



NORTH VANCOUVER 1308 LONSDALE REZONING APPLICATION

JANUARY 2012



IBI/HB
Architects



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0.0 INTRODUCTION & CHRONOLOGY



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INTRODUCTION

IBI/HB Architects was retained by Onni Group of Companies in 2010 to provide architectural and planning consulting services for the development property located at 1308 Lonsdale Avenue, North Vancouver, BC. Situated within the Lonsdale Town Centre, the proposal features a high-density mix of commercial and institutional uses, and incorporates two residential towers.

IBI GROUP

IBI Group is a multi-disciplinary consulting organization offering services in four areas of practice: Urban Land, Facilities, Transportation and Systems.

IBI Group was founded in 1974 and is a leading, international, multi-disciplinary provider of a broad range of professional services focused on the physical development of cities. IBI's business is concentrated in four main areas of development: Urban Land, Facilities, Transportation and Systems. The professional services provided by IBI include planning, design, implementation, analysis of operations and other consulting services related to these four main areas of development.

ONNI GROUP OF COMPANIES

The privately-owned Onni Group of Companies is an integrated enterprise engaged in designing, developing, constructing and managing exceptional real estate projects. Driven by a passionate commitment to integrity, quality and value, Onni's track record of successful developments stretches back almost four decades. Today Onni is one of British Columbia's premier new home builders with a reputation for providing architectural innovation, superior quality and courteous customer service.



District of North Vancouver Geographic Information Systems, 2008

ONNI GROUP OF COMPANIES/IBI GROUP REVISIONS TO 1308 LONSDALE SUBMISSION

Onni Group of Companies/IBI Group submitted a rezoning application for 1308 Lonsdale in December 2010, which included 230,000 square feet of retail space and 340,000 square feet of residential space. The retail space included a 150,000 square foot department store, and the residential component included three 180 foot towers. The December 2010 application also included a 20,000 square foot North Vancouver Museum and Archives. The overall site density was 5.7 FSR.

After working with the city planning staff and preliminary feedback from the community, Onni/IBI re-submitted an application in April 2011. This new application included a height reduction of the tower on Lonsdale from 180 feet to 120 feet, a 10,000 square foot museum, smaller retail units on the ground floor and reduced overall density to 4.92 FSR. The application was then moved forward to ADP and APC meetings in late April, and council urged Onni to continue with community consultation.

Onni hired Catherine Rockandel of Rockandel and Associates to document this community engagement process, which has subsequently been submitted to the city. Catherine attended an Onni Open House at the Legion on 15th street, where over 180 people showed up. She also attended and documented meetings with the Lower Lonsdale Business Association, The North Vancouver Chamber of Commerce and several meetings with residents of the Grande, located on 13th and St Georges. Onni also received all correspondence that residents and local businesses submitted to the city, and to the rezoning website.

This community engagement process and the April APC and ADP meetings identified 7 key concerns/feedback components from City of North Vancouver residents and businesses.

1. Changing from a 3 tower(120 feet, 180 feet, 180 feet) to 2 tower option(180 feet and 240 feet)
2. Pedestrian access to Stella Jo Dean park from 13th directly to park.
3. Overall mass of podium, specifically facing the Stella Jo Dean Park.
4. Pedestrian and vehicular traffic generated by the proposed 220,000 commercial space, specifically a department store tenant. The impact of this department store on local business was also raised as a concern from businesses and residents.
5. Suggestions of including office space in lieu of commercial space
6. East-West Lane (the lane that services the Grande) concerns and how it will function in future
7. Shadowing over Stella Jo Dean Park, building setbacks and park enhancements



December 2010 Submission Tower Rendering



April 2011 Rezoning Submission Package

Onni categorized this feedback, and has completed another revision to the 1308 Lonsdale proposal that incorporates the various feedback from the public engagement process and city staff. Below is a list of the many modifications Onni has made to the proposal.

- Reducing number of towers on site from 3 towers to 2 towers. This improves view corridors in Central Lonsdale, and eliminates shadowing concerns on Stella Jo Dean Park. Placement and height of the two tower option is as per Frank Ducote's March 2011 council workshop. Feedback from APC on April 14, 2011 also recommended supporting 2 towers with additional height over a 3 tower option at OCP height limit.
- The podium has been reduced from 3 floors to 2 floors, with specific setback added on eastern side adjacent to the Grande, as well as on the podium that backs onto Stella Jo Dean Park, as per feedback from ADP on April 26, 2011, which noted height and design of podium as a concern.
- More slender towers and small floor plates, as per direction from Frank Ducote, City Planner.
 - Tower A - Reduced from 7900 sq. ft. to 7400 sq. ft.
 - Tower B - Reduced from 8300 sq. ft. to 7800 sq. ft.
- Reduction in overall FSR for the project, reducing overall density from 5.7 FSR per December 2010 to 4.53 FSR
- New architectural shaping and floor plate placement, which carefully consider view corridors with adjacent towers. Framing of the gateway to Central Lonsdale has been carefully considered by IBI architects.
- Provision of a pedestrian pathway that connects 13th street to Stella Jo Dean Park, as per suggestion from City Staff, April 26, 2011 ADP meeting and ongoing public engagement process. This pathway results in a land dedication of 3,551 sq. ft.
- Provision of additional building setbacks surrounding the office tower. These setbacks were incorporated due to feedback from Stella Jo Dean and residents of the Grande.
- Provision of an enhanced pedestrian connection at mid-block lane - Adding permeability to site, as per APC feedback.
- Land dedication to west side of Stella Jo Dean Park in an effort to increase the park's size.
- Enhancements to the existing park. Onni will work with City Staff and Stella Jo Dean on specific enhancements to the Stella Jo Dean Park on 14th Street.
- Addition of new 80,000 square foot office component to development. This is in response to feedback from the Lower Lonsdale Business Association and the North Vancouver Chamber of Commerce. Feedback for provision of new office space in the central Lonsdale corridor also came from existing business owners in the neighborhood. We have spent considerable time reviewing and understanding the City of North Vancouver's Economic Development Strategy which encourages new office development.
- Onni Exceedingly Green Initiatives are being considered, striving for highest level of Green building practices in City of North Vancouver. LEED Gold equivalency has been proposed, which would set the standard for the "greenest" development in the City of North Vancouver.
- Addition of Smaller Commercial Retail Units, which engage the streetscape and create opportunities for small local businesses. Smaller units were requested by City staff, local businesses and APC.
- Deleting department store tenant. Alleviating concerns of its potential effect on local business, along with increased traffic congestion.
- Inclusion of 10,000 square feet of affordable housing.
- Deleting the North Vancouver Museum and Archives.
- Kids play area and urban agriculture strategically placed in sunlight rooftop amenity space, as per direction from April 26, 2011 APC meeting.
- Additional 3 meter setbacks along 13th Street, as per direction from the City Staff. The sidewalk will now be 6 meters wide, improving the pedestrian experience surrounding the site.
- Addition of Lonsdale Energy Corporation Miniplant- This miniplant, which will be located in the parkade, will service the Central Lonsdale Corridor.
- East-West Lane (the lane that services the Grande) - Onni worked with IBI Traffic engineers to ensure that this east-west lane will function in the future once it has been closed off. The residents of the Grande identified garbage loading issues, moving truck parking and residential parking access/egress challenges with the proposed plan. IBI Traffic engineers worked with the City and the residents on resolving these issues, which ensure that the residential parkade will not be blocked and that loading will be satisfactory.

1.0 ZONING & OFFICIAL COMMUNITY PLAN



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CURRENT ZONING

The Site is currently zoned C-1A, C1-B and CD-216.

C-1A (Central Lonsdale Mixed Use A)

Retail-Service Group 1 Use:

Retail-Service Group 1 Use means a use providing for the sale at retail or repair of household or personal goods or things, or for extending services to persons. This group also permits Accessory Apartment Use, Accessory Arcade Use, Accessory Off-Street Parking Use, Accessory Off-Street Loading Use

Tourist Accommodation Use:

Tourist Accommodation Use means a use providing for the accommodation of the transient public in individual sleeping units or dwelling units. It may also include dining facilities. This use permits Accessory Off-Street Parking Use and Accessory Off-Street Loading Use

CD-216 (Comprehensive Development 216 Zone)

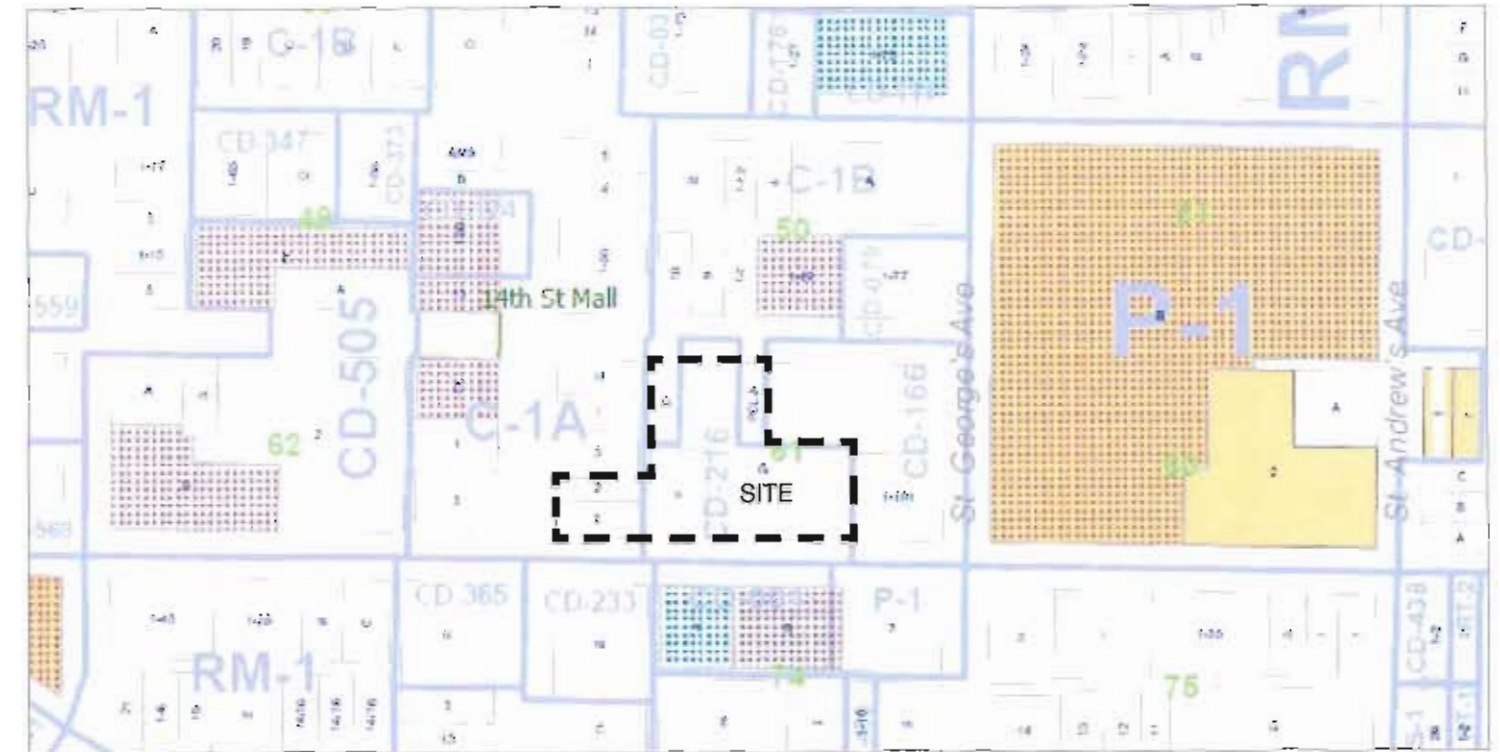
Presently B&B Tickets, Canada Safeway

In the CD-216 Zone, permitted uses, regulations for permitted uses, regulations for the size, shape and siting of buildings and structures and required off-street parking shall be as in the C-1B Zone, except for the permission of a retail sales kiosk.

C-1B (Central Lonsdale Commercial B Zone) allows for the same uses as C1-A.

CITY OF NORTH VANCOUVER OFFICIAL COMMUNITY PLAN (OCP)

The City of North Vancouver OCP classifies the site as Lonsdale Town Centre (Central). The OCP promotes this area as one that will stimulate redevelopment with higher densities. Development densities up to 2.6 times the lot area are allowed in this area. The City encourages high density mixed use development, which is typically a mix of retail and office on the lower floors and residential apartments on the upper floors.



City of North Vancouver Generalized Zoning Map, 2010



City of North Vancouver Official Community Plan Schedule A, 2009

CONTEXT PHOTOS



1 NORTHWEST CORNER



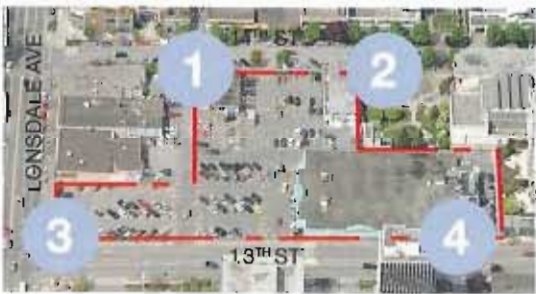
2 NORTHEAST CORNER



3 SOUTHWEST CORNER



4 SOUTHEAST CORNER



Key



PLANNING & DESIGN RATIONALE

The site is one which requires thoughtful redevelopment to facilitate the emerging urban nature of this shopping and business street. This proposal consists of a high-density mix of commercial, office and residential uses. Over 170,000 SF of commercial development in the form of anchor grocery tenant, office and smaller CRUs, and over 280,000 SF of residential development will help to create an active, accessible, liveable hub within the city, providing support within the community and enhancing local services.

In recognizing that the development is situated within the Lonsdale Town Centre which encourages high density mixed use development at up to 2.6 times the lot area, Onni Group of Companies wishes to apply for a rezoning of the property to permit additional density for the proposed development.

The site is currently zoned C-1A, C1-B and CD-216 (see Zoning & OCP section of this document for zoning definitions). At its current zoning, C-1A allows for a maximum height of 24.4m and C1-B and CD-216 allows for a maximum height of 36.6m. The development features two residential towers of varying heights. Onni Group of Companies wishes to apply for OCP amendments for both towers in order to increase the maximum height of the proposed western tower on 13th Street and Lonsdale Avenue to 55.0m, and the maximum height of the northern tower to 73.2m.



Aerial Perspective Render at Corner of 13th Street and Lonsdale Avenue



Perspective Render at Corner of 13th Street and Lonsdale Avenue

OFFICIAL COMMUNITY PLAN & REDEVELOPMENT PROPOSAL

NORTH VANCOUVER OFFICIAL COMMUNITY PLAN ANALYSIS			
	CITY OF NORTH VANCOUVER OCP	PROPOSAL	
3.1	Community Vision - To be a vibrant, diverse and highly livable community that strives to balance the needs of our community locally. ...the City's future development will primarily be urban in nature. This will include reasonably dense development, close to transit, with a mixture of uses. ...the City wishes to provide as many of our community needs locally as is practical, thereby reducing demands on other areas, on transportation, and on the environment.	The proposal supports such a vision. A high density, mixed-use development which provides commercial, office and residential support to the community and enhances local services is proposed.	 Mixed-use Mid-rise and High-rise Development
4.9	Sense of Place Goals 4.9.2 To encourage the development of the Lonsdale Regional Town Centre as an identifiable core of the City with two centres: Central and Lower Lonsdale. 4.9.5 To strive for excellence in developments in terms of architecture, landscaping, social and environmental characteristics of the North Shore.	The design of the development will strive to promote architectural excellence, as well as enhance the social and environmental character of North Vancouver.	 Development Fronting Green Landscape
4.10	Sense of Place Objectives 4.10.6 To encourage an architectural identity that responds to the unique context of the City in a sensitive, sustainable, aesthetic and rational manner. 4.10.7 To develop the commercial streets in Central and Lower Lonsdale as active, vibrant, pedestrian friendly spaces.	- Commercial frontages proposed on Lonsdale Avenue, 13th Street, and 14th Street will encourage active and pedestrian-friendly streets. - Careful planning along with a unique and contemporary architectural vocabulary will complement and enhance the character of this important gateway site.	 Active Street Life
5.2	Land Use Plan The Lonsdale Regional Town Centre has two high density, mixed-use centres, in Lower Lonsdale and Central Lonsdale. These support commercial, institutional and residential high density uses. From Lonsdale Avenue, densities generally step down in gradual increments to avoid the creation of "zoning cliffs". This also has the effect of providing for a wide range of housing types within walking distance of Lonsdale Avenue.	The development, which is situated on Lonsdale Avenue and 13th Street is located within the Lonsdale Town Centre. A high density, mixed-use development which supports commercial, office, and residential uses is proposed.	

