

# City of Richmond Planning and Development Department

# Report to Development Permit Panel

To:

**Development Permit Panel** 

Date:

April 18, 2011

From:

Brian J. Jackson, MCIP

File:

DP 11-564210

Re:

Director of Development

Application by Phileo Development Corp. for a Development Permit for

Phase II of the Proposed Quintet Development at 5900 Minoru Boulevard

#### Staff Recommendation

That a Development Permit be issued which would:

- 1. Permit the construction of approximately 418 units distributed in three (3) residential towers (two (2) 16-storey and one (1) 14-storey tower), approximately 3,239 m² (34,873 ft²) of Community Centre space and approximately 1,944 m² (20,930 ft²) of space for a Post-Secondary Institution on a site zoned "Downtown Commercial and Community Centre/University (ZMU15) Lansdowne Village (City Centre)"; and
- 2. Vary the provisions of Richmond Zoning Bylaw 8500 to:
  - a) Reduce the minimum required setback from Firbridge Way from 3.0 m to 1.5 m for the portion of the development consisting of the Community Centre/Post Secondary Institution;
  - b) Reduce the total number of required short-term bicycle parking to 60 stalls;
  - c) Increase the permitted lot coverage to 90%; and
  - d) Reduce the resident and visitor parking requirement by 13.3%.

Brian J. Vackson, MCIP Director of Development

DN:blg Att.

#### Staff Report

#### Origin

W. T. Leung Architects, on behalf of Phileo Development Corp., has applied to the City of Richmond for permission to develop two (2) 16-storey high-rise buildings and one (1) 14-storey building consisting of approximately 418 residential units, including four (4) live/work units located along the Ackroyd Road frontage, over a common parking structure for approximately 580 cars, including 2 stalls secured for use by co-op cars. On-site development also includes 3,239.25 m<sup>2</sup> (34,873 ft<sup>2</sup>) of community centre space and 1,944.55 m<sup>2</sup> (20,930.99 ft<sup>2</sup>) of space allocated for use by a post-secondary education institution.

The subject site located at 5900 Minoru Boulevard, is Phase II of a comprehensive Mixed-Use Residential, Institutional and Community Use development, known as the Quintet development, which includes the eastern adjacent property, 5911 No. 3 Road. The complete Quintet development site is bounded by No. 3 Road, Firbridge Way, Ackroyd Road and Minoru Boulevard. The site has been rezoned from "Limited Industrial Retail District (I4)" and "Automobile-Oriented Commercial District (C6)" to "Downtown Commercial and Community Centre/University (ZMU15) – Lansdowne Village (City Centre)", formerly "Comprehensive Development District (CD/198)".

Bylaw 8428 (RZ 06-341234) was adopted in September, 2010 and required a Servicing Agreement (SA 09-473756) for full upgrades across all frontages of the Quintet development site, as well as storm and sanitary sewer upgrades.

#### **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 across the extension of Ackroyd Road, an existing car dealership fronting Minoru Boulevard on a parcel zoned "Downtown Commercial (CDT1)";

To the east, a north-south lane separating the two (2) phases of the Quintet development, Phase I consisting of two (2) 16-storey residential buildings with ground floor commercial retail space and townhouses on a site zoned "Downtown Commercial and Community Centre/University (ZMU15) – Lansdowne Village (City Centre);

To the south across Firbridge Way, a single-storey commercial building that wraps around from Firbridge Way to Minoru Boulevard, and the Capri building, a 15-storey residential tower development that fronts Westminster Highway, both zoned "Downtown Commercial (CDT1)"; and

To the west across Minoru Boulevard, the 16-storey Hilton Hotel with a commercial podium on a parcel zoned "Downtown Commercial (CDT1)".

#### Rezoning and Public Hearing Results

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

Design development to the frontage along the lane to retain the richness and interest of the rest of the street fronting façades.

The development being proposed has added texture to the lane elevation. Horizontal metal perforated screen bands will be installed over the mechanical louvers. The slight wave or fold in the screen bands will introduce a subtle depth to the elevation while maintaining ventilation into the parkade. In addition, the ground floor openings will be framed using the same material used for the Skybridge above. In addition, a residential-like treatment has been extended around the southeast corner of the parkade mass along a portion of the lane façade to add detail and texture.

The proposed development includes more details than were used to treat the north-south lane elevation in Phase I. To address the discrepancy between the phases, metal perforated screens and Cor-ten material treatment will be introduced into Phase I through the Building Permit approval.

Further development of green roofs.

The sloped-plane roof of the Community Centre/Post Secondary Institution building is a green roof with multi-colored planting that will be visible both to the courtyard and from above. However, the space will not be accessible.

The outdoor amenity space above the podium is designed to provide a series of experiences and includes a walking trail through and around the 1.43 acre outdoor amenity space shared between the two phases (Phase II:  $3,561.23 \text{ m}^2 (38,322 \text{ ft}^2)$ ), Phase I  $2,225.77 \text{ m}^2 (23,957 \text{ ft}^2)$ .

There are two (2) main character areas proposed at the podium level. The first includes the ornamental grass slopes created through the integration of the planted green roof of the Community Centre/Post Secondary Institution and the adjacent podium landscaping. The second is the formal garden terrace on the remainder of the podium. Both contribute to the outdoor experience and minimizing overlook concerns.

Integration of Public Art into the architecture of the City Centre Community Centre/Post Secondary Institution building at the corner of Minoru Boulevard and Firbridge Way is desired.

In association with rezoning of this site, the applicant committed a voluntary contribution toward the inclusion of Public Art within the Quintet development. The preference is for Public Art to be located in association with the Community Centre/Post Secondary Institution plaza. The details related to installation will be coordinated with the City Public Art Planner.

The Public Hearing for the rezoning of this site was held on October 20, 2008. At the Public Hearing, the following concerns about rezoning the property were expressed:

- Some residents of the Aqua building, which is located on the north side of Ackroyd Road parallel to Phase I, raised concerns regarding the affect of Phase I on views, as well as noise and traffic during construction of the Quintet development.
- Strata BCS 251 representatives from the Capri Building, which is a 15-storey residential building located south of the subject site at 7831 Westminster Highway, expressed the following concerns:
  - > obstruction of northern views;
  - > traffic congestion on Firbridge Way; and

increased use of the right-of-way (ROW) through the Capri Building parkade by vehicles trying to bypass the No.3 Road and Westminster Highway intersection.

Following the Public Hearing, on October 20, 2008, staff facilitated a meeting that included the architect for the development proposal and individuals representing the residents of the Aqua and Capri buildings to discuss the concerns expressed during the Public Hearing. Staff discussed the goals and objectives of the City Centre Area Plan (CCAP) for this specific downtown area and how the development proposal responds to the associated objectives and the design guidelines generally. Mr. W.T. Leung, the architect for the subject proposal, presented revised plans that included adjustments to tower locations and massing adjustments in response to the residents' concerns. The residents considered the changes to be minimal and expressed disappointment with the outcome.

Through the review process, staff has worked with the architect to implement additional design adjustments to address the Capri building residents' concerns through adjustments to the site plan and tower massing as follows:

#### View Corridors/Massing

The location of Tower C, which is located on the south side of the subject site, was shifted westward and the east-west width of the tower floorplate reduced to minimize the extent Tower C directly fronts the Capri building (**Attachment 2**). Through the Development Permit review process, the tower floorplate was further adjusted to pull back the northeast corner of the building. Tower C is located a minimum of 26 m (85 ft.) from the Capri building, which is greater than the standard separation required between towers.

The effect of proposed Tower C on the existing Capri building is not considered to impact the privacy and views of Capri building residents more than what is normally expected in the context of high-density residential areas within the City Centre.

#### Traffic

Capri resident representatives were sent a copy of the Traffic Impact Analysis (TIA) undertaken by the Transportation engineering consultant engaged by the architect for this development proposal. The TIA was reviewed by Transportation Engineering staff and its findings and recommendations were supported by staff.

The study assesses street capacity and recommended improvements to the street network that are being implemented in association with the Quintet development. Information provided included reference to the dedication of approximately 1.7 m along the Firbridge Way frontage to widen the street public right-of-way to 16 m, and on-street parking being restricted to the north side of Firbridge Way east of the parking access.

The ROW through the Capri Building parkade was established to facilitate movement between Westminster Highway and Firbridge Way for the benefit of the commercial uses associated with the Capri Building. Use of the ROW is limited to business hours (8:00 am to 7:00 pm) in perpetuity. The issue and process associated with discharging the ROW was discussed at a meeting between staff and Capri building resident representatives. It was concluded that based on the requirement that discharging the ROW would require full concurrence from all owners of the Capri Building, including the commercial premises owners, discharge would not be feasible

as the commercial owners/tenants would not be amenable to discharge of the ROW from title due to the impact on the feasibility of the commercial uses, which depend on the access granted by the existing ROW.

#### Construction Impacts

Capri resident representatives were provided with information regarding regulations and limitations related to permitted construction hours and general information associated with noise during construction.

#### **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 (OCP) and the City Centre Area Plan (CCAP). In addition, it is generally in compliance with the "Downtown Commercial and Community Centre/University (ZMU15) – Lansdowne Village (City Centre)" 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) Reduce the minimum required setback from Firbridge Way from 3.0 m to 1.5 m for the portion of the development consisting of the Community Centre/Post Secondary Institution;

(Staff support the proposed variance as the variance is limited to the Community Centre/Post Secondary Institution setback, which is less than half of the site's southern frontage. The treatment of the building façade and the materials used ensures that the space remains animated and visually transparent. Locating the Community Centre/Post Secondary Institution building closer to the street, combined with the building's proposed architectural treatment identifies this functional component as unique within the development and contributes to establishing an architectural feature at the corner of Minoru Boulevard and Firbridge Way. The variance will not compromise the public pedestrian experience.

2) Reduce the total number of required short-term bicycle parking to 60 stalls;

(Staff support the proposed variance based on the applicant's demonstration that a supportable number of short-term bicycle parking spaces can be accommodated in visually prominent, convenient locations along the perimeter of the site. Long-term secure bicycle parking exceeds the minimum bylaw requirement and is expected to be preferred by those who regularly cycle to the site.)

3) Increase the permitted lot coverage to 90%; and

(Staff support the proposed increase in lot coverage based on the site's mixed use, high-density designation. Further, the design guidelines for this Village Centre area support a maximum permitted lot coverage of 90%.)

4) Reduce the resident and visitor parking requirement by 13.3 %.

(The proposed development is located within a Village Centre area within immediate proximity of the Brighouse Canada Line Station and the City Centre system of designated bike lanes. The site is ideally situated for its residents to maximize use of alternative forms of

transportation. Based on this opportunity, staff support a reduction of the resident and visitor parking requirement by 13.3%.

Transportation Engineering has assessed the number of stalls available for the 418 units proposed and the associated visitor requirement as 1.04 stalls per dwelling unit, which is supported based on the site specific application. A total of 463 residential stalls are provided, 76 of which are tandem stalls. 51 stalls are available for use by residential visitors.)

#### **Advisory Design Panel Comments**

The development proposal was considered by the Advisory Design Panel (ADP) on August 20, 2008 (preliminary) and again on April 6, 2011 (formal). The Panel commended the architect on a well-designed project that had addressed on-site massing and site planning challenges. A copy of the relevant excerpt from the Advisory Design Panel Minutes from April 6, 2011 is attached for reference (**Attachment 3**). The design response from the applicant has been included immediately following the Design Panel comments and is identified in '*italics*'.

#### Analysis

#### Conditions of Adjacency

The at grade uses, including residential, live/work, community centre, residential lobbies, and indoor amenity space combine to introduce an active pedestrian street character on a site with challenging edge conditions that include a local arterial road, auto-oriented commercial use, a commercial lane and secondary residential and commercial functions such as loading and holding areas. The development will contribute toward the establishment of an active pedestrian-oriented retail precinct within the City Centre.

#### Minoru Boulevard

• The uses fronting the Minoru Boulevard frontage strategically engage with the public realm. The outdoor plaza located adjacent to the Community Centre/Post Secondary Institution building extends the indoor public uses to the outdoor plaza adjacent to the building. The use of window walls and large sliding doors both visually and physically connect indoor and outdoor spaces. The main entry to the Community Centre/Post Secondary Institution features a double height entry. The Tower D lobby, which is highlighted by colored spandrel glass panels, is located at the northwest corner of the site and visually balances the presence of the Community Centre/Post Secondary Institution on the southwest corner. The transition between the Community Centre/Post Secondary Institution and Tower D is marked by a glass privacy wall, a ground level water feature that incorporates edge bench seating, and a three-storey green wall intended to draw attention upward to indicate the landscaped courtyard above.

#### Ackroyd Road

• The Ackroyd Road frontage includes the Tower D lobby and associated ground level amenity space, four (4) live/work units, and the Tower E lobby and associated ground level amenity space. The uses wrap around the building corner effectively screening the parking podium at ground level. Due to limitations related to minimum floor elevations and required headroom within the parking elevations, a grade separation between the interior living and working spaces of the live/work units could not be accommodated. Strategic use of landscaping and patio grade separation from the sidewalk has been used to establish a distinction between the live and work uses within the live/work units.

#### Firbridge Way

• The Firbridge Way frontage has been designed to continue the active ground level uses being introduced in association with Phase I and to improve the overall character of the street, which is currently used as a commercial lane and presents an atmosphere that is dominated by loading facilities and blank parking exteriors on the south side of the street. This frontage of the proposed development features the Community Centre/Post Secondary Institution at the southwest corner of the site and residential units with individual ground level access on the eastern portion of the property. The frontage also includes the Tower C lobby, and access to Community Centre/Post Secondary Institution and visitor parking.

#### North-south lane

• The building frontage along the north-south lane is the only elevation with an exposed portion of the parking podium. Opportunities to change the treatment of the wall are limited by seismic structural requirements; however, the façade is proposed to be treated with perforated metal screens over parkade fenestrations to introduce texture to the elevation.

#### Urban Design and Site Planning

- The proposed development meets the intent of the CCAP, Lansdowne Village with respect to land uses, density, site planning and building height, as well as being generally responsive to the building and design features outlined in the Mixed Use High-Rise Commercial and Mixed-Use Sub-Area guidelines affiliated with the area.
- Buildings comprising the development are sited to minimize impacts on adjacent uses and to maximize the outdoor amenity space located above the parking podium. More specifically, the development includes the following:

#### Tower D

- Tower D is a 16-storey tower located in the northwest corner of the site and is distinguished by its "L" shaped configuration that wraps around the corner and steps down in height at the eastern end of the 14<sup>th</sup> and 11<sup>th</sup> storeys.
- Tower D exceeds the maximum tower floorplate size guidelines; however, the tower successfully anchors the northwest corner of the site with its "L" shaped configuration and its rectangular massing, which is unique in Richmond where uniform tower heights and floorplates are the dominant building form. Tower D has been sited and designed with consideration of adjacent uses which minimizes the effect of the structure's mass.

#### Tower E

- Tower E is a 16-storey tower located at the northeast corner of the site. With a smaller floorplate and a minimum separation from adjacent towers of 24 m (78 ft.) the tower's location adjacent to the north-south lane anchors the eastern corner of the site.
- Phase I of the Quintet development includes a 16-storey tower at the northeast and southwest corners of the site with a mid-rise five-storey building located at the northwest corner of the site. The siting of Tower E achieves the objective of balancing the massing on the overall Quintet development.

#### Tower C

- Tower C's location and height was determined with consideration of the existing Capri residential tower, as well as its relationship to the Community Centre/Post Secondary Institution and a tower proposed at the southwest corner of the Quintet Phase I development.
- As mentioned in the Rezoning and Public Hearing Results section of this report, the siting of Tower C is a concern for residents of the Capri building. In response to the concerns expressed by residents of the Capri building, Tower C was shifted westward and the east-west width of the tower floorplate was reduced (Attachment 2). Further, the northeast corner of the building was redesigned to pull back the building in order to maximize the view corridor angles for Capri building residents.
- Based on consideration of the adjustments undertaken to Tower C's massing and siting, the 26 m (85 ft.) separation from the Capri building and the site's location within a high-density residential area within the City Centre, the effect of proposed Tower C on the existing Capri building is considered typical to what is expected in a high density City Centre development area.
- A seven-storey residential component extends from Tower C to the north-south lane and includes units with private entrances from Firbridge Way. Located a maximum 1.2 m (4 ft.) above the sidewalk elevation, these units contribute to the animation of Firbridge Way and provide opportunities for passive surveillance of the street.

