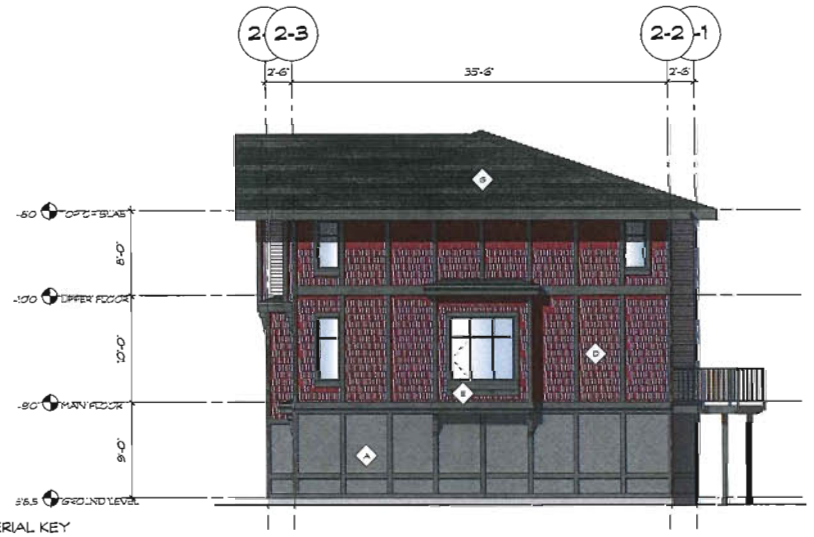
Elevations Building 1
Elevations/Sections

REVISION NO.:	SHEET NO.:
-	A4.0

File: RCA301_A4.0 Elevations.vwx Plotted: 10/31/14 at 5:00:36 PM



1 / A4.1 FRONT (WEST) ELEVATION
SCALE: 1/8" = 1'-0"



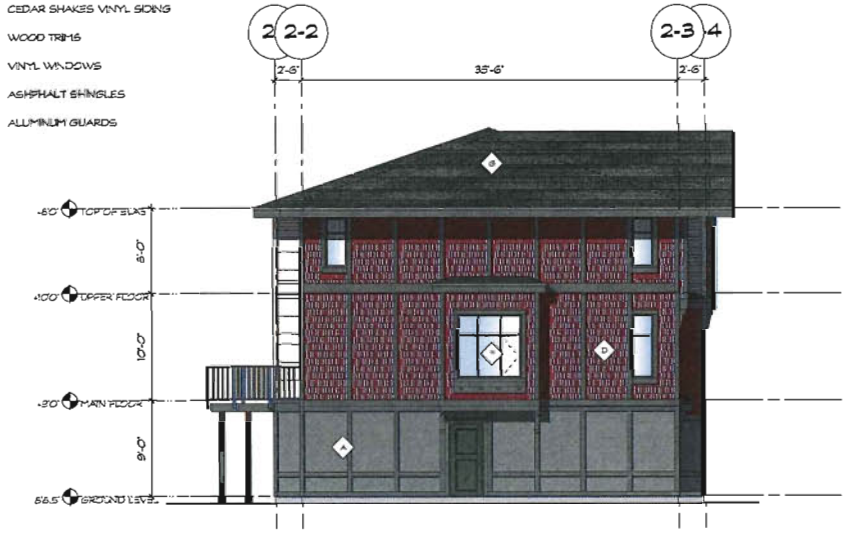
2 / A4.1 SIDE (SOUTH) ELEVATION
SCALE: 1/8" = 1'-0"

MATERIAL KEY

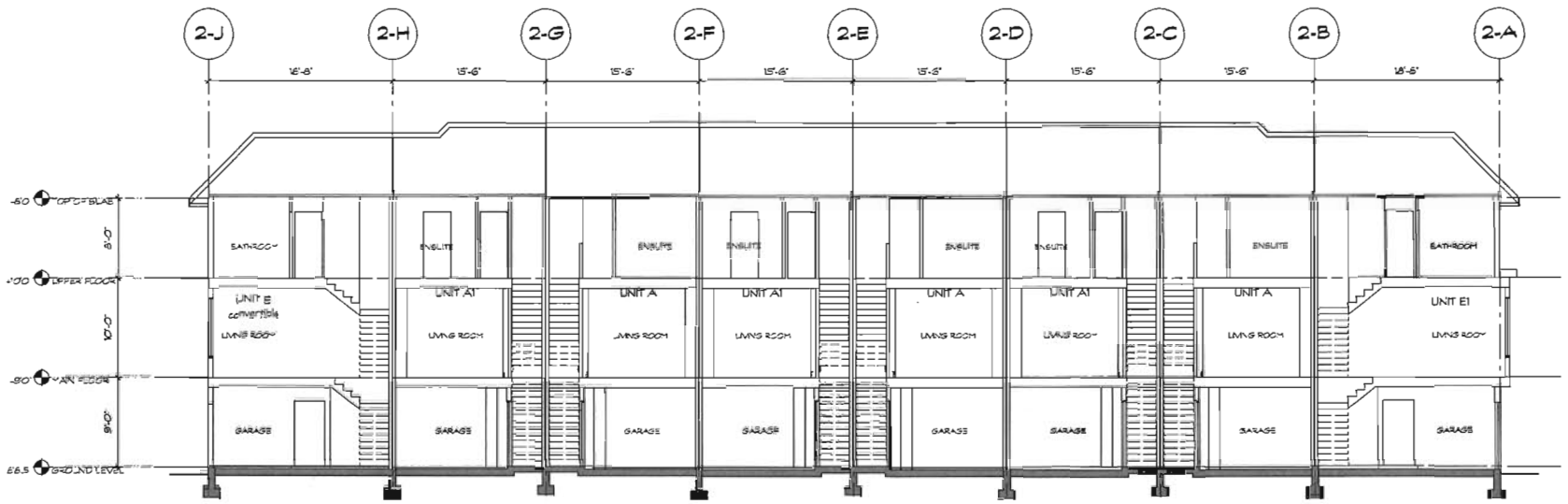
- A HARDI-PANEL WITH WOOD TRIMS
- B HORIZONTAL VINYL SIDING
- C BOARD AND BATTEN VINYL SIDING
- D CEDAR SHAKES VINYL SIDING
- E WOOD TRIMS
- F VINYL WINDOWS
- G ASPHALT SHINGLES
- H ALUMINUM GUARDS



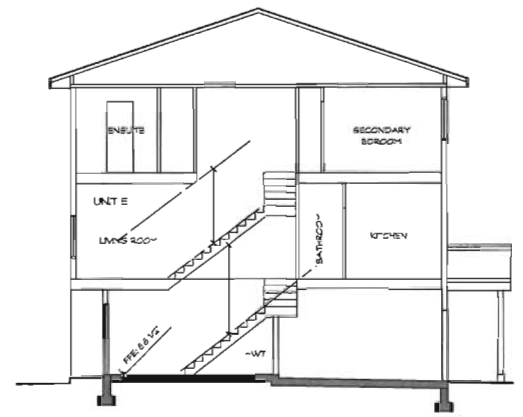
3 / A4.1 BACK (EAST) ELEVATION
SCALE: 1/8" = 1'-0"



4 / A4.1 SIDE (NORTH) ELEVATION
SCALE: 1/8" = 1'-0"



5 / A4.1 LONGITUDINAL SECTION
SCALE: 1/8" = 1'-0"



6 / A4.1 CROSS SECTIION UNIT E
SCALE: 1/8" = 1'-0"

REF. A4.0 FOR CROSS SECTION OF UNIT 'A' (TYPICAL)

COPYRIGHT RESERVED. THIS DRAWING MUST NOT BE SCALED. VARIATIONS AND MODIFICATIONS TO WORK SHOWN ON THESE DRAWINGS SHALL NOT BE CARRIED OUT WITHOUT WRITTEN PERMISSION FROM THE ARCHITECTS. THIS DRAWING IS THE EXCLUSIVE PROPERTY OF ROBERT CICCOZZI ARCHITECTURE INC. AND CAN BE REPRODUCED ONLY WITH THEIR WRITTEN PERMISSION.

REVISION:

NO.:	DATE:	DESCRIPTION:

ISSUE:

DATE:	DESCRIPTION:
18.02.14	ISSUED FOR REZONING
28.03.14	REISSUED FOR REZONING
19.08.14	ISSUED FOR DP
31.10.14	REISSUED FOR DP

SEAL:

Plan 3b Nov 03, 2014
DP 14-672669

RCA
Robert Ciccozzi Architecture Inc.
200 - 2339 Columbia Street
Vancouver, B.C.
Canada V5Y 3Y3
Tel: (604) 687-4741
Fax: (604) 687-4641
admin@ciccozziarchitecture.com

RECEIVED
NOV 03 2014

PROJECT:
OXFORD LANE TOWNHOMES
9191 - 9231 Alexandra Rd.
Richmond BC

DRAWN:	CHECKED BY:
SCALE:	PROJECT NO.: RCA 301

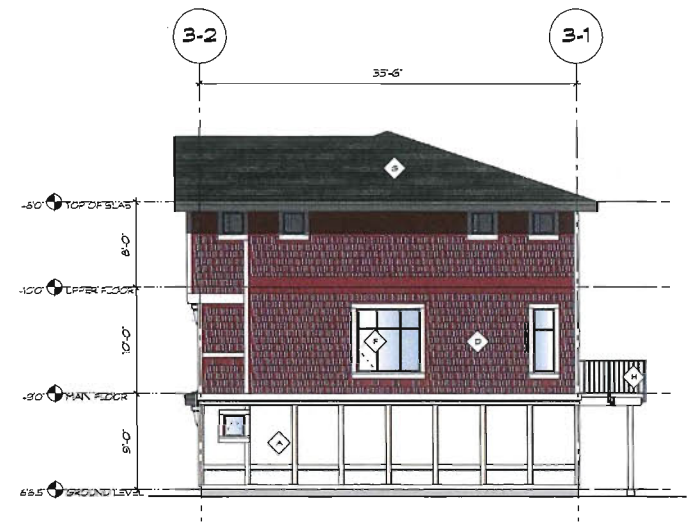
SHEET TITLE:
Elevations Building 2
Elevations/Sections

REVISION NO.:	SHEET NO.:
-	A4.1

File: RCA301_A4.00 Elevations.mvs Plotted: 10/31/14 at 1:50:15 PM



1 / A4.2 FRONT (NORTH) ELEVATION
SCALE: 1/8" = 1'-0"



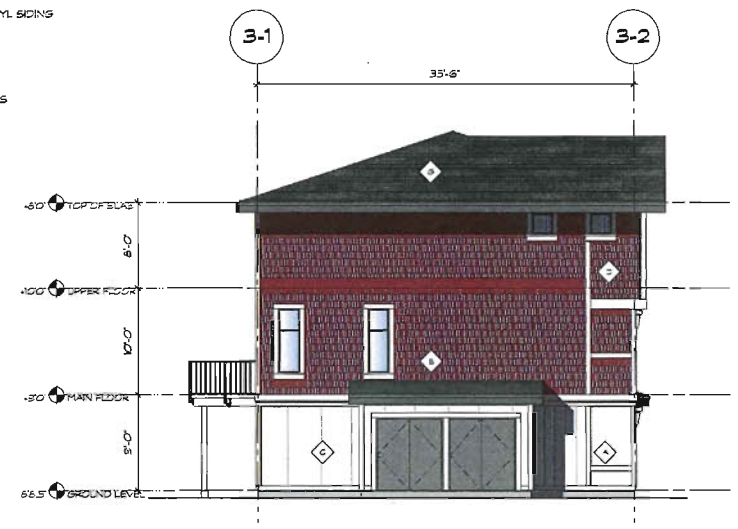
2 / A4.2 SIDE (WEST) ELEVATION
SCALE: 1/8" = 1'-0"

MATERIAL KEY

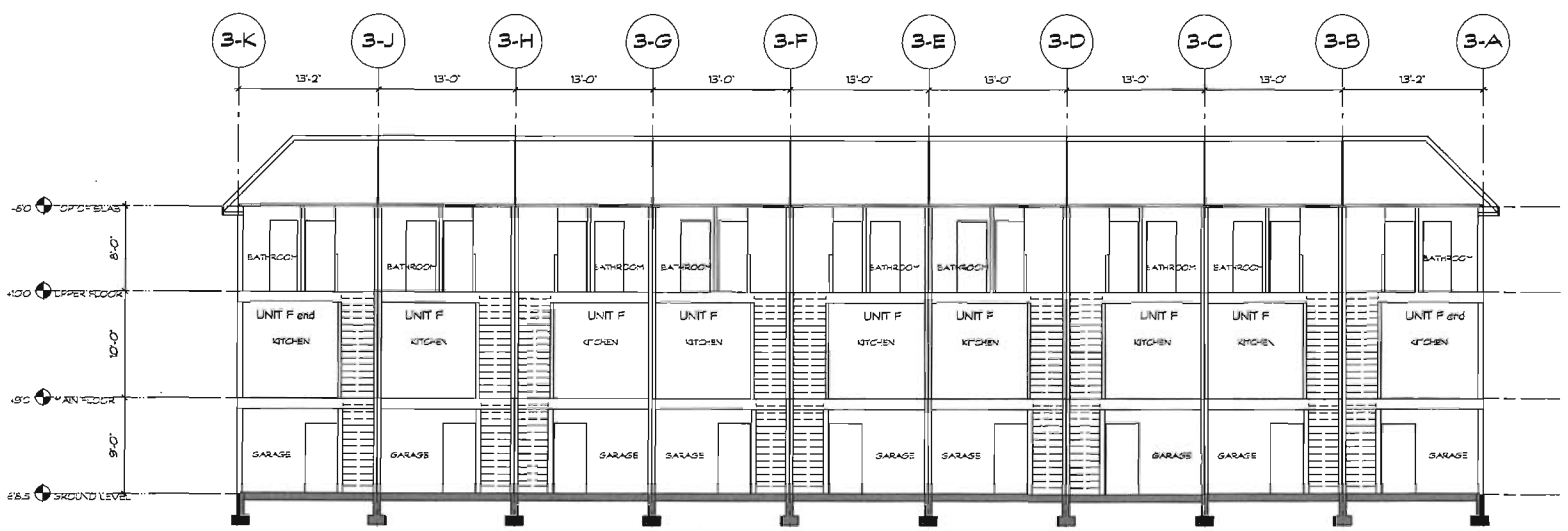
- A HARDI-PANEL WITH WOOD TRIMS
- B HORIZONTAL VINYL SIDING
- C BOARD AND BATTEN VINYL SIDING
- D CEDAR SHAKES VINYL SIDING
- E WOOD TRIMS
- F VINYL WINDOWS
- G ASHPHALT SHINGLES
- H ALUMINUM GUARDS



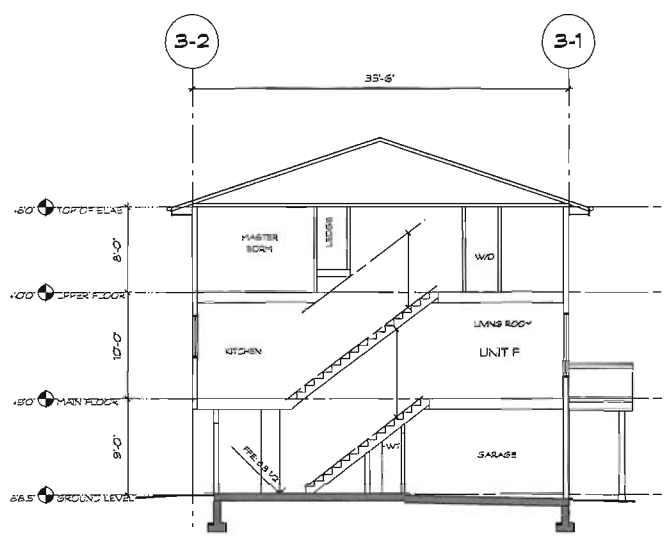
3 / A4.2 BACK (SOUTH) ELEVATION
SCALE: 1/8" = 1'-0"



4 / A4.2 SIDE (EAST) ELEVATION
SCALE: 1/8" = 1'-0"



5 / A4.2 LONGITUDINAL SECTION
SCALE: 1/8" = 1'-0"



6 / A4.2 CROSS SECTION UNIT F
SCALE: 1/8" = 1'-0"

COPYRIGHT RESERVED. THIS DRAWING MUST NOT BE SCALED. VARIATIONS AND MODIFICATIONS TO WORK SHOWN ON THESE DRAWINGS SHALL NOT BE CARRIED OUT WITHOUT WRITTEN PERMISSION FROM THE ARCHITECTS. THIS DRAWING IS THE EXCLUSIVE PROPERTY OF ROBERT CICCOZZI ARCHITECTURE INC. AND CAN BE REPRODUCED ONLY WITH THEIR WRITTEN PERMISSION.

REVISION:

NO.:	DATE:	DESCRIPTION:

ISSUE:

DATE:	DESCRIPTION:
13.02.14	ISSUED FOR REZONING
26.03.14	RE-ISSUED FOR REZONING
19.08.14	ISSUED FOR DP
31.10.14	REISSUED FOR DP

SEAL:

Plan 3c Nov 03, 2014
DP 14-672669

RCA
Robert Ciccozzi Architecture Inc.
200 - 2339 Columbia Street
Vancouver, B.C.
Canada V5Y 3Y3
Tel: (604) 687-4741
Fax: (604) 687-4641
admin@ciccozziarchitecture.com

RECEIVED
NOV 03 2014

PROJECT:
OXFORD LANE TOWNHOMES
9191 - 9231 Alexandra Rd.
Richmond BC

DRAWN:	CHECKED BY:
SCALE:	PROJECT NO.: RCA 301

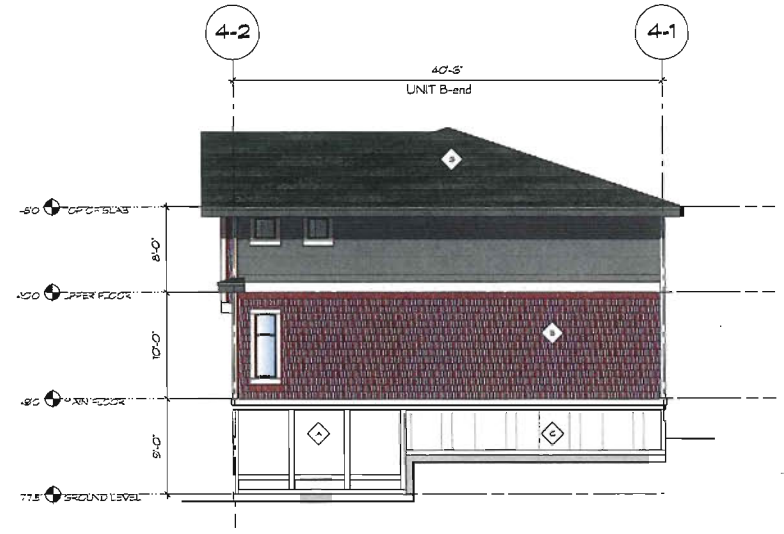
SHEET TITLE:
Elevations Building 3
Elevations/Sections

REVISION NO.:	SHEET NO.:
-	A4.2

File: RCA301_A4.04 Elevations.mwx Plotted: 10/31/14 at 4:51:15 PM



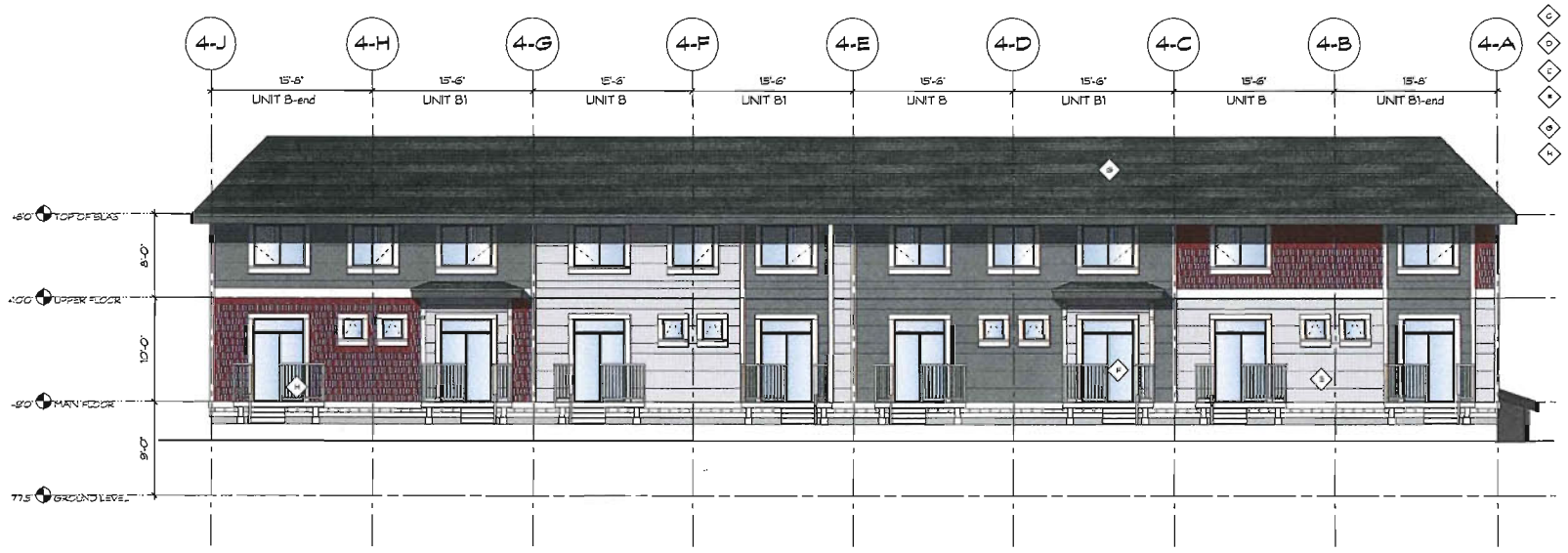
1 / A4.3 FRONT (WEST) ELEVATION
SCALE: 1/8" = 1'-0"



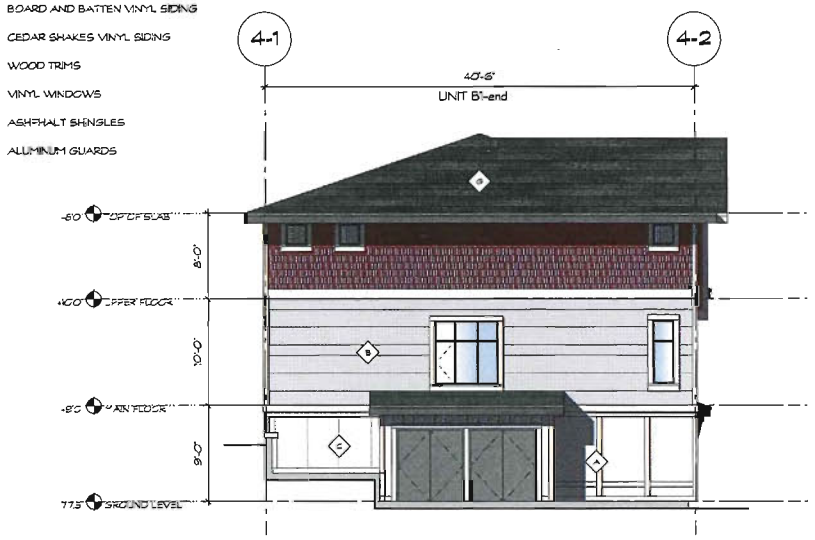
2 / A4.3 SIDE (SOUTH) ELEVATION
SCALE: 1/8" = 1'-0"

MATERIAL KEY

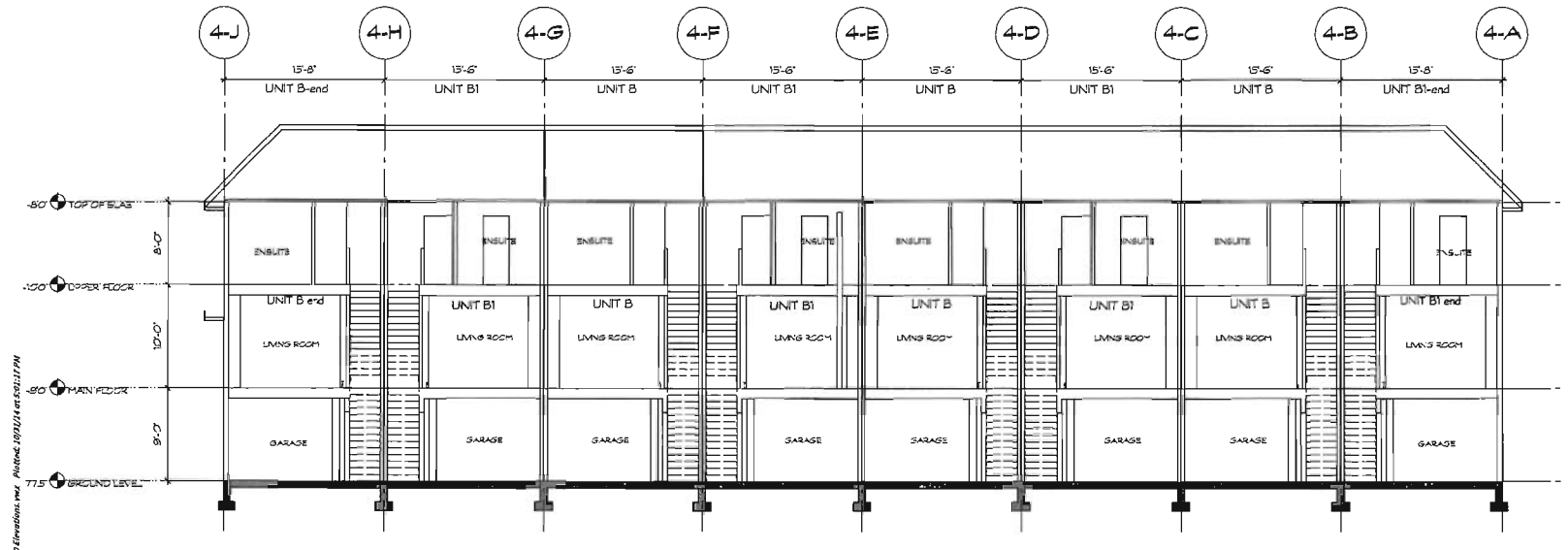
- A HARDI-PANEL WITH WOOD TRIMS
- B HORIZONTAL VINYL SIDING
- C BOARD AND BATTEN VINYL SIDING
- D CEDAR SHAKES VINYL SIDING
- E WOOD TRIMS
- F VINYL WINDOWS
- G ASPHALT SHINGLES
- H ALUMINUM GUARDS



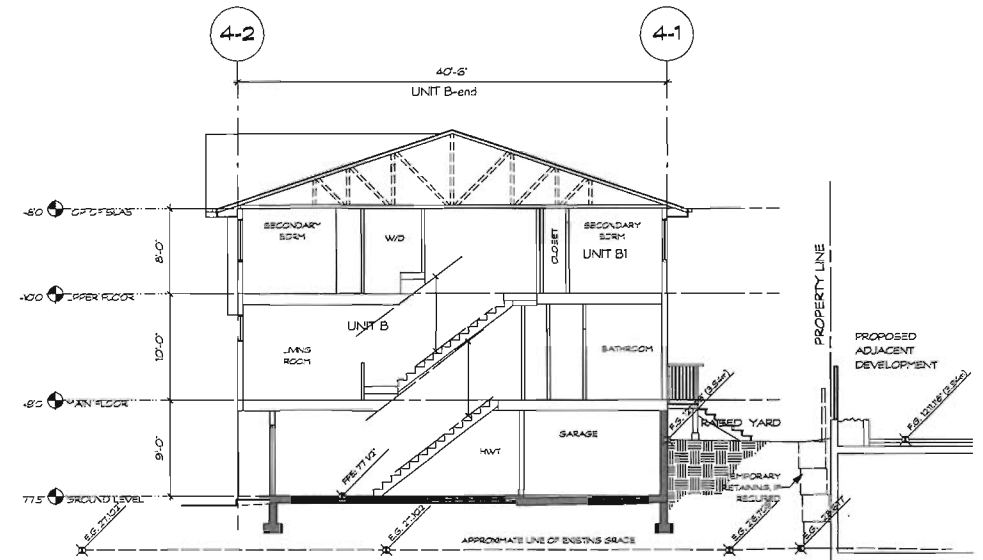
3 / A4.3 BACK (EAST) ELEVATION
SCALE: 1/8" = 1'-0"



4 / A4.3 SIDE (NORTH) ELEVATION
SCALE: 1/8" = 1'-0"



5 / A4.3 LONGITUDINAL SECTION
SCALE: 1/8" = 1'-0"



6 / A4.3 CROSS SECTION UNIT B
SCALE: 1/8" = 1'-0"

COPYRIGHT RESERVED. THIS DRAWING MUST NOT BE SCALED. VARIATIONS AND MODIFICATIONS TO WORK SHOWN ON THESE DRAWINGS SHALL NOT BE CARRIED OUT WITHOUT WRITTEN PERMISSION FROM THE ARCHITECTS. THIS DRAWING IS THE EXCLUSIVE PROPERTY OF ROBERT CICCOZZI ARCHITECTURE INC. AND CAN BE REPRODUCED ONLY WITH THEIR WRITTEN PERMISSION.

REVISION:

NO.:	DATE:	DESCRIPTION:

ISSUE:

DATE:	DESCRIPTION:
13.02.14	ISSUED FOR REZONING
28.03.14	RE-ISSUED FOR REZONING
19.09.14	ISSUED FOR DP
31.10.14	RE-ISSUED FOR DP

SEAL:

Plan 3d Nov 03, 2014
DP 14-672669

RCA
Robert Ciccozzi Architecture Inc.
200 - 2339 Columbia Street
Vancouver, B.C.
Canada V5Y 3Y3
Tel: (604) 687-4741
Fax: (604) 687-4641
admin@ciccozziarchitecture.com

RECEIVED
NOV 03 2014

PROJECT:
OXFORD LANE TOWNHOMES
9191 - 9231 Alexandra Rd.
Richmond BC

DRAWN:	CHECKED BY:
SCALE:	PROJECT NO.: RCA 301

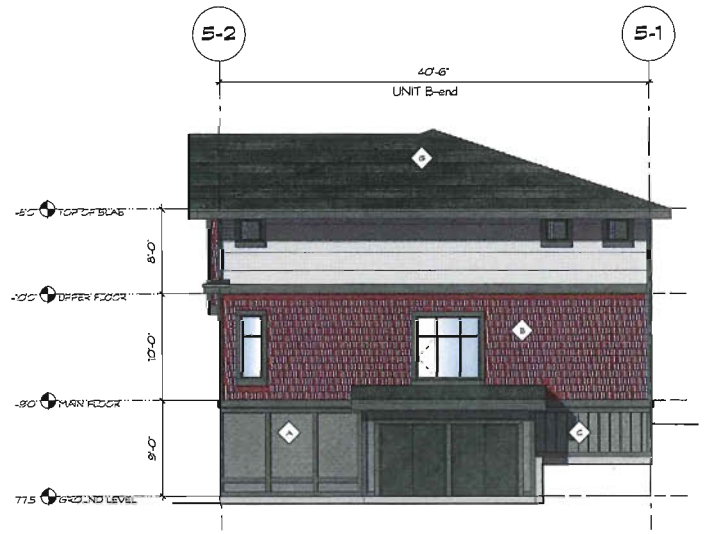
SHEET TITLE:
Elevations Buidling 4
Elevations/Sections

REVISION NO.:	SHEET NO.:
-	A4.3

File: RCA301_A4.3 Elevations.vwx Plotted: 10/31/14 at 4:57:17 PM



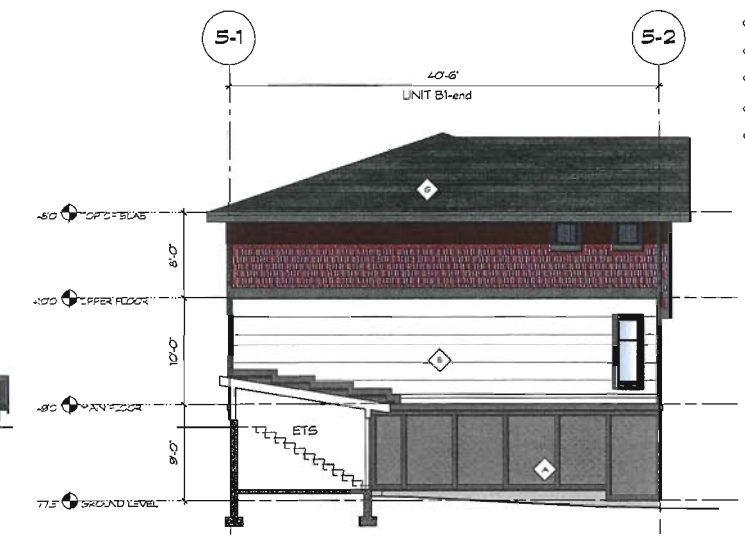
1 / A4.4 FRONT (WEST) ELEVATION
SCALE: 1/8" = 1'-0"



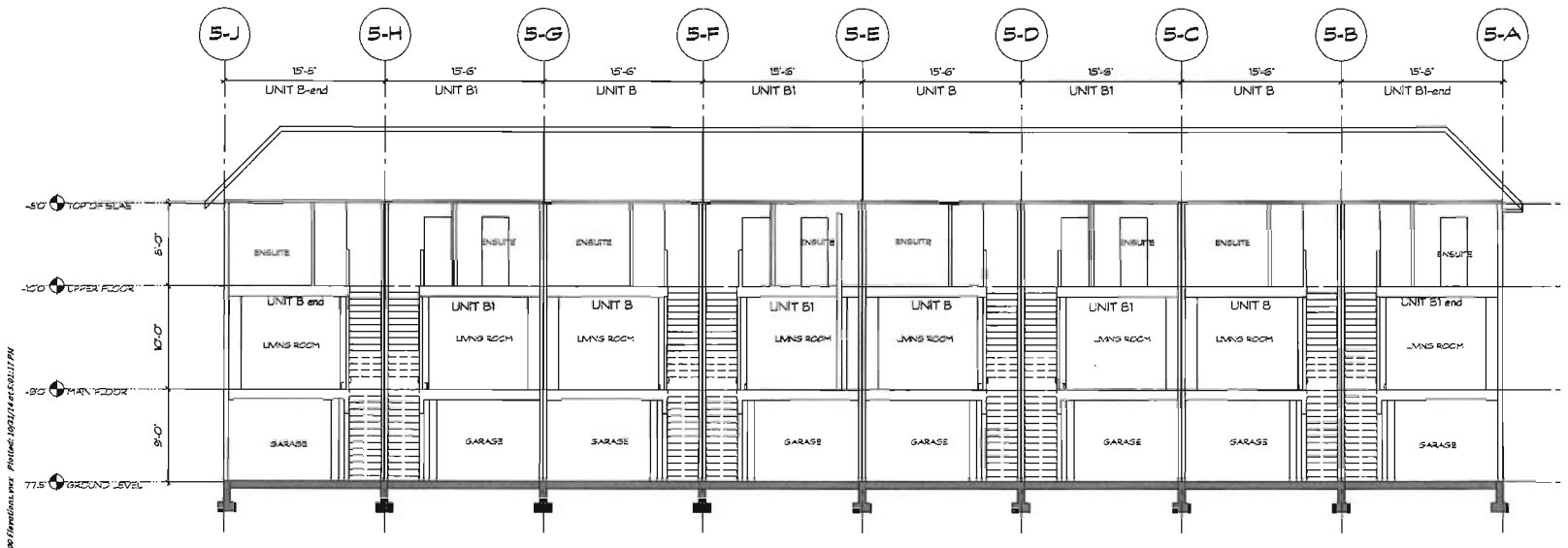
2 / A4.4 SIDE (SOUTH) ELEVATION
SCALE: 1/8" = 1'-0"



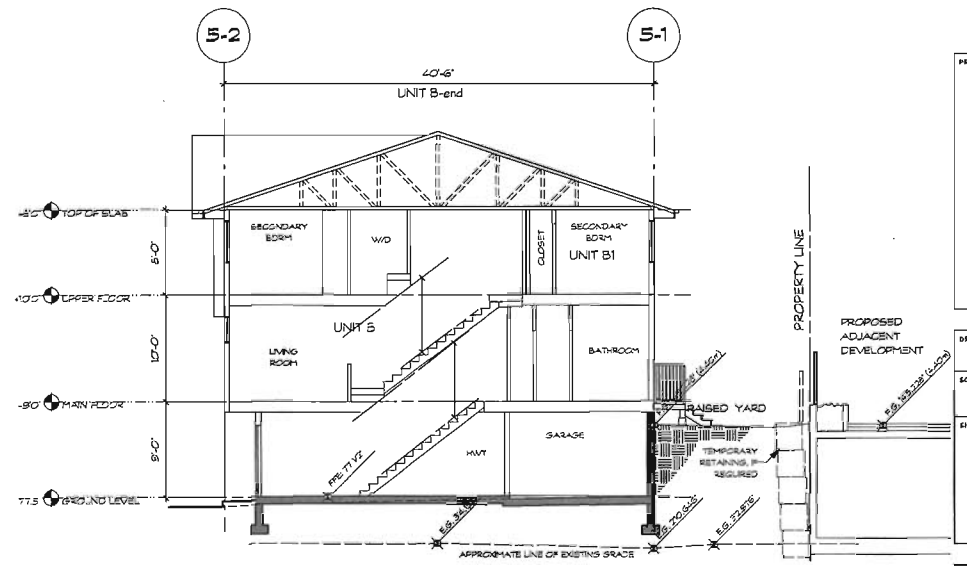
3 / A4.4 BACK (EAST) ELEVATION
SCALE: 1/8" = 1'-0"



4 / A4.4 SIDE (NORTH) ELEVATION
SCALE: 1/8" = 1'-0"



5 / A4.4 LONGITUDINAL SECTION
SCALE: 1/8" = 1'-0"



6 / A4.4 CROSS SECTION UNIT B
SCALE: 1/8" = 1'-0"

MATERIAL KEY

1. HARDI-PANEL WITH WOOD TRIMS
2. HORIZONTAL VINYL SIDING
3. BOARD AND BATTEN VINYL SIDING
4. CEDAR SHAKES VINYL SIDING
5. WOOD TRIMS
6. VINYL WINDOWS
7. ASHPHALT SHINGLES
8. ALUMINUM GUARDS

COPYRIGHT RESERVED. THIS DRAWING MUST NOT BE SCALED. VARIATIONS AND MODIFICATIONS TO WORK SHOWN ON THESE DRAWINGS SHALL NOT BE CARRIED OUT WITHOUT WRITTEN PERMISSION FROM THE ARCHITECTS. THIS DRAWING IS THE EXCLUSIVE PROPERTY OF ROBERT CICCOZZI ARCHITECTURE INC. AND CAN BE REPRODUCED ONLY WITH THEIR WRITTEN PERMISSION.

REVISION:

NO.:	DATE:	DESCRIPTION:

ISSUE:

DATE:	DESCRIPTION:
13.02.14	ISSUED FOR REZONING
28.03.14	REISSUED FOR REZONING
19.09.14	ISSUED FOR DP
31.10.14	REISSUED FOR DP

SEAL:

Plan 3e Nov 03, 2014
DP 14-672669

RCA
Robert Ciccozzi Architecture Inc.
200 - 2339 Columbia Street
Vancouver, B.C.
Canada V5Y 3Y3
Tel: (604) 687-4741
Fax: (604) 687-4641
admin@ciccozziarchitecture.com

RECEIVED
NOV 03 2014

PROJECT:
OXFORD LANE TOWNHOMES
9191 - 9231 Alexandra Rd.
Richmond BC

DRAWN:	CHECKED BY:
SCALE:	PROJECT NO.: RCA 301

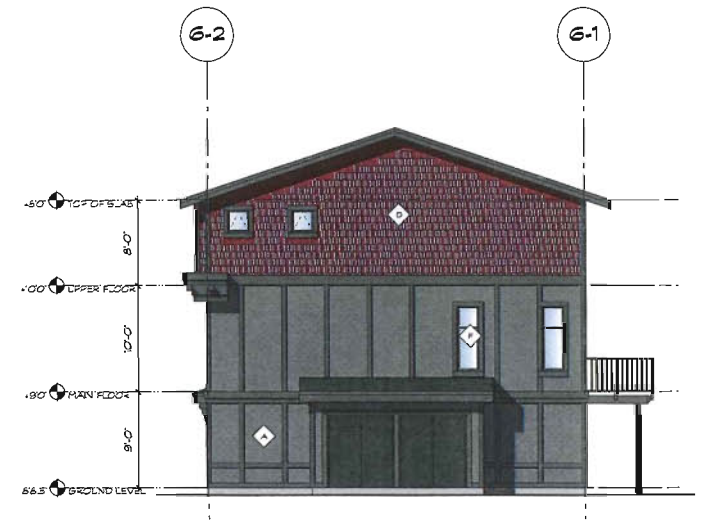
SHEET TITLE:
Elevations Building 5
Elevations

REVISION NO.:	SHEET NO.:
-	A4.4

File: RCA301_A4.4 Elevations.vwx Printed: 10/31/14 11:31:17 PM



1 / A4.5 FRONT (SOUTH) ELEVATION
SCALE: 1/8" = 1'-0"



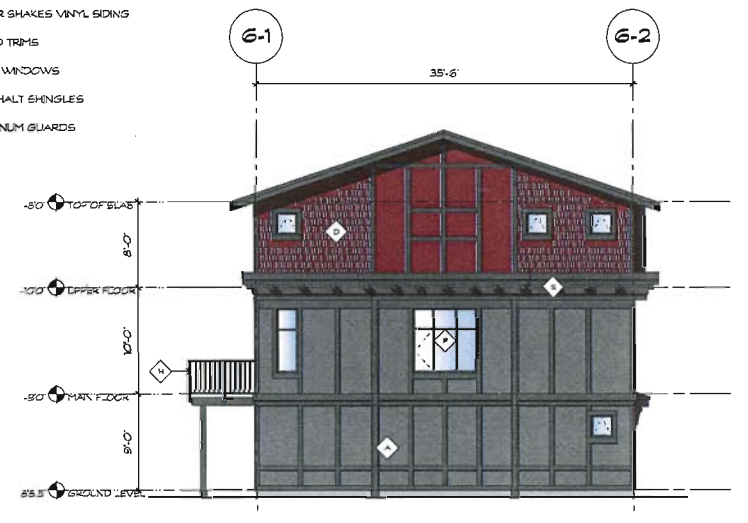
2 / A4.5 SIDE (EAST) ELEVATION
SCALE: 1/8" = 1'-0"

MATERIAL KEY

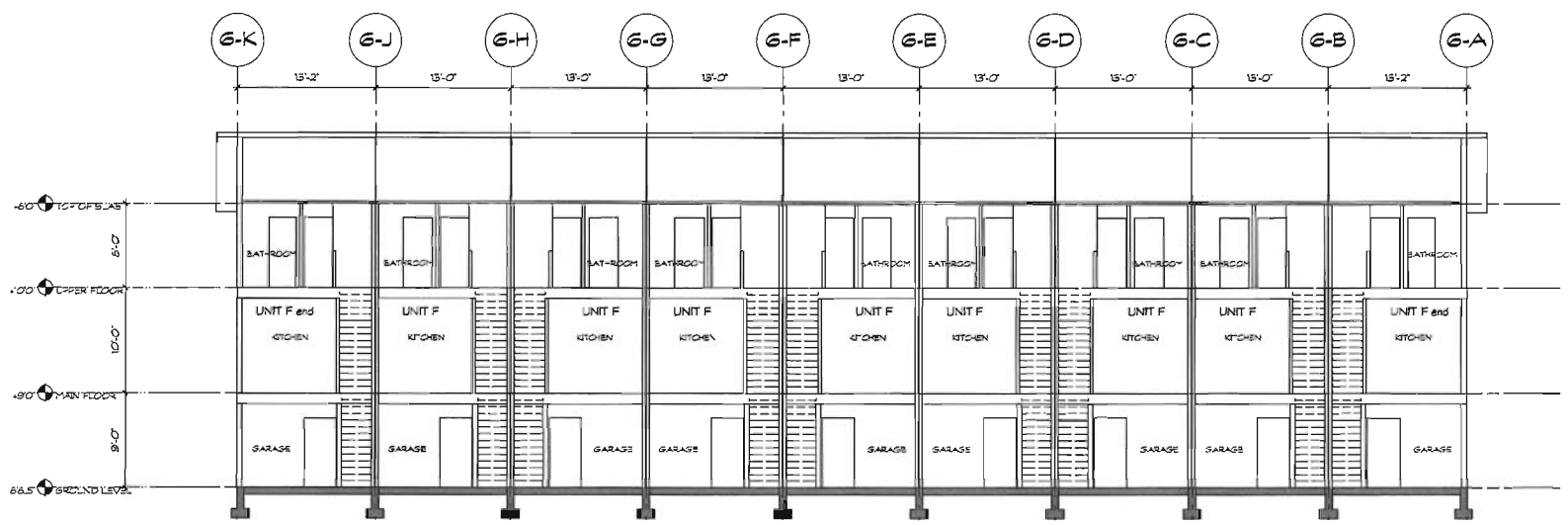
- A HARDI-PANEL WITH WOOD TRIMS
- B HORIZONTAL VINYL SIDING
- C BOARD AND BATTEN VINYL SIDING
- D CEDAR SHAKES VINYL SIDING
- E WOOD TRIMS
- F VINYL WINDOWS
- G ASPHALT SHINGLES
- H ALUMINUM GUARDS



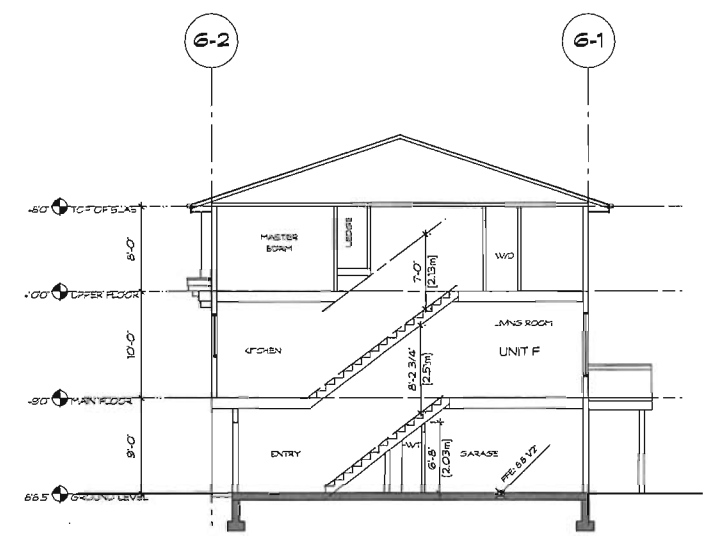
3 / A4.5 BACK (NORTH) ELEVATION
SCALE: 1/8" = 1'-0"



4 / A4.5 SIDE (WEST) ELEVATION
SCALE: 1/8" = 1'-0"



5 / A4.5 LONGITUDINAL SECTION
SCALE: 1/8" = 1'-0"



6 / A4.5 CROSS SECTIION
SCALE: 1/8" = 1'-0"

COPYRIGHT RESERVED. THIS DRAWING MUST NOT BE SCALED. VARIATIONS AND MODIFICATIONS TO WORK SHOWN ON THESE DRAWINGS SHALL NOT BE CARRIED OUT WITHOUT WRITTEN PERMISSION FROM THE ARCHITECTS. THIS DRAWING IS THE EXCLUSIVE PROPERTY OF ROBERT CICCOZZI ARCHITECTURE INC. AND CAN BE REPRODUCED ONLY WITH THEIR WRITTEN PERMISSION.

