AGENDA
DESIGN ADVISORY PANEL MEETING

October 8, 2020, 5:00 PM
Board Room, Service and Resource Centre,
411 Dunsmuir Street, Nanaimo, BC

Pages

1. CALL THE MEETING TO ORDER:

   [Note: This meeting will be live streamed and video recorded for the public.]

2. ADOPTION OF AGENDA:

3. ADOPTION OF MINUTES:

4. PRESENTATIONS:

   a. **Development Permit Application No. DP1186 - 5320 Tanya Drive** 2 - 47

      To be introduced by Lisa Brinkman, Planner, Current Planning Section

      A development permit application was received from BJK Architecture Ltd., on behalf of Patricia Wallach for the development of multi-family residential development which is comprised of 37 units. The residential units are in the forms of condos, townhouses and duplex units. The subject property is legally described as Lot 2, District Lot 55, Wellington District, Plan 47120.

   b. **Development Permit Application No. DP1202 - 427, 449 and 455 Nicol Street** 48 - 71

      To be introduced by Caleb Horn, Planner, Current Planning Section

      A development permit application was received from Island West Coast Developments, on behalf of Nicol Street Holdings Ltd., for the development of a multi-family residential rental building, which is comprised of 35 units. Three properties will be consolidated to site the building. The subject properties are legally described as Lot 1, Section 1, Nanaimo District, Plan 48224, except Part in Plan VIP51613; The northerly 41.25 Feet of Lot 19, Section 1, Nanaimo District, Plan 437, except Part in Plans 48224 and VIP51613; and Lot 19, Section 1, Nanaimo District, Plan 4377.

5. ADJOURNMENT:

STAFF DESIGN COMMENT

DEVELOPMENT PERMIT APPLICATION NO. DP001186 – 5320 Tanya Drive

Applicant/Architect: BJK ARCHITECTURE INC.

Owner: PATRICIA WALLACH

Landscape Architect: 4-SITE LANDSCAPE ARCHITECTURE AND SITE PLANNING

SUBJECT PROPERTY AND SITE CONTEXT

Zoning	R10 – Steep Slope Residential
Location	The subject property is located north of Lost Lake Road, and 300m south of Linley Valley Cottle Lake Park.
Total Area	2.4 ha
Official Community Plan (OCP)	Map 1 – Future Land Use Plan – Neighbourhood
Relevant Design Guidelines	General Development Permit Area Design Guidelines; and Steep Slope Development Permit Area Guidelines

The subject property is located on a north facing slope, overlooking the Strait of Georgia (Salish Sea), and is accessed by a driveway on a panhandle from Tanya Drive. The property contains a Douglas-fir-Salal forest ecosystem with rocky bluffs, and a significant ridgeline. The property is surrounded by an R1 zoned single family neighbourhood to the north; forested R10 zoned parcels to the east and west; and a forested Urban Reserve zoned parcel to the south.

PROPOSED DEVELOPMENT

The applicant is proposing a multi-family development with 35 townhouse units. A total of 25 units will have three bedrooms and 10 units will have two bedrooms. The R10 Zone supports a density of 16 units per hectare, and a density of 15 units per hectare is proposed. Also, the R10 zone allows a Floor Area Ratio (FAR) of 0.45, and an FAR of 0.23 is proposed.

	Two bedroom	**Three bedroom**	*Total*
Townhouse	10 units	25 units	*35 units*
unit size range	*106m^2 – 149m^2*	*133m^2 – 181m^2*	

Site Design and Steep Slope Guidelines

The applicant is proposing to site the townhouse units along two natural benches below the ridgeline, with an internal access road around the buildings. The buildings would be sited 19m from the north side property line, and 39m from the south side property line to protect the natural area on the top of the ridge. The siting of the internal access road requires significant cuts into the rock of the ridgeline, such that the rock face along the south access road is approximately 9m in height at its highest point. A rock cut and retaining wall is also required between the upper and lower rows of the townhouse buildings. Two concrete retaining walls are proposed to support the north portion of the internal access road.

Staff Comments:

- Consider reducing the number of visitor parking spaces at the site entrance, and replace with landscaping to enhance the entrance to the development.

- The proposed development complies with the Steep Slope Guidelines in the following ways:

    a) The buildings are sited on two natural benches below the ridgeline, such that the natural area on top of the ridge would remain forested.
    b) The roofline of the buildings are proposed to be varied in height, following the contours of the ridgeline.
    c) The overall building footprint is reduced to protect the natural areas on the perimeter of the site.
    d) Several types of townhouse units are proposed allowing for variety in design to suit the topography and site configuration.
    e) The applicant has provided an Environmental Assessment, Arboricultural Inventory, Civil Engineering and Servicing Report, and Geotechnical Assessment of the property to ensure the design of the proposed development addresses the Steep Slope Guidelines.

Building Design

The townhouse units are arranged on two benches below the ridgeline, such that the upper townhouse units have views over the lower townhouse units, with a lightwell between the townhouse rows. A total of 25 units are three stories in height, and 10 units are proposed to be four stories in height. Each unit incorporates balconies, with some units also containing a ground level patio or rooftop patio. Each townhouse also has a garage and indoor storage for a bike and refuse bins.

Each unit is 7.2m in width, with a variation of flat and shed roofs. The facades have overhangs, balconies, and recessed sections for interest. The exterior façade materials are proposed to be Hardie plank lap siding, reveal panels, Hardie shingle siding, and natural stone accents. The exterior colour palette mimics the colours of the surrounding natural environment.

Staff Comments:

- Add windows and more interest to the building side elevations to better relate to the walkways between the buildings and the internal road.
- Consider reducing the ceiling height in the four storey units to reduce the building height, and to reduce the height variance request.

Landscape Design

The panhandle entrance to the property will be landscaped with an entrance sign, a pedestrian path, a hedge and trees. The pedestrian path (1.5m in width) is proposed from Tanya Drive, through the panhandle, and along the top of the ridgeline for the full extent of the south property line. A split rail fence is proposed adjacent to sections of the pedestrian path. The pedestrian path will then connect to the access road along the north portion of the property. Two pedestrian paths are also provided between the buildings to connect the upper and lower levels of the site. An outdoor play area, viewing pavilion, and visitor parking spaces are provided on the west side of the property. Planting beds and ornamental trees are provided at the entry of each unit, and between the parking spaces of the townhouse units. Site lighting will be kept close to the buildings and amenity areas to reduce light pollution. The concrete retailing walls will have a pattern to mimic natural rock to compliment the natural character of the site.

Staff Comments:

- Ensure that 50% of the trees and shrubs are evergreen to provide year round screening of the buildings from viewpoints in the lower areas (see Section 17.12 of Zoning Bylaw).
- Provide information regarding the surface materials for all pedestrian paths on the property.
- Consider a different pavement treatment for the pedestrian path that is integrated with the access road along the lower townhouse units, and consider raised textured pavement for the pedestrian crossings on the access road.
- Show the location of the outdoor bike rack on the landscape plan.

PROPOSED VARIANCES

Building Height

In the R10 zone, the maximum allowable building height is 7m for buildings with a flat roof (less than 4:12 pitch). The proposed building heights and proposed variances for 10 of the townhouse buildings is shown in the table below.

	Permitted Building Height (flat roof)	**Proposed Building Height**	**Proposed Variance**
7 Upper Townhouse Units	7m	13.2m	6.2m
3 Lower Townhouse Units	7m	8.2m	1.2m

Perimeter Wall Height

In the R10 Zone the maximum allowable perimeter wall height is 7.32m. The proposed perimeter wall height and proposed variance for each building in the development are shown in the table below:

	Permitted Perimeter Wall Height	**Proposed Perimeter Wall Height**	**Proposed Variance**
Upper Townhouse Units	7.32m	13.2m	5.88m
Lower Townhouse Units	7.32m	13.2m	5.88m

Retaining Wall Height

The maximum allowable height of a fence or retaining wall outside of the required yard setback is 3m. The height of the retaining wall in the northeast corner of the site, to support the access road, is 5m at the highest point, a proposed variance of 2m.

A retaining wall is also needed in the lightwell area, between the rows of upper and lower townhouse units. While approximately 2m will be rock cut, a retaining wall 4m in height will be needed on the rock cut to support the foundation of the upper townhouse units. Thus, a variance to the retaining wall height of 1m is proposed in this location.

Date: August 21, 2020

Design Rationale– Development Permit Application – 5320 Tanya Dr. – Nanaimo

Project and Rationale Overview.

The multi-family townhouse project being proposed is located on a steeply sloped site. As this document is a written description of how the design relates to the Design Guidelines, it is organized as per the guidelines. This rationale document examines the proposed development using both the General DP Guidelines as well as the Steep Slope Guidelines.
(Part A – General, Part B – Steep Slope).

Part A - Review of Development with respect to the General Development Permit Guidelines.

Part 1 – Development Objectives

- To create a community of homes the blends into the woods and takes advantage of the spectacular views available.
- To maximize the allowable residential unit site density while respecting the sites geography and unique features.
- To minimize the disturbance to the site as a result of this development.
- To integrate the site with the adjacent properties by creating appropriate buffers.
- Provide multi-family housing options in a primarily single-family area of Nanaimo.
- The Development consists of 35 residential units in 2 buildings:
    - Lower Townhouse building with 18, 3 and 4 story townhouses with attached garage, elevator and rooftop patios in some.
    - Upper Townhouse building with 17, 3 story townhouses with attached garage and rooftop patio.
    - The proposed Unit Mix is:
        - 10 – Two bedroom units
        - 25 – Three bedroom units
- All finishes will be durable and suitable to a development of this level of quality.
- Pedestrian and bicycle paths are created on the site and linked to Tanya Dr. A meandering concrete sidewalk is proposed down the panhandle.
- Public Transit is not available on Tanya Dr. The nearest bus stop is located on Hammond Bay Rd. approximately 1 km. away.

Part 2 – Design Principals

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- Respecting the Landscape. The existing site contains a long ridge, visible from many locations and is a prominent feature in the overall landscape. Any development along the treed ridgeline was avoided in the design. By cutting / filling the area between the ridge and the adjacent downhill properties and by incorporating the natural stone bluffs into the site design, building areas were made possible.
- An important driver to this design is the natural environment. The overall 'footprint' was kept as small as practically possible. Two-way ring road is combined with the sidewalk to reduce amount of hard surface. The buildings are kept within this ring to focus the disruption into a discrete area and leave the balance untouched.
- The street presence will be limited to the end of the panhandle. Coordinated signage and landscaping will mark the entrance to the site. Much of the existing landscaping will remain in this area and along the panhandle.
- The form of the development is that of a hillside village, with streets, sidewalks, front yard driveways and common on-site recreation areas. The buildings are visually similar, but varied in mass and materials / colours, in response to the immediate site conditions.
- The design of the buildings, roads and landscaped areas are durable and permanent in their design and use of materials. The proper design of drainage and overall water management are paramount on this site.
- The site will be well lit with low-level, non-glare type lighting appropriate to its function. The building windows overlook the streets and sidewalks, creating a safer environment.
- CEPTD (Crime Prevention through Environmental Design) principals will continue to be incorporated as the design is developed in more detail.

Part 3 – Design Guidelines

Site Design

1. Parking

- The majority of the required resident parking is located in enclosed garages, the remainder and more is provided in the driveways up to the garage. Visitor parking is located near the playground.
    - 72 stalls are required (68 residential, 4 visitor)
    - 78 stalls are provided (70 residential, 8 visitor)
- The surface parking stalls, (driveways and visitor area) are distributed around the perimeter of the road, with landscape intermixed. This avoids creating large paved areas, difficult to shade.

