



To: Development Permit Panel
From: Brian J. Jackson, MCIP
Director of Development
Date: July 6, 2010
File: DP 10-520511
Re: **Application by Onni Group of Companies for a Development Permit at 6951
Elmbridge Way**

Staff Recommendation

That a Development Permit be issued which would:

1. Permit the construction of a mixed-use project at 6951 Elmbridge Way, on a site zoned "Residential/Limited Commercial (RCL3)", incorporating three towers of varying heights (i.e. approximately 39 m, 44 m, and 47 m geodetic), 324 dwellings including 70 live/work dwellings and 20 low-end market rental units (secured via a Housing Agreement), approximately 6,200 m² (67,000 ft²) of ground floor retail, large outdoor and indoor amenity spaces at the project's podium roof level, green roofs on a minimum of 50% of the project's total roof area, and three levels of parking (711 spaces); and
2. Vary the provisions of Richmond Zoning Bylaw 8500, as amended by zoning amendment Bylaw No. 8604, to:
 - a) Reduce the minimum allowable front yard and exterior side yard setback along Elmbridge Way, Hollybridge Way, and River Road for portions of the building that are situated below finished grade from 3.0 m to no setback required;
 - b) Reduce the minimum allowable exterior side yard setback along Hollybridge Way, south of Lansdowne Road, from 3.0 m to 2.0 m;
 - c) Increase the maximum allowable projection for balconies projecting into an exterior side yard setback along Hollybridge Way, south of Lansdowne Road, from 1.0 m to 2.6 m; and
 - d) Increase the maximum allowable projection for architectural features projecting into an exterior side yard setback along Hollybridge Way, at the end of Lansdowne Road, from 0.6 m maximum to no setback required.

Brian J. Jackson, MCIP
Director of Development

BJJ:spc
Att.

Staff Report

Origin

Onni Group of Companies has applied to the City of Richmond for permission to develop a mixed-use project at 6951 Elmbridge Way, on a site zoned “Residential/Limited Commercial (RCL3)”, incorporating three towers of varying heights (i.e. 39 m, 44 m, and 47 m geodetic), 324 dwellings including 70 live/work dwellings and 20 low-end market rental units (secured via a Housing Agreement), approximately 6,200 m² (67,000 ft²) of ground floor retail, large outdoor and indoor amenity spaces at the project’s podium roof level, green roofs on a minimum of 50% of the project’s total roof area, and three levels of parking (711 spaces).

To facilitate this project, the site is being rezoned from “Industrial Business Park (IB1)” to “Residential/Limited Commercial (RCL3)” under Bylaw No. 8605 (RZ 07-38022). In addition, as part of this rezoning, amendments are proposed to “Residential/Limited Commercial (RCL3)” in order that it may more accurately reflect the intent of the City Centre Area Plan (CCAP) with regard to the permitted non-residential uses applicable to the subject site and other lands similarly designated under the CCAP as “Urban Centre T5 (45 m)” and “Village Centre Bonus”.

Infrastructure improvements, including frontage improvements along the subject site’s three street frontages, full construction of a service lane and park improvements, and service upgrades and connections, have been secured via rezoning and will be constructed via two Servicing Agreements (SA 10-532891 and SA 10-534017).

Development Information

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

Background

The subject site, which contains a warehouse/office building and surface parking/loading, is situated in the City Centre’s “Oval Village”, a predominantly light industrial area designated for future high-density, mixed-use development. Existing development surrounding the site is as follows:

North: River Road, across which is the Richmond Oval and plaza.

East: Hollybridge Way road right-of-way, which contains the existing roadway, a major City drainage canal, a natural area designated as a 5 m Riparian Management Area (RMA), and a row of “significant (heritage) trees” attributed to Samuel Brighthouse. Beyond Hollybridge Way are older light industrial/commercial buildings and the Richmond Winter Club.

South: Elmbridge Way, across which is the Work Safe BC facility.

West: An existing light industrial/warehouse property, which is one of several that (like the subject site) front Elmbridge Way and back on to River Road (across from the Oval).

Rezoning and Public Hearing Results (Staff comments in ***bold italics***.)

During the rezoning process, staff determined that at Development Permit stage attention should be given to the project’s image (e.g., emerging character of the Oval Village, Lansdowne Road street-end view), public realm (e.g., pedestrian-friendly public spaces and streetscapes), and tower treatment (e.g., massing, rooftops, colour, ground plane). The developer has addressed these issues to the satisfaction of staff. In brief, the developer proposes the following:

- *A distinctive “garden city” image – that complements the Richmond Oval, Hollybridge Canal Linear Park, and emerging urban-riverfront Village, and is characterized by colourful streetwalls, glassy towers, pedestrian-friendly streetscapes, high-quality materials and amenities, and extensive green landscaping;*
- *A unique public realm – that marries the Village’s signature feature at the end of Lansdowne Road – the Hollybridge Canal Linear Park – with natural and “green” features (e.g., tree retention, canal enhancement, “rain garden” establishment) and visually engaging pedestrian-oriented shop fronts, signage, weather protection, seating, and other amenities; and*
- *Attractive residential towers – that contribute towards an interesting skyline, complement the Richmond Oval and public enjoyment of its plaza (i.e. via spatial definition, minimal shading), take advantage of mountain views, and complement the development’s retail streetscape via the use of “glassy” articulated forms, colourful features (e.g., fins, spandrel panels, glass), varied heights (39 m, 44 m, and 47 m geodetic), and careful attention tower lobby/landscape design.*

Public Hearing Results (Staff comments in **bold italics**.)

Rezoning of the subject site was supported by Council after Public Hearing on June 21, 2010. Among other things, the following information was provided:

- How will the subject development help to ensure retail viability?

The developer recognizes the challenges of retail in today’s marketplace and proposes to address this situation via a “landmark” location, attractive to quality retailers and shoppers; long-term developer investment (i.e. the developer plans to own/manage the project’s retail space); and, well-designed, pedestrian-oriented retail units with good street exposure, easy lane access for parking and service vehicles, and large, deep spaces that can accommodate a variety of large-format (e.g., grocery) and smaller specialty, service, restaurant, and complementary uses.

- Does the proposed development provide adequate parking for visitors and shoppers?

The number of proposed residential and commercial vehicle parking spaces, bicycle lockers, and short-term bike racks satisfy all Zoning Bylaw requirements. In addition, adequate parking for shoppers and visitors will be ensured by the City securing 177 spaces on the project’s lowest parking level (P1) for general use by shoppers and visitors via the registration of:

- As per RZ 07-380222, a right-of-way securing 40 “public” parking spaces (together with pedestrian and vehicle access); and*
- Prior to DP approval, a covenant limiting the number of spaces that may be sold, leased, or otherwise assigned to employees, specific businesses, and specific people to a maximum of 50% of the project’s total commercial spaces, and co-locating the spaces not assigned for those uses with the project’s 40 “public” spaces.*

- What are the developer’s intentions with regard to a future City District Energy Utility (DEU)?

The developer is aware that the City wishes to pursue the establishment of a DEU in the Oval Village area, and that it will be seeking a utility partner to facilitate the system’s design and construction. The developer has indicated support for the City’s efforts and has completed a preliminary study identifying the subject development’s roughly 6,200 m² of ground floor retail as its preferred candidate for possible hook-up to a future DEU system, together with various mechanical requirements that will be incorporated into the building design. Unfortunately, due to development timing, the developer cannot commit to building or pre-piping a hydronic heating and/or cooling system for the residential portions of the development that could have been served by a future DEU.

Staff Comments

The proposed scheme attached to this report has satisfactorily addressed the significant urban design issues and other staff comments identified as part of the review of the subject Development Permit application. In addition, it complies with the intent of the applicable sections of the Official Community Plan and is in compliance with the "Residential/Limited Commercial (RCL3)" zone, as amended by zoning amendment Bylaw No. 8604 (proposed as part of the project's concurrent rezoning application, RZ 07-380222, to permit a broader range of non-residential uses, as per CCAP objectives), except for the zoning variances noted below.

Zoning Compliance/Variations (Staff comments in *bold italics*.)

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

- 1) Reduce the minimum allowable front yard and exterior side yard setback along Elmbridge Way, Hollybridge Way, and River Road for portions of the building that are situated below finished grade from 3.0 m to no setback required.

Staff support this proposed variance as the affected portions of the building (i.e. parkade) will be fully concealed below the site's public pedestrian areas and landscaping, resulting in a seamless transition between the public sidewalk and on-site pedestrian areas along River Road and a desirable interface with the Elmbridge Way sidewalk and proposed park along the site's Hollybridge Way frontage in the form of a landscaped, terraced edge.

- 2) Reduce the minimum allowable exterior side yard setback along Hollybridge Way, south of Lansdowne Road, from 3.0 m to 2.0 m; *and*
- 3) Increase the maximum allowable projection for balconies projecting into an exterior side yard setback along Hollybridge Way, south of Lansdowne Road, from 1.0 m to 2.6 m.

Staff support these two proposed variances as the affected portions of the building are limited to the upper floors of the project's southeast tower and one supporting column, the reduced setback will contribute towards a more interesting streetscape, and adequate public circulation space and vertical clearance (i.e. 4.5 m from the public walkway to the underside of the tower soffit) has been provided to ensure that there will be no impacts on pedestrian activity along the project's Hollybridge Walkway (on the site's east side) or within the adjacent Hollybridge Canal Park.

- 4) Increase the maximum allowable projection for architectural features projecting into an exterior side yard setback along Hollybridge Way, at the end of Lansdowne Road, from 0.6 m maximum to no setback required.

Staff support this proposed variance as the affected portion of the building will not compromise public pedestrian activity on-site or within the adjacent park, does not conflict with City utilities or service access, and will contribute towards a distinctive street-end view at the west end of the important Lansdowne Road axis.

Advisory Design Panel Comments

The development was presented to the Advisory Design Panel (ADP) on April 21, 2010 (preliminary) and May 19, 2010 (final). The Panel commended that developer on a well-designed, well-presented project; identified items for design development and consideration; and, voted in support of the project advancing to Development Permit Panel. Relevant comments from the May 19th ADP Meeting Minutes and the developer's response (in '*bold italics*') are attached. (**Attachment 2**)

Analysis

The proposed development is subject to OCP and CCAP policies and Development Permit (DP) Guidelines. The site is at the “heart” of the Oval Village and is designated under the CCAP for:

- High-density (3 FAR max., of which residential use may not exceed 2 FAR), high-rise (47 m geodetic max.), mixed-use development with pedestrian-oriented retail at grade and a mix of residential and commercial uses above;
- Bonus density (1 FAR of the permitted 3 FAR) for the provision of a pedestrian-oriented retail “high street” along River Road and other commercial uses supportive of a viable, livable urban village (e.g., grocery store); and
- Enhancement of the proposed Hollybridge Canal Linear Park and the important Lansdowne Road street-end view along the site’s east frontage.

Based on this, the proposed development is designed as half of a city block with a service lane on its west side, pedestrian-oriented retail along its three street frontages, and stepped, “glassy” towers of varying heights anchoring three of its four prominent corners. A large podium roof deck, variety of indoor and outdoor amenities, live/work units, affordable housing, accessible housing features, and “green” building measures (e.g., LEED Silver equivalency, green roofs, charging facilities for electric vehicles) will make the subject development an attractive place to live for a wide range of people. In addition, the developer proposes to construct the Hollybridge Canal Linear Park along the project’s east side, together with a broad public walkway/terrace (on-site), a special “landscape” feature incorporated into the building at the end of Lansdowne Road, and colourful streetwalls, which will contribute to a high-amenity pedestrian experience and a distinct identity for the Oval Village.

Conditions of Adjacency

- River Road “High Street”: The north face of the development fronts the Oval plaza and River Road, the latter of which is designated under the CCAP as a pedestrian-oriented retail “high street” and is intended to provide for a visually engaging streetscape incorporating ground floor retail and restaurants with narrow shop fronts and direct access to the public sidewalk, pedestrian-oriented signage, weather protection, large shop windows, outdoor dining, and complementary features. The subject development satisfactorily addresses this objective via:
 - a) A mid-rise (6 storey) streetwall that is in scale with the Oval and helps to define the edge of the Oval’s plaza, thus, enhancing it as community focus and place for public gatherings;
 - b) Bold colours that complement the Oval (blues) and its public art (red), and help ensure that this north-facing facade will provide a bright, engaging backdrop to activities along the street;
 - c) Glassy, stepped towers that minimize shading of the Oval plaza (i.e. no shading after 11 am, from mid-March to mid-September) and provide a visual lightness to the building’s upper storeys that helps to focus attention back on the street and the pedestrian realm;
 - d) Unique retail display windows (i.e. large glass box-bay windows), signage, weather protection, and complementary features that combine to make a special pedestrian environment; and
 - e) The sensitive integration of the Hollybridge Canal’s landscape with the project’s new urban environment in a way that makes the canal an attraction and asset to the retail environment.
- Hollybridge Canal Linear Park: The east face of the development fronts a proposed linear park along Hollybridge Way that is intended to be a signature feature of the Oval Village and an important linkage between the Village’s urban upland areas and the riverfront. Via RZ 07-380222 and SA 10-534017, the developer is responsible for the design and construction of the park, including the retention and enhancement of the existing City drainage canal, “significant (heritage) trees”, and riparian area (i.e. 5 m RMA), the extension of the Hollybridge Way “cherry tree” promenade along the street edge, the establishment of a “rain garden” stormwater management

system, and the installation of viewing, seating, walkways, public art, and related amenities. In addition, the subject DP is designed to enhance the park experience via:

- a) A mid-rise (6 storey) streetwall that is in scale with and provides an attractive, colourful backdrop for Hollybridge Canal's "significant trees";
 - b) The "Hollybridge Walkway", a broad public walkway along the development's east frontage, raised roughly 1 m above the grade of the park to provide for unobstructed views of the park's riparian area (while restricting public access), strolling, terraced seating and planting, and concealed on-site parking;
 - c) A continuous retail frontage along the west side of the public walkway, including a possible grocery store and complementary activities and features (e.g., coffee shop, casual outdoor dining, displays of flowers, fruit, vegetables);
 - d) A focal "landscape" feature incorporated into the building on axis with Lansdowne Road that helps to address this important street-end view and visually tie the building with the park; and
 - e) Continuous handicapped access, weather protection, seating, and other pedestrian amenities.
- Elmbridge Way: The south face of the development fronts Elmbridge Way, which is understood to transition from the busy Hollybridge Way park area to become a quieter, more locally-oriented street characterized by ground floor townhouses, live/work dwellings, and local commercial uses (e.g., coffee shops, medical/dental, personal services) with mid- and high-rise residential and office uses above. The subject development satisfactorily addresses this objective via:
 - a) Siting of the project's tallest towers, together with the retention of several tall evergreen trees, to anchor the development's prominent Hollybridge/Elmbridge corner;
 - b) A mid-rise (6 storey) streetwall that gently curves to follow the arc of Elmbridge Way;
 - c) A raised, south-facing terrace that provides an intimate setting for outdoor dining and socializing; and
 - d) Continuous handicapped access, weather protection, seating, and other pedestrian amenities.
 - West: Along the development's interior side yard, a public lane is proposed to provide for 100% of the subject development's vehicle and service access, along with access to future development to its west. The neighbouring site, like the subject site, is designated for high-density, high-rise, mixed-use development. The developer has submitted an illustrative development concept for the neighbouring site, to the satisfaction of staff, demonstrating a density of 3 FAR, including 2 FAR of residential uses in two towers, a mid-rise office tower, and a mix of retail and residential at grade. (**Attachment 4**)
 - Traffic Considerations: Potential traffic impacts will be minimal, as all traffic generated by the subject site and future development to its west (including parking, garbage/recycling, furniture moving, large and small item deliveries) will be handled along the site's proposed service lane. Some restrictions will be placed on truck access at the two ends of the lane on an interim basis (until it is widened by the future development west of the subject site) to prevent potential traffic congestion on River Road or Elmbridge Way that could otherwise arise due to the wide turning radii of large trucks (e.g., WB-17).
 - Potential Road Right-of-Way Encroachments: Via SA 10-534017 for the developer's design and construction of the Hollybridge Canal Park, staff have identified a number of features (e.g., stairs, ramp, bridge) that must be linked "seamlessly" with the subject development. To achieve this, it may be necessary to physically tie one or more of these park features to the proposed building, and in doing so, some portion(s) of the building's proposed Hollybridge walkway may be required to encroach into the park (i.e. Hollybridge Way road right-of-way). Staff are supportive of any such encroachments, the possible locations of which are shown in **Attachment 5**.

Urban Design and Site Planning

- **CCAP Compliance:** The proposed development is generally consistent with CCAP guidelines and policies, and is supportive of the Oval Village's establishment as a high-density, high-amenity community that co-locates shops, services, housing, jobs, and transit within an attractive, pedestrian-friendly, urban environment. More specifically, the subject development includes:
 - a) Three "glassy" residential towers with articulated forms and varying heights (39 m, 44 m, and 47 m geodetic) that contribute towards an interesting skyline and an amphitheatre-like massing that focuses attention on the Oval, opens up views from the towers towards the mountains, and minimizes shading of the Oval's outdoor public spaces;
 - b) Boldly-coloured, mid-rise (6 storey) streetwalls that wrap around the sites three street frontages and help to define and contain the Oval Village's open spaces and streets and impart a distinctive, urban character;
 - c) Varied, engaging, and visually attractive, pedestrian-oriented retail streetscapes offering deep commercial units adaptable to the needs of large and small retailers, restaurants, and services, including unit(s) suitable for grocery or other large format retailers;
 - d) A self-contained live/work "building" within the mid-rise portion of the development, accessed independently of the development's "conventional" residential units in order to provide for necessary customer and business-related live/work access and image without impacting other project residents;
 - e) 20 affordable (low-end market rental) housing units situated on levels 2 – 8 in the development's southeast tower (as per a Housing Agreement that received third reading of Council on June 28, 2010), to the satisfaction of the City;
 - f) A service lane, accommodating all vehicle access, loading, and related uses, including large delivery and moving trucks (as per Bylaw requirements), for both the subject site and future neighbouring development to its west;
 - g) Over 700 parking spaces on three levels, as per Bylaw requirements (e.g., number, stall size, aisle width), including:
 - One commercial parking level below grade (Level P1) with direct vehicle access from the lane and direct pedestrian access to the live/work units and ground floor retail via an elevator and stairs (and for the large format retail unit, an in-store ramp);
 - Two parking levels above the project's ground floor retail, most of which is intended for residential use and accessed via a ramp from the lane that is independent of the ramp to P1 to minimize possible commercial/residential conflicts and security issues;
 - For residents, a minimum of 1.2 spaces per dwelling (or as otherwise required under the Bylaw), of which at least one space must be assigned for the exclusive use of each market dwelling and 19 spaces must be assigned to the project's 20 affordable housing units; and
 - A minimum of 173 spaces available for the use of shoppers and visitors, including:
 - i) 40 "public" spaces secured via a right-of-way at rezoning stage (RZ 07-380222); and
 - ii) A minimum of 50% of the project's total commercial parking (i.e. 50% of 235 space) proposed to be secured via a covenant prior to DP approval;
 - h) Large outdoor and indoor amenity spaces for the use of residents co-located on the project's podium roof (level 5), providing direct access from the project's residential towers and live/work mid-rise to an indoor pool, gymnasium, meeting rooms, children's play space, garden plots, lawns, passive recreation spaces, and complementary uses;
 - i) A minimum habitable floor level of 2.9 m geodetic for all portions of the building, except the residential lobbies and 10% of the project's commercial floor area (to facilitate a pedestrian-friendly commercial interface with River Road), which shall be at the level of the sidewalk or higher as per City Bylaw;

- j) Green roofs on 50% of the building's roof area (as per LEED Silver); and
- k) A signature "garden city" image at the important Lansdowne Road street-end that clearly places the subject development – and by extension, the Oval Village – in a park, by:
 - Placing emphasis on the Hollybridge Canal landscape by framing it with the project's towers and using its mid-rise streetwall to provide a colourful backdrop;
 - Centering the street-end view on a special "landscape" feature incorporated into the building's facade; and
 - Illuminating the building's street-end "feature", together with the project's pedestrian and commercial spaces, to provide nighttime interest and a landmark view.
- **Tower Guideline Non-Compliance:** The proposed towers deviate from the CCAP DP Guidelines regarding minimum tower spacing and maximum floorplate size. Nevertheless, staff are supportive of the proposed development as follows:
 - a) Tower spacing – The CCAP encourages 35 m between towers (and 50% of 35 m to interior property lines) to ensure adequate privacy for tower residents and minimize sun and view blockage. The subject development proposes a reduction in tower spacing to 24 m between two of its three towers, and a tower setback of 12 m to its west (interior) property line (i.e. 50% of 24 m). Staff's review indicates that while the subject development does not fully comply with the CCAP guideline, the proposal is satisfactory because elsewhere the project's tower spacing exceeds 35 m and the neighbouring site is large and is not, therefore, unduly impacted by the proposed tower siting (as illustrated in **Attachment 4**). Furthermore, by locating two towers 24 m apart (as the standard applied in some other parts of the City Centre), the developer is able to provide for a larger, usable, outdoor amenity space (at the podium roof level), a better relationship between the tower entry lobbies and the fronting streets, and a more interesting skyline.
 - b) Tower floorplate size – The CCAP encourages a maximum tower floorplate size (above a height of 25 m) of 650 m², but subject development proposes roughly 750 m². Staff support the developer's proposed tower floorplate size, as reducing it would require either:
 - A reduction in floor area, which would be contrary to CCAP objectives for high-density, mixed-use development in the "heart" of the Oval Village; or
 - An increase in the number or height of the proposed towers or an increase in the proposed streetwall height, all of which would reduce usable on-site open space and increase shading of the Oval's public plaza.
- **Garbage/Recycling:** All garbage and recycling facilities shall conform to City standards and requirements. More specifically:
 - a) A commercial garbage room is provided along the service lane, adjacent to the project's loading area and a designated location for a possible future compactor. Both locations are directly accessible from all the ground floor commercial units via internal service corridors.
 - b) A residential garbage room is provided on the project's first parking level above the ground floor retail where it is convenient to all three towers and the live/work units. To facilitate pick-up, a garbage holding room is provided along the lane. While this arrangement requires moving garbage for pick-up, this approach is not uncommon and satisfies City requirements.
 - c) Truck pick-up will be accommodated along the east side of the lane adjacent to the commercial and residential (holding) rooms. To ensure that this will not interfere with traffic movement, a broad siding and rollover curb is provided adjacent to the two rooms, overhead clearance is designed to accommodate the raising of carts and bins, and possible obstructions near the rooms (e.g., planting) have been minimized.