REVISION:

NO.:	DATE:	DESCRIPTION:

ISSUE:

DATE:	DESCRIPTION:
13.02.14	ISSUED FOR REZONING
26.03.14	RE-ISSUED FOR REZONING
19.09.14	ISSUED FOR DP
31.10.14	RE-ISSUED FOR DP

SEAL:

Plan 3f Nov 03, 2014
DP 14-672669

RCA
Robert Ciccozzi Architecture Inc.
200 - 2339 Columbia Street
Vancouver, B.C.
Canada V5Y 3Y3
Tel: (604) 687-4741
Fax: (604) 687-4641
admin@ciccozziarchitecture.com

RECEIVED
NOV 03 2014

PROJECT:
OXFORD LANE TOWNHOMES
9191 - 9231 Alexandra Rd.
Richmond BC

DRAWN:	CHECKED BY:
SCALE:	PROJECT NO.: RCA 501

SHEET TITLE:
Elevations Building 6
Elevations/Sections

REVISION NO.:	SHEET NO.:
-	A4.5

File: RCA501_A4.5 Elevations.vwx Printed: 10/31/14 at 9:51:17 PM









COPYRIGHT RESERVED. THIS DRAWING MUST NOT BE SCALED. VARIATIONS AND MODIFICATIONS TO WORK SHOWN ON THESE DRAWINGS SHALL NOT BE CARRIED OUT WITHOUT WRITTEN PERMISSION FROM THE ARCHITECTS. THIS DRAWING IS THE EXCLUSIVE PROPERTY OF ROBERT CICCOZZI ARCHITECTURE INC. AND CAN BE REPRODUCED ONLY WITH THEIR WRITTEN PERMISSION.

REVISION:

NO.:	DATE:	DESCRIPTION:

ISSUE:

DATE:	DESCRIPTION:
18.08.14	ISSUED FOR DP
31.10.14	RE-ISSUED FOR DP

SEAL:

Plan 3g Nov 03, 2014
DP 14-672669

RCA
Robert Ciccozzi Architecture Inc.
200 - 2339 Columbia Street
Vancouver, B.C.
Canada V5Y 3Y3
Tel: (604) 687-4741
Fax: (604) 687-4641
admin@ciccozziarchitecture.com



1 HORIZONTAL SIDING
GENTEK
LINEN (012)
- VINYL HORIZONTAL SIDING
- VINYL BOARD & BATTEN

2 HORIZONTAL SIDING
GENTEK
DOVER GRAY (127)
- VINYL HORIZONTAL SIDING
- VINYL BOARD & BATTEN

3 HORIZONTAL SIDING
GENTEK
WINDSWEPT SMOKE (651)
- VINYL HORIZONTAL SIDING
- VINYL BOARD & BATTEN

4 CEDAR SHAKES
GENTEK
VENETIAN RED (088)
- VINYL CEDAR LOOK SHAKES

5 ROOF SHINGLES
OWENS CORNING
ONYX BLACK

8 PAINT COLOUR
BENJAMIN MOORE
"WHITE DOWN" (OC-131)
- HARDIE PANEL
- TRIMS
- PANELS
- SOFFIT

7 PAINT COLOUR
BENJAMIN MOORE
"COVENTRY GRAY" (HC-169)
- TRIMS

6 PAINT COLOUR
BENJAMIN MOORE
"KENDALL CHARCOAL" (HC-166)
- HARDIE PANEL
- TRIMS
- PANELS

9 PAINT COLOUR
BENJAMIN MOORE
"SIENNA" (2092-20)
- TRIMS

10 PAINT COLOUR
BENJAMIN MOORE
- "IRON MOUNTAIN" (2134-30)
- TRIMS
- FASCIA
- DOORS

11 BRICK
MUTUAL MATERIALS
INCA - MISSION

RECEIVED
NOV 03 2014

PROJECT:
OXFORD LANE TOWNHOMES
9191 - 9231 Alexandra Rd.
Richmond BC

DRAWN:	CHECKED BY:
SCALE:	PROJECT NO.: RCA 301

SHEET TITLE:
Material Board
COLOUR BOARD

REVISION NO.:	SHEET NO.:
-	A4.6

File: RCA301_A4.6 Sheet Boards.vwx Plotted: 30/10/14 at 3:37:17 PM



1 / A1.1 STREETSCAPE (DUBBERT STREET)
SCALE: 1:200



ADJACENT DEVELOPMENT SITE

2 / A1.1 STREETSCAPE (TOMICKI AVE.)
SCALE: 1:200



ADJACENT DEVELOPMENT SITE

3 / A1.1 STREETSCAPE (ALEXANDRA ROAD)
SCALE: 1:200

COPYRIGHT RESERVED. THIS DRAWING MUST NOT BE SCALED. VARIATIONS AND MODIFICATIONS TO WORK SHOWN ON THESE DRAWINGS SHALL NOT BE CARRIED OUT WITHOUT WRITTEN PERMISSION FROM THE ARCHITECTS. THIS DRAWING IS THE EXCLUSIVE PROPERTY OF ROBERT CICCOZZI ARCHITECTURE INC. AND CAN BE REPRODUCED ONLY WITH THEIR WRITTEN PERMISSION.

REVISION:

NO.:	DATE:	DESCRIPTION:

ISSUE:

DATE:	DESCRIPTION:
13.02.14	ISSUED FOR REZONING
26.03.14	RE-ISSUED FOR REZONING
18.08.14	ISSUED FOR DP
31.10.14	RE-ISSUED FOR DP

SEAL:

RCA
Robert Ciccozzi Architecture Inc.
200 - 2339 Columbia Street
Vancouver, B.C.
Canada V5Y 3Y3
Tel: (604) 687-4741
Fax: (604) 687-4641
admin@ciccozziarchitecture.com

RECEIVED
NOV 03 2014

PROJECT:
OXFORD LANE TOWNHOMES
9191 - 9231 Alexandra Rd.
Richmond BC

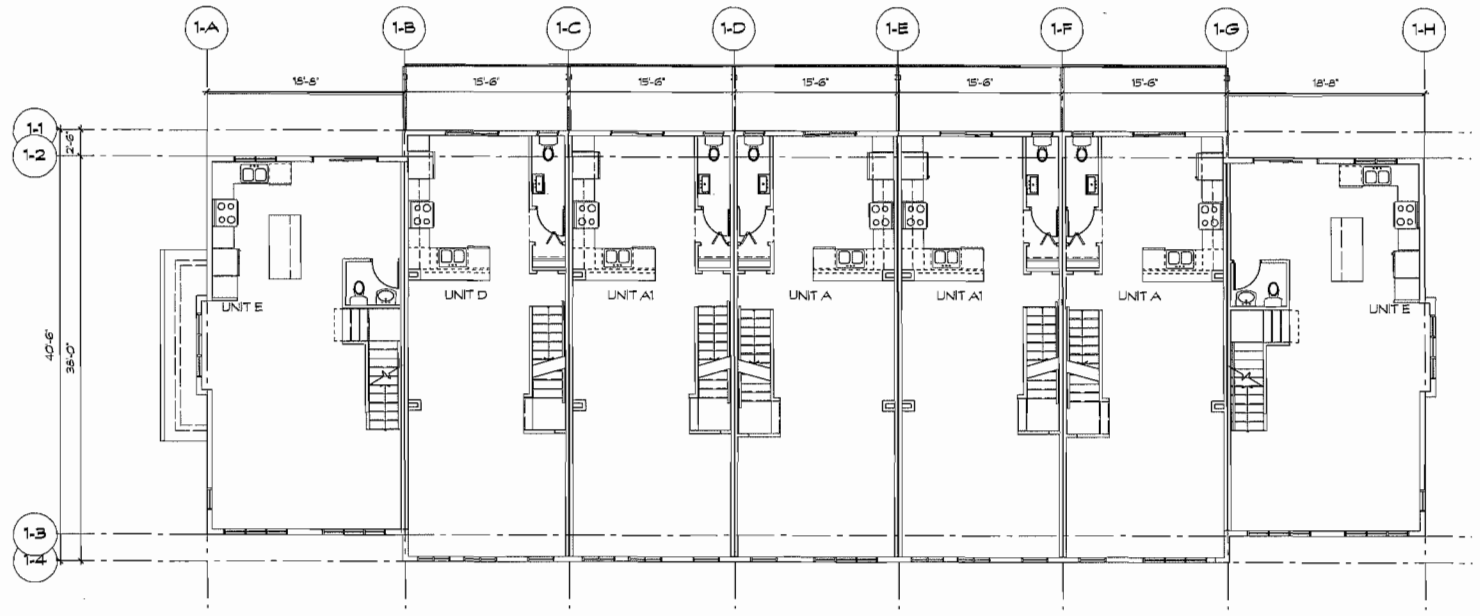
DRAWN:	CHECKED BY:
SCALE:	PROJECT NO.: RCA 301

SHEET TITLE: Streetscape

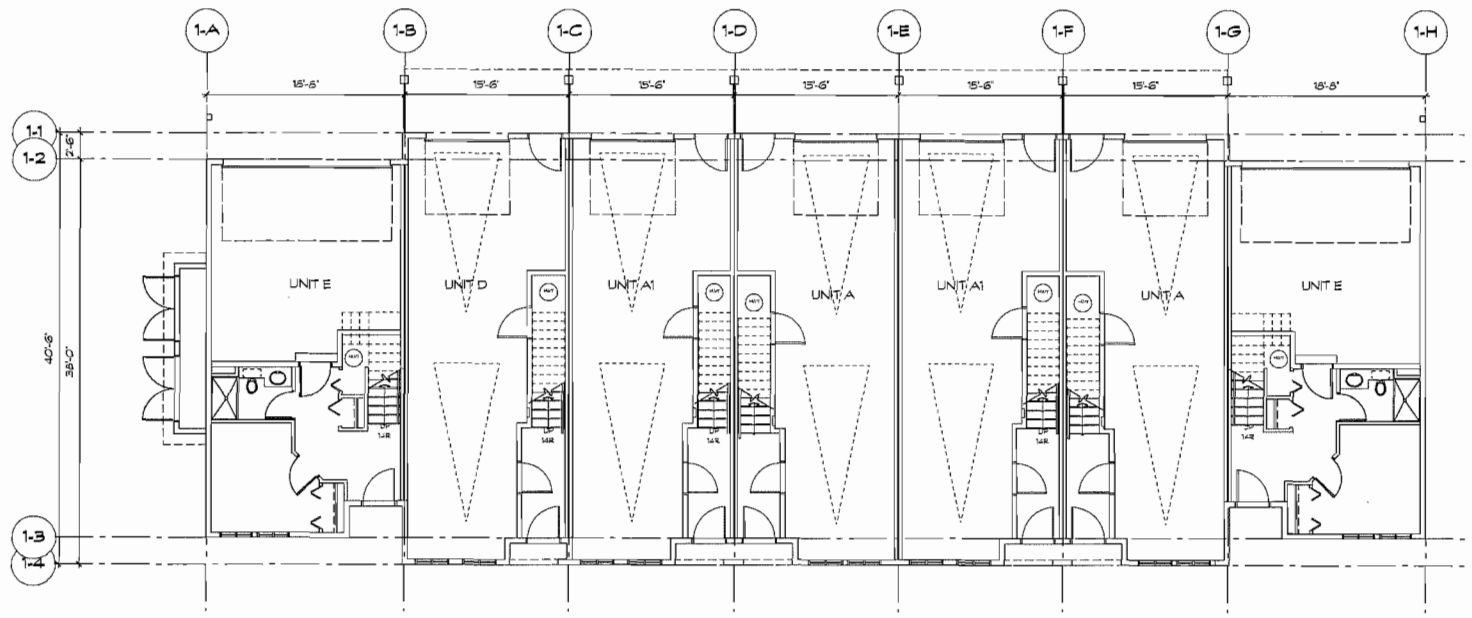
REVISION NO.:	SHEET NO.:
-	A1.1

Reference Plan Nov 03, 2014
DP 14-672669

File: RCA301_A1.1 Elevations.vwx Printed: 10/31/14 at 3:50:17 PM



2 MAIN FLOOR PLAN
SCALE: 1/8"=1'-0"



1 GROUND FLOOR PLAN
SCALE: 1/8"=1'-0"

Reference Plan Nov 03, 2014

DP 14-672669

COPYRIGHT RESERVED. THIS DRAWING MUST NOT BE SCALED. VARIATIONS AND MODIFICATIONS TO WORK SHOWN ON THESE DRAWINGS SHALL NOT BE CARRIED OUT WITHOUT WRITTEN PERMISSION FROM THE ARCHITECTS. THIS DRAWING IS THE EXCLUSIVE PROPERTY OF ROBERT CICCOZZI ARCHITECTURE INC. AND CAN BE REPRODUCED ONLY WITH THEIR WRITTEN PERMISSION.

REVISION:

NO.:	DATE:	DESCRIPTION:

ISSUE:

DATE:	DESCRIPTION:
13.02.14	ISSUED FOR REZONING
13.06.14	RE-ISSUED FOR REZONING
19.09.14	ISSUED FOR DP
31.10.14	RE-ISSUED FOR DP

SEAL:

RCA

Robert Ciccozzi Architecture Inc.

200 - 2339 Columbia Street
Vancouver, B.C.
Canada V5Y 3Y3
Tel: (604) 687-4741
Fax: (604) 687-4641
admin@ciccozziarchitecture.com

PROJECT:

OXFORD LANE TOWNHOMES

9191 - 9231 Alexandra Rd,
Richmond BC

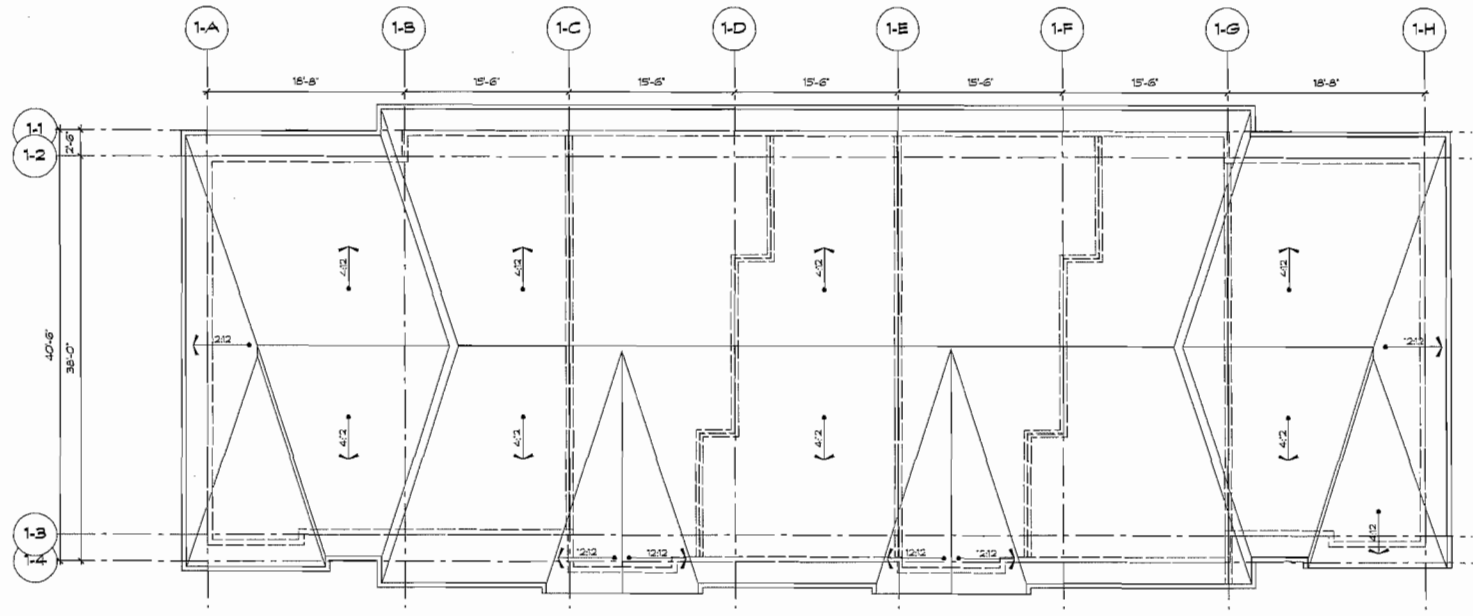
DRAWN:	CHECKED BY:
SCALE: 1/8" = 1'-0"	PROJECT NO.: RCA 301

SHEET TITLE:

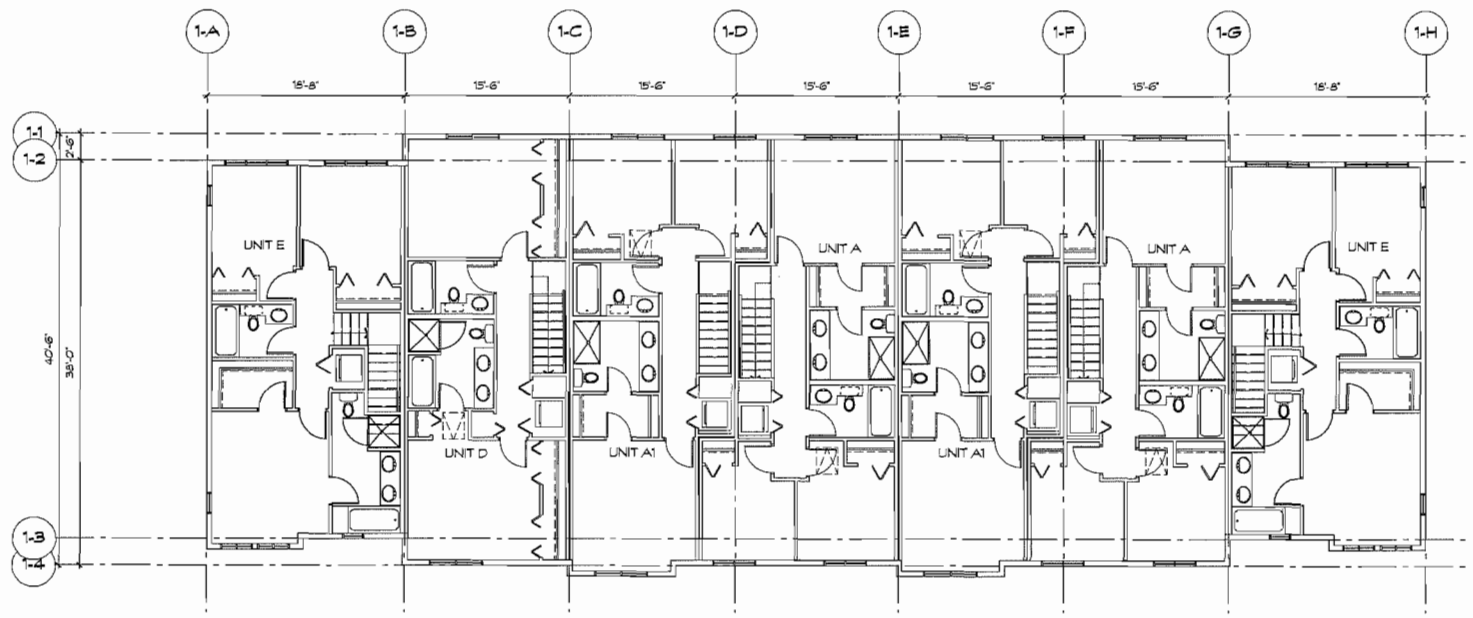
Building 1
FLOOR PLANS

REVISION NO.:	SHEET NO.:
-	A2.0

File: RCA301_A2.0a1 Building Plans.rvt Plotted: 19/11/14 at 4:56:43 PM



2 ROOF PLAN
SCALE: 1/8"=1'-0"



1 UPPER FLOOR PLAN
SCALE: 1/8"=1'-0"

Reference Plan Nov 03, 2014
DP 14-672669

COPYRIGHT RESERVED. THIS DRAWING MUST NOT BE SCALED. VARIATIONS AND MODIFICATIONS TO WORK SHOWN ON THESE DRAWINGS SHALL NOT BE CARRIED OUT WITHOUT WRITTEN PERMISSION FROM THE ARCHITECTS. THIS DRAWING IS THE EXCLUSIVE PROPERTY OF ROBERT CICCOZZI ARCHITECTURE INC. AND CAN BE REPRODUCED ONLY WITH THEIR WRITTEN PERMISSION.

REVISION:

NO.:	DATE:	DESCRIPTION:

ISSUE:

DATE:	DESCRIPTION:
13.02.14	ISSUED FOR REZONING
13.05.14	RE-ISSUED FOR REZONING
19.09.14	ISSUED FOR DP
31.10.14	RE-ISSUED FOR DP

SEAL:

RCA

Robert Ciccozzi Architecture Inc.

200 - 2339 Columbia Street
Vancouver, B.C.
Canada V5Y 3Y3
Tel: (604) 687-4741
Fax: (604) 687-4641
admin@ciccozziarchitecture.com

PROJECT:

OXFORD LANE TOWNHOMES

9131 - 9231 Alexandra Rd.
Richmond BC

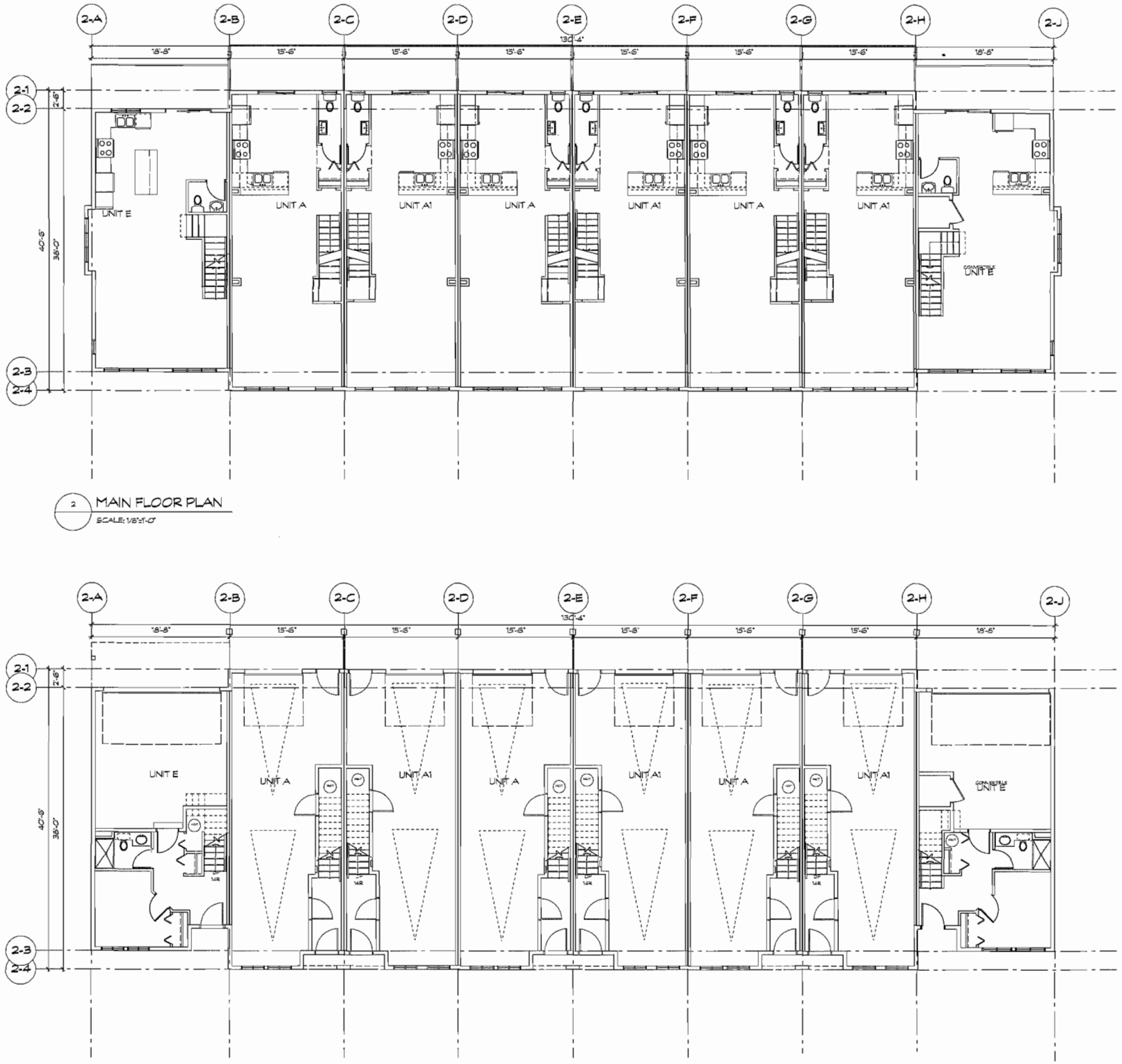
DRAWN:	CHECKED BY:
SCALE: 1/8" = 1'-0"	PROJECT NO.: RCA 301

SHEET TITLE:

Building 1
FLOOR PLANS

REVISION NO.:	SHEET NO.:
-	A2.1

File: RCA301_A2.01 Building Plans.vwx Printed: 10/31/14 at 4:45:43 PM



2 MAIN FLOOR PLAN
SCALE: 1/8"=1'-0"

1 GROUND FLOOR PLAN
SCALE: 1/8"=1'-0"

Reference Plan Nov 03, 2014
DP 14-672669

COPYRIGHT RESERVED. THIS DRAWING MUST NOT BE SCALED. VARIATIONS AND MODIFICATIONS TO WORK SHOWN ON THESE DRAWINGS SHALL NOT BE CARRIED OUT WITHOUT WRITTEN PERMISSION FROM THE ARCHITECTS. THIS DRAWING IS THE EXCLUSIVE PROPERTY OF ROBERT CICCOZZI ARCHITECTURE INC. AND CAN BE REPRODUCED ONLY WITH THEIR WRITTEN PERMISSION.

REVISION:

NO.:	DATE:	DESCRIPTION:

ISSUE:

DATE:	DESCRIPTION:
13.02.14	ISSUED FOR REZONING
13.06.14	RE-ISSUED FOR REZONING
19.09.14	ISSUED FOR DP
31.10.14	RE-ISSUED FOR DP

SEAL:

RCA

Robert Ciccozzi Architecture Inc.
200 - 2339 Columbia Street
Vancouver, B.C.
Canada V5Y 3Y3
Tel: (604) 687-4741
Fax: (604) 687-4641
admin@ciccozziarchitecture.com

PROJECT:

OXFORD LANE TOWNHOMES

9191 - 9231 Alexandra Rd.
Richmond BC

DRAWN:	CHECKED BY:
SCALE: 1/8" = 1'-0"	PROJECT NO.: RCA 301

SHEET TITLE:

Building 2
FLOOR PLANS

REVISION NO.:	SHEET NO.:
-	A2.2

File: RCA301_A2.1a Building Plans.mwx Plotted: 19/12/14 at 8:55:43 PM

COPYRIGHT RESERVED. THIS DRAWING MUST NOT BE SCALED. VARIATIONS AND MODIFICATIONS TO WORK SHOWN ON THESE DRAWINGS SHALL NOT BE CARRIED OUT WITHOUT WRITTEN PERMISSION FROM THE ARCHITECTS. THIS DRAWING IS THE EXCLUSIVE PROPERTY OF ROBERT CICCOZZI ARCHITECTURE INC. AND CAN BE REPRODUCED ONLY WITH THEIR WRITTEN PERMISSION.

REVISION:

NO.:	DATE:	DESCRIPTION:

ISSUE:

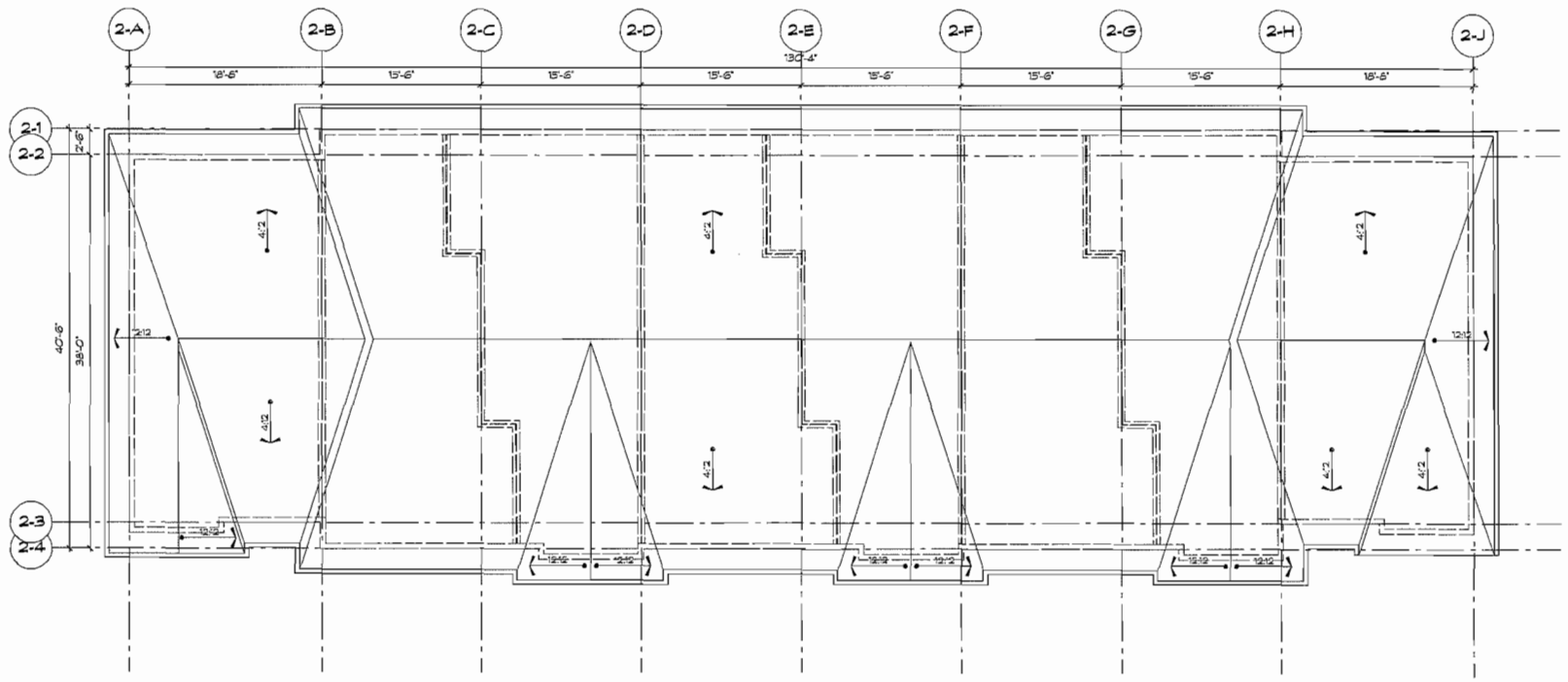
DATE:	DESCRIPTION:
13.02.14	ISSUED FOR REZONING
13.08.14	RE-ISSUED FOR REZONING
19.09.14	ISSUED FOR DP
31.10.14	RE-ISSUED FOR DP

SEAL:

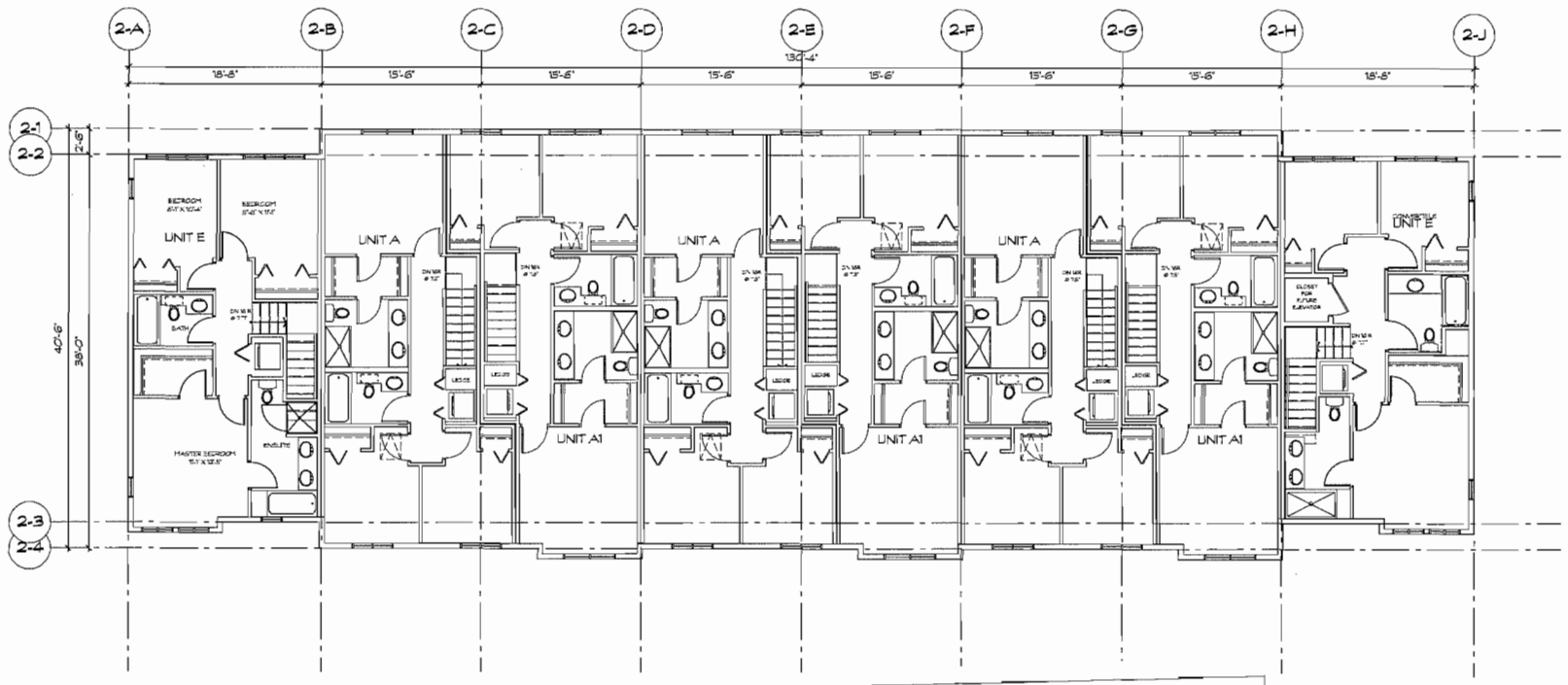
RCA

Robert Ciccozzi Architecture Inc.

200 - 2339 Columbia Street
Vancouver, B.C.
Canada V5Y 3Y3
Tel: (604) 687-4741
Fax: (604) 687-4641
admin@ciccozziarchitecture.com



2 ROOF PLAN
SCALE: 1/8"=1'-0"



1 UPPER FLOOR PLAN
SCALE: 1/8"=1'-0"

Reference Plan Nov 03, 2014
DP 14-672669

PROJECT:

OXFORD LANE TOWNHOMES

9131 - 9231 Alexandra Rd.
Richmond BC

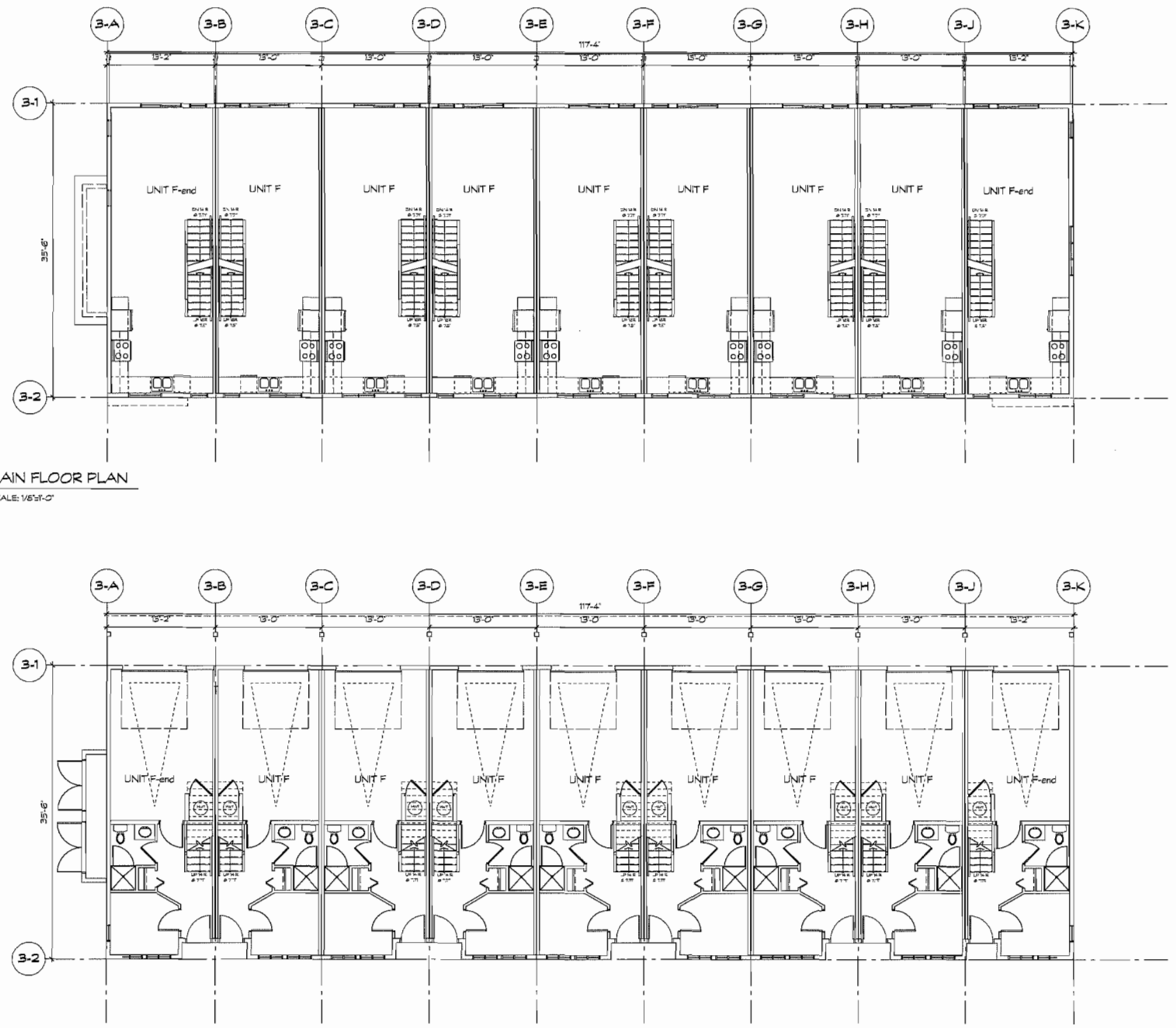
DRAWN:	CHECKED BY:
SCALE: 1/8" = 1'-0"	PROJECT NO.: RCA 301

SHEET TITLE:

Building 2
FLOOR PLANS

REVISION NO.:	SHEET NO.:
-	A2.3

File: RCA301_A2.3a Building Plans.vwx Plotted: 10/31/14 at 4:55:43 PM



2 MAIN FLOOR PLAN
SCALE: 1/8"=1'-0"

1 GROUND FLOOR PLAN
SCALE: 1/8"=1'-0"

Reference Plan Nov 03, 2014
DP 14-672669

COPYRIGHT RESERVED. THIS DRAWING MUST NOT BE SCALED. VARIATIONS AND MODIFICATIONS TO WORK SHOWN ON THESE DRAWINGS SHALL NOT BE CARRIED OUT WITHOUT WRITTEN PERMISSION FROM THE ARCHITECTS. THIS DRAWING IS THE EXCLUSIVE PROPERTY OF ROBERT CICCOZZI ARCHITECTURE INC. AND CAN BE REPRODUCED ONLY WITH THEIR WRITTEN PERMISSION.