#### Community Centre/Post Secondary Institution

• A Community Centre/Post Secondary Institution is prominently located at the southwest corner of the site. Although the building design relates to the rest of the development, it establishes its own character and individual identity. The building consists of four (4) full storeys and a partial fifth storey. The roof will be landscaped to address overlook concerns. The building is pulled back from the street to maximize the area and emphasize the civic space character of the public plaza that extends to the property edge of the site.

#### Design Guidelines Compliance

The CCAP Design Guidelines include reference to urban design and site planning. The proposal is supported based on context specific considerations and the development's responsiveness to the intentions of the guidelines.

- The CCAP identifies minimum separation between towers to address privacy concerns, minimize shadow effects, and maximize view corridors. The subject development proposes a minimum tower separation of 24 m (79 ft.) between on-site and off-site towers, which is the recommended separation between towers in this area of the City Centre. A shadow analysis was undertaken and no critical off-site impacts were identified (Attachment 4). The minimum separation between Tower C and the Capri building is 26 m (85 ft.), which is greater than the standard minimum requirement.
- Based on consideration of the location of existing towers, the size of the site, the density proposed on-site, the unique massing of the towers and the measures undertaken to minimize the affects of the building massing, the proposed tower separation is considered acceptable.
- The CCAP encourages a maximum tower floorplate size of approximate 650 m<sup>2</sup> (6,996 ft<sup>2</sup>). The floorplate sizes proposed are greater. However, floorplate configuration and massing articulation minimize the potential impact on the surrounding existing and future urban environment.

• Reducing the floorplate sizes would result in a reduced overall development floor area, which is contrary to the CCAP objectives for high-density, mixed-use development within a Village Centre area. Further, efforts to spread the density on-site would result in buildings with an increased mass, a less varied building form, and a higher, continuous streetwall. The floorplate sizes proposed are supported based on consideration of the site specific challenges associated with the project and the adequate resolution of issues associated with building massing.

#### Parking, Loading and Unloading

- The site's location within the City Centre and close proximity to the Brighouse Canada Line Station increases the transportation options available to future residents, as well as users of the Community Centre/Post Secondary Institution.
- The total number of parking spaces provided within six (6) levels of parking is 580, including 2 stalls that will be secured for use by co-op cars. The parking stalls are allocated as follows:
  - ➤ Residential and Visitor: 1.04 stalls per unit (463 residential stalls and 51 stalls available for use by visitors)
  - Community Centre and Post Secondary Institution: In accordance with the Terms of Reference associated with the Community Centre/Post Secondary Institution, 64 stalls are secured for exclusive use by community centre users, students and associated staff. An additional 51 stalls are available for use by Community Centre/Post Secondary Institution users and residential visitors
  - > Co-op parking stalls: 2
  - Among the conditions associated with rezoning of the subject site (RZ 06-341234), a subsidy of \$15,500 to the Co-op network for the purchase of one co-op car was referenced. Due to changes to the TDM strategy that was proposed at the rezoning stage, a second subsidy, for an equivalent value, will be provided for the purchase of a second co-op car.
- Community Centre and student parking is located within a partially submerged parking level accessed via Firbridge Way.
- Access to residential parking is solely via the north-south lane; thereby limiting the impact of the 418 proposed units on traffic flow within the area.
- Provisions for loading and drop-off for the Community Centre/Post Secondary Institution is secured via signage that will be introduced adjacent to the parking lane and provided on the north side of Firbridge Way in front of the facility. Required loading spaces for the residential uses is provided from the north-south lane.
- The approximately 14.5 m (47 ft.) wide Skybridge, which spans the north-south lane and connects the proposed Phase I and Phase II outdoor amenity spaces will have a minimum vertical clearance of 9 m. The applicant is required to secure the use of the north-south lane for the Skybridge from the City by way of an Encroachment Agreement with a license agreement that runs for the life of the Quintet development.
- The Transportation Demand Management (TDM) provisions associated with this development include:
  - ➤ Provision of 2-Zone transit passes for approximately 12 City Centre South Community Centre Staff for a one year duration;
  - ➤ Allocation of parking spaces for 5 HOV vehicles;
  - > One per gender (total of 2) end of trip cycling facilities, including showers, toilets, grooming station, and clothing lockers for use by the Community Center and Post Secondary Institution. The number of facilities that will be provided within the lower

- parkade level, which are located adjacent to the main entry linking the parkade and Community Centre/Post Secondary Institution building, acknowledges the provision of shower facilities within the building that will be available to users.
- Two (2) co-op car parking spaces that are accessible at all times. After hours access will require a FOB/security pass that will be available to co-op car members. The main parkade overhead gate will remain open during regular Community Centre/Post Secondary Institution operating hours.
- Secure bike storage in excess of the bylaw requirement is provided and short-term bicycle parking is located in visible, easily accessible locations along the building's perimeter.
- Garbage and recycling facilities are enclosed. Facilities for Tower C are located adjacent to the parking drive aisle on Firbridge Way and are enclosed to minimize the impact of these facilities. Similarly, a holding area for Community Centre/Post Secondary Institution garbage and recycling is enclosed and located on the west side of the same Firbridge Way parking drive aisle. Two (2) designated garbage and recycling collection areas will service Tower D and E. An overhead door on the lane frontage provides easy access to the garbage compactor and minimizes the impact of collection on adjacent uses.

#### Architectural Form and Character

The site is within the Mixed-Use, High-Rise Commercial and Mixed-Use Sub Area and is responsive to the design guidelines associated with the area.

#### Materials and Color

- The residential tower component of the development is characterized by architectural concrete painted in a neutral beige hue with large glass window openings. Portions of the buildings consisting of punched out windows (Tower D north, west and south elevation, Tower E north and east elevation) will be painted a darker hue. Colored glass panels (in shades of gray, blue, grape green and forest green) provide further interest to the façade of the buildings. These building materials establish the common vocabulary between the buildings; however, it is the variety in the placement and application of these materials, combined with the individualized massing of the towers that introduces variety to the development.
- The three (3) two-storey L-shaped concrete frames at the base of Towers D and E and the space between will be clad in black basalt, which is used to draw attention to and provide a subtle visual linkage to the Community Centre and the retail and amenity space in Phase I. Materials and design character also reference and establish a connection Phase I of the Quintet development.
- A three-storey glass privacy wall adjacent to the Community Centre/Post Secondary Institution atrium, combined with a grade level water feature, green wall, and an exposed concrete wall that is intended to reflect sunlight back into the atrium and staircase, introduce a sensitive separation between community and residential uses.
- The Community Centre/Post Secondary Institution building exterior incorporates window walls, colored glass panels and horseshoe shaped building frames but is set apart from the rest of the development by the use of black basalt to highlight the building's edges. The building also features unique sloped-plane roof lines and a significant recess of the building façade at the third storey.

• The Skybridge linking the outdoor space at the podium level between Phase I and proposed Phase II is clad in Cor-ten, an unique material choice. Cor-ten is a "weathering steel" popularly used in outdoor sculptures for its rustic antique appearance. In addition, the resident parking opening on the north-south lane elevation is treated with a slim Cor-ten frame referencing the material used for the Skybridge above. The Community Centre/ Post Secondary Institution rooftop mechanical equipment is screened and also includes the use of Cor-ten.

#### **Building Articulation**

- The eastern elevation, which interfaces with the north-south lane, shows an exposed parking façade. To minimize the impact of the parking podium and humanize the space, the glass and colored panel treatment used on the southern façade of the seven-storey building frontage on Firbridge Way wraps around the building's southeast corner. The parking podium wall is a major structural wall; therefore, opportunity to randomize the openings for additional interest is limited. The installation of horizontal metal perforated screen bands over the parkade fenestrations will introduce a slight wave or fold in the façade; thereby achieving additional interest by adding a subtle depth to the east side wall of the parking podium.
- The Ackroyd Road building elevation, including the north elevation of Tower D and E spans the length of the property. To break up the façade, the underside of selected balconies will be painted green to complement the spandrel window colors. These balcony surfaces will be visible from the street below and will emphasize the depth of the façade. Further, specific balconies project slightly outwards to add texture to the north façade of the proposed development.
- The horseshoe shaped frames used throughout the site vary in size, orientation, and scale. They effectively punch out portions of the building façade to break up the mass of the buildings, highlight vertical and horizontal elements, and stress distinctions in building components.
- Each of the towers proposed on-site recess the top floors of the building and screen the rooftop mechanical equipment. Pulling back the top stories of the buildings introduces some variety to the skyline.
- The final storey of the seven-storey building attached to Tower C is significantly setback from Firbridge Way so that the mass of the building doesn't overwhelm the generally pedestrian oriented scale achieved along most of Firbridge Way. Further, the building height and design establishes a two-storey interface with the internal landscaped outdoor amenity space.

#### Streetscape

• The building setbacks and building street wall are responsive to the strong urban character associated with the site's location within a Village Centre.

<sup>• &</sup>quot;Weather steel" refers the material's chemical composition, which is associated with increased resistance to corrosion when exposed to weather. Essentially, the steel is permitted to rust in order to form a naturally occurring protective coating, which is associated with its unique visual appearance.

- In accordance with CCAP design guidelines for Mixed Use, High-Rise development, the proposed development presents a coordinated continuous streetwall along the Firbridge Way, Minoru Boulevard, and Ackroyd Road frontages.
  - o Where possible, garbage and recycling collection and holding areas are recessed from the building edges and are enclosed and treated with appropriate architectural building features when in close proximity to the street.
  - o Individual unit entries for the mid-rise building fronting Firbridge Way are no more than 1.2 m (4ft.) above the elevation of the road. The raised semi-private patios maintain a close relationship with the public realm and facilitate casual surveillance.
  - o The base of Tower E includes live/work units on the Ackroyd Road frontage between the Tower D and E lobbies. Similar to the other active uses at grade, the live/work units animate and active the pedestrian environment.
  - o Individual building lobbies and entry to the Community Centre/Post Secondary Institution include weather protection and are universally accessible.
  - o Indoor amenity space associated with Tower D and E is located at grade fronting Ackroyd Road. Locating amenity space at ground floor level facing the street provides opportunities for casual surveillance over the street and contributes toward an active street character quality.
  - o Landscaping and accessible short-term bicycle parking is provided along the street edges of the development.
  - Wall mounted illumination fixtures are incorporated into the design of the residential units with access to Firbridge Way and the live/work units fronting Ackroyd Road.

#### Indoor and Outdoor Amenity Space

- An outdoor amenity space for the residential component of the development is located at the fifth level above the parking podium. The 3,561.23 m² (38,332 ft²) landscaped podium space extends to the eastern edge of the development and connects to 2,225.77 m² (23,957 ft²) of landscaped and active play area associated with Phase I of the Quintet development via a pedestrian bridge. The total outdoor amenity space available for use by residents of the Quintet development is 1.43 acres.
- The 14.5 m (47 ft.) wide pedestrian Skybridge, which will be constructed in association with the proposed development, extends over the north-south lane facilitating direct access between the two phases of development. The Skybridge accommodates the slight change in elevation between the podium spaces resulting from development specific building conditions.
- A combination of lighting fixtures are proposed to sensitively illuminate the outdoor amenity area and includes submersible lights, post mounted and wall mounted lights, and tree accent illumination.
- Each of the residential buildings is provided with an indoor amenity space equipped with kitchen and washroom facilities. The indoor amenity space affiliated with Tower C, which will also be used by residents of the seven-storey extension of the Tower C building, is located at the fifth level and has direct access to the outdoor amenity space. Indoor amenity space for Tower D and E residents is located at ground level and oriented to animate the street frontage. A second indoor amenity space for residents of Tower D is located at the fifth level overlooking the Community Centre/Post Secondary Institution building.

- In addition, a common amenity space for residents of both phases of development was secured in association with the Phase I (DP 07-359083). This common indoor amenity space, consisting of 699.49 m<sup>2</sup> (7,529.5 ft<sup>2</sup>), includes a swimming pool and fitness centre. The facility is located on the Firbridge Way frontage.
- A private outdoor patio was incorporated into the design of the Community Centre/Post Secondary Intuition building at the fifth level. The post secondary institution building users do not have access to the proposed landscaped podium.

#### Landscape Design and Open Space Design

- The ground level street fronting perimeter of the site is treated with a variety of features including trees, a water feature, feature paving with seating walls and/or benches, street level planting and short term bicycle parking. Landscaping is used strategically along the Ackroyd Road frontage to establish a distinction between the live and the work components of the live/work units and to address privacy concerns associated with the ground level living spaces. The individual unit entries along Firbridge Way have individual patios that offer an opportunity to introduce a raised planter along the building's edge. Stonewall seating, planting, and feature paving mark entrances to building lobbies.
- The Community Centre/Post Secondary Institution building and plaza is located at the southwest corner of the site to maximize sun exposure. The space, which facilitates the outdoor expansion of the Community Centre activities, is accented by a water feature, feature paving, and stonewall seating.
- The podium level is characterized by its ornamental grass slopes and its formal garden terrace with extensive use of water as a strong feature. The space is designed to accommodate a series of "outdoor rooms". Among the spaces created is a children's adventure playground consisting of an earth mound with secret stone path and interactive water play jets. This space is planned as a complement to the formal children's play space and structures within Phase I. Approximately 65 m² (700 ft²) of structured children's play area is located within the Phase I outdoor amenity space and includes children's play equipment on a rubber safety surface, associated active play features such as play logs and landscaped mounds, and an area treated with lawn.
- The outdoor space available to residents is maximized by linking the Phase I and proposed Phase II amenity spaces. In total, approximately 1.43 acres of outdoor amenity area, with walking loops designed to maximize accessibility to the spaces, is available to the residents of the proposed Quintet development.
- The Community Centre/Post Secondary Institution building roof will be landscaped with ornamental grasses and seasonal flowering perennials. Ornamental steel bands will further articulate the landscaping treatment of this roof that is exposed to views from above.

#### Accessibility/Barrier-free Access

- The proposed development provides barrier-free access from the street to the lobby of the residential towers and from the street to the Community Centre/Post Secondary Institution, as well as barrier-free access to the various indoor and outdoor amenity spaces.
- Ten units within Tower D, which are equally divided between one (1) and two (2) bedroom units, are identified as universally accessible and include clearance and wheelchair turning radii at the bathroom sink and in the kitchen. The unit entry doorway width and common corridor width similarly facilitate accessibility. Some millwork modifications would be required to renovate the units to be fully universally accessible. Unfortunately, because of

- structural factors, the opening access to the elevator core can not be widened to fully meet the accessibility standards.
- Building Permit plans will note the incorporation of aging in place provisions that include backing for grab bars in one (1) bathroom, lever style door handles, tactile numbering of suites, etc.

#### Affordable Housing

- The CCAP Implementation Strategy includes provisions, that in certain circumstances, permit a density bonus for the provision of community amenities, rather than affordable housing.
- The proposed development has been exempted from complying with the provisions of the Affordable Housing Strategy based on its inclusion of a City Community Centre/Post Secondary Institution building.

#### Engineering/Servicing

- All Engineering issues were addressed via the Servicing Agreement associated with the rezoning application (SA 09-473756). Works included, but were not limited to the following:
  - Completion of Ackroyd Road, including sidewalk, boulevard and street trees, and City Centre street lights, curb and gutter and paving of the proposed travel/parking lane;
  - Construction of the City Centre standard north-south lane;
  - Completion of the No. 3 Road Canada Line road edge frontage;
  - Upgrades to the north edge of Firbridge Way, including replacement of curb and gutter, and planting of street trees;
  - Creation of a grass and treed boulevard, including street light improvements, behind the curb along Minoru Boulevard;
  - Traffic signal improvements at both the Elmbridge Way and Minoru Boulevard and the Ackroyd and No. 3 Road intersections;
  - Storm sewer upgrades along the No. 3 Road and Firbridge Way frontages, and along the Minoru Boulevard frontage south to Westminster Highway. In addition, off-site sewer upgrades will also extend from Alderbridge Way to Gilbert Road; and
  - Sanitary sewer upgrades along the Firbridge Way frontage and the north-south lane through the development site north to Lansdowne Road. Off-site upgrades include Lansdowne Road, from the lane, west to Cedarbridge Way and Cedarbridge Way, from Lansdowne Road, to the Minoru Pump Station.

#### Crime Prevention Through Environmental Design

The proposed development incorporates a range of CPTED design principles that include but are not limited to the following:

• Residential and community use/visitor parking are separated. Security at the entrance to the resident parking via the lane is secured by an overhead gate. Access to the visitor/Community Centre/Post Secondary Institution parking is similarly secured by an overhead gate, which will remain open during Community Centre and University operating hours. Two (2) additional secondary security gates separate the Community Centre/Post Secondary Institution parking and general parking from the main drive aisle.

