



City of
Richmond

Report to Development Permit Panel
Planning and Development Department


To: Development Permit Panel
From: Wayne Craig
Director of Development

Date: March 6, 2013
File: DP 11-587954

Re: Application by Oval 8 Holdings Ltd. for a Development Permit at
6611 Pearson Way (Parcel 9)

Staff Recommendation

That a Development Permit be issued which would permit the construction of a residential development consisting of a 12-storey and a 14-storey building containing 173 dwelling units over a two (2) level parkade for 361 cars at 6611 Pearson Way on a site zoned "High Rise Apartment and Olympic Oval (ZMU4) – Oval Village (City Centre)"


Wayne Craig
Director of Development

FM:blg
Att.

Staff Report

Origin

Oval 8 Holdings Ltd. has applied to the City of Richmond for permission to develop 6611 Pearson Way (Parcel 9) for a residential development consisting of two (2) high-rise towers of 12-storey and 14-storeys high, with a total area of approximately 27,386.0 m² (294,790 ft²), which includes a total of 173 dwelling units (including eight (8) street-fronting, two-level townhouses along Hollybridge Way) on a site zoned “High Rise Apartment and Olympic Oval (ZMU4) – Oval Village (City Centre)”. The proposal also provides parking for a total of 361 cars distributed in two (2) levels. The site is currently vacant.

“Bylaw 8686” (RZ 09-460962) that rezoned the subject site was adopted in October, 2011 and required Servicing Agreements (SA) associated with development of the subject site to undertake design and construction and full upgrading across Hollybridge Way and Pearson Way frontages of the site, including storm and sanitary sewer works and service connections. In addition, Specific Servicing Agreements are required in association with this Development Permit for 6611 Pearson Way (Parcel 9) that included design and construction of the Waterfront Park and Dyke Construction along the site frontage. These Servicing Agreements are to be entered into by the developer as a Development Permit Consideration prior to the City issuing a Development Permit.

Development Information

Please refer to the attached Development Application Data Sheet (**Attachment 1**) for a comparison of the proposed development data with the relevant bylaw requirements. This parcel is the first waterfront parcel to be developed on the east side of the Richmond Olympic Oval, within the original Oval Lands area between Hollybridge Way and Gilbert Road.

Background

The proposed development site is part of what has been defined as the Richmond Oval Neighbourhood; which is one (1) of several “Villages” in the City Centre Area Plan. This specific neighbourhood is envisioned as a premiere riverfront neighbourhood with high level of public amenities such as parks and open space, as well as a showcase of sustainable practices.

The subject proposal is the second site to be developed on the lands that extend east from the Richmond Oval to the Gilbert Road/Dinsmore Bridge. The proposal includes a total of 173 dwelling units distributed in two (2) residential towers that step down from south to north and include two-level townhouses along Hollybridge Way Greenway frontage of the site. Units in Level I, along the east property line, front onto and have alternate direct access to/from the public north-south park/pedestrian corridor (Mews) along the east side of the site that provides access to the waterfront park.

Development context surrounding the subject site is as follows:

To the North: The Middle Arm of the Fraser River, dyke, and related public amenities/park.

- To the West: Hollybridge Way and canal, across which are lands zoned “High Rise Apartment and Olympic Oval (ZMU4) – Oval Village (City Centre)”, including the Richmond Oval and ASPAC’s riverfront marketing building at “Lot 6” (5111 Hollybridge Way), which is slated for future restaurant and related uses.
- To the East: Two (2) waterfront development parcels (Lot 10-6655 Pearson Way and Lot 11-6811 Pearson Way) also owned by ASPAC for future residential development under the same “High Rise Apartment and Olympic Oval (ZMU4) – Oval Village (City Centre)” zone that extend toward Gilbert Road/Dinsmore Bridge. On the east side of the bridge, there are several light industrial properties designated for a major future riverfront park under the City Centre Area Plan (CCAP).
- To the South: A large site (Lot 12-6622 Pearson Way) being developed by ASPAC for a mixed-use residential-commercial development that includes two (2) high rise towers, street fronting townhouses along the Pearson Way and commercial uses at grade along the Hollybridge Way and new River Road frontages. Across new River Road, several sites in the process of being developed for high-rise, high-density, mixed-use developments.

Rezoning and Public Hearing Results

During the rezoning process, no major design issues were identified, as these specific aspects needed addressing at the Development Permit stage. The Public Hearing for the rezoning of the lands involved the “Richmond Oval Neighbourhood” which includes the subject site, was held on May 16, 2011. At the Public Hearing, a letter was submitted by YVR (Vancouver International Airport Authority) expressing concerns about aircraft noise affecting the development site. Aspects related to aircraft noise have been addressed via an aircraft noise covenant registered on Title at rezoning, and the submission of an Acoustic Report by a consultant engineer in acoustics including sound mitigation measures.

Staff Comments

Applicable Development Permit Guidelines.

The overall design principles for development of this area are found in the City Centre Area Plan (CCAP) urban design guidelines, the “Urban Design Framework” that defined the overall character for development of the subject lands during the initial phases of planning for this unique neighbourhood, and the recommendations originated through the rezoning review process for the ASPAC lands east of the Richmond Olympic Oval site.

Design criteria for development of the ASPAC properties east of the Richmond Olympic Oval, being implemented in collaboration and coordination with City staff, on a lot-by-lot basis through the Development Permit process included specific urban design objectives that are to be addressed by the subject development proposal included, among others:

Land Uses.

Commercial and residential uses in the area should be developed on the following basis:

- o *Commercial uses to be located along the “new” River Road between Pearson Way and Hollybridge Way and east side of the southern portion of Hollybridge Way.*

- *The riverfront sites, because they may suffer from poor access/visibility, would not include commercial uses, but would be exclusively developed for residential uses. 6611 Pearson Way (Parcel 9) is the first of these residential use only developments along the riverfront.*
- *The existing ASPAC sales centre would be converted into a restaurant and related uses in the future to provide for a punctual commercial uses along the waterfront.*

Streetscape. Public Realm

Urban design objectives for the public realm to be implemented via developments on this specific site within the Oval Village Neighbourhood include:

- *Hollybridge Way streetscape would be a low traffic street designed with a “park-like” character that would include a 7.0 m wide, landscaped greenway along its east side, traffic calming, and addition of landscape elements to complement existing public open space features along the street’s west side (e.g. tree “promenade”, heritage trees and canal, Oval water gardens).*
- *The north end of Hollybridge Way to incorporate a significant public amenity and open space that would link the riverfront park with the Village’s “High Street” and celebrate the street’s terminus at the riverfront.*
- *Developments in the area would need to provide for a wide park area along the waterfront (park development on private site), secured via a Public Right-of-Passage Right-of-Way (PROP ROW).*
- *Proposed developments would be allowed to encroach on this CCAP “Park” designated land (current existing River Road) subject to the development providing an equivalent area via PROP ROW corridors within private land to facilitate direct public access to the waterfront.*
- *Development along the waterfront provides interesting, attractive building/park interface and opens up public waterfront access/views.*
- *Blurring of distinction between public and private outdoor space along the waterfront.*

Buildings

- *Terraced buildings; height and massing. Variation in building height encouraged to provide for an interesting skyline.*
- *Building height increasing from north to south, from the riverfront. Maximum 25.0 m in height closer to the dyke (within 20.0 m from property line along the dyke) and 47.0 m geodetic toward the south.*
- *Taller buildings should minimize shading of the waterfront park and foreshore. Shadow studies should demonstrate achieving this objective.*
- *Maximum floorplates of 650 m² for towers or narrow, longer floor plates for block buildings and adequate spacing between buildings near the waterfront encouraged to maximize views towards the river and mountains.*
- *Buildings to incorporate colours, forms, materials, and building articulations that complement the landscape through all seasons and become an attractive feature that enhances and harmonizes with the landscape (e.g., natural materials like stone).*
- *Auto-courts (i.e. on-site, outdoor passenger and loading areas) if provided should be designed and provide pavement materials that help to establish priority of pedestrian over vehicles.*

The proposed scheme for development of 6611 Pearson Way (Parcel 9), which is Phase II of the multi-phase development of the larger ASPAC site that extends north of the “new” River Road between Hollybridge Way and Gilbert Street/Dinsmore Bridge, has satisfactorily responded well to the urban design objectives indicated above and has addressed staff comments and the significant urban design issues identified through the Development Permit review process. In addition, it complies with the intent of the applicable sections of the Official Community Plan (OCP), the “Urban Design Framework” that defined the overall character for development of the subject lands during the initial phases of planning for this unique neighbourhood, and is generally in compliance with the “High Rise Apartment and Olympic Oval (ZMU4) – Oval Village (City Centre)” zone.

Advisory Design Panel Comments

The Advisory Design Panel reviewed the proposed development at its meeting of July 5, 2012. A copy of the relevant excerpt from the Advisory Design Panel Minutes is attached for reference (**Attachment 2**). The design response from the applicant has been included immediately following the specific Design Panel comments and is identified in ‘*bold italics*’.

Analysis

Conditions of Adjacency

This is the first of three (3) waterfront sites of the Oval Village Neighbourhood to be developed on the east side of the Richmond Oval, therefore, analysis of its contextual relationships and potential impacts are mainly focused on its interface with the Richmond Oval, the waterfront park along the North Arm of the Fraser River and the conditions and opportunities that the proposed development will offer to future development on the adjacent site to the east.

- Height, massing and overall scale of the hi-rise residential towers, the terraced character of the buildings toward the waterfront and the lower level street oriented units along Hollybridge Way greenway respond well to the urban scale defined by the Richmond Oval building and its surrounding open areas.
- The proposal achieves a good relationship between buildings and the dyke. The natural features (water and landscaping along the edge of the water garden) soften the interface/transition between the proposed development open space areas and the greenway/dyke along the waterfront while defining a gradual transition between public and private spaces.
- Location of the two (2) north-south oriented terraced buildings on the site and the wide public pedestrian corridor being provided along the east side of the site will allow for adequate separation to future residential building(s) to be built on 6655 Pearson Way (Parcel 10) to the east, and provide for framed long views toward the river from many of the residential units in the proposed hi-rise building(s).
- Organization of the development focuses on the water garden between the north south oriented buildings and the advancement of the east building closer to the waterfront create an interesting articulation of open spaces along the river edge that open views toward the Richmond Olympic Oval from the east along the river and Dinsmore Bridge.

- The east building being further setback from Pearson Way, on the south side, creates a substantial buffer area and a proper massing interface with the development to the south (6622 Pearson Way - Lot 12) while creating an arrival plaza/courtyard to the proposed development.

Urban Design and Site Planning

This is the first waterfront development on the area east of the Richmond Olympic Oval, between Hollybridge Way and the Dinsmore Bridge. Located beside the Richmond Oval, the significant architectural expression of the proposed development would complement this internationally recognized venue from the Vancouver 2010 Olympics that is easily identified from airplanes above and the bridges.

- The siting and orientation of the proposed buildings on the site has resulted from its relationship to the Oval, the dyke and the river. The proposed development gracefully interfaces with these spaces and also relates well to the proposed north-south pedestrian mews along the east side of the site that provides public access to the riverfront, and the future public pier at the ending of Hollybridge Way.
- The proposed development is composed of two (2) slender buildings/towers, stepped in both plan and section, creating a form that allows for unobstructed views, paths, and open spaces.
- The two (2) buildings on the site step down towards the river from south to north, minimizing shadows and expanding the vertical space above the dyke.
- Higher portions of the buildings toward Pearson Way and stepping of buildings toward the riverfront is consistent with the general disposition of building heights and masses desired for this area. The west building steps down from 12-storey to 6-storey and a similar stepping is found on the higher 14-storey east building; relating this way to the gradual height changes in the arc of the Oval.
- Although the difference in height between the east and west buildings is only a two-storey, the appearance of additional height difference is stronger when viewed from the dyke. This perception is also accentuated by the staggered position of the buildings on the site.
- In plan, the west tower steps back generously from the riverfront, allowing for a widened view from Hollybridge toward the river and the future pier, and ensures a wide view of the Oval from the Dinsmore Bridge. At grade level, this setback from the waterfront creates a spacious, smooth transition for pedestrians and cyclists from the dyke to Hollybridge Way greenway which is the main linkage to the city centre.
- On the south side, at Pearson Way, the east tower steps forward to create a generous framed arrival courtyard in front of the buildings and visually indicate the entrance to the building(s) lobby and indoor amenity areas. The large arrival courtyard space and the staggered position of the buildings open views and helps to open up the south entry area to the north-south public pedestrian mews
- The arrival courtyard is accessed by pedestrians and vehicles from Pearson Way and its hard surface, composed of distinct paving material reinforces the pedestrian priority over vehicles on this open vestibule to the building(s). This open space/arrival area may also act as a multiple use space for unique private or public outdoor events while still allowing access to the parking levels along the perimeter of the plaza/courtyard space.

- The pedestrian scale is achieved and enhanced by a good treatment of the interface area between private deck/patios and the street; on Hollybridge Way and the north-south pedestrian mews. The pedestrian scale along these building frontages is also helped by the articulation provided by the decks/balconies of the units and the wide open spaces alongside.
- The lower level, two-storey street-fronting units, which have patio decks raised above the street level along the northern ending of Hollybridge Way/greenway, provide a strong pedestrian character to the public realm and reinforces the intent of reducing the presence of, and movement of vehicles on this portion of the street that is the gateway to the waterfront park.
- In general, thoughtful public realm treatment and extensive use of glass on the building façades have been incorporated to ensure good interface with the open space and public realm surrounding the proposed buildings.

Architectural Form and Character

The proposed form of development is generally consistent with CCAP Urban Design Guidelines for the area and other City policies (e.g., green roofs, pedestrian-friendly streetscapes, varied tower roof forms), as previously mentioned. Although the building/tower floor plates exceeds the recommended “tower” floor plate area in the CCAP, the buildings are thin, positioned on a north-south axis and step down toward the north, which helps to open views to and from the waterfront park, provide opportunities for framed views to the river and maximizing views toward the mountains.

Architectural features in the proposed development include:

- Both the lobby and amenity spaces are centrally located on a low building connecting the two (2) buildings/towers and make abundant use of glass that visually expands these spaces towards the outdoors achieving a gradual transition between the indoor amenity space and the outdoor water central courtyard. The lower height of this central connecting structure and its extensive glass provide a visual corridor toward the river for residents on proposed buildings on 6622 Pearson Way (Lot 12) on the south side of the development site.
- The proposal includes a landscaped outdoor space (atrium) within the lobby of the building that provides a visual focus for the common areas and views from the street. Building design maximizes views to the river for residents while also ensuring that public views at ground level and views from adjacent developments will not be blocked.
- While the surrounding volumes at the base of the buildings that frame the arrival courtyard are clad in green stone, the lobby is clad in white stone and includes large glass areas, emphasizing the openness between the two (2) towers.
- As the south wall at the base of the east building that encloses the mechanical and District Energy Utility (DEU) rooms is exposed to direct views from the street and the proposed townhouses in the development across Pearson Way, this wall has been clad in a combination of spandrel glass and metal panels to break down its mass and soften its presence over the street. Conversely, the extension of this same wall along the east side of the arrival courtyard is clad in stone only for the purpose of reinforcing the contrast with the transparency of the building(s) central lobby. A continuous planter is proposed at the top edge of the wall that would add a finer grain to its texture as the plants spill down its stone surface.

- The same cladding, a combination of spandrel glass and metal panels, used for the south wall of the mechanical and DEU rooms is also used on the east side of the ramp down to the parking levels, along the north-south public pedestrian mews to break the wall's solid expression. In this case, the glass and metal panels are placed in a random manner that is complementary to the glazing pattern used on the penthouse levels; unifying in this way the building's architectural language.
- The north-south horizontal length of the building(s) mass is interrupted, broken by the vertical path of the unique elevator core that is clearly expressed to the exterior by the use of glass and framed by walls. As well, horizontal elements that include the extended decks that frame individual units, appear to be of different lengths and contribute to the rich articulation of the building(s) faces. Building exterior materials have been chosen carefully to emphasize vertical and horizontal elements that also break up the building mass.
- Individual decks are separated by vertical glass privacy screens and have been detailed to be a continuous, inherent part of the building.
- The north elevations use similar architectural language and incorporate a central vertical element that separates the horizontal line of the balconies on each side. This divide diminishes as it leads down towards the dyke and at grade level, this vertical spine of the building(s) connect to the low retaining wall which defines the separation between public and private spaces.
- The lower level units along Hollybridge Way on the west side and the north-south mews on the east side are provided with direct access from the street and the pedestrian corridor respectively. The patio/deck of these units are raised above the level and separated from of the public sidewalk and pedestrian mews by low planters/retaining walls; in addition to a shallow canal in the case of the north-south pedestrian mews, that provide adequate privacy to these units outdoor space.
- Lower level, two-storey, street fronting units along Hollybridge Way and the north-south mews have a more solid expression, grounding the building and contrasting with the lightness of the clear glass above. This contrast accentuates the lower portion of the building and reinforces the pedestrian scale of the Hollybridge Way greenway and mews.
- Terraced building height range from approximately 47.0 m geodetic height (14-storey) on the south side (Pearson Way) on the east building to approximately 26.0 m geodetic height (7-storey) on the north side. The heights of the west building also reflect the same stepping configuration, however, its height is only 41.3 m geodetic (12-storey) on its south side.
- Although the height of the buildings is approximately 1.7 m over the desirable 25.0 m within 20.0 m from the lot line that abuts the City-owned land for the dyke, the stepping down of the north end of the building have achieved a proper interface with the Olympic Oval and the planned location of future buildings to the east. In addition, the applicant has provided shadow studies that demonstrated that the shadows cast by the proposed development over the waterfront park/dyke is minimized (**Attachment 3**).
- The materials, large decks and colour treatment of the upper floors of the buildings/towers combined with the use of concrete overhangs and vertical fins that highlight the level at which a change in height takes place help to break the horizontal character of the buildings and bring the building perceived height down.

- Materials and colours include high quality materials, such as concrete, glass, stone, steel on the outside of the buildings that will require minimum maintenance.
- The proposal includes a variety of residential unit sizes that will provide several larger units of a size above the average unit size found in Richmond. Size of dwelling units in the proposal range between 60.71 m² (651 ft²) and 323.8 m² (3,486 ft²). Breakdown of the type, size and number of units provided in the proposed development is as follows:
 - 23 - 1 Bedroom units: from 60.47 to 97.91 m² (651 to 1,054 ft²)
 - 76 - 2 Bedroom units: from 92.52 to 114.17 m² (996 to 1,229 ft²)
 - 56 - 3 Bedroom units: from 129.96 to 237.73 m² (1,399 to 2,559 ft²)
 - 18 - 4 Bedroom units: from 222.96 to 323.8 m² (2,400 to 3,486 ft²)

Landscape Design and Open Space Design

The Proposal and its Context

The need for an integrated design between buildings and the unique open space alongside the river (public and private) was recognized during the rezoning process for the lands to the east of the Richmond Olympic Oval.

A rezoning requirement associated with the subject development included the completion of a comprehensive conceptual design for the Waterfront Park/dyke extending from the ending of Hollybridge Way to the Dinsmore Bridge during the Development Permit review process for the subject development site. Following the submission of a Development Permit application, the developer worked in a continuous and close collaboration with City staff in developing a conceptual design for the development of this Waterfront Park, which is directly associated with and required an integrated design that would simultaneously achieve the upgrading of the existing dyke.

The “River Green Village Parks and Open Space Plan” report presented to the Parks, Recreation & Cultural Services Committee and endorsed by Council at its meeting of February 12, 2013 summarizes variety of park and open space features on the waterfront that will complement other city parks along the Fraser River and that will reinforce the link between the river and the Richmond city centre. The subject Plan identifies several dyke upgrading (**Attachment 4**) works that are integrated to the waterfront park development (**Attachment 5**), phasing and associated open spaces and features that are to be implemented on a lot-by-lot basis through the Development Permit process.

The subject development is expected to be influenced by and also have a strong impact in the shaping of its immediate surroundings and especially over the river waterfront areas. In the specific case of the subject development (Parcel 9), in addition to and in coordination with the on-site landscaping, there are various components of the Waterfront Park and Open Space Plan that will be developed in association with this proposal.

Critical components of the Waterfront Park and Open Space Plan that will be implemented through the subject development include: Phase I of the waterfront park/dyke, completion of the northern end of Hollybridge Way along the west side of the site, and the north-south public pedestrian mews along the east side.

Main objectives and character of these components of the Waterfront Park Plan and related open spaces are as follows:

Waterfront Park/Dyke. Phase I.

Within a general naturalized character of the waterfront park/dyke, the character of this portion of the dyke trail along the north property line of the subject development is more urban than its extension to the east which is proposed to slowly change to a stronger natural experience toward its link to the Gilbert Road Greenway, an environmental and heritage resource along the west side of Gilbert Road, integrated into the Waterfront Park Plan design concept.

- This phase will initiate the extension of the waterfront park to the east from the Richmond Olympic Oval. It includes pedestrian and bicycle pathways (dyke trail), and a dyke/park service access link to Hollybridge Way.
- This portion of the waterfront park includes a total 6.5 m wide trail that includes a 3.0 m wide coloured hard surface pedestrian path, a 3.0 m wide coloured hard surface bike path and a 0.5 m granite cobble pavers strip separating both paths.
- The proposed 4.0 m wide asphalt access/service road connecting Hollybridge Way to the dyke (**Attachment 6. A**) provides a gently, barrier free, 5% sloping link to the trail for pedestrians, cyclists, disabled people and service/emergency vehicles.
- This portion of the waterfront park also includes one (1) of the three (1) promontories proposed along the riverfront that will provide seating and river viewing opportunities. This, the easternmost promontory (**Attachment 6. B**), is located closer to the northeast corner of the site, at the intersection of the dyke trail and the north ending of the north-south pedestrian mews which runs along the east side of the site. This promontory will accommodate a metal grate ramp/footbridge down to the future floating walkway on the river that links to the future pier.
- A stepped seating wall close to the promontory is also to be built on this portion of the waterfront park. This seating is comprised of a combination of concrete, timber and steel steps of varying lengths that are 1.0 m wide and 0.5 m high.
- Non-invasive native plants will be planted on the water side rip-rap as ecobenches for ESA compensation and enhancement of the habitat values of the shoreline.

Hollybridge Way Plaza and (future) Pier

This unique landmark public space, composed of the upper and lower plaza, marks the intersection of the park and the north ending of Hollybridge Way and defines an important access gateway to the waterfront park.

- The upper plaza (**Attachment 6. C**), on top of the dyke at the end Hollybridge Way, will provide for a gathering space and host community events beside the river.
- The lower plaza (**Attachment 6. D**), at the ending of Hollybridge Way turn around, clearly defines the entry to the park and may also serve as a space for community events. A ceremonial staircase links the upper and lower plaza areas. This staircase is proposed to be constructed of cast- in-place concrete with light sand blast finish with ornamental concrete walls and lighting along each side of the stairs.
- The future Pier (**Attachment 6. E**) will be a destination point along the waterfront park and at the end of Hollybridge Way. It will offer unique opportunities for people to reach over and enjoy panoramic views of the river and look back to the dyke and riverfront developments. A Public Art/interpretive centre is also planned to provide an overview of the river history and ecology.

- The proposed configuration of the pier and the associated floating walkway relate to the currents in the river, expand the experience of the river by visitors and also allow temporary mooring for boaters.
- The suggested materials for the pier and floating dock include a combination of wood decking and metal grating to minimize shading and disturbance of existing tidal benches.
- The developer will enter into standard Servicing Agreements (SA) that will cover the design and construction of the upper and lower Hollybridge Plazas, while the future Pier design and construction will be facilitated by an amenity contribution by the developer totalling \$1,000,000, which must be provided prior to Development Permit issuance.

Hollybridge Way Greenway

The 7.0 m wide Hollybridge Way Greenway (measured from the eastern raised curb of the street) extends along the west side of the proposed development (**Attachment 6. F**) and will accommodate a 4.0 m wide sidewalk for use by pedestrians and cyclists, street trees, bike parking and seating areas on the wider boulevard.

- A narrow Public Right-of-Passage (PROP) Right-of-Way (ROW) will be provided closer to the south ending of the eastern building to achieve the required 7.0 m width of the corridor and facilitate a parking area for the fire truck in cases of emergency. Legal agreements will secure the integrity of this corridor.
- Landscaping treatment and sidewalk pavement pattern will highlight Hollybridge Way to create a pedestrian-friendly and unique streetscape that will identify this pedestrian corridor as the main access route to the waterfront from the south, from the City Centre area.
- Sidewalk paving will match existing paving on the west side of Hollybridge Way and consist of cast in place concrete with a light brown finish, score lines and a granite band. Grey and charcoal unit pavers arranged in a random pattern are being suggested to achieve a more informal pedestrian corridor.
- Planting, hedge and medium size trees, between the paved surface of the corridor and the raised private patios/decks of the street-oriented units at the lower level of the building, will clearly separate public from private areas and ensure an adequate level of privacy to the private patio/decks.
- A 2.25 m wide tree/grass planted boulevard between the pedestrian/bike paved path of the corridor and the 0.75 m paved edge along the street curb will also help to establish a buffer between the vehicular traffic and the units alongside the greenway.
- Design and construction of the Hollybridge Way greenway on the west side of the site will be undertaken by the developer via a standard City Servicing Agreement; maintenance and liability will be assumed by the City.

North-South Pedestrian Mews

The proposed development will provide a 12.5 m wide public use north-south “mews” (**Attachment 6. G**) along the east property line of the site in the form of a linear park and includes a pedestrian /bike path that provides access to the waterfront park/dyke from Pearson Way and River Road. This corridor would also facilitate access to and from the elevator lobby for residents in the east building on the subject development site.

As this north-south pedestrian mews is public open space provided on private property, a Public Right-of-Passage (PROP) Right-of-Way (ROW) over that area will be registered on Title to secure unrestricted access and use of this landscaped open space. Works associated with this public use corridor are being secured by the Development Permit landscaping Letter of Credit.

- The corridor includes a 3.5 m wide paved path for pedestrians and bicycles and a 9.0 m wide lawn and tree planting area along its side. The experience of this corridor will be enhanced by a 1.8m wide channel and/or landscaped band with shrubs between the pedestrian/bicycle path and the raised patio of the units on the lower level. A private 1.5 m pedestrian path and a 1.0 m wide hedge will be provided along the east side of the mews in association with development of the site to the east (Lot 10) in the future. The separation between buildings on both sides of the mews will be approximately 25.0 m.
- Bollard type of lighting, combined with wall mounted lighting on the low raised planters at the edges of the raised private patio of units along the west side of this public corridor, will be provided along the extent of the public pedestrian mews to ensure safety of users.
- The paved paths and other rest/gathering areas within is public pedestrian mews are proposed to include granite, basalt, pre-cast concrete pavers, and similar materials. The planting will include plant material associated with the history of the site and will also relate to the Fraser River context.
- A larger paved area and water surface at the southern end of the public pedestrian mews define the entrance to the corridor on Pearson Way, which is further opened and enhanced as an open vestibule to this linear park/corridor by the arrival courtyard space at the southern end of the proposed building(s).
- At its northern end, the public pedestrian mews terminates in and is anchored by a large children play area and a promontory/seating area at the edge of the river. The children's play area will be developed in conjunction with Phase II of the waterfront park/dyke as part of the future development to take place on the adjacent site to the east (Lot 10).
- Materials to be used in the promontory at the northern end of the mews include wood top benches with steel posts that will be consistent with all other promontories/seating along the whole extent of the waterfront park/dyke.

On-site Landscape Design, Courtyards and Green Roofs

Internal Central Courtyard

- The main landscaping statement made by the proposal is the continuous reflecting water internal courtyard (**Attachment 6. H**) that extends from the central lobby/indoor amenity space toward the waterfront park/dyke, between the east and west buildings. This expansive, semi-private courtyard of dramatic waterscapes and landscape islands provides an outdoor amenity space for the residents that will feature a number of residents' amenities such as wood decks, overlook, and seating spaces.
- The central courtyard landscaped islands also create a soft visual privacy screen between the various outdoor "floating" decks that extend out of the units on both sides of the courtyard. Hedges and semi-transparent screens that are carefully located along the edges of private patios will also contribute to ensuring privacy and security for the residents.
- The reflecting pool, landscape berms, strip-pattern planting, and cast in place, natural finished stepping stones will create a "Zen" garden landscape.

- There is also a small internal *Courtyard/atrium space* located between the lobby and the interior swimming pool amenity that includes a bamboo/moss garden. In addition, the proposed dominant culms of *Phyllostachys Vivax 'Aureocaulis'* planned for this space are of a radiant yellow with random and varying green stripes that are intended to provide a great focal point for the entry lobby.
- The north edge of the site, adjacent to Waterfront Park and to buildings include a buffer zone with plantings on slope that will contribute to the privacy of patio area of units fronting the waterfront and maintain the visual coherency of the planting on the waterfront park. This area will include a diversity of plants (native and non-native, deciduous and Evergreen, large and small, groundcovers, shrubs and hedges) that will be further detailed as part of the SA agreement associated with the waterfront park/dyke construction.

Green Roofs

- A green roof garden is provided on Level 3, over the pool and central lobby area. A smaller green roof garden is also provided at this level over portion of the party room/amenity space. These green areas will not be accessible by the residents, but will provide a soft and interesting view from the residential units above. Planting on these green roofs follow an undulating pattern of different widths and include a combination of planting material such as “Autumn Stonecrop” and “Cauricaula Stonecrop”.

Pearson Way Arrival Courtyard.

- Main access to the site is highlighted by the hard surface arrival open courtyard area on Pearson Way (**Attachment 6. I**), on the south side of the site, in front of the building(s) lobby and indoor amenity spaces. The arrival courtyard is proposed to be finished with special/unified pavement including pre-cast concrete on slab and accent strips of basalt axed black stone pavers that extend to the east to tie the arrival courtyard and the entry area to the north-south pedestrian mews.
- The solid wall at the base of the west building on the east side of the arrival courtyard, which encloses the mechanical and DEU rooms, is also clad in stone to tie with the surface treatment of the arrival courtyard and accentuate the transparency of the building(s) central lobby; plants in the continuous planter at the top of the wall are expected to spill down its stone surface and soften the eastern enclosure of this feature arrival area.

General Site Landscaping.

At the perimeter of the site, the residential pedestrian scale of the public realm is enhanced by the good treatment of the interface area between private decks/patios and the street along Hollybridge Way and the north-south public pedestrian mews.

- The paving, water surface areas and planting that is used in the buildings' immediately surroundings areas are designed to achieve a strong integration with, and to blur the boundary with the riverfront/dike open space. Overall landscaping planting includes climate-tolerant plants and a diversity of species that will reduce water consumption and discourage insect infestations. The areas will be mulched to conserve moisture. Vegetated roofs will include drought-resistant sedums and grasses.
- Landscaping includes a high efficient irrigation system (smart irrigation controllers, moisture sensors and other devices will be considered to avoid over-watering).

The developer will provide a Letter-of-Credit for landscaping in the amount of \$884,484 (based on cost estimate prepared by Phillips-Farevaag-Smallenberg, the landscape architects for the subject proposal) prior to the issuance of the Development Permit.

Indoor and Outdoor Amenity Areas.

- The proposal has achieved a good relationship between indoor and outdoor amenity spaces; with the main indoor amenity spaces opening to and naturally extending to the outdoors into the internal central water courtyard and the arrival courtyard to the building(s).
- The proposed development provides adequate indoor and outdoor amenity space on-site for the shared use of residents in accordance with the CCAP guidelines.
 - Total Indoor Amenity Space provided: approx. 801.0 m² (2,628 ft²)
 - Total Outdoor Amenity Space provided: approx. 1,080 m² (11,633 ft²)
(Outdoor amenity space includes 180 m² (1,937.5 ft²) of deck space, 316 m² (3,400 ft²) of landscaped islands/gardens and 585 m² (6,296 ft²) of reflecting water)

Specifics of the proposed type and size of the common use (indoor and outdoor) spaces provided in the development are as follows:

Outdoor Amenity Space.

- There are two (2) main outdoor spaces/courtyards that organize the proposed development site plan layout. A hard surface arrival pedestrian/auto courtyard on the south side, off Pearson Way, that is a multi-use type of space that can be partially closed to vehicular movement in special occasions; and the central internal courtyard between the two (2) buildings on the site that opens toward the river front at its northern end.
- There is a large outdoor amenity space/deck provided at the southern end of the central water courtyard, with direct access from the east building elevator core and from the main lobby common to the two (2) buildings. This deck and adjacent landscaped/planted area is connected to the secondary elevator/stair core of the west building and with the various small landscaped islands on the central water courtyard by a series of bridges which provide additional outdoor amenity space and allow access to a sun deck at the northern end of the courtyard, overlooking the Fraser River.
- A large raised deck at the base of the east building that overlooks the building(s) arrival courtyard, off Pearson Way, provides seating opportunities and is also an outdoor expansion of the party room.
- In addition to the on-site outdoor amenity areas provided, the residents will have direct access and enjoyment of the public linear park areas that include the pedestrian mews along the east side and the waterfront park/dyke along the north side of the site.

Indoor Amenity Space.

- Most of the indoor amenity space is provided on Level I, with the pool centrally located in the lower structure that connects the east and west buildings, behind the central landscaped atrium that is the main feature in the main lobby of the building(s). The party room and deck, the meeting room and theatre are immediately to the west of the main lobby and overlook the arrival courtyard.
- A gym and yoga room is provided on Level II in close proximity to the east building elevator core. These facilities are accessed via elevator or direct stairs from Level I.

Indoor amenity space for the use of residents is provided in Levels I and II and includes the following:

Level I

Swimming Pool, Sauna, Hot Tub, Steam Rm. :	• approx. 424.8 m ² (4,573 ft ²)
Theatre:	• approx. 32.6 m ² (351 ft ²)
Meeting Room:	• approx. 25.5 m ² (275 ft ²)
Party Room:	• approx. 91.6 m ² (986 ft ²)

Level II

Yoga Room and Gym:	• approx. 129.3 m ² (1,392 ft ²)
Games Room:	• approx. 96.9 m ² (1,043 ft ²)

Crime Prevention Through Environmental Design

The proposed building incorporates several of the basic CPTED design principles. In general, the extensive use of glazing in the units and perimeter townhomes and ground level units along Hollybridge Way and the north-south mews provide a good passive surveillance over the public use areas. The extensive glass across the main lobby also provides good casual surveillance over the arrival courtyard off Pearson Way. Specific CPTED features provided in the proposed development include:

- Residential visitor and private parking stalls are separated.
- Parkade and tower stairs are separated.
- Appropriate/efficient lightings within parkade and in exit stair’s vestibules.
- Painted parkade wall.
- Remote control gates for parking garage entry point from arrival courtyard.
- Access to the visitor parking area will be only allowed by the host.
- Glass on doors and at least one (1) of the walls enclosing the elevator lobby at the parkade levels.
- Individual suite base alarm system for the townhouses and ground floor units along the north-south mews.
- Provisions for security cameras.
- Concierge service located at main lobby overseeing drive court area.
- Entrances to the buildings, on Hollybridge Way and the arrival courtyard on Pearson Way, have been logically located and maintain continuous sight lines between public and private spaces, ensuring high visibility levels.
- Good definition of public and semi-public spaces (i.e. townhouses along Hollybridge Way and ground floor units along the north-south mews). A shallow water channel, planting, hedges, railing and grade changes will be utilized to define and separate the private area of ground floor units and the public pedestrian corridor along the north-south mews.

Accessibility and Aging in Place

Accessible features

- All levels within the proposed development, outdoor amenity spaces and Hollybridge Way Greenway meet the universal accessibility conditions. Ramps are provided to allow wheelchair access from the arrival courtyard to the building(s) main lobby.
- The proposal includes a total of two (2) accessible units; one (1) two-bedroom unit in Level 1, and one (1) two-bedroom unit in Level 2.
- Layout of these units that facilitate movement of a wheelchair in one (1) bedroom, one (1) of the bathrooms and in the kitchen. Floor plan layout included in the architectural drawings set will be further refined if needed.

Specific Aging-in-place features

- One (1) of the bathrooms in each unit in the proposed development will be provided with blocking in the walls to allow for installation of “grab bars”.
- Automatic doors at the building entrance, with security system including monitoring capacity.
- Enterphones and signage to have large scale buttons and large scale, high contrast lettering and numbering.
- Enterphones located to facilitate access and use by persons in wheelchairs.
- Elevator controls designed for accessibility and legibility for the visually impaired.
- Fire doors to be on magnetic holdbacks, with no doorframe in the centre of the doors.
- All doorways (including entry doors to residential units) to provide a desirable clear opening of not less than 915 mm (3 ft.), but in no case less than 855.0 mm.
- Provision of single occupancy, wheelchair accessible washrooms in common areas.
- Adequate, accessible, outdoor garden and patio space for residents’ access and use.
- Wheelchair access to parking areas.

Parking, Loading and Garbage/Recycling Collection.

- The total number of parking spaces provided for the proposed development is 384 parking spaces, with 361 spaces provided on-site. The residents/visitor parking breakdown includes 349 residents (208 parking spaces required) and 12 visitor parking spaces provided on-site and 23 additional visitor parking (35 parking spaces required) provided off-site, on 6622 Pearson Way (Lot 12).
- The total residents parking (349 spaces) include:
 - 303 standard size parking spaces, including five (5) universally accessible parking spaces (meet the 2% of required parking) and 46 small car parking spaces (below the allowed 50% of the required parking)/
 - Of this total, 88 parking spaces are provided in 41 private garages that include 2 (two) one-car garages, 31 two-car garages and eight (8) three-car garages.
- Breakdown of the 35 visitor parking provided to serve the needs of the proposed development is as follows:
 - 12 visitor parking spaces on-site in Level P1 that includes one (1) universally accessible parking space (meet the 2% of required parking) and 23 additional visitor parking

spaces available of-site on 6622 Pearson Way (Lot 12), which were secured by a legal agreement as part of Development Permit DP 11-587896.