OFFICIAL COMMUNITY PLAN & REDEVELOPMENT PROPOSAL

NORTH VANCOUVER OFFICIAL COMMUNITY PLAN ANALYSIS			
	CITY OF NORTH VANCOUVER OCP	PROPOSAL	
5.6	Land Use Goals 5.6.1 To establish a land use pattern that supports the creation of a complete community. A balance of residential and employment growth is encouraged. 5.6.2 To provide suitable locations for various land uses, or mixes of land uses, while shielding residential and other sensitive areas from adverse effects. 5.6.4 To achieve a balance between quality of life considerations in new developments, like livability and neighbourliness, with other factors such as economic and orderly growth considerations.	- The development is supportive of the Plan's Land Use Goals. A mix of commercial, office and residential use in the development creates opportunities in which to live, work and learn in the community. - Present land use of site is enhanced as the former grocery store is redeveloped into a site of retail, office, and residential development. - Context of development will be taken into account throughout planning and design stages, with livability and quality of life of particular importance. - Development's higher density, form, and use are in line with the recommendations from the OCP and are appropriate for this site.	 Mix of Commercial Activities
5.7	Residential Land Use Objectives 5.7.1. To promote a range of housing densities, diversified in type, cost and location, to accommodate the diverse needs of the community. 5.7.3 To design commercial and major institutional to mitigate impacts on nearby residential uses. 5.7.5 To encourage higher and medium density residential growth adjacent to major commercial facilities, with lower residential densities elsewhere. 5.7.8 To incorporate adaptable design features into apartments so that residents can age in place. 5.7.9 To consider the needs of households with children in the design of multi-family developments.	- The residential component of this development provides for a range of apartment types (studio, one-bedroom, two-bedroom and three-bedroom apartments) and is attractive to a diverse range of residents. - Commercial uses (anchor grocery tenant, CRUs and office) in the development provide useful services and employment opportunities for residents both in and near the development. - The mixed-use, high density nature of the development recognizes and supports the Land Use Objective of encouraging higher density residential growth near major commercial facilities.	 Mixed-Use Development
5.7.10	Residential Land Use Objectives Lower and Central Lonsdale Town Centre (Mixed Use): Up to 2.6 times the lot area in Lower and Central Lonsdale. In these areas, the City encourages high density mixed use development, which is typically a mix of retail and office on the lower floors and residential apartments on the upper floors. In certain areas the City may encourage purely residential projects in the mixed use areas. In other areas the City may encourage a higher percentage, or all commercial floor space.	- Uses within our development include an anchor grocery tenant, offices, smaller CRUs and residential towers. Retail is proposed on the development's lower floors as well as 80,000 SF of office space. Two residential towers comprising of approximately 346 units sit above the primarily retail podium. - Refer to Project Stats section for proposed density.	

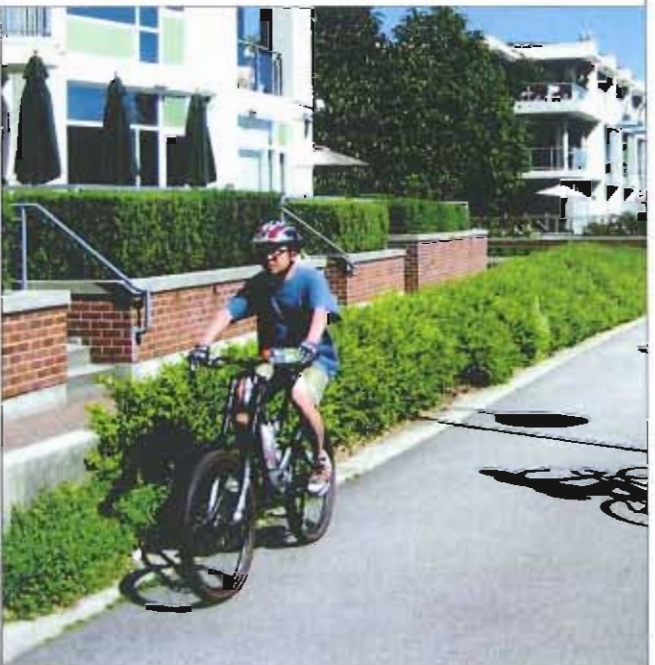
OFFICIAL COMMUNITY PLAN & REDEVELOPMENT PROPOSAL

NORTH VANCOUVER OFFICIAL COMMUNITY PLAN ANALYSIS			
	CITY OF NORTH VANCOUVER OCP	PROPOSAL	
5.8	Commercial Land Use Objectives 5.8.1 To encourage commercial development within appropriate land use designations to generate employment and provide the services and conveniences needed to support our population. 5.8.2 To support the Lonsdale Regional Town Centre as the urban core of the City, while recognizing the broader benefits and opportunities presented by commercial development in other locations. 5.8.4 To monitor the proportion of uses in mixed use buildings located in the Lonsdale corridor to ensure that there is sufficient commercial base to serve the public. 5.8.5 To monitor the composition and co-location of uses in a development to ensure that there is a smooth interface between potentially conflicting uses.	- An anchor grocery tenant, offices and smaller CRUs are proposed in this development. - A range of commercial activities in the development provide useful services and employment opportunities for residents both in and near the development.	 Neighbourhood Grocery Store
5.8.6	Lonsdale Town Centre (Central) Lonsdale Town Centre (Central): Central Lonsdale is concentrated within the 11th Street to 17th Streets area, but also has some strip commercial north to 23rd Street and south to Keith Road. Central Lonsdale will continue to grow as the institutional and administrative core of the City, and will continue to attract businesses that serve these institutions, their workers, and the growing population in this area. Hopefully, this area will also attract thoughtful redevelopment to higher densities to increase the emerging urban nature of this shopping and business street. Mixed-use, commercial and residential, developments are highly encouraged in this area. Office uses are particularly encouraged within the Lonsdale Town Centre.	- The development contains a high density mix of commercial, retail and office space. Commercial activities would likely include a grocery store on 13th Street, with smaller CRUs proposed on 13th Street, Lonsdale Avenue and 14th Street. A commercial tenant can be accommodated on the second level of the development, along with 80,000 SF of office space. - The mix of commercial and residential development facilitates growth in the Central Lonsdale Area and serves to enhance commercial and service activities already existing in the area.	
5.11	Building Heights - The City does not guarantee that any view will be preserved. However, in an attempt to find a balance between near, distant, public and private views, and the objectives of creating a viable, vibrant and attractive Town Centre, maximum building heights have been established for high density properties in the Town Centre. 5.11.1 The maximum potential building heights for medium and high density development in Lonsdale Regional Town Centre shall be as presented in Figure 1.	- A proposal for two towers will preserve the view corridors of neighbouring developments. - Tower A (Lonsdale Avenue and 13th Street) is proposed to be 55.0m in height while Tower B (14th Street) is proposed to be 73.2m - All towers are separated by more than 80' to preserve views.	 Well Spaced Residential Towers

OFFICIAL COMMUNITY PLAN & REDEVELOPMENT PROPOSAL

NORTH VANCOUVER OFFICIAL COMMUNITY PLAN ANALYSIS			
	CITY OF NORTH VANCOUVER OCP	PROPOSAL	
5.12	Additional Density Factors - As an incentive to achieve public benefits or amenities, City Council may consider providing density bonuses, density transfers or gross floor area exclusions. - The following additional density factors may be considered: -5.12.3 Adaptable Design Consideration -5.12.4 Community Amenity Space Consideration -5.12.5 Environmental Considerations	- The residential component of the development will contain a mix of dwelling units, with at least 20% of the units built in accordance with the City's Adaptable Design Guidelines Level 2. - LEED Gold equivalency is proposed for this development (Note: Onni will have to consider various forms of energy optimization and the cost of implementation). - A 24m x 15m space within the development will be provided for the construction of a miniplant to be used by Lonsdale Energy Corp. A miniplant will use more than 17 parking stalls. Accordingly, that density will be relocated to residential towers. 10,000 SF of affordable housing is being proposed for this development. - Onni is proposing a land dedication for pedestrian access to Stella Jo Dean Park. - A monetary contribution to the City's newly created Community Amenity Fund is also proposed.	 Pedestrian-friendly Streetscape
6.3	Pedestrians The City of North Vancouver supports policies that improve the comfort, safety and enjoyment of pedestrians. This includes the expansion and improvement of pedestrian pathways and linkages as identified in the Parks and Greenways Plan, as well as the improvement of pedestrian areas in the urban public realm such as sidewalks, crosswalks, civic plazas, and the safe separation room, but co-existence with, other modes of transportation such as bicycles and vehicular traffic.	- Where possible, the development will encourage a safe and pedestrian-friendly streetscape. - Development will include two separate pedestrian thoroughfares for pedestrian access within the site, one which connects 13th Street directly to the park. Both will include all CPTED measures.	 Bus Repair Station
6.4	Bicycles - The City of North Vancouver supports the improvement and expansion of a bicycle route network throughout the City as well as the provision of facilities to encourage more bicycle use. - City initiatives in support of bicycle use include the following: -North Vancouver Bicycle Master Plan -Designated Bicycle Routes -Bicycle Facilities	- Based on Schedule "C" of the OCP, West 13th Street is an existing bike route and Lonsdale Avenue is designated as an area of destination facilities and a truck route. - The development is in support of bicycle use. Bike facilities for those living in the development and those working and visiting the development are proposed. - Bike repair stations.	 Bus Service
6.5	Transit - Improving transit as a viable alternative for daily trips is seen as the most effective way of reducing reliance on vehicle use. - City initiatives in support of transit use include the following: -Regional Transportation Authority -North Shore Area Transit Plan -Improvement for People with Disabilities	- The development is fully accessible by frequent transit. -Bus 242 runs along Lonsdale Avenue -Bus 240 and 255 run along 15th Street (1 block away from our site) - Close proximity to Seabus, providing quick access to downtown Vancouver.	

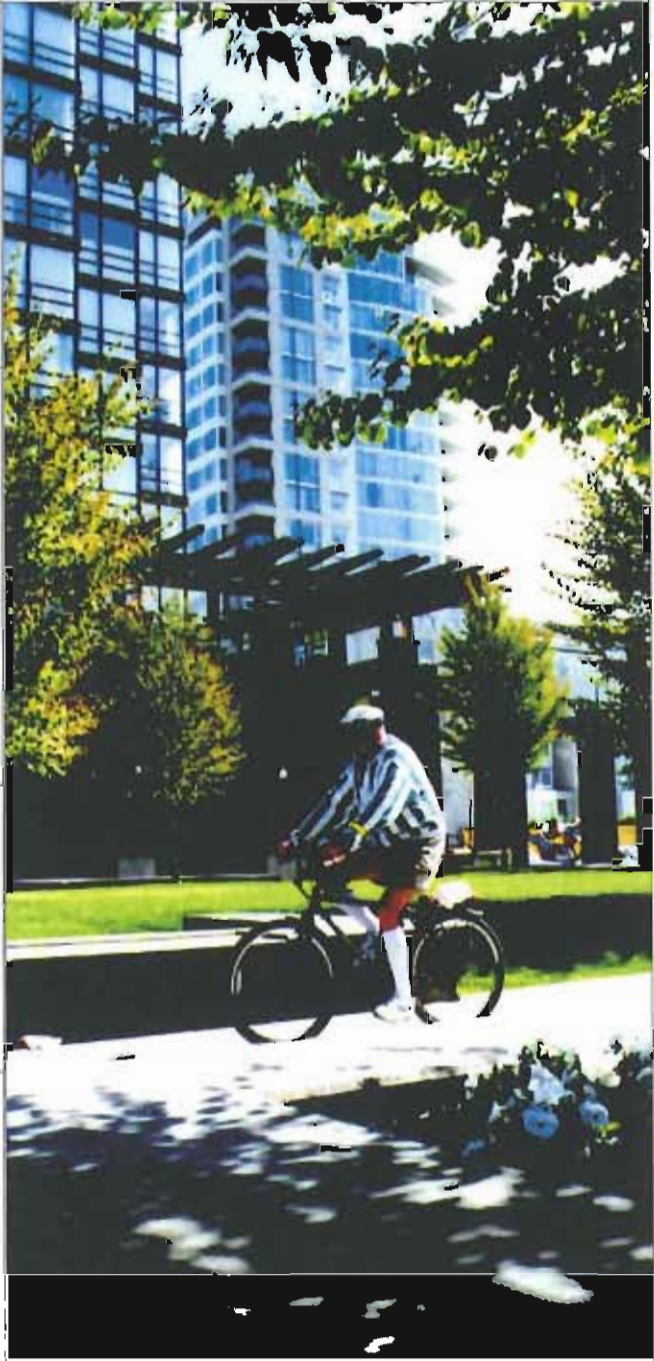
OFFICIAL COMMUNITY PLAN & REDEVELOPMENT PROPOSAL

NORTH VANCOUVER OFFICIAL COMMUNITY PLAN ANALYSIS			
	CITY OF NORTH VANCOUVER OCP	PROPOSAL	
6.8	Road Network A regional Major Road Network was created as one of the responsibilities of TransLink. The Major Road Network consists of Lonsdale Avenue, Esplanade, Marine Drive, the Low Level Road, and Cotton Road. The City of North Vancouver is committed to improving the existing road network within its jurisdiction.	- Lonsdale Avenue is recognized as a major pedestrian area where attractive and well-designed sidewalk and crossing facilities are required to accommodate people of all mobility levels, and to encourage people to use alternative modes of transportation. - Although not a designated bike route, Lonsdale Avenue accommodates bike traffic as a key destination for local cyclists.	
6.9	Neighbourhood Preservation/Traffic Calming A traffic calming policy has been developed to allow the City to prioritize and identify traffic calming strategies in a systematic manner for individual neighbourhoods. The City's Parks and Greenways Plan also supports the goals of the traffic calming policy by creating more bicycle and pedestrian friendly corridor treatments.	The proposed site is in the Neighbourhood Traffic Calming Area classified as Central Lonsdale East. A Calming Plan was completed in 2005. Directly affecting our site would be a New Median Island and Marked Crosswalk on 13th St. (put in place in 2005).	
6.11	Transportation, Mobility and Access Goals 6.11.1 To encourage the use of a variety of transportation choices to serve the needs of all residents and visitors, with priority given to transit, cycling, and walking.	A high density hub of commercial, office and residential uses creates a well-served hub where residents are able to walk, cycle and take transit to work.	
6.12	Transportation, Mobility and Access Objectives 6.12.1 To enhance and expand opportunities for bicycles as a viable and attractive transportation choice. 6.11.2 To enhance pedestrian corridors to encourage more pedestrian activity throughout the City of North Vancouver	- Where feasible, the development will enhance pedestrian corridors and promote a safe and pedestrian-friendly streetscape. - Bike facilities for those living in the development and those working and visiting the development are proposed.	
7.4	Community Well-Being Issues Many of the City's policies related to community well-being are existing, and are highlighted on the City's web page and in the Social Plan. The main policy areas concern child care, affordable housing, enhanced service networks, community amenities and facilities, and City initiatives to address emerging community issues.	10,000 SF of affordable housing is proposed for this project. - A potential monetary contribution to the City's newly formed Community Amenity Fund is proposed.	

