

DUNDAVE
BEACHSIDE LIMITED
PARTNERSHIP.



SCHEDULE A to DP 20 105

2452-2490 MARINE DRIVE, WEST VANCOUVER, BC

Development Permit Application

May 31, 2022



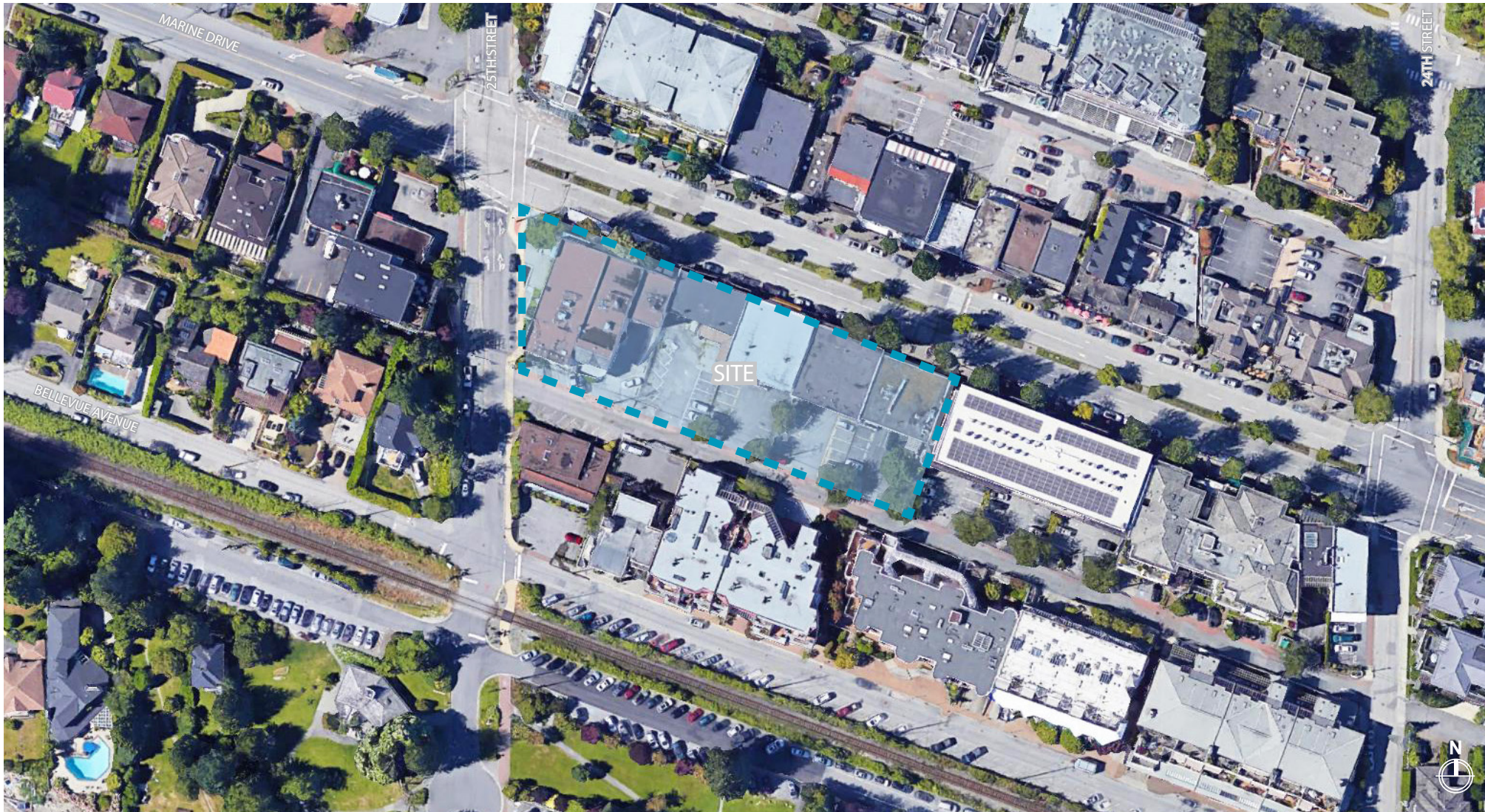
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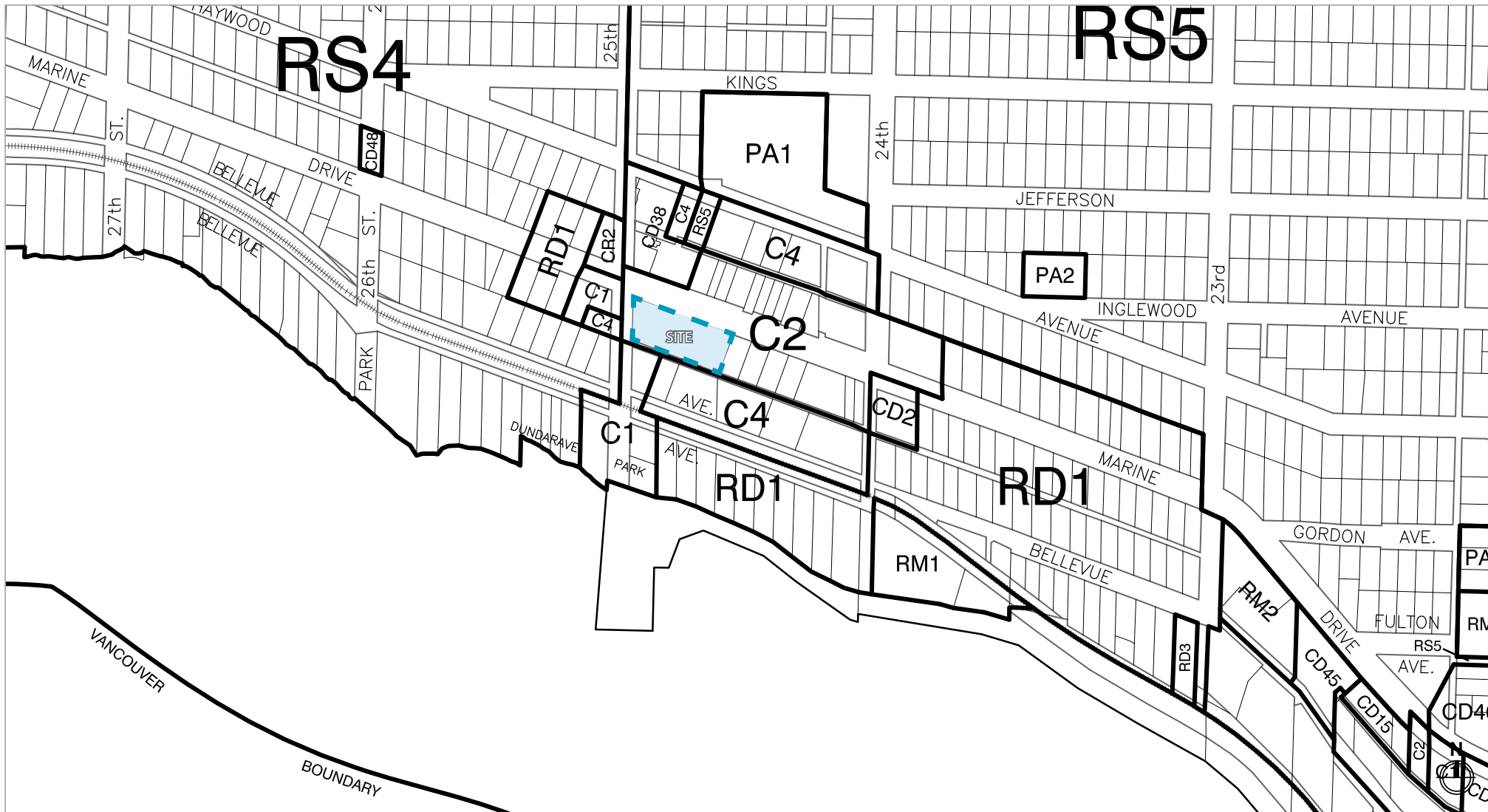
A. SITE CONTEXT - AERIAL CONTEXT PLAN



