

Report to Development Permit Panel

To: Development Permit Panel

Date: February 5, 2014

From: Wayne Craig

File: DP 12-612510

Director of Development

Re: Application by Polygon Development 192 Ltd. for a Development Permit at 8311,

8331, 8351, and 8371 Cambie Road and 3651 Sexsmith Road

Staff Recommendation

That a Development Permit be issued which would permit the construction of a three-phase, residential development containing 528 dwellings units at 8311, 8331, 8351, and 8371 Cambie Road and 3651 Sexsmith Road on a site zoned "High Rise Apartment (ZHR12) Capstan Village (City Centre)".

Wayne Craig

Director of Development

WC:spc Att.

Staff Report

Origin

Polygon Development 192 Ltd. has applied to the City of Richmond for permission to develop a three-phase, three tower residential development containing 528 dwelling units at 8311, 8331, 8351, and 8371 Cambie Road and 3651 Sexsmith Road, in the City Centre's Capstan Village.

The site is being rezoned from "Single Detached (RS1/F)" and "Auto-Oriented Commercial (CA)" to "High Rise Apartment (ZHR12) Capstan Village (City Centre)", under Bylaw No. 8903, which received third reading after Public Hearing on November 18, 2013 (RZ 11-591985). In addition to the proposed residential development, the rezoning provides for:

- The establishment of new streets and pedestrian linkages;
- Funding towards the future construction of the Capstan Canada Line station, as per density bonus provisions in City Centre Area Plan (CCAP) and Zoning Bylaw;
- Funding towards the to the City's Affordable Housing Reserve in lieu of building affordable housing units on site, which funds may, at the sole discretion of the City, be used to facilitate the construction of affordable housing units elsewhere within Richmond;
- The replacement of an existing City-owned playing field at 3651 Sexsmith Road (Cambie Field) with a larger City-owned park designed and located to better meet the needs of Capstan Village's emerging residential community and nearby commercial activity in Aberdeen Village; and
- Public art within the proposed park.

The proposed park is envisioned as an important focal point for Capstan Village, providing both passive, neighbourhood-oriented, green space and an attractive venue for a variety of public gatherings and community events (Attachment 1). The proposed park concept and related public consultation process were the subjects of a separate report from the Senior Manager, Parks to the Parks, Recreation, and Cultural Services Committee on September 24, 2013. The first phase of the Council-approved park concept, which includes general grading and landscaping, a children's playground, lighting, and a plaza area, will be constructed by the developer, via the City's standard Servicing Agreement process, beginning this year. Funding for the balance of park development has been approved and construction is targeted for completion in 2019.

All off-site requirements in respect to the subject development have been resolved via RZ 11-591985 and the related Servicing Agreements: SA 12-622318 (tri-party sanitary pump station agreement), SA 13-651753 (park), and SA 12-623061 (road and engineering). No additional Servicing Agreement is required.

Development Information

Please refer to attached Development Application Data Sheet (Attachment 2) for a comparison of the proposed development data with the relevant Bylaw requirements.

Background

Existing development surrounding the subject site is as follows:

North: The residential building backs onto "Union Square", a low-density (0.5 FAR), low-rise, strip mall zoned "Auto-Oriented Commercial (CA)". Redevelopment of this site with high-density residential uses is permitted under the CCAP, but is not imminent, as the site is strata-titled and in good repair.

East: The residential site abuts several single-family lots zoned "Single Detached (RS1/F)". The CCAP designates these lots for future high/mid-rise residential uses and the eastward extension of Brown Road (to Sexsmith Road). There are currently no applications for rezoning these lots, but there is no apparent barrier to their redevelopment.

West: Across Hazelbridge Way from the residential site are existing low/medium-density, low/mid-rise commercial and hotel properties (e.g., Yaohan Centre, President Plaza, Radison Hotel) that are predominantly zoned "Auto-Oriented Commercial (CA)". Redevelopment of this area with high-density, mixed-use development is generally permitted under the CCAP, but there are no active development proposals at present.

South: Across the proposed eastward extension of Brown Road from the residential site is "Continental Shopping Centre". Like "Union Square", this is a low-density (0.5 FAR) strip mall that is zoned "Auto-Oriented Commercial (CA)" and designated for higher density, mixed-use development, but it is not expected to redevelop in the near term, as it is strata-titled and in good repair.

Rezoning and Public Hearing Results

The Public Hearing for the rezoning of this site was held on November 18, 2013. No concerns about rezoning the property were expressed at the Public Hearing; however, during the rezoning process, various design issues were identified to be resolved at the Development Permit (DP) stage. Staff and the applicant have worked together to address these issues. The applicant's response to each issue is described in **bold italics**.

- 1) The development's parking podium, the north side of which backs onto the rear service area of the adjacent strip mall, requires screening and other view mitigation measures as it will be visible from the mall and surrounding streets (until such time as the mall is redeveloped).
 - Decorative wall treatments, building setbacks at the upper level of the podium, and planting have been incorporated into the north facade of the parkade to enhance its appearance. In addition, the developer is working with the neighbouring owner to provide for the replacement and enhancement of the shopping centre's existing landscaping (along the common property line of the two sites) at the developer's sole cost. Prior to DP issuance, the developer will make application for a Tree Removal (Non-Development) Permit with respect to the affected trees on the neighbour's property and enter into a legal agreement with the City for landscape replacement (to be complete prior to occupancy of the development's final phase), secured by a Letter of Credit valued at \$45,881.00 (based on a sealed cost estimate provided by a registered Landscape Architect, including labour and 10% contingency (Attachment 3).

- 2) Steps should be taken to enhance the visual distinction between the project's three phases, paying particular attention to the west tower proposed for the head of the park.
 - The developer has introduced variations in the colours of the frame-like elements used to accent each phase, and the west tower's prow-like balconies and rooftop feature have been enlarged and enhanced with special glazing treatments to reinforce its landmark "flat iron" image.
- 3) Design development is encouraged with respect to the amenity building proposed for the site's prominent Hazelbridge Way corner in order that it may better contribute towards the establishment of a visually interesting, pedestrian friendly streetscape.
 - The residential amenity building has been redesigned to better complement and visually expand the adjacent park through the use of a four-storey form that is light and glassy, punctuated with dynamic frame-like elements and metallic accents, and set in a high-quality landscape incorporating generous outdoor decks, trees, ground cover, stone terrace walls, and related features.
- 4) Design development is encouraged with respect to the loft-type townhouse units proposed along the site's minor street (park) frontage.
 - The frontages of the loft-type townhouse units have been refined to incorporate raised, loading dock-like patios with industrial metal railings and a public seating wall that contribute towards a distinctive, pedestrian-friendly streetscape.
- 5) While landscaping of the parking podium rooftop has been addressed, more attention should be paid to the treatment of the project's mid-rise rooftops.
 - The design of the mid-rise rooftops has been revised to include a combination of outdoor decks for the private use of fronting units and extensive green roofs.

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 Zoning Bylaw and the intent of the applicable sections of the Official Community Plan.

Through the rezoning review and approval process for the subject development, phasing covenants and related legal agreements were registered on title requiring that various conditions are satisfied prior to DP issuance. The developer has voluntarily agreed to satisfy all the requisite conditions including, but not limited to, the following:

- Public Art: In accordance with Richmond's public art policy, the developer has submitted a Public Art Plan and voluntary developer contribution of \$358,500 for the installation of public art within the proposed park. Prior to DP issuance, a legal agreement will be registered on title requiring that the public art is completed prior to occupancy of the development's first phase.
- 2) <u>Interim Driveway</u>: Right-of-ways registered on the subject development provide for a temporary driveway along the north side of the Brown Road extension (for loading of large trucks), which driveway shall be closed, at the developer's sole cost, when Brown Road is extended (by others) to Sexsmith Road. Prior to DP issuance, the developer is required to

submit a Letter of Credit for \$10,500 for the removal and reinstatement of the interim driveway, including the reinstatement of on-site structural grass grid with turf within the temporary loading area (based on 100% of the sealed cost estimate provided by the developer's Civil Engineer, including labour and 50% contingency).

Zoning Compliance/Variances

No variances to the provisions of Richmond Zoning Bylaw 8500 are requested.

Advisory Design Panel (ADP) Comments

The subject development was presented for consideration by the Advisory Design Panel on a preliminary basis (at rezoning stage) on May 24, 2012. The Panel members commended the developer's team on a well-considered project and were supportive of the rezoning application moving forward to Planning Committee. Issues identified for design development by ADP members at the preliminary Panel review were addressed by the developer at the Panel's formal review of the subject DP application on December 4, 2013. In brief, at its December meeting, the ADP voted in support of the project advancing to DP Panel, but suggested design development with respect to the treatment of several features (i.e. mid-block plaza along Brown Road, north wall of the amenity building, south wall of the Phase 3 townhouses, and pathway widths for wheelchairs and strollers). A copy of the relevant excerpt from the Advisory Design Panel Minutes of December 4, 2013 is attached for reference, together with the applicant's design response, shown in 'bold italics' (Attachment 4). Staff believe the applicant's design response satisfactorily addresses the recommendations of the Panel.

Analysis

Conditions of Adjacency

The subject residential development presents few adjacency concerns because the proposed park is located to the south, car-oriented commercial sites are located to the west, north, and south, and the few single-family houses situated nearby are all on large lots that back onto the subject site. Furthermore:

- The phasing of the subject development is proposed to proceed from west to east with its first phase adjacent to Hazelbridge Way, where the proposed construction will have least impact on existing single-family homes and the introduction of streetscape improvements and new residents will provide the greatest benefit for adjacent commercial and park uses;
- With respect to the adjacent shopping centre north of the subject development, the proposed parking podium has been designed to mitigate visual impacts (i.e. setbacks, wall treatments, landscaping) and, as noted previously, the developer is working with the commercial neighbour to provide for the replacement and enhancement of existing landscaping along the common property line at the developer's sole cost;
- Along the east side of the development, adjacent to existing single-family uses, the developer proposes a row of low-rise townhouses fronting a public walkway, the form and character of which will minimize scale and overlook issues in the near term and provide for an attractive interface with multi-family residential uses in the future;

Along the park frontage, the new minor (diagonal) street is designed as a slow-moving, "park
drive" incorporating raised pedestrian and bike crossings, decorative paving, and special
landscaping treatments, complemented by extensive on-site planting near Hazelbridge Way
and a distinctive row of loft-style townhouse units with loading dock-like patios with
industrial metal railings and a public seating wall, that together serve to make the street
pedestrian-friendly and visually expand the park; and

On-site:

- The development's arrangement in several distinct residential buildings along the perimeter of the property, with generous separation between each, minimizes potential privacy and view blockage issues;
- The proposed built form minimizes the number of interior corner units (i.e. 5 in total) and where they do occur, effort has been made to enhance livability by reducing overlook and providing extra-large decks; and
- Prior to rezoning, covenants are to be registered on title with respect to (a) aircraft noise and (b) view blockage and other development impacts (e.g., traffic noise, ambient noise, night-time light), which require that the development is designed and constructed in a manner that anticipates those potential impacts and notifies potential purchasers.

Urban Design and Site Planning

The CCAP proposes the establishment of new parks and roads to meet the needs of Capstan Village residents, workers, and visitors, including a new park and street that are to be secured via rezoning of the subject development. That park and road will, in part, be comprised of land voluntarily contributed by the developer with respect to the provisions of the CCAP's Capstan Station Bonus and "minor street" implementation policy, which allow net site area (for density calculation purposes) to include land transferred to the City for park and road purposes. As a result, the effective density on the buildable portion of the subject site is increased from 2.375 FAR to 3.233 FAR (as per ZHR12) and, in turn, the proposed form of development:

- Exceeds the "typical maximum building height" recommended under the CCAP (i.e. 47 m geodetic as compared to 35 m);
- Provides for no variation in tower height (i.e. all towers measure 47 m geodetic); and
- Exceeds the maximum recommended tower floorplate size (i.e. 676 m², 798 m², and 1,281 m² as compared to 650 m²).

Nevertheless, as determined at rezoning stage and taking into account the comments of the Advisory Design Panel, while it would be preferable for the project to comply fully with CCAP policy, staff recommend support for the proposed form of development on the basis that:

- The scale and massing are well suited to the development's prominent location as a backdrop to the new park, and provide for streetscape variations that contribute to visual interest and pedestrian amenities (e.g., mid-block walkway, seating plazas);
- The location of the towers north of the park means they will not shade sensitive public spaces and, as mentioned in the previous section, the development's proposed streetscape features and road works have been designed to visually expand and enhance the public experience of the park;

- The proposed tower separation is a minimum of 35 m (i.e. as per CCAP policy on the subject site, but greater than the 24 m separation permitted in many areas of the City Centre), which will reduce overlook between the proposed towers and enhance views for residents, both onsite and off;
- The tapered shape of the site has been used to advantage to provide for attractive variations in tower orientation and shape, notably including the distinctive "flat iron" form of the tower on the development's west side;
- The proposed tower massing along the south and east sides of the development helps to mitigate the potential impacts of the project's larger floorplates on the fronting streetscapes and neighbouring properties (e.g., views, privacy, sun exposure); and
- Parking is concealed from view from fronting streets and the proposed park, and the roof of the parking podium is designed in coordination with the project's towers to maximize on-site opportunities for usable open space and green roofs.

Architectural Form and Character

The CCAP encourages the City Centre to be developed as a mosaic of distinctive, yet cohesive, urban villages. The clean, contemporary character of the subject development is consistent with this objective and provides for a landmark image at the head of the proposed park that complements nearby recent and proposed buildings. Moreover, the development is comprised of three distinct "layers" that contribute to visual interest, pedestrian scale, and a distinct identity, as follows:

- <u>Base</u>: The lower two floors of the building, which contain street-fronting townhouse units and the development's amenity building, are set forward of the upper floors and articulated with bold frame-like elements, raised patios, individual units entrances, and feature walls clad in basalt. This, together with projecting canopies, architectural appurtenances, and shifts in colour, makes a strong visual statement and contributes towards visually interesting, pedestrian-friendly streetscapes along the development's frontages.
- Middle: Two "framed" mid-rise forms, one along the development's park frontage and the other on Brown Road, appear to "float" above the townhouse level. These forms, which break up the overall mass of the development and read like independent buildings, provide important definition along the park edge, a sense of human-scale, and a bold graphic statement in keeping with the area's existing and emerging character.
- Towers: The development's high-rise elements are articulated through the use of setbacks, frame elements, glazing, and variations in colour that help to reduce apparent bulk and contribute towards a visually interesting skyline. The project's larger tower floorplates are further addressed by bringing a portion of each tower directly to grade, which creates tall, slim, vertical forms that draw the eye up and make the building's lobby entries more prominent. Furthermore, as noted previously, the west tower has a prow-like rooftop feature and projecting balconies, enhanced with special glazing treatments, which contribute to its unique "flat iron" image.

Landscape Design and Open Space Design

The development's landscape has been designed with the aim of providing for a highly livable, residential environment in a rapidly urbanizing setting. In addition to providing every dwelling

with private outdoor space in the form of a balcony or patio, the development incorporates three main open space areas as follows:

- The development's streetscapes are punctuated by small landscaped open spaces designed to help break-up the building mass, enhance building entries/identity, accommodate loading activities, and complement adjacent uses. This includes, among other things:
 - Landscaping around the amenity building that helps to visually expand the public's experience of the adjacent park;
 - A "mews" along the project's east side (Phase 3) that provides for the first part of a midblock walkway linking Brown Road with Capstan Way (to be extended by others via future neighbouring development), the south end of which is designed in coordination with a landscaped plaza for the shared use of pedestrians and vehicles adjacent to the development's Phase 3 lobby, parkade entrance, and "mews" townhomes;
 - Loading dock-like patios with industrial-style, metal railings along the frontage of the
 project's loft-style units, together with public seating in the form of a low wall at the back
 of the sidewalk, that add visual interest and present a more public face towards the park;
 and
 - A mid-block open space along the project's Brown Road frontage, which is designed to provide for temporary use for loading (until Brown Road is extended to Sexsmith Road by others) and as a green respite for passers-by offering landscaped terraces, lawn (in a structured grass grid), and trees, framed by trellises and climbing vines on the adjacent building walls.
- Siting of the project's high- and mid-rise forms along the south edge of the development frees up a significant portion of the podium roof deck for landscaping. Furthermore, due to the podium's large size and the wide spacing between towers, the outdoor space receives good sun exposure. This is expected to make the podium rooftop an attractive location for gardening, play, and passive recreation, as will its proximity to the development's large indoor amenity facilities and convenient vehicle access (via the parking structure) for garden materials, maintenance, and related activities.
- The roofs of the development's mid-rise buildings are treated as a combination of extensive green roofs and private outdoor spaces for the enjoyment of fronting residential units.

Indoor & Outdoor Amenity Space

The OCP and CCAP require that multi-family developments provide indoor and outdoor amenity space to meet the anticipated on-site social and recreational amenity needs of their residents. The developer's proposal is consistent with City policy as follows:

Amenity Space Requirements	Min. Area 528 units	Proposed
Indoor Space @ 2 m2/unit	1,056 m ²	1,136 m²
Outdoor Space - OCP: Recreation @ 6 m2/unit (incl. 600 m² play space) - CCAP: Other landscaping @ 10% of net site	3,168 m ² + 1,373 m ² TOTAL: 4,541 m ²	4,219 m ² + 1,450 m ² TOTAL: 5,669 m ²

- Indoor Amenity Space: The proposed development exceeds the City's minimum indoor amenity space requirements. The developer proposes to construct approximately 83% of this space as part of the project's first phase and the remainder in its third phase. Residents in all phases of the development will have use of the proposed amenities, which will include:
 - At Phase 1 A four storey amenity building is proposed for the site's Hazelbridge Way corner overlooking the park. Amenities include fitness facilities and a large, outdoor terrace on the main floor (raised approximately 0.75 m above grade), music rooms and a dance studio on the second floor, a games room on the third floor, and a party room with direct access to a large outdoor deck and rooftop, outdoor amenity space on the fourth floor.
 - At Phase 3 Two amenity spaces are proposed including a multi-purpose room on Level 3 with direct access to the outdoor amenity spaces on the podium rooftop and a meeting room on Level 2.
- Outdoor Amenity Space: The proposed development exceeds the City's minimum outdoor amenity space requirements. The proposed spaces are located as shown in Attachment 5 and include the following:
 - OCP recreation space for the shared use of residents in all phases will be comprised of rooftop outdoor space on the parking podium and two large, south-facing decks with park views constructed as part of the Phase I amenity building. Residents will have direct access to these outdoor areas from each building. Proposed amenities within these outdoor areas will include a 639 m² children's playground and lawn (i.e. larger than the City's 600 m² minimum requirement), raised agricultural garden plots with tool storage, space for potting, compost, water, and direct access to the parkade for loading and maintenance purposes, an outdoor dining and barbeque area, lawns and decorative planting, pathways, seating, and complementary features.
 - Additional landscaped area, as required under the CCAP, is provided at street level and includes, among other things, the proposed "mews" walkway along the site's east edge, landscaped, semi-public areas near each of the three tower lobbies, and sidewalk widening to facilitate the creation of an off-street bike path along the site's Brown Road frontage.