- Security O/H gates are provided at Parking Level P1 to separate visitor parking area from residents parking.
- Only access to the visitor parking area and residents parking levels, as established by the Rezoning Considerations associated to the rezoning of these lands, is provided from Pearson Way, through, and along the eastern side of the arrival courtyard. This is also the access route for trucks to serve the garbage compactors and recycling holding rooms.
- A loading bay that can comfortably accommodate a SU-9 truck (medium size) and the required recycling carts for the proposed development is provided at the base of the west building. This loading bay, which meets the dimensions and overhead clearance operational requirements, has direct access from Pearson Way.
- The applicant has also demonstrated that adequate turning radius is being provided for trucks manoeuvring in and out of the loading space. Transportation Engineering has reviewed the proposal and loading area configuration and has found it acceptable.
- There are two (2) garbage/compactor and recycling rooms provided to serve the needs of the proposed development; they are located on Parking Level P2 for the west building and on Level P1 for the east building. Garbage is delivered to the garbage/compactor rooms via a vertical chute that is accessed from a small room located beside the elevator core on each residential floor of each one of the buildings.
- All garbage pickup will be via a private company, which has specialized trucks and equipment that will allow convenient access to the entire underground parking garage. The developer will provide the equipments required for taking the recycling carts from the parking levels to the holding area within in the loading bay area on the south side of the west building; which can accommodate up to 25 recycling carts.
- Parking and loading provided meet the parking requirements of the Zoning Bylaw and also satisfies the Rezoning Considerations requirements.

Public Art

The applicant is working in close contact with the City Public Art Coordinator to formalize the process that will see the implementation of Phase II of the Public Art Master Plan for the applicant's River Green Village, which encompasses development of the lands between the Richmond Olympic Oval and Gilbert Road/Dinsmore Bridge.

Phase II – “Hollybridge Way and Waterfront Park” is proposed to be implemented in coordination with and in conjunction to the development of Parcel 9, the subject development proposal, and Parcel 10 located immediately east.

- A total of \$176,874.00 (based on \$6.64/m² over a total development area of 27,386m²) is being contributed in association with the proposed development for implementation of Phase II of the Public Art Program. The proposal is for an integrated art and heritage interpretation of the area aiming to express the history and heritage of the place, including: Early Settlers, CP Rail and Industrial uses, Riparian Ecology, Cultural Landscape and Agriculture.

- The Public Art concept agreed in principle by the developer and the City includes Public Art piece (s) that would highlight the gateway to the waterfront park/dyke at the end of Hollybridge Way; in the upper and/or lower plaza, or integrated into the design of the future pier.
- At this moment, options are being investigated in regard to the provision of a Public Art component to be provided on the waterfront and/or Hollybridge Way in conjunction with the subject development at 6611 Pearson Way (Lot 9), or achieving a stronger, iconic Public Art statement made at the moment that the Pier, and/or Lot 10 are developed. This Public Art would then be funded by the combined Public Art contribution to be made in association with these two (2) sites.

Affordable Housing

This proposed development is not required to incorporate affordable housing units in the proposed buildings. Affordable housing component, with a total area of 3,943.6 m², to satisfy the affordable housing component for the Village neighbourhood east of the Richmond Olympic Oval is to be provided on Parcel 13 [Area “M” in the “High Rise Apartment and Olympic Oval (ZMU4) – Oval Village (City Centre)” zone of the Richmond Zoning Bylaw].

- The applicant will provide a Letter of Credit in the amount of \$2,461,028 (calculated on the base of \$4.0/ft² on the total residential area (615,257 ft²) in the proposed developments on 6611 Pearson Way-“Lot 9” (294,790 ft²) and 6622 Pearson Way -“Lot 12” (320,467 ft²) to secure the developer’s commitment to providing a “stand-alone” affordable housing building on Lot 13.

Sustainability Aspects of the Proposal

Leadership in Energy and Environmental Design (LEED):

The CCAP requires that development project applications greater than 2,000 m² in size, demonstrate compliance with LEED Silver (equivalency) or better, paying particular attention to features significant to Richmond (e.g., green roofs, urban agriculture, district energy, storm water management and quality).

- The proposed development is being designed to LEED Silver equivalent standards. The objective of LEED is to implement measurable green building design, construction, operations and maintenance. Stantec Consulting Ltd., the LEED consultants for this project, has indicated that the proposed development has been assessed against seven (7) LEED categories in determining their level of performance for this proposal.
- The LEED Scoreboard (**Attachment 7**) and Strategy Report submitted by Stantec Consulting Ltd. indicate the strategies being put in place for the proposed development currently are targeting between 50 and 60 points (Silver). This scoreboard illustrates the range of strategies and measures the project is considering at this Development Permit stage of the design.

- As additional adjustments may be required as the detailed design proceeds to a Building Permit set of drawings, these assumptions will be validated and the feasibility of certain options revised as the detailed design progresses. Final, formal LEED scorecard and Strategy report will be submitted by the applicant with the Building Permit application to confirm that the development will achieve LEED Silver equivalency.

District Energy Utility (DEU):

The CCAP encourages the coordinated planning of City infrastructure with the aim of advancing opportunities to implement environmentally responsible services in areas undergoing significant change, such as the Oval Village.

On this regard the proposed development has been designed and will be built to facilitate its connection to a DEU in the Oval Village after this utility becomes operational, as follows:

- As the DEU system in this area is expected to be “heating only” supply, with no cooling function, the building’s Heating and Domestic Hot Water systems have been designed to be able to use the “DEU” supply. As it is possible that the “DEU” system will not be in operation when the project is completed, the proposal includes boilers for the heating source match the “DEU” system’s design requirements (winter at 95° C and summer at 65° C) in order that the system can be switch over easily in the future.
- The domestic hot water system will be centrally supplied from the roof storage tanks to each of the fixtures that require hot water supply through a separate set of heat exchangers.
- The heating supply source can also be switched from the boilers to the “DEU” supply. The proposal includes a “DEU Room” for the City, a mechanical room for the transfer pumps and a pair of piping from the “DEU Room” to the roof mechanical rooms where the boilers and heat exchangers are installed. The proposed “DEU Room” has been reviewed and accepted by the City already.
- Legal agreement(s) will be required to cover all aspects associated with the commitment to connect to and service the proposed development via the Oval Village District Energy Utility (DEU).

Sustainability. Site Planning - Architectural.

Design aspects of the proposed development that address and respond to basic sustainability principles include:

- Developing on previously developed land.
- Provision of bicycle storage spaces for residents.
- High efficient Low-E glazing, large overhangs, relatively deep balconies and eyebrows that contribute to minimizing heat gain.
- At least 20% of the materials will be locally sourced and at least 10% of the materials used in the building will be recycled materials.
- Low Volatile Organic Compound (VOC) emitting materials and low flow toilets, showers and lavatories will be used in the building.
- The building aims to achieve at least 23% savings in energy consumption and a 10% in energy cost savings.
- Landscaping includes a high efficient irrigation system (smart irrigation controllers, moisture sensors and other devices will be considered to avoid over-watering) in all common landscaped areas.

- Large trees along Hollybridge Way and double trees along the north-south mews on the east side of the site, in addition to rooftop over lobby and pool/central amenity area, will contribute to reduce the heat island effect.

Sustainability - Landscaping

Landscaping features that contribute and reinforce the sustainability response of the proposed development include:

- Climate-tolerant plants and diversity of species will contribute to reduce water consumption.
- Pervious paving and groundcover provided under street trees along Hollybridge Way and the north-south mews for storm water infiltration.
- A high efficiency irrigation system provided in all residential common landscape areas.
- Green roofs will be installed on Level 3, over the pool and lobby to the building(s) that will contribute to reduce heat island effect and will include drought-resistant sedums and grasses.
- Proposed large trees along Hollybridge Way and rows of trees along the north-south mews will provide shade to reduce heat island effect.
- Climate-tolerant plants and diversity of species will reduce water consumption and discourage insect infestations.
- Soft landscape area will include native plants and mulched soft landscaped to conserve moisture.

Noise Related Aspects Related to the Proposal.

The Aircraft Noise Sensitive Development Policy (ANSND) includes the subject site within Area 2: High Aircraft Noise Area. This designation permits all new aircraft noise sensitive land uses, except single-family, provided that a restrictive covenant is registered on Title, submission of an acoustics report, noise mitigation measures incorporated in the construction and other required design guidelines are being met at Development Permit (DP) and Building Permit (BP) stages. On this subject, actions undertaken as part of the Development Permit review process include:

- In response to the current Official Community Plan (OCP) Section 3.6.3 “Noise Management”, Brown Strachan Associates Consulting Engineers in Acoustics was retained by the applicant to conduct an acoustical study of the proposed residential development for the purpose of making an assessment of noise levels on the subject site and recommend sound mitigation measures to meet the City of Richmond design requirements, as outlined in Section 5.4 and Section 5.17.3 of the Zoning Bylaw.
- The acoustics report submitted identifies noise attenuation measures and concludes that, provided the recommendations in the report are implemented, the development will meet the City of Richmond’s OCP interior design noise level criteria.
- Some of the most important recommendations included in the report are, among others:
 - *Glazing upgrades for windows and doors, indicating recommended thickness and potential strengthening of glass to meet the maximum size requirements of the Code.*
 - *Good quality airtight weather-stripping on exterior doors and windows.*

- In addition, and in response to the recommendations indicated above, Yoneda & Associates, the mechanical engineering consultants for the applicant, have confirmed that the proposed development will be full air-conditioned, with the design temperatures of at 21 degree Celsius to 24 degree Celsius and a relative humidity at about 55% therefore, complying with the “ASHRAE 55-2004” requirements with the windows closed.
- Confirmation that the Brown Strachan Associates Acoustical Evaluation report recommendations dated March 20, 2012, have been incorporated into the construction drawings will be required at the Building Permit stage.

Minimum Flood Plain Elevation

- ‘Flood Plain Designation and Protection – Bylaw No. 8204 establishes the flood plain elevation for this site at 2.9 m (9.51 ft.) geodetic. Level 1 street-oriented units, along the Hollybridge Way frontage are at and comply with the lowest permitted habitable floor elevation.
- The lower parking level in the building, parking levels P2, includes most of the bicycle storage lockers, recycling and garbage storage room and garbage compactors. These are uses permitted to be below the flood plain under the bylaw.
- The mechanical and electrical rooms, including the room allocated for the future District Energy Unit within the building, are located at 2.9 m (9.51 ft.) Flood Construction Level (FCL) in the area.

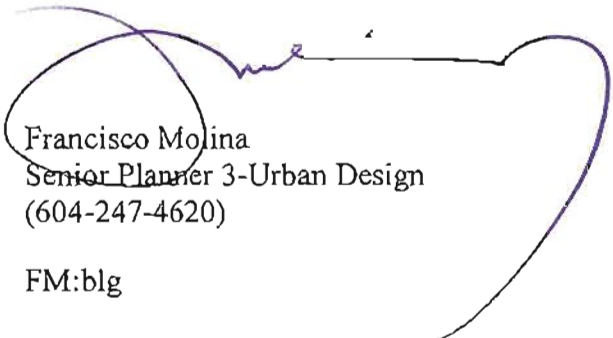
Engineering Works

The following Servicing Agreements associated with the subject development proposal that are required for the developer to enter into prior to the issuance of a Development Permit are:

- Servicing Agreement for the design and construction of Phase I of the Waterfront Park.
- Servicing Agreement for construction of the north portion of Hollybridge Way, including the greenway.
- Servicing Agreement for design, construction of dike upgrades.
- Servicing Agreement for construction and installation of Servicing works.

Conclusions

The proposed development has successfully addressed and responded well to the urban design objectives for the Richmond Oval Neighbourhood, with buildings of distinctive massing and high quality and refined architectural design that harmonize and interface well with the adjacent structure of the Richmond Olympic Oval and the waterfront. The proposal is also making a strong contribution to the implementation of the Waterfront Park Plan that sees the full development of the riverfront as a main recreational area associated to the city centre. Staff recommends approval for the subject development, as the proposed buildings will set a standard for high quality design in the area.



Francisco Molina
Senior Planner 3-Urban Design
(604-247-4620)

FM:blg

- Attachment 1: Development Application Data Sheet
- Attachment 2: Advisory Design Panel Minutes of Meeting
- Attachment 3: Shadow Studies
- Attachment 4: Dike Upgrading Plan
- Attachment 5: Waterfront Park development Concept
- Attachment 6: A, B, C.... Open Space Components of Waterfront Park Phase I
- Attachment 7: LEED Scoreboard
- Attachment 8: Development Permit Considerations



DP 11-587954

Attachment 1

Address: 6611 Pearson Way – Parcel 9

Applicant: Oval 8 Holdings Ltd.

Owner: Oval 8 Holdings Ltd.

Planning Area(s): City Centre Area Planning – Richmond Oval Neighbourhood

Floor Area Gross: 29,970 m²

Floor Area Net: 27,386 m²

	Existing	Proposed
Site Area:	8,460 m ²	8,460 m ²
Land Uses:	Multiple Family Residential	Residential Multi-Family
OCP Designation:	Urban Centre (T5)	Urban Centre T5
Zoning:	"High Rise Apartment and Olympic Oval (ZMU4) – Oval Village (City Centre)"	"High Rise Apartment and Olympic Oval (ZMU4) – Oval Village (City Centre)"
Number of Units:	vacant	173 dwelling units

	Bylaw Requirement	Proposed	Variance
Floor Area Ratio:	3.0 FAR for all Parcels east of the Olympic Oval	3.12 FAR (27,386 m ²)	<i>No variance required subject to FAR of remaining parcels contributing a combined max. 3.0 FAR for all sites to the east of the Olympic Oval</i>
Lot Coverage:	Max. 45%	39%	None required
Setback – Front Yard: South (Pearson Way)	Min. 3.0 m	3.0 m	N/A
Setback – Side Yard: West (Hollybridge Way)	Min. 3.0 m	3.06 m	N/A
Setback – Side Yard: East (North-South Mews)	Min. 3.0 m	18.30 m (5.8 m to PROP-ROW)	N/A
Setback – Rear Yard: Waterfront Park/Dike	Min. 3.0 m	4.8 m (3.6 m to PROP ROW)	N/A

Height (m):	Max. 25.0 m (geodet.) within 50.0 m of north PL; higher if conditions met through DP Process Max. 45.0m after 50.0 m from PL	26.6 m	N/A
Lot Size:	7,800 m ²	8,460 m ²	N/A
Off-street Parking Spaces – (Residents)	208	349	
Off-street Parking Spaces – (Visitors)	35 <i>(required minimum 12 spaces on-site with remainder on Lot 12)</i>	35 <i>(12 spaces on-site and 23 spaces on Lot 12)</i>	
Total off- street Spaces:	243	384	
Off-street Parking Spaces – Accessible (Residents):	5 <i>(2% of required parking)</i>	5 <i>(2% of required parking)</i>	
Off-street Parking Spaces – Accessible (Visitors):	1 <i>(2% of required parking)</i>	1 <i>(2% of required parking)</i>	
Bicycle Parking (Class 1)	217 <i>(1.25/dw)</i>	364	
Bicycle Parking (Class 2)	35	35	
Amenity Space – Indoor:	Min. 70 m ²	801 m ²	
Amenity Space – Outdoor:	1,038 m ² <i>(6 m²/dw unit)</i>	1,080 m ²	

**Excerpt from the Minutes from
The Design Panel Meeting**

**Wednesday, July 5, 2012 – 4:00 p.m.
Rm. M.1.003
Richmond City Hall**

Time: 4:00 p.m.
Place: Rm. M.1.003
City of Richmond
Present: Kush Panatch, Chair
Simon Ho, Vice-Chair
Joe Fry
Tom Parker
Sherri Han
Hal Owens
Also Present: Francisco Molina, Senior Planner, Urban Design
Edwin Lee, Planner
Rustico Agawin, Committee Clerk
Absent: Thomas Leung
Cst. Greg Reimer
Steve Jedreicich
Matthew Thomson

The meeting was called to order at 4:04 p.m.

1. MINUTES

It was moved and seconded

That the minutes of the meeting of the Advisory Design Panel held on Wednesday, June 20, 2012 be adopted.

CARRIED

4. DP 11-587954 – 2- tower (twelve and fourteen -storey) hi-rise development with 170 apartments

APPLICANT: IBI/HB Architects

PROPERTY LOCATION: 6611 Pearson Way (ASPAC Lot 9)

Applicant's Presentation

Architect Martin Bruckner, IBI Group, and Landscape Architect Chris Phillips, Phillips, Farevaag and Smallemberg, presented the project on behalf of the applicant.

Panel Discussion

Comments from the Panel were as follows:

- a very elegant project and the most handsome of all the phases;

Noted and thank you.

- no problem with massing stepping down; corner resolution is fantastic;

Noted and thank you.

- keep the design of the mechanical rooms as clean as possible;

Noted and thank you.

- nice to see that the amenity room is adjacent grade; adds a sense of community and place;

Noted and thank you.

- spines are interesting but need a little design development; consider angling on either side; consider avoiding “knife- like” forms;

The “knife- like” form is avoided by not alternating the angle of the waterfront balconies, which also reduces the mass of the building. The balconies are now in tune with the staggered massing of the towers, creating a directional force that is more focused and simple, particularly when viewed from the dike.

- geometry is intriguing; make something special happening at the end of the pier;

The conceptual form of the pier has been revised to reflect currents in the river. Docks, a floating walkway and articulated bridges were added to connect the pier with the western most of the three promontories enabling people to go down to the river, as well as transient moorage for boaters to visit the park and River Green Village neighbourhood.

- a high quality project; don’t see anything that needs too much work;

Noted and thank you.

- applicant has appropriately addressed previous comment regarding the site plan not respecting the existing grade of the Oval;

Noted and thank you.

- there should be something that should tie the various phases of the whole development together; the whole development phases should appear as one single development with the various phases having the same high level quality;

In general, both Parcel 9 and 12 have the following architectural elements that tie the phases together as a family:

- i. *Stepping forms towards the River*
- ii. *White stone at the main entrance lobby*
- iii. *Vertical window wall elements from ground level to penthouse massing*

- beautiful project; consider providing more than two accessible units; staff indicated that it makes sense to provide the same number of accessible units as the number of accessible parking provided in the development;

Noted, but two is the minimum requirement, which we have met.

- incremental moves and small changes made by the applicant resulted in vast improvement to the project;

Noted and thank you.

- look at planting plan and contrast between cleanliness of buildings and the riparian landscape; discuss planting materials with Parks as it appears a bit flat along the riverside of the proposal;

A planting strategy has been provided by PGL environmental consultant and reviewed by City's park and environmental departments. The plant materials will be a mix of native shrubs and hedges. Tree species will include English oaks, white birch and Douglas Fir. Refer to River Green Village Waterfront Park report for details.

- would be nice for platforms that work their way out towards the water to have a gesture to the public that allows a view for passersby; would improve the edge condition along the water;

The pier has been extended out towards the water. The pier and the additional floating walkway & docks will allow the public to view and access the water.

- proportion of lawn, paving and planting are equal in the park site; one should take precedence over the other;

Based on the comments from City staff, the lawn has been replaced with ecobenches for environmental value. Planting takes precedence.

- form of the public pier is dramatic and a great place for public art;

The public art and heritage interpretation will be integrated into the pier design by a selected artist under separate process.

- effective use of the curtain wall and different glazing to break up and differentiate massing;

Noted and thank you.

- good use of high quality materials; provides a nice image, character and feel to the building;

Noted and thank you.

- use of wood and stone is welcome but they tend to be applied as decoration (like paint) rather than to articulate the various massing; however, overall, they serve to break up the massing;

We have carefully studied the stone areas and refined the design by eliminating the stone where it was more of a decorative application, and we have kept the stone where it was more of a natural application that conformed to the building's massing.

We are also considering removing the "decorative" wood pattern metal soffits to keep the design more pure in its intention.

- water feature is individual for each of the proposed sites; would be nice if they could be linked together to reflect the sloughs that traversed the site in the past;

The sloughs that traversed the site in the past will inspire the design of the children's play area set along the north edge of lots 9 and 10.

- open space design is good especially water features, car entry court and parking levels access from the local street between north and south sites;

Noted and thank you.

- appreciate the applicant's efforts to address the previous comments of the Panel;
- Noted and thank you.*

- appreciate the high level of quality of information presented by the applicant;
- Noted and thank you.*

- pleased to see how the applicant integrated some of the design components of the other phases into Parcel 9;

Noted and thank you.

- overall development is well done; respectful to the Oval; there is no need for the building stepping down; one of the interesting components of Parcel 9 is the two-storey "lantern" hanging into the air; would stand out when lit up and would be very visible from the dike;

Noted and thank you.

- design of Parcel 9 complements the adjacent phase to the south;

Noted and thank you.

- appreciate the new level of quality of the materials, design and construction brought into Parcel 9;

Noted and thank you.

- hope that the elegant and simple design of the pier will be carried on and survive the comments from various stakeholders of the project; present design is a grand end to Hollybridge Way; and

The pier has been revised to accommodate the comments while the elegant and simple design of it is still being carried on.

- consider providing more seating areas/places to stop in view of the number of users and pedestrians along the dike.

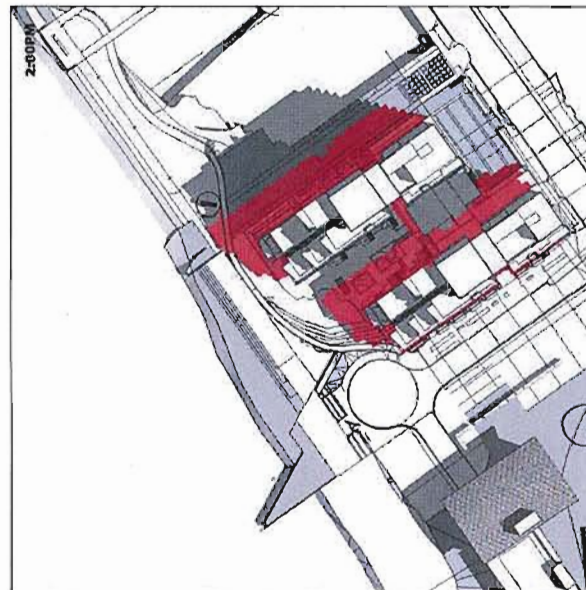
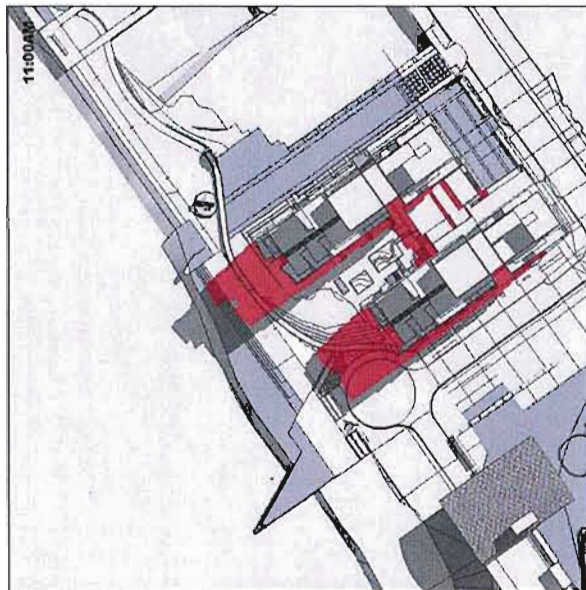
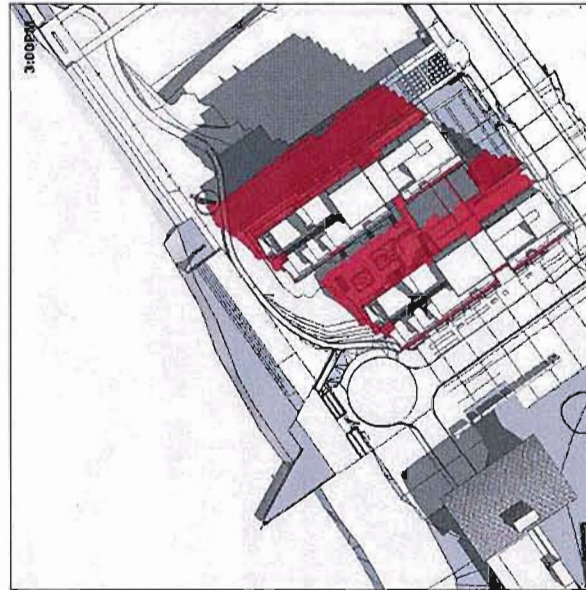
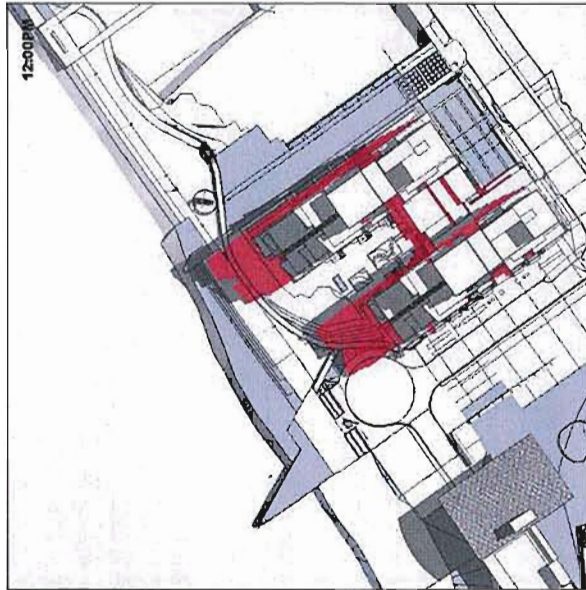
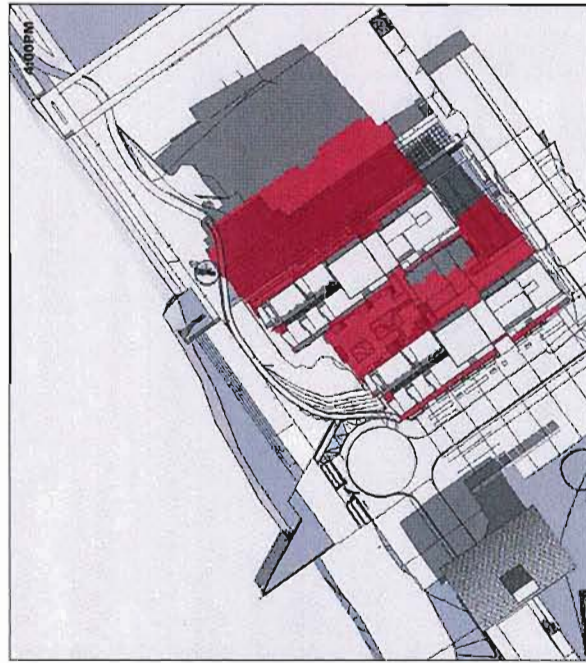
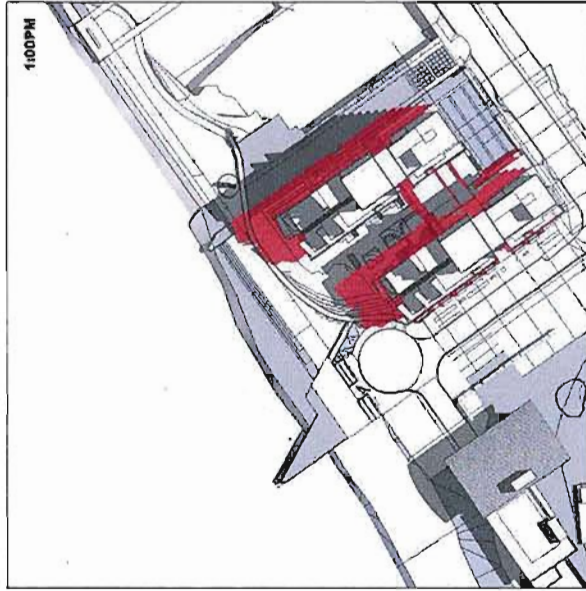
Benches will be provided on the pier, the upper plaza, and the three promontories. A long terraced seat wall will be located along the dike path and adjacent to the western most of the three promontories.

Panel Decision

It was moved and seconded

That 11-587954 be supported to move forward to the Development Permit Panel subject to the applicant giving consideration to the comments of the Panel.

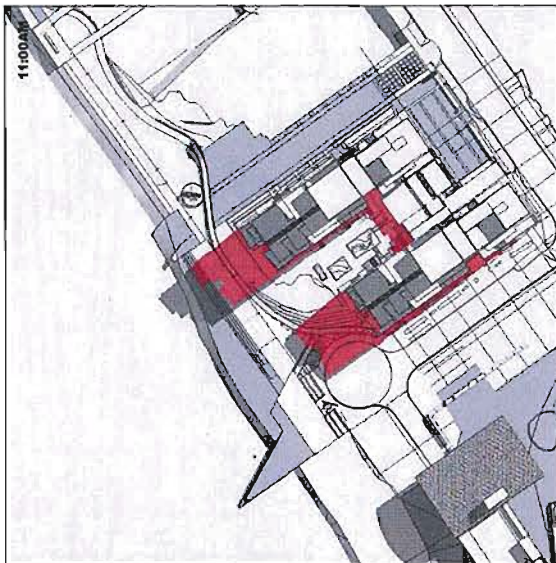
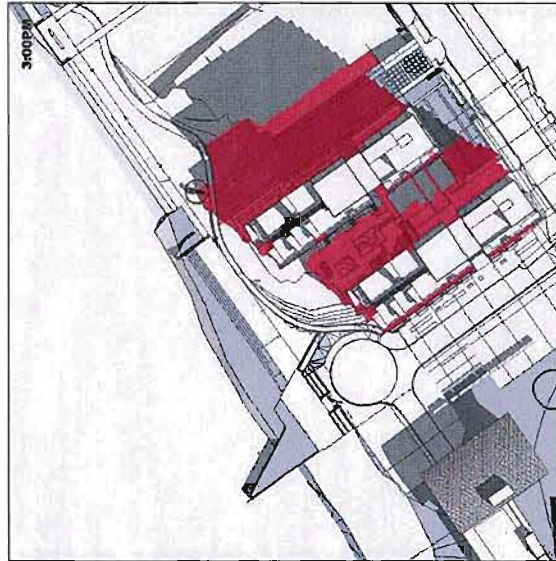
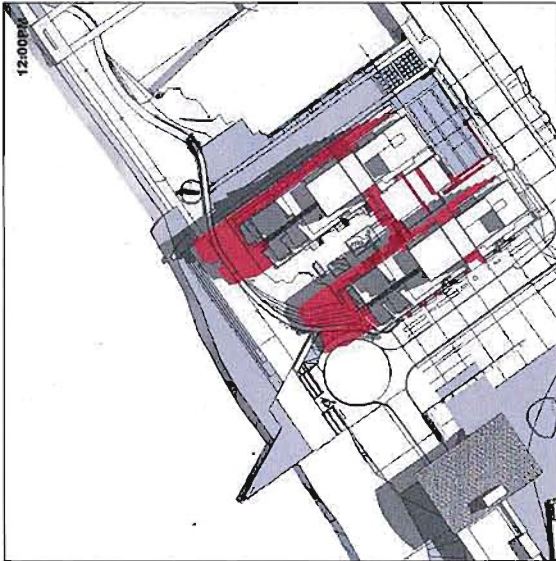
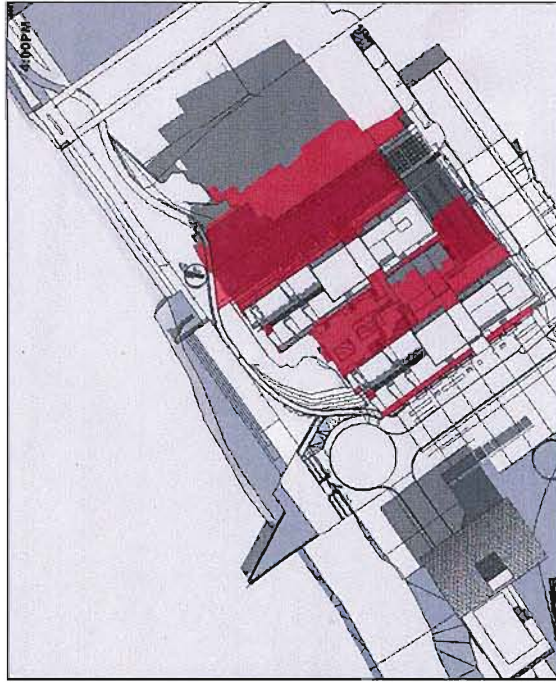
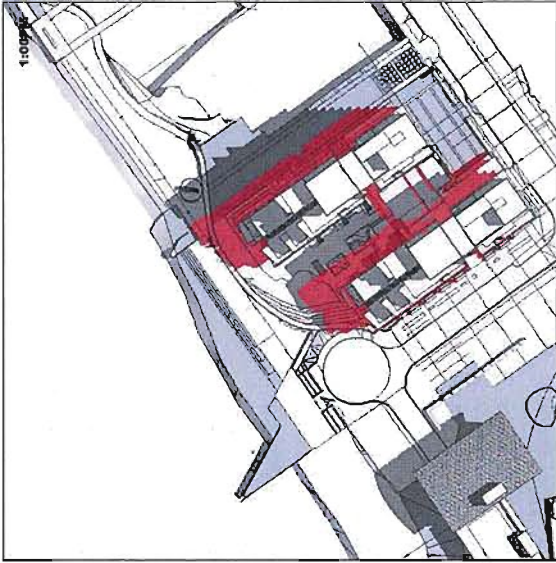
CARRIED



SHADOW DIAGRAM. MARCH 21

SHADOWS CAST BY BUILDING AT AT 45°
SHADOWS CAST BY BUILDING AT FULL HEIGHT



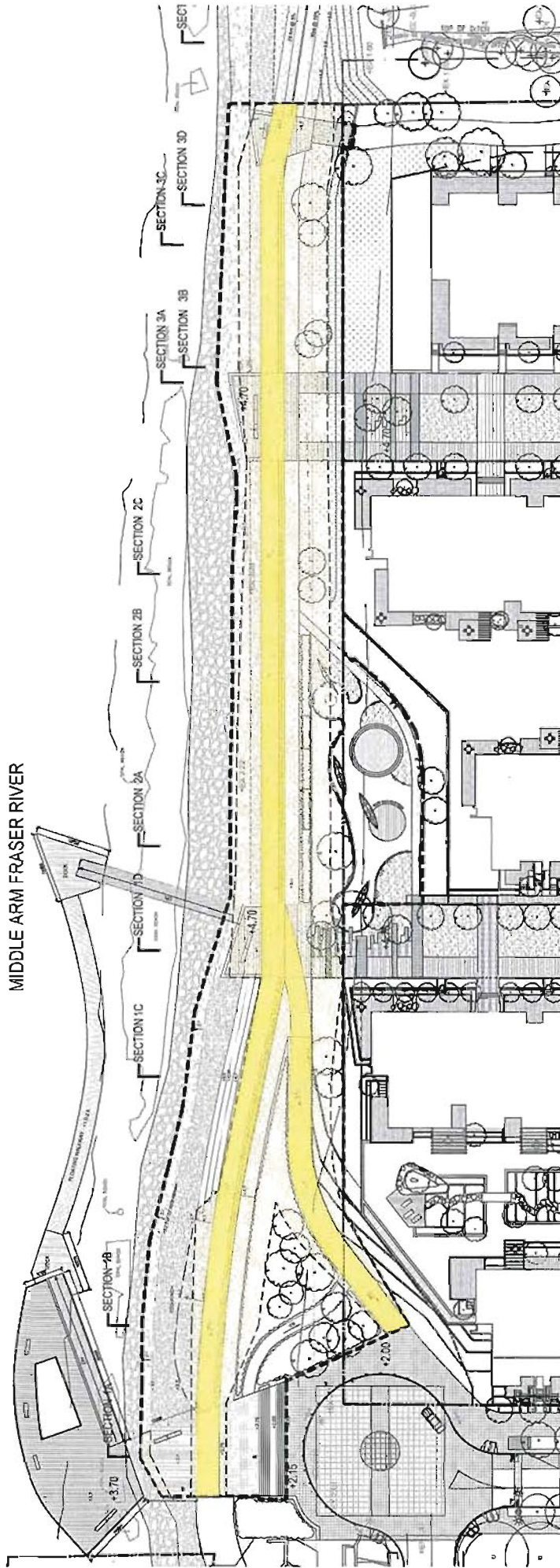


SHADOW DIAGRAM. SEPTEMBER 21






SHADOWS CAST BY BUILDING AT 45°
SHADOWS CAST BY BUILDING AT FULL HEIGHT



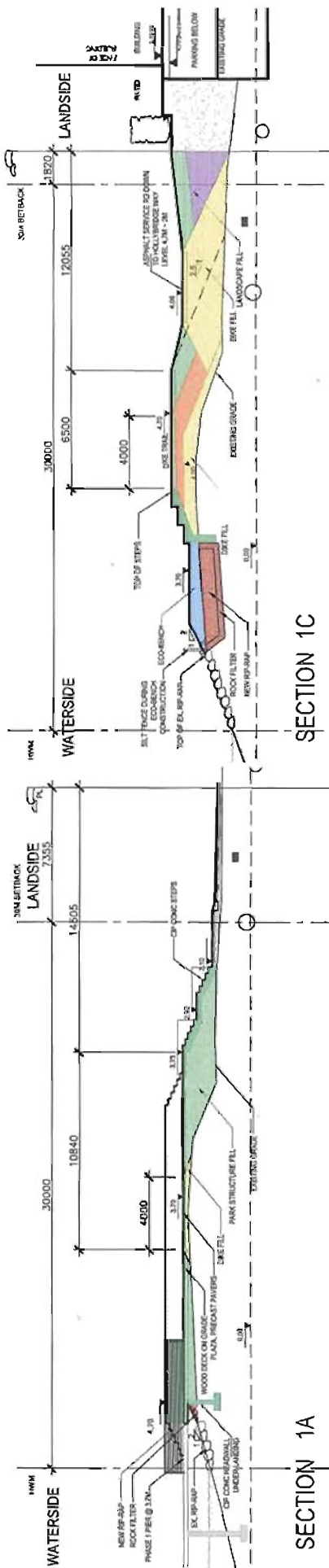
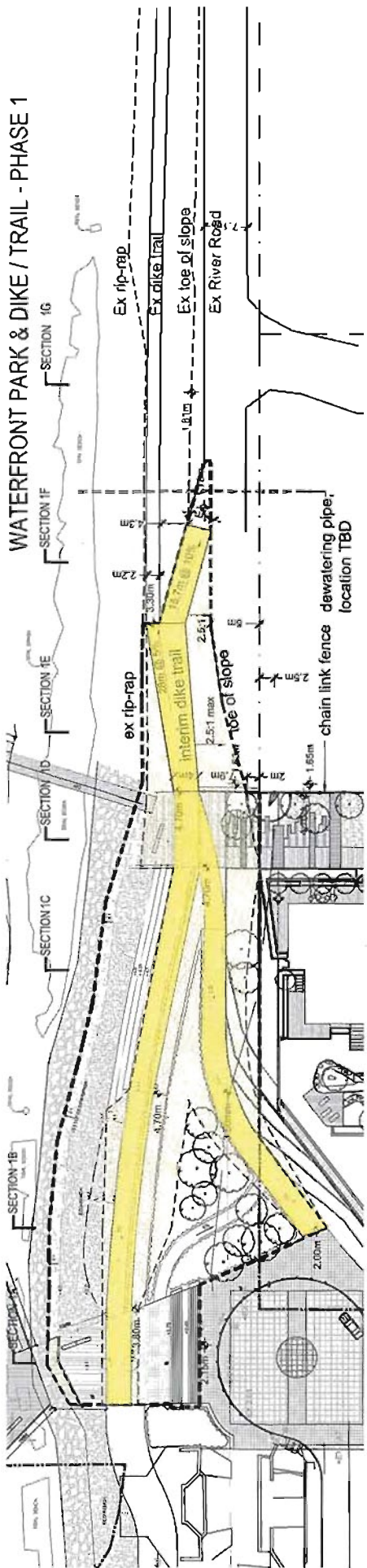
WATERFRONT PARK & DIKE / TRAIL - DIKE AREA