- The parkade walls are to be painted white, glazing is to be incorporated into elevator lobbies, and doors are to include vision panels to maximize light penetration and visibility.
- Fenestrations on exterior walls of the parkade improve air circulation and facilitate the penetration of natural light into the parkade.
- Pedestrian routes within the parkade are to be defined by wayfinding provisions in a contrasting paint color.
- The development's site planning and design incorporates opportunities for passive surveillance of both the street frontages and the internal semi-private space.
- Residential lobbies are located with consideration of clear sightlines from the fronting streets, weather protection, and are accessible from the street. Pedestrian entry into the buildings will be secured and individual mailboxes are located within the building lobbies.

#### Public Art

- In association with rezoning of this site (RZ 06-341234), the applicant committed a voluntary contribution of approximately \$396,756.23 towards the inclusion of public art within the Quintet development.
- It has been noted that the preferred location for Public Art is in association with the Community Centre/Post Secondary Institution public plaza at the corner of Firbridge Way and Minoru Boulevard and at the public plaza area associated with Phase I along No. 3 Road in proximity to the Akroyd Road intersection. The details associated with the inclusion of on-site Public Art will be reviewed and coordinated with the City Public Art Coordinator.

#### Sustainability

- Attached to this report is a synopsis, provided by the applicant, highlighting the energy conservation and design measures proposed, which would be in accordance with a Silver LEED rating for the project (Attachment 5). Although the project will not be LEED certified it will include a number of sustainable features associated with the LEED rating system including the following features:
  - Maximizing the benefits associated with the site's prominent City Centre location including proximity to services, transit, and recreation;
  - Water efficiency features including a water harvesting irrigation system to reuse rain water to irrigate the green roof and landscaped areas; and
  - Energy and Atmosphere harm reduction measures associated with the materials, fixtures and appliances that will be within the development, as well as active waste management procedures to segregate and divert recycling waste materials from disposal.
- The Terms of Reference associated with the Community Centre/Post Secondary Institution building include provisions for building efficiency. Included in the conditions is the requirement that the base building shell contribute towards achieving a LEED Silver standard based on requirements for the building core and shell.

#### Conclusions

The subject development is responsive to the City of Richmond's design objectives within the Lansdowne Village of the City Centre. The proposal's distinctive building massing, mix of high density uses, design details, and inclusion of a significant community space actively contribute to the developing mixed-use, high density neighbourhood evolving within the Village Centre. Based on the proposal's design response to its context and location within the City Centre area, and significant public benefit associated with the project, staff support the proposed development proposal.

Francisco Molina, MCIP, IA, AIBC Senior Planner III, Urban Design

Diana Nikolic

Planner II, Urban Design

DN:blg

Attachment 1: Development Data Sheet

Attachment 2: Tower C Massing and Location Adjustments

Attachment 3: ADP Minutes and Applicant Responses (in italics at the end of the document)

Attachment 4: Shadow Analysis

Attachment 5: Sustainability Response (provided by applicant)

Provision of the following Transportation Demand Measure as per Zoning Bylaw and Transportation consultant report:

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 \$351,879.00 for ground level landscaping and \$933,152.00 for podium level landscaping;
- Provision of the following Transportation Demand Management requirements:
  - provision of a subsidy of \$31,000 (\$15,500 per co-op car) to the Co-op network for the purchase of two co-op cars, to the satisfaction of the Director of Transportation; and
  - registration of a Right of Way to secure the two co-op car parking spaces;
- Contribution of \$17,424 into the Leisure Facilities Reserve (\$15,840 + 10% for future rate increases) for 2-Zone transit passes for 12 City Centre South Community Centre staff;
- Registration of a tandem parking assignment indicating the tandem stalls must be assigned to the same dwelling unit;
- Registration of an agreement to ensure the main overhead gate to the parking accessed via Firbridge Way remains open during Community Centre/Post Secondary Institution hours of operation;
- Registration of a legal agreement on title to ensure the use of the outdoor amenity space for all residents of both Phase I and Phase II;
- Registration of Right of Way to secure public access to the total area of the plaza associated with the Community Centre/Post Secondary Institution at the southwest corner of the site. The area is to encompass:

- the area between the property line and the edge of the Community Centre/Post Secondary Institution building along the Minoru Boulevard frontage; and
- the area between the property line and the edge of the Community Centre/Post Secondary Institution building along the Firbridge Way frontage;
- The developer is required to apply to the City for an Encroachment Agreement for the Skybridge over the north-south lane that links 5900 Minoru (proposed development) and 5911 No. 3 Road (Phase I) to the satisfaction of the Director of Engineering, the Director of Development, and Manager Real Estate Services. The developer is to agree to pay for all associated costs including:
  - preparation of the agreement;
  - preparation of volumetric survey of the space being occupied;
  - · market value of the encroachment area (to be determined by appraisal); and
  - legal costs.

The duration of the license agreement will be for the life of the Quintet development (or sooner termination) and is to include terms between the developments for maintenance of the Skybridge, and rights-of-way over each Phase to facilitate access for repair, maintenance and/or removal.

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).
- Incorporation of accessibility measures for aging in place in Building Permit drawings for all units including lever handles for doors and faucets and blocking in all washroom walls to facilitate future potential installation of grab bars/handrails.



# **Development Application Data Sheet**

**Development Applications Division** 

Attachment 1 DP 11-564210

Address: 5900 Minoru Boulevard

Canada Sunrise Development

Applicant: W. T. Leung Architects Inc.

Owner: Corp.

Planning Area(s): City Centre Area Plan

Site Area:

Land Uses:

Zoning:

**OCP Designation:** 

**Number of Units:** 

Floor Area Gross: 42,792.64 m<sup>2</sup> (460,616 ft<sup>2</sup>)

Floor Area Net: 39,308.61 m<sup>2</sup> (423,114.35 ft<sup>2</sup>)

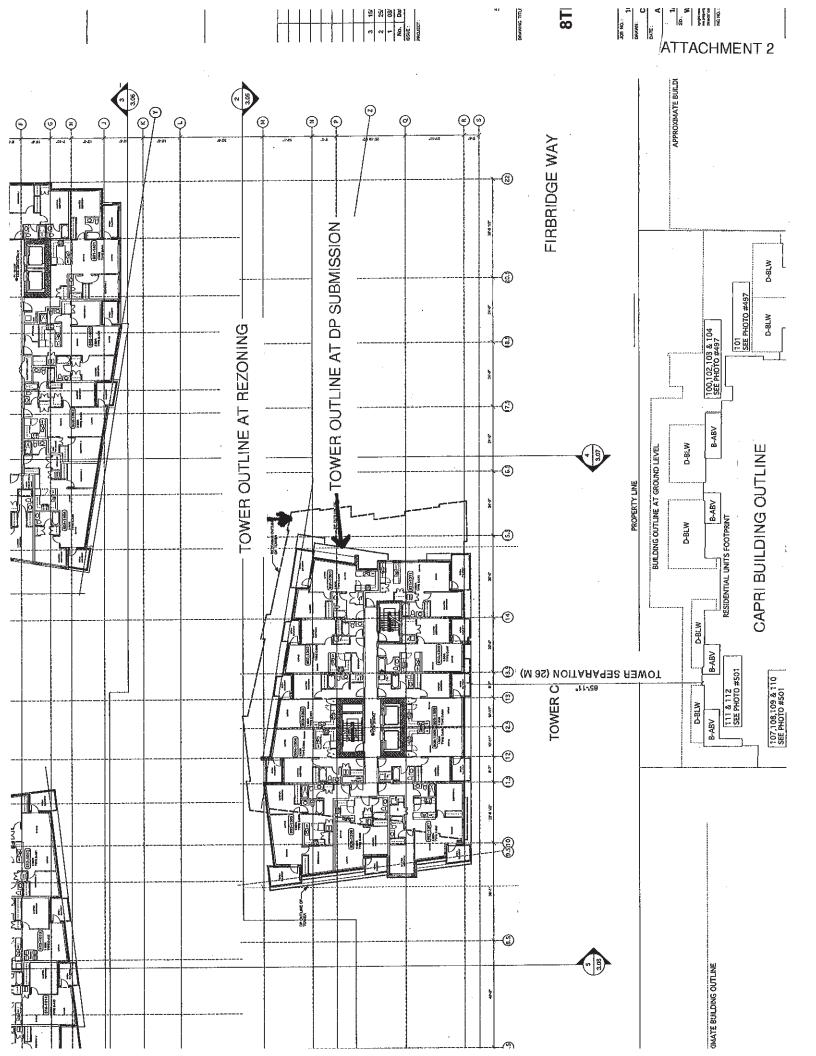
Existing **Proposed** 8,931.3 m<sup>2</sup> 8,931.3 m<sup>2</sup> Residential, Community Sales centre for Phase I Centre, Post Secondary Institution High-Density Mixed Use High-Density Mixed Use Downtown Commercial and **Downtown Commercial and Community** Community Centre/University Centre/University (ZMU15) (ZMU15)

418

|                             | Bylaw Requirement  | Proposed  | Variance                    |
|-----------------------------|--|---|-----------------------------|
| Floor Area Ratio:           | maximum combined FAR<br>(for Phase I and II) is 4.3<br>FAR | 4.29  | none permitted              |
| Lot Coverage:               | Max. 80%   | 86.2%   | Variance to increase to 90% |
| Setback – from public road: | Min. 3 m   | 3 m Minoru Boulevard, Ackroyd Road, north- south lane 1.5 m Firbridge Way for the Community Centre/Post Secondary Institution | Firbridge Way<br>variance   |
| Height (m):                 | Max. 45 m  | 44.95 m   |                             |
| Lot Size:                   | n/a  | 9,113.754 m²  |                             |

1 sales centre

| Off-street Parking Spaces –<br>Regular/Commercial: | Resident and Visitor: 1.2 stalls per unit Community Centre/Post Secondary Institution: 64 stalls secured solely for use by users of the building. | Residential and Visitor: 1.04 stalls per unit (463 residential stalls and 51 stalls available for use by visitors Community Centre and Post Secondary Institution: 64 stalls secured for exclusive use by the Community Centre and Post Secondary Institution. An additional 51 stalls are available for use by Community Centre/Post Secondary Institution users. Co-op car stalls: 2 | Variance to<br>reduce<br>residential/visitor<br>parking to<br>1.04/unit |
|--|---|--|---|
| Off-street Parking Spaces – Accessible:            | 12  | 12   |   |
| Tandem Parking Spaces                              | permitted   | 76 pairs/152 spaces  |   |
| Amenity Space – Indoor:                            | Min. 100 m²   | Tower C: 93.5 m <sup>2</sup> (1,007.08 ft <sup>2</sup> ) Tower D: 311.67 m <sup>2</sup> (3,354.78 ft <sup>2</sup> ) Tower E: 147.78 m <sup>2</sup> (1,590.77 ft <sup>2</sup> ) TOTAL: 552.95 m <sup>2</sup> (5,951.90 ft <sup>2</sup> )  |   |
| Amenity Space – Outdoor:                           | Min. 2,520 m <sup>2</sup> (27,125 ft <sup>2</sup> )   | 3,561.23 m <sup>2</sup> (38,332 ft <sup>2</sup> )  |   |



# Excerpt from the Minutes from The Design Panel Meeting

Wednesday, April 6, 2011 – 4:00 p.m. Rm. M.1.003 Richmond City Hall

2. DP 11-564210 – APPROXIMATELY 418 UNITS (3 TOWERS [2 AT 16 STOREYS, 1 AT 14 STOREYS], COMMUNITY CENTRE SPACE, POST SECONDARY INSTITUTION SPACE, AND CONNECTED TO PHASE 1 BY A PEDESTRIAN BRIDGE AT THE 5TH STOREY

ARCHITECT:

W.T. Leung Architects

PROPERTY LOCATION:

5900 Minoru Blvd.

#### **Panel Discussion**

Comments from the Panel were as follows:

- overall form and development is well done; Phase 2 of the project relates well to Phase 1; 24-meter separation between towers is not a problem as it is an industry standard;
- appreciate the changes in texture, height and elevation of the podium; however, there is a lack of spaces for residents to pause and rest; an architectural structure such as a gazebo can be added as focal point in the courtyard; consider covered areas; define the path of journey from Phase 1 to Phase 2 and vice-versa;
- like the modern quality of the three buildings; however, they lack colour; consider colour or texture changes in the building horseshoe/frames to offset the building mass;
- massing of community centre building needs further architectural treatment (e.g. cantilevered overhangs or rain cover) to enhance the corner; opportunity for massing features to be introduced to play up the corner;
- alley facade needs further development; consider green grid or random grilles to soften up the facade;
- facades of buildings facing Ackroyd Road (Towers D and E) look flat; need more articulation; consider stepping out the balconies;
- well-crafted project; has some commendable landscape components;
- concern about the laneway which looks bleak; make it safer and more inviting; needs softening for pedestrian use and safety;
- overall, the direction of the streetscape is good; students spilling out into the corner of Minoru Blvd, and Firbridge Way in the future will make it lively;

- roof deck geometry is appreciated but there is an absence of useful spaces on the roof deck; introduce spaces to respond to different needs of various groups of people, e.g. elderly, young families, students, etc.;
- concern on scale of the use of water; consider cost and proportion; consider punctuating the roof deck with useful open spaces which are either passive or active;
- concern on scale of hard spaces and scale of pedestrian environment; need to soften up some spaces and bring down the scale of hard surfaces to a more appropriate level; pedestrian environment currently reads as a promenade;
- appreciate the green roof and use of vertical green walls to bring down the landscape to a three-dimensional character and meet the street;
- consider softening up the detailing, e.g. edges, steps, and seating for families, to enhance residential character;
- overall, a high-quality project;
- project is large but well-designed;
- treatment of parking facade is handled well; edges are well-articulated;
- laneway wall needs further treatment; small punched box-like windows need more articulation to make them more visually interesting;
- site planning has been optimized in the project and has created a community of buildings;
- tower articulation is well-handled; consider hierarchy of boldness of "frames";
- University/Community Centre articulation is well-handled; like the bold materials used;
- Tower C's evolving footprint is well-positioned in relation to the other buildings;
- Tower D is positioned well; having complete Tower C views is difficult to achieve;
- separation between Towers D and E is well-handled; no detrimental effect of the removal of two-storey townhouses between the two towers at the courtyard level;
- larger tower floor plates result in creatively-shaped series of building forms;
   breaks down the repetitive tower forms;
- outward extension of balconies could be done selectively; balconies could be pulled where necessary;
- frame on Building D needs design development to break up the large flat facade; the most challenging elevation in the project; consider pulling out the balconies within the frame;
- consider more articulation of massing/definitive "top" of the towers to pull them together; need to have some kind of relationship;
- project is a welcome addition to the urban realm in Richmond;
- massing is appropriate for the urban core;

- agree that Tower C is appropriately located; creates a great street environment on Firbridge Way; provides good precedent for future developments in the area; addition of townhouses along Firbridge Way enhances the street;
- hierarchy of spaces needed at the podium level; give more breadth to the trellis at the north edge; covered spaces are needed;
- interesting choice of cor-ten steel material for the land bridge which has a distinct character compared to the other materials used in the building; encourage use of this material in gaps between building masses to bring the landscape to the ground, particularly at the north edge of the community centre; emphasize the relationship of the landscape to the buildings;
- emphasize visual connection between the water featured at the northern edge of the Community Center and its connection to the podium level;
- 1.2-meter grade change on the elevation of patio decks in relationship to the sidewalk is appropriate in combination with well-detailed railings;
- handling of grade transitions on the podium level between Phases 1 and 2 is not a concern; water is used nicely as a unifying device; provides rich landscape environment;
- nicely-rendered scheme;
- an exciting massive development in Richmond; a lot of work done on massing and site lay-out;
- consider introducing public art in the streetscape, public spaces and on the podium level;
- consider more interesting transitions between buildings; identify the distinction between buildings with more spontaneous or more organic features, which could include public art;
- consider more 3-D treatment or introduce more colour on building facades along Ackroyd Road;
- site planning is skilful; there is a sense of rhythm in the placement of towers; creation of a garden on the rooftop is a good idea; provides visual interest to an otherwise bare rooftop;
- community centre design brings a focal point to the project; creates contrast to the residential towers;
- consider introducing more materials to mitigate the large mass of the buildings; consider using new materials for frames in Building D to provide contrast;
- agree that further treatment is needed on the elevation of buildings along Ackroyd Road to break down the big facades;
- there is a good opportunity to introduce public art in the project; consider introducing public art in the community centre which is a focal point in the project; public art can be tied up with the water feature;
- consider softening the corner of Ackroyd Road and Minoru Blvd. where the lobby of Building B is located; the corner is too sharp as an entry point to the building;

- overall, the project is well-designed; and
- there is opportunity to add more colour to the buildings; colour treatment of Community Centre building is appreciated; however, the corner at Minoru Boulevard and Firbridge Way needs further enhancement as it is expected to become a major corner.