2. Pedestrian Circulation

- Paths have been provided on-site to separate pedestrian and vehicular traffic. These are a combination of on and off-road walkways, circulating around the site, along the significant ridge with a viewing area and playground. This circuit is connected to the public road at Tanya Dr.

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- Pedestrians can only access the site from the main entrance on Tanya Dr. Buffers between neighbouring properties will be provided, primarily of existing forest, but also enhanced as a part of the landscape design.

3. Small seating areas and a picnic area are included.
4. Bicycle facilities.

- Bicycle parking is intended to be within the townhouse garages and the bicycle room in the condominium building. One visitor bike rack has been included at the picnic area.

5. Open Space and Site Design

- The preservation of the ridge provides a partially open area with ocean views, natural moss rock outcroppings, stone bluffs and groves of Arbutus trees, all within a second growth forest. The layout of the buildings, walkways, access roads and pedestrian viewpoints are intended to create a sense of 'place'.

6. Landscaping – Refer to 4-Site Landscape Architecture Concept Plan.
7. Setbacks and Buffers

- The buildings are setback from the property lines by distances that exceed the required building setbacks under this zone. These buffers are landscaped with the existing forest, supplemented as required to achieve the overall landscape design concept of privacy between neighbours. The ring road will provide a 12-meter-wide fire-break between the buildings and the forest.

Building Design

1. Form

- The 2 buildings share the same architectural style, materials, massing and detailing. Variety is created by their varying heights as they step up the site, each facing the access road and with views down the slope.
- The building mass is grouped together within the ring road, stepped and follows the natural contours and existing rock cliff.
- Each building incorporates a variety of outdoor areas including patios, balconies and roof decks.
- The building placement is organized along the access road, creating a street-frontage to each building. These are further developed with individual entrances, walkways, front yard landscaping and a driveway up to the garage door. The buildings will 'step up the hill' as the adjacent access road winds its way around the site.

2. Height

- The buildings as currently designed will exceed the allowable building height in the R10 zone. This height has allowed the design to;
  - Cluster the building floor areas into a more dense area of the site, leaving the remaining un-developed area in its natural state.
  - Increase the ocean view from each unit.

3. Create more energy conscious building forms by providing an increased floor area to building envelope area ratio, resulting in decreased energy consumption.
4. Facades

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- Building materials will be durable and of a high quality. Expansive areas of exposed wood elements are not planned due to their maintenance requirements. Select areas will receive wood trim, where it can contribute to the human scale of the project.
- The detailing of the buildings will be well considered to avoid premature failure of the building envelope.
- The building facades have protruding sections, overhangs, balconies and recesses. These create a pleasing building form, addressing human scale and avoiding tall, flat walls facing the public realm. Side and rear elevations are more modest, with careful treatment of materials and window placements.
- The individual suite entrances of the townhouses each face the main access road, are protected under an overhang and are surrounded with stone veneer. This creates a sense of human scale as one approaches and enters the buildings.

5. Building Siting

- The buildings are sited to take full advantage of the topography, views, access to light and preservation of the natural environment.
- The buildings are place on 2 natural 'benches' preserving the ridgeline.
- The clustering of the multi-family buildings near the bottom of the site, allow the preservation of the significant open area on the site at the ridge.
- The buildings are located to allow the upper buildings to 'look over' the lower buildings, thereby allowing all residents an unimpeded view of the ocean and beyond.

6. Signage

- A site sign is planned for the entrance at Tanya Rd. It will be integrated with the landscape.
- On-site signage will be designed as an integrated package of home addresses and wayfinding.
- Signs will be lit, using non-glare downlight directional fixtures. Overspill will be contained and the dark-sky concept for outdoor lighting will be respected.

Part B - Review of Development with respect to the Steep Slope Development Permit Guidelines.

1. Goals of the Development

Our goals are to:

- Create a new multi-family housing development, integrating the design with the site features while minimizing the built footprint on the site.
- To maximize the allowable site density in accordance with the overall plan for this part of Nanaimo.
- To acknowledge and respect the unique features of the site such as the views, the ridge, cliffs and significant trees.

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- To create a high-quality development suitable to this part of the city, offering a variety of multi-family housing types.

2. Applicable Development Concepts

The existing site conditions make the following considerations applicable to this project.

2.1 Slopes and Steep Slopes

This is a Steep Slope site. The site is located on a north facing slope, overlook the Strait of Georgia. It includes a slightly defined trail, (an old logging trail) along what has been determined to be a significant ridge in the landscape of the area. Specifics of the site are:

- Site Area = 2.71 ha.
- Average slope = 24% (north to south)
- Cliffs and rock outcroppings
- Significant ridgeline
- Significant trees

2.2 Open Space

- The current site has very little naturally open space. Some areas exist at the base of a steep rocky section and below groups of deciduous trees, open below. Otherwise, the site is fully and densely forested.
- There is one significant open space at the top of the ridgeline. This ridge runs along the south property line, ending at a knoll with a group of Arbutus. This area will be preserved and developed for recreation.

2.3 Buildable Sites

- The site has limited natural buildable areas on natural 'benches' within the allowable setbacks. The creation of the access road through the site will result in additional buildable areas. The natural contours and bluffs will be integrated into the building design by way of stepping.

2.4 Intensive Residential Development

- This development includes 35 units in 2 individual buildings. The buildings are clustered within the access road, following the natural contours and cliffs of the site. Approximately 58% of the site will be left undisturbed. This can be considered permanent open space.

2.5 Open Space

- The natural areas that will remain following the completion of this development are the rocky knoll, forested ridge line, rock bluffs and fractured rock cliffs.

2.6 Site Design

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The site layout is based solidly on the natural contours of the rocky site. By following the existing contours, new access roads can be built, following good engineering practices for emergency vehicle access, drainage as well as scenic bends and viewscapes. This 2-way access road starts from Tanya Dr., down a panhandle then creates a loop road back to this location. The loop road follows an existing steep rock face and is located within the center of the site. This allows ocean views while maintaining some distance to the residential properties below.
The buildings are located within the access road, each with a side facing the ocean. The individual buildings align with the nearest rock face and climb up along with the road. Their siting is respectful of the existing ridgeline above, by not removing significant ridgeline trees and by building below the ridge itself. The rooflines of the buildings are a mix of flat and curved, spaced apart and represent a 'segmented' bluff line, in order not to stand out against the natural, broken curves and slopes of the ridge above.

As the development is primarily 'cut' into the landscape along existing contour lines, natural rock walls, reinforced into the bedrock behind, will be formed. The height of these walls varies, to a maximum of 9 meters in one particular location. Minor concrete retaining walls will be lower part of the site to a maximum height of 1 meter. Glimpses to the ocean beyond are expected through the trees. The existing landscape will be retained in the area adjacent to the properties to the north. This will help to preserve the privacy of the neighbors below.
There a picnic / play area located at the west end of the upper roadway, adjacent to the existing Arbutus stand, at the top of the ridge.

2.6.1 Assessment

Natural Features
The site contains significant rock outcroppings, stands of Arbutus trees, individual significant trees and 180-degree views. Facing north, the site slopes down to the ocean. 200 meters below.

The site has been assessed in significant detail. This information is contained in the following studies, commissioned and included as a part of this application.

- Arboricultural Inventory and Report (March 25, 2020) Diamond Head Consulting
- Environmental Assessment of 5320 Tanya Dr. (March 2020) Associated Environmental.
- Geotechnical Assessment (March 16, 20 & June 30, 20) Lewkowich Engineering Assoc. Ltd.

The recommendations stemming from these reports have been adopted into the design of the project. Significant trees, landscape features, slopes and trails have been integrated into the design of the project.

2.6.2 Planning

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- The Open Space Development Concept is being utilized in this design. The buildings are clustered within the access road, leaving the existing connected open space in its natural state.
- This will create a buffer between this development and the existing single-family developments to the north and west.
- The areas adjacent to the east and west are zoned R-10 Steep Slope. The property to the north is zoned R-1. The property to the south is zoned AR2 - Urban Reserve.
- The undeveloped portion of this development will be designated and secured as permanent Open Space and shall not be sub-divided or developed further.
- The road and building-area layout are designed to complement the natural hillside. The Cut is significantly larger than the Fill.
- The existing trail to Tanya Dr. will be developed newly created paved pathways are proposed around the site and meant for use by the community residents.

2.6.3 Earthworks and Grading – Refer to Civil Engineering Report – Herold Eng.

2.6.4 Visual Quality

- Ridgelines. This site contains a significant ridgeline visible from strategic locations in Nanaimo. This ridgeline will be protected to maintain or enhance the visual character of the area.
- The actual ridge location has been identified and left open. There is an old, undeveloped logging trail in this area today. This will remain. The trees along the ridge will also be left intact, maintaining the existing tree line.
- The ridgeline ends to the west with an on-site knoll. There is a collection of significant trees and a rock bluff in this immediate area. These are being maintained.
- The building sites are located parallel to and below the ridgeline. Rooftops are varied in height, following the contours of the site.
- Scenic Features on this site include the treed knoll at the top of the ridge and the ridgeline itself. These form a vital part of this development. Views will exist following the completion of the development. Some exist now, as seen through the existing dense forest.
- Views from the site are expected to be varied including the Strait of Georgia and the on-site forest canopy.
- Views from the homes will be un-obstructed by each other as a result of following the natural terrain. The buildings will look into and over the forest below. The upper row of buildings will look over the buildings below. The ocean views from the upper floors of these residences could be expansive.

2.7 Natural Environment – refer to Environ. Report – AE Engineering Ltd.
2.7.1 Environmental Protection – refer to Environ. Report – AE Engineering Ltd.
2.7.2 Vegetation and Landscape – refer to Environ. Report – AE Engineering Ltd.
2.7.3 Revegetation and Landscaping – Refer to 4-Site Landscape Architecture Concept
2.8 Works and Services – Refer to Civil Engineering Report – Herold Eng.
2.8.1 Stormwater Management – Refer to Civil Engineering Report – Herold Eng.

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2.8.2 Road Design – Refer to Civil Engineering Report – Herold Eng.
2.8.3 Property Access – Refer to Civil Engineering Report – Herold Eng.
2.8.4 Municipal Services and Utilities – Refer to Civil Engineering Report – Herold Eng.

2.9 Buildings and Structures

2.9.1 Building Setbacks

- The building setbacks from the property lines far exceed the requirements of the Zoning Bylaw - R10 Zone.

2.9.2 Building Height and Mass

- This project will require a Height Variance to be constructed as designed. The R10 zone allows for a 7m maximum building height for a flat roof design. We are proposing various building heights to a maximum of 13.2 meters.
- The building masses vary in length, width and height. The upper floors of the buildings step back with balconies and rooftop patios, reducing the visual mass of the building. The ground level garage and entry doors are also set back with a narrow overhang immediately above.
- The buildings are set into the hillsides to integrate them into the natural form of the site. The buildings are intentionally set back into the banks, eliminating the need for retaining walls.
- Concrete retaining walls are used to create flat areas on-site for vehicle and pedestrian access only along the bottom of the site. Buildings areas and roadways will be constructed on cut/ fill areas.

2.10 Inventory Assessment and Plan Requirements

2.10.1 Site Survey - Refer to Turner & Associates Land Survey
2.10.2 Geotechnical Evaluation – Refer to Geotech Eng. Assessment – LEA
2.10.3 Environmental Assessment – Refer to Environ. Report – AE Engineering Ltd.
2.10.4 Tree Retention / Removal Plan – Refer to Arborist Report - Diamond Head
2.10.5 Grading Plan – Refer to Civil Engineering Report – Herold Eng.
2.10.6 Drainage Management Plan – Refer to Civil Engineering Report – Herold Eng.
2.10.7 Erosion Control Plan – Refer to Geotech Eng. Assessment – LEA

Appendix A Fire Protection for Interface Areas

- The buildings are located within the ring-road, creating a ‘defensible space’ between the building faces and the adjacent forested areas.