Architectural Form and Character

- **Character:** The subject development is consistent with CCAP objectives for a character that is urban, pedestrian-oriented, and cohesive, yet distinct from the character of other City Centre Villages. The project's proposed mid-rise streetwalls, bold colours, glassy towers of varying heights, and attention to the Hollybridge Canal landscape:
 - a) Sets this project apart from developments elsewhere in Richmond's downtown;
 - b) Presents a playfulness and boldness in keeping with the Oval, its public art, and the riverfront;
 - c) Sets the stage for the establishment of River Road as a bold, dynamic, and engaging pedestrian-oriented retail "high street", complemented by "lighter" tower structures and careful attention to the integration of a distinctive, green landscape vocabulary, views, sun, and high quality amenities; and
 - d) Contributes towards an attractive skyline where towers share a common vocabulary of materials and form, while variations in their height, the stepping of their upper storeys, and rooftop treatments combine to create visual interest and diversity.
- **Materials & Colour:** The subject development mixes materials and colours to focus attention on the pedestrian realm, while tying it into the overall project:
 - a) Painted and textured architectural concrete with large punched openings act like screen walls on the lower floors of the building, revealing glassy residential and live/work frontages behind that visually tie into the towers above;
 - b) Building setbacks and slender, coloured "fins" running up the towers help to create a visual break between the "heavier" horizontal streetwalls and "lighter" towers, while making the latter appear more slender, adding visual interest, and balancing the streetwalls' bold forms;
 - c) A screen wall of pre-cast concrete "trees" conceals parking along the proposed lane, making the lane more attractive and referencing the Hollybridge Canal Park and quality of design and finish found along the project's street frontages; and
 - d) Varied shop front and residential lobby designs that respond to the distinct conditions of each street frontage, including narrow retail units with large glass box-bay windows along River Road, playful glass canopies and colourful frontage features along the Hollybridge Walkway, and fabric awnings along Elmbridge Way's "neighbourhood commercial" terrace.
- **Residential Tower Lobbies:** Site size, shape, proximity to the proposed park, and the interface with pedestrian retail uses present challenges for siting and designing the subject development's residential tower lobbies. In particular, objectives for an animated retail streetscape can be undermined by large residential lobby frontages that are less active, less engaging, and present a character quite different from adjacent commercial uses. To address this and ensure that the project's residential lobbies will contribute to an attractive retail and pedestrian environment, the developer proposes to:
 - a) Locate all indoor amenity spaces on the building's upper floors, with the exception of one space at the southwest tower lobby (near the lane) where Elmbridge Way is planned to transition away from commercial/park activities to a quieter, more residential character;
 - b) Design the lobbies as special "jewel boxes" through the use of high floor-to-ceiling heights (4.5 m), floor-to-ceiling glass walls, night-time lighting that makes them shine, and special interior design features that enhance the streetscape and make it visually interesting for passers-by; and
 - c) Contribute to a special residential identity that complements the project's "garden city" image through the incorporation of native evergreen foundation planting (i.e. salal) around the perimeter of each lobby to frame the tower entries, provide a buffer without reducing visibility, and tie the urban landscape to the naturalized landscape characteristic of the adjacent park.

- **Accessible Housing:** The OCP and CCAP encourage the provision of a range of housing choices, including housing suited to Richmond’s aging population and people with impaired mobility. To address this, all of the project’s residential and live/work units include features supportive of aging in place (e.g., lever handles, blocking in walls to accommodate the future installation of grab bars), plus 11% of the units provide higher standards of accessibility including:
 - a) (6%) All 20 affordable housing units secured via a Housing Agreement will satisfy Basic Universal Housing Bylaw standards; and
 - b) (5%) 15 market residential units will satisfy Richmond’s Convertible Housing standards (to facilitate the ready conversion of units to accommodate wheelchair use).
- **Signage:** A signage package has been prepared for each of the project’s three street frontages, taking into account the unique opportunities (e.g., River Road “high-street”) and challenges (e.g., view obstruction caused by the Hollybridge Canal natural area) of each, with special attention to how the signage can enhance the pedestrian experience of the streetscape. For the most part, the proposed signage concept relies on a variety of pedestrian-oriented façade, projecting, and low pylon signs in combination with weather protection and distinctive façade treatments (e.g., bold colours, projecting display windows).

Landscape Design and Open Space Design

- **Tree Replacement:** The subject development, as proposed, exceeds the City’s 2:1 tree replacement policy as follows. (Note that information presented at the rezoning stage has been updated based on the subject DP review and SA 10-534017.)

| Tree Location | Trees Retained | Trees Removed | Replacement Trees | Comments |
|------------------------|----------------------------------|---------------|------------------------------------|---|
| Hollybridge Canal Park | 9 “significant (heritage) trees” | 11 | 45 | - Tree removal is subject to SA 10-534017. - No “significant (heritage) trees” or other trees in the 5 m RMA will be removed. |
| Street Trees | Nil | 2 | 39 | - Tree removal is subject to SA 10-532891. - New street trees will include Hollybridge Way (28), Elmbridge Way (6) & River Road (5), |
| On-Site | 3 | 12 | 27 | - 12 healthy trees will be removed due to lane construction & habitable grade requirements. - 3 trees will be planted in the new lane. - 24 trees min. will be planted within the rooftop amenity spaces. |
| Total | 12 | 25 | 111 (72 excluding street trees) | - Based on a 2:1 replacement ratio, the subject development must provide 50 replacement trees (excluding street trees). |

- **Outdoor Amenity Space:** The subject development, as proposed, provides 6,847 m² of semi-private (rooftop) and public (grade level) outdoor spaces, which more than doubles City guidelines regarding the provision of on-site amenity space and includes:
 - a) 4,090 m² of public open space in the form of the (on-site) Hollybridge Canal Walkway, incorporating a promenade, viewing and seating areas, an expansion of the Canal’s natural area, green landscape, and complementary features (versus CCAP guidelines for 1,167 m²);
 - b) 2,757 m² of outdoor rooftop amenity space for the shared use of residents, including garden plots (complete with irrigation and tool storage), lawn, seating areas, and a children’s play space (versus OCP guidelines for 1,920 m²); and

- c) Direct access from the rooftop outdoor space to the project's indoor amenity spaces (e.g., indoor pool, gym, meeting and change rooms), towers, and live/work units.
- **Public Art:** As per RZ 07-380222, the developer has agreed to voluntarily contribute \$210,300 towards the Public Art Reserve, based on \$0.60/ft² of building area (excluding affordable housing). As determined by the City via the Hollybridge Canal Park design review process (SA 10-534017), the contribution may be applied within the park, in which case, the developer has expressed an interest in participating in the public art selection process.

Crime Prevention through Environmental Design (CPTED)

A variety of measures are incorporated to minimize safety and security issues, including:

- **Parking:** Residential and commercial parking are, for the most part, located on separate levels and, where they share a level, are separated by gates. The interior of the parkade will be painted white and illuminated (to Building Code standards), and glazing will be provided at all stairwells, elevator lobbies, and vestibules.
- **Live/Work Dwellings:** To prevent conflicts and security concerns that could arise from the mixing of live/work business customers with residents of the project's three conventional residential towers, the project's live/work units are grouped on its lower levels and are designed to function as an independent "building" with their own elevator, circulation spaces, and entrances (both at the street and the parkade).
- **Residential Towers:** Due to the site configuration and various urban design objectives (e.g., grade changes, park), the project's residential lobbies are set back from the fronting streets. To minimize any potential personal safety issues that could result, clear sightlines are provided to all three lobbies from the fronting streets; weather protection, lighting, and walkways/ramps are designed to provide direct, accessible street access, good night-time visibility, and alternative routes (i.e. no dead-end walkways); and lobby exteriors are fully glazed and kept free of visual obstructions (e.g., no tall plants).
- **Hollybridge Walkway:** The proposed public walkway along the project's east frontage is separated from the fronting street by the existing drainage canal and proposed park. Pedestrians are not required to take the walkway, and may instead use the regular sidewalks to move around the building and the park. Within the site, the walkway is designed to provide pedestrians with clear sightlines from River Road through to the Elmbridge/Hollybridge intersection and, except adjacent to the canal, stairs, ramps, and unobstructed views will link the walkway with Hollybridge Way. In addition, surveillance of the walkway will be provided by retail uses along its length at grade, together with two residential lobbies, the live/work lobby, the elevator lobby for the project's commercial parking, and, above grade, the project's live/work units. Lighting of the walkway will provided at night to enhance pedestrian safety and the walkway's visibility from Hollybridge Way.

Live/Work Dwellings

The subject development includes 70 live/work units on levels 2-7, accessed via a private elevator, lobby, and corridors (i.e. not shared with project's "conventional" residential units).

- The proposed form of development is permitted under Richmond's Zoning Bylaw; and, is consistent with the CCAP, under which it is understood that live/work dwellings:
 - a) Are intended to accommodate a range of professional, office, arts, and business activities;
 - b) Must each contain a designated work space that is at least 30 m² (323 ft²) in size and no larger than 2/3 of the unit's total area, demised from the unit's residential space by a wall or change in storey, and secured via a covenant registered on title; and

- c) Should not share elevators, lobbies, or corridors intended for use by customers and others accessing the live/work units for business purposes with circulation spaces intended for use by residents of a development's "conventional" residential units.
- Furthermore, where units comply with the CCAP directions, it is understood that the demised work portion of each live/work unit and any elevators, lobbies, and corridors intended for the exclusive use of the live/work units (i.e. not shared with conventional residential units) is required for "commercial" purposes (e.g., office, studio, etc.) and will, therefore, be counted as such for the purpose of floor area ratio (FAR) calculations.
- Based on this, the developer proposes the following floor areas:
 - a) 45% residential (excluding in-suite work spaces): 4,012 m² (43,188 ft²)
 - b) 55% commercial: 4,940 m² (53,180 ft²), including -
 - In-suite work spaces: 2,808 m² (30,225 ft²)
 - Shared circulation: 2,132 m² (22,955 ft²)
 - c) 100% (total) live/work: 8,952 m² (96,368 ft²)
- Note that the subject live/work units share level 5 with the project's proposed indoor/outdoor amenity spaces. These spaces are intended for the use of all the project's residents. In order for residents in two of the project's three towers to access these amenity spaces, they must cross the live/work building's level 5 corridor at two points (next to the tower elevators). Staff have reviewed this situation and have determined that there is no reasonable alternative routes by which to link the two towers with the amenity spaces. Given this and the small portion of the corridor that is affected, staff do not think this will set an undesirable precedent for future projects and are supportive of the subject development.

Additional Considerations:

Via the subject rezoning (RZ 07-380222), the following considerations have been secured:

- Land dedication for widening River Road;
- Rights-of-ways to facilitate the proposed service lane, sidewalk widening, the Hollybridge Canal walkway, park expansion and tree protection, and 40 parking spaces secured for "public" use to the satisfaction of the City;
- Covenants with regard to Industrial Noise (as the site is in a transitional industrial area), Flood indemnity, Aircraft Noise Sensitive Development, and Live/Work Dwellings for the purpose of securing required commercial areas.
- Housing Agreement (which received third reading of Council on June 28, 2010) for the provision of 20 low-end market rental units (i.e. 16 one-bedroom and 4 two-bedroom units on levels 2-8 of the project's southwest tower), at the sole cost of the developer, as per Richmond's Affordable Housing Strategy (*NOTE: The proposed 20 units is an increase from the 18 identified at rezoning stage, and was made possible by more efficient design at DP stage.*);
- Voluntary developer contributions towards transportation improvements (e.g., bus shelter, special crosswalk, traffic signals, future realignment of Lansdowne Road at Hollybridge Way), Child Care Reserve (i.e. \$447,104), Public Art Reserve (i.e. \$210,300), and community planning program (i.e. \$87,626);
- Legal agreements to place limitations on the assignment of tandem parking spaces;
- Tree protection; including fencing and monitoring requirements;
- Servicing Agreements (SA) and Letters of Credit for the design and construction of transportation, parks, and engineering works, at the developer's sole cost, to the satisfaction of the City; and

- Sustainability measures, based on LEED Silver Equivalency, as per the attached LEED Scorecard (**Attachment 3**), including, among other things:
 - a) Green roofs (50% of total roof area), including rooftop agricultural plots for the use of residents;
 - b) Pre-wiring of 24 (3+%) parking stalls for future electric vehicle (plug-in and pay) charging stations within the project's commercial parking area (including separate metering);
 - c) District Energy Utility (DEU) features to facilitate the possible hook-up of the project's ground floor commercial space to a future City DEU system;
 - d) Protection and enhancement of the Hollybridge Canal's existing 5 m RMA and "significant (heritage) trees"; and
 - e) Establishment of "eco-amenity" in the form of a "rain garden" stormwater management system within the proposed park.

Conclusions

The subject development is consistent with Richmond's objectives for the subject property and the Oval Village, as set out in the City Centre Area Plan (CCAP). The proposed project's distinctive, mid-rise streetwall buildings, varied tower heights, pedestrian-oriented commercial streetscapes, mix of uses, and extensive on-site amenities, together with the developer's proposed park, "rain garden", and frontage improvements (as per RZ 07-380222 and the applicable Servicing Agreements), will complement the Richmond Oval and help establish the emerging Village area as a high-amenity, high-quality urban community. On this basis, staff support the proposed development and recommend that a Development Permit be issued.



Suzanne Carter-Huffman
Senior Planner/Urban Design

SPC:cas

Attachments:

1. Development Application Data Sheet
2. Advisory Design Panel Meeting Minutes & Applicant's Response
3. LEED (Silver) Equivalent Scorecard (DP 10-520511)
4. Illustrative Development Concept for Neighbouring Site (6851 & 6871 Elmbridge Way)
5. Hollybridge Way – Locations of Possible Road Right-of-Way Encroachments (as per SA 10-534017)

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

- Receipt of a Letter-of-Credit for landscaping in the amount of \$755, 628.
- Registration of a covenant on title on the subject site to restrict the number of commercial parking spaces that may be designated by the owner and /or operator (i.e. sold, leased, reserved, or otherwise assigned) for the exclusive use of employees, specific businesses, or specific people to a maximum of 50% of the project's required number of commercial parking spaces, as determined based on the Zoning Bylaw (i.e. 133 spaces), and requiring, to the satisfaction of the City, that the residual 50% of required commercial parking spaces that are not designated for such uses:
 - a) Are located on the project's lowest parking level (Level P1);
 - b) Are located immediately adjacent to and are accessible by vehicles and pedestrians from the area secured via a City right-of-way for "public" parking purposes (as per RZ 07-380222);
 - c) Are available for use by shoppers and any other visitors for the same hours as the City "public" parking spaces;
 - d) Do not include tandem parking spaces;
 - e) Include a proportional number of handicapped and small car parking spaces as per the Zoning Bylaw (i.e. no more than 50% of the Bylaw allowance); and
 - f) Comply with aisle widths, parking space sizes, and all other requirements, as per the Zoning Bylaw.

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

- Encroachment agreement(s) for any portions of the building that project into the Hollybridge Road right-of-way to facilitate the design and construction of the Hollybridge Canal Linear Park, to the satisfaction of the City, as determined via SA 10-534017.
- Incorporation of accessibility measures in Building Permit (BP) drawings as determined via the rezoning and Development Permit (DP) processes, including the design and construction of:
 - a) All affordable housing units secured via a Housing Agreement to Basic Universal Housing standards;
 - b) 15 market residential units to Convertible Housing standards; and
 - c) All other residential and live/work units to include features supportive of aging in place (e.g., lever handles, blocking in walls to accommodate the future installation of grab bars).
- The applicant is required to obtain a Building Permit for any construction hoarding associated with the proposed development. If construction hoarding is required to temporarily occupy a street, or any part thereof, or occupy the air space above a street or any part thereof, additional City approvals and associated fees may be required as part of the Building Permit. *For further information on the Building Permit, please contact Building Approvals Division at 604-276-4285.*
- Submission of a construction traffic and parking management plan to the satisfaction of the City's Transportation Division (<http://www.richmond.ca/services/ttp/special.htm>).
- Submission of a final District Energy Utility (DEU) report by a registered professional, qualified in district energy systems and their implementation, confirming that the building design satisfies the objectives and recommendations identified, to the satisfaction of the City, prior to Development Permit issuance.
- Submission of an acoustical report by a registered professional, qualified in acoustics, confirming that the building design includes sufficient noise mitigation measures to ensure compliance with the standards set out in Richmond Official Community Plan (OCP), Section 5.4, Noise Management
- Monitoring of existing trees, habitat, and sediment, both on the subject site and within the City's designated Hollybridge Canal natural area and park. In the event that some trees do not survive, mature replacement trees are to be planted to the satisfaction of the City.



City of Richmond
6911 No. 3 Road
Richmond, BC V6Y 2C1
www.richmond.ca

Development Application
Data Sheet
Development Applications Division

DP 10-520511

Address: 6951 Elmbridge Way

Applicant: Onni Group of Companies. Owner: 6951 Elmbridge Way Ltd., Inc. No. 0597673

Planning Area(s): City Centre Area (Oval Village)

Floor Area 34,730 m² (373,832 ft²), net of standard zoning exclusions (e.g., parking)

| | Existing | Proposed |
|--|---|--|
| Site Area | 11,707 m ² (126,017 ft ²) | Net Site: 11,677 m ² (125,689 ft ²) River Road Dedication: 30.5 m ² (328 ft ²) |
| CCAP Designation | <ul style="list-style-type: none"> Urban Centre T5 (45 m): 2 FAR residential and/or commercial Village Centre Bonus: 1 FAR, limited to non-residential uses | No change |
| Zoning | Industrial Business Park (IB1) | Residential/Limited Commercial (RCL3): <ul style="list-style-type: none"> Uses: Residential, commercial, mixed-use, etc. Density: 3 FAR max. (Residential: 2 FAR max.) Height: 47 m geodetic max. |
| Aircraft Noise Sensitive Development Designation | "Area 2": Aircraft noise sensitive uses are permitted, EXCEPT: <ul style="list-style-type: none"> Residential uses are limited to 2/3 of max. buildable floor area | Maximum Permitted Buildable Floor Area, as per RCL3: <ul style="list-style-type: none"> 2/3 Residential (2 FAR): 23,354 m² (251,379 ft²) 1/3 Non-residential (1 FAR): 11,677 m² (125,689 ft²) Total (3 FAR): 35,031 m² (377,068 ft²) |
| Land Uses | Industrial Business Park (warehouse & accessory office) | Proposed Floor Area: <ul style="list-style-type: none"> Residential (2 FAR): 23,354 m² (251,379 ft²) Commercial (0.97 FAR): 11,376 m² (122,453 ft²) <ul style="list-style-type: none"> - Ground floor retail: 6,232 m² (67,080 ft²) - Commercial in live/work units: 5,144 m² (55,373 ft²) Total (2.97 FAR): 34,730 m² (373,832 ft²) |
| Heritage: Significant Trees | 9 "significant trees" along the Hollybridge Canal (attributed to Samuel Brighouse) | All "significant (heritage) trees" will be protected & enhanced, at the developer's cost, as part of the Hollybridge Canal park. |
| Riparian Management Area | 5 m RMA along the open portion of the Hollybridge Canal | The RMA will be protected & enhanced, at the developer's cost, as part of the Hollybridge Canal park. |
| Number of Dwellings | Nil | <ul style="list-style-type: none"> Apartment (condominium) units: 234 Affordable (low-end market rental) units: 20 Live/work dwellings: 70 Total: 324 |
| Accessible Dwellings | Nil | <ul style="list-style-type: none"> Basic Universal Housing: 20 (100% Affordable Housing) Convertible Units: 15 (5% non-Affordable Housing) Total: 35 (11% of total units) |

| | Bylaw Requirement | Proposed | Variance |
|-------------------|--|--|----------------|
| Floor Area Ratio: | 3.0 FAR (Residential: 2.0 FAR max.) | 2.97 FAR, including: Residential: 2.0 FAR Commercial: 0.97 FAR | None permitted |
| Lot Size: | Min. 45.0 m wide Min. 40.0 m deep Min. 4,000 m ² area | 96 m wide 156 m deep 11,677 m ² area | None |
| Lot Coverage: | Buildings & Roofs over Parking: Max. 90% | Buildings & Roofs over Parking: 79% | None |
| Height: | Max. 47.0 m geodetic | Max. 47.0 m geodetic | None |

| Bylaw Requirement | | Proposed | Variance |
|--|--|---|---|
| Setback @ River Road: | <p><u>For buildings:</u></p> <ul style="list-style-type: none"> 6.0 m min, <u>except</u> this may be reduced to 3.0 m if the City is satisfied with the building/sidewalk interface & there is no street-fronting loading or driveway | <p><u>Proposed buildings:</u></p> <ul style="list-style-type: none"> At/above grade): 3.0 m (No variance.) Below grade: Nil (Variance required.) <p><u>Proposed projections:</u></p> <ul style="list-style-type: none"> Awnings & Canopies: No setback (No variance, as used for weather protection.) Balconies & Bay Windows: 2.6 m min. from the property line (No variance.) | <p><u>Along all street frontages:</u></p> <ul style="list-style-type: none"> Reduce the minimum allowable building setback for portions of the building situated below finished grade from 3.0 m to 0 m (for concealed parking) <p><u>Along Hollybridge Way:</u></p> <ul style="list-style-type: none"> Reduce the minimum allowable building setback from 3.0 m to 2.0 m (for the corner of the southeast tower) Increase the maximum allowable projection for: <ul style="list-style-type: none"> a) Balconies from 1.0 m to 2.6 m (for the southeast tower) b) Architectural features from 0.6 m to no setback (for the Lansdowne Road street-end feature) |
| Setback @ Elmbridge Way: | <p><u>Permitted projections:</u></p> <ul style="list-style-type: none"> Architectural Features: 0.6 m max. Balconies & Bay Windows: 1/3 of required min. setback depth (i.e. allowed to project to 2 m from a property line abutting a street) Cantilevered Roofs: 1.2 m max Awnings & Canopies: No setback required if these elements are used for weather protection & are approved via a DP process | <p><u>Proposed buildings:</u></p> <ul style="list-style-type: none"> At/above grade): 3.0 m (No variance.) Below grade: Nil (Variance required.) <p><u>Proposed projections:</u></p> <ul style="list-style-type: none"> Awnings & Canopies: No setback (No variance, as used for weather protection.) | |
| Setback @ Hollybridge Way: | | <p><u>Proposed buildings:</u></p> <ul style="list-style-type: none"> At/above grade): 3.3 m, except 2.0 m at the corner of the southeast tower (Variance required.) Below grade: Nil (Variance required.) <p><u>Proposed projections:</u></p> <ul style="list-style-type: none"> Architectural Feature: No setback provided at the Lansdowne Road street-end feature (Variance required.) Balconies: 2.6 m at the corner of the southeast tower (Variance required.) Awnings & Canopies: No setback (No variance, as used for weather protection.) | |
| Setback @ Lane: | Nil | <ul style="list-style-type: none"> Building: 0 m to 6.0 m (to right-of-way) Parking: Nil (to right-of-way) | None |
| Off-Street Parking: (includes Live/Work Dwellings) | <p><u>Parking Spaces:</u></p> <ul style="list-style-type: none"> Residents: 379 Visitors: 64 Commercial: 264 Total: 707 | <p><u>Parking Spaces:</u></p> <ul style="list-style-type: none"> Residents: 406 (379 required) Public: 40 (As per RZ 07-380222) Commercial: 265 (264 required) <u>Note:</u> Covenant limits parking for specific businesses/people/employees to 50%. Total: 711 (683 required) | None |
| Handicapped Parking: | 15 (2% of total parking) | 15 (2% of total proposed parking) | None |
| Tandem Parking: | Permitted, provided that min. 0.9 sp./unit are provided for Affordable Housing & min. 1 sp./unit for other units | <ul style="list-style-type: none"> 60 units @ 2 sp./unit = 120 (tandem) 23 units @ 2 sp./unit = 46 (NOT tandem) 221 units @ 1 sp./unit = 221 20 Affordable Units @ 0.9 sp./unit = 19 Total residential sp. = 406 | None |
| Small Car Parking: | 50% max. of total parking | 227 (32% of total parking) | None |
| Loading: | <ul style="list-style-type: none"> Residential: 2@ WB-17 (SU-9) Commercial: 2@ WB-17 (SU-9) | <ul style="list-style-type: none"> 4 @ WB-17 (SU-9) 1 @ SU-9 | None |
| Bicycle Parking: | <ul style="list-style-type: none"> Class 1 (secured): 428 Class 2 (unsecured): 98 | <ul style="list-style-type: none"> Class 1 (secured): 455 Class 2 (unsecured): 99 | None |
| Indoor Amenity Space (CCAP): | For projects exceeding 200 units: <ul style="list-style-type: none"> Min. 640 m² (i.e. 2 m²/unit), but may be reduced if a special amenity is provided (e.g., pool) | 1,168 m ² , including a lap pool, squash courts, gym & meeting rooms | None |
| Outdoor Amenity Space: | <ul style="list-style-type: none"> OCP: 1,920 m² @ 6 m²/unit for socializing, play space, etc. CCAP: 1,167 m² @ 10% of net site area for garden plots, etc. Total: 3,087 m² | <ul style="list-style-type: none"> Podium Rooftop (Levels 3 & 5): 2,757 m² Hollybridge Walkway: 4,090 m² Total: 6,847 m² | None |
| Green Roofs: | <ul style="list-style-type: none"> CCAP encourages "green roofs", except on towers & as required for amenity space. | <ul style="list-style-type: none"> As per LEED Silver standards, 50% of the project's roof area will be a combination of "extensive" & "intensive" green roofs. | None |

Other: Tree replacement compensation required for any loss of significant trees.