Transportation

• Transportation Demand Management (TDM) Measures: The Zoning Bylaw permits the minimum number of parking spaces required by a development to be reduced by up to 10% based on the provision of TDM measures to the satisfaction of the City. Through the rezoning process, TDM measures were identified for implementation via the development's Servicing Agreements (SA 13-651753 and SA 12-623061) and secured via Letters of Credit, including the design and construction of a special crosswalk on the Cambie Road frontage of the proposed park and improvements along the park's Hazelbridge Way frontage. In light of this, staff support the developer's proposed parking reductions, as follows:

Parking Spaces	# Units	Bylaw Rate ("Parking Zone 1")	Bylaw Requirement	Proposed TDM Reduction	Proposed Total Parking	
For Residents	500	Min. 1.0/unit	528	16 (3%)	512	
For Visitors	528	Min. 0.2/unit	106	11 (10%)	95	
TOTAL	528	Min. 1.2/unit	634	27 (4%)	607	

• Transitional Vehicle Parking Strategy: The Zoning Bylaw requires that any multi-phase development in Capstan Village must provide extra vehicle parking in its early phase(s) over and above the minimum Bylaw requirement (i.e. "Parking Zone 2" versus "Parking Zone 1") and secure that extra parking for the future use of later phase(s) so that, at build-out, the combined total amount of vehicle parking provided at all phases will comply with "Parking Zone 1". The rationale for this approach is that the extra parking is useful in the near-term, prior to the construction of the Capstan Canada Line station, but unnecessary in the longer-term when the Village is better established (e.g., amenities, shopping, jobs, child care) and more convenient Canada Line service is expected. The developer's proposal is consistent with the intent of the Bylaw, as follows:

	Cor	Total			
Parking Spaces	Phase 1 164 units	Phase 2 114 units	Phase 3 250 units	Total 528 unit	
For Residents	342**	7	163	512	
For Visitors***	43	9	43	95	
TOTAL	385	16	206	607	

- * As per Zoning Bylaw requirements for parking for multi-phase developments in Capstan Village, the developer proposes to over-supply parking in the project's early phases and make excess parking available for the use of later phases as required. As such, parking proposed for construction in Phase 1 exceeds minimum City requirements for Phase 1 residents and excess parking will be applied to Phases 2 and 3.
- ** Resident parking constructed at Phase 1 shall provide for at least 160spaces for the use of Phase 1 residents and 182 spaces for the use of the residents of future phases (i.e. approximately 106 spaces for Phase 2 and 76 spaces for Phase 3). The 182 spaces may be used on a temporary basis by the residents of Phase 1 until they are required for Phases 2 and 3.
- *** Visitor parking is for the shared use of all phases.
- <u>Bike Parking</u>: As per Zoning Bylaw requirements, for Phases 1, 2, and 3, the developer proposes to build a total of 660 "Class 1" bike storage spaces for residents (i.e. 1.25/unit) and 106 "Class 2" bike storage spaces for visitors (i.e. 0.2/unit).
 - <u>Note</u>: A portion of the project's "Class 2" bike storage is proposed within the parkade's visitor parking area, which will make this parking convenient to use and weather-protected, while also helping to de-clutter the development's tower entry areas (by reducing the number of "Class 2" bike racks in those locations).
- Vehicle & Bike Electric Vehicle (EV) Charging Stations: The OCP aims to support the use
 of electric vehicles, including bicycles and mobility scooters, through the mandatory
 provision of EV Charging Stations in new multi-family developments. The developer
 proposes to build EV Charging Stations in compliance with OCP policy as follows:

EV Charging		Const			
Stations for Residents*	Rates	Phase 1 164 units	Phase 2 114 units	Phase 3 250 units	Total 528 units
For Vehicles 120-V stations EV rough-ins***	OCP (min) rate: 20% total parking 25% total parking	83 104	Nil Nil	39 48	122 152
For Bikes • 120-V stations	Zoning Bylaw (min) rate: Greater of 1/10 bike storage spaces or portion	13	24	29	66

- * The proposed locations of EV Charging Stations for residents' vehicles and "Class 1" bike storage are indicated on the DP drawings.
- ** As per Zoning Bylaw requirements for parking for multi-phase developments in Capstan Village, the developer proposes to over-supply parking in the project's early phases and make excess parking available for the use of later phases as needed. As such, parking proposed for construction in Phase 1 AND the EV vehicle charging stations constructed as part of that parking exceed minimum City requirements for Phase 1 residents and excess spaces AND EV stations will be applied to Phases 2 and 3.
- *** "EV rough-ins" refers to the pre-ducting of residents parking spaces to enable the future installation of EV Charging Stations.
- Loading & Waste Collection: A coordinated loading, garbage, and recycling strategy has been prepared for the development's three phases to the satisfaction of City staff. All collection vehicles and related activities will be accommodated on-site, except for one large truck (WB-17) loading space, which is proposed along the development's new minor street (i.e. linking Hazelbridge Way and Brown Road). In addition to permanent on-site loading, the development proposes one temporary on-site loading space for large trucks (WB-17) within a landscaped plaza along the development's Brown Road frontage. This temporary loading space will be utilized by the development until the Brown Road /Sexsmith Road connector is constructed by others and large trucks are able to safely access loading facilities proposed for Phase 3. (The closure of the temporary driveway and reinstatement of the open space with lawn will be completed at the sole cost of the developer, secured via a Letter of Credit submitted prior to DP issuance.)

Accessible Housing

Richmond's OCP seeks to meet the needs of the city's aging population and people facing mobility challenges by encouraging the development of accessible housing that can be approached, entered, used, and occupied by persons with physical or sensory disabilities. To address the City's policy, the developer proposes to provide:

- Barrier-free access to all residential lobbies from the fronting street.
- Barrier-free access to all indoor and outdoor amenity spaces.
- 80 Basic Universal Housing (BUH) units (i.e. 15% of total units) designed to Zoning Bylaw standards to provide for their ready renovation to accommodate wheelchair users, including 25 in Phase 1, 17 in Phase 2, and 38 in Phase 3.

Note: The developer does not plan to take advantage of the Zoning Bylaw's permitted density exclusion of 1.86 m² (20 ft²) per BUH unit.

- Aging in place features in all dwellings, including:
 - Stairwell hand rails;
 - Lever-type handles for plumbing fixtures and door handles; and
 - Solid blocking in washroom walls to facilitate future grab bar installation (by others) beside toilets, bathtubs, and showers.

Crime Prevention through Environmental Design (CPTED)

Measures are proposed to enhance safety and personal security including, but not limited to:

- The parking structure and lobbies are designed to minimize alcoves and hidden corners;
- The parking structure will be well lit and its interior will be painted white;
- Elevator lobbies and vestibules will include glazing as per Building Code requirements;
- Outdoor amenity spaces will be visually open and well lit, offer multiple access options, and be secured from casual public access;
- The development's site planning and building design provide for the passive surveillance of all street, walkway, and nearby park frontages; and
- Lobbies are placed in prominent locations and have clear sightlines to fronting streets and publicly-accessible open spaces.

Sustainability Measures - LEED "Silver"

The project's sustainability goal is to provide a cost-effective, high-value development that meets or exceeds City standards (i.e. LEED "Silver" equivalent). The development proposal responds to City objectives for enhanced long-term environmental, fiscal, and social sustainability as per the attached LEED Checklist (Attachment 6). In brief, the proposed development will provide for:

- Various measures secured via the rezoning process, including:
 - District Energy Utility (DEU) "ready" design and construction, ensuring that the development will be able to connect to a City DEU system when one comes available;
 - Voluntary developer contributions towards the future construction of the Capstan Canada Line station;
 - Implementation of Transportation Demand Management (TDM) measures, including a special, illuminated crosswalk and frontage improvements around the proposed park;
 - The construction of an off-street bike path and pedestrian amenities; and
 - The implementation of a multi-phase "transitional parking strategy" aimed at minimizing parking demand and supporting transit and alternative travel modes;
- Electric Vehicle (EV) charging stations for vehicles and bikes;
- Intensive and extensive green roofs, vegetated outdoor areas, and agriculture plots;
- Rainwater management measures within the residential site and the proposed park aimed at
 reducing the water volume and improving the water quality in respect to storm water entering
 the City drainage system (e.g., retention and re-use of rainwater for landscape irrigation;
 supplementary water source for water features; nourishment of rain gardens);
- Energy analysis simulations to optimize building performance; and

• Water efficient plumbing fixtures (e.g., low-flow shower, kitchen, and lavatory faucets and dual flush toilets).

Conclusions

The proposed development is consistent with Richmond's objectives for the subject property and Capstan Village as set out in the OCP, City Centre Area Plan (CCAP), and Zoning Bylaw. The project's distinctive form, pedestrian-oriented streetscapes, and sustainable development measures (e.g., electric vehicle charging facilities, green roofs, agricultural plots), together with the associated park development and Capstan Station Reserve funding secured as voluntary developer contributions at the project's rezoning stage, will enhance the establishment of Capstan Village as a high-amenity, transit-oriented, urban community. On this basis, staff recommend support for the subject Development Permit application.

Suzanne Carter-Huffman Senior Planner/Urban Design

SPC:cas

Attachments:

- 1. Approved Park Concept
- 2. Development Application Data Sheet

Sorranne Corter-Huffman.

- 3. Proposed Treatment of Parking Podium (North) Wall
- 4. Advisory Design Panel Minutes
- 5. Outdoor Amenity Space Location Plan
- 6. LEED Checklist
- 7. Development Permit Considerations





Development Application Data Sheet

Development Applications Division

DP 12-612510

Address: 8311, 8331, 8351, and 8371 Cambie Road and 3651 Sexsmith Road

Applicant: Polygon Development 192 Ltd. Owner: Polygon Development 192 Ltd.

Planning Area(s): <u>City Centre (Capstan Village)</u>

Floor

Floor Area Gross: 47,801 m² Area Net: 44,402 m²

	Existing	Proposed	
Site Area	13,734 m²	13,734 m ²	
Land Uses	Vacant	Multi-family residential	
OCP Designation	Mixed Use	No change	
Zoning	Subject to Zoning Amendment Bylaw 8903: "High Rise Apartment (ZHR12) Capstan Village (City Centre)"	No change	
Number of Units	Nil	Phase 1: 164 Phase 2: 114 Phase 3: 250 TOTAL: 528* * All units incl. aging in place features	
Basic Universal Housing (BUH) Units	Nil	Phase 1: 25 Phase 2: 17 Phase 3: 38 TOTAL: 80 (15% of total units)	

	Bylaw Requirement "ZHR 12"	Proposed	Variance
Floor Area Ratio (FAR)	3.233 FAR	3.233 FAR	none permitted
Lot Size	4,000 m ²	13,734.0 m ²	none
Buildable Floor Area	Max. 44,402 m ²	44,402 m ²	none permitted
Lot Coverage	Max. 90%	82%	none
Setback @ Public Streets & Walkway	Min. 6 m, but this may be reduced to 3 m based on City-approved design	3 m	none
Setback @ Rear (North)	Min. 3 m, but this may be reduced to nil based on City-approved design	Nil	none
Height (m)	Max. 35 m, but this may be increased to 47 m geodetic based on City-approved design	47 m geodetic	none

	Bylaw Requirement "ZHR 12"	Proposed	Variance
Lowest Habitable Floor Elevation	Min. 2.9 m geodetic, except building lobbies	2.9 m geodetic, except building lobbies	none
Off-street Parking - Residents @ 1.0/unit* - Visitors @ 0.2/unit LESS up to 10% TDM**	Residents: 528 Visitors: 106 Total: 634 LESS 10% = 571	Residents: 512 Visitors: 95 Total: 607	none
Off-street Parking Spaces – Accessible	Min. 2%	2% (13 spaces)	none
Off-street Parking Spaces - Small Car	Max. 50%	20% (121 spaces)	none
Off-street Parking ~ Tandem Spaces	Not permitted (because no tandem parking covenant will be registered on title)	none	none
Off-street Parking – Electric Vehicle (EV) Charging Stations	120-V stations: Min. 20% Pre-ducted stations: Min. 25%	120-V stations: 20% (122) Pre-ducted stations: 25% (152)	none
Bike Storage - - Class 1 @ 1.25/unit - Class 2 @ 0.2/unit	Class 1 (residents): 660 Class 2 (visitors): 106	Class 1 (residents): 660 Class 2 (visitors): 106	none
Bike Storage – Electric Vehicle (EV) Charging Stations for residents (Class 1)	120-V stations; Min. 1/10 bikes	120-V stations: 1/10 bikes (66)	none
Amenity Space – Indoor @ 2 m²/unit	Min. 1,056 m ²	1,136 m ²	none
Amenity Space – Outdoor @ 6 m2/unit PLUS landscaping of 10% of net site	Amenity space: Min. 3,168 m ² (incl. 600 m ² play space) Landscaping: Min. 1,373 m ² TOTAL: 4,541 m ²	Amenity space: 4,219 m ² (incl. 639 m ² play space) Landscaping: 1,450 m ² TOTAL: 5,669 m ²	none

^{* &}quot;Parking Zone 1" rates are permitted on the basis that the subject development will contribute towards the Capstan Station Reserve prior to Building Permit issuance.

^{**} Parking may be reduced by up to 10% based on City-approved Transportation Demand Management (TDM) measures



AERIAL RENDERING LOOKING SOUTH-WEST



AERIAL RENDERING LOOKING NORTH-WEST

Excerpt from the Minutes from Advisory Design Panel Meeting

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

2. DP 12-612510 - 44,402 SQ.M. (478,019 SQ.FT.), 528-UNIT, 3-TOWER, 3-PHASE RESIDENTIAL DEVELOPMENT IN CAPSTAN VILLAGE

APPLICANT: Polygon Development 192 Ltd (Chris Ho); Durante Kreuk

Landscape Architects

PROPERTY LOCATION: 8311,8331,8351 & 8371 Cambie Road & 3651 Sexsmith Road

Applicant's Presentation

Chris Ho, Polygon Homes, Gwyn Vose, IBI/HB Architects, and Jennifer Stamp, Durante Kreuk Landscape Architects, presented the project and replied to queries from the Panel on behalf of the applicant.

Panel Discussion

Comments from the Panel were as follows:

- appreciate the proposed treatment to the north façade fronting the adjacent retail development; like the planters on top; changes to the architecture work very well; previous comments by the Panel have been addressed by the applicant; hope that in the future, the area will have more developments like the subject development;
- the proposed development is a welcome addition to Richmond; appreciate the massing, setbacks, building footprint and edge condition;
- appreciate the graphic of the podium landscape which has a nice contemporary feel; however, not sure about the in-the-space feel; the park across the subject development has a different kind of feel compared to the podium space; program elements are present on the landscaped podium and relate well to each other;
- the stairs located within the plaza at the junction between the east and west buildings appear jammed; need further design development; should match the bold moves on the podium; stairs can be used as an element to celebrate the arrival to the podium;

The plaza has been redesigned to make a softer, greener respite along the Brown Road frontage. New features include the replacement of the stairs to the podium with landscaped terraces, replacement of the plaza surface with grass (in a structural grass grid to accommodate loading activities), and the addition of trellises and climbing vines on the east wall.

- appreciate the provision of outdoor and indoor bike racks;
- the interface with the park and the extension of the landscape across the street are good;
- appreciate how the proposed development has been broken down into three pieces; massing and form of the towers are well done; appreciate the subtle accents of the colours on the towers; like the flatiron building;
- north wall of the amenity building needs further design development in view of its prominence at the northwest corner; should be highlighted as it is visible to pedestrians and motorists travelling from the north side;

Varied setbacks, windows, and a painted wall graphic have been incorporated into the rear (north) wall of the amenity building to enhance its appearance and better coordinate with the character and quality of the overall development.

- design development is required in respect to the blank wall of the mid-rise building and adjacent interim loading area/plaza at the junction between the east and west buildings; residents in Tower B are facing the large blank wall of the mid-rise adjacent to Tower C;
- the blank wall of the townhouse will be visible to residents driving into the parkade entrance in Tower C; consider further design development;

A low, stone planter, a trellis, climbing vines, signage, and lighting have been incorporated into the south façade of the east townhouses to enhance their appearance from Brown Road and the Phase 3 driveway.

 concern that two strollers/wheelchairs cannot be accommodated at the same time on the long pathways across the podium; consider increasing the width of the walkways and/or widen the walkway at periodic intervals and incorporate seating/benches;

The design of the podium landscaping has been advanced, with attention to ensuring that walkways and seating are designed to meet the varied needs of future residents.

 appreciate the design of the proposed development; appreciate the amenity building being brought out as a feature; investigate the potential for a catalyst on the park side as a counter point or gateway to the amenity building;

The park concept has been reviewed and approved by Council.

 applicant should determine the energy target in view of the applicant's proposal to construct the residential buildings to LEED Silver (equivalent);

The developer intends to undertake energy analysis simulations ensure that building performance is optimized.

- consider increasing the amount of green roof;
- the applicant has done a good job on the subtle accent colours on the buildings;

- the project currently has a lot of green roofs; there is a huge amount of on- and off-site green space;
- integrate the design of the tower and the park; and
- reiterated the items identified by Panel members for further design development, including the i) loading/plaza at the junction between the east and west buildings, ii) treatment of the broad blank wall of the mid-rise adjacent to the loading/plaza at the junction between the east and west buildings (consider adding clerestory windows or apertures to enhance the livability of the mid-rise and adjacent Tower B, iii) treatment of the podium's north walk at the amenity building, and iv) pathway widths for wheelchair users and others on the podium roof deck.

See comments inserted above.

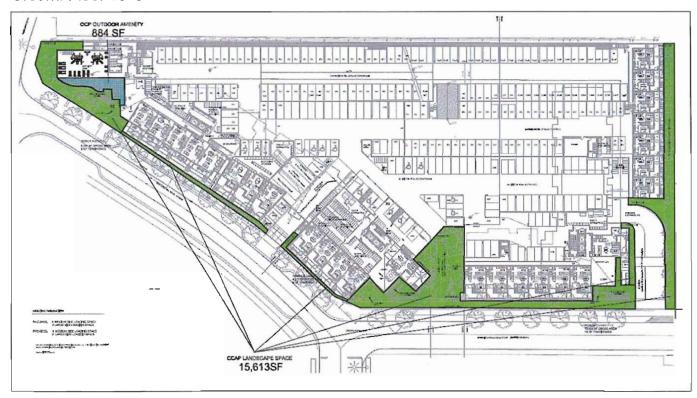
Panel Decision

It was moved and seconded

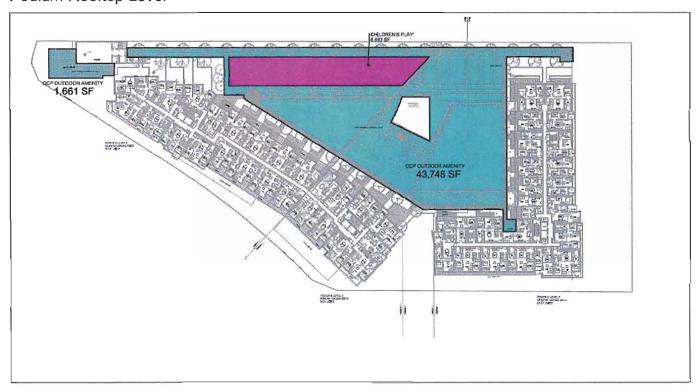
That DP 12-612510 be supported to move forward to the Development Permit Panel subject to the applicant giving consideration to the comments of the Panel.

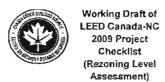
CARRIED

Ground Floor Level



Podium Rooftop Level





5-Feb-14

Avanti. Richmond, BC

Yes 7 No

17		9	Sustair	nable Sites 26 Points	Lead	Support	LEED Requirement	Implementation Timing
Y			Prered 1	Erosion & Sedimentation Required Control	Ctv3	Contractor	Create Excelon and Sediment Control Plan for construction phase of development.	Construction (Building Permit)
1			Creda 1	Site Selection 1	Sustainability Consultant	NA	Property is not prime farmland, ecologically sensitive land, within setback limits of watercourses etc.	Design (Rezoning, Development Permit)
5		٦	Credit 2	Development Density 5	Arch	N/A	Project has development density of 13,800m2 per heaters (60,000 SF/scro).	Design (Rezoning. Development Formit)
		1	Crodit 3	Redevelopment of S Contaminated Site	Owner	N/A	Develop on a contaminated site and provide remediation by Provincial Contaminated Sites Program	Design (Rezoning, Development Permit)
6			Credit 4.1	Alternative Transportation, 6 Public Transportation Access	Sustainability Consultant	N/A	Locate within 800m of rapid transit, 400m of two bus lines.	Design (Rezoning, Development Permit)
1			Cradit 4.2	Alternative Transportation, 1 Bicycle Storage & Changing Rooms	Arch	Sustainability Consultant	Covered storage facilities for securing bicycles for 15% or more of occupants. This can include storage rooms and bike racks. Note that residents that are unable to physically use bikes can be excluded from this calculation.	Design (Reznring, Development Permit)
: 11	-	3	Credit 4.3	Afternative Transportation, Lew-Emitting & Fuel-Efficient Vahicles	Arch	Sustainability Consultant	Install alternative-fuel refueling stations for 3% of total vehicle purking capacity or provide fuel-efficient vehicles and parking for these vehicles. An additional option is to provide occupanta access to fuel-efficient vehicle sharing program and providing easy access to parking.	Design (Rezoning, Development Permit)
2			Credit 4.4	Alternative Transportation, 2 Parking Capacity	Arch	Overses	Size parking capacity to meet, but not exceed, minimum local zoning requirements and provide easy eccess to mass transit. Note that Bridgeport Station (Sky Train) is only few 100m away.	Design (Rezoning, Development Permit)
	-	1	Credit 5.1	Site Development, Protect of Restore Habitat	Landecape	N/A	Restore or protect minimum of 50% of the site area (occluding building footprint) or 20% of total site area with native or adapted vegetation. Vegetated roof surface can be included in this calculation if it is native or adaptive.	Cosign (Rezentrg. Development Permit)
1		-	Credit 5.2	Site Development, 1 Maximize Open Space	Landacape	N/A	Exceed local zerving requirements for open space by 25%. Vegetated roof areas and pedestrian orientared hardscape areas can contribute to open space,	Design (Rezoning, Development Permit)
_		1	Credit 6.1	Storm water Management, 1 Rate and Quantity	Civil	Land	Storm water management plan prevents the post development 1.5 year, 24 hour peak discharge rate and quantity from exceeding the pre-development 1.5 year, 24hour peak discharge rate.	Construction (Building Permit)
		1	Credit 8.2	Storm water Management. Treatment	Civil	Land	Sterm water management plan that promotes infiltration and capturestreats 90% of storm water runoff. The plan is designed to remove B0% of the average annual post- development total suspended solids (TSS).	Censtruction (Building Permit)
1			Credit 7.1	Heat Island Effect, Non- 1 Roof	Arch	NA	Place minimum 50% or parking underground or within a covered structure.	Design (Development Permit)
		1	Credit 7.2	Heat Island Effect, Rool 1	Arch	Lænd	75% or greater of roof area has solar reflective Tidex (SRI) of 78 (low-sloped roof) or 29 (stoop-sloped roof), Items such as white coated gravel on built up roof flow high SRI values (greater flan 78) Or Install vegetated roof for 50% of roof area. Covered parking structures do not count towards this credit.	Design (Development Permit)
		1	Cress 8	Light Pollution Reduction 1	Eec	Arch / Land	Reduce light repass from building and site. Interfor Lighting: Reduce the input power (by automatic device) of all nemoregency interior limitaries with a direct line of sight to any openings in the envelope (translucent or transparent) by at least 50% between the hours of 11pm and Sam. After hours override may be provided by a manual or occupant sensing device provided the override lasts no more than 30 minutes. OR All openings in the envelope (translucent or transparent) with a direct line of sight to any non-emergency furnisharies must have shinding (controlled/closed by automatic device for a resultiset transmittence of less than 10% between the hower of 11am and 5pm). Exterior Lighting: Partially or fully shield a exterior luminaries with 1000 initial tamp furners or more to meet the Full Cutoff IESNA Classification so they do not emit light directly to the night sky.	Construction (Building Permit)