REVISION:

NO.:	DATE:	DESCRIPTION:

ISSUE:

DATE:	DESCRIPTION:
13.02.14	ISSUED FOR REZONING
13.08.14	RE-ISSUED FOR REZONING
19.09.14	ISSUED FOR DP
31.10.14	RE-ISSUED FOR DP

SEAL:

RCA
Robert Ciccozzi Architecture Inc.
200 - 2339 Columbia Street
Vancouver, B.C.
Canada V5Y 3Y3
Tel: (604) 687-4741
Fax: (604) 687-4641
admin@ciccozziarchitecture.com

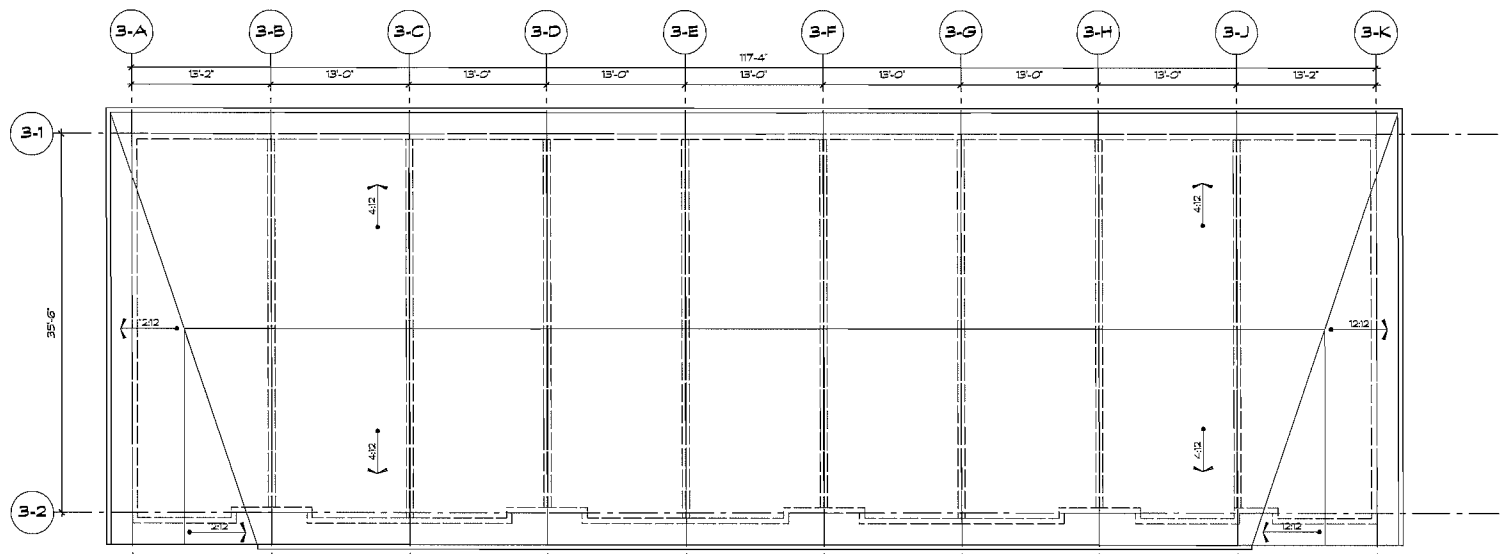
PROJECT:
OXFORD LANE TOWNHOMES
9191 - 9231 Alexandra Rd.
Richmond BC

DRAWN:	CHECKED BY:
SCALE: 1/8" = 1'-0"	PROJECT NO.: RCA 301

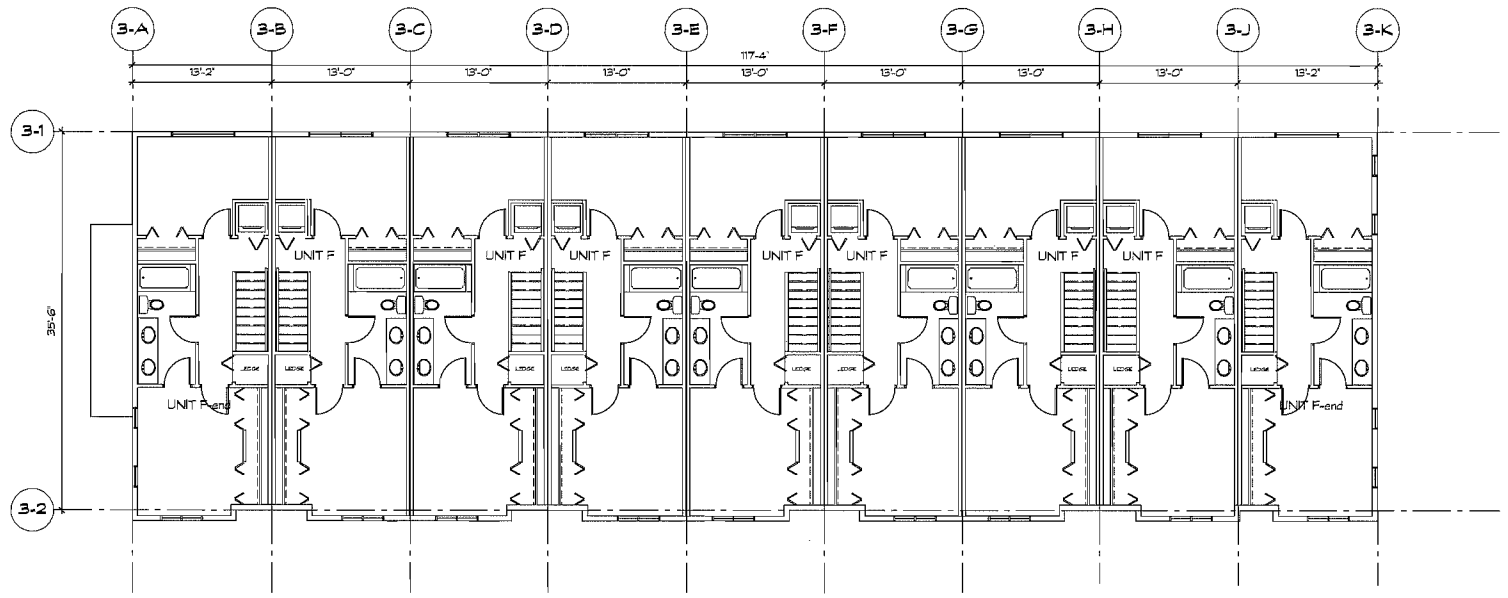
SHEET TITLE:
Building 3
FLOOR PLANS

REVISION NO.:	SHEET NO.:
-	A2.4

File: RCA301_A2.4 Building Plans.vwx Plotted: 10/31/14 at 4:30:43 PM



2 ROOF PLAN
SCALE: 1/8"=1'-0"



1 UPPER FLOOR PLAN
SCALE: 1/8"=1'-0"

Reference Plan Nov 03, 2014
DP 14-672669

COPYRIGHT RESERVED. THIS DRAWING MUST NOT BE SCALED. VARIATIONS AND MODIFICATIONS TO WORK SHOWN ON THESE DRAWINGS SHALL NOT BE CARRIED OUT WITHOUT WRITTEN PERMISSION FROM THE ARCHITECTS. THIS DRAWING IS THE EXCLUSIVE PROPERTY OF ROBERT CICCOZZI ARCHITECTURE INC. AND CAN BE REPRODUCED ONLY WITH THEIR WRITTEN PERMISSION.

REVISION:

NO.:	DATE:	DESCRIPTION:

ISSUE:

DATE:	DESCRIPTION:
13.02.14	ISSUED FOR REZONING
13.06.14	RE-ISSUED FOR REZONING
19.09.14	ISSUED FOR DP
21.10.14	RE-ISSUED FOR DP

SEAL:

RCA
Robert Ciccozzi Architecture Inc.
200 - 2339 Columbia Street
Vancouver, B.C.
Canada V5Y 3Y3
Tel: (604) 687-4741
Fax: (604) 687-4641
admin@ciccozziarchitecture.com

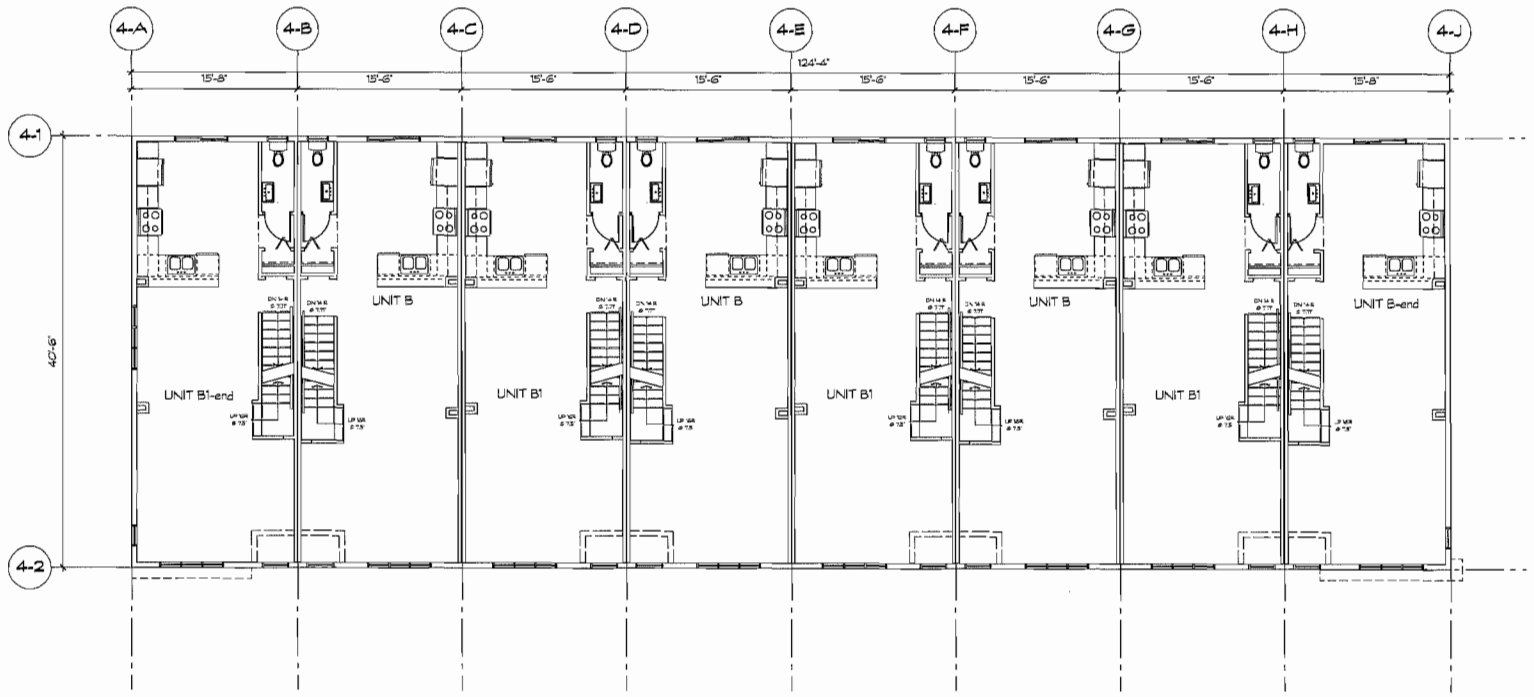
PROJECT:
OXFORD LANE TOWNHOMES
9191 - 9231 Alexandra Rd.
Richmond BC

DRAWN:	CHECKED BY:
SCALE: 1/8" = 1'-0"	PROJECT NO.: RCA 301

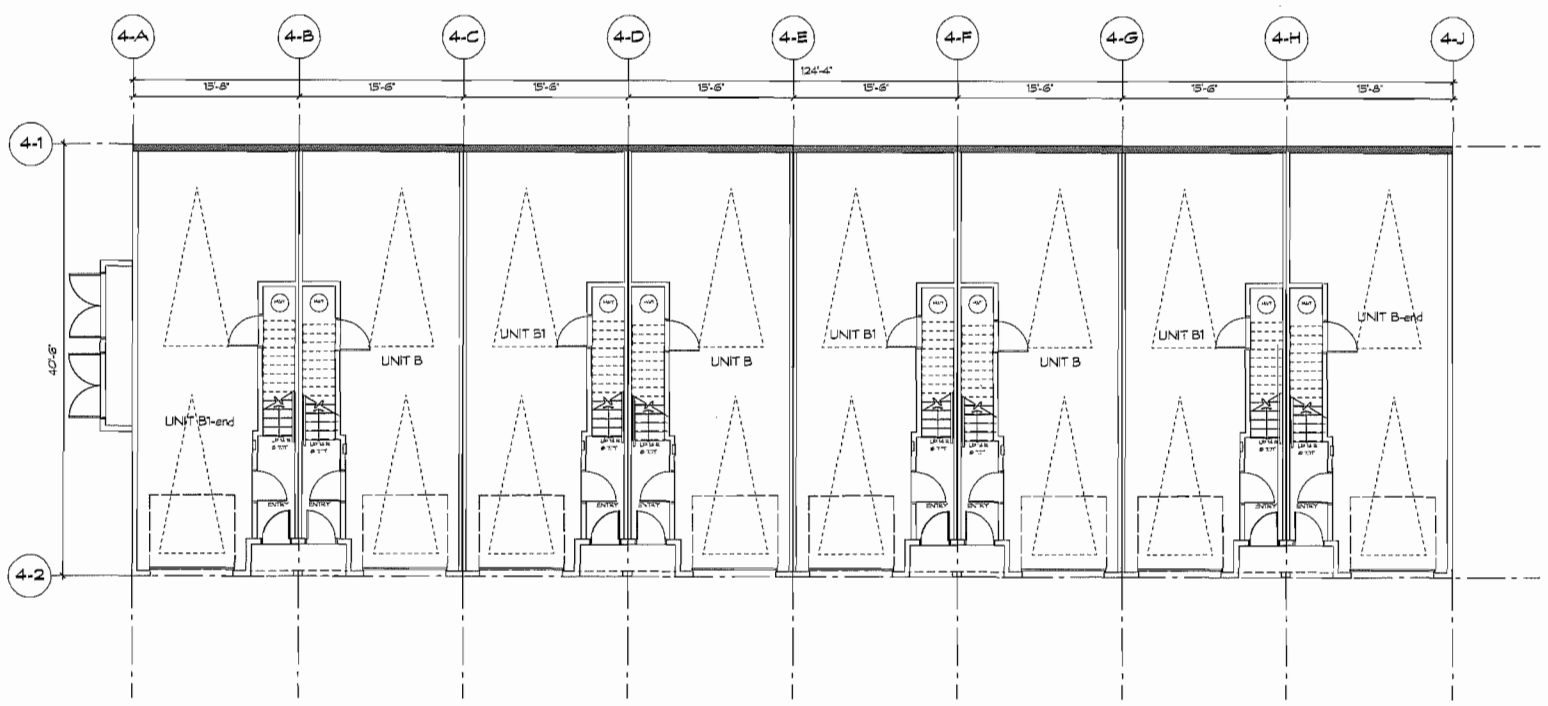
SHEET TITLE:
Building 3
FLOOR PLANS

REVISION NO.:	SHEET NO.:
-	A2.5

File: RCA301_A2.5R Building Plans.vwx Plotted: 10/31/14 at 4:30:43 PM



2 MAIN FLOOR PLAN
SCALE: 1/8"=1'-0"



1 GROUND FLOOR PLAN
SCALE: 1/8"=1'-0"

Reference Plan Nov 03, 2014
DP 14-672669

COPYRIGHT RESERVED. THIS DRAWING MUST NOT BE SCALED. VARIATIONS AND MODIFICATIONS TO WORK SHOWN ON THESE DRAWINGS SHALL NOT BE CARRIED OUT WITHOUT WRITTEN PERMISSION FROM THE ARCHITECTS. THIS DRAWING IS THE EXCLUSIVE PROPERTY OF ROBERT CICCOZZI ARCHITECTURE INC. AND CAN BE REPRODUCED ONLY WITH THEIR WRITTEN PERMISSION.

REVISION:

NO.:	DATE:	DESCRIPTION:

ISSUE:

DATE:	DESCRIPTION:
13.02.14	ISSUED FOR REZONING
13.06.14	RE-ISSUED FOR REZONING
19.09.14	ISSUED FOR DP
31.10.14	RE-ISSUED FOR DP

SEAL:

RCA

Robert Ciccozzi Architecture Inc.

200 - 2339 Columbia Street
Vancouver, B.C.
Canada V5Y 3Y3
Tel: (604) 687-4741
Fax: (604) 687-4641
admin@ciccozziarchitecture.com

PROJECT:

OXFORD LANE TOWNHOMES

9191 - 9231 Alexandra Rd,
Richmond BC

DRAWN:	CHECKED BY:
SCALE: 1/8" = 1'-0"	PROJECT NO.: RCA 301

SHEET TITLE:

Building 4
FLOOR PLANS

REVISION NO.:	SHEET NO.:
-	A2.6

File: RCA301_ALL4 Building Plans.vwx Plotted: 10/31/14 at 4:53:43 PM

COPYRIGHT RESERVED. THIS DRAWING MUST NOT BE SCALED. VARIATIONS AND MODIFICATIONS TO WORK SHOWN ON THESE DRAWINGS SHALL NOT BE CARRIED OUT WITHOUT WRITTEN PERMISSION FROM THE ARCHITECTS. THIS DRAWING IS THE EXCLUSIVE PROPERTY OF ROBERT CICCOZZI ARCHITECTURE INC. AND CAN BE REPRODUCED ONLY WITH THEIR WRITTEN PERMISSION.

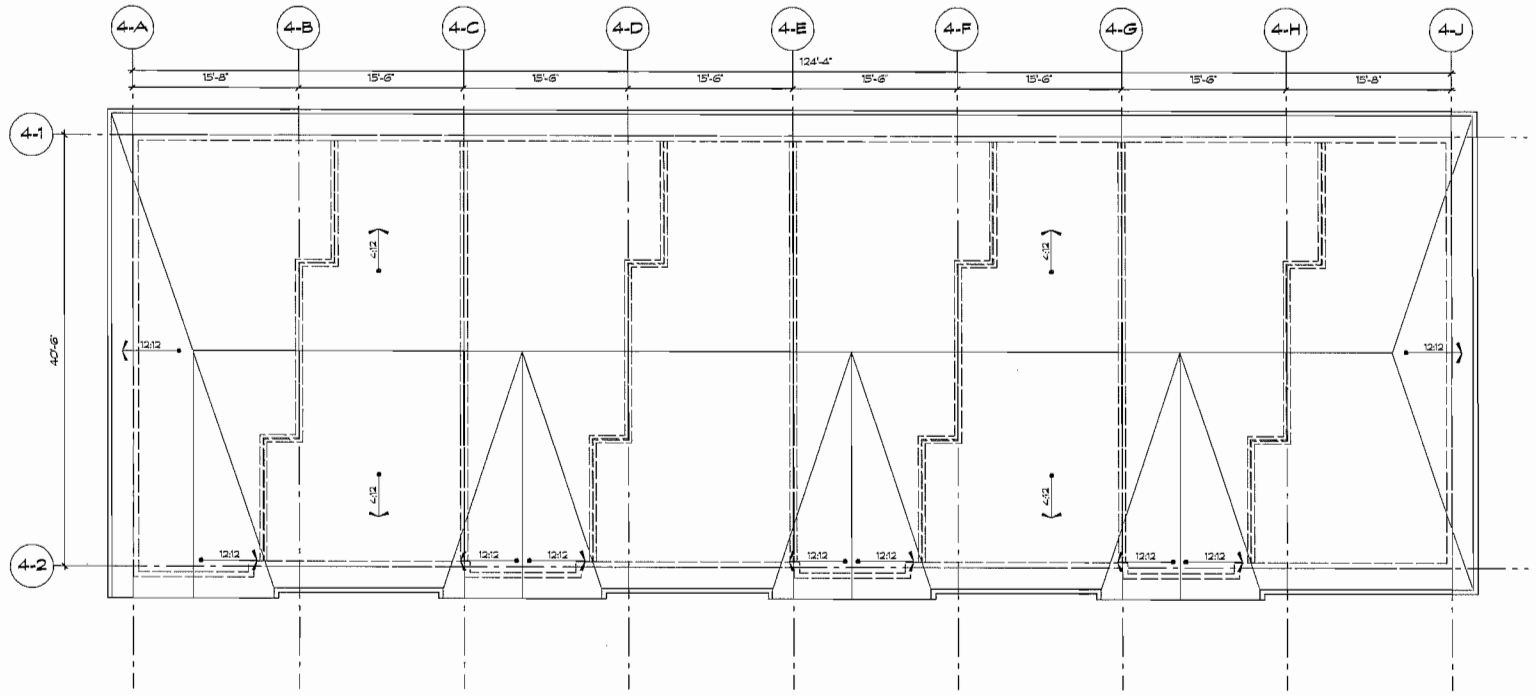
REVISION:

NO.:	DATE:	DESCRIPTION:

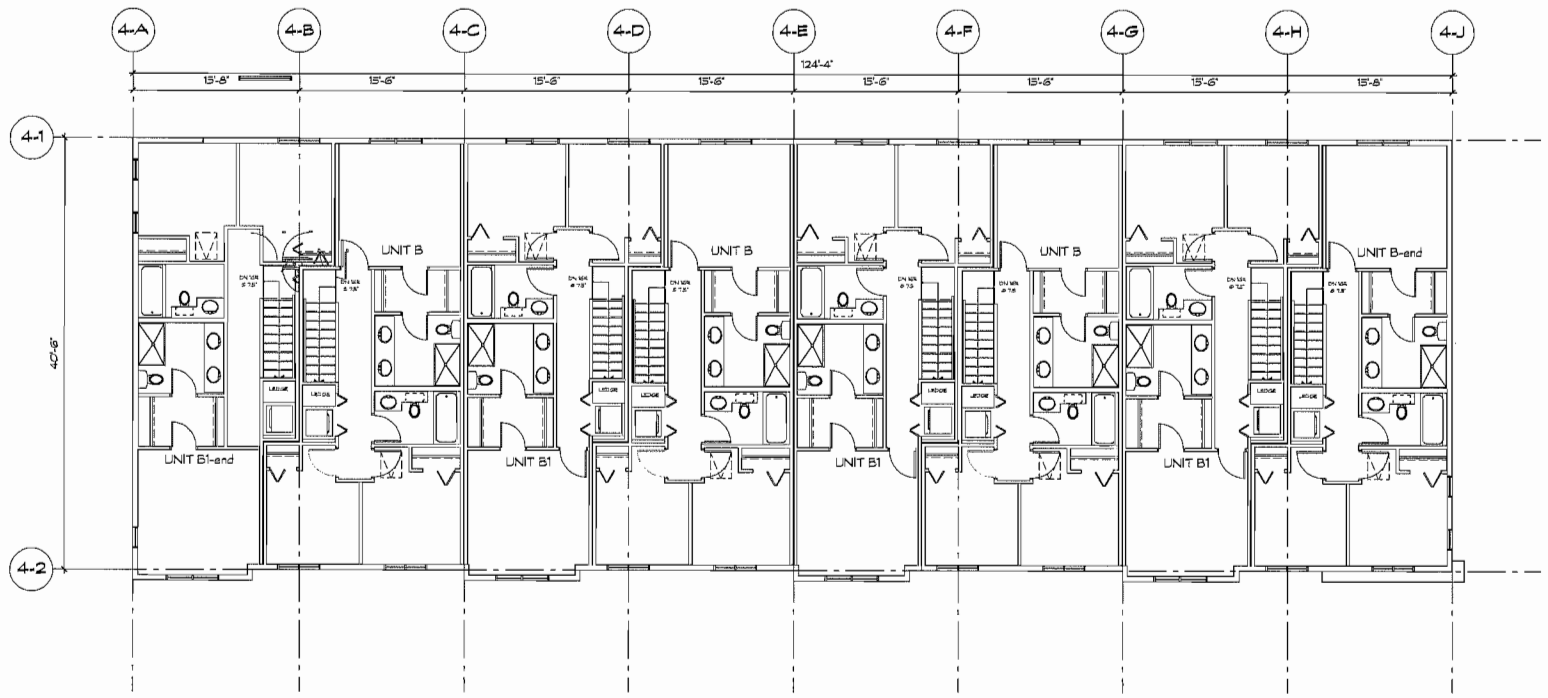
ISSUE:

DATE:	DESCRIPTION:
13.02.14	ISSUED FOR REZONING
13.06.14	RE-ISSUED FOR REZONING
19.09.14	ISSUED FOR DP
31.10.14	RE-ISSUED FOR DP

SEAL:



2 ROOF PLAN
SCALE: 1/8"=1'-0"



1 UPPER FLOOR PLAN
SCALE: 1/8"=1'-0"

Reference Plan Nov 03, 2014
DP 14-672669

RCA

Robert Ciccozzi Architecture Inc.

200 - 2339 Columbia Street
Vancouver, B.C.
Canada V5Y 3Y3
Tel: (604) 687-4741
Fax: (604) 687-4641
admin@ciccozziarchitecture.com

PROJECT:

OXFORD LANE TOWNHOMES

9191 - 9231 Alexandra Rd.
Richmond BC

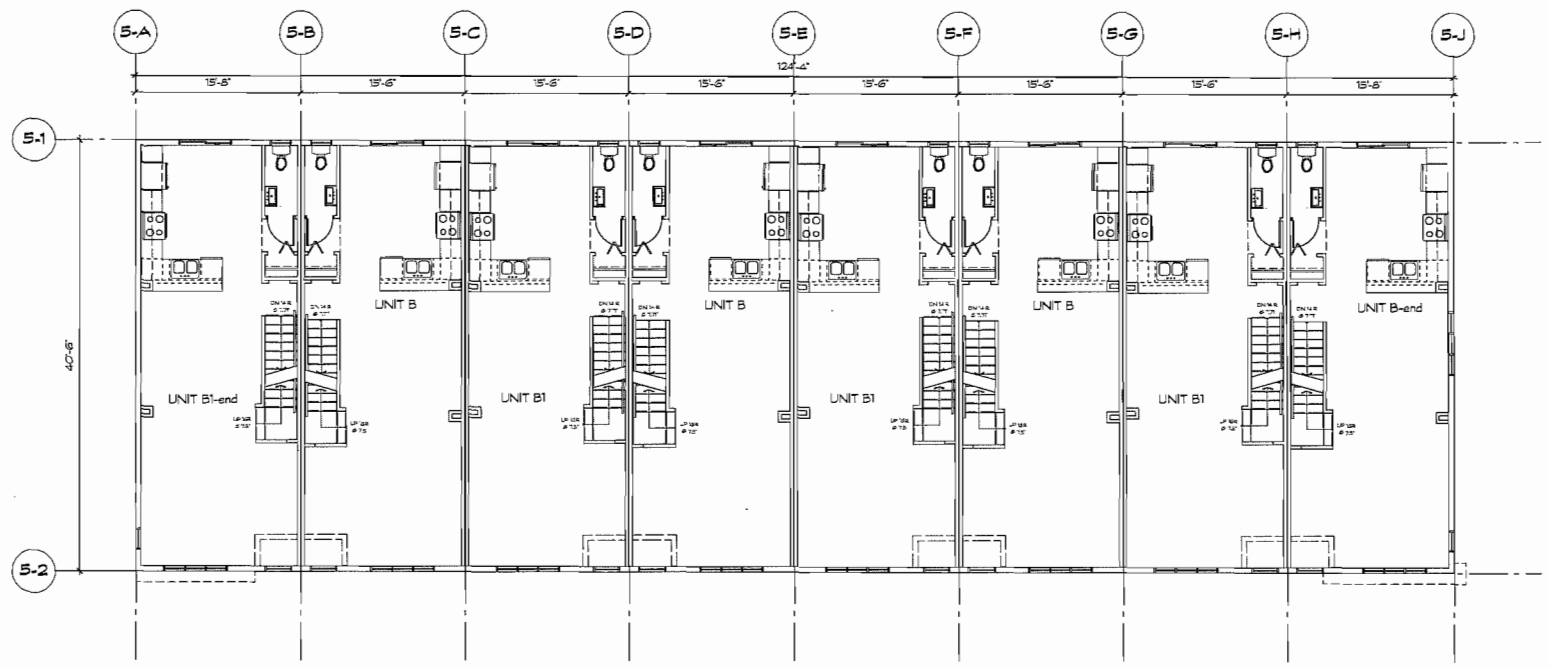
DRAWN:	CHECKED BY:
SCALE: 1/8" = 1'-0"	PROJECT NO.: RCA 301

SHEET TITLE:

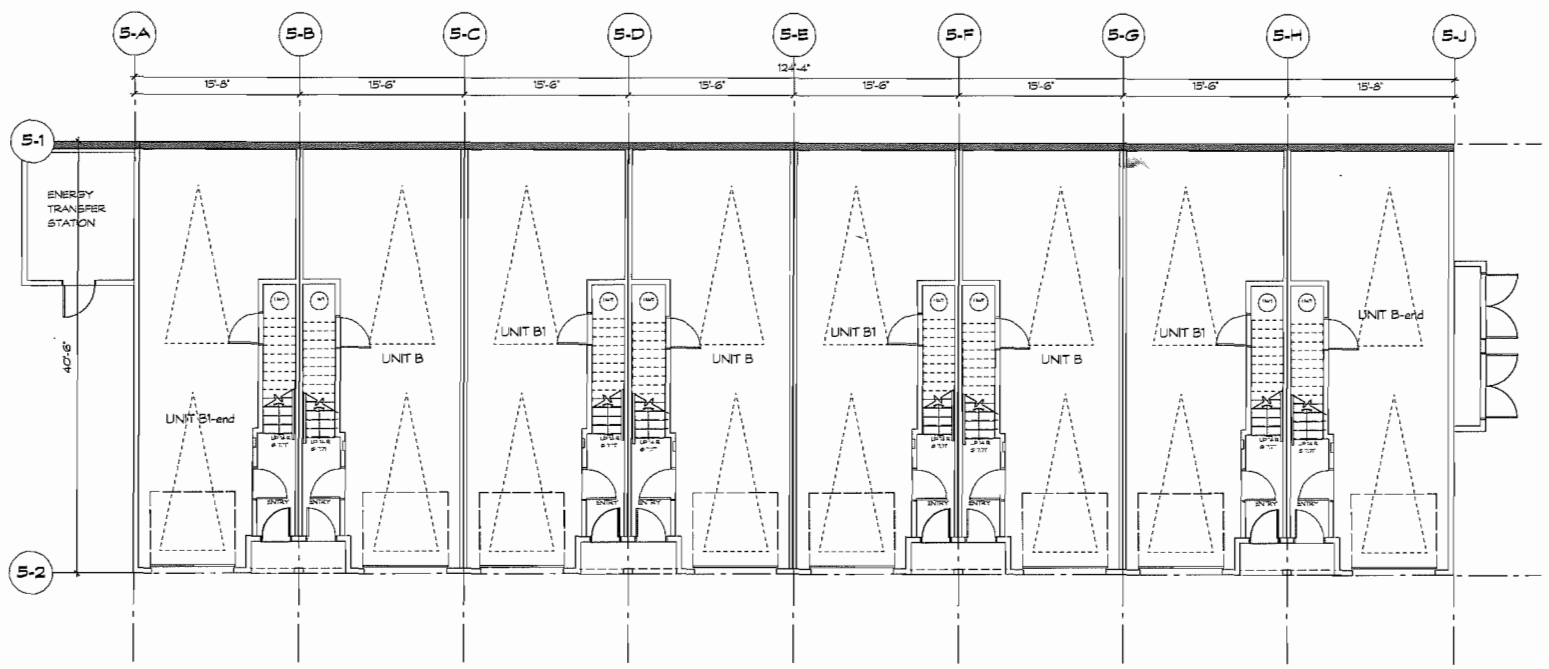
Building 4
FLOOR PLANS

REVISION NO.:	SHEET NO.:
-	A2.7

File: RCA301_A2.xx Building Plans.vwx Plotted: 2015.12.24 at 4:45:43 PM



2 MAIN FLOOR PLAN
SCALE: 1/8"=1'-0"



1 GROUND FLOOR PLAN
SCALE: 1/8"=1'-0"

Reference Plan Nov 03, 2014
DP 14-672669

COPYRIGHT RESERVED. THIS DRAWING MUST NOT BE SCALED. VARIATIONS AND MODIFICATIONS TO WORK SHOWN ON THESE DRAWINGS SHALL NOT BE CARRIED OUT WITHOUT WRITTEN PERMISSION FROM THE ARCHITECTS. THIS DRAWING IS THE EXCLUSIVE PROPERTY OF ROBERT CICCOZZI ARCHITECTURE INC. AND CAN BE REPRODUCED ONLY WITH THEIR WRITTEN PERMISSION.

REVISION:

NO.:	DATE:	DESCRIPTION:

ISSUE:

DATE:	DESCRIPTION:
13.02.14	ISSUED FOR REZONING
13.06.14	RE-ISSUED FOR REZONING
19.08.14	ISSUED FOR DP
31.10.14	RE-ISSUED FOR DP

SEAL:

RCA

Robert Ciccozzi Architecture Inc.

200 - 2339 Columbia Street
Vancouver, B.C.
Canada V5Y 3Y3
Tel: (604) 687-4741
Fax: (604) 687-4641
admin@ciccozziarchitecture.com

PROJECT:

OXFORD LANE TOWNHOMES

9191 - 9231 Alexandra Rd,
Richmond BC

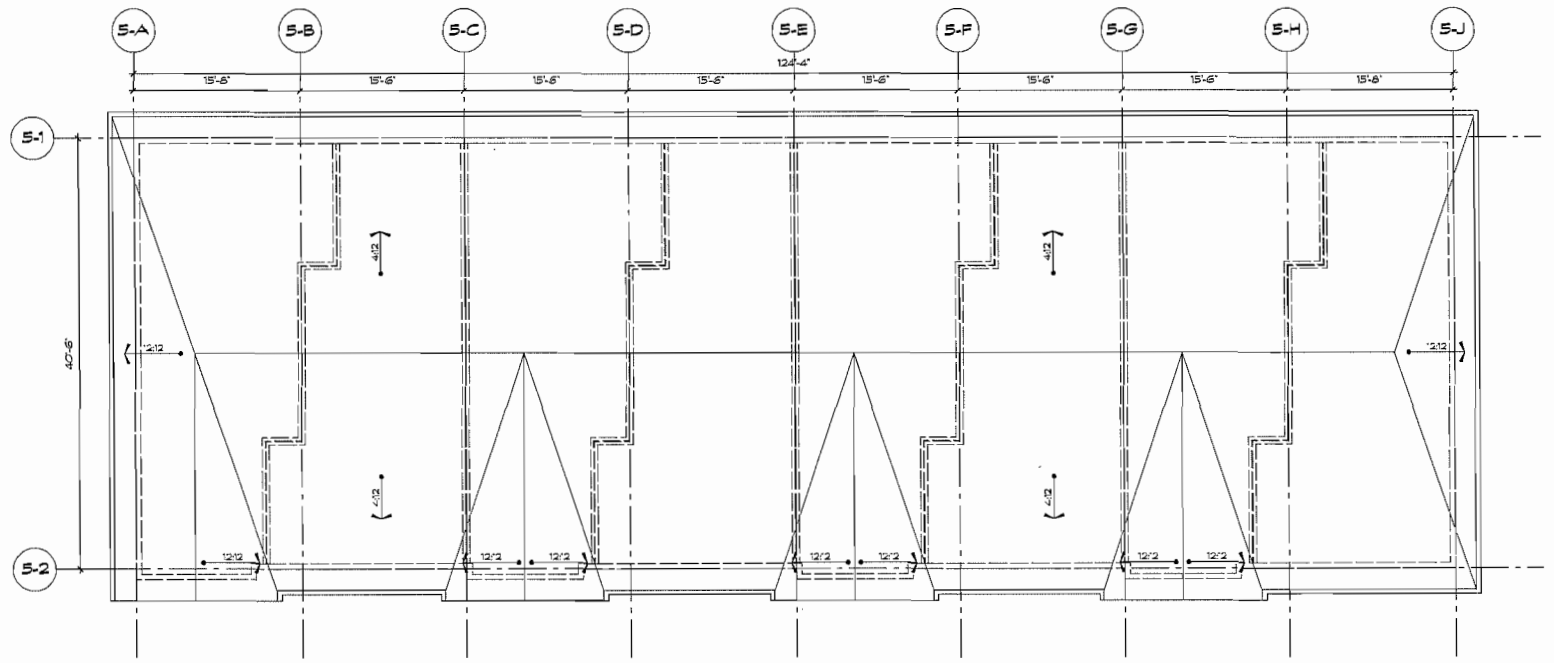
DRAWN:	CHECKED BY:
SCALE: 1/8" = 1'-0"	PROJECT NO.: RCA 301

SHEET TITLE:

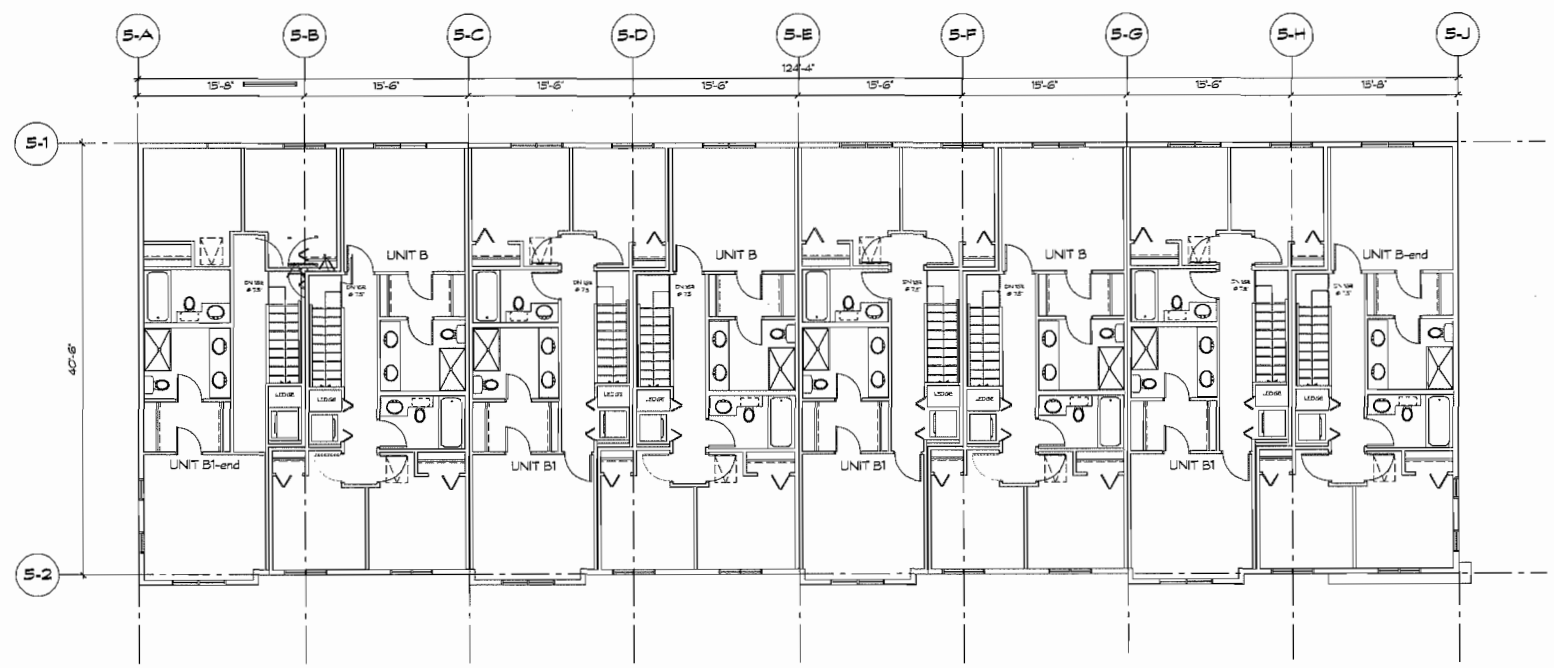
Building 5
FLOOR PLANS

REVISION NO.:	SHEET NO.:
-	A2.8

File: RCA301_A2.8 Building Plans.mwx Plotted: 19/11/14 at 4:55:43 PM



2 ROOF PLAN
SCALE: 1/8"=1'-0"



1 UPPER FLOOR PLAN
SCALE: 1/8"=1'-0"

Reference Plan Nov 03, 2014

DP 14-672669

COPYRIGHT RESERVED. THIS DRAWING MUST NOT BE SCALED. VARIATIONS AND MODIFICATIONS TO WORK SHOWN ON THESE DRAWINGS SHALL NOT BE CARRIED OUT WITHOUT WRITTEN PERMISSION FROM THE ARCHITECTS. THIS DRAWING IS THE EXCLUSIVE PROPERTY OF ROBERT CICCOZZI ARCHITECTURE INC. AND CAN BE REPRODUCED ONLY WITH THEIR WRITTEN PERMISSION.

REVISION:

NO.:	DATE:	DESCRIPTION:

ISSUE:

DATE:	DESCRIPTION:
13.02.14	ISSUED FOR REZONING
13.06.14	RE-ISSUED FOR REZONING
18.09.14	ISSUED FOR DP
31.10.14	RE-ISSUED FOR DP

SEAL:

RCA

Robert Ciccozzi Architecture Inc.

200 - 2339 Columbia Street
Vancouver, B.C.
Canada V5Y 3Y3
Tel: (604) 687-4741
Fax: (604) 687-4641
admin@ciccozziarchitecture.com

PROJECT:

OXFORD LANE TOWNHOMES

9191 - 9231 Alexandra Rd.
Richmond BC

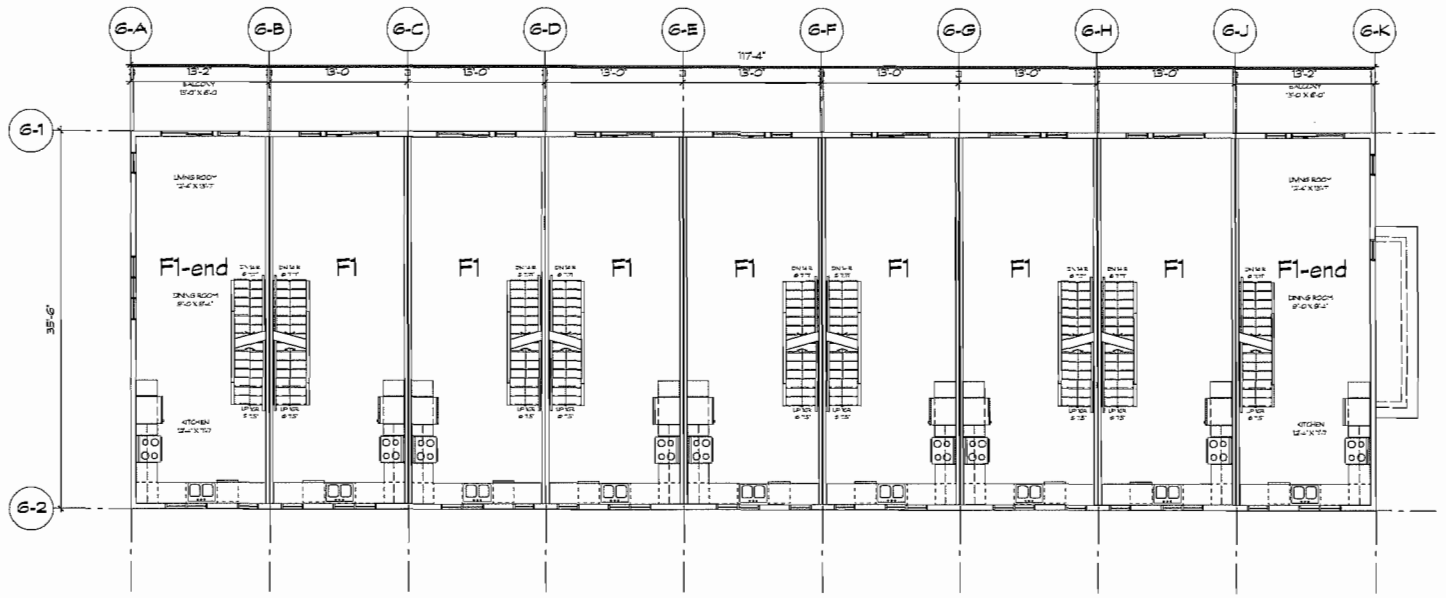
DRAWN:	CHECKED BY:
SCALE: 1/8" = 1'-0"	PROJECT NO.: RCA 307

SHEET TITLE:

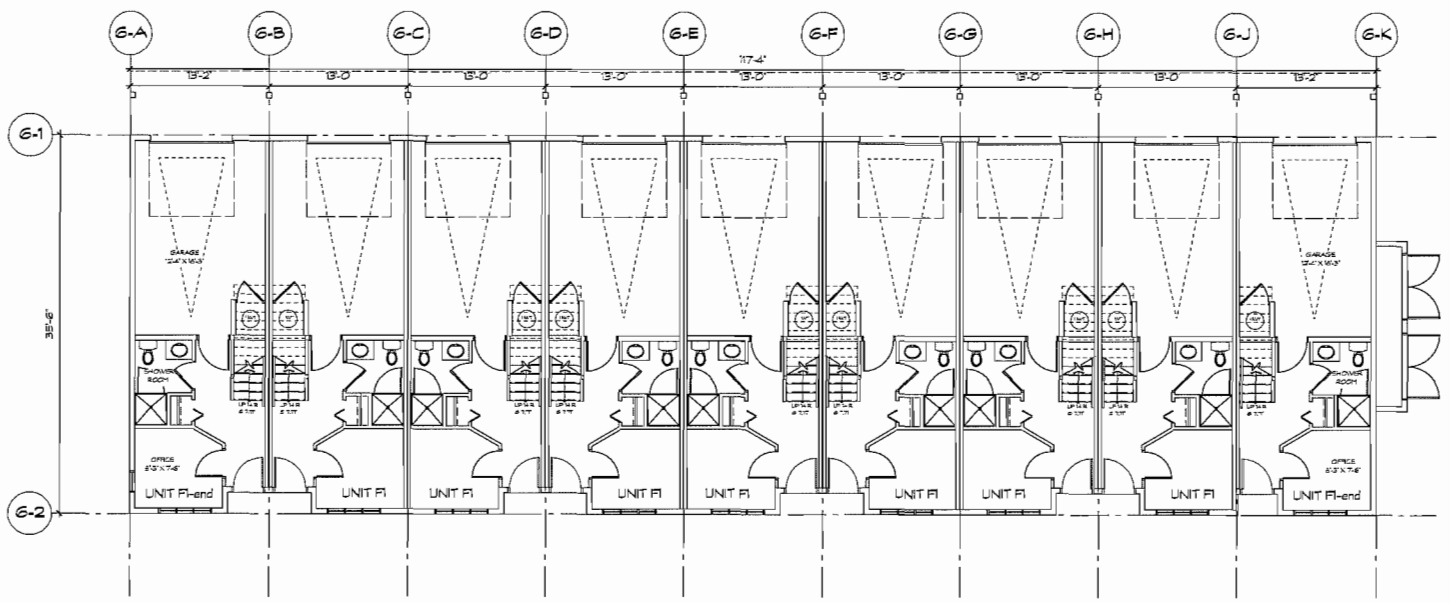
Building 5
FLOOR PLANS

REVISION NO.:	SHEET NO.:
-	A2.9

File: RCA14_A2.9 Building Plans.vwx Plotted: 31/10/14 at 4:53:43 PM



2 MAIN FLOOR PLAN
SCALE: 1/8"=1'-0"



1 GROUND FLOOR PLAN
SCALE: 1/8"=1'-0"

Reference Plan Nov 03, 2014
DP 14-672669

COPYRIGHT RESERVED. THIS DRAWING MUST NOT BE SCALED. VARIATIONS AND MODIFICATIONS TO WORK SHOWN ON THESE DRAWINGS SHALL NOT BE CARRIED OUT WITHOUT WRITTEN PERMISSION FROM THE ARCHITECTS. THIS DRAWING IS THE EXCLUSIVE PROPERTY OF ROBERT CICCOZZI ARCHITECTURE INC. AND CAN BE REPRODUCED ONLY WITH THEIR WRITTEN PERMISSION.