**Excerpt from the Minutes of the
Advisory Design Panel Meeting**

Wednesday, May 19, 2010 – 4:00 p.m., Richmond City Hall

DP 10-520511: MIXED-USE HIGH RISE DEVELOPMENT WITH THREE RESIDENTIAL TOWERS, RETAIL AT GRADE, AND APPROXIMATELY 320 RESIDENTIAL & LIVE/WORK UNITS

ARCHITECT: IBI/HB Architects
PROPERTY LOCATION: 6951 Elmbridge Way (Oval Village, City Centre)

Panel Decision

It was moved and seconded:

That the Advisory Design Panel supports DP 10-520511 moving forward to the Development Permit Panel, taking into consideration the following:

- A. The applicant making the following improvements to the project design:
1. Design development to introduce a roof top element for the low tower to better relate to the taller towers. *Improved – The roof of the lower tower (Tower 1) has been redesigned to include a 2-storey penthouse and other features similar to the other two towers.*
 2. Design development to integrate signage opportunities into the building and ensure that scale of signage relates to the surrounding area. *Improved – A signage package has been prepared for each of the project's three street frontages, taking into account the unique opportunities (e.g., River Road "high-street") and challenges (e.g., view obstruction caused by the Hollybridge Canal natural area) of each, with special attention to how the signage can enhance the pedestrian experience of the streetscape.*
 3. Reconsider super graphics due to impact on transparency of edge. *Improved – No super graphics are proposed. The revised concept relies instead on a variety of pedestrian-oriented façade, projecting, and low pylon signs in combination with weather protection and distinctive façade treatments (e.g., bold colours, projecting display windows).*
 4. Design development to strengthen the relationship and expression of the water-giving rain garden and the water-receiving canal. *Improved – Via SA 10-534017 (park), views of the outflow from the "rain garden" to the canal will be enhanced with planting, earthworks, and related landscape treatments.*
 5. Design development to strengthen the character of the corner experience [of the southeast tower (Tower 3) as seen from the Elmbridge Way/Hollybridge Way intersection]. *Improved – The addition of patterned concrete and a contrasting colour on the tower's "fins" add a distinctive vertical element that helps to mark the corner and balance the project's boldly-patterned horizontal streetwalls.*
 6. Design development to strengthen the architectural expression at the intersection of the tower and the podium. *Improved – Features have been incorporated to help create a stronger visual break between the project's colourful horizontal streetwall "frames" and more glassy building/tower facades behind (e.g., stepping back the mid-rise building above the "frames" and at the corners, introducing a deeper overhang along the top of mid-rise) and adding more visual interest to the towers (e.g., contrasting colours and lighting).*
 7. Provide an environmental agenda for the development. *Improved – The design team has continued to advance the project's environmental objectives introduced via RZ 07-380222. A LEED checklist is attached demonstrating equivalency to LEED Silver, as per CCAP policy. Of note, the project includes a 50/50 ratio of solid-to-glass on its façades to reduce solar heat gain, extensive and intensive green roofs, pre-design for hook-up to a District Energy Utility (DEU) for the project's ground floor commercial units, and a stormwater management system designed to improve water quality by directing the project's run-off through the "rain garden" proposed for the Hollybridge Canal park.*

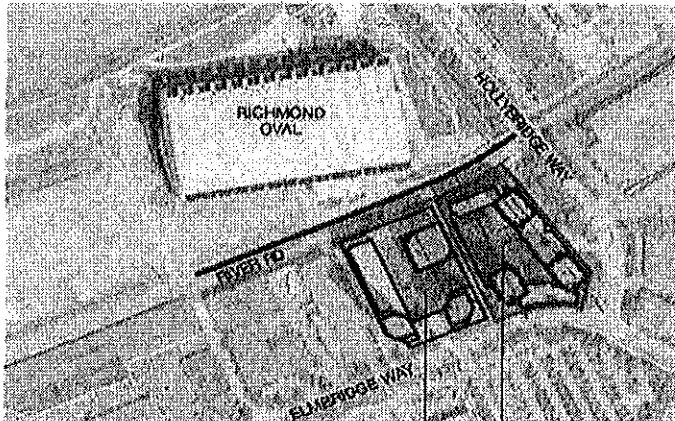
B. The applicant taking into consideration the following comments:

8. Consider providing a transitional material between the horizontal and “tree” elements along the service lane elevation. *Improved – The contrast between the precast concrete “tree” elements and horizontal painted concrete panels is enhanced with a railing system incorporating coloured glass panels.*
9. Consider improving the termination edge treatment of the horizontal siding at the tower intersection. *Improved – Detailing has been refined at this interface.*
10. Consider increasing the dramatic expression of the tower fin. Consider an alternate or contrasting treatment or material to accentuate the curved fin. *Improved - The towers fins have been re-proportioned, and*
11. *lighting and contrasting colour have been added, to strengthen their visual impact.*
12. Consider increasing the integration of active and non-active uses on the roof deck to terrace in courts or other usable spaces. *Improved – The roof deck design includes garden plots, children’s play space, lawn, seating areas, trees, decorative planting, and a raised deck with direct access to the indoor pool.*
13. Ensure that pylon signage does not block wayfinding features for the visually impaired. *Improved – Along Elmbridge Way, pylon signs are integrated with the landscape terrace and stairs linking the retail units with the public sidewalk, so as to be visible without conflicting with pedestrians. Pylon signs elsewhere have been eliminated.*
14. Consider rationalizing building form to address sun exposure on each side independently. *Improved - The project has a 50/50 ratio of solid-to-glass on its façades, with more clear glazing on its shady north side to take advantage of views and less where solar heat gain is an issue.*
15. Consider a sophisticated building material choice to contain the garden plots. *Improved – The garden plots are contained within one area of the rooftop for convenience and to reduce problems of soil being tracked into other areas. The quality of materials and design features used to define the perimeter of the garden plot area are consistent with those used elsewhere on the roof deck.*
16. Consider reversing the landscape approach to wrap the deck with dense planting. *Improved – The transition between the raised (pool) deck and the surrounding outdoor space will be handled via a set of broad seating steps, foundation planting, and lawn in order to make the deck a special landscape feature while enhancing the flow between it and other outdoor amenities/spaces.*
17. Encourage the design team to challenge the approach to the Hollybridge canal to strengthen the walkway experience, the interface between the indoor and outdoor spaces and the canal landscape. *Improved – Via the subject DP application and SA 10-534017 (park), more opportunities for public access to the park, viewing, and seating have been provided on-site and off along the walkway and park edge.*
18. Consider lighting design for night view of iconic element [at the visual terminus of Lansdowne Road]. *Improved – Lighting will be provided via LED lighting incorporated into the feature element, and (when in use) the double-height meeting room contained within it.*
19. Consider locating usable spaces behind the iconic [Lansdowne Road terminus] element. Consider locating
20. & usable or atrium spaces behind the iconic [Lansdowne Road terminus] element. *Improved – A double-*
21. *height meeting room (serving the live/work units) and a rooftop winter garden are contained within the element.*
20. Consider the architectural character of the towers and the architectural character of the podium and review their relationship. *Improved – The project places its emphasis on the pedestrian experience by creating bold, colourful streetwalls and complementary architectural and landscape features near grade, rising up to the glassier, more transparent towers above.*
22. Consider further developing the living wall component of the iconic [Lansdowne Road terminus] element. *Improved – The element incorporates planters (with irrigation) at levels 3 and 5, from which cables crisscrossing the structure will direct and support ivy growth.*

23. Consider opportunities to integrate public art particularly at Lansdowne terminus location. *Under consideration – This will be addressed via the park design (SA 10-534017) and Public Art Program.*
24. Ensure convertibility of all affordable units and 5% of all the other residential units of the project. *Improved – 100% of the units will include “aging in place” features (e.g., lever door handles, blocking in walls for grab bars), plus 11% of the project’s residential units (35 units) will be accessible, including:*
- *100% of affordable (low-end market rental) housing (20 units) will meet Richmond’s “Basic Universal Housing” standards (as per the Zoning Bylaw); and*
 - *5% of market housing (15 units) will meet Richmond’s “Convertible Housing” standards (i.e. provides larger washrooms and kitchens and other features to allow for ready conversion for wheelchair use).*

CARRIED

Illustrative Development Concept for Neighbouring Site (6851 & 6871 Elmbridge Way)

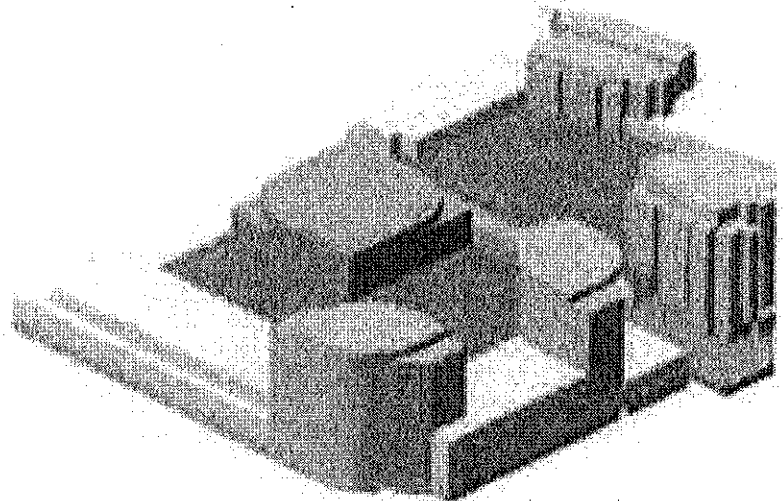
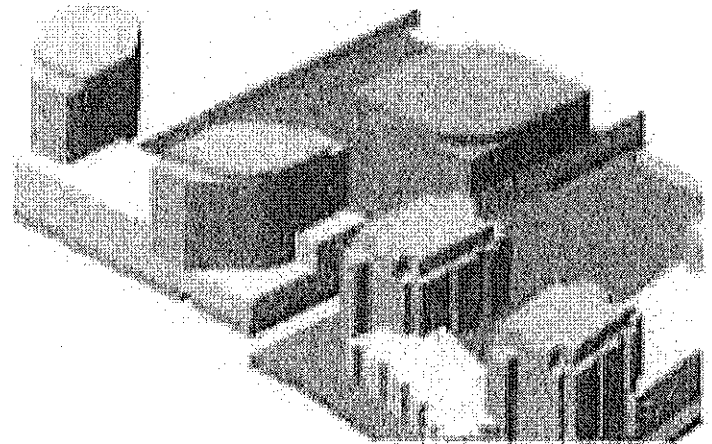
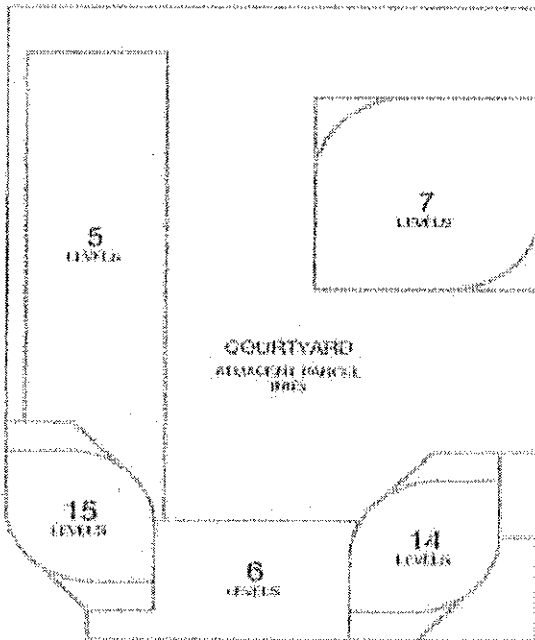


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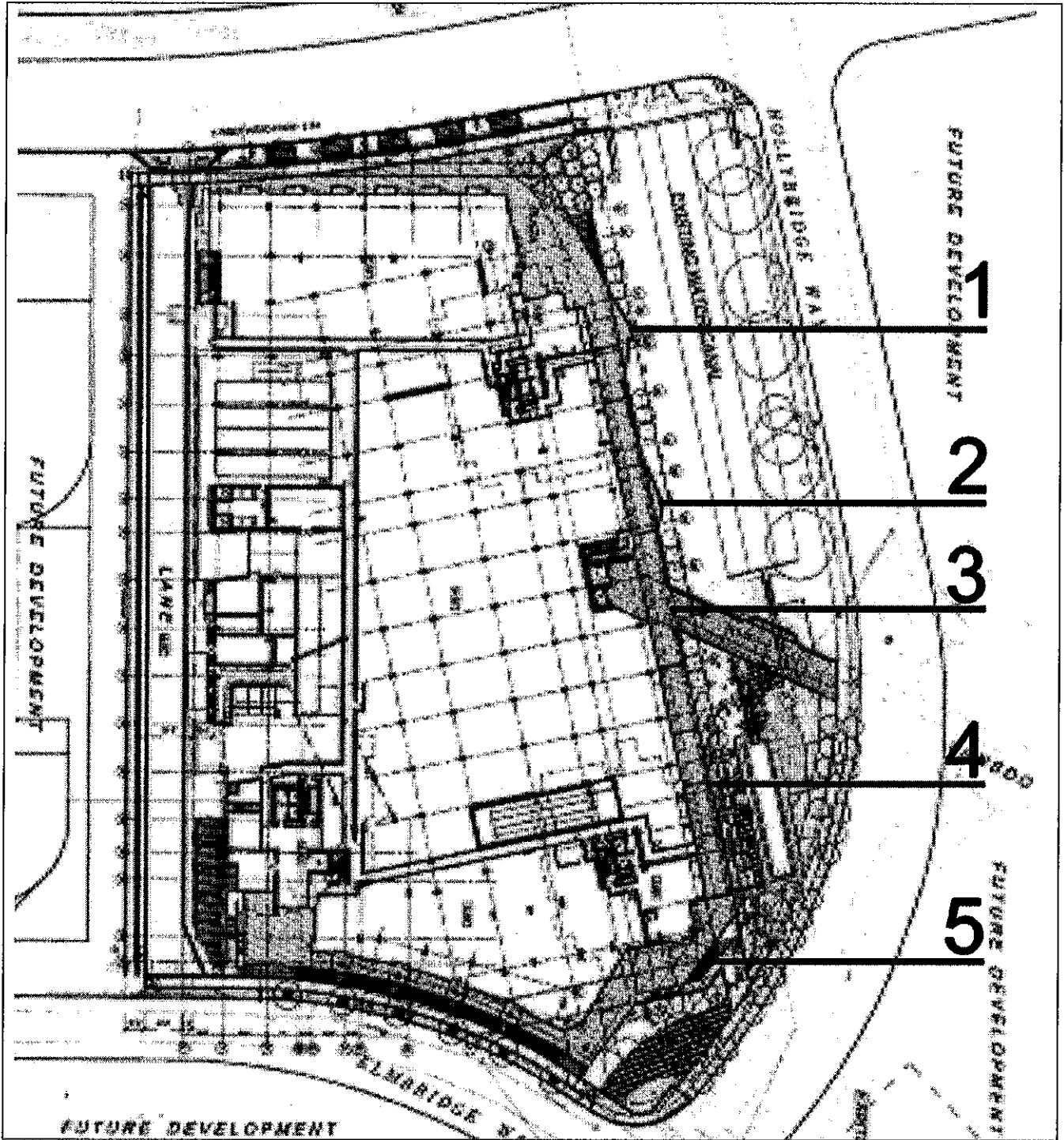
| | COMM AREA | RES AREA | UNITS | TOTAL AREA |
|----------------------------|---------------|---------------|-------|---------------|
| LEVEL 19 | | 7000 | 8 | 7000 |
| LEVEL 14 | | 14000 | 17 | 14000 |
| LEVEL 13 | | 14000 | 17 | 14000 |
| LEVEL 12 | | 14000 | 17 | 14000 |
| LEVEL 11 | | 14000 | 17 | 14000 |
| LEVEL 10 | | 14000 | 17 | 14000 |
| LEVEL 9 | | 14000 | 17 | 14000 |
| LEVEL 8 | | 14000 | 17 | 14000 |
| LEVEL 7 | 14000 | 14000 | 17 | 28200 |
| LEVEL 6 | 14000 | 24400 | 29 | 38000 |
| LEVEL 5 | 14000 | 43700 | 51 | 58300 |
| LEVEL 4 | 14000 | 43700 | 51 | 58300 |
| LEVEL 3 | 10000 | 28000 | 34 | 38000 |
| LEVEL 2 | 10000 | 28000 | 34 | 38000 |
| LEVEL 1 | 71348 | 8182 | | 77638 |
| P1 | | | | |
| TOTAL AREA PROVIDED | 149748 | 209492 | | 449238 |
| TOTAL AREA REQ'D | 149748 | 209492 | | 449238 |
| DIFF | 0 | 0 | | 0 |
| FAR | 1 | 2 | | 3 |

ADJACENT SITE

6951 ELMBRIDGE WAY



Hollybridge Way – Locations of Possible Road Right-of-Way Encroachments (as per SA 10-534017)



| Location | Purpose |
|----------|---|
| 1 | Viewing/seating platform. (May not encroach into 5 m Riparian Management Area.) |
| 2 | Viewing/seating platform. (May not encroach into 5 m Riparian Management Area.) |
| 3 | Pedestrian "bridge" on axis with Lansdowne Road. |
| 4 | Seating, steps, and related features extending from #4 to #5. |
| 5 | Pedestrian walkway, handicapped ramp, and related features. |



No. DP 10-520511

To the Holder: ONNI GROUP OF COMPANIES.
Property Address: 6951 ELMBRIDGE WAY
Address: 300 – 550 ROBSON STREET, VANCOUVER, BC, V6B 2B7

1. This Development Permit is issued subject to compliance with all of the Bylaws of the City applicable thereto, except as specifically varied or supplemented by this Permit.
2. This Development Permit applies to and only to those lands shown cross-hatched on the attached Schedule "A" and any and all buildings, structures and other development thereon.
3. The "Richmond Zoning Bylaw 8500", as amended by zoning amendment Bylaw No. 8604, is hereby varied to:
 - a) Reduce the minimum allowable front yard and exterior side yard setback along Elmbridge Way, Hollybridge Way, and River Road for portions of the building that are situated below finished grade from 3.0 m to no setback required;
 - b) Reduce the minimum allowable exterior side yard setback along Hollybridge Way, south of Lansdowne Road, from 3.0 m to 2.0 m;
 - c) Increase the maximum allowable projection for balconies projecting into an exterior side yard setback along Hollybridge Way, south of Lansdowne Road, from 1.0 m to 2.6 m; and
 - d) Increase the maximum allowable projection for architectural features projecting into an exterior side yard setback along Hollybridge Way, at the end of Lansdowne Road, from 0.6 m maximum to no setback required.
4. Subject to Section 692 of the Local Government Act, R.S.B.C.: buildings and structures; off-street parking and loading facilities; roads and parking areas; and landscaping and screening shall be constructed generally in accordance with Plans #1 to #14 attached hereto.
5. Sanitary sewers, water, drainage, highways, street lighting, underground wiring, and sidewalks, shall be provided as required.
6. As a condition of the issuance of this Permit, the City is holding the security in the amount of \$755, 628. 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.

Development Permit

No. DP 10-520511

To the Holder: ONNI GROUP OF COMPANIES.

Property Address: 6951 ELMBRIDGE WAY

Address: 300 – 550 ROBSON STREET, VANCOUVER, BC, V6B 2B7

7. If the Holder does not commence the construction permitted by this Permit within 24 months of the date of this Permit, this Permit shall lapse and the security shall be returned in full.
8. The land described herein shall be developed generally in accordance with the terms and conditions and provisions of this Permit and any plans and specifications attached to this Permit which shall form a part hereof.

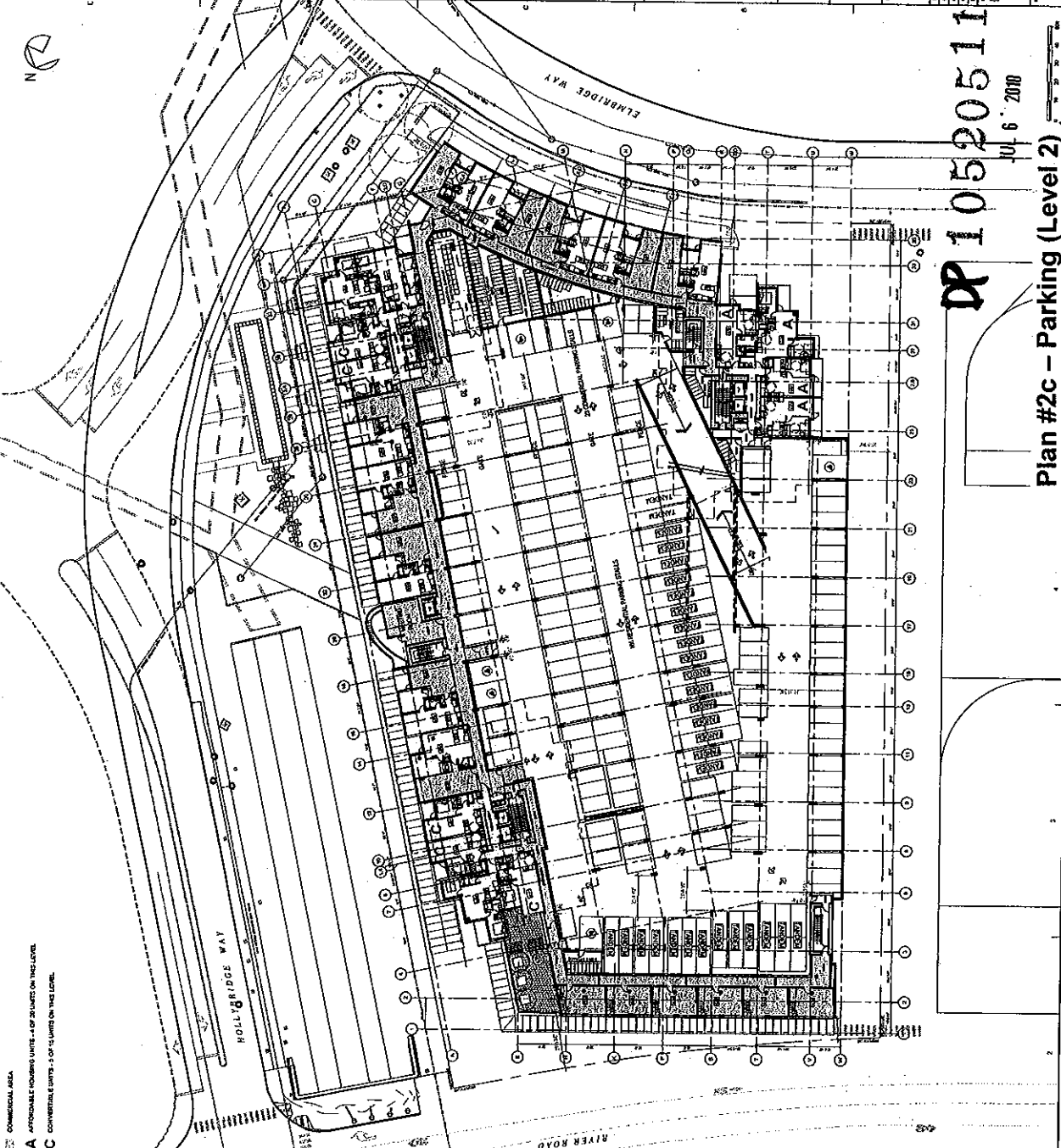
This Permit is not a Building Permit.