	5	Water	Efficiency Points	Lead	Support	LEED Requirement	Implementation Timing
	Ì	Prereg 1	Water Use Reduction Required	Mech	N/A	Use 20% less water than a baseline building (not including irrigation).	Construction (Bullding Pennit)
		Credit 1.1	Water Efficient 2 Landscaping, Reduce by 50%	Land	N/A	Reduce potable water consumption for imigration by 50% over conventional means.	Construction (Building Parmit)
 	2	Credit 1.2	Water Efficient 2 Landscaping, No Potable Use or No Infigation	Land	N/A	Use only captured rain or recycled site water to eliminate all potable water use for site imigation (except for initial watering to establish plants).	Construction (Building Permit)
T	2	Credit 2	Innovative Wastewater 2 Technologies	Mesh	N/A	Reduce potable water for sewage conveyance by 50% or treat 50% of wastewater on-site to tertiary standards.	Construction (Building Permit)
		Creda 3.1	-	Mech	Int	Employ strategies that in aggregato use 30% less water than in the water use baseline calculated for the building (not including insignation).	Construction (Building Permit)
	П	Credit 3.2	Water Use Reduction, 35% 1 Reduction	Mech	fat	Employ strategies that in aggregate use 35% less water than in the water use baseline calculated for the building (not including impation).	Construction (Building Permit)
	1	Cradit 3.2	Water Use Reduction, 48% Reduction	Иесп	ini	fimpley strategies that in aggregate use 40% less water than in the water use baseline calculated for the building (not including largation).	Construction (Building Permit)
-	33	Energy	& Atmosphere 25	11 020	Support	LEED Requirement	Implementation Timin
	-	Prered 1	Fundamental Building Required Systems Commissioning	Mech	All	Implement all of the following commissioning procedures: 1. Engage commissioning personnel. 2. Develop design Intent. 3. Include commissioning requirements in construction documents. 4. Develop and implement commissioning plan. 5. Verify Installation and performance of systems to be commissioned. 6. Complete summany commissioning report.	Construction (Building Parmit)
		Prereq 2	Minimum Energy Required Performance	Medi	Elec / Arch	New buildings; design energy cost improvement by 23% over MNECB reference case OR energy cost improvement by 10% over ASHRAE/IESNA 90.1-2007 reference case	Construction (Building Permit)
		Pre:eq 3	CFC Reduction in HVAC&R Required Equipment	Mech	N/A	Zoro use of CFC-based refrigerants in new base building HVAC&R systems.	Occupancy (Occupance Permit)
	19	Creda 1	Optimize Energy 1 to 18 Performance	Mech	Elec / Arch	Improve energy cost compared to the energy cost of MNRCB or ASHRAE/IESNA Standard 90.1-2007 reference building. New Building: Reductor % required MNRCB/ASHRAE: 1(26/12); 2(27/14); 3(26/16); 4(30/18); 5(32/20); 5(31/22); 7(35/24); 8(26/50); 5(22/55); 10(30/60) etc.	Construction (8cllding Permit)
1	7	Credit 2.1	On-Site Renewable Energy 1 to 7	Owner	N/A	Use on-site renewable energy systems to offset building energy cost. New Building % of renewable energy generated on-site. § (1%), 2 (3%), 3 (5%)stc.	
	2	Credit 3	Enhanced Commissioning 2	Mech	AH	Implement additional commissioning tasks: 1. Engage independent Commissioning Authority to oversae occumissioning activities. 2. Conduct commissioning design review and seview construction socuments when close to completion. 3. Selective review of contractor submittatis of commissioned equipment (of by Independent authority). 4. Provide recommissioning manual. 5. Have a contract in place to review ops. with O&M staff including: report and process plan for IAO concerns plan for issues resolution withing one year of construction completion.	Construction (Building Parmit)
2		Credit 4	Enhanced Rofrigoration Management	2 Mech	N/A	Do not use reingerents or install base building level HVAC and fire suppression equipment that do not contributes to excess depiction (no HCFCs, CFCs, halons and HFCs etc.).	Construction (Building Permit)
	. 3	Credit 5	Measurement & Verification	Mech	Elèc	Develop a measurement and verification plan. The plan must cover at least 1 year of post-oneshuetion occupancy. Typically requires metering for central equipment and common utilities, tenerry savings are net being achieved develop corrective actions.	Occupancy (Occupance Permit)
\dagger	2	Credit 6	Green Power	2 Owner	Electrical	Engage in at least 2-yr renewable energy contract to provide at least 35% of the building's electricity from renewable sources.	Occupancy (Occupant

6	and the same	8	Materia	als & Resources Points	Lead	Support	LEEO Requirement	Implementation Timing
	21 TST	_	Prereq 1	Storage & Cotlection of Required Recyclables	Arch	Owner	Provide an easily accessible area serving entire building dedicated to separation, collection and storage of materials for recycling including (at a minimum) paper, corrugated cardboard, glass, plastics, and metals,	Construction (Building Permit)
		3	Credit 1.1	Building Reuses blaintain 1 to 3 Existing Walls, Floors, and Roof	Amh	Owner	Maintain existing building structures (structural floor, reof decking, envelope etc.). % of building structure reused by surface area: 1pt (55%), 2pt (75%) and 3pt (95%)	Construction (Building Permit)
\top		1	Credit 1.2	Building Reuse: Visintain t Interior Non-Structural Elements	Anch	Owner	Reuse Interior non-structural elements (Interior walls, doors, floor coverings etc.) in at least 50% (by surface area) of the completed building.	Construction (Building Permit)
2			Credit 2	Construction Waste 1 to 2 Management	Contractor	Owner	Divert construction waste and demolition debris from lensils. Excavation self and land-clearing debris do not contribute to this cradit. Recycle or salvage (by weight or volume) 50% (fpt) or 75% (2pts).	Construction (Building Pennit)
		2	Credit 3	Resource Reuse 5 to 2	Arch:	Owner	Use salvaged, refurbished or reused materials (salvaged wood floors, remanufactured wood doors etc.), the sum of which constitutes at least 5% (19t) or 10% (2pts) based on cost, of the total value of materials for the project. Do not include mechanical or electrical components.	Construction (Building Permit)
2			Credit 4	Recycled Content 1 to 2	Contractor	Struct / Sustainability Consultant / Arch	Use materials with recycled content (fly ash concrete, sheef typically has a minimum recycled content of 25% post-consumer and can easily be as high as 90% etc.) such that the sum of post-consumer recycled content plus 1/2 of the pre-consumer content constitutes at least 10% (1ph or 20% (2ph), based on cost, of the total value of the materials in the project. Determine recycle content value by weight. Do not include mechanical or effective components.	Construction (Building Permit)
2			Credit 5	Regional Misterials : 10 2	? Contractor	Struck / Sustainability Consultant / Arch	Specify that a minimum of 20% (1pt) or 30% (2pts) of building materials (concrete, brick, steel etc.) by weight have been extracted/processed within 800km (by truck) or 2460km (6 shipped by rail or water) of the final manufacturing site. Also, demonstrate that the final manufacturing site is within 800km (by truck) or 2400km (if shipped by rail or water) of the project site. Do not include mechanical or electrical components,	Construction (Building Permit)
•		1	Credit 6	Rapidly Renewable Materials	A-ch	Owner	Use rapidly renewable materials and products (bamboo flooring, wool carpet, wheat board etc.) for 2.5% of the total value of all brilling materials used in the project, based on cost. Rapidly renewable materials bypically are harvested within a 10-year cycle or shorter.	Construction (Bullding Permit)
\dagger	1	1	Cueda: 7	Certified Wood	Arch	Owner	Use a minimum of 50% (based on cost) of wood-based materials and products that are certified in accordance with the Forest Stawardship Council (FSC).	Construction (Building Permit)
2	1	3	Indoor Quality	Environmental 15 Poiris	Lead	Support	LEED Requirement	Implementation Timing
T.				Minimum IAQ Performance Required	Mech	NEA	Meet the minimum requirements of Sections 4 through 7 of ASHRAE 62.1-2007, Ventilation for Acceptable Indoor Air Cluality (with cerata but without addereds). Kechanical ventilation systems must be designed using the ventilation rate procedure or the applicable local code, whichever is more stringent. Naturally ventilated buildings must comply with ASHRAE 62.1-2007, peragraph 5.1 (with errets but without addends).	Construction (Building Permit)
			Proreq 2	Environmental Tobacco Smoke (ETS) Centrol	Mach / Owner	Arch / Sustainability Consultant	Prohibit smoking in all common areas of the building. Locate exterior designated smoking areas at least 7.5m from entries, outdoor af intakes etc. Weather strip all extendre doors and operation windows by residential units, Sgalling perversions in walls, cellings and floors in each unit, Or just prohibit emoking anywhere in building or with 7.5m from entries, outdoor sir intakes etc.	Construction (Building Permit)
100		1	Credit 1	Outdoor Air Delivery Monitoring	MocN/Dec	NA	Install permanent monitoring systems to ansure that verifiation systems maintain design minimum requirements. Install CO2 (overy unit) and outdoor intake airlow monitoring systems (each supply deet). Auflow meetishing devices care cast \$1,000 to \$5,000 per monitor and CO2 censor can cost \$500-\$1,000 per unit including installation.	Permit)
		1	Credit 2	Increased Ventiliation	Mach	N/A	Design ventilation systems in accordance with ASKRAE 62 1- 2007 and provide outside air through a central or individual system, ducted directly to the suite with air distributed to all regularly occupied areas in the suite.	Construction (Building Permit)
1			Credit 3.1	Construction IAQ Management Plan: During Construction	Contractor	Mech / Arch	Develop an indoor Air Quality (IAQ) Management Plan for construction and pre-occupancy phases; various requirements including; meet SMACNA IAQ Guideline for Occupied Building Under Construction, 2nd Edition 2007 ANSV SMACNA 608-1208 (Chapter 3); perfect absorptive materials from moleculations and including a family moleculation and pronders (if a thoules used during consequiction) as per ASHRAE 52.2-1999. This vipically involves: protect HVAC dusts during construction (wrap in plastic), exhausting gas fool directly to outside of soliding, temporary hang plastic to prevent dust migration, seep clean tronk site (excepting restinally) etc.	
1	-		Credit 3.2	Construction IAQ Management Plan; Testing Betera Cocupancy	Contractor	Mech / Arch	Develop an Indoor Air Quality (IAQ) Mamagement Plan and Implement it after all finishes have been installed and the building has been completely dearned before occupancy. This can be done by using all to flush out building (mast common) or testing air for a number of parameters: before occupancy.	Occupancy (Occupancy Permit)
1	1		Credit 4.1	Low-Emitting Materials: Adhesives & Sealards	Arein/int	Mech / Eac / Contractor	The VOC content of adhesives, sealants and sealant primers used must be less than VOC content limits of the Sister of California's South Coast Air Quality Management Dietrict (SCAOMD) Rule \$1165.	Construction (Building Permit)
1	1		Credii 4.2	Low-Emitting Materials: Paints and Coating	1 Arch/Int	Mech / Elec / Contractor	Paints and coatings of interior of building must meet or exceed the VOC and charriest component limits of Green Sea's Standard GS-11 Jan., 1997 requirements.	Construction (Building Permit)

		_				· .		and the same of th
1				Low-Emitting Materials: 1 Flooring Systems	Archite	Contractor	Use carpet that meet or exceed regs. Of Carpet and Rug institute's Green Label Piuz Program Resilient flooring, rubbor flooring and prefinished wood flooring all must be Floorscore or Greenguard certified. Wood, concrete and other flooring installed raw need not be certified as long as adhesives, coatings and sealants meet requirements of MR Credit 4.1/4.2.	Construction (Building Pennit)
1				Low-Emitting Materials: 1 Composite Wood	Arch/Int	Contractor	Composito wood and agrifiber products, including core materials, must contain no added urea-formaldehyde resins. Adhesives used to tabricate taminated assemblies containing these products must contain no added urea-formaldehyde resins.	Construction (Suiding Permit)
1			Cred'i 5	Indoor Chernical & 1 Pollutant Source Control	Arch / Mach	Sustainability Consultant / Contractor	Employ permanent entryway systems (grills, gates, etc.) to capture dirt, particulates, etc. from entering the building at all high volume entryways. AND sufficiently exhaust each spaces where hazardous gases or chemicals may be stored (garages, housekooping/laundry areas etc.) and separate with decic-to- deck partitions or a hard-tid ceiling.	Construction (Building Permit)
1			Crodit 6.1	Controllability of Systems: 1 Lighting	Arch / Elec	Sustainability Consultant	Provide individual lighting controls for 90% (minimum) of the building occupants to enable adjustments to suit individuals needs. Provide lighting system controls for all shared multi- occupant spaces that complies with ASHRAE/IESNA Standard 90,1-2007 section 9.4.1.2 (lighting)	Construction (Building Permit)
1			Credit 6.2	Controllability of Systems: 1 Thormal Comfort	Mech	Elec/Arch	Provide individual comfort controls (temperature/operable windows) for each regularly occupied epoce to enable adjustments to meet individual needs. Operable windows can be used as comfort controls. The areas of operable windows must meet the requirements of ASHRAE Standard 62.1-2007-Ventilation for Acceptable window Air Quality, paragraph 5.1 Natural Ventilation. Typically occupied spaces (living rooms) are within 18.5m2 of a operable window.	Construction (Building Permit)
1		٦	Credit 7.1	Thermal Comfort: Design 1	Mech	Arch	Comply with ASHRAE Standard 55-2004, Thermat Comfort Conditions for Human Occupancy.	Construction (Building Permit)
		1	Credit 7.2	Thermal Comfort: 1 Verification	Mech	Arch	Provide a percanent monitoring system to ensure building performance to the desired comfort criteria as determined by IEQ Credit 7.1., Thermal Comfort - Design, Where the occupant has control over the unit temperature, it is acceptable to have standalone displays of temperature.	Construction (Building Pennit)
1			Credit 8.1	Daylight & Views: Daylight 1	Arch	N/A	75% or more of all regularly occupied spaces (living rooms) achieve daylight illuminance levels of a minimum 250 Lux and a maximum of 5,000 Lux on Sept 21 or March 21 at 9am and 3pm.	Construction (Building Permit)
1			Credit 8.2	Daylight & Views: Views 1	Arch	N/A	Achieve direct line of sight to outdoor environment via vision glazing between 0.76m and 2.3m above the finished floor for building occupants in 90% of all regularly occupied areas (living roome).	Construction (Building Permit)
6			Innova	tion & Design 6 Points	Lead	Support	LEED Requirement	Implementation Timing
1	Ť			Innovation in Design 1	Sustainability Consultant	NA	Proximity to regional transit system.	Design (Rezoning, Development Permit)
1	7	┫	Credit 1.2	Innovation in Design 1	Arch	N/A	100% underground/covered parking.	Design (Development Permit)
1	1		Credit 1,3	Innovation in Design 1	Cwner	N/A	Proximity to umenities.	Cosign (Rezoning, Sevelopment Permit)
1	\uparrow	\neg	Credit 1.4	Innovation in Design 1	Owner	N/A	Onsite amenities.	Design (Rezoning. Development Permit)
1	1		Credd 1.4	Innovation in Design 1	Arch	N/A	Very high density project	Design (Rezoning, Development Permit)
1			Credit 2	LEED® Accredited 1 Professional	Sustainability Consultant	N/A	At least one principal participant of the project team that has successfully completed the LEED Accredited Professional exam.	Design (Dovelopment Permit)
	$\overline{}$	1	Region	al Priorities 4 Points	Lead	Support	LEED Requirement	Implementation Timing
3			THE STATE OF	SENTENCE OF THE ENGLISHMENT OF THE	A SA TA SANGER OF SALES	THE RESIDENCE OF THE PARTY OF THE		
3		1	Credit 1	Durable Bullding 1	Owner	Struct/Arch	Design and implement a Building Durability Plan, in accordance with the principles Ion CSA S478-95 (R2007).	Construction (Building Permit)

51	59 Project Totals (pre- 110
1 I	certification estimates) Points

Development Permit Considerations

(Unsigned original @ REDMS #4140427 / Signed version @ REDMS #4151987)



Development Permit Considerations

Development Applications Division 6911 No. 3 Road, Richmond, BC V6Y 2C1

Address: 8311, 8331, 8351 & 8371 Cambie Road & 3651 Sexsmith Road File No.: DP 12-612510

- A. Prior to approval of the Development Permit, the developer is required to complete the following:
- Rezoning (RZ 11-591985): Final adoption of the Zoning Amendment Bylaw No. 8903, including the developer's compliance with the terms of the Rezoning Considerations, as approved by Council, as follows:
 - 1.1. <u>Subdivision</u>: Registration of a subdivision plan, which provides for park relocation, land transfer, road dedication, lot consolidation, registration of Public Rights of Passage right-of-ways, a driveway covenant, and related requirements;
 - 1.2. <u>Affordable Housing</u>: Submission of a voluntary developer contribution of \$5,660,550 (in a combination of cash and Letter of Credit) to the City's capital Affordable Housing Reserve Fund.
 - 1.3. <u>Flood Construction Level</u>: Registration of a flood indemnity covenant restricting minimum habitable elevation to 2.9 m geodetic.
 - 1.4. "No Development" Covenants: Registration of covenants restricting Development Permit* issuance with respect to "Aircraft Noise Sensitive Development", "View Blockage and Other Development Impacts", and the future closing of the development's "Interim Driveway Crossing" at the owner's sole cost.
 - 1.5. No Build" Covenants: Registration of covenants restricting the phased issuance of Building Permits with respect to construction and/or occupancy (as outlined in Section B, below).
 - 1.6. Public Art: Submission of a Public Art Plan and voluntary developer contribution of \$358,500.
 - 1.7. Community Planning: Submission of voluntary developer contribution of \$119,500...
 - 1.8. <u>Servicing Agreement (SA)</u>: Enter into three Servicing Agreements, secured via Letters of Credit, including:
 - 1.8.1. Sanitary pump station (tri-party) design/construction (SA 12-622318);
 - 1.8.2.Park design/construction (SA 13-651753); and
 - 1.8.3.Road and engineering design/construction (SA 12-623061).
- 2. Aircraft Noise Sensitive Development: Submission of a report and recommendations prepared by an appropriate registered professional, which demonstrates that the interior noise levels and thermal conditions comply with the City's Official Community Plan requirements for Aircraft Noise Sensitive Development. The standard required for air conditioning systems and their alternatives (e.g. ground source heat pumps, heat exchangers and acoustic ducting) is the ASHRAE 55-2004 "Thermal Environmental Conditions for Human Occupancy" standard and subsequent updates as they may occur. Maximum interior noise levels (decibels) within the dwelling units must achieve CMHC standards follows:

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

(NOTE: This DP Consideration has been satisfied. Report submitted January 24, 2014. REDMS #4140526)

DP 12-612510 Page 2

3. View Blockage and Other Development Impacts: Submission of a Letter of Assurance from a registered professional confirming that the building design conforms to the "View Blockage and Other Development Impacts" report attached as a schedule to the covenant registered on title prior to rezoning adoption.
(NOIE: This DP Consideration has been satisfied. Letter submitted January 30, 2014. REDMS #4143544)