REVISION:

NO.:	DATE:	DESCRIPTION:

ISSUE:

DATE:	DESCRIPTION:
13.02.14	ISSUED FOR REZONING
13.06.14	RE-ISSUED FOR REZONING
13.09.14	ISSUED FOR DP
31.10.14	RE-ISSUED FOR DP

SEAL:

RCA

Robert Ciccozzi Architecture Inc.

200 - 2339 Columbia Street
Vancouver, B.C.
Canada V5Y 3Y3
Tel: (604) 687-4741
Fax: (604) 687-4641
admin@ciccozziarchitecture.com

PROJECT:

OXFORD LANE TOWNHOMES

9191 - 9231 Alexandra Rd.
Richmond BC

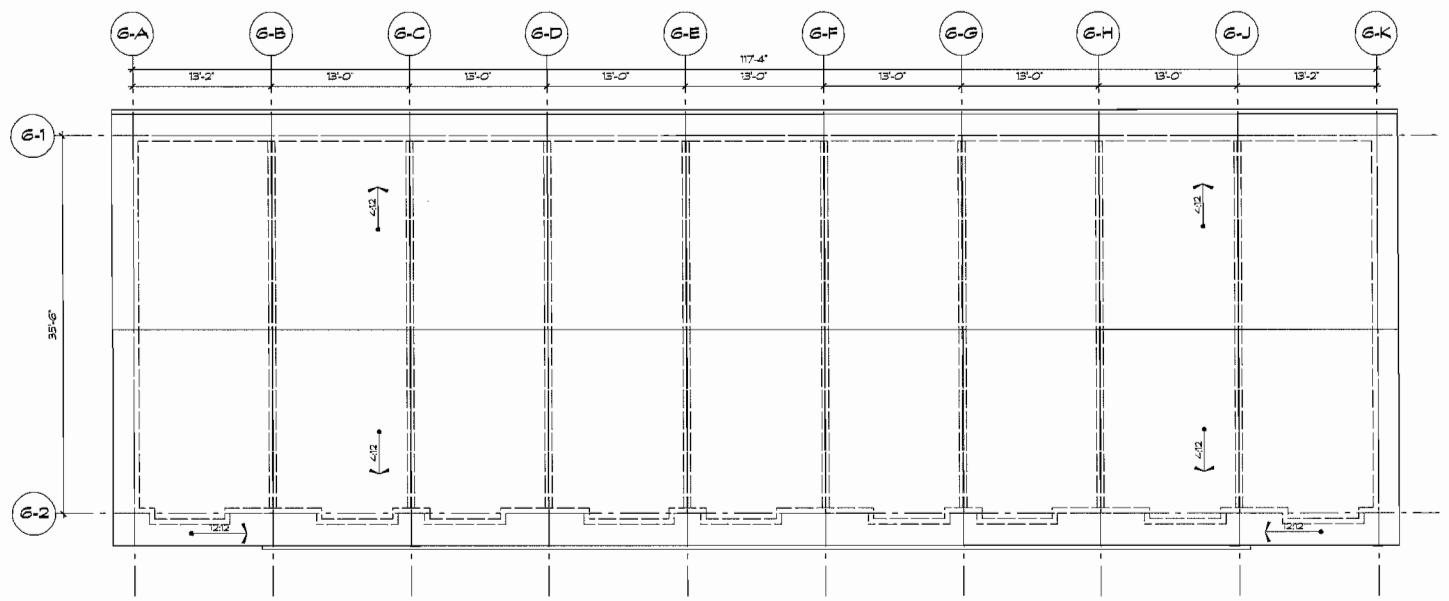
DRAWN:	CHECKED BY:
SCALE: 1/8" = 1'-0"	PROJECT NO.: RCA 301

SHEET TITLE:

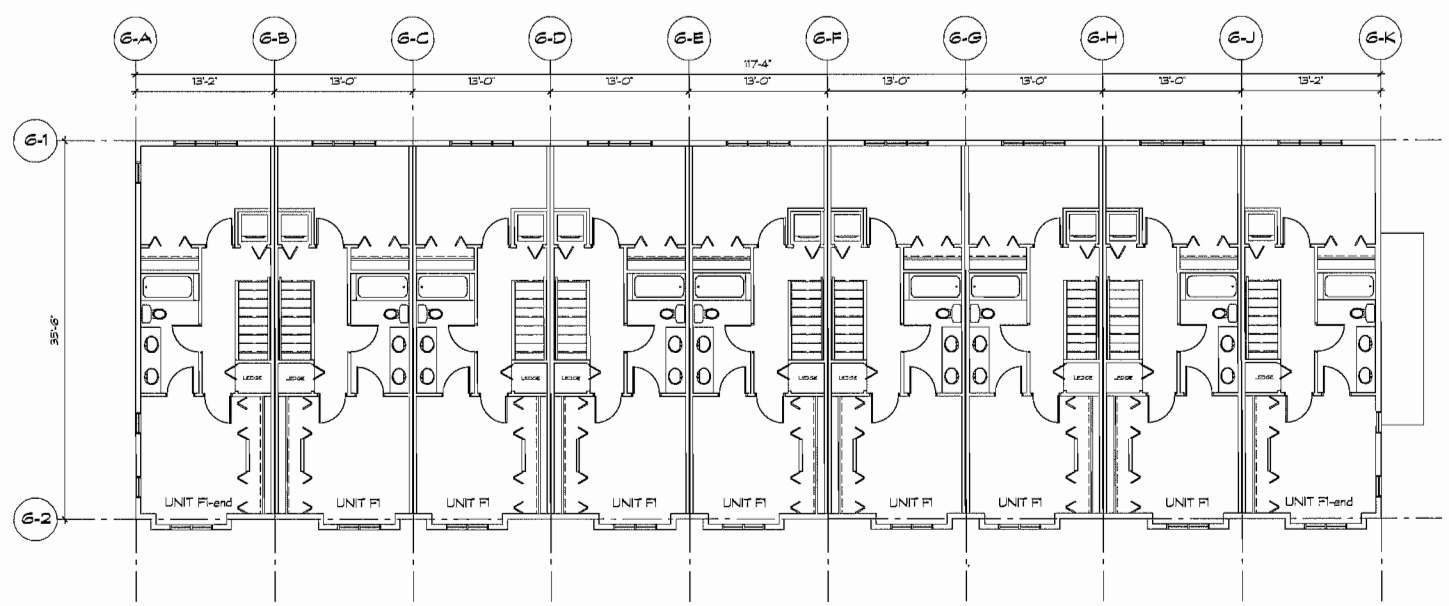
Building 6
FLOOR PLANS

REVISION NO.:	SHEET NO.:
-	A2.10

File: RCA301_A2.10 Building Plans.rvt Plotted: 10/31/14 at 4:56:43 PM



2 ROOF PLAN
SCALE: 1/8"=1'-0"



1 UPPER FLOOR PLAN
SCALE: 1/8"=1'-0"

Reference Plan Nov 03, 2014
DP 14-672669

COPYRIGHT RESERVED. THIS DRAWING MUST NOT BE SCALED. VARIATIONS AND MODIFICATIONS TO WORK SHOWN ON THESE DRAWINGS SHALL NOT BE CARRIED OUT WITHOUT WRITTEN PERMISSION FROM THE ARCHITECTS. THIS DRAWING IS THE EXCLUSIVE PROPERTY OF ROBERT CICCOZZI ARCHITECTURE INC. AND CAN BE REPRODUCED ONLY WITH THEIR WRITTEN PERMISSION.

REVISION:

NO.:	DATE:	DESCRIPTION:

ISSUE:

DATE:	DESCRIPTION:
13.02.14	ISSUED FOR REZONING
13.08.14	RE-ISSUED FOR REZONING
19.08.14	ISSUED FOR DP
31.10.14	RE-ISSUED FOR DP

SEAL:

RCA

Robert Ciccozzi Architecture Inc.

200 - 2339 Columbia Street
Vancouver, B.C.
Canada V5Y 3Y3
Tel: (604) 687-4741
Fax: (604) 687-4641
admin@ciccozziarchitecture.com

PROJECT:

OXFORD LANE TOWNHOMES

9191 - 9231 Alexandra Rd,
Richmond BC

DRAWN:	CHECKED BY:
SCALE: 1/8" = 1'-0"	PROJECT NO.: RCA 301

SHEET TITLE:

Building 6 FLOOR PLANS

REVISION NO.:	SHEET NO.:
-	A2.11

File: RCA301_A2.00 Building Floors.vwx Printed: 10/22/14 at 4:35:47 PM

City of Richmond

Report to Development Permit Panel

To:	Development Permit Panel	**Date:**	November 6, 2014
From:	Wayne Craig Director of Development	**File:**	DV14-676341 TE14-672413
Re:	**Application by Rogers Communications Inc. for a Development Variance Permit at 11771 Fentiman Place**		

Staff Recommendations

1. That a Development Variance Permit be issued which would vary the provisions of "Richmond Zoning Bylaw 8500" to increase the maximum accessory structure height in the "Health Care (HC)" zoning district from 12 m (39.3 ft.) to 21 m (68.9 ft.) in order to permit the installation of a temporary telecommunications antenna pole at 11771 Fentiman Place; and

2. That Richmond City Council grant concurrence to the proposed temporary telecommunications antenna pole installation for the site located at 11771 Fentiman Place for period of time extending up until December 31, 2017.

Wayne Craig
Director of Development

MM:blg
Att. (4)

Staff Report

Origin

Rogers Communications Inc. has applied to the City of Richmond for permission to vary Richmond Zoning Bylaw 8500 to increase the maximum height for an accessory structure in the Health Care (HC)" zone from 12 m (39.3 ft.) to 21 m (68.9 ft.) in order to permit the construction of a temporary cellular telecommunications antenna pole for the site located at 11771 Fentiman Place.

The proposed temporary antenna installation will consist of the 21 m (68.9 ft.) antenna pole within a fenced compound with a site area of 41 m^2 (441 sq ft.) containing related telecom equipment to be located near the south (rear) part of the site.

The applicant has been operating antennas on the rooftop of the seven (7) storey Richmond Lions Manor on the site for approximately 12 years. The original building was built in 1972, serving as a residential care facility. Vancouver Coastal Health (VCH) has determined the building was no longer adequate to meet the care needs of residents, and thus have vacated the building which is planned to be demolished this December (Attachment 2).

The temporary antenna pole will accommodate cellular antenna infrastructure to provide cellular communications service in the surrounding area for up to three (3) years as the site is redeveloped by VCH. Staff have requested further information about the future redevelopment of the site from VCH but have not received any more information from VCH than the above-noted letter from VCH. Staff will continue to try and work with VCH staff to determine the future plans for the site and inform Council accordingly.

Development Information

Please refer to the attached Development Application Data Sheet (Attachment 1) for a comparison of the proposed development data with the relevant bylaw requirements.

Background

Development surrounding the subject site is as follows:

- To the north, single-family homes zoned "Single Detached (RS1/A and RS1/E)".
- To the east, single-family homes zoned "Single Detached (RS1/A and RS1/E)".
- To the south, Steveston Park zoned "School and Institution Use (SI)".
- To the west, three (3) storey apartments zoned "Medium Density Low Rise Apartments (RAM1)".

Staff Comments

As VCH works on the long-term re-development of the site, VCH has agreed to allow the applicant to relocate their antennas from the existing building and onto the temporary antenna pole within the same property.

The proposed temporary pole is a mobile structure that will be towed onto the site, with the pole then extended to 21 m (68.9 ft.). Concrete blocks will be placed at the base of the structure to anchor it. As noted above, there will be a fenced compound with an area of 41 m^2 (441 ft^2) at the base containing the supporting equipment.

Zoning Compliance/Variances (staff comments in **bold**)

The applicant requests to vary the provisions of Richmond Zoning Bylaw 8500 to:

1) To increase the maximum accessory structure height of the "Health Care (HC)" zoning district from 12 m (39.3 ft.) to 21 m (68.9 ft.).

Staff do not object to the proposed height variance as discussed in the analysis below.

Analysis

Temporary Antenna Pole Options
The applicant has reviewed the impact of the removal the current roof-top antenna and found there will be a significant loss of cellular services that needs to be addressed with a replacement antenna pole (Attachment 3). The applicant also examined the option of installing a 12 m (39.3 ft.) temporary antenna pole in conformance with the accessory structure height limit within the Healthcare (HC) zone, but found that it did not provide the necessary coverage, given the location of this site and their nearby related antennas.

Public Consultation
In addition to the standard 50 m (164 ft.) notification radius from sites with Development Variance Permit (DVP) applications, the City's *Telecommunication Antenna Consultation and Siting Protocol* (Protocol) requires additional consultation. Applications for telecommunications antennas over 15 m (49.2 ft.) require that the applicant mail notices to owners and occupants of properties within a radius of six (6) times the tower height from the base of the antenna pole prior to the City's DVP application notices being mailed (Attachment 5). Given the proposed antenna pole height is 21 m (68.9 ft.), notices were direct-mailed to owners and occupiers within a 126 m (413.4 ft.) radius of the proposed antenna location from a mailing list provided by the City.

Under the Protocol notification process, the applicant was required to provide a 10-day reply period (ending October 31, 2014) for those receiving notices. During this period, neither the applicant nor City staff received any calls or correspondence from the public on the application. Further to applicant's consultation, the City is also required to send the standard DVP notice to all owners and occupiers with this larger 126 m (413.4 ft.) radius from the pole, in addition to the standard DVP notice of 50 m (164 ft.) from the subject property.

Siting and Design Considerations Under the Protocol
The proposed temporary antenna pole will have relatively minor design and siting considerations under the Protocol as follows:

- The pole is proposed to be located at the rear of the relatively large 7,484 m^2 (1.85 acre) site at a minimum of 45 m (148 ft.) from any road frontage.

- There are a number of nearby large trees located to the south in Steveston Park and on the west of the site which provide screening of the temporary installation.

- The proposed antenna is to be painted forest green to blend-in visually with the adjacent trees.

Given the above location considerations and the three (3) year maximum time period for the antenna pole to be in place, no significant design changes are recommended.

Conclusions

The proposed scheme attached to this report has satisfactorily addressed the siting and consultation requirements of the City's Protocol identified as part of the review of the subject Development Variance Permit application. In addition, it complies with the "Health Care (HC)" zone except for the subject zoning height variance.

Staff recommends that the proposed Development Variance Permit be supported and forwarded to Council for consideration of issuance.



Mark McMullen
Senior Coordinator-Major Projects
(604-276-4173)

MM:blg

Prior to future Building Permit issuance, the developer is required to complete the following:

- The applicant is required to obtain a Building Permit for any construction hoarding associated with the proposed development. If construction hoarding is required to temporarily occupy a street, or any part thereof, or occupy the air space above a street or any part thereof, additional City approvals and associated fees may be required as part of the Building Permit. *For further information on the Building Permit, please contact Building Approvals Division at 604-276-4285.*
- Submission of a construction traffic and parking management plan to the satisfaction of the City's Transportation Division (http://www.richmond.ca/services/ttp/special.htm).

City of Richmond

Development Application Data Sheet

Development Applications Division

DV 14-676341/TE 14-672413 **Attachment 1**

Address: 11771 Fentiman Place

Applicant: Rogers Communications Inc. Owner: Vancouver Coastal Health Authority

Planning Area(s): Steveston

Floor Area Gross: Not applicable Floor Area Net: Not applicable

	Existing	Proposed
Site Area:	7,484 m^2	7,484 m^2
Land Uses:	Congregate Housing	Congregate Housing
OCP Designation:	Apartment Residential	Apartment Residential
Zoning:	Health Care (HC)	Health Care (HC)
Number of Units:	Not applicable	Not applicable

On Future Subdivided Lots	Bylaw Requirement	Proposed	Variance
Floor Area Ratio:	1.0	N/A	none permitted
Lot Coverage:	Max. 45%	N/A	none
Setback – Front Yard:	Min. 6 m	6 m	none
Setback – Side Yard:	Min. 6 m	19 m	none
Setback – Side Yard:	Min. 6 m	>6 m	none
Setback – Rear Yard:	Min. 6 m	14.5 m	none
Height (m):	Max. 12 m	21 m	9 m (from 12 m to 21 m)
Lot Size:	N/A	7484 m^2	

City of Richmond

Development Variance Permit

No. DV14-676341

To the Holder:	ROGERS COMMUNICATIONS INC.
Property Address:	11771 FENTIMAN PLACE
Address:	C/O SAMUEL SUGITH 1600 - 4710 KINGSWAY VANCOUVER, BC V4H 4W4

1. This Development Variance Permit is issued subject to compliance with all of the Bylaws of the City applicable thereto, except as specifically varied by this Permit.
2. This Development Variance Permit applies to and only to those lands shown cross-hatched on the attached Schedule "A" and any and all buildings, structures and other development thereon.
3. The "Richmond Zoning Bylaw 8500" is hereby varied to increase the maximum accessory structure height of the "Health Care (HC)" zoning district from 12 m (39.3 ft.) to 21 m (68.9 ft.) in order to permit the construction of a temporary cellular antenna pole as shown on Plans #14-672413-1 to #14-672413-3 attached hereto.
4. The land described herein shall be developed generally in accordance with the terms and conditions and provisions of this Permit and any plans and specifications attached to this Permit which shall form a part hereof.
5. If the Holder does not commence the construction permitted by this Permit within 24 months of the date of this Permit, this Permit shall lapse.

This Permit is not a Building Permit.

AUTHORIZING RESOLUTION NO. ISSUED BY THE COUNCIL THE DAY OF , .

DELIVERED THIS DAY OF , .

MAYOR

fraserhealth Better health. Best in health care. | Vancouver CoastalHealth Promoting wellness. Ensuring care. | Provincial Health Services Authority Province-wide solutions. Better health. | Providence HEALTH CARE How you want to be treated

October 10, 2014

VC1009/W1459/W3948

Ms. Tracy Robinson
Team Leader
Property Management
ROGERS COMMUNICATIONS INC.
1600 – 4710 Kingsway
Burnaby, BC
V5H 4W4

Re: Temporary Occupancy Richmond Lions Manor past November 28, 2014

Dear Tracy,

As you know, Vancouver Coastal Health (VCH) intends to demolish the building known as Richmond Lions Manor at 11771 Fentiman Place, Richmond. The demolition is planned to start sometime in December 2014. As such, we have terminated your antenna rooftop license at this site, effective November 28, 2014.

We received your request for ROGERS to remain on site, transferring your existing rooftop antennas onto a temporary structure on our site while the existing building is being demolished and re-planned / re-developed. VCHA confirms that it will enter into a license agreement for ROGERS to install a temporary structure, which would remain on site until a new building is developed or until the license, to be entered into between the parties, is otherwise terminated.

VCH confirms that it is agreeable to the above and approves the proposed location of the temporary structure. However, ROGERS is fully responsible for obtaining all necessary municipal approvals for the installation of its proposed temporary structure.

Please do not hesitate to contact me should you or the City of Richmond require any further clarification to the above.

Sincerely,

Nicholas Bodie
Manager, Real Estate & Leasing
Lower Mainland Facilities Management
(604) 614-2864
Nicholas.bodie@fraserhealth.ca

Rogers Communications Inc.
1600 – 4710 Kingsway
Burnaby, British Columbia
V5H 4W4
rogers.com

Attn: Wayne Craig, Mark McMullen
Director of Development
City of Richmond
6911 No. 3 Road
Richmond, BC V7C 5B2

October 6, 2014

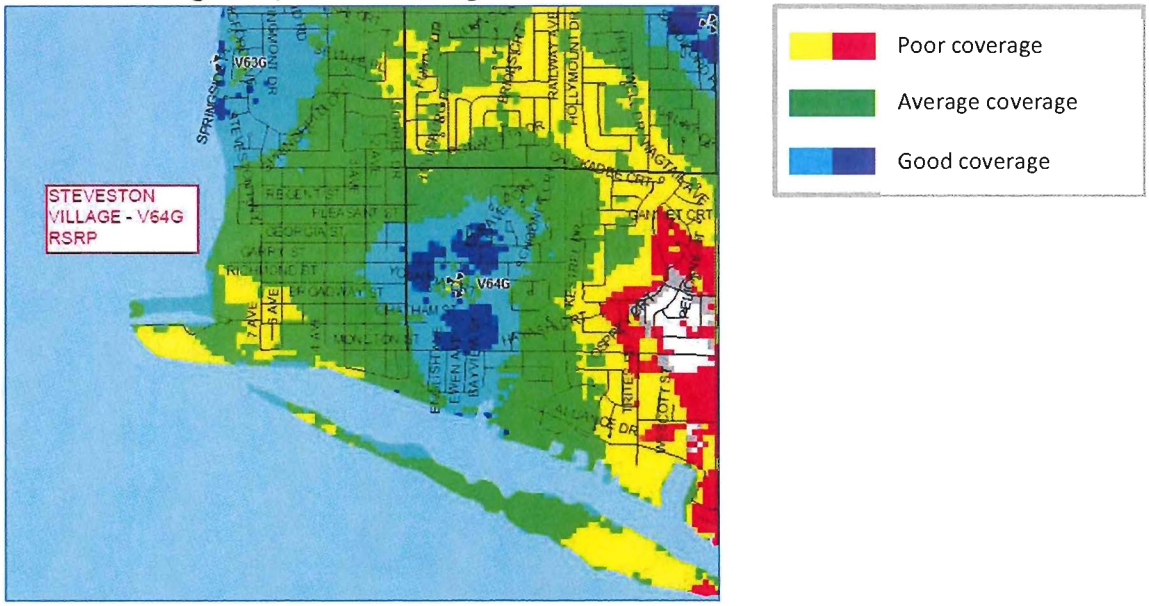
RE: Temporary Use Permit for a Telecommunications Facility in Steveston (11771 Fentiman Place/Richmond Lions Manor)

Background
Rogers Communications Inc. (Rogers) has been operating on the rooftop of a seven story concrete building called Richmond Lions Manor at 11771 Fentiman Place for approximately 12 years (December 11, 2002). The original building was built in 1972 and renovated in 2009, serving as a residential care facility for people who require assisted living services. Vancouver Coastal Health (VCH) determined in 2012, that the 40-year old building was no longer adequate to meet the complex care and needs of residents. Approximately 100 residents of this facility was relocated to a temporary site, which was the former Executive Inn Hotel at 9020 Bridgeport road.

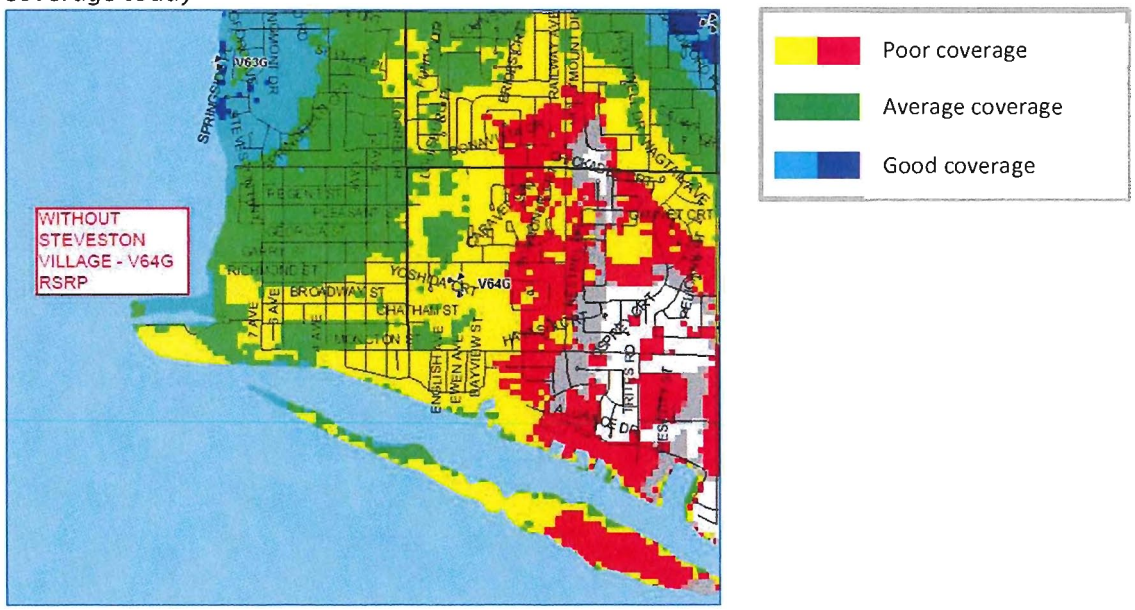
VCH has been working on a long-term solution with the Ministry of Health. At this time, VCH intends to demolish and re-develop the existing building at 11771 Fentiman Place. They have agreed to allow Rogers to relocate their antennas off the seven storey (~26m) building and onto a temporary pole structure within the same property. VCH has also agreed to allow Rogers to relocate the antennas from the temporary pole onto the rooftop of the new building.

Emergency Situation – the effect of cellular site loss
The proposed temporary site services a large population of the Steveston Park neighborhood of the Steveston Area Plan. The existing cellular coverage in the Steveston Park neighborhood provides voice and data service for personal and local businesses in the area. The approximate coverage boundary for this site is as follows: east to Garry Point Park, north to Williams Road, west to No. 2 Road, and south towards the shipyards and some parts of Westham Island. The site today supports over 3,000 user interactions (i.e., calls and text messages) per day and exchange data volumes in excess of 120 gigabytes per day. Considering over 60% of 9-1-1 calls today are made from a mobile device, the loss of this site temporarily will be significant and its effect in loss of coverage will be felt in the Steveston Park neighborhood.

Current Coverage Plot/Loss in Coverage



Coverage today



Coverage loss if site is down

Proposed Temporary Installation

Rogers is proposing to move antennas from the rooftop of 11771 Fentiman Place onto a 21m temporary pole structure within the same property during demolishment and redevelopment of the health care facility.

Height Requirement
The existing height of the current installation is approximately 26m in height and sees onto another cellular site. A clear line of site is required between cellular sites to ensure it is connected to the network and calls/data services for users can be transferred from one site to another as they travel between two given cellular sites. In this situation, the proposed temporary pole has a minimum height requirement of 21m as that height is required to have clear line of site from the temporary pole to another cellular site. A temporary pole at 12m or 15m would not be able to communicate (transmit data) from this site to another site.

Temporary Pole Design
The proposed is a temporary pole design with no concrete pour for its foundation. The 21m pole would be similar to rooftop antenna installations where it would be secured down by multiple thick concrete blocks. The monopole design was chosen for its small footprint and thin design (at 18" in width). The antenna equipment at ground level that powered the existing antennas would also need to be relocated from its current location adjacent to building, to a location next to the temporary pole structure. Please find attached a brochure from the manufacturer (Trylon) regarding this temporary pole structure.

Duration of Temporary Pole
It is understood that Fraser Health Authority will commence demolishment of their building – Richmond Lions Manor mid-November/December of 2014. Therefore the existing rooftop on Lions Manor will need to be relocated onto the temporary pole structure the end of October. To ensure ease of transition and minimal service disruption, the temporary pole will be setup (without antenna equipment) in the last week of October. After which, the equipment from the rooftop can be moved down to the temporary pole structure for the duration of the redevelopment (approximately 3 years).

Land Use
The site is zoned for Health Care (HC) for the provision of health care and assisted living housing. Within the Official Community Plan, the site is zoned Apartment Residential (APT) for multiple family housing in the form of townhouses and apartments including congregate care, intermediated care and assisted living. It is our knowledge that this site will maintain existing zoning and land use over the next 10 years.

Next Steps
Rogers is required by VCH to remove and relocate their antennas from the rooftop onto a temporary structure by the end of October for them to commence site clearance/demolishment. Rogers is applying to the City of Richmond for temporary use permit to allow the proposed temporary pole structure to sustain existing wireless coverage service in Steveston. Rogers understands that this installation is unique and do not fall under the existing Telecommunications Protocol. Rogers is committed to working with the City in ensuring proper transition of this telecommunication infrastructure to sustain network coverage in this neighborhood.

This installation is an urgent request to ensure uninterrupted cellular coverage in this community. Please let me know if I could provide additional information.

Thank you for your assistance with this request.

Regards,

Samuel Sugita
Municipal Project Manager, MCIP, RPP
Rogers Communications Inc.

ROGERS™

Notice for Temporary Telecommunications Installation

Communities across Canada rely on high quality wireless service in their day to day lives for personal, business and emergency use. To maintain service in your neighbourhood, Rogers is proposing to place a **temporary 21m (69 ft) high antenna pole installation next to the Richmond Lions Manor at 11771 Fentiman Place**. This installation will sustain wireless service to your neighbourhood for up to three years until new small roof-top antenna can be placed after construction work on Lion's Manor site is completed. Thus, Rogers has applied to the City of Richmond for a Telecommunications Antenna Protocol Concurrence and Development Variance Permit for the installation of this temporary antenna pole in order to maintain service in the Steveston area. As part of this permitting process, Rogers is notifying the community, ensuring residents are well informed about this project.

Included in this notice is information you may find helpful. If you have any questions, please contact Kiersten Enemark, Standard Land Company Inc., Agents to Rogers Communications Inc., before **October 31, 2014** via e-mail at **commentsBC@standardland.com** or by telephone at (604) 687-1119.

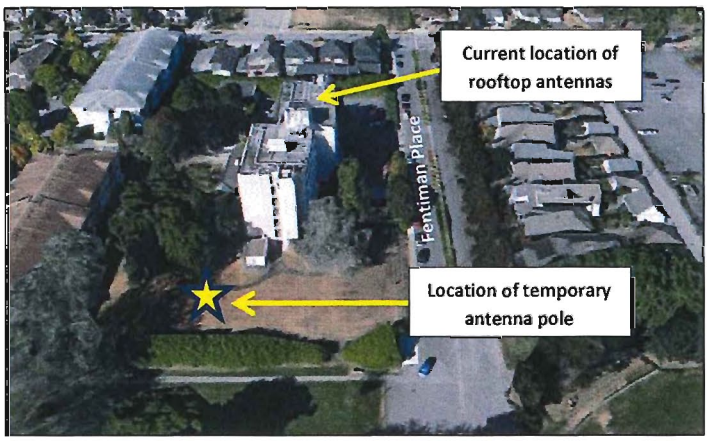
Why does Rogers need a temporary antenna pole?

Rogers is currently servicing your neighbourhood with antennas placed on the rooftop of Richmond Lions Manor at 11771 Fentiman Place, which is a residential care facility managed by Vancouver Coastal Health (VCH). VCH has determined that the building is no longer adequate to provide the best care for its residents, and will re-develop the site over the next three years. Consequently, Rogers' existing rooftop antennas can no longer be accommodated until after major renovations are complete. Without antennas operating in the area, all wireless service dependent on the Rogers network will be lost. Rogers needs a temporary antenna pole in order to sustain existing service to the community.

Why is a temporary antenna installation needed at this specific location?

The current antenna location is providing high quality and dependable wireless service to residents and businesses in Steveston. Today, the rooftop antennas are servicing 3,000 user interactions (i.e., calls and text messages) per day and exchange data volumes in excess of 120 gigabytes per day. Dependable coverage from home is also critical to personal safety, with over 60% of all calls to 9-1-1 being made made from a wireless device. The loss of this antenna site will be significant to the neighbourhood without a temporary solution in place. Rogers is proposing to use the same property for a temporary antenna pole in order to maintain a high quality service.

Aerial View



How long will this temporary antenna pole be required?

We understand that building demolition will start in November/December 2014. To maintain service, Rogers is proposing to relocate the existing rooftop antennas to the temporary antenna pole in the first week of December 2014. Once construction on the site is completed, Rogers will relocate the antennas back onto the new building rooftop in approximatley three years time, and remove the temporary antenna pole.

What will the temporary antenna pole look like?

Similar to a hydro or a telephone pole, the temporary pole will be a slim pole design, approximately 18 inches in diametre, and 21 metres in height. Rogers proposes to place the pole on the southwest side of the property. To reduce the visibility of the structure, Rogers is painting the pole green to better blend in with the surrounding trees. The pole will be supported at the base with multiple thick concrete blocks and will occupy a ground space of approximately 4.5 metres by 9.0 metres. Below are photo-simulations that show the proposed pole design and location.



View from Fentiman Place, looking west at proposed temporary antenna pole.

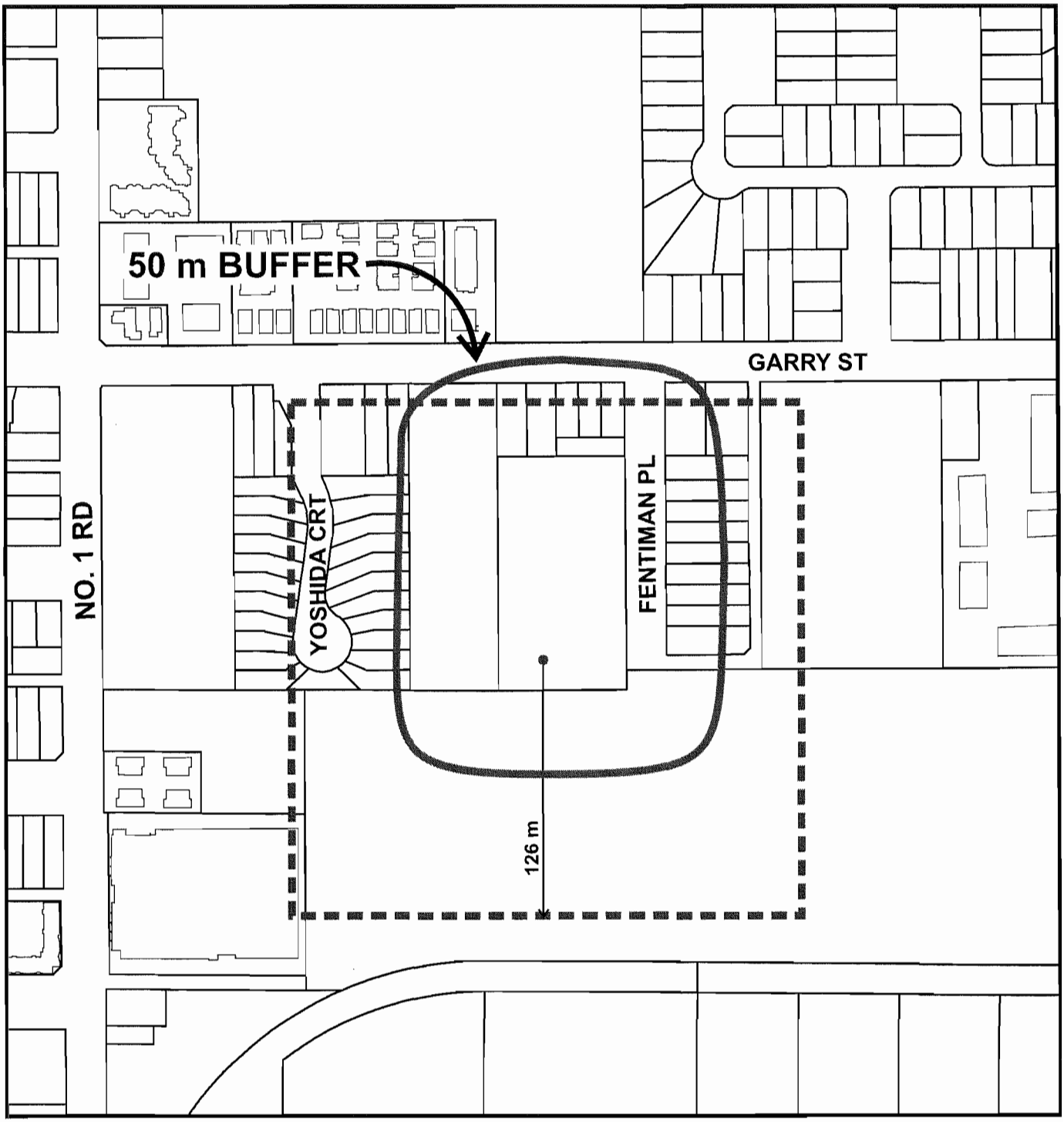


View from the south end of Fentiman Place, looking northwest towards proposed antenna pole.

Is the installation safe?

The health of residents is our top concern – antenna installations are safe. All of our sites operate well below Health Canada's safety regulations, which limit the public's exposure to radiofrequency electromagnetic fields and ensure public safety for all Canadians. Rogers confirms that the temporary antenna pole will comply with Health Canada's Safety Code 6. This code is based on current, accepted scientific data. More information on health and safety can be found online at Health Canada Safety Code 6 Fact Sheet: www.hc-sc.gc.ca/ahc-asc/media/ftr-ati/_2014/2014-023fs-eng.php

City of Richmond



11771 Fentiman Place

Original Date: 11/06/14

Revision Date:

Note: Dimensions are in METRES

City of Richmond

Development Variance Permit

No. DV14-676341

To the Holder:	ROGERS COMMUNICATIONS INC.
Property Address:	11771 FENTIMAN PLACE
Address:	C/O SAMUEL SUGITH 1600 - 4710 KINGSWAY VANCOUVER, BC V4H 4W4

1. This Development Variance Permit is issued subject to compliance with all of the Bylaws of the City applicable thereto, except as specifically varied by this Permit.
2. This Development Variance Permit applies to and only to those lands shown cross-hatched on the attached Schedule "A" and any and all buildings, structures and other development thereon.
3. The "Richmond Zoning Bylaw 8500" is hereby varied to increase the maximum accessory structure height of the "Health Care (HC)" zoning district from 12 m (39.3 ft.) to 21 m (68.9 ft.) in order to permit the construction of a temporary cellular antenna pole as shown on Plans #14-672413-1 to #14-672413-3 attached hereto.
4. The land described herein shall be developed generally in accordance with the terms and conditions and provisions of this Permit and any plans and specifications attached to this Permit which shall form a part hereof.
5. If the Holder does not commence the construction permitted by this Permit within 24 months of the date of this Permit, this Permit shall lapse.

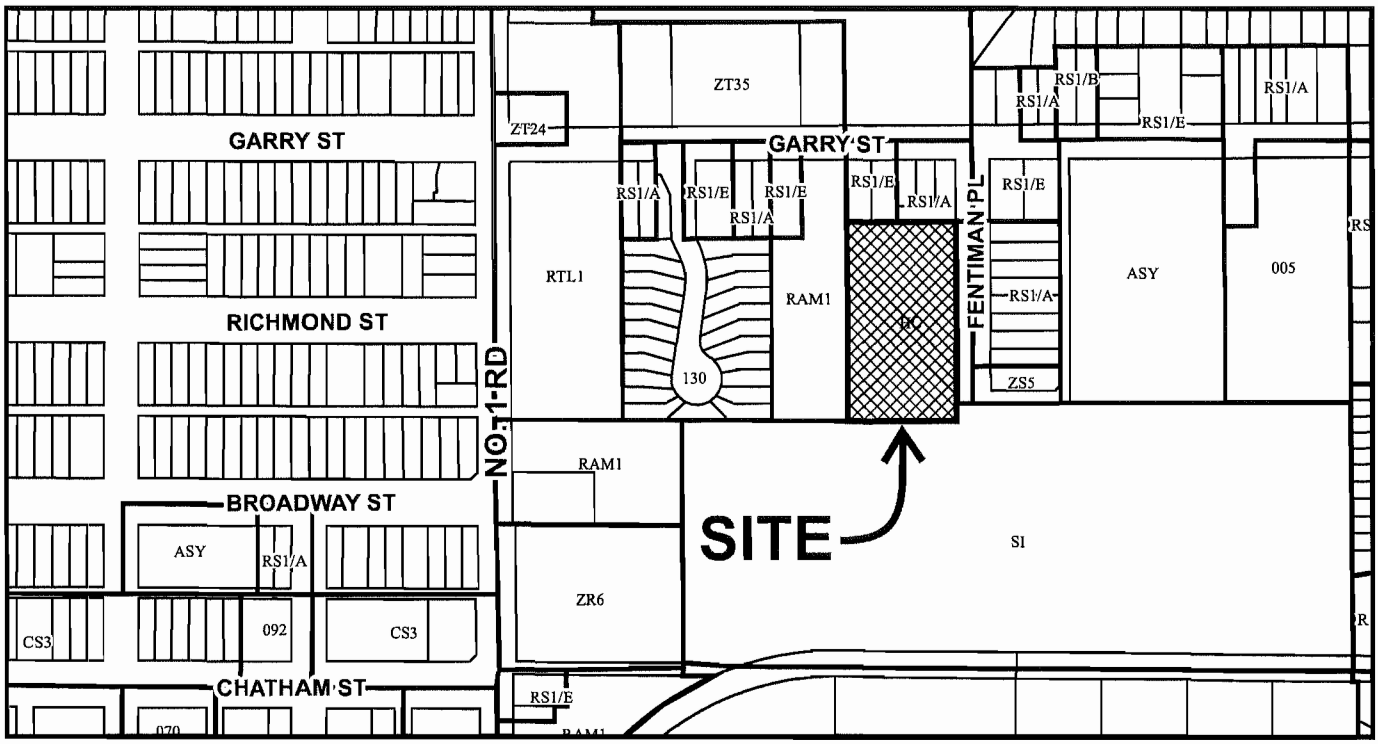
This Permit is not a Building Permit.