AUTHORIZING RESOLUTION NO.
DAY OF

ISSUED BY THE COUNCIL THE

DELIVERED THIS DAY OF

MAYOR



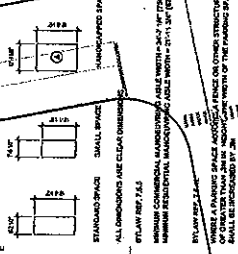
LEGEND

COMMERCIAL AREA

A APPROXIMATE HOUSING UNITS - 4 OF 25 UNITS ON THIS LOT

C CONVENTIONAL UNITS - 5 OF 15 UNITS ON THIS LOT

89 STANDARD SPACES
 52 SMALL SPACES
 6 HANDICAPPED SPACES
 31 TANDEN X12 = 62 SPACES*
TOTAL = 209 SPACES*



ALL DIMENSIONS ARE CLEAR DIMENSIONS
 (BY LAW REF. 7.4.5)

MINIMUM COMMERCIAL MANEUVERING SPACE WIDTH SHALL BE 20'-0" (BY LAW REF. 7.4.5)

MINIMUM RESIDENTIAL MANEUVERING SPACE WIDTH SHALL BE 20'-0" (BY LAW REF. 7.4.5)

MINIMUM CLEARANCE HEIGHT SHALL BE 7'-0" (BY LAW REF. 7.4.5)

MINIMUM CLEARANCE HEIGHT OF OVERHEAD TRUCKS SHALL BE 10'-0" (BY LAW REF. 7.4.5)

MINIMUM CLEARANCE HEIGHT OF OVERHEAD TRUCKS SHALL BE 10'-0" (BY LAW REF. 7.4.5)

MINIMUM CLEARANCE HEIGHT OF OVERHEAD TRUCKS SHALL BE 10'-0" (BY LAW REF. 7.4.5)

MINIMUM CLEARANCE HEIGHT OF OVERHEAD TRUCKS SHALL BE 10'-0" (BY LAW REF. 7.4.5)

DP 10520511
 JUL 6 2010
Plan #2c - Parking (Level 2)

Legend

| | |
|---------------------------|-------------|
| Symbol | Description |
| Circle with dot | Tree |
| Square with dot | Shrub |
| Triangle with dot | Grass |
| Diamond with dot | Water |
| Circle with cross | Light |
| Square with cross | Sign |
| Circle with star | Structure |
| Square with star | Structure |
| Circle with dot and cross | Structure |
| Square with dot and cross | Structure |
| Circle with dot and star | Structure |
| Square with dot and star | Structure |

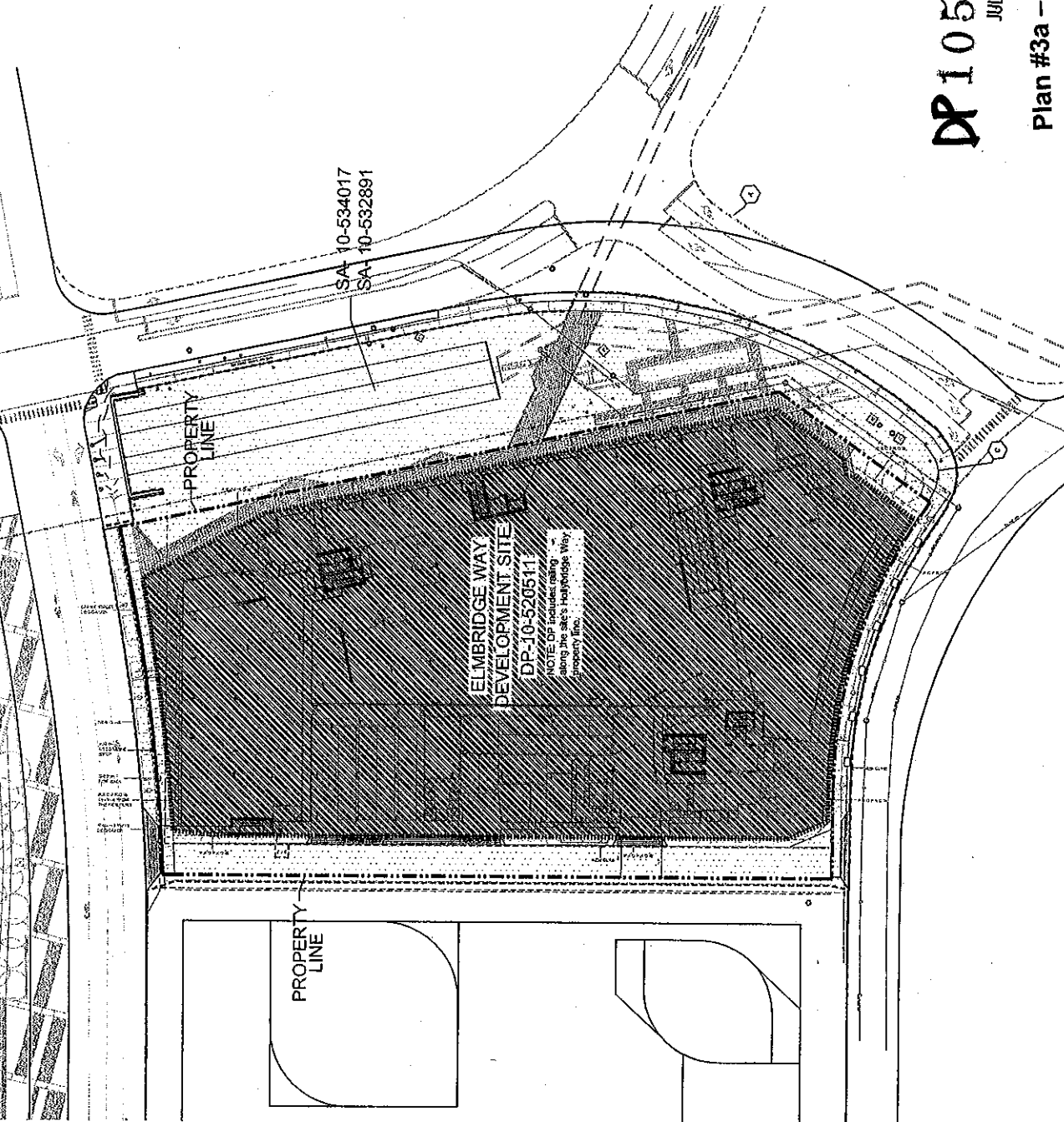
oni
 ONI Consulting LLC
 4300-540 Highway 101
 Vancouver, BC V6S 2B7

MATERIALS KEY

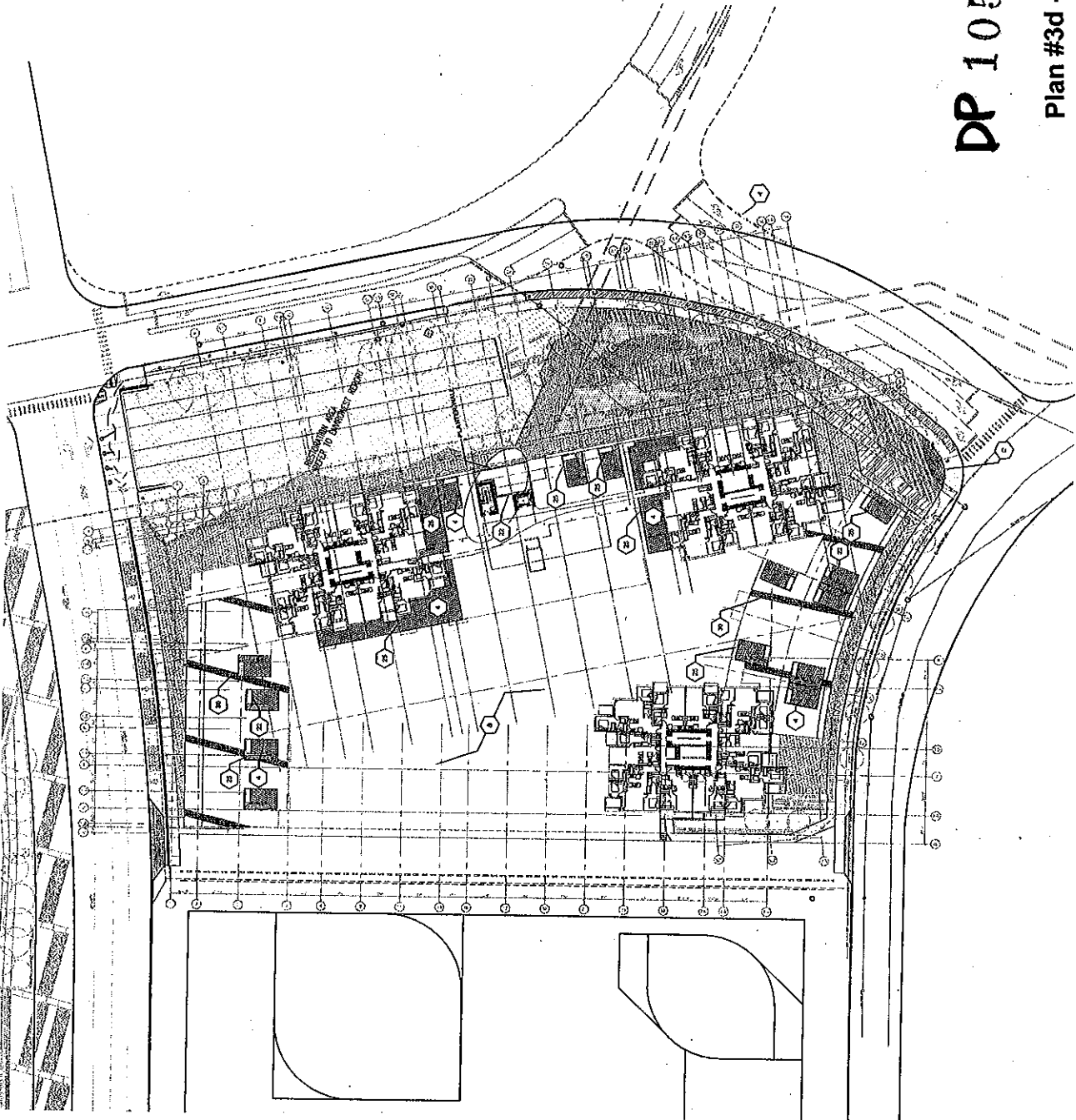
| KEY | DESCRIPTION | NOTES |
|-----|----------------|-------|
| 1 | As-Constructed | |
| 2 | As-Constructed | |
| 3 | As-Constructed | |
| 4 | As-Constructed | |
| 5 | As-Constructed | |
| 6 | As-Constructed | |
| 7 | As-Constructed | |
| 8 | As-Constructed | |
| 9 | As-Constructed | |
| 10 | As-Constructed | |
| 11 | As-Constructed | |
| 12 | As-Constructed | |
| 13 | As-Constructed | |
| 14 | As-Constructed | |
| 15 | As-Constructed | |
| 16 | As-Constructed | |
| 17 | As-Constructed | |
| 18 | As-Constructed | |
| 19 | As-Constructed | |
| 20 | As-Constructed | |
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| 23 | As-Constructed | |
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| 33 | As-Constructed | |
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| 35 | As-Constructed | |
| 36 | As-Constructed | |
| 37 | As-Constructed | |
| 38 | As-Constructed | |
| 39 | As-Constructed | |
| 40 | As-Constructed | |
| 41 | As-Constructed | |
| 42 | As-Constructed | |
| 43 | As-Constructed | |
| 44 | As-Constructed | |
| 45 | As-Constructed | |
| 46 | As-Constructed | |
| 47 | As-Constructed | |
| 48 | As-Constructed | |
| 49 | As-Constructed | |
| 50 | As-Constructed | |

Key Notes

| | |
|----|-------------|
| 1 | DESCRIPTION |
| 2 | DESCRIPTION |
| 3 | DESCRIPTION |
| 4 | DESCRIPTION |
| 5 | DESCRIPTION |
| 6 | DESCRIPTION |
| 7 | DESCRIPTION |
| 8 | DESCRIPTION |
| 9 | DESCRIPTION |
| 10 | DESCRIPTION |
| 11 | DESCRIPTION |
| 12 | DESCRIPTION |
| 13 | DESCRIPTION |
| 14 | DESCRIPTION |
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| 37 | DESCRIPTION |
| 38 | DESCRIPTION |
| 39 | DESCRIPTION |
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| 41 | DESCRIPTION |
| 42 | DESCRIPTION |
| 43 | DESCRIPTION |
| 44 | DESCRIPTION |
| 45 | DESCRIPTION |
| 46 | DESCRIPTION |
| 47 | DESCRIPTION |
| 48 | DESCRIPTION |
| 49 | DESCRIPTION |
| 50 | DESCRIPTION |



DP 10520511
 JUL 6 2010
 Plan #3a - Landscape



Legend

| | |
|---------------------|-------------|
| Symbol | Description |
| Circle with dot | Planting |
| Square with dot | Planting |
| Triangle with dot | Planting |
| Diamond with dot | Planting |
| Circle with cross | Planting |
| Square with cross | Planting |
| Triangle with cross | Planting |
| Diamond with cross | Planting |

MATERIALS KEY

| KEY | DESCRIPTION | DETAIL SYMBOL |
|-----|------------------------------------|---------------|
| 1 | 2" Concrete (2000) Slab on Grade | (Symbol) |
| 2 | 4" Concrete (2000) Slab on Grade | (Symbol) |
| 3 | 6" Concrete (2000) Slab on Grade | (Symbol) |
| 4 | 8" Concrete (2000) Slab on Grade | (Symbol) |
| 5 | 10" Concrete (2000) Slab on Grade | (Symbol) |
| 6 | 12" Concrete (2000) Slab on Grade | (Symbol) |
| 7 | 14" Concrete (2000) Slab on Grade | (Symbol) |
| 8 | 16" Concrete (2000) Slab on Grade | (Symbol) |
| 9 | 18" Concrete (2000) Slab on Grade | (Symbol) |
| 10 | 20" Concrete (2000) Slab on Grade | (Symbol) |
| 11 | 22" Concrete (2000) Slab on Grade | (Symbol) |
| 12 | 24" Concrete (2000) Slab on Grade | (Symbol) |
| 13 | 26" Concrete (2000) Slab on Grade | (Symbol) |
| 14 | 28" Concrete (2000) Slab on Grade | (Symbol) |
| 15 | 30" Concrete (2000) Slab on Grade | (Symbol) |
| 16 | 32" Concrete (2000) Slab on Grade | (Symbol) |
| 17 | 34" Concrete (2000) Slab on Grade | (Symbol) |
| 18 | 36" Concrete (2000) Slab on Grade | (Symbol) |
| 19 | 38" Concrete (2000) Slab on Grade | (Symbol) |
| 20 | 40" Concrete (2000) Slab on Grade | (Symbol) |
| 21 | 42" Concrete (2000) Slab on Grade | (Symbol) |
| 22 | 44" Concrete (2000) Slab on Grade | (Symbol) |
| 23 | 46" Concrete (2000) Slab on Grade | (Symbol) |
| 24 | 48" Concrete (2000) Slab on Grade | (Symbol) |
| 25 | 50" Concrete (2000) Slab on Grade | (Symbol) |
| 26 | 52" Concrete (2000) Slab on Grade | (Symbol) |
| 27 | 54" Concrete (2000) Slab on Grade | (Symbol) |
| 28 | 56" Concrete (2000) Slab on Grade | (Symbol) |
| 29 | 58" Concrete (2000) Slab on Grade | (Symbol) |
| 30 | 60" Concrete (2000) Slab on Grade | (Symbol) |
| 31 | 62" Concrete (2000) Slab on Grade | (Symbol) |
| 32 | 64" Concrete (2000) Slab on Grade | (Symbol) |
| 33 | 66" Concrete (2000) Slab on Grade | (Symbol) |
| 34 | 68" Concrete (2000) Slab on Grade | (Symbol) |
| 35 | 70" Concrete (2000) Slab on Grade | (Symbol) |
| 36 | 72" Concrete (2000) Slab on Grade | (Symbol) |
| 37 | 74" Concrete (2000) Slab on Grade | (Symbol) |
| 38 | 76" Concrete (2000) Slab on Grade | (Symbol) |
| 39 | 78" Concrete (2000) Slab on Grade | (Symbol) |
| 40 | 80" Concrete (2000) Slab on Grade | (Symbol) |
| 41 | 82" Concrete (2000) Slab on Grade | (Symbol) |
| 42 | 84" Concrete (2000) Slab on Grade | (Symbol) |
| 43 | 86" Concrete (2000) Slab on Grade | (Symbol) |
| 44 | 88" Concrete (2000) Slab on Grade | (Symbol) |
| 45 | 90" Concrete (2000) Slab on Grade | (Symbol) |
| 46 | 92" Concrete (2000) Slab on Grade | (Symbol) |
| 47 | 94" Concrete (2000) Slab on Grade | (Symbol) |
| 48 | 96" Concrete (2000) Slab on Grade | (Symbol) |
| 49 | 98" Concrete (2000) Slab on Grade | (Symbol) |
| 50 | 100" Concrete (2000) Slab on Grade | (Symbol) |

onni
 ONNI Contracting LLC
 10000 Robson Street
 Vancouver, BC, V6B 0C7

6951 Glenridge Way
 HZ 07-20222

MATERIAL SERIES
 LEVEL 7

L1-03 X

Key Notes

1. See General Notes for all details.

2. All materials to be installed in accordance with the manufacturer's instructions.

3. All work to be done in accordance with the current edition of the British Columbia Building Code.

4. All work to be done in accordance with the current edition of the International Building Code.

5. All work to be done in accordance with the current edition of the International Plumbing Code.

6. All work to be done in accordance with the current edition of the International Fire Code.

7. All work to be done in accordance with the current edition of the International Electrical Code.

8. All work to be done in accordance with the current edition of the International Mechanical Code.

9. All work to be done in accordance with the current edition of the International Energy Conservation Code.

10. All work to be done in accordance with the current edition of the International Green Building Code.

DP 10520511
 JUL 6, 2010
 Plan #3d - Landscape

Legend

- Proposed Contour
- Existing Spot Elevation
- Proposed Spot Elevation
- Spot Elevation: top of stair
- Spot Elevation: bottom of stair
- Spot Elevation: top of wall
- Spot Elevation: bottom of wall
- Area Drain
- Slope

MATERIALS KEY

| KEY | DESCRIPTION | SYMBOL |
|-----|-------------------|----------|
| 1 | Asph/Flt Concrete | (Symbol) |
| 2 | Asph/Flt Concrete | (Symbol) |
| 3 | Asph/Flt Concrete | (Symbol) |
| 4 | Asph/Flt Concrete | (Symbol) |
| 5 | Asph/Flt Concrete | (Symbol) |
| 6 | Asph/Flt Concrete | (Symbol) |
| 7 | Asph/Flt Concrete | (Symbol) |
| 8 | Asph/Flt Concrete | (Symbol) |
| 9 | Asph/Flt Concrete | (Symbol) |
| 10 | Asph/Flt Concrete | (Symbol) |
| 11 | Asph/Flt Concrete | (Symbol) |
| 12 | Asph/Flt Concrete | (Symbol) |
| 13 | Asph/Flt Concrete | (Symbol) |
| 14 | Asph/Flt Concrete | (Symbol) |
| 15 | Asph/Flt Concrete | (Symbol) |
| 16 | Asph/Flt Concrete | (Symbol) |
| 17 | Asph/Flt Concrete | (Symbol) |
| 18 | Asph/Flt Concrete | (Symbol) |
| 19 | Asph/Flt Concrete | (Symbol) |
| 20 | Asph/Flt Concrete | (Symbol) |
| 21 | Asph/Flt Concrete | (Symbol) |
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| 34 | Asph/Flt Concrete | (Symbol) |
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| 47 | Asph/Flt Concrete | (Symbol) |
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| 50 | Asph/Flt Concrete | (Symbol) |

Key Notes

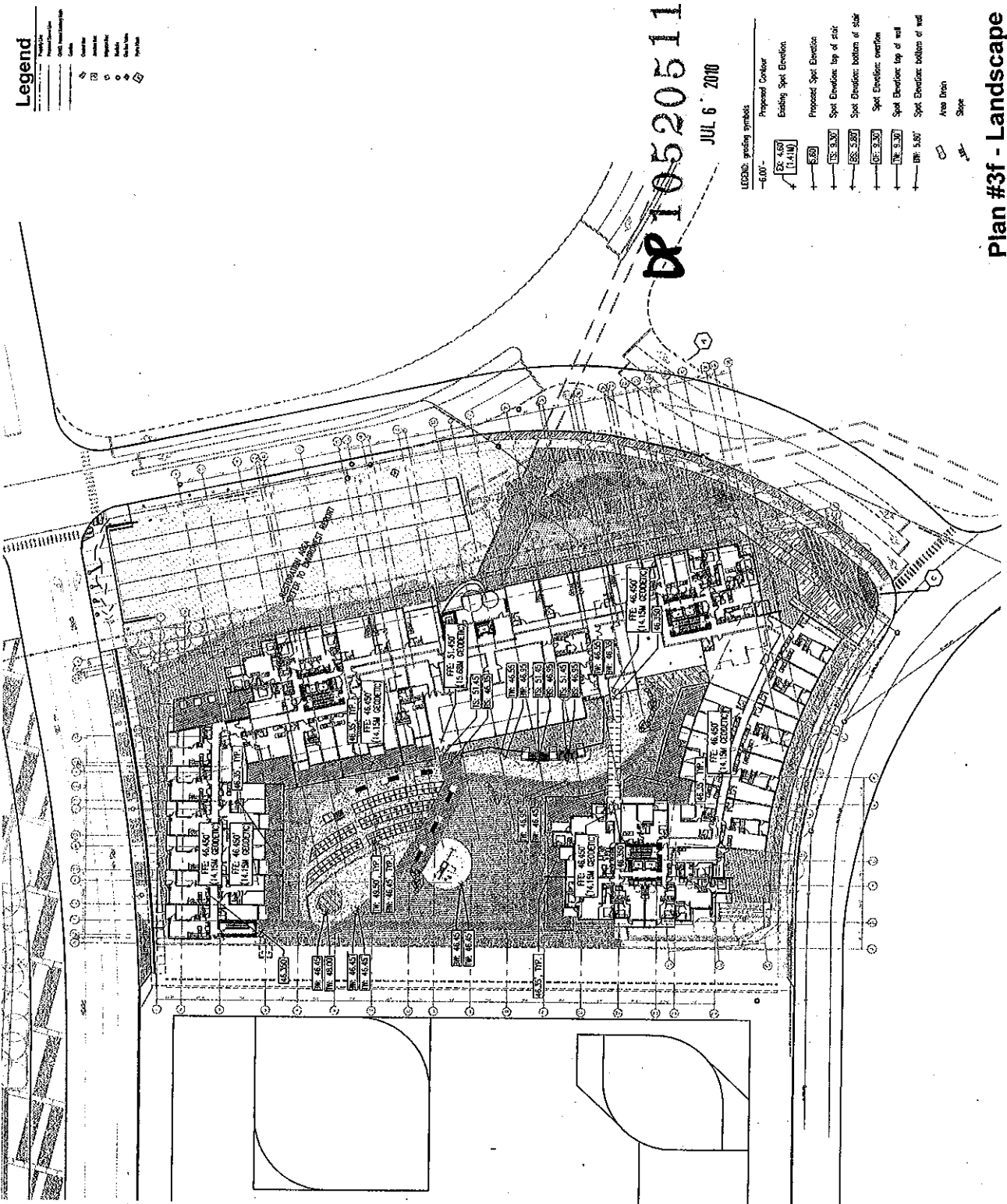
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| 3 | Asph/Flt Concrete |
| 4 | Asph/Flt Concrete |
| 5 | Asph/Flt Concrete |
| 6 | Asph/Flt Concrete |
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| 46 | Asph/Flt Concrete |
| 47 | Asph/Flt Concrete |
| 48 | Asph/Flt Concrete |
| 49 | Asph/Flt Concrete |
| 50 | Asph/Flt Concrete |