#### **Panel Decision**

It was moved and seconded

That DP 11-564210 move forward to the Development Permit Panel subject to the applicant addressing the items discussed by the Panel, including the key items highlighted below:

- 1. design development to the roof deck landscaped area and consider i) using the distinct sky bridge material elsewhere and establishing a visual linkage between podium level and streetscape, ii) reconsider the amount of hard/soft materials within the landscaped podium, and iii) creating passive or active open spaces to serve as stopping or rest areas;
- 2. design development to Buildings D and E façade considering further articulation through the use of i) colour, ii) texture/material, and iii) more 3-D treatment of elements such as frames, balconies, etc.;
- 3. design development to the community centre considering i) introducing public art, and ii) adding more dramatic architectural elements to enhance the corner; and
- 4. design development to the laneway wall to soften it and provide more visual interest.

CARRIED

# The applicant was required to address the items addressed by the Panel, which includes but is not limited to the key items highlighted in the Panel Decision synopsis. Responses from the applicant include:

- On the Ackroyd façade, the 3 two storey high L-shaped concrete frames at the base of Towers D and E and in between will be clad in the black basalt similar to that being used on the Community Centre and the retail and amenity facades in Phase 1. Logic is that the spaces contained within these frames are also amenity spaces or Live/Work spaces, still being different from the residential suites in the rest of the project.
- The full tower height concrete 'punched opening' walls, one on the west side of Tower D and one on the north side of Tower E as well as two similar walls facing the podium courtyard on Tower E (west and south sides) will be painted in the darker shade than the multi-storey 'horseshoe frames' on the towers. As well on the north side of both Towers D and E, the underside of selected balconies will be painted a green colour to complement the window spandrel colours. These balcony surfaces would be visible from the street below and would animate the surface of the façade and emphasize the depth of the façade. Select balconies have been adjusted to project slightly outwards from the north façade.
- On the lane façade, the building structurally requires a certain wall length of concrete for developing seismic shear restraint. We will be treating the wall with installation of several

approx. 5' wide horizontal metal perforated screen bands that will span across most of the length of the concrete wall. The screen will allow ventilation to the Parkade, yet cover the mechanical louvers (which will still be slightly visible through the screen.) The installation of the bands will include a slight 3 dimensional depth achieved with a slight wave or fold in the band. In addition, the 4 ground floor openings for the Parkade Entry, Garbage Room door, exit stair and gas meter niche, will have a slim Cor-Ten frame around the collective group of openings with the head of this frame protruding about 6" to accent this opening. It recalls the material on the land bridge above, but does not compete with that architectural feature.

- The complementary wall on Phase 1 across the Lane did not have this metal perforated screen and Cor-Ten treatment. We will however add a similar treatment so that the walls complement each other.
- For the Minoru façade of the community Centre/University, we are comfortable with the amount of architectural drama on the building with its massing, roof line, curtain wall, folding planes, colours and glazed entry atrium element as well as the associated water feature.
- Between the buildings where there is sometimes a transition slot between structures, we will be using the steel lattice screen material (shown on the materials board). We do not want to use the Cor-ten in these locations, preferring to use that material in more 'special' application. We may try to use some Cor-ten in the area around the water feature, north of the Community Centre atrium, but have not decided how or where yet.
- In the Community Centre/University/residential visitor parking Parkade, we have juggled some things around and gained 4 parking spaces while keeping the two car co-op stalls in the original location. There will be an entrance overhead security gate at the top of the driveway that would be closed after hours which takes care of the CPTED concerns raised by staff. There are also the gates at the bottom of the driveway beyond the car co-op stalls which secures the Parkade after hours. Access to the car co-op after hours would be through the use of the key fob which all co-op members have to which the entrance overhead gate would be programmed.
- Public art will be incorporated into this project once we have initiated discussion with Eric Fiss, Public Art Planner.
- Regarding the amount of hard/soft materials within the landscape podium, the Allee promenade has been reduced and the adjacent lawn area increased. The Ipe walkway at the Lower podium to the west has been reduced to 6' wide and a 2' wide lawn band has been added with stone seat walls. The kids' adventure playground has been extended further west and the planting south of the pathway has been extended. The Ipe deck at the Upper podium has been reduced and a lawn area has been added with curved seat walls.
- Regarding the creation of passive/active open spaces to serve as stopping or rest areas, the definition of the outdoor rooms and their components is highlighted with the bubble diagram (see L04.a)
  - A shade tea garden has been created at the lower podium with wood tables and chairs.

- A reflective walk has been provided at the lower podium with stone seat walls as rest areas to enjoy the sound and view of the waterfall.
- o A trellis has been added as a gateway and focal point at the Upper podium.
- Large wood platforms with a chessboard pattern have been provided to serve as lounge areas or large outdoor chessboards to play on.
- Curved seat walls have been installed close together in the lawn area to encourage social interaction.



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SHADOW DIAGRAM

DP-1.07

SEPTEMBER 21 & MARCH 21

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# W. T. LEUNG ARCHITECTS INC.

Suite 300 - 973 West Broadway, Vancouver, British Columbia, Canada V5Z 1K3 Tel 604 736-9711 Fax 604 736-7991

April 19, 2011

## **Sustainability Design and Features**

### Quintet Phase 2 - Canada Sunrise Development Corp.

7733 Firbridge Way, 5900 Minoru Blvd. & 7788 - 7888 Ackroyd Rd., Richmond, B. C.

The Quintet Phase 2 project will include numerous design and material applications that include sustainable measures intended to target a Silver LEED rating, although the project will not be registered for LEED certification.

#### Sustainable Sites:

- by virtue of the site location in close proximity to services, transit, recreation and necessities of daily life will reduce automobile use as well as promote general personal well being.
- treatment of dewatering ground water for quantity and quality during excavation and construction will be enhanced to the most recent and more stringent environmental code requirements so that ground water re-entering the storm system will be both cleaner and less chemically toxic.
- heat island effect of the completed project will be reduced as a result of the extensive landscaped courtyard, green roof and selected roof treatment materials.

#### Water Efficiency:

- Quintet will be designed and constructed in compliance with the 2006 edition of Part 10 of the British Columbia Building Code for Energy and Water Efficiency and with ANSI/ASHRAE/IESNA 90.1, Energy Standard for Buildings.
- green roof and landscaped areas will incorporate a water harvesting irrigation system to reuse rain water.
- water use reduction will be achieved using low flow and low consumption domestic plumbing fixtures.

#### Energy & Atmosphere:

- the Community Centre and University shell building will be designed to target Silver LEED rating for building shell structures for energy performance and refrigerant management.
- domestic kitchen appliances will include Energy Star rated appliances.
- interior lighting will include the use of CFL and low-voltage halogen lamp light fixtures.
- residential split system A/C interlocked with suite electrical heating to minimize energy consumption.
- low-e glazing throughout to temper summer heat gain and winter heat loss.

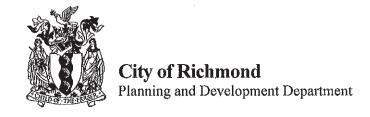
#### Materials and Resources:

- construction activities on site will involve waste management procedures to segregate and divert recyclable waste materials from disposal.
- FSC certified wood products have been specified for floor finishes.
- while some finish materials are yet to be specified, where feasible, regional sourcing of these materials will be selected.
- the raft slab foundation and core will include the use of recycled fly ash in the concrete mixture reduces cement content requirements yet enhances the performance of the concrete structure.

#### Indoor Environmental Quality:

- low emitting finishes to be specified throughout residential suites and common areas.
- daylight access to suites is maximized with full or near full height windows as well as Community Centre and University.
- Community Centre and University will include daylight management strategies including light shelves to bring daylight deeper into interior spaces and control brightness and glare closer to window walls.

#### W. T. LEUNG ARCHITECTS INC.



## **Development Permit**

No. DP 11-564210

To the Holder:

PHILEO DEVELOPMENT CORP.

Property Address:

5900 MINORU BOULEVARD

Address:

C/O W. T. LEUNG ARCHITECTS INC.

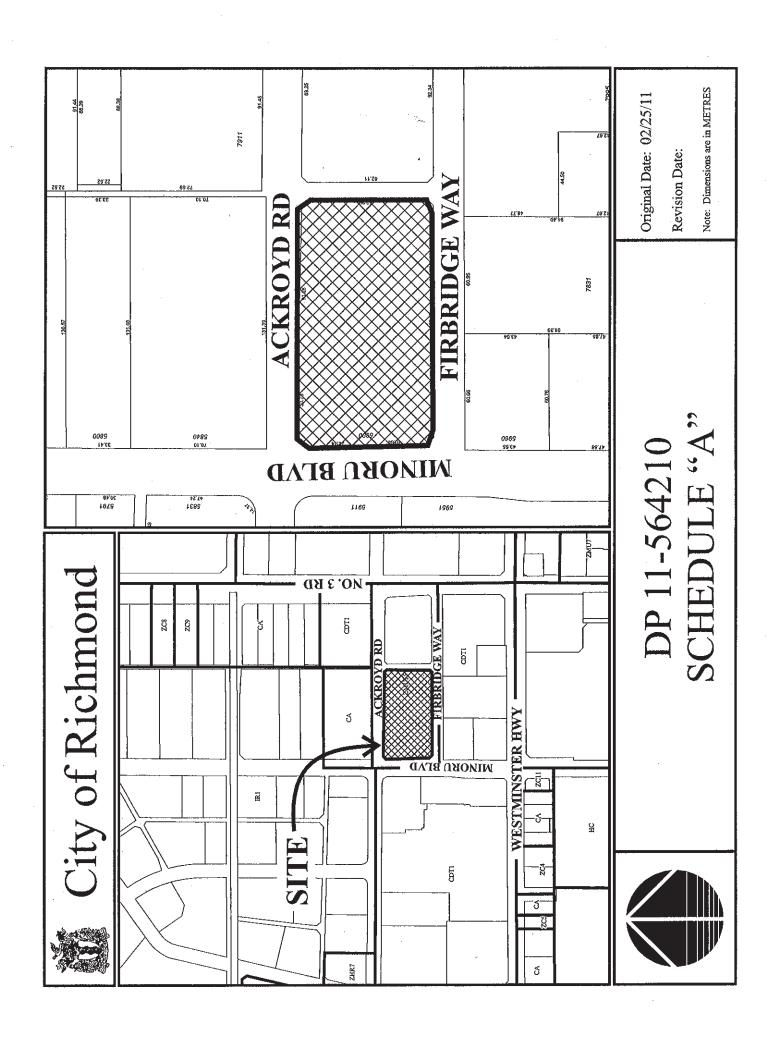
SUITE 300 - 973 WEST BROADWAY

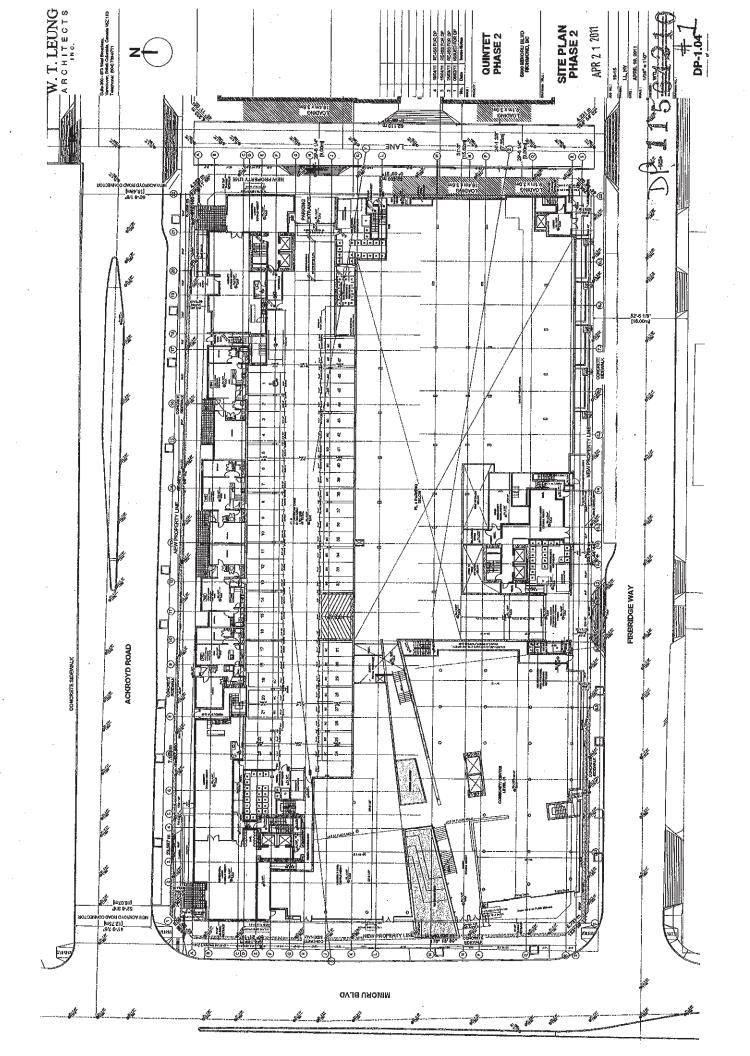
VANCOUVER, BC V5Z 1K3

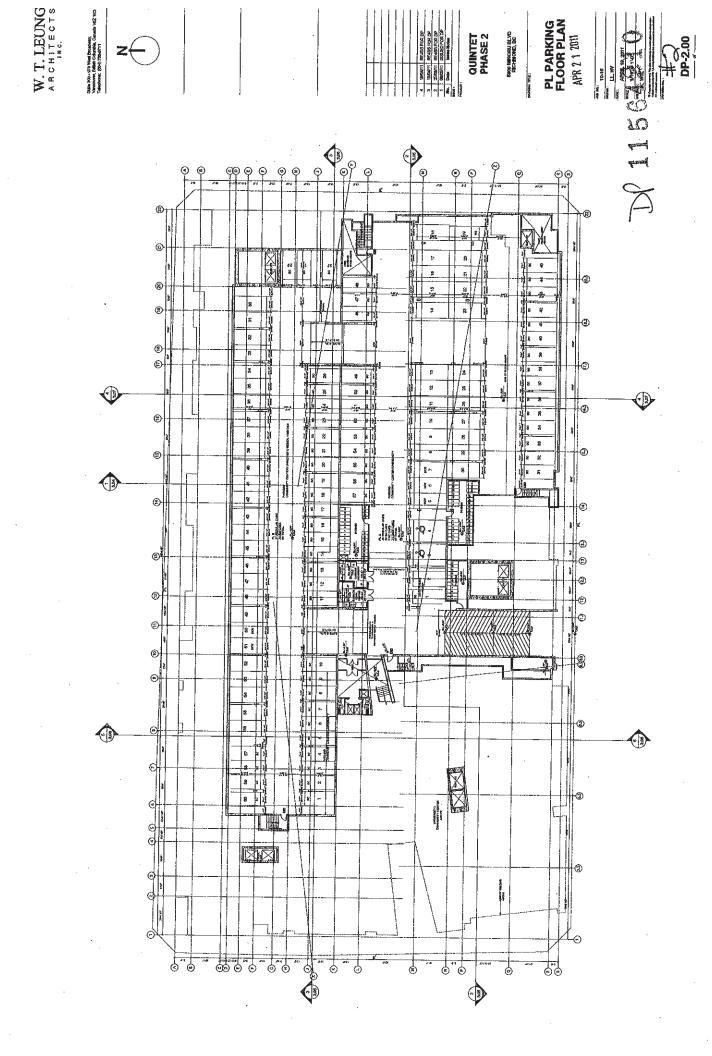
- 1. This Development Permit is issued subject to compliance with all of the Bylaws of the City applicable thereto, except as specifically varied or supplemented by this Permit.
- 2. This Development Permit applies to and only to those lands shown cross-hatched on the attached Schedule "A" and any and all buildings, structures and other development thereon.
- 3. The "Richmond Zoning Bylaw 8500" is hereby varied to:
  - a) Reduce the minimum required setback from Firbridge Way from 3.0 m to 1.5 m for the portion of the development consisting of the Community Centre/Post Secondary Institution;
  - b) Reduce the total number of required short-term bicycle parking to 60 stalls;
  - c) Increase the permitted lot coverage to 90%; and
  - d) Reduce the resident and visitor parking requirement by 13.3%.
- 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 #23 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 \$351,879.00 for ground level landscaping and \$933,152.00 for podium level landscaping 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.