Bike-friendly Development

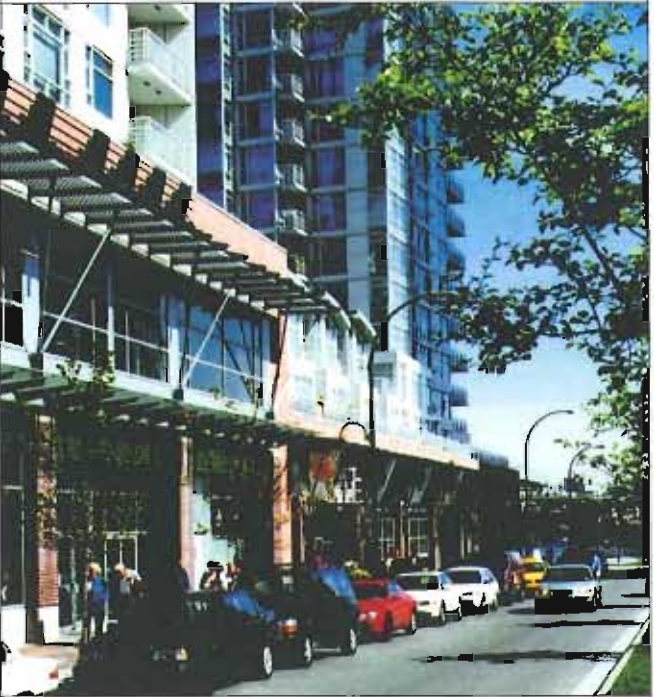
Community Amenities

OFFICIAL COMMUNITY PLAN & REDEVELOPMENT PROPOSAL

NORTH VANCOUVER OFFICIAL COMMUNITY PLAN ANALYSIS			
	CITY OF NORTH VANCOUVER OCP	PROPOSAL	
8.5.1.1	Policies (Environment/Land Use Priorities) A. To encourage the planning and design of energy efficient neighbourhoods to minimize green house gas emissions; B. To provide higher density, mixed use development along key transit and energy utility corridors; C. To increase the quantity, diversity and quality of local jobs to maintain a residents in the labour force to jobs balance thereby reducing the need for longer work commute distances for City residents.	- The higher density mixed-use nature of the proposed development is in line with the recommendations of the OCP for the Lonsdale Corridor. - Site specific sustainable building initiative that will be equivalent in function to LEED Gold. - The development's mix of uses coupled with its high density creates an employment hub in a well-used, well-serviced corridor. Employment opportunities would be available for residents living both in the near the development. For those living further away, the site is well serviced by the Seabus and several bus lines.	
	Policies (Environment/Energy Supply Priorities) A. To work with LEC to expand the existing Community Energy System, to connect as many buildings as possible, as a means of providing heat energy for applications such as space heating and domestic hot water provided that it is demonstrated to be economically and technically feasible, and meets the City's sustainability goals and objectives; B. To minimize the use of non-renewable energy increasing the use of clean and efficient renewable energy supply systems including: i. Encouraging the use of on-site renewable energy for all building types; and, ii. Assisting LEC to transition to renewable energy sources.	- The development will be Integrated into the Lonsdale Energy Corporation - The development will include its own miniplant.	
8.7	Built Environment Objectives 8.7.8 To encourage pedestrian-friendly mixed-use redevelopment that combines residential, commercial and institutional uses 8.7.12 To encourage new developments that minimize environmental impacts and that incorporate the principles of a sustainable lifestyle	The proposed high-density mixed-use development is in line with the OCP's built environment objectives. The proposal will provide various commercial, office and residential uses and where possible, enhance pedestrian corridors and promote a safe and pedestrian-friendly streetscape.	
9.3	Trails and Recreational Greenway System - The Parks and Greenways Strategic Plan determines priorities for trail improvements in the City. Trail connections and associated green corridors – recreational greenways – may be in parks, on the waterfront, and on street or other public lands. - Solid lines on Schedule "F" indicate a primary trail route. Dashed lines indicate secondary trails to connect residential areas to the primary route, or to interconnect trail systems. The focus of the park and greenway trail system is walking or slow-speed recreational cycling.	- Based on Schedule "F" of the OCP, the development along the secondary trail of the Necklace Trail System. These are along: -Lonsdale Avenue -14th Street - The development promotes walking and biking along these trails by creating active and attractive storefronts and streetscapes along these trails when appropriate, and supporting bicycle use through the inclusion of bike facilities for those living, working and visiting the development.	

Pedestrian and Cycle-friendly Development

OFFICIAL COMMUNITY PLAN & REDEVELOPMENT PROPOSAL

NORTH VANCOUVER OFFICIAL COMMUNITY PLAN ANALYSIS				
	CITY OF NORTH VANCOUVER OCP	PROPOSAL		
12.5	Economic Goal To maintain a strong and diverse local economy capable of supporting a complete community.	A high-density mix of commercial, office and residential uses within the development helps to support the Economic Goal.		
12.6	Economic Objectives 12.6.1 To maintain an approximate balance, and to encourage as large an overlap as possible, between the resident labour force and jobs in the City. 12.6.3 To seek a wide range of employment opportunities that accommodates the diverse needs and skills of the community, including opportunities for youth, people with disabilities and all member of the City's resident labour force. This should include a wide range of incomes, enabling workers to work and live on the North Shores. 12.6.5 To attract new businesses that can contribute to the local economy. 12.6.6 To support the Lonsdale Regional Town Centre as a business and service core 12.6.9 To promote and develop the City of North Vancouver as a tourist destination. 12.6.11 To encourage businesses to operate in a sustainable manner.	- A high-density mix of commercial uses in the form of retail and office provides a large and diverse amount of employment opportunities for those living in and around the North Shore as well as promotes the Regional Town Centre as a business and service core. - The development will include numerous smaller commercial retail units, contributing to the growing business core of North Vancouver. 12 jobs per \$1 million in construction value.		

Mixed-Use Development



2.0 SUSTAINABILITY OVERVIEW



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SUSTAINABILITY OVERVIEW

Onni has a long history of creating quality projects in Greater Vancouver, and is committed to creating a socially, economically and environmentally sustainable project at this exciting North Vancouver site. We believe the site location provides an opportunity to create a livable, dense and sustainable, urban experience.

We are currently exploring the opportunities to create an ONNI Exceedingly Green development, targeting a LEED Gold equivalent community onsite, that is tied in to the Lonsdale Energy District and aligning with some of the City's 100 year sustainability vision targets. (Note: Onni will have to consider various forms of energy optimization and the cost of implementation)

EXCEEDINGLY GREEN GOALS

The sustainability initiatives for the 1308 Lonsdale project are consistent with LEED Gold Equivalency, a standard with which Onni is familiar with in the building of "The Mark" in Yaletown. LEED Gold equivalency typically increases hard costs by 5% to 10%. Onni will employ site specific sustainable building initiatives that will be equivalent in function to LEED Gold.

Included in this document are many of the additional environmental, social and economic sustainability initiatives that will be incorporated into this project. Further discussions regarding specific costs to the building envelope, shading devices, glazing, insulation, hydronic mechanical system for commercial, residential and office spaces and other features will detail the sustainable premium Onni is expected to commit to in exchange for additional density pursuant to section 5.12.5 of the OCP.

ENVIRONMENTAL SUSTAINABILITY

SITE PLANNING :

- Urban infill densification is inherently sustainable, promoting development in existing areas and diverting development pressures from Greenfield sites and environmentally sensitive areas, including wilderness and other ecologically important areas such as agricultural land.
- Infill and mixed-use density within the existing neighborhood means the site will provide for a high degree of walkability for future residents and decrease single-occupant vehicle trips
- Site will retain high degree of permeability and walkability to ensure easy local walking and cycling access to amenities.
- The large amount of surface parking currently on site will be replaced with covered and underground parking, reducing urban heat island effects. Heat island will be further mitigated by innovative use of landscaping, including green walls or other technologies available at the time.
- Potential green roofs, landscaped amenity areas, and permeable paving technologies will reduce storm water runoff into municipal systems and increased groundwater infiltration to replenish local aquifers.



SUSTAINABILITY OVERVIEW

TRANSPORTATION:

- Efforts to reduce the reliance on single-occupant vehicles will be a priority in the new development.
- Circulation and pedestrian access will be the backbone of the new site's layout, enabling intuitive and simple access for residents and visitors.
- The site will be a Transit-oriented development, served by multiple bus routes and just over 1km away from a multi-modal transit hub, Lonsdale Quay.
- The site is adjacent to two priority bike routes, 13th Ave and 14th Ave, which is part of the "Green Necklace" system. It is also within a block of two primary North-South bike routes, Chesterfield and St. Andrews.
- Neighborhood bike station- Access to bike parking for visitors and secure storage and change facilities will improve the biking experience for those visiting, working and living in the new complex. Onni will exceed City of North Vancouver requirements (exact space and location to be determined following final design).
- We will Endeavour to make Commercial/retail space available for a bike shop, repairs, to support cycling in the City.
- Onni will exceed Electrical Vehicle (EV) charging needs for bikes, scooters and cars and have at least 2 EV car pool vehicles to reduce reliance on fossil fuel reliant vehicles. This will be included in the green building premium.



ENERGY:

- The project will minimize the energy intensity of the buildings and building systems by working with the Lonsdale Energy Corporation (LEC), calculating the anticipated annual GHG emissions (tones/yr) and reviewing the energy use intensity (kWh/m²/yr).
- Onni will work with the City and its engineering team to connect and integrate a mini plant to LEC, which is intended to reduce reliance on fossil fuels and CO₂ output. Onni will work with the LEC to specify high efficiency boilers for its mini plant.
- Waste Heat Recovery – A system is being considered where waste heat from the building's cooling system is recovered and used to heat domestic hot water as well as possibly feed energy back into the LEC system.
- Efficient energy production. Hot water heat is created three times more efficiently than electrical heat produced by thermal generation. One small mini-plant can serve several buildings.
- Flexibility. LEC is designed to use a variety of fuels, including emissions-free solar energy, so that other energy sources can be considered when it becomes economical to do so.
- Dependability. LEC can switch between mini-plants to ensure energy is always available. Long-term efficiency is not hampered by aging equipment.
- Visual advantages. Mini-plants are contained within buildings and underground and can serve multiple buildings.
- Daylighting strategies will be employed throughout the residential and retail spaces to reduce reliance on electric lighting.
- Low-energy lighting systems will be employed in all public areas throughout the project, and we will work with tenants to ensure that they employ "green" strategies throughout tenant fit-out.
- Energy Star efficient appliances will be used throughout the project.
- HVAC systems will not use ozone-depleting chemicals outlawed by the Montreal Convention and will seek to limit those with negative effects on climate change. Hydronic HVAC systems for commercial and residential space will be included in development
- Long term building energy performance is best achieved with whole building commissioning, measurement, verification, and in-suite meters & monitoring.
- Onni is exploring Passive Design principles including a maximum of 50% glazing to wall ratio, partially thermally broken balconies, exterior shading devices on west elevation, and high performance glazing.



SUSTAINABILITY OVERVIEW

CLIMATE LEADERSHIP:

- Efforts will be made to track the carbon emissions, energy consumption, and solid waste consumption during construction.
- Identify what the carbon footprint is for the concrete structure and explore offsets through planting of trees either on site or elsewhere.
- Educating the strata, residents and tenants on the green elements of their new building, a Green Owners Guide and Green Care Manuals will be developed and distributed.
- To expand the sustainability knowledge of the strata council and commercial tenants, training will be provided on the One Planet Living framework.
- Support urban agriculture with edible landscaping, potential contract with local farmers, catering, grocer and farmers market etc
- Explore alternative financing models, 3rd party partnerships (Vancity, BC Hydro, etc)
- Document the project as a case study for the City of North Vancouver – Set standard for sustainable building level in City of North Vancouver

MATERIALS & RESOURCES:

- Recycling will be seamlessly incorporated into the project, both in the construction and final design of the property.
 - Recycling facilities will be accessible to all users of the property.
 - Enhanced space and collection services for recyclables (CFLs, batteries, furniture, etc)
 - Triple-stream (compost, recyclables, garbage) waste management in-suites.
- Water consumption will be reduced by at least 25% over code standards through the employment of low-flow fixtures.
- Low-VOC products will be used throughout the project, including paints and coatings, adhesives, sealants, and binding agents to improve the indoor air quality for residents and visitors.
- Onni will strive to meet a 15% recycled content level in all building materials, enabling the market for pre- and post-consumer materials to grow.
- We will also strive to source at least 10% of our materials from local or regional sources, reducing embedded CO2 in materials and fostering local industries.
- Low-mercury lighting will be used throughout the project where possible, reducing reliance on base minerals as well as toxicity in the waste stream.



SUSTAINABILITY OVERVIEW

FOOTPRINT:

- Research “Eco-concierge” to support residents and businesses green efforts (ex. Maintain air-pressure for vehicles in underground parking.)
- Encourage local food production through striving to secure commercial space for a farmers market and/or food suppliers (SPUD, etc).
- Endeavor to have an urban agriculture maintenance contract (City Farm Boy, etc)

CLEAN AIR:

- Meet all IAQ LEED credits, IAQ plan during construction.

ECONOMIC SUSTAINABILITY:

- Intensification of residents will improve the tax base for the City and provide an increased commercial tax base, which is a large net gain to the provision of services within the community.
- Food store and small-format retail will provide the neighborhood with access to essential services and neighborhood-serving retail, stimulating long-term job growth and local small business opportunities.
- Local economies stimulated through mixed-use retail and housing.
- Thousands of temporary construction & consulting jobs created over the multi-year development timeline. Income from these jobs filters into the community through basic daily consumption of goods and services.
- Job creation in all capacity will contribute to the city of North Vancouver’s 100 year sustainability goals. Construction, building operators, retail and marketing sales and create at least 10 new green jobs such as urban agriculture maintenance contract, green building operator, green janitorial, waste management & maintenance supporting job creation in the City.
- Collection of Development Cost Charges (DCCs) by the City.
- Sourcing of construction materials and development services from local suppliers and trades will further contribute to the local economy.

