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Musson
Cattell
Mackey
Partnership

HAVN

HAPA

2535 CAROLINA STREET

REZONING APPLICATION

November 2023



HAVN

**2535
CAROLINA
STREET**

Rezoning
Application

November
2023

2535 CAROLINA STREET
Project # 222035.01

SUBMITTED BY: MUSSON CATTELL MACKEY ARCHITECTS DESIGNERS PLANNERS

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INTRODUCTION

OWNER’S INTRODUCTORY LETTER

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15 September 2023

Chee Chan – Rezoning Planner
City of Vancouver
West Annex, 515 West 10th Avenue
Vancouver, BC, V5Y 1V4

RE: Rezoning Application Submission - 2535 Carolina Street

Dear Mr. Chan,

HAVN Developments Ltd. and Musson Cattell Mackey Partnership are pleased to formally submit a Rezoning Application to the City of Vancouver for the project at 2535 Carolina Street. An LOE on this site was submitted in November 2022. Due to the extraordinary volume of LOE applications, the processing period took over six months; while we were waiting for a response to our application, another project on the same block bypassed the LOE process and submitted for Rezoning. As there is a one-tower limit on the block, we understand that by opting for the recommended LOE process, 2535 Carolina has lost its position as the only tower on this block, and the opportunity to be a compliant project under the current policy is no longer possible.

In working closely with CoV staff, we understand that the current policy does not support two towers on this block, but we also understand that CoV sees value in added density in this area. The project team has worked with CoV staff to develop a project on this site that presents a compelling case for added density in the form of a second tower on the 500 block of E10th Ave. The proposed development is committed to providing the following public benefits:

- One residential tower with 150+ secured rental units
- 20% of FSR at below-market rental rates
- 35% of FSR is dedicated to Family Units, which includes 10% to three-bedroom units
- Corner store and flex amenity space accessible by the community at large
- Interactive landscape and ground-oriented suites that increase eyes on the street
- Prime location and proximity to transit
- At-grade bicycle parking and maintenance facilities
- Neighbourhood accessed dog run
- Enhanced rear lane design to heighten safety and community access

We believe this proposal exceeds the approved Broadway Plan’s vision of introducing new housing and job space opportunities. The proposed development has been designed to meet and deliver on the policies noted in Section 10.25 Mount Pleasant RT Areas – Area B (MRTB).

As the site is ideally located near primary bus and rapid transit routes and the project provides convenient and thoughtful bicycle amenities, we believe that 2535 Carolina will contribute significantly to the City’s vision for delivering secured rental with sustainable transportation links.

We are committed to and believe in the current council’s vision for delivering secure rental housing in Vancouver. As pressure mounts in our communities for housing, we at HAVN Developments are committed to significantly increasing rental homes in the Broadway corridor and working with CoV staff and council to deliver community-based projects that engage with our neighbourhoods. In saying this, this project faces challenges due to the adjacent application on this block. We believe these challenges can be overcome through teamwork between the CoV, the adjacent developer and us. Many issues can be resolved by accommodating both towers and allowing us to design a more standard and efficient floorplate.

We look forward to working with all parties involved to create two separate efficient and successful projects on this block.

We kindly ask the CoV to present this case to the Council as soon as possible to discuss the merits of this development and the additional secured rental units this project will deliver.

Thank you for considering our application; we look forward to continuing to work with CoV to make this project a reality.

Yours truly,

HAVN Developments Ltd.



Martin Rahn
CEO | Co-Founder



Adrian Lai
President | Co-Founder

REZONING INTENT

EXISTING CONTEXT

The proposed project is located on the 2500 block of Carolina Street. This corner site is currently zoned RT-5 and occupied by three single family homes. Located in Mount Pleasant, this neighbourhood is transitioning from primarily single family residential uses to higher-density multifamily uses.

PROPOSAL

The project envisions a new 18-storey residential rental building within the Mount Pleasant RT Area B, with 20% of the units offered at below-market rates. The proposal is intended to contribute to the objectives of the Broadway Plan by adding much-needed housing supply in the Mount Pleasant area. The influx of new residents will help improve the community and support the businesses of the East Broadway corridor, as well as increasing street safety and contributing new community amenities to the existing neighbourhood. The proposed project, with an FSR of 5.8, will have 150 market and below market rental units and a corner store. A narrow floor plate was specifically designed to ensure separation from future towers while still maximizing access to light and views. The building will be accessed from Carolina Street and will provide shared amenities on the ground floor and rooftop. The parkade, bike storage and service loading will be accessed from the lane.

An alternative proposal for achieving a more efficient tower is outlined on Page 56 of this Rezoning booklet.



REZONING RATIONALE

HOUSING DIVERSITY

As identified within the Broadway Plan, residential units proposed under this project will address the housing needs of a diverse and inclusive neighbourhood. A mix of studio, one-bed, two-bed and three-bed units will be dispersed throughout the project, allowing the greatest flexibility in living environments, with city views and street-level neighbourhood connection. Special attention will be paid to ground-oriented units located along E10th. As part of the project’s ambitions to activate and engage with the existing neighbourhood, a series of over-height studio loft units are planned for the street fronts. These units intend to increase front doors and ‘eyes on the street’ while articulating the front façade with stoops and respite areas for pedestrians to enjoy. This proposed housing type will allow renters to have a front door and their own stoop, increasing their relationship with the neighbourhood while keeping an architectural language of ground-oriented living within the Mount Pleasant community. The proposal intends to create neighbourhood engagement by supporting informal connections experienced when blurring lines between public and private spaces.

BUILDING AMENITY

The amenities of this development will be geared towards those with busy urban lives. Amenities will include onsite coworking spaces, a lounge, a gym, and an outdoor gathering space on the rooftop. Ease of access for pedestrians and bicycle commuters will take priority over vehicles, with bike storage thoughtfully integrated at grade to increase usability. All homes will also be designed to prioritize access to air, light and biophilia whenever possible.

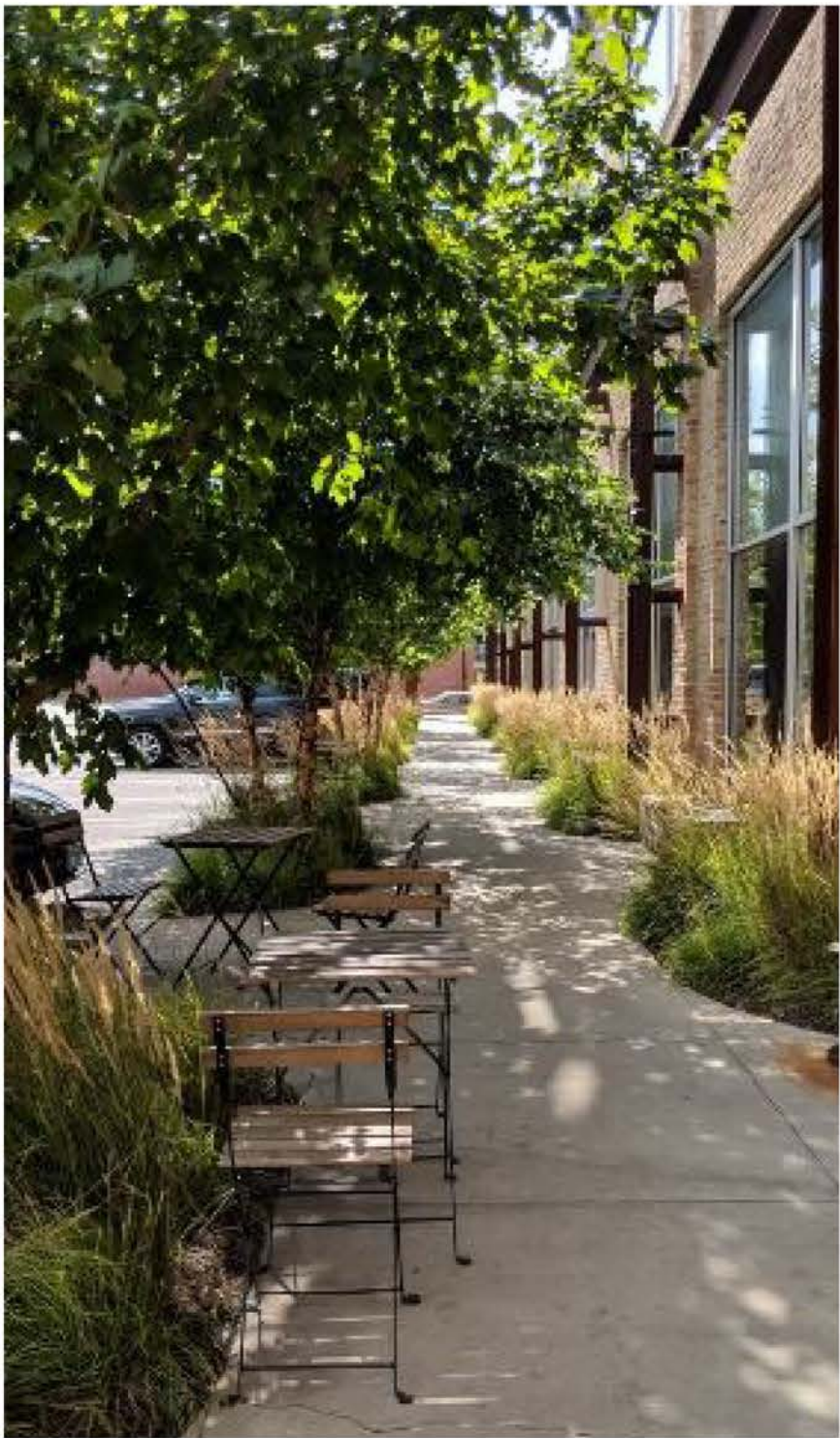


REZONING RATIONALE

PUBLIC REALM

‘Public space is critical to our health and well-being and profoundly shapes our day-to-day experience. It is used for getting around, socializing and gathering, and recreation and respite.’ – Broadway Plan 2022

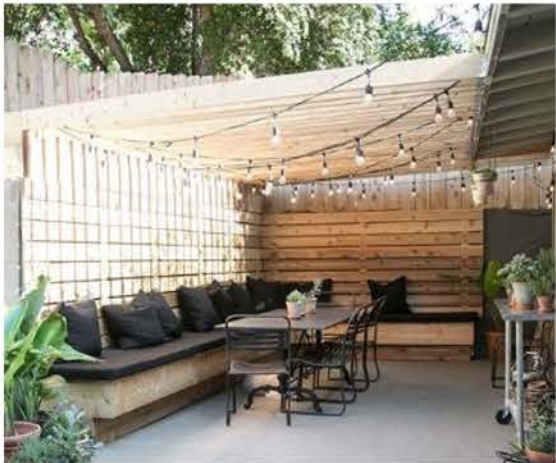
This project will pay special attention to the relationship between the built form and the public realm along its two fronts. With the introduction of front doors, interactive landscape and respite areas along E10th Avenue and Carolina Street, the opportunity for neighbours and pedestrians to engage with one another is significantly enhanced. Further strengthening the public realm, the project proposes introducing a corner store at E10th and Carolina. This small neighbourhood commercial space is intended as a community attractor where the public can congregate and meet for social moments and interactions. The interplay of built form, setbacks and landscape will be vital to establishing spaces sheltered from the elements and intimate enough for conversations and independent respite. Areas where one can be social and alone will be planned along the building frontages, intensifying social space designed around the corner store. A neighbourhood book exchange and a community bulletin board are also proposed for the communal flex space, where neighbours and friends can leave books and share information in an informal and relaxed setting. The site will positively engage with the public and community; an interactive public realm, including the rear lane condition, will be considered wherever possible. Safety and security will be paramount for all persons interacting with the project.



REZONING RATIONALE

THE CORNER STORE

At the corner of E10th Avenue and Carolina Street, a small neighbourhood corner store/restaurant is proposed. Enhancing the neighbourhood streetscape and promoting a community gathering point will be its defining purpose. Vancouver has a long tradition of residential neighbourhood corner stores/ restaurants that have disappeared as primarily residential areas are redeveloped. The project intends to reintroduce this community amenity and enhance the public realm, creating a point of differentiation for the block. Unlike commercial prospects found on the major arterial roads in the area, this one-off opportunity will serve the local building population and neighbours alike. Situated on a quiet, primarily residential street, the intended corner store/ restaurant will become where locals meet and the community comes together. A generous exterior space will be provided by setting back the corner store/restaurant façade and providing ample covered space where patrons can spill into the community while enjoying their favorite coffee or light meal. Integration with the public realm will be essential to the success of the space.



REZONING RATIONALE

COMMUNITY BENEFITS

The building is located in an exciting developing district of the Mount Pleasant RT Areas (Area B) that is expected to be revitalized due to the Broadway Plan. The project will supply much-needed housing for a vibrant, walkable, and transit-oriented community. As part of creating maximum benefits for the community, the proposed project will provide the following benefits:

- Eyes on the street; minimizing setbacks between public and private along the two street-fronting sidewalks
- Diverse housing options: housing for families by meeting or exceeding the percentage of two and three-bedroom suites required under the Family Room Housing Mix Policy for Rezoning Projects
- Corner activation through commercial activity supporting local business and neighbourhood convenience
- An elevated design aesthetic, sensitive and respectful transitions to adjacent built forms within the neighbourhood
- A community-accessible dog run
- At-grade bicycle share and parking facilities
- An activated rear lane experience
- An activated pedestrian experience that utilizes landscape and street furniture to promote respite and community congregation
- A built form that maximizes access to sunlight for pedestrians and building users



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Rationale

DESIGN RATIONALE

ARCHITECTURAL INTENT

The building’s architecture draws inspiration from the neighbourhood and surrounding context, prioritizing communal interaction, enhancing unit livability, and promoting social sustainability as outlined in the Broadway Plan. These fundamental principles are embodied by sculpting the massing to blend into the existing context seamlessly. The building’s base fronts 10th Avenue and Carolina Street, featuring an inviting glass facade housed in expressive arches that create a warm and welcoming extension to the neighbourhood. This design pays homage to the nostalgia of local Broadway storefronts while further establishing the intersection of 10th and Carolina as a gathering place for the community. Meanwhile, the tower is strategically positioned on the eastern side to ensure adequate separation from potential future towers.

Utilizing the natural grading of the terrain, the building defines its primary functions. The corner store and lobby entrance are thoughtfully located on the southeast corner, providing easy street-level access. In contrast, the ground-level lofts along the southern side are slightly elevated from the street, establishing a natural hierarchy between private and semi-public zones. At the intersection of the roads, the podium base is characterized by an intricate array of arches, forming a guiding arcade that not only highlights the main building entrance but also offers shelter from adverse weather conditions. The tower’s design incorporates a deliberate interplay between light and heavy facades; the east and west facades balance the inset strip of balconies and glass on the north and south. Along Carolina Street, the elongated tower massing is intentionally divided into two distinct parts, creating the illusion of two separate structures harmoniously integrating with the existing context. Throughout the building, careful consideration has been given to creating pockets of occupant engagement through thoughtfully landscaped amenity spaces that shape the framework of the rooftop patios. The building aspires to become an integral part of the community, serving as a beacon for community engagement and inviting passersby to stop, pause, and interact as they see fit.



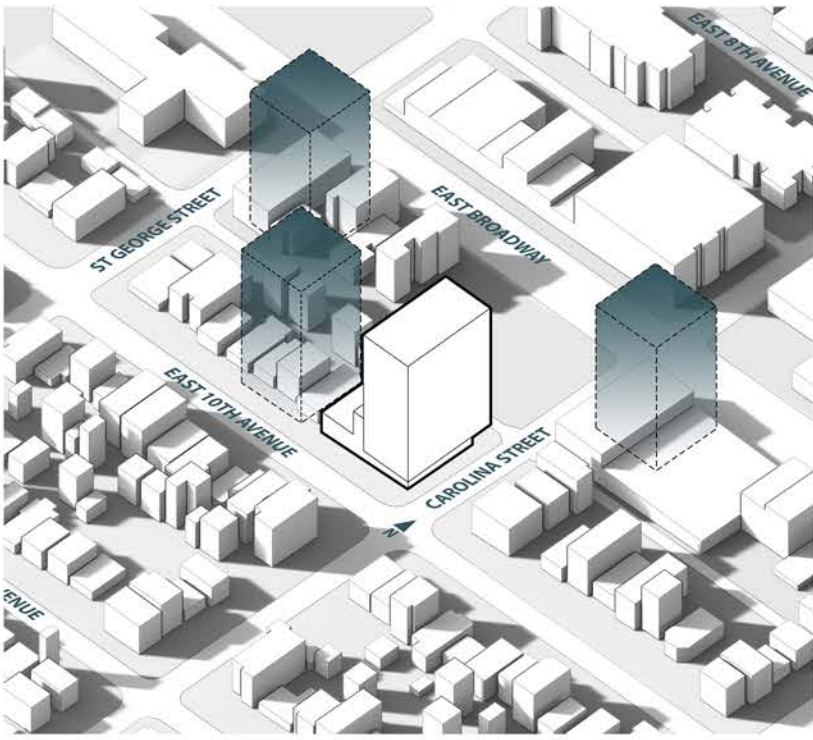
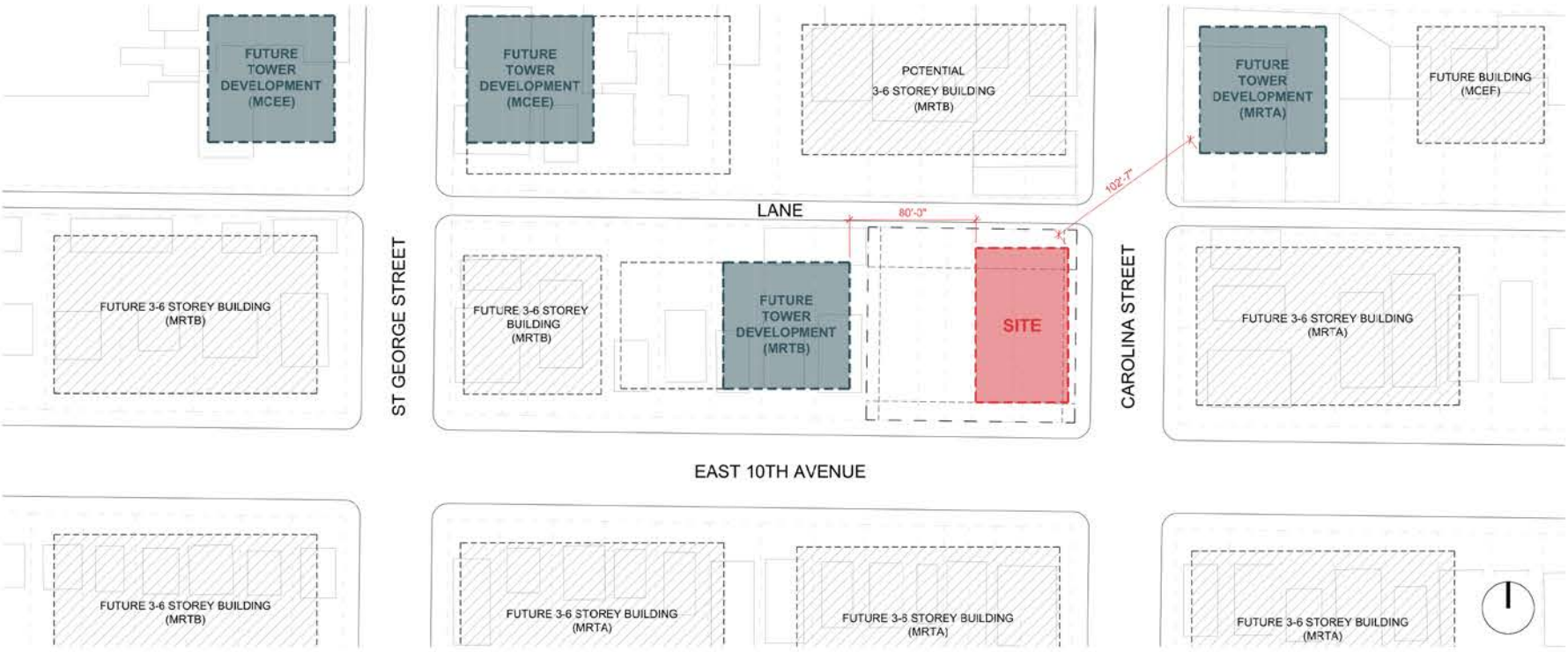
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Design
Rationale

TOWER SEPARATION



PROXIMITY

The proposed development is situated on the border of the Mount Pleasant RT Areas - Area B (MRTB) as defined in the Broadway Plan. This area is designated for buildings with a maximum height of 18 stories, with an exception allowing for a single tower on the northern block facing E 10th Avenue between Guelph and Carolina Street, within the outlined parameters that encompass the project site. The new built development to the north along East Broadway consists of 3-6 story buildings in the Mount Pleasant Centre Area F (MCEF), which provides more space for towers on this block. Additionally, other potential developments on the same block to the west (MRTB) and those adjacent to the east and south within the Mount Pleasant RT Areas - Area A (MRTA) are planned as 3-6 story low-rise buildings, eliminating any concerns regarding tower separation with our proposed building. Overall, the strategies of the project aim to align with the goals described in the Broadway Plan to sculpt a skyline that resonates with the vibrancy of the corridor. An alternate proposal with superior tower separation is outlined on page 56 of this Rezoning application.