Appendix B Suggestions for Building Design on Steep Slopes

- Balconies are included in every unit of the development. Rooftop patios are included in some of the units and are intended to form a part of the rainwater collection system. These will all could be used for outdoor living and gardening. Balconies are a part of the building mass, sometimes cantilevered but not perched on tall columns. This creates a less cluttered lock to the design.

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- Garages are provided for each townhouse unit. Private driveways are provided at each garage entrance providing additional surface parking.
- Building Materials. The building designs are modern, and the building exteriors will be finished using a combination of glass, cement board panels, metal cladding and natural stone. Finishes and trims will be of a high-quality, reflecting the character of the design. The colours selected will reflect the natural environment and not clash or appear foreign in the landscape.

End of Design Rationale

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Date: August 21, 2020

Height Variance Rationale – Development Permit Application – 5320 Tanya Dr. – Nanaimo

This project will require a Height Variance in order to be constructed as designed.

R10 Zone

Maximum Allowable Building Height (flat roof design)	7.0 meters
Proposed Building Height	
• Lower Townhouses- 4 stories	8.2
• Upper Townhouses – 4 stories	13.2
Maximum allowable Wall Height	7.32 meters
Proposed Wall Height	
• Lower Townhouses- 4 stories	13.2
• Upper Townhouses – 4 stories	13.2

Discussion.
As can be seen in the Site Sections, the buildings are 'nestled' into the existing sloped grades. Therefore, the backdrop to the lower buildings is not sky, but rather rock bluffs and trees. A lightwell has been included in the design to provide fresh air through cross ventilation and natural light to the back of the townhouse.
The backdrop to the upper buildings is the natural ridge in the landscape. The roofline of upper building is approximately parallel to and lower in elevation than the ridgeline. Because no trees are being removed from the ridge, the visual continuity of the 'tops of trees' along the ridge will not be disrupted. The buildings will be viewed as being near the ridge, not on it.

The additional height does not change the apparent 'skyline' of the ridge, allowing it to remain the dominant feature in the landscape.

This height has been increased to;

- Cluster the building floor areas into a denser area of the site, leaving the remaining un-developed in its natural state, while still meeting the desired density.
- Increase the ocean view from each unit, by having the additional floor of living space as well as the rooftop patio in some locations.
- Create more energy conscious buildings by providing an increased floor area without creating more wall or roof area, resulting in lower energy consumption per m2.

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Building Height and Mass

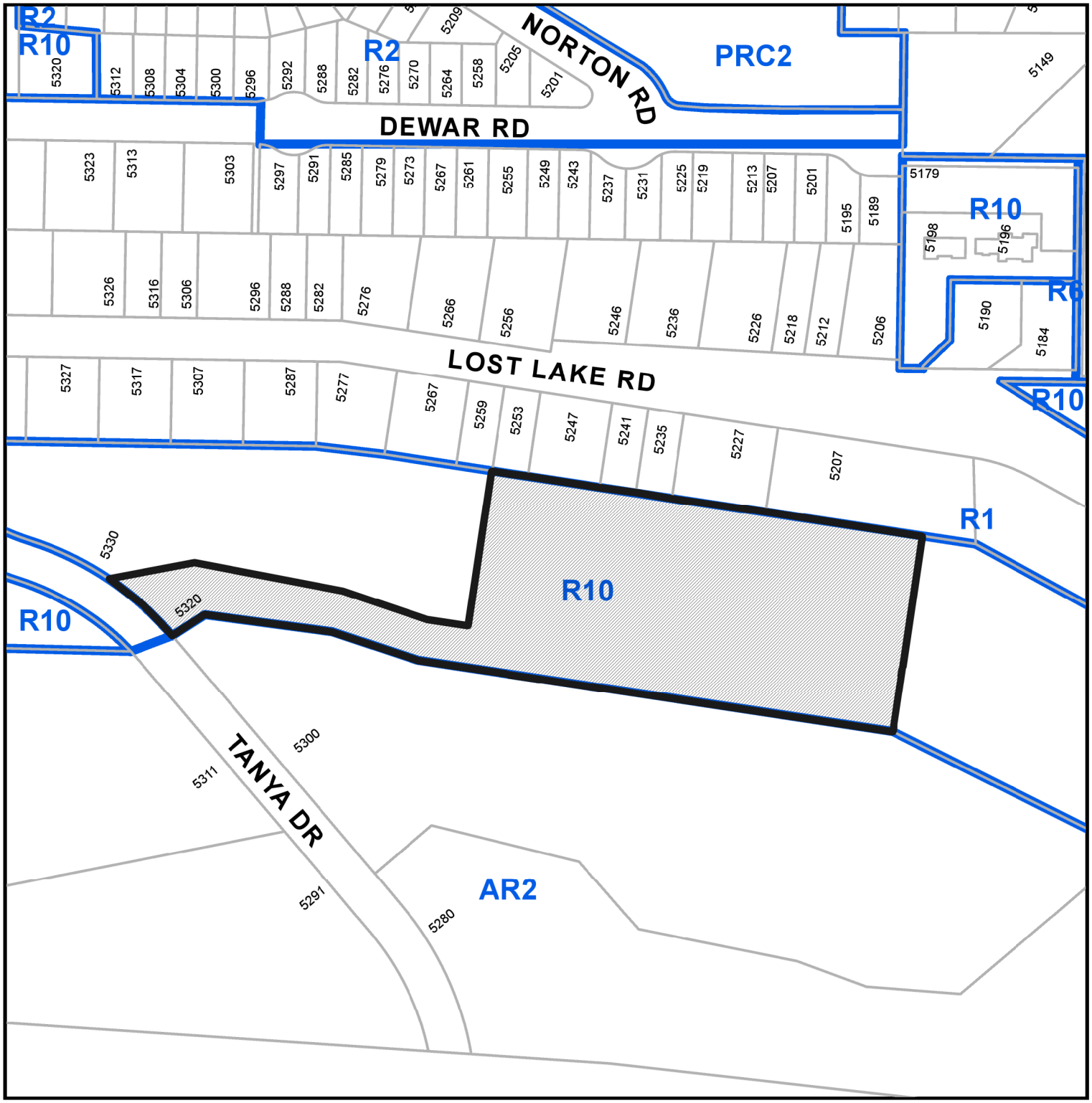
- The upper floors of all buildings are partially set back from the façades, with the balconies and sometimes rooftop patios, reducing the visual mass of the building.
- The balconies on all buildings include a recessed portion, breaking up the tall expanse of exterior wall. Cantilevered sections of the balconies reinforce this idea.
- The Townhouse ground level garage and entry doors are also set back from the main façade with a narrow overhang immediately above. This feature provides human scale a at the ground plane and assists in breaking up the building mass.
- The buildings are set into the hillsides to integrate them into the natural form of the site. The buildings are intentionally cut into the slopes, to avoid extensively high foundation walls being exposed on the downslope side. The maximum height of a cut rock face is 9.0 meters.
- A patterned concrete retaining wall (maximum 5 meters in height) are used to create flat areas for vehicle and pedestrian access only. Buildings will be constructed on newly filled / retained lands and land formed by cutting into the bank.

End of Variance Rationale

bjk architecture inc.
Brian Kapuscinski, Architect AIBC, MRAIC, M. Arch., LEED®AP

2122 Brandon Rd.
Shawnigan Lake, BC
V0R 2W3
T 250.891.1602
brian@bjkarch.com
www.bjkarch.com

LOCATION PLAN

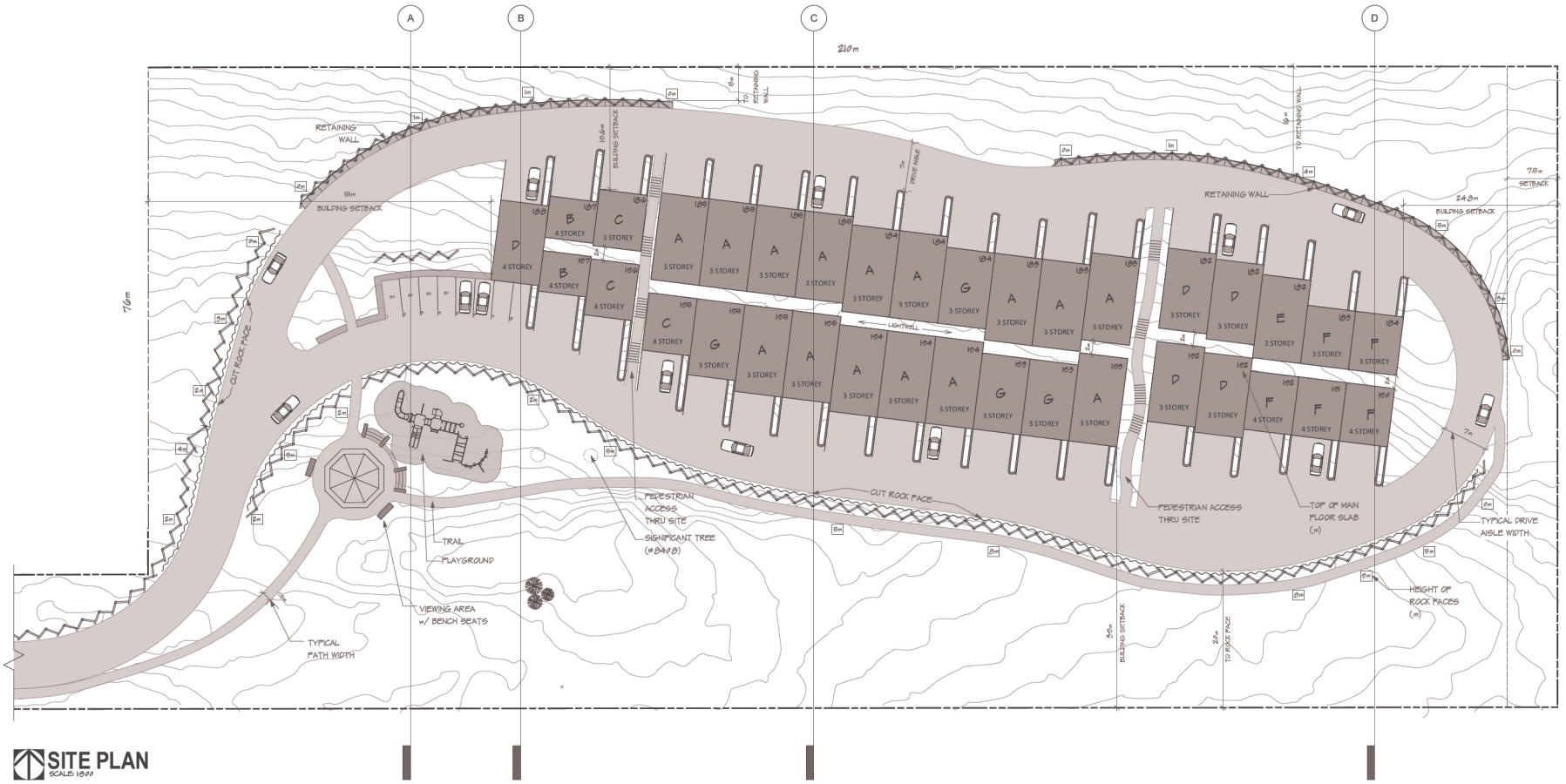


DEVELOPMENT PERMIT NO. DP001186

CIVIC: 5320 TANYA DRIVE

LEGAL: LOT 2, DISTRICT LOT 55, WELLINGTON DISTRICT, PLAN 47120

Subject Property



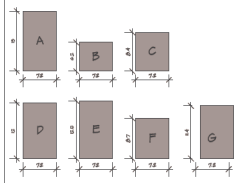
SITE PLAN

SCALE: 1:500

LEGEND

- RETAINING WALL
- SPLIT RAIL FENCE
- CUT ROCK FACE
- WALL HEIGHT OF RETAINING WALLS & CUT ROCK FACE
- EV — ELECTRIC VEHICLE CHARGING STATION
- 1.0 METER CONTOUR LINE