SOCIAL SUSTAINABILITY:

- Mixed-use housing variety and size provide for opportunities for an assortment of socio-economic distinctions and a demographically diverse community.
- Provides housing opportunities for mixed income households as well as young families and downsizing empty nesters/ retirees
- Opportunities for commercial areas will allow for greater vibrancy in the community through increased localized interaction and economies.
- Gathering areas and public meeting places provide for community interaction.
- Various unit layouts provide for home based businesses opportunities.
- Mixed-use development allows residents to live and work close to home.
- Employment will be created with the provision of commercial and office space.
- Explore potential for low-wage job creation via partnership with social hiring agencies.
- Improvements and expansion of existing park – improving community space



3.0 GREENSPACE



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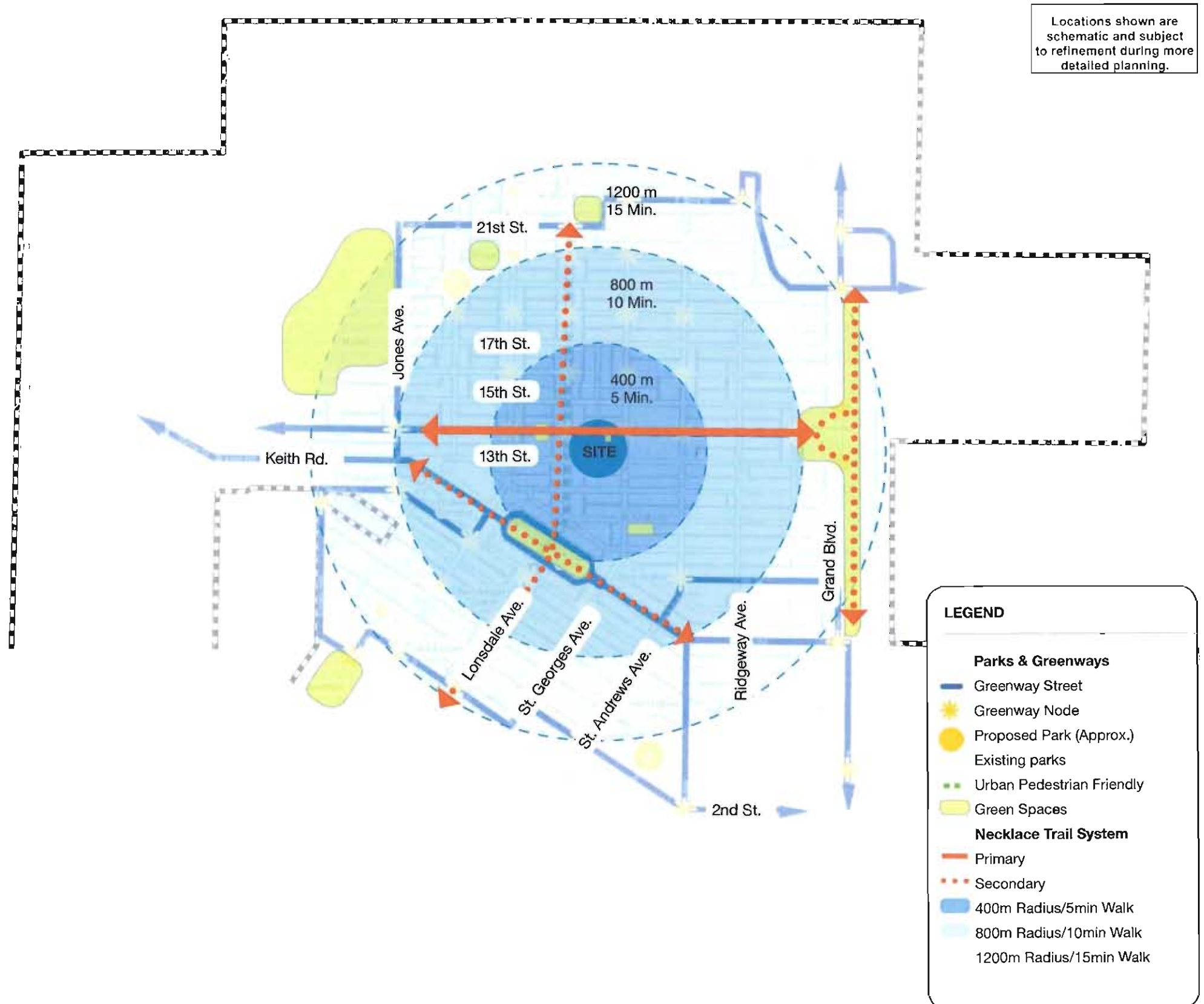
EXISTING PARKS & GREENWAYS

EXISTING PARKS & GREENWAYS

- The Green Necklace is a 7km long multi-use trail that will form a continuous loop around the centre of the City of North Vancouver. This greenway will link important city parks, public spaces and natural habitats, providing safe, enhanced access for pedestrians, inline skaters and cyclists alike.
- The trail averages 3m in width with the ability to expand, where possible, in the future. To accommodate this, a buffer strip of 1.0-1.5m is being provided, where possible, on either side of the trail.
- Safe street crossing safety has been improved by building intersection curb extensions, additional signage and zebra striping pavement markings across roadways.
- The trail is comprised on an asphalt surface to provide access to wheeled mobility devices for people with disabilities and in-line skaters.
- The Green Necklace will encourage community interaction, lifetime fitness and safe, easy access to parks, open spaces and streets.
- The Green Necklace will enhance the walkability of the City which is a major factor in determining the overall livability of a city.

There are four Greenway systems planned for the City:

- Green Necklace Greenway
- Upper Levels Greenway
- Ravine Greenway
- Waterfront Greenway



4.0 COMMUNITY BENEFITS



IBI/HB
Architects



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COMMUNITY BENEFITS

According to the Urban Development Institute, for each \$1 million in construction revenue, more than 12 direct and indirect jobs are created. Considering that the project has an estimated construction value over \$200,000,000, this contributes over 2400 direct and indirect jobs to the region. Employment is created in a vibrant, mixed-use district, where new residents shop and eat locally, and new visitors come to enjoy neighbourhood amenities stimulating spinoff economic effects. The redevelopment of 1308 Lonsdale brings the total amount of commercial/employment space to over 170,000 SF. This is a significant increase in floor area for new jobs and economic activity.

The neighbourhood benefits extend far beyond job creation and economic development. The implementation of green building and landscape design principles encourages environmental responsibility and shows the community how sustainability and development can coexist. The redevelopment brings infrastructure upgrades to sidewalks and storm-water management facilities, and plant-covered “living-walls” will significantly raise the exposure of the project and contribute to the urban realm. Additionally, the redevelopment will bring forward an extensive partnership with Lonsdale Energy Corp, by including a miniplant to be used by the company. A miniplant will use approximately the space of 34 parking stalls that will need to be provided elsewhere.

The creation of distinctive, mixed-use nodes along traffic-corridors brings community benefits as well by integrating living, employment, shopping and culture at key points along the city’s central core. Transportation efficiencies are gained by having homes and destinations closer together in a neighbourhood where people have alternatives to the automobile. This development opportunity offers a range of housing types and promotes walking, cycling and public transit. Ultimately, when people have more choices, the whole city benefits.

Onni is proposing 10,000 SF of affordable housing, land dedication and park enhancements to Stella Jo Dean Park, land dedication for a pedestrian access to the park and a monetary contribution to the City's newly created Community Amenity Fund. The proposal of architecturally unique development with a mix of uses , and an additional 3m setback along 13th Street will encourage a dynamic streetscape experience in Central Lonsdale.



AFFORDABILITY STATEMENT AND ADAPTABLE DESIGN

AFFORDABILITY STATEMENT

The residential portion of the proposed development will provide a wide range of units and sizes with varying pricepoints. This will create much needed housing choices and an alternative to the predominantly single family homes which dominate the North Vancouver market. Empty nesters, downsizers, retirees and first-time home buyers will be attracted to this wide range of one and two-bedroom units and prices. Strata pricing will be subject to current market conditions.

Specifically, the proposed range of smaller dwellings in Tower B will afford residents and opportunity to continue living on the North Shore at a time when housing prices are at a premium. Providing a mixed-use development will offer many residents the option to live where they work, allowing them the tradeoff to upgrade to bigger units as a result of not having to purchase an automobile.

The proposed 346 units will be a mix of 1-bedroom and 2-bedroom units. 1 bedroom units will measure approximately 550 SF while the 2 bedroom units will measure 850 SF. Onni is proposing 10,000 SF of affordable housing in this development.

ADAPTABLE DESIGN STATISTICS

Adaptable design features will be integrated throughout the buildings and within individual units, in accordance with the direction set out by the City of North Vancouver. As we move through the design process for the buildings and units, these features will be detailed. 20% units must be Level Two;

- for each Level Two unit, 20 sq. ft. will be excluded from floor area calculations;
- for each Level Three unit, 45 sq. ft. will be excluded from floor area calculations.



CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN

The redevelopment of 1308 Lonsdale Avenue represents an opportunity for increased Crime Prevention Through Environmental Design (CPTED). Onni will strive to ensure that the principles of CPTED are employed throughout all facets of the project to deter crime before it occurs and to improve the safety and experience of residents and pedestrians.

CPTED will be facilitated by implementing design that encourages:

- Residents to have "eyes on the street" offering natural surveillance;
- Active street fronts with a mixture of shops and a strong pedestrian presence;
- People to see and be seen in all public spaces;
- Windows overlooking sidewalks;
- Well-lit parking facilities and common areas;
- Landscape designs that facilitate surveillance and do not provide places to hide.

When people feel safe in their neighbourhood they are more likely to interact with one another and intervene when crime occurs.

CPTED measure will be incorporated specifically in the newly created park access from 13th Street.



5.0 PROJECT STATISTICS



B C C O N D O S . N E T



PROJECT STATISTICS

SITE AREA		98694					
TOTAL # UNITS		346					
COMMERCIAL		170586		AFFU		FSR	
RESIDENTIAL		286345		LESS 10000			
		456932		446932		4.53	
	RETAIL	OFFICE	TOWER A	#UNITS	TOWER B	#UNITS	AMENITY LOBBY
P1							
1	58777		0	0	0	0	10314
MEZZ	10224		0	0	0	0	
2	22865	19680	0	0	5162	6	8938 2010
3		19680	7492	9	7924	10	
4		19680	7492	9	7924	10	
5		19680	7492	9	7924	10	
6			7492	9	7924	10	
7			7492	9	7924	10	
8			7492	9	7924	10	
9			7492	9	7924	10	
10			7492	9	7924	10	
11			7492	9	7924	10	
12			7492	9	7924	10	
13			7492	9	7924	10	
14			7492	9	7924	10	
15			7492	9	7924	10	
16			6203	6	7924	10	
17			6203	6	7924	10	
18					7924	10	
19					7924	10	
20					7924	10	
21					7924	10	
22					6946	7	
23					6946	7	
24					6946	7	
	91866	78720	109797	129	176548	217	8938 12324
Lobby areas not included in FSR				Retail use		Office use	
Amenity area not included in FSR				1.6% adjustment for wall exclusions included in areas above			

PARKING BYLAW CALCULATIONS				PARKING PROVIDED	
FOOD	COMM	RES	STALLS REQ.	P1	204
@1.0/200SFT	@1.0/750SFT	@1.2/UNIT		P2	269
159	185	415	760	P3	261
				P4	261
				TOTAL	995

SECURE	COMM	RES	SHORT TERM	COMM	RES
BIKES REQ	@1/2690SFT	@1.5/UNIT	BIKES REQ	@6/10764SFT	6+6/60UNITS
	63	519		95	41
TOTAL BIKES			TOTAL BIKES		95