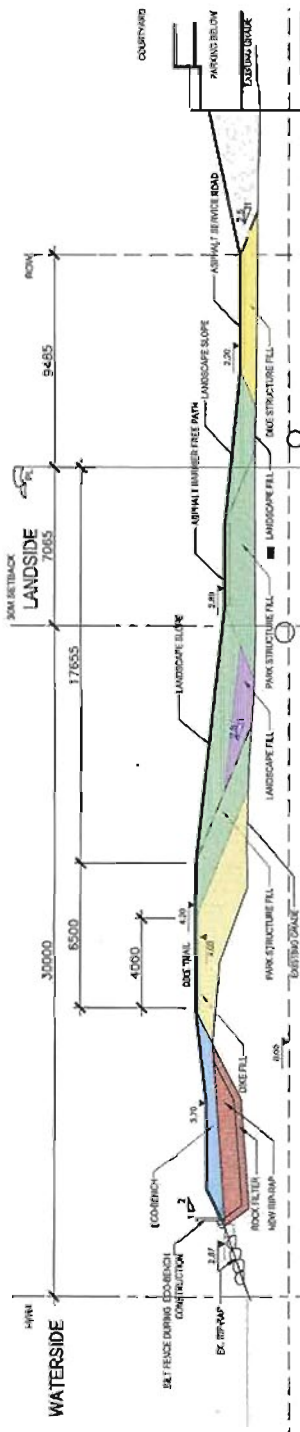
LEGEND:

-  4M WIDE DIKE CREST
-  DIKE SLOPE TO EXISTING GRADE
-  BOUNDARY OF WATERFRONT PARK
-  BOUNDARY OF DIKE AREA
-  PROPERTY LINE

WATERFRONT PARK & DIKE / TRAIL - PHASE 1

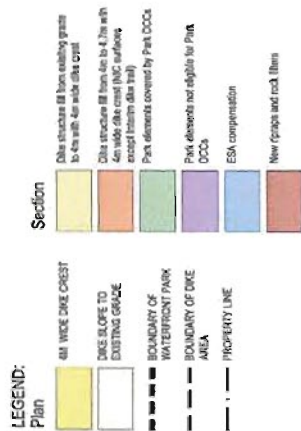


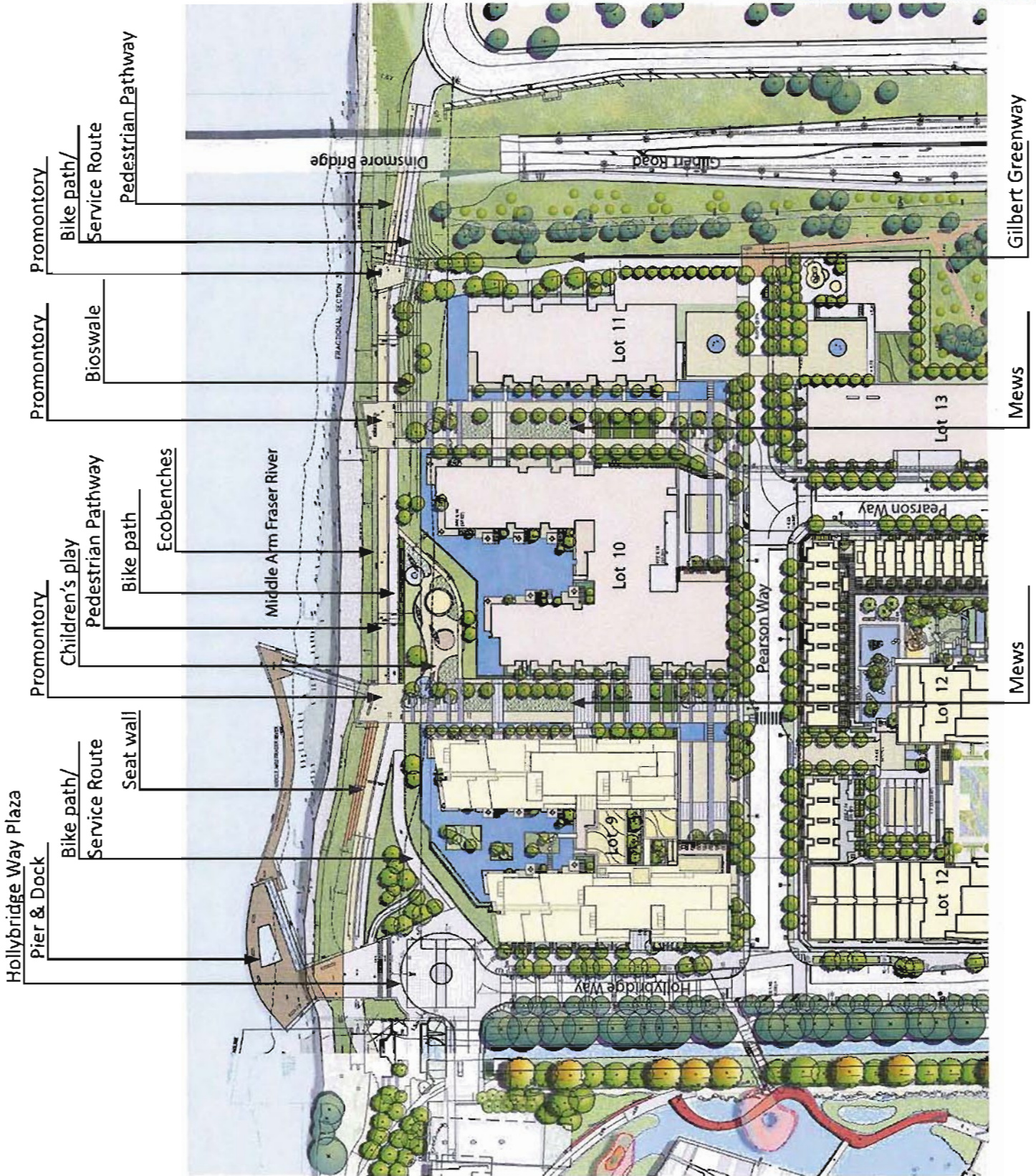
SECTION 1A



SECTION 1B

SECTION 1C





River Green Village Waterfront Park Site plan



City of Richmond

Development Permit Considerations

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

Address: 6611 Pearson Way

File No.: DP 11-587954

Prior to approval of the Development Permit, the developer is required to complete the following:

1. Receipt of a Letter of Credit for landscaping in the amount of \$884,484 based on the preliminary cost estimates provided by Phillips - Farevaag - Smallberg, the Landscape Architects for the proposed development. (This estimate includes hard and soft landscaping, labour and 10% contingency).
2. Satisfying the provisions of "No Development" Covenant (BB1991737) as it relates to Environmentally Sensitive Areas Development Permit as the Waterfront Park Design Concept Plan involving the Waterfront Park, Dike and the portion of the Pier associated the subject development is acceptable to City staff and these works being exempt of a ESA Development Permit(s)* under Sub-Section 14.1.6.2 of the Official Community Plan (OCP).
3. Satisfying the provisions of "No Development" Covenant (BB1991737) as it relates to Phasing upon issuance of a Development Permit for 6622 Pearson Way ("Parcel 12").
4. Satisfying the provisions of "No Development" Covenant (BB1991737) as it relates to the District Energy Utility, provided the developer registers new legal agreement(s) to secure the developer's commitment to connect 6611 Pearson Way ("Lot 9") development to the Oval Village District Energy Utility (DEU), as indicated below:
 - a) No BP will be issued unless the building is designed to facilitate future connection to the Oval Village District Energy Utility (DEU);
 - b) That upon operation of an Oval Village District Energy Utility (DEU) the development will be required to connect to the DEU including entering into appropriate Service Provision Agreement(s) and Statutory Right-of-Way (s) or alternative legal agreements as required to the satisfaction of the City;
 - c) That should an Oval Village District Energy Utility (DEU) be in operation prior to the City granting final BP inspection granting occupancy that no such final BP inspection granting occupancy will be issued until the developer has entered into appropriate Service Provision Agreement(s) and Statutory Right-of-Way (s) or alternative legal agreements as required to the satisfaction of the City.
5. Satisfying the provisions of "No Development" Covenant (BB1991737) as it relates to the Waterfront Park-Phase I upon the developer entering into a Servicing Agreement*, secured via a Letter(s) of Credit in the amount of \$726,231.45, for the design and construction of Phase I of the City owned park along the riverfront extending along the north side of the site.
 Note. No Occupancy Permit will be granted on 6611 Pearson Way ("Lot 9") until the works are completed to the City's satisfaction.
6. Discharging Statutory Right of Way BB1991703 for that portion along the north property line, adjacent to Waterfront Park from 6611 Pearson Way ("Lot 9") upon registration of the following (PROP) Public Right of Passage Statutory Right-of-Ways ("Replacement SRW") to the satisfaction of the Senior Manager, Parks and the Director of Development:
 - a) for that portion located at the northwest corner of the site [6611 Pearson Way ("Lot 9")], as generally identified as Area "A" in "Sketch A", for the purpose of facilitating seamless linkages and public access to the waterfront park. This PROP statutory Right-of- Way to provide for the following:
 - i. 24-hour-a-day, universally accessible, pedestrian, bicycle, and emergency and service vehicle access, together with related uses, features, utilities, and bylaw enforcement;

- ii. The design and construction of the Statutory Right-of-Way to be the responsibility of the owner, to the satisfaction of the City.
 - iii. No encroachments will be allowed under, upon or over (as the case may be) the (PROP) Statutory Right-Of-Way;
 - iv. Maintenance of this (PROP) Statutory Right-Of-Way will be the responsibility of the City.
 - v. This (PROP) Statutory Right-of-Way will be fully defined by a survey plan following completion of the proposed development, prior to granting an Occupancy Permit.
- b) for that portion located at the northeast corner of the site [6611 Pearson Way (“Lot 9”)], as generally identified as Area “B” in “Sketch A”, for the purpose of facilitating seamless linkages and public access to the waterfront park. This PROP statutory Right-of- Way to provide for the following:
- i. 24-hour-a-day, universally accessible, pedestrian, bicycle, and emergency and service vehicle access, together with related uses, features, utilities, and bylaw enforcement;
 - ii. No other encroachment than a parking structure concealed below finish grade of the (PROP) Statutory Right-Of-Way will be allowed; provided that such encroachments do not compromise the City’s intended public use or enjoyment, design quality or landscaping of the SRW Area’s public open space;
 - iii. The design, construction and maintenance of the Right-of-Way and all associated liability, will be the responsibility of the owner, to the satisfaction of the City;
 - iv. This (PROP) Statutory Right-of-Way will be fully defined by a survey plan following completion of the proposed development, prior to granting an Occupancy Permit.
- c) for that portion of approximately 12.5m wide and 80.06 m long along the east property line of the site [6611 Pearson Way (“Lot 9”)], generally identified as Area “A” in Sketch “B”, for the purpose of providing public access to the City’s waterfront park and open spaces while reinforcing the relationship between the waterfront park and the developer’s proposed buildings and associated private outdoor spaces. This PROP Statutory Right-of-Way to provide for the following:
- i. 24-hour-a-day, universally accessible, pedestrian, bicycle, and emergency and service vehicle access, together with related uses, features, utilities, and bylaw enforcement;
 - ii. providing a public open space area equivalent to the area of the buildings and associated private outdoor spaces that encroach onto the SROW being discharged, generally identified as Area “C” in “Sketch A”
 - iii. No other encroachment than a parking structure concealed below finish grade of the (PROP) Statutory Right-Of-Way will be allowed; provided that such encroachments do not compromise the City’s intended public use or enjoyment, design quality or landscaping of the SRW Area’s public open space;
 - iv. The design, construction and maintenance of the Right-of-Way and all associated liability, will be the responsibility of the owner, to the satisfaction of the City;
 - v. This (PROP) Statutory Right-of-Way will be fully defined by a survey plan following completion of the proposed development, prior to granting an Occupancy Permit.
7. Discharging Statutory Right-of-Way BB1991708 re. for that portion along the west property line of 6611 Pearson Way (“Lot 9”) required for the Hollybridge Way Greenway upon the developer registering a (PROP) Statutory Right-of-Way along the southernmost portion of the west property line of 6611 Pearson Way (“Lot 9”), as generally identified as Area “A” in “Sketch C”, for the purpose of reflecting the final variable width (minimum of 7.0 m wide) of the Hollybridge Way Greenway along the west side of the development site. This amendment to provide for the following:
- i. 24-hour-a-day, universally accessible, pedestrian, bicycle, and emergency and service vehicle access, together with related uses, features, utilities, and bylaw enforcement;
 - ii. No encroachments will be allowed under, upon or over (as the case may be) the (PROP) Statutory Right-Of-Way;

- iii. The design and construction of the Right-of-Way and all associated liability to be the responsibility of the owner, to the satisfaction of the City;
 - iv. Maintenance of this (PROP) Statutory Right-Of-Way will be the responsibility of the City.
 - v. This (PROP) Statutory Right-of-Way will be fully defined by a survey plan following completion of the proposed development, prior to granting an Occupancy Permit.
8. Satisfying the provisions of "No Development" Covenant (BB1991737) as it relates to Road and Related Improvements, subject to:
 - a) Entering into a Servicing Agreement* secured via a Letter(s) of Credit or cash-in-lieu, for the design and construction of the north portion of Hollybridge Way (extending from its intersection with Pearson Way to and including the turn-around to the front edge of the stairs to the pedestrian plaza at its northern end), from the far-side curb to the west property line of 6611 Pearson Way ("Lot 9"), including the full width of the Hollybridge Way Greenway, and the completion of Pearson Way, from the near-side curb to the inside edge of the sidewalk, and site servicing connections.
 - b) Completion, to the City's satisfaction, the "interim" River Road connecting the existing River Road east of Gilbert Road with the intersection of Gilbert Road and new River Road (i.e. former CP Rail corridor).
 - c) Entering into a legal agreement which provides for the removal of the Interim Road,
 - d) Receipt of a Letter of Credit in the amount of \$100,000 to be held by the City for a term of not more than 10 years, for the removal of the "interim" road when no longer required for transportation purposes.
9. Satisfying the provisions of "No Development" Covenant (BB1991737) as it relates to Public Art, provided the developer provides a conceptual design, implementation and management plan in accordance with the Public Art Plan, has entered into a Public Art Agreement to the satisfaction of the City, and the City receiving a Letter-of-Credit and/or cash-in-lieu associated with the implementation of the coordinated Public Art Program (Phase II) in the amount of of \$176,874 (based on a \$6.46/ m² contribution on the proposed 27,386 m² of built area).
10. Satisfying the provisions of "No Development" Covenant (BB1991737) as it relates to the design and construction of a 464.5 m² Child Care facility, to be completed to a turnkey level of finish on "Lot 13", as per accepted "Child Care Terms of Reference", upon the City:
 - a) Receiving a voluntary contribution to the City's Child Care Reserve fund in the amount of \$100,000 for the purpose of advancing the provision of Child Care initiatives in the City and;
 - b) Receiving a Letter of Credit or cash-in-lieu in the amount of \$50,000 to secure the developer's commitment to providing a 464.5 m² Child Care facility, at the sole cost of the developer, completed to a turnkey level of finish on "Lot 13" as per accepted "Child Care Terms of Reference".
11. Satisfying the provisions of "No Development Covenant" (BB1991737) as it relates to the provision of a 3,943.6 m² of affordable housing on Lot 13 upon the City receiving a Letter of Credit or a cash-in-lieu contribution in the amount of \$2,461,028 equivalent to \$4.0/ft² on the total residential area (615,257 ft²) in the proposed developments on 6611 Pearson Way-"Lot 9" (294,790 ft²) and 6622 Pearson Way -"Lot 12" (320,467 ft²) to secure the developer's commitment to providing a "stand-alone", four-storey affordable housing building, at the sole cost of the developer, completed to a turnkey level of finish on "Lot 13".
12. Satisfying the provisions of "No Development" Covenant (BB1991737) as it relates to the design and construction of raising the (Phase I) dike crest along the north side of 6611 Pearson Way ("Lot 9") from existing grade to 4.7 m geodetic, including transition areas, upon the developer entering into a Servicing Agreement(s)*, secured via a Letter(s) of Credit, with the City contributing a fix amount of \$68,310 to Phase I of the dike works.

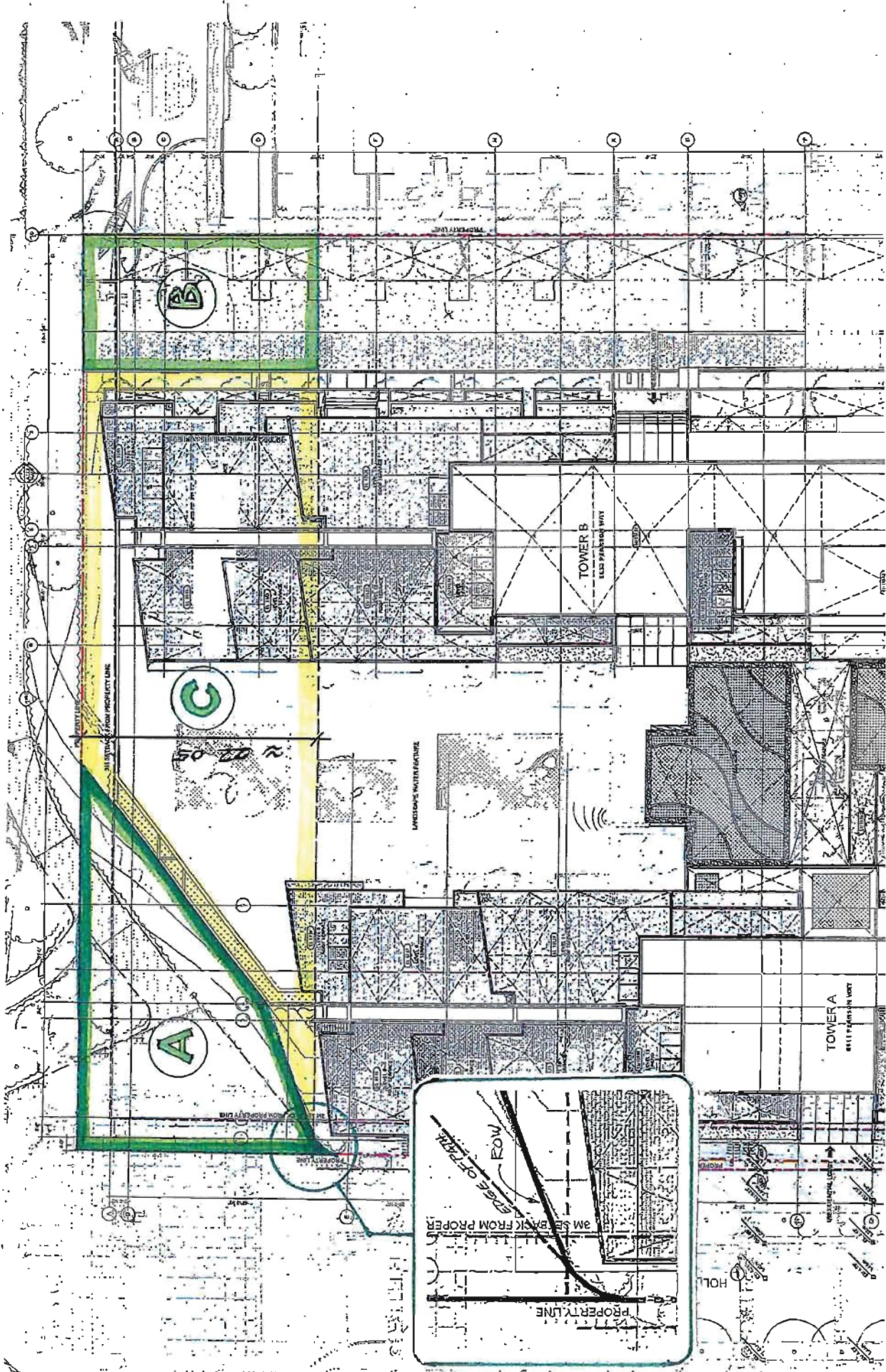
13. Satisfying the provisions of "No Development" Covenant (BB1991737) as it relates to construction of the pier near the foot of Hollybridge Way as per the "Waterfront Park Design Concept Plan" approved by the City, upon receipt of a voluntary contribution to the City in the amount of \$1,000,000.
14. Satisfying the provisions of "No Development" Covenant (BB1991737) as it relates to Water, Sanitary Sewer, Storm Sewer and Related Improvements upon the developer entering into a Servicing Agreement(s)*, secured via a Letter(s) of Credit for the design, construction and installation of the Servicing Works.
15. Satisfying the provisions of "No Development" Covenant (BB 1991737) as it relates to the City's community planning program upon receipt of a voluntary contribution to the City in the amount of \$100,000.
16. Discharging "No Development" Covenant (BB1991737) upon the developer satisfying the Development Permit Considerations listed above.
21. Submission of a Title Summary report identifying the existing charges on title and confirming substantial registration of legal agreements associated with this Development Permit (DP 11-587954) and Rezoning (RZ 09-460962)

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

1. Submission of a Construction Parking and Traffic Management Plan to the Transportation Division. Management Plan shall include location for parking for services, deliveries, workers, loading, application for any lane closures, and proper construction traffic controls as per Traffic Control Manual for works on Roadways (by Ministry of Transportation) and MMCD Traffic Regulation Section 01570.
2. Incorporation of accessibility and aging-in-place measures in Building Permit (BP) plans as determined via the Development Permit process.
3. Confirmation that the acoustic and mechanical recommendations by Brown Strachan Associates Consulting Engineers in Acoustics, consultant for this project, have been incorporated in the construction drawings.
4. Confirmation that the project will be built to Silver LEED or equivalent as per LEED Scoreboard and Strategy report by Stantec Consulting Ltd., the LEED consultants for this project, have been incorporated in the construction drawings.
5. The applicant is required to obtain a Building Permit for any construction hoarding associated with the proposed development. If construction hoarding is required to temporarily occupy a street, or any part thereof, or occupy the air space above a street or any part thereof, additional City approvals and associated fees may be required as part of the Building Permit. *For further information on the Building Permit, please contact Building Approvals Division at 604-276-4285.*
6. Submission of a construction traffic and parking management plan to the satisfaction of the City's Transportation Division (<http://www.richmond.ca/services/ttp/special.htm>)

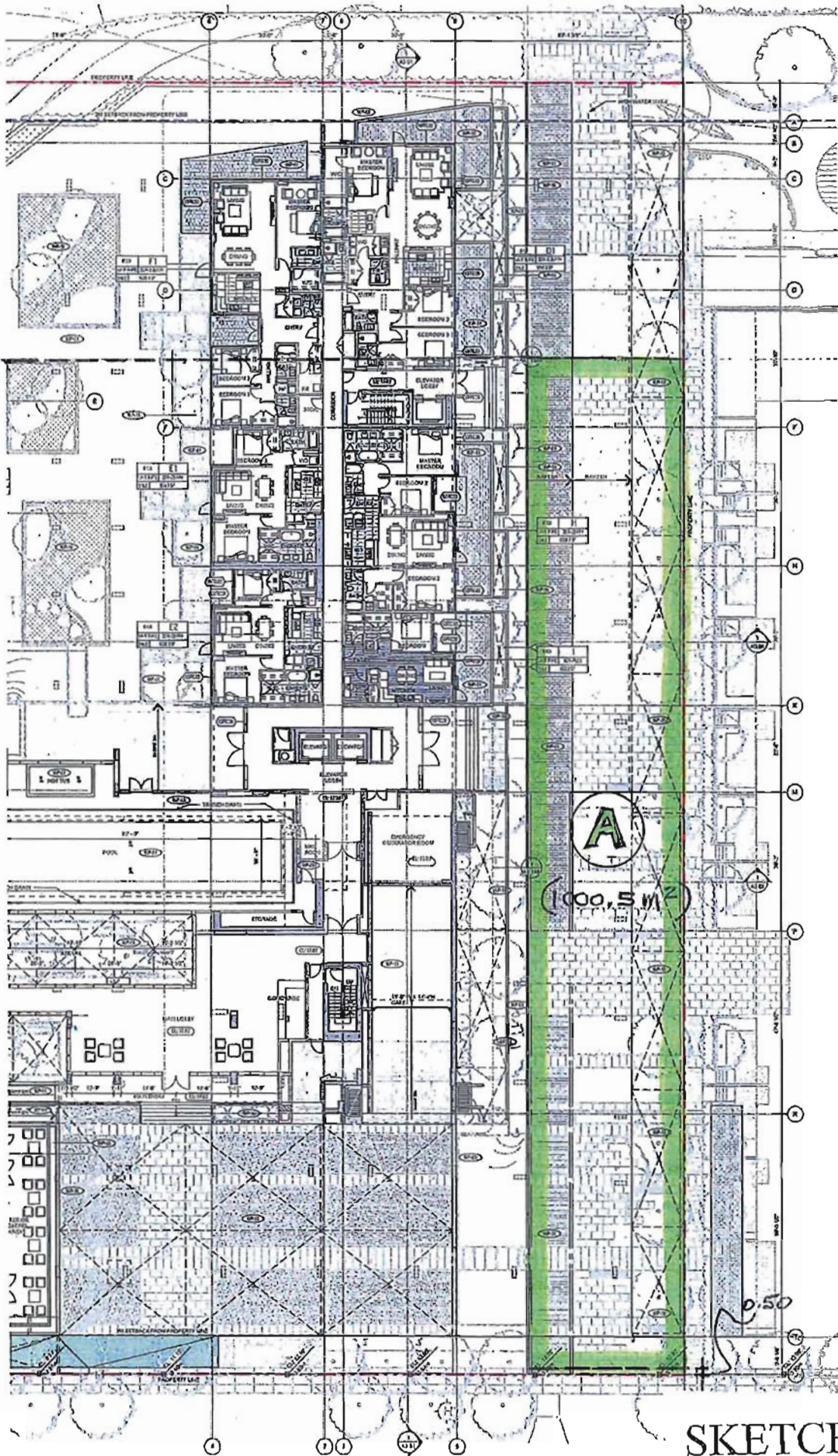
Note:

- * This requires a separate application.
- Where the Director of Development deems appropriate, the preceding agreements are to be drawn not only as personal covenants of the property owner but also as covenants pursuant to Section 219 of the Land Title Act.
All agreements to be registered in the Land Title Office shall have priority over all such liens, charges and encumbrances as is considered advisable by the Director of Development. All agreements to be registered in the Land Title Office shall, unless the Director of Development determines otherwise, be fully registered in the Land Title Office prior to enactment of the appropriate bylaw.



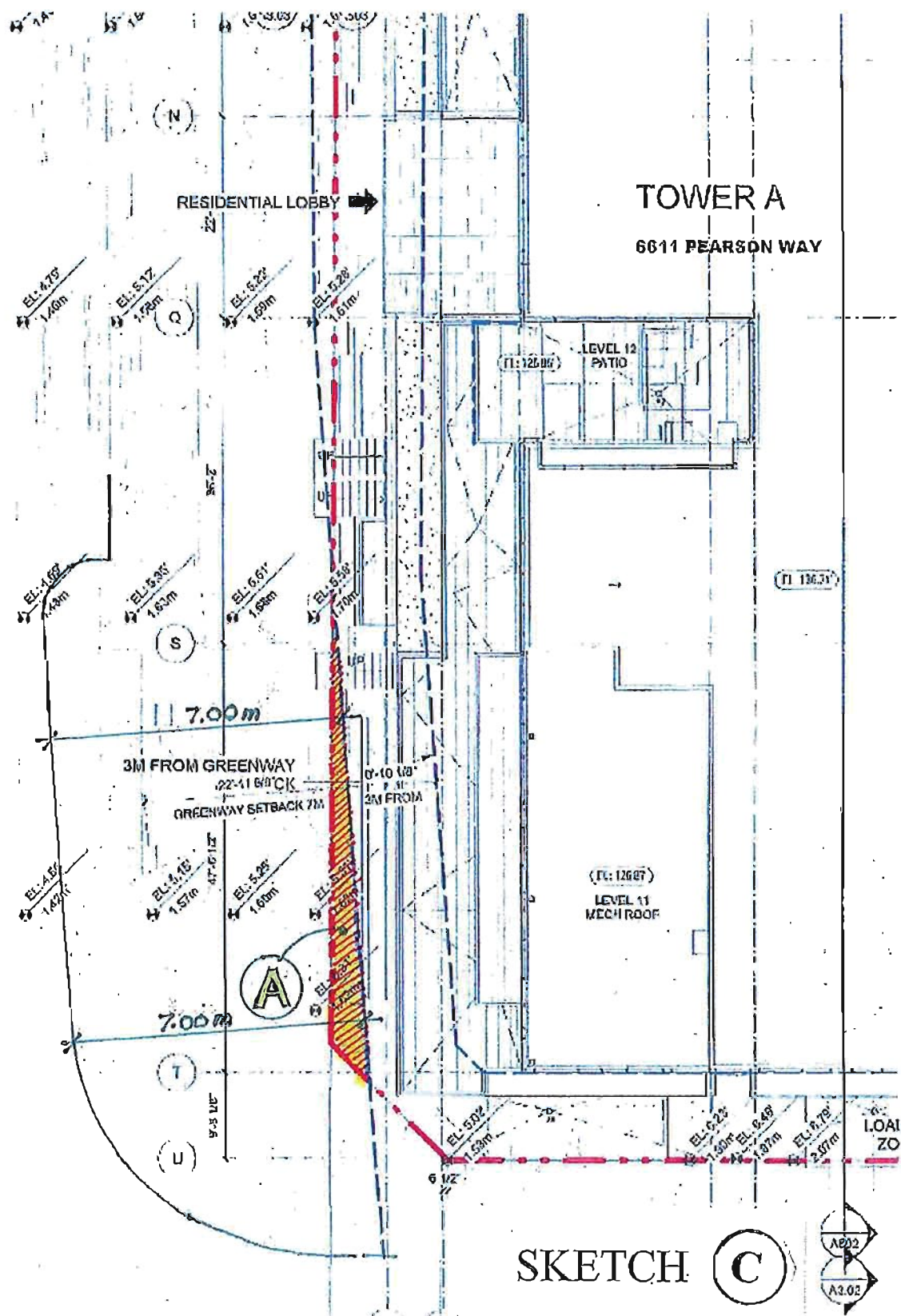
SKETCH A

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SKETCH

(B)



TOWER A
6611 PEARSON WAY

RESIDENTIAL LOBBY →

SKETCH **(C)**



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 8



No. DP 11-587954

To the Holder: OVAL 8 HOLDINGS LTD.
Property Address: 6611 PEARSON WAY (PARCEL 9)
Address: C/O UNIT 101 - 6500 RIVER ROAD
RICHMOND, BC V6X 4G5

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 #48 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 \$884,484 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 11-587954

To the Holder: OVAL 8 HOLDINGS LTD.
Property Address: 6611 PEARSON WAY (PARCEL 9)
Address: C/O UNIT 101 - 6500 RIVER ROAD
RICHMOND, BC V6X 4G5

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

This Permit is not a Building Permit.

AUTHORIZING RESOLUTION NO.
DAY OF

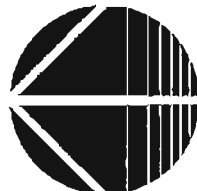
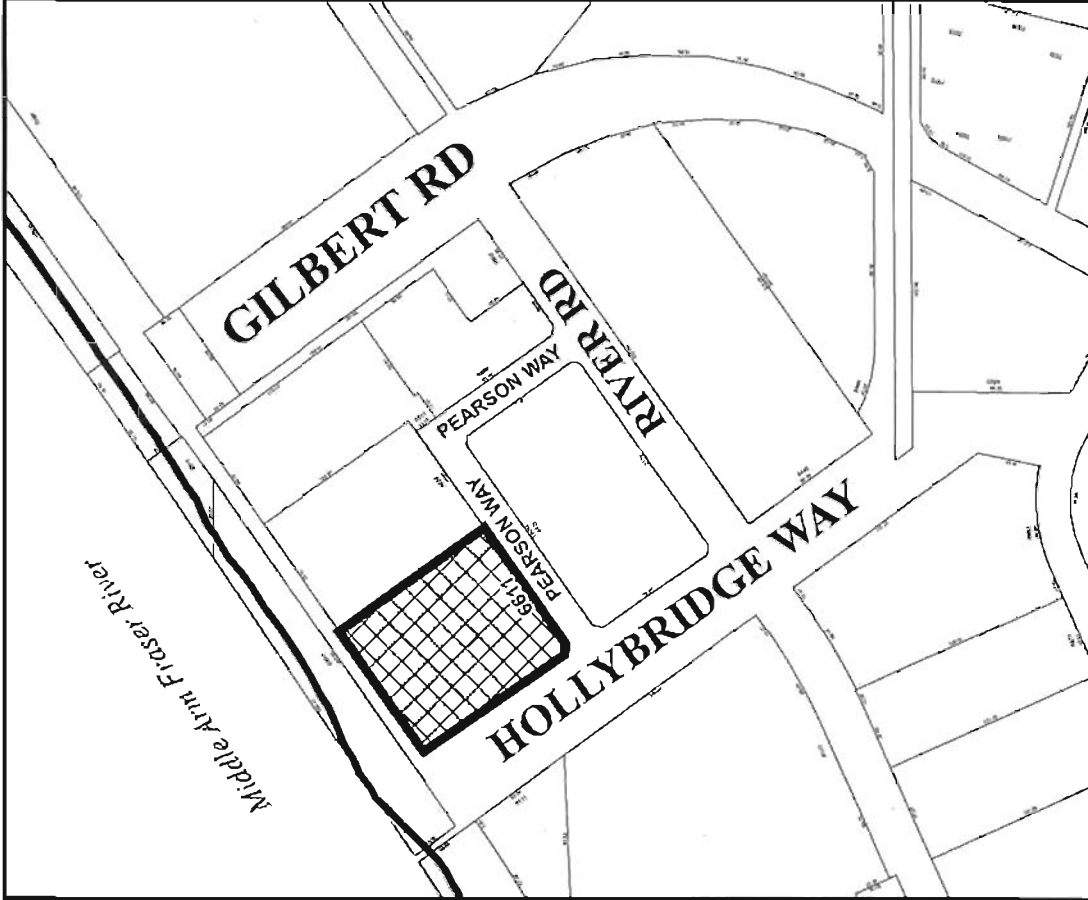
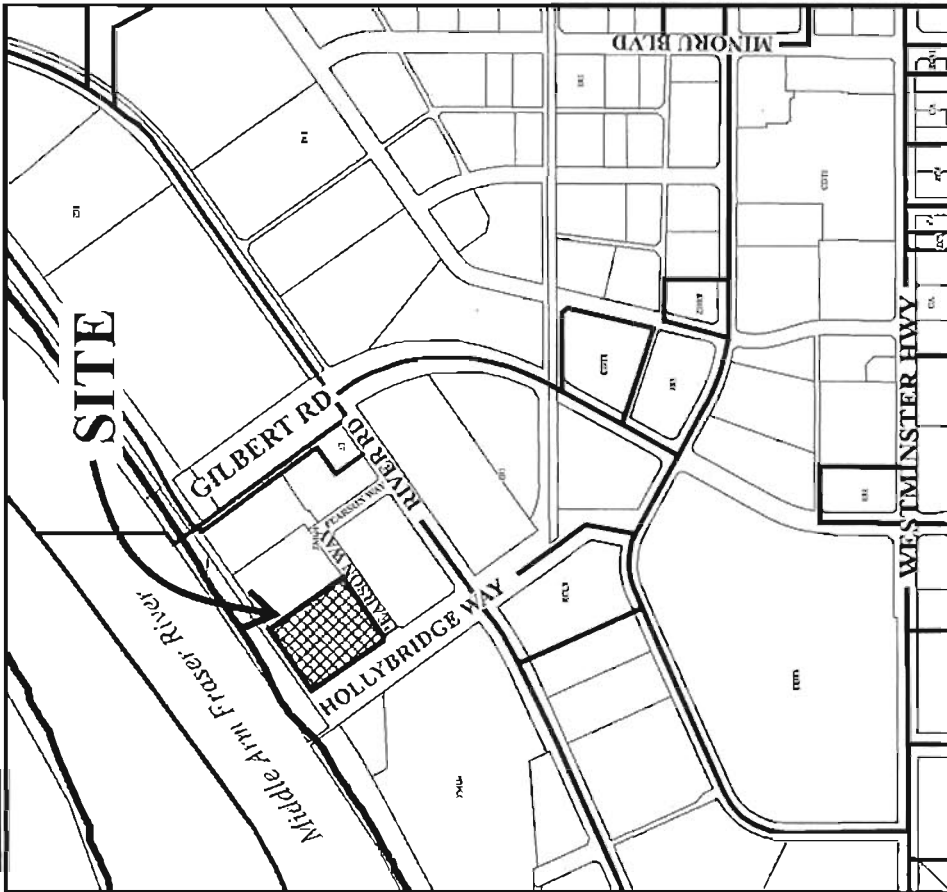
ISSUED BY THE COUNCIL THE

DELIVERED THIS DAY OF

MAYOR



City of Richmond

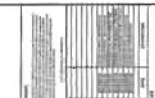


DP 11-587954
 SCHEDULE "A"

Original Date: 09/15/11

Revision Date: 03/07/13

Note: Dimensions are in METRES



Project Information section including Project Name, Number, and Date.