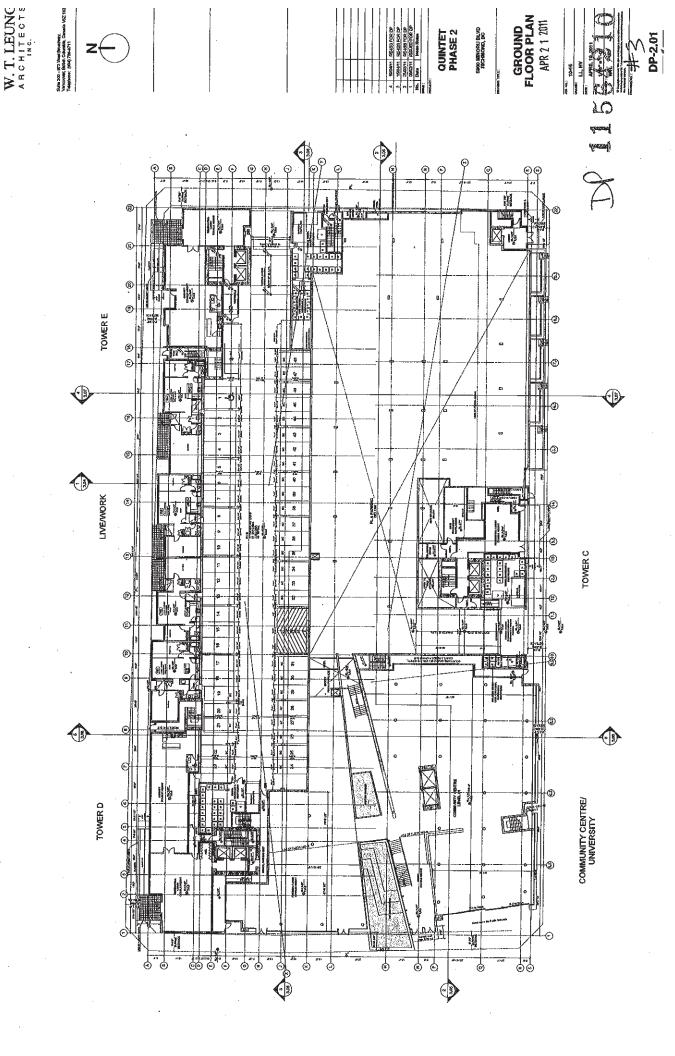
# **Development Permit**

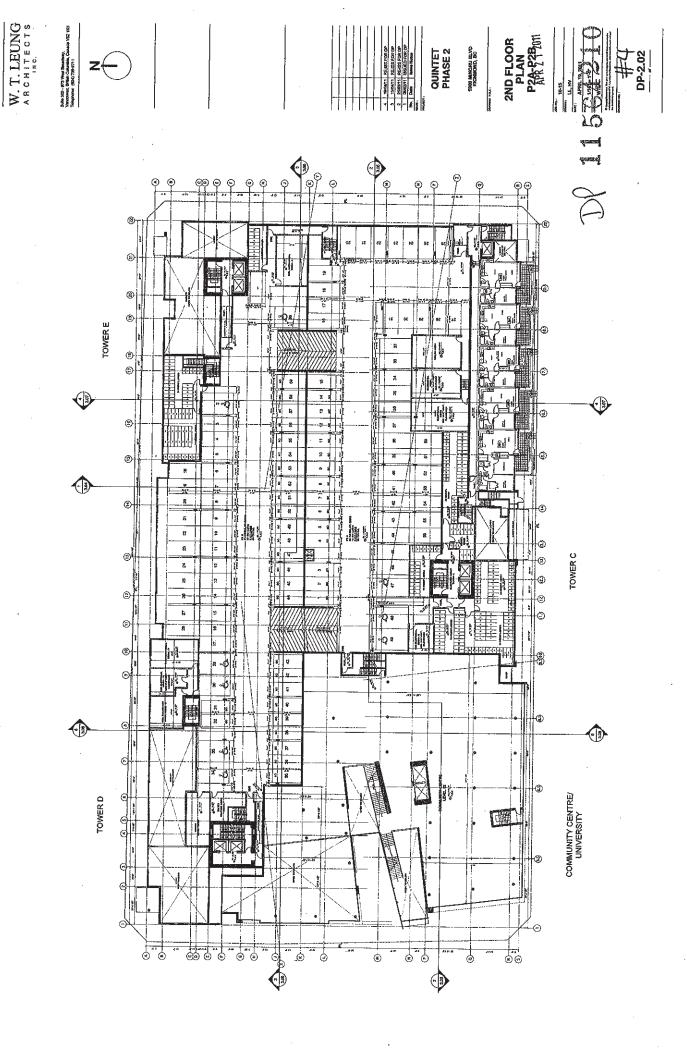
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| To the Holder:                | PHILEO DEVE   | PHILEO DEVELOPMENT CORP.  |           |  |  |  |  |  |
| Property Address:             | 5900 MINORU   | 5900 MINORU BOULEVARD   |           |  |  |  |  |  |
| Address:                      | SUITE 300 - 9   | C/O W. T. LEUNG ARCHITECTS INC.<br>SUITE 300 – 973 WEST BROADWAY<br>VANCOUVER, BC V5Z 1K3 |           |  |  |  |  |  |
|                               | oped generally in accordance with th<br>and any plans and specifications atta |   |           |  |  |  |  |  |
| This Permit is not a E        | Building Permit.  |   |           |  |  |  |  |  |
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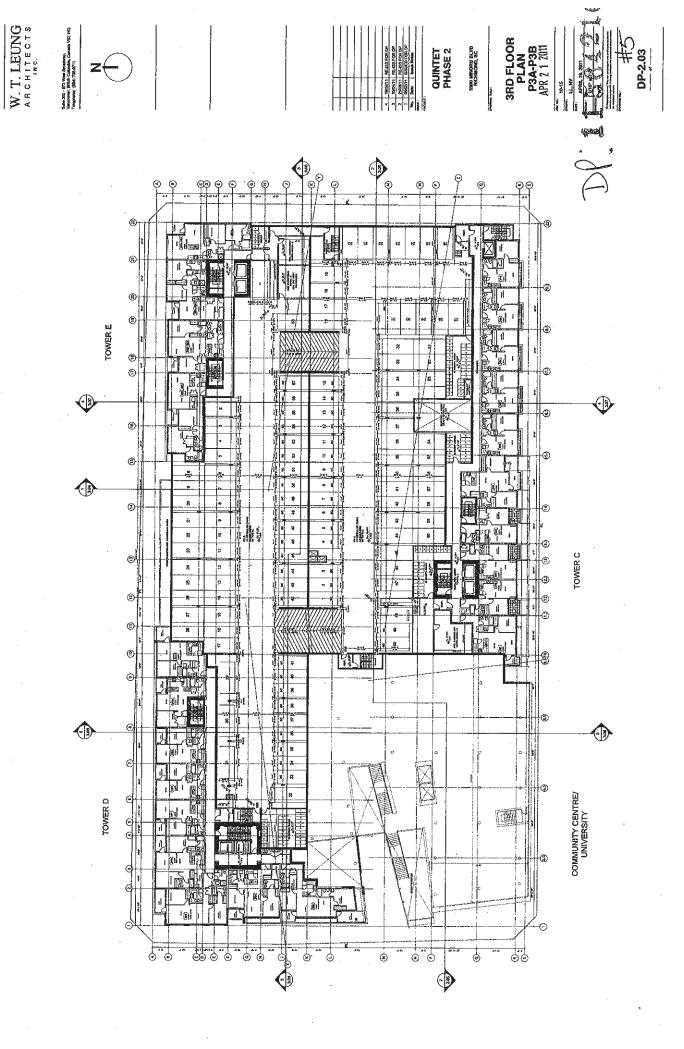