A. SITE CONTEXT - AERIAL SITE PLAN



A. SITE CONTEXT - ZONING MAP



A. SITE CONTEXT - STREET VIEW

1. FACING SOUTHEAST AT MARINE DRIVE AND 25TH STREET



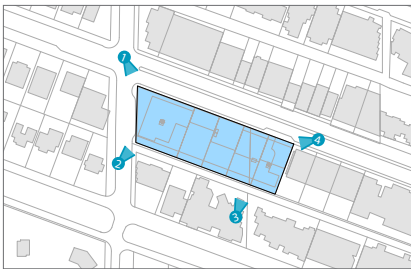
2. FACING NORTHEAST FROM 25TH STREET AT DUNDARAVE LANE



3. FACING NORTH AT DUNDARAVE LANE

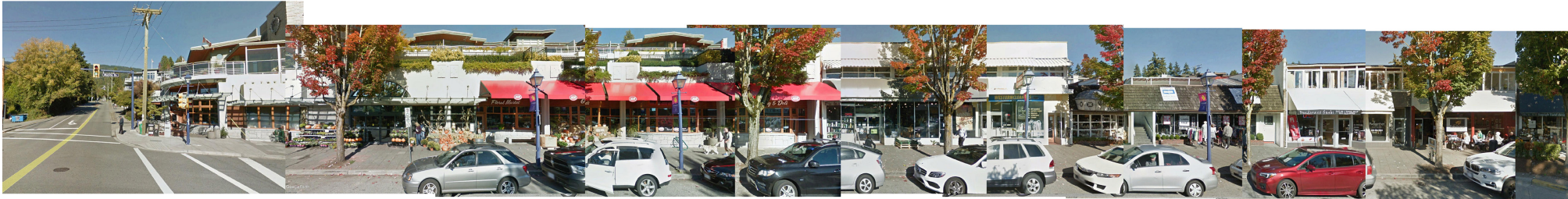


4. FACING SOUTHWEST AT MARINE DRIVE

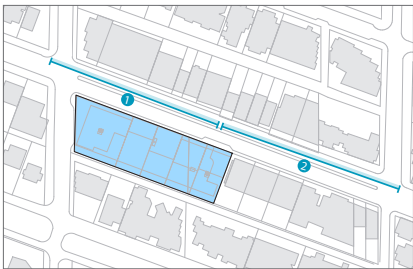


A. SITE CONTEXT - MARINE DRIVE STREETScape (NORTH)

1. MARINE DRIVE (NORTH) - FACING AWAY FROM SITE



2. MARINE DRIVE (NORTH) - FACING AWAY FROM SITE

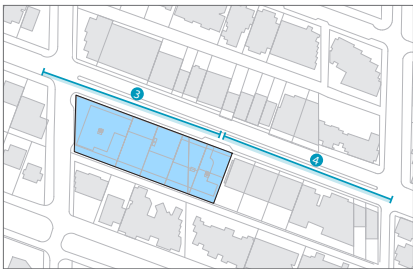


A. SITE CONTEXT - MARINE DRIVE STREETScape (SOUTH)

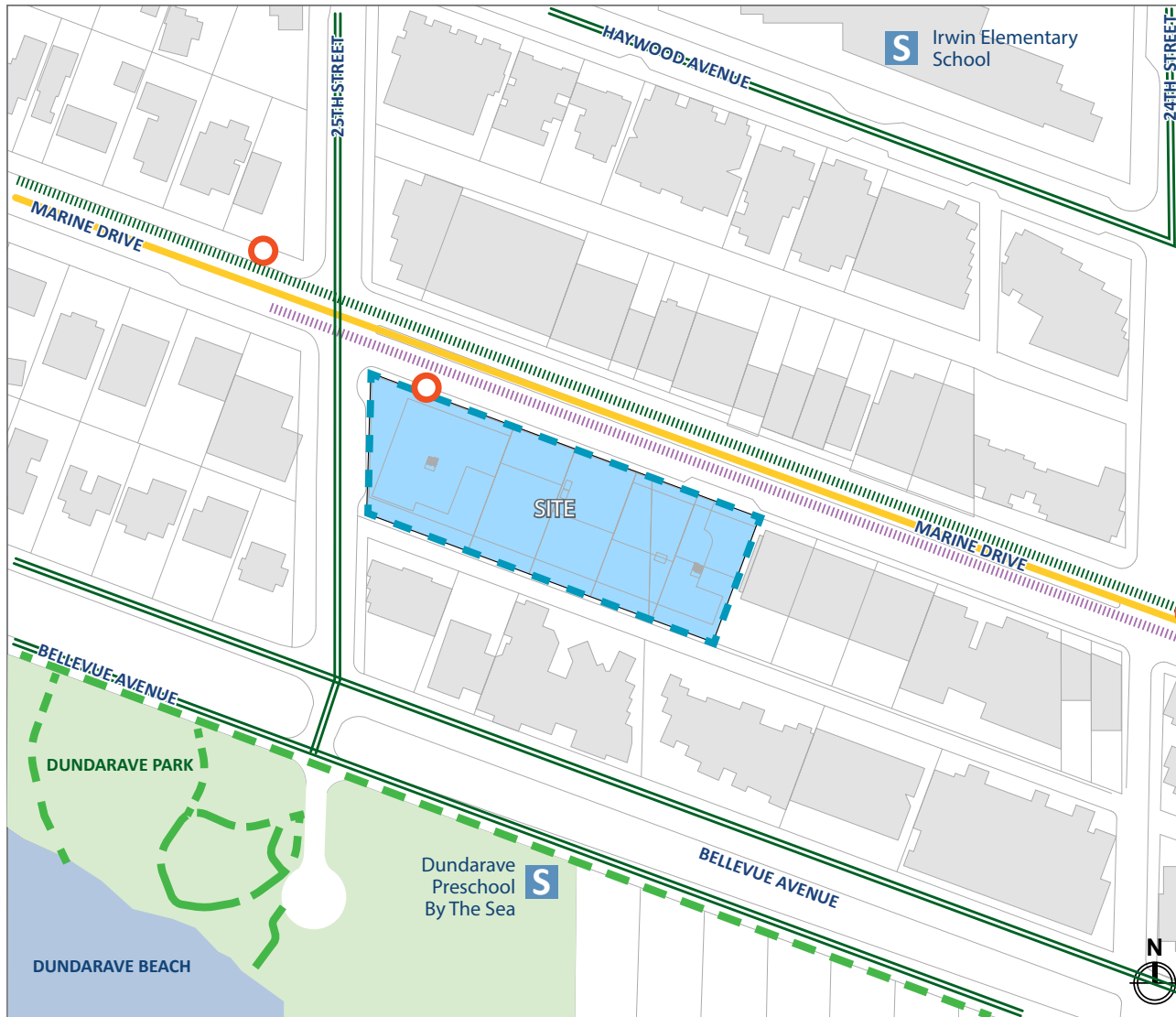
3. MARINE DRIVE (SOUTH) - FACING SITE



4. MARINE DRIVE (SOUTH) - FACING SITE



A. SITE CONTEXT - SITE RELATIONSHIP DIAGRAM



EXISTING CONTEXT

Located in the heart of the Dundarave Village, 2452-2490 Marine Drive sits at the corner of Marine Drive and 25th Street. The site is comprised of an assembly of six parcels totalling just over an acre.

The site is currently occupied by a series of mixed use buildings with retail shops at grade and residential above. The lands surrounding the subject site along Marine Drive are primarily mixed-use, while the greater area is predominantly made up of established single-family residential dwellings.