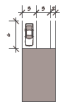
TOWNHOUSE MIX



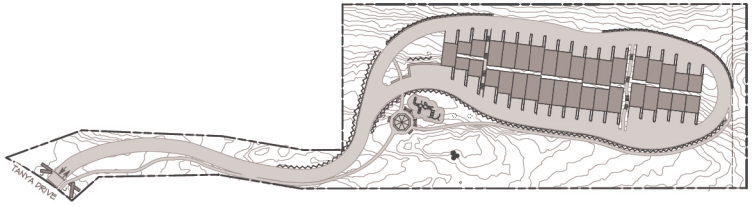
A = 15 UNITS
B = 2 UNITS
C = 3 UNITS
D = 8 UNITS
E = 1 UNIT
F = 5 UNITS
G = 4 UNITS

35 TOWNHOUSE UNITS

TYPICAL PARKING STALL DIMENSIONS



KEY PLAN



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HAYAT RESIDENCES

TANYA DRIVE, NANAIMO, BC

SITE PLAN

SCALE:
CMW
BJK
DATE: 09/28/2020

D1.1

LEGEND

- CRITICAL ROOT ZONE
- NO-BUILD ZONE
- TREE PROTECTION ZONE AND FENCING
- SURVEYED TREE TO BE RETAINED
- UN-SURVEYED TREE TO BE RETAINED (MUST BE SURVEYED)
- TREE TO BE REMOVED

NOTES

1. The location of un-surveyed trees on this plan is approximate. Their location and ownership cannot be confirmed without being surveyed by a Registered BC Land Surveyor.
2. All tree protection fencing must be built to the relevant municipal bylaw specifications.The dimensions shown are from the outer edge of the stem of the tree.
3. The tree protection zone shown is a graphical representation of the critical root zone, measured from the outer edge of the stem of the tree. (½ the trees diameter was added to the graphical tree protection circles to accommodate the survey point being in the center of the tree)
4. No work is permitted within the Tree Protection Zone with the exception of swales. Swale construction is only permitted under the direct supervision of an arborist.
5. The 1.5m area No Build Zone does not allow for any building foundation wall encroachment. Excavation is permitted within this area under the direct supervision of an arborist.
6. Drainage works such as lawn basins, associated piping or services are permitted within the No Build Zone under the direct supervision of an arborist.
7. This plan is based on a topographic and tree location survey provided by the owners' Registered British Columbia Land Surveyor (BCLS) and layout drawings provide by the owners' Engineer (P Eng).
8. This plan is provided for context only, and is not certified as to the accuracy of the location of features or dimensions that are shown on this plan. Please refer to the original survey plan and engineering plans.

REFERENCE DRAWINGS

1. Base Survey by: Turner & Associates Land Surveying

DIAMOND HEAD
3559 COMMERCIAL STREET
VANCOUVER BC | V5N 4E8
T 604.733.4886 | F 604.733.4879

Drawing title: Tree Management Plan
Project address: 5320 Tanya Drive, Nanaimo BC
Client: Mohammed Doar

Drawing No: 03
Date: 2020/03/25
Drawn by: CC
Page Size: TABLOID 11"x17"

LEGEND

- CRITICAL ROOT ZONE
- NO-BUILD ZONE
- TREE PROTECTION ZONE AND FENCING
- SURVEYED TREE TO BE RETAINED
- UN-SURVEYED TREE TO BE RETAINED (MUST BE SURVEYED)
- TREE TO BE REMOVED

NOTES

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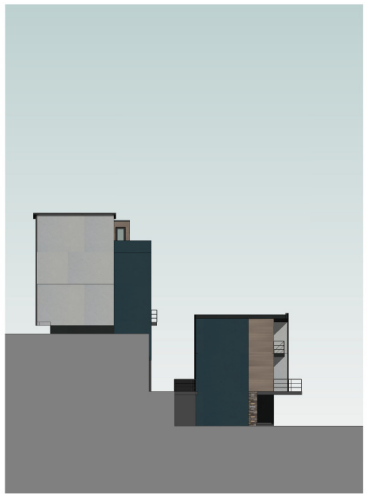
Drawing No: 03
Date: 2020/03/25
Drawn by: CC
Page Size: TABLOID 11"x17"

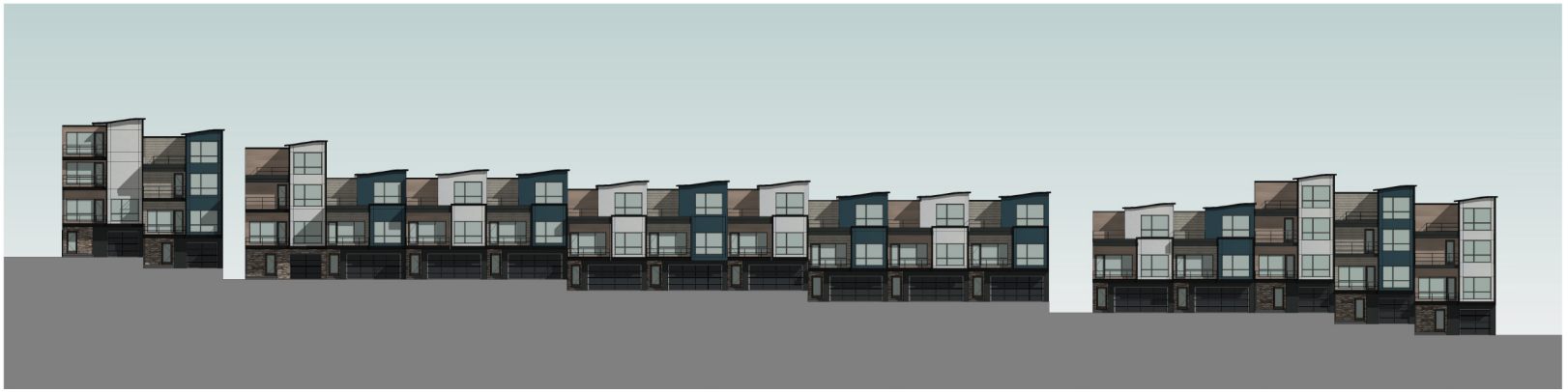
Hayat Residences - Nanaimo		
21-Aug-20		
Project Data Summary		
Civic Address	5320 Tanya Dr.	
Legal Description	Lot 2, District Lot 55	
	Wellington District	
	Plan 47120	
Existing Zoning	R-10 Residential - Steep Slope	
Site Area	2.3706	ha
	23706	m2
Density (no. of residential units)		
allowable (16 units / ha.)	37.93	
proposed	35	
Total Building Footprint	2722	m2
Total Floor Area (Living Area)	5348	m2
Building Height		
allowable - flat roof (approx 2 stories)	7	m
Lower Townhouses - flat roof (4 stories)	8.2	Variance Required
Upper Townhouses - flat roof (4 stories)	13.2	Variance Required
Perimeter wall height		
allowable	7.32 m	m
Lower Townhouses	13.2	Variance Required
Upper Townhouses	13.2	Variance Required
Floor Area Ratio		
allowable	0.450	
proposed	0.226	
Site Coverage		
allowable	40%	
proposed	11.5%	
Setbacks	allowable	proposed
front yard (Tanya)	4.5	approx. 200
side (east)	1.5	24.8
flanking side (west)	4	51
rear yard (north)	7.5	19.6
Parking	required	proposed
2 bedroom units (10 x 1.8 = 12.6)	18	20
3 bedrooms units (25 x 2 = 50)	50	50
Total	68	70
Visitor parking (1 per 22)	4	8
Total Parking Stalls	72	78



EAST ELEVATION 1:200

NORTH ELEVATION 1:200

WEST ELEVATION 1:200



SOUTH ELEVATION 1:200

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HAYAT RESIDENCES

TANYA DRIVE, NANAIMO, BC

SITE ELEVATIONS

SCALE:	1 : 200
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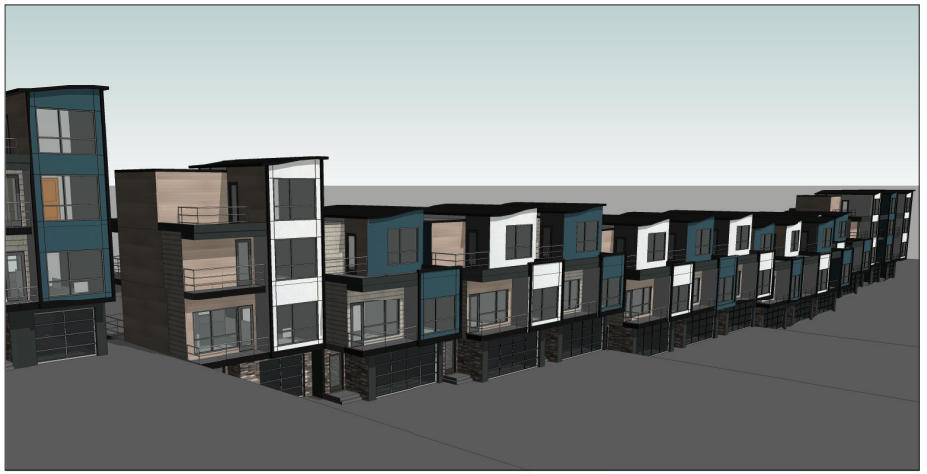
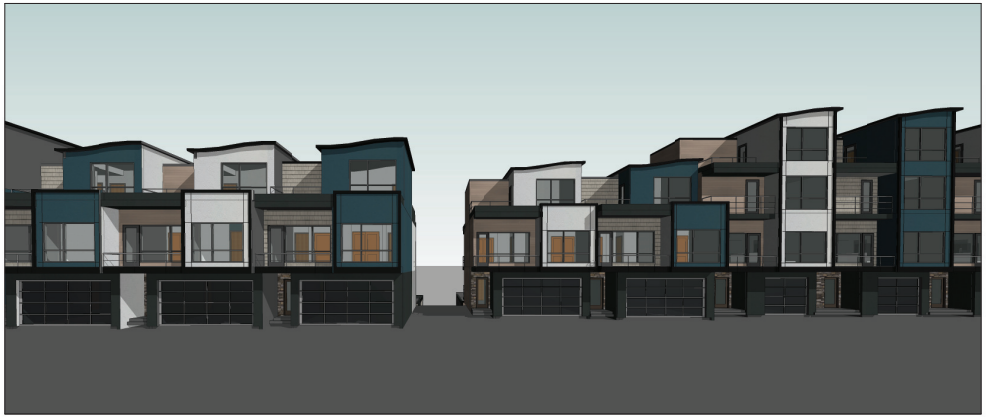
CHECKED BY:	BJK
DATE:	09/28/2020