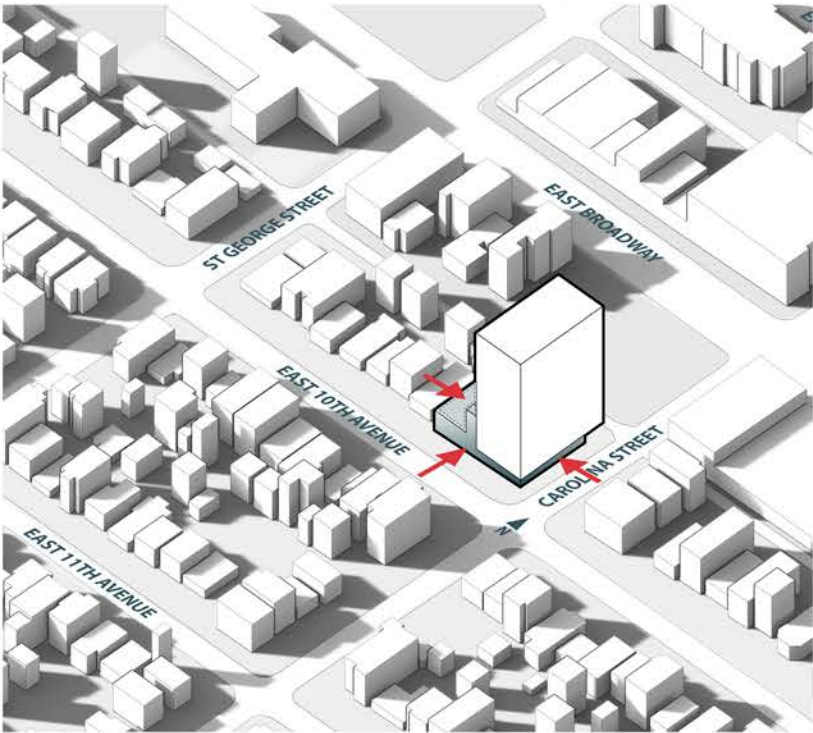
SEPARATION

The privacy and separation factor between the proposed building development and potential future towers have been considered by following the city guideline of providing a minimum 80ft separation between each building face.



AUGMENTATION

The design begins with a simple, narrow rectangular massing, which gradually tapers inward from the east to maintain an 80-foot separation from the potential future development to the west. This manipulation of massing shifts the core series of residences to the east, creating a distinct cluster of programmatic spaces. The resulting asymmetry also provides ample exterior amenity space above and adjacent to the podium mass.



CONNECTION

The massing is strategically adjusted in key areas to define the building spaces better. The resulting long and narrow form directly responds to the 80-foot tower separation requirement while also considering the typical tower efficiencies. The tower extends into the side and rear setbacks on the upper levels to achieve this. However, a designated area of relief has been created at the base along East 10th Avenue and Carolina Street to allow for connectivity and movement between the project and the existing streetscape while adhering to all setback regulations. This relief area is characterized by an arcade structure that supports the tower above and provides an inviting covered space, offering shelter from inclement weather.



IDENTITY

The elongated tower massing along Carolina Street is intentionally divided into two distinct parts in the middle to create the illusion of two separate structures. This division is achieved through recessed balconies, shading elements, and darker facade materials. The cladding and window patterns on each side are slightly different, emphasizing the idea of two segments within the same tower. Finally, the tower's design presents a slender, elegant facade facing 10th Avenue.

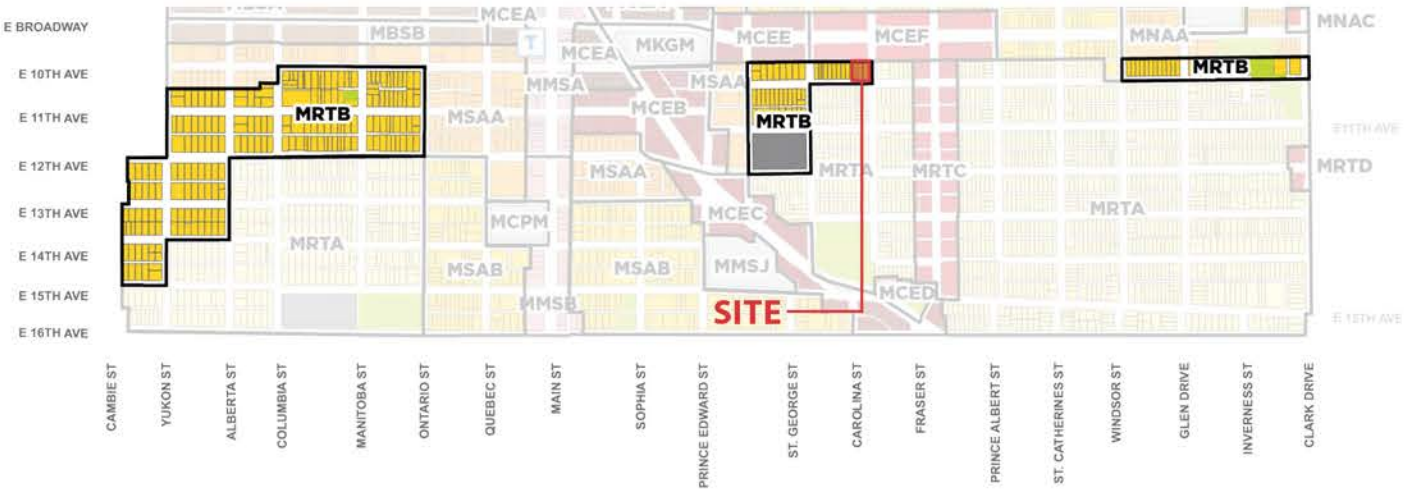
APPLICABLE POLICIES AND GUIDELINES - BROADWAY PLAN

Mount Pleasant RT Areas - Area B

Policy Area	Mount Pleasant RT Areas - Area B		MRTB
Uses	Residential, retail/service		
Option/Tenure	Secured rental housing		
Max Height	18 storeys		3-6 storeys
Max Density	5.5 FSR		1.0-2.7 FSR
Min Frontage	45.7 m (150 ft.)		Variable - refer to Built Form and Site Design (Chapter 11)
Notes	Minimum 20% of the net residential floor area must be secured at below-market rents (see Housing (Chapter 12) for details).		- Applies to site frontages that are less than 45.7 m (150 ft.) or where a tower cannot be achieved due to lot conditions or policy 10.25.2. - Height and density allowances to vary based on lot conditions (see Built Form and Site Design (Chapter 11) and sections 11.2 and 11.3 for details)

Additional Policies

- 10.25.2
- There will be a maximum of two towers per block (street to street, including any laneways). However, for the northern block faces along 11th Avenue between Yukon Street and Columbia Street, number of towers per block shall be counted in conjunction with the remainder of the block located in Mount Pleasant South Apartment Area A. For the northern block faces along 10th Avenue between Guelph Street and Carolina Street, only one tower will be allowed on the Mount Pleasant RT Area B block face. Between Cambie and Yukon streets, towers located outside of the Mount Pleasant RT Area B boundaries will not be included in counting the number of towers per block.
- 10.25.3
- Minor increases in height and density will be considered for delivery of ground-level local-serving retail/service uses or childcare.
- 10.25.4
- For 6-storey apartment buildings, minor increases in density may be considered where 100% of the residential floor area is social housing, generally following the provisions for social housing in the RR-2C district schedule and associated requirements.



Built Form

Mixed Use Mid/High-Rise Typology. Minimum lot depth of 120 ft. Generous setbacks. Privately-owned public space at podium and street level is encouraged and shared outdoor amenity space should be provided on the podium or rooftop.

Public Realm

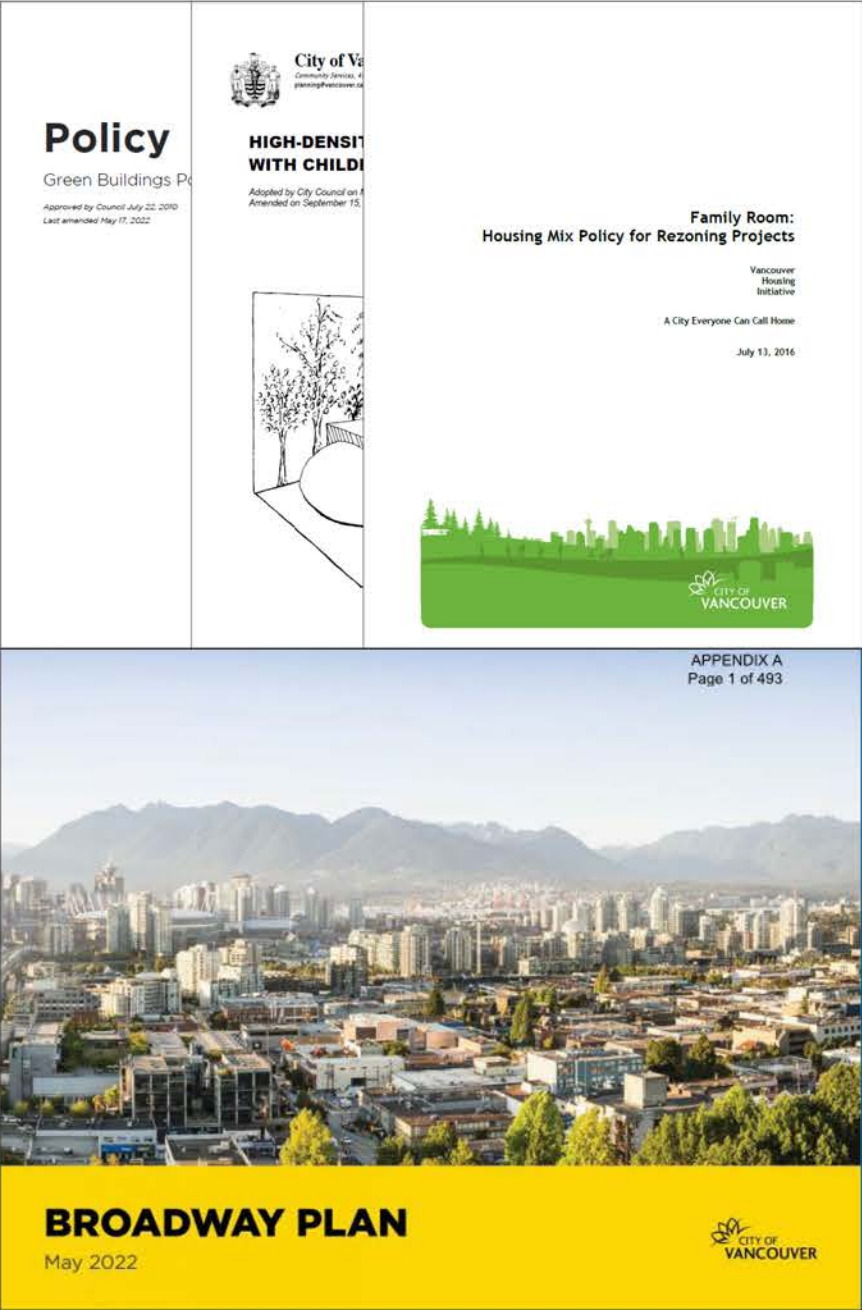
- Provide small storefronts with a maximum frontage of 50 ft. (not including grocery retail) to support small businesses.
- Local serving commercial uses should be clearly delineated with architectural features appropriate for the neighbourhood.
- Patio space and privately owned public space at street level is encouraged.

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APPLICABLE POLICIES AND GUIDELINES - BROADWAY PLAN



OTHER POLICIES AND GUIDELINES

- Green Building Policy for Rezoning (2018)
- Rainwater Management Bulletin (2018)
- Zoning By-law (3575)
- RT-5 District Schedule
- High-Density Housing for Families with Children Guidelines (2020)
- Housing Design and Technical Guidelines (2019)
- Family Room: Housing Mix Policy for Rezoning Projects (2016)
- Parking By-Law 6059
- Transportation Demand Management for Developments in Vancouver (2019)

The proposal intends to adhere to the Broadway Plan – providing secure market rental with 20% below market rates and building height of 203'-6" and 18-storeys. As noted, the project will comply with all the relevant policies and guidelines for multi-family dwellings.

PLANNING ASPECTS REQUIRING CONSIDERATION

This proposal, with its location and proximity to E Broadway, seeks to:

- Increase density from 5.5 to 5.8 FSR to allow for additional market and affordable rental units.
- Permit development to the encroach to rear and side setbacks from level 03 up for tower separation allowance.
- Removal of existing trees to allow for non-market and market rental development at the corner site.

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LOE RESPONSE, RATIONALE AND VARIATIONS

RATIONALE & VARIATIONS

RESIDENTIAL DWELLING UNITS + LIVABILITY

Dwelling units are recommended to have a net floor area of no less than 37 sq. m (398 sq. ft.) for studios, 46.5 sq. m (500 sq. ft.) for one-bedroom units, 70 sq. m (753 sq. ft.) for two-bedroom units, and 90 sq. m (970 sq. ft.) for three-plus bedroom units to meet minimum standards of livability.



The residential dwelling units are designed to invite daylighting through oversized glazing positioned high at ceiling level, bringing natural light deep into the suite. Light-coloured walls and a natural palette are envisioned to create bright interiors suitable for indoor plants. The location of fenestrations balances visibility and thermal performance for optimal comfort conditions all year round. In the narrower units, we have maximized space through an elongated layout. This strategic layout positions storage and shower facilities at the back of the unit, while the kitchen and living spaces occupy the front, thereby maximizing access to natural light and fresh air. Every suite also provides access to private outdoor spaces, seamlessly extending the living areas. We've paid meticulous attention to utility and usability, minimizing unusable space and circulation areas within the project. The design emphasizes flexibility in floor plans by incorporating standalone closets and storage units while maintaining standardized kitchen configurations for maximum functionality. This flexibility enhances the potential for in-suite storage, allowing even smaller units to feel considerably more spacious than what the current market typically offers.

HOUSING

The project must include a minimum of 35% family units, including a minimum of 10% three-bedroom units, and a minimum of 25% two-bedroom units; the proposal does not meet this requirement since no three-bedroom units are proposed.



The project comprises market and below-market rentals to help supplement the housing needs defined by the Broadway Plan. The intent is to supply diverse modern housing solutions from ground-oriented loft studios designed to interact with the neighbourhood and add eyes on the street to efficient two and three-bedroom family units with standardized bedrooms that all fit queen-sized beds and stand-alone closets. All units are designed to be efficient and provide more utility than much bigger units of the same bed count in the market. Falling slightly below the two-bedroom recommended mix, the project aims to balance out the deficit with additional smaller units to contribute towards more affordable units, with hopes to maximize the inclusion of more families. Small units are designed to live larger through thoughtful kitchen design, standalone closets, and storage. The development introduces ground-level loft-type studio units that utilize the volumetric space that fortifies the podium units above. The studio lofts' extensive ceiling height helps create a space showered with natural light, making a small space live and feel significantly larger.

PEDESTRIAN REALM INTERFACE



The project utilizes the natural grade to guide the design in dictating the programmatic uses and establishing the entrance sequence that stitches into the existing urban fabric. In finessing with the sloping topography, the design takes advantage of the high point to elevate the ground-level studio lofts, creating a soft delineation with the main building entrance at the low point where height is maximized to form a volumetric congregation space for both the tenants and surrounding community. The ground-level studio lofts are accessible with stoops that collectively shape an informal boundary between the residential and adjacent streetscape, providing opportunities for connecting with the existing neighbourhood. With meticulous landscaping, gradation from public to private is delicately blurred at the forefront of the loft units to assure privacy to the suites. The corner store is located at the corner of 10th Avenue and Carolina St. with an easy access at the grade level. An arcade of columns holding the tower above, offers area sheltered from the weather for a variety of semi- outdoor activities.

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Rationale &
Variations

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RATIONALE & VARIATIONS

RESIDENTIAL AMENITY (OUTDOOR)

2.7 sq. m (29 sq. ft.) per dwelling unit of common outdoor amenities is recommended. Outdoor amenity space is not clearly defined in this application. Providing for a variety of outdoor activities to suit a range of age groups is encouraged.



A primary objective of the project is to create diverse outdoor amenities. From the front stairs on E 10th, designed as a casual gathering point and community attractor, to the level three seasonal garden, all the outdoor amenities create formal and informal social engagement opportunities for the building occupants and the neighbourhood. The resident-only accessible patio space above the podium will have a seasonal garden to grow herbs, fruits and vegetation; this space has informal seating opportunities and community activities amongst the foliage. This will be a space for community gathering and individual respite within an urban garden that will be supplemented by a potted shed for additional agricultural growth and a beekeeping program to promote the garden's healthy development. HAVN Developments intends to contribute the urban garden yield to a local community food bank and involve community gardeners with the upkeep of this area. During the off-season, the patio will be reconfigured as an outdoor event space for parties and ceremonies. Located on the top level of the building, formal outdoor seating areas with unobstructed views are adjacent to the indoor community lounge and gym.

RESIDENTIAL AMENITY (INDOOR)

Indoor amenities should be designed to give residents of all ages access to a variety of activities that may be difficult to do in apartment homes, and creativity is encouraged.



The indoor amenities offered by this development cater to a vast array of individuals and age groups, creating spaces to facilitate activities that would otherwise be difficult to do in their homes. Internal activities are centralized in the ground floor-oriented community flex space. This space is intended to be accessible to the neighbourhood and the building residents and is envisioned to provide flexible areas to lounge, work, gather and socialize. The corner store will provide opportunities for local community entrepreneurs, such as cafes, flower shops, ready-made juices and food companies. This commercial activity is designed to invite the community in and help to activate the internal space and front street via the stairs. The community flex space will also hold a community book exchange and information board.

RESIDENTIAL AMENITY (INDOOR)

A minimum 1.2 sq. m (13 sq. ft.) per dwelling unit of common indoor amenity areas is strongly recommended.



The development offers various indoor amenity areas of different sizes and locations within the building. Starting with the communal flex space on the ground level, this area features seating areas and other community amenities. Additionally, there are enclosed facilities for dog washing and bike maintenance, easily accessible from both the street and the rear lane. The bike room is also connected to maintenance, storage, and repair facilities, providing a dependable resource for tenants and promoting a cycling culture, contributing to a more sustainable way of living. The rooftop level of the building is equipped with a gym and a resident-only multifunctional room to hold private events and gatherings. These spaces are located on the uppermost floor to give all residents a view and large space access.

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RATIONALE & VARIATIONS

DENSITY

The proposal does not comply with the maximum allowable density of 5.5 FSR.



The project intends to increase the suggested 5.5 to 5.8 FSR by providing ground-level local serving retail/service uses. The corner store and the community flex space, approximately 1,230 sf in size, located on the ground floor and accessed from E 10th Avenue and Carolina, is designed to be accessible to the general community/neighbourhood during regular operating hours and house commercial space opportunities focused on local businesses. The flex space will also have a community book exchange area and communication board to attract the community and create a vibrant link between the new building and existing residents of the Mount Pleasant community.

SITE DESIGN

The proposal does not comply with the required 3.7 m (12 ft.) front yard below-grade setback. This setback must be free and clear of any encumbrances above or below grade in order to contribute to passive rainwater management and to provide sufficient growing medium to support the health of the urban tree canopy.

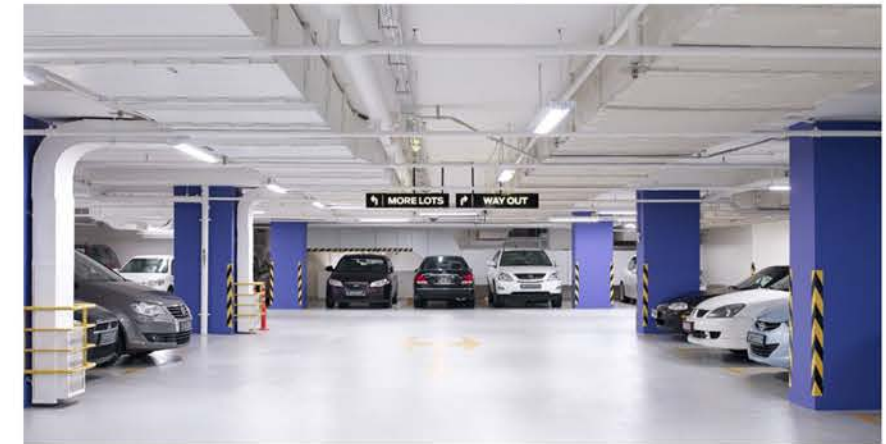


The project seeks to maximize the site's buildable area and adjacent tower separation while mitigating damage to existing trees by utilizing methods such as air-vac excavation and passive landscape design rain management. Moreover, the parking layout respects the critical root zones of City trees on both 10th and Carolina St. Ongoing monitoring paired with root zone enhancements such as mulch and fertilizer will be explored to promote the longevity of the root health and ensure the trees are strong post-construction. Landscape Design has implemented passive rainwater management throughout the site, utilizing permeable pavers and large planters along E 10th Avenue. The project will ensure street-facing trees have sufficient moisture to survive periods of environmental strain through the stormwater detention tank found within the stair architecture and site grade change. This water storage will generate significant residual water feedback to the surrounding trees to maximize the longevity of onsite and offsite vegetation.

*Refer to the Arborist Report and Landscape Design

PARKING

Provide a Transportation Demand Management (TDM) plan if vehicle parking reductions are sought



The project intends to reduce parking from the City of Vancouver's recommended 77 to 53. Reduction in parking is supported by our Traffic Study and by providing ground-oriented and accessible bicycle facilities and storage onsite. Through the evaluation of a Transportation Demand Management (TDM) Plan, several parking reductions can be considered by taking into account Transit Accessibility, which is established as a Level A – "100m walking distance of any one (1) existing FTN route, including B-Line stops". Additional reductions are met through land use considerations which the project provides by planning for 20% below-market rental units.