ONNI CONTRACTING LLC
4000-550 Robeson Street
Raleigh, NC 27607

6802 Embargo Way
R2 07-28222

GRADING SERIES
LEVEL 5

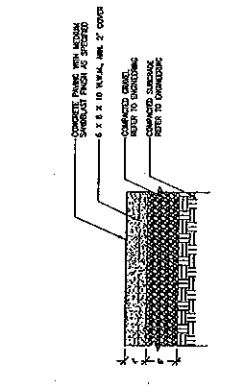
L2-02



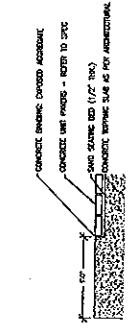
Plan #3f - Landscape



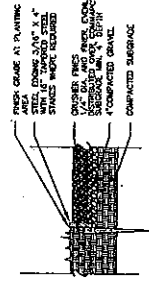
1 CONCRETE SLAB WITH REBAR
 SCALE: 1"=1'-0"



2 MEDIUM SAND BLAST FINISH CONCRETE
 SCALE: 1"=1'-0"

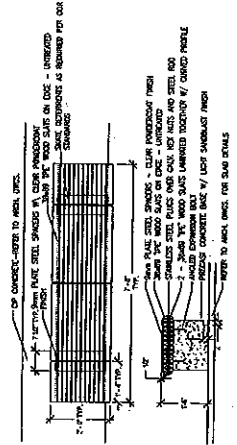


3 CONCRETE BANDING
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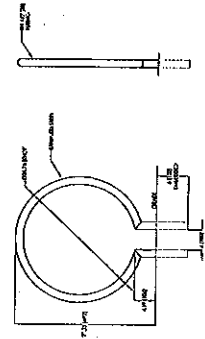


4 CRUSHER FINES
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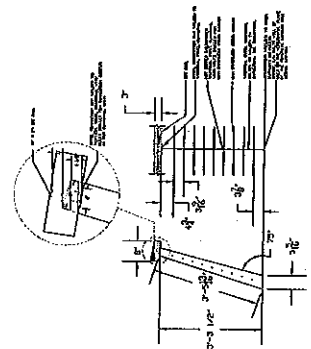
DR 10520511
 JUL 6, 2010



5 CONCRETE SLAB WITH REBAR
 SCALE: 1"=1'-0"



6 BIKE RACK
 SCALE: 1"=1'-0"

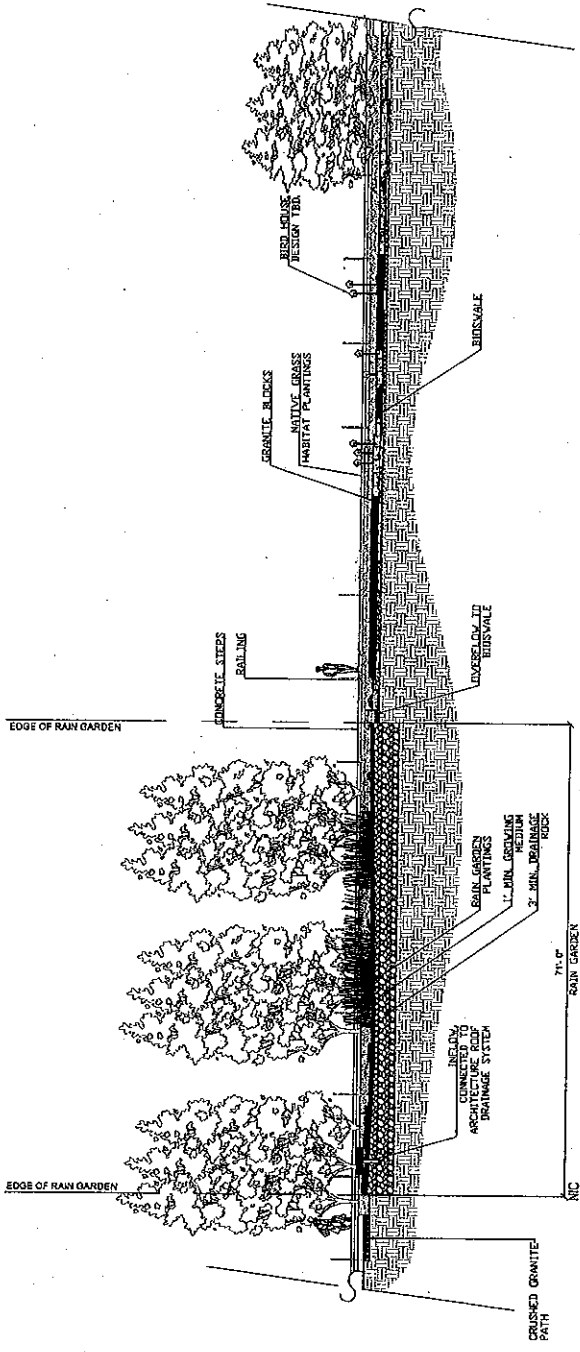


7 GUARDRAIL
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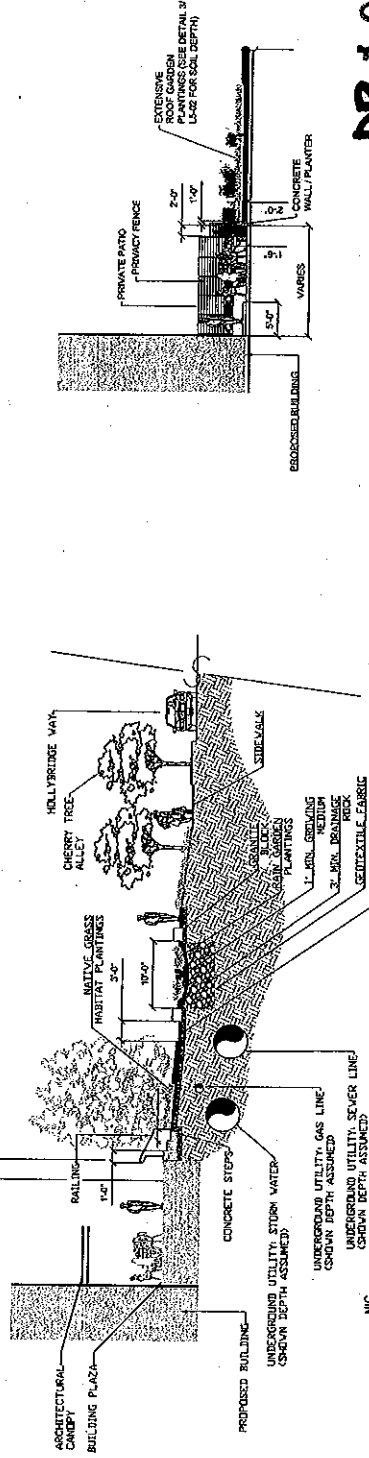
Landscapers
 FORMS
 CONSTRUCTION
 CONSTRUCTION
 CONSTRUCTION

Plan #3g - Landscape

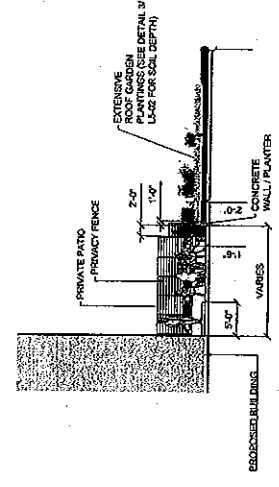
| | | | | | |
|--|---|--|---|--------------------|--------|
| | ONI Contracting LLC 6901 E. 1st Avenue Greenwood, CO, 80022 | | 6901 E. 1st Avenue Greenwood, CO 80022 | LANDSCAPE SECTIONS | L-3.04 |
| | DATE: _____ DRAWN BY: _____ CHECKED BY: _____ PROJECT NO.: _____ | | | | |



NIC SECTION, RAIN GARDEN #1
SCALE: 1/8" = 1'-0"

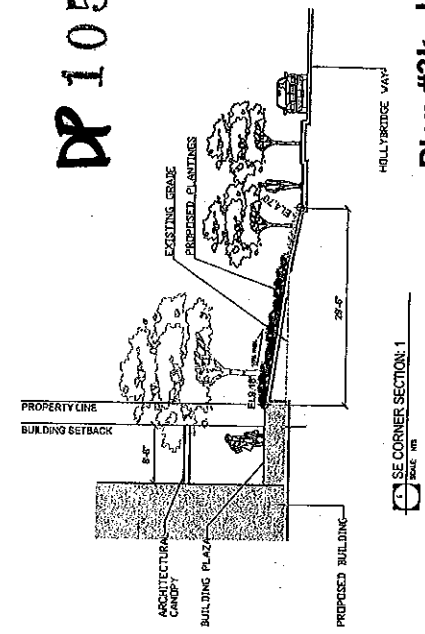
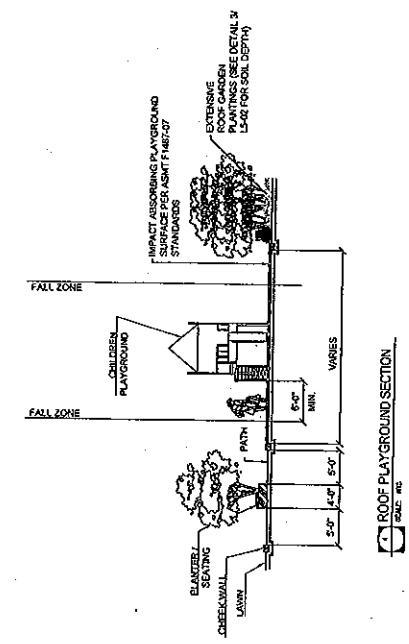
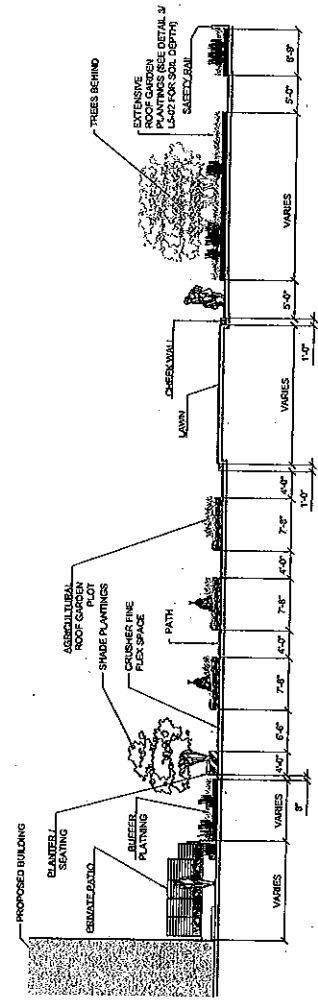
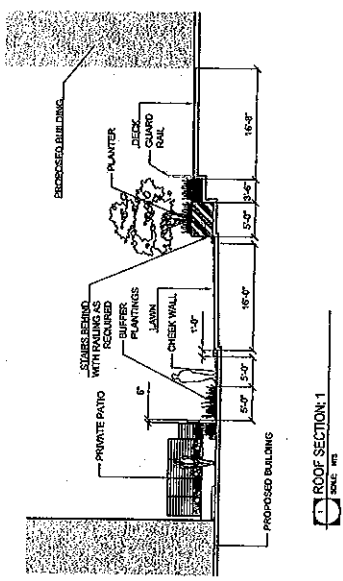
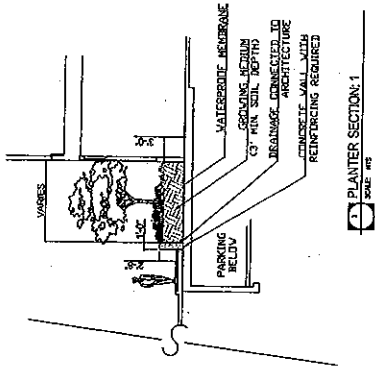


NIC SECTION, RAIN GARDEN #2
SCALE: 1/8" = 1'-0"



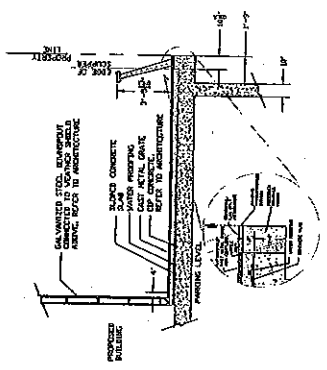
PATIO SECTION: TYPICAL
SCALE: 1/8" = 1'-0"

DR 10520511
 JUL 6 2010
 Plan #3j - Landscape

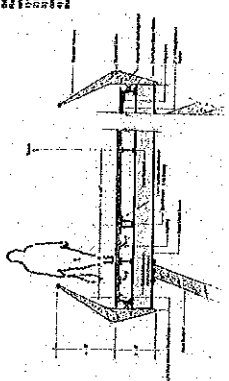


DP 10520511
 JUL 6 2010

Plan #3k - Landscape



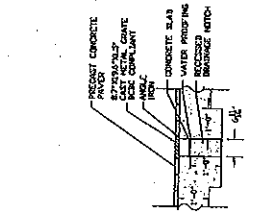
1 PLAZA DRAINAGE SCUPPER SECTION
 SCALE: 1/2\"/>



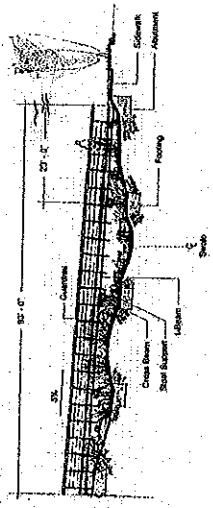
6 BRIDGE SECTION 1
 SCALE: 1/2\"/>



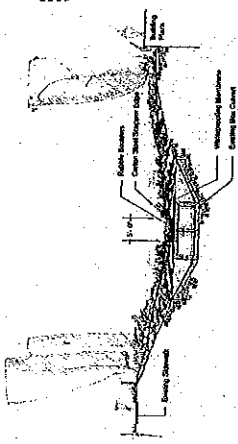
7 BRIDGE SEATING, CONCEPTUAL SKETCH
 SCALE: 1/2\"/>



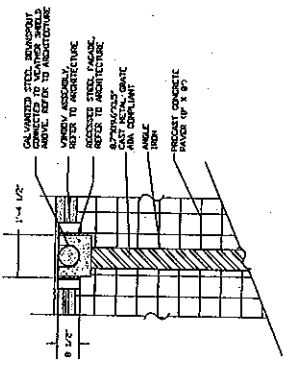
2 PLAZA DRAINAGE SCUPPER SECTION 2
 SCALE: 1/2\"/>



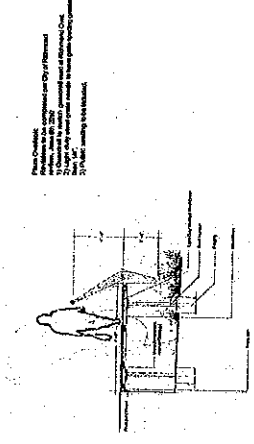
8 BRIDGE ELEVATION
 SCALE: 1/2\"/>



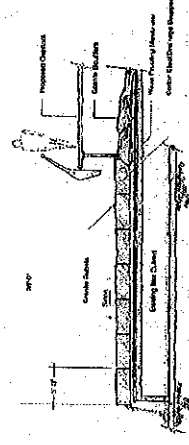
9 PARK DRAINAGE SCUPPER SECTION
 SCALE: 1/2\"/>



3 PLAZA DRAINAGE SCUPPER PLAN
 SCALE: 1/2\"/>



4 PLAZA OVERLOOK SECTION
 SCALE: 1/2\"/>




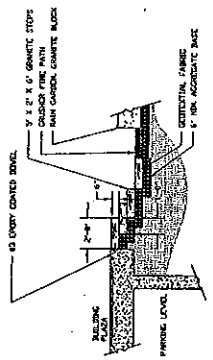
5 BRIDGE OVERLOOK SECTION
 SCALE: 1/2\"/>

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NIC
 PARK DRAINAGE SCUPPER SECTION 2 JUL 6 2010
 SCALE: 1/2\"/>

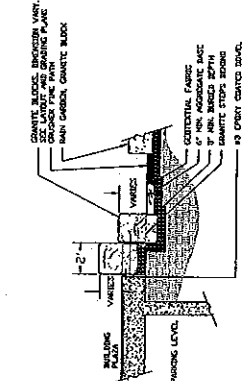
Plan #31 - Landscape

| | | | |
|--|--|---|--|
|  | | OMNI Contracting LLC 6900-550 Lochwood Street Vancouver, BC V6S 3B7 | |
| PROJECT NO. _____ SHEET NO. _____ DATE _____ | | 6951 Fairbridge Way R2Z 0P-3B0222 | |
| LANDSCAPE DETAILS | | L-3.07 | |



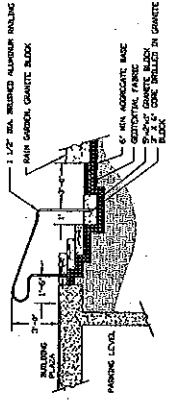
NIC
 GRANITE STEPS, TYP.
 SCALE: 1/8\"/>

XXXXXX XXXX
 SCALE: 1/8"



NIC
 GRANITE BLOCKS
 SCALE: 1/8"

XXXXXX XXXX
 SCALE: 1/8"



NIC
 GRANITE STEPS RAILING, TYP.
 SCALE: 1/8"

XXXXXX XXXX
 SCALE: 1/8"

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JUL 6 2010

XXXXXX XXXX
 SCALE: 1/8"

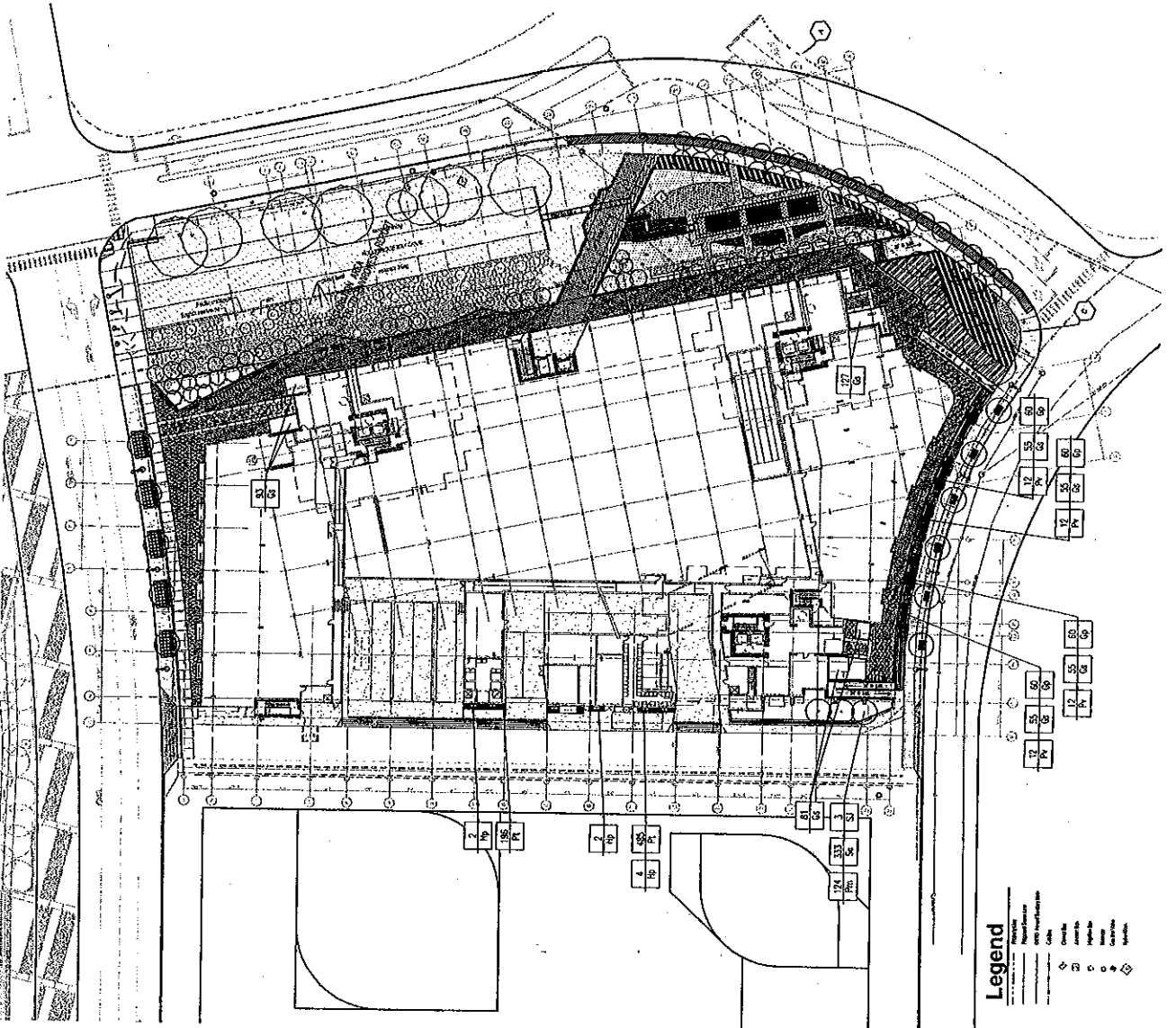
Plan #3m - Landscape

PLANT LIST LEVEL 1

- TREES**
 CH1 Cornus mas / Cornus Dogwood
 S1 Syringa japonica / Japanese Shrub Lilac Tree
- SHRUBS / GRASSES**
 G1 Galium aparine / Spina
 G2 Galium aparine / Spina
 P1 Polygonum multifidum / Smartweed
 P2 Polygonum multifidum / Smartweed
 S1 Symplocos alba / Snowy / Shallow
 S2 Symplocos alba / Snowy / Shallow
- GROUNDCOVERS**
 GP Galium aparine / Spina
 P1 Polygonum multifidum / Smartweed

| Quantity | Tree Code | Tree Name | Notes |
|----------|-----------|--|-------|
| 3 | CH1 | Cornus mas / Cornus Dogwood | |
| 3 | S1 | Syringa japonica / Japanese Shrub Lilac Tree | |
| 248 | GP | Galium aparine / Spina | |
| 350 | P1 | Polygonum multifidum / Smartweed | |