Project Date: FEB 26 2010
A001

1

AP - 11587954

FEB 26 2010

NOT FOR CONSTRUCTION

PROJECT DESCRIPTION & NEIGHBORHOOD SUMMARY

CITY ADDRESS: TOWER B
5011 WILKINSON WAY
RICHMOND, B.C.

PARKING, BICYCLE / LOADINGS SUMMARY

PROVIDED: 500 (773 units x 1.9) (see second table)
REQUIREMENT: 500 (773 units x 1.9) (see second table)

FLOOR AREA RATIO CALCULATION (FR)

Table with 13 columns: Level, FLS TO FLR, Height, Residential, Amenity, Gross Area (Parking & Service, Total), Unit Number, Mechanical, Heat Pumps, Pruning & Service, Electrical, Elevators, Amenity, Sub Total, FAR TOTAL.

FLOOR AREA RATIO CALCULATION (FR)

Table with 13 columns: Level, FLS TO FLR, Height, Residential, Amenity, Gross Area (Parking & Service, Total), Unit Number, Mechanical, Heat Pumps, Pruning & Service, Electrical, Elevators, Amenity, Sub Total, FAR TOTAL.

FLOOR AREA RATIO CALCULATION (FR)

Table with 13 columns: Level, FLS TO FLR, Height, Residential, Amenity, Gross Area (Parking & Service, Total), Unit Number, Mechanical, Heat Pumps, Pruning & Service, Electrical, Elevators, Amenity, Sub Total, FAR TOTAL.

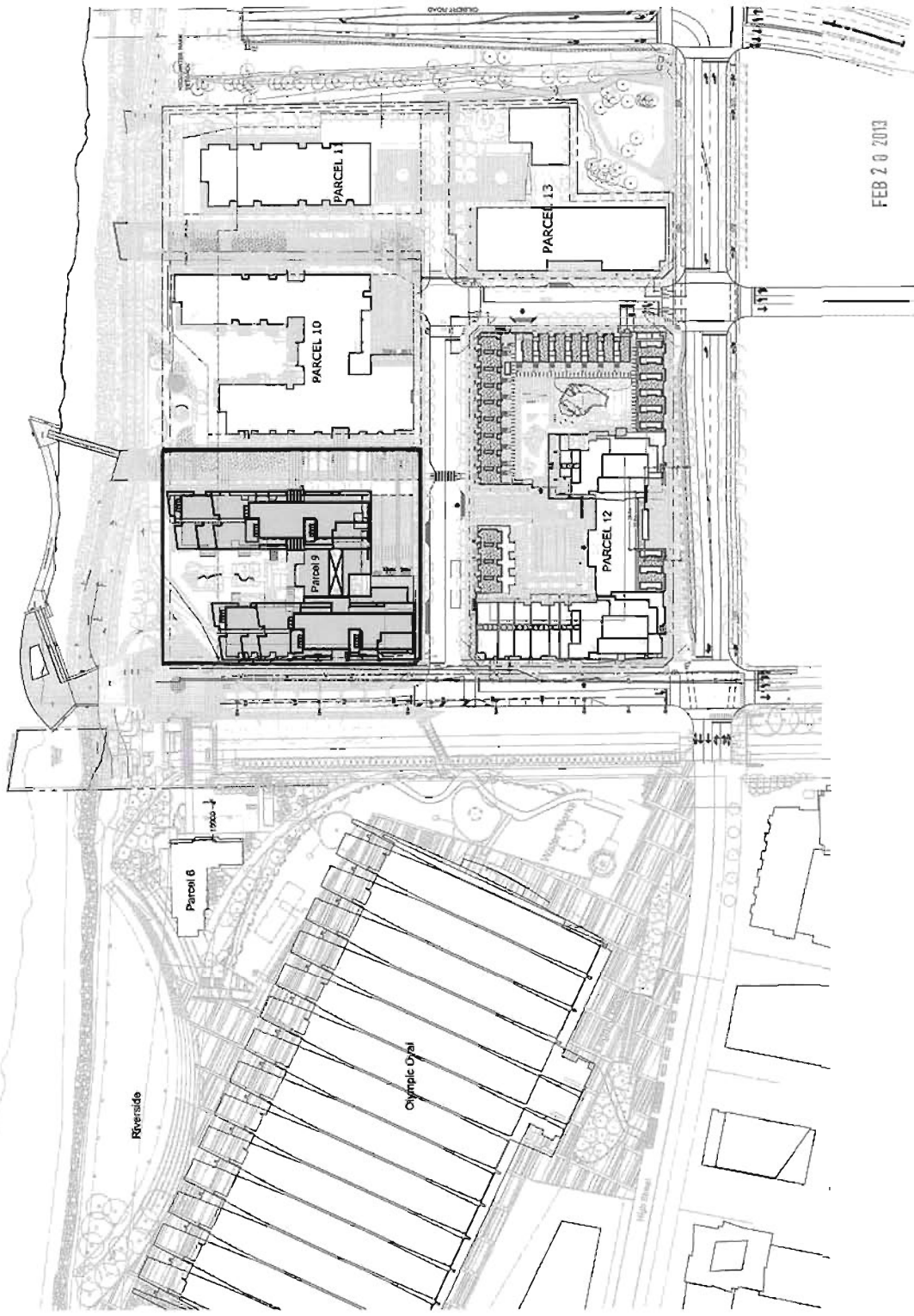
ASPAC

Project Name	Project No.	Sheet No.
Client	Scale	Date
Designer	Author	Checker
Reviewer	Approver	Contract No.

river green

Project Name: River Green
 Project No.: 11587954
 Sheet No.: A101
 Contract No.:
 Date: FEB 20 2013

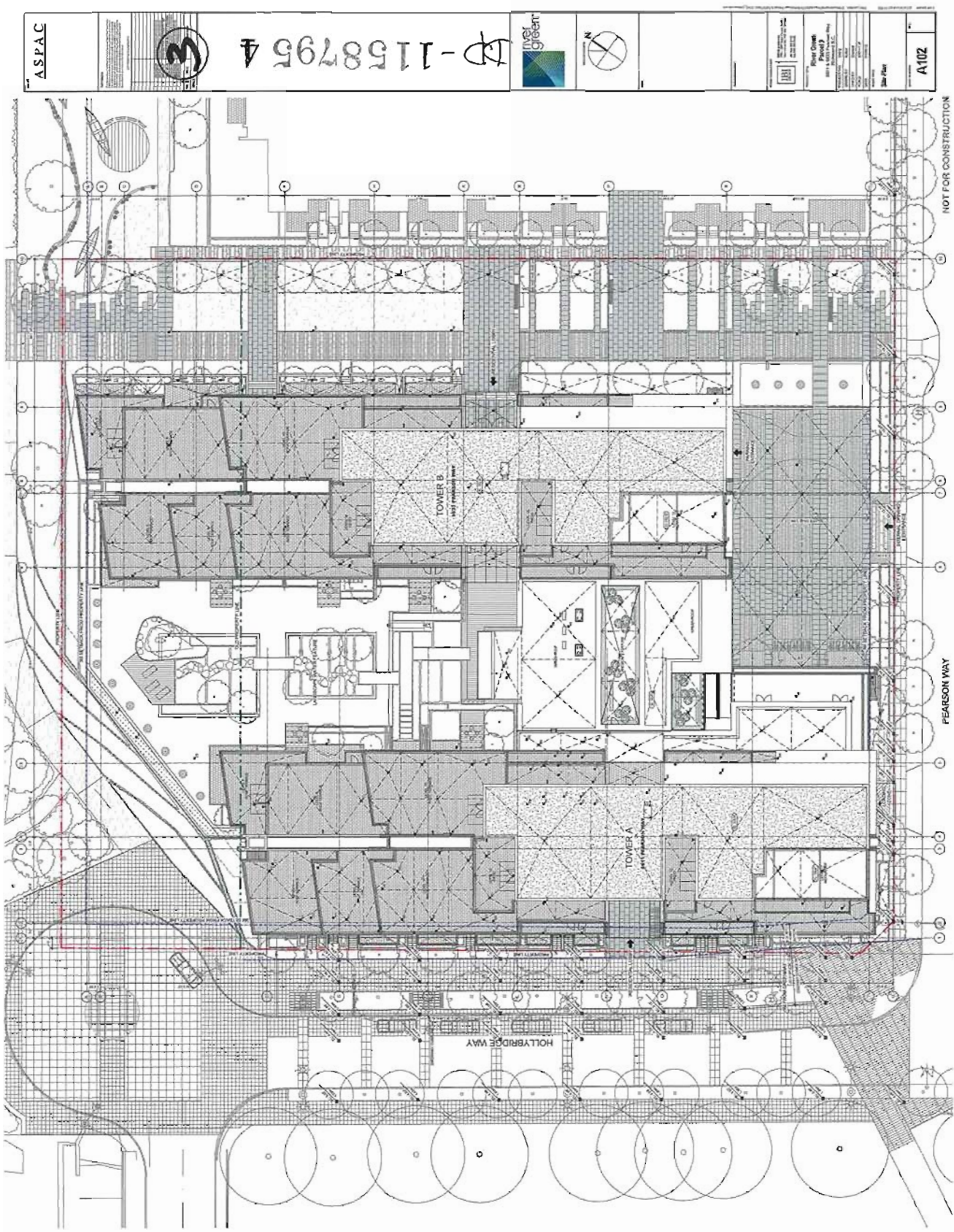
② DP-11587954



Middle Arm Fraser River

FEB 20 2013

NOT FOR CONSTRUCTION



ASPAC



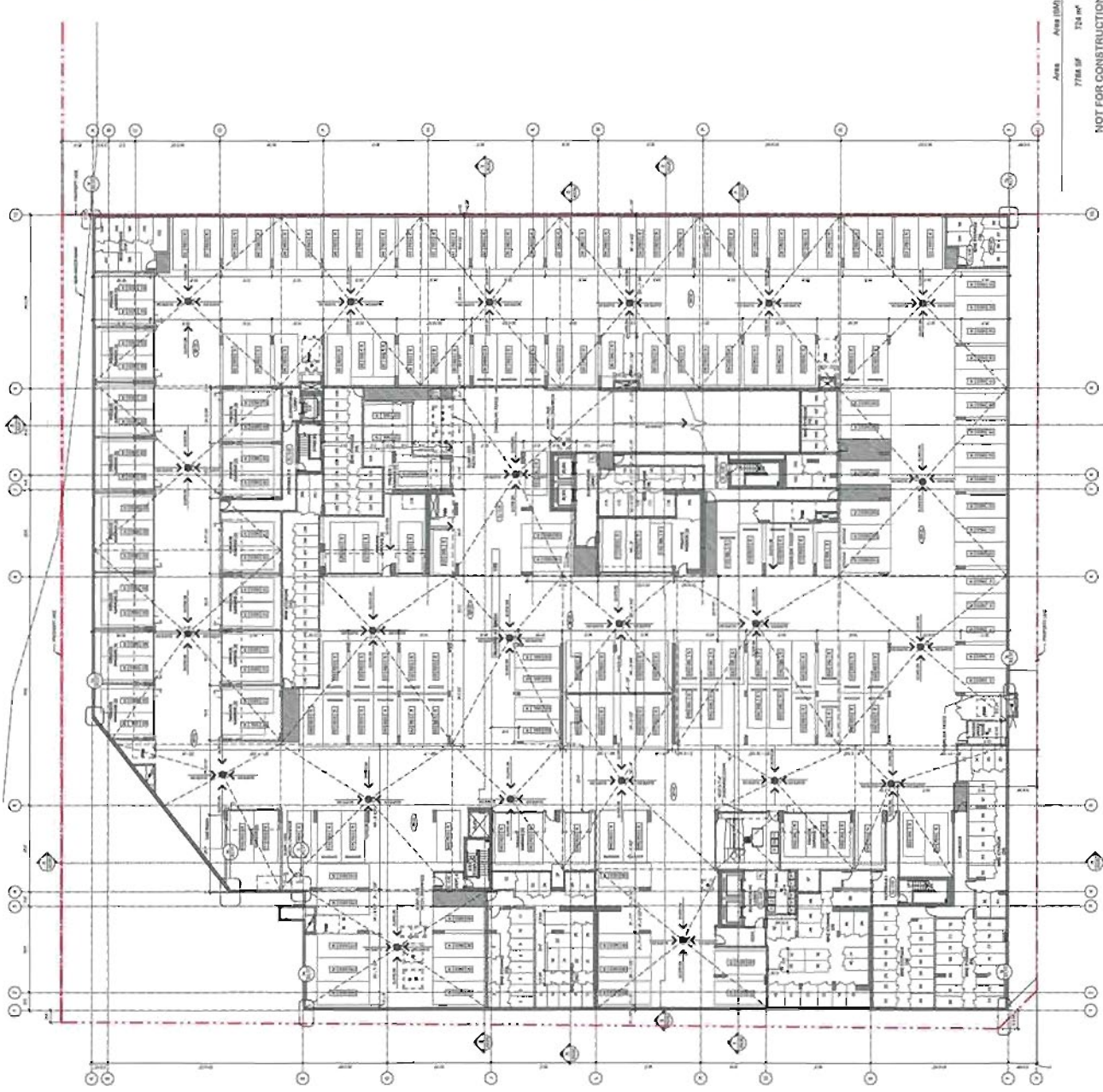
D-11587954



<p>Project Name Project # Date Scale</p>	<p>A102</p>
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FEB 28 2013

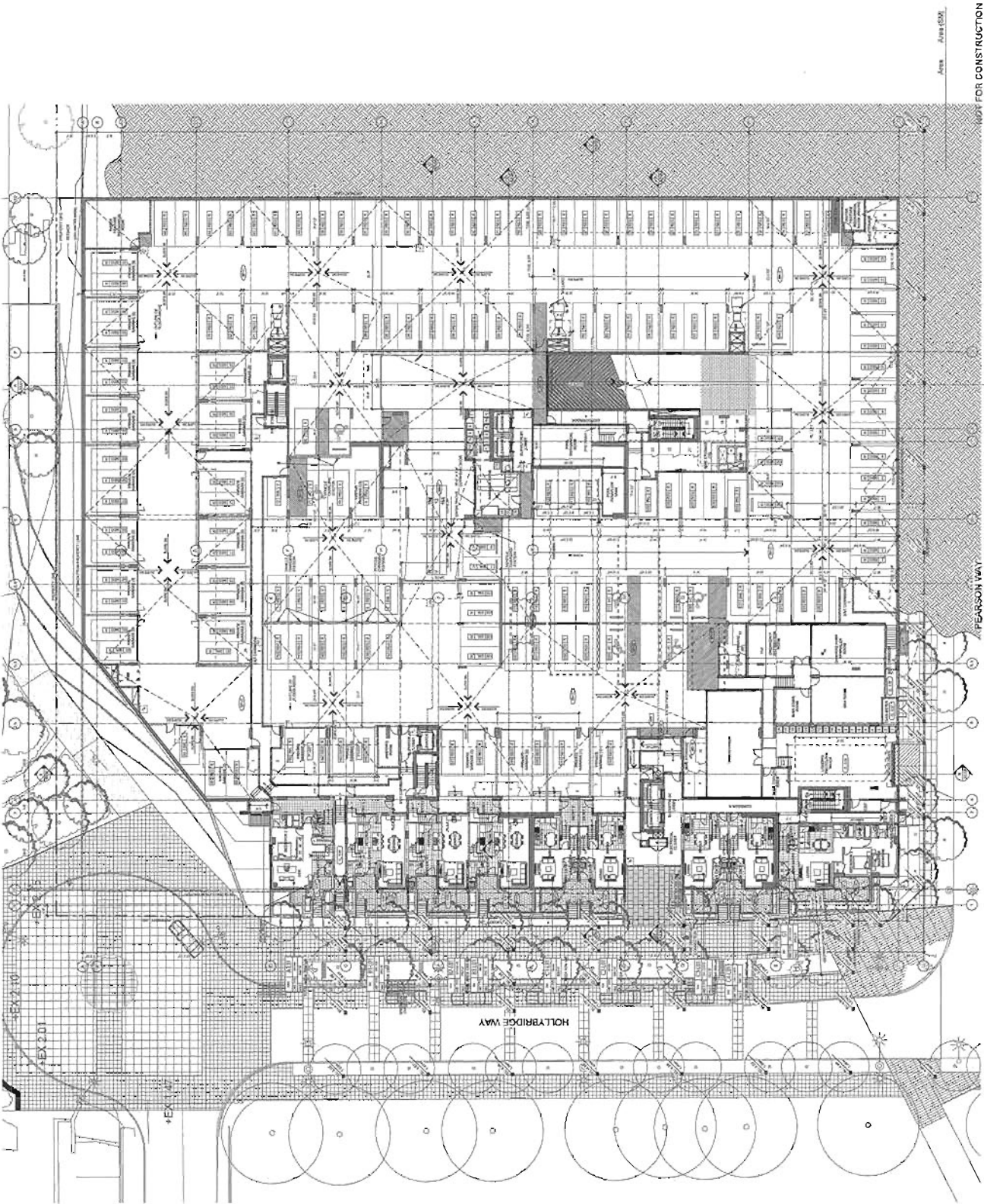
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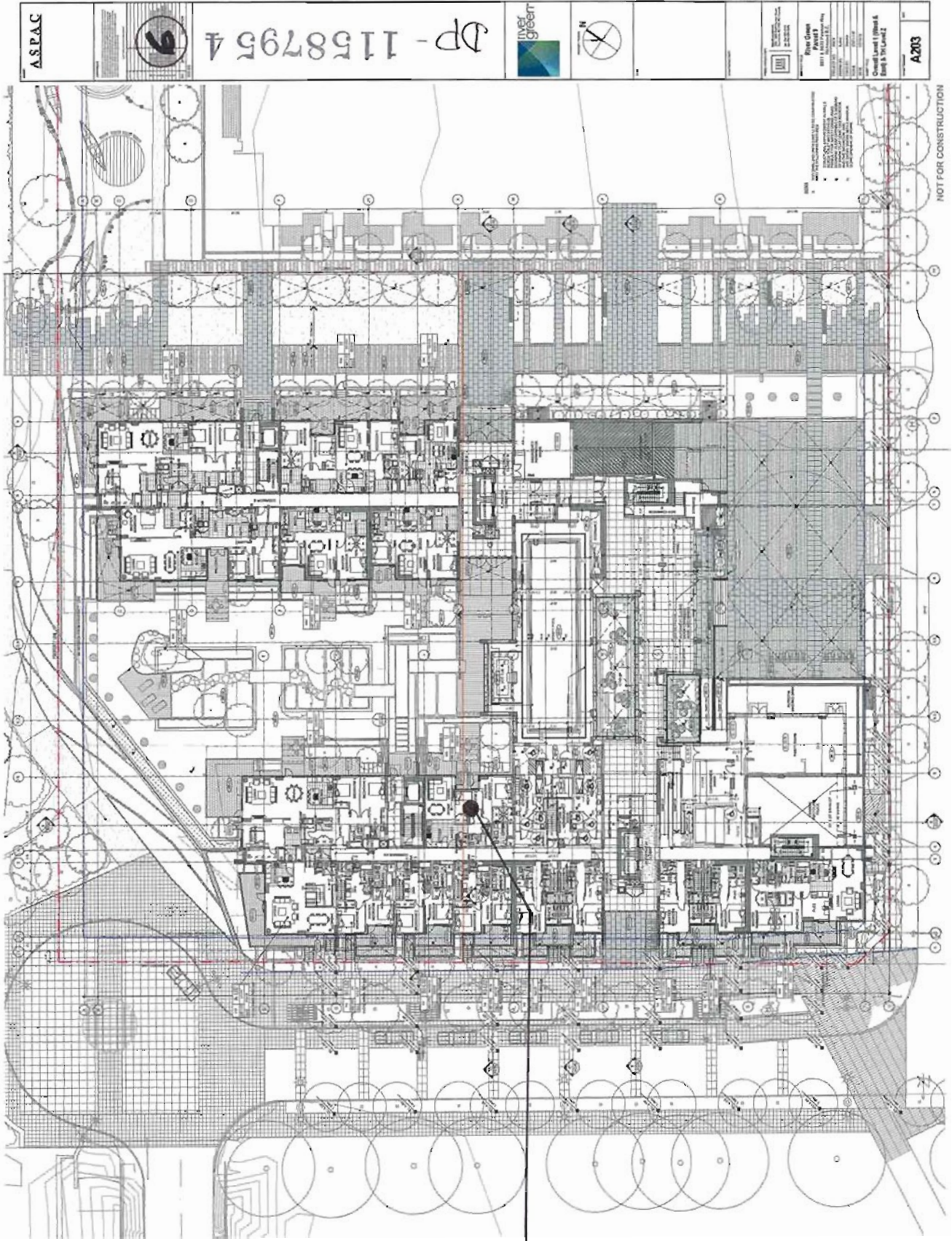
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 2. ALL DIMENSIONS UNLESS OTHERWISE NOTED
 3. ALL DIMENSIONS UNLESS OTHERWISE NOTED
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Area (MS)
 7786 SF
 724 m²
NOT FOR CONSTRUCTION

		DP - 1158795 4				River Green Project B 1011 N.	Overall Level P1 & P1 Level	A202
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NOT FOR CONSTRUCTION



UNIVERSAL ACCESSIBLE UNIT

ASPAC







DP - 1158795 4



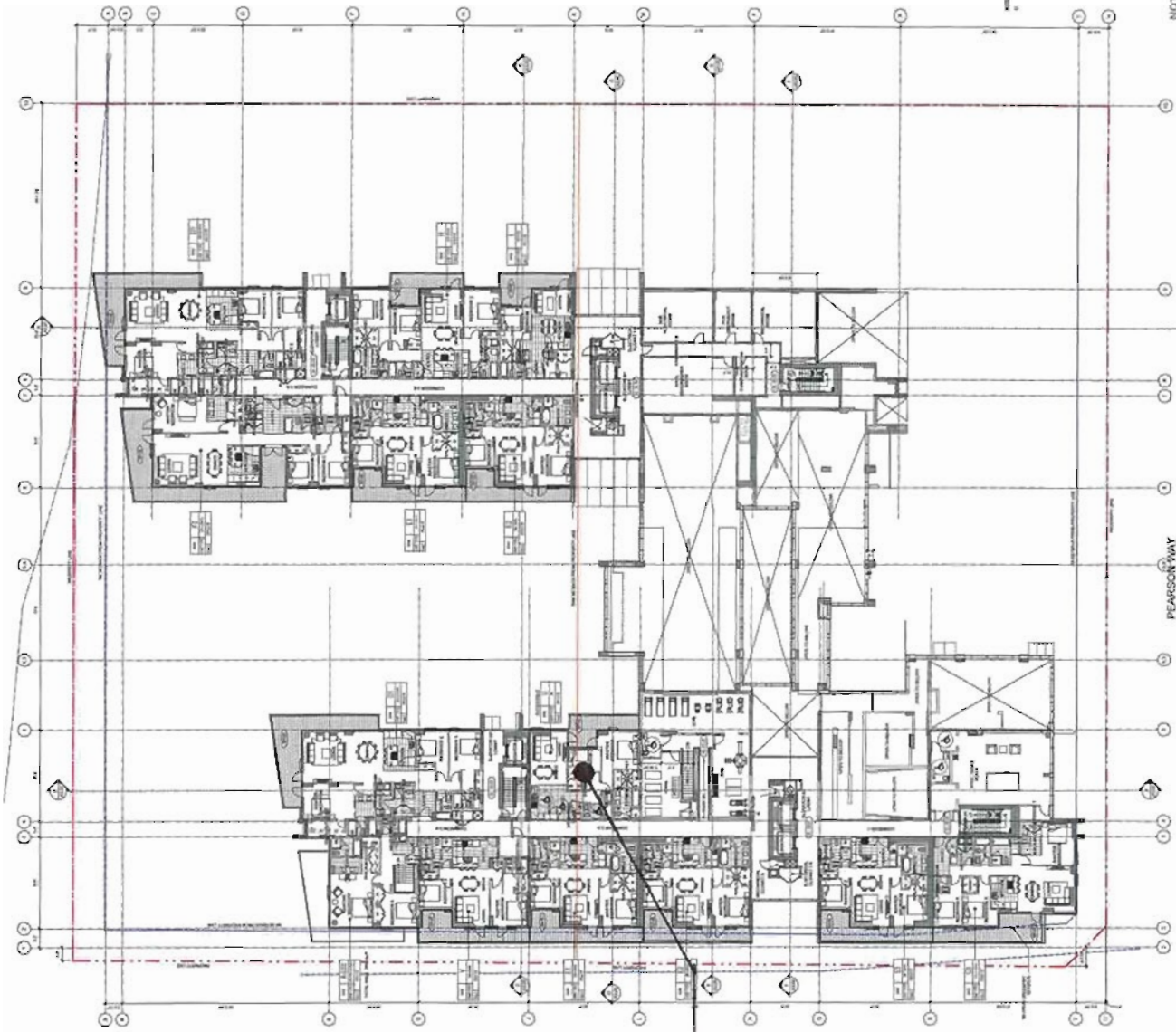
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<p>Project No. 1158795</p>	<p>Sheet No. A203</p>

FEB 28 2013

NOT FOR CONSTRUCTION

ASPAC		DP-11587954				Project Name Project # Date Overall Level # (of #) Sheet #	A204
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FEB 20 2013



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UNIVERSAL ACCESSIBLE UNIT

HOLLYBRIDGE WAY

PEARSON WAY

ASPAC

8

DP - 1158795 4

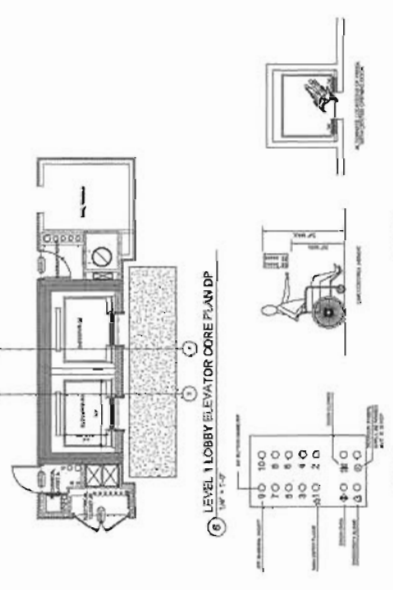
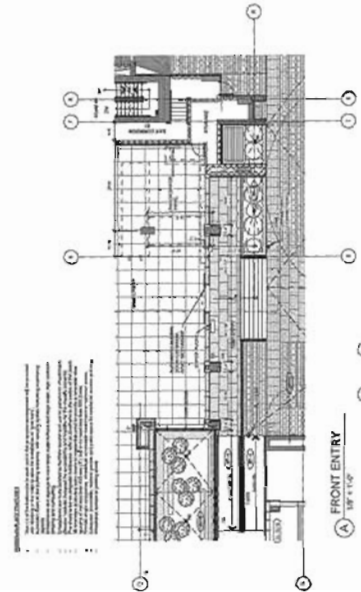
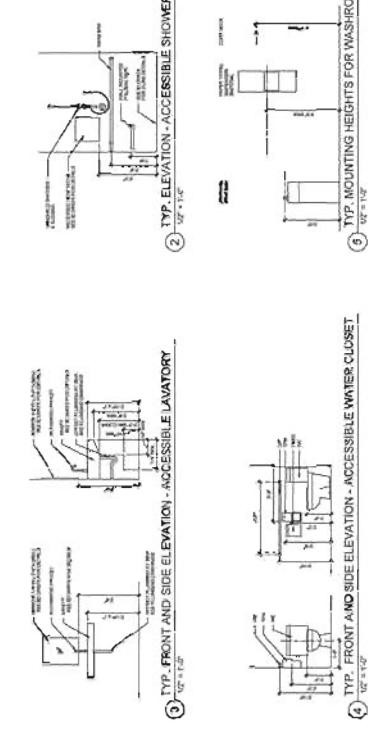
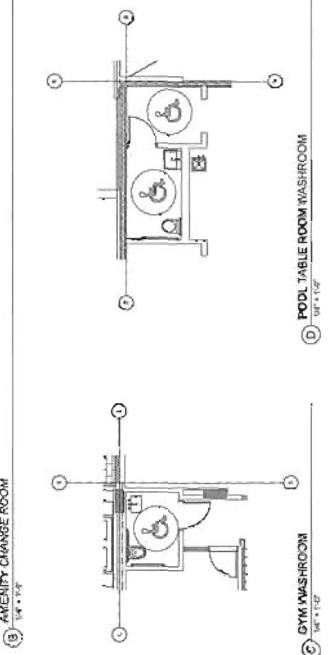
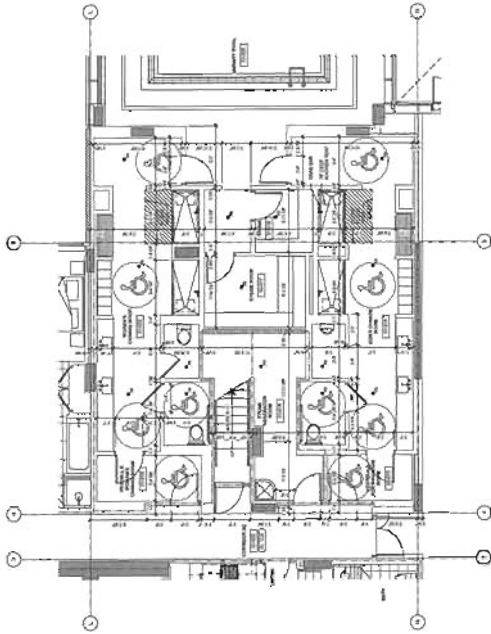
UBER GREEN

N

Ryan Green
Principal
1611 15th Street, NW
Washington, DC 20004
Tel: 202.233.4570
www.ryan-green.com

Accessibility

A010



ACCESSIBILITY AND AGING-IN-PLACE FEATURES

ASPAC

UBER GREEN

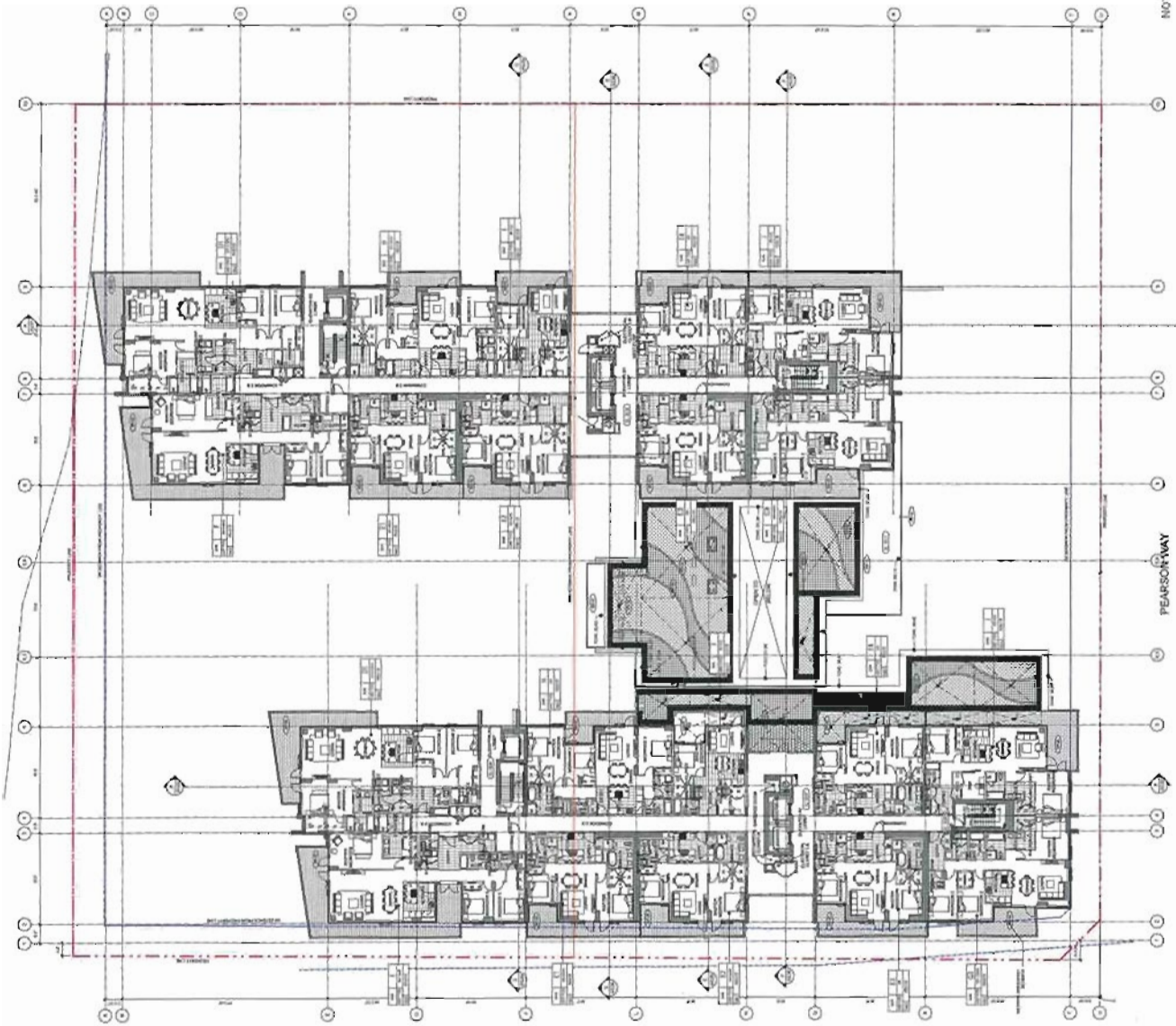
Ryan Green

Accessibility

A010

FEB 20 2013



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	<p>Project Name Pearson & Partners 1111 ...</p>										
<p>Overall Level / Sheet & Size</p>											
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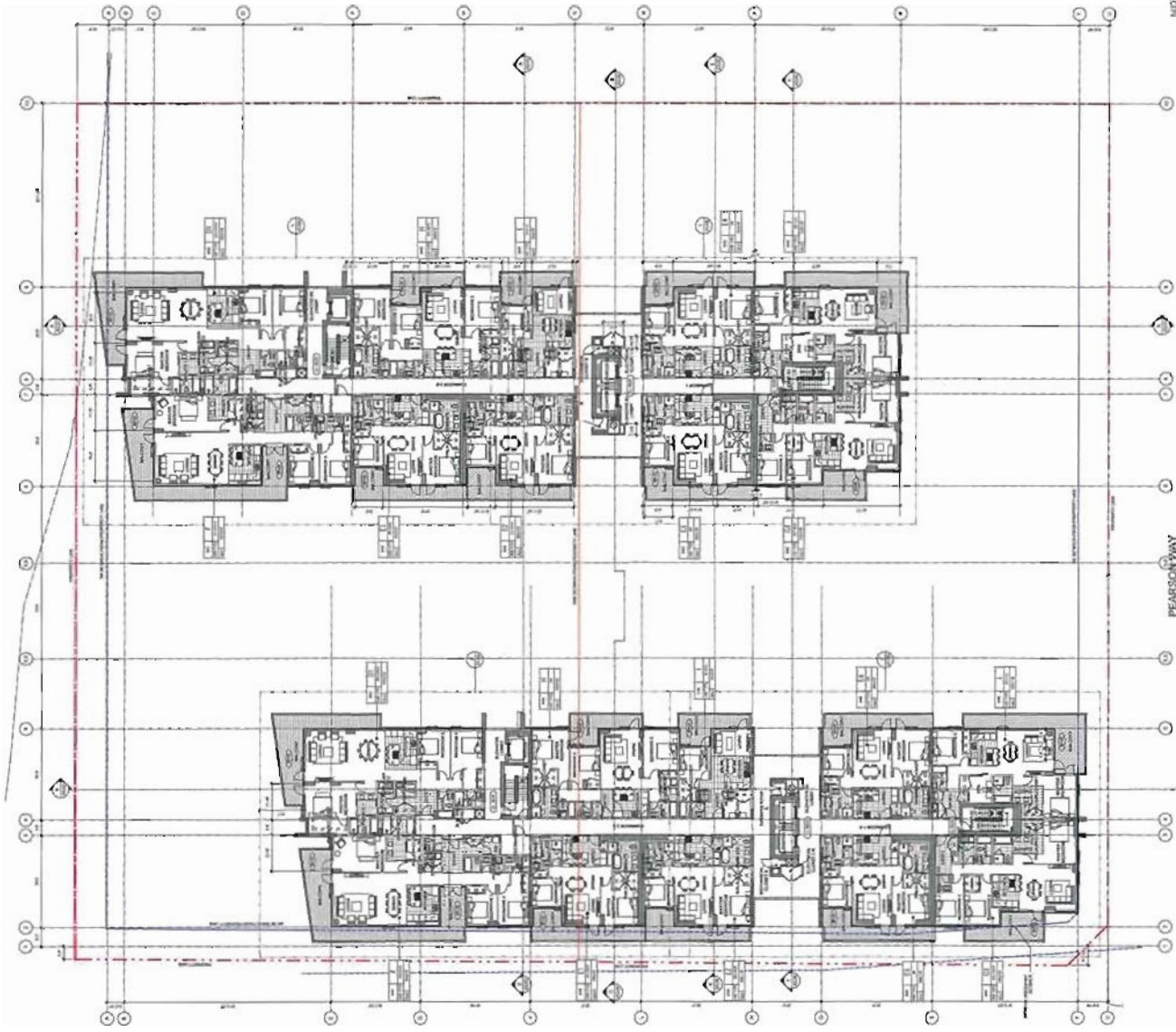