- 4. <u>Public Art: Unless already registered on title</u>, registration of a legal agreement in the form of a covenant, registered on title, restricting final Building Permit inspection granting occupancy for a building (in whole or in part) on the subject site, exclusive of parking, until:
 - 4.1. The developer, at its expense, commissions an artist or artists to conceive, create, manufacture, design, and oversee or provide input about the manufacturing of the public art, and causes the public art to be installed on City property in accordance with the City-Approved Public Art Plan;
 - 4.2. The developer, at its expense and within thirty (30) days of the date on which the public art is installed, executes and delivers to the City, in a form satisfactory to the City Solicitor, a transfer of all of the developer's right, title, and interest in the public art to the City, including a transfer of joint world-wide copyright; and
 - Note: It is the understanding of the City that the artist's rights, title, and interest in the public artwork will be transferred to the developer upon acceptance of the artwork based on an Agreement solely between the developer and the artist. These rights will in turn be transferred to the City, subject to approval by Council to accept the donation of the artwork.
 - 4.3. The developer, at its expense, submits a final report to the City promptly after the completion of the installation of the public art in respect to City-Approved Public Art Plan, which report shall, to the satisfaction of the Director of Development and Director, Arts, Culture, and Heritage Services, include:
 - 4.3.1 Information regarding the siting of the public art, a brief biography of the artist(s), a statement from the artist(s) on the public art, and other such details as the Director of Development and Director, Arts, Culture, and Heritage Services may require;
 - 4.3.2.A statutory declaration, satisfactory to the City Solicitor, confirming that the developer's financial obligations to the artist(s) have been fully satisfied;
 - 4.3.3. The maintenance plan for the public art prepared by the artist(s); and
 - 4.3.4.Digital records (e.g., photographic images) of the public art, to the satisfaction of the Director, Arts, Culture, and Heritage Services.
- 5. Interim Driveway Crossing: Submission of a Letter of Credit for \$10,500.00 for the removal of the interim driveway letdown and reinstatement of the curb, boulevard, and related hard and soft landscaping, including the reinstatement of on-site landscaping (i.e. replacement of the structural grass grid within the interim on-site loading area with turf), to the satisfaction of the City, the value of which is based on 100% of the sealed cost estimate provided by the developer's Civil Engineer, including labour and 50% contingency. (NOTE: For the sealed estimate submitted January 31, 2014, see: REDMS #4146298)
- 6. Tree Protection & Replacement: Registration of a legal agreement, secured via a Letter of Credit, and related requirements with respect to the developer's removal of existing trees and other landscaping at 8300 8388 Capstan Way ("Union Square") along the common property line it shares with the subject site prior to preloading of the subject site, and the developer's installation of replacement trees and other landscaping at 8300 8388 Capstan Way ("Union Square") upon the construction of the subject development. More specifically, prior to issuance of the subject DP, the developer shall satisfy the following:
 - 6.1. Submission of an application for and issuance of a Tree Removal (Non-Development) Permit with respect to the removal of existing trees along the portion of the southern boundary of 8300 8388 Capstan Way ("Union Square") abutting the subject site, which trees shall be replaced as generally indicated in the attached landscape plan (Schedule A), as authorized by the owner of 8300 8388 Capstan Way ("Union Square");

DP 12-612510 Page 3

6.2. <u>Unless already registered on title</u>, registration of a restrictive covenant on the subject site for the purpose of restricting BP issuance granting occupancy for the third (final) phase of the subject development (in whole or in part, inclusive of parking) until replacement trees and other landscaping, as generally indicated in the attached landscape plan (Schedule A), have been installed at 8300 - 8388 Capstan Way ("Union Square") to the satisfaction of the City; and

- 6.3. Submission of a Letter of Credit for the installation of replacement trees and other landscaping, as generally indicated in the attached landscape plan (Schedule A), in the amount of \$45,881.00, the value of which is based on 100% of the sealed cost estimate provided by the developer's Landscape Architect, including labour and 10% contingency. (NOTE: For the sealed estimate submitted January 30, 2014, see: REDMS #4143537) Upon installation of the replacement trees and other landscaping to the satisfaction of the City, the value of the Letter of Credit may be reduced to 10% of its original value for a maintenance period of one year. At the end of the one year maintenance period, provided that the condition of the trees and other landscaping are to the satisfaction of the City, the 10% Letter of Credit holdback may be released.
- Landscape Bond: Submission of a Letter of Credit for landscaping in the amount of \$1,204,450.50, the value of
 which is based on 100% of the sealed cost estimate provided by the Landscape Architect (including labour and
 10% contingency).
- B. Prior to Building Permit* (BP*) issuance for the purpose of construction, the developer must complete various requirements including, but not limited to, the following:
- "No Build": Compliance with the terms of the restrictive covenant(s) registered on title prior to rezoning
 adoption (RZ 11-591985) or Development Permit issuance (DP 12-612510) securing that no construction will
 be permitted and restricting BP* issuance in respect to some or all of the subject development until conditions
 are satisfied for the following, as determined to the satisfaction of the City:
 - 1.1. Walkway and Utilities Statutory Right-of-Ways (SRWs): Prior to BP* issuance for Phase 3, the developer shall ensure that the detailed design of the walkway and combined walkway driveway along the eastern edge of the subject site are completed to the satisfaction of the Director of Engineering, Director of Transportation, Director of Development, and Senior Manager, Parks, and provide for, among other things, the seamless coordination of the SRW areas with future development by others to the east and north (i.e. lengthening, widening, maintenance), satisfactory accommodation for existing/future engineering services and related features (e.g., retaining walls, furnishings, and other improvements must not conflict with underground utilities), and public vehicle turn-around activities (if Brown Road has not yet been extended to provide for unrestricted public access to/from Sexsmith Road).
 - 1.2. <u>Affordable Housing</u>: Prior to BP* issuance for Phases 2 and 3, the developer shall provide cash contributions to the City's capital Affordable Housing Reserve Fund, together with applicable Consumer Price Index (CPI) contributions.
 - Capstan Station Bomis: Prior to BP* issuance on a phase-by-phase basis, the developer shall contribute to the Capstan Station Reserve.
 - 1.4. <u>Aircraft Noise Sensitive Use</u>: Prior to BP* issuance on a phase-by-phase basis, the developer shall provide a Letter of Assurance from a registered professional confirming that the building conforms to City policy as set out in the covenant.
 - 1.5. View Blockage and Other Development Impacts: Prior to BP* issuance on a phase-by-phase basis, the developer shall provide a Letter of Assurance from a registered professional confirming that the building design conforms to the "View Blockage and Other Development Impacts" report attacked as a schedule to the covenant.

1.6. Phasing:

1.6.1.BP* issuance shall proceed sequentially from Phase 1 through to Phase 3 and provide for the phaseby-phase: DP 12-612510 Page 4

Construction of and final BP* inspection granting occupancy for the development's outdoor
landscaping, residential indoor amenity space, transitional vehicle and bike parking, Electric
Vehicle (EV) charging stations for residents' cars and bikes, and accessible dwelling measures, as
approved via the Development Permit* process (DP 12-612510); and

- Registration of additional engineering-related agreements, as determined to the satisfaction of the City via the development's phase-by-phase BP* approval processes.
- 1.6.2. Prior to BP* issuance on a phase-by-phase basis, the developer shall provide a Letter of Assurance from a registered professional confirming that the building design conforms to the "Phasing" covenant.
- 1.7. <u>District Energy Utility (DEU)</u>: Prior to BP* issuance on a phase-by-phase basis, the developer shall ensure the building is designed with the capability to connect to and be serviced by a DEU and provide an energy modelling report satisfactory to the Director of Engineering.
- Construction Traffic: 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.
- Construction Hoarding: Obtain a 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:

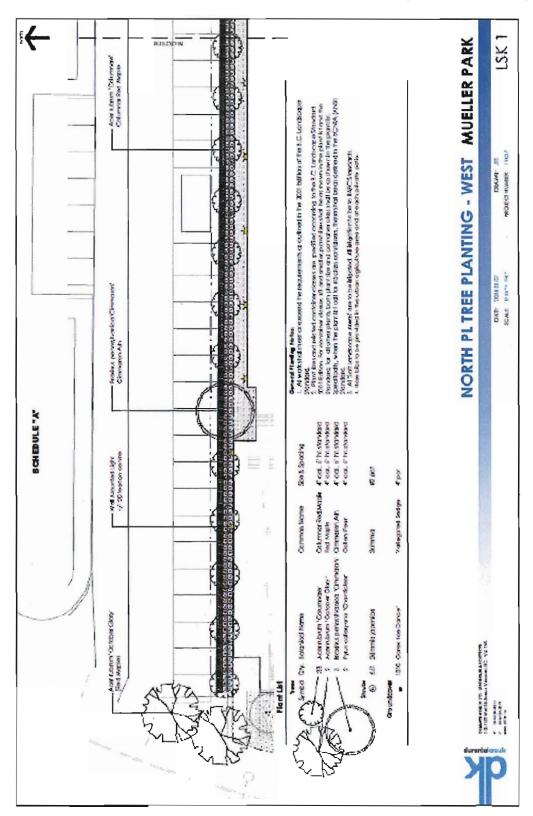
- This requires a separate application.
- Where the Director of Development deems appropriate, the preceding agreements are to be drawn not only as personal
 covenants of the property owner but also as covenants pursuant to Section 219 of the Land Title Act.
 All agreements to be registered in the Land Title Office shall have priority over all such liens, charges and

All agreements to be registered in the Land Title Office shall have priority over all such tiens, 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.

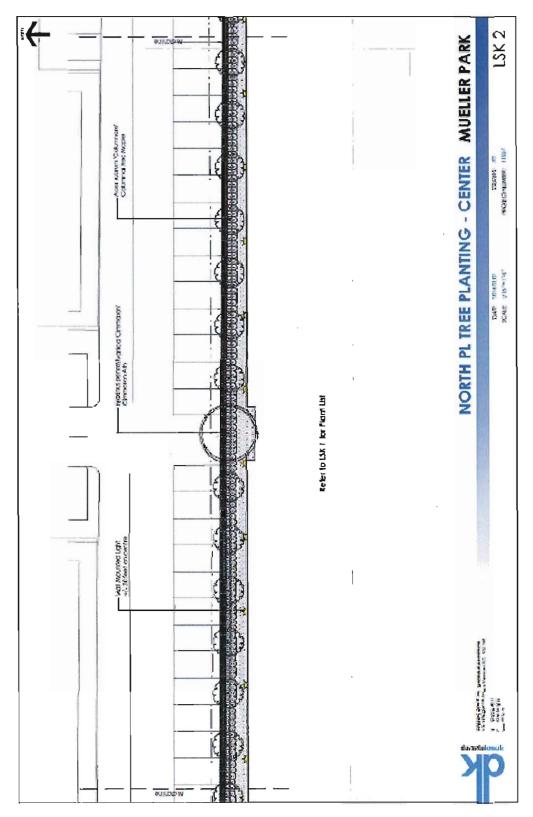
- The preceding agreements shall provide security to the City including indemnities, warranties, equitable/rent charges, letters of credit and withholding permits, as deemed necessary or advisable by the Director of Development. All agreements shall be in a form and content satisfactory to the Director 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.

Signed	Dat	te

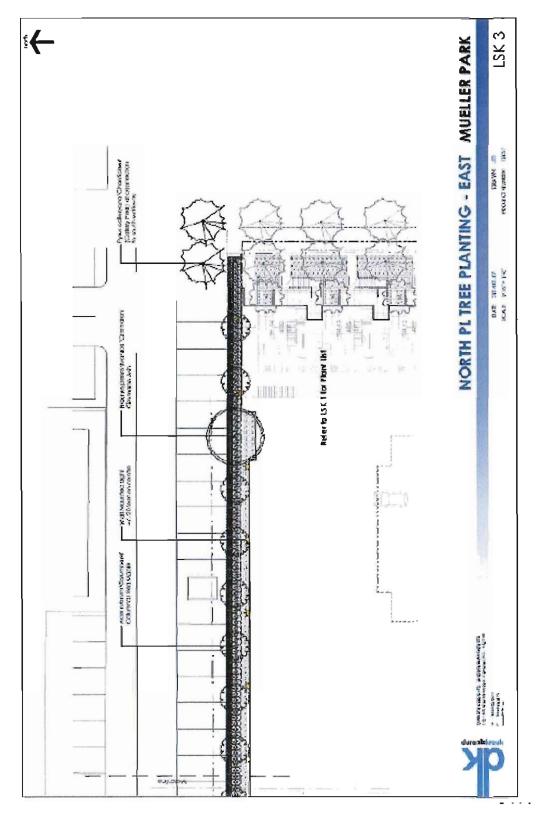
Schedule A Replacement Plan for Trees and Other Landscaping at 8300 – 8388 Capstan Way ("Union Square")



 ${\bf Schedule~A~Replacement~Plan~for~Trees~and~Other~Landscaping~at~8300-8388~Capstan~Way~("Union~Square")}\\$



 $\label{eq:Schedule A} Schedule\ A \\ Replacement\ Plan\ for\ Trees\ and\ Other\ Landscaping\ at\ 8300-8388\ Capstan\ Way\ ("Union\ Square")$





Development Permit

No. DP 12-612510

To the Holder:

Polygon Development 192 Ltd.

Property Address:

8331, 8351 & 8371 Cambie Road

Address:

900 – 1333 West Broadway Vancouver, BC V6H 4C2

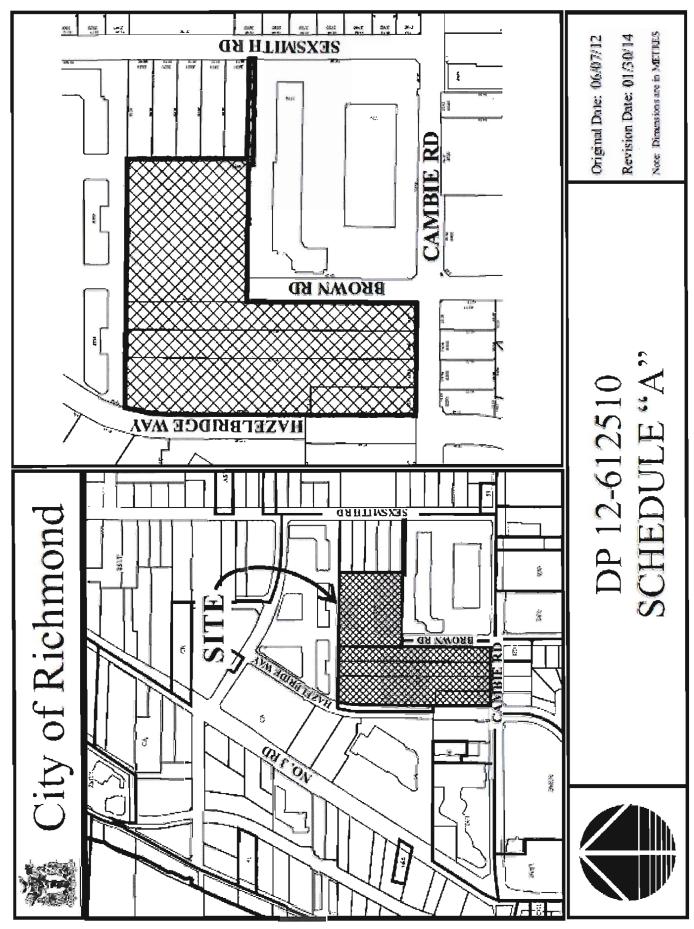
1. This Development Permit is issued subject to compliance with all of the Bylaws of the City applicable thereto, except as specifically varied or supplemented by this Permit.

- 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 #29 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 \$1,204,450.50 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 12-612510

To the Holder:	Polygon Development 192 Ltd.
Property Address:	8331, 8351 & 8371 Cambie Road
Address:	900 – 1333 West Broadway Vancouver, BC V6H 4C2
conditions and	bed herein shall be developed generally in accordance with the terms and provisions of this Permit and any plans and specifications attached to this all form a part hereof.
This Permit is	ot a Building Permit.
AUTHORIZING DAY OF	ESOLUTION NO. ISSUED BY THE COUNCIL THE
DELIVERED TH	DAY OF , .
MAYOR	



	Permitted	Proposed
Net Site Area	13,734 m²	No change
Floor Area Ratio	Max 3.233 FAR	3 233 FAR
Net Buildable Floor Area	Max, 44,402 m²	44,402 m²
Lot Coverage	Max. 90%	82%
Lowest Habitable Floor Elevador	Min. 2.9 m goodetic, except tobbles	2.9 m geodetic, except tobbles
Height	Max. 35 m, but may be 47 m geodelic based on City- approved design	47 m geodelic

	Phase 1	Phase 2	Phase 3	TOTAL
Gross Floor Area	16,485.9 m²	10,411.1 m²	20,904.0 m²	47,801.0 m ²
FAR Exemptions	1,684,8 m²	656.4 m²	1,078.0 m² 3,39	3,399.2 m²
findoor Amenity Space	947.1 m2 (Levels 1, 2, 3 & 5)	Jel Jel	186.5 nr (Levels 2 & 3)	1,133.6 m²
- Circulation & Mechanical	o 717.7 ni ²	656,4 m²	891.5 m²	2,265.6 m²
Not Floor Area	14,821.1 m²	9,754.7 m²	19,826.0 m²	44,401.8 m ²
Number of Units	164	114	250	528
Basic Universal Housing (BUH) Units	525	11	88	80

	0	Con	Construction Phasing	ng,	1
	Coming bylaw Rates	Phase 1	Phase 2	Phase 3	IOIAI
Vehicle Parking	Including min, 2% accessible parking spaces & max, 20% small cer parking spaces				
. For Residents	Min, 1.0/unit (ESS 16 spaces (TDMnm)	342**	7	163	512
- For Visitors***	Min. 0.2/unit LESS 11 spaces (TDM***)	4	o.	43	96
TOTAL	n/a	386	16	206	607
Bike Storage					
· For Residents (Class 1)	Min, 1.25/unit	126	236	298	099
For Visitors (Class 2)	Min. 0,2/unit	33	23	90	106

- As per Zoving Bylaur requirements for parking for multi-phase developments in Capstan Villago, the developer proposed to ever-supply parking in the operated services and projects early planes and multi-phase according to the parking analysis of the phases is cover-supply parking in the phase is exceede infinitely explained to this are of last of the phase is exceeded infinitely ordinaments for Phase I resident parking the Phase I are all provide for all lass! floopings for the use of these is residents and 182 spaces for the use of the establishment of the phase is the provide for all lass! floopings for the use of the pases is for the use of the establishment of phase is until they are ver required for Phases 2 and 3. The flass gloces may be used on a temporary Visitor pathog is for the shared use of all phases.

 Visitor pathog is for the shared use of all phases.

 Reductions permitted has so on the development of approved Transportation Demand Management (TDM) measures.
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EV Charging Stations		Cons	Construction Phasing**	6u		
for Residents Only"	SOLF NAMES	Phase 1	Phase 1 Phase 2	Phase 3	lotal	
For Vehicles 120-V stations	20% total parking.	និង្	7 7	8 4	221	
S C COBILLIES	Daniel man harri	-		200	100	
For Bikes (Class 1) 120-V stations	Zoning Bylaw (mfn) rate: Greater of 1/10 bike spaces or portion	51	24	29	93	

- Proposed incultions of EV Changleg Stations for rosidents' volhicles & "Class 1" biles storage are shown on the DP classings, the storage special power property proteing the property of the special power property of the property of the property proteing the proteing and proteing the proteing sealing the proteing sealing the proteing and account plasses are readed. As stock, pulmp proposed for construction in Plasse appear of the protein and account and protein and account appear and account and protein and account and protein and account account account and protein and account account account and account account account account account account account and account accoun :

Polygon "Avanti" (Mueller)

8311, 8331, 8351, and 8371 Cambie Road and 3651 Sexsmith Road

Peb 5, 2014

DP 12 - 612510

No Affordable Housing units are provided in the subject development. 7

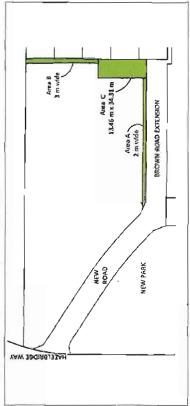
No variances are requested.

NOTES:

Building Permit applications are to be submitted and approved on a phase-by-phase basis, as shown below and secured with a logal agreement on title.



Statutory right-of-ways registered on title are shown below. 4



Basic Universal Housing units are indicated on the floor plans as "BUH". 5

(NOTE: No Zoning Bylaw floor area exemption applies.)