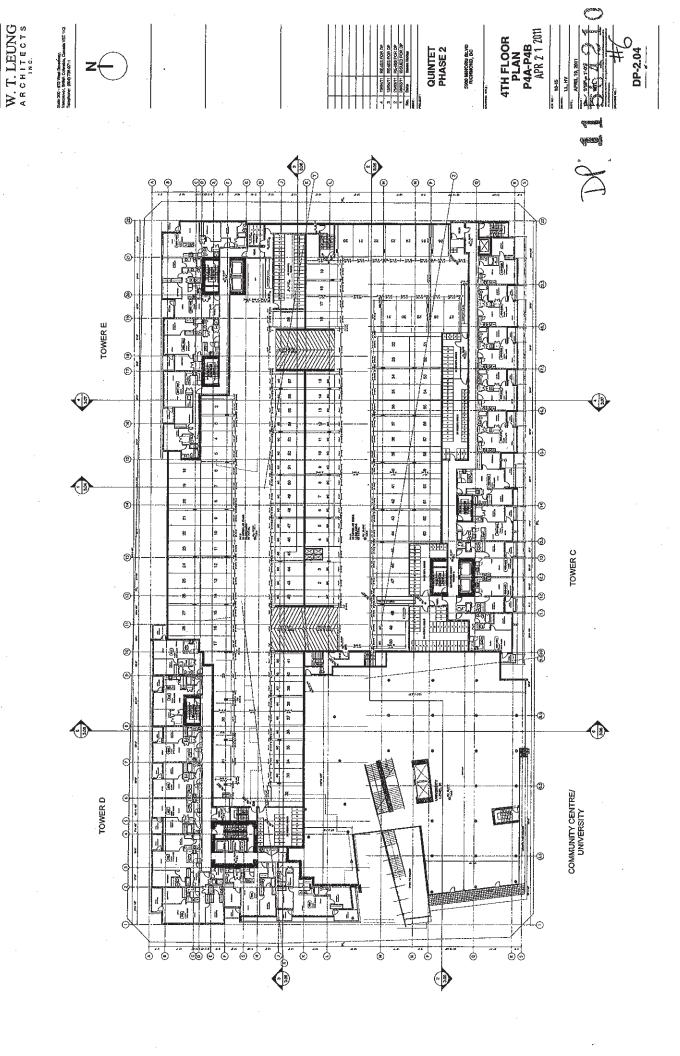


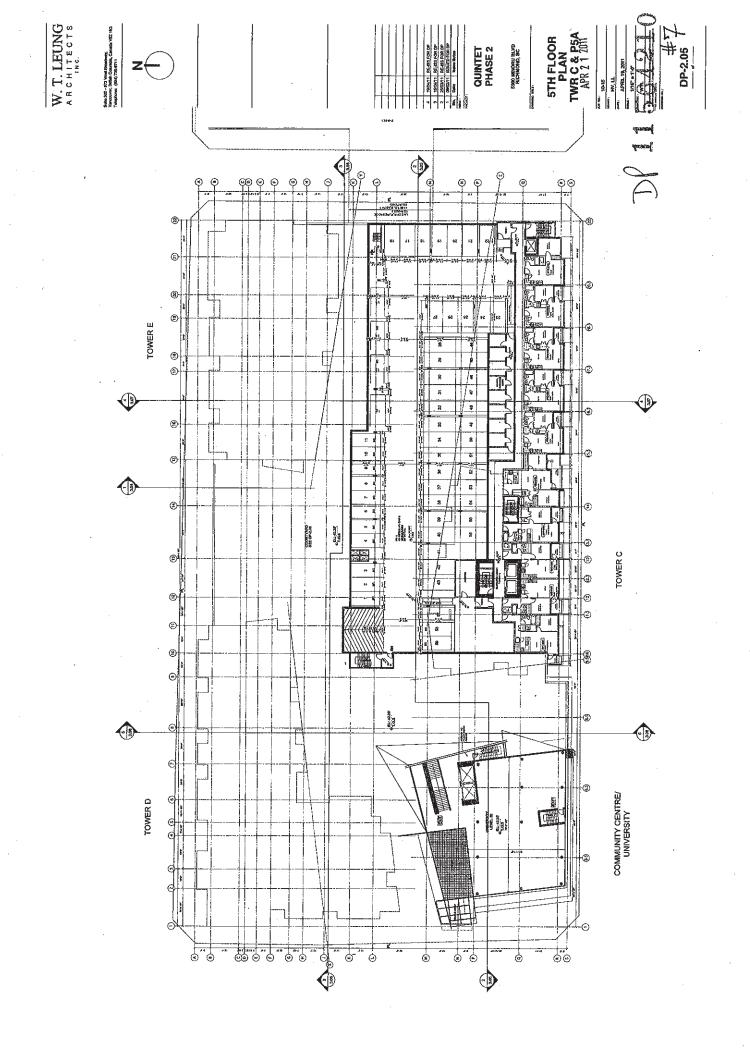


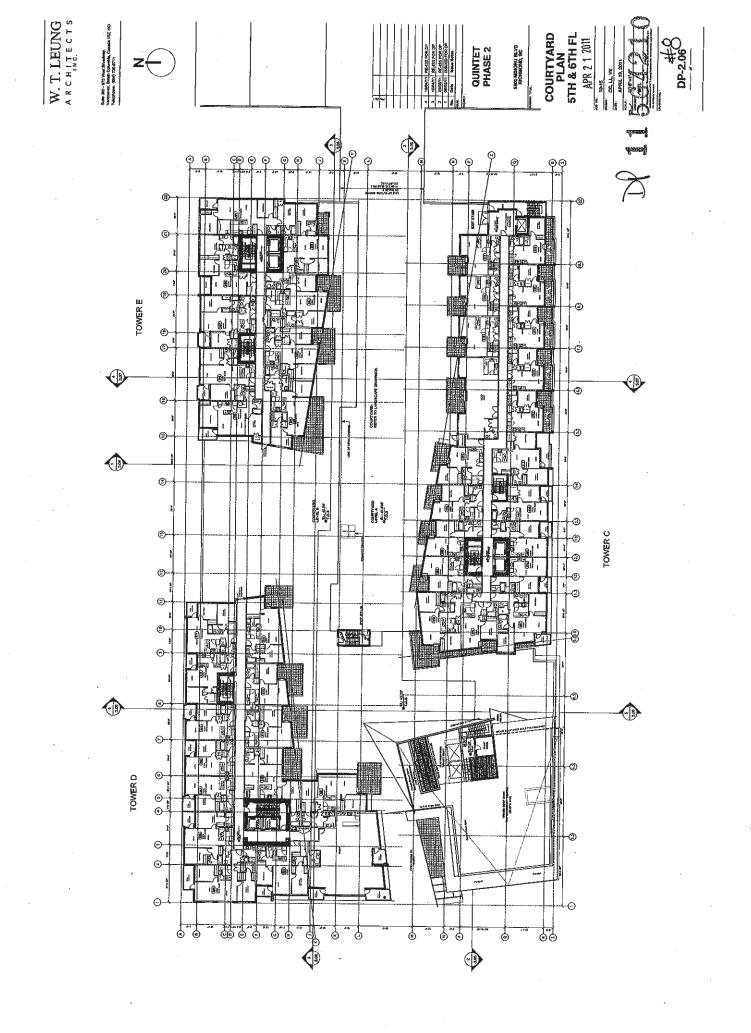


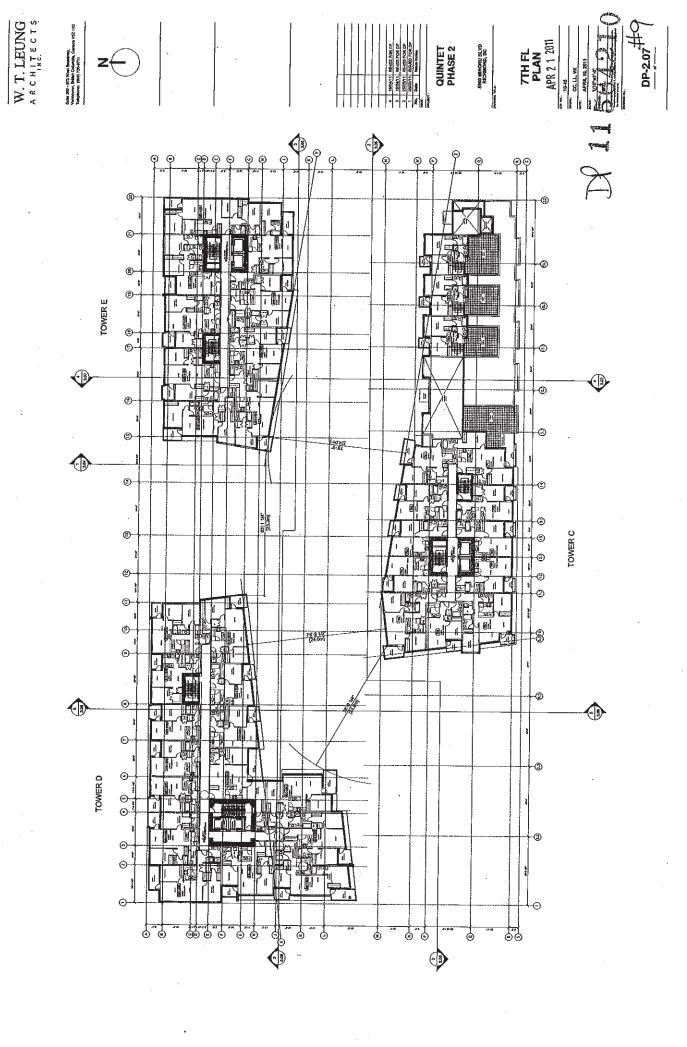


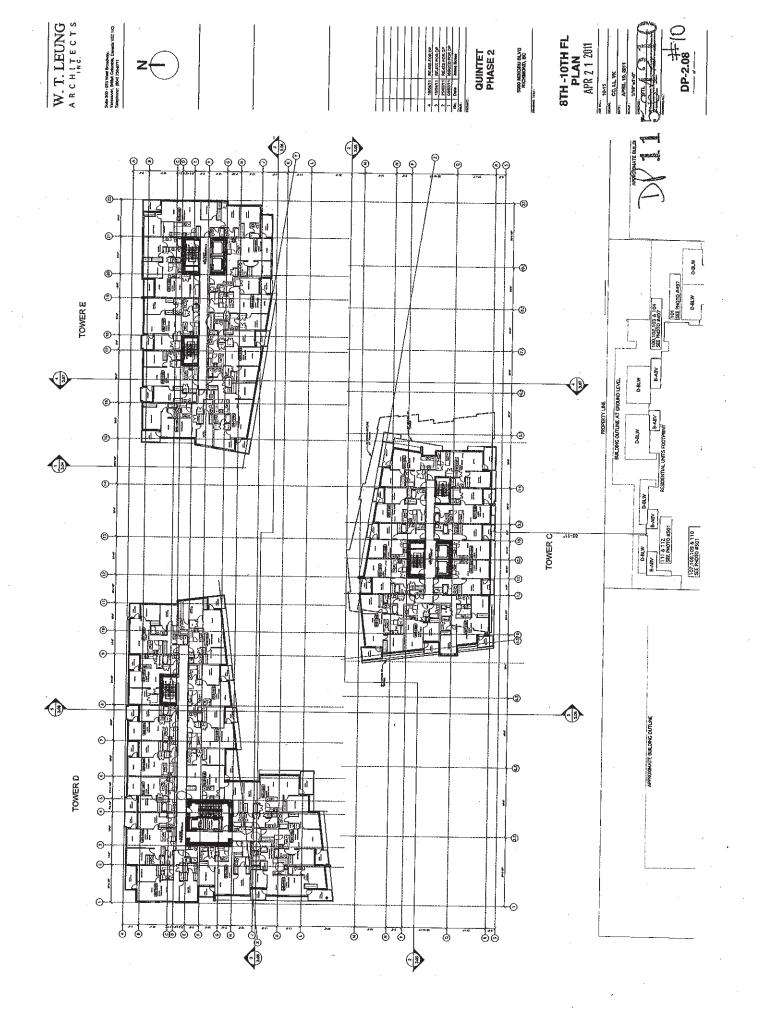


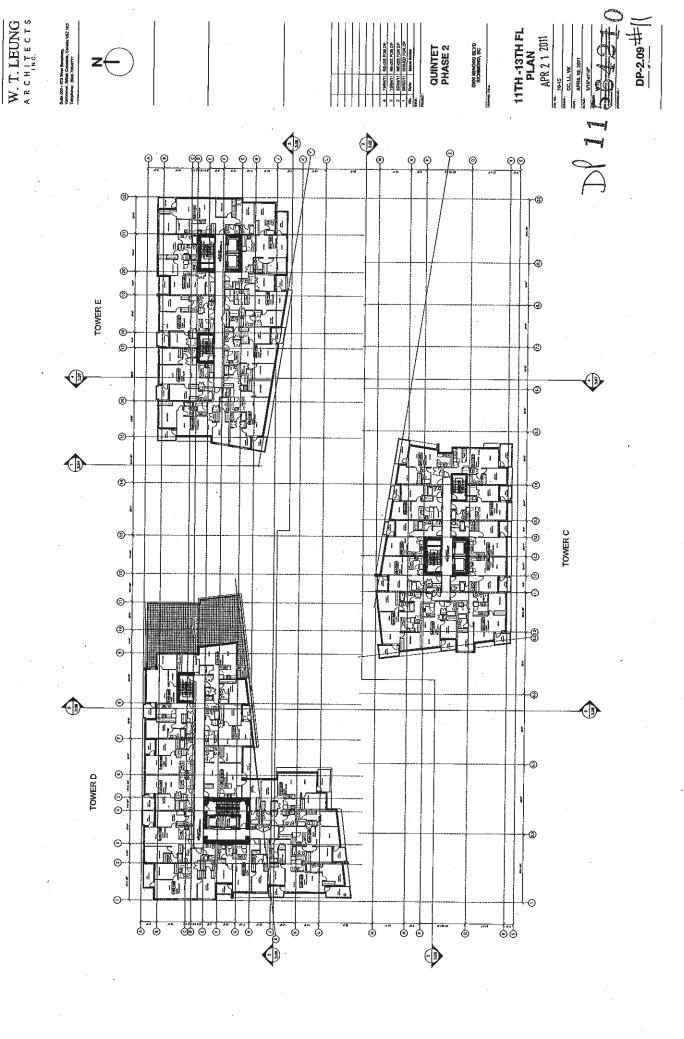


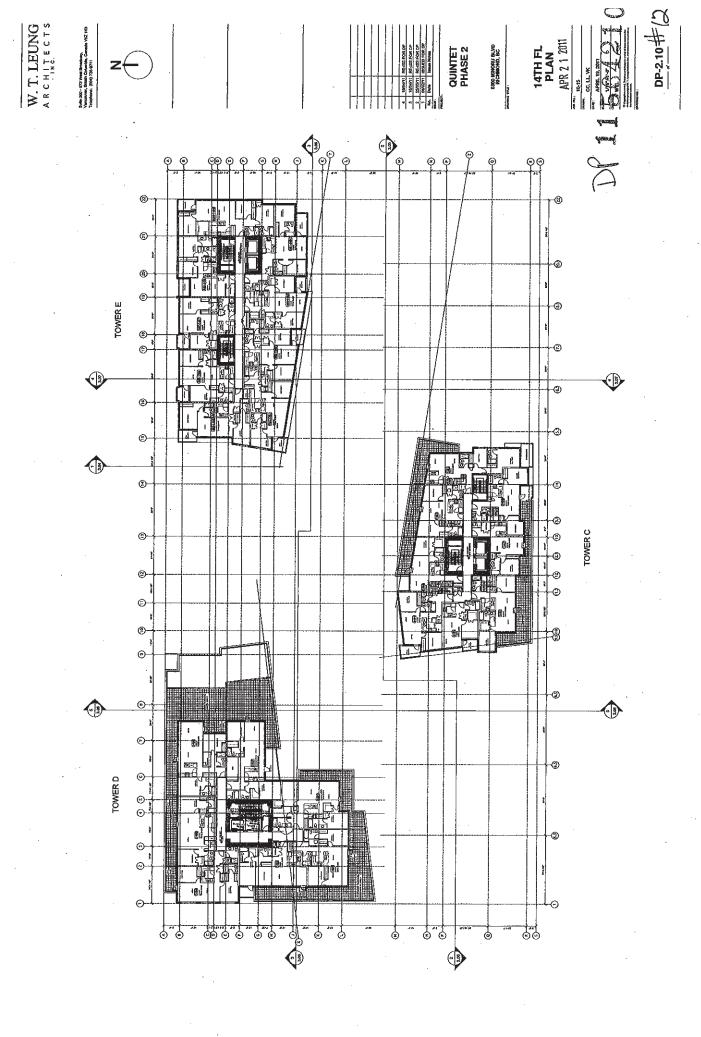


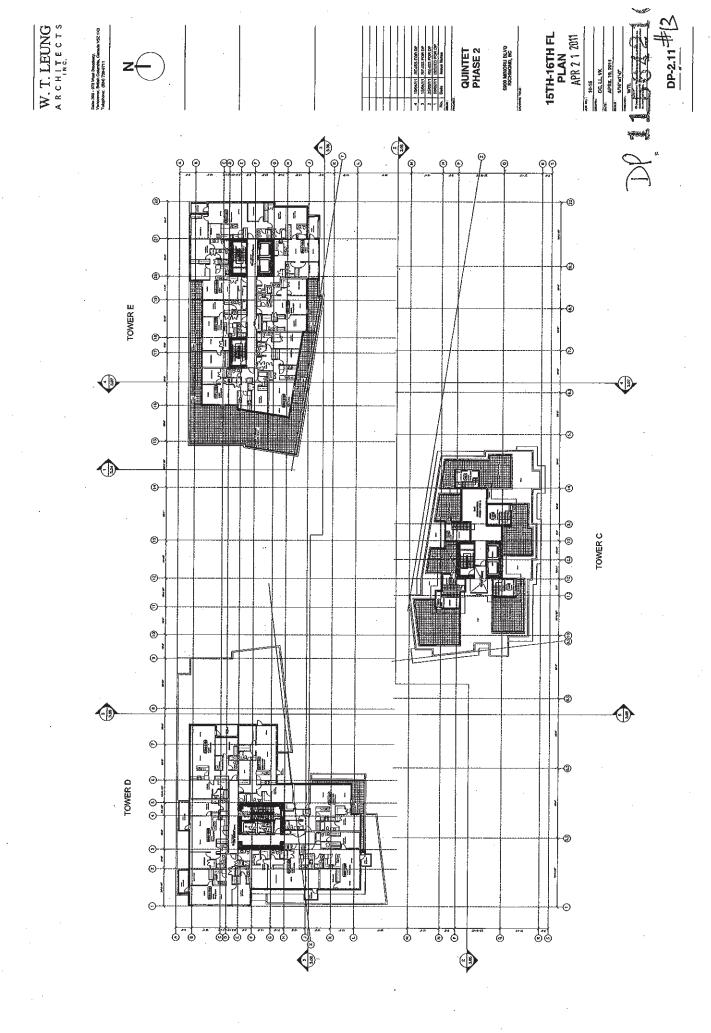


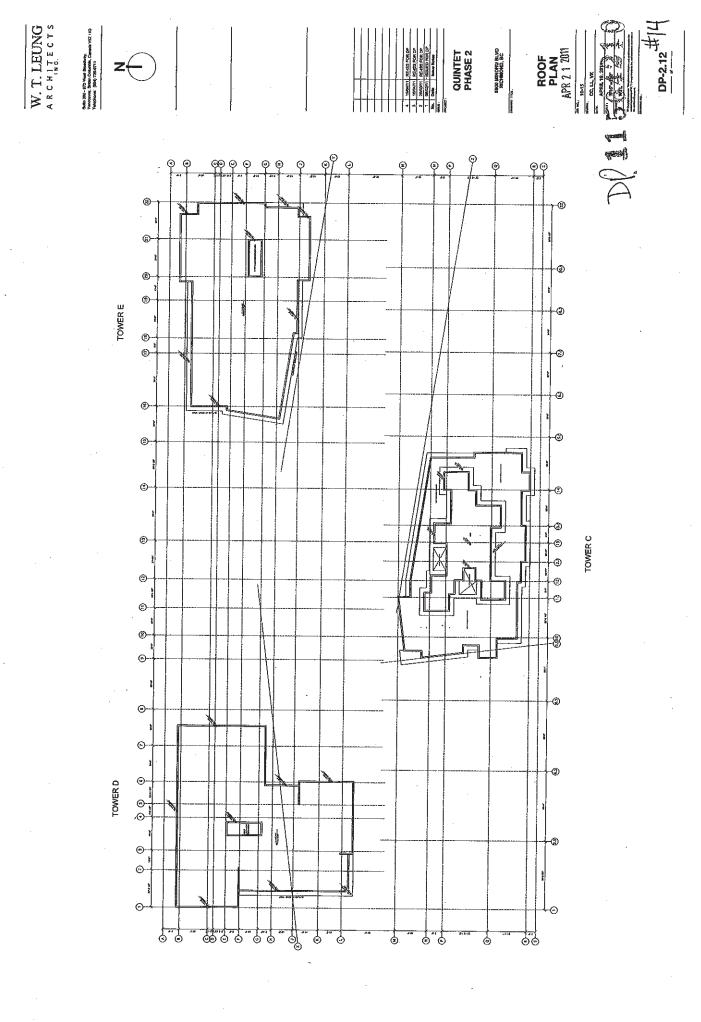


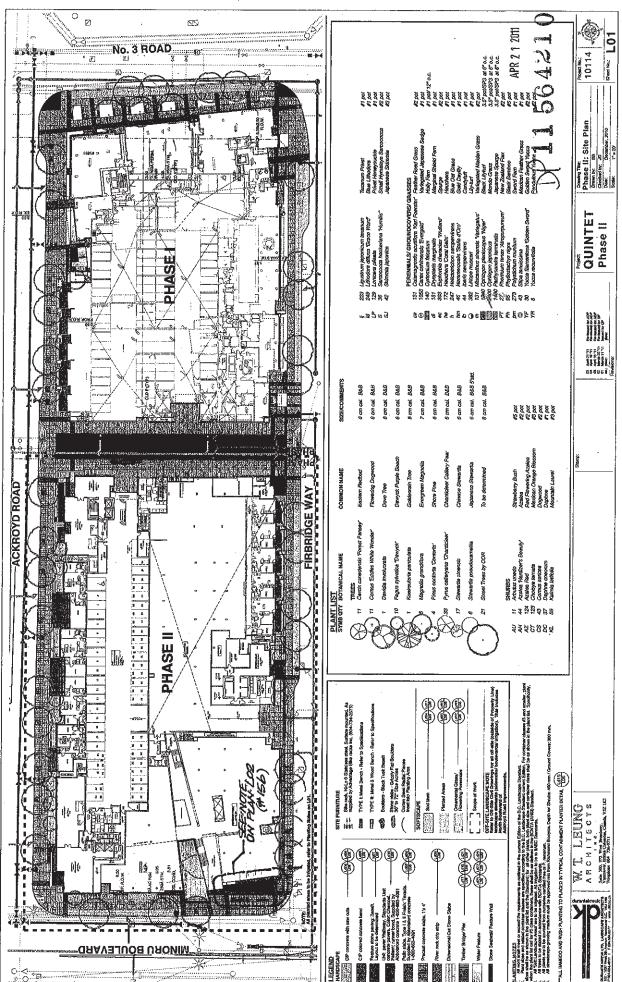




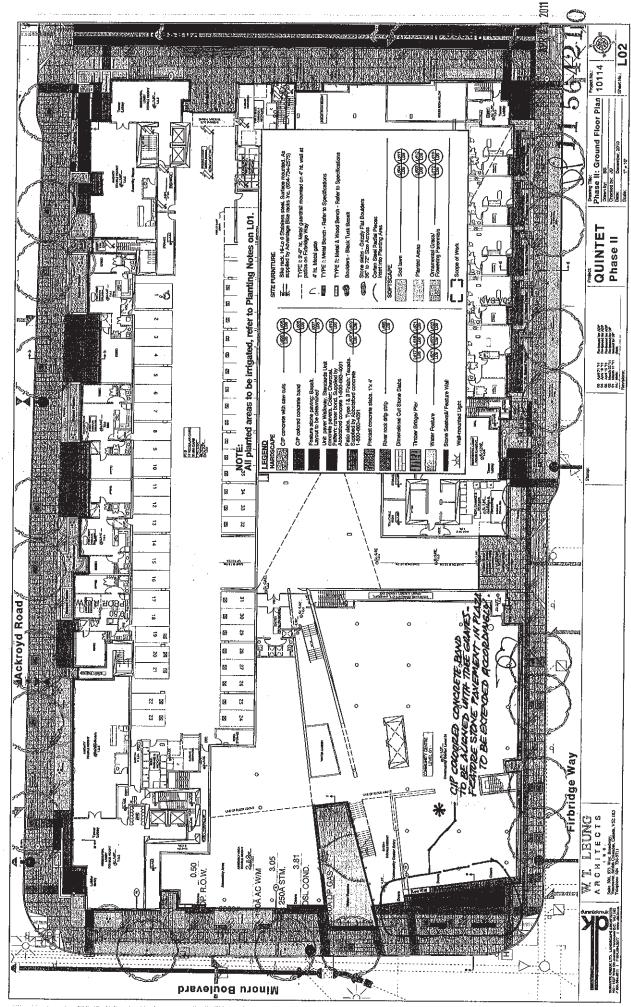






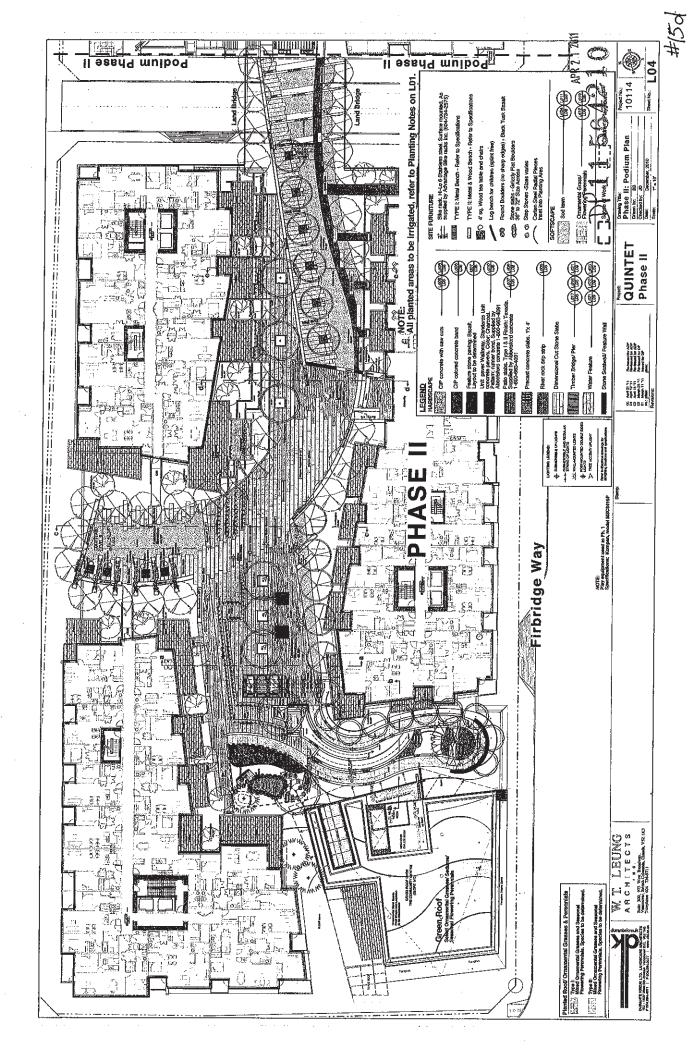


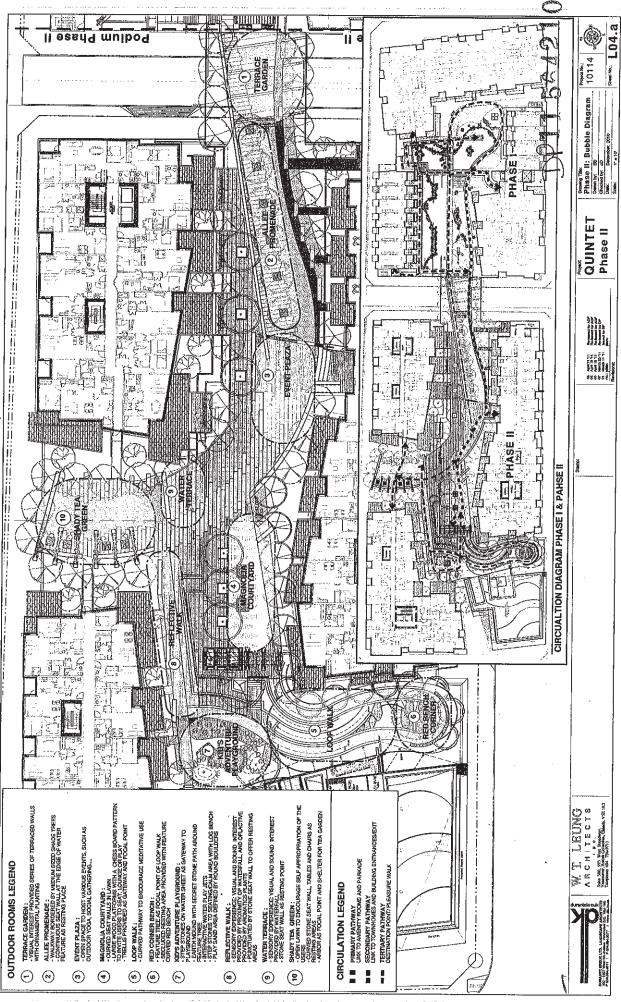
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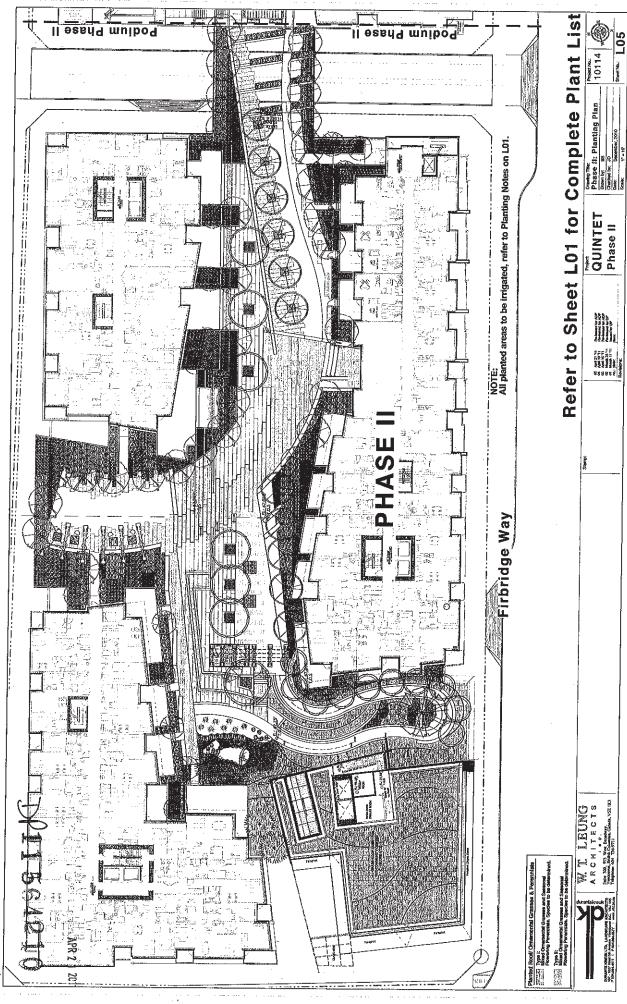
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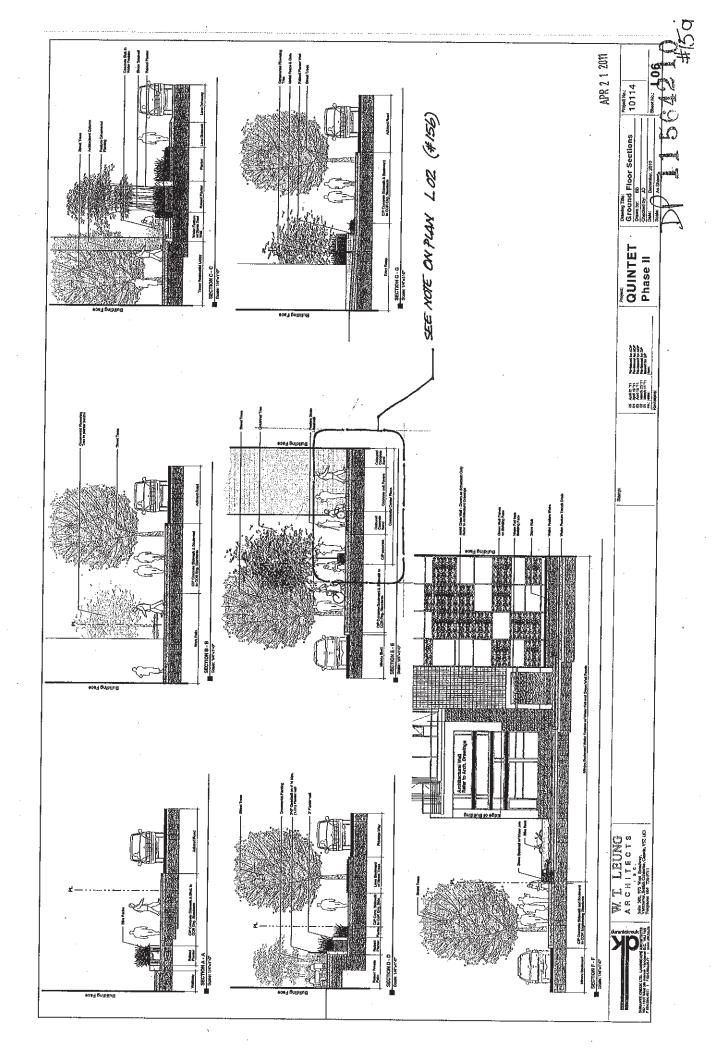


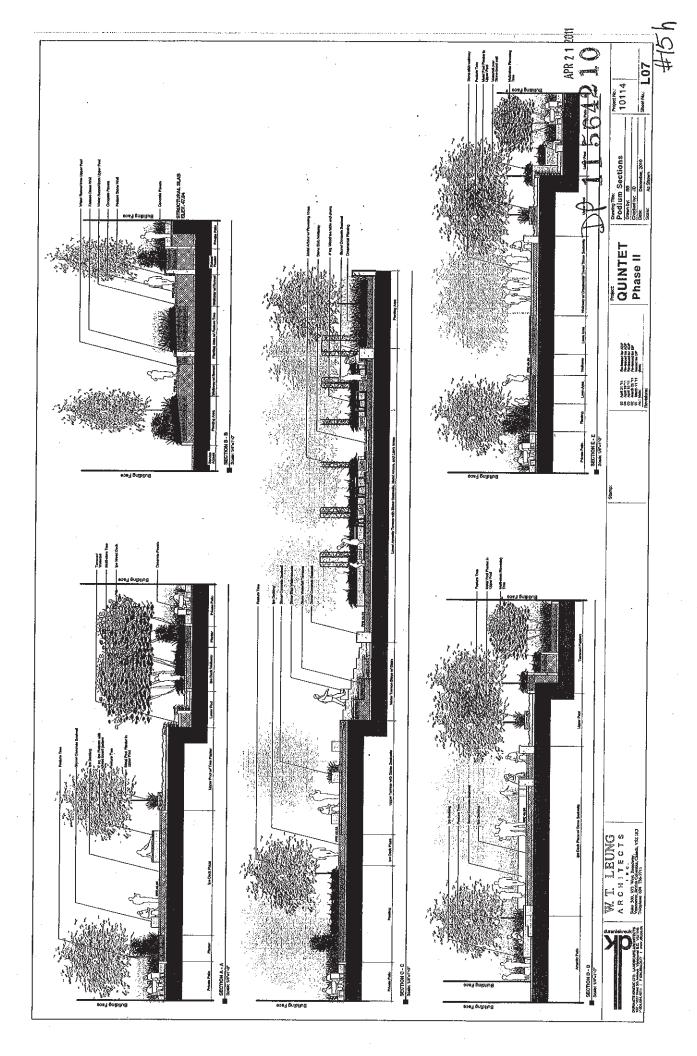


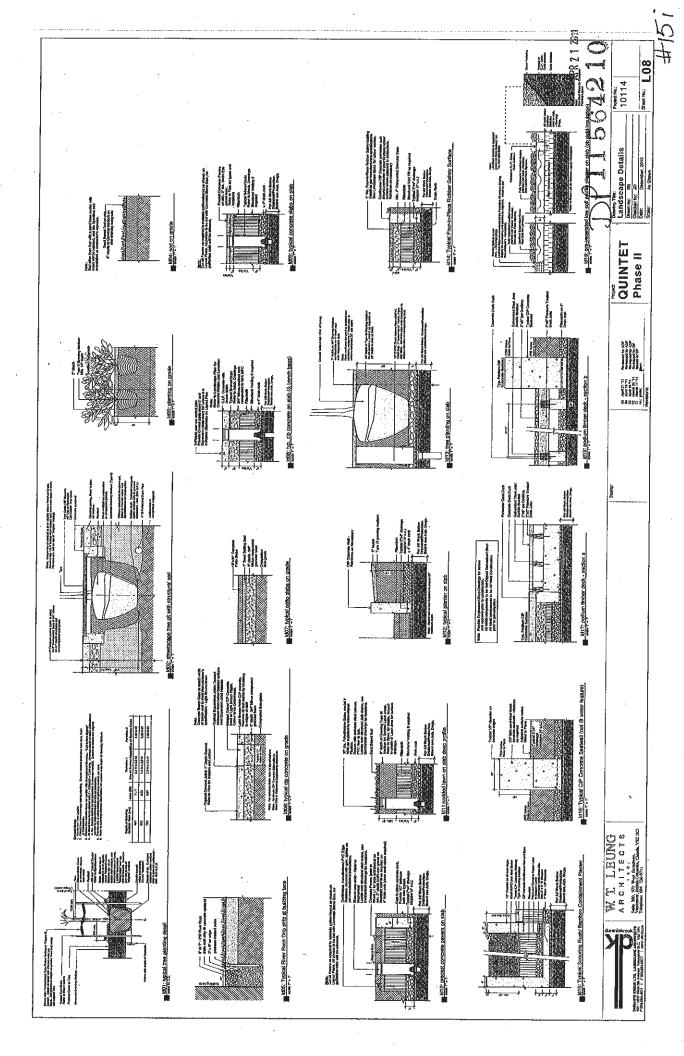


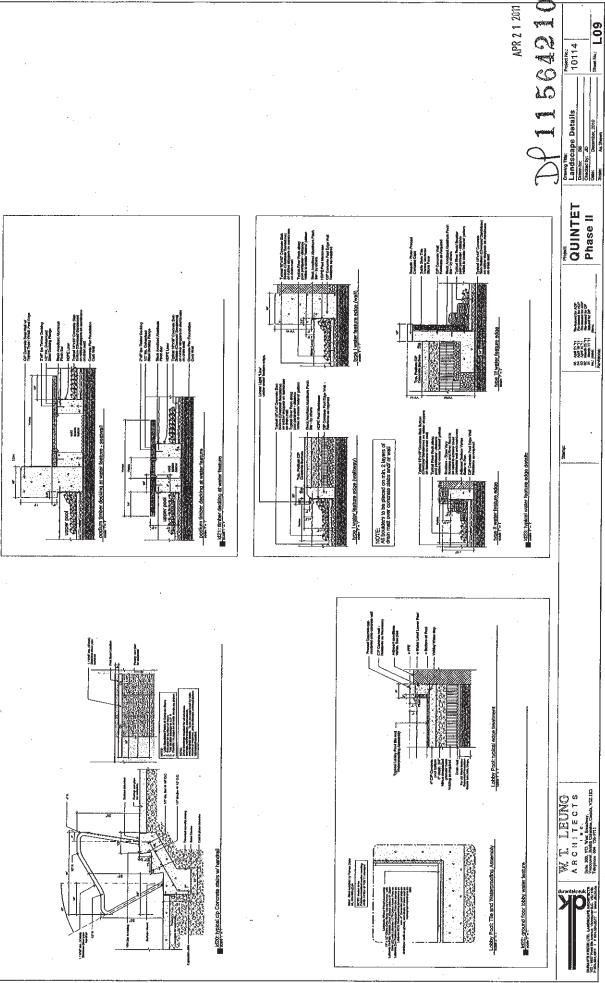


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W. T. LEUNCARCHITECT Suffe 300 - 472 West Broadway, Vencouver, Setieh Colembia, Camach VIIZ 115 Telephone: (post) 736-4711

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W. T. LEUNG
ARCHITECTS

Subo 300 - 972 Viter Broadway, Vancovers, Billigh Celeption, Camada VSZ 1103, Telephone: (\$00), 735-0711

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5900 MINORU BLYD RUCHMORD, BC

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Subtro 360 - 973 West Broadway, Vendouvor, British Columbia, Cemado VEZ 153 Tolephone: (654) 736-5711

QUINTET PHASE 2

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TOWER C WEST ELEVATION

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TOWER C WEST ELEVATION / TOWER D SECTION SECTION 5

#### SITE DATA

CHINC ADDRESS 7788/ 7888 ACKGOYD RD, 5000 MINORU BLVD, 7735 FIRBRIDGE WAY, RICHMOND, B. C.