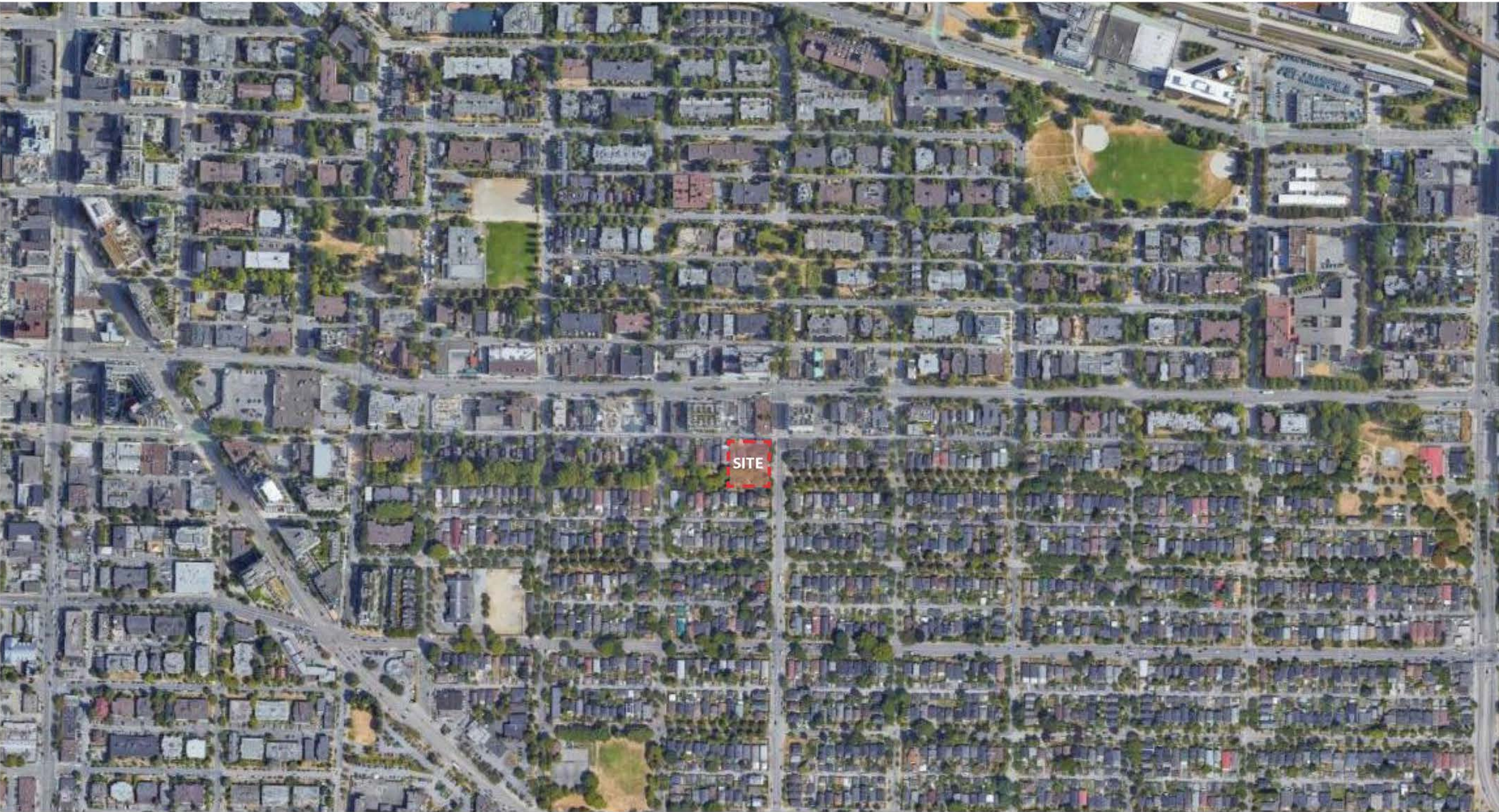
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SITE ANALYSIS

CONTEXT MAP



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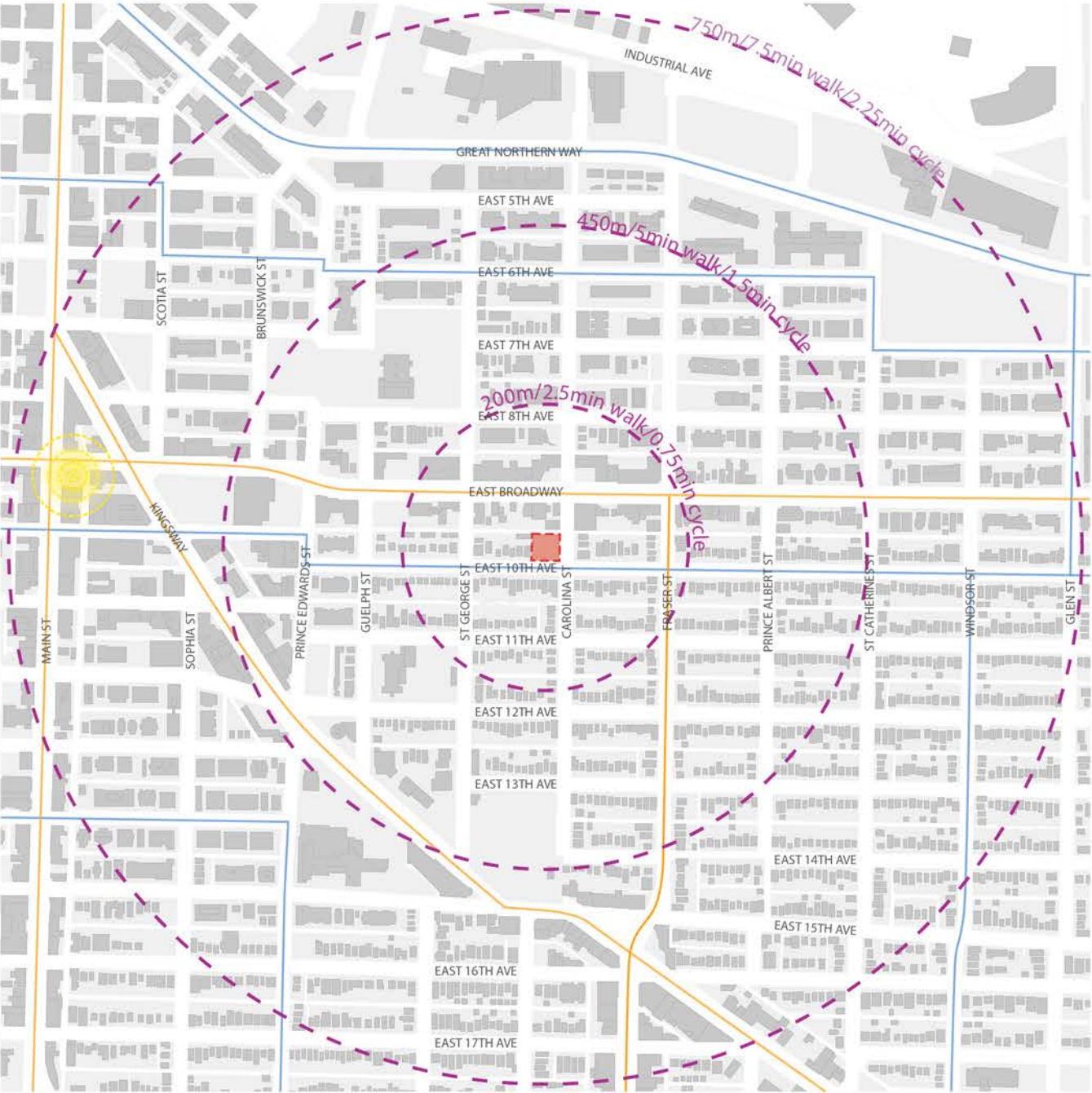
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Context Map

CONTEXT ANALYSIS

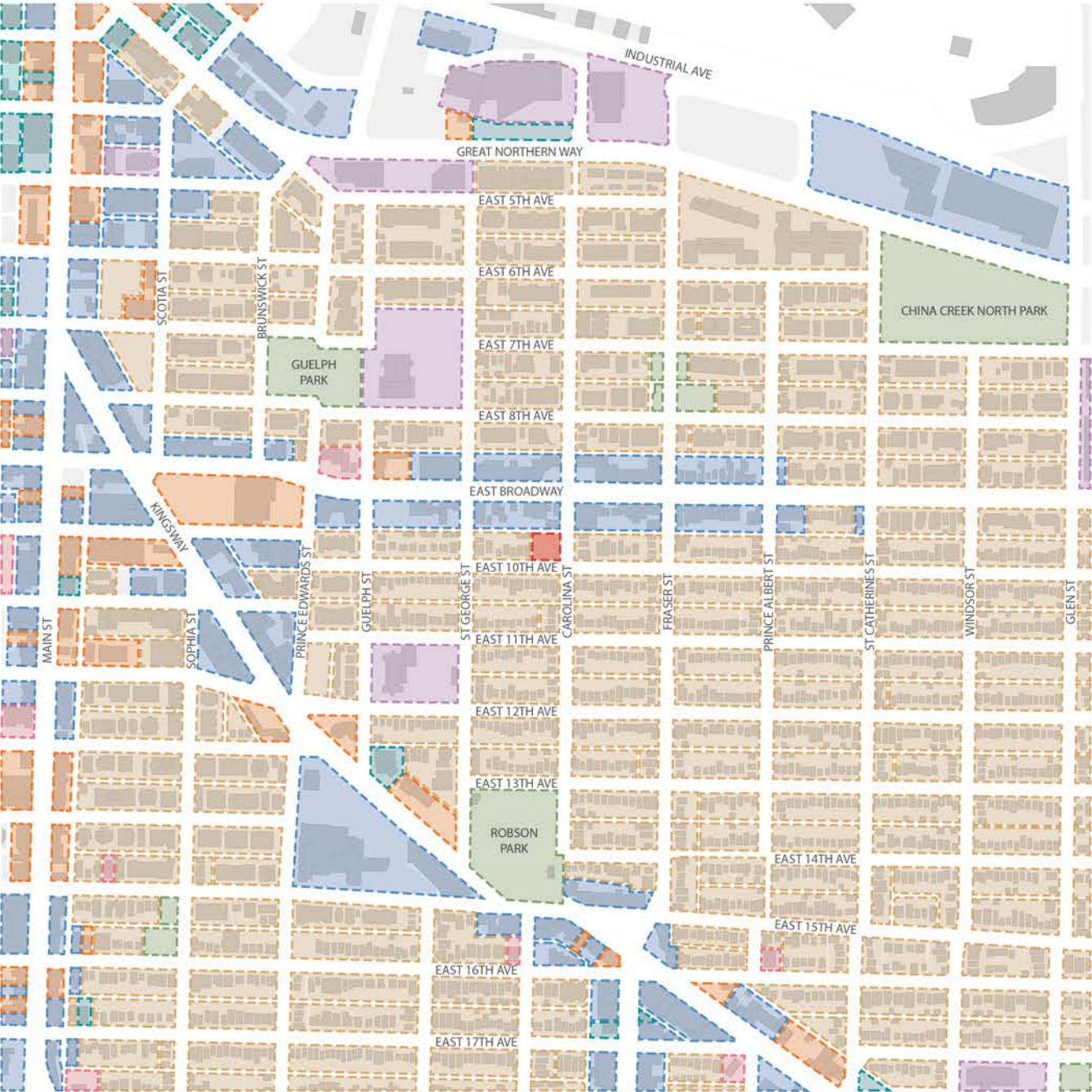
TRANSPORTATION



LEGEND

- BIKE LANE
- BUS ROUTE
- WALK/CYCLE RADIUS
- SITE LOCATION
- FUTURE SKY TRAIN STATION

LAND USE



LEGEND

- MIXED-USE
- RESIDENTIAL
- RETAIL
- OFFICE
- SCHOOL
- PARKS
- RELIGION
- SITE LOCATION

2535
CAROLINA
STREET

Rezoning
Application

November
2023



Context
Analysis

CONTEXT PHOTOS



A. View of local commercial businesses along Broadway



B. View of plaza complex at the corner of Broadway and Carolina



C. View of commercial and mixed use development on Broadway



D. View of adjacent residential neighbourhood

SITE PHOTOS



A. View of north-west corner of the lane



B. View of north-east corner of the site



C. View of south-east corner of the site



4. View of south-west corner of the site

SHADOW STUDY



10:00 AM
SPRING EQUINOX (PDT)



12:00 PM
SPRING EQUINOX (PDT)



2:00 PM
SPRING EQUINOX (PDT)



4:00 PM
SPRING EQUINOX (PDT)



10:00 AM
SUMMER SOLSTICE (PDT)



12:00 PM
SUMMER SOLSTICE (PDT)



2:00 PM
SUMMER SOLSTICE (PDT)



4:00 PM
SUMMER SOLSTICE (PDT)



10:00 AM
AUTUMN EQUINOX (PDT)



12:00 PM
AUTUMN EQUINOX (PDT)



2:00 PM
AUTUMN EQUINOX (PDT)



4:00 PM
AUTUMN EQUINOX (PDT)



SUSTAINABILITY

GREEN BUILDINGS POLICY FOR REZONING
LOW EMISSIONS GREEN BUILDINGS - RESIDENTIAL



Performance Limits

The project aims to achieve minimum performance limits outlined by the City of Vancouver (CoV):

Table B.1.2Ab

Residential High-Rise:	7+ storeys
TEUI:	130 kWh/m ²
TEDI:	40 kWh/m ²
GHGI:	4.0 kgCO ₂ /m ²



Whole Building Airtightness

The project whole-building airtightness will be tested (ASTME779 or equivalent) and reported to meet the minimum requirements:

- Air leakage target of 2.0 L/s*m² @75 Pa
- Suite-level air-leakage target of 1.2 L/s*m² @50 Pa
- Airtightness testing on 10% of the first 100 units and 5% of above units



Energy System Sub-metering

The project will provide:

- Separate master metering for each energy utility
- Sub-metering of all major energy end-uses and major space uses



Embodied Emissions

The project life-cycle equivalent annual carbon dioxide emissions (kgCO₂e/m²) will be calculated and reported through a whole-building life cycle assessment.

The report will outline:

- Embodied emissions intensity in kgCO₂e/m²
- Total life-cycle embodied emissions in kgCO₂e/m²
- Equivalent annual embodied emissions intensity in kgCO₂e/m²/yr



Verified Direct Ventilation

The project will be designed to:

- Incorporate a ventilation system that provides outdoor air directly to all occupiable spaces
- Designed with flow rates to be tested and verified



Refrigerant Emissions

The project life-cycle equivalent annual carbon dioxide emissions (kgCO₂e/m²) of refrigerants will be calculated and reported.



Integrated Rainwater Management
and Green Infrastructure

The project will establish a management of the site's rainfall through integrated management and Green Infrastructure (GI) through:

- Return first 24mm of rainwater/day into natural pathways or evapotranspiration
- Treat the next 24mm of rainwater/day to remove pollutants
- Convey safely rainwater from storm events over 48mm per day



Low Emitting Materials

The materials proposed for the project containing volatile organic compounds (VOC's) or added urea formaldehyde will be minimized by meeting the standards of Green Seal, Green Label Plus, FloorScore, South Coast Air Quality Management District Rules.



Indoor Air Quality Testing

The project will test for any formaldehyde, particulates, ozone, total VOC's and carbon monoxide before occupancy is established with reported results communicated to the city.

ARCHITECTURAL DRAWINGS

STATISTICS

SITE AREA	ft ²	m ²	ADDRESS	CURRENT ZONE	NEW ZONE
	16,117.3	1,497.3			

CAROLINA & 10th AVE - FSR BREAKDOWN

LEVEL	GROSS AREA (ft²)	GROSS AREAS - BY USE (ft²)				
		PARKING	NEIGHBOURHOOD GROCERY STORE	SERVICE/STORAGE	AMENITY	RESIDENTIAL
				0.00	0.00	0.00
P2	14,371.00	14,371.00		0.00	0.00	0.00
P1	14,371.00	14,371.00		0.00	0.00	0.00
1 - Lower	3,216.70	0.00		2,383.30	0.00	833.40
1 - Ground	9,343.00	0.00	828.00	3,512.60	219.50	4,782.90
2 - Mezzanine	1,583.80	0.00		0.00	0.00	1,583.80
3	7,456.00	0.00		359.50	655.00	6,441.50
4	7,282.40	0.00		398.50	0.00	6,883.90
5	7,282.40	0.00		398.50	0.00	6,883.90
6	5,604.10	0.00		278.00	0.00	5,326.10
7	5,604.10	0.00		299.40	0.00	5,304.70
8	5,604.10	0.00		299.40	0.00	5,304.70
9	5,604.10	0.00		299.40	0.00	5,304.70
10	5,604.10	0.00		299.40	0.00	5,304.70
11	5,604.10	0.00		299.40	0.00	5,304.70
12	5,604.10	0.00		299.40	0.00	5,304.70
13	5,604.10	0.00		299.40	0.00	5,304.70
14	5,604.10	0.00		299.40	0.00	5,304.70
15	5,604.10	0.00		299.40	0.00	5,304.70
16	5,604.10	0.00		299.40	0.00	5,304.70
17	5,604.10	0.00		299.40	0.00	5,304.70
18	3,323.10	0.00		0.00	2,376.80	946.30
TOTAL	135,478.60	28,742.00	828 ft²	10,623.80	3,251.30	92,861.50

TOTAL PROPOSED NET FLOOR AREA		828.00		10,033 m²	93,690 ft²
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FSR SUB TOTAL		0.0		0.0	5.8
FSR TOTAL					5.8

PROPOSED BUILDING HEIGHT

Measured in meters from grade to top of parapet					62.04m
Number of storeys					18

BICYCLE PARKING REQUIREMENTS

STALL TYPE	USE CLASSIFICATION	BYLAW	REQUIREMENT	AREA (m²) / Units	NO. SPACES
BICYCLE (CLASS A)	RESIDENTIAL	6.2.1.2	1.5 Space / unit < 65 m²	134	201
BICYCLE (CLASS A)	RESIDENTIAL	6.2.1.2	2.5 Spaces / 65 m² > unit > 105 m²	16	40
BICYCLE (CLASS A)	RESIDENTIAL	6.2.1.2	3 Spaces / unit > 105 m²	0	0
TOTAL					241
STALL TYPE	USE CLASSIFICATION	BYLAW	REQUIREMENT	AREA (m²) / Units	NO. SPACES
BICYCLE (CLASS B)	RESIDENTIAL	6.2.1.2	2 for first 20 units	20	2
BICYCLE (CLASS B)	RESIDENTIAL	6.2.1.2	1 additional / 20 units	130	7
TOTAL					9

BICYCLE PARKING PROVIDED

	CLASS A	CLASS B
TOTAL	241	9

LOADING REQUIREMENTS

STALL TYPE	USE CLASSIFICATION	BYLAW	REQUIREMENT	AREA (m²) / Units	NO. SPACES
LOADING (CLASS A)	RESIDENTIAL		N/A		
LOADING (CLASS B)	RESIDENTIAL	5.2.1	1 Space if 100-299 units	150	1
TOTAL					1

LOADING PROVIDED

LEVEL	CLASS A	CLASS B	TOTAL
GROUND LEVEL	0	1	1
TOTAL	0	1	1

PASSENGER SPACE REQUIREMENTS

STALL TYPE	USE CLASSIFICATION	BYLAW	REQUIREMENT	AREA (m²)	NO. SPACES
PASSENGER (CLASS A)	RESIDENTIAL	7.2.1	1 Space Required	8,626	1
TOTAL					1

PARKING REQUIREMENTS

STALL TYPE	BYLAW	REQUIREMENT	AREA (m²) / Units	TOTAL
RESIDENTIAL	4.5.B1	1 Space / 125 m²	8,627	69
VISITOR	4.1.16	0.05 Space / unit	150	8
TOTAL				77

ACCESSIBLE PARKING REQUIREMENTS

STALL TYPE	BYLAW	REQUIREMENT	UNITS	NO. SPACES
RESIDENTIAL	4.8.4 (a)	1 Space for first 7 units	7	1.00
RESIDENTIAL	4.8.4 (a)	Add 0.034 space / units	143	4.86
TOTAL				6

PARKING PROVIDED

STALL TYPE	STALL TYPE	NO. SPACES
RESIDENTIAL	RESIDENTIAL	33
ACCESSIBLE	ACCESSIBLE	6
VISITOR	VISITOR	8
TOTAL		53

*Accessible counts as 2

RESIDENTIAL UNIT MIX

LEVEL	STUDIO	1 BED	2 BED	3 BED
	0	0	0	0
1 - Ground				
1 - Upper	8			
2 - Mezzanine				
3	4	3	3	1
4	4	3	4	1
5	4	3	4	1
6	2	2	3	1
7	3	3	2	1
8	3	3	2	1
9	3	3	2	1
10	3	3	2	1
11	3	3	2	1
12	3	3	2	1
13	3	3	2	1
14	3	3	2	1
15	3	3	2	1
16	3	3	2	1
17	3	3	2	1
SUB TOTAL	55	44	36	15
PERCENTAGE TOTAL	37%	29%	24%	10%
TOTAL		150		

RESIDENTIAL UNIT NET AREAS (SF)- MARKET RENTAL UNITS

LEVEL	*01	*02	*03	*04	*05	*06	*07	*08	*09	*10	*11	*12
1	367	355	387	387	387	387	387	400				
2	173	171	203	203	203	203	203	211				
3												
4												
5	640				690		488	690				660
6	755	348	690	488	488	690	349					
7	488	329	348	690	488	488	690	349	835			
8	488	329	348	690	488	488	690	349	835			
9	488	329	348	690	488	488	690	349	835			
10	488	329	348	690	488	488	690	349	835			
11	488	329	348	690	488	488	690	349	835			
12	488	329	348	690	488	488	690	349	835			
13	488	329	348	690	488	488	690	349	835			
14	488	329	348	690	488	488	690	349	835			
15	488	329	348	690	488	488	690	349	835			
16	488	329	348	690	488	488	690	349	835			
17	488	329	348	690	488	488	690	349	835			
SUB	7,303	4,493	5,108	8,668	7,136	6,648	9,017	5,140	9,185	0	0	660
TOTAL AREA	63,358 ft²		5,886 m²									

Average unit size by unit type (SF)

386.28 Studio	(including studio lofts)		488 One-Bedroom	689.48 Two-Bedroom	835 Three-Bedroom
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RESIDENTIAL UNIT NET AREAS (SF)- BELOW MARKET RENTAL UNITS

LEVEL	*01	*02	*03	*04	*05	*06	*07	*08	*09	*10	*11	*12
1												
2												
3	640	417	329	348	690	488	488	690	349	349	830	
4	640	417	329	348	690	488	488	690	349	349	830	660
5		417	329	348		488			349	349	830	
6								835				
SUB	1,280	1,251	987	1,044	1,380	1,464	976	2,215	1,047	1,047	2,490	660
TOTAL AREA	15,841 ft²		1,472 m²									

Average unit size by unit type (SF)

343.75 Studio		461.38 One-Bedroom	671.43 Two-Bedroom	831.25 Three-Bedroom
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2535
CAROLINA
STREET