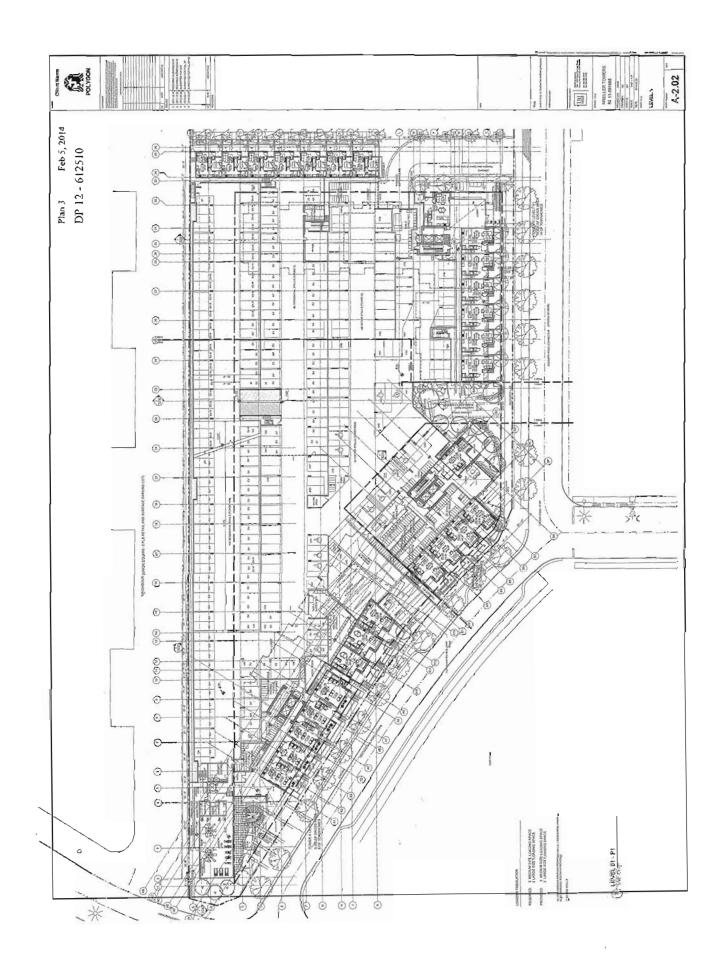
- All units must include aging in place features (e.g., blocking in washroom walls, lever handles on doors and e,
- No tandem parking is permitted

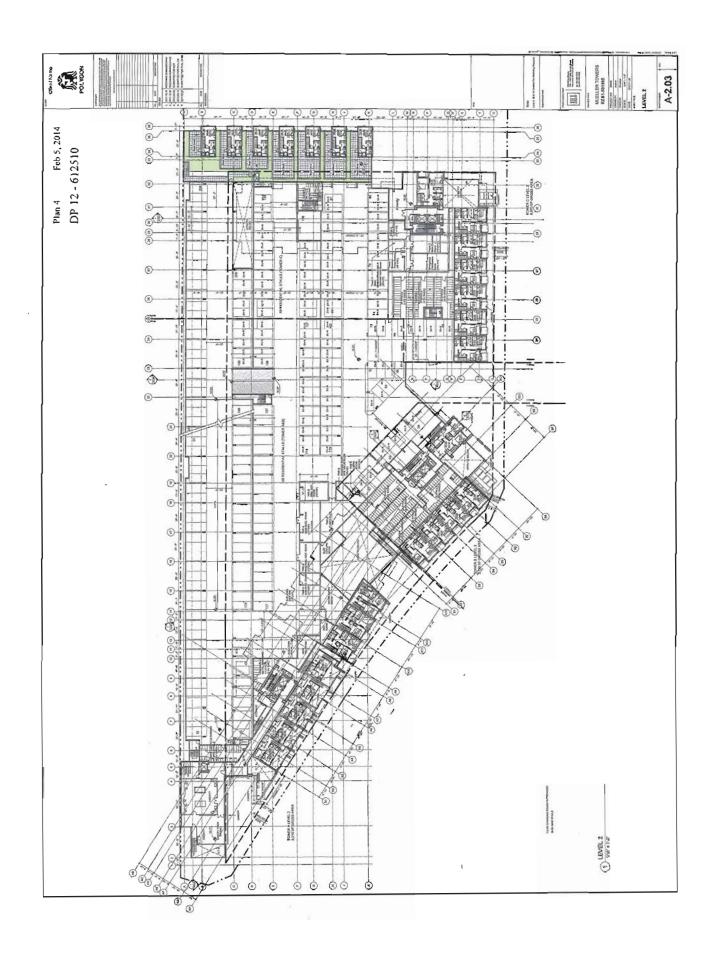
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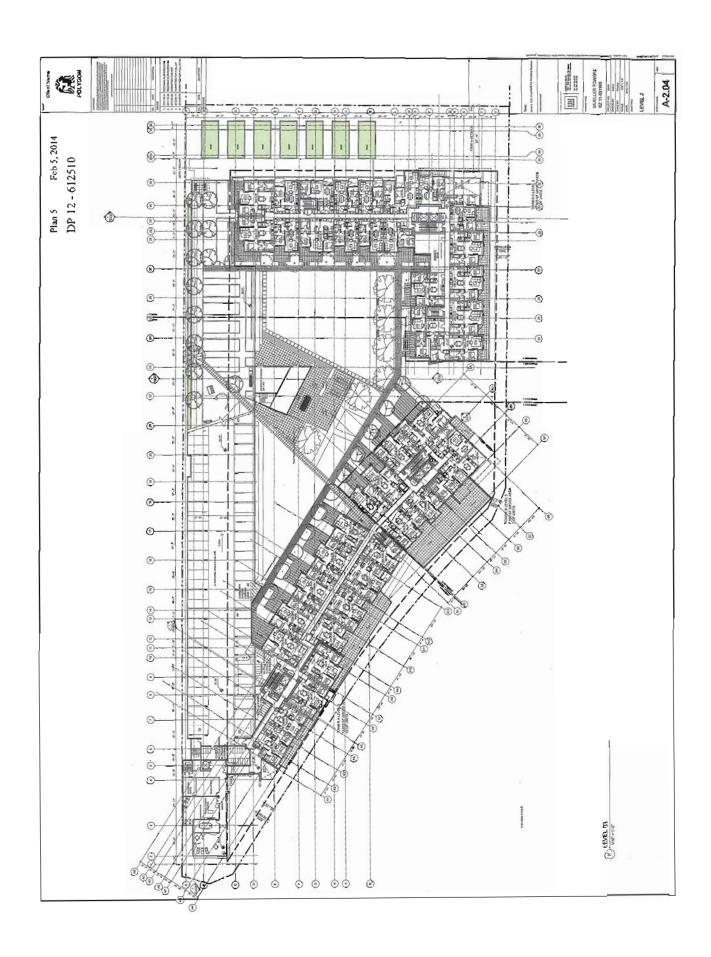
Electrical Vehicle (EV) Charging Stations (for vehicles and bikes) are to be provided for the use of residents as indicated in the table to the left æ



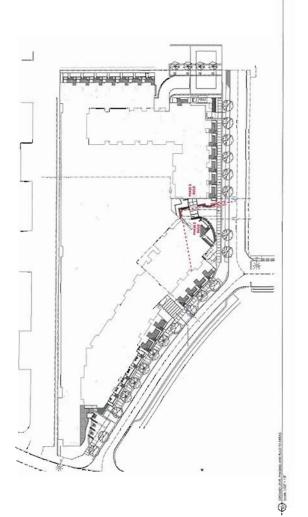


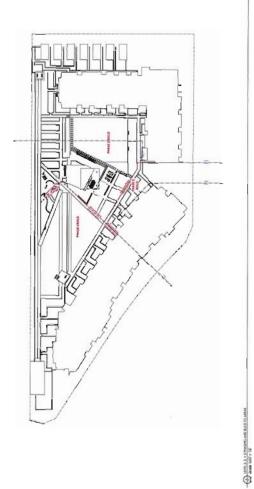










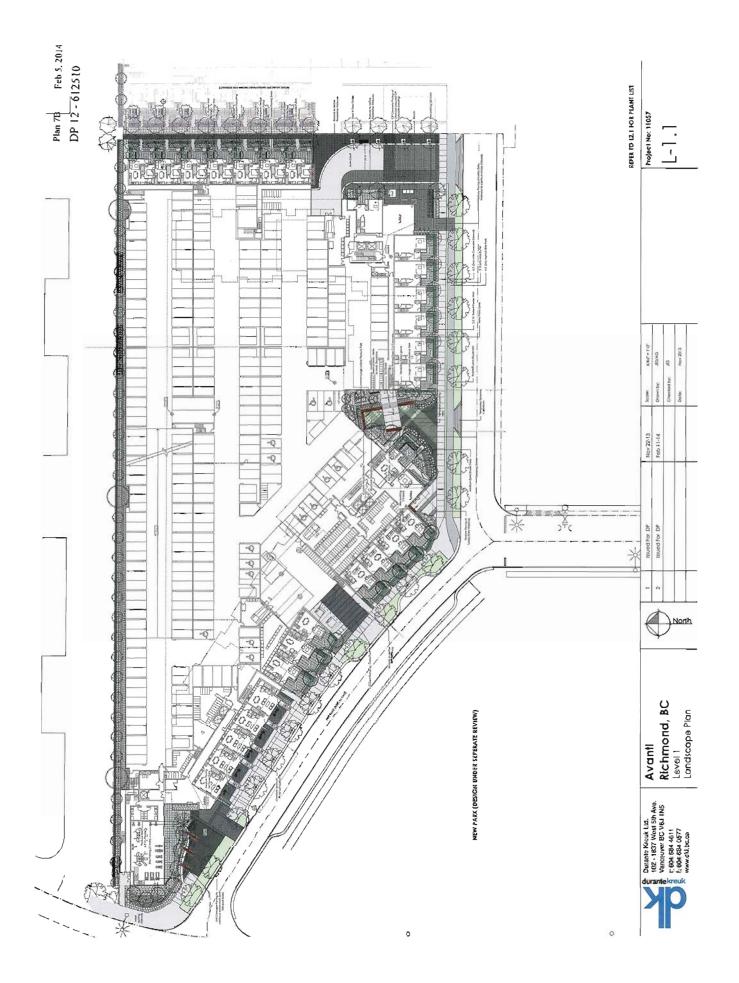


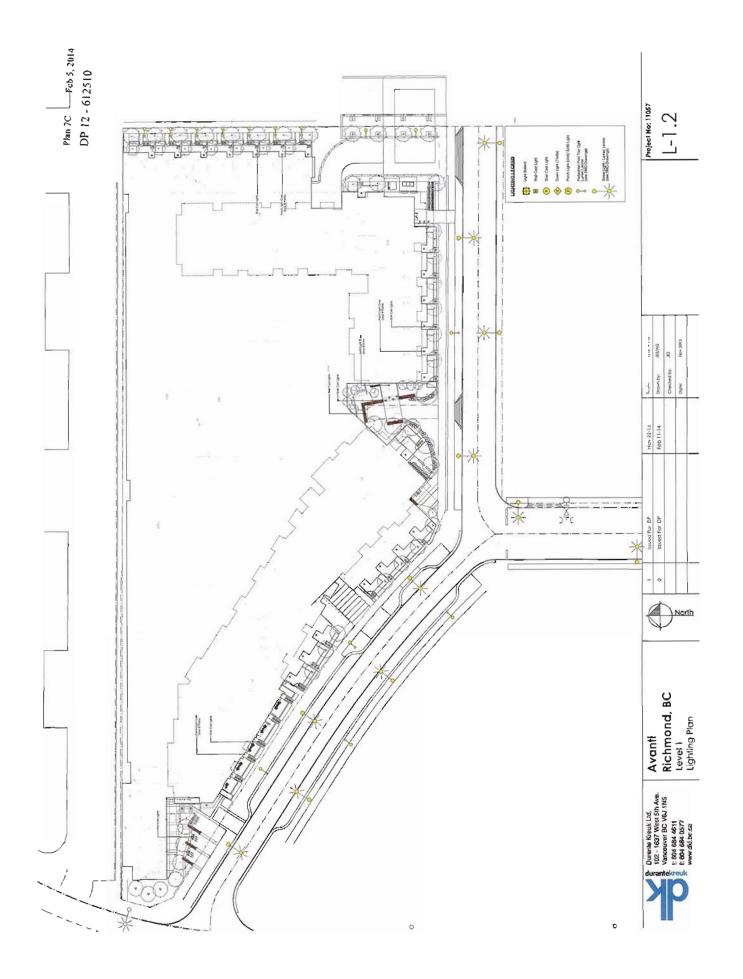
Mueller Tower
Richmond, BC
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Landscape Plan

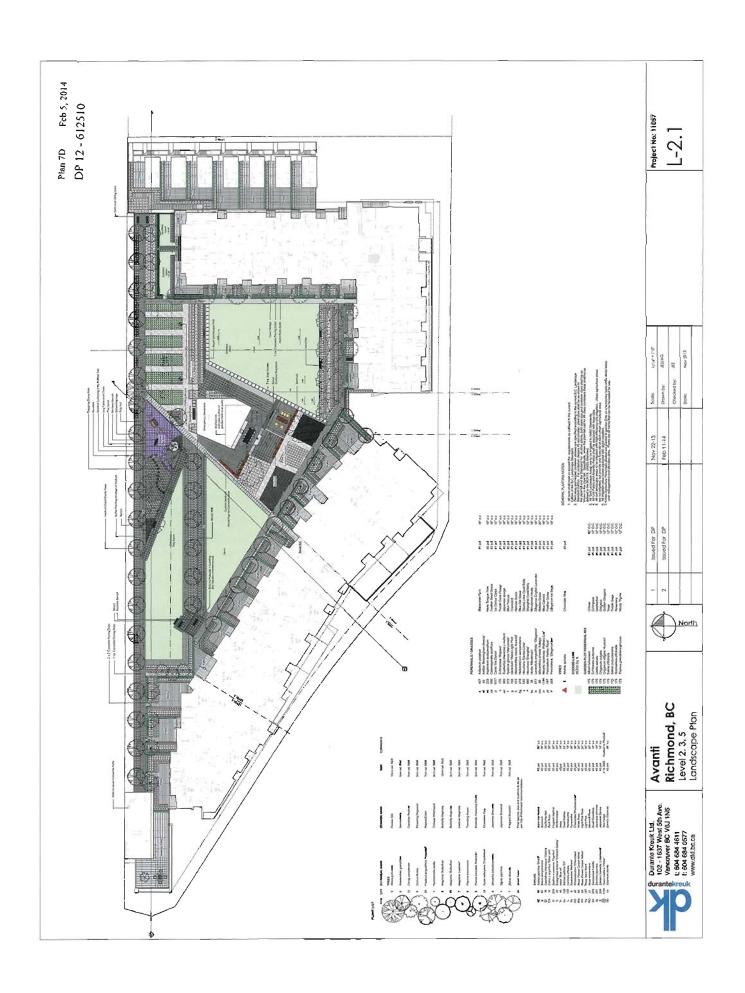
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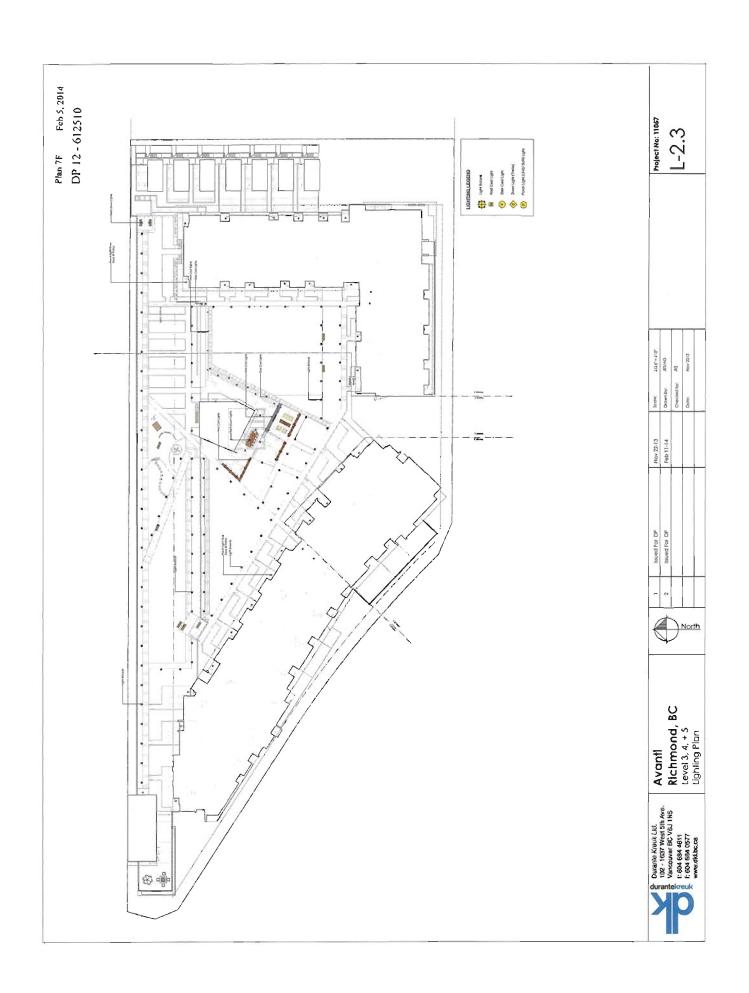
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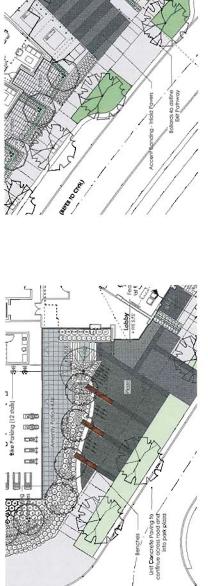
Avanti Richmond, BC Landscape Sections

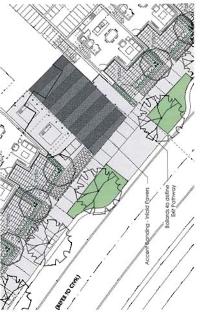
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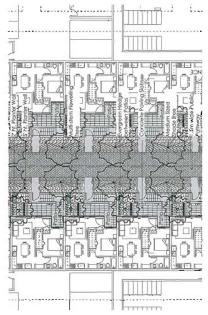
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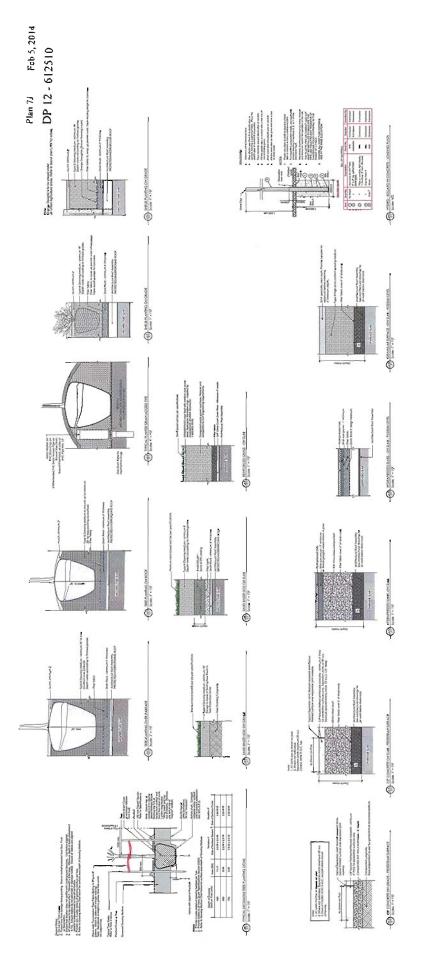
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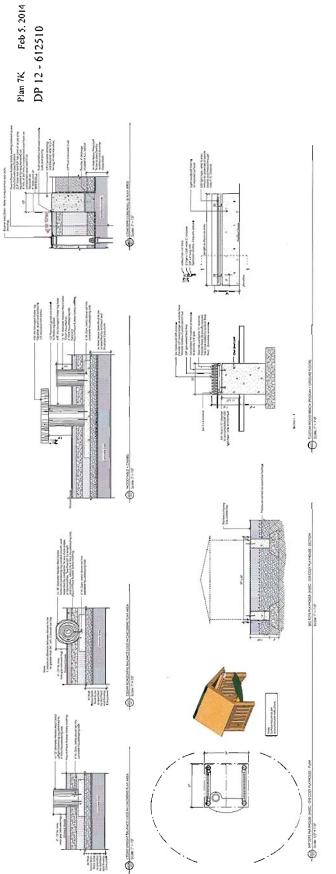
Mueller Tower

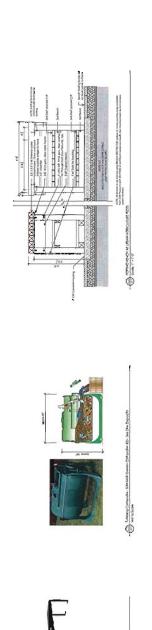
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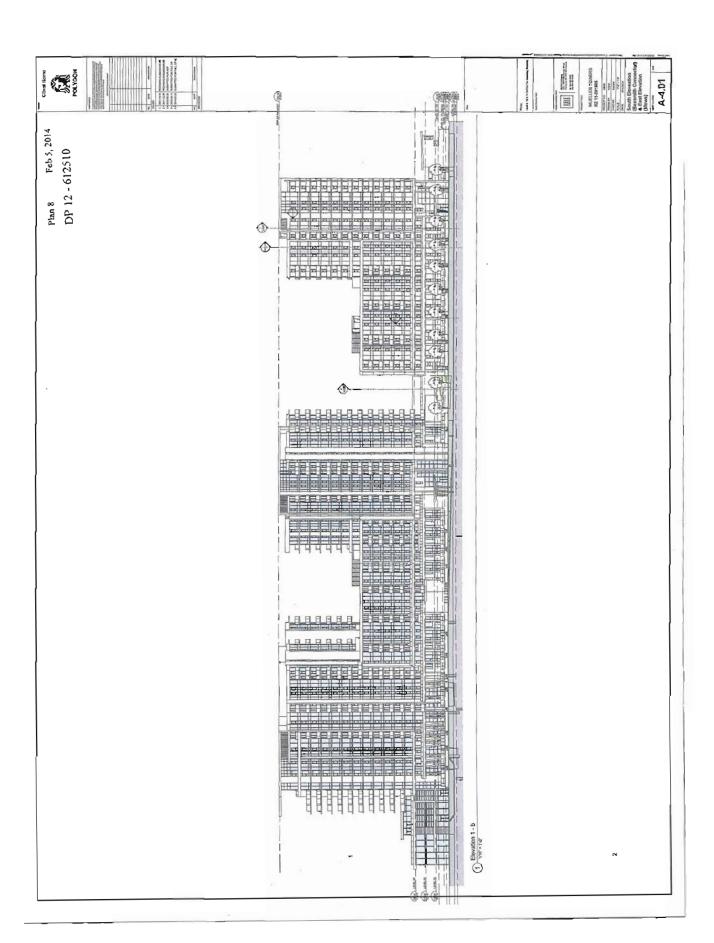