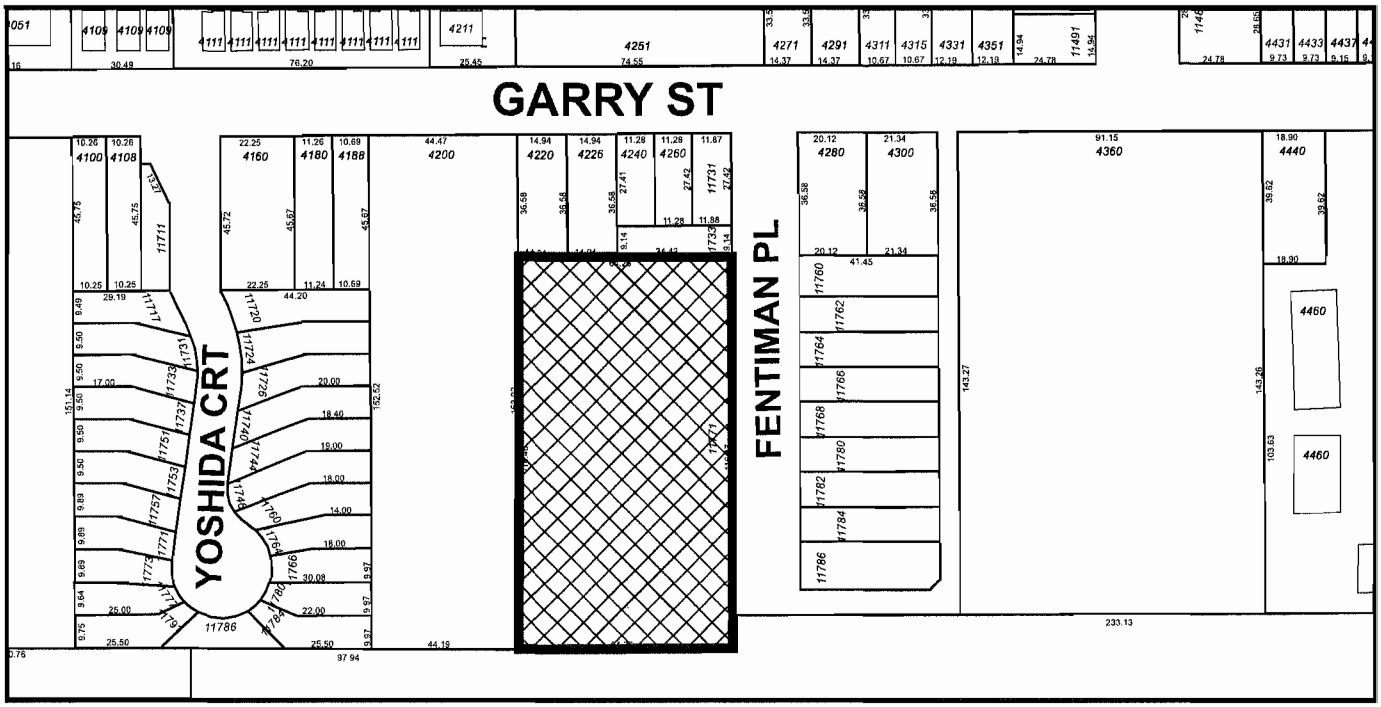
AUTHORIZING RESOLUTION NO. ISSUED BY THE COUNCIL THE DAY OF , .

DELIVERED THIS DAY OF , .

MAYOR

City of Richmond



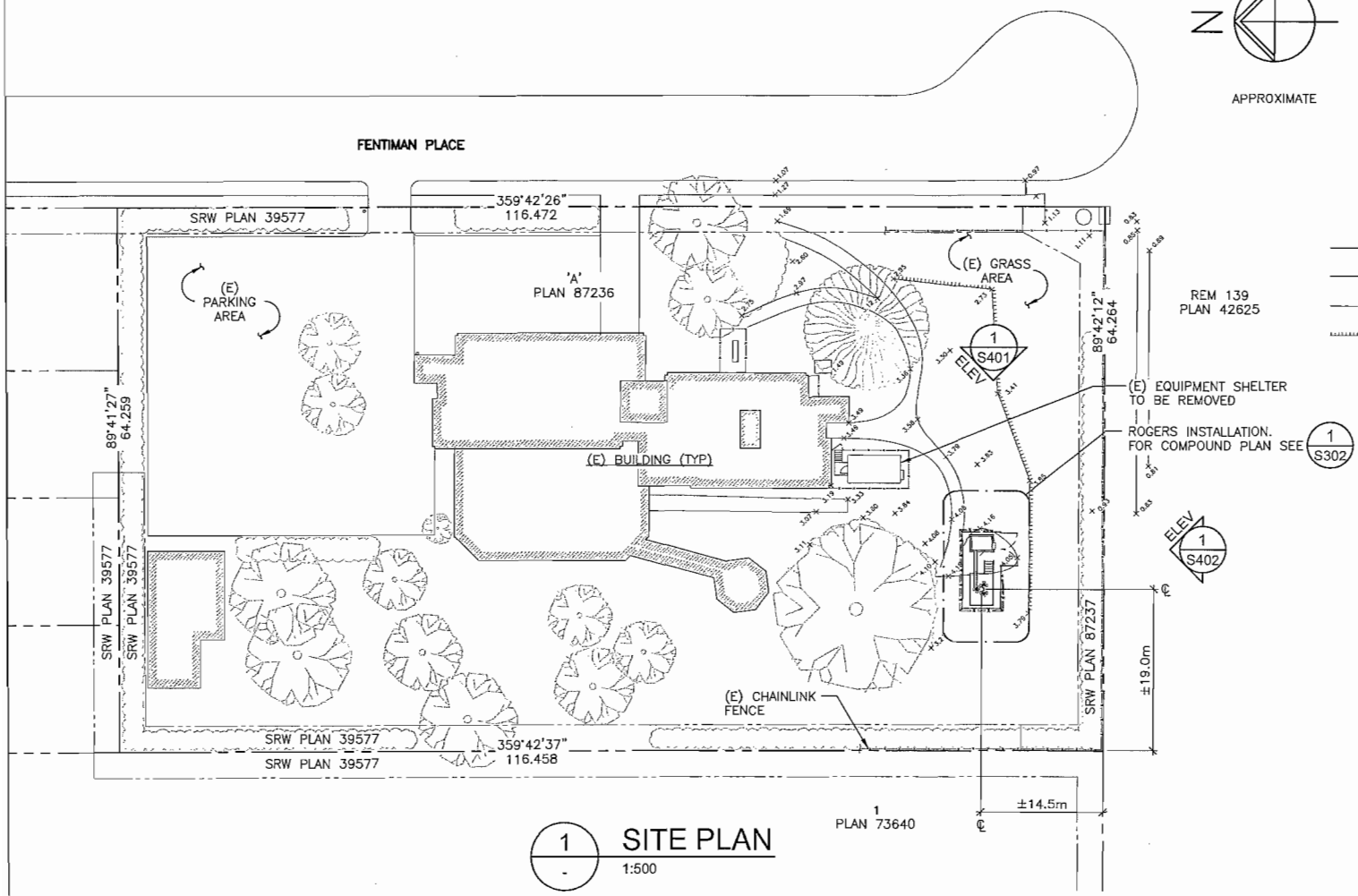


DV 14-676341
SCHEDULE "A"

Original Date: 11/06/14

Revision Date:

Note: Dimensions are in METRES



1 / - SITE PLAN
1:500

Z
APPROXIMATE

NOTES:

1. SITE PLAN INFORMATION OBTAINED FROM A SURVEY PREPAED BY McELHANNEY ASSOCIATES, AUG. 20, 2001.

LEGEND:

- ✸ – INDICATES PARTICULAR ATTENTION SHOULD BE GIVEN TO WHAT IS NOTED ON THE DRAWING
- (E) – DENOTES EXISTING
- (F) – DENOTES FUTURE
- (TYP) – DENOTES TYPICAL
- ——— – DENOTES PROPERTY LINE
- ——— – DENOTES ADJACENT BOUNDARY LINE
- ——— – DENOTES SETBACK LINE/EASEMENT
- ····· – DENOTES TOP OF (E) SLOPE
- +0.83 – DENOTES (E) SPOT ELEVATION

No.:	Date:	Description:
	2014.09.09	ISSUED FOR CLIENT REVIEW
	2014.08.06	ISSUED FOR CLIENT REVIEW

Revisions:

Copyright Reserved.
This plan and design are, and at all times remain the exclusive property of GS Sayers Engineering Ltd. and cannot be used or reproduced without written consent. Written dimensions shall have precedence over scaled dimensions. Contractors shall verify and be responsible for all dimensions and conditions on the job and this office shall be informed of any variations from the dimensions and conditions shown on the drawings.
Sketches may be issued which augment or alter the information presented on this drawing. It is the responsibility of parties using this drawing to ensure that they are in possession of all such sketches.

GS · Sayers
ENGINEERING LTD.
1661 West 5th Avenue
Vancouver, BC V6J 1N5
T: 604.734.8822
F: 604.734.8842
www.glotmansimpson.com

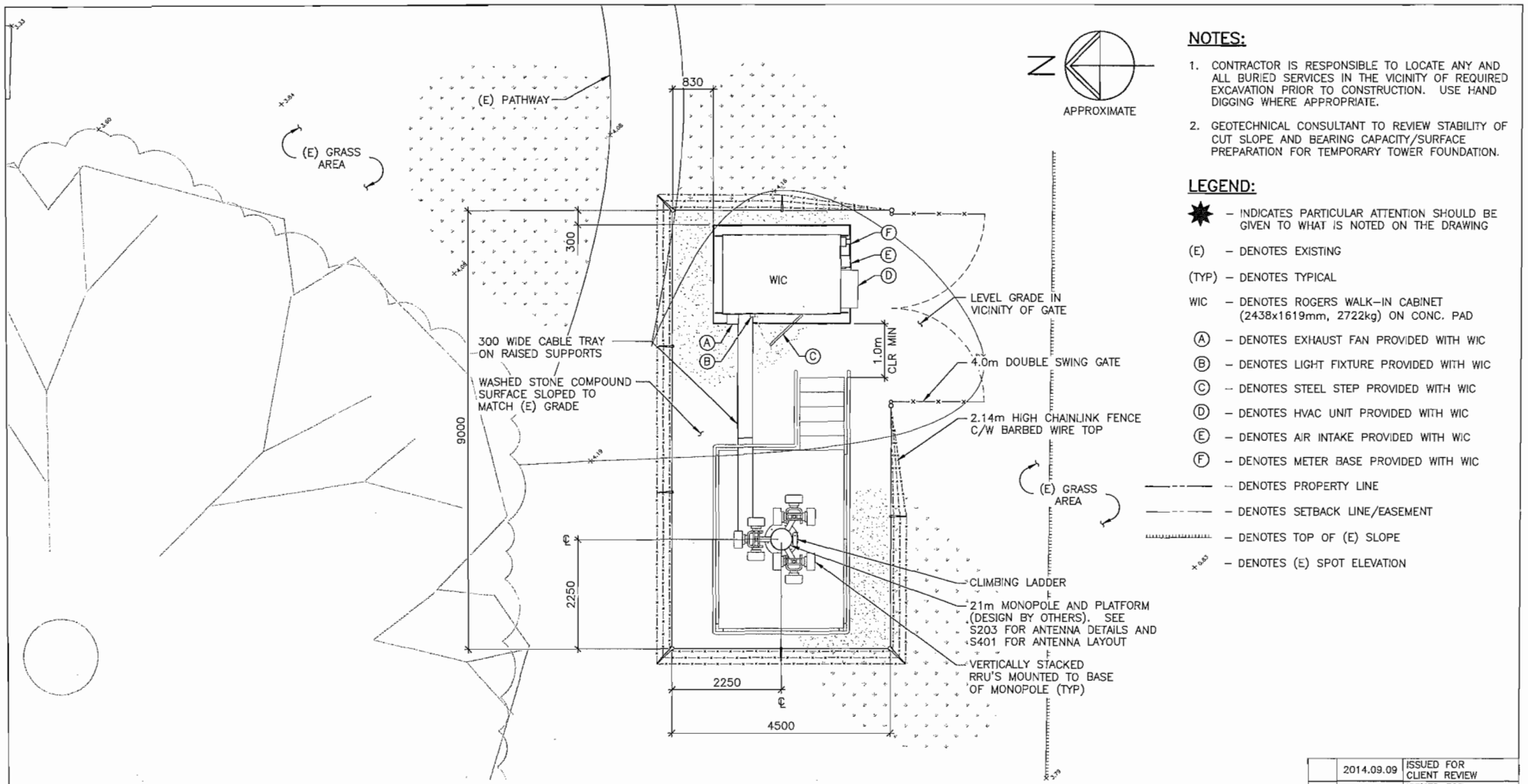
Project: STEVESTON VILLAGE TEMP
Site ID: W3948
11881 FENTIMAN PL, RICHMOND, BC

ROGERS™

Sheet Title: SITE PLAN

Date:	SEP 2014
Scale:	1:500
Drawn:	RS
Checked:	GF
Project:	214253

Drawing: S301
Of



NOTES:

1. CONTRACTOR IS RESPONSIBLE TO LOCATE ANY AND ALL BURIED SERVICES IN THE VICINITY OF REQUIRED EXCAVATION PRIOR TO CONSTRUCTION. USE HAND DIGGING WHERE APPROPRIATE.
2. GEOTECHNICAL CONSULTANT TO REVIEW STABILITY OF CUT SLOPE AND BEARING CAPACITY/SURFACE PREPARATION FOR TEMPORARY TOWER FOUNDATION.

LEGEND:

- ✸ – INDICATES PARTICULAR ATTENTION SHOULD BE GIVEN TO WHAT IS NOTED ON THE DRAWING
- (E) – DENOTES EXISTING
- (TYP) – DENOTES TYPICAL
- WIC – DENOTES ROGERS WALK–IN CABINET (2438x1619mm, 2722kg) ON CONC. PAD
- Ⓐ – DENOTES EXHAUST FAN PROVIDED WITH WIC
- Ⓑ – DENOTES LIGHT FIXTURE PROVIDED WITH WIC
- Ⓒ – DENOTES STEEL STEP PROVIDED WITH WIC
- Ⓓ – DENOTES HVAC UNIT PROVIDED WITH WIC
- Ⓔ – DENOTES AIR INTAKE PROVIDED WITH WIC
- Ⓕ – DENOTES METER BASE PROVIDED WITH WIC
- – – – – DENOTES PROPERTY LINE
- – – – – DENOTES SETBACK LINE/EASEMENT
- ····· DENOTES TOP OF (E) SLOPE
- +0.83 – DENOTES (E) SPOT ELEVATION

1 / S301 COMPOUND PLAN

1:75

No.:	Date:	Description:
		Revisions:
	2014.09.09	ISSUED FOR CLIENT REVIEW
	2014.08.06	ISSUED FOR CLIENT REVIEW

Copyright Reserved.
This plan and design are, and at all times remain the exclusive property of GS Sayers Engineering Ltd. and cannot be used or reproduced without written consent. Written dimensions shall have precedence over scaled dimensions. Contractors shall verify and be responsible for all dimensions and conditions on the job and this office shall be informed of any variations from the dimensions and conditions shown on the drawings.
Sketches may be issued which augment or alter the information presented on this drawing. It is the responsibility of parties using this drawing to ensure that they are in possession of all such sketches.

GS·Sayers ENGINEERING LTD.
1661 West 5th Avenue
Vancouver, BC V6J 1N5
T: 604.734.8822
F: 604.734.8842
www.glotmansimpson.com

Project: STEVESTON VILLAGE TEMP — Site ID: W3948
11881 FENTIMAN PL, RICHMOND, BC

ROGERS™

Sheet Title: COMPOUND PLAN

Date:	SEP 2014
Scale:	1:75
Drawn:	RS
Checked:	GF
Project:	214253

Drawing: S302

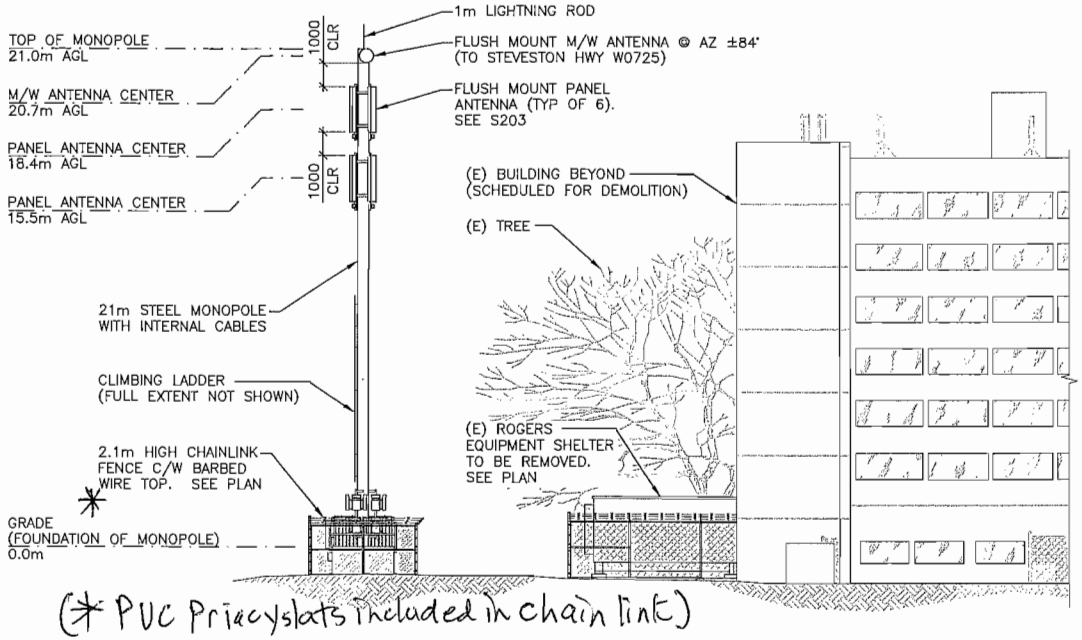
Of

NOTES:

1. MONOPOLE ELEVATION IS DIAGRAMMATIC ONLY (DESIGN BY OTHERS).

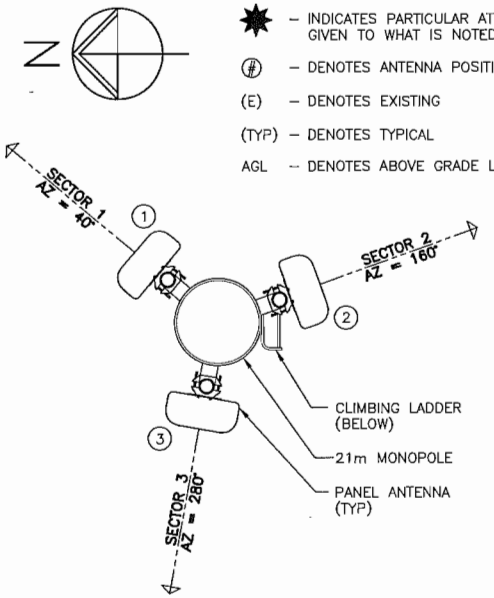
LEGEND:

- ✸ – INDICATES PARTICULAR ATTENTION SHOULD BE GIVEN TO WHAT IS NOTED ON THE DRAWING
- (#) – DENOTES ANTENNA POSITION
- (E) – DENOTES EXISTING
- (TYP) – DENOTES TYPICAL
- AGL – DENOTES ABOVE GRADE LEVEL



(* PVC Privacy slats included in chain link)

1 / S301 **EAST ELEVATION**
1:200



NOTE:
THIS LAYOUT IS SCHEMATIC ONLY. SPECIFIC TOWER AND ANTENNA MOUNT DIMENSIONS AND CONFIGURATION BY TOWER ENGINEER. ANTENNA BOOMS TO BE ORIENTED PERPENDICULAR TO ANTENNA AZIMUTHS

2 / - **ANTENNA LAYOUT**
1:25 (18.4m AGL)

No.:	Date:	Description:
	2014.09.09	ISSUED FOR CLIENT REVIEW
	2014.08.06	ISSUED FOR CLIENT REVIEW

Revisions:

Copyright Reserved.
This plan and design are, and at all times remain the exclusive property of GS Sayers Engineering Ltd. and cannot be used or reproduced without written consent. Written dimensions shall have precedence over scaled dimensions. Contractors shall verify and be responsible for all dimensions and conditions on the job and this office shall be informed of any variations from the dimensions and conditions shown on the drawings.
Sketches may be issued which augment or alter the information presented on this drawing. It is the responsibility of parties using this drawing to ensure that they are in possession of all such sketches.

GS·Sayers ENGINEERING LTD.
1661 West 5th Avenue
Vancouver, BC V6J 1N5
T: 604.734.8822
F: 604.734.8842
www.glotmansimpson.com

Project: STEVESTON VILLAGE TEMP
Site ID: W3948
11881 FENTIMAN PL, RICHMOND, BC

ROGERS™

Sheet Title: EAST ELEVATION AND ANTENNA LAYOUT

Date:	SEP 2014
Scale:	AS NOTED
Drawn:	RS
Checked:	GF
Project:	214253

Drawing: S401

Of

City of Richmond

Report to Development Permit Panel

To:	Development Permit Panel	**Date:**	November 4, 2014
From:	Wayne Craig Director of Development	**File:**	DP 13-652010
Re:	**Application by Zhao XD Architect Ltd. for a Development Permit at 8400 General Currie Road and 7411/7431 St. Albans Road**		

Staff Recommendation

That a Development Permit be issued which would:

1. Permit the construction of 12 three-storey townhouse units at 8400 General Currie Road and 7411/7431 St. Albans Road on a site zoned "High Density Townhouses (RTH2)".

2. Vary the provisions of Richmond Zoning Bylaw 8500 to increase the rate of tandem parking spaces from 50% to 67% to allow a total of sixteen (16) tandem parking spaces in eight (8) three-storey townhouse units.

Wayne Craig
Director of Development

WC:el
Att.

Staff Report

Origin

Zhao XD Architect Ltd. has applied to the City of Richmond for permission to develop 12 three-storey townhouse units at 8400 General Currie Road and 7411/7431 St. Albans Road. The site is being rezoned from "Single Detached (RS1/E)" to "High Density Townhouses (RTH2)" for this project under Bylaw 9111 (RZ 13-643346), which received Third Reading following the Public Hearing on April 22, 2014. The site currently contains a single-family home on one lot and a duplex on another lot, both of which will be demolished.

Frontage improvements were secured through the rezoning process and will be constructed through a separate Servicing Agreement (SA 13- 651696), which must be entered into prior to final adoption of the rezoning bylaw. Works include, but are not limited to: removal of the existing sidewalk on both frontages, construction of a new 1.5 m wide sidewalk at property line and a grass and treed boulevard between the new sidewalk and the existing curb along both frontages, removal of an existing power pole on General Currie Road, and upgrade of the storm main along the General Currie Road frontage to a minimum of 600mm.

Development Information

Please refer to attached Development Application Data Sheet (**Attachment 1**) for a comparison of the proposed development data with the relevant Bylaw requirements.

Background

Development surrounding the subject site is as follows:

To the north, across General Currie Road, a four-storey apartment building on a lot zoned "Medium Density Low Rise Apartments (RAM1)";

To the south, a 7-unit townhouse development on a lot zoned "Medium Density Low Rise Apartments (RAM1)" ;

To the east, across St. Albans Road, a four-storey condominium (three-storeys over parking) on a lot zoned "Medium Density Low Rise Apartments (RAM1)"; and

To the west, a four-storey condominium on a lot zoned "Medium Density Low Rise Apartments (RAM1)".

Rezoning and Public Hearing Results

The Public Hearing for the rezoning of this site was held on April 22, 2014. No concerns regarding the rezoning were expressed at the Public Hearing.

Staff Comments

The proposed scheme attached to this report has satisfactorily addressed the significant urban design issues and other staff comments identified as part of the review of the subject Development Permit application. In addition, it complies with the intent of the applicable sections of the Official Community Plan and is generally in compliance with the "High Density Townhouses (RTH2)" zone except for the zoning variances noted below.

Zoning Compliance/Variances (staff comments in **bold**)

The applicant requests to vary the provisions of Richmond Zoning Bylaw 8500 to:

1) Increase the rate of tandem parking spaces from 50% to 67% to allow a total of sixteen (16) tandem parking spaces in eight (8) three-storey townhouse units;

(Based on the City Centre location, 17 residential parking spaces are required for this 12-unit development, with a maximum of 8 parking spaces permitted in a tandem arrangement. By permitting an extra two (2) residential parking spaces as tandem parking spaces, the applicant is able to provide seven (7) extra residential parking spaces on-site.

Tandem parking is generally supported as it can reduce pavement area on-site and facilitate a more flexible site layout. With the extra residential parking spaces provided on site and on-street parking available on both sides of both General Currie Road and St. Albans Road, staff do not envision any noticeable impact to parking in the immediate neighbourhood due to the proposed tandem parking variance.

This variance was identified in the Report to Committee and a restrictive covenant to prohibit the conversion of the tandem garage area into habitable space has been secured at the Rezoning stage.)

Advisory Design Panel Comments

The Advisory Design Panel supported the design of the project and the Design Panel's suggested design changes have been incorporated in the proposal. A copy of the relevant excerpt from the Advisory Design Panel Minutes from Wednesday, May 7, 2014 is attached for reference (Attachment 2). The design response from the applicant has been included immediately following the specific Design Panel comments and is identified in '***bold italics***'.

Analysis

Conditions of Adjacency

- The proposed height, siting and orientation of the buildings respect the massing of the surrounding residential developments and would be consistent with the form and character of existing multiple residential projects in the area.
- While no tree planting is permitted within the SRW along the west property line, various shrubs are proposed along the west property line to form a landscape buffer; a row of cedar hedge and 1.8 m solid wood fence are also proposed to increase privacy of the adjacent apartment units to the west as well as privacy in the yard spaces of the proposed development.
- A natural screen with a mix of hedging materials and Aspen trees, and a 6 ft. wood fence is proposed between the subject site and adjacent townhouse development to the south for added privacy on both sites.

Urban Design and Site Planning

- The proposed site layout includes 12 townhouses in three (3) townhouse clusters. Nine (9) units have direct access from the street and three (3) units have access from the internal drive aisle.

- Vehicular access is from General Currie Road. A pedestrian walkway is provided to St. Albans Road to the east.
- All units have two (2) vehicle parking spaces. Tandem parking spaces are proposed in eight (8) of the twelve units only. A Restrictive Covenant prohibiting the conversion of tandem parking area into habitable area has been secured at rezoning.
- A total of three (3) visitor parking spaces, including one (1) accessible visitor parking space, are provided at the entrance of the site. The number of visitor parking spaces proposed complies with the bylaw requirement. Bicycle parking is provided and is also in compliance with the zoning bylaw requirements.
- All units have private outdoor spaces consisting of front or rear yard and balconies on the second and third floors. All private outdoor space can be accessed directly from the main living space.
- Outdoor amenity space is proposed at the entrance of the site. The size and location of the outdoor amenity space is appropriate in providing open landscape and amenity convenient to all of the units. The central location provides for casual surveillance opportunity from most units.
- A covered mailbox kiosk is provided adjacent to the outdoor amenity area.
- The garbage, recycling and organic storage enclosures have been incorporated into the design of Building 3 to minimize their visual impact.

Architectural Form and Character

- A pedestrian scale is generally achieved along the public streets and internal drive aisle through the inclusion of variation in building projections, recesses, entry porches, varying material/colour combinations, landscape features, and the use of individual unit entrances.
- The existing site context has a variety of architectural massing and styles. The architectural language used for the design is generally reflective of the traditional residential building styles found in the surrounding neighbourhood. Architectural elements proposed in this project (such as pitched roof, staggered massing, framed windows and doors, canopies and balconies, materials and colour mix, etc.) are intended to adopt the characters found in the immediate neighbourhood.
- The impact of blank garage doors has been mitigated with panel patterned doors, transom windows, main/secondary unit entrances, and planting islands/window planters along the internal drive aisle.
- Natural colours have been used for all siding materials to fit with the context of the neighbourhood. Strong contrasting colours and culture stone veneer are used on the accent walls to provide visual interest.
- The proposed building materials (asphalt roof shingles, hardi panel/board/siding, wood trim/column/canopy, culture stone veneer, solid core wood doors, and metal guard rail) are generally consistent with the Official Community Plan (OCP) Guidelines and compatible with the existing character of the neighbourhood.

Landscape Design and Open Space Design

- Tree preservation was reviewed at rezoning stage and all three (3) bylaw-sized trees noted on-site were identified for removal due to general poor condition; six (6) replacement trees are required.

- The applicant is proposing to plant 19 replacement trees on-site, including 4 conifers and 15 deciduous trees. Hedges, an assortment of shrubs and ground covers, and perennials and grasses have been selected to ensure the landscape treatment remains interesting throughout the year.
- The street side landscape defines the private yard boundaries with low fences along the back of sidewalk and low hedges inside the yards. The front yards are internally separated by fencing and hedging to create privacy.
- Each street fronting unit will have a private yard with a shade tree, shrub/groundcover planting, patio, and lawn area.
- A children's play area designed for children aged 2 to 5 years old is proposed for the outdoor amenity area. The play equipment includes a curved slide, a tree climber, and a steering wheel for pretend plan; it was chosen to fit into the provided space and to allow multiple children to play at the same time. The equipment provides different play opportunities such as social, imagination, balance, and motor skills.
- A bench is also provided for caregivers.
- Feature paving will highlight road transitions at the site entrance and the drive aisle ends, as well as at the intersection of the internal drive aisle. Permeable pavers will be used to identity a pedestrian route from the site entrance to the internal units, and to provide a break in the asphalt internal driveway.
- In order to ensure that the proposed landscaping works are completed, the applicant is required to provide a landscape security of $78,253.89 in association with the Development Permit.
- Indoor amenity space is not proposed on-site. A $12,000 cash-in-lieu contribution has been secured as a condition of rezoning approval, consistent with the OCP.

Crime Prevention Through Environmental Design

- The applicant advises that the following design principles are incorporated into the development:
  - Real or perceived barriers created by landscape design;
  - Clearly-defined pedestrian entries;
  - Edges and corners with low landscaping and low permeable fencing;
  - Visual access without loss of privacy;
  - Semi-private open spaces designed to maximize resident access and enhance neighbour-to-neighbour surveillance;
  - Natural Surveillance opportunities for easy viewing activities around of public and semi-private spaces;
  - "Eyes on the street" with windows, front doors, playgrounds and seating, visible from street and not hidden by vegetation; and
  - Lighting will be installed at main entry for each unit as well as the secondary entry at the internal driveway.

Sustainability

- At rezoning stage, the applicant committed to achieving an EnerGuide rating of 82 for the proposed town houses and to pre-ducting all units for solar hot water heating.

- A Certified Energy Advisor has confirmed that the proposed townhouse units will be designed to achieve an EnerGuide rating of 82. The report prepared by the Energy Advisor is on file and will be utilized through the Building Permit review process to ensure these measures are incorporated in the permit drawings.
- A legal agreement is required to be registered on-title prior to issuance of the Development Permit to ensure that all units are designed to achieve an EnerGuide rating of 82 (as detailed by the Certified Energy Advisor), and to include pre-ducting for solar hot water heating.
- The developer also advises that the following sustainability features will be incorporated into the development:
  - Energy efficient lighting;
  - Plumbing fixtures that conserve water;
  - High efficiency irrigation and drought tolerant plants for landscape areas;
  - Permeable paver for patios and driveway allows maximum storm water infiltration potential;
  - Sustainable materials such as Hardie sidings as primary cladding material for buildings which contain post-industrial or pre-consumer recycled content and provide longer lasting and lower maintenance and repair cost;
  - Planting are generally selected for lower water usage and year-round interest.
  - The construction techniques will encourage sub-trades to use recycled materials such as recycled steel, concrete, and other materials, wherever feasible.

Accessible Housing

- The proposed development includes one (1) convertible unit that is designed with the potential to be easily renovated to accommodate a future resident in a wheelchair. The potential conversion of this unit will require installation of a vertical lift in the stacked storage space (which has been dimensioned to allow for this in Unit F) in the future, if desired.
- All of the proposed units incorporate aging in place features to accommodate mobility constraints associated with aging. These features include:
  - stairwell hand rails;
  - lever-type handles for plumbing fixtures and door handles; and
  - solid blocking in washroom walls to facilitate future grab bar installation beside toilets, bathtubs and showers.

Conclusions

The applicant has satisfactorily addressed staff's comments regarding conditions of adjacency, site planning and urban design, architectural form and character, and landscape design. The applicant has presented a development that fits into the existing context. On this basis, staff recommend support of this Development Permit application.

Edwin Lee
Planning Technician-Design

EL:cas

4308100

The following are to be met prior to forwarding this application to Council for approval:

- Receipt of a Letter-of-Credit for landscaping in the amount of $78,253.89; and
- Registration of a legal agreement on title identifying that the proposed development must be designed and constructed to meet or exceed EnerGuide 82 criteria for energy efficiency and that all dwellings are pre-ducted for solar hot water heating.

Prior to future Building Permit issuance, the developer is required to complete the following:

- Submission of fire flow calculations signed and sealed by a professional engineer, based on the Fire Underwriters Survey to confirm that there is adequate available water flow.
- Submission of DCC's (City & GVS&DD), School site acquisition charges, and Utility charges etc.
- 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.
- Incorporation of accessibility measures in Building Permit (BP) plans as determined via the Rezoning and/or Development Permit processes.
- 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.

City of Richmond

Development Application Data Sheet

Development Applications Division

DP 13-652010 **Attachment 1**

Address: 8400 General Currie Road and 7411/7431 St. Albans Road

Applicant: Zhao XD Architect Ltd. Owner: Benest Real Estate Development Ltd.

Planning Area(s): City Centre

Floor Area Gross: 2,298.8 m^2 Floor Area Net: 1,530.6 m^2

	Existing	Proposed
Site Area:	1,953 m^2	1,946.1 m^2
Land Uses:	Single-Family Residential & Duplex	Multiple-Family Residential
OCP Designation:	Neighbourhood Residential	No Change
Zoning:	Single Detached (RS1/E)	High Density Townhouses (RTH2)
Number of Units:	3	12

	Bylaw Requirement	Proposed	Variance
Floor Area Ratio:	Max. 0.80	0.79	none permitted
Lot Coverage – Building:	Max. 45%	43.3%	none
Lot Coverage – Non-porous Surfaces:	Max. 70%	69.2%	none
Lot Coverage – Landscaping:	Min. 20%	23.6%	none
Setback – Front Yard (North) (m):	Min. 4.5 m	4.50 m	none
Setback – Exterior Side Yard (East) (m):	Min. 2.0 m	4.50 m	none
Setback – West Side Yard (m):	Min. 2.0 m	3.00 m	none
Setback – Rear Yard (South) (m):	Min. 2.0 m	2.00 m	none
Height (m):	12.0 m (3-storeys)	12.0 m (3-storeys)	none
Lot Size:	600 m^2 (min. 20 m wide x 30 m deep)	1,946.1 m^2 (37.97 m wide x 51.06 m deep)	none
Off-street Parking Spaces – Regular (R) / Visitor (V):	1.4 (R) and 0.2 (V) per unit	2.0 (R) and 0.25 (V) per unit	none
Off-street Parking Spaces – Total:	20	27	none

Tandem Parking Spaces:	Max. 50% of proposed residential spaces (24 x Max. 50% = 12)	16	**Variance Requested**
Small Car Parking Spaces	None on the required parking stalls (when fewer than 31 spaces are provided on site)	2 (parking stalls provided in excess of bylaw requirement may be small car parking stalls)	none
Handicap Parking Spaces:	Min. 2% when 3 or more visitor parking spaces are required (3 x Min. 2% = 1)	1	none
Amenity Space – Indoor:	Min. 70 m^2 or Cash-in-lieu	Cash-in-lieu	none
Amenity Space – Outdoor:	Min. 6 m^2 x 12 units = 72 m^2	72 m^2	none

Attachment 2

Excerpt from the Minutes from
The Design Panel Meeting

Wednesday, May 7, 2014 – 4:00 p.m.
Rm. M.1.003
Richmond City Hall

Panel Discussion

Comments from the Panel were as follows:

- balconies in the model appear bigger than what is presented in the floor plan submitted by the applicant, i.e. as per Plan A-3; consider reducing the size of the nook on the second floor and bedroom number 3 above it to increase the size of the balconies;

  Balconies in model are in scale that is consistent to the drawings. The size of the nook is reduced for balcony size increase (see drawings A-3 to A-8).

- agree with staff comment regarding the visitor parking stall (Stall V1) along the south property line; consider relocating to the visitor parking area near the driveway entrance; consider reducing the size of the adjacent landscaped area to the north and the outdoor amenity area to the south to provide additional parking space; north-south drive aisle need not extend up to the south property line; consider planting a large tree at the end of the drive aisle;

  The suggestions are taken to relocate visitor parking stall (V1) to the other visitor parking area near the driveway entrance by shifting Building 1 southward. The drive aisle can also be shortened to leave more space for landscaping (see site plan on drawing A-1).

- there is a huge piece of asphalt at the driveway intersection in the middle of project; consider introducing another tree/landscaping;

  Due to requirements for minimum drive aisle width and maneuvering space for truck, extra landscaping appears not possible at the intersection. Feature paving is proposed at the intersection of internal drive aisle.

- bay window on the turrets appear awkward; consider further design development;

  The design of turrets has been improved, which are closer and more integrated to the principal building massing (see revised drawings A-3, A-11 & 12 and perspectives).

- consider introducing permeable pavers on the driveway intersection and maintain the continuity of the asphalt area elsewhere in the project as it could function as children's outdoor play area;

  See updated site plan (A-1) and landscape architectural plans. An introduction of permeable area also enriches surface pattern of the ground.

- site is very tight; nice curve on the street;
- agree with the proposed location of the balconies; however, consider increasing their size to make them more usable;

  The balcony/deck design has been revised. The balcony/deck depth has been increased to be 1.8m (5'-11") (see Drawing A-3 to A-8).

- turrets appear awkward but can add a "fun" character to the proposed development;
- bay windows on the turret are projecting out too much; large amount of glazing on the bay windows is the weak spot on the thermal performance of the building; ensure good quality thermally broken windows and reduce the thermal massing on the windows;

  One window panel on turret in Building 1 is removed by shifting the turret more into the building. Turrets in Building 2 & 3 have been also revised with the amount of glazing areas reduced as suggested (see drawings A-3).

- turrets are not an uncommon feature in the Craftsman style homes in Richmond; support the feature as it will add interest to the proposed development;
- the proposed convertible unit is well designed; consider a sliding door in the powder room on the main floor to provide more usable space for residents;

  Sliding door is introduced to powder room replacing the swing door (see drawings A-3 & A- 8).

- garbage and recycling area is located adjacent to the convertible unit; relocate garbage and recycling to another area to ensure the marketability of the convertible unit;

  The garbage and recycling closet is physically near the convertible unit for convenient use for the unit while it is visually still quite separated from the unit.

- overall planning of the small and tight site is appropriate and workable;
- concern on the location, safety and manoeuvrability of the visitor parking stall adjacent to the neighbouring property to the south; might become a parking stall for the adjacent townhouse unit; support the proposal to relocate the visitor parking stall close to the driveway entrance;

  The visitor parking (V1) has been relocated (See drawing A-1).

- review the size and shape of the balconies facing the street to improve their functionality; concern the space will become an outdoor storage space;

  The balconies are redesigned (see drawings A-3 to A-8).

- concern on the architectural character of the proposed development; a lot of things happening in the proposal, e.g. turrets, gables, hip roofs, etc.; turret form appears disconnected with the other elements of the project; review and simplify the character of the proposal;

  The turrets have been redesigned with consideration of more integration to the building massing. One turret is shifted more into the main building for Building 1. The turrets on Building 2 & 3 are also redesigned to be more merged into other parts of the building (see drawings A-3, A-10 to A-12 and perspectives). Hip roof is introduced to south portion of Building 1 for more balanced cross-references of different compositional elements within the same building and also to the same in other buildings. Communication utility closet for Building 1 has relocated in to the building south end to simplify the north façade facing the driveway entrance.

- agree with the comment to introduce permeable paving on the internal driveway intersection to break up the huge area of asphalt;

  See updated site plan (A-1) and landscape architectural plans as mentioned earlier. An introduction of permeable area also enriches surface pattern of the ground.

- agree with the proposal to relocate the visitor parking stall at the south end of the property;

  The stall is relocated as mentioned above.

- concern on the dark space that might be created underneath the L-shaped balconies and the overlook on neighbouring developments; and

  The porch is open and an ideal private outdoor area in raining seasons. As shown on Context Plan in drawing A-1, overlook on neighboring residential units would not be an issue. An existing emergency vehicle route on west of the west property line and a drive way on south of the south property line.

- consider further design development to the turrets to integrate them better with other elements in the project.

  As mentioned earlier, the turrets have been redesigned with consideration of more integration to the building massing. One turret is shifted more into the main building for Building 1. The turrets on Building 2 & 3 are also redesigned to be more merged into other parts of the building (see drawings A-3, A-10 to A-12 and perspectives).

Panel Decision

It was moved and seconded
That DP 13-652010 be supported to move forward to the Development Permit Panel subject to the applicant giving consideration to the comments of the Panel.

CARRIED

City of Richmond

Development Permit

No. DP 13-652010

To the Holder:	Zhao XD Architect Ltd.
Property Address:	8400 General Currie Road and 7411/7431 St. Albans Road
Address:	255 - 11181 Voyageur Way Richmond, BC V6X 3N9

1. This Development Permit is issued subject to compliance with all of the Bylaws of the City applicable thereto, except as specifically varied or supplemented by this Permit.
2. This Development Permit applies to and only to those lands shown cross-hatched on the attached Schedule "A" and any and all buildings, structures and other development thereon.
3. The "Richmond Zoning Bylaw 8500" is hereby varied to 8500 to increase the rate of tandem parking spaces from 50% to 67% to allow a total of sixteen (16) tandem parking spaces in eight (8) three-storey townhouse units.
4. Subject to Section 692 of the Local Government Act, R.S.B.C.: buildings and structures; off-street parking and loading facilities; roads and parking areas; and landscaping and screening shall be constructed generally in accordance with Plans #1 to #4 attached hereto.
5. Sanitary sewers, water, drainage, highways, street lighting, underground wiring, and sidewalks, shall be provided as required.
6. As a condition of the issuance of this Permit, the City is holding the security in the amount of $78,253.89 to ensure that development is carried out in accordance with the terms and conditions of this Permit. Should any interest be earned upon the security, it shall accrue to the Holder if the security is returned. The condition of the posting of the security is that should the Holder fail to carry out the development hereby authorized, according to the terms and conditions of this Permit within the time provided, the City may use the security to carry out the work by its servants, agents or contractors, and any surplus shall be paid over to the Holder. Should the Holder carry out the development permitted by this permit within the time set out herein, the security shall be returned to the Holder. The City may retain the security for up to one year after inspection of the completed landscaping in order to ensure that plant material has survived.
7. If the Holder does not commence the construction permitted by this Permit within 24 months of the date of this Permit, this Permit shall lapse and the security shall be returned in full.

Development Permit
No. DP 13-652010

To the Holder:	Zhao XD Architect Ltd.
Property Address:	8400 General Currie Road and 7411/7431 St. Albans Road
Address:	255 - 11181 Voyageur Way Richmond, BC V6X 3N9

8. The land described herein shall be developed generally in accordance with the terms and conditions and provisions of this Permit and any plans and specifications attached to this Permit which shall form a part hereof.

   This Permit is not a Building Permit.