COMMUNITY AMENITIES





The site is within walking distance of some of the District’s best parks, recreational facilities, schools, shops and restaurants including Dundarave Beach, the seawall, pier, Irwin Elementary School, and the curated shops and lively restaurants along Marine Drive.

MOBILITY AND ACCESS

The site has excellent access by way of bike routes; with a designated bike route along the site’s northern edge on Marine Drive as well as along the site’s western edge on 25th Street, both of which connect to the City’s greater cycling network.

The site is also easily accessible by transit with frequent buses running East-West along Marine Drive, and a bus stop directly in front of the site.

LEGEND

-  Public Trail
-  Shared Bike Lane on Major Street
-  Local Street Bike Route
-  Bus Route
-  Bus Stop
-  School/Educational Institution
-  Dundarave Village (Commercial Street)

B. POLICY CONTEXT

C2 - COMMERCIAL ZONE 2

The subject site is zoned C2, a commercial zone where residential uses are permitted over commercial premises.

Site Area

The C2 zone requires sites to be a minimum of 464.5 sqm (5,000 sq ft), the proposed site area is greater than 464.5 sqm.

Site Width and Frontage

The C2 zone requires a minimum frontage of 18.2 m (59.71 ft). The provided building width is greater than 18.2 m.

Front Yard

While the C2 zone does not require a front yard setback, in preliminary discussions with District Staff, the District indicated a desire to see a 2 m front yard setback. A 2 m front yard setback has been provided as requested.

Rear Yard

The C2 zone requires a 4.3 metres minimum setback on a corner site.

Side Yard

The C2 zone does not require a side yard, but if one is provided, the C2 zone required a minimum of 1.52 m be provided. The provided side yard is greater than 1.52 m.

Building Height

The C2 zone permits a maximum height of 10.7 m (35.10 ft) from average grade. To accommodate the height contemplated by the District of West Vancouver's OCP, at 14.50 m (47.5 ft) the proposed building height is slightly higher than what is permitted outright in the C2 zone.

Number of Storeys

The C2 zone permits heights of 2 storeys, with a third storey permitted within the overall height limit, provided the ceiling of the lowest storey is not more than 0.3 m above the frontage curb. The proposed development is seeking a variance to permit 3 storeys along Marine Drive, as is contemplated by the District of West Vancouver's Official Community Plan for development's in the Dunderave Village Neighbourhood Centre Commercial Area.

Off-Street Parking

Off-Street Parking provided (122 spaces) exceeds the C2 Zoning Requirement of 110 spaces (less credit for bicycle parking, for a total of 96 spaces) in order to address community concerns related to parking.

DISTRICT OF WEST VANCOUVER OCP (2018)

The District of West Vancouver's Official Community Plan (OCP), which was adopted by Council in June 2018, provides a framework for guiding planning and development in the District.

The OCP divides the district in to three over-arching sub-areas; Multiple Family Areas, Commercial Areas and New Neighbourhood Areas. The OCP designates the subject site as within the Dunderave Village Neighbourhood Centre Commercial Area.

The OCP sets out the following objectives for developments within the Dunderave Village Neighbourhood Centre:

- preserve the "village commercial" character of Dunderave,
- encourage upgrading of building facades to enhance the village theme,
- promote and enhance the pedestrian scale of development,
- promote a high quality of building design and landscaping, and
- facilitate pedestrian access along the street, through blocks, from parking to shops and down to the waterfront.

CONTEXT AND SITE DESIGN

As the Dunderave Village Neighbourhood Centre is developed over time, the OCP seeks to guide growth in a way that is well-integrated into the existing "village" community.

The OCP envisions boutique-style retail at the street level and commercial or residential uses above, streetscape features including distinctive awnings, enhanced landscaping, and clearly defined public, semi-public, and private areas.

The proposed development has sought to cultivate a village-feel, while offering a high quality public realm and access to nature.

RESPONSE TO DRC COMMENTS

Following feedback received from the West Vancouver Design Review Committee held April 21, 2022, the following revisions to the design have been incorporated into this submission:

- The varying storefront conditions along Marine Drive now provide continuous weather protection along the ground floor. In-between the fabric awnings we've added a glass extension to bridge any gaps, while the more limited glass canopies have been extended to create continuous weather protection (particularly along the tower element);

- The transitions between the two different architectural looks (West Coast Village and Seaside Village looks) have been refined, particularly at key transition moments such as the mid-block entry courtyards;
- The handrails in the Seaside Village look have been given a more contemporary aesthetic with a glass sheet in the back and refined balusters and cross patterns;
- The location of lamp posts and trees near the Marine Drive mid-block entry courtyard have been updated to better align with the building geometry; and,
- In addition to the main mural proposed along 25th Street, a second mural has been proposed and incorporated along the east right-of-way stairs. This mural also covers a new egress door that was added to the landing shared with the unit entry.

B. POLICY CONTEXT

BUILDING DESIGN

The urban design and built form of the proposed development aligns with the objectives set out in the OCP. At 3 storeys, the height of the proposed development integrates well into the existing neighbourhood.

The OCP directs the building length to be broken up along Marine Drive. This is achieved using a push-pull strategy, stepping the volumes forward and backward to create visual rhythm and interest. Furthermore, the massing of the building is cleverly broken down through the strategic placement of the residential lobby. The residential lobby is centrally located along the site's frontage, and distinguishes itself from the retail volumes by stepping backwards providing a courtyard as a place for respite and relief

A combination of awnings, canopies, wall-mounted signage, and wood details are used to foster the village character of building.

The commercial/retail units have been designed to accommodate a range of unit sizes to support the economic viability of the units.

The corner plaza at 25th and Marine Drive has been articulated and scaled to support the pedestrian level. The corner has been further opened up with views to the ocean and ample room for seating and landscaping. This plaza celebrates the west entrance to Dundarave Village creating an active urban place with cafe/restaurant uses and a passive "West Coast feel" park, both with views to the ocean.

At the northeast corner of the site seating and commercial retail opens up to Marine Drive and to the east north-south pedestrian lane.

Along Marine Drive the building has created additional opportunities for seating as part of the retailing experience.

The rear access provides a physical and visual connection north-south to read as one continuous space.

Careful selection of a variety of materials, colours and textures has been provided to create interest and variation along the street front.

Storefront scale and parapet heights vary to enhance and support the pedestrian scale.

URBAN DESIGN / PUBLIC REALM

The public realm is comprised of four core components:

First is the creation of a significant plaza at the corner of 25th Street and Marine Drive that extends south along 25th Street to Dundarave Lane. The plaza is defined by both its active and passive design elements. Along Marine Drive, the plaza is activated with seating and will interact positively with the retail space proposed at the west corner of the building. The open space slopes down 25th Street toward Dundarave Lane, taking on more passive, park-like elements with a planted West Coast softscape. A meandering pedestrian path with handrail reduces the grade

of the 25th Street slope from between 9% and 12% to between 6% and 7%, providing increased accessibility between Marine Drive and Dundarave Lane. This park incorporates multiple small seating areas that terrace down the hill, providing views to the ocean.

Second, the treatment of Dundarave Lane has been thoughtfully considered to provide a pedestrian-oriented streetscape, taking reference from the pedestrian-priority "woonerf" concept of living lanes. To enhance the pedestrian experience, the building has been setback from the lane to allow for landscaping and a sidewalk comprised of stone tile pavers. The lane will be activated with stairs leading down to below-grade retail spaces and stairs up to residential entrance porches.

Third, the alcoves that have been incorporated mid-block to break up the building mass on both Marine Drive and Dundarave Lane will provide attractive, landscaped courtyards with seating areas that provide quite respite from bustle of the sidewalk.