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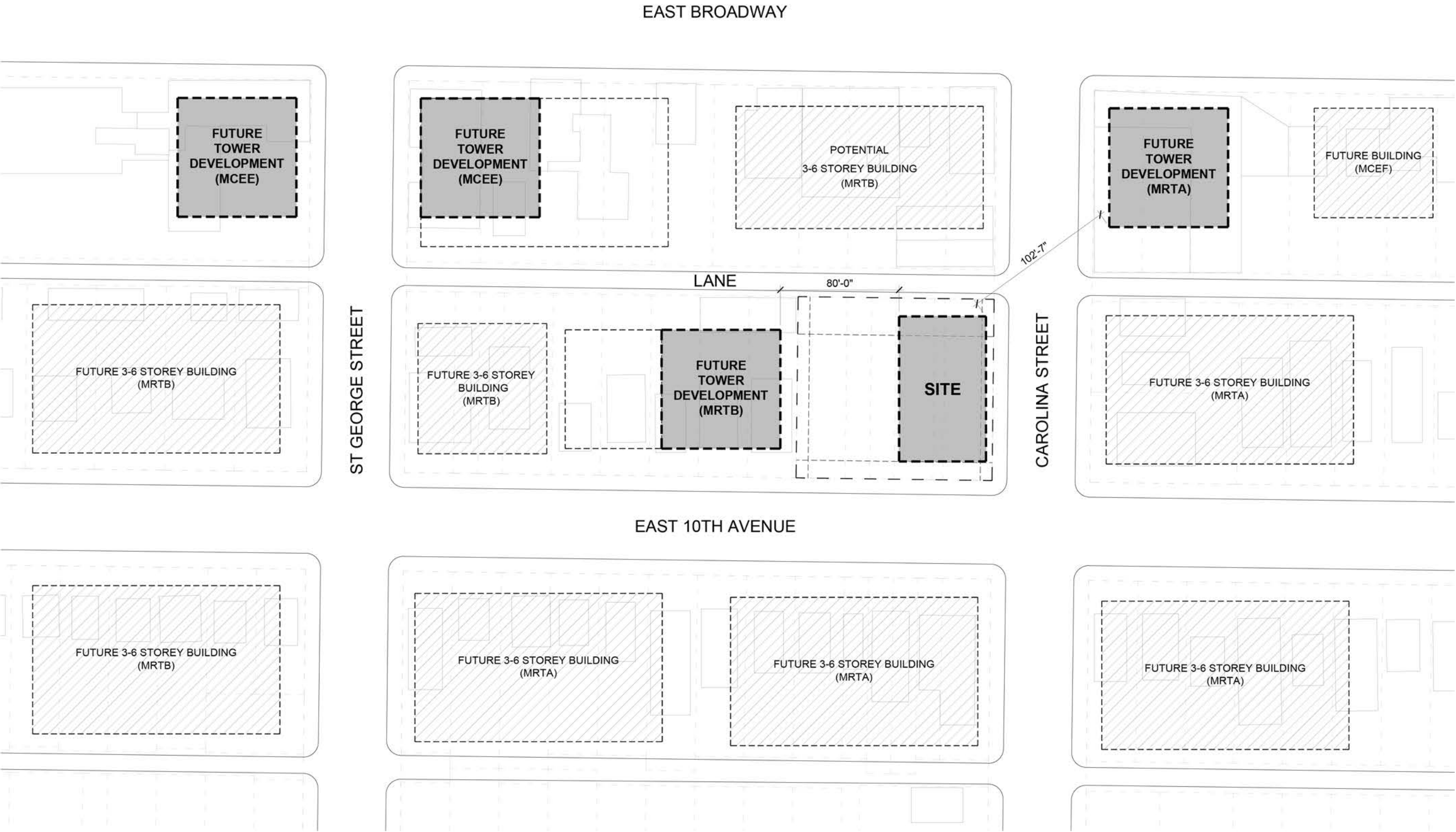
November
2023

November
2023

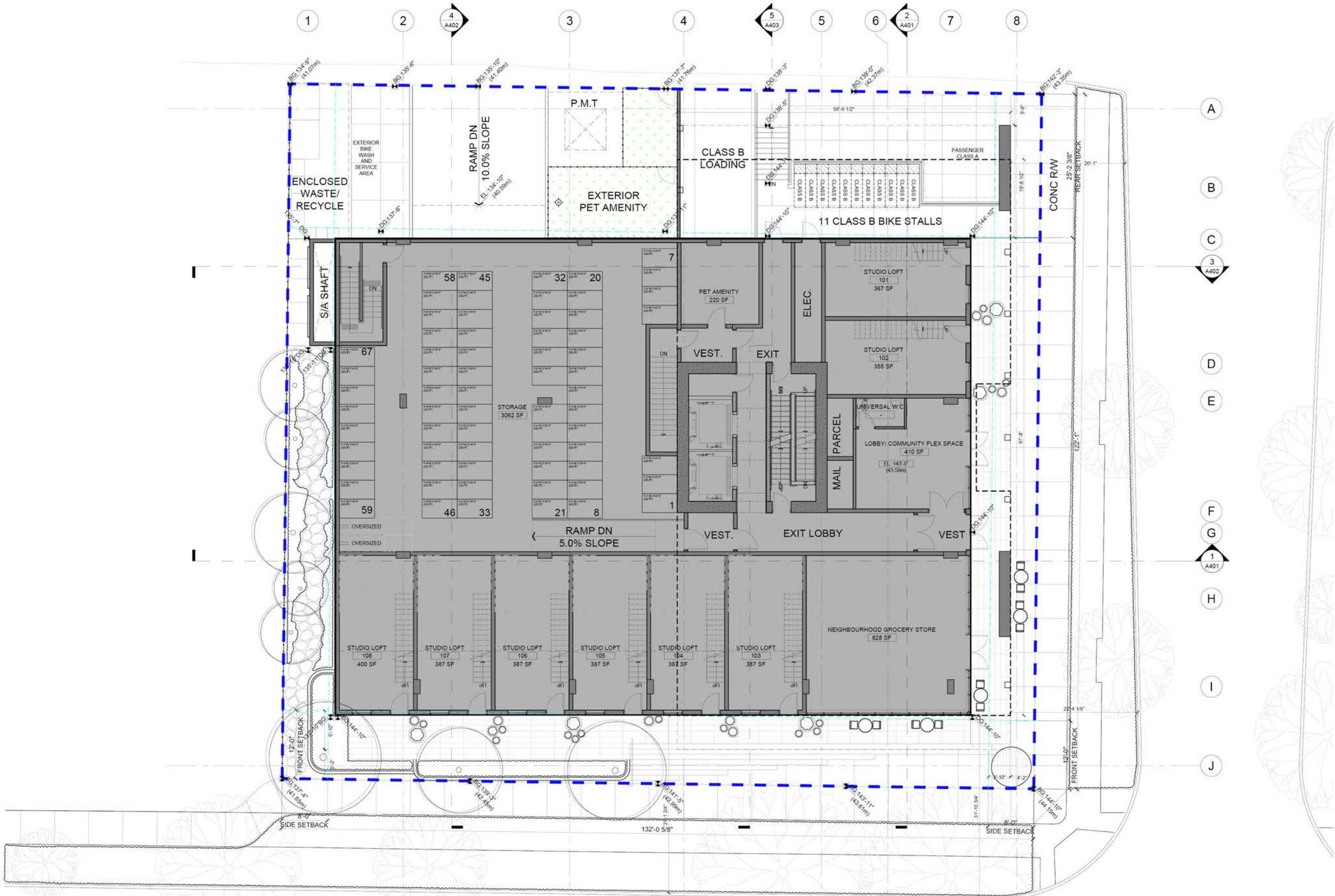
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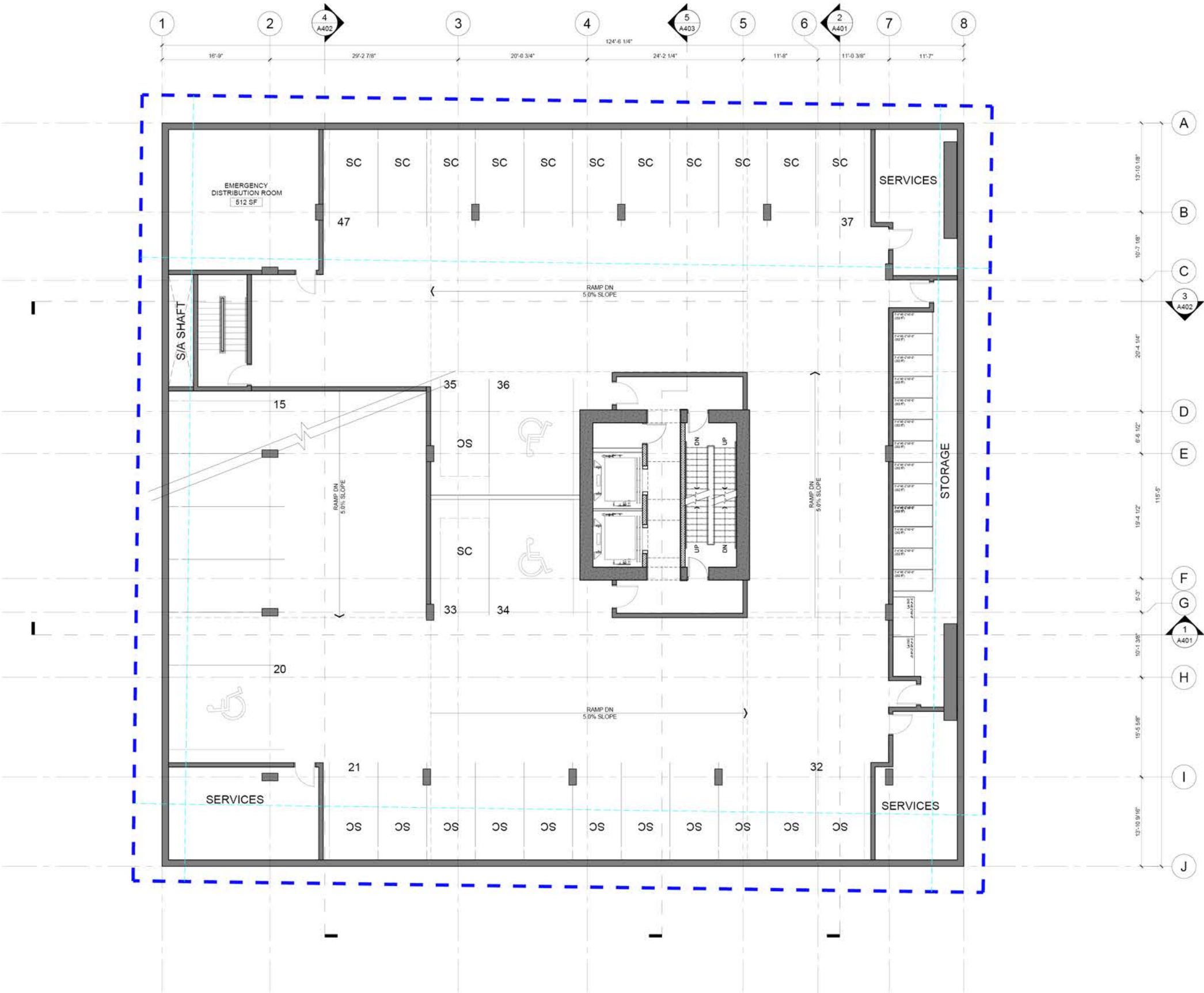
CONTEXT PLAN



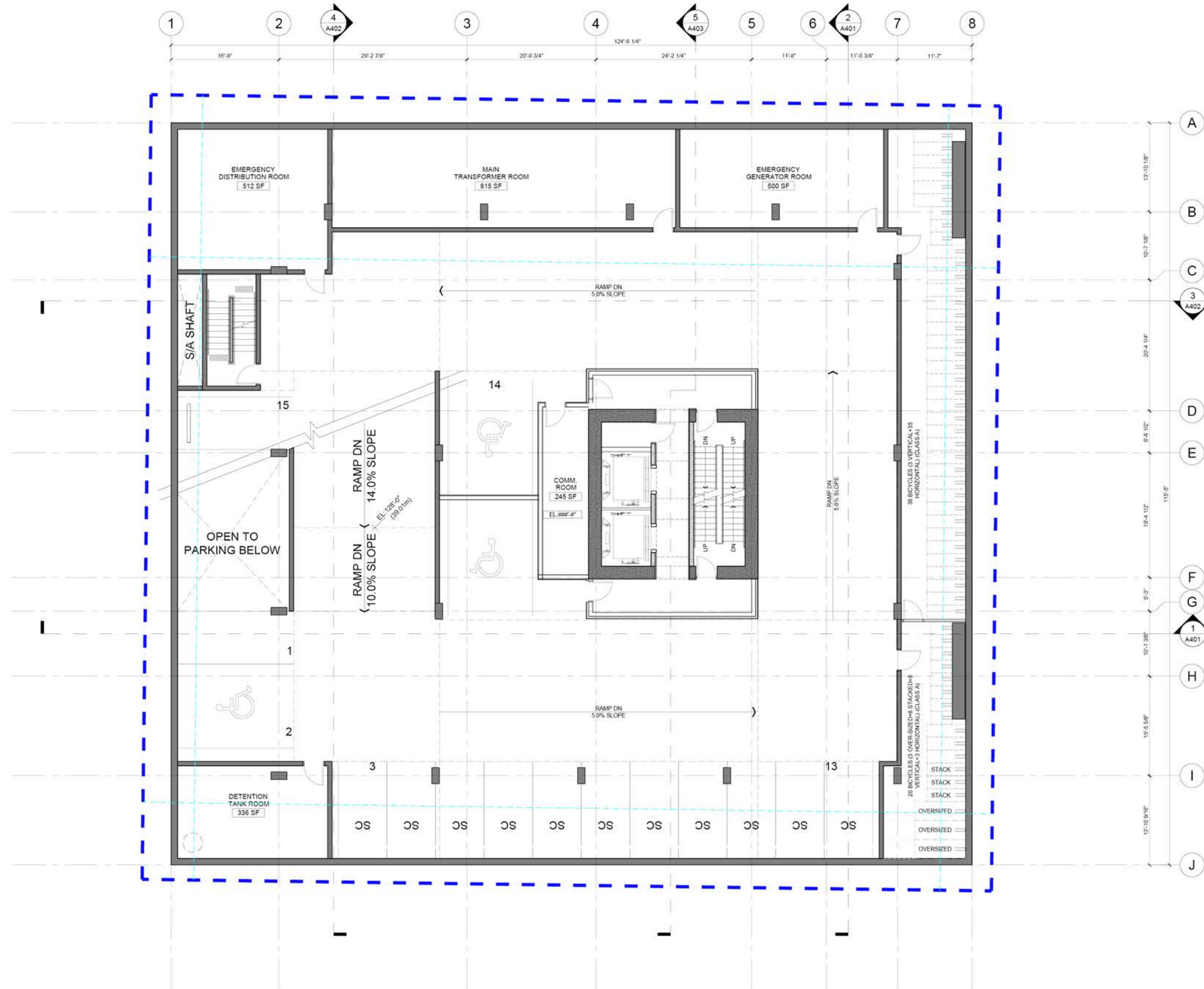
SITE PLAN



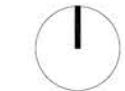
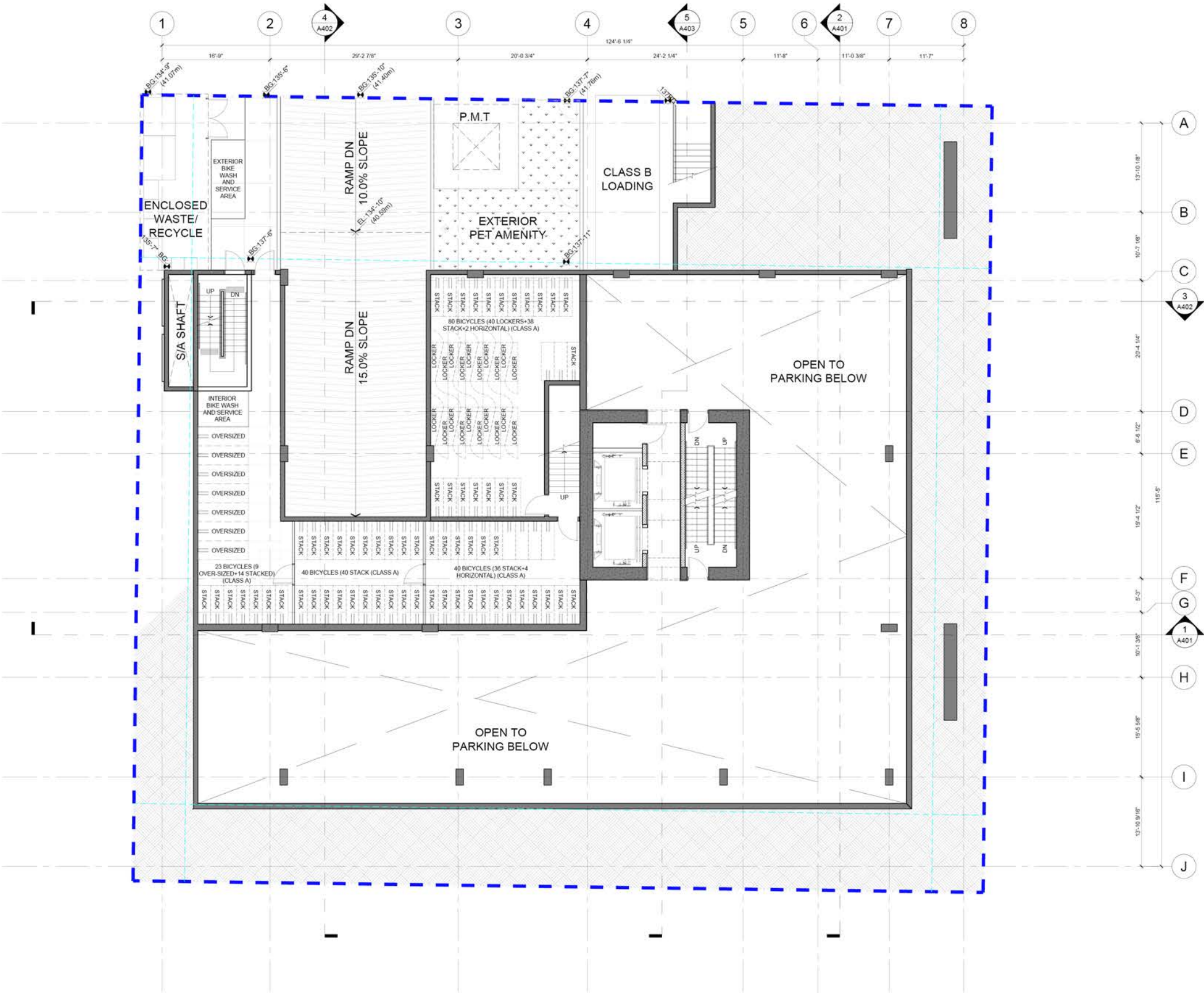
PARKING PLAN



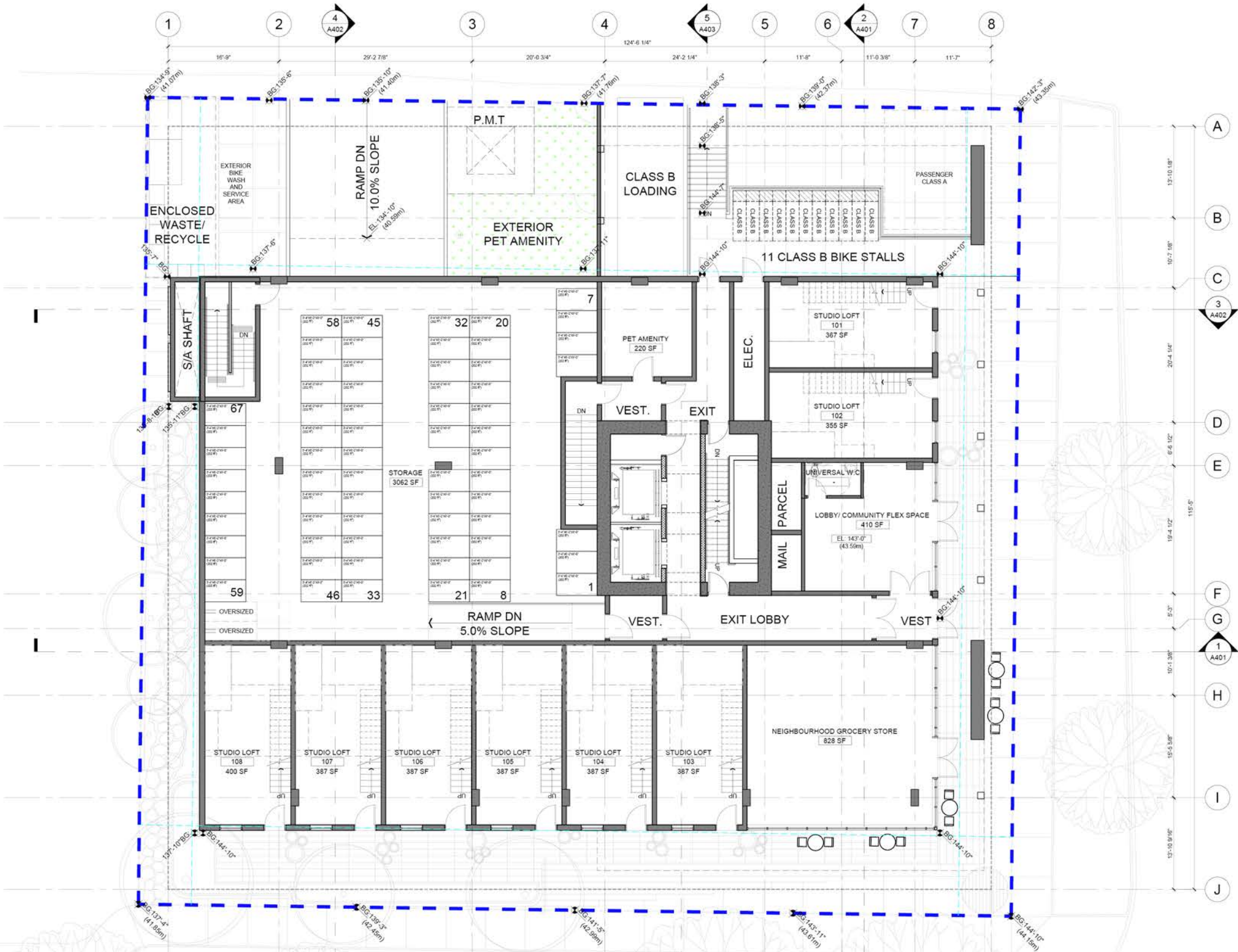
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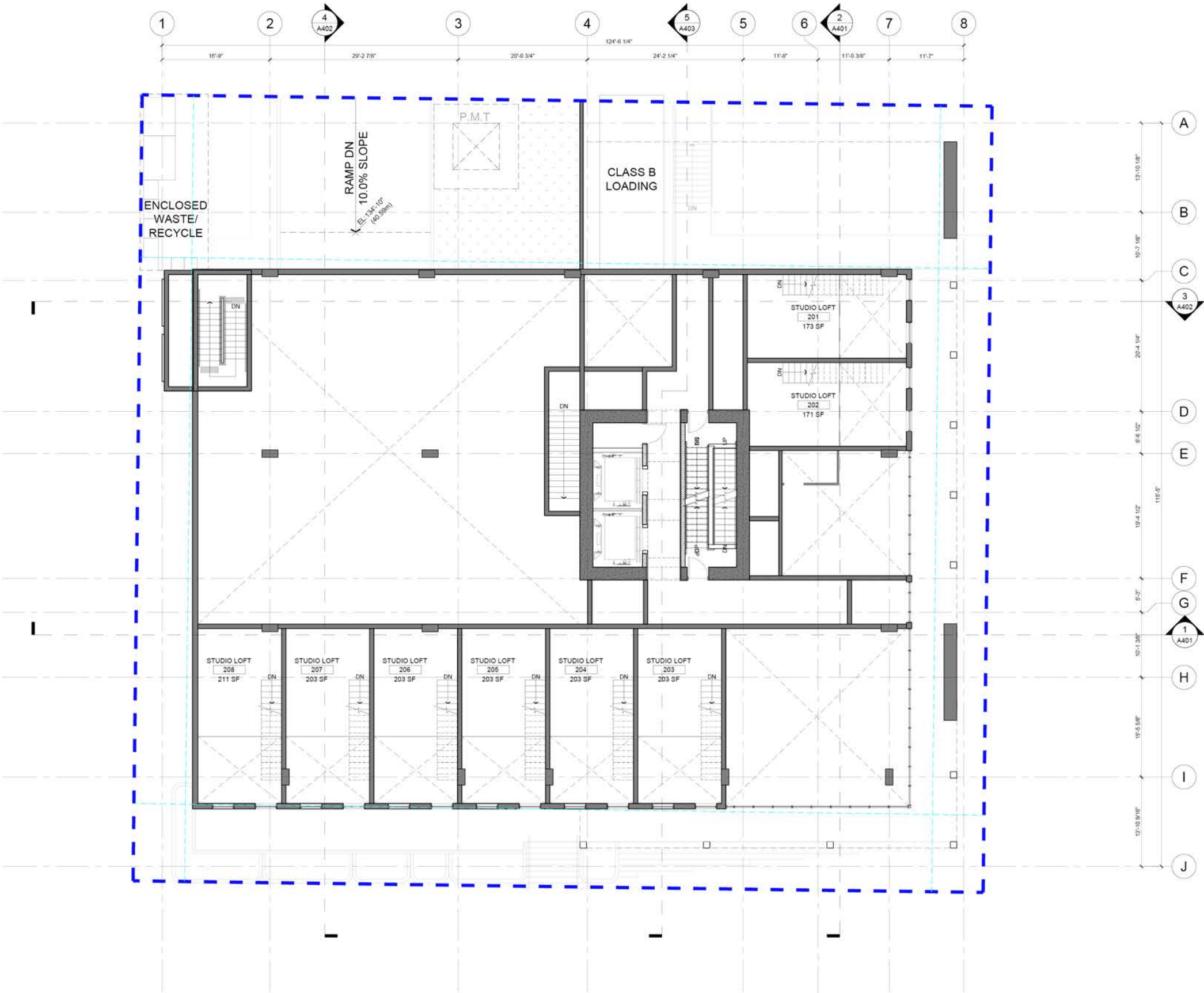
FLOOR PLAN