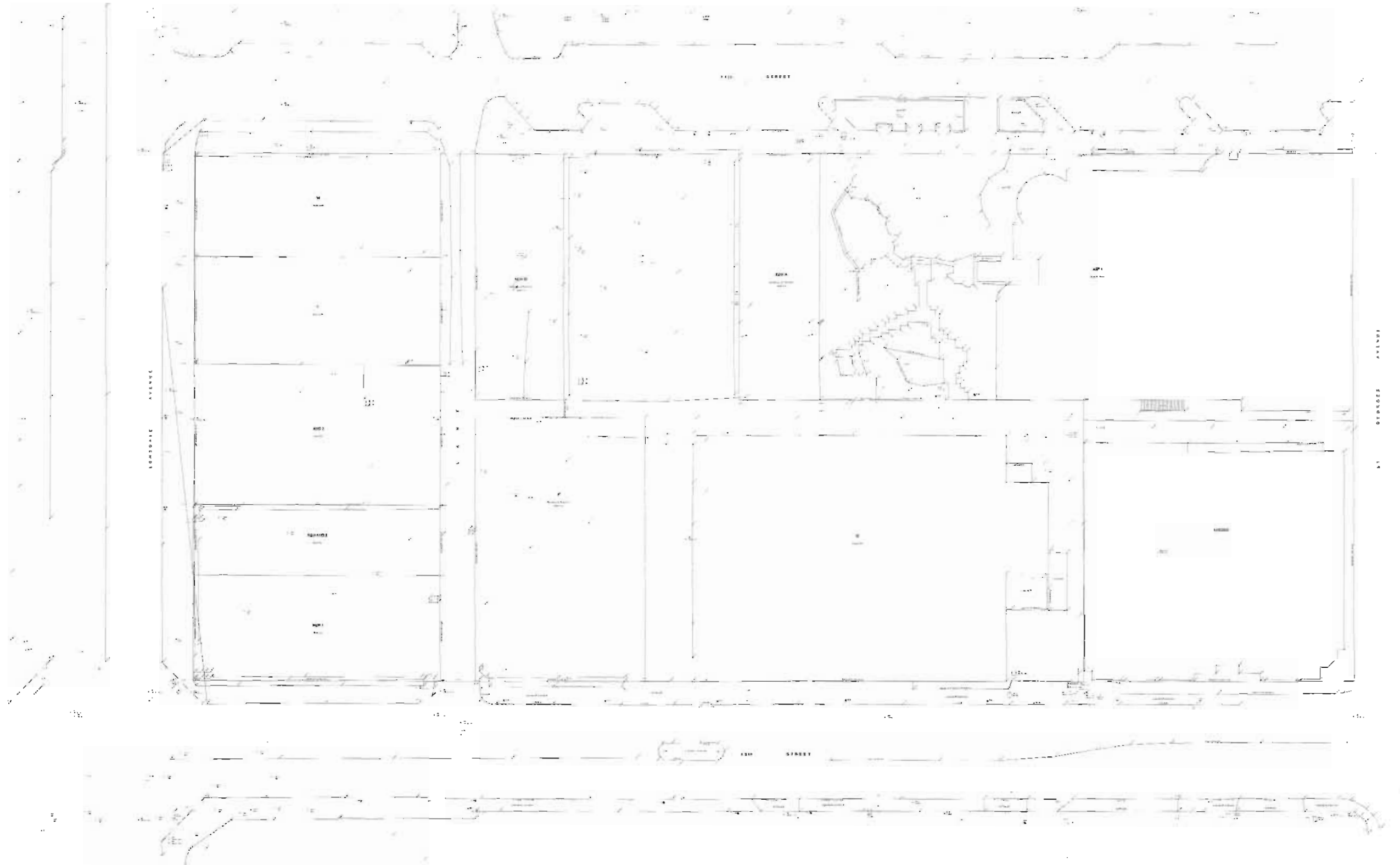
6.0 DESIGN CONCEPT



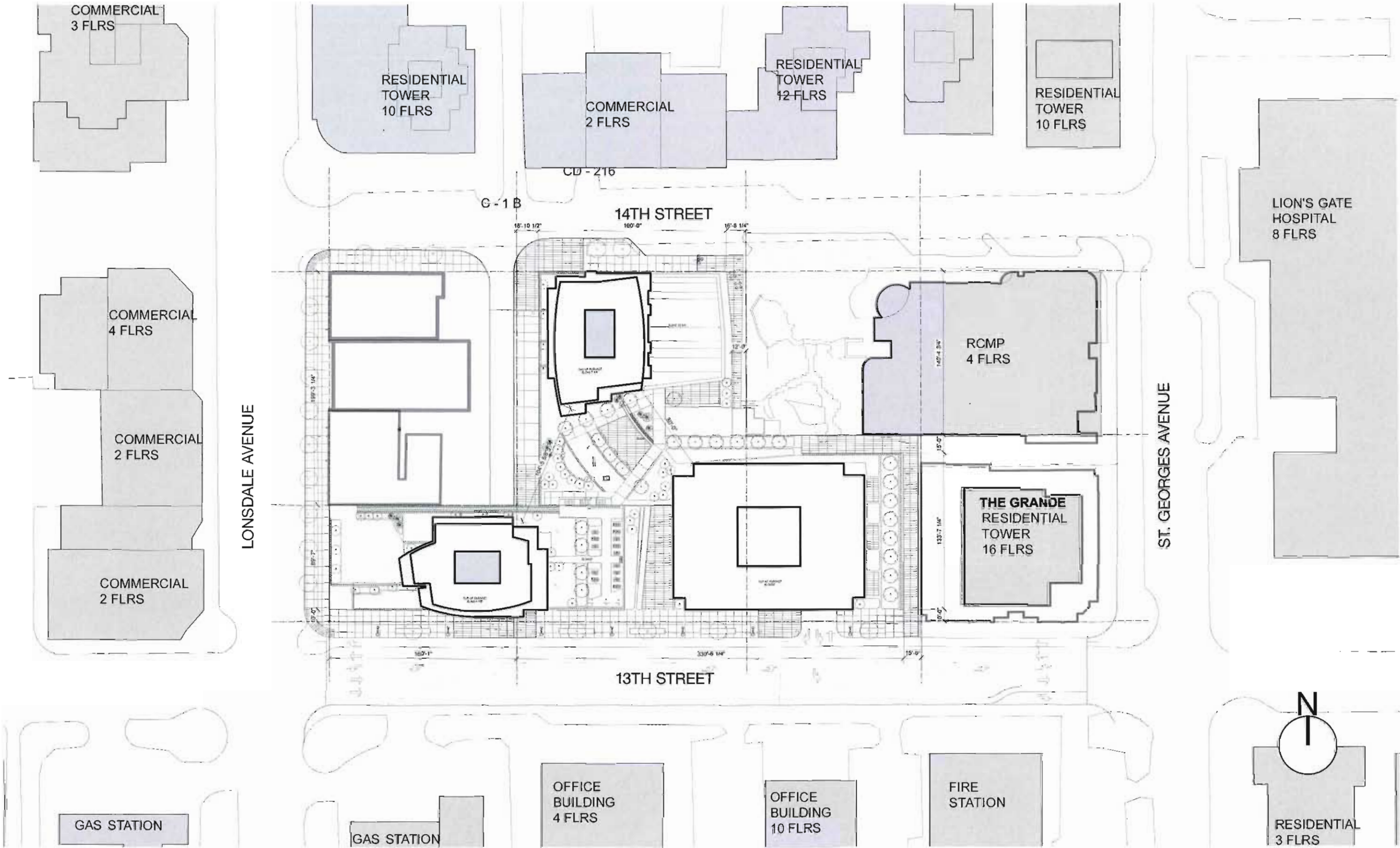
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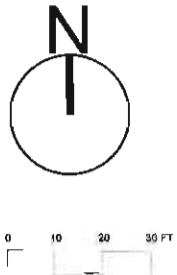
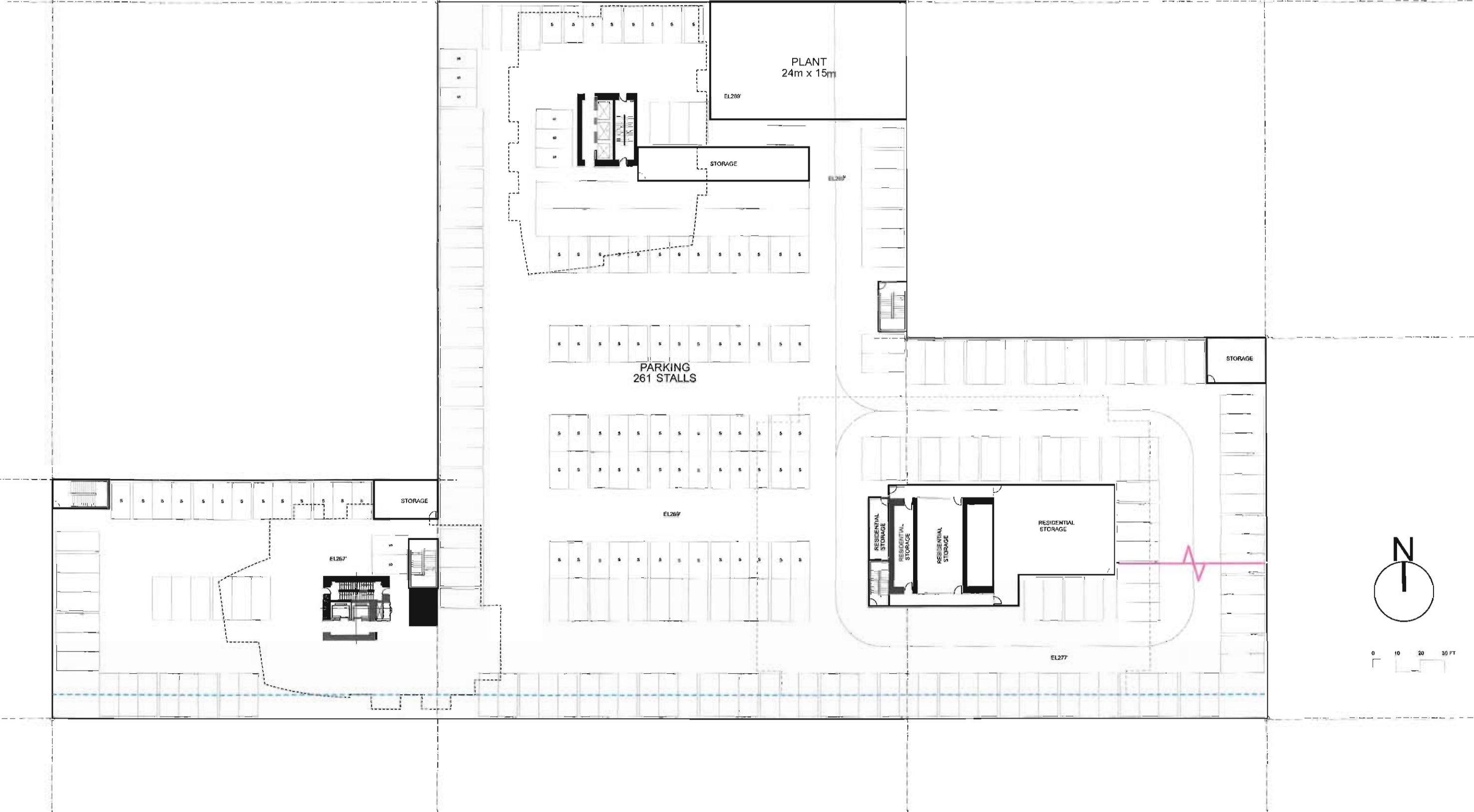
SITE SURVEY



CONTEXT PLAN



LEVEL P4 FLOOR PLAN



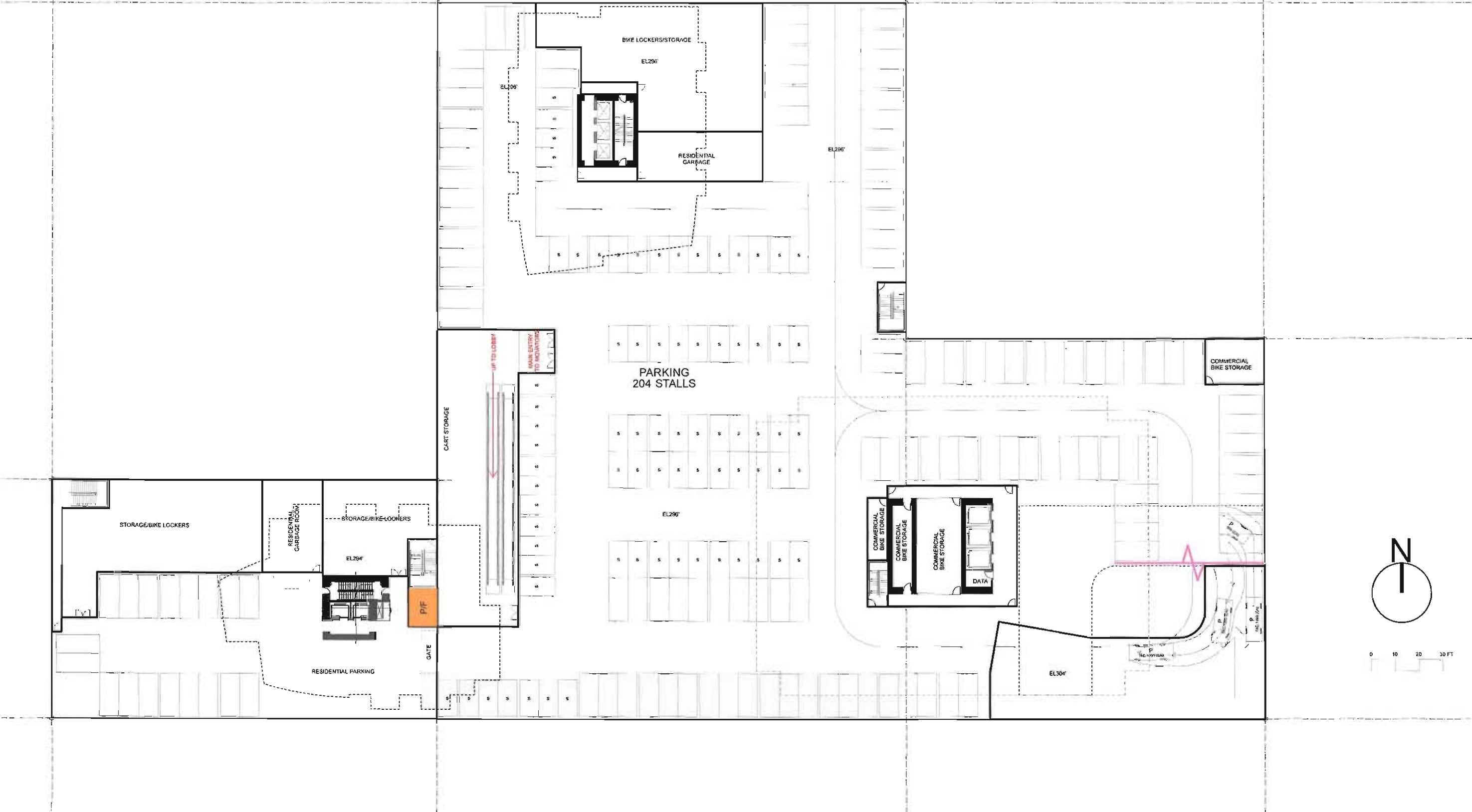
LEVEL P3 FLOOR PLAN



LEVEL P2 FLOOR PLAN



LEVEL P1 FLOOR PLAN

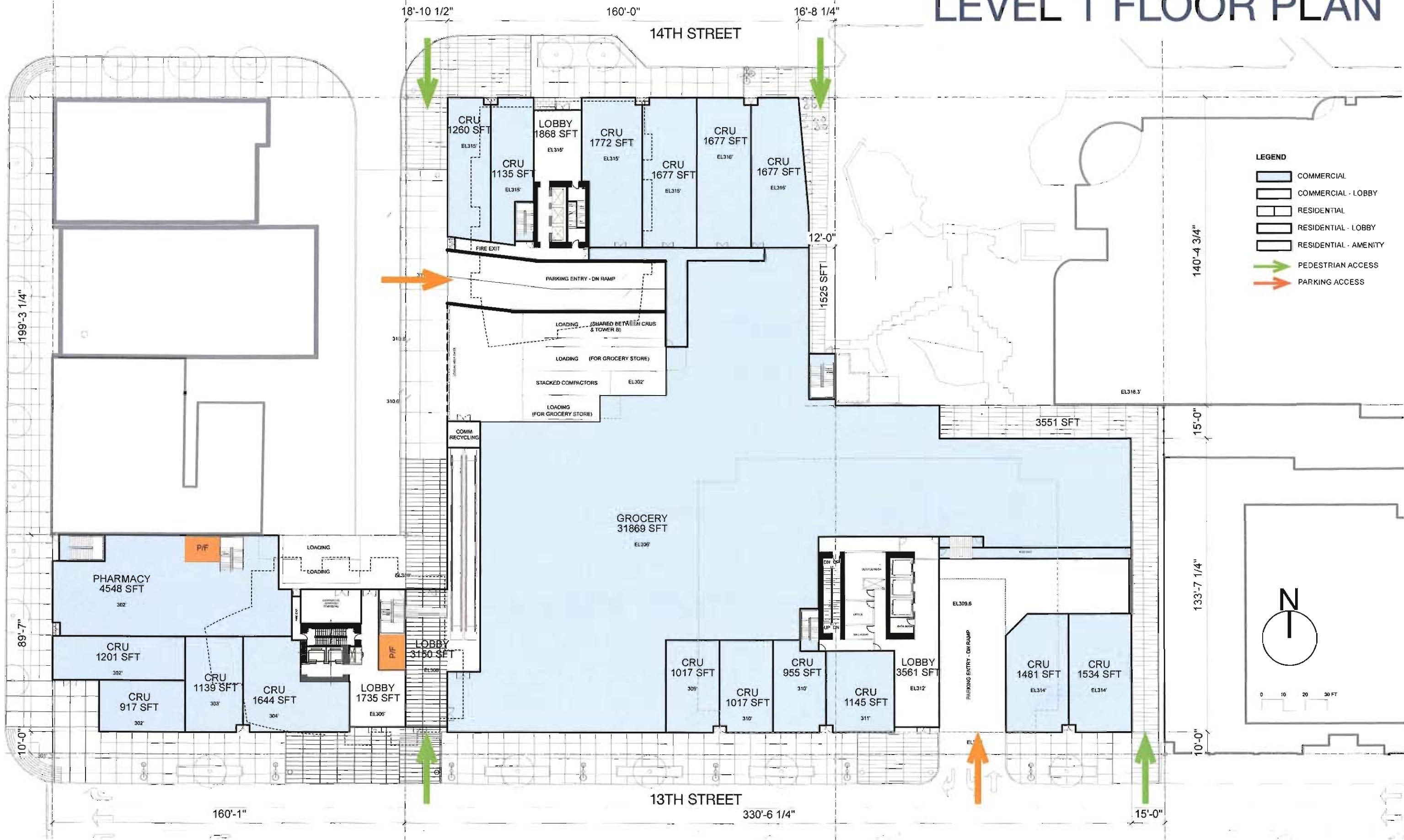


LEVEL P1 MEZZANINE FLOOR PLAN



LEVEL 1 FLOOR PLAN

LONSDALE AVENUE



LEVEL 1 MEZZANINE FLOOR PLAN

LONSDALE AVENUE

14TH STREET

13TH STREET

LEGEND

- COMMERCIAL
- COMMERCIAL - LOBBY
- RESIDENTIAL
- RESIDENTIAL - LOBBY
- RESIDENTIAL - AMENITY



0 10 20 30 FT

PHARMACY
10143 SFT

EL317

P/F

P/F

UP DN
SERV/MECH
OFFICE
MAIL
DATA

199'-3 1/4"

89'-7"

10'-0"

18'-10 1/2"

160'-0"

12'-0"

140'-4 3/4"

15'-0"

133'-7 1/4"

10'-0"

15'-0"

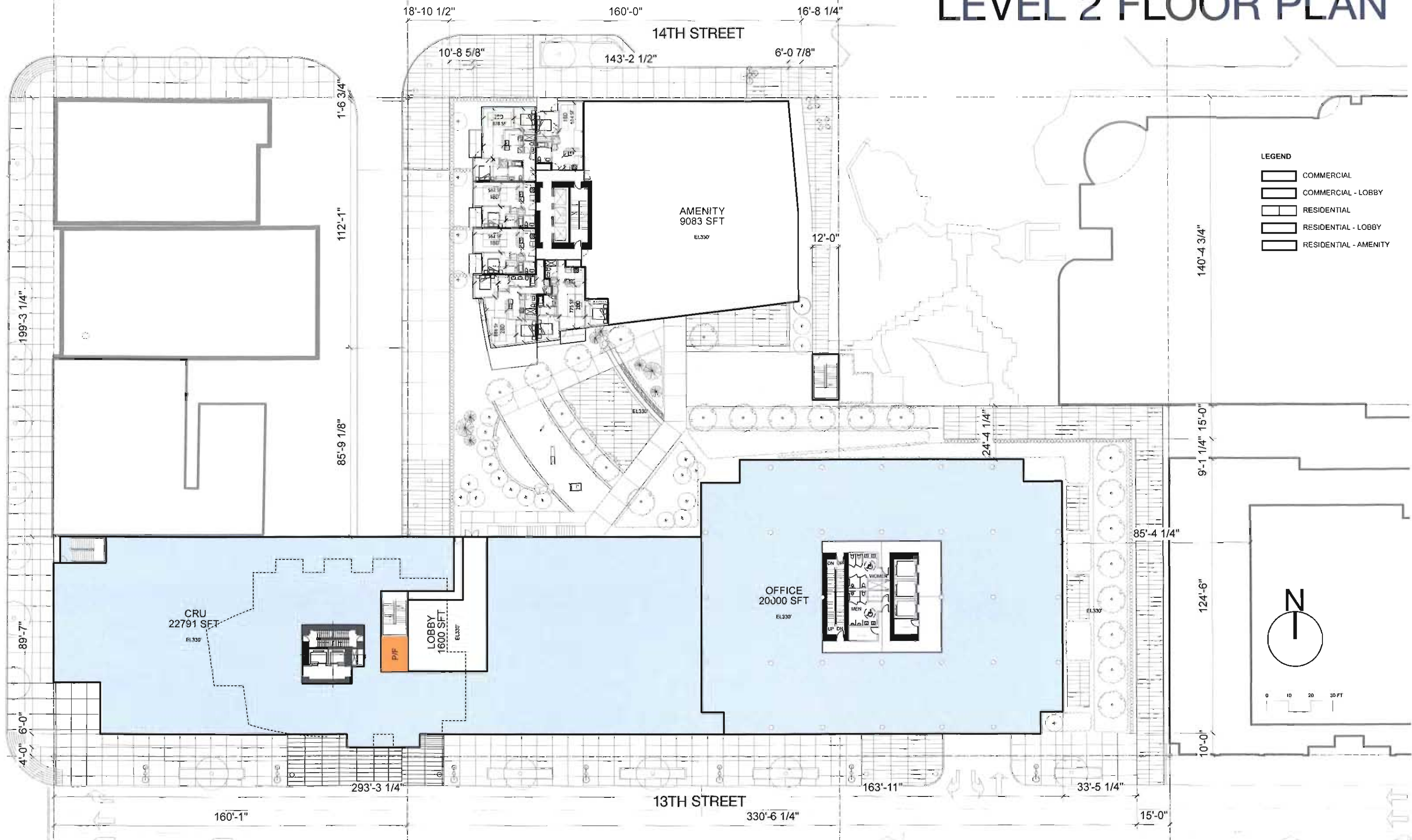
160'-1"