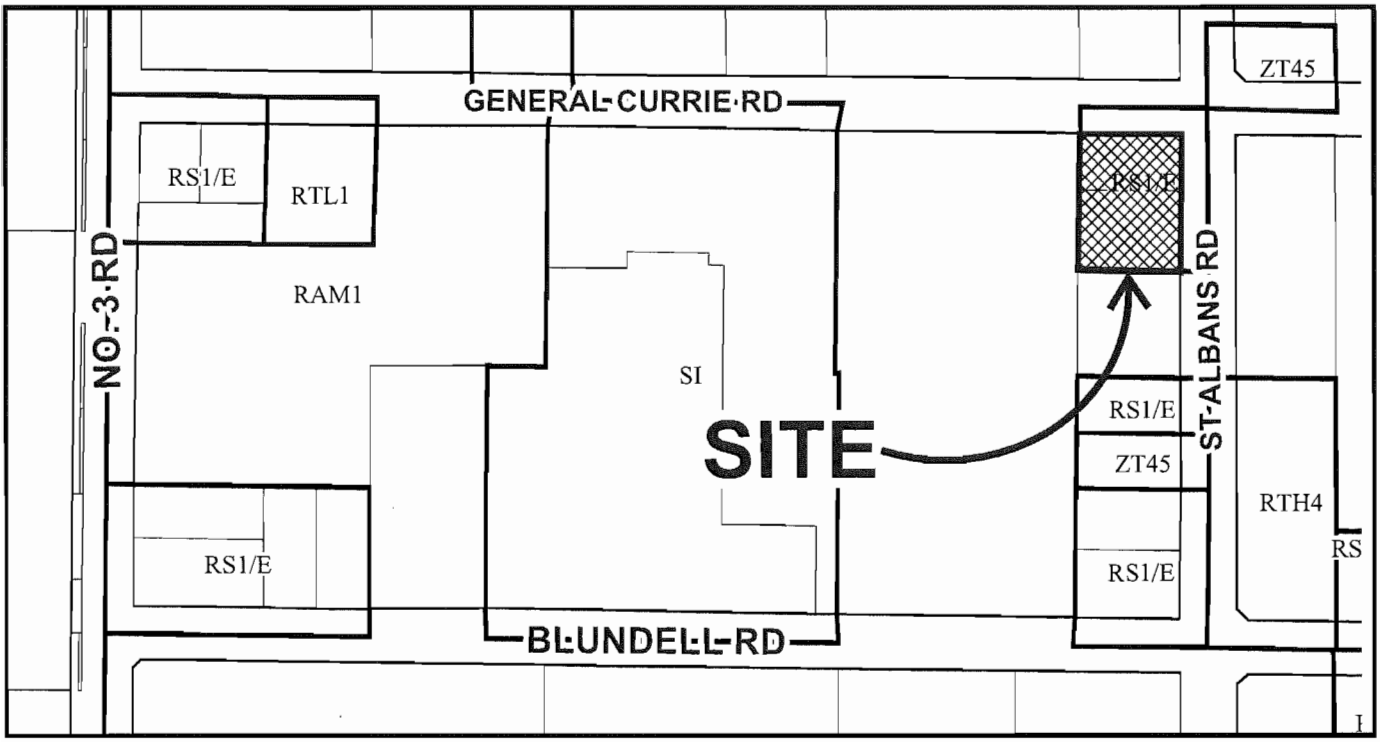
AUTHORIZING RESOLUTION NO. ISSUED BY THE COUNCIL THE DAY OF , .

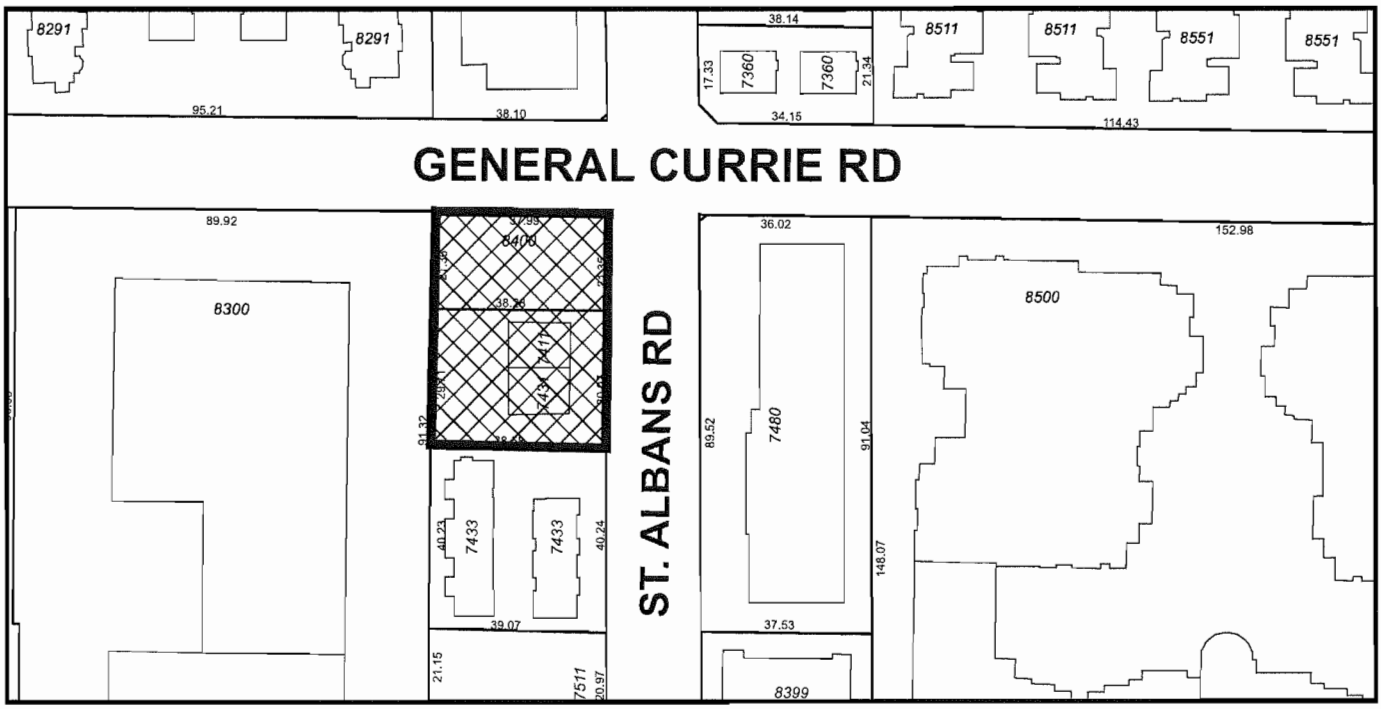
DELIVERED THIS DAY OF , .

_____

MAYOR

City of
Richmond



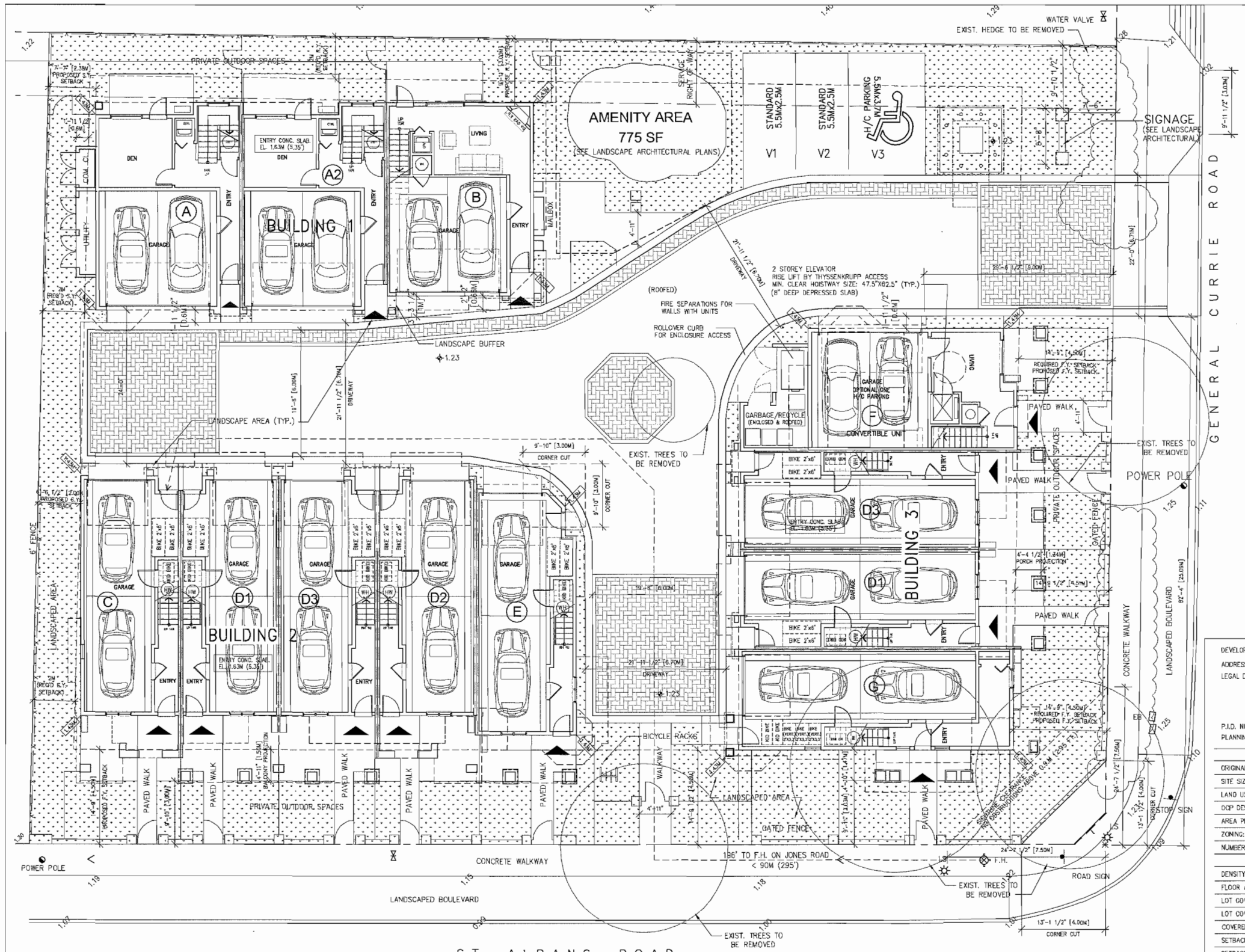


DP 13-652010
SCHEDULE "A"

Original Date: 10/16/14

Revision Date:

Note: Dimensions are in METRES



N

SITE PLAN / LOWER FLOOR PLAN

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

HIGHEST POINT ELEVATION OF THE CROWN OF THE ROAD 1.33

PLAN #1

ENGERGUIDE RATING OF 82 OR ABOVE TO BE ACHIEVED FOR THIS DEVELOPMENT PROJECT. (SEE CEA REPORT FOR DETAILS)

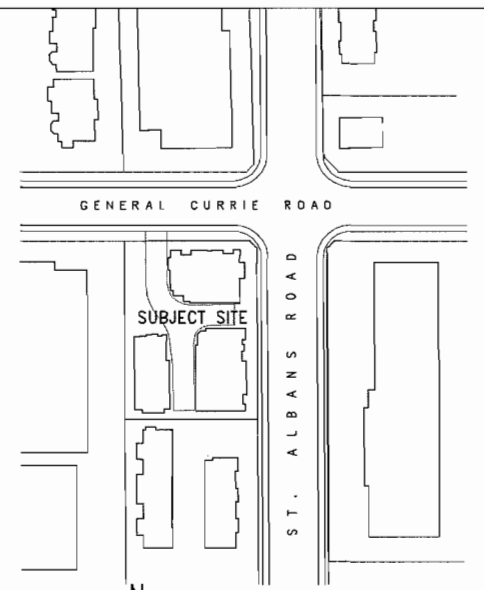
NOTE FOR LIFT:
2 STOREY LIFT
RISE LIFT BY THYSSENKRUPP DESTINY RESIDENTIAL ELEVATOR
MIN. CLEAR HOISTWAY SIZE: 4.5"X60" (TYP.)
DEPRESSED SLAB FOR LIFT

AGING IN PLACE FEATURES FOR ALL UNITS:
-SOLID BLOCKING IN WASHROOM WALLS FOR FUTURE GRAB BARS;
-LEVER-TYPE HANDLES FOR PLUMBING AND DOOR HANDLES

A CONVERTIBLE UNIT IS PROPOSED FOR THIS PROJECT.

0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 millimetres

NOV 0 4 2014



CONTEXT PLAN

N.T.S.

F.A.R. CALCULATION: LOT AREA: 20947.1 SQ.FT.

F.A.R. PERMITTED:	0.8 FAR =	16757.7 SQ.FT.
UNIT 'A' *	1546.8	SQ.FT.
UNIT 'A2'*	1622.3	SQ.FT.
UNIT 'B'	1567.3	SQ.FT.
UNIT 'C'	1288.3	SQ.FT.
UNIT 'D1'	1249.4	SQ.FT.
UNIT 'D1'*	1257.1	SQ.FT.
UNIT 'D2'	1231.5	SQ.FT.
UNIT 'D3'*	1257.1	SQ.FT.
UNIT 'D3'	1249.4	SQ.FT.
UNIT 'E'	1275.4	SQ.FT.
UNIT 'F'	1461.8	SQ.FT.
UNIT 'G'	1468.8	SQ.FT.
TOTAL PROPOSED (0.787 FAR)	16475.2	SQ.FT.

(* FAR INCL. COVERED AREA WITH ONLY ONE SIDE OPEN)

DEVELOPMENT DATA

ADDRESS: #8400 GENERAL CURRIE ROAD, #7431/7411 ST ALBANS ROAD.

LEGAL DESCRIPTION: 1) THE NORTHERLY 70 FEET LOT 3, PLAN 15928;
2) STRATA LOT 1, STRATA PLAN NW1401 TOGETHER WITH AN INTEREST IN THE COMMON PROPERTY IN PROPORTION TO THE UNIT ENTITLEMENT OF THE STRATA LOT AS SHOWN ON FORM 1; BOTH OF SECTION 18 BLOCK 4 NORTH RANGE 6 WEST NEW WESTMINSTER DISTRICT

P.I.D. NUMBERS: P.I.D 003-909-785 P.I.D 001-792-130 P.I.D 001-792-121

PLANNING AREA(S): 10 CITY CENTRE (OCP SCH: 2.10A)

	EXISTING	PROPOSED
ORIGINAL SITE SIZE (SM):	1953 SM (21021.4 S.F.)	
SITE SIZE AFTER ROAD DEDICATION:		1946.1 SM (20947.1 S.F.)
LAND USES:	SINGLE-FAMILY RESIDENTIAL	TOWNHOUSE
OCP DESIGNATION:	NEIGHBOURHOOD RESIDENTIAL	NEIGHBOURHOOD RESIDENTIAL
AREA PLAN DESIGNATION:	–	10 CITY CENTRE (OCP SCH: 2.10A)
ZONING:	SINGLE DETACHED (RS-1E)	HIGH DENSITY TOWN HOUSING (RTH2)
NUMBER OF UNITS:	2	12

	BYLAW REQUIREMENT	PROPOSED	VARIANCE
DENSITY (UNITS/ACRE):	–	24.8 UNITS/ACRE	NOT PERMITTED
FLOOR AREA RATIO:	MAX. 0.80 (16757.7 SF)	0.787 (16475.2 SF)	NOT PERMITTED
LOT COVERAGE – BUILDING:	MAX. 45% (9426.2 SF)	43.3% (9066.9 SF)*	NONE
LOT COVERAGE – LANDSCAPING:	MIN. 20% (4189.4 SF)	23.6% (4934.1 SF)	NONE
COVERED AREA (SF):	MAX. 10% OF FSR	7.7% OF FSR (1611.7 SF)	
SETBACKS – ROAD SETBACK (NORTH):	MIN. 4.5 M	4.5M	NONE
SETBACKS – ROAD SETBACK (EAST):	MIN. 4.5 M	4.5M	NONE
SETBACK – SOUTH SIDE YARD:	MIN. 2 M	2.0 M	NONE
SETBACK – REAR YARD (WEST):	MIN. 2 M	3.0 M	NONE
HEIGHT:	12M (3 STOREYS)	12M (3 STOREYS)	NONE
LOT SIZE (MIN. DIMENSIONS):	(MIN. 30M WIDE) (MIN. 35M DEEP)	20947.1 S.F.	NONE
RESIDENTIAL PARKING SPACES:	1.4 SPACES/ UNIT = 17	2.0 SPACES/ UNIT	NONE
VISITOR PARKING SPACES:	0.2 SPACES/ UNIT	3 SPACES	NONE
OFF-STREET PARKING SPACES-TOTAL:	20	27 (INCL. 2 SMALL-CAR)	NONE
TANDEM PARKING SPACES:	8 (MAX 50% OF 17 REQ'D STALLS)	9 (AMONG REQ'D STALLS)	VARIANCE REQ'D
BICYCLE PARKING SPACE-CLASS-1:	1.25 SPACES PER UNIT	1.42 PER UNIT	NONE
BICYCLE PARKING SPACE-CLASS-2:	0.2 SPACES PER UNIT	0.25	NONE
AMENITY SPACE – INDOOR:	MIN. 56 SM OR CASH-IN-LIEU	CASH-IN-LIEU	NONE
AMENITY SPACE – OUTDOOR:	MIN. 6 SM PER UNIT	775 SF (6 SM PER UNIT)	NONE
PRIVATE OPEN SPACE:	MIN. 37 SM PER UNIT	38.0 SM PER UNIT (AVG.)	NONE

* INCL. UTILITY CL. & MAILBOX

ZHAO XD ARCHITECT LTD.

#255-11181 Voyageur Way,
Richmond, BC V6X 3N9
Tel. (604) 275-8882
Fax (604) 909-1736

Email: info@zhaoarch.com
Web: zhaoarch.com

This drawing shall not be used for construction unless it is countersigned by the CONSULTANT.

Date:	Issued For:
14JUN21	CITY ADP COMMENTS
14APR23	ADP
13DEC10	DP

A DETAIL NUMBER
B LOCATION SHEET
C DETAIL SHEET

All drawings, specifications and other related documents are the copyright property of the CONSULTANT and shall be returned upon request.

Reproduction of drawings and related documents, in whole or in part, is forbidden without the written permission of the CONSULTANT.

The contractor shall check and verify all pertinent dimensions and report any discrepancies to the CONSULTANT before proceeding with the work.

Project:

12 UNITS TOWNHOUSE DEVELOPMENT

8400 GENERAL CURRIE RD.,
7411, 7431 ST ALBANS RD.
RICHMOND, BC

Drawing Title:

SITE PLAN

Date:	May, 2013
Scale:	1/8"=1'-0"
Drawn By:	
Checked By:	
Project No.:	20130501
Drawing No.:	A-1

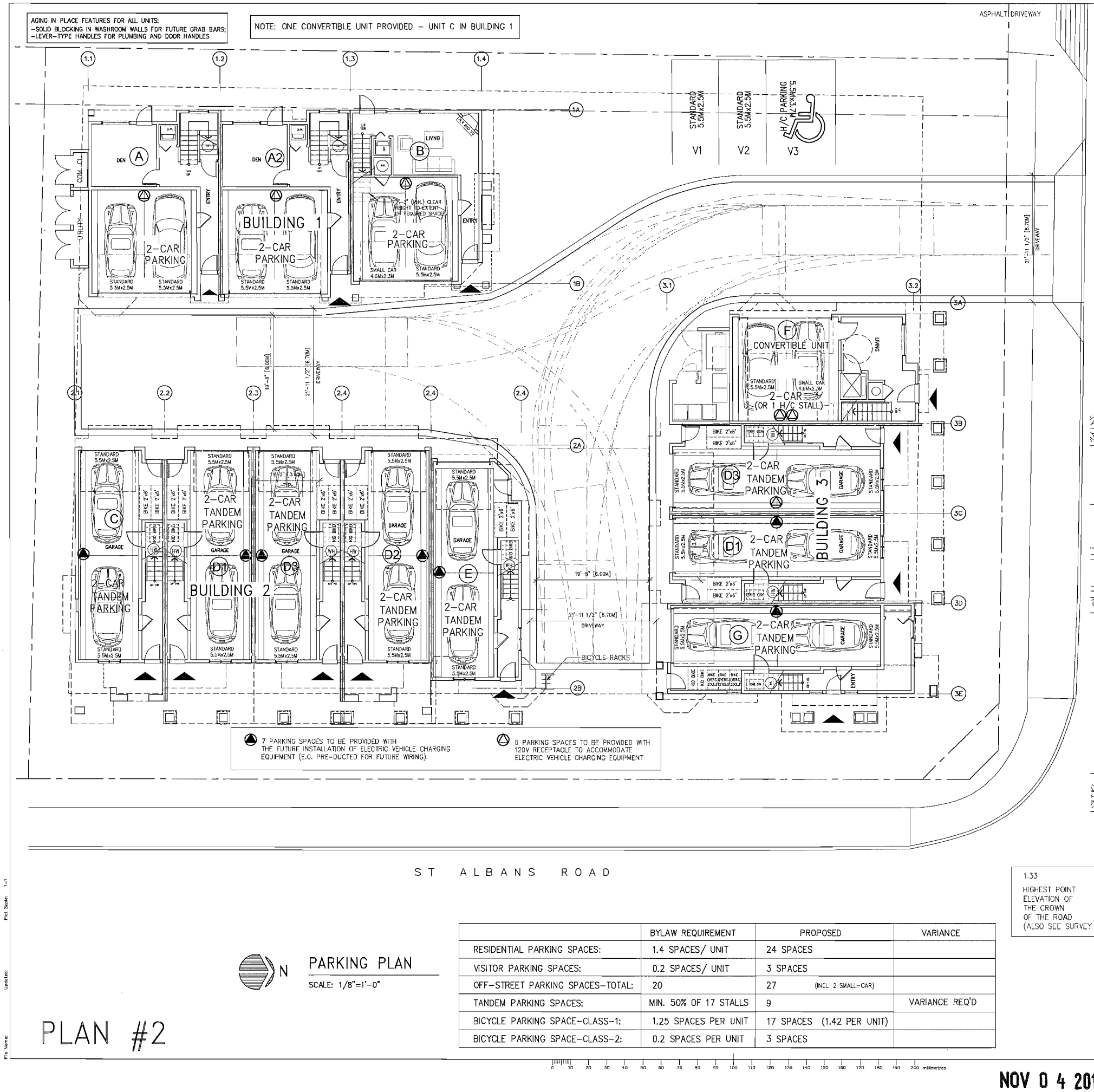
DP 13-652010

This drawing is NOT to be scaled. Use figured dimensions only.

PLAN#1

AGING IN PLACE FEATURES FOR ALL UNITS:
-SOLID BLOCKING IN WASHROOM WALLS FOR FUTURE GRAB BARS;
-LEVER-TYPE HANDLES FOR PLUMBING AND DOOR HANDLES

NOTE: ONE CONVERTIBLE UNIT PROVIDED – UNIT C IN BUILDING 1

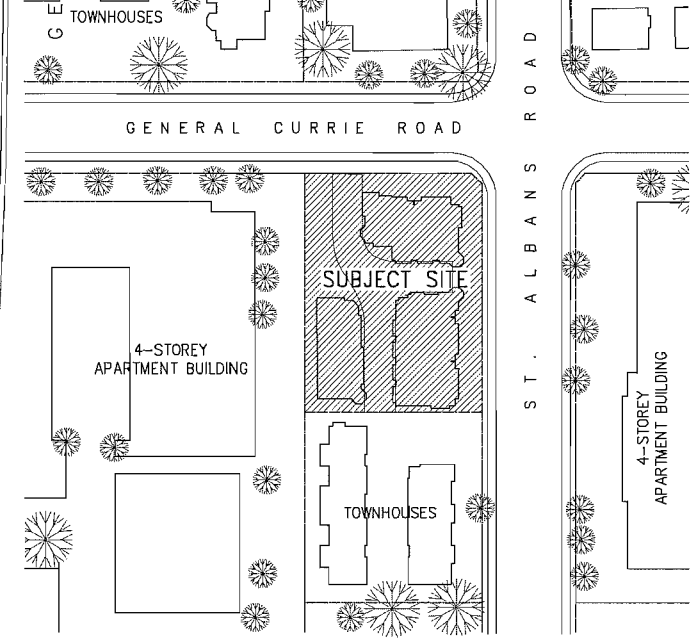


N

PARKING PLAN

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

	BYLAW REQUIREMENT	PROPOSED	VARIANCE
RESIDENTIAL PARKING SPACES:	1.4 SPACES/ UNIT	24 SPACES	
VISITOR PARKING SPACES:	0.2 SPACES/ UNIT	3 SPACES	
OFF-STREET PARKING SPACES-TOTAL:	20	27 (INCL. 2 SMALL-CAR)	
TANDEM PARKING SPACES:	MIN. 50% OF 17 STALLS	9	VARIANCE REQ'D
BICYCLE PARKING SPACE-CLASS-1:	1.25 SPACES PER UNIT	17 SPACES (1.42 PER UNIT)	
BICYCLE PARKING SPACE-CLASS-2:	0.2 SPACES PER UNIT	3 SPACES	



N

CONTEXT PLAN

SCALE: 1"=60'-0"

1.33
HIGHEST POINT ELEVATION OF THE CROWN OF THE ROAD (ALSO SEE SURVEY PLAN)

11.33M

PLAN #2

PLAN #2

ZHAO XD ARCHITECT LTD.

#255-11181 Voyageur Way,
Richmond, BC V6X 3N9
Tel. (604) 275-8882
Fax (604) 909-1736

Email: info@zhaoarch.com
Web: zhaoarch.com

This drawing shall not be used for construction unless it is countersigned by the CONSULTANT.

Date:	Issued For:
14JUN21	CITY ADP COMMENTS
14APR23	ADP
13DEC10	DP

A DETAIL NUMBER
B LOCATION SHEET
C DETAIL SHEET

All drawings, specifications and other related documents are the copyright property of the CONSULTANT and shall be returned upon request.

Reproduction of drawings and related documents, in whole or in part, is forbidden without the written permission of the CONSULTANT.

The contractor shall check and verify all pertinent dimensions and report any discrepancies to the CONSULTANT before proceeding with the work.

Project:

12 UNITS TOWNHOUSE DEVELOPMENT

8400 GENERAL CURRIE RD.,
7411, 7431 ST ALBANS RD.
RICHMOND, BC

Drawing Title:

PARKING PLAN/ GROUND FLOOR & CONTEXT PLAN

Date:

Scale: AS SHOWN

Drawn By:

Checked By:

Project No.:

Drawing No.:

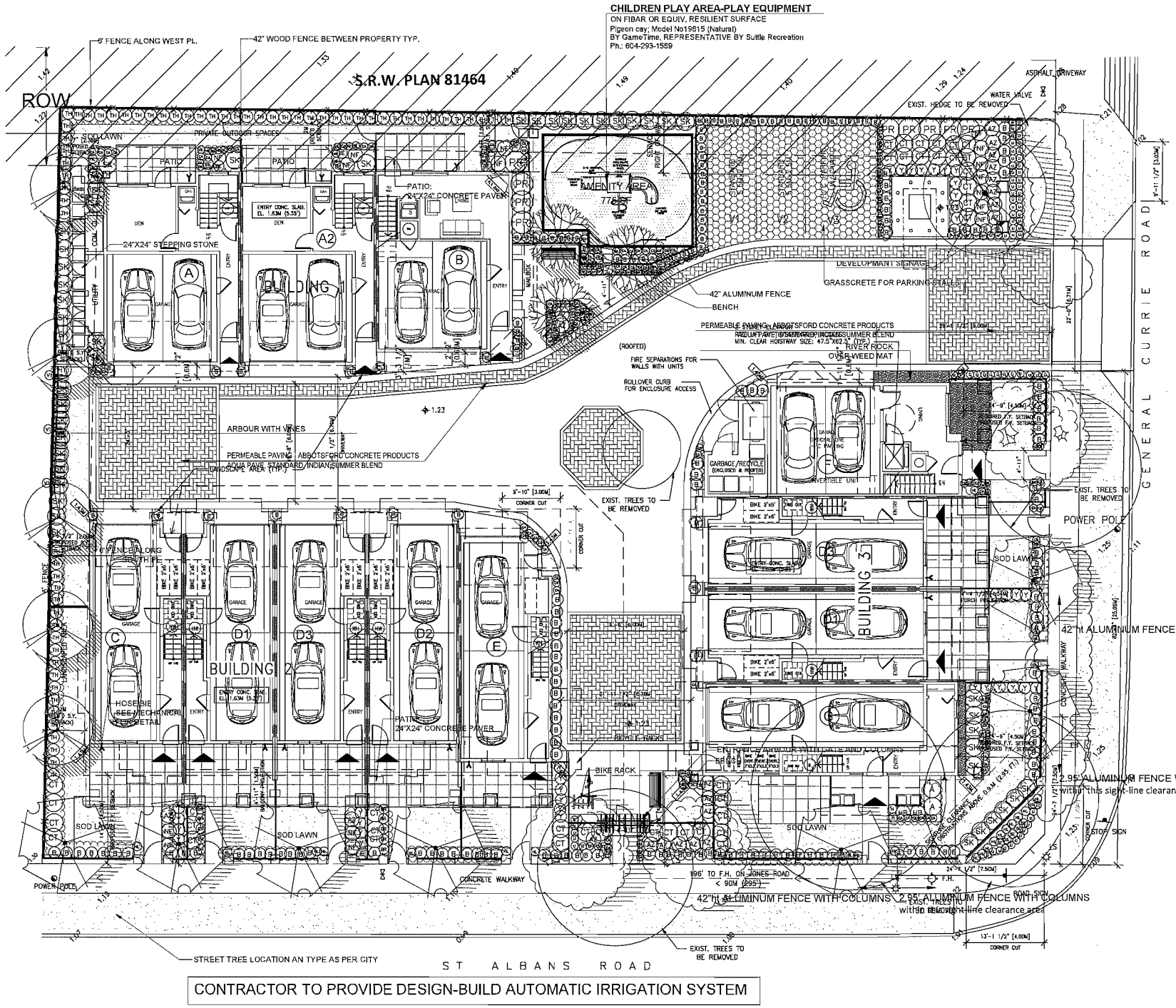
A-2

0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 millimetres

Plot Scale: 1=1
Updates
File Name:

This drawing is NOT to be scaled. Use figured dimensions only.

NOV 0 4 2014 DP 13-652010 PLAN #2



CONTRACTOR TO PROVIDE DESIGN-BUILD AUTOMATIC IRRIGATION SYSTEM

A CONVERTIBLE UNIT IS PROPOSED FOR THIS PROJECT.

PLANT SCHEDULE

PMG PROJECT NUMBER: 13-096

KEY	QTY	BOTANICAL NAME	COMMON NAME	PLANTED SIZE / REMARKS
TREE				
	3	ACER GRISEUM	PAPERBARK MAPLE	6CM CAL; 1.8M STD; B&B
	7	CERCIS CANADENSIS 'FOREST PANSY'	FOREST PANSY REDBUD	6CM CAL; B&B
	3	MAGNOLIA KOBUS STELLATA 'PINK STAR'	PINK STAR MAGNOLIA (LIGHT PINK)	4M HT; B&B
	1	MAGNOLIA SOULANGEANA	SAUCER MAGNOLIA (PINK)	4M HT; B&B, 2M STD
	5	POPULUS TREMULA 'ERECTA'	SWEDISH COLUMNAR ASPEN	6CM CAL; B&B
SHRUB				
(C)	2	ABELIA X'EDWARD GOUCHER'	PINK ABELIA	#3 POT; 50CM
(D)	21	AZALEA JAPONICA 'BLUE DANUBE'	AZALEA; BLUISH-VIOLET	#2 POT; 25CM
(E)	7	BERBERIS THUNBERGII "AUREA NANA"	GOLDEN DWARF BARBERRY	#2 POT; 30CM
(F)	197	BUXUS MICROPHYLLA 'WINTER GEM'	LITTLE-LEAF BOX	#3 POT; 40CM
(G)	39	CHOISYA TERNATA SUNDANCE	MEXICAN MOCK ORANGE	#3 POT; 50CM
(H)	2	HEBE CALEDONIA	CALEDONIA HEBE	#3 POT
(J)	1	HYDRANGEA QUERCIFOLIA 'SNOWFLAKE'	OAKLEAF HYDRANGEA	#3 POT; 80CM
(K)	17	NANDINA DOMESTICA 'FIREPOWER'	FIREPOWER HEAVENLY BAMBOO	#3 POT; 50CM
(L)	9	PRUNUS LUSITANICA	PORTUGESE LAUREL	1M B&B
(M)	47	SKIMMIA CHAMELEON	CHAMELEON SKIMMIA	#3 POT
(N)	35	TAXUS X MEDIA 'HICKSII'	HICK'S YEW	#3 POT; 80CM
(P)	65	THUJA OCCIDENTALIS 'SMARAGD'	EMERALD GREEN CEDAR	1.2M HT; B&B
GRASS				
(R)	101	CAREX PRAIRIE FIRE	PRAIRIE FIRE SEDGE	#1 POT
(S)	24	HELICTOTRICHON SEMPERVIRENS	BLUE OAT GRASS	#1 POT
(T)	76	LIRIOPE MUSCARI	LILYTURF	#1 POT
VINE				
(V)	3	CLEMATIS ARMANDII	EVERGREEN CLEMATIS	#2 POT; 60CM ; STAKED
PERENNIAL				
(W)	10	BRUNNERA 'JACK FROST'	JACK FROST HEARTLEAF	#1 POT
(X)	2	HEMEROCALLIS 'YELLOW STONE'	DAYLILY; LIGHT YELLOW	#2 POT; 2-3 FAN
(Y)	16	HEUCHERA MACRANTHA 'PALACE PURPLE'	CORAL BELLS; PURPLE-RED	11CM POT
(Z)	8	SEDUM AUTUMN JOY	AUTUMN JOY SEDUM	#1 POT
GC				
(EP)	88	EPIMEDIUM X RUBRUM	BARRENWORT	#1 POT; 25CM

NOTES: * PLANT SIZES IN THIS LIST ARE SPECIFIED ACCORDING TO THE BC LANDSCAPE STANDARD, LATEST EDITION. CONTAINER SIZES SPECIFIED AS PER CNTA STANDARDS. BOTH PLANT SIZE AND CONTAINER SIZE ARE THE MINIMUM ACCEPTABLE SIZES. * REFER TO SPECIFICATIONS FOR DEFINED CONTAINER MEASUREMENTS AND OTHER PLANT MATERIAL REQUIREMENTS. * SEARCH AND REVIEW: MAKE PLANT MATERIAL AVAILABLE FOR OPTIONAL REVIEW BY LANDSCAPE ARCHITECT AT SOURCE OF SUPPLY. AREA OF SEARCH TO INCLUDE LOWER MAINLAND AND FRASER VALLEY. * SUBSTITUTIONS: OBTAIN WRITTEN APPROVAL FROM THE LANDSCAPE ARCHITECT PRIOR TO MAKING ANY SUBSTITUTIONS TO THE SPECIFIED MATERIAL. UNAPPROVED SUBSTITUTIONS WILL BE REJECTED. ALLOW A MINIMUM OF FIVE DAYS PRIOR TO DELIVERY FOR REQUEST TO SUBSTITUTE. SUBSTITUTIONS ARE SUBJECT TO BC LANDSCAPE STANDARD - DEFINITION OF CONDITIONS OF AVAILABILITY. ALL LANDSCAPE MATERIAL AND WORKMANSHIP MUST MEET OR EXCEED BC LANDSCAPE STANDARD'S LATEST EDITION. ALL PLANT MATERIAL MUST BE PROVIDED FROM CERTIFIED DISEASE FREE NURSERY

©Copyright reserved. This drawing and design is the property of PMG Landscape Architects and may not be reproduced or used for other projects without their permission.

pmg LANDSCAPE ARCHITECTS
Suite C100 - 4185 Still Creek Drive
Burnaby, British Columbia, V5C 6G9
p: 604 294-0011 ; f: 604 294-0022

SEAL:

NO.	DATE	REVISION DESCRIPTION	DR.
7	14.AUG.26	REV. PER CITY COMMENTS/NEW SITE	BA
6	14.AUG.20	NEW SITE PLAN/CITY COMMENTS	DD
5	14.JUL.09	NEW SITE PLAN	DD
4	14.FEB.6	TREE MANAGEMENT PLAN	DD
3	14.JAN.27	NEW SITE PLAN/CITY COMMENTS	DD
2	13.DEC.12	NEW SITE PLAN	RH
1	13.AUG.06	NEW SITE PLAN	RH

CLIENT:

PROJECT:

14 UNIT CONDOMINIUM DEVELOPMENT

8400 GENERAL CURRIE ROAD RICHMOND

DRAWING TITLE:

LANDSCAPE PLAN

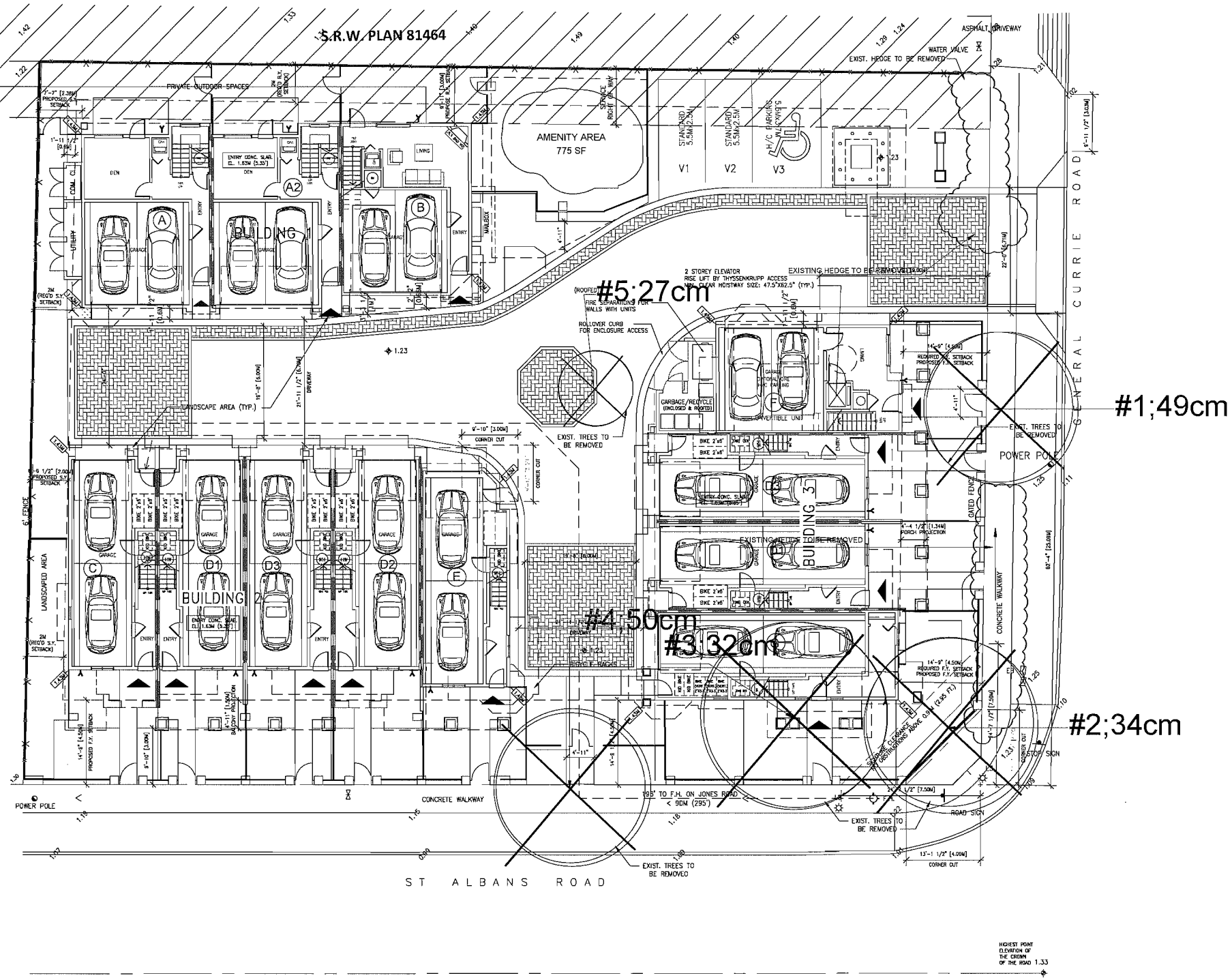
DATE:	13.JUNE.26	DRAWING NUMBER:
SCALE:	1"=10'-0"	**L1**
DRAWN:	RH	
DESIGN:	RH	
CHK'D:	PC	OF 4

13D96-8.ZIP

PMG PROJECT NUMBER: **13-096**

NOV 0 4 2014

DP 13-652010 PLAN #3



TREE TO REMOVE

Table of Trees

Tree No.	Species		DBH(cm)	CRZ radius (m)
	Common Name	Botanical Name		
No.1	Birch	Betula sp.	49	2.5
No.2	Cherry	Prunus sp.	34	2.1
No.3	Birch	Betula sp.	32	2.0
No.4	Plum	Prunus sp.	50	2.5
No.5	Spruce	Picea sp.	27	1.6

Suitable Replacement Trees

Species	
Common Name	Botanical Name
ACER GRISEUM	PAPERBARK MAPLE
CERCIS CANADENSIS 'FOREST PANSY'	FOREST PANSY REDBUD
MAGNOLIA SOULANGEANA	SAUCER MAGNOLIA (PINK)
POPULUS TREMULA 'ERECTA'	SWEDISH COLUMNAR ASPEN

NOV 0 4 2014 DP 13-652010 13096-8.ZIP

PLAN #3A

©Copyright reserved. This drawing and design is the property of PMG Landscape Architects and may not be reproduced or used for other projects without their permission.

pmg LANDSCAPE ARCHITECTS
Suite C100 - 4185 Still Creek Drive
Burnaby, British Columbia, V5C 6G9
p: 604 294-0011 ; f: 604 294-0022

SEAL:

NO.	DATE	REVISION DESCRIPTION	DR.
7	14.AUG.26	REV. PER CITY COMMENTS/NEW SITE	BA
6	14.AUG.20	NEW SITE PLAN/CITY COMMENTS	DD
5	14.JUL.09	NEW SITE PLAN	DD
4	14.FEB.6	TREE MANAGEMENT PLAN	DD
3	14.JAN.23	NEW SITE PLAN/CITY COMMENTS	DD
2	13.DEC.12	NEW SITE PLAN	RH
1	13.AUG.06	NEW SITE PLAN	RH

CLIENT:

PROJECT:

14 UNIT CONDOMINIUM DEVELOPMENT

8400 GENERAL CURRIE ROAD RICHMOND

DRAWING TITLE:

TREE MANAGEMENT PLAN

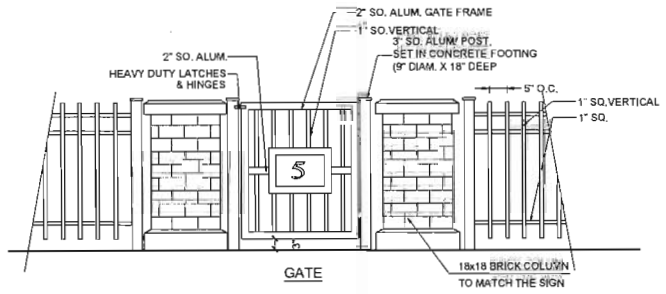
DATE:	13.JUNE.26	DRAWING NUMBER:	
SCALE:	1"=10'-0"		**L2**
DRAWN:	RH		
DESIGN:	RH		
CHK'D:	PC		OF 4

PMG PROJECT NUMBER: 13-096

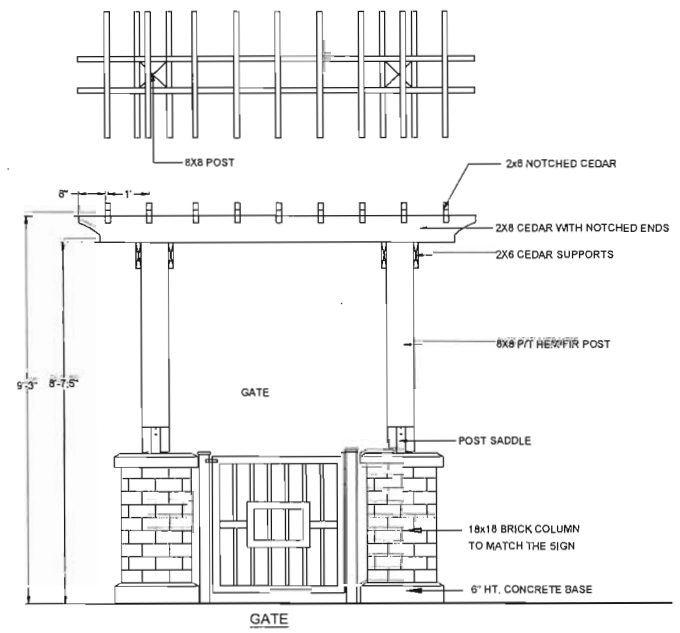
© Copyright reserved. This drawing and design is the property of PMG Landscape Architects and may not be reproduced or used for other projects without their permission.