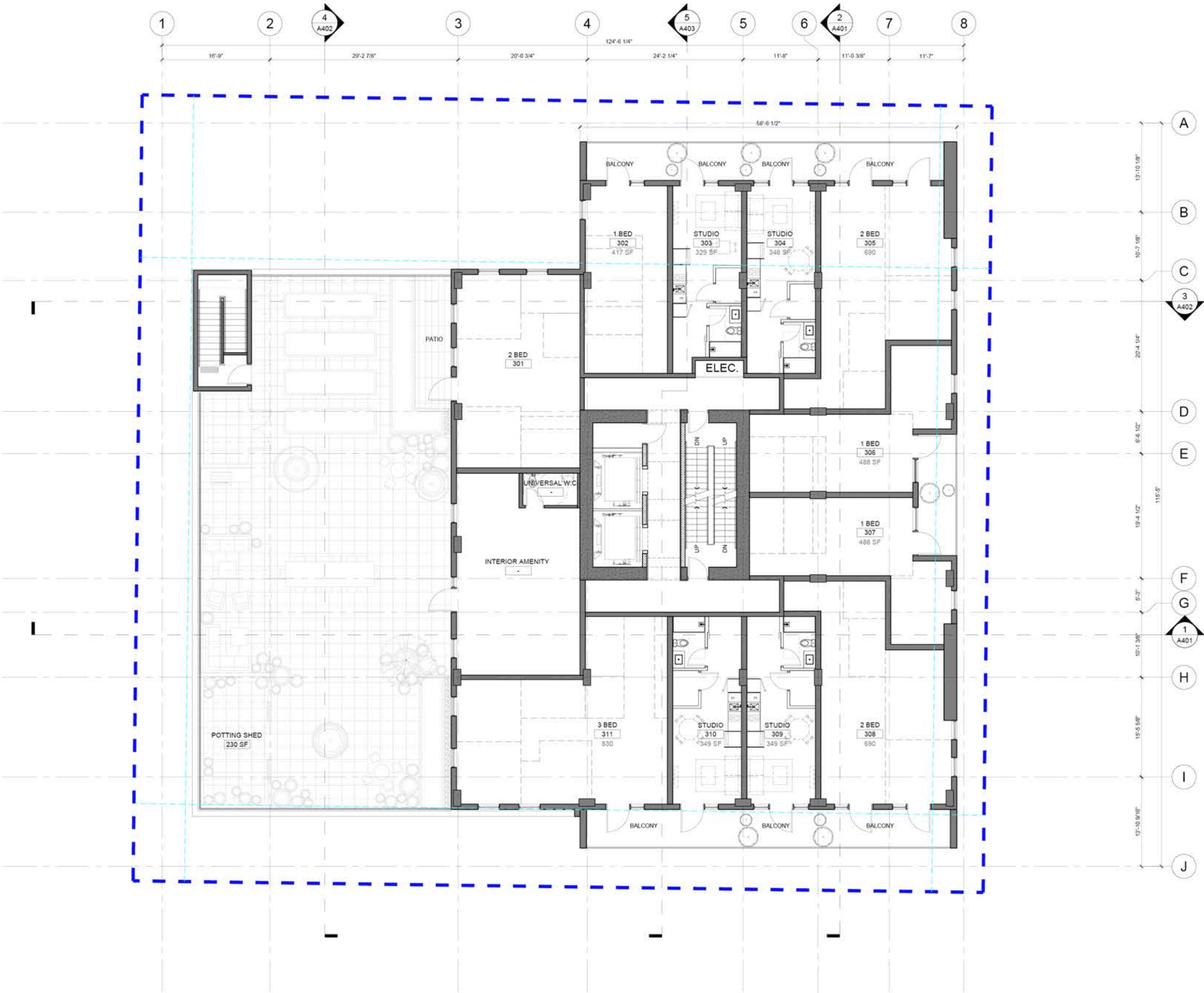
FLOOR PLAN



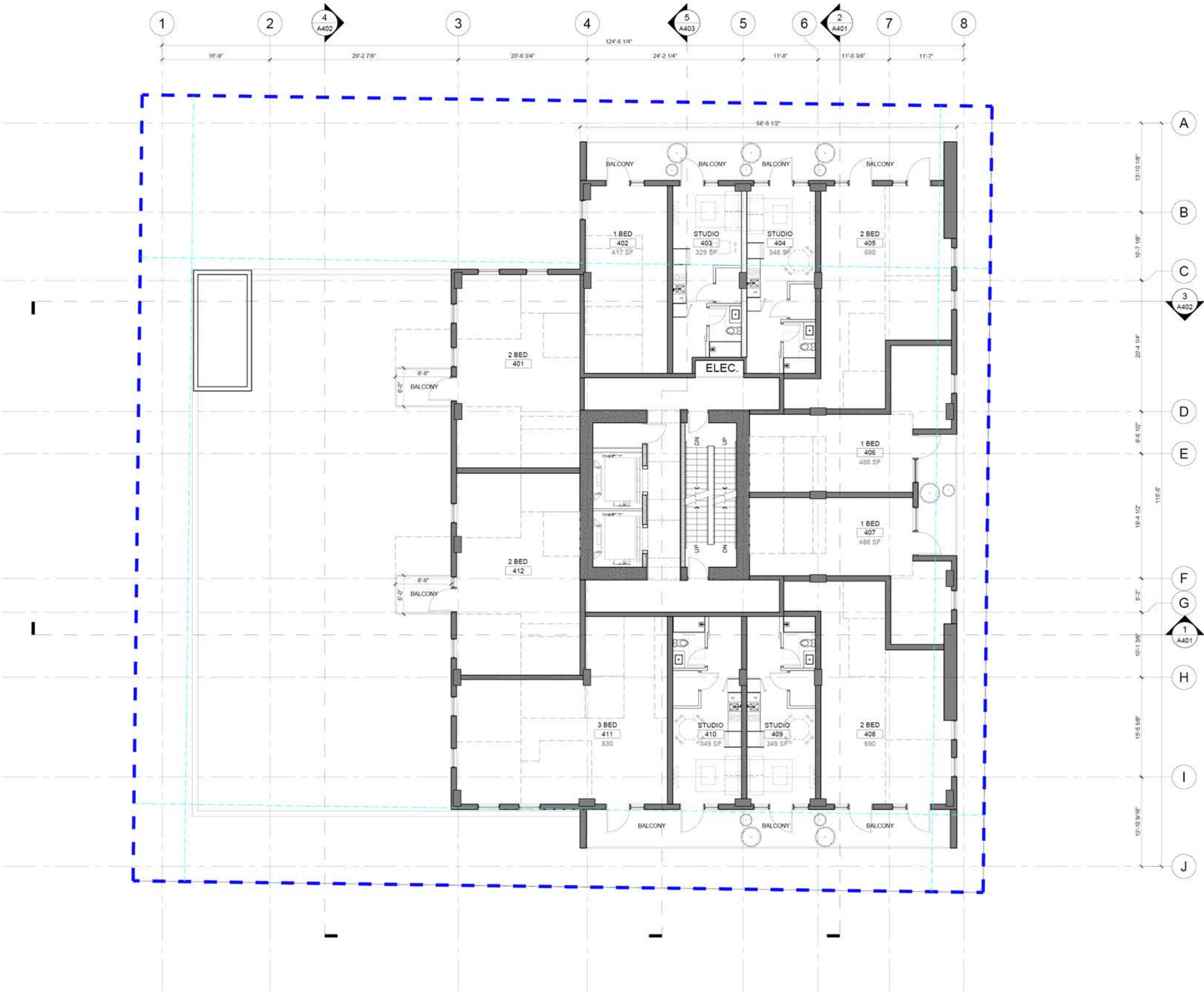
FLOOR PLAN



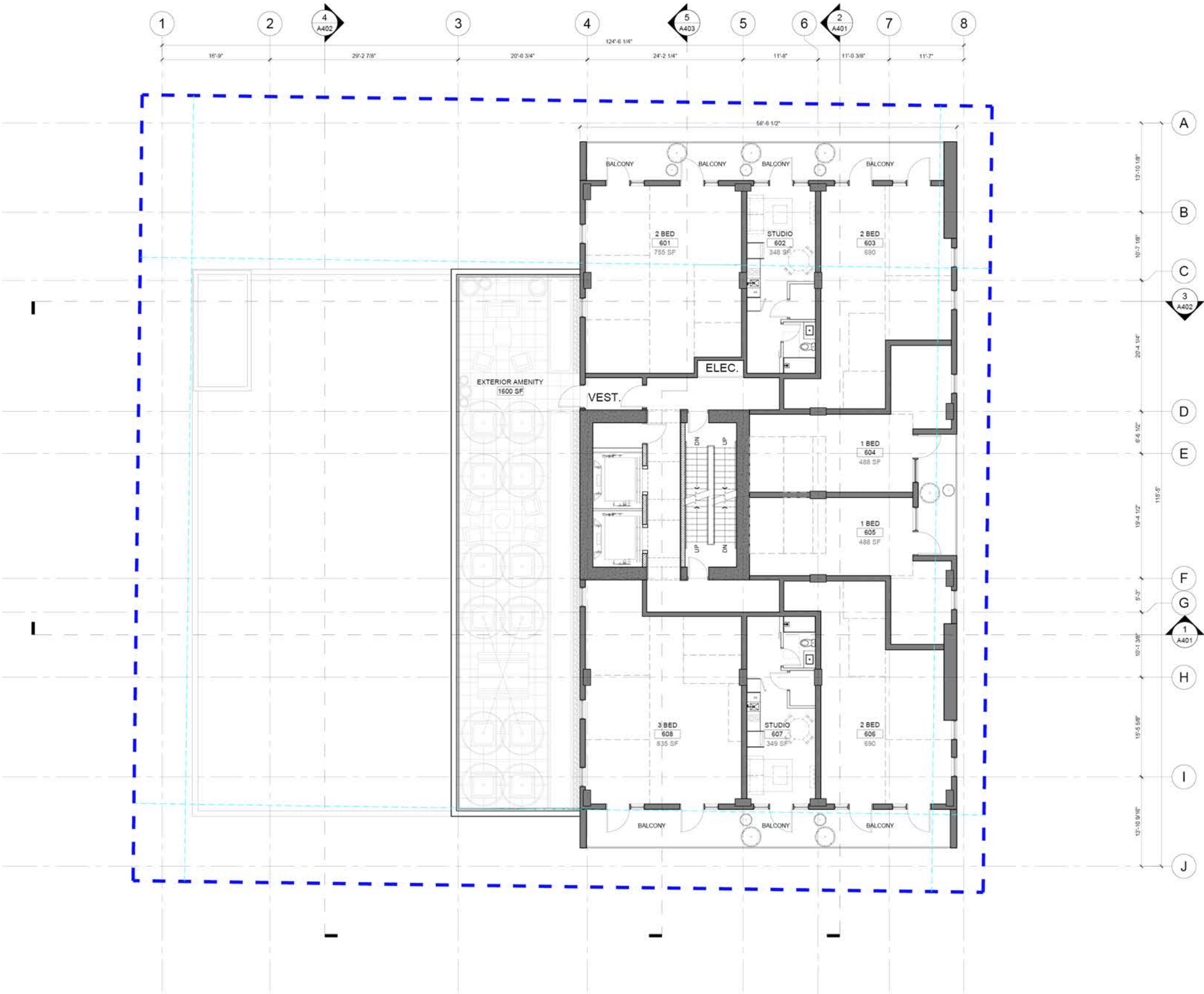
FLOOR PLAN



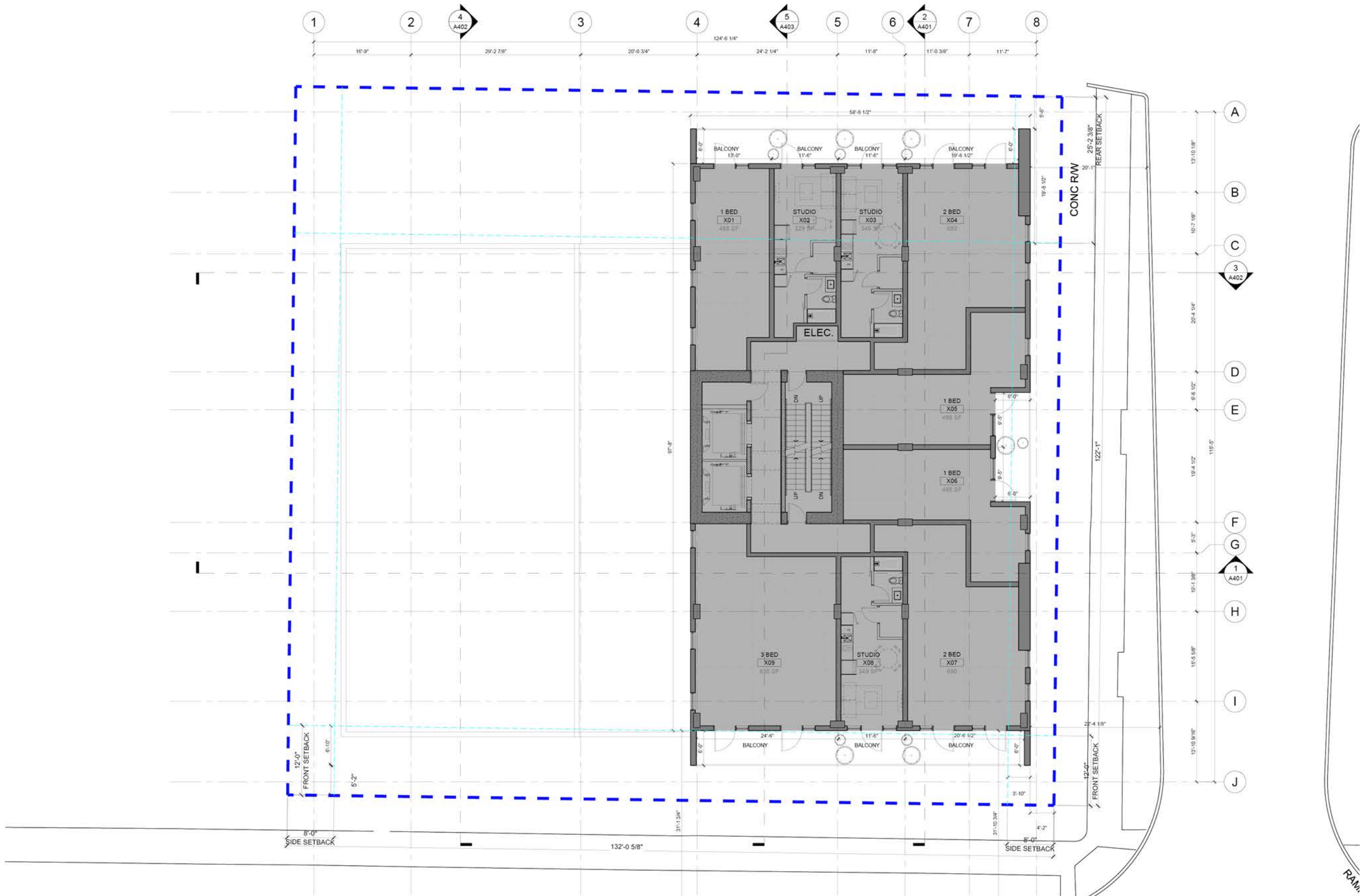
FLOOR PLAN



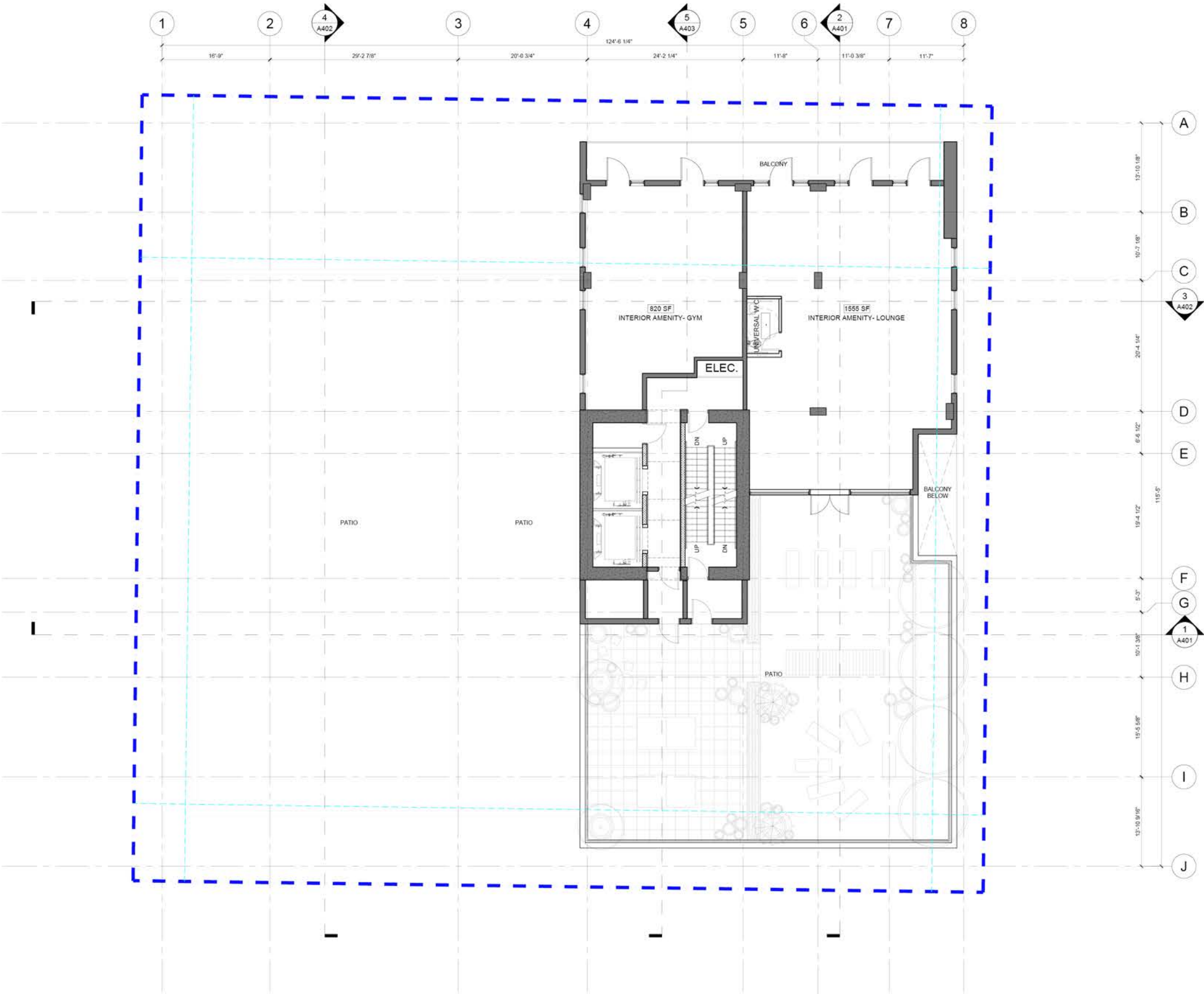
FLOOR PLAN



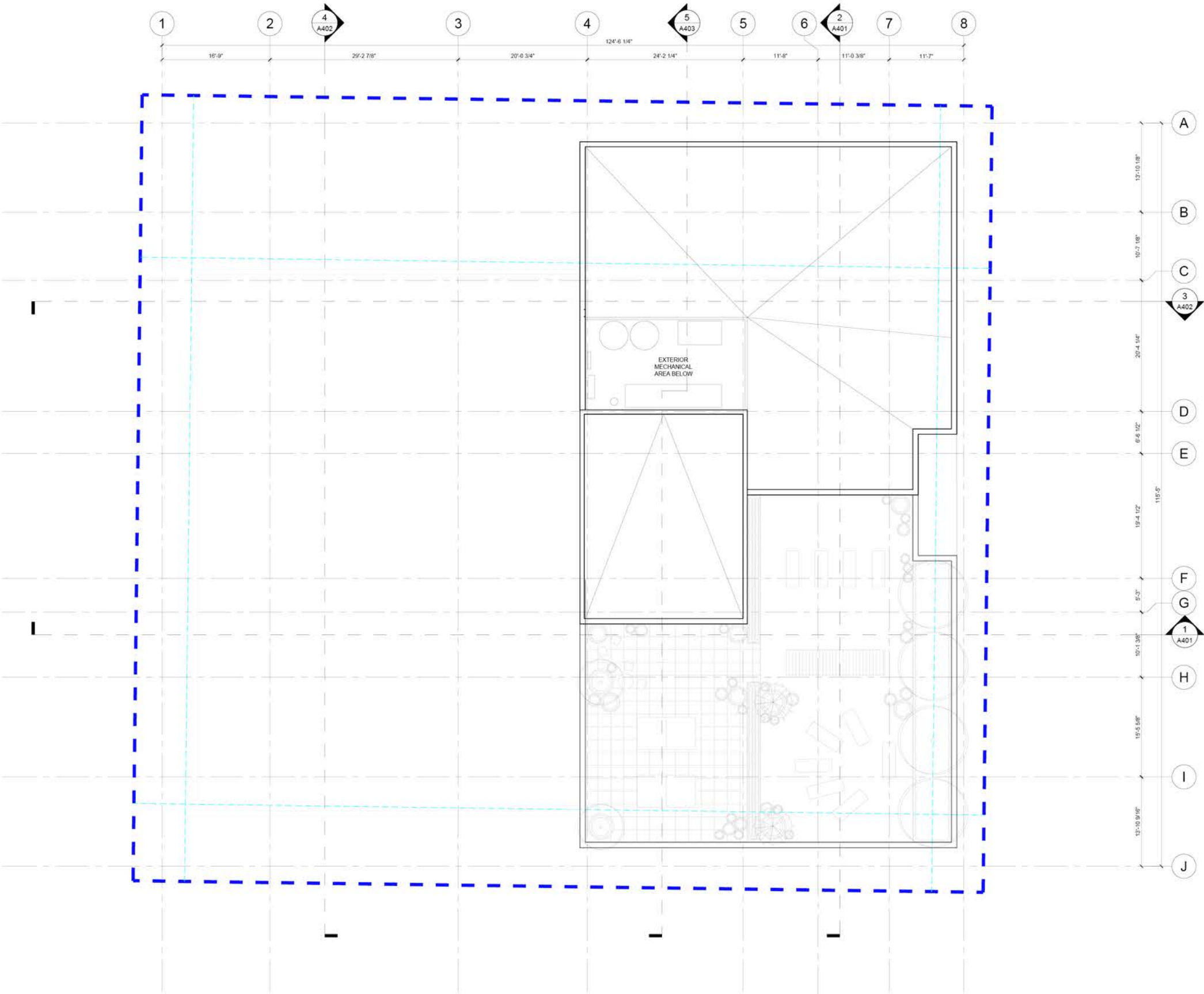
FLOOR PLAN



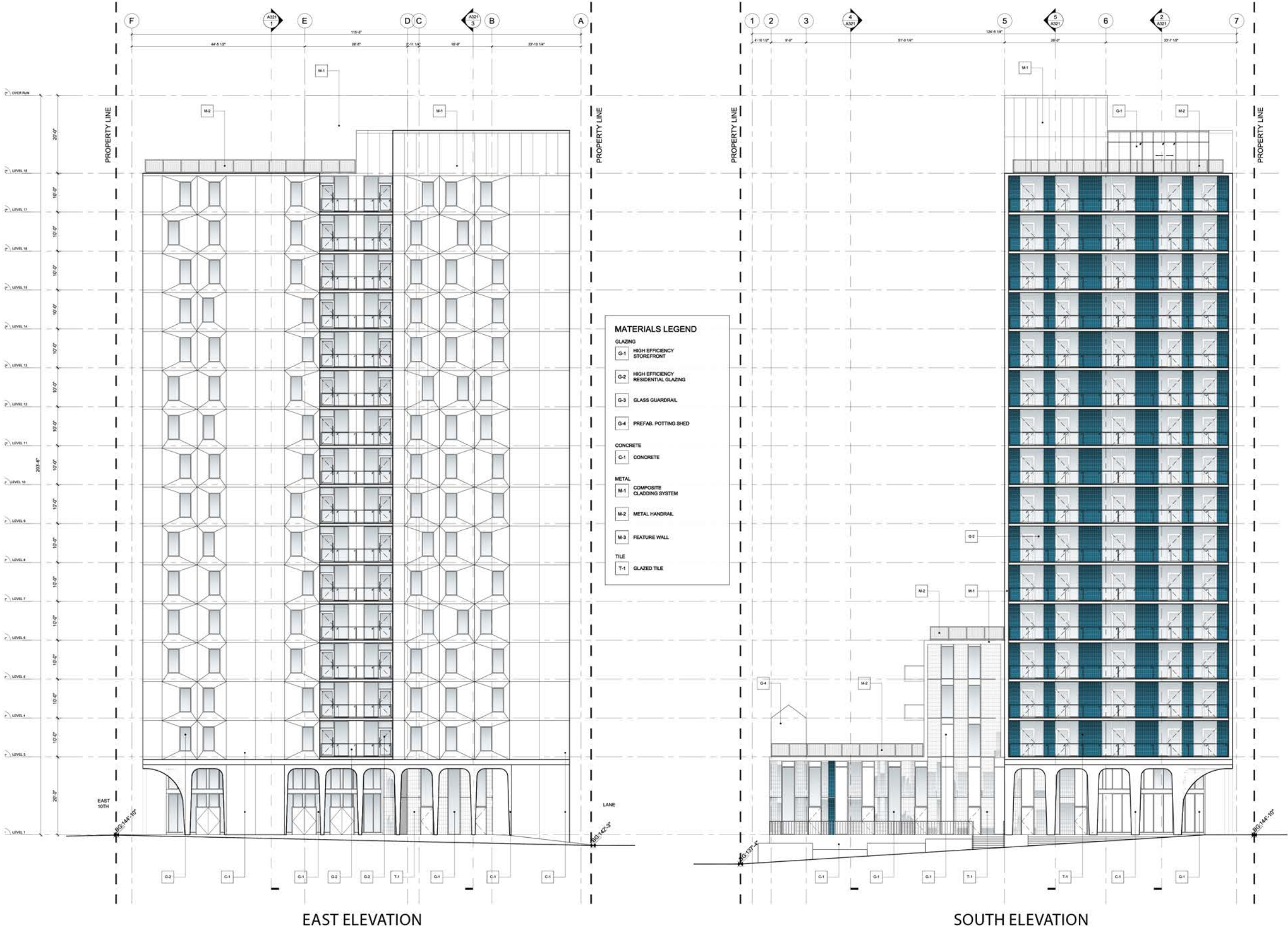
FLOOR PLAN



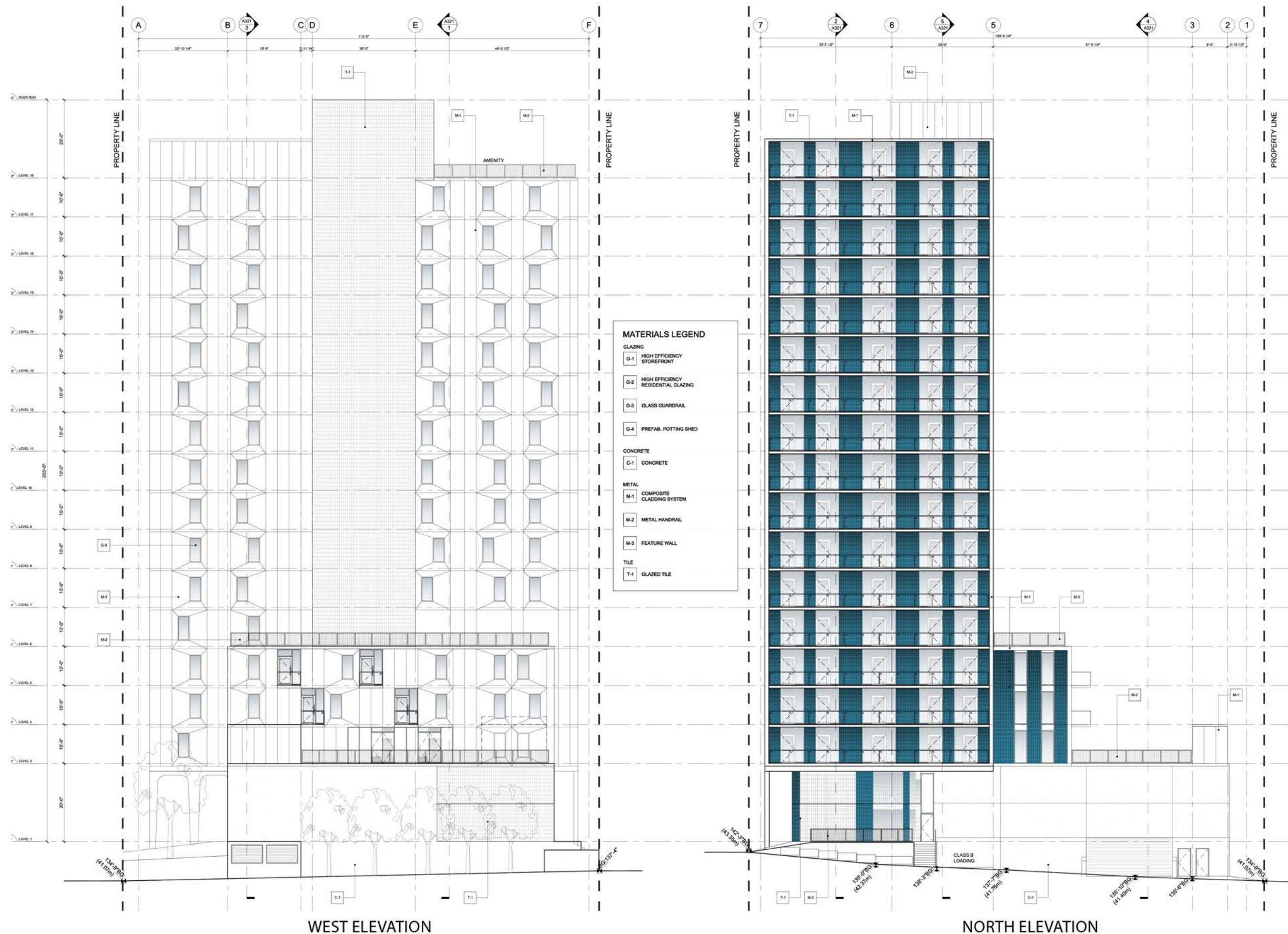
ROOF PLAN



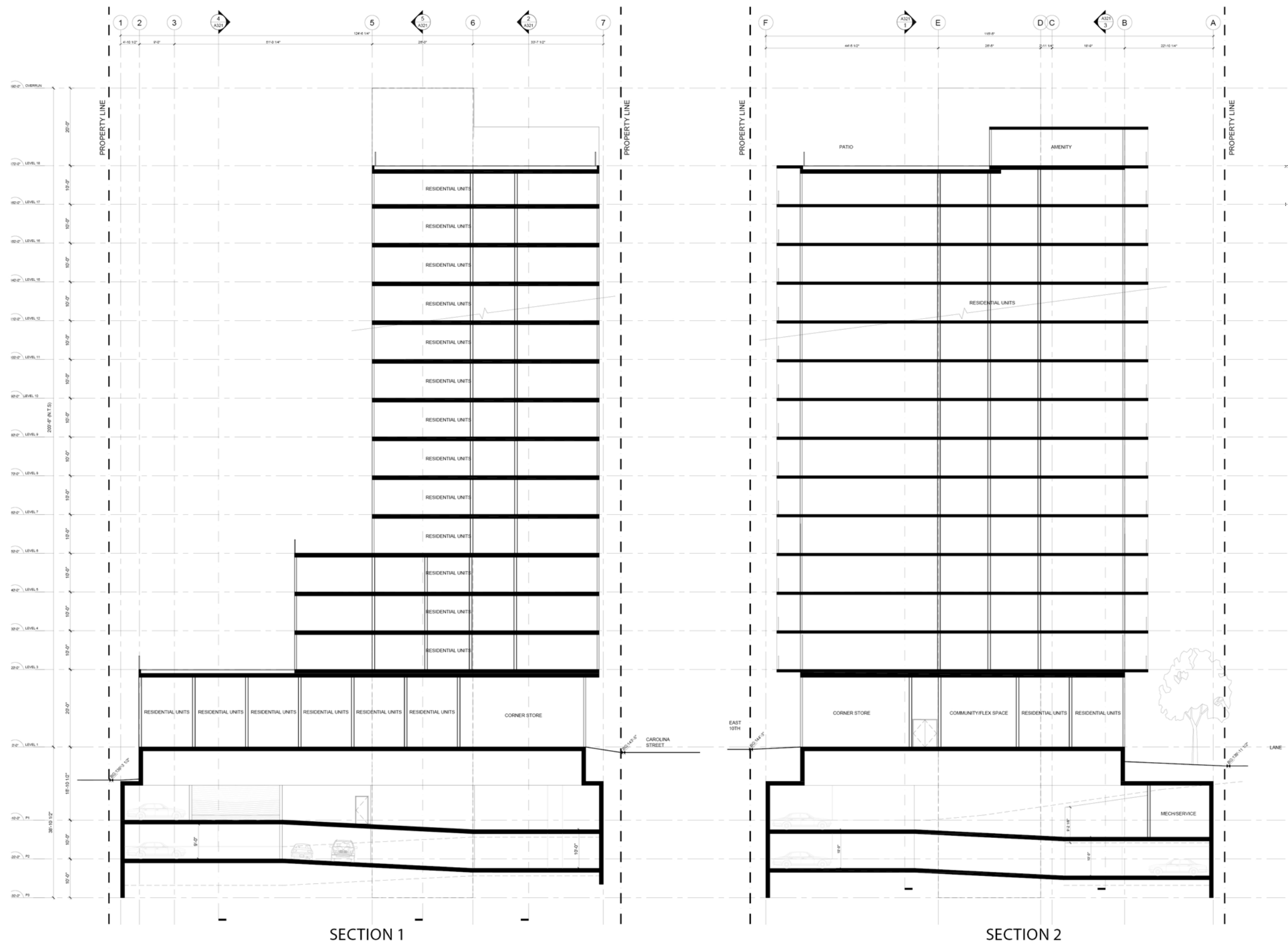
BUILDING ELEVATIONS



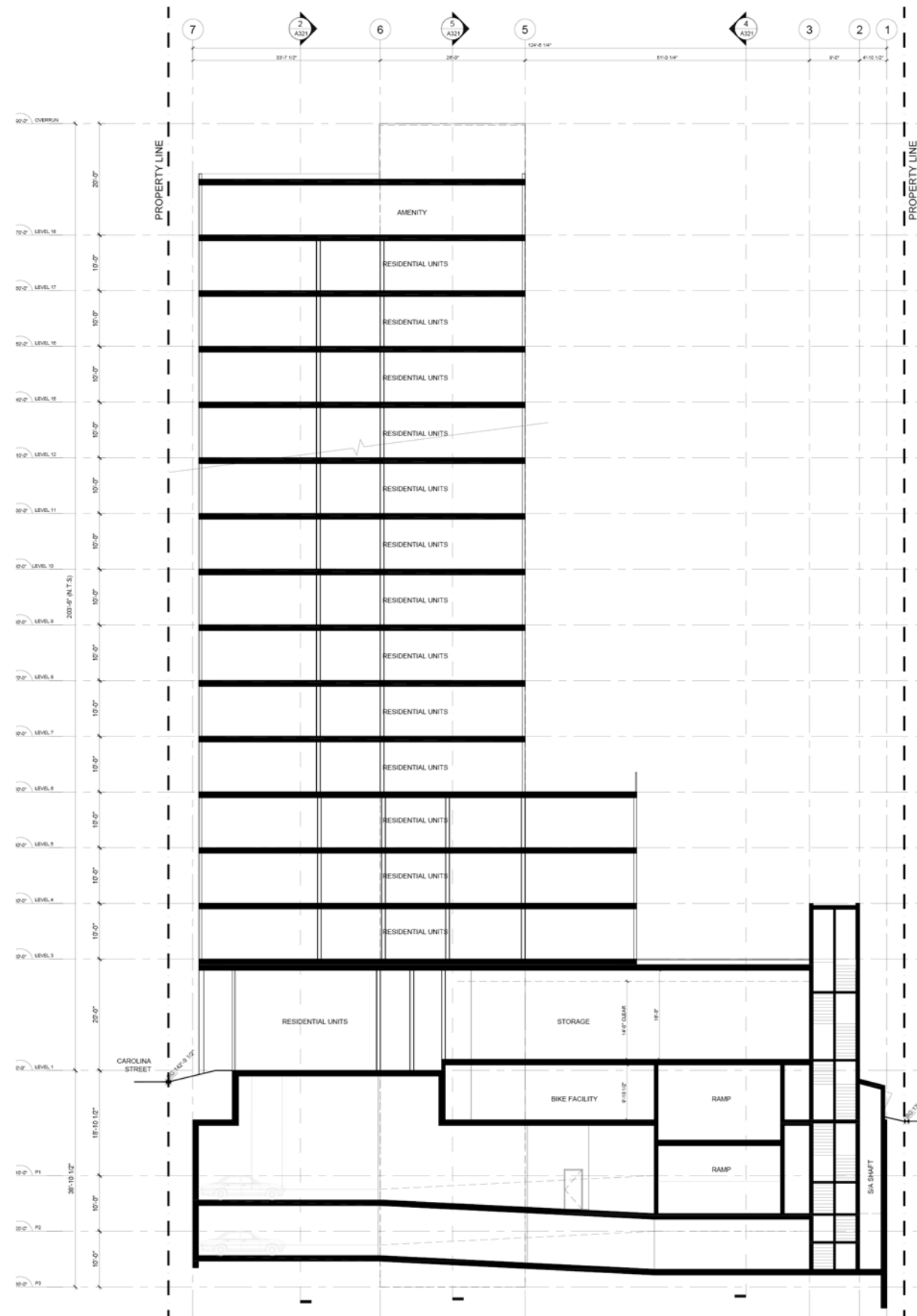
BUILDING ELEVATIONS



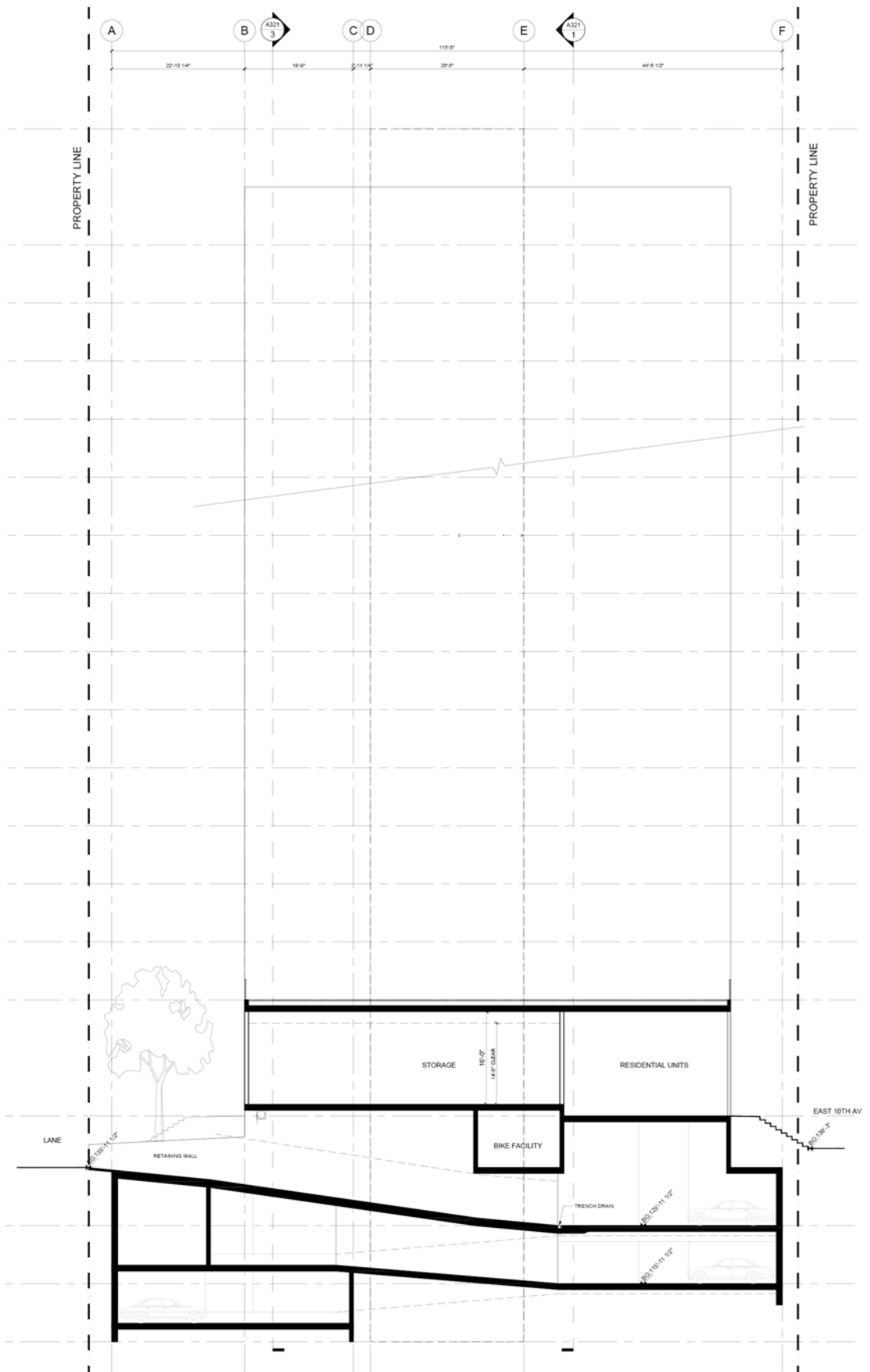
BUILDING SECTIONS



BUILDING SECTIONS

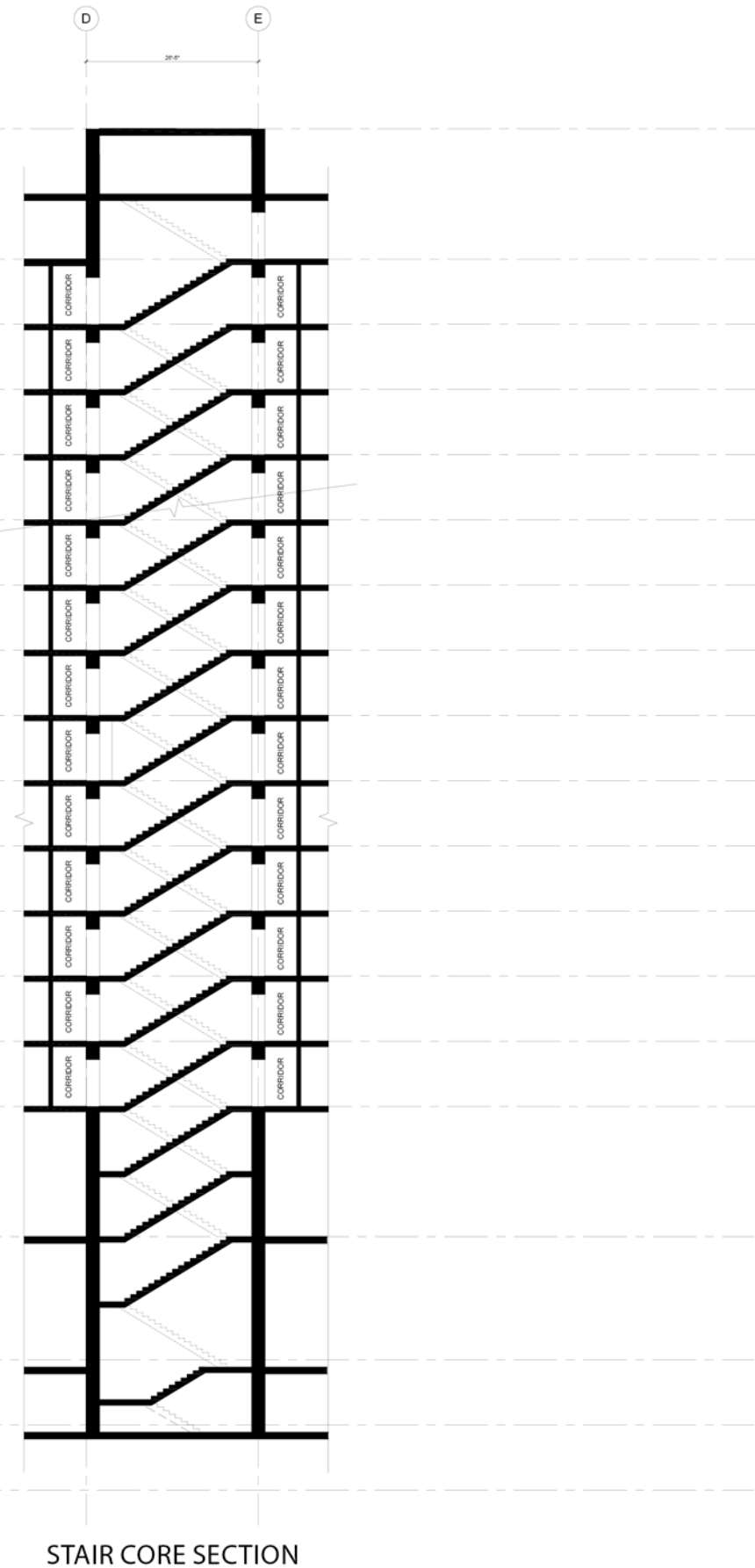
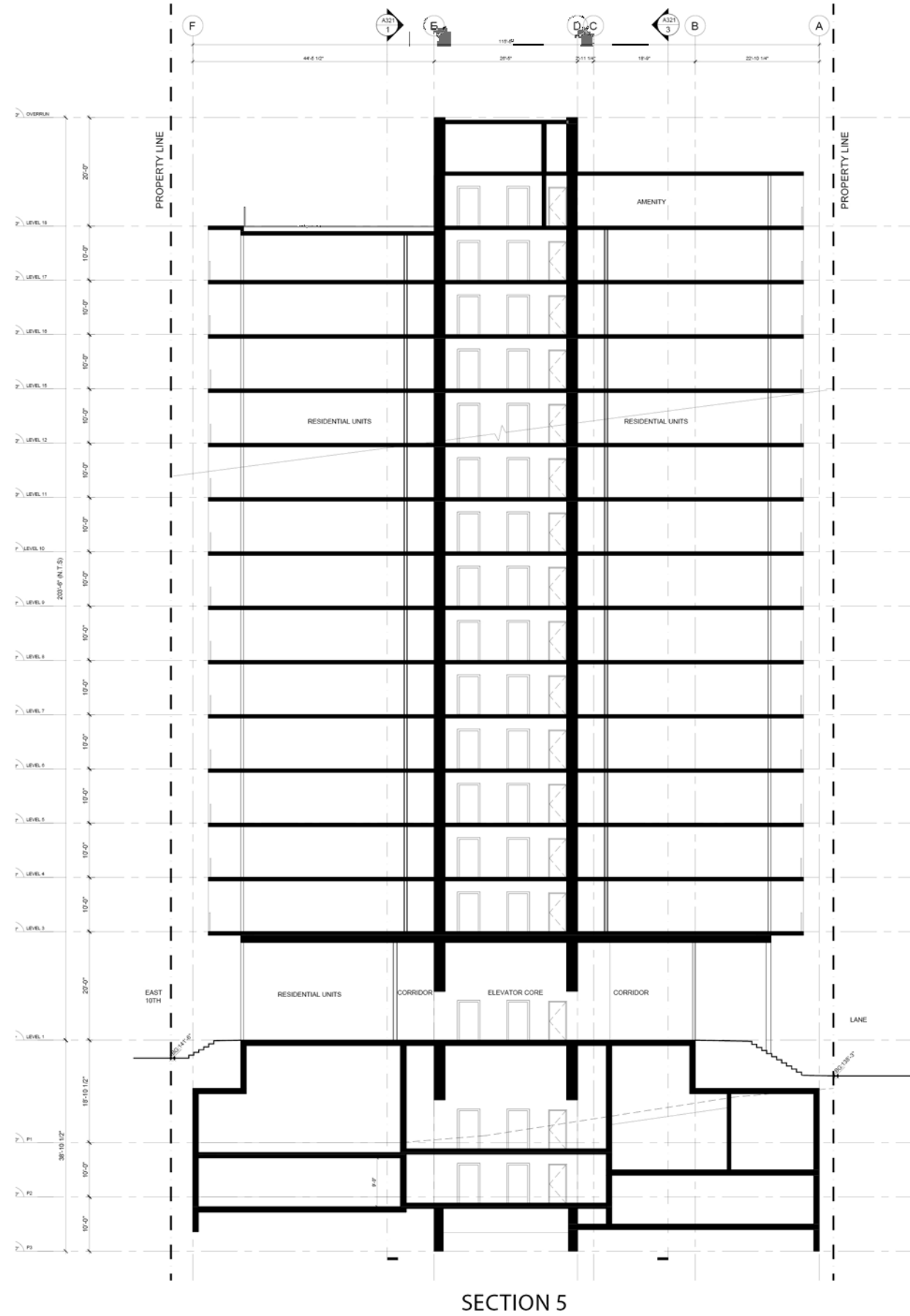


SECTION 3



SECTION 4

BUILDING SECTIONS



3D VIEW



HAVN

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NORTH VIEW ALONG WEST 10TH AVENUE

3D View

3D VIEW



ENTRANCE VIEW ALONG WEST 10TH AVENUE

3D VIEW



SOUTH-EAST VIEW AT CORNER OF WEST 10TH AVENUE AND CAROLINA STREET

3D VIEW



EAST VIEW ALONG CAROLINA STREET

3D VIEW



WEST VIEW PARALLEL TO ST. GEORGE STREET

ALTERNATE TOWER POSITION

ALTERNATE TOWER POSITION RATIONALE

RATIONALE

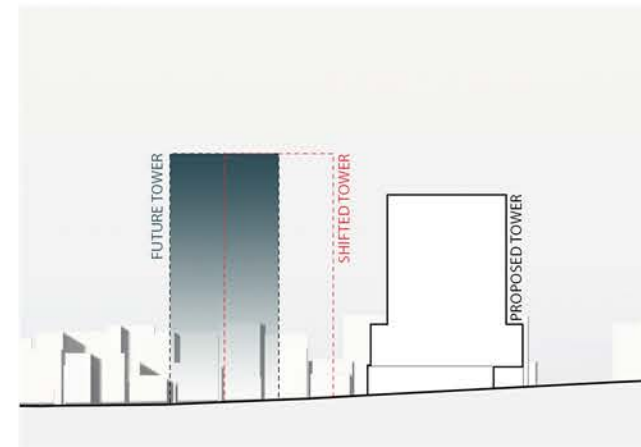
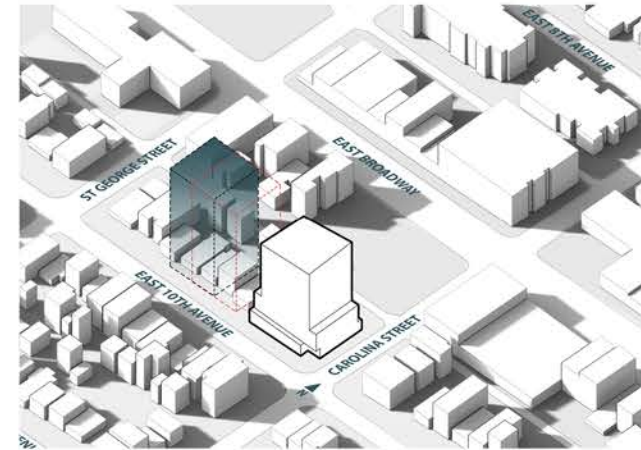
The Vancouver Broadway Plan represents a comprehensive urban development strategy for the Broadway Corridor, primarily focusing on addressing housing and transportation challenges. The plan's overarching goal is to expand housing options, including secured rental and affordable housing. In most blocks along the Broadway Plan, there is an allowance for two towers. However, it's worth noting that the block bordered by Saint Georges Street, 10th Avenue, Carolina Street, and E Broadway permits only one tower. We understand that because our block fronts onto Broadway and a local street, the Broadway Plan allows for more intensive development and up to three towers on the Broadway block face and limits tower development on the local street to help create a transition. However, a new six-storey building was recently completed on E Broadway, and there is only room for one more tower on E Broadway. We believe this is a compelling rationale to allow an additional tower on E10th Ave.