Drawn panel



Legend

- Symbol for Tree
- Symbol for Shrub
- Symbol for Groundcover
- Symbol for Wall
- Symbol for Window
- Symbol for Door
- Symbol for Stair
- Symbol for Ramp
- Symbol for Elevation
- Symbol for Section
- Symbol for Detail

| | | | |
|----------------------|--|--|--|
| | | ONI Contracting LLC 10000 W. 10th Street Minneapolis, MN 55427 | |
| | | 8951 Elmridge Way RZ 07-30022 | |
| PROJECT NO. 07-30022 | | PLANTING SERIES LEVEL 1 | |
| DATE: 07/06/2010 | | DRAWN BY: [Name] | |
| CHECKED BY: [Name] | | SCALE: 1" = 10'-0" | |
| SHEET NO. L4-01 | | TOTAL SHEETS: X | |

DP 10520511

JUL 6 2010

Plan #3n - Landscape

PLANT LIST LEVELS

- TREES**
 C1 Honey Locust / Double Hawthorn
 C2 Hypericoid / Japanese Stewartia Tree
- SHRUBS / GRASSES**
 P4 Rockrose gerardii / Blue gerard
 S1 Stipa tenuissima / Feather grass
 S2 Stipa tenuissima / Feather grass
 S3 Stipa tenuissima / Feather grass
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 S100 Stipa tenuissima / Feather grass

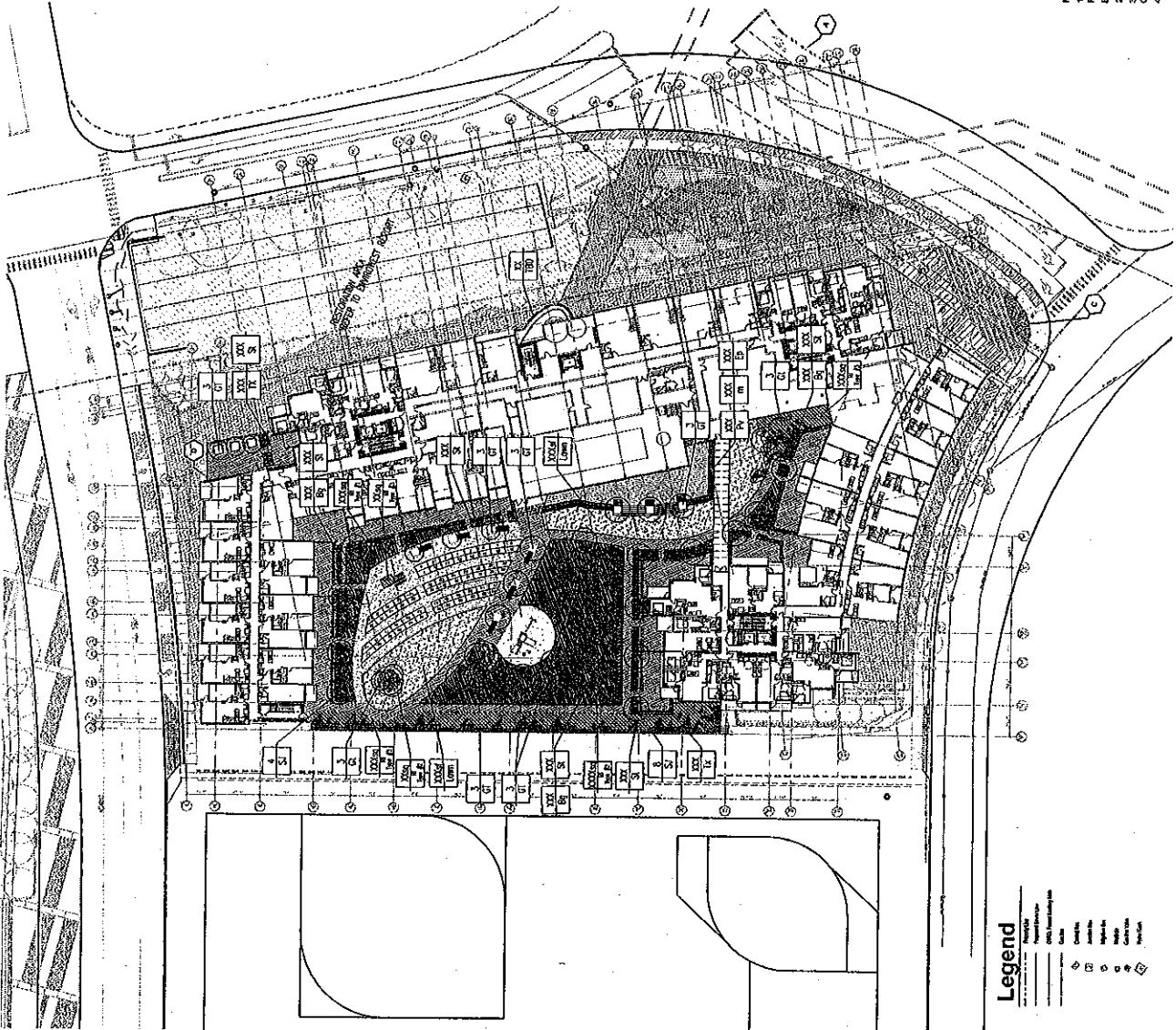
| | | |
|-------|------------|----------|
| 24 | Corn Oak | As shown |
| 12 | 2" Caliper | Specimen |
| 600SM | Seed | As shown |
| 1500 | 4" Pot | 2" OC |
| 200 | 4-6" High | 1" OC |
| 400SM | Seed | 1" OC |

Made only, No test.
 Premium grade

Onni Contracting, LLC
 6520-500 Rosswood Street
 Vancouver, BC, V6B 2B7

6521 Elizabeth Way
 R1Z 0T2 2B2Z

PROJECT NO. 10520511
 DRAWING NO. L4-02
 DATE: JUL 6, 2010



Legend

- Building Footprint
- Parking Area
- Plant Placement
- Tree
- Shrub
- Grass
- Groundcover
- Water Feature
- Light Pole

DR 10520511

JUL 6, 2010

- NOTE**
1. INSTALL ALL PLANT MATERIAL TO CITY OF RICHMOND STANDARDS. PROVIDE AND INSTALL ALL PLANT MATERIAL IN ACCORDANCE WITH:
 2. BCSLA / BORLA LANDSCAPE STANDARDS, LATEST EDITION.
 3. AREA OF SEARCH: BRITISH COLUMBIA, WASHINGTON AND OREGON.
 4. PROVIDE DISEASE AND PEST-FREE PLANT MATERIAL FROM CERTIFIED NURSERIES. PROVIDE GUARANTEE OF CERTIFICATION.
 5. ALL PLANTS TO BE MAINTAINED WITH AN AUTOMATIC IRRIGATION SYSTEM.

Plan #30 - Landscape

L4-02 X

PLANT LIST LEVEL 7

TREES
 CT Heavy Wood / Cordilia all-around
 SHRUBS / GRASSES
 Tr. Tuna 3' round / Brown's yew
 EXTENSIVE GRASS/ROOF



4 5.00m CK As shown
 160 4.0' High 12' OC
 Make only, No huc.

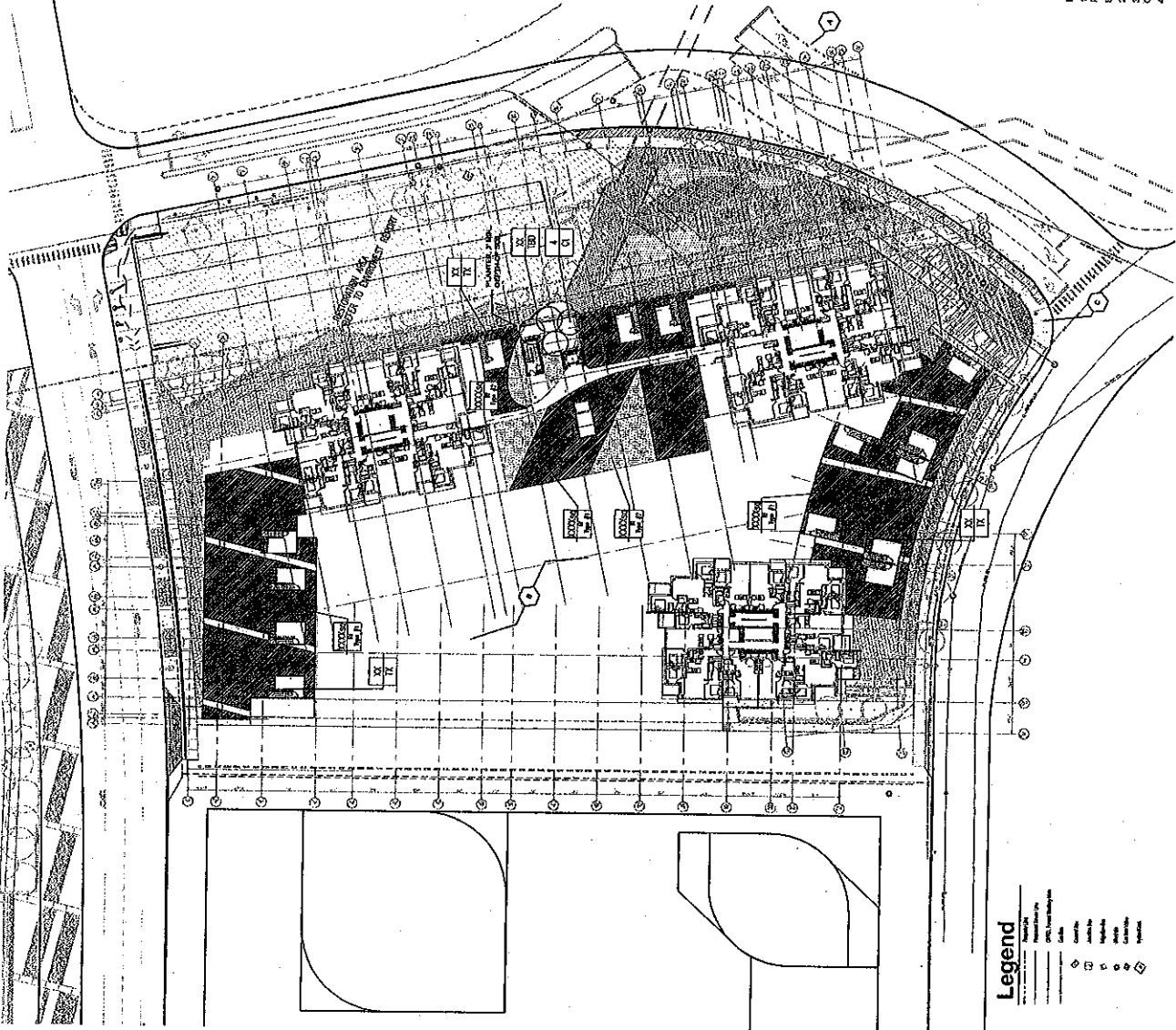
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| | | ONI Contracting Ltd. 1100 West Broadway Vancouver, BC, V6H 3R7 | |
| PROJECT NO. 10520511 | | SHEET NO. L4-03 | |
| DATE: JUL 6 2010 | | DRAWN BY: [Blank] | |
| CHECKED BY: [Blank] | | PROJECT: [Blank] | |
| CLIENT: [Blank] | | LOCATION: [Blank] | |
| DESIGNER: [Blank] | | PLANTING SERIES LEVEL 7 | |
| EST: [Blank] | | L4-03 X | |

DP 10520511

JUL 6 2010

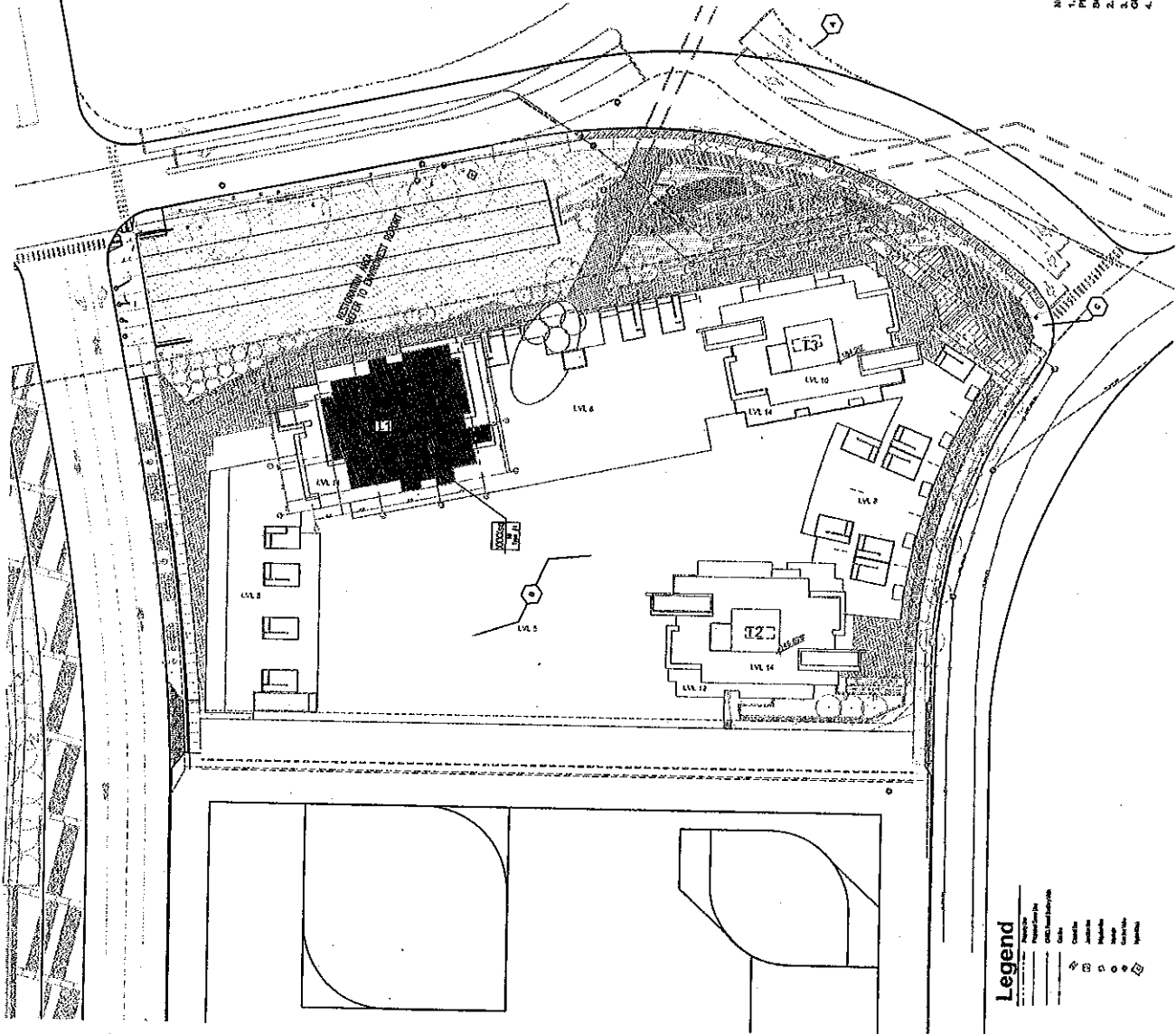
NOTE
 1. INSTALL ALL PLANT MATERIAL TO CITY OF RICHMOND STANDARDS, PROVIDE AND INSTALL ALL PLANT MATERIAL IN ACCORDANCE WITH BOLSIA / BOLA LANDSCAPE STANDARDS - LATEST EDITION.
 2. AREA OF SEARCH: BRITISH COLUMBIA, WASHINGTON AND OREGON.
 3. PROVIDE DISEASE AND PEST-FREE PLANT MATERIAL FROM CERTIFIED NURSERIES. PROVIDE GUARANTEE OF CERTIFICATION.
 4. ALL PLANTS TO BE MAINTAINED WITH AN AUTOMATIC IRRIGATION SYSTEM.

Plan #3p - Landscape



PLANT LIST TOWER 1

EXTENSIVE GREEN ROOF



Legend

| | |
|-----|---------------|
| — | Proposed |
| --- | Existing |
| — | Site Boundary |
| — | Grade |
| — | Circle |
| — | Triangle |
| — | Square |
| — | Hexagon |
| — | Octagon |

- NOTE**
1. INSTALL ALL PLANT MATERIAL TO CITY OF RICHMOND STANDARDS. PROVIDE AND INSTALL ALL PLANT MATERIAL IN ACCORDANCE WITH BOLSIA / BOLILA LANDSCAPE STANDARDS - LATEST EDITION.
 2. AREA OF SEASIDE: BRITISH COLUMBIA, WASHINGTON AND OREGON.
 3. PROVIDE DISEASE AND PEST-FREE PLANT MATERIAL FROM CERTIFIED NURSERIES. PROVIDE PROOF OF CERTIFICATION.
 4. PROVIDE TRODE DBB ON ROOF FOR USES ASSOCIATED WITH THE EXTENSIVE GREEN ROOF.

DP 10520511

JUL 6 2010

Plan #3q - Landscape

| | | | | | |
|--|--|---|---|---------------------------------------|------------------|
| <p>ONI CONSULTING LTD. 8940-555 Robson Street Vancouver, BC, V6B 2B7</p> | | <p>DATE: _____</p> <p>SCALE: _____</p> <p>PROJECT: _____</p> <p>CLIENT: _____</p> <p>DESIGNER: _____</p> <p>CHECKER: _____</p> <p>APPROVER: _____</p> | <p>8941 Richards Way R2 07-300223</p> | <p>PLANTING SERIES ROOF LEVEL</p> | <p>NO. _____</p> |
| | | | | | <p>4-04</p> |

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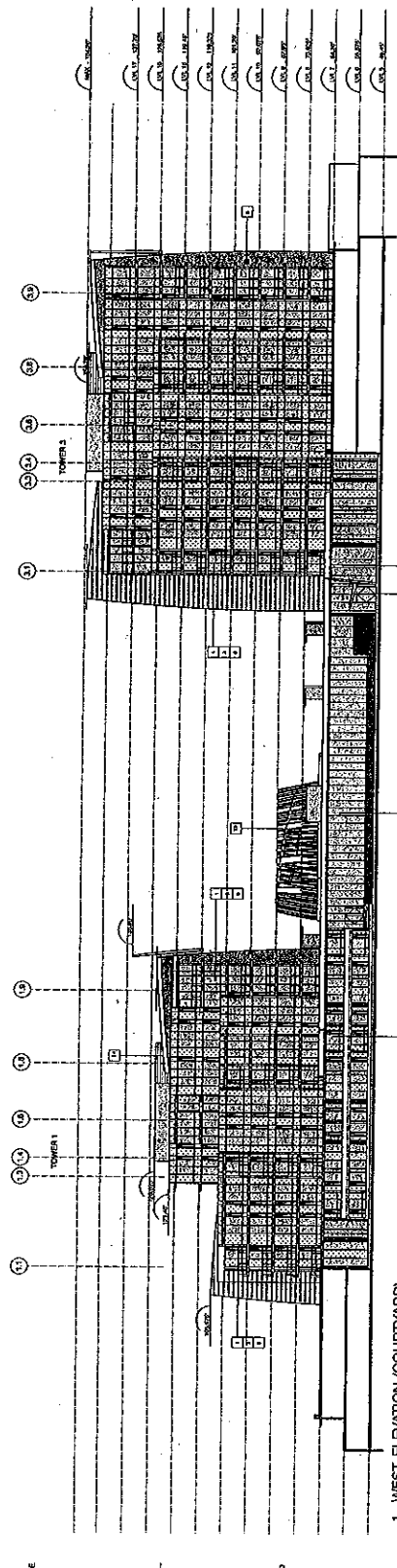
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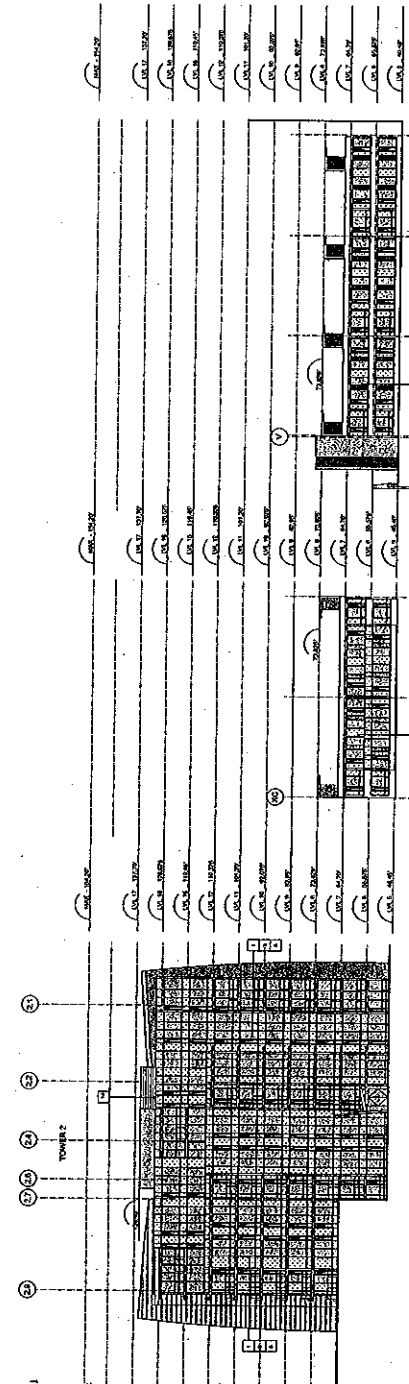
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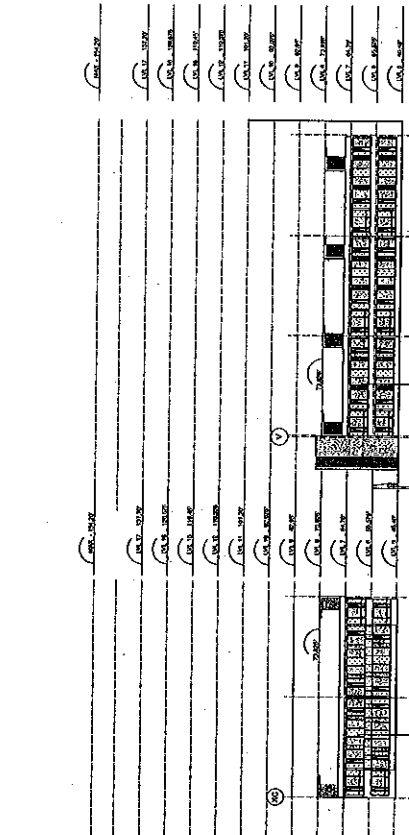
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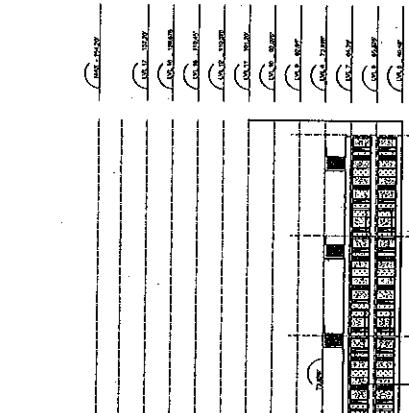
1. WEST ELEVATION (COURTYARD)



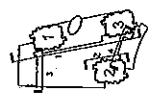
2. EAST ELEVATION (TOWER #2)