Fourth, the existing mid-block pedestrian connection at the eastern end of the building will be expanded and improved, providing a comfortable public connection between Marine Drive and Dundarave Lane, and continuing the network of pathways that lead from Irwin Park Elementary School to Dundarave Beach. This mid-block connection will be animated by the Marine Drive storefronts turning the corner, a wall mural that compliments the mural at 25th Street and Marine Drive, and a residential entry "porch" to the end unit.

LANDSCAPE DESIGN

The landscape design complements the design of the building and existing character of the street. Where possible, existing street trees will be protected and retained.

As is envisioned in the OCP, seating areas and feature planters are used adjacent to the sidewalk and at store entries to encourage visitors to spend time enjoying the village. The landscape and building design work together to provide universal, barrier-free access. The sidewalks are intentionally unobstructed to allow all visitors to move easily through the space.

Private outdoor space is provided to each residential unit by way of a balcony and/or private rooftop garden.

Exterior lighting design and siting have been carefully considered to minimize glare and light spill to surrounding properties, and subdued signage illumination.

CIRCULATION AND PARKING

Pedestrian circulation along Marine Drive and Dundarave Lane have been designed to be accessible to persons with disabilities. Unobstructed sidewalks facilitate comfortable movement through the space. Inclusion of pathway in public plaza along 25th Street reduces street grade from 9%-12% to 6%-7%. The pathway includes handrail for increased accessibility.

The existing north-south mid-block connection running along the site's eastern edge has been retained. Both the lane and Marine Drive have been treated as a part of the circulation pattern, through the use of building entries, signage, lighting, and landscaping.

Short term bicycle storage has been provided along both Marine Drive as well as Dundarave Lane. Long term bicycle storage has also been provided for both residents and commercial users, in conformance with the District's requirements.

Both commercial and residential parking will be provided below grade, accessible from lane (at the southeastern edge of the site). The residential parking area will be secured and separate from the unsecured commercial parking area. The commercial parking area has been designed to be readily accessible and easily used by customers.

ACCESSIBILITY

Automated doors provided at public areas including entry, alternative entry, parking area, amenities and storage areas. Where automated doors are not possible lever-style handles are provided.

Zero threshold for showers is provided for all adaptable units.

All outlets, switches and in-wall controls are provided at accessible height.

Plumbing allowances for integrated toilet adaptable bidets are provided for all adaptable units.

An intercom / directory voice activated for easy access and hands free in addition to touch screen, audio activated for people with vision loss or final motor control. Integrated with cell phone app. Braille or raised characters for people with vision loss.

Mailboxes accessible from seating position are provided with less than 1200mm height and maximum 400mm reach. Mailboxes are accessible for people with limited hand function and braille or raised identification characters for people with vision loss.

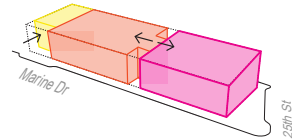
Provided visual and audible alarms in residential areas shared spaces, where people may be expected to be alone for limited hearing people to be alerted to an emergency.

Backup framing in walls and ceilings for possible lift installation is provided for adaptable units.

Colour contrast between wall and floor 70% glarefree surface is provided on public areas.

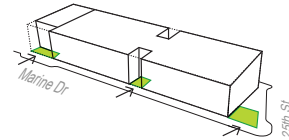
B. DESIGN PRINCIPLES

01 3 BUILDINGS



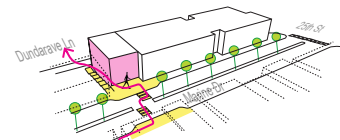
Break the design into 3 separate and distinct pieces, each designed according to its function and mirroring the immediate context: IGA, shopfronts, mid-block crossing.

02 MINI-PLAZAS



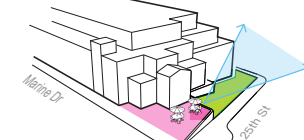
Add public realm expansions at key locations along Marine Drive to provide places of respite, entrance courtyards, and shops to spill out on the street.

03 MID-BLOCK CONNECTION



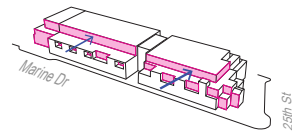
Exploit the potential of the only mid-block crossing in the village by creating a welcome courtyard and an active connection from Marine Drive to Dundarave Lane.

04 CORNER PLAZA



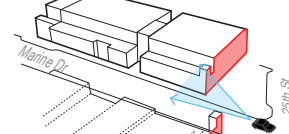
Celebrate the west entrance to Dundarave Village creating an active plaza with café/restaurant uses and a passive "West Coast feel" park, both with views to the water.

05 STRATEGIC SETBACKS



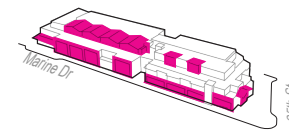
Create a significant setback at the 3rd floor on Marine Drive, so it isn't perceived from the street, and play with the 2nd floor setback to ensure variety along the street wall.

06 ENTRANCE MARKER



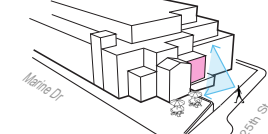
Mimic the stone tower on the IGA building by a similar scaled vertical element of civic function to announce the entrance to Dundarave Village from the west.

07 VILLAGE BUILDING CHARACTER



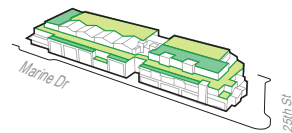
Break down scale to achieve a "village look & feel" by using a variety in architectural elements, materials, street fronts, canopies and signage.

08 PUBLIC ART MURAL



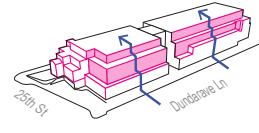
Recreate the 1986 mural created by the same or other prominent West Coast local artist to create something as or more impactful, providing its own identity to the corner park.

09 GREEN & ACTIVE ROOFS



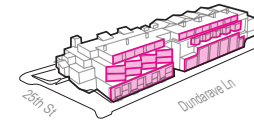
Provide a combination of green roofs and useable roof terraces to ensure a nice view aesthetic and provide gardening opportunities for the target demographic.

10 LANE-SIDE SETBACKS



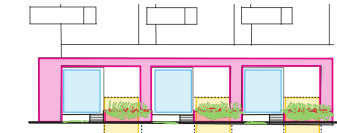
Push the upper floor on the lane setback to reduce the perceived height from the street level and provide useable terraces with water views to the south.

11 LANE-SIDE HEIGHT



Articulate the massing of the lane side of the building vertically and horizontally so it breaks up the mass and effectively reads as a 4-storey building.

12 LANE STREET-LEVEL ACCESS



Make the 1.5-storey ground floor read as one floor by providing direct access to residential units and daylighting commercial space through window wells.

C. PUBLIC ENGAGEMENT DESIGN RESPONSE

Following two public engagement events held April 5th (Virtual) and April 6th (In-Person), efforts have been made to update the building design to reflect the aspirations heard from the community. Following this engagement process, five design changes have been incorporated into this Development Permit package:

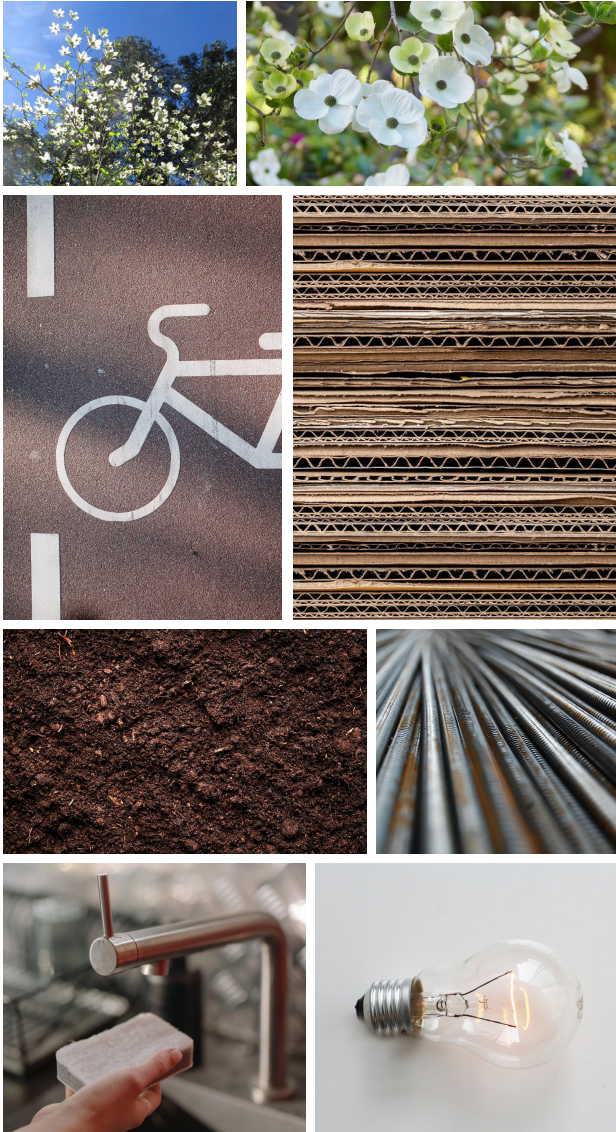
1. Reinforcing the “Village” Character: Neighbourhood residents and members of the public spoke of their desire to maintain a ‘village’ character for Dundarave, comprised of varied buildings of different architectural styles. In response, a blend of two architectural styles has been incorporated into the building design: a “Seaside Village” and “West Coast Village” look. Both building styles were presented to the community, and the community’s preference was relatively evenly split between the two aesthetics. While the ‘broken-up’ building form gives the impression of three separate buildings, the addition of the “Seaside Village” look to the west portion of the building, along with the “West Coast Village” look of the remainder of the building, provides further differentiation, and provides a fourth distinct building section.
2. Maintaining Varied Retail Storefronts: The retail spaces on Marine Drive have been revised to ensure variation in retail storefronts. This has been achieved by incorporating the natural wood materiality of the “West Coast” building elements, while in other cases picking up the white paneling and details of the “Seaside Village” look. The location and type of entry doors as well as the mullion details for each bay have also been modified to incorporate better variation. Updates to the retail canopies favour more fabric awnings with limited glass canopies, while still maintaining continuous weather protection.
3. Size of Retail Tenants: The community gave an overwhelming preference for small, local-oriented retailers and restaurants. However, there were also many who wanted to maintain the convenience of having a drug store or pharmacy in the neighbourhood. We have adjusted the layouts of the retail spaces to accommodate a pharmacy or drug store, while ensuring that the remainder of the retail spaces are small enough to be attractive to local businesses. The above-mentioned change in canopy materials will add a human-scaled element to mitigate the impression of the larger commercial unit from the street.
4. Paying Homage to the Existing Public Art: The community voiced overwhelming support for having the existing mural at 25th Street and Marine Drive retained or replicated and incorporated into the building design. This mural is a cherished piece of public art that defines the western entry to the village, while also reflecting the history of Dundarave. While discussions with the Public Art Advisory Committee are ongoing, our current submission reflects the public sentiment by showing a recreated version of the mural near its original location. We are also proposing locations for public art elsewhere on the site, the details of which will be discussed with the PAAC.
5. Ensuring a Green Public Realm: While the active plaza at the corner of 25th Street and Marine Drive was viewed positively by the community, there was also a desire to ensure that hardscapes were minimized, and the tree canopy maximized. The plaza design has been modified to incorporate two large trees to provide additional greenery and shade.

The overall building design has also been informed by the extensive and thoughtful input received from the community at Open House #1 held in October, 2019, the DRC Meeting in September, 2021 and the DRC Workshop held March 9, 2022.

Refer to Appendix E for the Public Engagement Summary.



D. SUSTAINABILITY



SITE

The proposed development's infill densification is inherently sustainable by promoting development in an existing urban area and diverting development pressures from greenfield sites or environmentally sensitive areas.

The mixed use density of the existing neighbourhood has supported a very active pedestrian and bike oriented community, which this development will further support through the provision of bicycle storage infrastructure as well as additional housing in close proximity to bus routes and activities of daily living. The site is within walking distance to work opportunities, grocery stores, restaurants, a community centre, parks and walking trails.

The design will be targeting a LEED Gold equivalent approach.

SOIL AND GROUNDWATER

Environmental work completed during development will improve the overall quality of soil and groundwater on the property. Environmental services will be engaged throughout all stages of the project from planning to decommissioning to provide input on how to efficiently and cost effectively reduce impacts.

PASSIVE DESIGN STRATEGIES

The design for the proposed building uses passive sustainable strategies to not only inform but also to enhance the architecture. The building design strategically incorporates balconies, outward projected mullions, and high performance glazing to improve building performance.

Each unit will have access to a balcony and interior shading devices, which will provide passive natural ventilation and support passive solar control.

The glazing and window-to-wall ratio for the building is designed to minimize glazing heat transfer and energy loss. A structural thermal break at exterior balconies will also be used to allow for a continuous insulated building envelope.

MATERIAL CONSIDERATIONS

Where feasible, the design will incorporate:

- The use of sustainable concrete material such as with the use of supplementary cementitious material or through a carbon dioxide mineralization process.
- Use of recycled steel.
- Carefully selected exterior components and assemblies will be incorporated with the focus of delivering a high-performing, long lasting exterior that will endure maintenance. Interior finishes will be carefully selected to be long lasting to minimize future replacement and maintenance.

ENERGY

The building will be heated and air conditioned by a Variable Refrigerant Flow system. The proposed system does not rely on gas fired boilers, reducing green house gas emissions.

Central corridor ventilation will provide 80% of the energy requirements from a variable refrigerant heat pump systems which also reduces green house gas emissions.

All suites in the building will be provided with a 75% efficient energy recovery ventilator. All motors over 1hp will be extra high efficiency.

All transformers will meet or exceed the minimum 98% performance efficiency per CSA C802.2-18. Compliance will ensure the minimum cooling load that the mechanical system will need to address, thus minimizing energy use.

Metering for measuring and recording power consumption of major load types to enable monitoring and detection of higher than normal power usage, indicating possible failure of mechanical equipment. Metering will also provide residents and commercial tenants a baseline to gauge power usage, and create incentives to reduce consumption.

LIGHTING

Lighting will be designed to better the minimum lighting power density (LPD) requirements and control requirements of ASHRAE 90.1 2016. All luminaires installed in the building will use LED light sources which are currently the most efficient lighting system commercially available. High efficacy LED lighting systems will be specified for the project. A low-voltage control system will provide centralized control of lighting in interior and exterior common areas.

The lighting control system will have timelock functionality, multiple zone controllable relays, and will operate with motion, photocell and daylight sensors. Lighting in spaces vacated by occupant(s) will automatically de-energize after 20 minutes (or less) to ensure minimal wastage of lighting energy. Lighting power in the parkade will be minimal when no motion is detected while maintaining a minimal lighting level for safety. Automated lighting controls will reduce parkade lighting when not required, but maintain a safe level of illumination for security purposes.