HOLLYBRIDGE WAY

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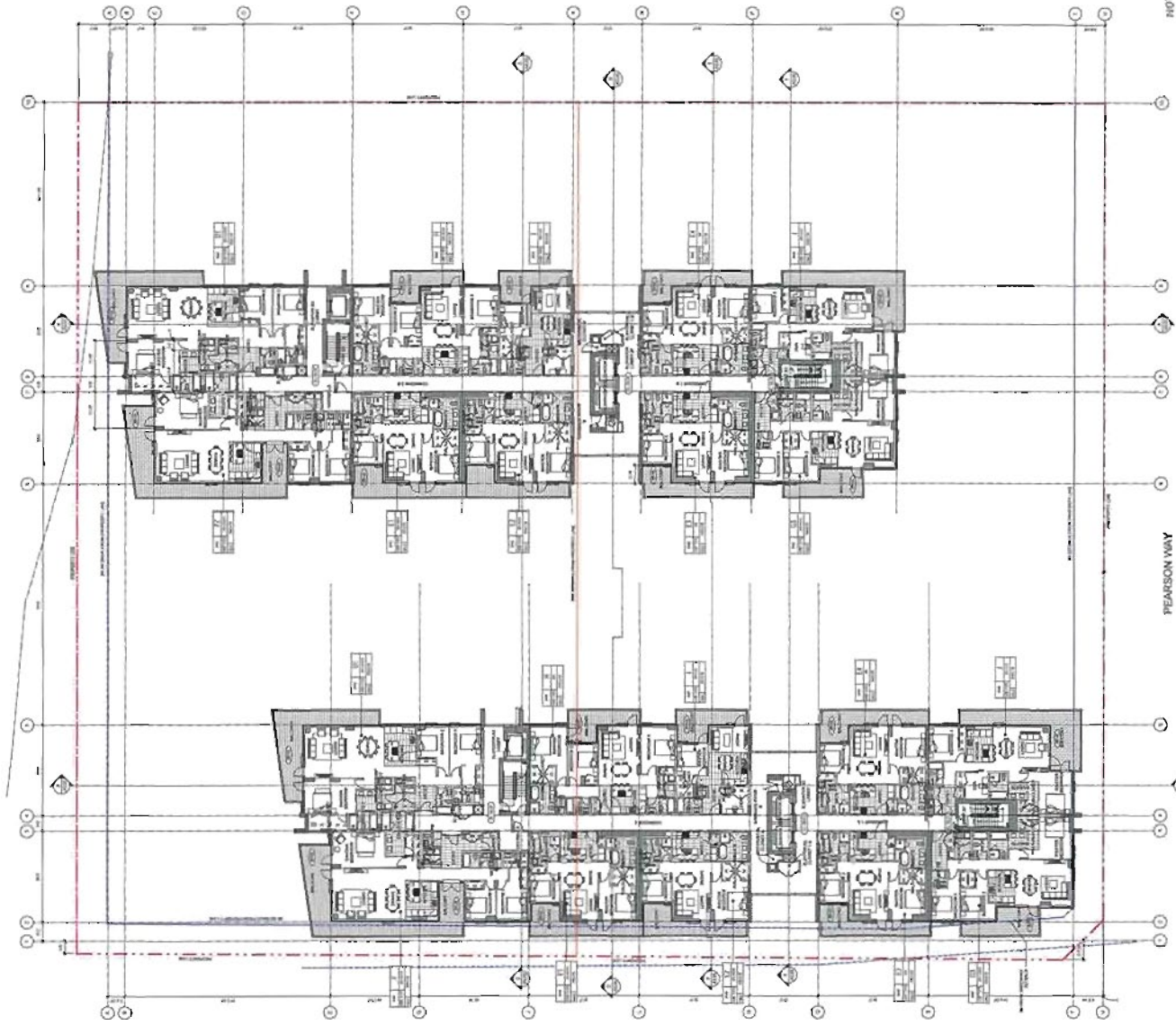
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Project Name	Project #	Overall Level / Sheet #										



HOLL VERRIDGE WAY

NOT FOR CONSTRUCTION

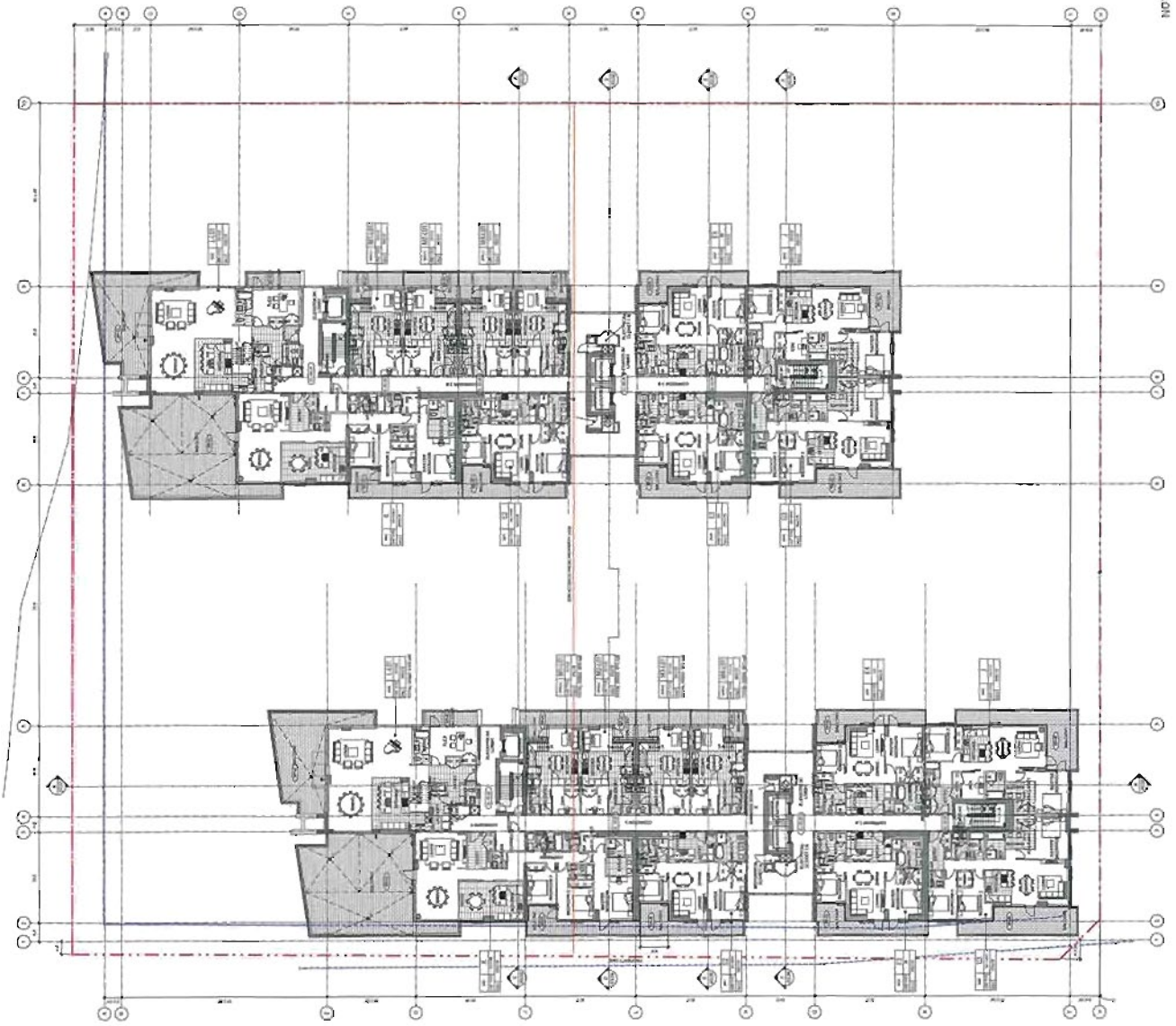
FEB 20 2013



NOT FOR CONSTRUCTION

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ASPAC <small>Architectural Services, Planning & Construction</small>		river green <small>Architecture & Interiors</small>		Project Name: Project #: 11111111111111111111		Sheet Level (Sheet & Entry)





FEB 7 8 2013

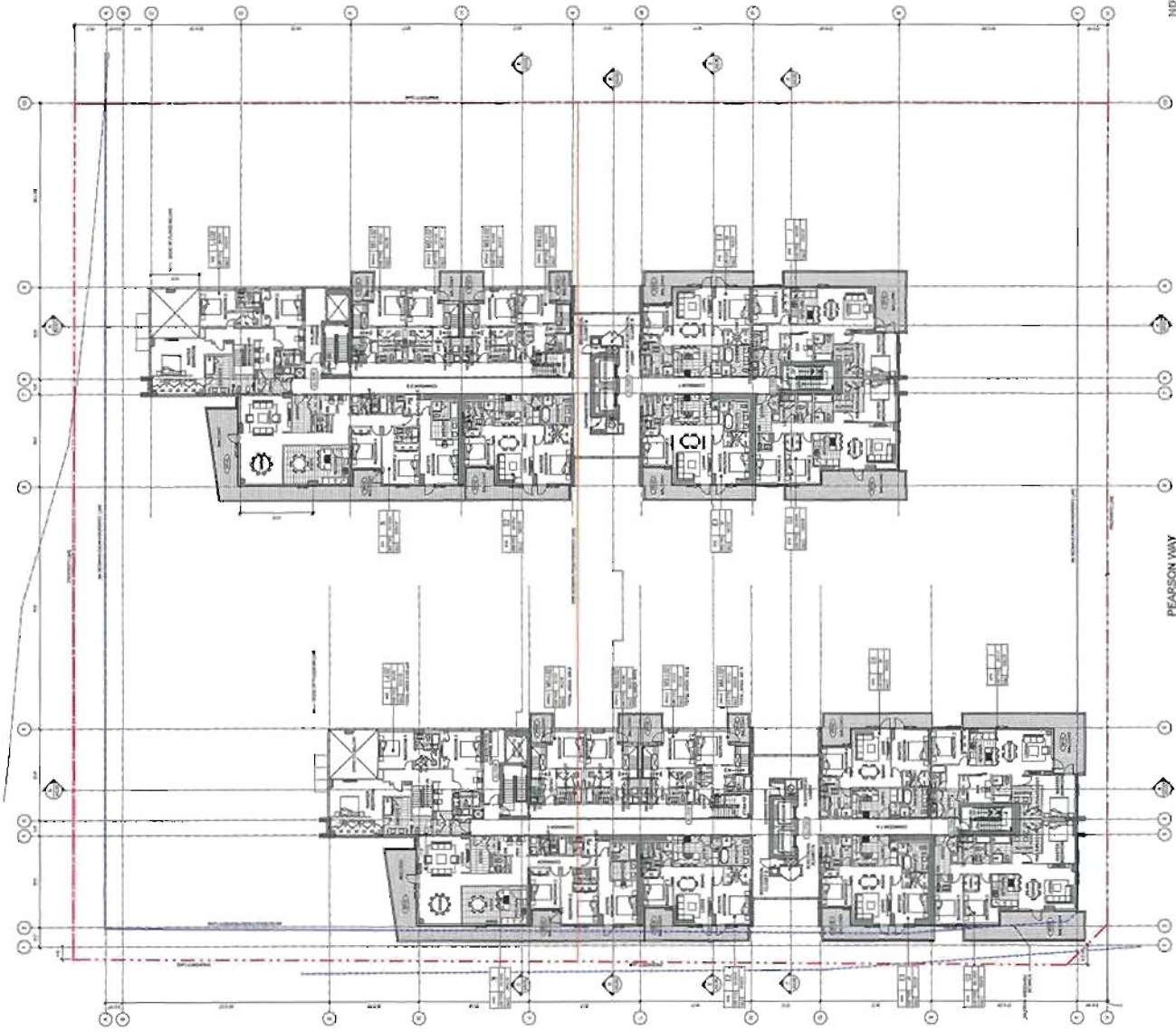


NOT FOR CONSTRUCTION

				DP-11587954		A208
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FEB 28 2012

			
DP-11587954			A209

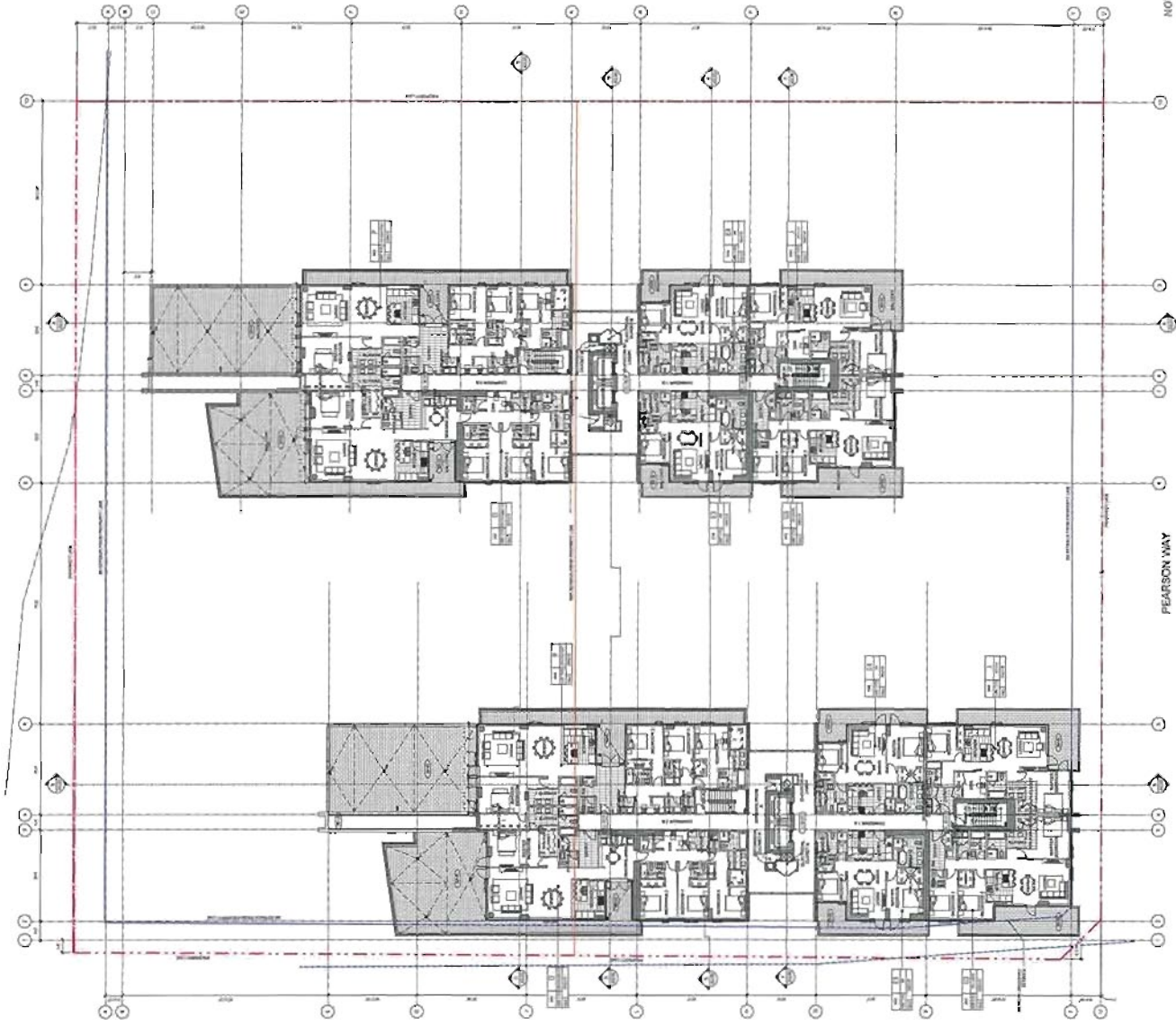


HOLLYBRIDGE WAY

PEARSON WAY

NOT FOR CONSTRUCTION

FEB 7 0 7/13







NOT FOR CONSTRUCTION

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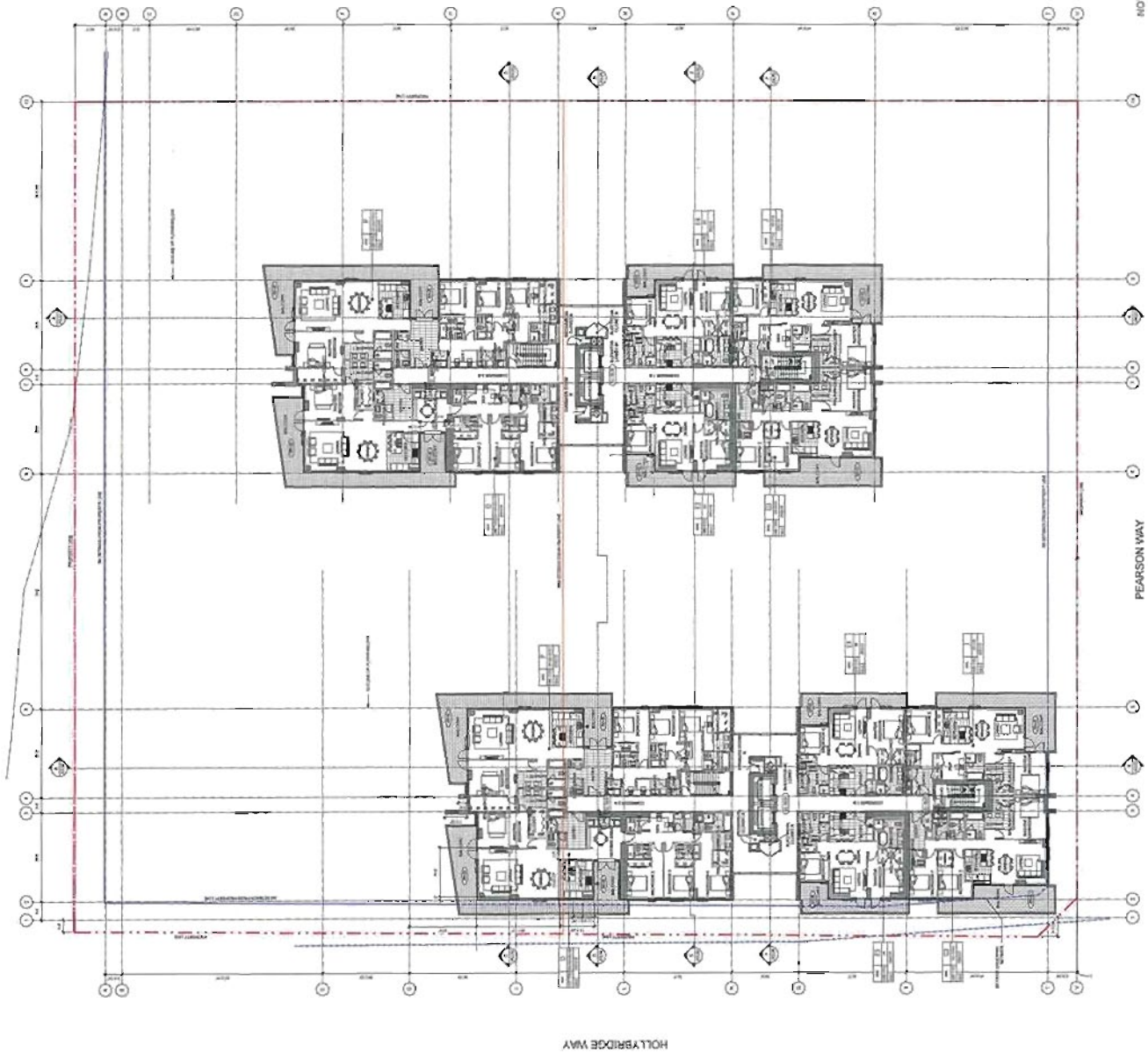
FEB 20 2013

HOLLYBRIDGE WAY

PEARSON WAY

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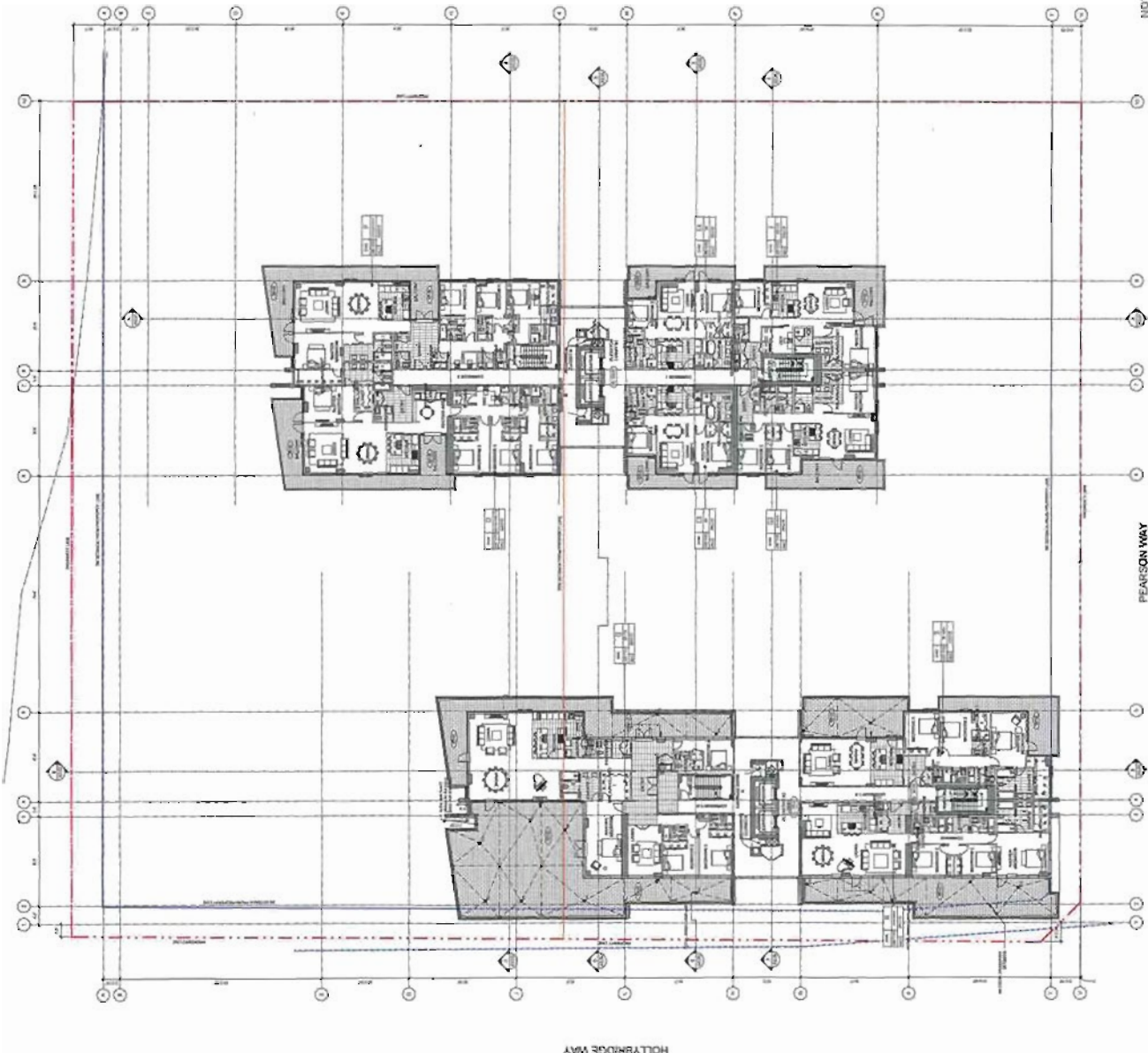
DP - 11587954



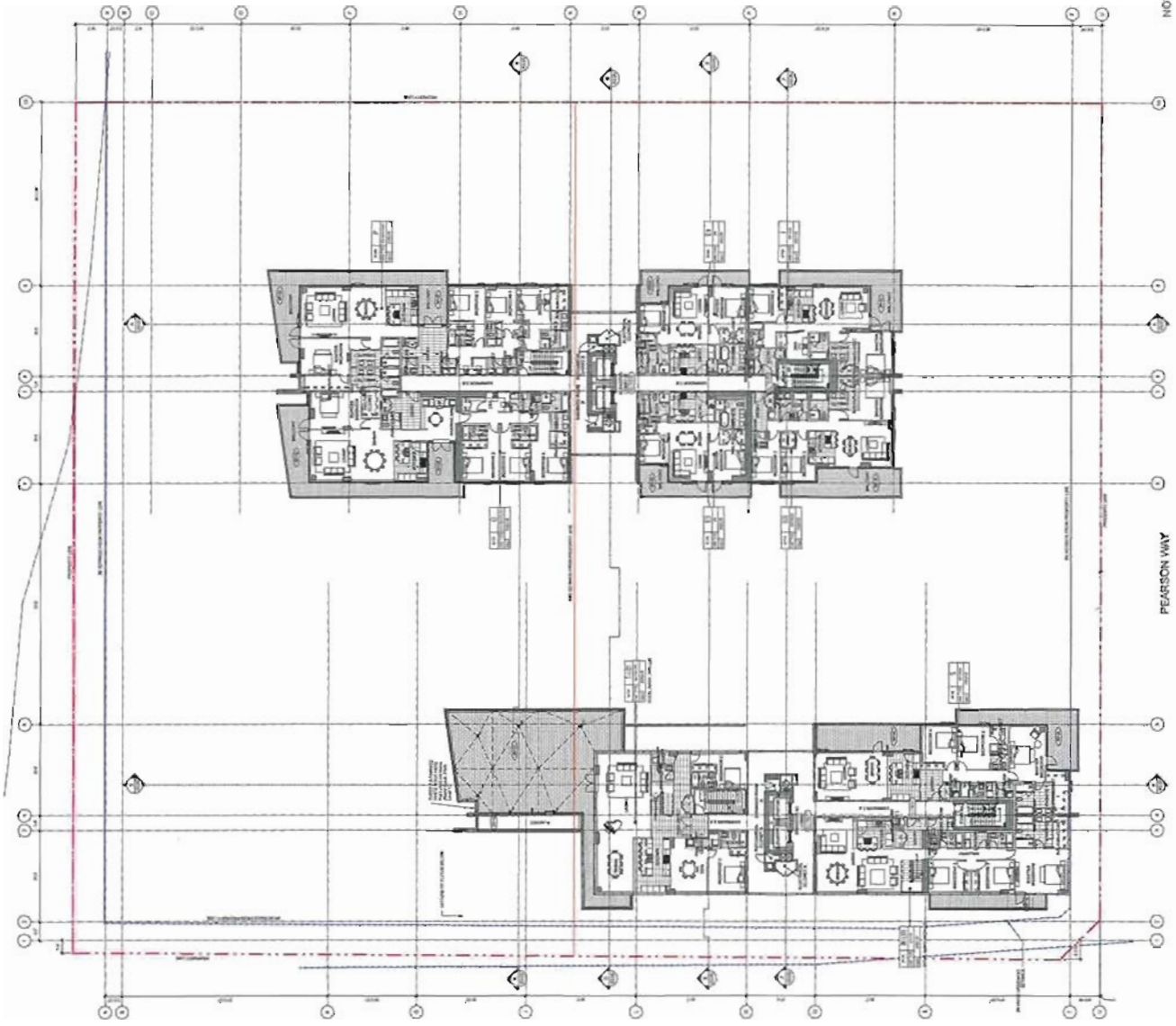
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Project No.	11587954
Client	
Architect	
Engineer	
Contractor	
Scale	
Overall Level	15 (Overall 5 Feet)

A212

FEB 26 2013






NOT FOR CONSTRUCTION



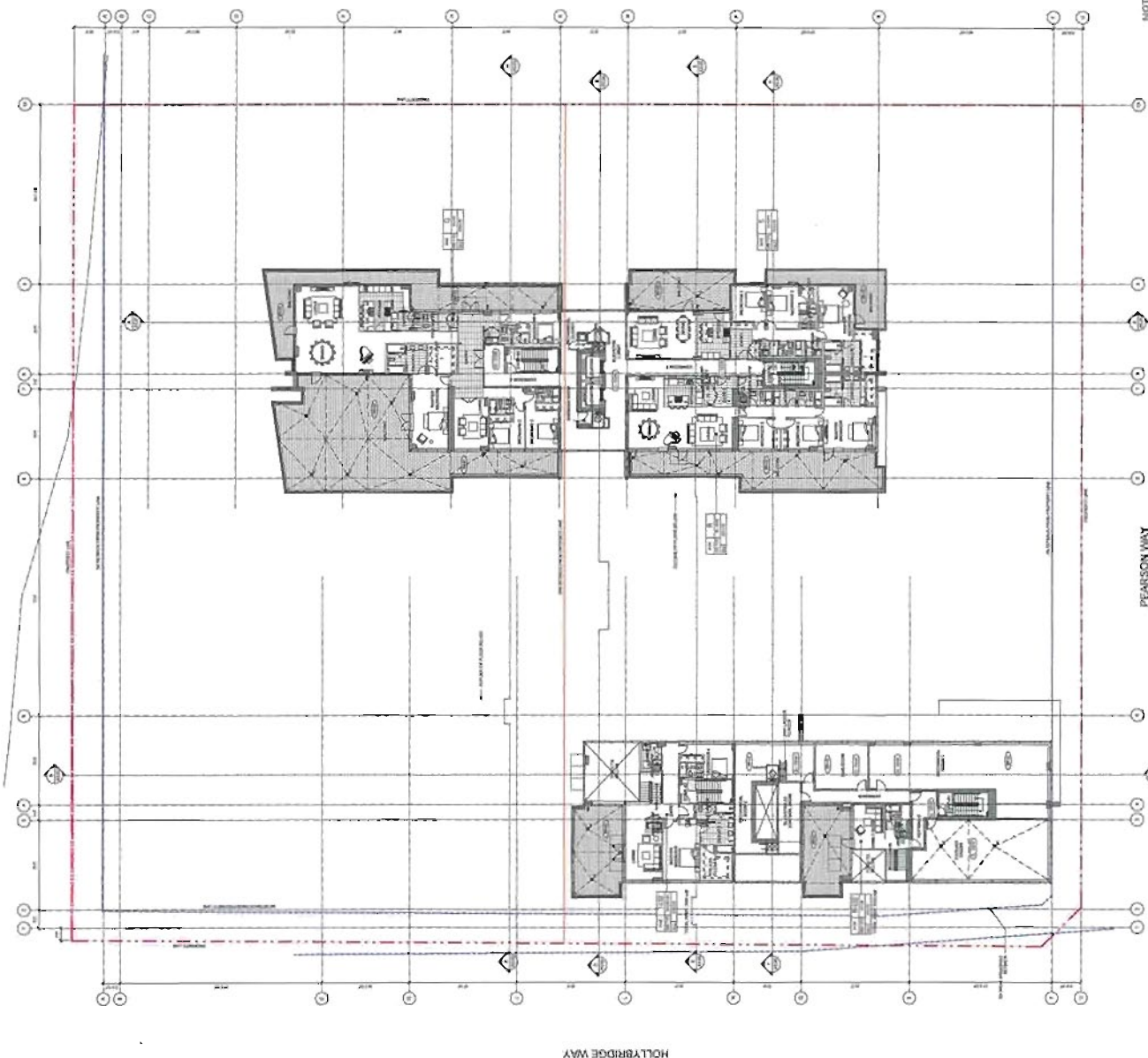
NOT FOR CONSTRUCTION

		D-11587954				A213
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FEB 20 2013

ASPAC	18	D - 11587954				Project Name: Project #: 10111587954 Overall Level 12 (Plan 5)	A214
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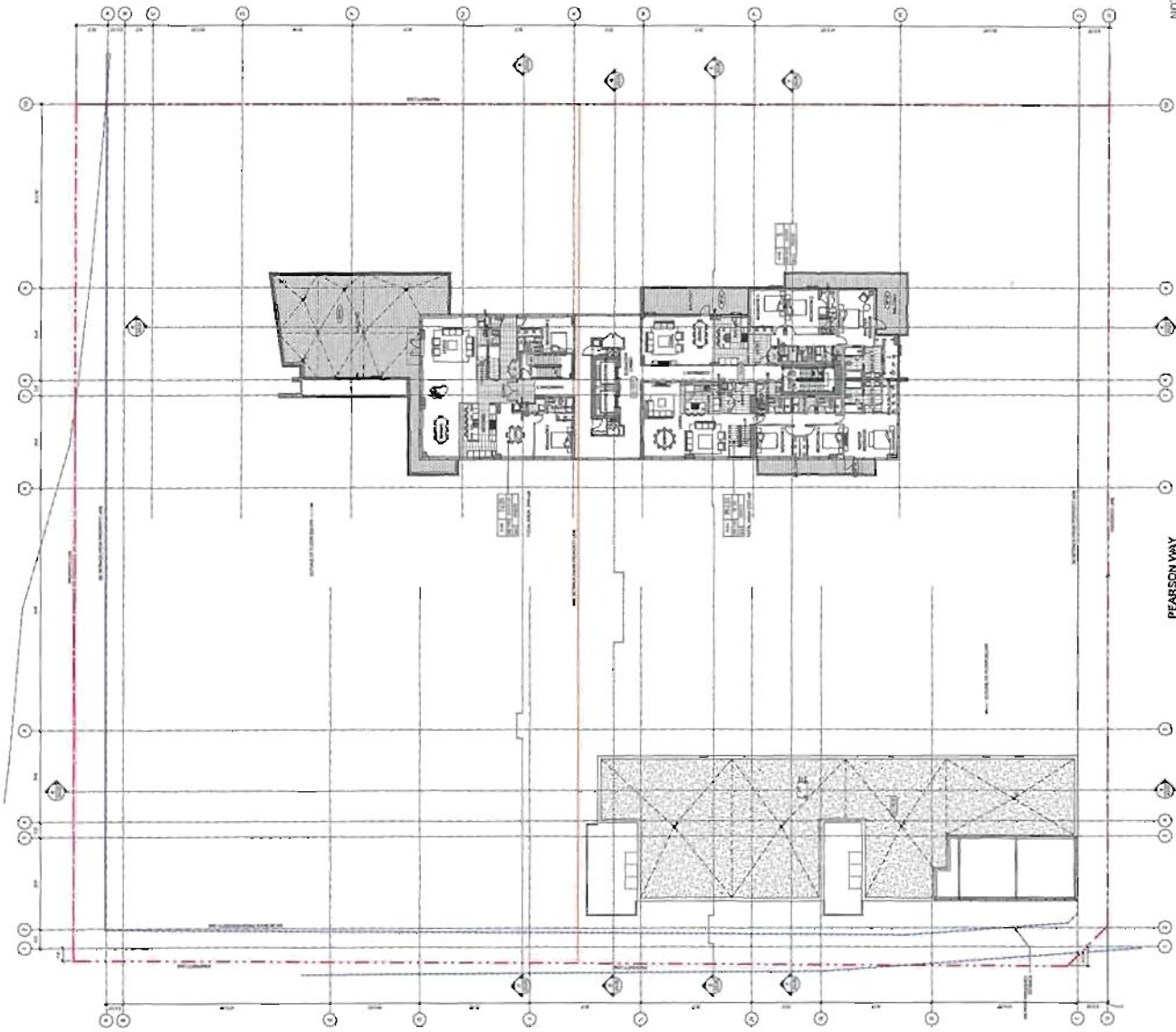
FEB 20 2013