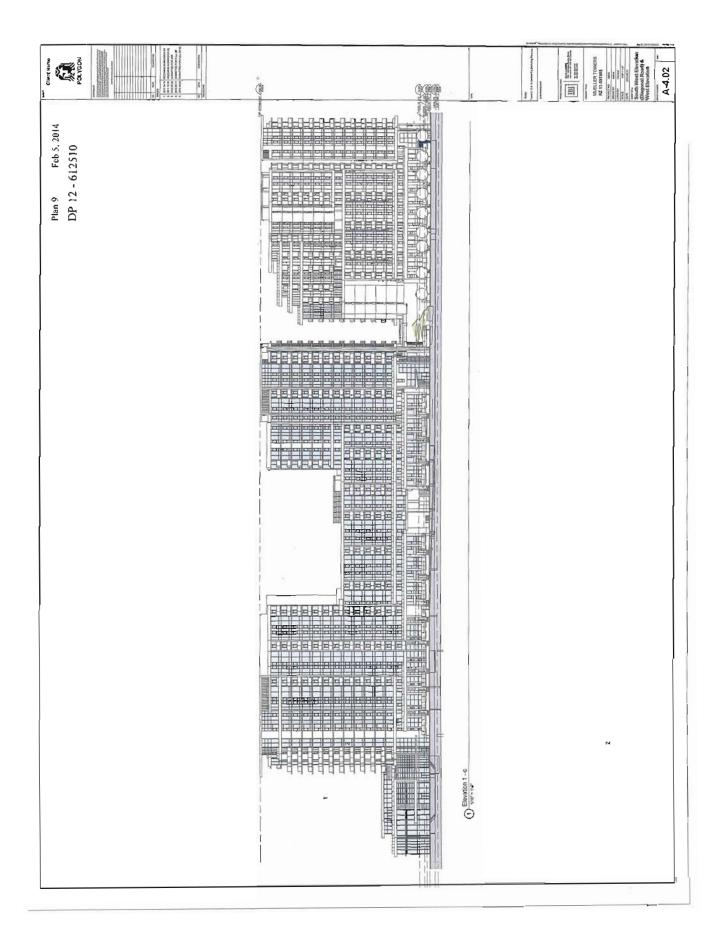
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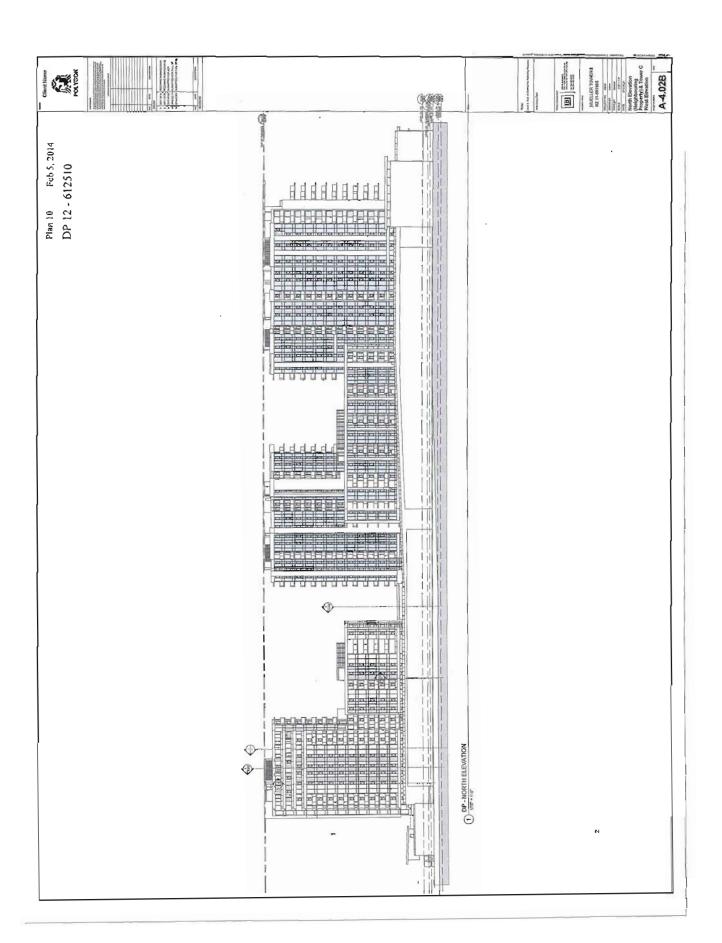
Mueller Tower Richmond, BC Landscape Details

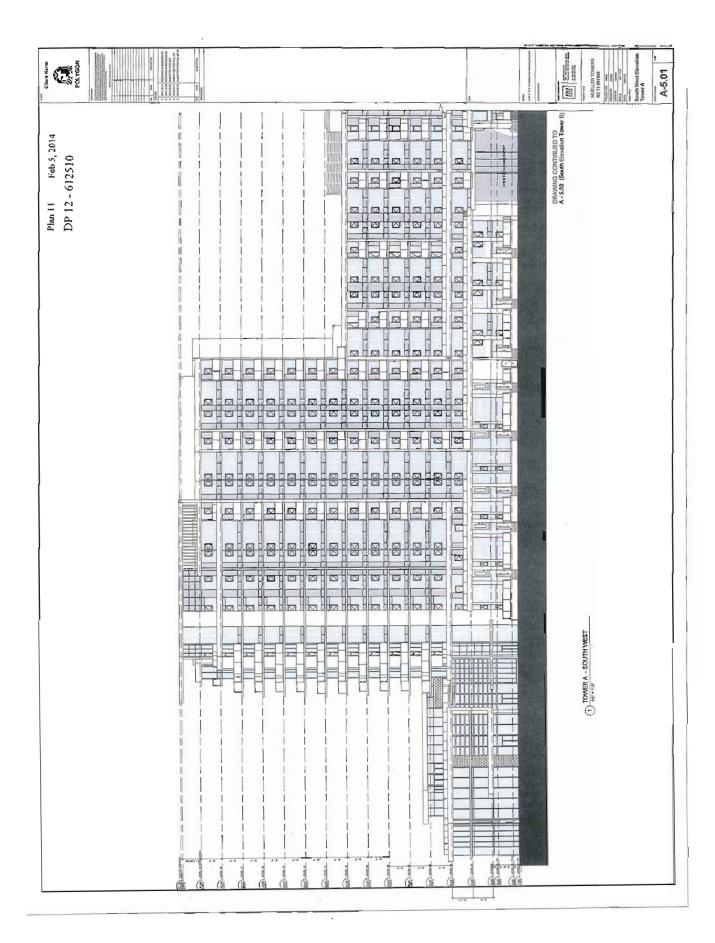
*	1	da sol pensi	Nov 22-13	Scott;	(7) 6" = 1" 47"
	2	based for DP	Feb 14-34	Drawnby	JESTAG
)				Checked by:	B
Nor				Dale:	Nov 2013
th					