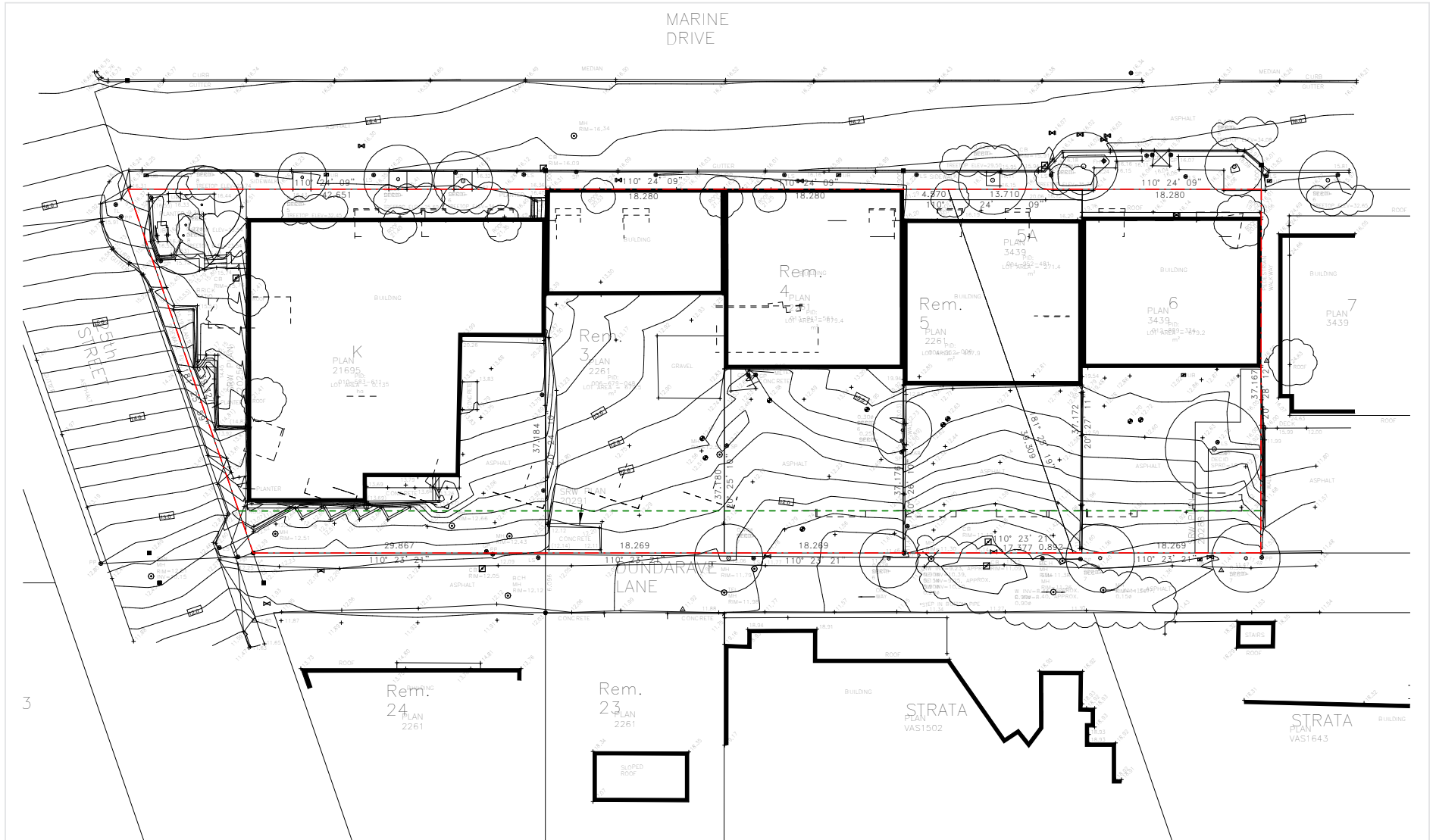
RECYCLING AND WASTE MANAGEMENT

Recycling facilities will be provided for both residential and commercial properties. The building will have recyclable storage facilities that will be accessible to all users of the property. Recyclables generated in the building will be collected in dedicated bins for at a minimum paper, corrugated cardboard, glass, plastics, metals and compost.

E. Architectural Drawings

The following drawings are not to scale. Please refer to separate full size drawing set at 24" x 36".