NOT FOR CONSTRUCTION

ASPAC	19	BP - 11587954				Project Name: Project #: Date: Scale: Drawing No.:	Overall Level 15 (Link A) Roof Level (Sheet)	A215
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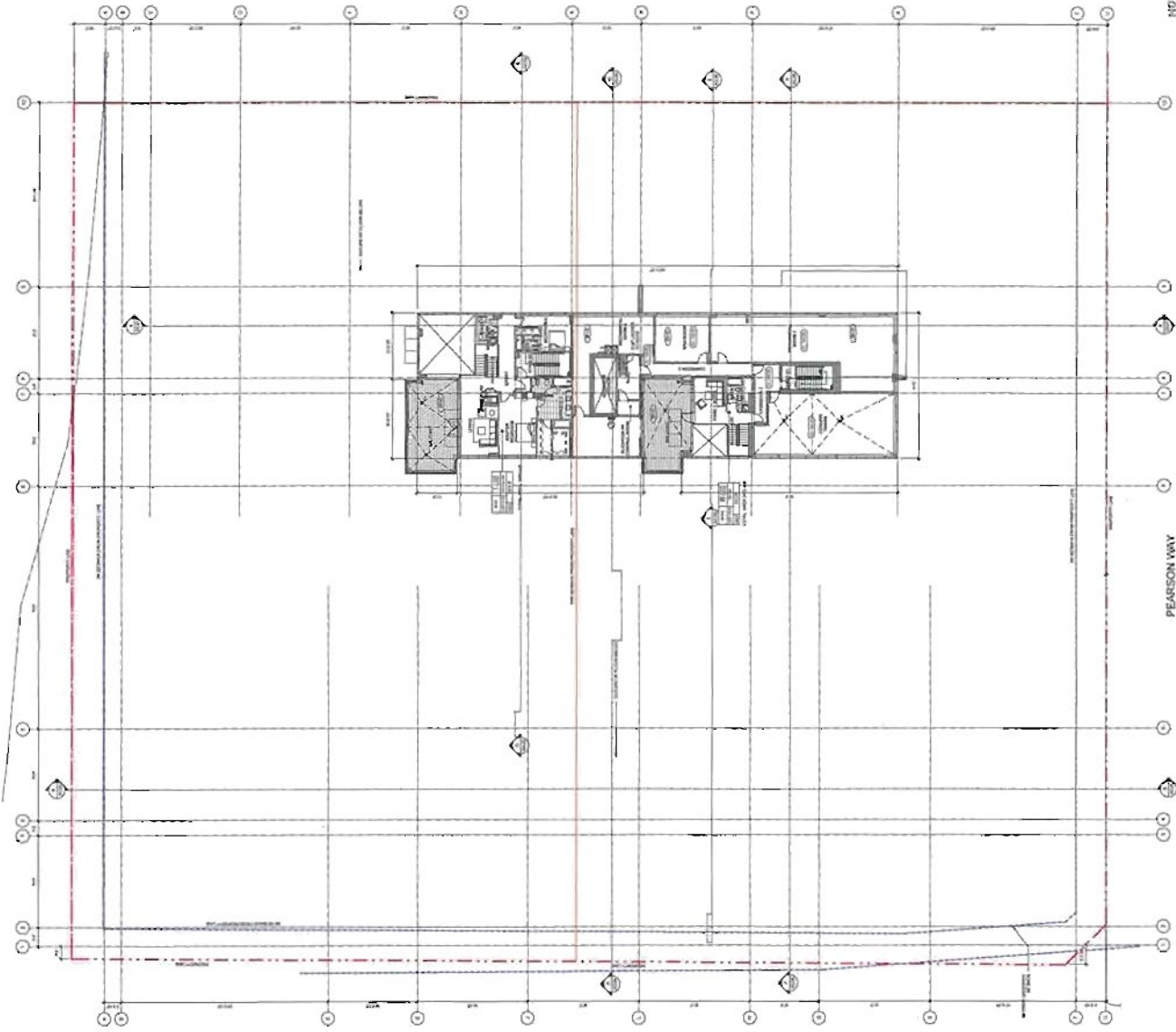
FEB 7 0 2013



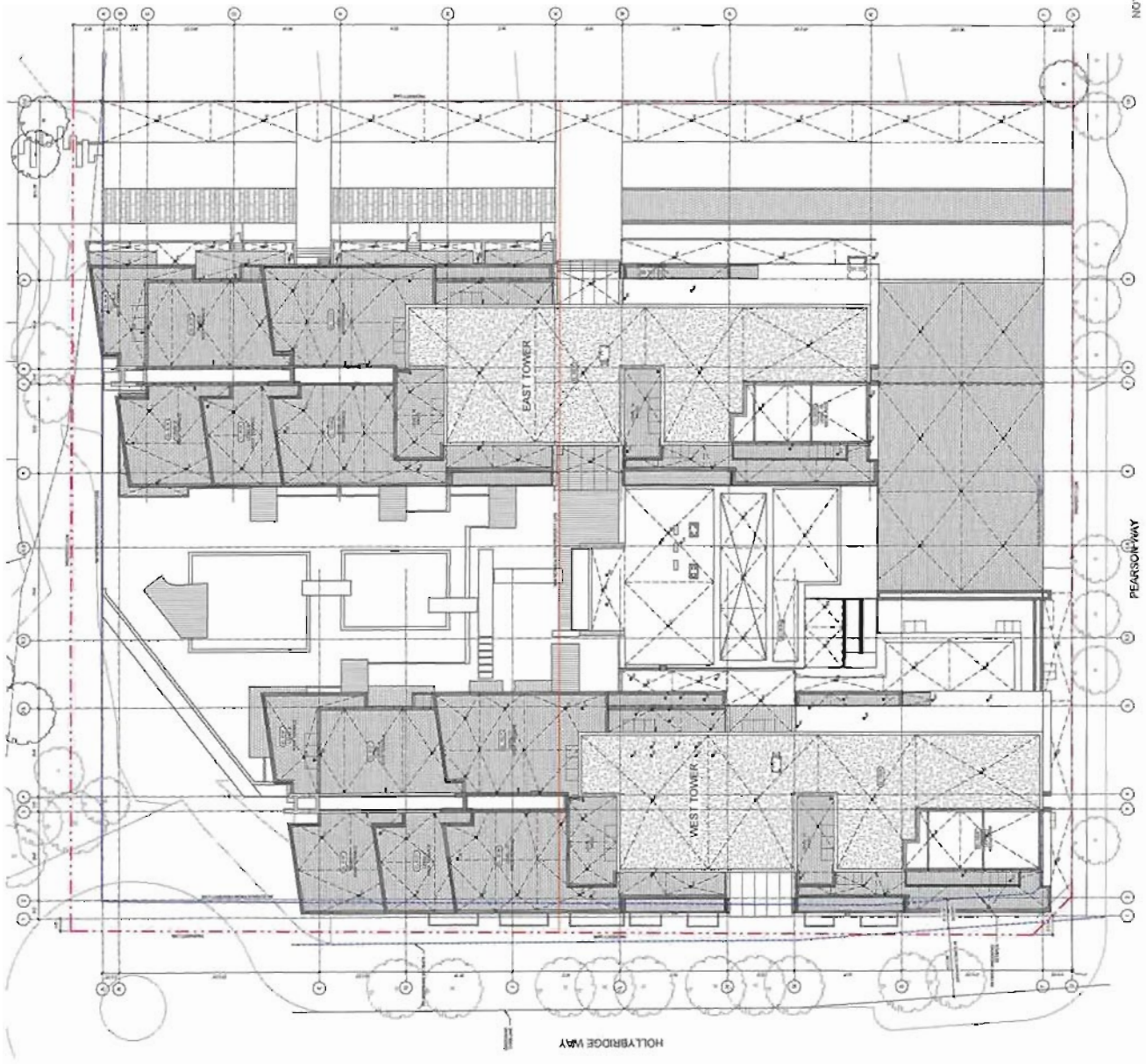
NOT FOR CONSTRUCTION

ASPAC		11587954 - 11587954			<table border="1"> <tr><td>Project Name</td><td> </td></tr> <tr><td>Project #</td><td> </td></tr> <tr><td>Client</td><td> </td></tr> <tr><td>Location</td><td> </td></tr> <tr><td>Overall Level</td><td> </td></tr> <tr><td>Overall Level H (mm)</td><td> </td></tr> </table>	Project Name		Project #		Client		Location		Overall Level		Overall Level H (mm)		<table border="1"> <tr><td>Sheet No.</td><td>A216</td></tr> </table>	Sheet No.	A216
Project Name																				
Project #																				
Client																				
Location																				
Overall Level																				
Overall Level H (mm)																				
Sheet No.	A216																			

FEB 20 2013



NOT FOR CONSTRUCTION



NOT FOR CONSTRUCTION

ASPAC	21	DP-11587954	over green	N	<table border="1"> <tr> <td>Project Name</td> <td>Project No.</td> <td>Project Date</td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>	Project Name	Project No.	Project Date				A217
Project Name	Project No.	Project Date										

FEB 20 2013

ASAPAC

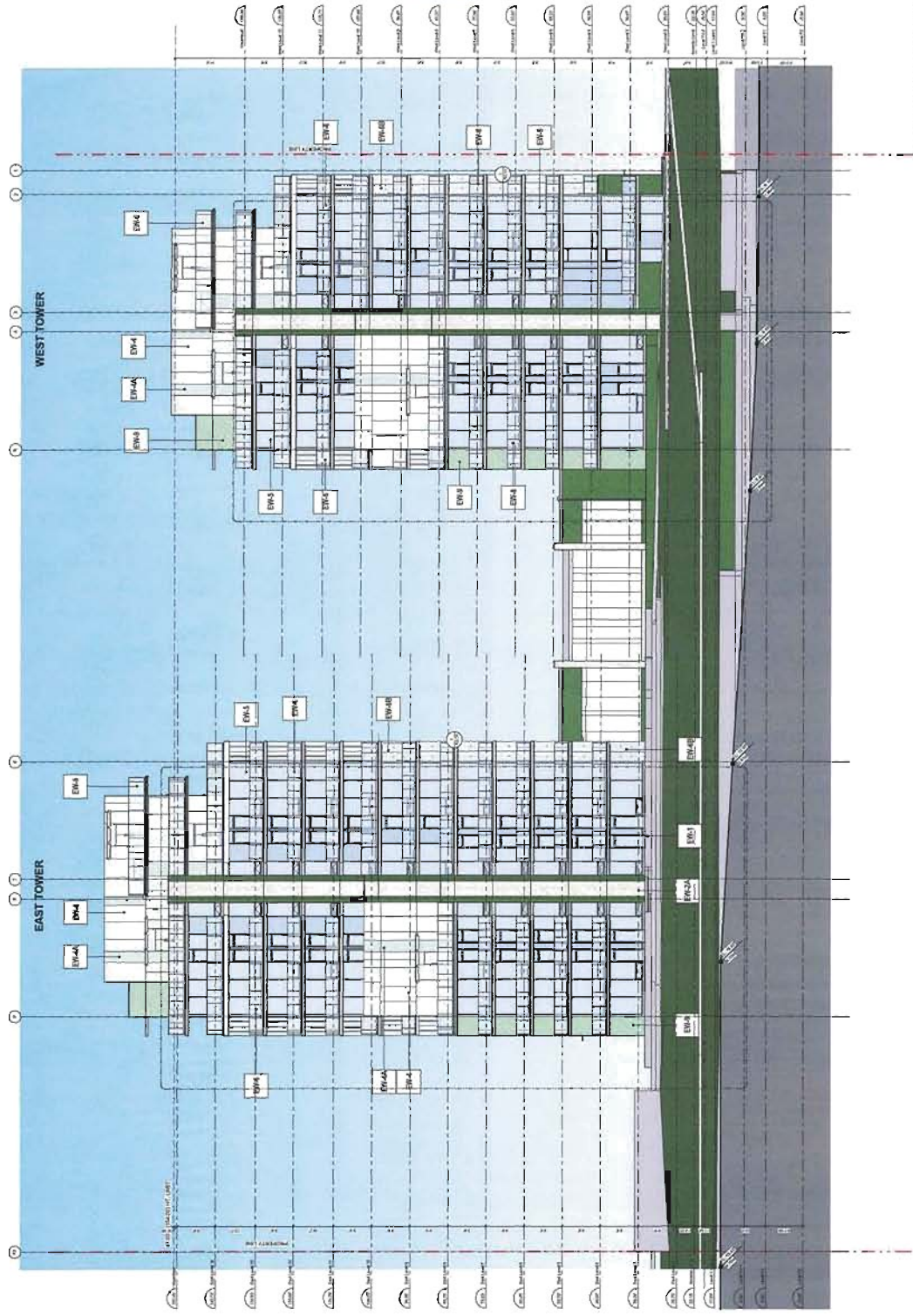
11587954

inter green

North Stroud

A401

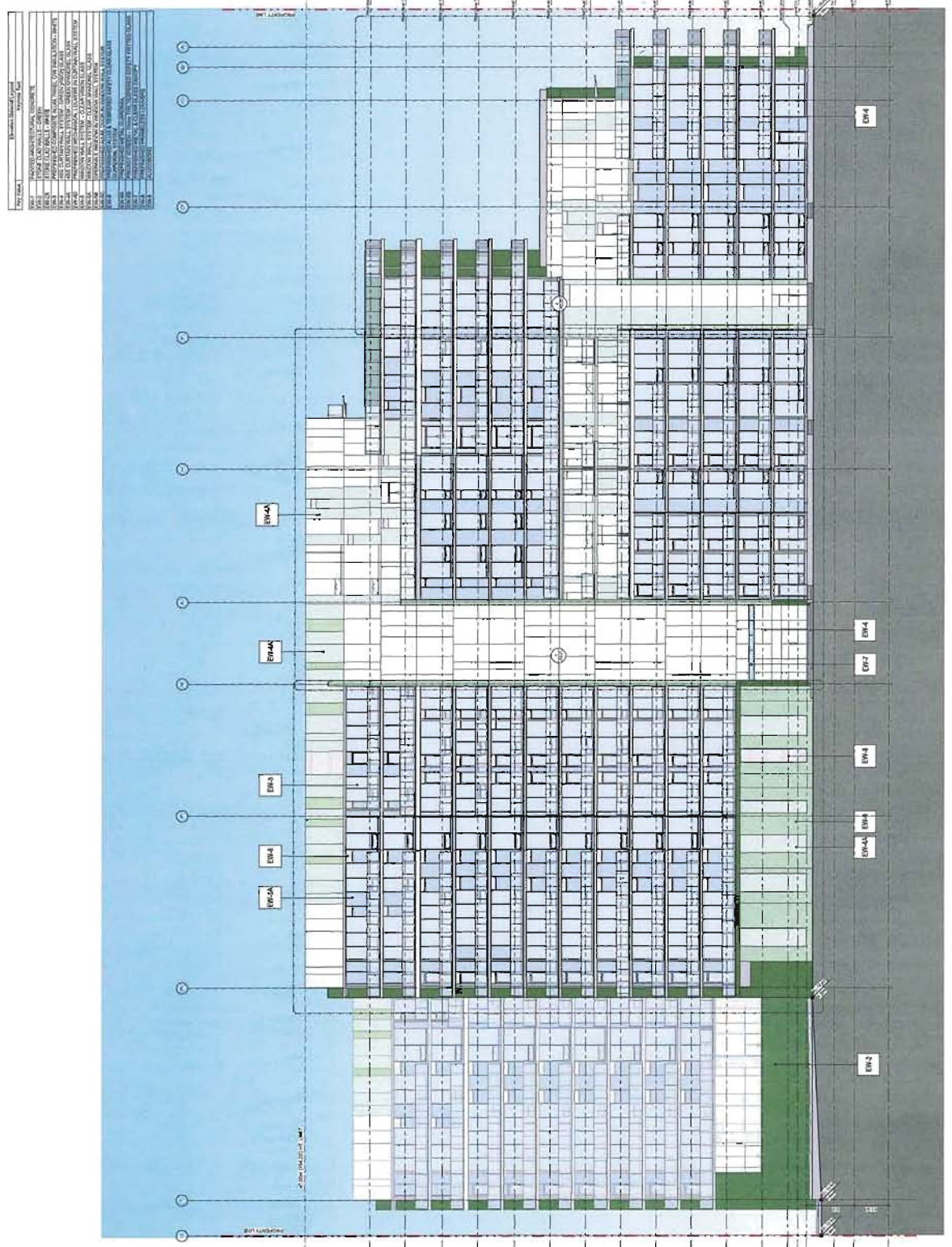
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3	EXISTING CONCRETE SLABS
4	EXISTING STEEL STRUCTURE
5	EXISTING MECHANICAL SYSTEMS
6	EXISTING ELECTRICAL SYSTEMS
7	EXISTING PLUMBING SYSTEMS
8	EXISTING FINISHES
9	EXISTING EXTERIOR WALLS
10	EXISTING EXTERIOR ROOFING
11	EXISTING EXTERIOR CLADDING
12	EXISTING EXTERIOR GLAZING
13	EXISTING EXTERIOR DOORS
14	EXISTING EXTERIOR WINDOWS
15	EXISTING EXTERIOR STAIRS
16	EXISTING EXTERIOR ELEVATORS
17	EXISTING EXTERIOR RAMP
18	EXISTING EXTERIOR DRIVEWAY
19	EXISTING EXTERIOR PAVEMENT
20	EXISTING EXTERIOR LANDSCAPE
21	EXISTING EXTERIOR LIGHTING
22	EXISTING EXTERIOR SECURITY
23	EXISTING EXTERIOR SIGNAGE
24	EXISTING EXTERIOR FENCE
25	EXISTING EXTERIOR GATE
26	EXISTING EXTERIOR WALLS
27	EXISTING EXTERIOR ROOFING
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33	EXISTING EXTERIOR ELEVATORS
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98	EXISTING EXTERIOR DOORS
99	EXISTING EXTERIOR WINDOWS
100	EXISTING EXTERIOR STAIRS



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FEB 20 2013

		DP-11587954				Project Name: Bay Green Project No: 11587954 Date: 2/6/2013	A402
						East Elevation	



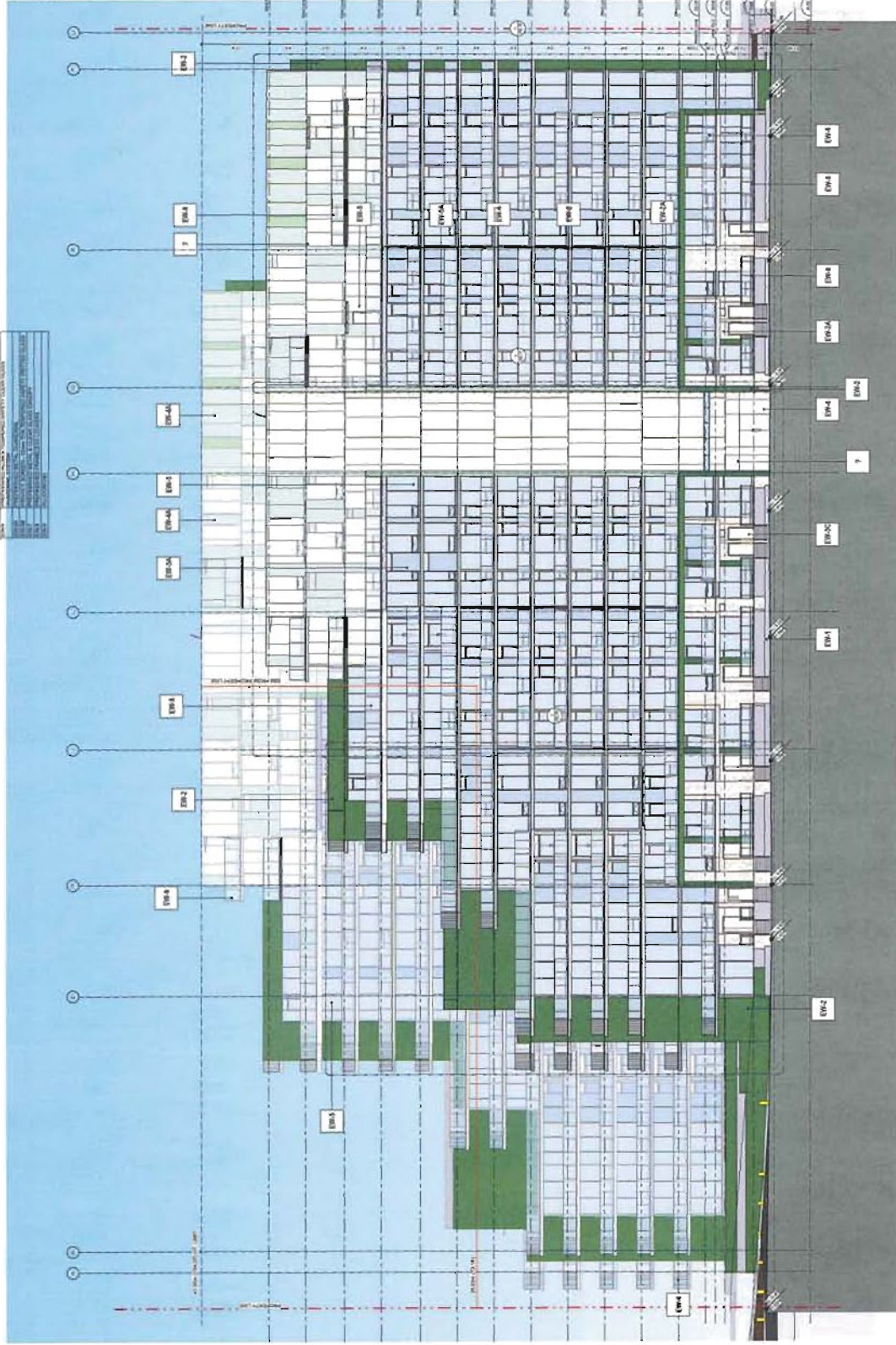
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FEB 26 2013

NOT FOR CONSTRUCTION

ASPAC
 25
 DP-11587954
 Just Green
 North
 Project Name: **Project 3**
 Project Location: **11587954**
 Project Number: **11587954**
 Project Date: **11/15/12**
 Project Status: **Final**
 Project Director: **ASPAC**
A404

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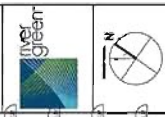
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ASPAC

26

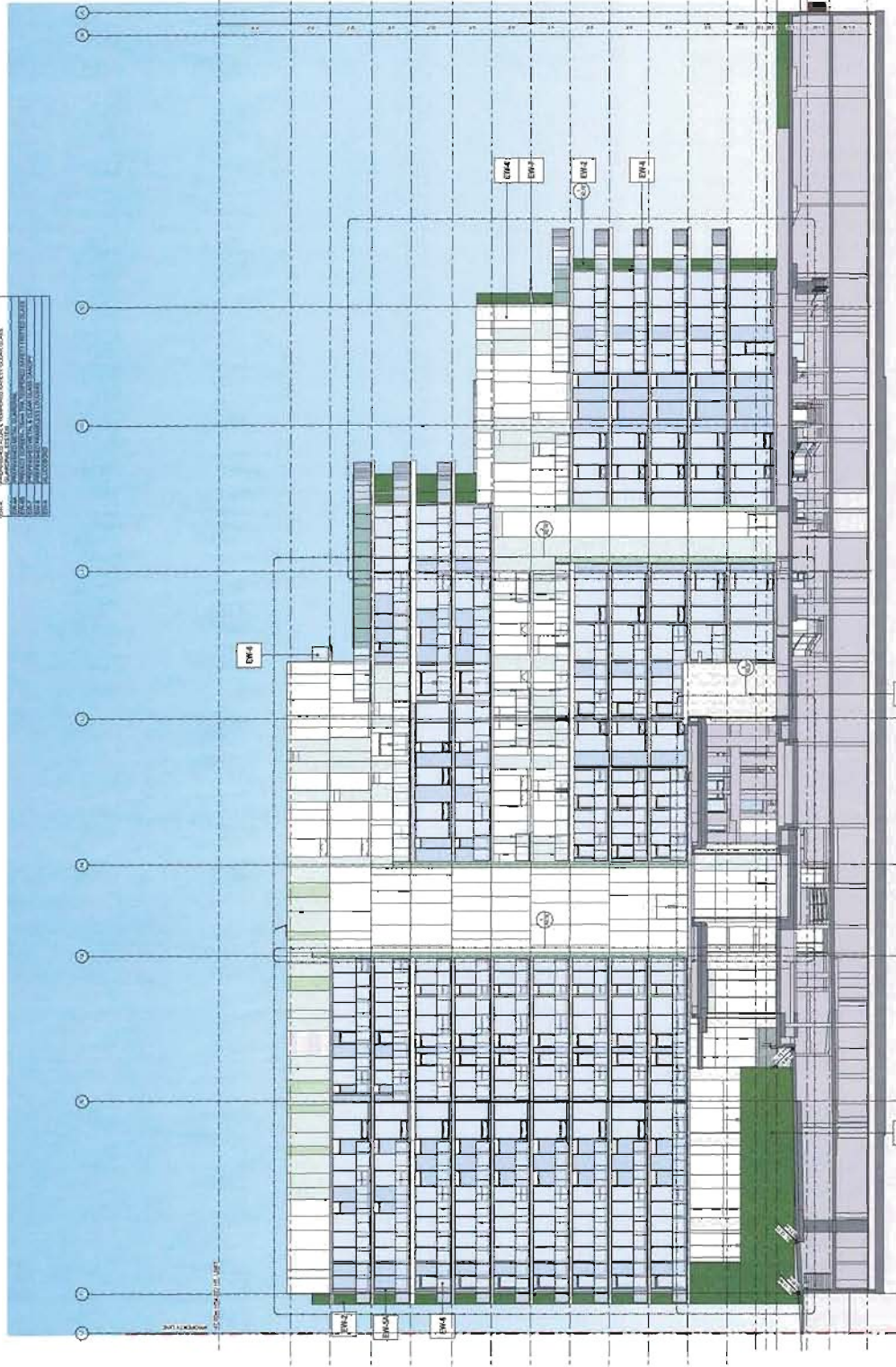
11587954

11587954



Project Name	River Oaks
Client	East Developer Elevator - Hill Tower
Architect	ASPAC
Scale	1/8" = 1'-0"
Date	2/20/13
Sheet No.	A405

NO.	REVISION	DATE
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100	REVISED PER COMMENTS	2/20/13



NOT FOR CONSTRUCTION

FEB 20 2013

ASPAC

27

11587954

Green

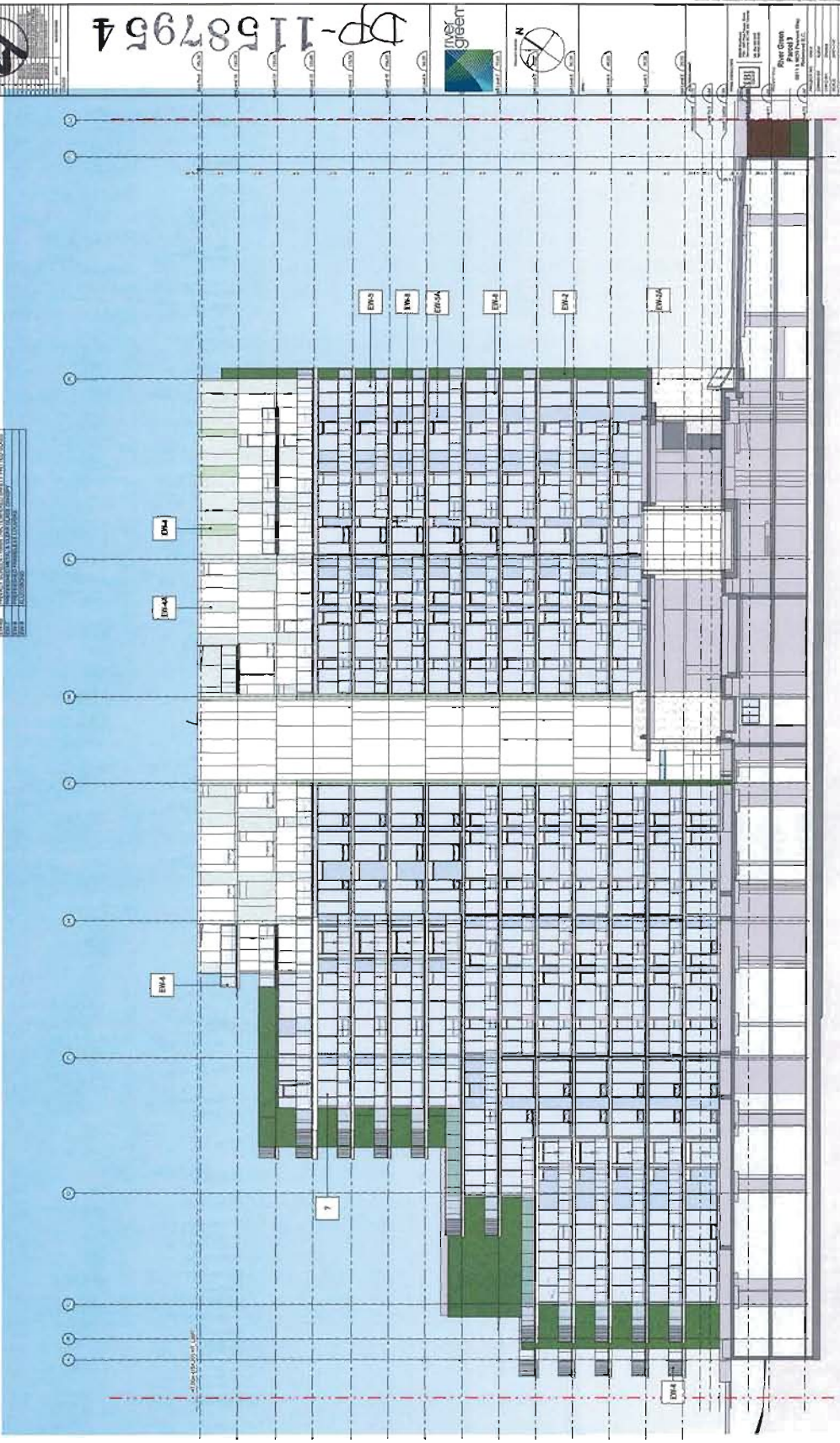
North

18

West Campus Elevator East Tower

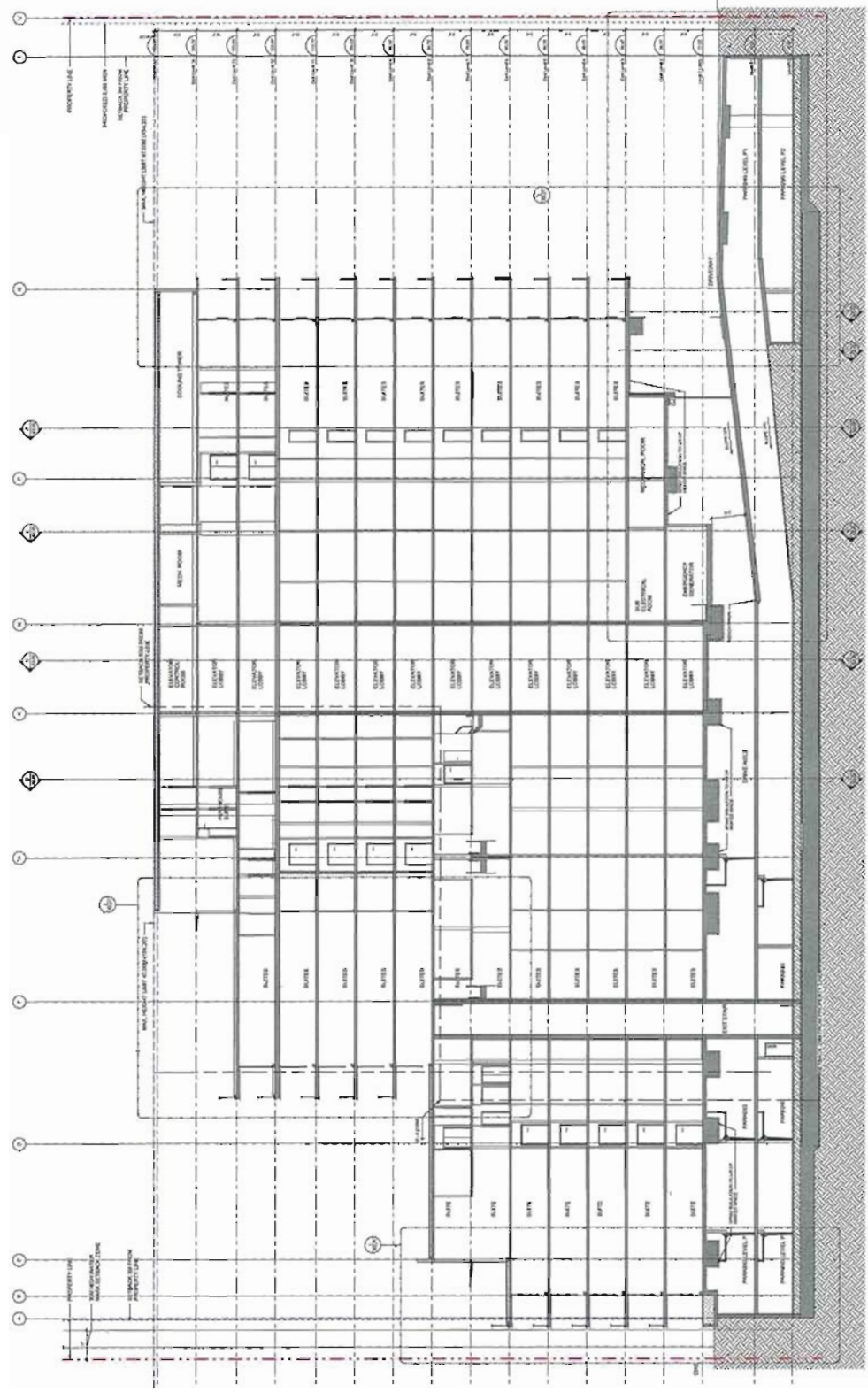
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FEB 20 2013