330'-6 1/4"



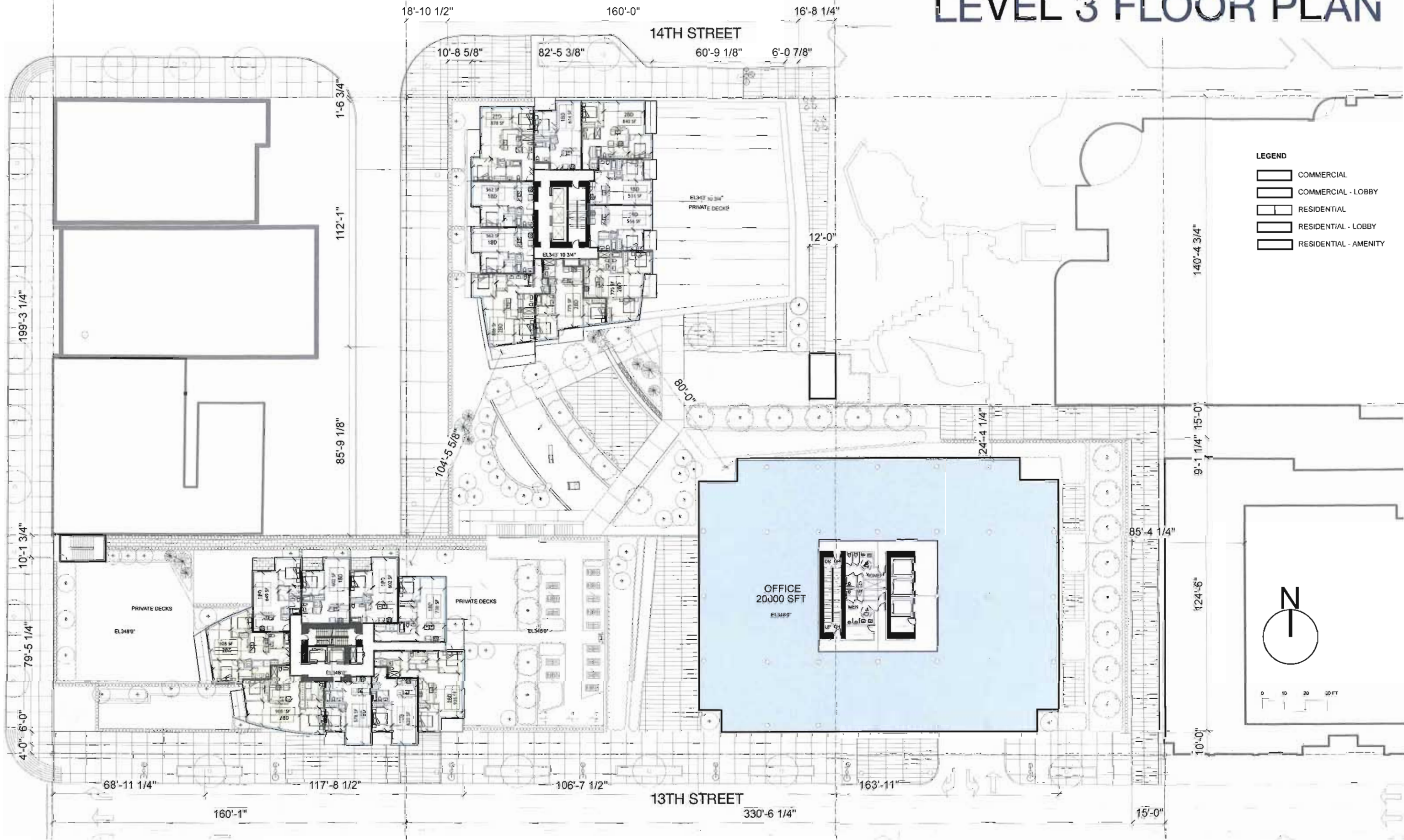
LEVEL 2 FLOOR PLAN

LONSDALE AVENUE



LEVEL 3 FLOOR PLAN

LONSDALE AVENUE



LEGEND

- COMMERCIAL
- COMMERCIAL - LOBBY
- RESIDENTIAL
- RESIDENTIAL - LOBBY
- RESIDENTIAL - AMENITY



0 10 20 30 FT



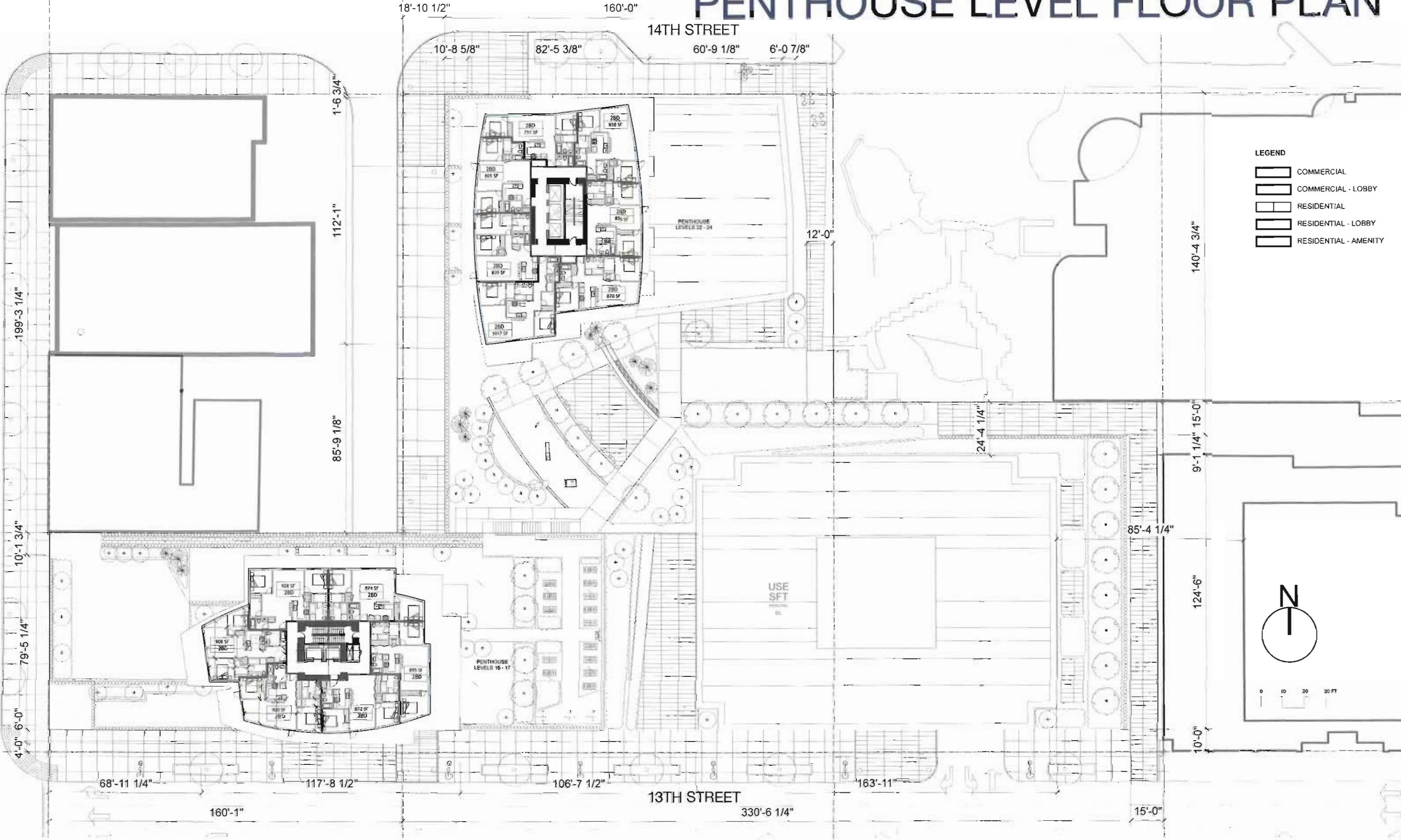
LEVEL 4 FLOOR PLAN

LONSDALE AVENUE

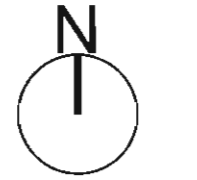


PENTHOUSE LEVEL FLOOR PLAN

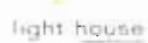
LONSDALE AVENUE



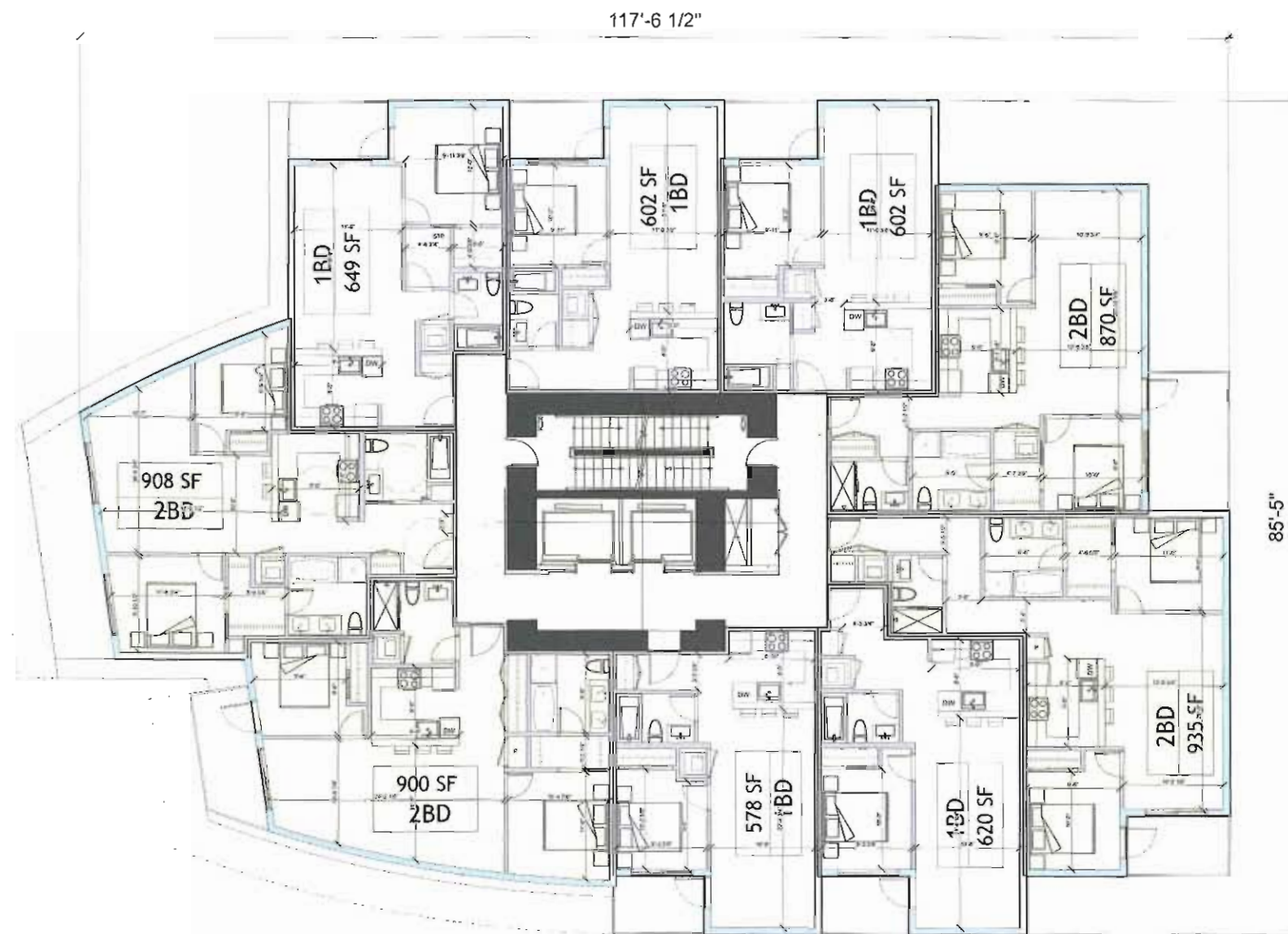
- LEGEND
- COMMERCIAL
 - COMMERCIAL - LOBBY
 - RESIDENTIAL
 - RESIDENTIAL - LOBBY
 - RESIDENTIAL - AMENITY