D5.2

1 View Lower Thru



2 View Upper



3 View Upper Thru

4 View Lower

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HAYAT RESIDENCES

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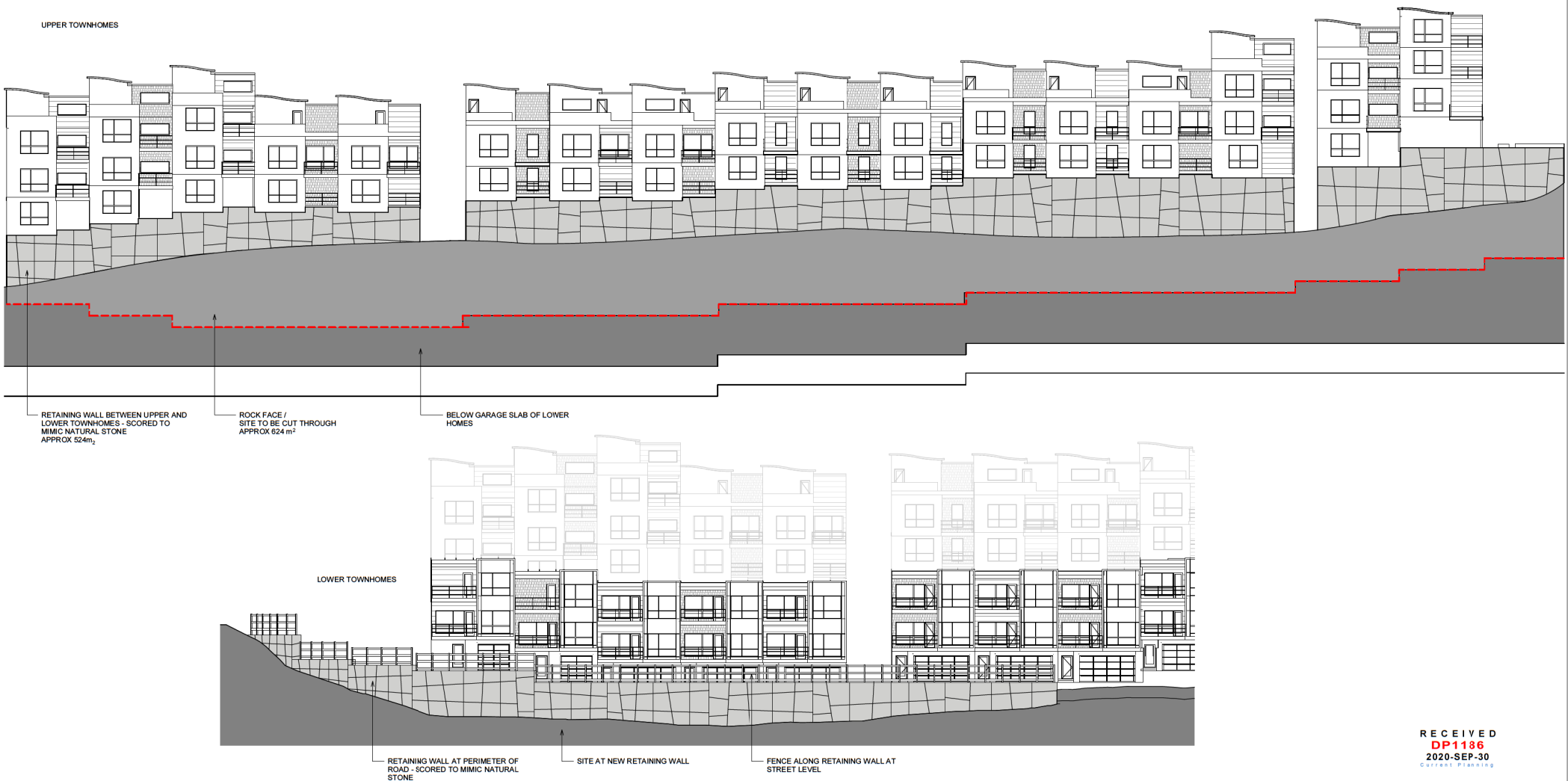
3D ELEVATIONS

SCALE:
DRAWN BY: ART
CHECKED BY: BJK
DATE: 08/21/2020

D5.4



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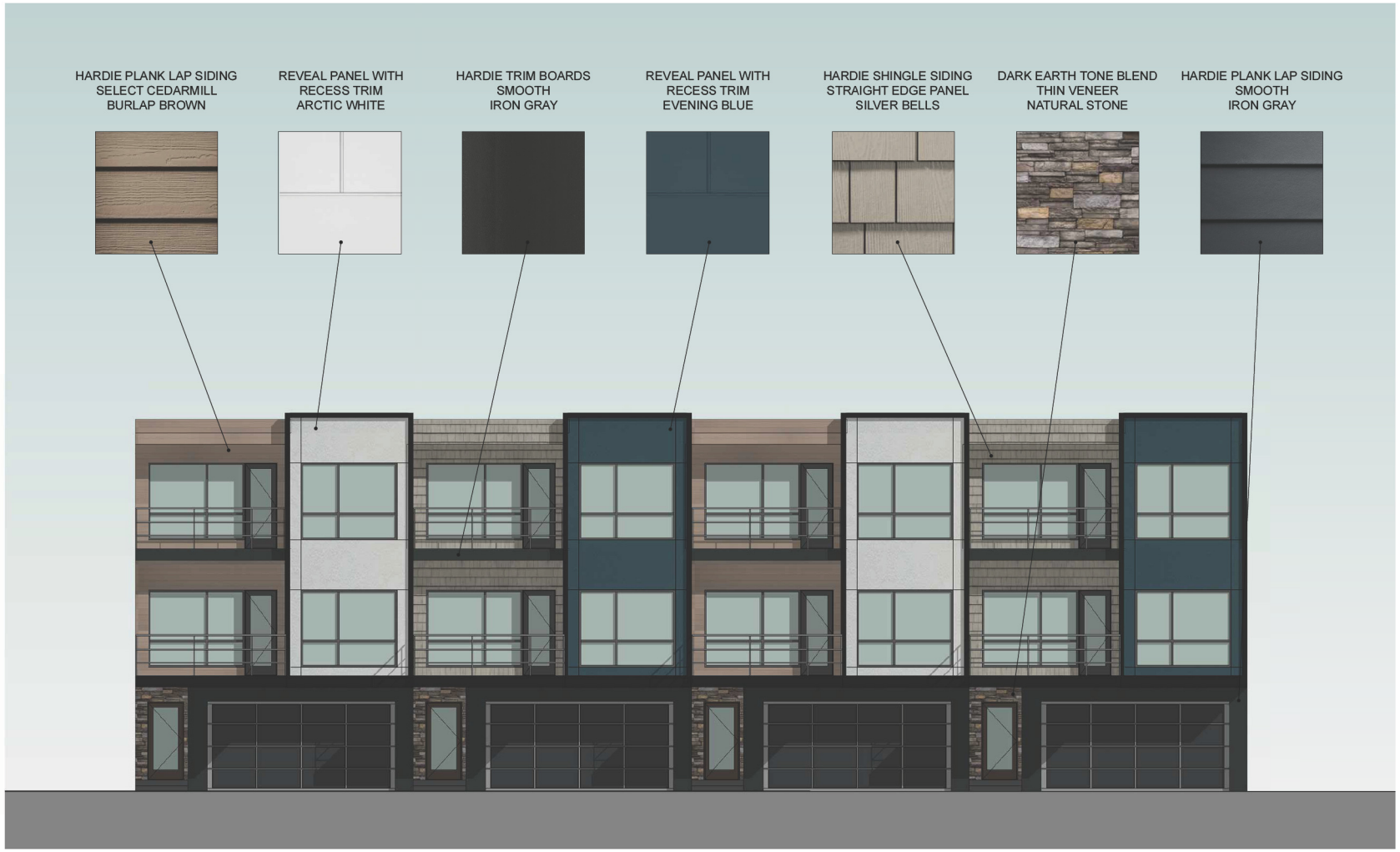
TANYA DRIVE, NANAIMO, BC

RETAINING WALLS

SCALE:	1 : 150
DRAWN BY:	ART
CHECKED BY:	BJK
DATE:	09/28/2020

D4.7



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TOWNHOME MATERIALS BOARD

SCALE:	1 : 50
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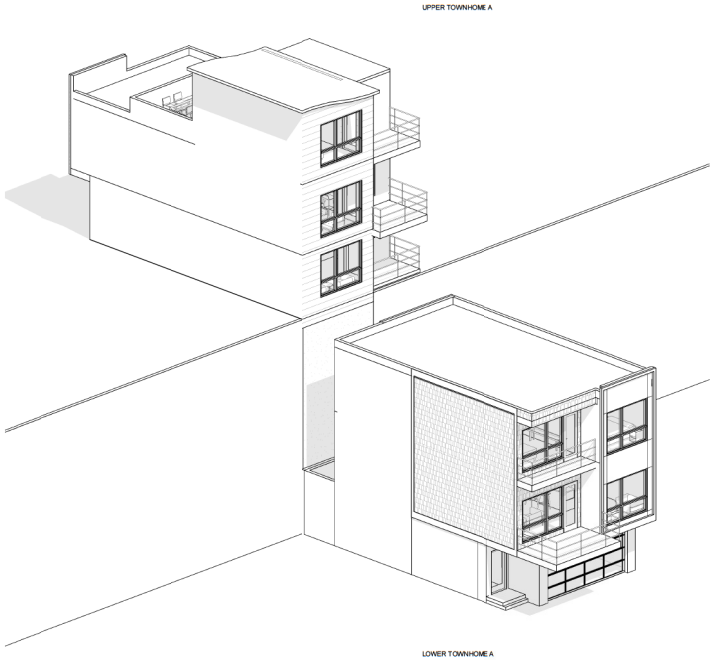
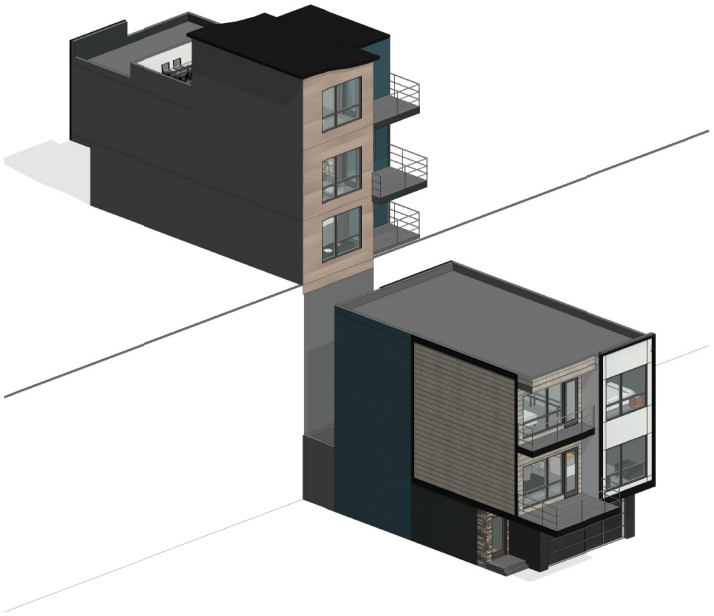
CHECKED BY:	BJK
DATE:	09/28/2020