E. ARCHITECTURAL DRAWINGS - SURVEY

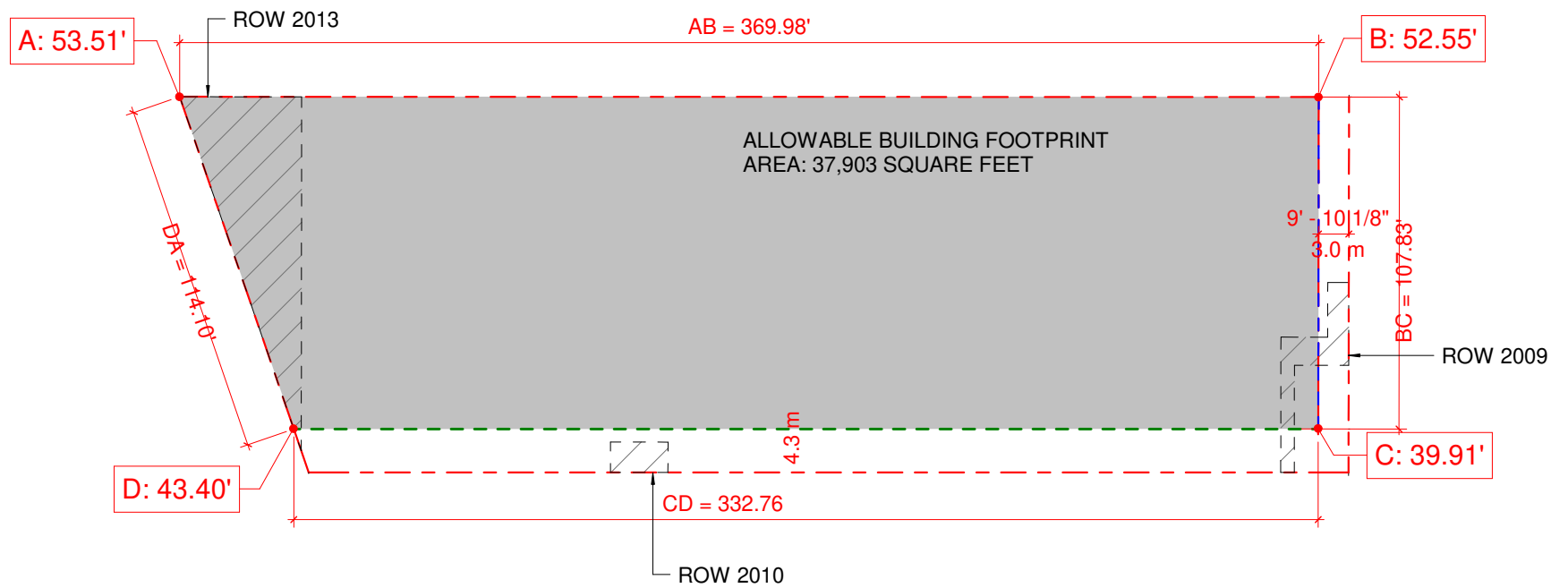


E. ARCHITECTURAL DRAWINGS - CONTEXT PLAN



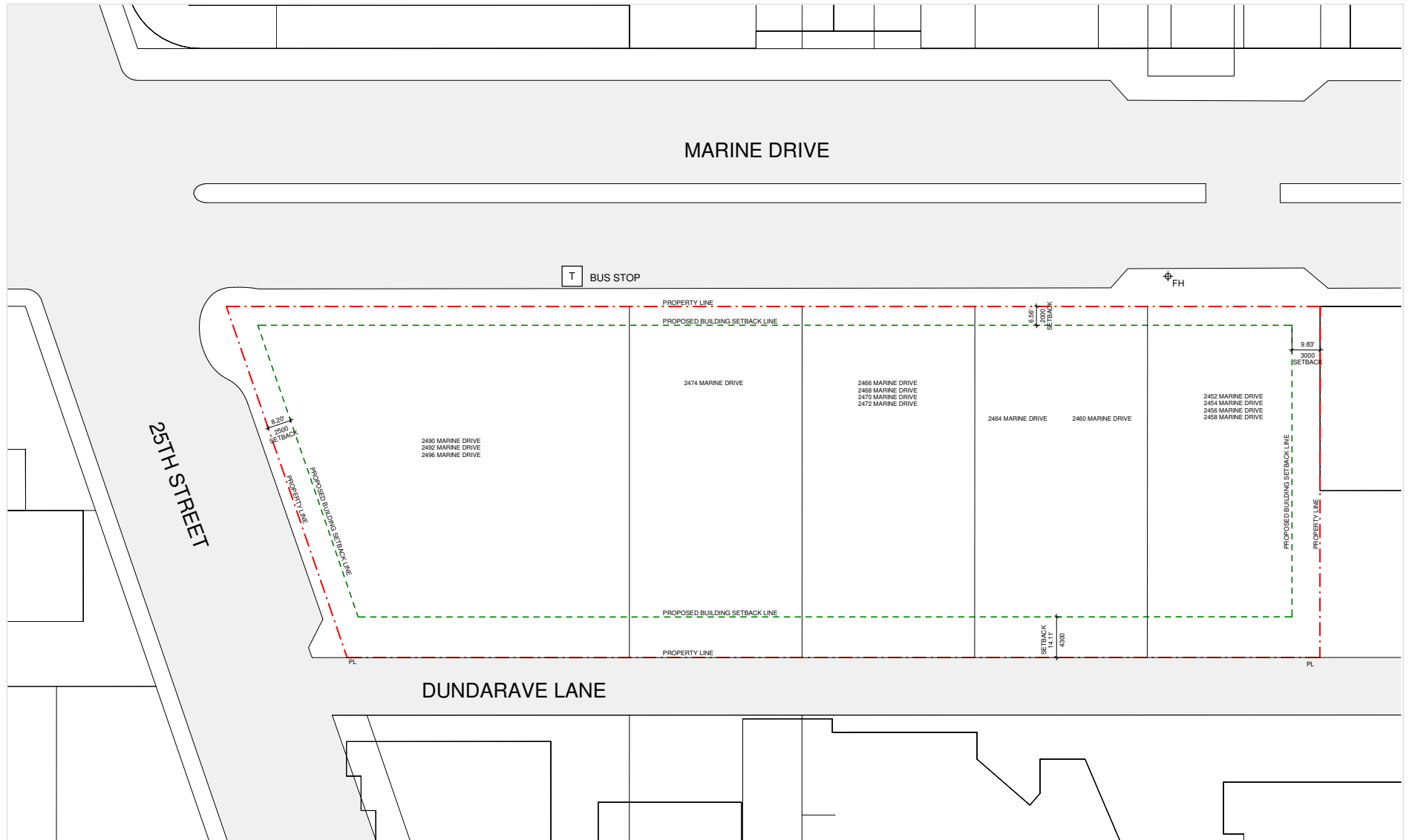
E. ARCHITECTURAL DRAWINGS - PROJECT DATA & STATISTICS

AVERAGE GRADE:		
Section	Length	Y
AB $(53.51 + 52.55) / 2$	369.98	19,620
BC $(52.55 + 39.91) / 2$	107.83	4,985
CD $(39.91 + 43.40) / 2$	332.76	13,861
DA $(43.40 + 53.51) / 2$	114.10	5,529
TOTAL (FT)	924.67	43,995
AVERAGE GRADE (FT)	47.58	