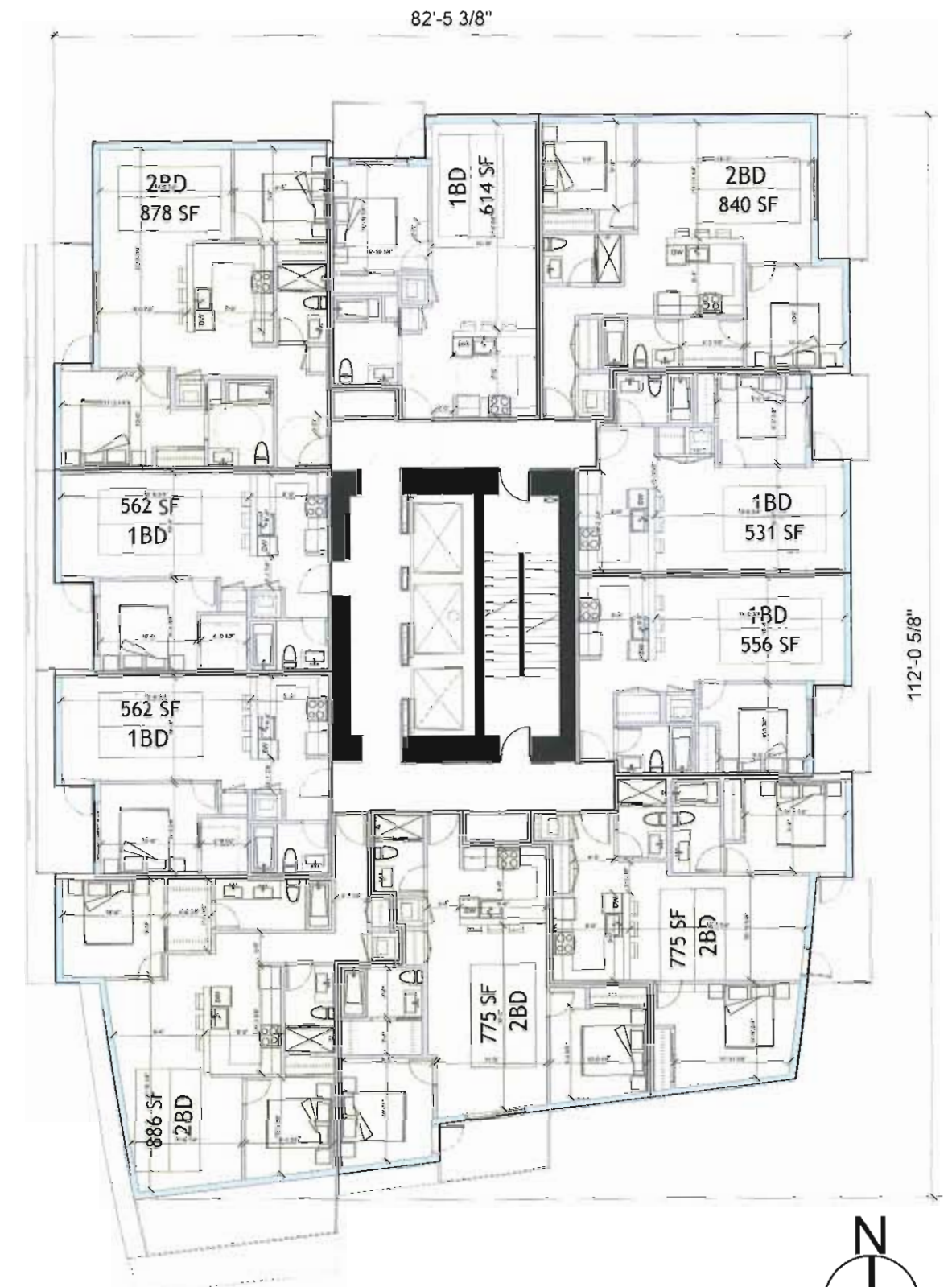
0 10 20 30 FT



ENLARGED TYPICAL FLOOR PLAN



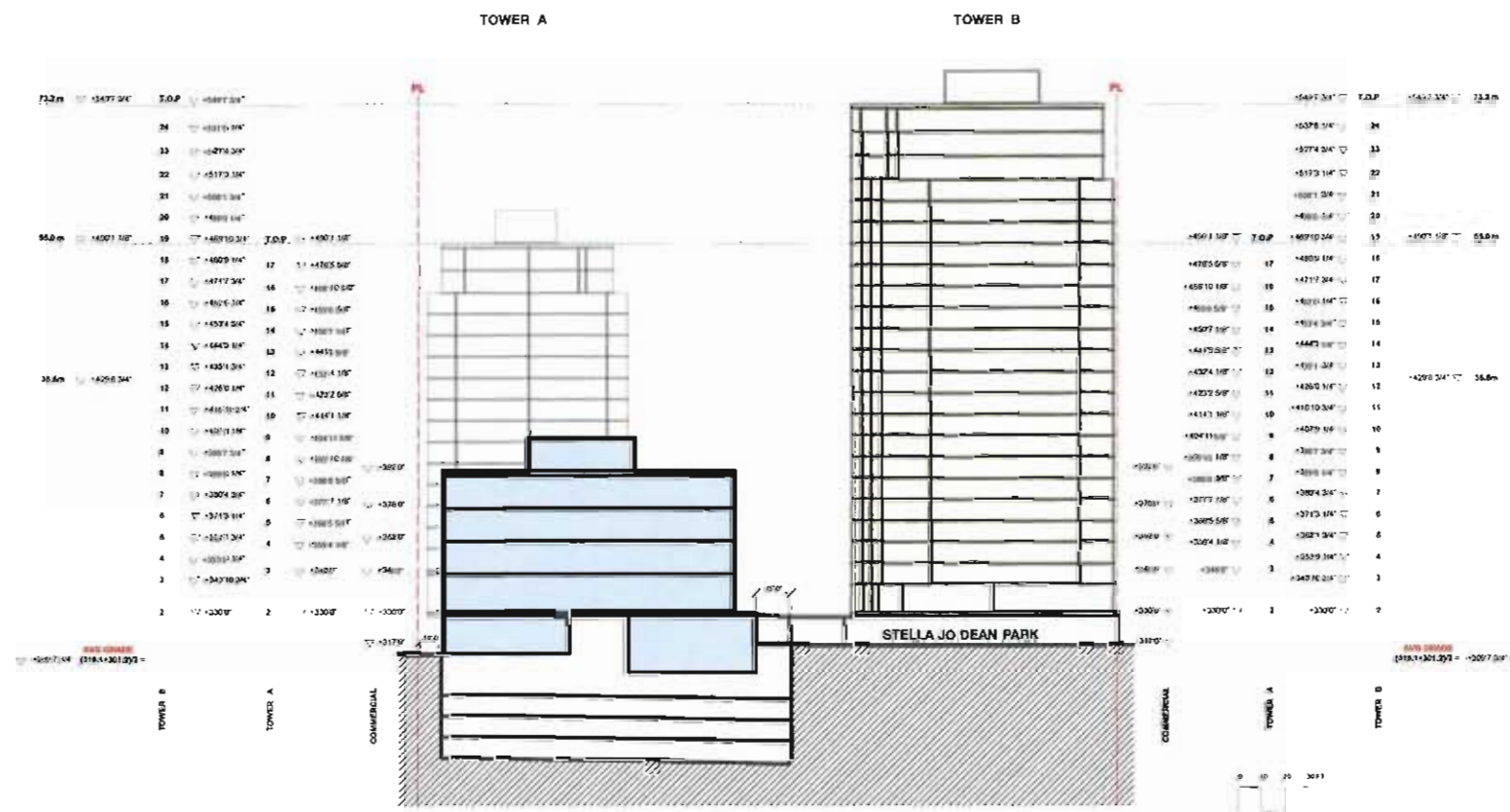
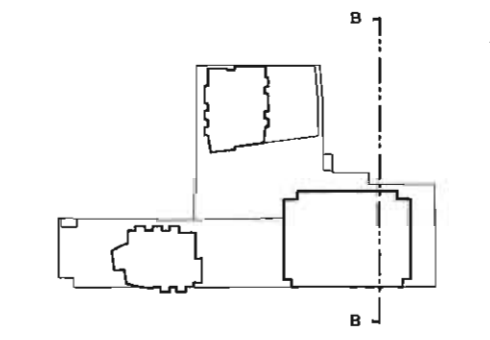
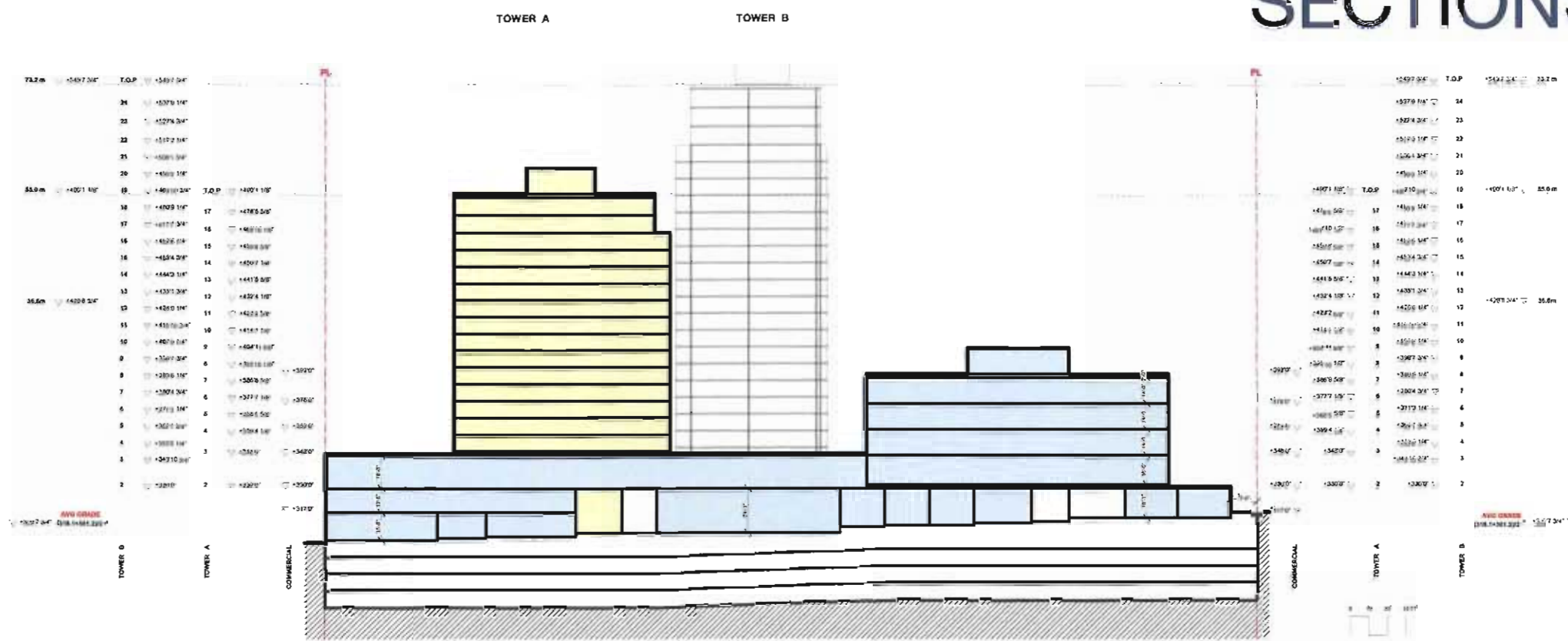
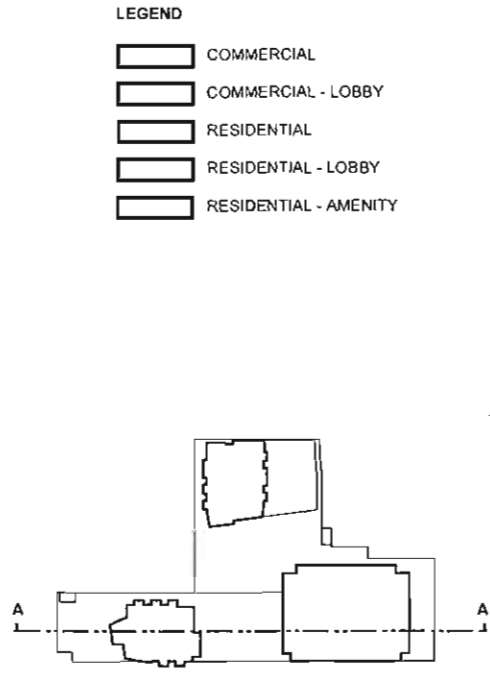
TOWER A



TOWER B



SECTIONS



NORTH ELEVATION



SOUTH ELEVATION



EAST ELEVATION



WEST ELEVATION



STREETVIEW FROM 13TH STREET & LONSDALE AVENUE



AERIAL VIEW FROM 14TH STREET



AERIAL VIEW FROM 13TH STREET



AERIAL VIEW FROM LONSDALE AVENUE & 13TH STREET



AERIAL VIEW FROM LONSDALE AVENUE & 14TH STREET



AERIAL VIEW FROM 13TH STREET & PEDESTRIAN LANE



STREETVIEW FROM 13TH STREET & PEDESTRIAN LANE



STREETVIEW ON 13TH STREET



7.0 SHADOW & VIEW STUDIES



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SHADOW STUDY



MARCH 21 10 AM

MARCH 21 12 PM

MARCH 21 2 PM

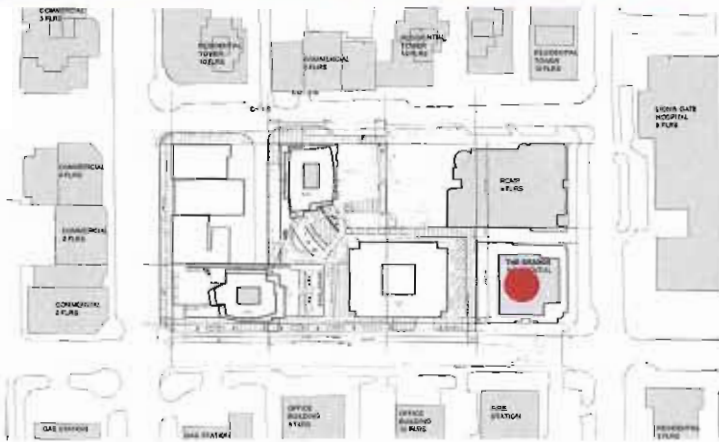


SEPTEMBER 21 10 AM

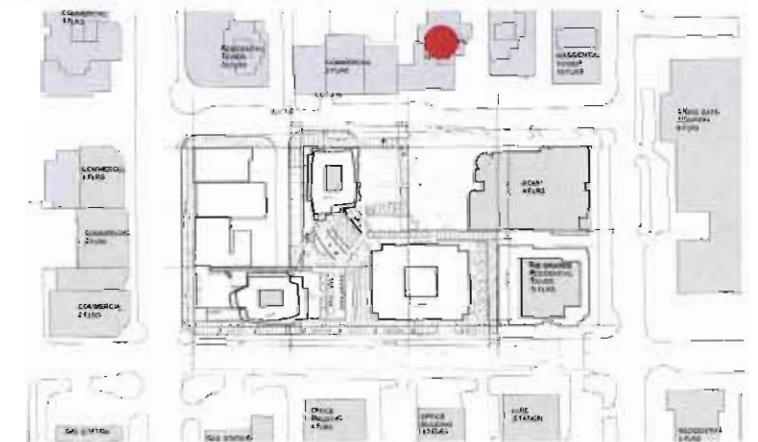
SEPTEMBER 21 12 PM

SEPTEMBER 21 2 PM

VIEW STUDY - 16TH LEVEL AT THE GRANDE



VIEW STUDY - ROOF LEVEL AT SPRINGHILL PLACE



8.0 LANDSCAPE



B C C O N D O S . N E T



LANDSCAPE RATIONALE

LONSDALE LANDSCAPE RATIONALE

The infilling of the Lonsdale site will provide a significant opportunity to reconsider and address the public realm which will incorporate sustainable social, economic and environmental design principles.

EXISTING CONDITIONS

The proposed project area includes the streetscapes on 13th Street, 14th Street and Lonsdale Avenue, as well as, the building's amenity podium and roofs. Currently the core of the site is an existing parking lot void of significant landscape treatments which serves one grocery store and is adjacent to the Royal Canadian Mounted Police's (RCMP) public plaza.

STREET CHARACTER

Along 13th Street and 14th Street the project proposes introducing a stormwater management strategy that utilizes stormwater gardens. These gardens will be a functional and visual amenity that provides areas for stormwater infiltration, shade and visual interest. Along these streets, pedestrian lighting and public seating will be provided at appropriate locations. The paving materials will match existing paving materials found adjacent to the site. On 14th street it is proposed that a visual focal point be added to the streetscape that will be an artful "beacon" to signal the entry of the proposed public museum.

GATEWAYS

To serve the projects primary entries a system of gateway appoints are proposed. These gateway appointments will consist of changes in paving material at each entry and a hierarchy of lighting features where the building's public entries will contain lighted bollards / features and the museum's entry will contain an artful "beacon".

LANDSCAPING

Along the streetscape stormwater gardens are proposed that will consist of ornamental shrub plantings and street trees. Adjacent to the RCMP plaza a vine wall is proposed to minimize the visual impact of the proposed wall. On the roof of the proposed building: a lawn area, agricultural plots, trees and extensive green roof plantings will be utilized.