The City of Vancouver faces one of the most severe housing shortages in its history. In our Letter of Response, we were informed that a rezoning submission for a tower on the same block had been made while we were waiting for the response letter. Under the current policy, there is no allocation for an additional tower on this block. Since then, we have collaborated with the City of Vancouver to demonstrate the feasibility of allowing another tower on this block while adhering to the 80-foot separation requirement between towers and contributing additional housing to the neighbourhood.

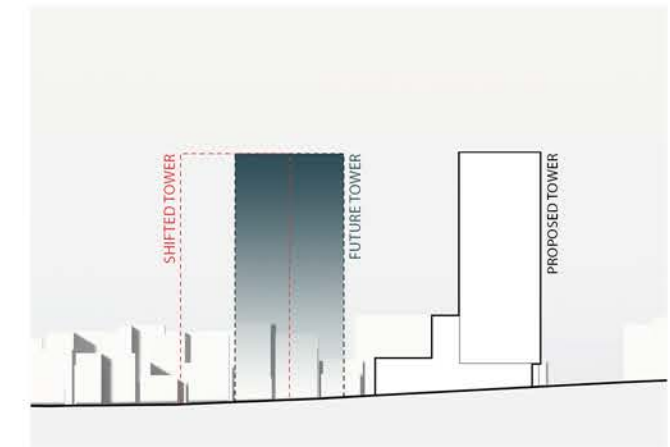
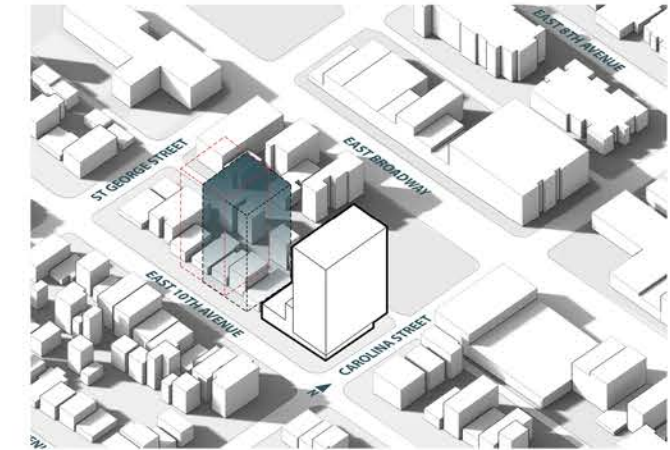
To meet the 80-foot tower separation requirement, the tower's design needs to be narrower and, therefore, less efficient than industry standards. The building's core has also been positioned off-centre to facilitate the most efficient parking layout possible on this tight and constrained site. Regrettably, this tower layout presents financial challenges for our project and hinders our ability to provide the community with more diverse housing options.

We hope to work with Planning and the neighbouring developer to allow two efficient towers on the block. Shifting the adjacent developers' mid-block tower westward and relocating the daycare facility to the east will result in improved sun exposure. As demonstrated in the "Optimal Scenario" diagrams, moving the mid-block tower to the west will allow us to position our proposed tower at the center of the lot, creating a more efficient and typical tower layout. This revised tower configuration will enable us to comply with all setback requirements fully.

OPTIMAL SCENARIO



CURRENT PROPOSED SCENARIO



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Comparative
Rationale

LANDSCAPE DRAWINGS

LANDSCAPE DESIGN PRINCIPLES



Context Integration

While respecting and retaining the existing streetscape and culture, the landscape design draws inspirations from neighbourhood and create visual cues at eye-level, which enables the project to seamlessly fit into the surrounding community with a sense of domesticity.