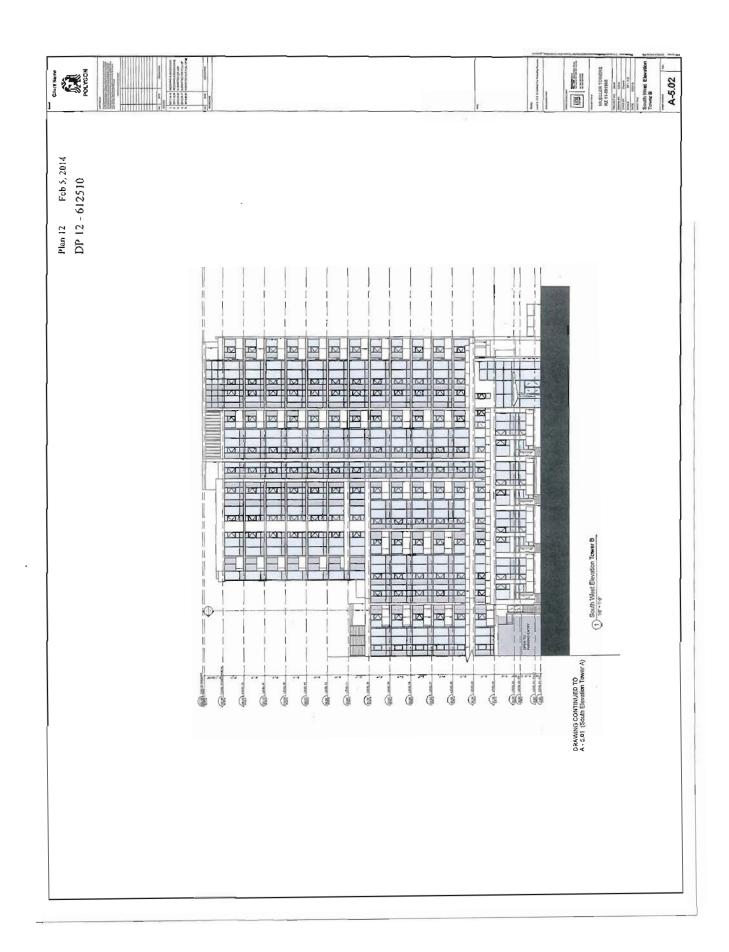
Project No: 11057 L-5.2

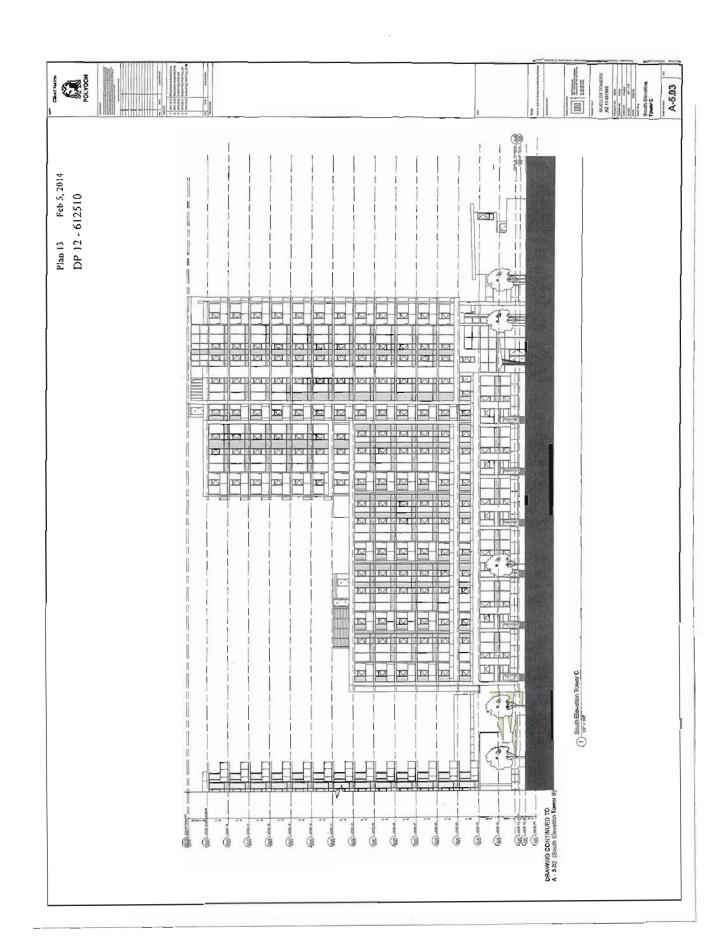


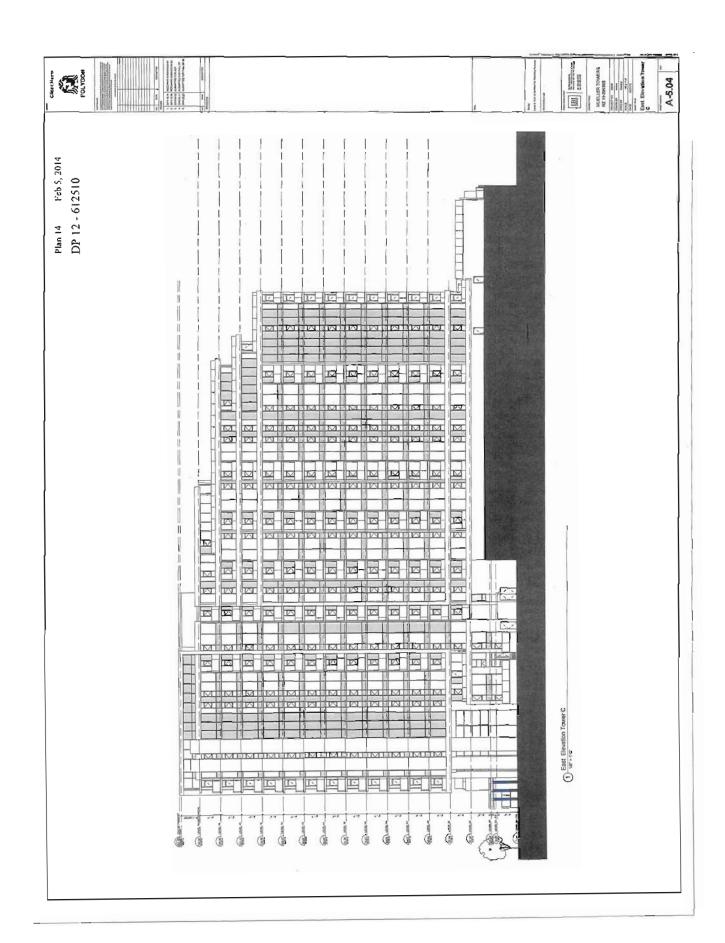


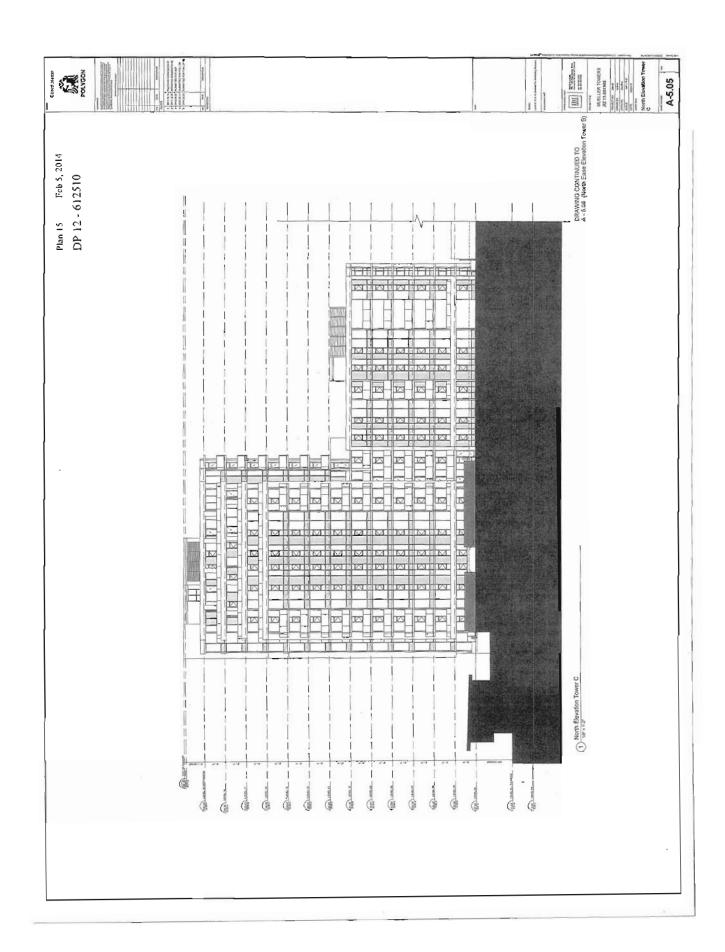


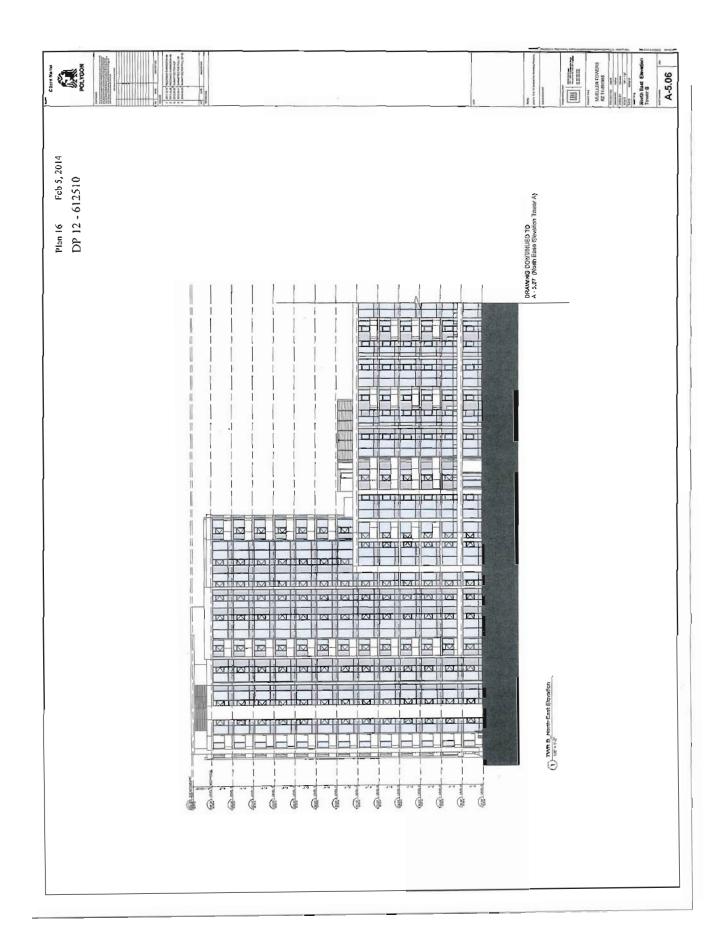


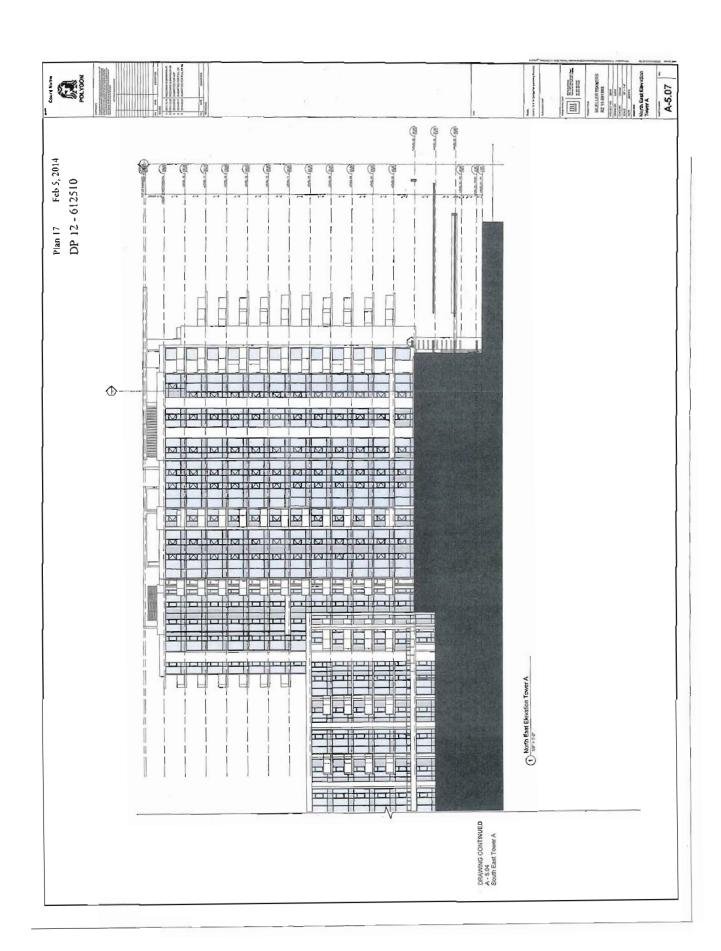


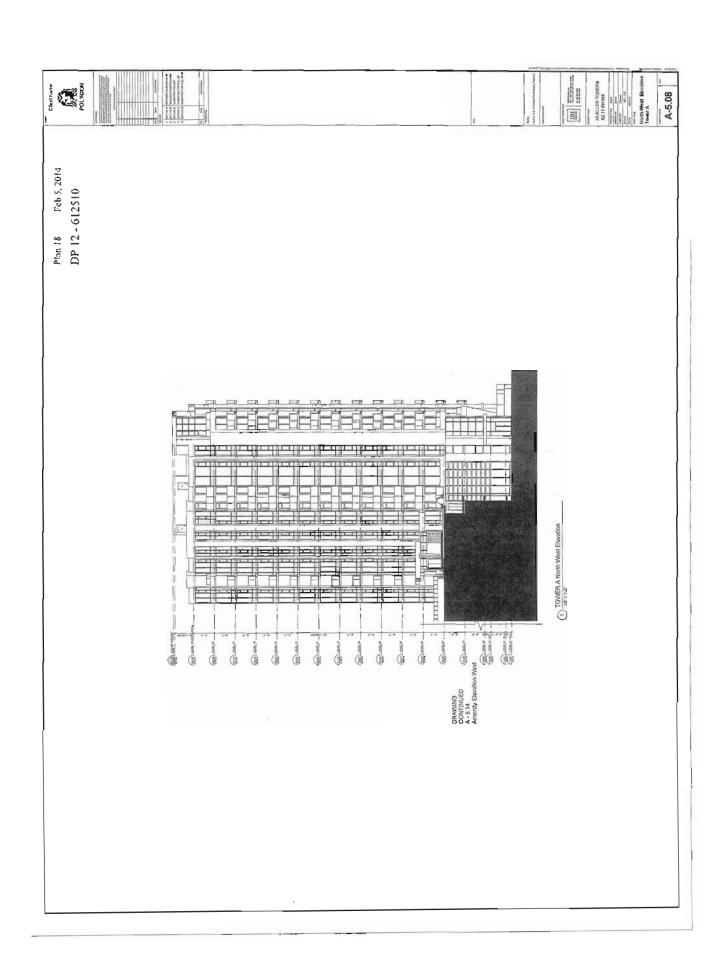


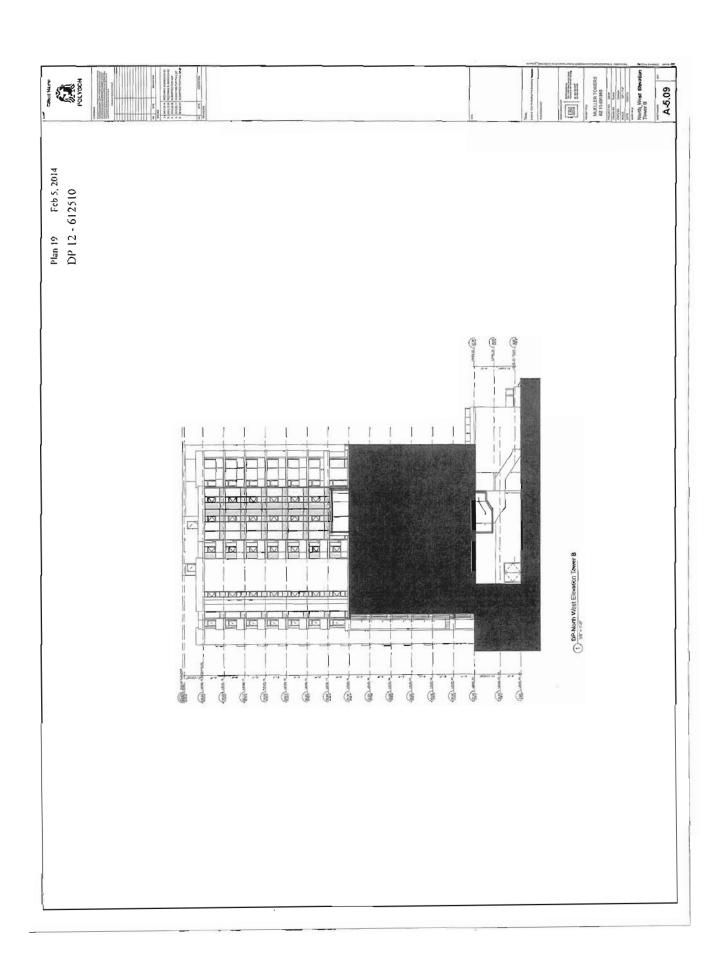


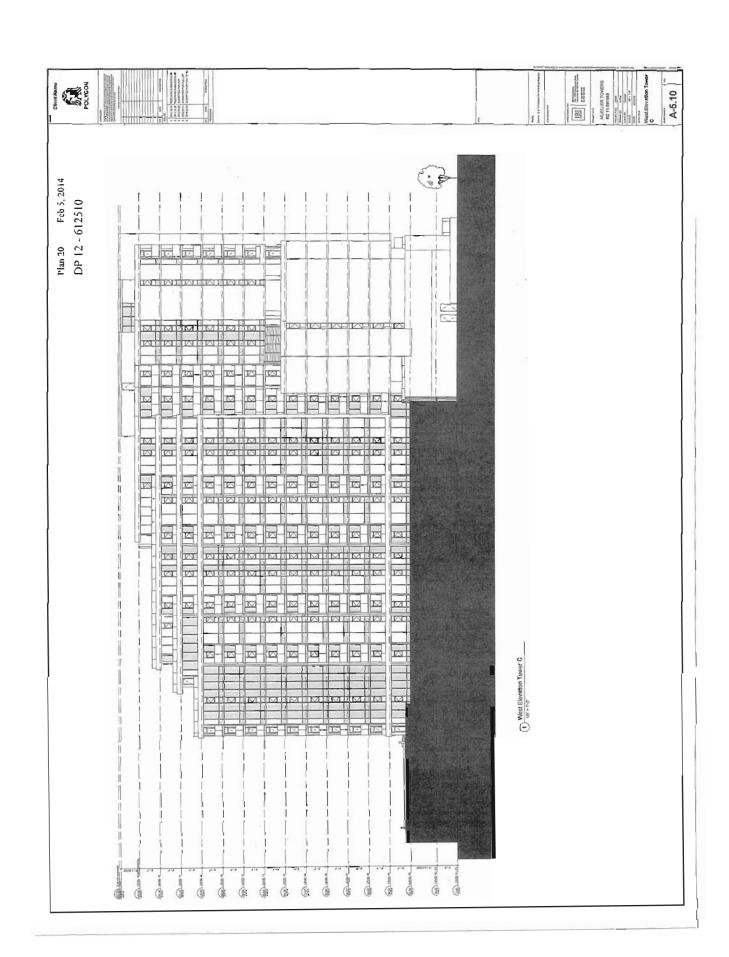


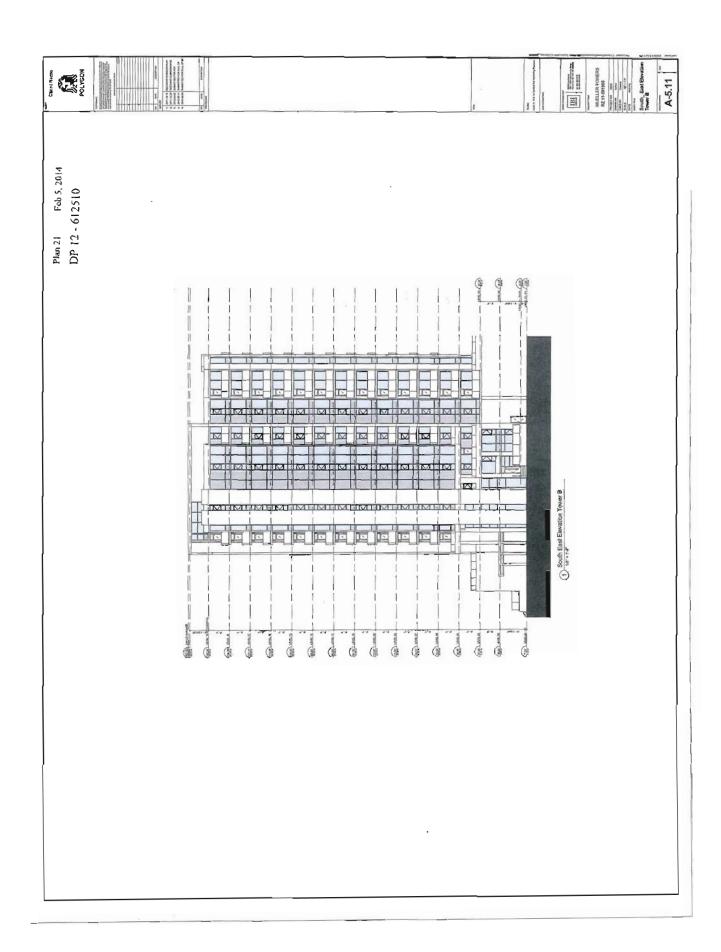


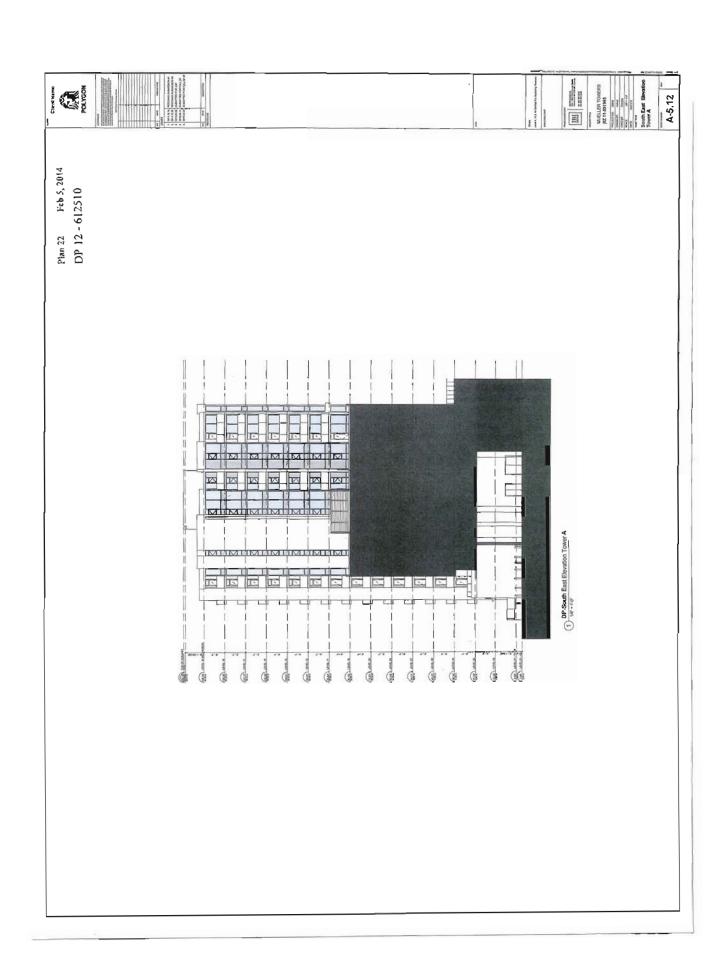


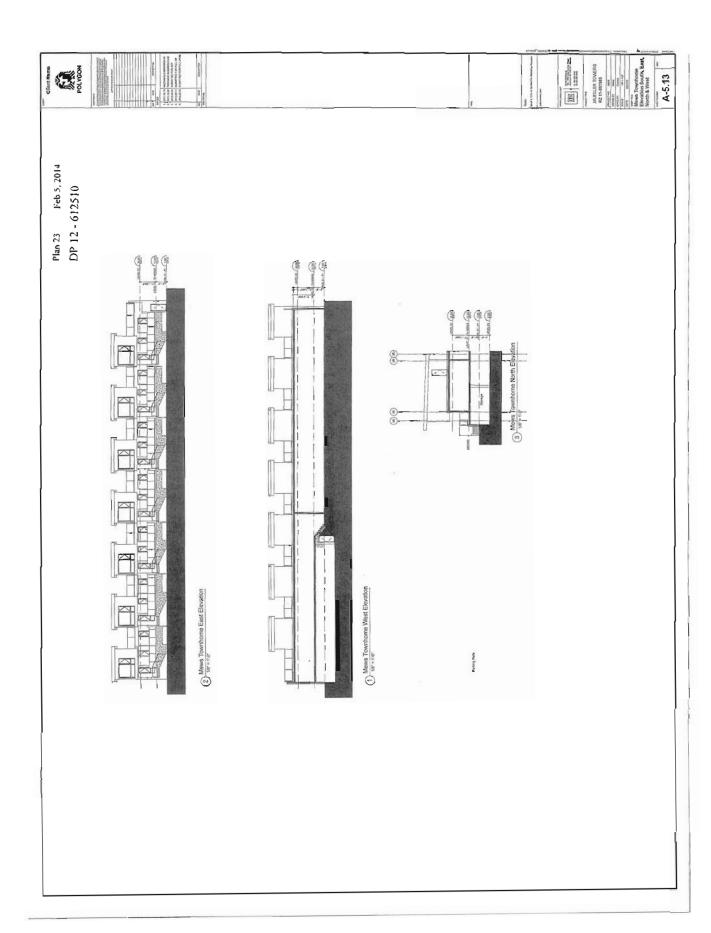


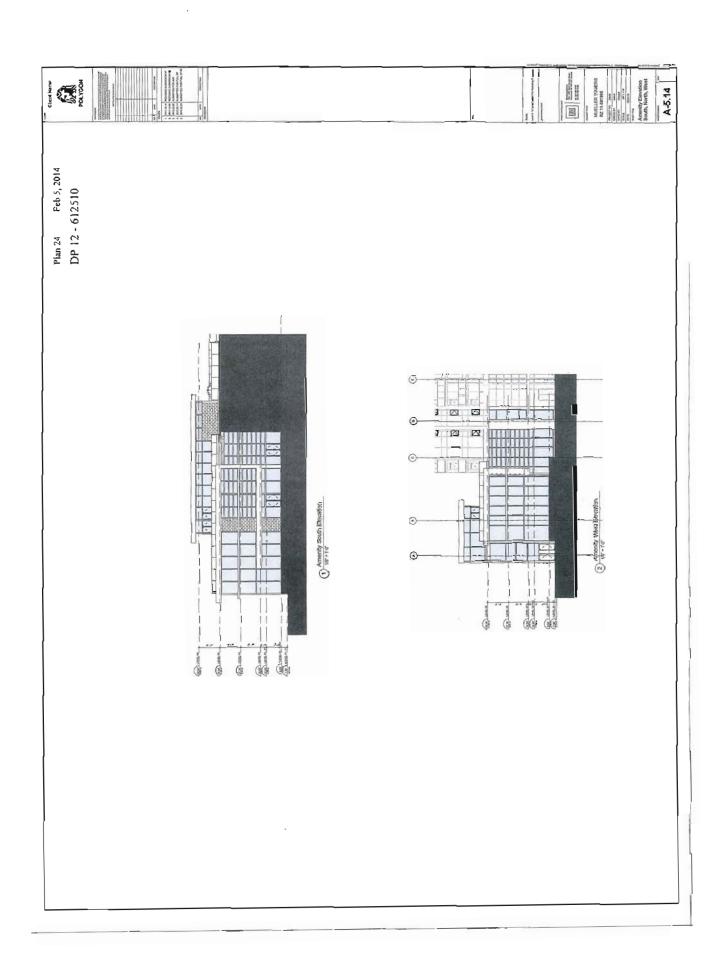


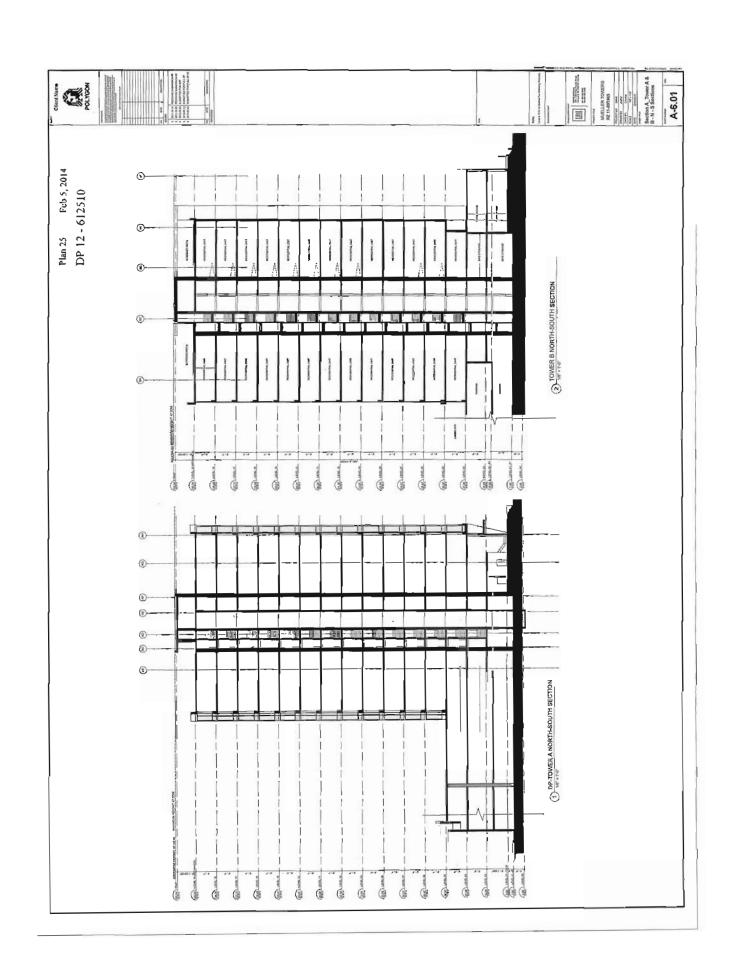