ROOFTOP

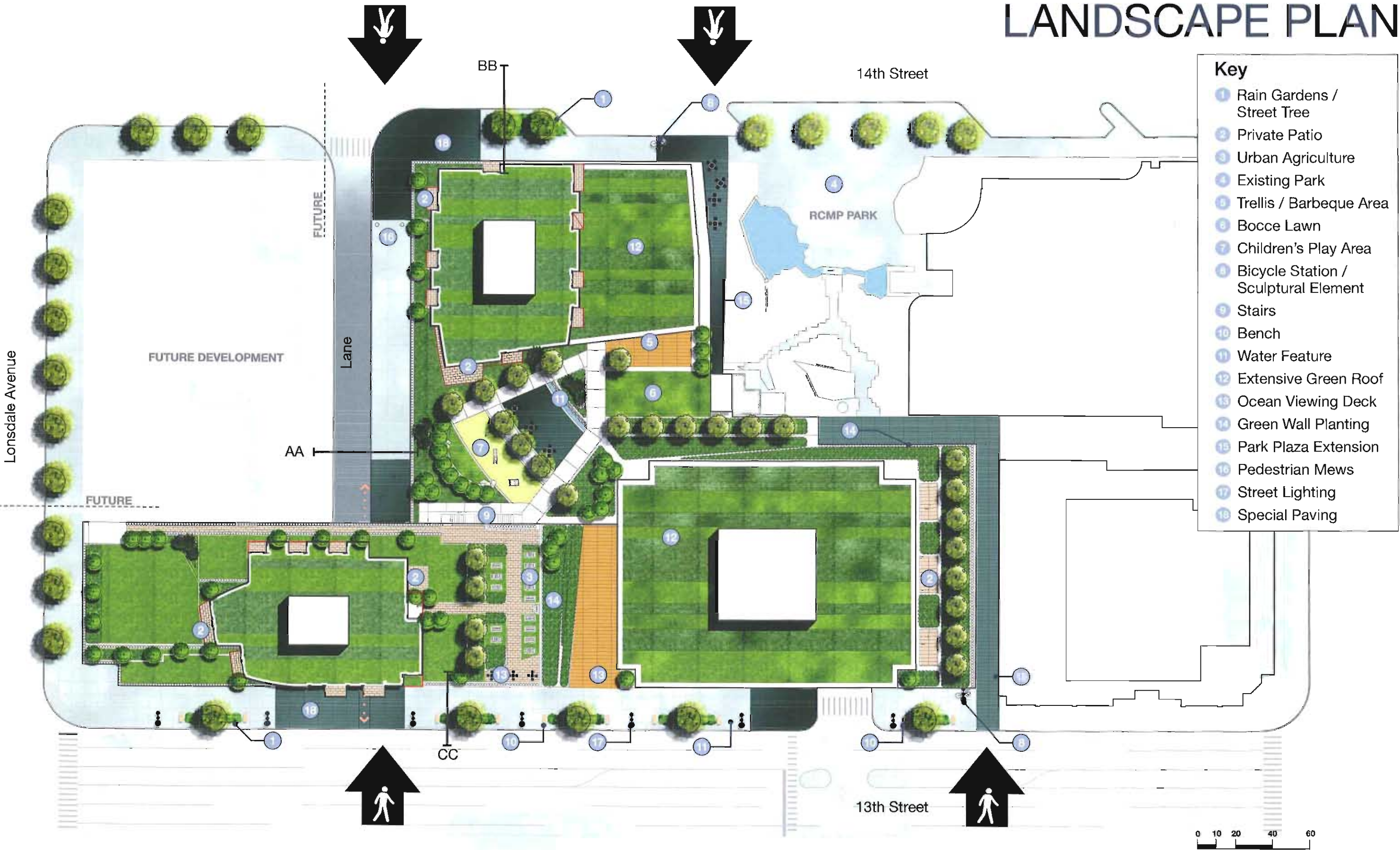
On the project's roof, it is proposed that a visually attractive roof garden containing elements inspired by North Vancouver's industrial past be created. The roof garden will take advantage of the area's prominent views and landscape features will supplement the buildings amenity room and podium units. It is proposed that the roof's landscape treatments will support: lawn bowling, roof agricultural, strolling boardwalk (corduroy road), a child's play area, BBQ facilities, passive recreational areas, landscaped private patio areas and ornamental planting areas.

CPTED

In consideration to public safety it is proposed that abundant public lighting and minimal shrub plantings be used within the public realm. For the project's lane it is proposed that a series of lighted bollards be used to provide light and spatial definition between vehicular and pedestrian zones. Within the public realm a minimal use of shrubs will be used in the project's proposed rain gardens. These planting will be minimal in height and density to ensure visual permeability.



LANDSCAPE PLAN



PLANT IMAGES



Character Image: Rooftop Gardens



Character Image: Bicycle Station



Character Image: Children's Play



Character Image: Barbeque Gathering Area



Character Image: Lane



Character Image: Vine Wall (Green Wall)



Character Image: Patio Lanterns



Character Image: Rain Gardens



Image: Lawn Bowling



Character Image: Public Seating / Outdoor Room



Character Image: Bench



Character Image: Lighted Bollard



Character Image: Stone Paving

9.0 LANE



B C C O N D O S . N E T





IBI Group
700 - 1285 West Pender Street
Vancouver BC V6E 4B1 Canada
tel 604 683 8787
fax 604 683 0492

MEMO

To: Jeff Mok Date: November 22, 2011
From: Mladen Pecanac Sleno: mp
cc: Homayoun Vahidi, Dionne Delesalle File No: 0999
Subject: The Grande Building Driveway: Vehicle Operation Preliminary Concept

As a part of the Transportation Study for the ONNI development at 13th Street & Lonsdale North Vancouver, a request has been made to assess the feasibility of changing the commercial vehicle operation process (e.g. truck loading/ unloading) for the Grande Building

Currently, the lane behind (north side) the Grande building operates as a public laneway, even though it is on private property; this allows the trucks the option of traveling west once they complete their loading/unloading operation. In addition, the Grande residents have the option of travelling either west or east once they exit their garage. Furthermore, the area fronting the Grande underground parking is congested due to different vehicle type usage e.g. private vehicles, garbage/ recycling trucks, HandyDart vans as well as moving/delivery trucks. Predominantly, the Grande residents are experiencing the problem when entering and exiting the parking facility.

The proposed ONNI site requires the closure of the portion of the lane that falls west of the Grande building / property line. Accordingly, this review was undertaken to assess feasibility in terms of the impacts to the Grande building's truck loading/unloading operation and parking access/egress.

With reference to Drawing 1, the closure of the west side of the lane will require trucks to back into a designated spot within the lane to perform garbage removal and other loading/unloading operations. Specifically, the preliminary vehicle operation concept proposes the following:

- 1. Loading Area:
 - A designated loading area, placed diagonally opposite to the Grande parking gate.
 - A loading zone to be clearly marked to ensure that pedestrians are aware of the truck loading/unloading at this location.
 - During garbage/ collection days, residential waste and recycling containers and bins should be placed on the lane (alongside the parking lot entrance).
- 2. Truck Operation:
 - The truck driver backs into the driveway, past the Grande parking gate and park in a designated loading space.
 - Perform loading/ unloading and exit onto St Georges St.
 - Moving/delivery trucks during non-garbage/recycling collecting hours should be established by the residents.
- 3. Passenger Car Operation:
 - The Lane will only allow residents to travel east and exit onto St Georges St.

IBI Group is a group of companies providing professional services.

As shown in Tables 1 & 2, the comparison of "existing operation" to "proposed operation" has been performed in order to determine similarities and differences.

Table 1: The Driveway Physical Considerations

Parameter	Existing	Proposed
Speed limit on lane	20 km/h	Unchanged
Cross-section	~5.5m	Unchanged
Driveway / St Georges St (Operation)	Stop-control (in favor of St Georges St)	Unchanged
Driveway / St Georges St (Sight distance)	Issues due to adjacent RCMP/ Grande buildings	Unchanged
Ability for trucks to negotiate corners	Accommodated	Unchanged
Ability for two-way traffic	Accommodated	Unchanged
Pedestrian access to the park	"Scattered" (undesignated) crossings	A designated crossing
Pedestrian crossings at the St Georges St sidewalk)	Unchanged	Warning lights that go off when a car is exiting

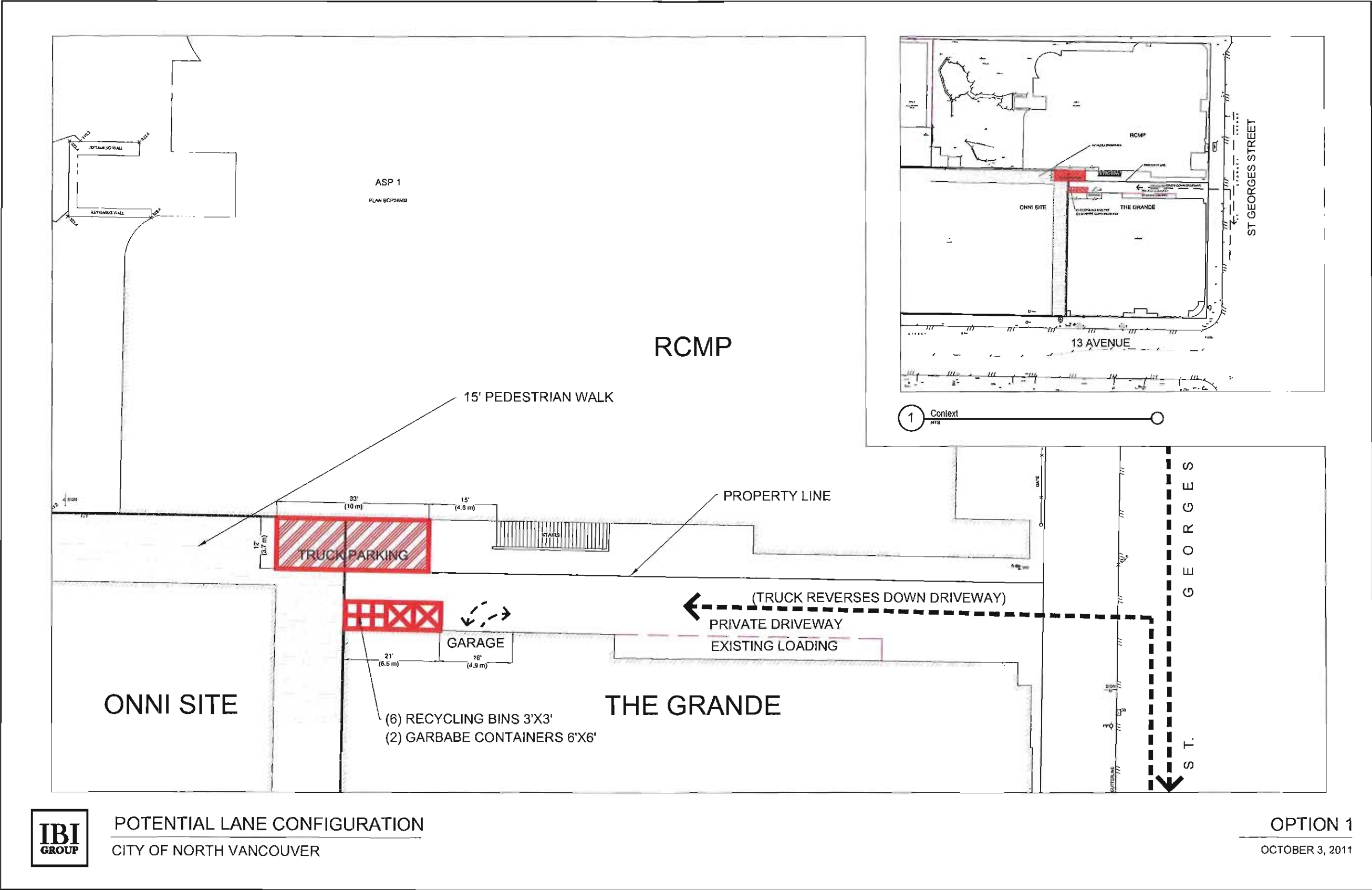
Table 2: Loading/ Operational Considerations

Parameter	Existing	Proposed
Traffic Flow	Residents, Visitors, and cut-through traffic	Residents, Visitors (cut-through traffic diverted)
Truck traffic flow	Infrequent	Unchanged
Days/ times that loading activities are expected to occur	As per current	Unchanged
Dominant truck size	32ft-long truck	Unchanged
Dominant truck type	Garbage/ recycling trucks	Unchanged
Max truck size (on-driveway)	A truck-semitrailer	The size of trucks to be controlled by the residents (max 32-ft long truck)
Max truck size (on-St Georges St)	A truck-semitrailer	Unchanged
Designated loading area	No designate space	Designated space
Truck entering direction	Either from St. Georges St or the Safeway Site	backing from St. Georges St
Truck exiting direction	Either to St. Georges St or the Safeway Site	to St. Georges St
Truck loading activity impact to the Grande traffic	Maximum conflict (residents are blocked)	Minimal conflict (residents are not blocked)
# of garbage containers and recycling bins	Current (2 containers & 6 bins)	Unchanged

- In summary, the proposed vehicle operational concept:
- Provides a designated (clearly marked) area for a single-unit truck (up to 32ft-long), minimizing the passenger car/ truck conflicts.
 - Requires trucks to back in from St. Georges Street and exit the same way, while other parking access/egress movements will remain unchanged.
 - Includes a pedestrian walkway buffer along the north-south pedestrian route (through the proposed development).
 - Eliminates the current situation where passenger cars can be blocked while exiting/entering the Grande parking due to undesignated loading operations.



LANE CONCEPT



SMITHRITE

B.C. OWNED
AND

70 Golden Avenue, Coquitlam BC V3K 6B5

Gary Penway
City of North Vancouver
141 West 14th Street
North Vancouver, BC
V7M 1H9

Dear Gary,
I am writing to you regarding a current customer of Smithrite's, The Grande, and The Onni Group, who is developing the property adjacent to The Grande.

The Issue-

The lane that circulates East -West on the 1308 Lonsdale Safeway site is slated to be blocked off to vehicular traffic. This lane currently allows residents of the Grande the option of traveling either west or east once they exit their parkade. Pedestrian traffic will be replacing vehicular traffic in the North-South Lane that connects to this East-West Lane.

In the future, the lane will only allow residents to travel east and exit onto St Georges.

The problem that the residents of The Grande experience when entering and exiting the underground parking is dealing with blockage from the different vehicles that use the lane. The predominant users of this lane are the residents, and the garbage collection. Other users include Handyart services, as well as moving and delivery trucks.

At present, when the lane is blocked by a garbage , moving or other service vehicles, resident vehicles can exit the building parking garage, by turning left (west) on the lane and proceed to an area allowing access to the roadways surrounding the area. Smithrite recognizes that this will

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become a problem for the residents and has looked into viable options to resolve this issue. We have reviewed the plans with our drivers and operational Manager, along with the Onni Group.

Smithrite has been back and forth with the Onni Group for a few months now. Smithrite has had numerous site checks, with both Sales and Operations visiting the site. We have also studied the drawings and discussed the situation with the drivers.

Potential solution-

Onni brought forth the idea of a Compactor. This would be an option in this lane, but would have some challenges.

A low pro compactor may, at best, be able to fit into the current garbage area. It would have to be at an angle and would involve extensive concrete work on the existing structure. This would also cause some blockage in the lane. We explained to the building caretaker that a better location for the compactor would be inside the existing loading bay, where it would not block through traffic. This location was rejected by the Grande due to space limitation of the area.

The cost for the low pro compactor to buy will be approximately \$24,000. Onni has communicated that they would help pay for the compactor, in hopes of alleviating the problem of access/egress for the residents. To rent a low pro compactor will cost \$500.00 per month plus haulage and landfill fees of around \$300.00 per month. The current service for waste has a monthly rate of \$521.00.

Each haul on a low pro compactor, takes about five minutes to hook up and 5 minutes to put back. This service will be lengthier in time than the original pickup time, and will block a portion of the lane way.

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GARBAGE LOADING FROM LANE



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AND

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A low pro compactor is not something that we will recommend for the service of this account based on volume, cost, and logistics. It is still an option, and we will be more than happy to get the ball rolling on this. But I wish for this letter to stand as a disclaimer.

Preferred Option-

After consulting our drivers, the best option would be to have our driver back into the lane past the garbage room and parkade entrance. Then while he wheels and dumps the container, he will not be blocking the residents as they enter and exit the parkade. A designated GARBAGE LOADING AREA, located west of the parkade entrance, will ensure that residents are not blocked. This area could also be used as a loading area for bigger Moving/Delivery vehicles during non-garbage collecting hours. Posting and enforcing signage that this new area is a Garbage/loading zone only should be a priority.

Our drivers are aware that this loading zone is partly within the boundaries of the new pedestrian thoroughfare, and will be mindful of safety issues. The garbage pickup times are very efficient, and we do not see this as a problem. A clearly visible loading zone will ensure that pedestrians are aware of the garbage collection at this location.

Regards,

Scott Despot
Sales Manager
Smithrite Disposal

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