3. NORTH ELEVATION (COURTYARD)



4. SOUTH ELEVATION (COURTYARD)



MATERIALS LEGEND

| | |
|----|---------------------------|
| 1 | GLASS CURTAIN WALL SYSTEM |
| 2 | GLASS CURTAIN WALL SYSTEM |
| 3 | GLASS CURTAIN WALL SYSTEM |
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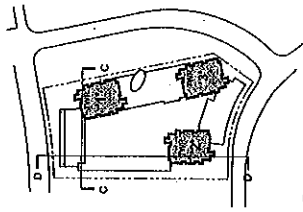
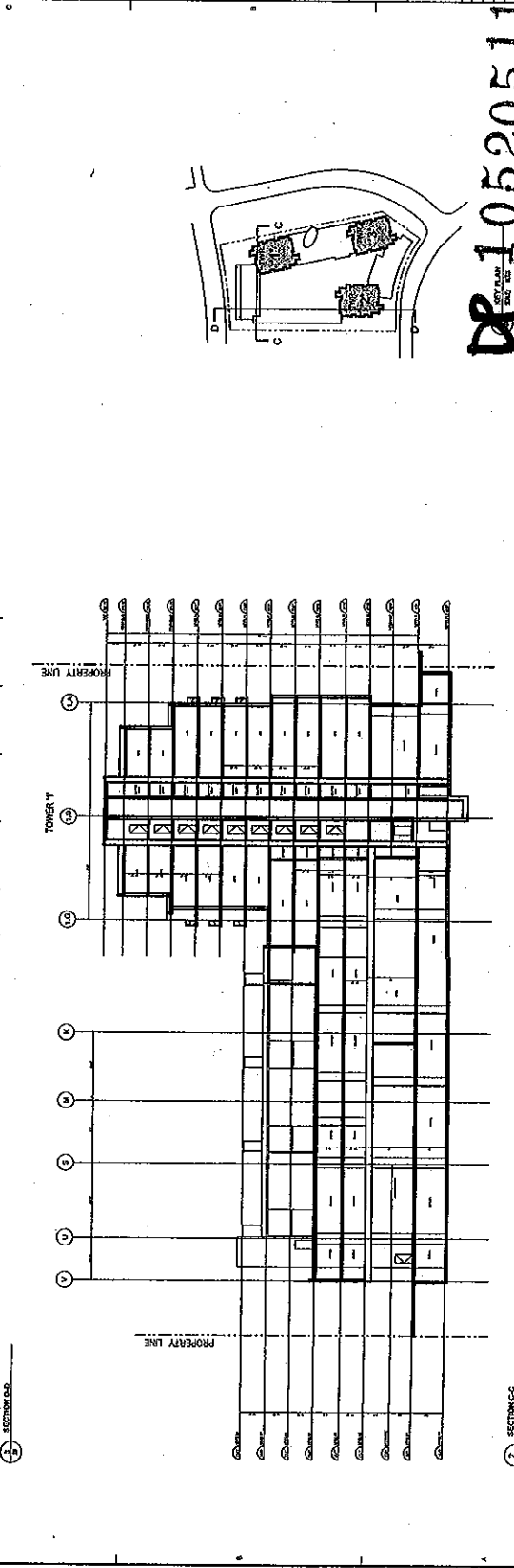
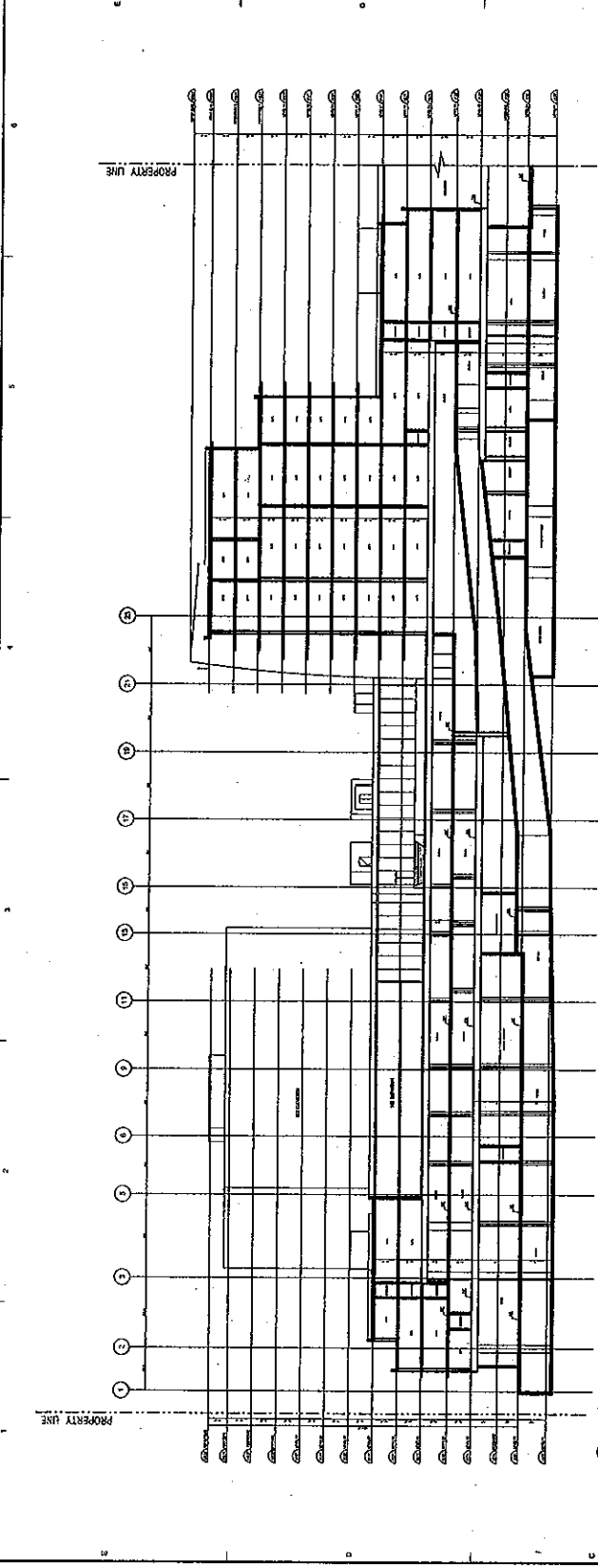
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JUL 6 2010

Plan #8 - Architectural

SECTION C-C

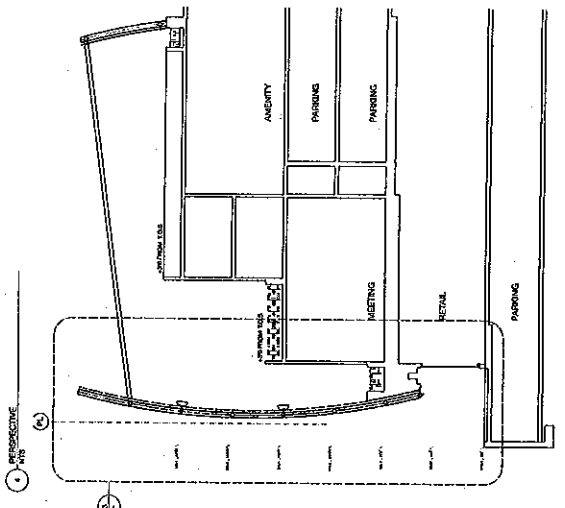
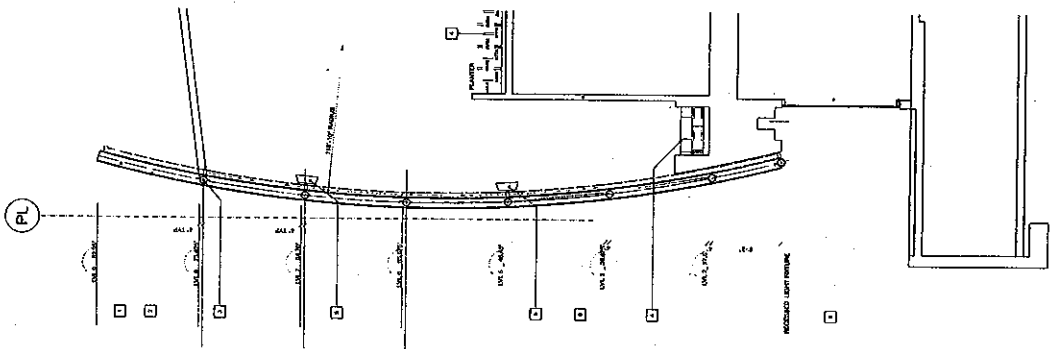
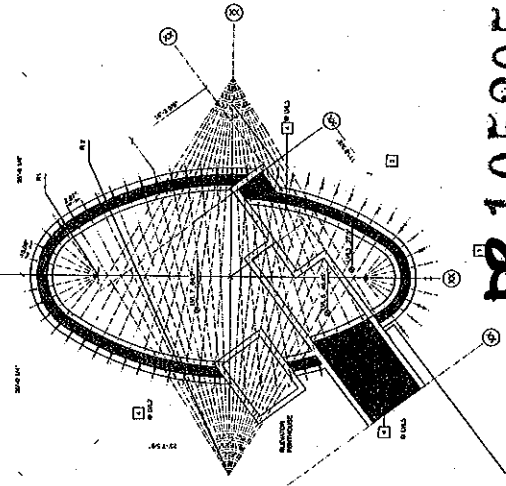
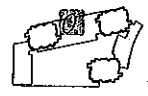
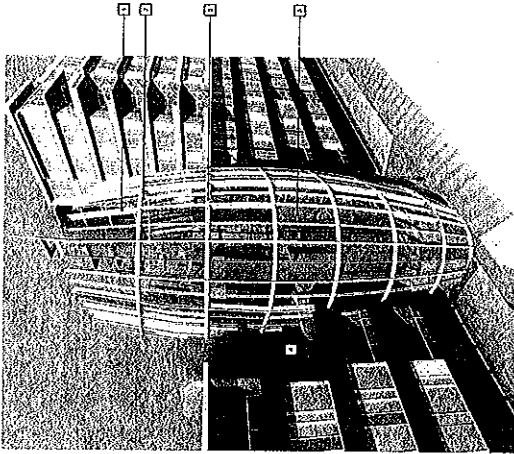
SECTION D-D

Embridge Way
 RICHMOND, VA

SECTIONS C AND D

- LIST OF MATERIALS
- 1 PAINTED STRAIN STEEL 3" SECTION
 - 2 PAINTED STRAIN STEEL 1" SECTION
 - 3 1/2" DIA STRAIN STEEL
 - 4 PLASTER
 - 5 UP / DOWN LIGHT
 - 6 COLOURED GLASS
 - 7 STAINLESS STEEL CABLE SYSTEM
"Jumbo Rope System" by Jumbo
 - 8 CURTAIN WALL SYSTEM (GLAZION CLADDING)

| NO. | DESCRIPTION | QUANTITY |
|-----|--|----------|
| 1 | PAINTED STRAIN STEEL 3" SECTION | 1000.00 |
| 2 | PAINTED STRAIN STEEL 1" SECTION | 2000.00 |
| 3 | 1/2" DIA STRAIN STEEL | 1000.00 |
| 4 | PLASTER | 1000.00 |
| 5 | UP / DOWN LIGHT | 1000.00 |
| 6 | COLOURED GLASS | 1000.00 |
| 7 | STAINLESS STEEL CABLE SYSTEM "Jumbo Rope System" by Jumbo | 1000.00 |
| 8 | CURTAIN WALL SYSTEM (GLAZION CLADDING) | 1000.00 |

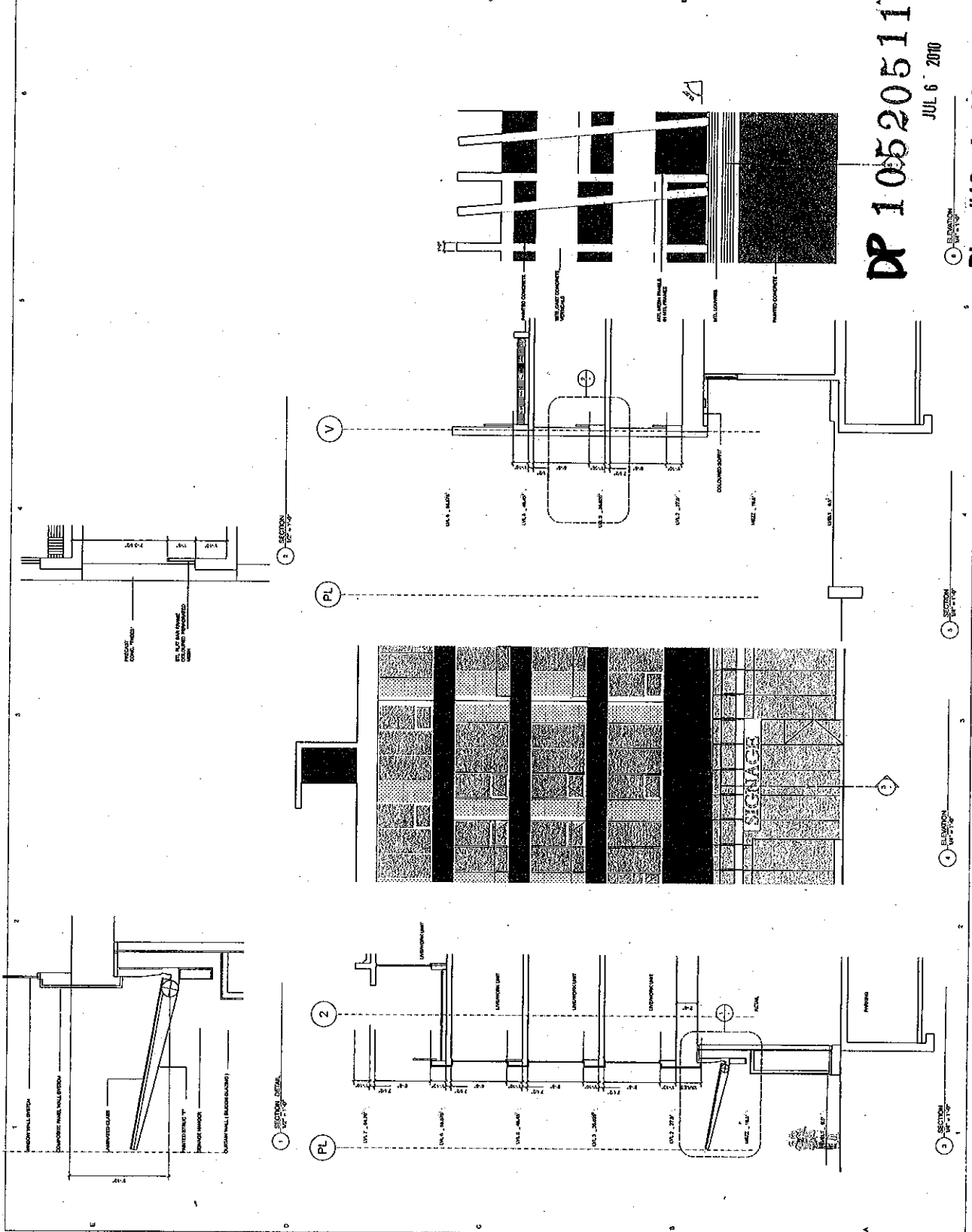


DP 10520511

JUL 6 2010

Plan #9 - Architectural

1 PLAN
 2 SECTION



DP 10520511

JUL 6 2010

SECTION 1-2

Plan #12 - Architectural



1500 - 1500 Robinson Street
 Richmond, VA 23261-2007

PROJECT: Elmbridge Way
 RICHMOND, VA

DATE: JUL 6, 2010

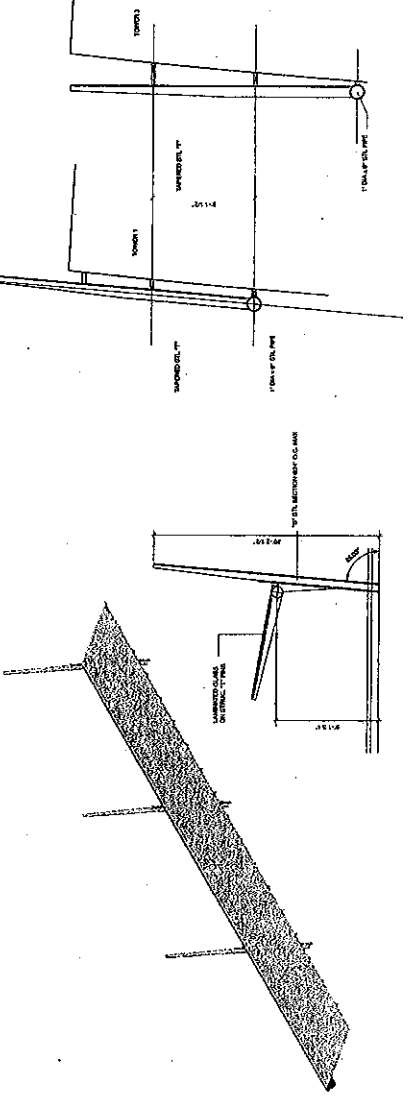
SCALE: 1/8" = 1'-0"

35

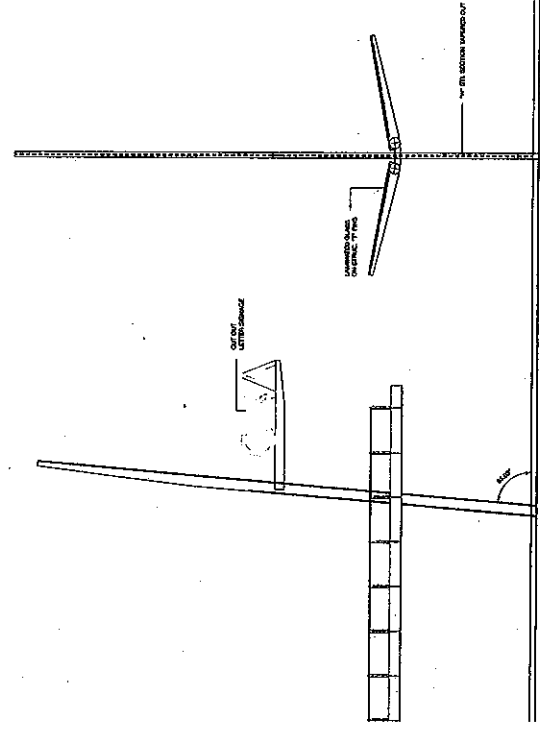
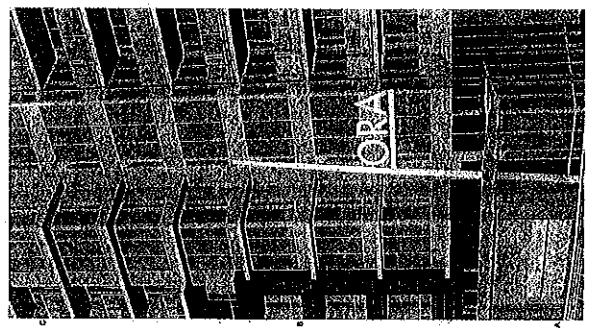
PP 10520511

JUL 6, 2010

Plan #13 - Architectural



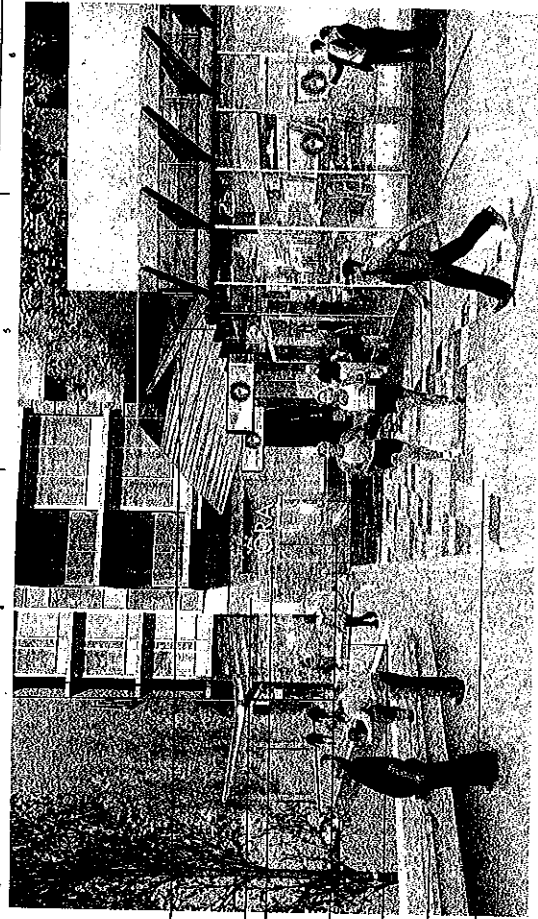
1 - TOWER SECTION



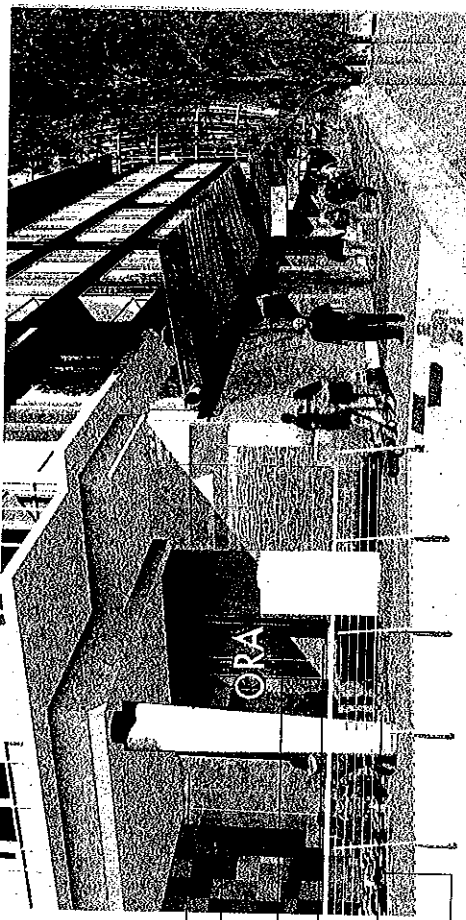
2 - TOWER SECTION

3 - CANOPY SECTION

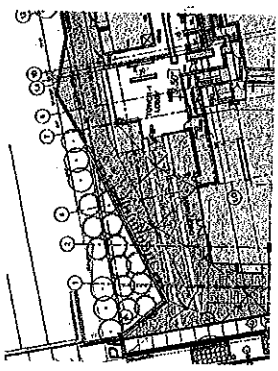
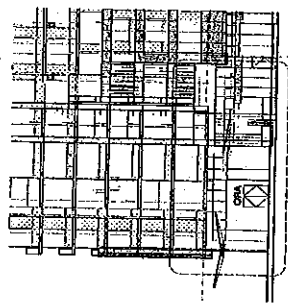
4 - SECTION DETAIL



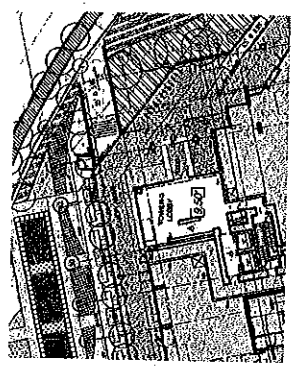
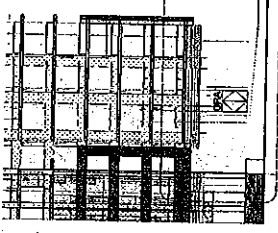
- PERFORM PLACE IN FRONT OF LOBBY LEADS TO LOBBY PLAZA AREA
- GLASS-TO-GLOSS GLASS WITH INTERNAL GLASS PARTITIONING, REFLECTIVE
- CHANGE AT THE LEVEL OF COMMERCIAL, UNAVAILABLE TO SHOPPING/RESTAURANTS
- PLANTING BARRIER GLASS WALLS
- PUBLIC GATHERING/SEATING SPACE
- SPECIAL PUBLIC LEADING TO THE FRONT DOOR



- FLOOR-TO-GLOSS GLASS WALLS REFLECTING INTERIOR GLASS PARTITIONING, REFLECTIVE
- CHANGE AT THE LEVEL OF COMMERCIAL, UNAVAILABLE TO SHOPPING/RESTAURANTS
- PERFORM PLACE IN FRONT OF LOBBY LEADS TO LOBBY PLAZA AREA
- SPECIAL PUBLIC LEADING TO THE FRONT DOOR
- WOOD PLANTING



1. TOWER 1 LOBBY (FACING RIVER ROAD)



2. TOWER 3 LOBBY (FACING ELMBRIDGE WAY)

DR 10520511

JUL 6 2010

Plan #14 - Architectural

LOBBIES

36

PROJECT NAME
 Elmbridge Way
 Richmond BC

ARCHITECT
 ONI

DATE
 JUL 6 2010

SCALE
 1/8" = 1'-0"

PROJECT NO.
 10520511

DATE
 JUL 6 2010

SCALE
 1/8" = 1'-0"

PROJECT NO.
 10520511

DATE
 JUL 6 2010

SCALE
 1/8" = 1'-0"

PROJECT NO.
 10520511

DATE
 JUL 6 2010

SCALE
 1/8" = 1'-0"

PROJECT NO.
 10520511



4200 - 550 Potholes Check
 November, DC - 1/10/2010



LEGEND
 COMMERCIAL AREA
 APPROXIMATE HOLDING LIMITS - 4 OF 20 UNITS ON THIS LOT.
 CONVENTIONAL HOLDING LIMITS - 3 OF 11 UNITS ON THIS LAND.