D5.1



1 Stacked Ortho



2 Stacked Ortho Materials

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HAYAT RESIDENCES

TANYA DRIVE, NANAIMO, BC

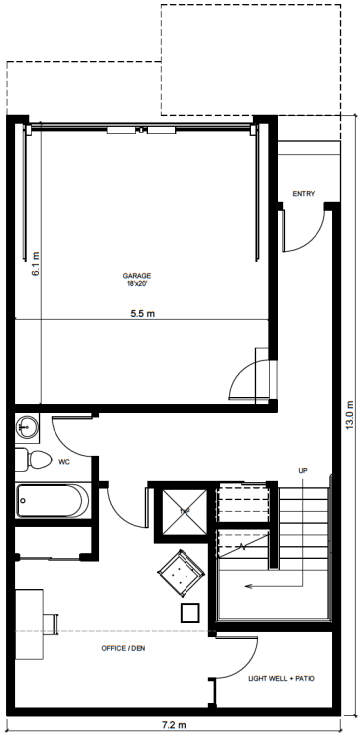
ORTHO VIEW

SCALE:
DRAWN BY: ART
CHECKED BY: BJK
DATE: 09/28/2020

D5.3

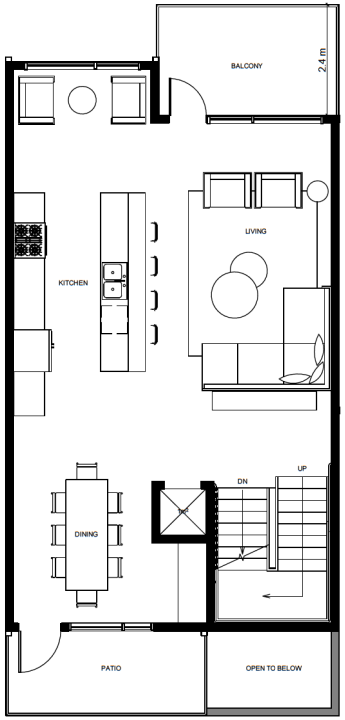
UNIT A LOWER
9 UNITS

3 BR + OFFICE, 3 BATH, 2 CAR GARAGE
AREA 181m² - 1950 SQFT



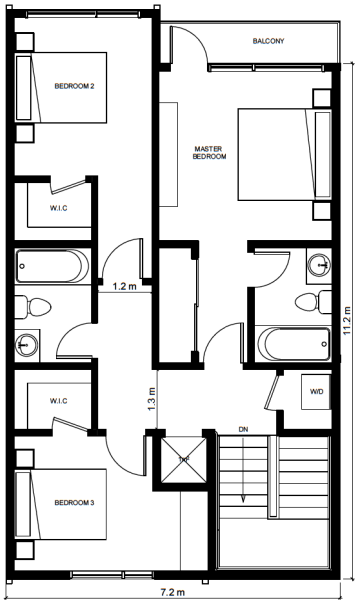
1 TownHomes L1
1 : 50

FOOTPRINT 91m²
GARAGE 34m²
AREA INTERIOR 43m²
AREA EXTERIOR 4²



2 TownHomes L2
1 : 50

AREA INTERIOR 69m²
AREA EXTERIOR 11m²



3 TownHomes L3
1 : 50

NORTH

AREA INTERIOR 69m²
AREA EXTERIOR 3m²

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LOWER TOWNHOMES - A PLANS

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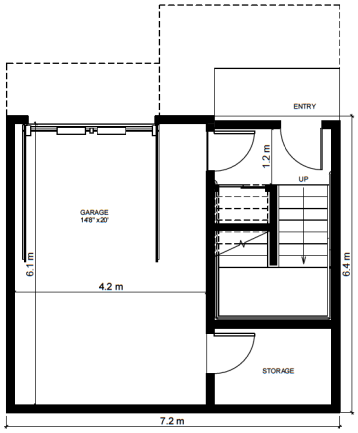
DATE:	09/28/2020

D2.1

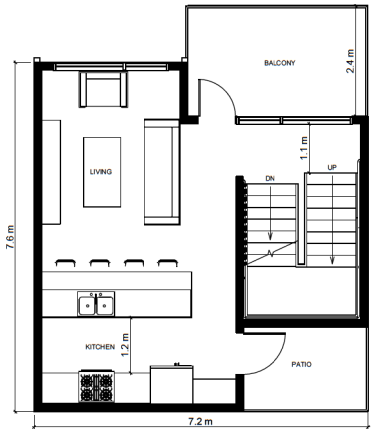
UNIT B LOWER 2 BR, 2.5 BATH, SINGLE CAR GARAGE
1 UNIT AREA 107m² - 1152 SQFT



1 TownHome B L1
1 : 50

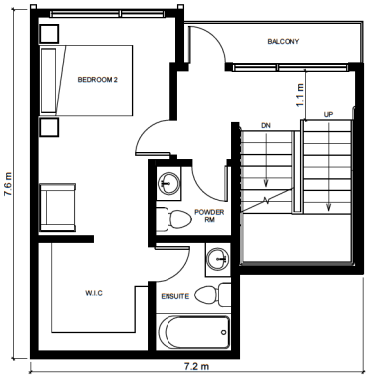
FOOTPRINT 46m²

GARAGE 25m²
STORAGE 4m²
ENTRY 11m²



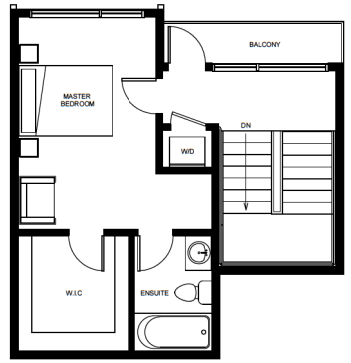
2 TownHome B L2
1 : 50

AREA INTERIOR 32m²
AREA EXTERIOR 8m²



3 TownHome B L3
1 : 50

AREA INTERIOR 32m²
AREA EXTERIOR 3m²



4 TownHome B L4
1 : 50

NORTH

AREA INTERIOR 32m²
AREA EXTERIOR 3m²

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LOWER TOWNHOMES - B PLANS

SCALE:	1 : 50
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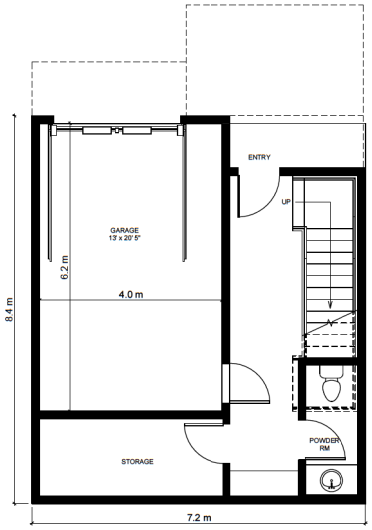
DATE:	09/28/2020

D2.2

UNIT C LOWER
1 UNIT

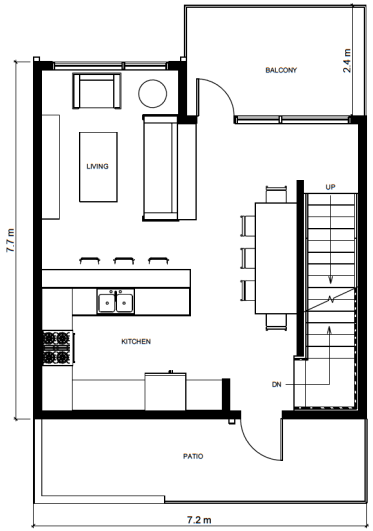
2 BR, 2.5 BATH, SINGLE CAR GARAGE
AREA 106m² - 1141 SQFT



1 TownHome C L1
1 : 50

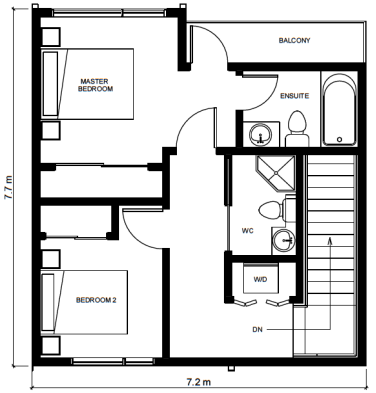
FOOTPRINT 57m²

GARAGE 25m²
AREA INTERIOR 26m²



2 TownHome C L2
1 : 50

AREA INTERIOR 40m²
AREA EXTERIOR 15m²



3 TownHome C L3
1 : 50

NORTH

AREA INTERIOR 40m²
AREA EXTERIOR 3m²

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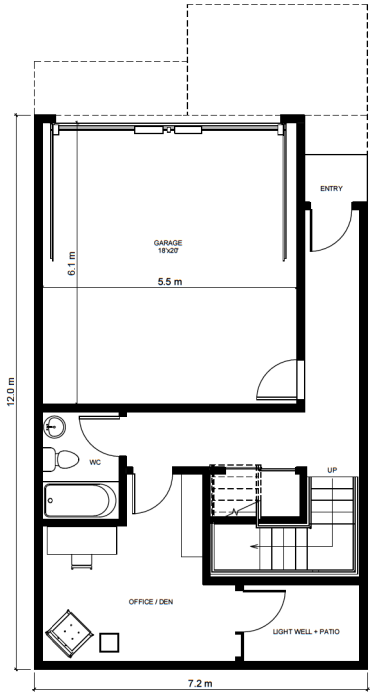
LOWER TOWNHOMES - C PLANS

SCALE:	1 : 50
DRAWN BY:	ART
CHECKED BY:	BJK
DATE:	09/28/2020

D2.3

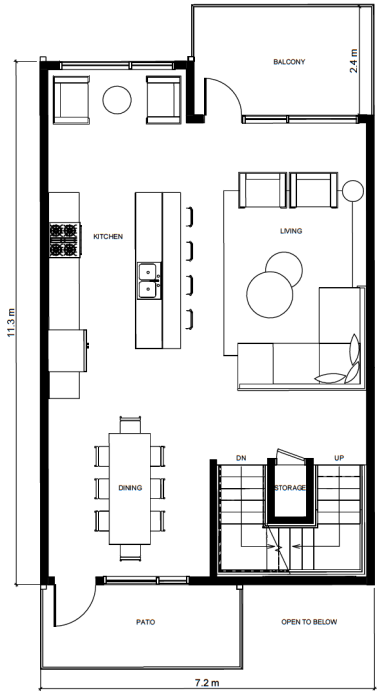
UNIT D LOWER 3 BR + OFFICE, 3 BATH, 2 CAR GARAGE
3 UNITS AREA 172m² - 1852 SQFT
- 1 WITH ROOFTOP PATIO,
- 2 WITHOUT ROOFTOP PATIO



1 TownHome D L1
1 : 50

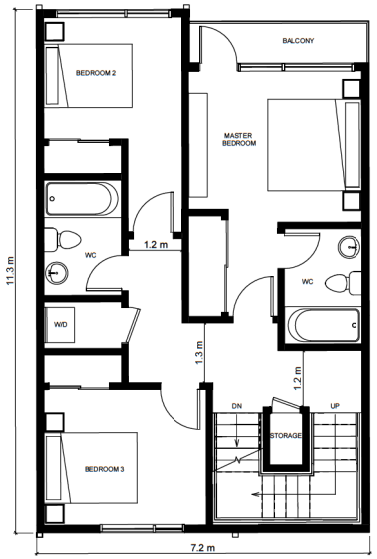
FOOTPRINT 84m²

GARAGE 34m²
AREA INTERIOR 37m²
AREA EXTERIOR 4²



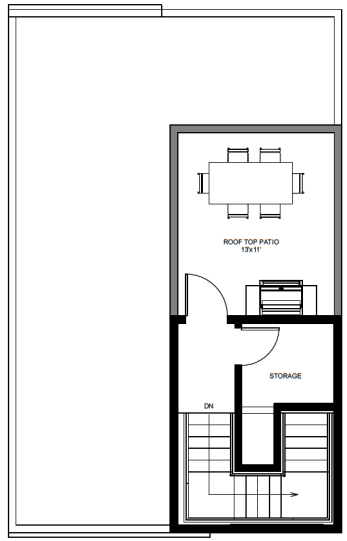
2 TownHome D L2
1 : 50

AREA INTERIOR 64m²
AREA EXTERIOR 11m²



3 TownHome D L3
1 : 50

AREA INTERIOR 64m²
AREA EXTERIOR 3m²



4 TownHome D Roof
1 : 50

NORTH

AREA INTERIOR 7m²
AREA EXTERIOR 13m²

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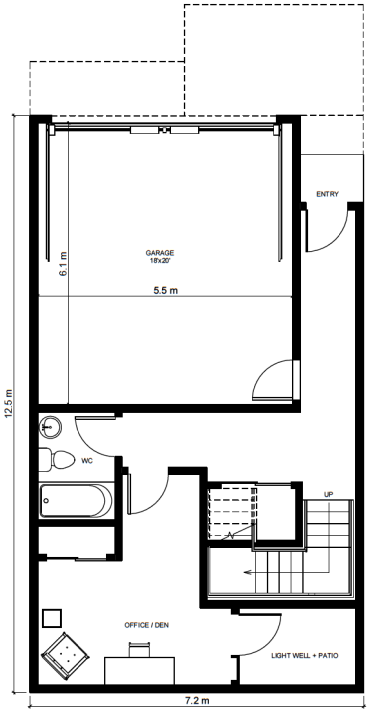
LOWER TOWNHOMES - D PLANS