pmg LANDSCAPE ARCHITECTS
Suite C100 - 4185 Still Creek Drive
Burnaby, British Columbia, V5C 6G9
p: 604 294-0011 ; f: 604 294-0022

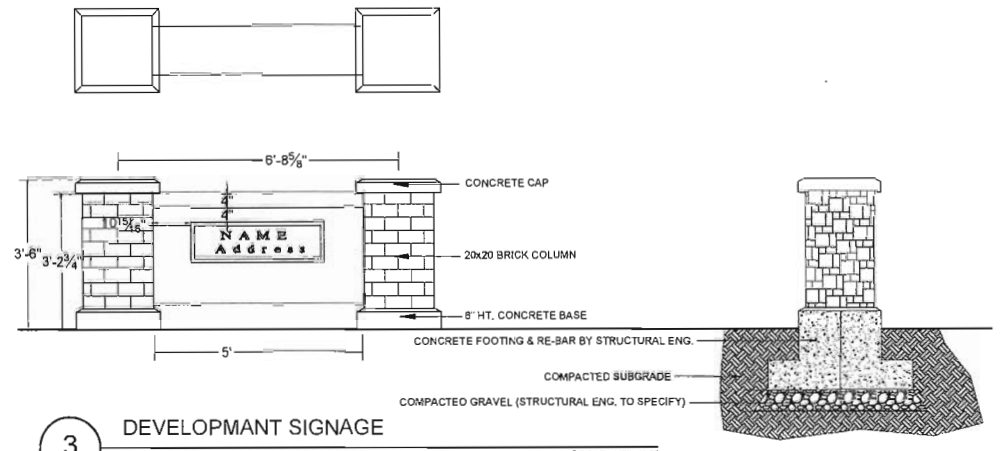
SEAL:



1 STREET FRONTAGE-42"HT ALUMINUM FENCE AND COLUMN
SCALE: 1/2"=1'-0"

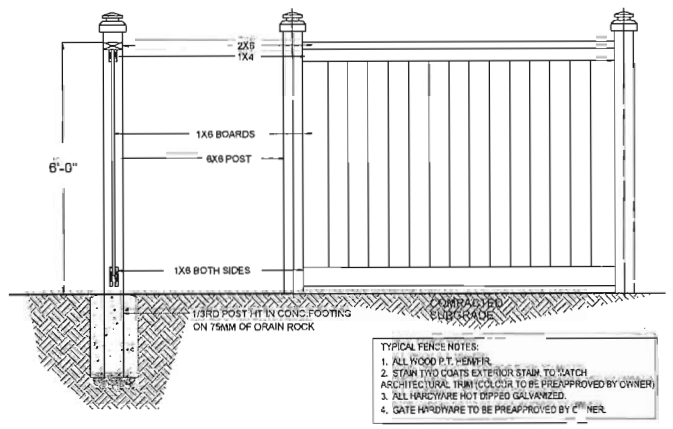


2 ENTRANCE ARBOUR WITH GATE AND COLUMN
SCALE: 1/2"=1'-0"

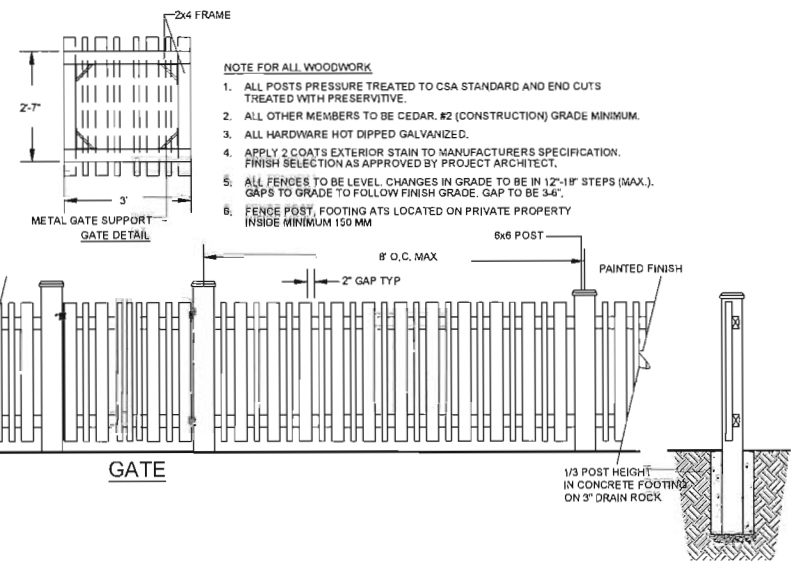


3 DEVELOPMANT SIGNAGE
SCALE: 1/2"=1'-0"

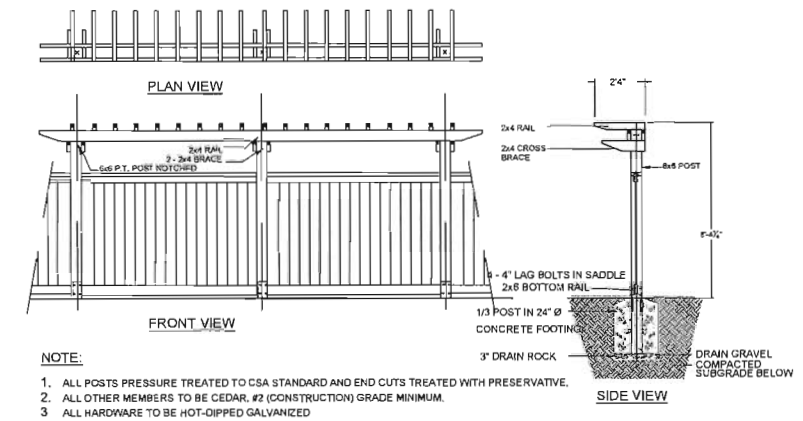
SECTION



4 6' HIGH PRIVACY SCREEN FENCE
SCALE: 1/2"=1'-0"



5 42" HT PICKET FENCE AND GATE
SCALE: 1/2"=1'-0"



6 ARBOUR
1/4" = 1'-0"



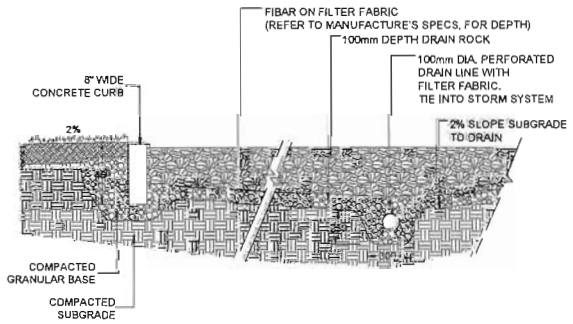
Pigeon cay; Model No19615 (Natural)
BY GameTime, REPRESENTATIVE BY Suttle Recreation
Ph.: 604-668-5221



Whishbone BIKE RACK
Mountain Classic Park Bench;
Model:MCB-5
BLACK COLOUR;
Ultraplast ™ Recycled Plastic Slats



Whishbone BIKE RACK
SFBR-3 MODEL for 3 bikes;
BLACK COLOUR;14"L x 38.5" H
Ph.: 604 626 0476



7 PLAYGROUND SAFETY SURFACE
SCALE: 1/2"=1'-0"

13096-8.ZIP

NOV 0 4 2014 DP 13-652010

PLAN #3B

NO.	DATE	REVISION DESCRIPTION	DR.
7	14.AUG.26	REV. PER CITY COMMENTS/NEW SITE	BA
6	14.AUG.20	NEW SITE PLAN/CITY COMMENTS	CO
5	14.JUL.09	NEW SITE PLAN	CO
4	14.FEB.6	TREE MANAGEMENT PLAN	CO
3	14.JAN.27	NEW SITE PLAN/CITY COMMENTS	CO
2	13.DEC.12	NEW SITE PLAN	RH
1	13.AUG.06	NEW SITE PLAN	RH

CLIENT:

PROJECT:

14 UNIT CONDOMINIUM DEVELOPMENT

8400 GENERAL CURRIE ROAD
RICHMOND

DRAWING TITLE:

LANDSCAPE DETAILS

DATE:	13.JUNE.28	DRAWING NUMBER:
SCALE:		**L3**
DRAWN:	RH	
DESIGN:	RH	
CHK'D:	PC	OF 4

PMG PROJECT NUMBER: 13-096

© Copyright reserved. This drawing and design is the property of PMG Landscape Architects and may not be reproduced or used for other projects without their permission.

PART ONE GENERAL REQUIREMENTS

1.1 REFERENCES

.1 CCDC Doc 2 2008
Comply with all articles in the General Conditions of Contract in conjunction with this section unless superseded by other Contract Documents.

.2 B.C. Landscape Standard, 2012 edition prepared by the B.C. Society of Landscape Architects and the B.C. Landscape & Nursery Associations, jointly. All work and materials shall meet standards as set out in the B.C. Landscape Standard unless superseded by this specification or as directed by Landscape Architect with written instruction

.3 MASTER MUNICIPAL SPECIFICATIONS & STANDARD DETAILS, 2000 edition, prepared by the Consulting Engineers of British Columbia, Roadbuilders and Heavy Construction Association, and the Municipal Engineers Common

.4 STANDARD FOR LANDSCAPE IRRIGATION SYSTEM, 2006 Prepared by the Irrigation Industry Association of British Columbia

.5 MUNICIPAL BYLAWS AND ENGINEERING SPECIFICATIONS WHERE NOTED.

1.2 TESTING

.1 A current test more than one month old test for all growing medium to be used on this site is required. Provide and pay for testing by an independent testing facility pre-approved by the Landscape Architect. Drawer growing medium test results to Landscape Architect for review and approval prior to placement Refer to Section 3.4. Growing Medium Testing for procedure

.2 Owner reserves the right to test or re-test materials. Contractor responsible to pay for testing if materials do not meet specification

1.3 SUBMITTALS

.1 Any alternate products differing from that contained in the contract documents must be pre-approved by the Landscape Architect.

.2 Submittals to consist of product sample or manufacturer's product description

1.4 SITE REVIEW

.1 Under the terms of the Landscape Architect's Contract with the Owner and where the Landscape Architect is the designated reviewer, the Landscape Architect will observe construction as is necessary in their opinion to confirm conformance to the plans and specifications. Contract Owner's Representative to arrange for site observation at the appropriate times, allow two days notice. Observation schedule may include but will not be limited to the following:

.2 Start Up Site Meeting, General Contract Prior to any site disturbance, a meeting with the general contractor to review tree preservation issues, general landscape issues and municipal requirements.

.2 Start Up Site Meeting, Landscape Contract (if separate) At the start of work with Owner's Representative, Site Superintendent and Landscape Contractor, a meeting is to be held to review expected work and to verify the acceptability of the subgrade and general site conditions for the Landscape Contractor. Provide growing medium test results for this meeting.

.3 Progress Site Visits To observe materials and workmanship as necessary through the course of the work. Review of different aspects of the work may be dealt with on any single visit. Such elements may include Site Layout, Rough Grading, Growing Medium – quality, depths, finish grading, Drainage and Drainage Materials, Lawns or Grass areas, Planting –plant material including negotiations with suppliers, nursery inspections, plant sizes, quality, quantity, planting practice and layout, tree support, Mulch, Irrigation Systems, Play Equipment, Site Furniture, and other elements of the site development where the Landscape Architect is the designated reviewer such as: Pedestrian Paving, Fencing, Non-structural walls and slabs, Unit Paving.

.4 Sub-trade Performance Review of all work, according of all subtrades, deficiencies, plant counts, precautions of deficiency list, and recommendations for completion

.5 Certificate of Completion Upon the declaration of Substantial Performance, a recommendation for the issuance of the Certificate of Completion will be made for the Payment Certifier as defined in the contract.

.6 Deficiency Review Prior to the completion of the maintenance period, check for completion of deficiencies. Once completed, a Schedule 'C' will be issued where required

.7 Warranty Review Prior to the completion of the warranty period (+/- 11 months after issuance of the Certificate of Completion), review all warranty material and report recommendations for warranty replacement

1.5 WORKMANSHIP

.1 Unless otherwise instructed in the Contract Documents, the preparation of the subgrade shall be the responsibility of the General Contractor. Placement of growing medium constitutes acceptance of the subgrade by the Landscape Contractor. Any subsequent corrections to the subgrade are the responsibility of the Landscape Contractor

.2 All work and superintendence shall be performed by personnel skilled in landscape contracting. In addition, all personnel applying herbicides and/or pesticides shall hold a current licence issued by the appropriate authorities.

.3 A site visit is required to become familiar with site conditions before bidding and before start of work.

.4 Confirm location of all services before proceeding with any work

.5 Notify Landscape Architect of any discrepancies. Obtain approval from Landscape Architect prior to deviating from the plans.

.6 Take appropriate measures to avoid environmental damage. Do not dump any waste materials into water bodies. Conform with all federal, provincial and local statutes and guidelines.

.7 Collect and dispose of all debris and/or excess material from landscape operations. Keep paved surfaces clean and repair damage resulting from landscape work. Repairs are to be completed prior to final acceptance

.8 Where new work connects with existing, and where existing work is altered, make good in match existing undisturbed conditions.

1.6 WARRANTEE

.1 Guarantee all materials and workmanship for a minimum period of one full year from the date of Certificate of Completion

.2 Refer to individual sections for specific warranties

PART TWO SCOPE OF WORK

2.1 SCOPE OF WORK

.1 Other conditions of Contract may apply. Confirm Scope of Work at time of tender.

.2 Work includes supply of all related items and performing all operations necessary to complete the work in accordance with the drawings and specifications and generally consists of the following:

.2.1 Retention of Existing Trees where shown on drawings.
.2.2 Finish Grading and Landscape Drainage.
.2.3 Supply and placement of growing medium.
.2.4 Testing of imported growing medium and/or site topsoil.
.2.5 Supply and incorporation of additives to meet requirements of soil test and Table One.
.2.6 Preparation of planting beds, supply of plant material and planting.
.2.7 Preparation of rough grass areas, supply of materials and seeding.
.2.8 Preparation of lawn areas, supply of materials and sodding.
.2.9 Supply and placement of bark mulch.
.2.10 Maintenance of planted and seeded/sodded areas until accepted by Owner.
.2.11 SEPARATE PRICE: Establishment Maintenance, Section 3.11
.2.12 Other work: Work other than this list, not specified by Landscape Architect

2.2 MATERIALS

.1 Growing Medium: Conform to B.C. Landscape Standard for definitions of imported and on-site topsoil. Refer to Table One below.

TABLE ONE PROPERTIES OF GROWING MEDIUM FOR LEVEL 1 GROOMED AND LEVEL 3 MODERATE AREAS
Canadian System of Soil Classification Textural Class "Loamy Sand" to "Sandy Loam"

Applications	Low Traffic Areas: Trees and Large Shrubs	High Traffic Areas: Lawn Areas	Planting Areas and Planters
Growing Medium Types	1%	2M	2P
Texture	Percent Of Dry Weight of Total Growing Medium		
Coarse Gravel: larger than 25mm	0 - 1%	0 - 0%	0 - 1%
All Gravel: larger than 2mm	0 - 5%	0 - 5%	0 - 5%
	Percent Of Dry Weight of Growing Medium Excluding Gravel		
Sand: larger than 0.05mm smaller than 2.0mm	50 - 80%	70 - 90%	60 - 80%
Silt: larger than 0.002mm smaller than 0.05mm	10 - 25%	0 - 15%	10 - 25%
Clay: smaller than 0.002mm	0 - 25%	0 - 15%	0 - 25%
Clay and Silt Combined	maximum 35%	maximum 15%	maximum 25%
Organic Content (coarse)	3 - 15%	3 - 5%	10 - 20%
Organic Content (fine/silt)	3 - 5%	3 - 5%	15 - 25%
Acidity (pH)	6.0 – 7.0	6.0 – 7.0	4.5 – 5.5
Drainage	Percolation shall be such that no standing water is visible 60 minutes after at least 10 minutes of moderate to heavy rain or irrigation.		

.2 Fertilizer: An organic and/or inorganic compound containing Nitrogen (N), Phosphate (P2O5), and Potash (soluble) (K2o) proportions required by soil test.

.3 Lime: Ground agricultural limestone. Meet requirements of the B.C. Landscape Standard

.4 Organic Additive: Commercial compost product to the requirements of the B.C. Landscape Standard, 4th edition and pre-approved by the Landscape Architect. Recommended suppliers: The Answer Garden Products, Fraser Richmond Soils & Fibre, Stream Organics Management.

.5 Sand: Clean, washed pump sand to meet requirements of the B.C. Landscape Standard.

.6 Composted Bark Mulch: 10mm (3/8") sieve for Manitoba bare chips and forest, free of chunks and slivers, dark brown in colour and free of all soil, stones, roots or other extraneous matter. Fresh orange in colour bark will be rejected

.7 Herbicides and Pesticides: If used, must conform to all federal, provincial and local statutes. Appliers must hold current licenses issued by the appropriate authorities in the area

.8 Filter Fabric: A non biodegradable blanket or other filtering membrane that will allow the passage of water but not fine soil particles (Such as MIRAFI 140 NL, GEOLON 66S OR AMOCO 4545 or alternate product pre-approved by the Landscape Architect.)

.9 Drainage Piping if required: Schedule 40 PVC material slotted.

.10 Drain Rock: Clean, round, inert, durable, and have a maximum size of 19mm and containing no material smaller than 10mm

.11 Plant Material: To the requirements of the B.C. Landscape Standard. Refer to 3.9, Plants and Planting. All plant material must be provided from a certified disease free nursery. Provide proof of certification

.12 Sod: Refer to individual tradesmen in this specification.

.13 Supplier and installers of segmental block walls to provide engineered drawings for all walls signed and sealed drawings for all walls, individually, in excess of 1.2m, or combinations of walls collectively in excess of 1.2m installations must be reviewed and signed off by Certified Professional Engineer, include cost of engineering services in Tender price.

.14 Miscellaneous: Any other material necessary to complete the project as shown on the drawings and described herein.

PART THREE SOFT LANDSCAPE DEVELOPMENT

3.1 RETENTION OF EXISTING TREES

.1 Prior to any work on site – protect individual trees or plant groupings indicated as retained on landscape plans as vegetation retention areas.

.11 In some instances the Landscape Architect will tag trees or areas to remain. Discuss tree retention areas at a start-up meeting with the Landscape Architect.

.2 A physical barrier must be installed to delineate clearing boundaries. Refer to physical barrier detail. If detail not provided, comply with local municipal requirements.

.3 No machine travel through or within vegetation retention areas or under crowns of trees to be retained is allowed

.5 Do not trench, fill, construct foundations, or excavate material within vegetation retention areas.

.5 Do not park, fuel or service vehicles within vegetation retention areas

.6 No debris fires, clearing fires or trash burning shall be permitted within vegetation retention areas.

.7 No excavations, drain or service trenches nor any other disruption shall be permitted within vegetation retention areas without a review of the proposed encroachment by the Landscape Architect.

.8 Do not cut branches or roots of retained trees without the approval of the Landscape Architect

.9 Any damage to existing vegetation intended for preservation will be subject to evaluation by an I.S.A. Certified Arborist using the "Guide for Plant Appraisal", Eighth Edition, 1992

.10 Replacement planting of equivalent value to the disturbance will be required. The cost of the evaluation and of the replacement planting will be the responsibility of the General Contractor and/or the person(s) responsible for the disturbance

.11 In municipalities with specific tree retention/replacement bylaws ensure compliance to bylaws

.12 In situations where required construction may disturb existing vegetation intended for preservation, contact Landscape Architect for review prior to commencing construction.

3.2 GRADES

.1 Ensure subgrade is prepared to conform to depths specified in Section 3.5, Growing Medium Supply, below. Where planting is indicated close to existing trees, prepare suitable planting pockets for material indicated on the planting plan. Shape subgrade to eliminate steps towards water and conform to the site grading and drainage plan.

.2 On slopes in excess of 3:1 (much subgrade across slope to 150mm (6") minimum at three (3) intervals minimum

.3 Scarify the entire subgrade immediately prior to placing growing medium. Re-cultivate where vehicular traffic results in compaction during the construction procedures Ensure that all planting areas are smoothly contoured after light compaction for finished grades.

.4 Eliminate standing water from all finished grades. Provide a smooth, firm and even surface and conform to grades shown on the Landscape Drawings. Do not exceed maximum and minimum gradients defined by the B.C. Landscape Standard

.5 Construct swales true to line and grade, smooth and free of sags or high points. Minimum slope 2%, maximum side slopes 10%. Assure positive drainage to collection points.

.6 Slope not to exceed the following maximums: Rough Grass 3:1, Lawn 4:1, Landscape plantings 2:1

.7 Finished soil/mulch elevation at building to comply with municipal requirements

.8 Inform Landscape Architect of completion of finish grade prior to placement of seed, sod, plants or mulch.

3.3 LANDSCAPE DRAINAGE

.1 Related Work: Growing medium and Finish Grading, Grass areas, Trees Shrubs and Groundcovers, Planters, Crib Walls

.2 Work Included: Site finish grading and surface drainage. Installation of any drainage systems detailed on landscape plans. Note: Catch basins shown on landscape plans for coordination only, confirm scope of work prior to bid.

.2.1 Coordinate all landscape drainage work with rest of site drainage. Refer to engineering drawings and specifications for connections and other information.

.2.2 Determine exact locations of all existing utilities and structures and underground utilities prior to commencing work, which may not be located on drawings and conduct work so as to prevent interruption to service or damage to them. Protect existing structures and utility services and be responsible for damage caused

.2.3 Plumber drains on slab. Refer to Section 3.10, Installing Landscape on Structures

.3 Execution:

.3.1 Do trenching and backfilling in accordance with engineering details and specifications

.3.2 Lay drains on undisturbed bed, free to line and grade with inverts smooth and free of sags or high points. Ensure barrel of each pipe is in contact with bed throughout full length.

.3.3 Commence laying pipe at outlet and proceed in upstream direction

.3.4 Lay perforated pipes with perforations at 8pm and 4pm positions.

.3.5 Make joints tight in accordance with manufacturer's directions.

.3.6 Do not allow water to flow through the pipes during construction except as approved by Engineer.

.3.7 Make watertight connections to existing drains, new or existing manholes or catchbasins where indicated or as directed by Landscape Architect.

.3.8 Plug upstream ends of pipe with watertight clean rock caps.

.3.9 Surround and cover pipe with drain rock in uniform 150mm layers for various depths as shown in details, minimum 100mm.

.3.10 Cover drain rock with non-woven filter cloth lap all edges and seams minimum 150mm

.3.11 Assure positive drainage

.3.12 Rock fill manhole or leach pit as indicated

.3.13 Protect subdrains from installation during installation.

3.4 GROWING MEDIUM TESTING

.1 Submit representative sample of growing medium proposed for use on this project to an independent laboratory. Provide test results to Landscape Architect prior to placing. Test results to include:

.11 Physical properties, % content of gravel, sand, silt, clay and organics.

.12 Acidity PH and quantities of lime or sulphur required to bring within specified range.

.13 Nutrient levels of principle and trace elements and recommendations for required soil amendments

.14 Carbon/Nitrogen level.

3.5 GROWING MEDIUM SUPPLY AND PLACEMENT

.1 Supply all growing medium required for the performance of the Contract. Do not haul, transport or spread growing medium when it is so wet that its structure is likely to be damaged

.2 Supply all growing medium stockpiles as required by the soil test. Amended growing medium must meet the specification for growing medium as defined in Table One For the various areas

.21 Thoroughly mix required amendments into the full depth of the growing medium

.22 Special mixes may be required for various situations. Refer to drawing notes for instructions

.3 Place the amended growing medium in all grass and planting areas. Spread growing medium in uniform layers not exceeding 6" (150mm), over undisturbed subgrade free of standing water.

.4 Minimum depths of growing medium placed and compacted to 85%:

4.1 On-grade:
4.11 Seeded and sodded lawn..... 6" (150mm)
4.12 Mass planted shrubs & groundcovers..... 15" (380mm)
4.13 Groundcover only areas, if defined on plan..... 9" (225mm)
4.14 Tree & large shrub pits..... depth to conform to depth of rootball – width shall be at least twice the width of the root ball with saucer shaped sides.

4.2 On-Slab
4.21 Irrigated lawn..... 9" (225mm)
4.22 Groundcover areas..... 12" (300mm)
4.23 Lawn without automatic irrigation..... 12" (300mm)
4.24 Shrub & groundcover areas..... 24" (600mm)
4.25 Trees and specimen plantings..... 39" (1000mm) over columns and/or edge of slab (notify column locations on-site for tree locations.)
4.26 Depth noted includes 1" to 2" (25-50mm) sand over rolled fabric
4.27 Minimum 18" depth growing medium except where mounded for trees over column points

.5 Manually spread growing medium/planting soil around existing trees, shrubs and obstacles.

.6 In perimeter seeded grass areas, feather growing medium out to nothing at edges and blend into existing grades.

.7 Finished grades shall conform to the elevations shown on landscape and site plans.

3.6 ROUGH GRASS AREA – SEEDING

.1 General: Rough grass areas are noted on the drawings as "Rough Grass". Treat all areas defined as rough grass between all property lines of the project including all boulevards to edge of roads and lanes.

.2 Preparation of Surfaces: To B.C. Landscape Standard Class 3 Areas (Rough grass) Section 3.11.1

.21 Clean existing soil by mechanical means of debris over 50mm in any dimension

.22 Roughly grade surfaces to allow for maintenance specified and for positive drainage.

.3 Time of Seeding: Seed from early spring (generally April 1st) to late fall (September 15th) of each year. Further extensions may be obtained on construction of the Landscape Architect.

.4 Seed Supply & Testing: All seed must be obtained from a recognized seed supplier and shall be No. 1 grass mixture delivered in containers bearing the following information

.4.1 Analysis of the seed mixture
.4.2 Percentage of each seed type

.5 Seed Mixture: All varieties shall be rated as strong performers in the Pacific Northwest and are subject to client approval.

70% Creeping Red Fescue
20% Annual Rye
5% Salton Perennial Rye
5% Kentucky Bluegrass
For Wildflower Areas: use a mixture of Wildflowers with Hard Fescues (Barrabile Coastal Wildflowers) with Hard Fescue or pre-approved alternate.

.6 Fertilizer: Mechanically seeding: Apply a complete synthetic slow-release fertilizer with minimum 35% water soluble nitrogen and a formulation ratio of 16-16-16 – 56% sulphur urea coated, 12 kg/ha (10 lbs/acre) using a mechanical spreader

.7 Seeding: Apply seed at a rate of 100kg/ha (100lbs /acre) with a mechanical spreader. Incorporate seed into the top 1/4" (6mm) of soil and lightly compact.

.8 Acceptance: Provide adequate protection of the seeded areas until conditions of acceptance have been met. Comply with Section 3.7 Hydroseeding

3.7 HYDROSEEDING

.1 May be used as an alternate to mechanical seeding in rough grass areas.

.2 May not be used in areas of lawn unless pre-approved by the Landscape Architect prior to bidding.

.3 Preparation and Growing Medium
.31 In areas of Rough Grass: Comply with Section 3.6 Rough Grass.
.32 Where approved for use in areas of lawn, comply with Section 3.8 Lawn Areas- Sodding

.4 Protection: Ensure that fertilizer in solution does not come in contact with the foliage of any trees, shrubs, or other susceptible vegetation. Do not spray seed or mulch on objects not expected to grow grass. Protect existing site equipment, roadways, curbs, existing reference points, monuments, markers and structures from damage. Where contamination occurs, remove seeding slurry to satisfaction of and by means approved by the Landscape Architect

.5 Mulch shall consist of virgin wood fibre or recycled paper fibre designed for hydraulic seeding and dyed for ease of monitoring application If using recycled paper material for wood fibre substitute use 135% By weight. Conform to B.C. Landscape Standard for mulch requirements.

.6 Water: Shall be free of any impurities that may have an injurious effect on the success of seeding or may be harmful to the environment.

.7 Equipment: Use industry standard hydraulic seeder/mulcher equipment with the tank volume certified by an identification plate or sticker affixed in plain view on the equipment. The hydraulic seeder/mulcher shall be capable of sufficient agitation to mix the material into a homogenous slurry and to maintain the slurry in a homogenous state until it is applied. The discharge pumps and gun nozzles shall be capable of applying the materials uniformly over the designated area

PART THREE SOFT LANDSCAPE DEVELOPMENT - CONT

.8 Application Rate:
8.1 Seed Mixture: 114 kg/ha (100 lbs/acre)
8.2 Fertilizer: 112 kg/ha (100 lbs/acre)
8.9 Erosion Watering: As Where specified, apply (11 litres/acre) (1/4 lb - 1 lb. of grass seed)
8.4 Mulching:
8.4.1 At the time of Tender provide a complete chart of all components of the mix proposed including mulch, tackifier, water etc. Slipped sites require tackifier.
8.4.2 Fertilizer:
8.4.2.1 Rough Grass: If a soil analysis is provided, comply with results
8.4.2.2 Lawn: Where hydroseeding is approved, comply with soil analysis recommendations

.9 Accurately measure the quantities of each of the materials to be charged into the tank either by mass or by a commonly accepted system of mass-calibrated volume measurements. The materials shall be added to the tank while it is being filled with water, in the following sequence: seed, fertilizer. Thoroughly mix into a homogenous slurry After charging, add no water or other material to the mixture. Do not leave slurry in the tank for more than four (4) hours.

.10 Distribute slurry uniformly over the surface of the area to be hydroseeded. Blend application into previous applications and existing grass areas to have uniform surfaces.

.11 Clean up. Remove all materials and other debris resulting from seeding operations from the job site.

.12 Maintenance: Begin maintenance immediately after seeding and continue for 60 days after Substantial Completion and until accepted by the Owner. Re-seed all three week intervals where germination has failed. Protect seeded areas from damage with temporary wire or twine fences complete with signage until grass area is fully mature or by the Owner. Water in sufficient quantities to ensure deep penetration and at frequent intervals, to maintain vigorous growth until grass is taken over by the Owner. It is the Owner's responsibility to supply water at no extra cost to the Contract.

.13 Acceptance of the Rough Grass Areas: Proper germination of all specified grass species is the responsibility of the Landscape Contractor. The grass shall be reasonably well established, with no apparent dead or bare spots and shall be reasonably free of weeds the B.C. Landscape Standard, Section 13 Maintenance Level 4, 85% typical. Sixty days after substantial completion, areas meeting the conditions above will be taken over by the Owner. Areas seeded in Fall will be accepted in Spring, one month after start of growing season, provided that the above conditions for acceptance are fulfilled.

3.8 LAWN AREAS – SODDING

.1 General: Treat all areas defined as lawn areas on the landscape plan between all property lines of the project including all boulevards to edge of roads and lanes.

.2 Growing Medium: Comply with Section 2.2.1, Growing Medium. Prior to sodding, request an inspection of the finished grade, and depth and condition of growing medium by the Landscape Architect.

.9 Time of Sodding: Sod from April 1st to October 1st. Further extensions may be obtained on concurrence of the Landscape Architect

.4 Sod Supply: Conform to all conditions of B.C. Landscape Standard, Section 8, B.C. Standard for Turfgrass Sod

.5 Specified Turfgrass by area: Refer to Table 2 below.

TABLE 2 SPECIFIED TURFGRASS BY AREA

Area	Description	Quality Grade	Major Species
CLASS 1	Lawn, all areas noted on drawings as lawn or urban development sites including boulevard grass	No 1 Premium	Kentucky Blue for sun, Fescues for shade
CLASS 2	Grass - public parks, industrial and institutional sites	No 2 Standard	same
CLASS 3	Rough Grass	see hydroseeding	
SPECIAL			

.6 Lime: The lime shall be as defined in Section 2.2.3, Materials. Apply all rates recommended in required soil test. Refer to Section 3.4. for method.

.7 Fertilizer: Refer to Section 2.2.2 Materials. Apply specified fertilizer at rates shown in the required soil test. Apply with a mechanical spreader. Cultivate into growing medium 48 hours prior to sodding. Apply separately from lime

.8 Seeding: Prepare a smooth, firm, even surface for laying Sod. Lay sod staggered with sections closely butted, without overlapping or gaps, smooth and even with adjoining areas and not slightly higher to obtain moisture penetration at 9" to 4" (3 – 10cm). Comply with requirements of BC Landscape Standard Section 8, BC Standard for Turfgrass Sod

.9 Maintenance: Begin maintenance immediately after sodding and continue for 60 days after Substantial Completion and until accepted by the Owner. Protect sodded areas from damage with temporary wire or twine fences complete with signage until lawn is taken over by the Owner. Water to obtain moisture penetration of 9" to 4" (3 -10cm) at intervals necessary to maintain sufficient growth. Keep grass cut at height of between 4-1/2" to 2" (6cm). Provide adequate protection of sodded areas against damage until the turf has been taken over by Owner. Repair any damaged areas, re-grade as necessary. Aeration may be required if the soil is compacted

.10 Acceptance of Lawn Areas: The turf shall be reasonably well established, with no apparent dead spots or bare spots and shall be reasonably free of weeds the B.C. Landscape Standard, Section 13 Maintenance Level 2 (Approximate). Use herbicides if necessary for weed removal unless other conditions of contract forbid their use. After the lawn has been cut at least twice, areas meeting the conditions above will be taken over by the Owner.

3.9 PLANTS AND PLANTING

.1 Conform to planting layout as shown on Landscape Plans.

.2 Obtain approval of Landscape Architect for layout and preparation of planting prior to commencement of planting operations.

.3 Make edge of beds with smooth clean defined lines.

.4 Time of Planting:
4.1 Plant trees, shrubs and groundcovers only during periods that are normal for such work as determined by local weather conditions when seasonal conditions are likely to ensure successful adaptation of plants to their new location

.5 Standards:
5.1 All plant material shall conform to the requirements of the B.C. Landscape Standard, 7th edition 2006, unless excepted by drawing/Plant Schedule or this specification.
5.13 Refer to B.C. Landscape Standard, Section 9, Plants and Planting, and in Section 12, INCLINA Standard for Container Grown Plants for minimum standards.
5.12 Refer to Plant Schedule for specific plant and container sizes and comply with requirements.
5.2 Plant material obtained from areas with less severe climatic conditions shall be grown to withstand the site climate.

.6 Review
6.1 Review at the source of supply and/or collection point does not prevent subsequent rejection of any or all planting stock at the site.

.7 Availability:
7.1 Area of search includes the Lower Mainland and Fraser Valley. Refer to Plant Schedule for any extension of area.
7.2 Supply proof of the availability of the specified plant material within 30 days of the award of the Contract.

.8 Substitutions:
8.1 Obtain written approval of the Landscape Architect prior to making any substitutions to the specified material. Non-approved substitutions will be rejected
8.2 Allow a minimum of 5 days prior to delivery for request to substitute
8.3 Substitutions are subject to B.C. Landscape Standard – definition of Conditions of Availability

.9 Plant Species & Location:
9.1 Plants shall be true to name and of the height, caliper and size of root ball as shown on the Landscape/site plan plant schedule. Caliper of trees is to be taken 6" (15cm) above grade.
9.2 Plant all specified species in the location as shown on the landscape drawings. Notify Landscape Architect if conflicting rock or underground/overhead services are encountered.
9.3 Revision of given planting location will only be allowed after review of the proposed revision by the Landscape Architect.

.10 Excavation:
10.1 Trees and large shrubs: Excavate a saucer shaped tree pit to the depth of the rootball and to at least twice the width of the rootball. Assure that finished grade is at the original grade the tree was grown at

.11 Drainage of Planting Holes:
11.1 Free de-drainage of planting pits where required, ie. on sloped conditions, break out the side of the planting pit to allow drainage down slope; and in flat conditions, excavate to raise the rootball above impervious layer. Notify the Landscape Architect where the drainage of planting holes is limited.

.12 Planting and Fertilizing Procedures:
12.1 Plant all trees and shrubs with the roots placed in their natural growing position. If burlapped, loosen around the top of the ball and cut away or fold under. Do not pull burlap from under the ball. Carefully remove containers without injuring the rootballs. After settled in place, cut twine, for wire baskets, clip and remove top three rows of wire.
12.2 Fill the planting holes by gently firming the growing medium around the root system in 6" (15cm) layers. Settle the soil with water. Add soil as required to meet finish grade. Leave no air roots. When 2/3 of the topsoil has been placed, apply fertilizer as recommended by the required soil test at the specified rates
12.3 Where planting is indicated adjacent to existing trees, use special care to avoid disturbance of the root system or natural grades of such trees.
12.4 Where trees are in lawn areas, provide a clean cut mulched 900mm (3 ft.) diameter circle centered on the tree.

.13 Staking of Trees:
13.1 Use two 2"x2"x8' stakes, unless superseded by municipal requirements. Set stakes minimum 2 ft. in soil. Do not drive stake through rootball
13.2 Loose the tree carefully vertical
13.3 Tie with pre-approved commercial, flat woven polypropylene fabric belt, minimum width 19mm (3/4"). Approved product: Arbor Tie – available from Dogsheet.
13.4 Coniferous Trees over 8 ft. height: Guy with three 2-strand wires (12 gauge). Drive three stakes equidistant around the tree completely below grade.
13.5 Trees 4 ft. on Wood or Concrete Decks: Guy as above using three deadmen 3"x3"x4"-1 buried to the maximum possible depth instead of stakes.
13.6 Mark all guy wires with visible flagging material

.14 Pruning:
14.1 Limit pruning to the minimum necessary to remove dead or injured branches. Preserve the natural character of the plants, do not cut the leader. Use only clean, sharp tools. Make all cuts clean and cut to the branch collar leaving no stubs. Shape affected areas so as not to retain water. Remove damaged material.

.15 Mulching:
15.1 Mulch all planting areas with an even layer of mulch to 2-1/2 – 3" (65 – 75mm) depth. Confirm placement of mulch on areas labelled "Groundcover Area" on drawings. Mulch a 3 ft. (900mm) diameter circle around trees in lawn areas, leave a clean edge

.16 Acceptance
16.1 The establishment of all plant material is the responsibility of the Landscape Contractor

.17 Plant Material Maintenance
17.1 Maintain all plant material for 60 days after landscape work has received a Certificate of Completion
17.2 Watering: Conform to B.C. Landscape Standard, Section 10.3.2 – Watering and generally as follows:
17.21 Water to supplement natural rainfall such that the soil moisture content is kept to 50% to 100% of field capacity. Water in the full depth of the root zone each time. The Owner is responsible to supply water at no extra cost to the Contract. Confirm source of water prior to beginning work.
17.3 Use appropriate measures to combat pests or diseases damaging plant material. Comply with all local governing statutes and guidelines for chemical control.
17.4 Plant material which fails to survive shall be replaced in the next appropriate season as determined by the Landscape Architect
17.5 Repair tree guards, stakes, and guy wires, when necessary.
17.6 Maintain areas relatively weed free. Maintenance level 2, B.C. Landscape Standard, Chapter 13
17.7 Maintain mulch to specified depths

.18 Plant Warranty:
18.1 Replace all unsatisfactory plant material except those designated "Specimen" for a period of one (1) year after the Certificate of Completion. Replace all unsatisfactory plant material designated "Specimen" for a period of two (2) years after the Certificate of Completion. Replace all unsatisfactory trees and shrubs and continue to replace these until the specified number is complete and satisfactory in the Landscape Architect. Such replacement shall be subject to the notification, inspection and approval as specified for the original planting, and shall not constitute an extra to the Contract.
18.2 Those Plants, identified as hardy within one zone of the Canada Department of Agriculture zonal class for the area, specified by the Landscape Architect and installed by the Landscape Contractor which are killed through below normal temperatures (below the average of the extreme minimum temperatures officially recorded in the area concerned, in the last 10 years), will not be replaced without cost of replacement borne by the Owner
18.3 A review may be requested during the latter part of the warranty growing season. All plant material showing well developed foliage, healthy growth and bud forming, will then be taken over

PART THREE SOFT LANDSCAPE DEVELOPMENT - CONT

3.10 INSTALLING LANDSCAPE ON STRUCTURES

.1 Verify that drainage and protection material is completely installed and acceptable before beginning work. Contract Landscape Architect for instructions if not in place.

.2 Coordinate work with construction of planters and planter drainage
2.1 Verify that planter drains are in place. Excessive drainage for roof drains is present prior to placing any drain rock or soil.

.3 Provide clean cut at all through-slab drain locations. Use 300mm dia. PVC Pipe filled with drain rock unless specific drawing detail shown

.4 Install drain rock evenly to a minimum depth of 4" (100mm)or alternate sheet drain as specified. Install sheet drain as per manufacturer's recommendations.

.5 Cover drain rock (or alternate sheet drain if specified) on drawing details) with filter fabric lapping 6" (150mm) at all edges. Obtain approval of drainage system prior to placing growing medium.

.6 Place an even layer of 25 – 50mm clean washed pump sand over filter fabric.

.7 Place growing medium in depths specified in Section 3.5 above for various surface treatments. Refer to Drawing details for any light weight filler required for after grade. Use Styrofoam block over drain rock shaped to provide smooth surface transition at edges. Butt each piece tightly together and cover with filter fabric to prevent soil from migrating downward

3.11 ESTABLISHMENT MAINTENANCE Provide a separate price for this section

.1 Intent: The intent of "establishment" maintenance is to provide sufficient care to newly installed plant material for a relatively short period of time to ensure or increase the long term success of the planting. The objective is the establishment of plants to a new site in order to obtain the desired effect from the planting while reducing the rate of failure and unnecessary work associated with improper establishment. Establishment of maintenance procedures apply to all new and released vegetation including cultivated hedgerow areas and new trees and shrubs.

.2 Maintenance Period: Provide maintenance of installed landscaping for 12 months following substantial completion.

.3 Related Standards and Legislation: B.C. Landscape Standard, latest edition; Fertilizer Code, B.C. Pesticide Control Act.

.4 Site Review: In addition to the inspections at substantial completion, at final progress draw application, and at the end of the guarantee period, there should be three other reviews during the 12 months attended by the Contractor and a designated representative of the Owner. Maintain a logbook and inspecting procedures and submit to the designated representative.

.5 Scheduling: Prepare a schedule of anticipated visits and submit to designated representatives at start-up. Maintenance operations shall be carried out precisely/daily during the growing season between March 1st and November 30th, however visits at other times of the year may be required.

.6 Maintenance Levels: Comply with B.C. Landscape Standard, Section 14, Table 14.2, Maintenance Level 2 "Groomed".

.7 Materials: Comply with Part Two of this specification.
7.1 Fertilizers: To the requirements of the B.C. Landscape Standard. Formulations and rates as required by soil testing.