Public Realm Enhancement

The streetscape design aims to expand and animate the current public realm to encourage recreational activities and social interactions. The green space is maximized to benefit existing mature trees and proposed planting. It becomes an inviting and conducive space to the community.



Public Stoop

The stoops serve as a semi-public zone which blurs the boundary between the public and private spaces. “Make these raised areas immediately accessible from below, so that people may congregate and sit to watch the goings-on” - Christopher Alexander



Intimate Space of Comfort

The porch of each unit provides privacy and safety, while blocking views and noises from the street. The semi-enclosed space is versatile enough to accommodate various activities and provide a sense of belonging. It is also an extension of the indoor space where family and friends can congregate and foster meaningful connections within a cozy setting.

LANDSCAPE DESIGN PRINCIPLES



Corner Shop as a Fixture

Corner shop holds a special place in the neighborhood, functioning as both a social hub for local residents and supporting daily necessities. It plays a pivotal role in fostering community connections and enhancing social cohesions.



Social Good

In addition to the existing boulevard farming in the neighbourhood, the potting shed and large-scale urban agriculture on the podium level offer year-round gardening/farming opportunities for the residents. Flexible and inclusive gathering spaces promote community engagement and social value.



Landscape as Signature

The potting shed on the podium level is a focal point in the overall design. It is an eye-catching branding element that draws attention from the streets below. As an unique landscape feature, it provokes curiosity and a sense of place.



Materials

A material palette with warm hues evokes a sense of welcoming while creating a harmonious and comfortable atmosphere. Consistent materials can be applied to both the architecture and landscape, such as glazed tiles with special patterns and accent colours.