SCALE:	1 : 50
DRAWN BY:	ART
CHECKED BY:	BJK
DATE:	09/28/2020

D2.4

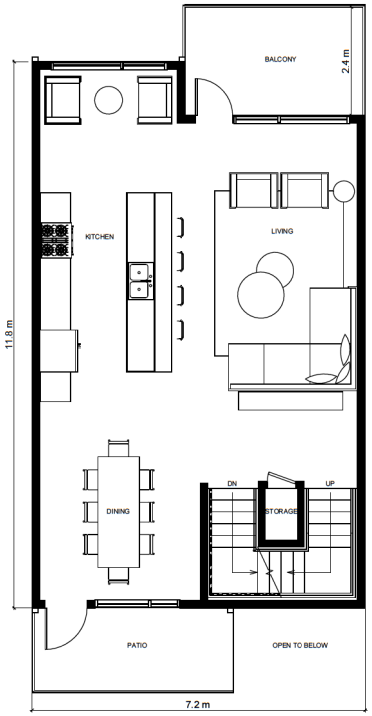
UNIT E LOWER 3 BR + OFFICE, 3 BATH, 2 CAR GARAGE
1 UNIT AREA 178m² - 1916 SQFT



1 TownHome E L1
1 : 50

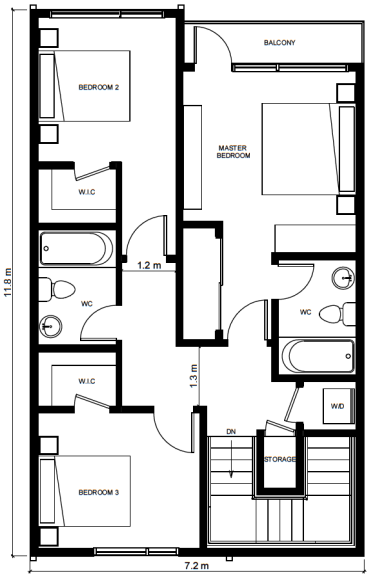
FOOTPRINT 88m²

GARAGE 34m²
AREA INTERIOR 42m²
AREA EXTERIOR 4²



2 TownHome E L2
1 : 50

AREA INTERIOR 68m²
AREA EXTERIOR 11m²



3 TownHome E L3
1 : 50

NORTH

AREA INTERIOR 68m²
AREA EXTERIOR 3m²

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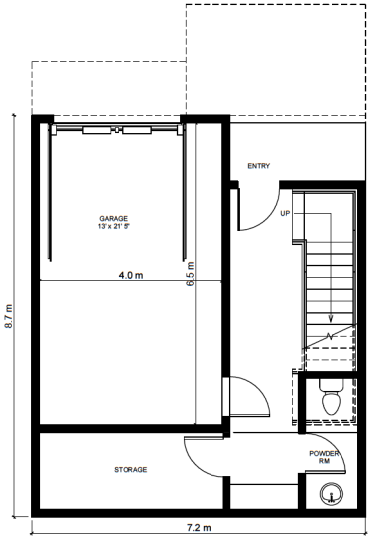
LOWER TOWNHOMES - E PLANS

SCALE:	1 : 50
DRAWN BY:	ART
CHECKED BY:	BJK
DATE:	09/28/2020

D2.5

UNIT F LOWER
2 UNITS

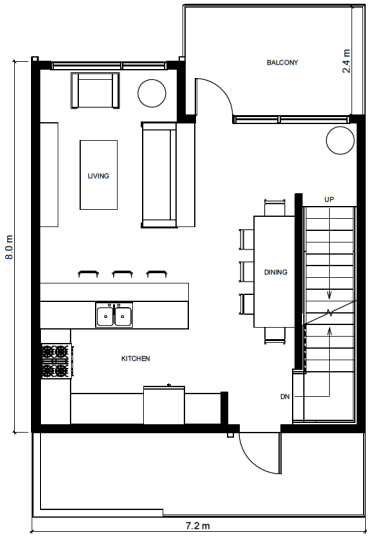
2 BR, 1.5 BATH, 1 CAR GARAGE
AREA 110m² - 1184 SQFT



1 TownHome F L1
1 : 50

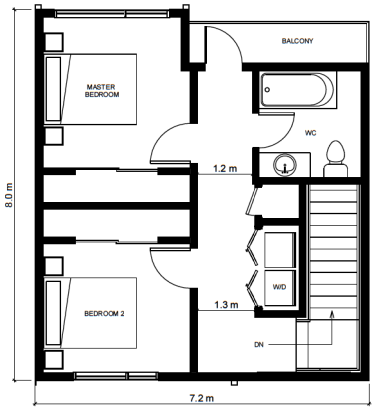
FOOTPRINT 59m²

GARAGE 26m²
AREA INTERIOR 26m²



2 TownHome F L2
1 : 50

AREA INTERIOR 42m²
AREA EXTERIOR 12m²



3 TownHome F L3
1 : 50

NORTH

AREA INTERIOR 42m²
AREA EXTERIOR 3m²

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HEROLD ENGINEERING

HAYAT RESIDENCES

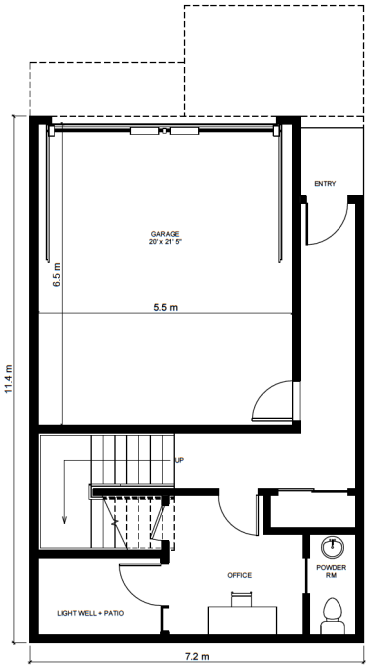
TANYA DRIVE, NANAIMO, BC

LOWER TOWNHOMES - F PLANS

SCALE:	1 : 50
DRAWN BY:	ART
CHECKED BY:	BJK
DATE:	09/28/2020

D2.6

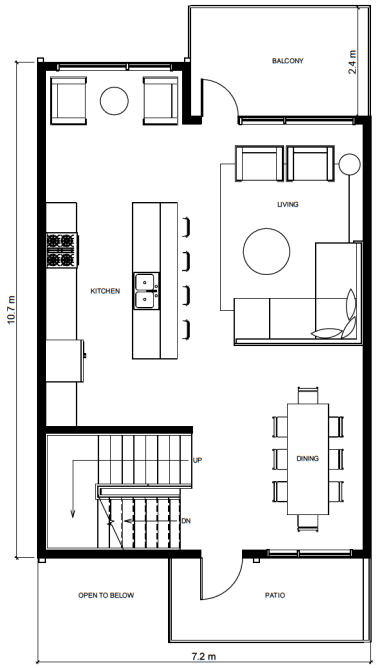
UNIT G LOWER 2 BR + DEN + OFFICE, 2.5 BATH, 2 CAR GARAGE
1 UNIT AREA 149m² - 1604 SQFT



1 TownHome G L1
1 : 50

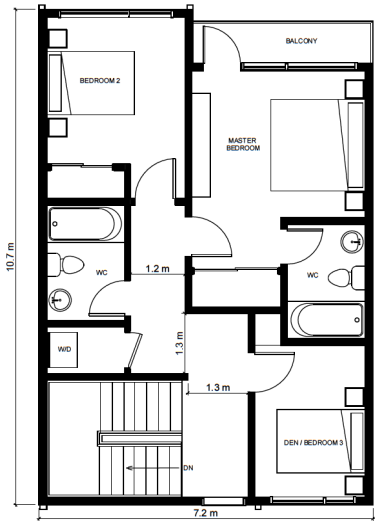
FOOTPRINT 80m²

GARAGE 36m²
AREA INTERIOR 31m²
AREA EXTERIOR 4²



2 TownHome G L2
1 : 50

AREA INTERIOR 59m²
AREA EXTERIOR 12m²



3 TownHome G L3
1 : 50

NORTH

AREA INTERIOR 59m²
AREA EXTERIOR 3m²

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HAYAT RESIDENCES

TANYA DRIVE, NANAIMO, BC

LOWER TOWNHOMES - G PLANS

SCALE:	1 : 50
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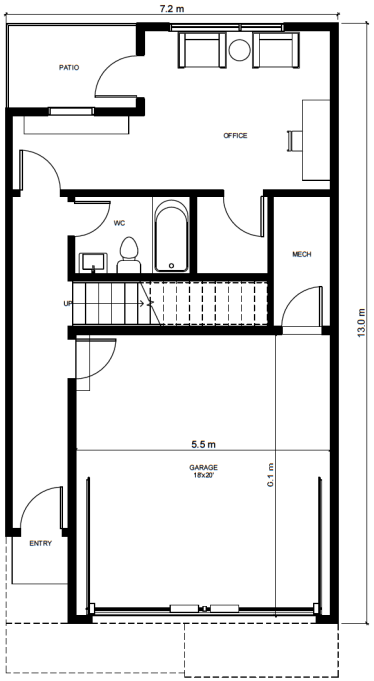
CHECKED BY:	BJK
DATE:	09/28/2020

D2.7

UNIT A UPPER
6 UNITS

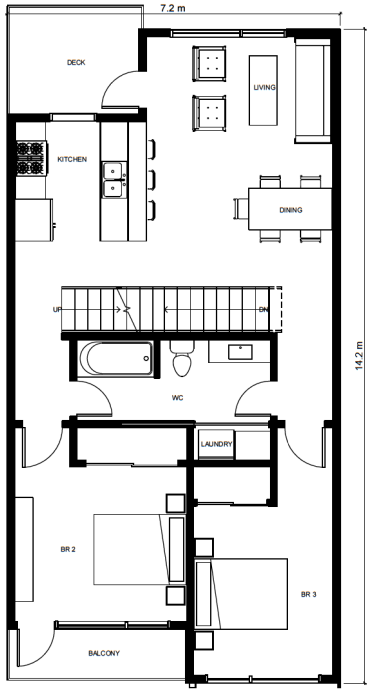
3 BR +OFFICE, 3 BATH, 2 CAR GARAGE
AREA 152m² - 1636 SQFT