.8 Plant Material Establishment:
8.1 Watering: During the first growing season, water new plants at least every ten (10) days between April 1st and July 31st, and every twenty (20) days between August 1st and September 30th. Minimum 25 gallons per tree per application. During the second growing season, water new plants at least every twenty days between April 1 and July 31 and once between August 1st and September 31st. Apply water at a rate and duration such that the water content reaches field capacity to the full depth of the growing medium. Apply water again when the water content reaches 25% of field capacity. Provide and irrigate with water in the event that any automatic irrigation system malfunctions or has not been completely installed. Scheduled applications of water shall be noted only when rainfall has penetrated the soil help as required.
8.2 Mulch: Maintain mulches in the original areas and to the original depths.
8.3 Weed Control: Remove all weeds from all areas at least once per month during the growing season by hoeing or cultivation to a maximum depth of 40mm, hand-pulling, or, if necessary, by the use of herbicides.
8.4 Pest and Disease Control: Inspect all planted areas for pests and diseases periodically and at least every two months during the growing season by an experienced person. Carry out treatment for insects or diseases promptly and consistently for maximum effectiveness. Comply with all B.C. Pesticide Control Act and municipal requirements.
8.5 Tree Support: Maintain stakes, guy wires and ties one full growing season. Check ties at least every two months to ensure that they are not causing a depression in the bark. Loosen, repair or replace ties as necessary. Remove all stakes guy wires and ties after the first growing season once plant trees require continuing support in the opinion of the Landscape Architect. All flagging of guy wires shall be visible and in good repair.
8.6 Pruning: Inspect all trees and shrubs at least every two months during the growing season; prune to remove all dead, weak or diseased wood. Maintain the natural shape of the plant. Carry out clipping or shaping only if required in the maintenance contract for specific varieties or conditions
8.7 Fertilizing: Once during the twelve month period of establishment maintenance fertilize shrubs, trees and groundcovers according to soil analysis requirements

.9 Grass Areas Establishment:
9.1 Watering: Use hoses and sprinklers, irrigation systems or other methods to apply water to Class 1 and Class 2 grassed areas (B.C. Landscape Standard, Section 7, Lawns and Grasses) such that the grass is maintained in a fungal condition. Supply and irrigate with water in the event of any irrigation system malfunction, or incomplete installation of an expense to the owner. Apply water to prevent packing or erosion of the soil. Apply water at a rate and duration so that the water content reaches field capacity to the full depth of the growing medium. Apply water again when the water content reaches 25% of field capacity.
9.2 Weed, Insect and Disease Control: Inspect grass areas each time they are mowed for weeds, insect pests, and diseases and treat promptly when necessary by appropriate manual methods, or by the use of chemicals in compliance with the B.C.S.L.A./B.C.L.N.A. Landscape Standards latest edition. Kill broadleafed weeds in grassed weeds by a general application at a suitable herbicide if the weed population exceeds 10 broadleaf weeds or 50 annual weeds or weedy grasses per 40 square meters. This application shall reduce the weed population to zero.
9.3 Fertilizing: According to soil analysis.
9.4 Liming: According to soil analysis
9.5 Mowing and Trimming – All areas: The first four cuts shall be a sharp rotary type mower. Excess grass clipping shall be removed after each cut. Mow all grassed areas with a sharp reel or rotary mower when the grass reaches a height of 60mm. Mow to a height of 40mm. Edge with a mechanical vertical cutting edge once per year in March. Remove all grass clippings after each cut.
9.6 Aeration: Aeration not required in the first growing season. If necessary, in the second growing season, aerate in early May with a suitable mechanical core. Core to a depth of 100mm (4"), and remove cores.
9.7 Repairs: Re-grade, re-seed or re-sod when necessary to restore damaged or failing grass areas. Match the grass varieties in the surrounding area. Re-sod, if required, throughout The growing season. Re-seed between April 1st and April 15th or between September 1st and September 10th. Protect re-seeded areas and keep moist until the first mowing

NO.	DATE	REVISION DESCRIPTION	DR.
7	14.AUG.26	REV. PER CITY COMMENTS/NEW SITE	RA
6	14.AUG.20	N



ZHAO XD ARCHITECT LTD.

www.zhaoarch.com tel: 604 275-8882

12 UNITS TOWNHOUSE DEVELOPMENT

8400 General Currie Road & 7411-7431 St. Albans Road, Richmond, BC



PLAN #4

NOV 0 4 2014

DP 13-652010

PLAN #4.1



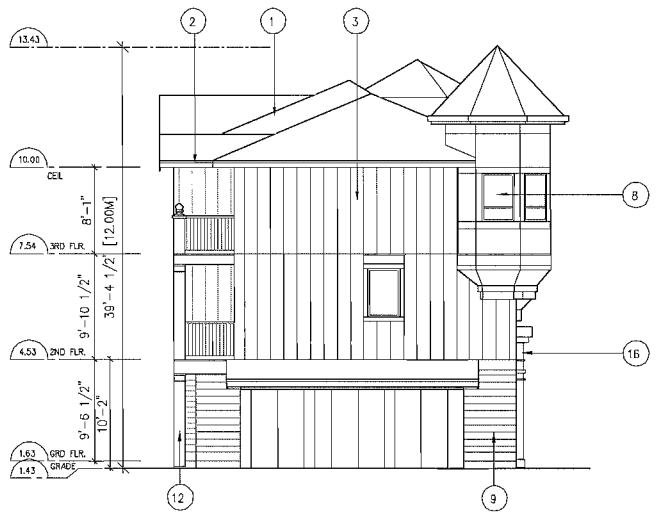
EAST ELEVATION – BUILDING 1

SCALE: 1/4"=1'-0"



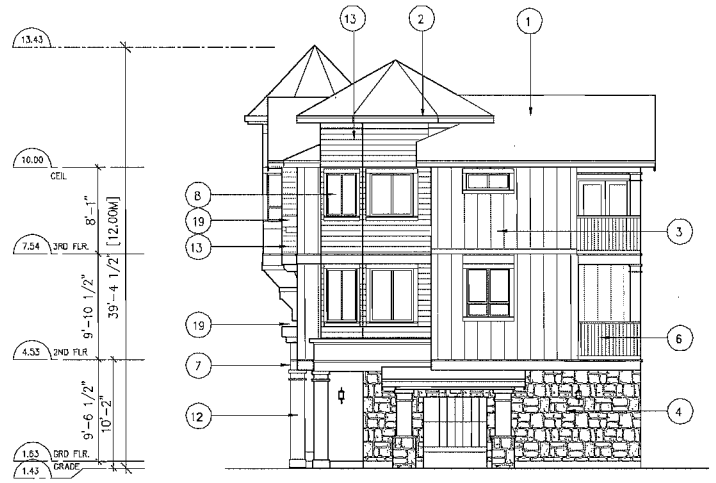
WEST ELEVATION – BUILDING 1

SCALE: 1/4"=1'-0"



SOUTH ELEVATION – BUILDING 1

SCALE: 1/4"=1'-0"



NORTH ELEVATION – BUILDING 1

SCALE: 1/4"=1'-0"

ENGERGUIDE RATING OF 82 OR ABOVE TO BE ACHIEVED FOR THIS DEVELOPMENT PROJECT. (SEE CEA REPORT FOR DETAILS)



WEST ELEVATION – BUILDING 2

SCALE: 1/4"=1'-0"



EAST ELEVATION – BUILDING 2

SCALE: 1/4"=1'-0"

EXTERIOR FINISH & COLOR

(14) GARAGE DOOR: BM: AF-380 COSTAL PATH

(15) POT LIGHTS AT EACH ENTRY

(16) PAINTER 1X2 TRIM ON 2X12 HORIZONTAL TRIM BOARD PAINTED – IRON GRAY

(17) PAINTER 2X10 HORIZONTAL TRIM BOARD C/W FLASHING OVER PAINTED – IRON GRAY

EXTERIOR FINISH & COLOR

(1) ASPHALT SHINGLES – DUAL BLACK – IKO

(2) 5" ALUM. GUTTER ON 2X6 WOOD FASCIA BOARD – PAINTED (TYP.) BM: AF-565 MYSTERIOUS

(18) HARDIPANEL-PAINTED (TYP.) – IRON GRAY

(3) HARDIE BOARD (BOARD & BATTEN) – MONTEREY TAUPE

(4) CULTURE STONE – CAMBRIA CLIFFSTONE – ELDORADO STONE

(5) 2X4 WOOD TRIM – MATCH THE SIDING COLOR

(6) ALUNM. GUARDRAIL (BLACK)

(7) BUILT-UP WOOD CANOPY & POST W/HARDIPANEL-PAINTED (TYP.) – IRON GRAY

(8) DOUBLE-GLAZED WINDOWS IN VINYL FRAMES C/W 2x4 SILL (SLOPE 15 %) & 2x4 SIDE & TOP TRIM C/W FLASHING OVER TRIM PAINTED: BM: AF-720 SPARROW

(9) HARDIE SIDING (7") – TRADITIONAL RED

(10) LIGHT FIXTURE

(11) SOLID CORE WOOD DOOR – BJ 1231 WYNWOOD

(12) BUILT-UP WOOD COLUMN & POST W/HARDIPANEL-PAINTED (TYP.)

PLAN #4

Plot Scale: 1=1

Updated:

File Name:

0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 millimetres

NOV 0 4 2014

DP 13-652010 PLAN #4A

ZHAO XD ARCHITECT LTD.

#255–11181 Voyageur Way,
Richmond, BC V6X 3N9
Tel. (604) 275–8882
Fax (604) 909–1736

Email: info@zhaoarch.com
Web: zhaoarch.com

This drawing shall not be used for construction unless it is countersigned by the CONSULTANT.

Date:	Issued For:
14JUN21	CITY ADP COMMENTS
14APR23	ADP
13DEC10	DP

A DETAIL NUMBER
B LOCATION SHEET
C DETAIL SHEET

All drawings, specifications and other related documents are the copyright property of the CONSULTANT and shall be returned upon request.

Reproduction of drawings and related documents, in whole or in part, is forbidden without the written permission of the CONSULTANT.

The contractor shall check and verify all pertinent dimensions and report any discrepancies to the CONSULTANT before proceeding with the work.

Project:

12 UNITS TOWNHOUSE DEVELOPMENT

8400 GENERAL CURRIE RD., 7411, 7431 ST ALBANS RD. RICHMOND, BC

Drawing Title:

ELEVATIONS

Date:

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

Drawn By:

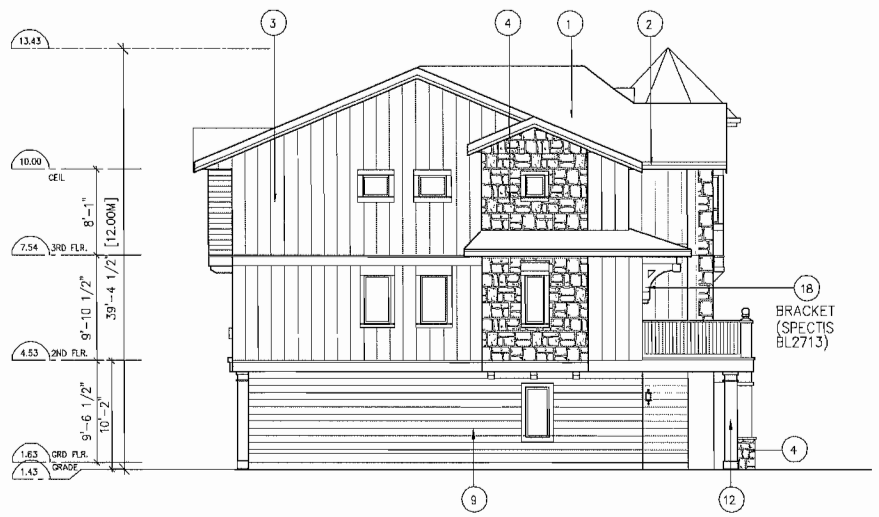
Checked By:

Project No.:

Drawing No.:

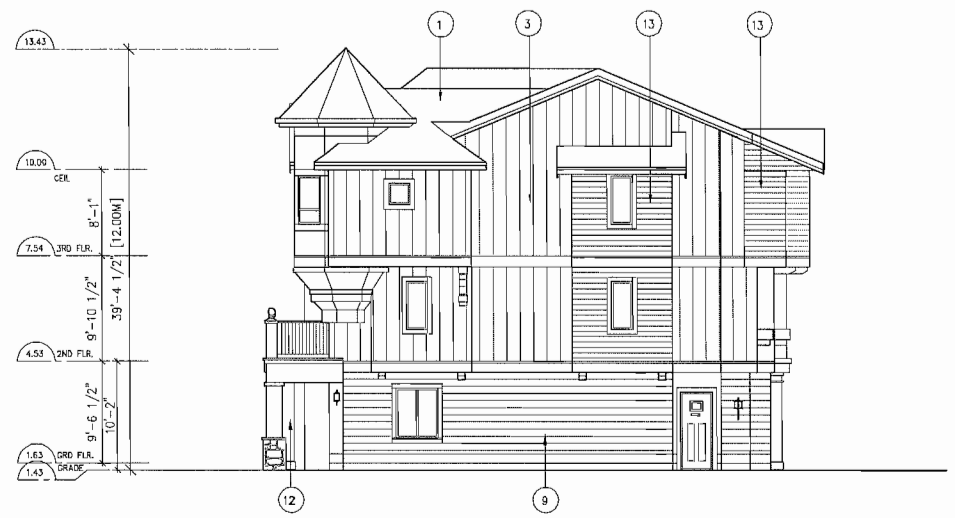
A–11

Drawing is NOT to be scaled. Use figured dimensions only.



SOUTH ELEVATION – BUILDING 2

SCALE: 1/4"=1'-0"



NORTH ELEVATION – BUILDING 2

SCALE: 1/4"=1'-0"

PLAN #4.2

1. ASPHALT SHINGLES – DUAL BLACK – IKO
2. 5" ALUM. GUTTER ON 2X6 WOOD FASCIA BOARD – PAINTED (TYP.) BM: AF-565 MYSTERIOUS
3. HARDIE BOARD (BOARD & BATTEN) – MONTEREY TAUPE
4. CULTURE STONE – CAMBRIA CLIFFSTONE – ELDORADO STONE
5. 2X4 WOOD TRIM – MATCH THE SIDING COLOR
6. ALUNM. GUARDRAIL (BLACK)
7. BUILT-UP WOOD CANOPY & POST W/HARDIPANEL-PAINTED (TYP.) – IRON GRAY
8. DOUBLE-GLAZED WINDOWS IN VINYL FRAMES C/W 2x4 SILL (SLOPE 15 IO & 2x4 SIDE & TOP TRIM C/W FLASHING OVER TRIM PAINTED: BM: AF-720 SPARROW
9. HARDIE SIDING (7") – TRADITIONAL RED
10. LIGHT FIXTURE
11. SOLID CORE WOOD DOOR – BU 1231 WYNWOOD
12. BUILT-UP WOOD COLUMN & POST W/HARDIPANEL-PAINTED (TYP.)
13. HARDIE SIDING (7") – PAINTED (TYP.) PAINTED – IRON GRAY
14. GARAGE DOOR: BM: AF-380 COSTAL PATH
15. POT LIGHTS AT EACH ENTRY
16. PAINTER 1X2 TRIM ON 2X12 HORIZONTAL TRIM BOARD PAINTED – IRON GRAY
17. PAINTER 2X10 HORIZONTAL TRIM BOARD C/W FLASHING OVER PAINTED – IRON GRAY

ENGERGUIDE RATING OF 82 OR ABOVE TO BE ACHIEVED FOR THIS DEVELOPMENT PROJECT. (SEE CEA REPORT FOR DETAILS)



EAST ELEVATION – BUILDING 3

SCALE: 1/4"=1'-0"



SOUTH ELEVATION – BUILDING 3

SCALE: 1/4"=1'-0"

EXTERIOR FINISH & COLOR

8. DOUBLE-GLAZED WINDOWS IN VINYL FRAMES C/W 2x4 SILL (SLOPE 15 C/W FLASHING OVER TRIM PAINTED: BM: AF-720 SPARROW

EXTERIOR FINISH & COLOR

14. GARAGE DOOR: BM: AF-380 COSTAL PATH
15. POT LIGHTS AT EACH ENTRY
16. PAINTER 1X2 TRIM ON 2X12 HORIZONTAL TRIM BOARD
17. PAINTER 2X10 HORIZONTAL TRIM BOARD C/W FLASHING OVER



WEST ELEVATION – BUILDING 3

SCALE: 1/4"=1'-0"



NORTH ELEVATION – BUILDING 3

SCALE: 1/4"=1'-0"

EXTERIOR FINISH & COLOR

1. ASPHALT SHINGLES – DUAL BLACK – IKO
2. 5" ALUM. GUTTER ON 2X6 WOOD FASCIA BOARD – PAINTED (TYP.) BM: AF-565 MYSTERIOUS
3. HARDIE BOARD (BOARD & BATTEN) – MONTEREY TAUPE
18. HARDIPANEL-PAINTED (TYP.) – IRON GRAY
5. 2X4 WOOD TRIM – MATCH THE SIDING COLOR
6. ALUNM. GUARDRAIL (BLACK)
7. BUILT-UP WOOD CANOPY & POST W/HARDIPANEL-PAINTED (TYP.)– IRON GRAY
12. BUILT-UP WOOD COLUMN & POST W/HARDIPANEL-PAINTED (TYP.) – IRON GRAY
4. CULTURE STONE – CAMBRIA CLIFFSTONE – ELDORADO STONE
11. SOLID CORE WOOD DOOR
10. LIGHT FIXTURE
9. HARDIE SIDING (7") – TRADITIONAL RED

PLAN #5

ZHAO XD ARCHITECT LTD.

#255–11181 Voyageur Way,
Richmond, BC V6X 3N9
Tel. (604) 275–8882
Fax (604) 909–1736

Email: info@zhaoarch.com
Web: zhaoarch.com

This drawing shall not be used for construction unless it is countersigned by the CONSULTANT.

14JUN21	CITY ADP COMMENTS
14APR23	ADP
13DEC10	DP
Date:	Issued For:

A DETAIL NUMBER
B LOCATION SHEET
C DETAIL SHEET

All drawings, specifications and other related documents are the copyright property of the CONSULTANT and shall be returned upon request.

Reproduction of drawings and related documents, in whole or in part, is forbidden without the written permission of the CONSULTANT.

The contractor shall check and verify all pertinent dimensions and report any discrepancies to the CONSULTANT before proceeding with the work.

Project:

12 UNITS TOWNHOUSE DEVELOPMENT

8400 GENERAL CURRIE RD., 7411, 7431 ST ALBANS RD. RICHMOND, BC

Drawing Title:

ELEVATIONS

Date:	
Scale:	1/8"=1'-0"
Drawn By:	
Checked By:	
Project No.:	

Drawing No.:

A–12

Plot Scale: 1=1

Updated

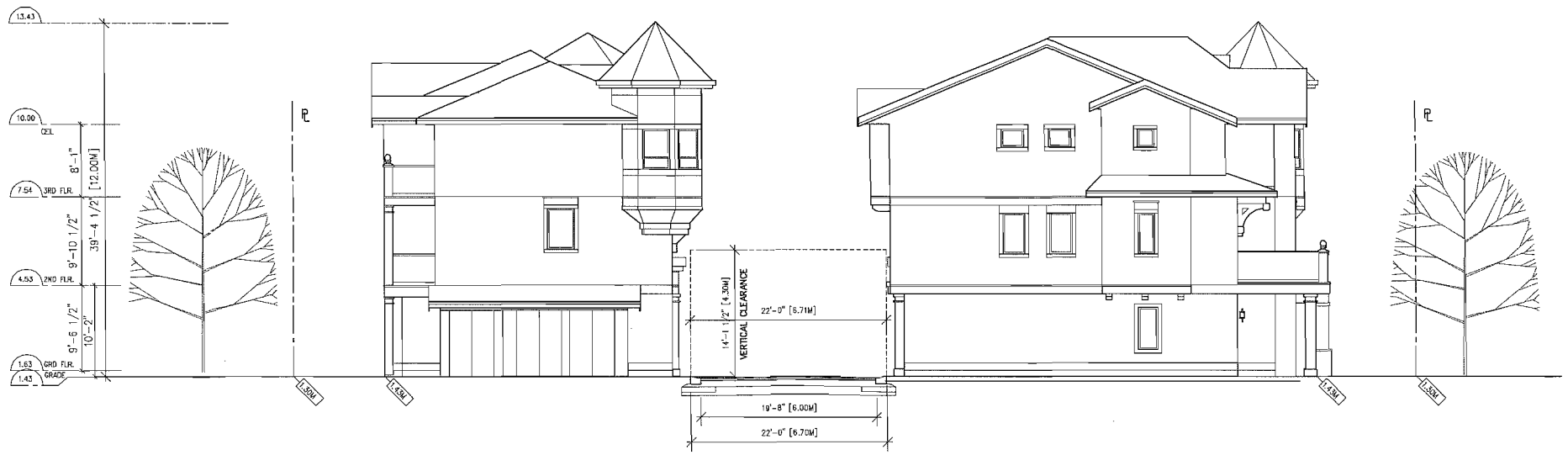
File Name:

0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 millimetres

Drawing is NOT to be scaled. Use figured dimensions only.

NOV 0 4 2014

DP 13-652010 PLAN #4B



INTERNAL DRIVE AISLE SECTION/ELEVATION

SCALE: 1/4"=1'-0"



NORTH SITE ELEVATION – (GENERAL CURRIE ROAD)

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



EAST SITE ELEVATION

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

0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 millimetres

NOV 0 4 2014

DP 13-652010

This drawing is NOT to be scaled. Use figured dimensions only.

PLAN #4

ZHAO XD ARCHITECT LTD.

#255–11181 Voyageur Way,
Richmond, BC V6X 3N9
Tel. (604) 275–8882
Fax (604) 909–1736

Email: info@zhaoarch.com
Web: zhaoarch.com

This drawing shall not be used for construction unless it is countersigned by the CONSULTANT.

Date:	Issued For:
14JUN21	CITY ADP COMMENTS
14APR23	ADP
13DEC10	DP

A DETAIL NUMBER
B LOCATION SHEET
C DETAIL SHEET

All drawings, specifications and other related documents are the copyright property of the CONSULTANT and shall be returned upon request.

Reproduction of drawings and related documents, in whole or in part, is forbidden without the written permission of the CONSULTANT.

The contractor shall check and verify all pertinent dimensions and report any discrepancies to the CONSULTANT before proceeding with the work.

Project:

12 UNITS TOWNHOUSE DEVELOPMENT

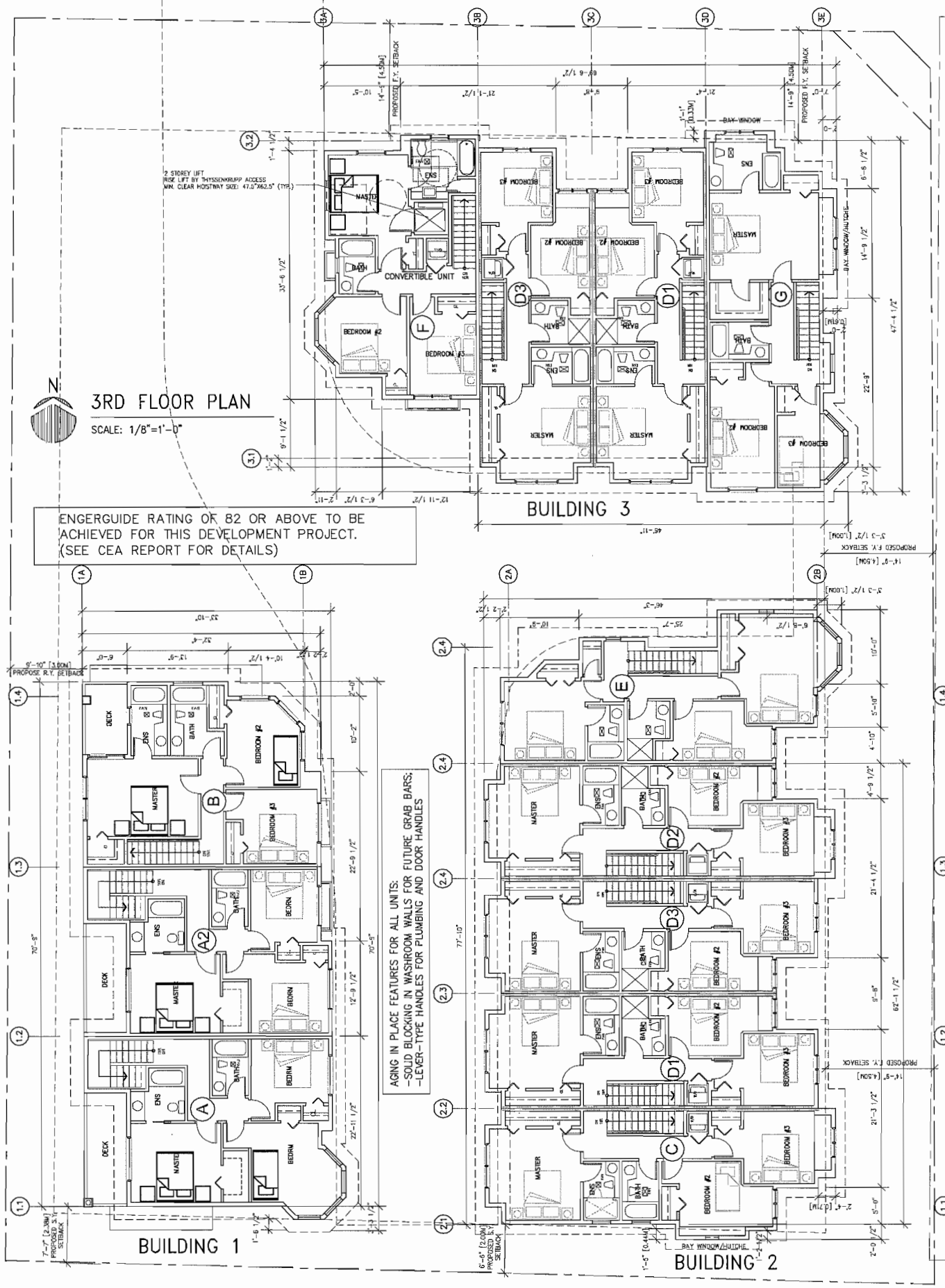
8400 GENERAL CURRIE RD.,
7411, 7431 ST ALBANS RD.
RICHMOND, BC

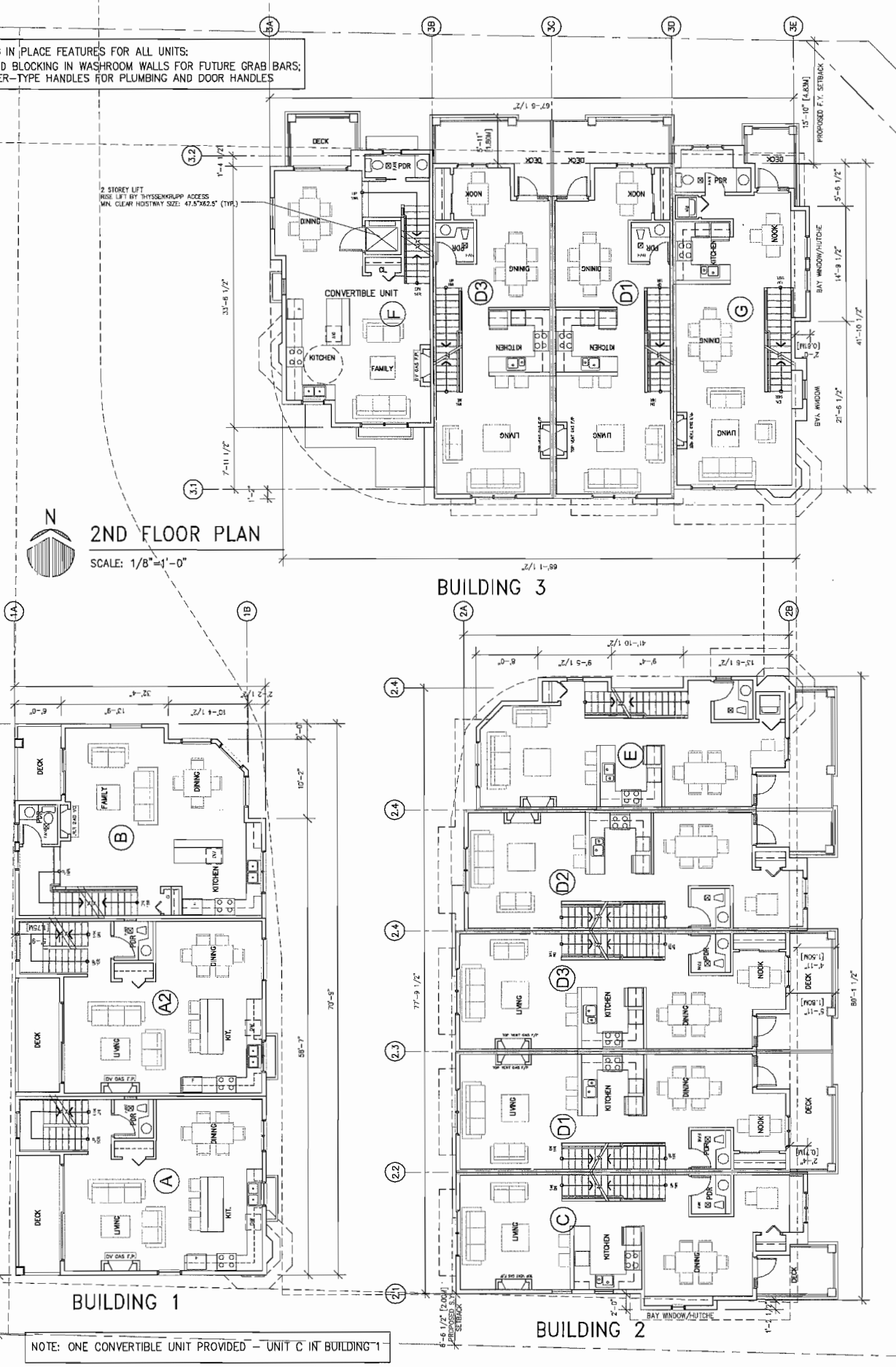
Drawing Title:

SITE SECTIONS & SITE ELEVATIONS

Date:	
Scale:	AS SHOWN
Drawn By:	
Checked By:	
Project No.:	
Drawing No.:	A–10

Plot Scale: 1=1
Updated
File Name:





ZHAO XD ARCHITECT LTD.

#255–11181 Voyageur Way,
Richmond, BC V6X 3N9
Tel. (604) 275–8882
Fax (604) 909–1736

Email: info@zhaoarch.com
Web: zhaoarch.com

This drawing shall not be used for construction unless it is countersigned by the CONSULTANT.

Date:	Issued For:
14JUN21	CITY ADP COMMENTS
14APR23	ADP
13DEC10	DP

A DETAIL NUMBER
B LOCATION SHEET
C DETAIL SHEET

All drawings, specifications and other related documents are the copyright property of the CONSULTANT and shall be returned upon request.

Reproduction of drawings and related documents, in whole or in part, is forbidden without the written permission of the CONSULTANT.

The contractor shall check and verify all pertinent dimensions and report any discrepancies to the CONSULTANT before proceeding with the work.

Project:

12 UNITS TOWNHOUSE DEVELOPMENT

8400 GENERAL CURRIE RD.,
7411, 7431 ST ALBANS RD.
RICHMOND, BC

Drawing Title:

FLOOR PLANS

Date:

Scale: AS SHOWN

Drawn By:

Checked By:

Project No.:

Drawing No.:

A–3

Updated: Plot Scale: 1=1

File Name:

0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 millimetres

NOV 0 4 2014

DP 13-652010

This drawing is NOT to be scaled. Use figured dimensions only.

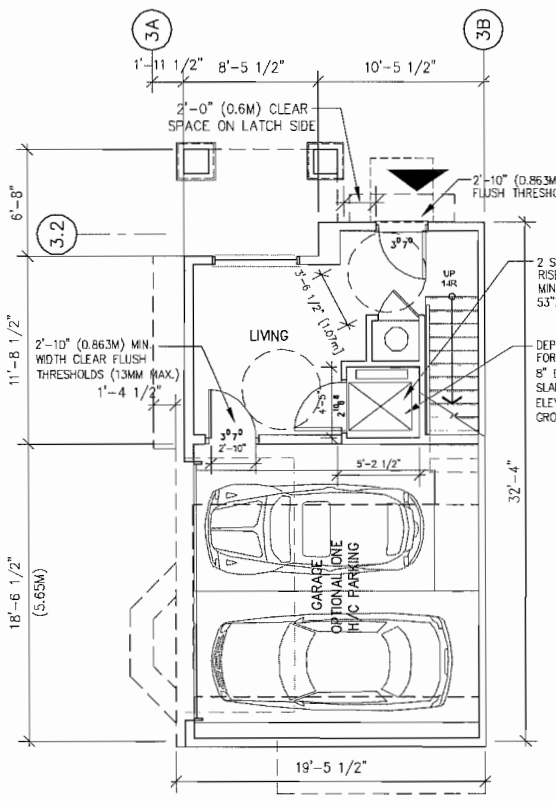
REFERENCE PLAN

ENGERGUIDE RATING OF 82 OR ABOVE TO BE ACHIEVED FOR THIS DEVELOPMENT PROJECT. (SEE CEA REPORT FOR DETAILS)

BAY WINDOW NOTES:

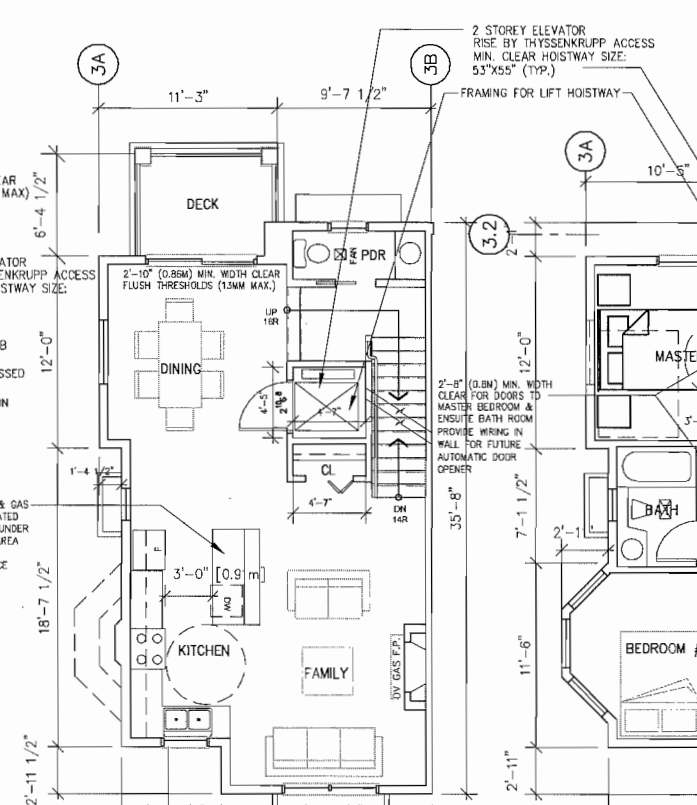
BAY WINDOW SEAT MIN. 2' ABOVE FINISHED FLOOR IS STRUCTURALLY PROTRUDED FROM THE WALL. NO FLOORING JOIST EXTENDS BEYOND THE WALL TO PREVENT A CONVERSION TO USABLE FLOOR SPACE.

AGING IN PLACE FEATURES FOR ALL UNITS:
-SOLID BLOCKING IN WASHROOM WALLS FOR FUTURE GRAB BARS;
-LEVER-TYPE HANDLES FOR PLUMBING AND DOOR HANDLES



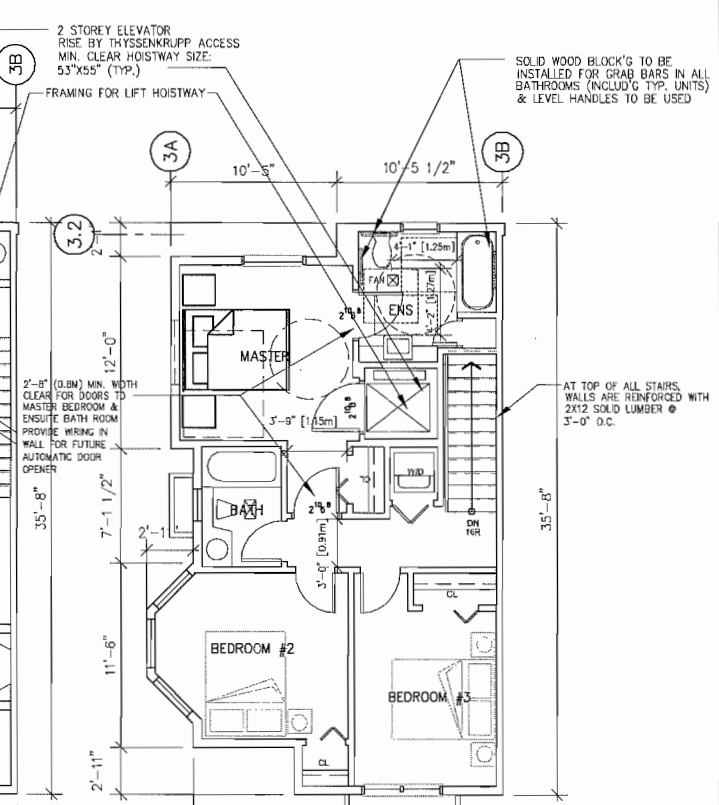
CONVERTIBLE UNIT
LOWER FLOOR PLAN (UNIT 'F')

SCALE: 3/16"=1'-0"	204.7 SF
GARAGE	357.6 SF
STAIR ENTRY:	37.1 SF (EXCLUDED)
OUTDOOR SPACE:	313.6 SF
COVERED AREA:	60.1 SF



CONVERTIBLE UNIT
MAIN FLOOR PLAN (UNIT 'F')

SCALE: 3/16"=1'-0"	599.5 SF
DECK	61.4 SF
STAIR:	69.9 SF (EXCLUDED)



CONVERTIBLE UNIT
UPPER FLOOR PLAN (UNIT 'F')

SCALE: 3/16"=1'-0"	657.6 SF
STAIRCASE: (EXCLUDED)	

AGING IN PLACE FEATURES FOR ALL UNITS:
-SOLID BLOCKING IN WASHROOM WALLS FOR FUTURE GRAB BARS;
-LEVER-TYPE HANDLES FOR PLUMBING AND DOOR HANDLES

TOTAL OUTDOOR SPACE:	375.0 SF
TOTAL FLOOR AREA:	1461.8 SF
LOT COVERAGE:	735.4 SF
COVERED AREA:	60.1 SF

GROSS FLOOR AREA:	1986.5 SF
EXEMPTED FLOOR AREA:	524.7 SF

HIGHLIGHTED AREAS ARE EXEMPTED FROM FSR CALCULATIONS.

CHECKLIST – CONVERTIBLE UNIT FEATURES

DOORS & DOORWAYS

ENTRY DOOR MIN. 863 MM BUT IDEALLY 914MM AND HAVE CLEAR ACCESS.
ENTRY DOOR CLEAR EXTERIOR FLOOR SPACE MIN. 1220 MM DEPTH BY DOOR WIDTH PLUS 600 MM ON LATCH SIDE (NOT NEEDED IF ROUGH IN WIRING PROVIDED FOR FUTURE AUTOMATIC DOOR OPENER)

INTERIOR DOORS TO MAIN LIVING AREAS, 1 BATHROOM AND 1 BEDROOM, MIN. 800 MM CLEAR OPENING WITH FLUSH THRESHOLDS MAX. 13MM HEIGHT. DEMONSTRATE WHEELCHAIR ACCESS BETWEEN THE HALLWAY AND ROOMS AND WIDEN HALLWAY AND/OR DOORWAY(S) IF NECESSARY TO SECURE ACCESS.

PATIO/BALCONY MIN. 860MM CLEAR OPENING. NOTE HOW ACCESSED.
ALL INTERIOR THRESHOLDS WITHIN UNITS COMPLY BC BUILDING CODE.

LEVER-TYPE HANDLES FOR ALL DOORS.

VERTICAL CIRCULATION

VERTICAL LIFT, DEPRESSED SLAB AREA, AND LANDINGS, AS NOTED ON FLOOR PLANS IN COMPLIANCE WITH MANUFACTURER SPECIFICATIONS. FRAMING TO ACCOMMONDATE SHAFT CONSTRUCTION WITHOUT IMPACT TO SOURROUNDING STRUCTURE.
AT THE TOP OF ALL STAIRWAYS, WALLS ARE REINFORCED WITH 2X12 SOLID LUMBER AT 914MM TO CENTRE.

HALLWAYS

MIN. 900 MM WIDTH

GARAGE

MIN. 1 ACCESSIBLE PARKING SPACE WITH MIN. 4 M GARAGE WIDTH
ACCESS FROM GARAGE TO LIVING AREA WITH MIN. 800 MM CLEAR DOOR OPENING (2'-8" SLIDING OR 2'-10" SWINGING DOOR SPEC.) AND FLUSH THRESHOLDS MAX. 13 MM HEIGHT

BATHROOMS (MIN. 1)

TOILET CLEAR FLOOR SPACE MIN. 1020 MM AT SIDE AND IN FRONT.
WALL BLOCKING FOR FUTURE GRAB BAR INSTALLATIONAT TOILET, TUB AND SHOWER. REINFORCED WITH 2X12 SOLID LUMBER IN ALL BATHTUB, SHOWER, AND TOILET LOCATIONS.
LEVER-TYPE HANDLES FOR PLUMBING FIXTURES.
PRESSURE AND TEMPERATURE CONTROL VALVES ARE INSTALLED ON ALL SHOWER FAUCETS.
CABINETS UNDERNEATH SINK(S) ARE EASILY REMOVED.
DEMONSTRATE BATH AND SHOWER CONTROLS ARE ACCESSIBLE (LAYOUT OR FIXTURE PLACEMENT).
MIN. 800 MM CLEAR DOOR OPENING (2'-8" SLIDING OR 2'-10" SWINGING DOOR SPEC.) WITH FLUSH THRESHOLDS MAX. 13 MM HEIGHT

KITCHEN

CLEAR AREA NEEDED UNDER FUTURE WORK SPACE. PLUMBING AND GAS PIPES (IN-WALL AND IN-FLOOR) LOCATED CLEAR OF UNDER COUNTER AREA OF FUTURE WORK SPACE (STOVE, SINK & MIN. 810 MM WIDE COUNTER) . ALL PIPES ARE BROUGHT IN NO HIGHER THAN 304MM TO 355MM TO THE CENTRE OF THE PIPE FROM FLOOR LEVEL.
CABINETS UNDERNEATH SINK ARE EASILY REMOVED.
1500 MM TURNING DIAMETER OR TURNING PATH DIAGRAM
MIN. 800 MM CLEAR DOOR OPENING (2'-8" SLIDING OR 2'-10" SWINGING DOOR SPEC.) WITH FLUSH THRESHOLDS MAX. 13 MM HEIGHT
LEVER-TYPE HANDLES FOR PLUMBING FIXTURES.

WINDOWS

MIN. 1 WINDOW THAT CAN BE OPENED WITH A SINGLE HAND (BATHROOM, KITCHEN, LIVING ROOM)

OUTLETS & SWITCHES

PLACEMENT LOCATIONS OF ELECTRICAL OUTLETS: BESIDE WINDOW, BOTTOM OF STAIRWAYS, BESIDE TOILET, ABOVE EXTERNAL DOORS (OUTSIDE AND INSIDE), ON FRONT FACE OF KITCHEN COUNTER, WITH PROXIMITY OF CONTROL CENTRE FOR SMART HOME OPTIONS.
UPGRADE TO FOUR-PLEX OUTLETS IN MASTER BEDROOM, HOME OFFICE, GARAGE, AND RECREATION ROOM.

ZHAO XD ARCHITECT LTD.

#255-11181 Voyageur Way,
Richmond, BC V6X 3N9
Tel. (604) 275-8882
Fax (604) 909-1736

Email: info@zhaoarch.com
Web: zhaoarch.com

This drawing shall not be used for construction unless it is countersigned by the CONSULTANT.

Date:	Issued For:
14JUN21	CITY ADP COMMENTS
14APR23	ADP
13DEC10	DP

A DETAIL NUMBER
B LOCATION SHEET
C DETAIL SHEET

All drawings, specifications and other related documents are the copyright property of the CONSULTANT and shall be returned upon request.

Reproduction of drawings and related documents in whole or in part, is forbidden without the written permission of the CONSULTANT.

The contractor shall check and verify all pertinent dimensions and report any discrepancies to the CONSULTANT before proceeding with the work.

Project:

12 UNITS TOWNHOUSE DEVELOPMENT

8400 GENERAL CURRIE RD., 7411, 7431 ST ALBANS RD. RICHMOND, BC

Drawing Title:

UNIT PLAN (CONVERTIBLE

F.A.R. OVERLAYS

Date:	
Scale:	AS SHOWN
Drawn By:	
Checked By:	
Project No.:	

Drawing No.:

A-8

Plot Scale: 1=1
Updated:
File Name:

0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 millimetres

This drawing is NOT to be scaled. Use figured dimensions only.

NOV 0 4 2014 DP 13-652010

REFERENCE PLAN