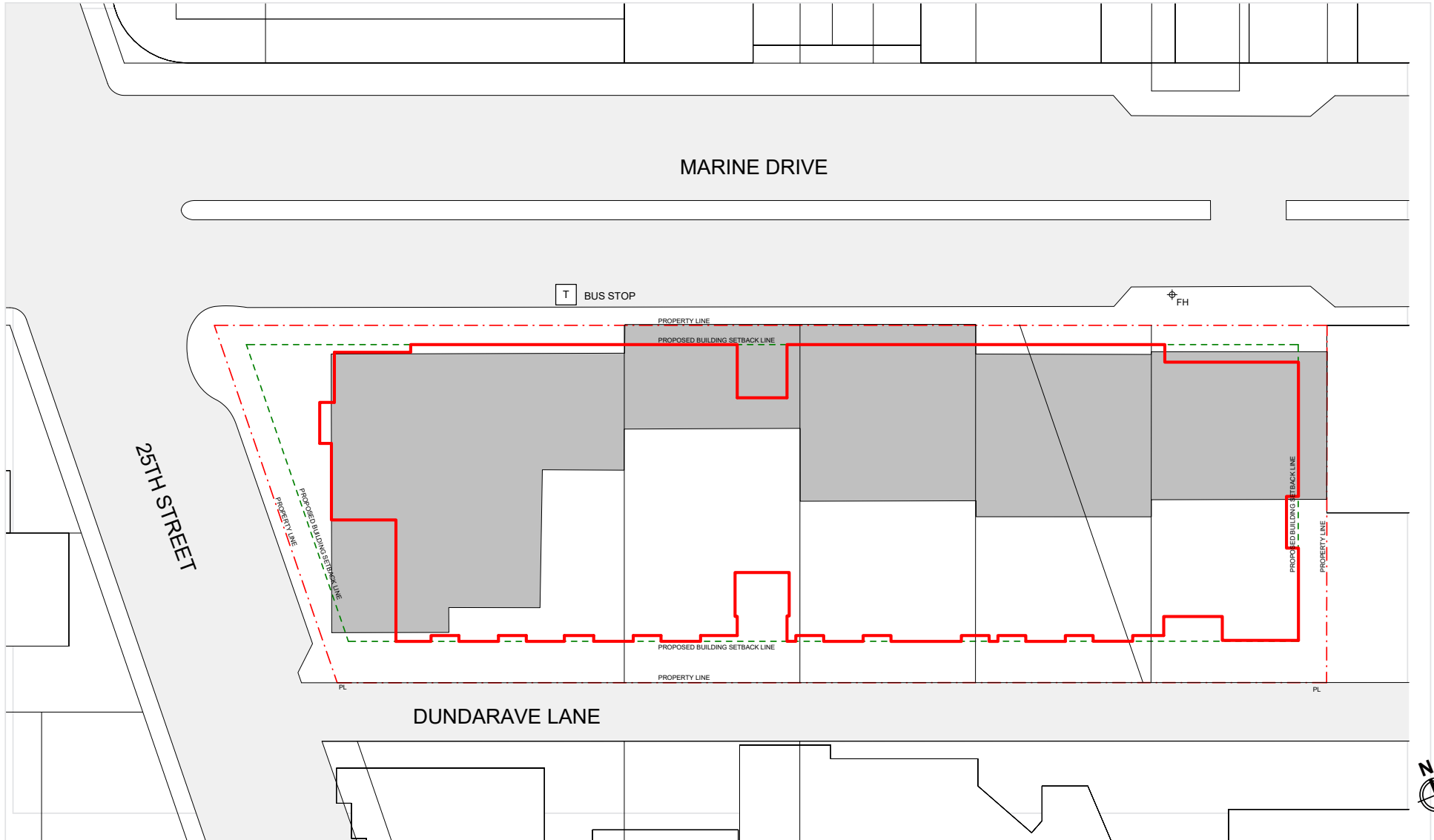


1 AVERAGE GRADE CALCULATION
A13 Scale: 1/32" = 1'-0"

E. ARCHITECTURAL DRAWINGS - SITE PLAN (EXISTING)

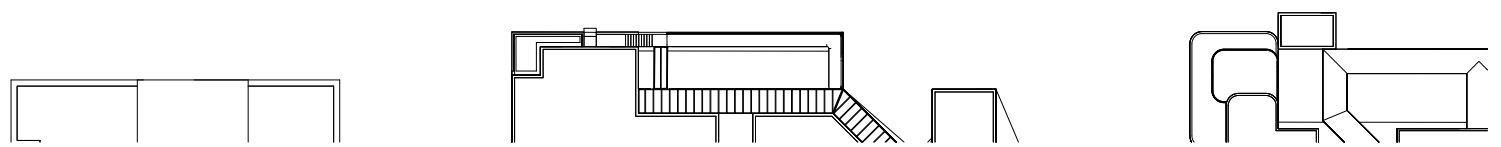
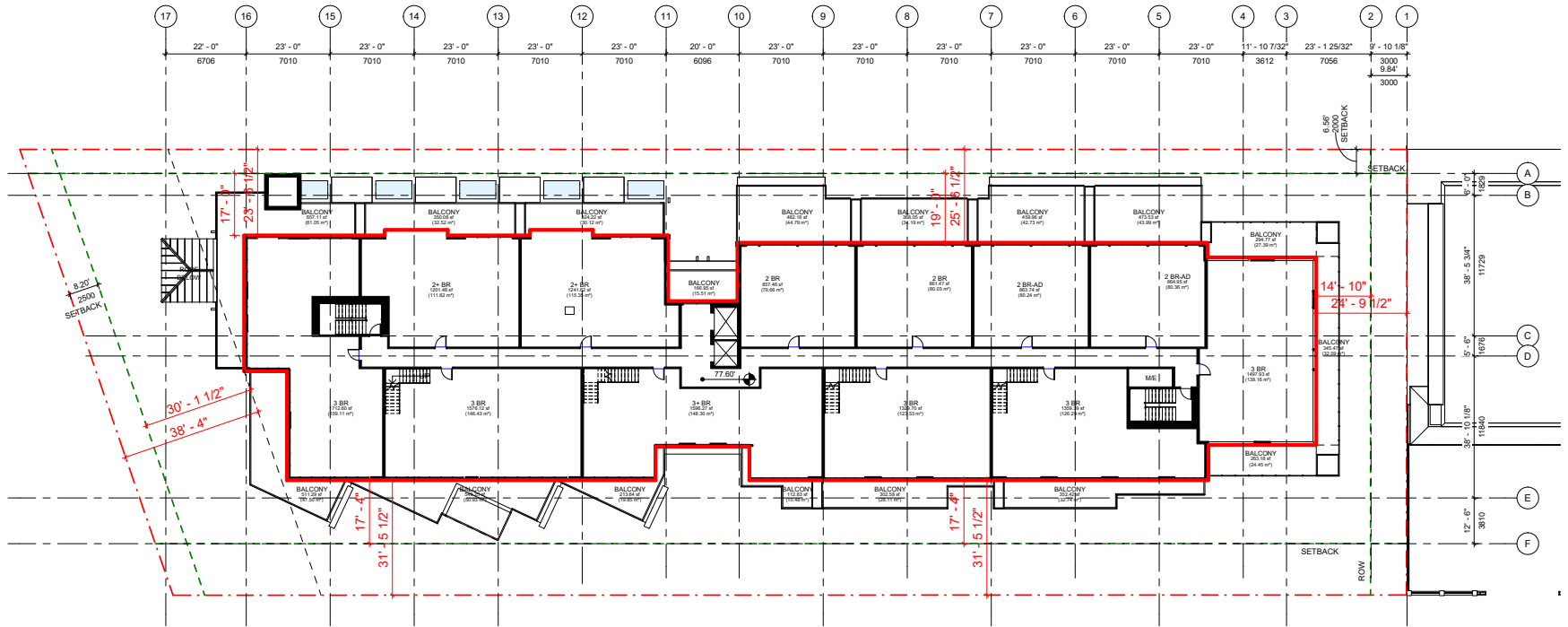


E. ARCHITECTURAL DRAWINGS - SITE COMPARISON



- OUTLINE OF PROPOSED SCHEME
- EXISTING BUILDING

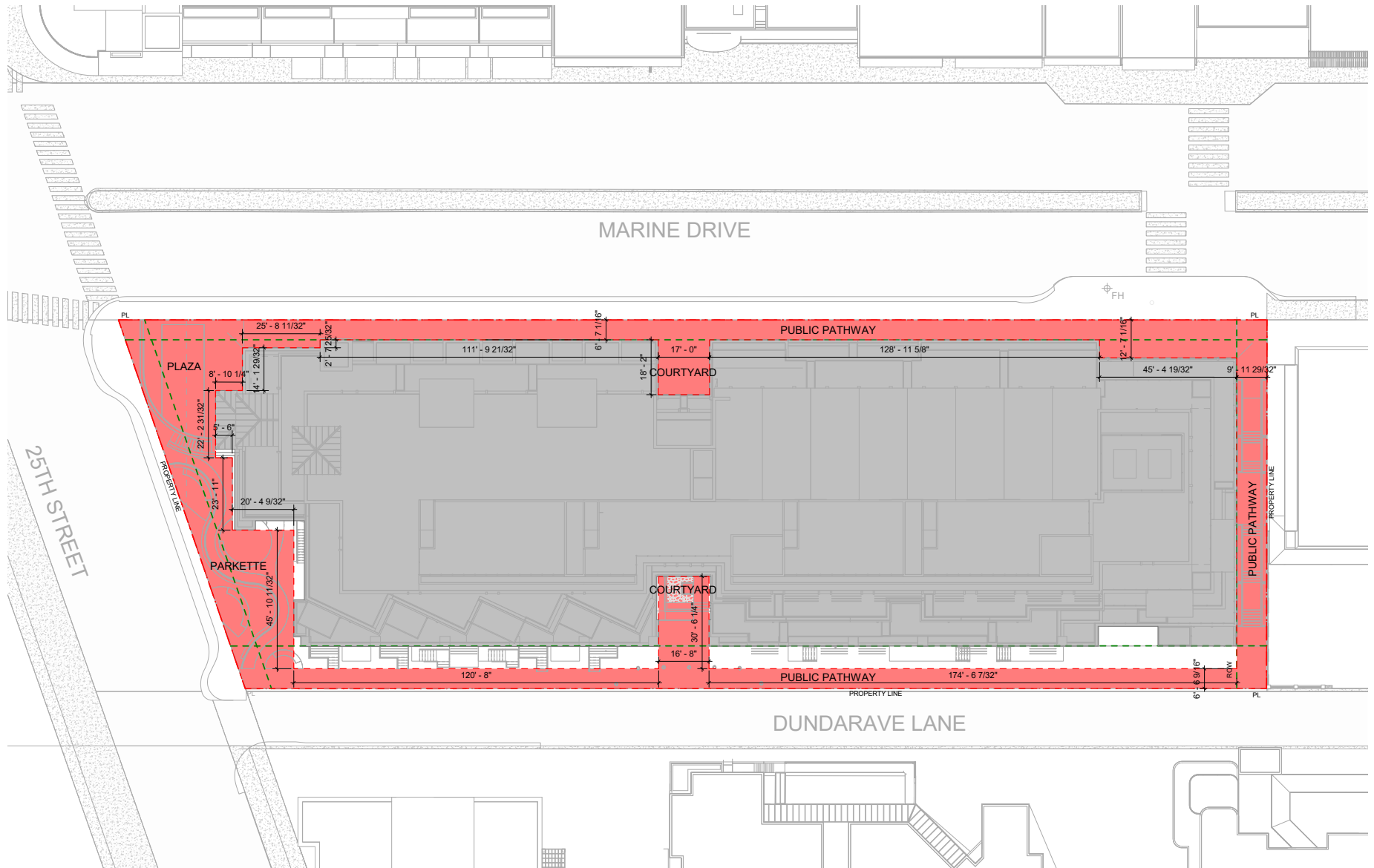
E. ARCHITECTURAL DRAWINGS - SETBACKS



LEVEL 3



E. ARCHITECTURAL DRAWINGS - PROPOSED RIGHT OF WAY



 DESIGNATED STATUTORY PUBLIC RIGHT OF WAY