NOT FOR CONSTRUCTION



NOT FOR CONSTRUCTION

ASPAC

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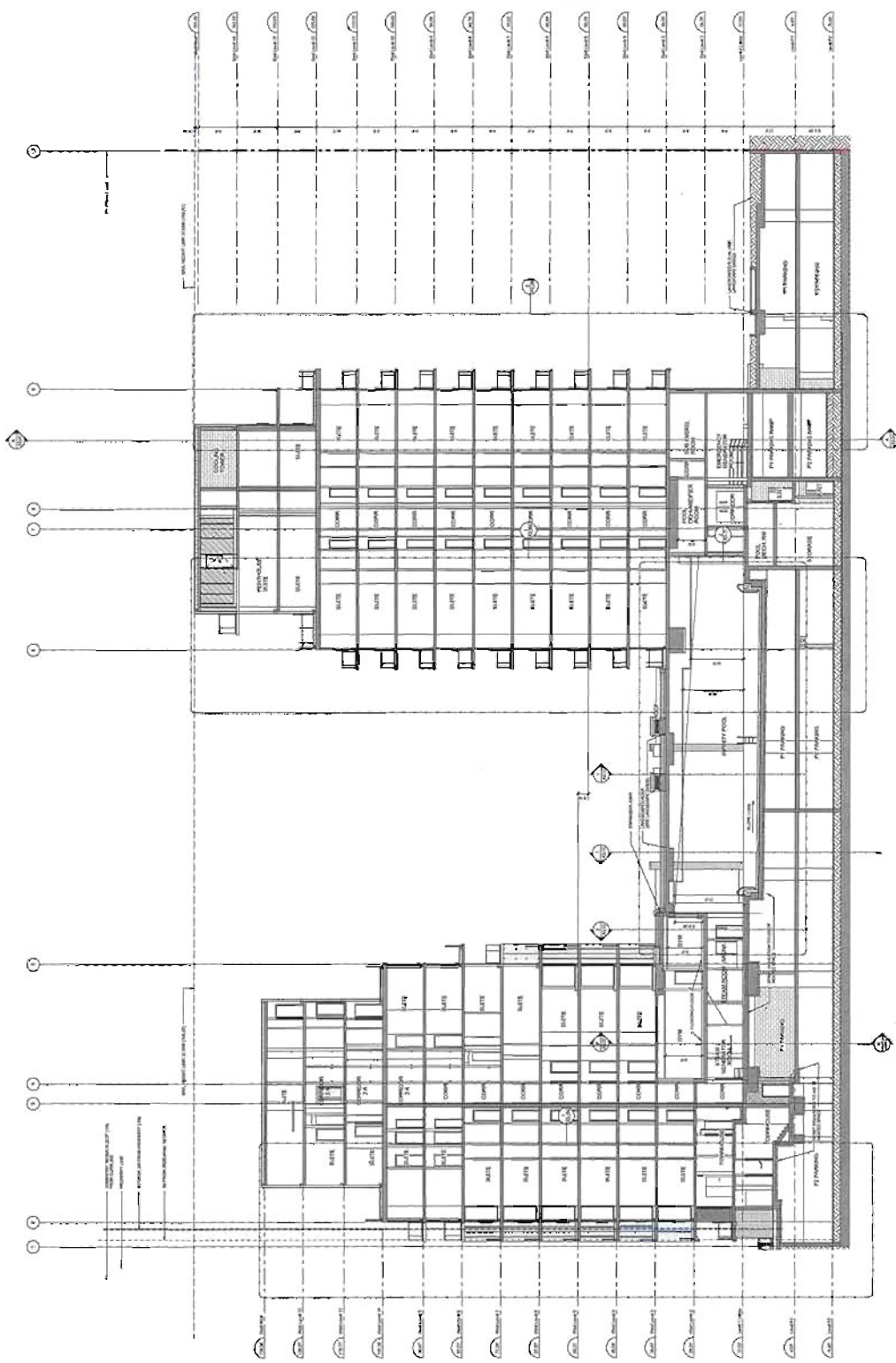
D - 11587954

live green

North Arrow

Project Name: River Oaks
 Project #
 1011
 11/15/2010
 11/15/2010

SECTION: 00
 A503



NOT FOR CONSTRUCTION

FEB 20 2010

ASPAC

30

D-11587954

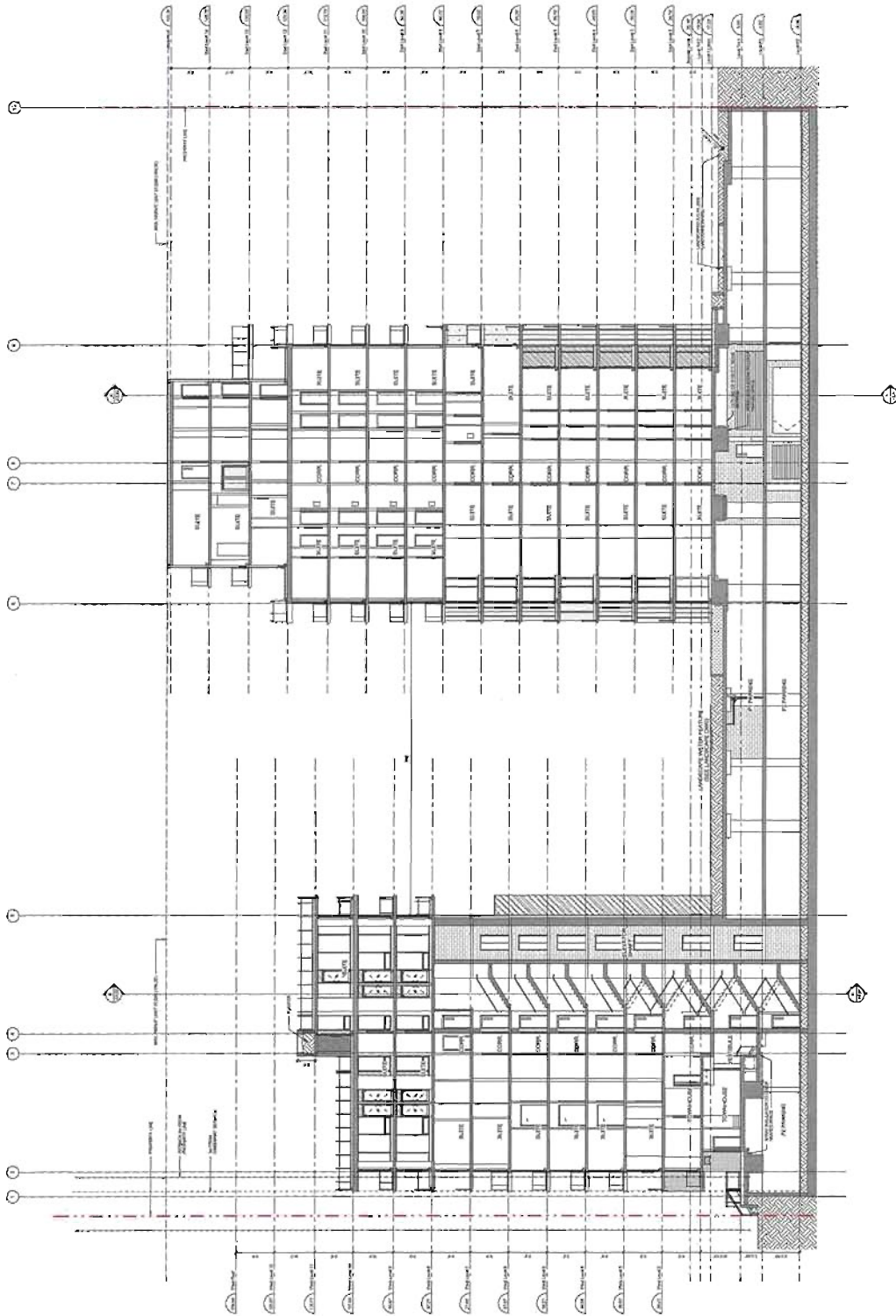
over green

North Arrow

Project: River Green
 Parcel 3
 10000 River Green Blvd
 Houston, TX 77054

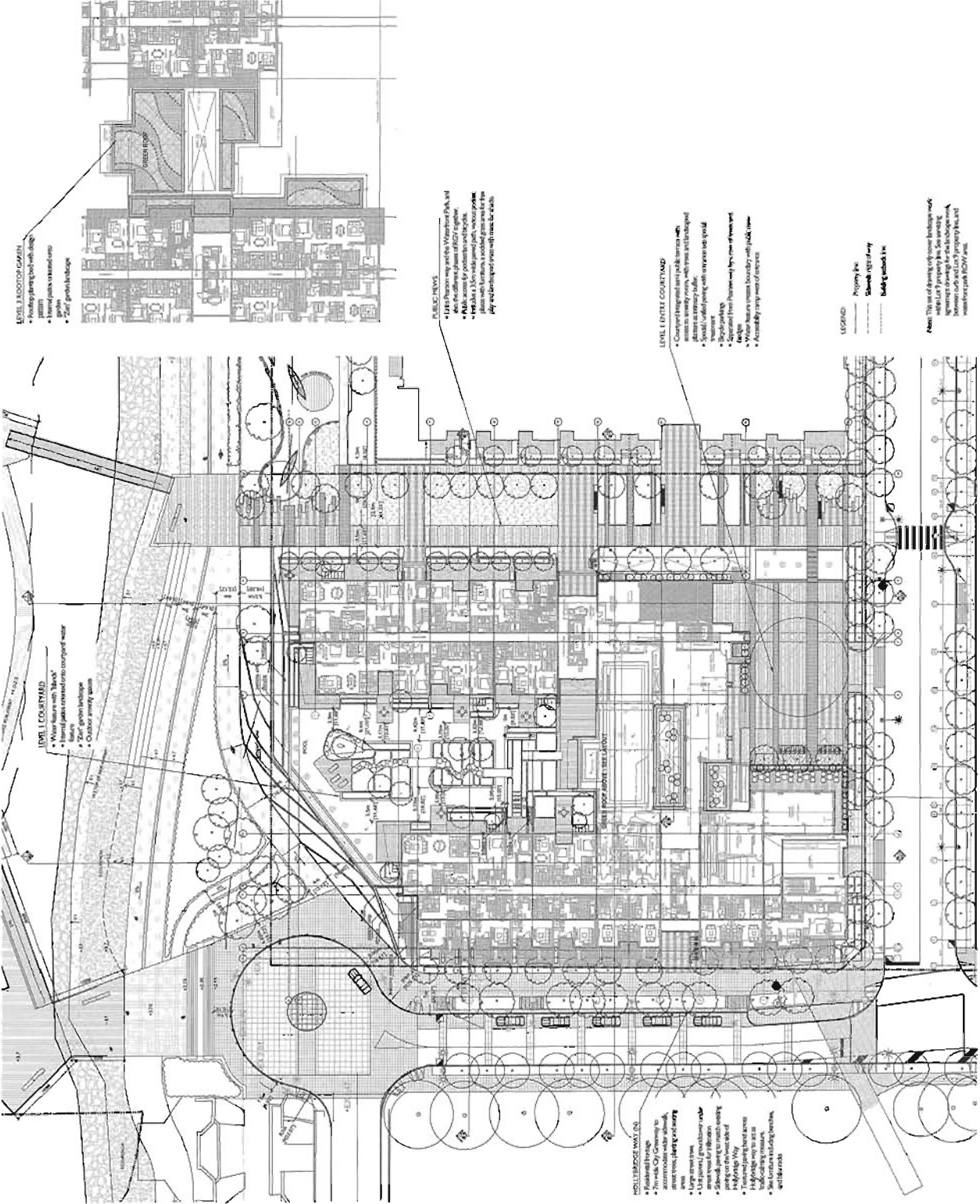
SECTION 00

A604



NOT FOR CONSTRUCTION

FEB 28 2010



LEVEL 1 FOOTCOURTAIN

- Footway along path with shade
- Plantings with raised edges
- Zero-grass landscape

PUBLIC PLAZA

- Public Plaza may act as Waterfront Park and also the different phases of RGV expansion
- Plaza is 1.50m wide path, access zone to plantings with furniture, a shaded green area for the play and activities space with trees for shade

LEVEL 1 ENTRY COURTYARD

- Open to the public with walkway, stairs, ramps, and trees and landscaped plants in primary walkway
- Social / walkway with trees and shade
- Open parking
- Separated from the rest of the site
- Whole house contains boundary with public zone
- Accessibility ramp areas of entrance

LEVEL 1 COURTYARD

- Water feature with 'black' plants
- Zero-grass landscape
- Outdoor amenity space

MULTI-USE WALKWAY

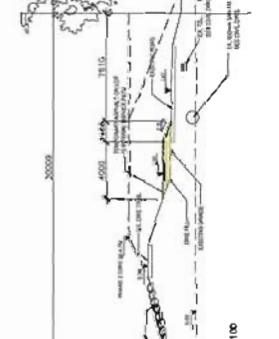
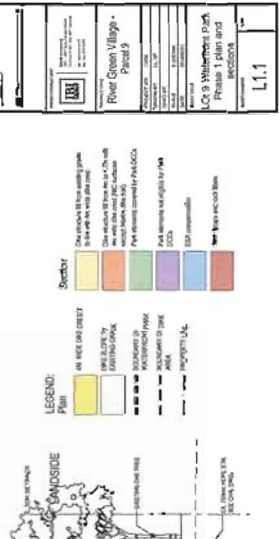
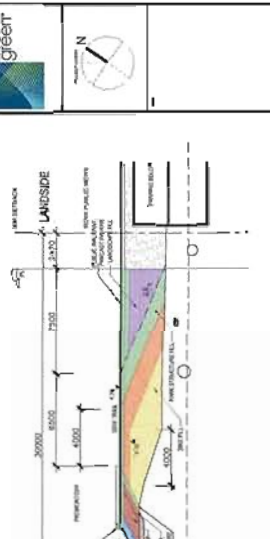
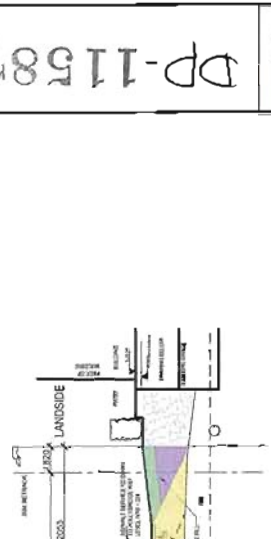
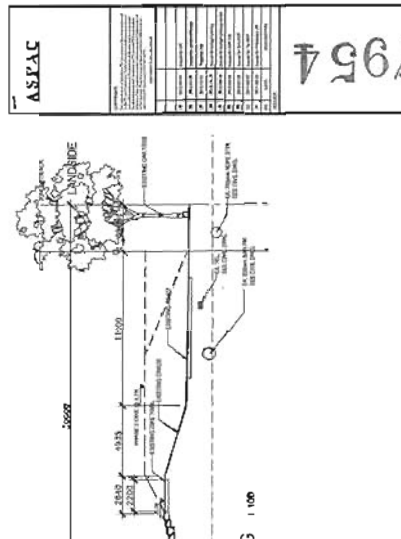
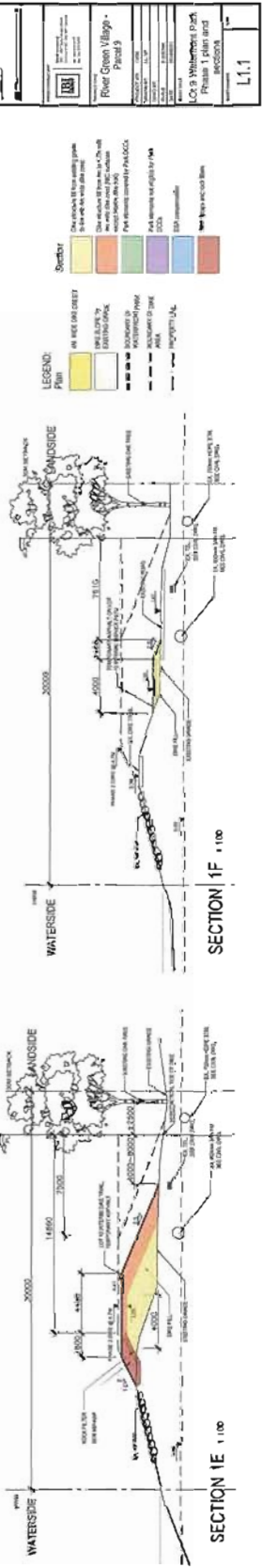
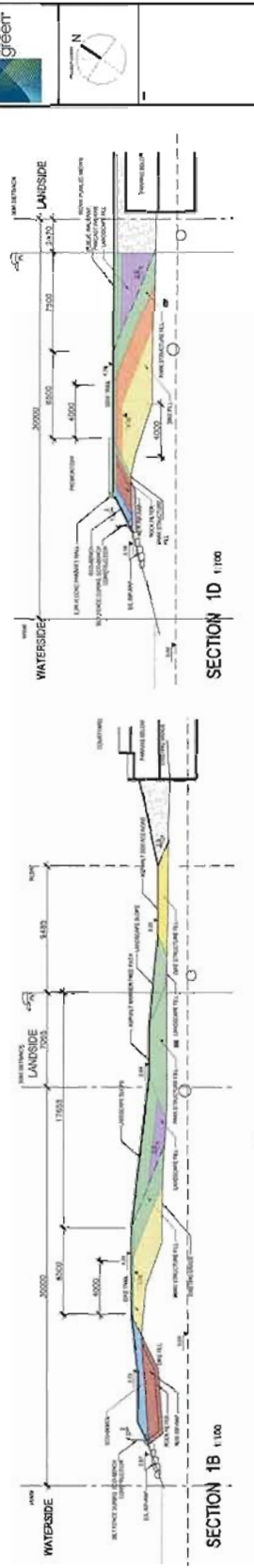
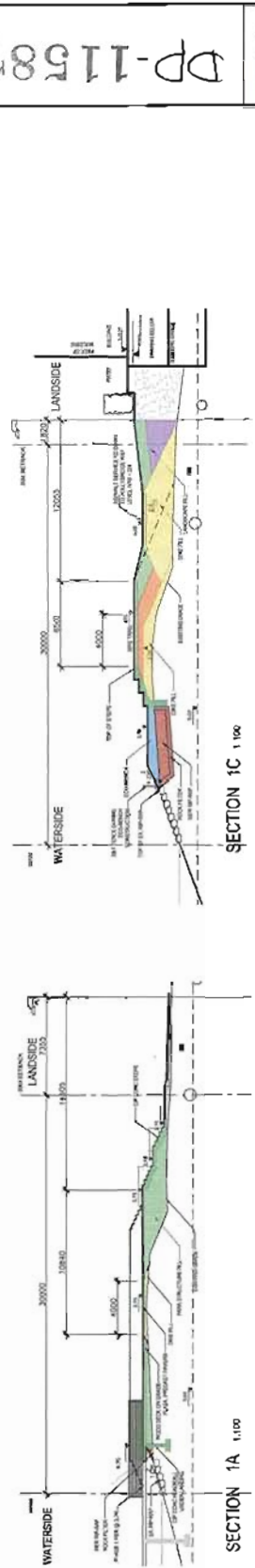
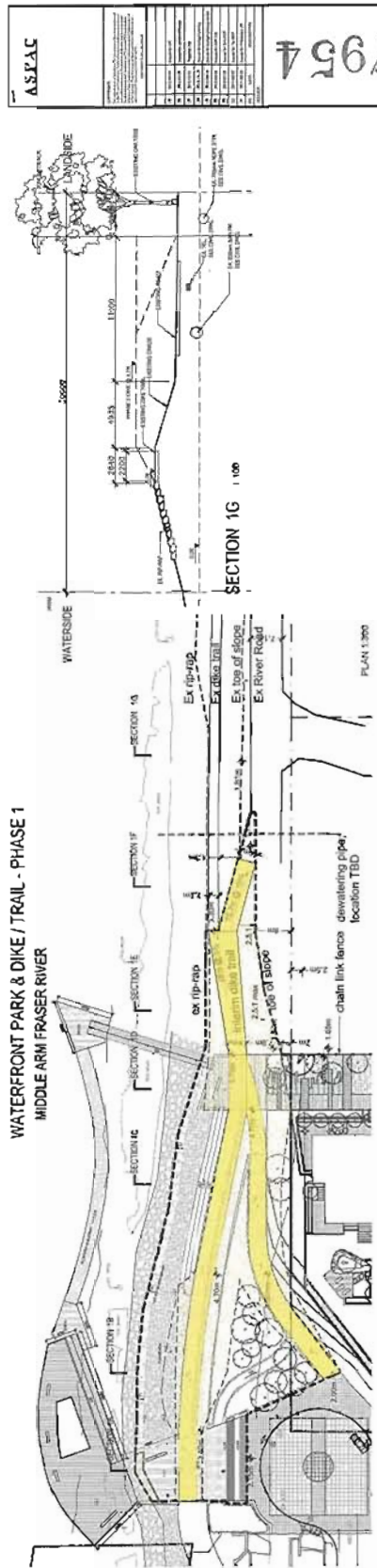
- Ballasted brick path
- 7m wide City Greenway to provide a path for pedestrian and bicycle access
- Large trees from adjacent site
- Shaded path to match existing
- Access to the site of the RGV unit
- Access to the site of the RGV unit
- See furniture including benches, tables, etc.

LEGEND

- Property line
- Sidewalk type of path
- Building setback line

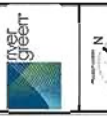
Note: This set of drawing of same building mark against drawing for site to show work between south and east property line and walkway path to RGV unit.

WATERFRONT PARK & DIKE / TRAIL - PHASE 1
MIDDLE ARM FRASER RIVER



NO. 1	ASPKAC
NO. 2	PROJECT NO.
NO. 3	PROJECT NAME
NO. 4	PROJECT LOCATION
NO. 5	PROJECT DATE
NO. 6	PROJECT SCALE
NO. 7	PROJECT AUTHOR
NO. 8	PROJECT REVIEWER
NO. 9	PROJECT APPROVER
NO. 10	PROJECT STATUS
NO. 11	PROJECT COMMENTS
NO. 12	PROJECT NOTES
NO. 13	PROJECT REFERENCES
NO. 14	PROJECT CONTACTS
NO. 15	PROJECT HISTORY
NO. 16	PROJECT LEGEND
NO. 17	PROJECT INDEX
NO. 18	PROJECT APPENDICES
NO. 19	PROJECT GLOSSARY
NO. 20	PROJECT ACRONYMS

DP-11587954



REFERENCE *

FEB 7 8 2013

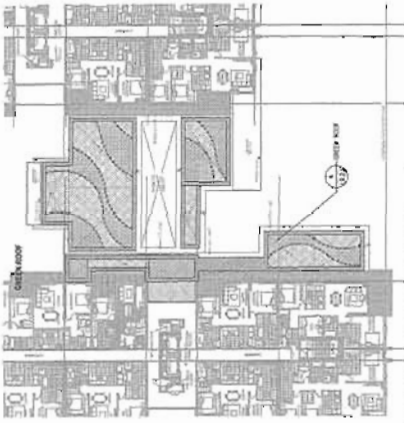
L1.1

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River Green Village-
Parcel 9

Landscape
Materials Plan

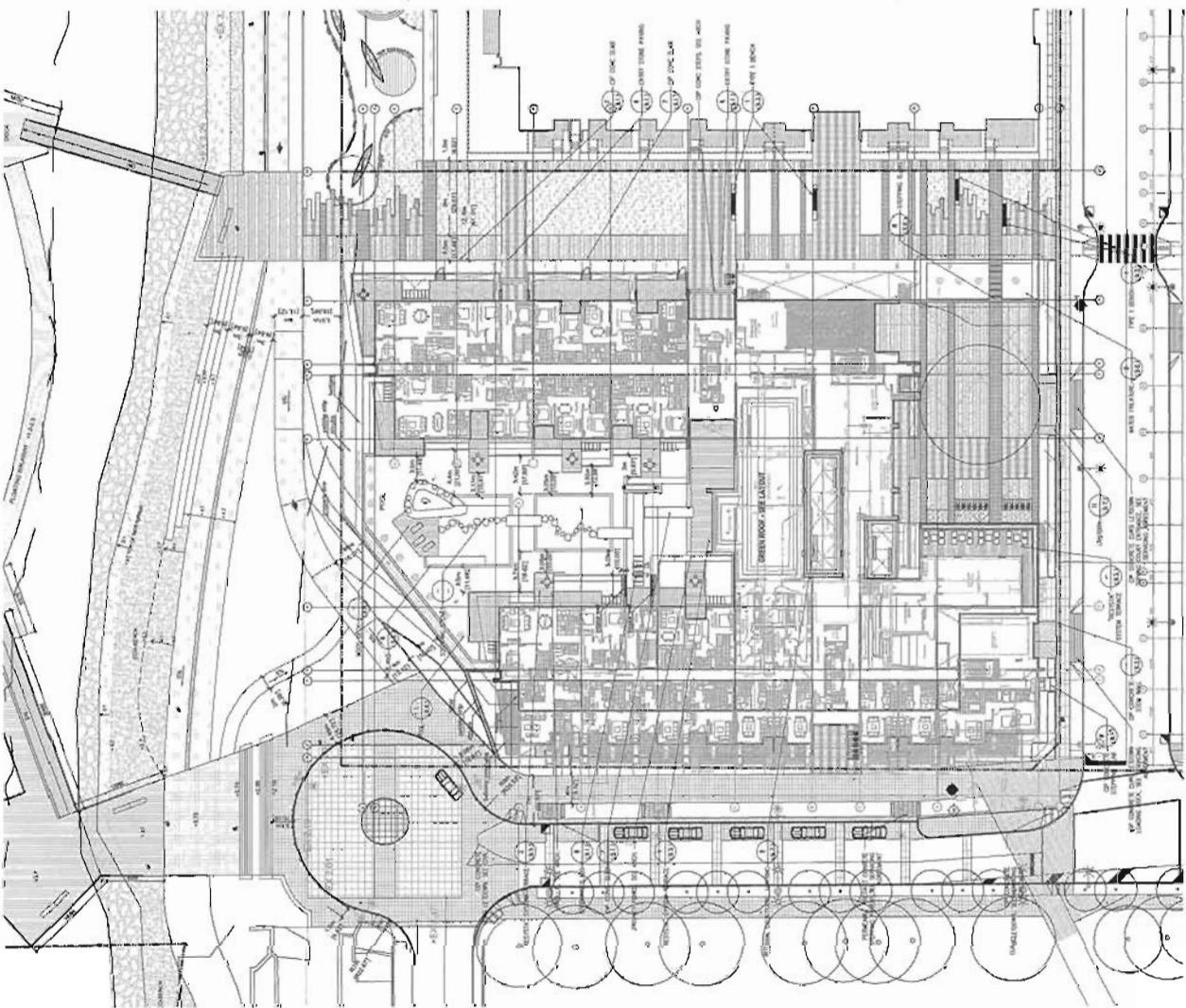
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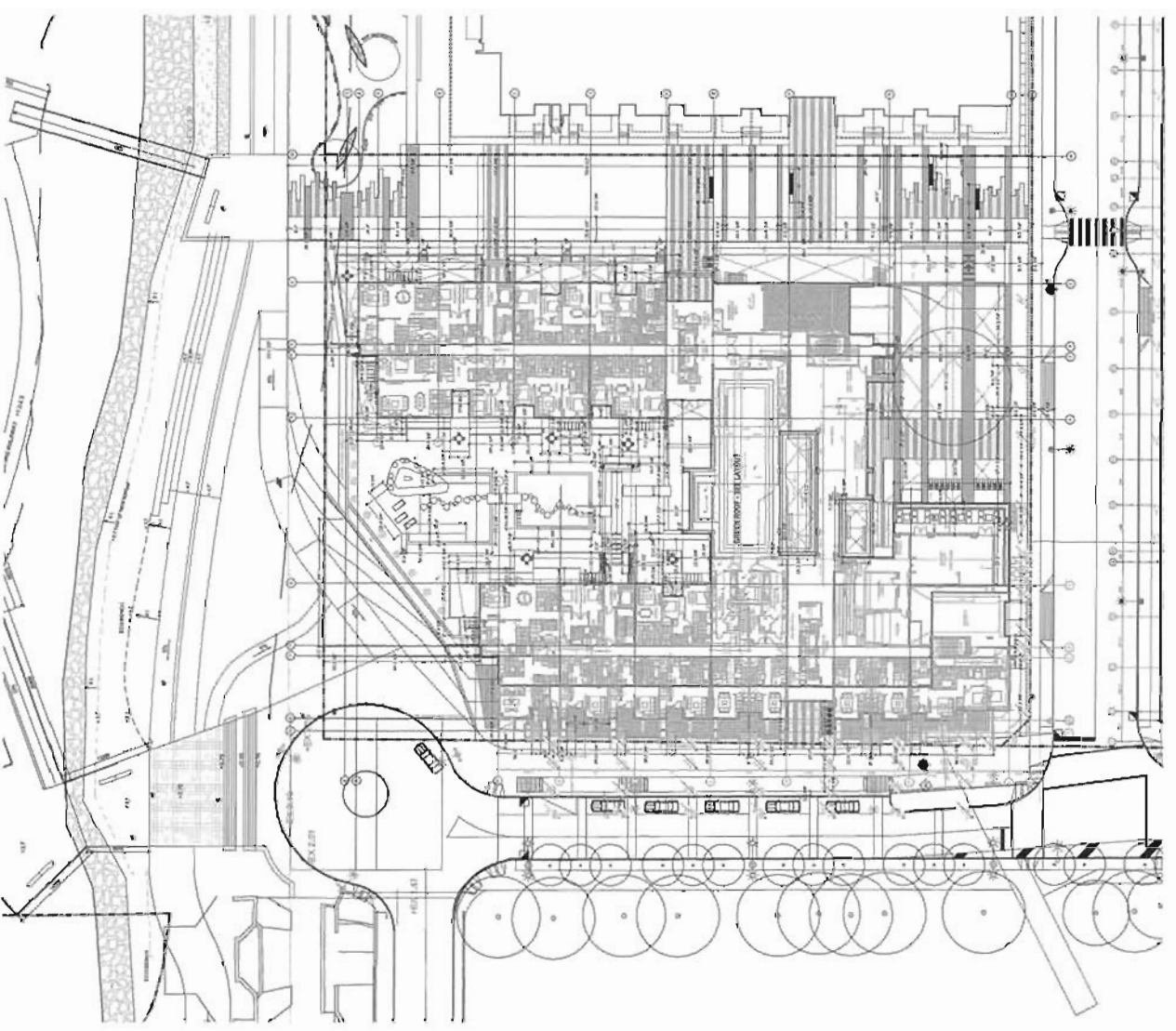
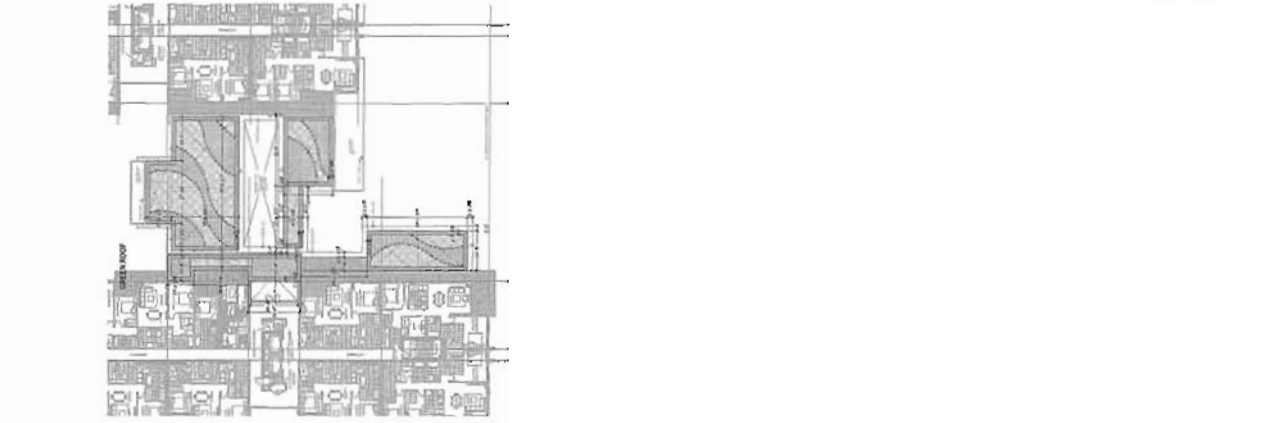
LAYOUT AND MATERIALS GENERAL NOTES

1. VERIFY LOCAL DIMENSIONAL LAYOUT AS PER DIMENSIONAL ACTIVITY.
2. VERIFY ALL DIMENSIONS AND SPACING TO THE CENTERLINE UNLESS OTHERWISE NOTED.
3. VERIFY ALL DIMENSIONS AND SPACING TO THE CENTERLINE UNLESS OTHERWISE NOTED.
4. VERIFY ALL DIMENSIONS AND SPACING TO THE CENTERLINE UNLESS OTHERWISE NOTED.
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9. VERIFY ALL DIMENSIONS AND SPACING TO THE CENTERLINE UNLESS OTHERWISE NOTED.
10. VERIFY ALL DIMENSIONS AND SPACING TO THE CENTERLINE UNLESS OTHERWISE NOTED.


MATERIALS LEGEND (REFER TO SPECIFICATIONS)




ASPAC		B-11587954				River Cross Village Part 1 Landscape Layout Plan	L3.0
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ASPAC



DP-11587954



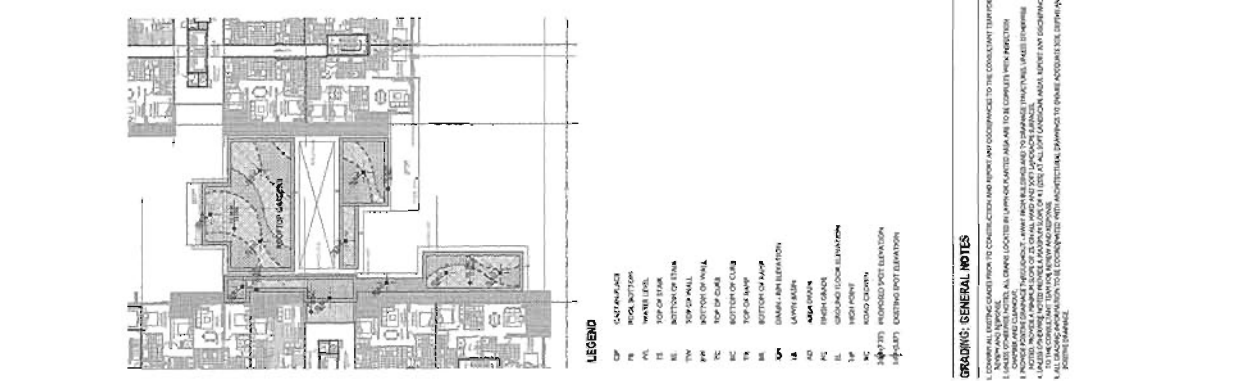
the green



Sheet: Green Village -
Part 113

Landscaping Grading Plan

L4.0

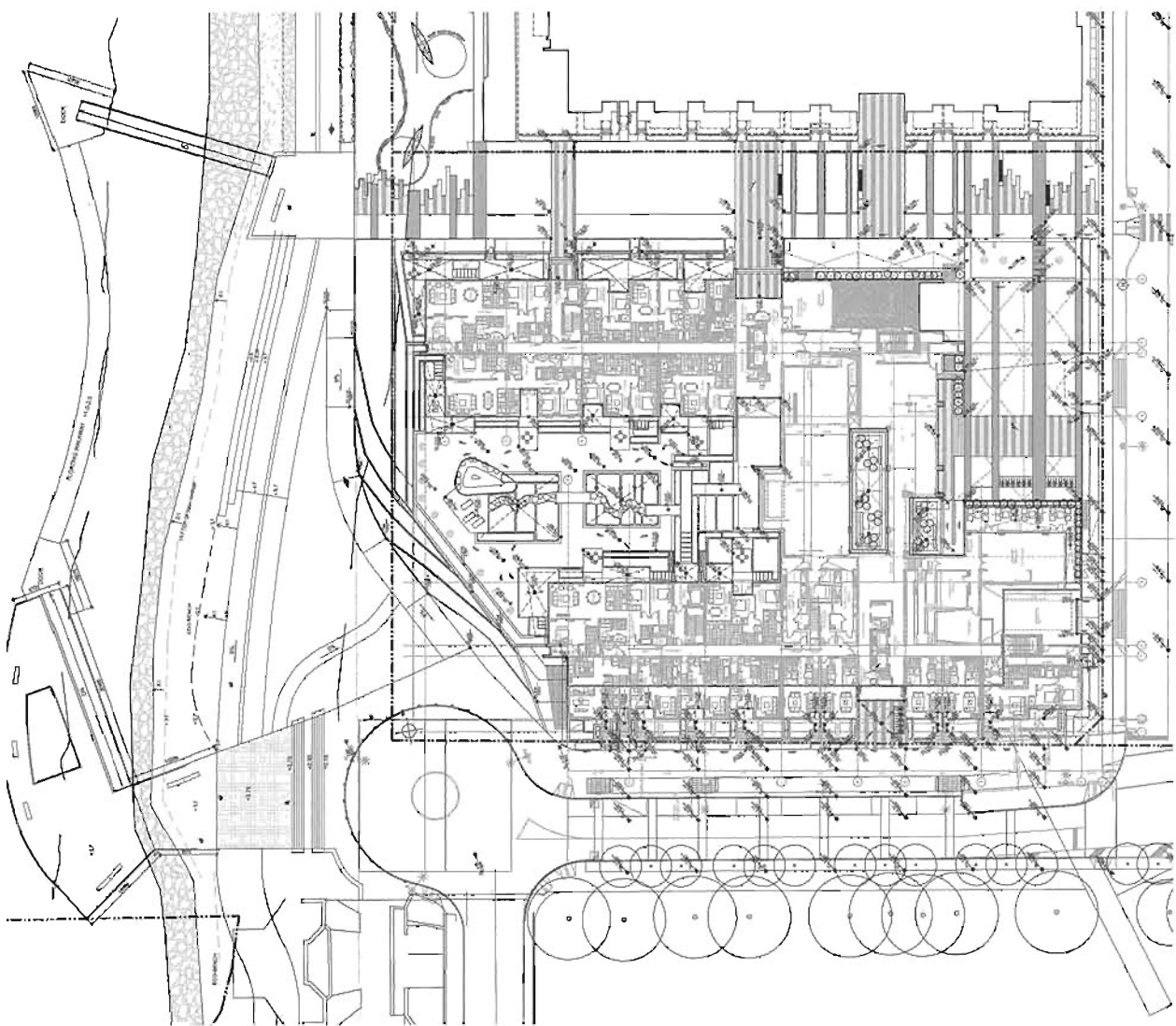


LEGEND

- DP OUTLINE
- PA PAVEMENT
- SI SIDEWALK
- TI TOP OF FINISH
- BT BOTTOM OF FINISH
- TM TOP OF MALL
- BM BOTTOM OF MALL
- TC TOP OF CURB
- BC BOTTOM OF CURB
- TH TOP OF HUMP
- BT BOTTOM OF HUMP
- SM SLOPE IN ELEVATION
- LA LANDSCAPE
- AD ADJUSTMENT
- FC FINISH GRADE
- SC SLOPE IN ELEVATION
- SR ROAD CENTER
- SE SLOPE DOWN
- UP UP SPOT ELEVATION
- DN DN SPOT ELEVATION

GRADING: GENERAL NOTES

1. GENERAL GRADING SHALL BE TO CONFORM WITH ALL APPLICABLE CODES AND REGULATIONS TO THE CONVEYANCE OF THE CONVEYANCE.
2. LANDSCAPING SHALL BE TO CONFORM WITH ALL APPLICABLE CODES AND REGULATIONS TO THE CONVEYANCE.
3. ALL GRADING SHALL BE TO CONFORM WITH ALL APPLICABLE CODES AND REGULATIONS TO THE CONVEYANCE.
4. ALL GRADING SHALL BE TO CONFORM WITH ALL APPLICABLE CODES AND REGULATIONS TO THE CONVEYANCE.
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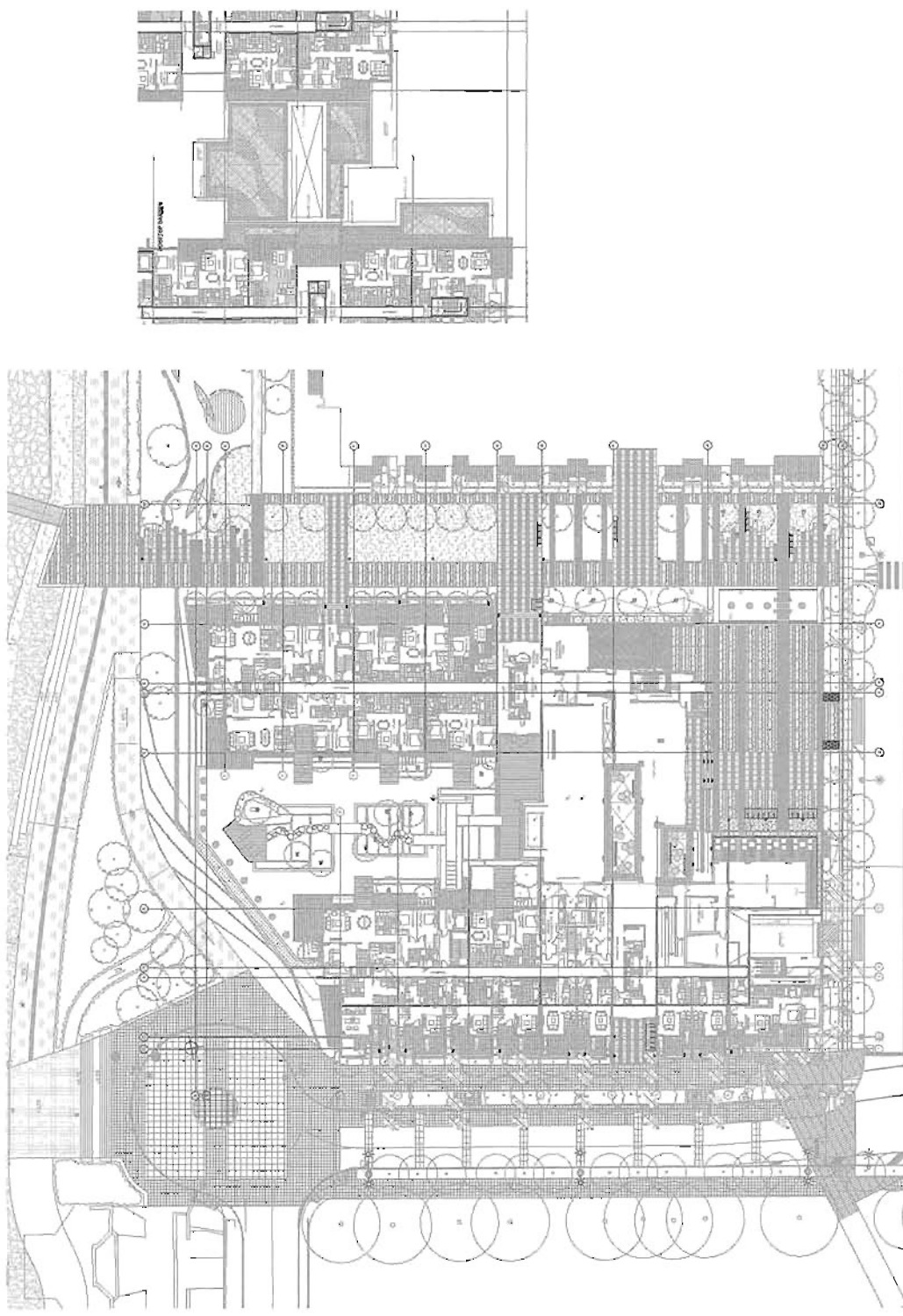