PRECEDENT IMAGES



Corner Store Frontage



Flagstone Pathway



Potted Plants at Front Door



Wooden Seating Deck

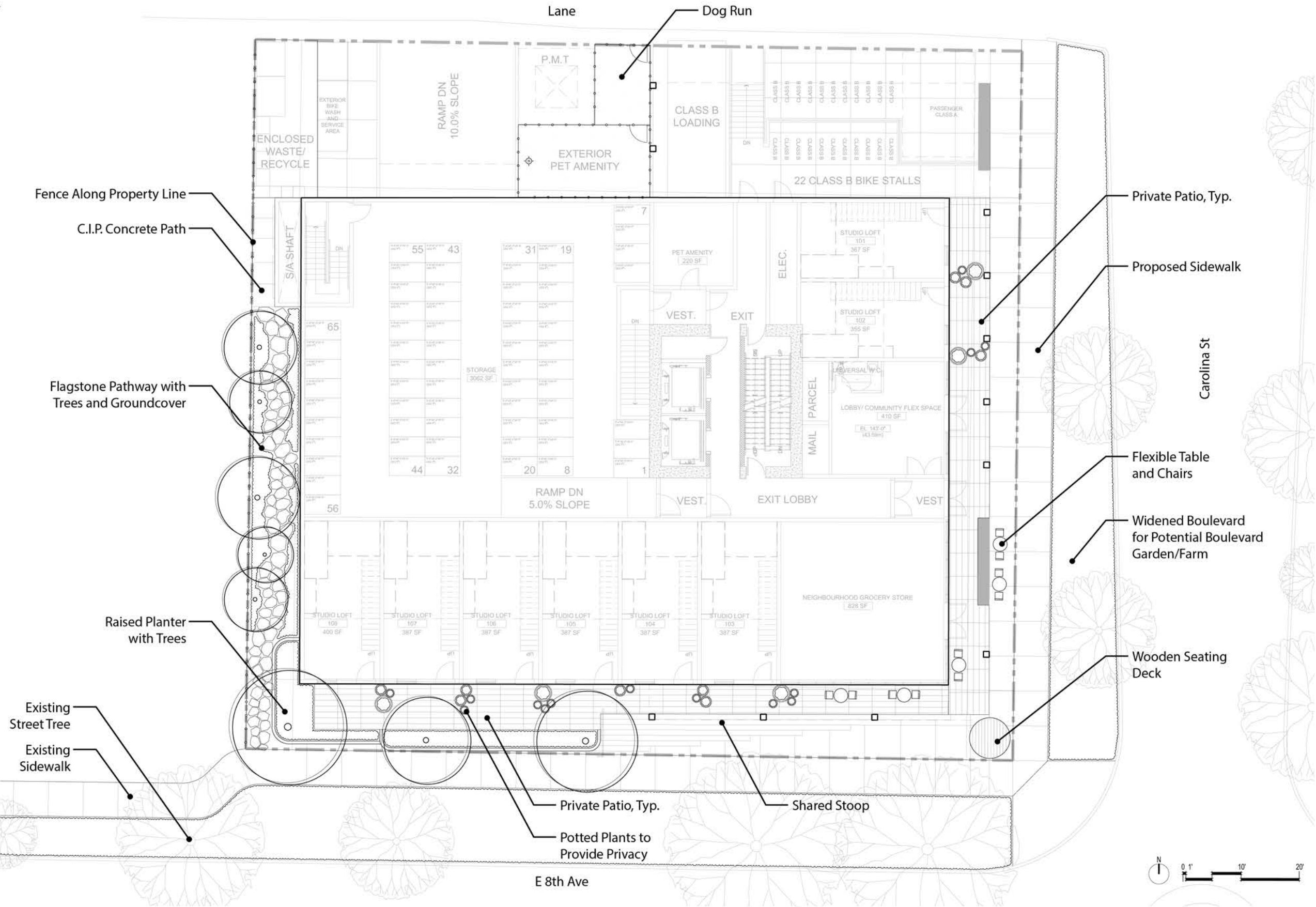


Colonnade and Planting

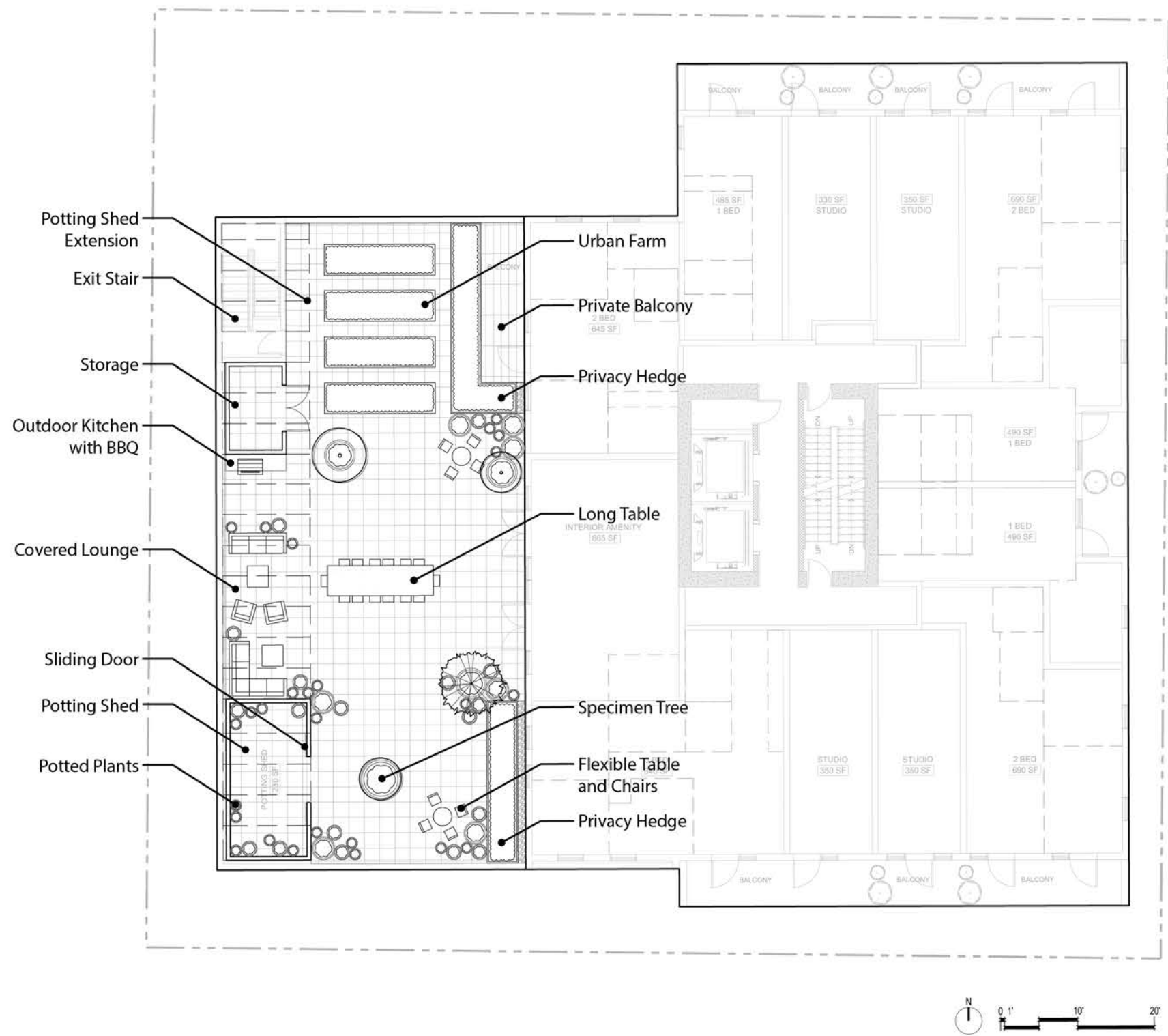


Dog Run

CONCEPT PLAN - LEVEL 01



CONCEPT PLAN - LEVEL 03



Potting Shed Extension

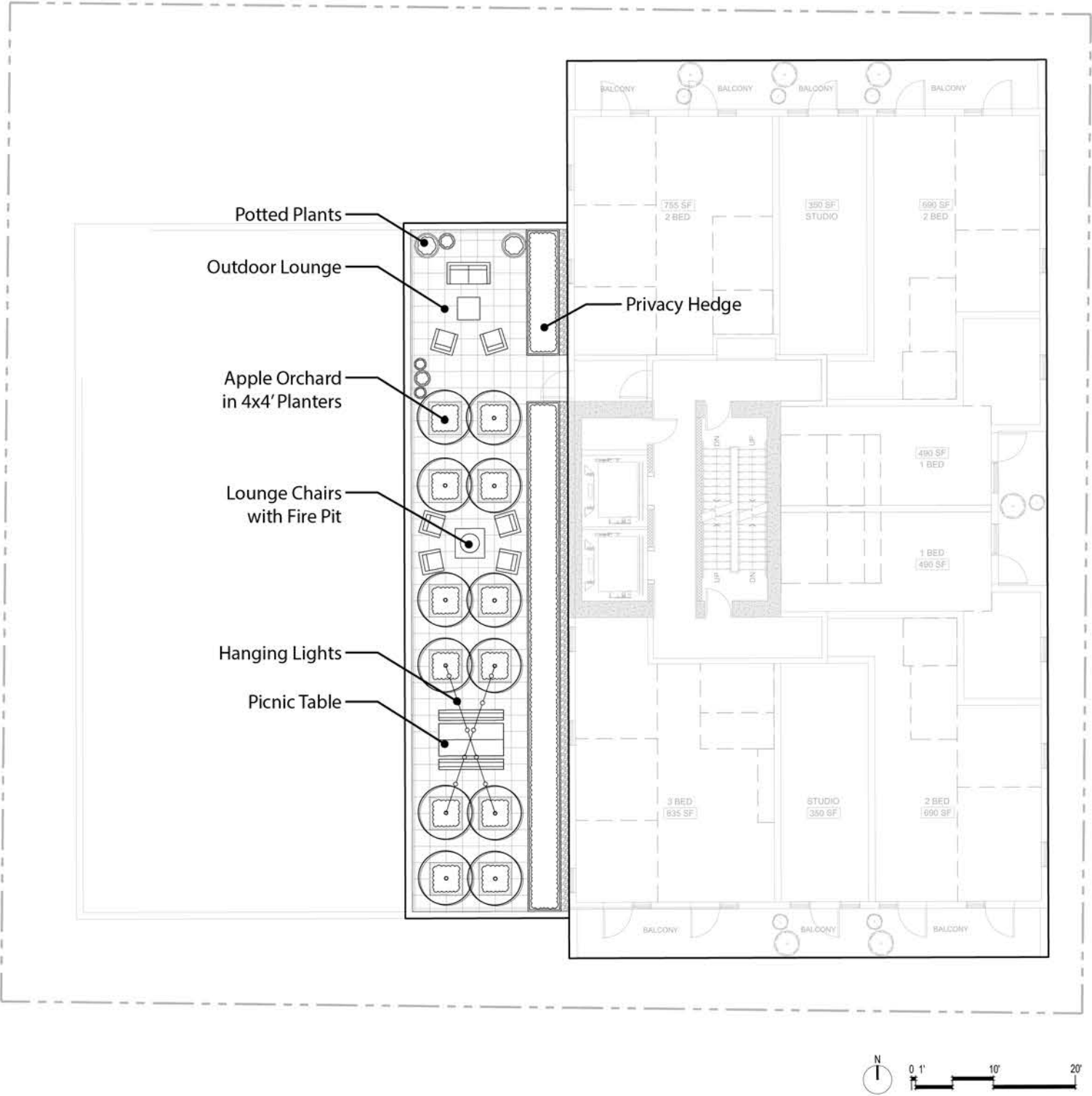


Long Table



Urban Farm

CONCEPT PLAN - LEVEL 06



Orchard in Square Planters



Fire Pit



Lounge Space with Hanging Lights

CONCEPT PLAN - LEVEL 18



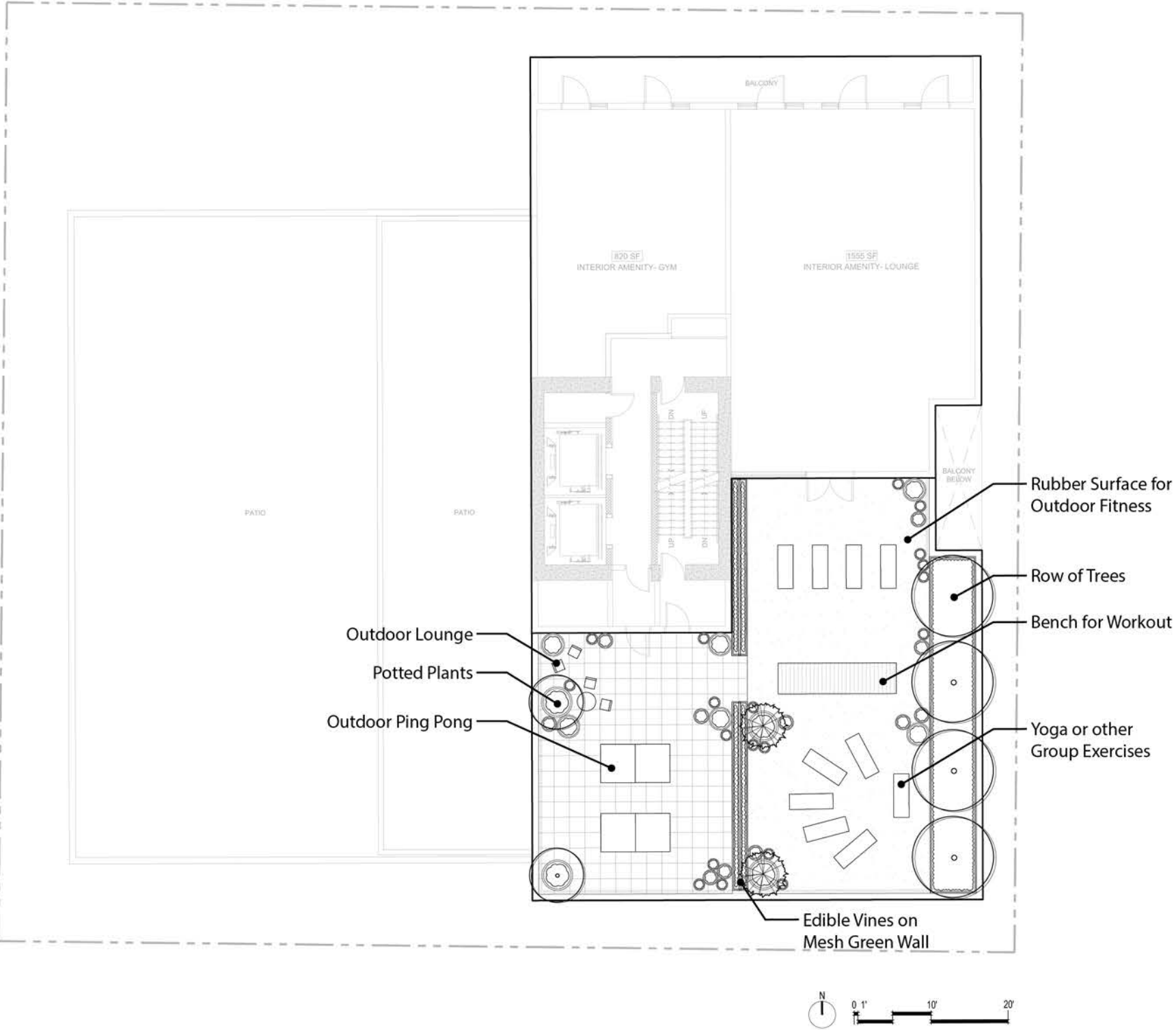
Mesh Green Wall



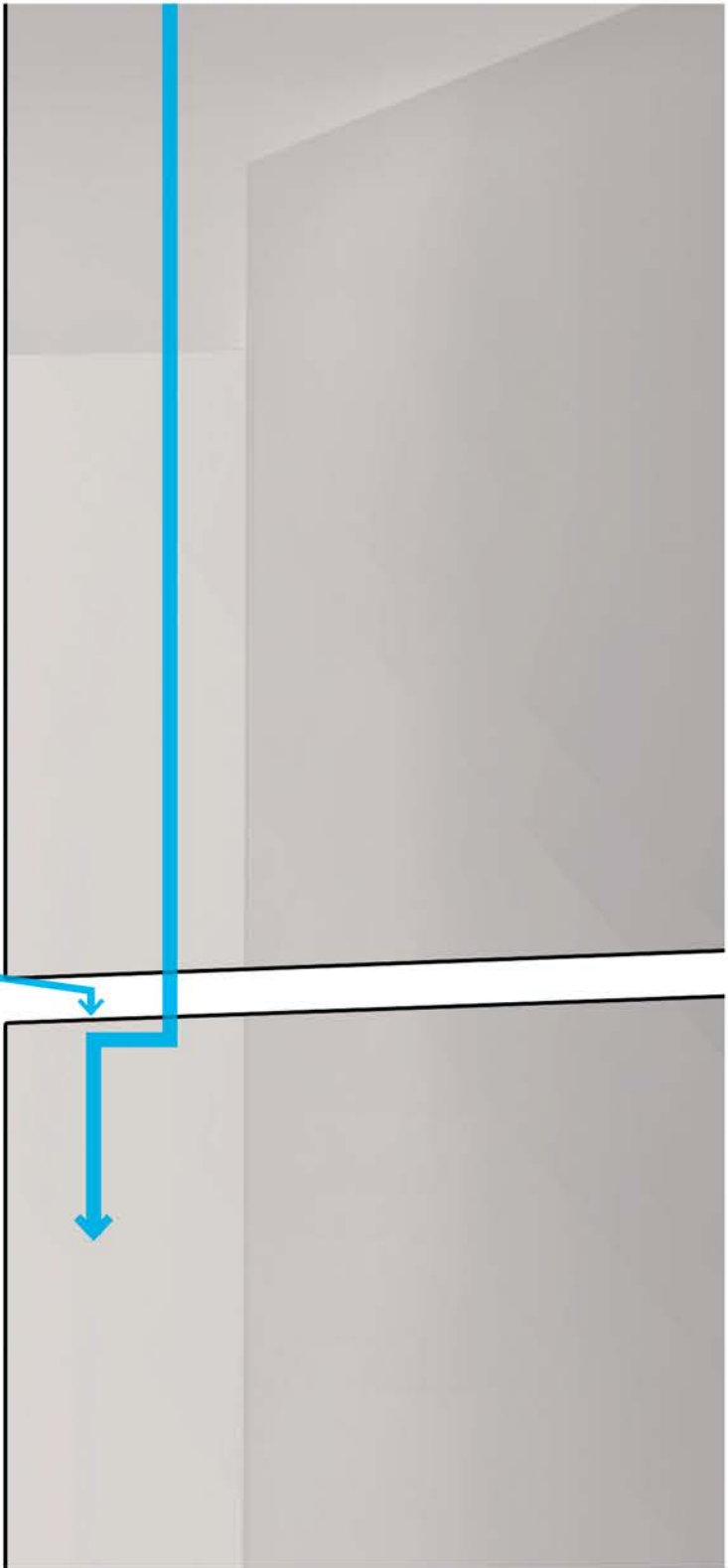
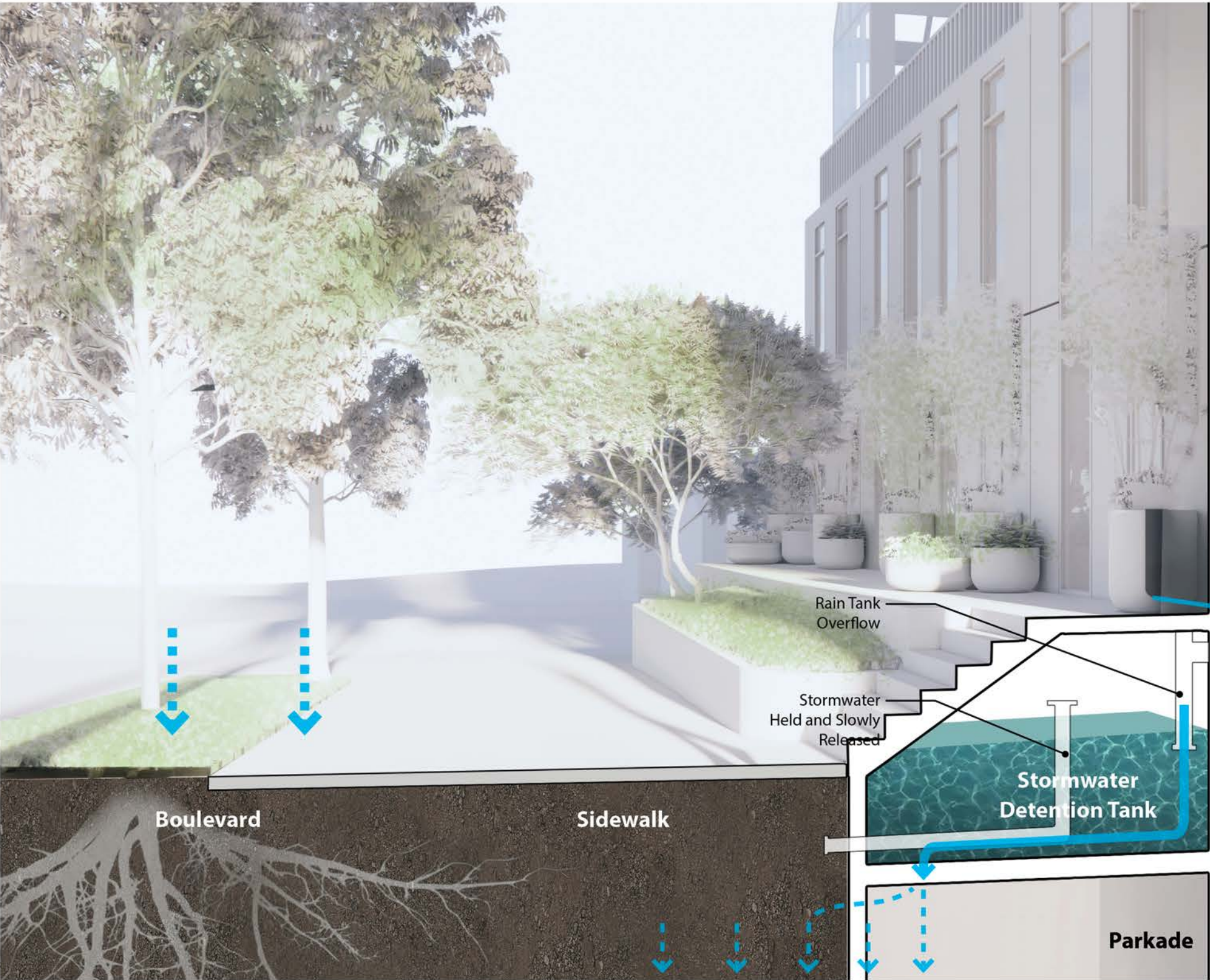
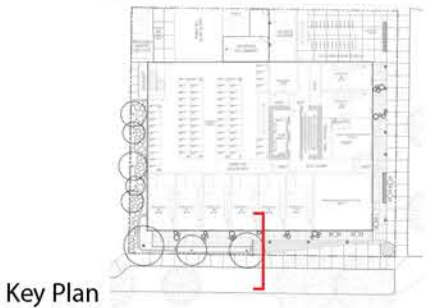
Outdoor Fitness



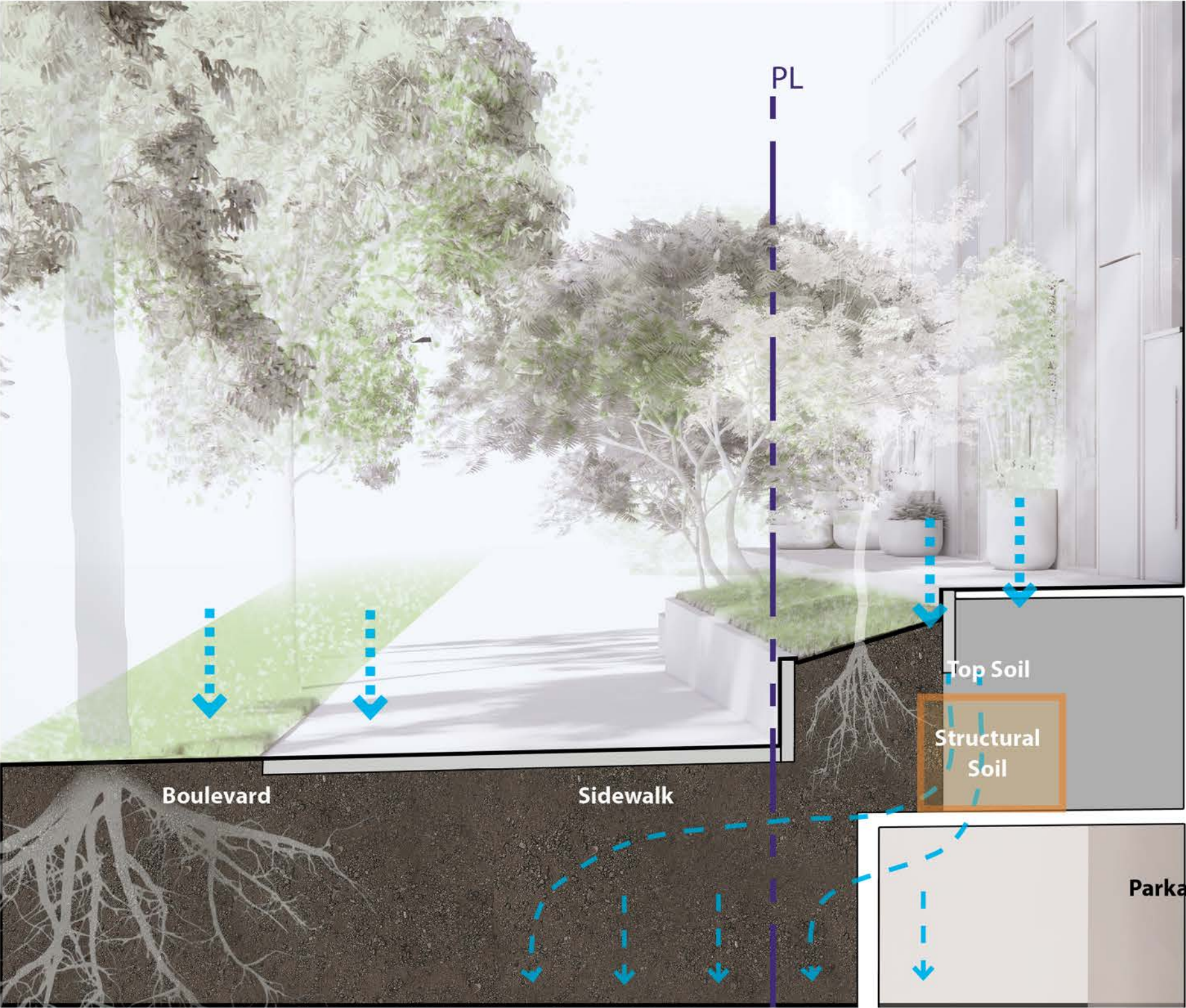
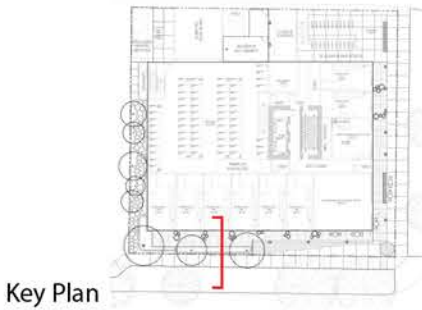
Outdoor Ping Pong



LANDSCAPE SECTION - AT STAIRS



LANDSCAPE SECTION - AT RAISED PLANTER



Musson Cattell Mackey Partnership
Architects Designers Planners
A Partnership of Corporations

Suite 1900, 1066 West Hastings Street
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