LEGAL DESCRIPTION LOT A SECTION 5 BLK 4 NORTH PANGE 6 WEST PLAN BOP 45612

SITE DINIENSIONS 129.09m x 70.60m/ 423.52 x 231.62\*

STTE AREA PHASE: 2
STTE AREA PHASE: 4.2 COMBINED
11,910.1 SOM / 128,166 SF (PRE-SUBDIVISION)
20,586.3 SOM / 221,586.5 SF (PRE-SUBDIVISION)
8,891.3 SOM / 167,225.6 SF (POST-SUBDIVISION)
15,525.3 SOM / 167,225.6 SF (POST-SUBDIVISION)

FLOOR AREA RATIO (FAR) MAXIMUM FAR ALLOWED: 3.0 FAR

PROPOSED 3.24 FAR (PRE-SUBDIVISION)
4.30 FAR (POST SUBDIVISION)
PHASE 1 AND 2 COMBINED

# PROJECT DATA PHASE 2

| RESIDENTIAL GROSS AREA                 | 386,980.79 SF  | 35,952.76 m2 |
|--|----------------|--------------|
| + UNIVERSITY/ COMMUNETY CENTER         | + 55,804,99 SF | 5,184.28 m2  |
| - VOID EXCLUSIONS                      | - 19,681.71 SF | 1.828.43 m2  |
| = NET TOTAL AREA PHASE 2               | 423,104.06 SF  | 39.308.61 m2 |
| = NET TOTAL AREA PHASE 1 & 2 COMBINED  | 717,883.68 SF  | 66 688 34 m2 |
| NDOOR AMENITY PHASE 2 (FAR EXCL. AREA) | 5952,72 SF     | 359.01 m2    |
| GROSS FLOOR AREA PHASE 2               | 429,056.78 SF  | 39.861.62 m2 |
| OUTDOOR AMENTY PHASE 2                 | 38,333,00 SF   | 3.561.23 m2  |

### PARKING SUMMARY

|  | REQUIRED | PROVIDED                       | Sum Cane                                  | 9            |
|--|----------|--------------------------------|---|--------------|
| RESIDENTIAL                            |          |                                | Charles Course                            | TC CANS      |
| VISITOR (0.2/UNIT)                     | ž        | WITH UNIVERSIT                 | WITH UNIVERSITY/ COMMUNITY CENTER PARKING | NTER PARKING |
| HESIDENT (1.0/JUNT)                    | 418      | 463                            | 57  | 01           |
|  |          |                                |   |              |
| TOTAL                                  | 502      |                                |   |              |
|  |          |                                |   |              |
| UNIVERSITY 25/STUDENT@150 STUDENTS     | 105      | 121                            | 6   | Q            |
| -5625/ STAFF MEMBER @ 25 STAFF MEMBERS |          | INCL. 2 COOP CARS              | v   |              |
| COMM. CENTER 1.7/100m2                 | 100      | 1 COOP CAP - 9 DADICING STALLS | CTALLE                                    |              |

## DRAWING LIST

#### ARCHITECTURAL

QUINTE

ARCHITECTS W. T. LEUNG

Sullio 200 - 973 West Sequebriny, Vancouver, British Columbia, Carada VSZ 11C) Wagbone: (804) 736-9711

|                    | z                       | z                     | PLAN         |                   | . ts                  | OUTH                     |                |
|--------------------|-------------------------|-----------------------|--------------|-------------------|-----------------------|--------------------------|----------------|
|                    | VICINITY & CONTEXT PLAN | ROOF & COURTYARD PLAN | PHASE 2 SITE | SITE PLAN PHASE 1 | STREETSCAPE EAST/WEST | STREETSCAPE NORTH/ SOUTH | DIAGRAM        |
| <b>COVER SHEET</b> | VICINITY &              | ROOF & CO             | PHASE 1 &    | SITE PLAN         | STREETSC              | STREETSC                 | SHADOW DIAGRAM |
| DP-1,00            | DP-1.01                 | OP-1.02               | DP-1.03      | DP-1.04           | OP-105                | 80.1                     | DP-1.07        |

INSTITUTIONAL & COMMUNITY BASED DEVELOPMENT

A COMPREHENSIVE MIXED-USE

PHASE 2

RESIDENTIAL,

GROUND FI. PLAN P18
AND FI. PLAN P28
SID FLOOR PLAN P34 P38
FITH CLOOR PLAN P34 P48
STH FLOOR PLAN TWR C. P54
STH FLOOR PLAN TWR C. P54
STH-STH FL PLAN - COURTYARD 7TH FL PLAN 8TH - 10TH FL PLAN 11TH - 13TH FL PLAN 14TH FL PLAN 15TH FL PLAN ROOF PLAN DP-2:09 DP-2:10 DP-2:11 DP-2:12

TOWER D 6TH - 10TH FL PLAN TOWER D 11TH - 13TH FL PLAN TOWER C 8TH - 13TH FL PLAN TOWER C 14TH FL PLAN TOWER C 15TH FL PLAN TOWER C 5TH FL PLAN TOWER C 7TH FL PLAN TOWER D STH FL PLAN DP-2.52 DP-2.53 DP-2.54 DP-2.55 DP-2.61 DP-2.62 DP-2.63 DP-2.64

TOWER E STH FL PLAN TOWER E 6TH - 14TH FL PLAN TOWER E 15TH - 16TH PL. PLAN TOWER D 14TH - 16TH FL PLAN DP-2.71

VIEW FROM ACKROYD AND MINORU

TOWER E GAST & WEST ELEVATION SECTION 1 TOWER C NORTH BENATION SECTION 2 TOWER D & E SOUTH ELEVATION SECTION 3 TOWER C EAST ELEVATION SECTION 4 TOWER C WEST ELEVATION SECTION 5 TOWER D WEST & SOUTH ELEVATION OWER D & E NORTH ELEVATION

QUINTET PHASE 2

GRED MENCHEU BLVD RICHMENIO, BC

VIEW FROM MINORU & FIRBRIDGE WAY

ENVIRONENTAL ENGINEER KEYSTONE ENVIRONMENTAL LTD.

LAND SURVEYOR MATSON PECK & TOPLISS CHANTITY SURVEYOR BTY GROUP

WATER FEATURE VINCENT HELTON & ASSOCIATES LTD.

STRUCTURAL ENGINEER READ JONES CHRISTOFFERSEN

INTERIOR DESIGN BBA DESIGN CONSULTANTS INC.

**CIVIL ENGINEER** MPT ENGINEERING LTD.

W.T. LEUNG ARCHITECTS INC. LANDSCAPE ARCHITECT DURANTE KREUK LTD.

RESIDENTIAL UNIT SUMMARY:

TOWER APARTMENTS

12 8 2

LIVE/WORK TOWER E TOWERC TOWER D

PROJECT CONSULTANT TEAM

8 K

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BACYCLES RESIDENTAL (1.25/UNT) UNIVERSITY 1/10 STUDENTS, 1/4 STAFF MEMBERS COUNT CENTER (1/100az)

TITLE PROJECT DATA

0000

**ELECTRICAL ENGINEER** NEMETZ (S/A) & ASSOCIATES LTD.

STERLING, COOPER & ASSOCIATES

**WECHANICAL ENGINEER** 

TRAFFIC CONSULTANT
BUILDING ENVELOPE CONSULTANT
IS! ENGINEERING & LAND SERVICES LTD. LEVELTON CONSULTANTS LTD. GEOTECHNICAL ENGINEER TROW ASSOCIATES INC.

CODE CONSULTANT CFT ENGINEERING

Addition in Piccing Provisions:

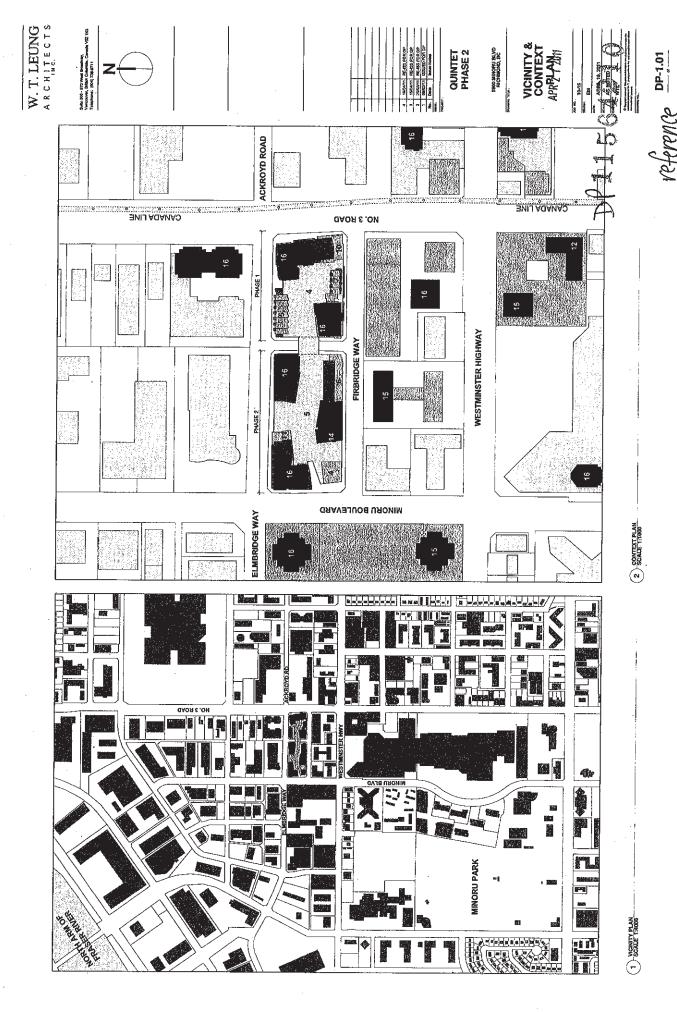
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DP-1.00



W. T. LEUNG 1011 2 1 2011 seems 1016 seems 1.00 SITE PLAN PHASE 1 & 2 QUINTET PHASE 2

Me from the op-1.03

STREETSCAPE PHASE 12842 QUINTET PHASE 2 STREETSCAPE EAST/ NO. 3 ROAD STREETSCAPE WEST/ MINORU BOULEVARD

DP-1.05

W. T. LEUNG

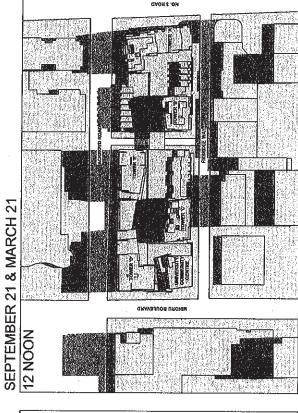
STREETSCAPE PHASE 1 & 2 APR 2 1 2011 Suita 300 - 973 Virus Broadway.
Vancourer, British Columbia, Canada VSZ 11C3
Temphones: (SDA) 739-9711 QUINTET PHASE 2 5000 MINORU BLYD RICHMOND, BC DP-1.06 STREETSCAPE SOUTH HBBRIDGEWAY 5 STREETSCAPE STREETSCAPE NORTH/ ACKROYD ROAD TOWERA TOWERE

W. T. LEUNG



SEPTEMBER 21 & MARCH 21

10 AM



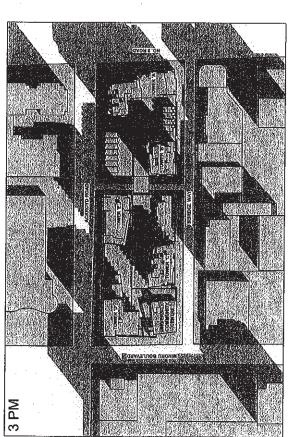
QUINTET PHASE 1

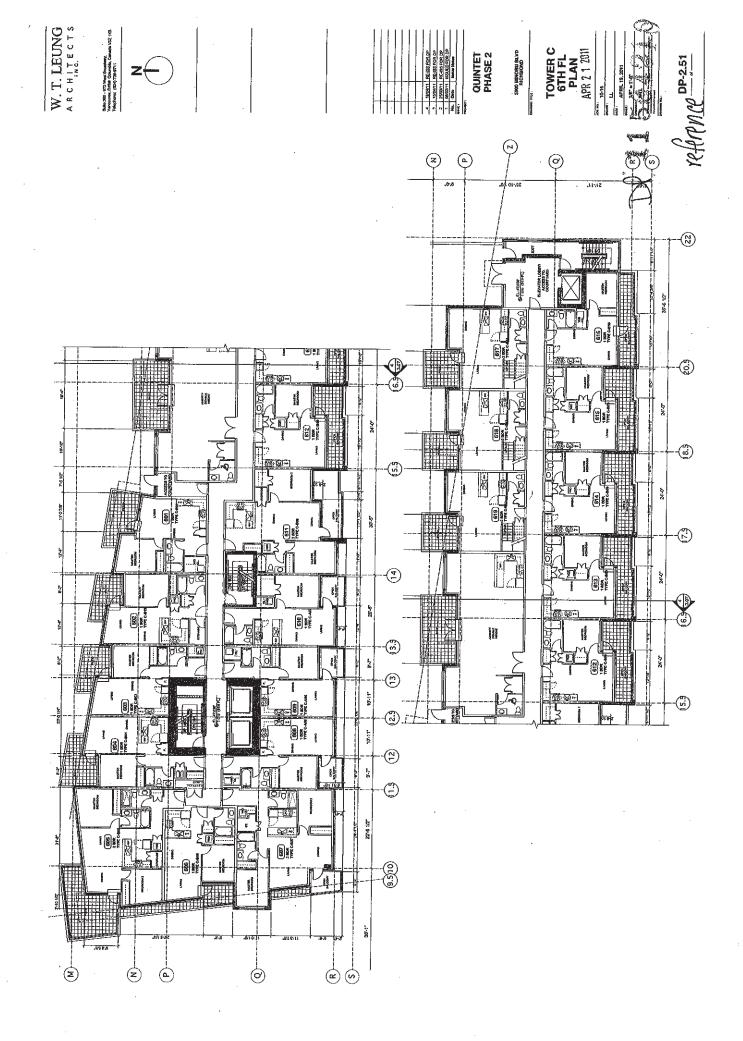
SOND MINORITY BUYD. BEST-SISTI M-3 ROAD RICHMOND

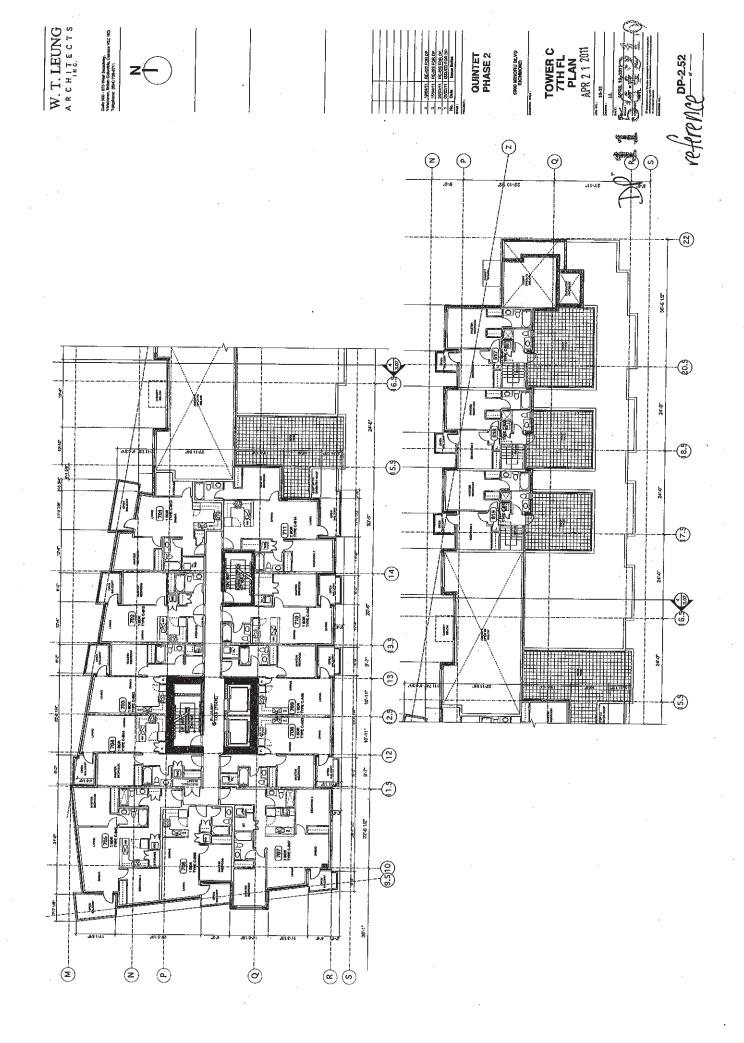
SHADOW DIAGRAM APR 2 1 2011

reference PP-1.07

SEPTEMBER 21 & MARCH 21









QUINTET PHASE 2

TOWER C 8TH-13TH FL PLAN APR 2 1 2011

(a) 0 (2) (R) (Q)