DP-11587954



River Green Village - Parcel 1	
Project No.	11587954
Client	ASPAC
Architect	ASPAC
Engineer	ASPAC
Lighting Designer	ASPAC
Scale	1/8" = 1'-0"
Date	FEB 20 2013
Sheet No.	L7.0



- LEGEND**
- NEW LIGHTING
 - RECESSED WALL LIGHT - Type 101, ESTIMOTEK BRIDGE S-500K-00-170-1-8.0020
 - FREE BUSHROOM LIGHT - Type 101, ESTIMOTEK BRIDGE S-500K-00-170-1-8.0020
 - UNDER COUNTER LIGHT - Type 101, ESTIMOTEK BRIDGE S-500K-00-170-1-8.0020
 - UNDER WALKWAY LIGHT - UNDER WALKWAY RECESSED WALL LIGHT - Type 101, 14000 ILM/2075 CAST
 - WALKWAY LIGHT - UNDER WALKWAY RECESSED WALL LIGHT - Type 101, 14000 ILM/2075 CAST
 - ROLLBAR LIGHT LOW-LEVEL PATH - Type 101, TRACCEL RUBE TIC-AS275 540mm ROLLBAR - LED
 - BEACH STRING LIGHT - Type 101, MAC INVISIBLO LEDT024-1-WT. 87/ LEDT024-CH RIGID CHANNEL
 - PLAYING STRING LIGHTING - Type 101, BEACON UN-100V-2000K. LENGTH 20 SLIT
 - PLAYING STRING LIGHTING - Type 101, LED LINEAR 100VLM 4700K-100V-9-4-1-197. LENGTH 20 SLIT
 - UNDERWATER STRIP LIGHTING - Type 101
 - CUSTOM LANTERN ENTRANCE LIGHTING - Type 101

FEB 20 2013

ASPAC

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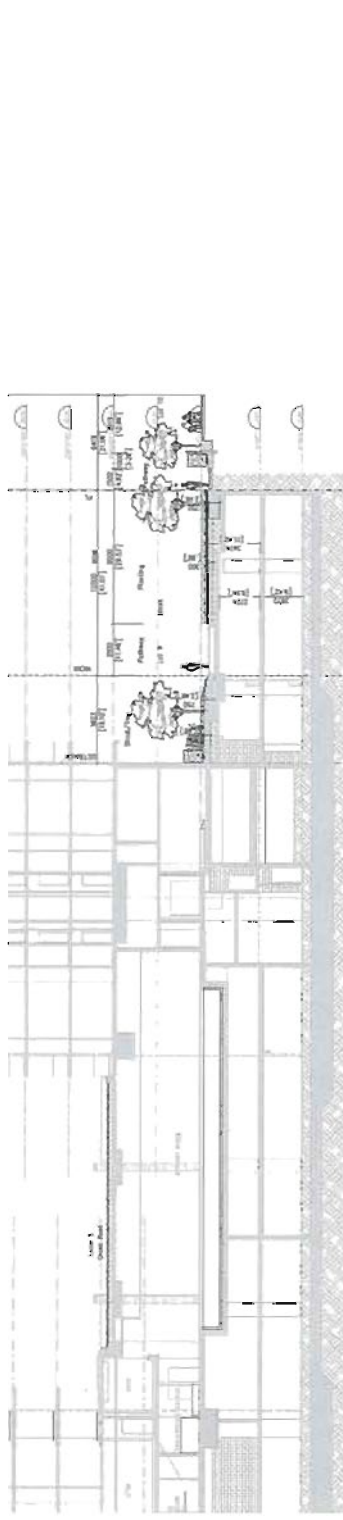
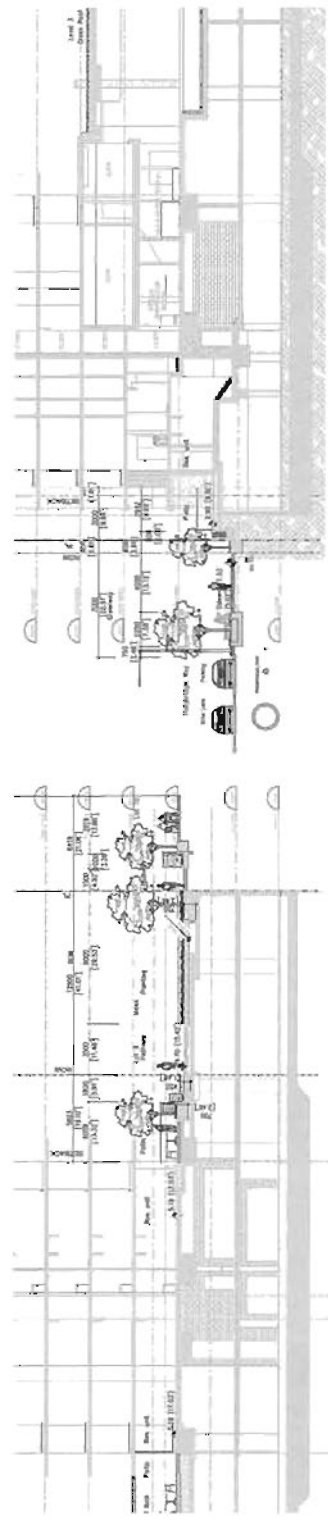
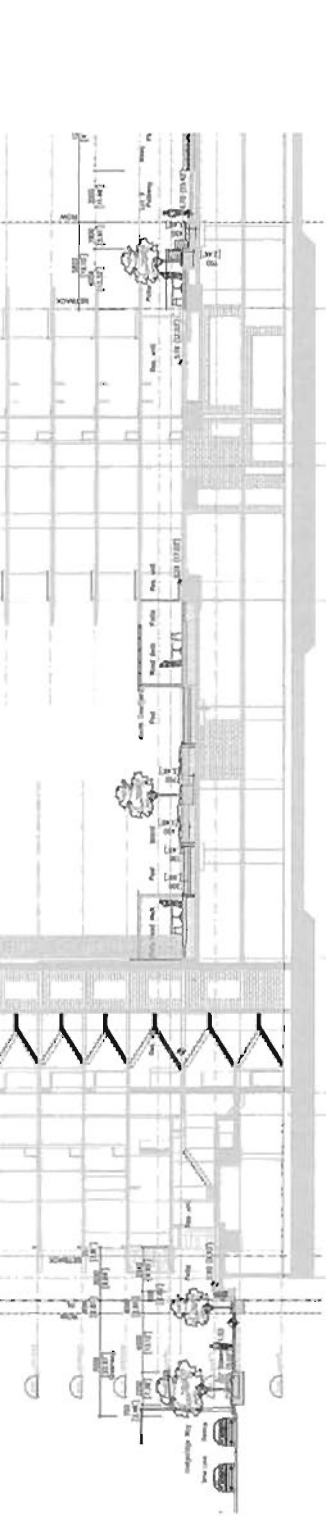
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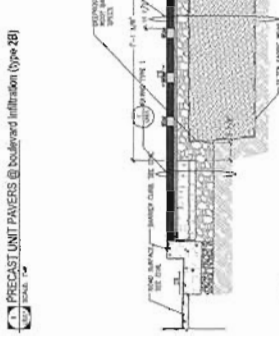
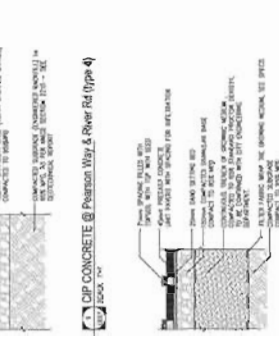
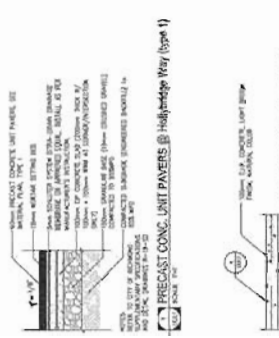
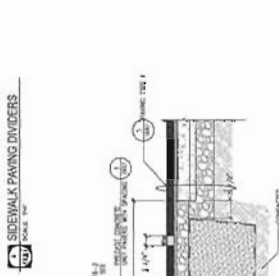
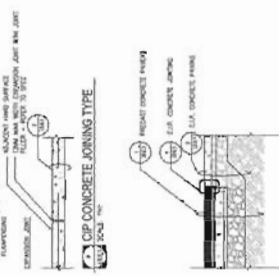
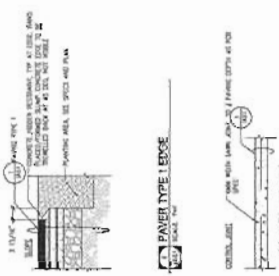
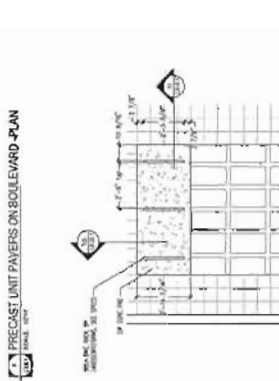
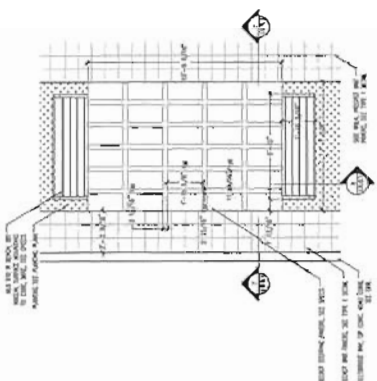
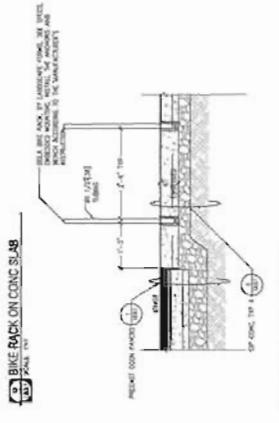
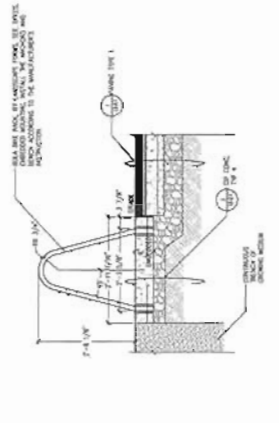
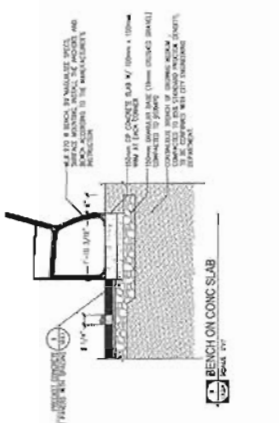
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Project: River Green Village - Parcel B
 Date: 02/07/13
 Scale: 1/8" = 1'-0"

Landscape Section

L8.01





ASPAC

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DP-11587954

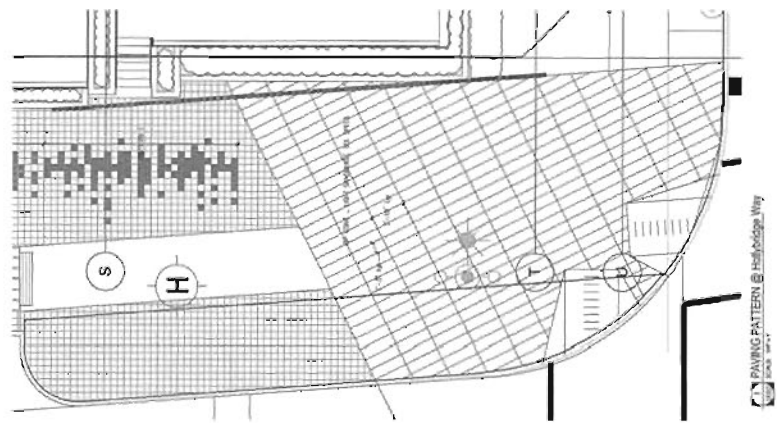
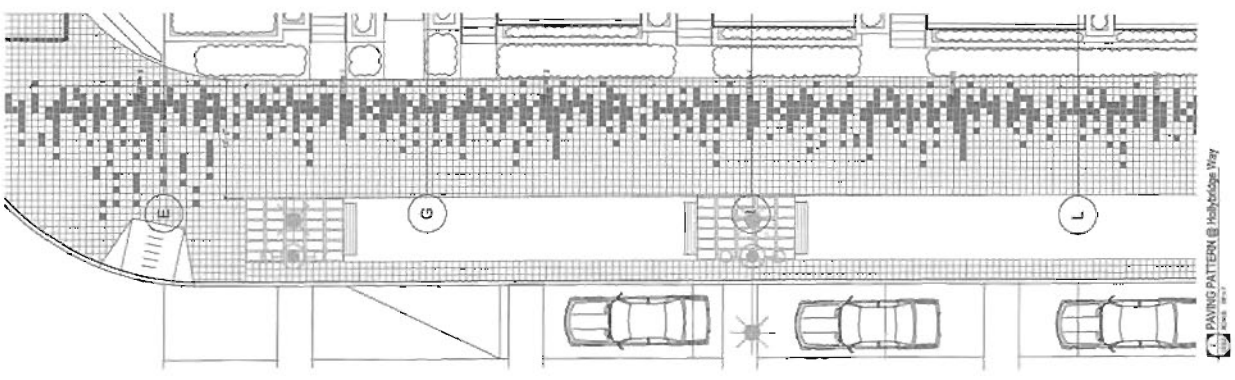
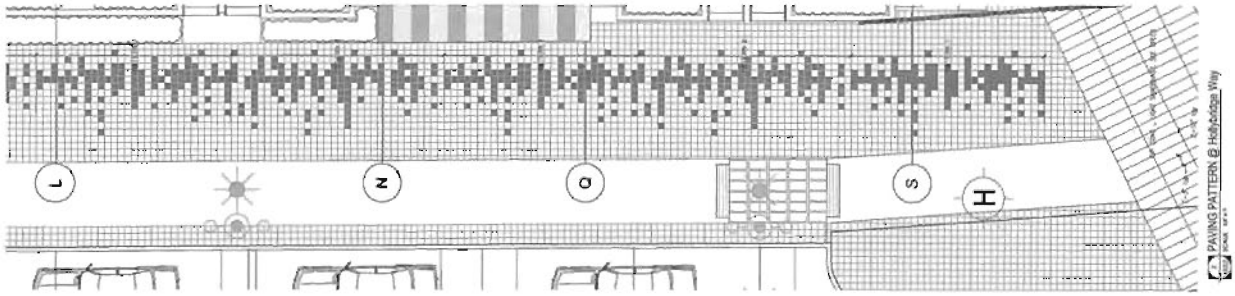
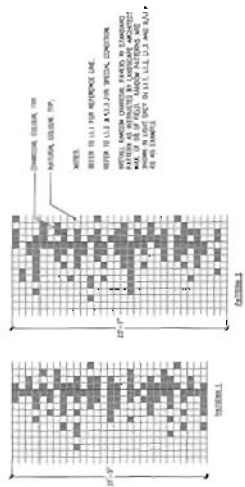
LIVE green

North Arrow

Blue Green Village - Parcel 9

LS02

FEB 20 2013



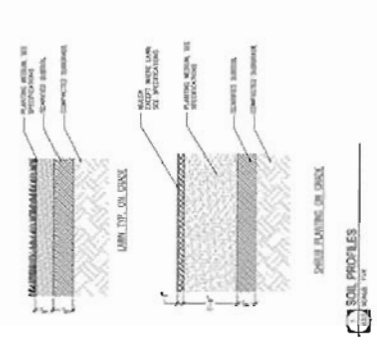
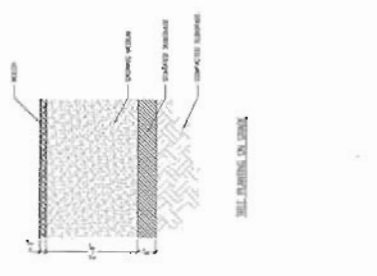
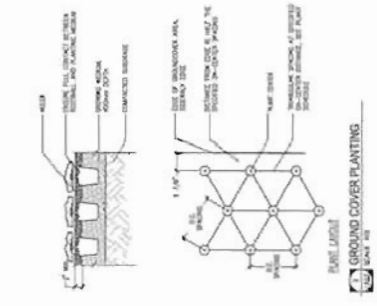
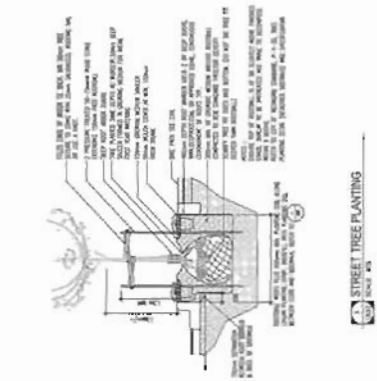


DP-11587954



Project Name	Five Green Village - Parcel 5
Project No.	
Sheet No.	
Scale	
Date	
Author	
Checker	
Appr. / Date	
Discipline	Landscaping Details
Sub-discipline	Streetcrops - planting
Sheet Title	
Sheet No.	LS.0.3

FEB 28 2013



3. STREET TREE PLANTING

4. GROUND COVER PLANTING

5. SOIL PROFILES

6. SOIL PROFILES

ASPAAC

ASPHALT PAVING ASSOCIATION OF ALBERTA

10000 17th Avenue S.E. Suite 100, Calgary, Alberta T2C 1L9

Phone: (403) 243-2222 Fax: (403) 243-2223

www.aspaac.org

DP-11587954

River Green

10000 17th Avenue S.E. Suite 100, Calgary, Alberta T2C 1L9

Phone: (403) 243-2222 Fax: (403) 243-2223

www.rivergreen.ca

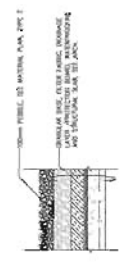
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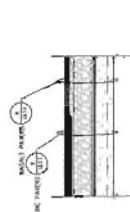
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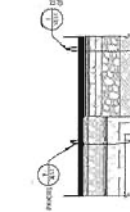
Date: 09.1.1



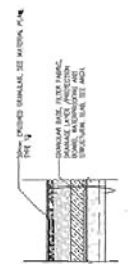
1. PEBBLE ON GRADE (Type 1)



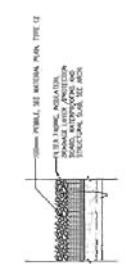
2. PEBBLE ON GRADE (Type 2)



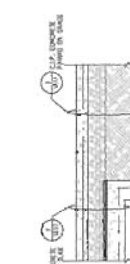
3. PEBBLE ON GRADE (Type 3)



4. PEBBLE ON GRADE (Type 4)



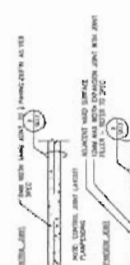
5. PEBBLE ON GRADE (Type 5)



6. PEBBLE ON GRADE (Type 6)



7. PEBBLE ON GRADE (Type 7)



8. PEBBLE ON GRADE (Type 8)



9. PEBBLE ON GRADE (Type 9)



10. PEBBLE ON GRADE (Type 10)



11. PEBBLE ON GRADE (Type 11)



12. PEBBLE ON GRADE (Type 12)



13. PEBBLE ON GRADE (Type 13)



14. PEBBLE ON GRADE (Type 14)



15. PEBBLE ON GRADE (Type 15)



16. PEBBLE ON GRADE (Type 16)



17. PEBBLE ON GRADE (Type 17)



18. PEBBLE ON GRADE (Type 18)



19. PEBBLE ON GRADE (Type 19)



20. PEBBLE ON GRADE (Type 20)



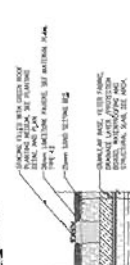
21. PEBBLE ON GRADE (Type 21)



22. PEBBLE ON GRADE (Type 22)



23. PEBBLE ON GRADE (Type 23)



24. PEBBLE ON GRADE (Type 24)



25. PEBBLE ON GRADE (Type 25)



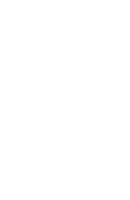
26. PEBBLE ON GRADE (Type 26)



27. PEBBLE ON GRADE (Type 27)



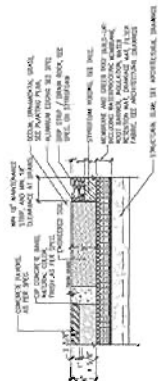
28. PEBBLE ON GRADE (Type 28)



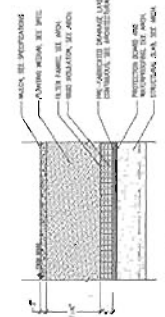
29. PEBBLE ON GRADE (Type 29)



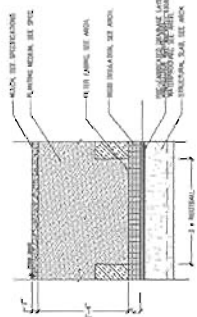
30. PEBBLE ON GRADE (Type 30)



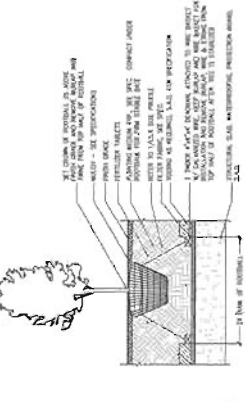
GREEN ROOF ON INSULATED SLAB
SCALE: 1/4\"/>



SHRUB PLANTING ON INSULATED SLAB
SCALE: 1/4\"/>



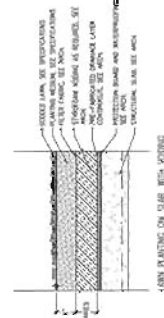
TREE PLANTING ON INSULATED SLAB
SCALE: 1/4\"/>



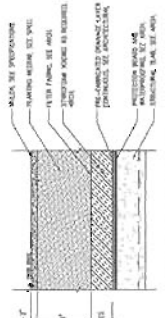
TREE PLANTING ON STRUCTURE
SCALE: 1/4\"/>



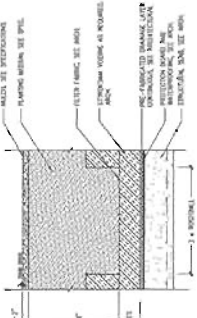
BAMBOO BARRIER
SCALE: 1/4\"/>



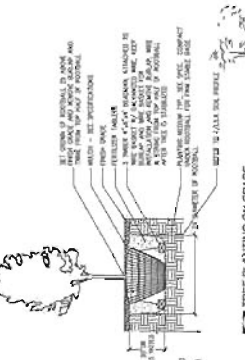
LAWN PLANTING ON SLAB WITH COPING
SCALE: 1/4\"/>



SHRUB PLANTING ON SLAB WITH COPING
SCALE: 1/4\"/>



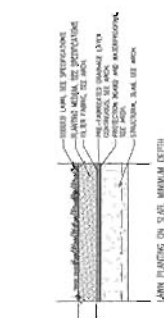
TREE PLANTING ON SLAB WITH COPING
SCALE: 1/4\"/>



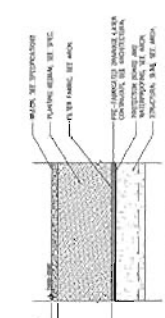
TREE PLANTING ON GRADE
SCALE: 1/4\"/>



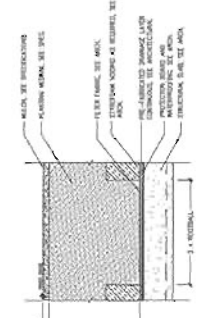
TREE PLANTING ON SLOPE
SCALE: 1/4\"/>



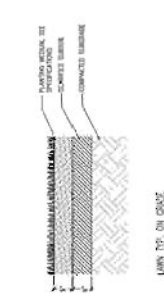
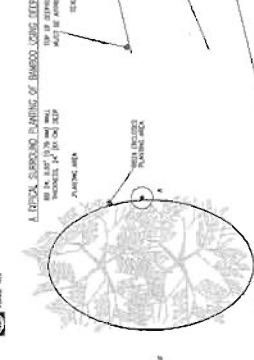
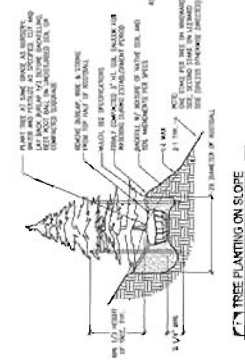
LAWN PLANTING ON SLAB MINIMAL DEPTH
SCALE: 1/4\"/>



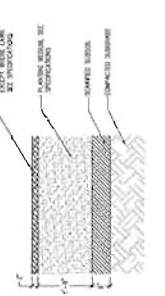
SHRUB PLANTING ON SLAB MINIMAL DEPTH
SCALE: 1/4\"/>



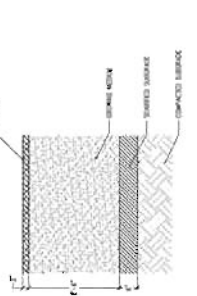
TREE PLANTING ON SLAB MINIMAL DEPTH
SCALE: 1/4\"/>



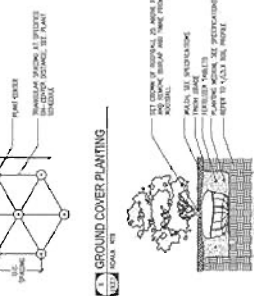
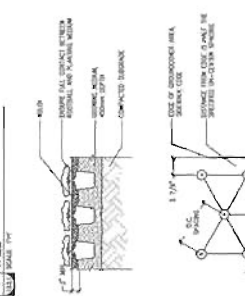
LAWN ON GRADE
SCALE: 1/4\"/>



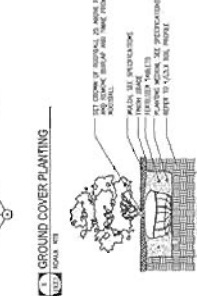
SHRUB ON GRADE
SCALE: 1/4\"/>



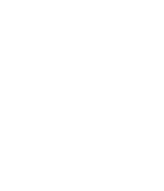
TREE ON GRADE
SCALE: 1/4\"/>



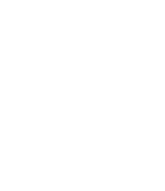
TREE ON SLOPE
SCALE: 1/4\"/>



GROUND COVER PLANTING
SCALE: 1/4\"/>



LAWN COVER PLANTING
SCALE: 1/4\"/>



SHRUB COVER PLANTING
SCALE: 1/4\"/>



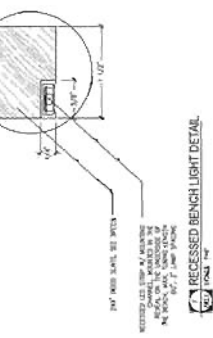
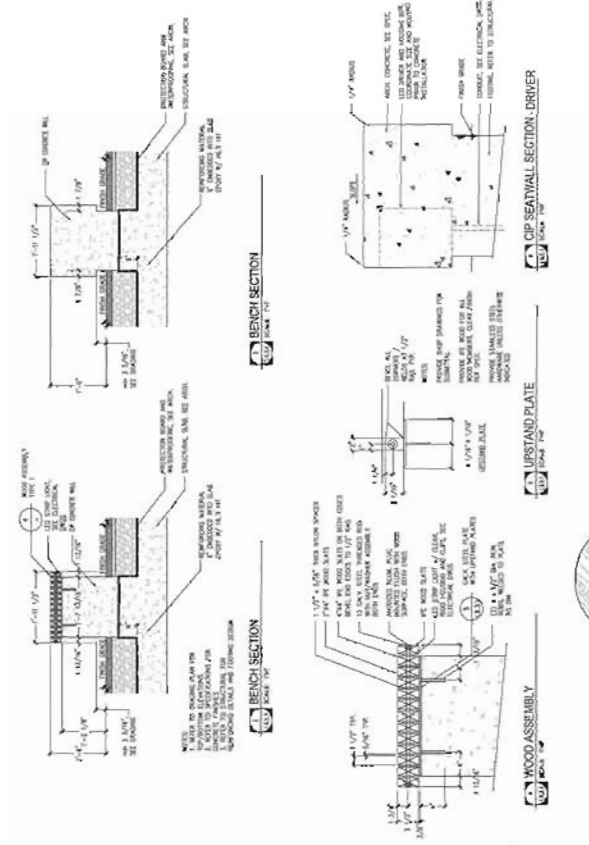
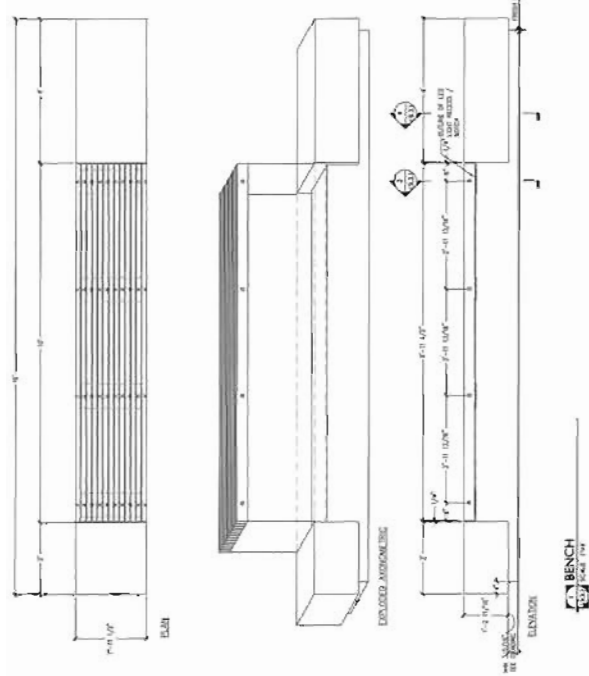
TREE COVER PLANTING
SCALE: 1/4\"/>



TREE COVER PLANTING
SCALE: 1/4\"/>



TREE COVER PLANTING
SCALE: 1/4\"/>



AEFAC

DP-11587954

river green

19.3.1

Project: River Green Village - Phase 1

Location: [Redacted]

Client: [Redacted]

Architect: [Redacted]

Scale: 1/4" = 1'-0"

Date: [Redacted]

Drawn by: [Redacted]

Checked by: [Redacted]

Approved by: [Redacted]

Project Manager: [Redacted]

Site Manager: [Redacted]

Contractor: [Redacted]

Subcontractors: [Redacted]

Materials: [Redacted]

Notes: [Redacted]

ASKAC

47

D-11587954

river gear

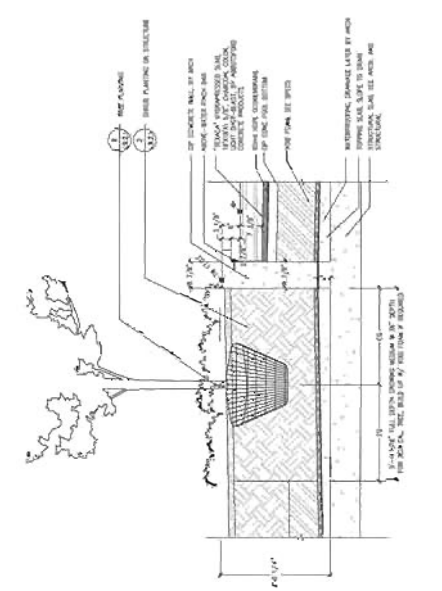
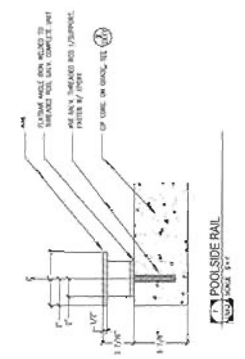
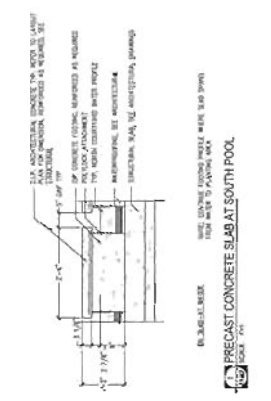
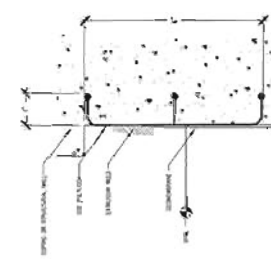
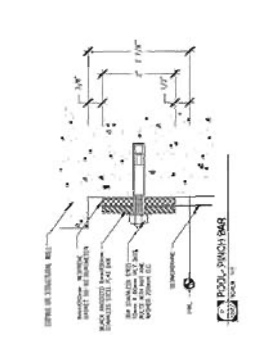
North Arrow

181

River Cross Village - Part 1

1962

FEB 20 2010



TYPICAL WATER EDGE AT RAIL AND



ASPAC

48

DP-11587954

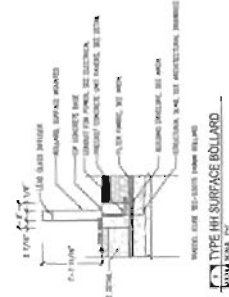
river green

North

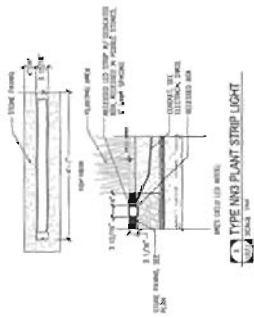
River Green Village - Panel 3

Landscaping Details Light Fixtures

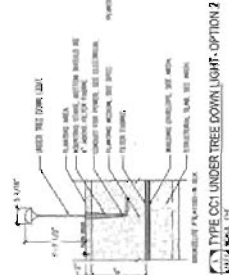
L9.7.1



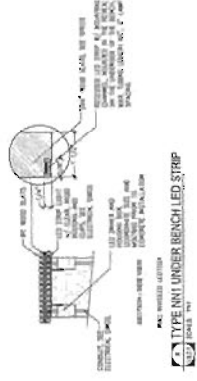
TYPE III SURFACE BOLLARD
SCALE: 1/4\"/>



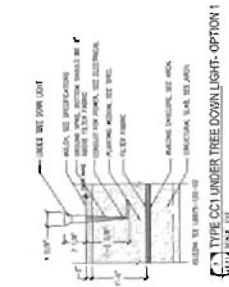
TYPE III PLANT STRIP LIGHT
SCALE: 1/4\"/>



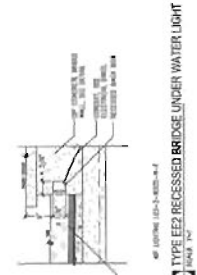
TYPE C01 UNDER TREE DOWN LIGHT - OPTION 2
SCALE: 1/4\"/>



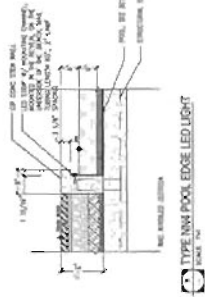
TYPE N01 UNDER BENCH LED STRIP
SCALE: 1/4\"/>



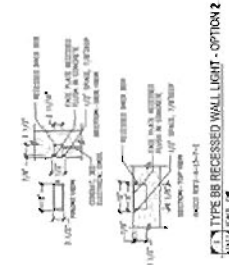
TYPE C01 UNDER TREE DOWN LIGHT - OPTION 1
SCALE: 1/4\"/>



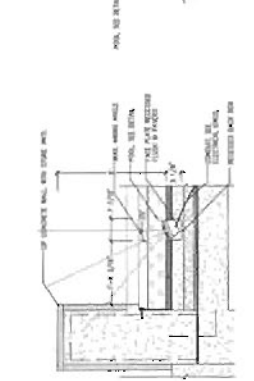
TYPE E02 RECESSED BRIDGE UNDER WATER LIGHT
SCALE: 1/4\"/>



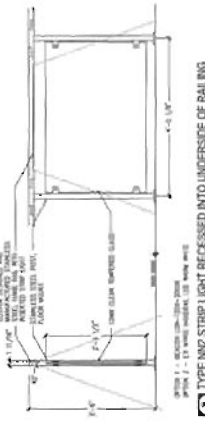
TYPE N01 POOL EDGE LED LIGHT
SCALE: 1/4\"/>



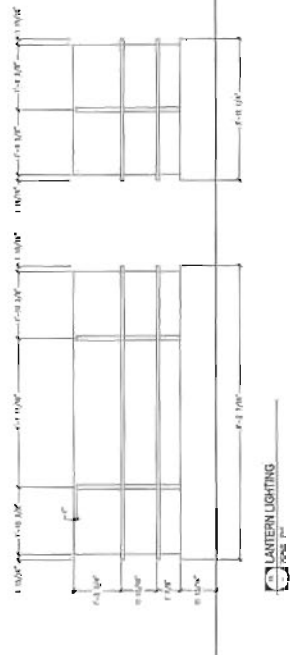
TYPE B01 RECESSED WALL LIGHT - OPTION 2
SCALE: 1/4\"/>



TYPE D0 IN-GROUND UNDER WATER LIGHT
SCALE: 1/4\"/>



TYPE N01 STRIP LIGHT RECESSED INTO UNDERSIDE OF RAILING
SCALE: 1/4\"/>



LANERN LIGHTING
SCALE: 1/4\"/>