DP 10520511

JUL 6 2010

Reference Plan

| | |
|-----------------------------|------------|
| Elbridge Way RICHMOND DC | |
| PROJECT NO. | 10520511 |
| DATE | JUL 6 2010 |
| SCALE | AS SHOWN |
| LEVEL | LEVEL 5 |



1000 500 Peachtree Street
Nashville, TN 37203

| | |
|--------------|------------|
| PROJECT NO. | 10520511 |
| DATE | JUL 6 2010 |
| DRAWN BY | ... |
| CHECKED BY | ... |
| SCALE | AS SHOWN |
| SHEET NO. | 13 |
| TOTAL SHEETS | ... |

| | |
|--------------|------------|
| PROJECT NO. | 10520511 |
| DATE | JUL 6 2010 |
| DRAWN BY | ... |
| CHECKED BY | ... |
| SCALE | AS SHOWN |
| SHEET NO. | 13 |
| TOTAL SHEETS | ... |



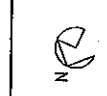
LEGEND

- COMMERCIAL AREA
- APPROXIMATE HOLDING LIMITS - ALL OF PARTS ON THIS LEVEL

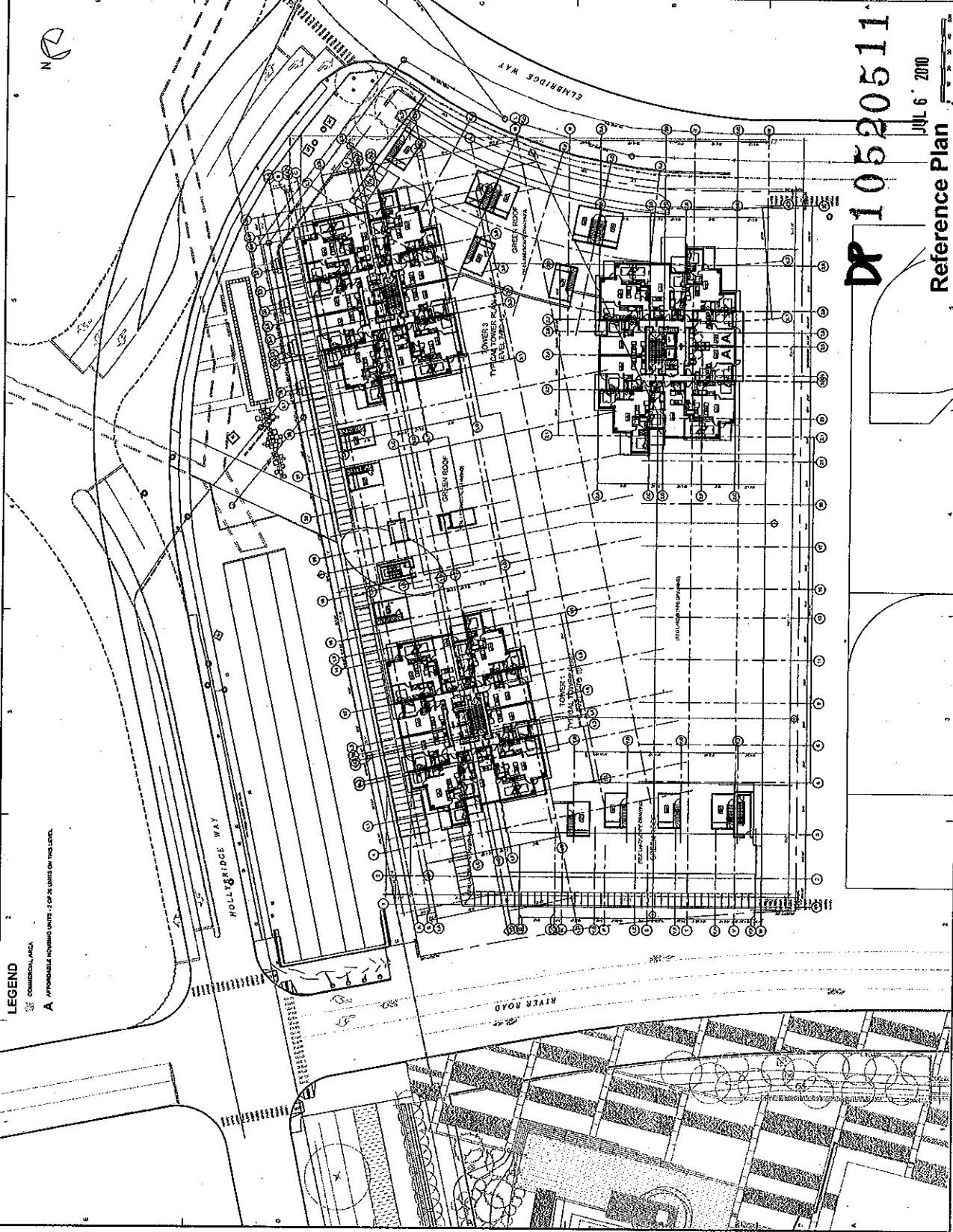
DP 10520511

JUL 6 2010

Reference Plan



LEGEND
 COMMERCIAL AREA
 A APPLICABLE HOUSING UNITS - 1 OF 26 UNITS ON THIS LEVEL.



DP 10520511

JUL 6 2010

Reference Plan

| | |
|---------------------------------|----------------|
| Elmbridge Way Reference Plan | |
| DATE | 2010.07.06 |
| PROJECT | ELM BRIDGE WAY |
| SCALE | AS SHOWN |
| LEVEL | LEVEL 7 |
| NO. | 14 |



LEGEND
 A APPLICABLE ROOMING UNITS - 1 OF 20 UNITS ON THIS LEVEL

DP 10520511

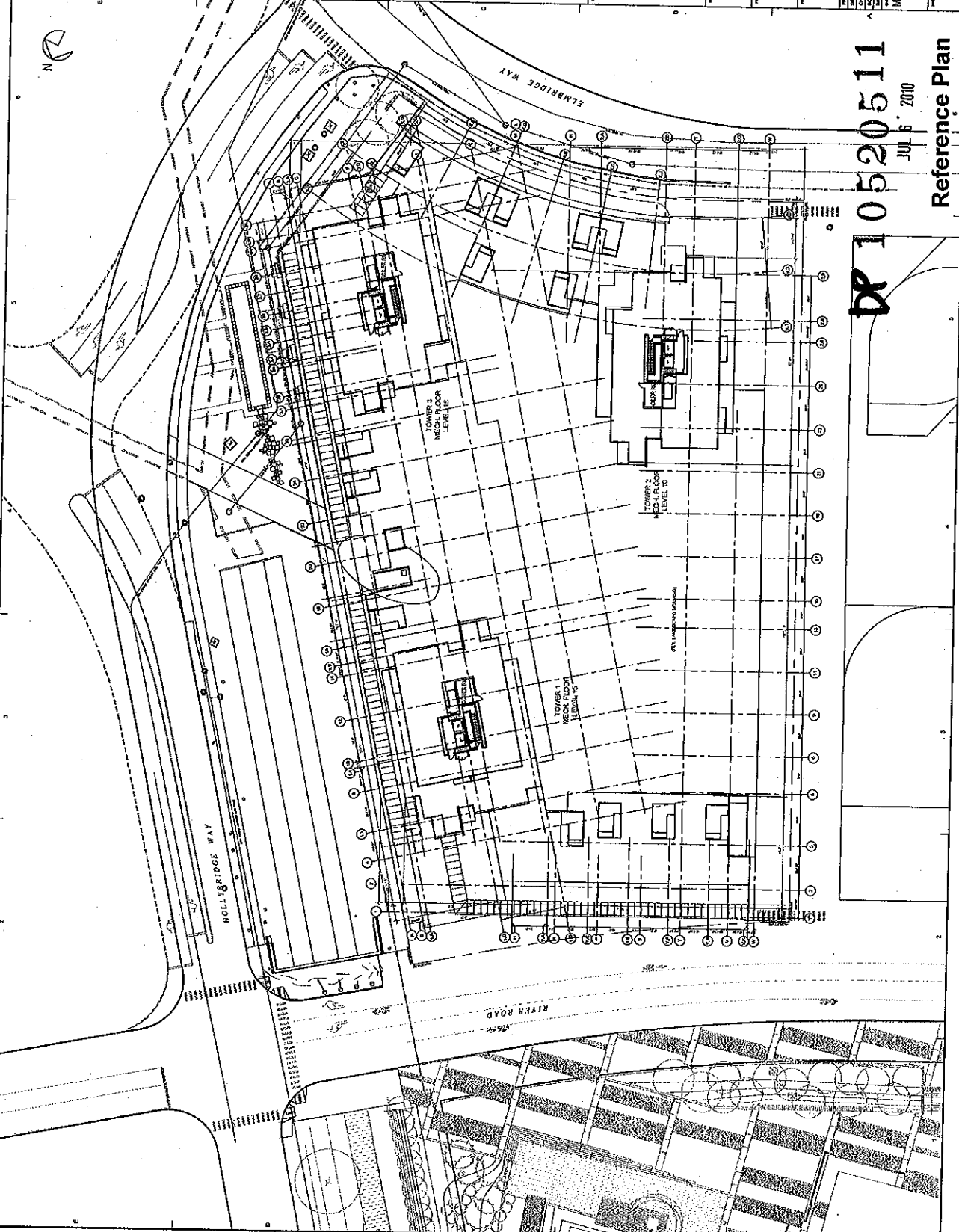
JUL 6 2010

Reference Plan

| | |
|-------------------------------------|------------|
| Embridge Way ARCHITECTURE | |
| PROJECT NO. | 10520511 |
| DATE | JUL 6 2010 |
| SCALE | AS SHOWN |
| LEVEL 8 | |

| NO. | DESCRIPTION | DATE |
|-----|-------------------|------------|
| 1 | ISSUED FOR PERMIT | 2010.07.05 |
| 2 | ISSUED FOR PERMIT | 2010.07.05 |
| 3 | ISSUED FOR PERMIT | 2010.07.05 |
| 4 | ISSUED FOR PERMIT | 2010.07.05 |
| 5 | ISSUED FOR PERMIT | 2010.07.05 |
| 6 | ISSUED FOR PERMIT | 2010.07.05 |
| 7 | ISSUED FOR PERMIT | 2010.07.05 |
| 8 | ISSUED FOR PERMIT | 2010.07.05 |
| 9 | ISSUED FOR PERMIT | 2010.07.05 |
| 10 | ISSUED FOR PERMIT | 2010.07.05 |

| | |
|-------------|--------------|
| PROJECT NO. | 2008 |
| CLIENT | ELMIDGE WAY |
| LOCATION | FRASER RIVER |
| DATE | 2010.07.05 |
| SCALE | AS SHOWN |
| DRAWN BY | MECHANICAL |
| CHECKED BY | |
| DATE | |



DR 10520511
 JUL 5 2010
 Reference Plan



600 - 5500th Street
 Vancouver, BC, V6B 3B7

DATE: _____
 DRAWN BY: _____
 CHECKED BY: _____
 APPROVED BY: _____

PROJECT: _____
 SHEET NO: _____

SCALE: _____

DATE: _____

BY: _____

DATE: _____

BY: _____

DATE: _____

BY: _____

DATE: _____

BY: _____

DATE: _____

BY: _____

DATE: _____

BY: _____

DATE: _____

BY: _____

DATE: _____

BY: _____

DATE: _____

BY: _____

DATE: _____

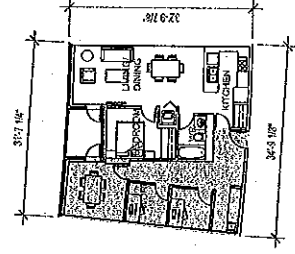
BY: _____

DATE: _____

BY: _____

LEGEND

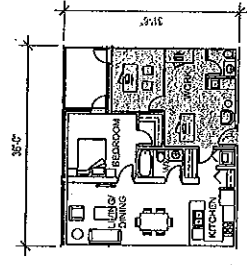
COMMERCIAL AREA



LIVING 508 SFT

LIVING WORK 430 SFT

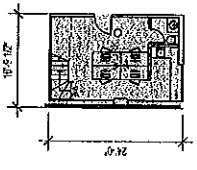
TOTAL 938 SFT



LIVING 678 SFT

LIVING WORK 376 SFT

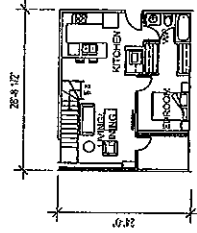
TOTAL 1054 SFT



LIVING 631 SFT

LIVING WORK 483 SFT

TOTAL 1114 SFT

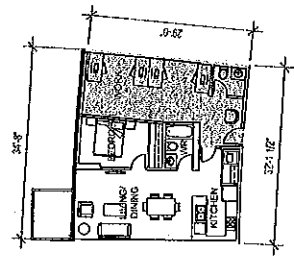


LIVING 631 SFT

LIVING WORK 483 SFT

TOTAL 1114 SFT

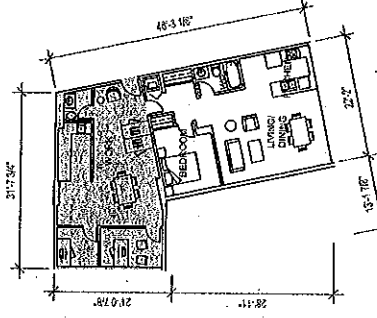
NOTE: POSSIBLE WORK LAYOUTS HAVE BEEN ILLUSTRATED. DEVELOPERS ARE NOT RESPONSIBLE FOR OBTAINING THE WORK SPACES AS SHOWN.



LIVING 627 SFT

LIVING WORK 377 SFT

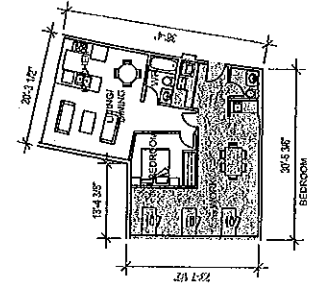
TOTAL 1004 SFT



LIVING 708 SFT

LIVING WORK 610 SFT

TOTAL 1318 SFT



LIVING 748 SFT

LIVING WORK 483 SFT

TOTAL 1231 SFT

DR 1052051

JUL 6 2010

Reference Plan

Elimbridge Way
 Richmond BC
 PROJECT NO: _____
 DRAWING NO: _____
 DATE: _____

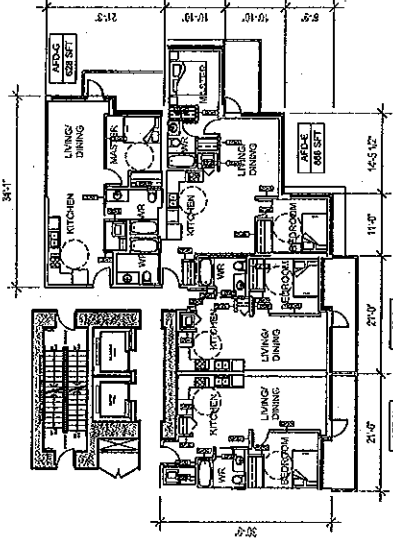


1000 - 500 Robert Street
Baltimore, MD 21202

| | | | | |
|------------------------|-------------------------|----------------------------|---------------------------|-------------------------|
| 1. PROJECT NAME | 2. PROJECT ADDRESS | 3. PROJECT CITY | 4. PROJECT STATE | 5. PROJECT ZIP |
| 6. PROJECT OWNER | 7. PROJECT ARCHITECT | 8. PROJECT ENGINEER | 9. PROJECT CONTRACTOR | 10. PROJECT DATE |
| 11. PROJECT PERMIT NO. | 12. PROJECT PERMIT DATE | 13. PROJECT PERMIT EXPIRES | 14. PROJECT PERMIT STATUS | 15. PROJECT PERMIT TYPE |

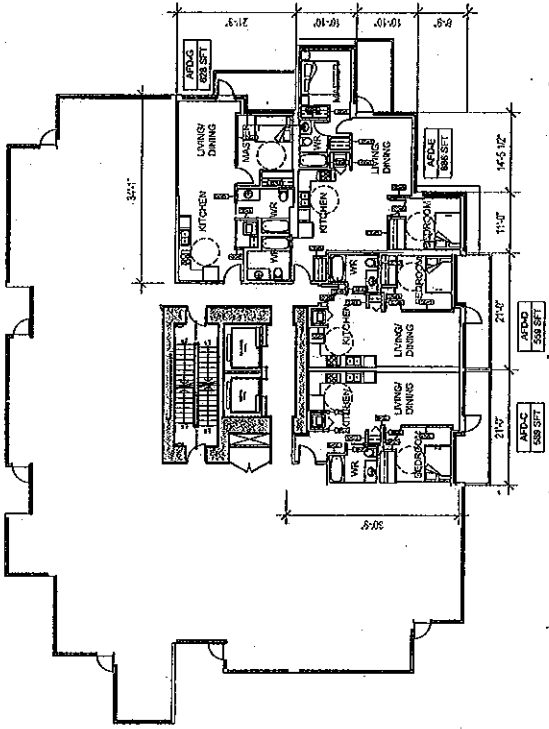
| | | | | |
|-------------------|----------------------|----------------------|-----------------------|-------------------------|
| 16. PROJECT NO. | 17. PROJECT DATE | 18. PROJECT SCALE | 19. PROJECT SHEET NO. | 20. PROJECT SHEET TOTAL |
| 21. PROJECT TITLE | 22. PROJECT SUBTITLE | 23. PROJECT LOCATION | 24. PROJECT CLIENT | 25. PROJECT CONTACT |
| 26. PROJECT PHONE | 27. PROJECT FAX | 28. PROJECT EMAIL | 29. PROJECT WEBSITE | 30. PROJECT URL |

AFFORDABLE HOUSING UNITS FOR:
TOWER 2 - LEVEL 2 AND 3

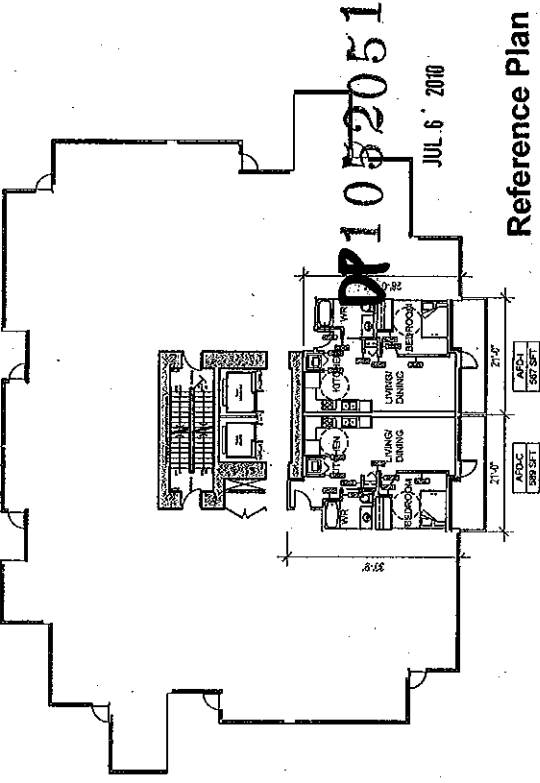


*ALL AFFORDABLE UNITS TO BE
BASIC UNIVERSAL HOUSING
UNITS (20 UNITS)

AFFORDABLE HOUSING UNITS FOR:
TOWER 2 - LEVEL 5 AND 6

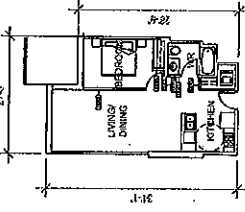


AFFORDABLE HOUSING UNITS FOR:
TOWER 2 - LEVEL 7 AND 8

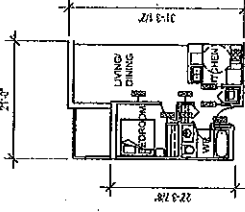


DP1052051
JUL 6 2010

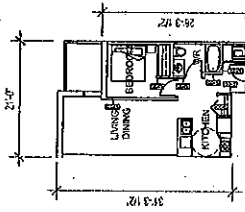
Reference Plan



P
 632 SFT.

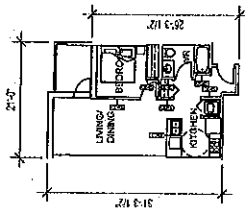


R
 548 SFT.

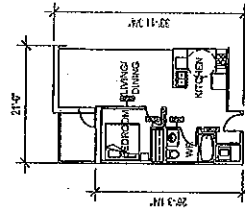


D
 621 SFT.

**CONVERTIBLE UNITS LOCATED
 ON LEVEL 2, 3 AND 5**



S
 632 SFT.



T
 529 SFT.

| Convertible Housing Standards: Unit Features | |
|--|--|
| Doors & Doorways | Entry door min. 865 mm clear opening (3' swinging door spec.) Entry door clear exterior floor space min. 1220 mm depth by door width plus 600 mm on latch side (not needed if rough in wiring provided for future automatic door opener) Interior doors to entry & main living areas, min. 800 mm clear opening (28" sliding or 21" swinging door spec.) with flush thresholds max. 13 mm height |
| Vertical Circulation | Stair lift (as per manufacturer spec), staircase width and landings Vertical lift (as per manufacturer spec): depressed slab area, landings, and landing to accommodate shaft construction. |
| Hallways | Min. 900 mm width |
| Garage | Access from garage to living area with min. 800 mm clear door opening (28" sliding or 21" swinging door spec.) and flush thresholds max. 13 mm height |
| Patios & Balconies | Door clear opening min. 860 mm (28" sliding 3' swinging spec.) with flush thresholds max. 13 mm height |
| Bathrooms (Minimum 1/unit) | Toilet clear floor space min. 1020 mm at side and in front Wall blocking for future grab bars at toilet, tub and shower Min. 800 mm clear door opening (21" sliding or 21" swinging door spec.) with flush thresholds max. 13 mm height |
| Kitchen | Clear area needed under future workspaces. Plumbing and gas pipes (in-wall and in-floor) located clear of under counter area of future work space (stove, sink & min. 810 mm wide counter) 1500 mm turning diameter or turning path diagram Min. 800 mm clear door opening (28" sliding or 21" swinging door spec.) with flush thresholds max. 13 mm height |
| Living Room | Min. 1 window that can be opened with a single hand |
| Bedroom (Minimum 1/unit) | Min. 1 window that can be opened with a single hand Min. 800 mm clear door opening (28" sliding or 21" swinging door spec.) with flush thresholds max. 13 mm height |

DR1052051
 JUL 6 2011
Reference Plan