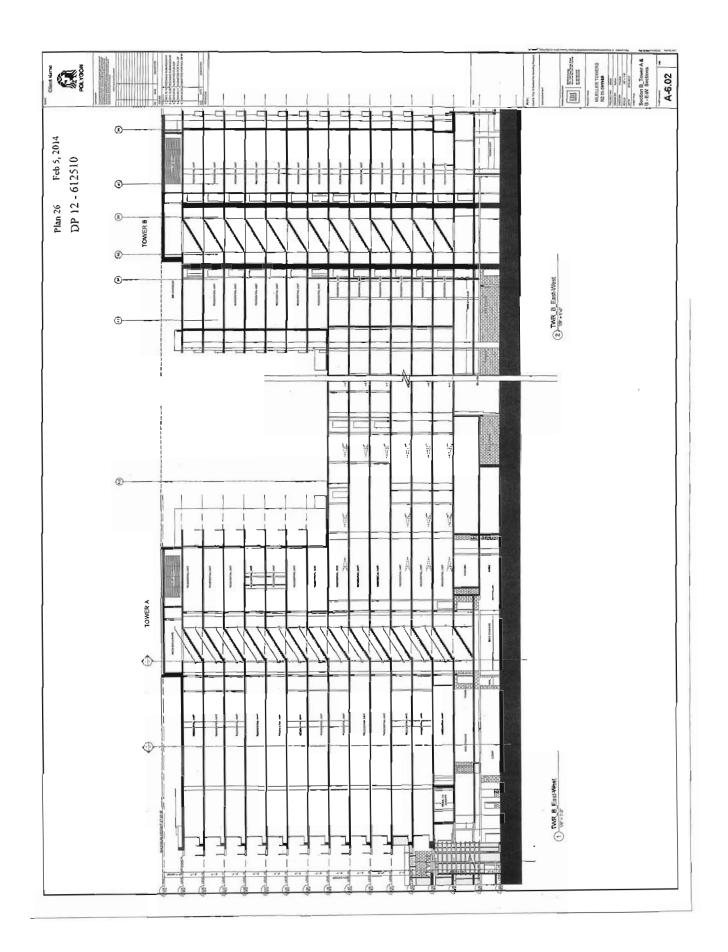


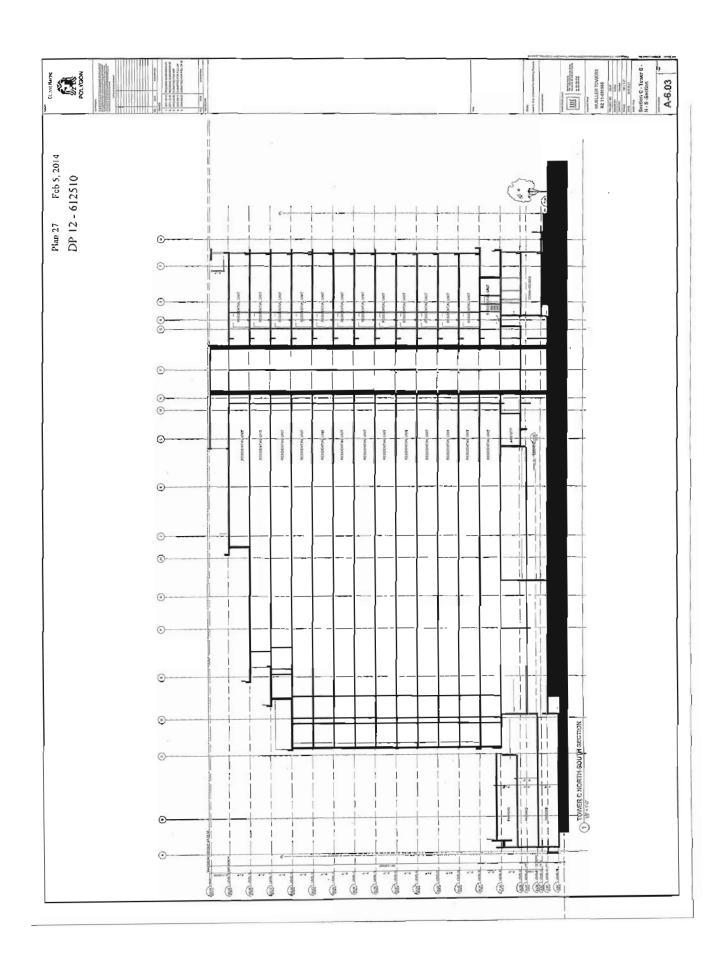


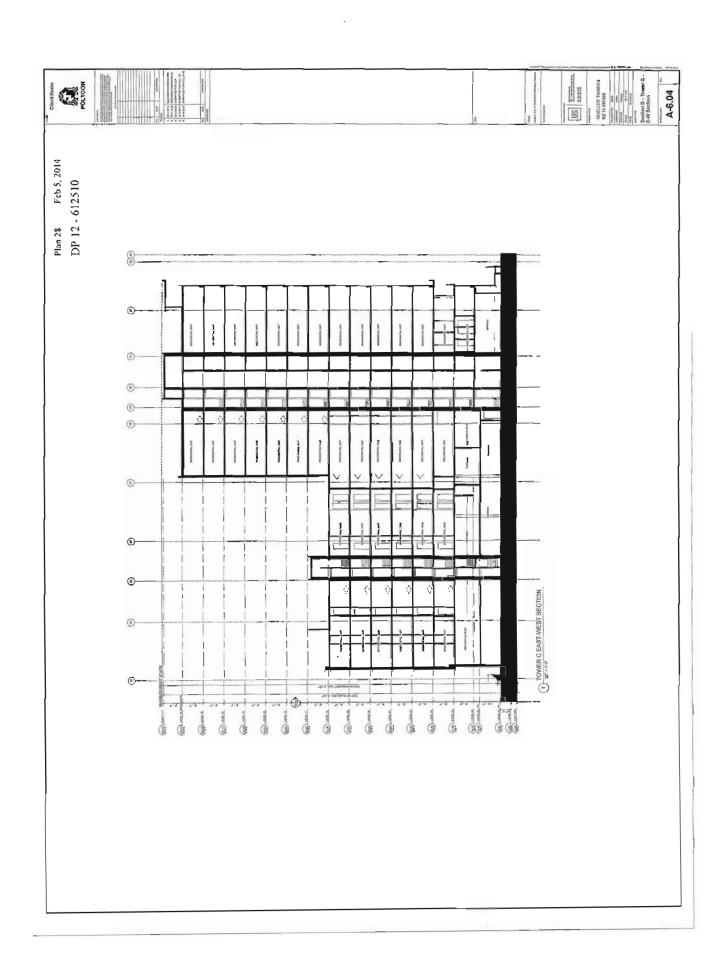


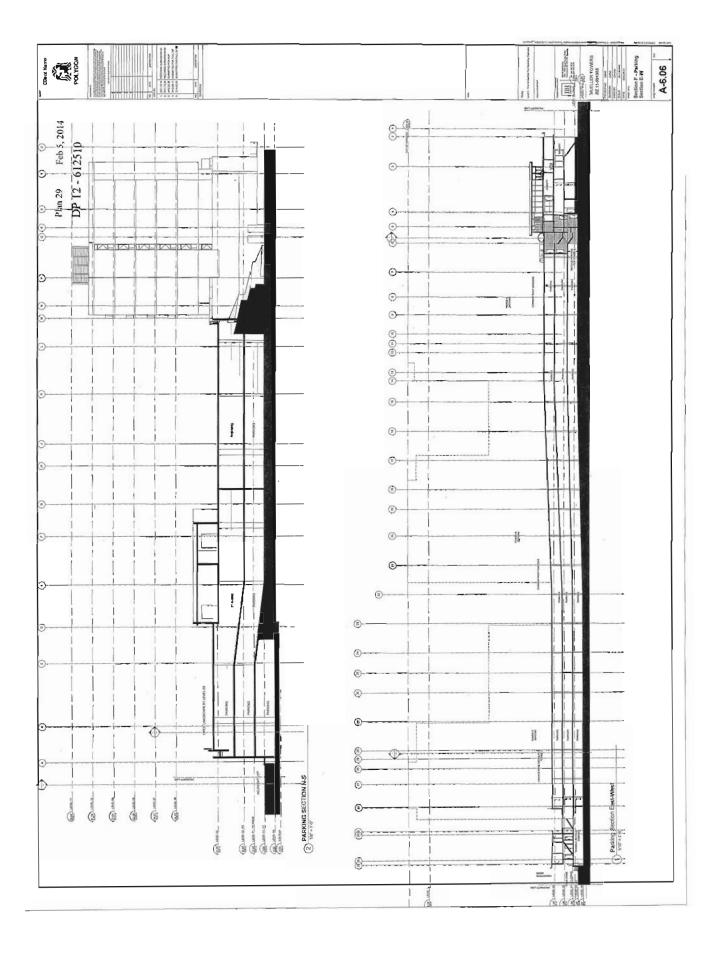


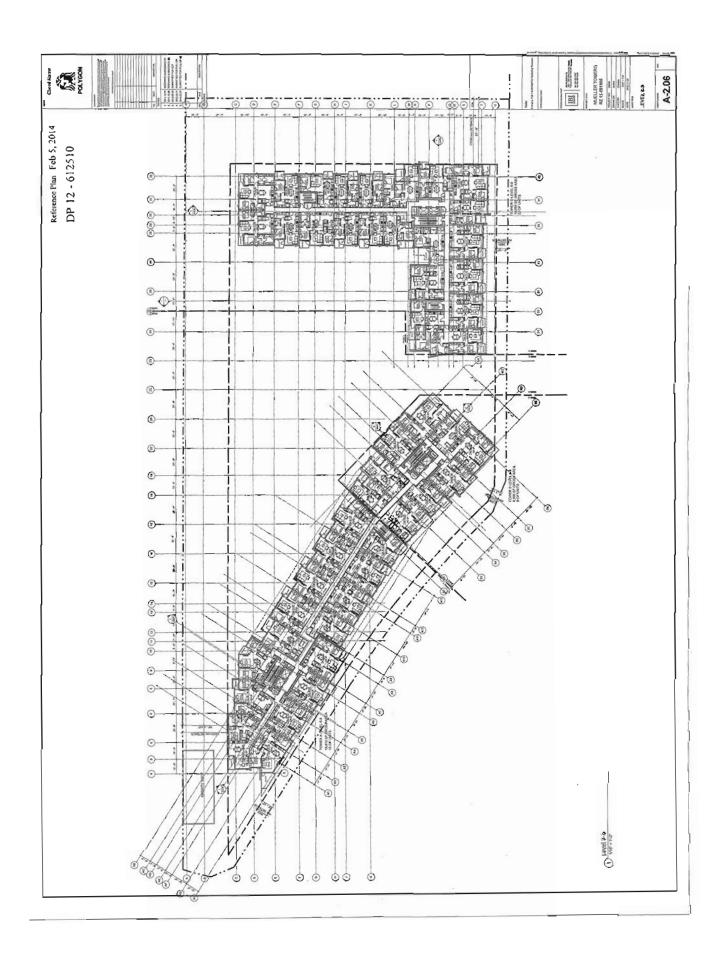


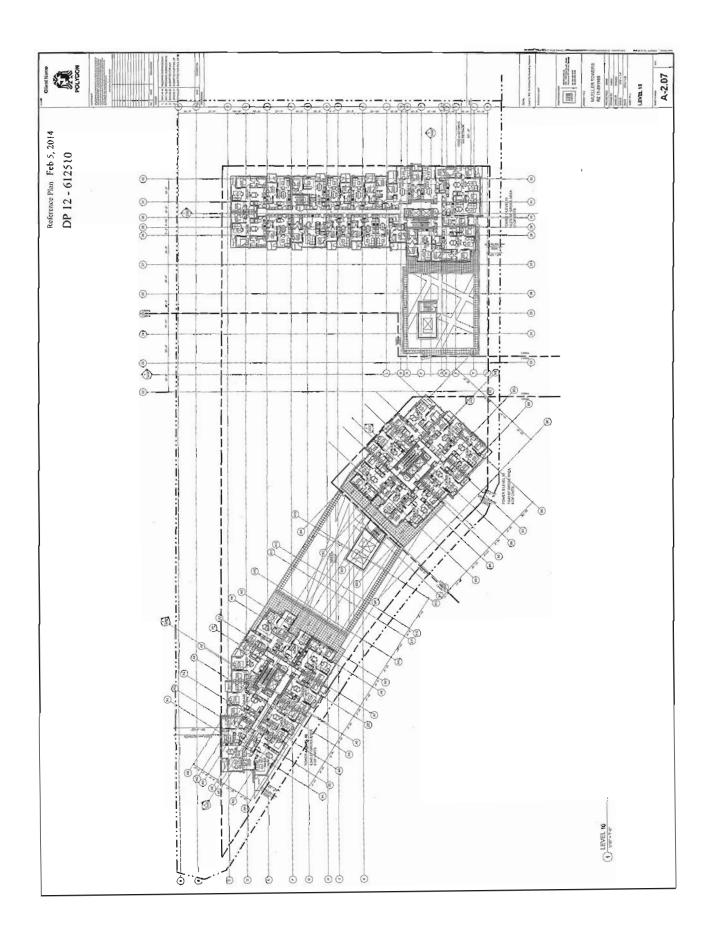


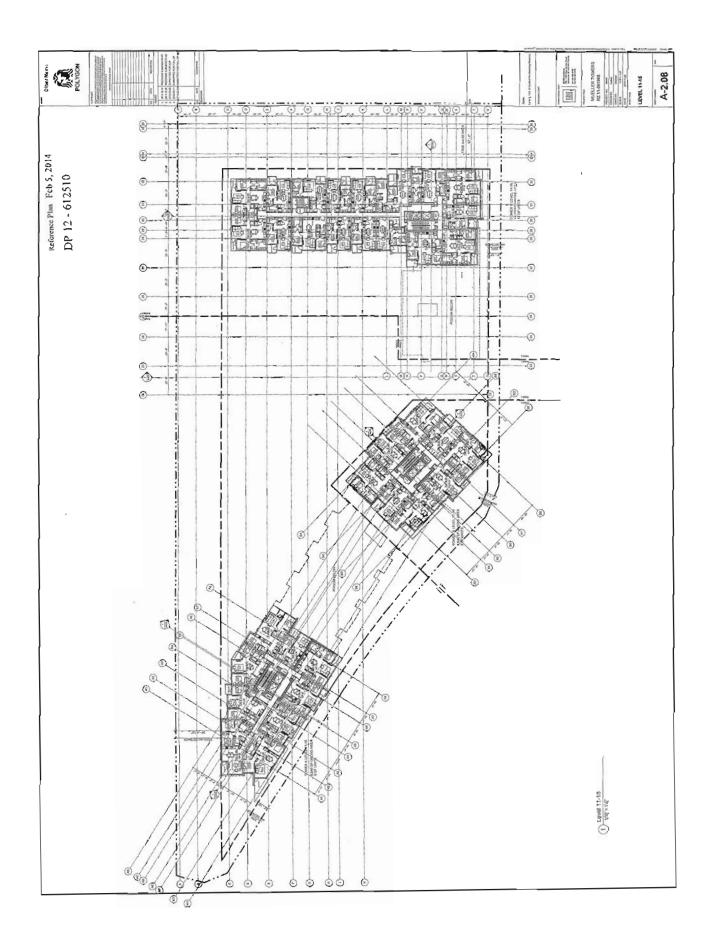


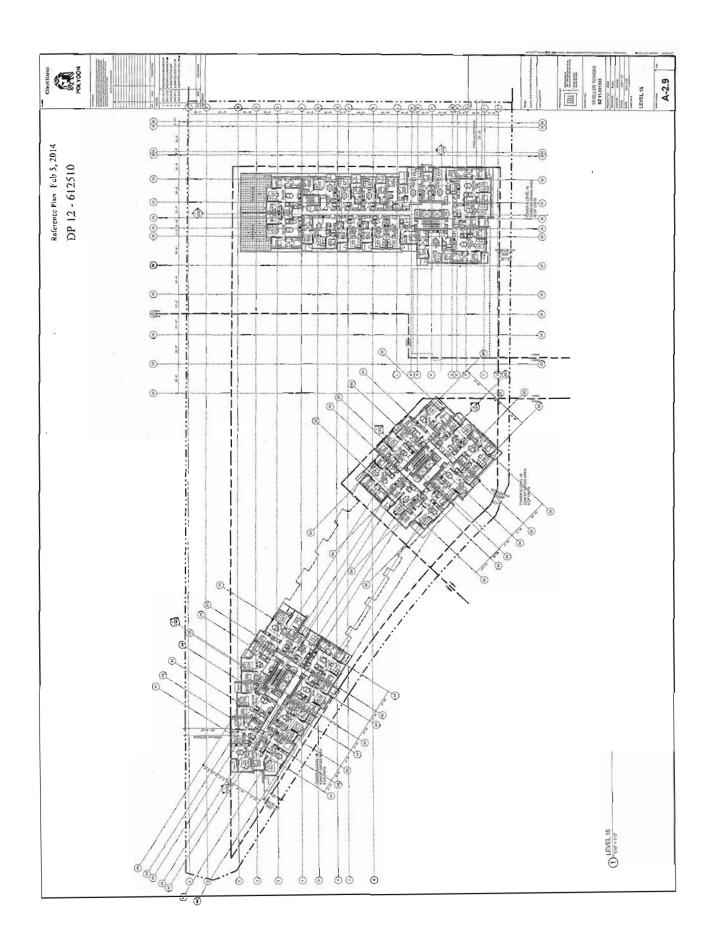


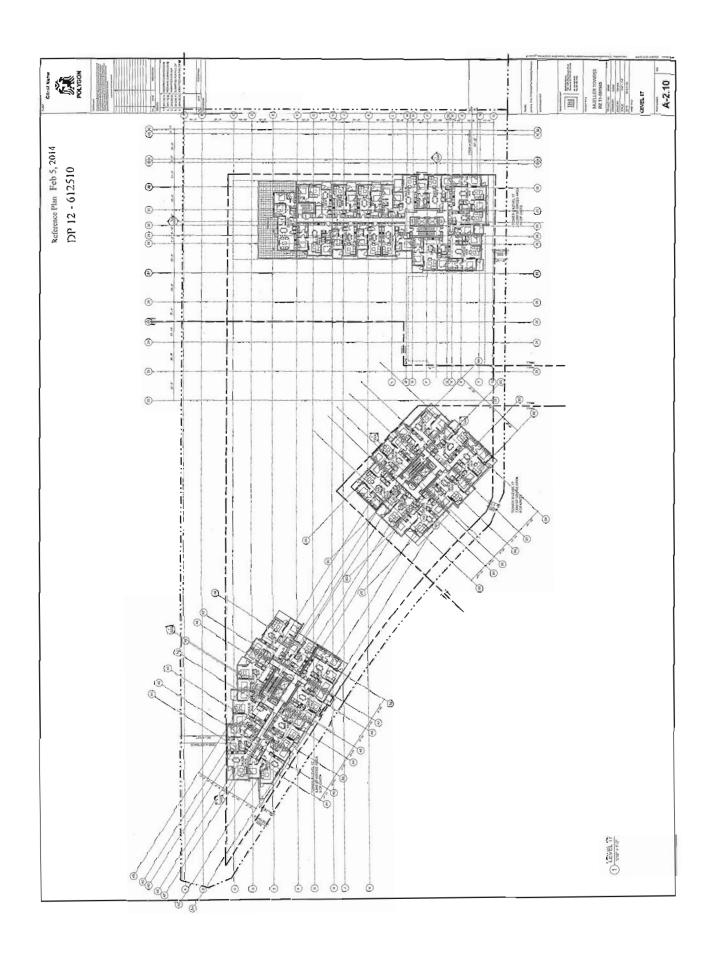


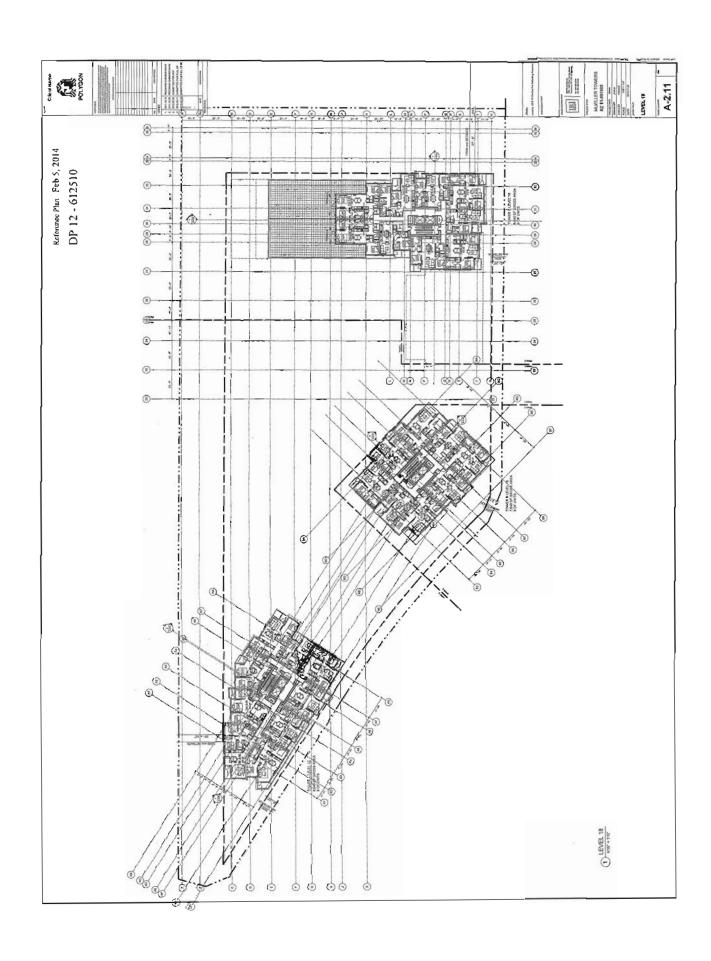


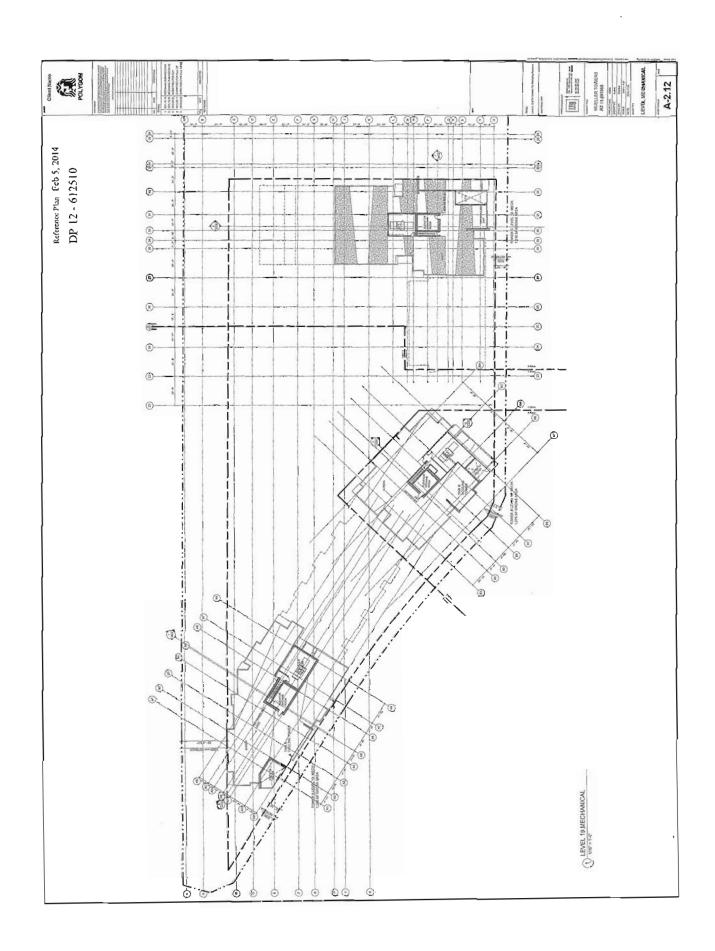


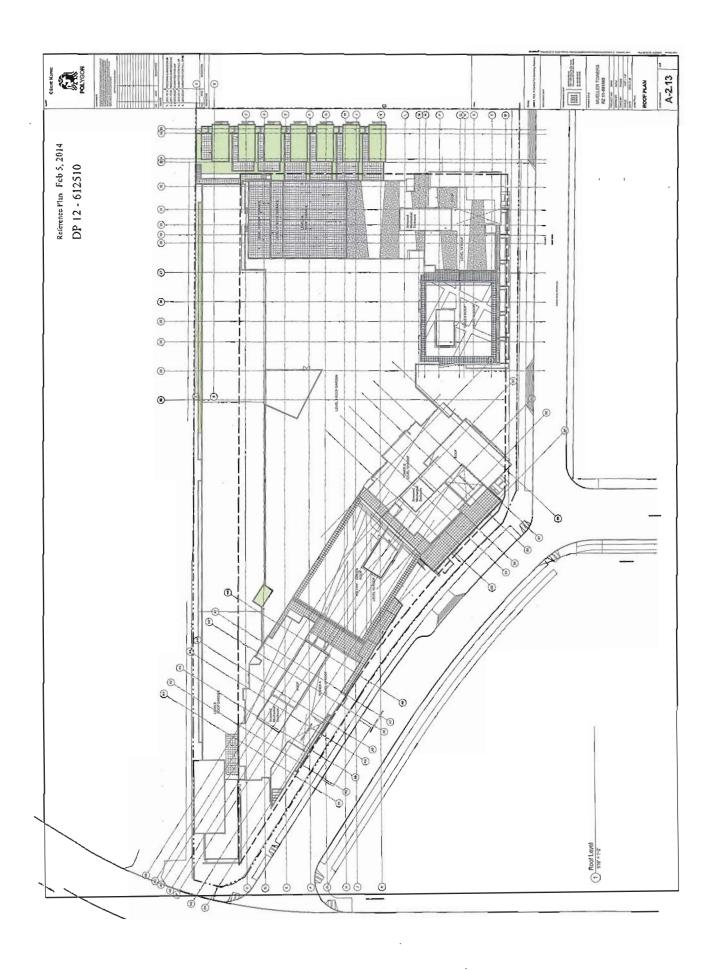
















AERIAL RENDERING LOOKING SOUTH-WEST

[B] STANDARD

A-1.08



TOWER A & B - LOOKING NORTH

A-1.10

TOWER C - LOOKING MORTH - WEST

A-1.11