1 Upper TownHome A L1
1 : 50

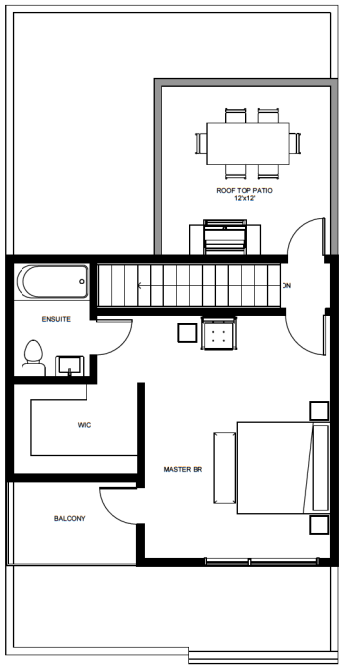
FOOTPRINT 86m²

GARAGE 34m²
AREA INTERIOR 44m²
AREA EXTERIOR 5²



2 Upper TownHome A L2
1 : 50

AREA INTERIOR 81m²
AREA EXTERIOR 10m²



3 Upper TownHome A L3
1 : 50

NORTH

AREA INTERIOR 34m²
AREA EXTERIOR 13m²

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HAYAT RESIDENCES

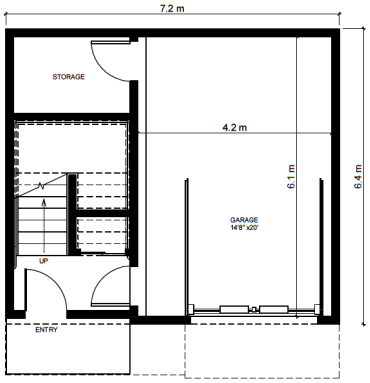
TANYA DRIVE, NANAIMO, BC

UPPER TOWNHOMES - A PLAN

SCALE:	1 : 50
DRAWN BY:	ART
CHECKED BY:	BJK
DATE:	09/28/2020

D3.1

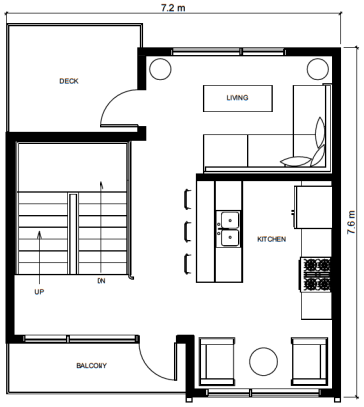
UNIT B UPPER 2 BR, 2 BATH, SINGLE CAR GARAGE
1 UNIT AREA 107m² - 1152 SQFT



1 Upper TownHome B L1
1 : 50

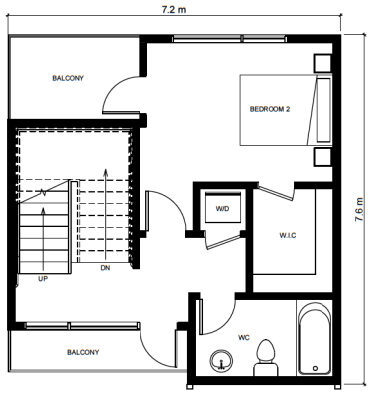
FOOTPRINT 46m²

GARAGE 25m²
STORAGE 4m²
ENTRY 11m²



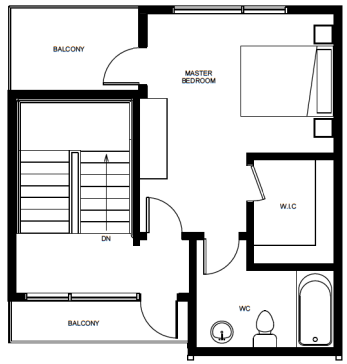
2 Upper TownHome B L2
1 : 50

AREA INTERIOR 32m²
AREA EXTERIOR 10m²



3 Upper TownHome B L3
1 : 50

AREA INTERIOR 32m²
AREA EXTERIOR 8m²



4 Upper TownHome B L4
1 : 50

NORTH

AREA INTERIOR 32m²
AREA EXTERIOR 8m²

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Current Planning

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HEROLD ENGINEERING

HAYAT RESIDENCES

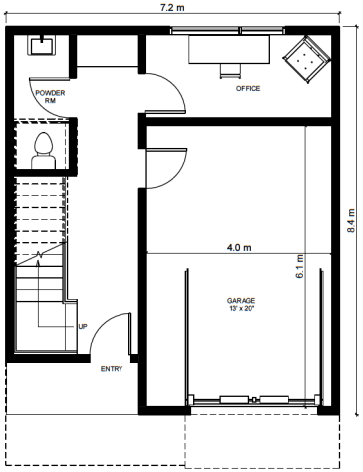
TANYA DRIVE, NANAIMO, BC

UPPER TOWNHOMES - B PLANS

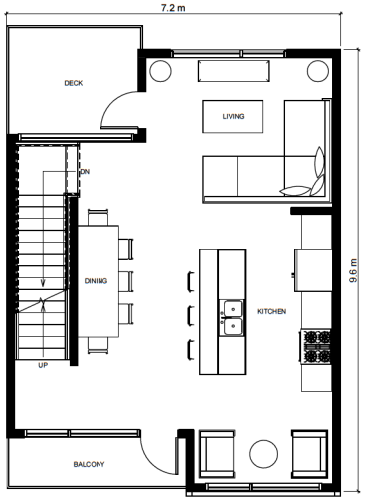
SCALE:	1 : 50
DRAWN BY:	ART
CHECKED BY:	BJK
DATE:	09/28/2020

D3.2

UNIT C UPPER 3 BR, + OFFICE, 2.5 BATH, SINGLE CAR GARAGE
2 UNITS AREA 147m² - 1583 SQFT



1 Upper TownHome C L1
1 : 50



2 Upper TownHome C L2
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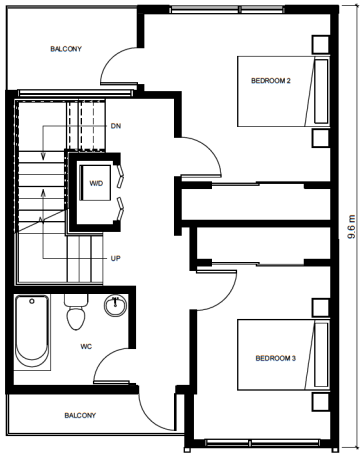

3 Upper TownHome C L3
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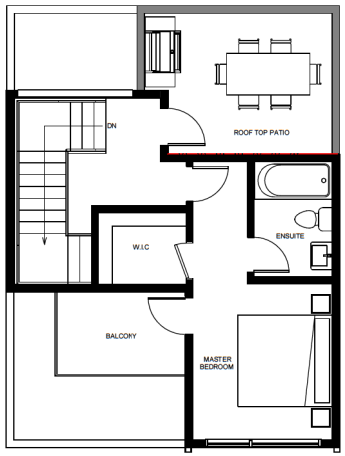

4 Upper TownHome C L4
1 : 50

NORTH

FOOTPRINT 57m²

GARAGE 25m²
AREA INTERIOR 26m²

AREA INTERIOR 47m²
AREA EXTERIOR 10m²

AREA INTERIOR 47m²
AREA EXTERIOR 8m²

AREA INTERIOR 27m²
AREA EXTERIOR 17m²

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HEROLD ENGINEERING

HAYAT RESIDENCES

TANYA DRIVE, NANAIMO, BC

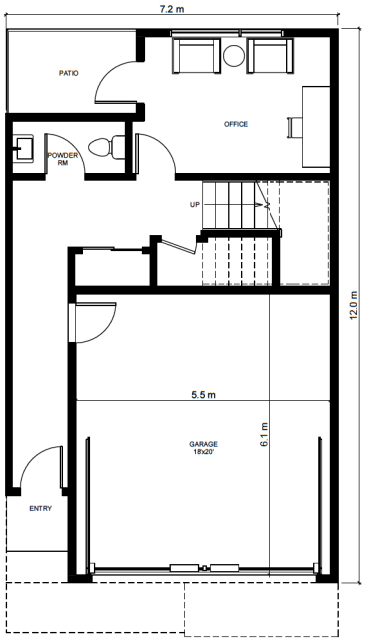
UPPER TOWNHOMES - C PLANS

SCALE:	1 : 50
DRAWN BY:	ART
CHECKED BY:	BJK
DATE:	09/28/2020

D3.3

UNIT D UPPER
2 UNITS

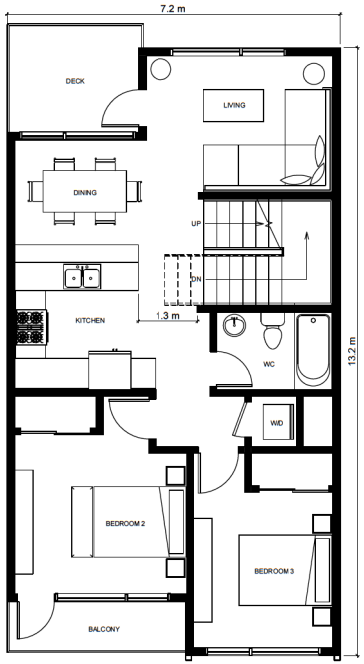
3 BR +OFFICE, 2.5 BATH, 2 CAR GARAGE
AREA 142m² - 1530 SQFT



1 Upper TownHome D L1
1 : 50

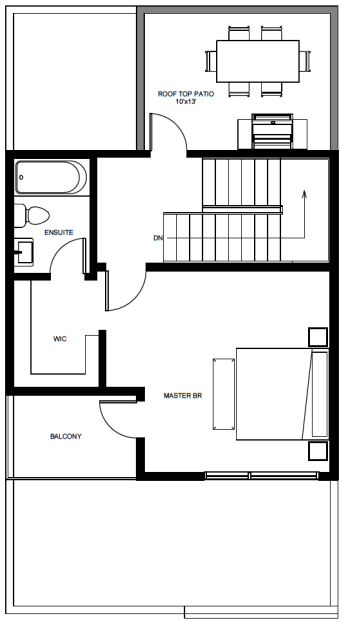
FOOTPRINT 86m²

GARAGE 34m²
AREA INTERIOR 37m²
AREA EXTERIOR 5m²



2 Upper TownHcme D L2
1 : 50

AREA INTERIOR 71m²
AREA EXTERIOR 10m²



3 Upper TownHome D L3
1 : 50

NORTH

AREA INTERIOR 34m²
AREA EXTERIOR 20m²

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HAYAT RESIDENCES

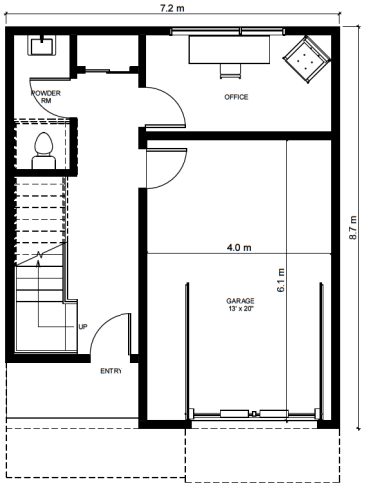
TANYA DRIVE, NANAIMO, BC

UPPER TOWNHOMES - D PLANS

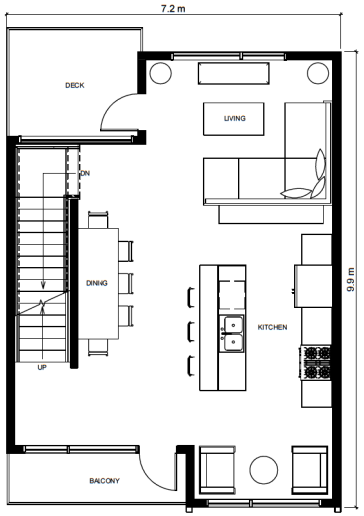
SCALE:	1 : 50
DRAWN BY:	ART
CHECKED BY:	BJK
DATE:	09/28/2020

D3.4

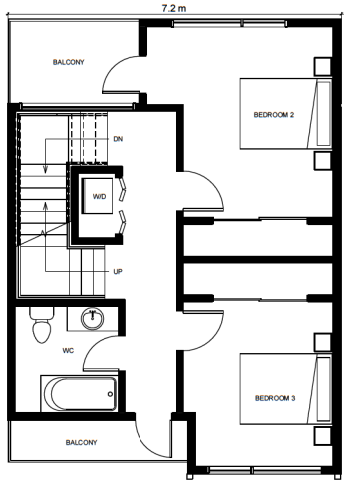
UNIT F UPPER 3 BR, 2.5 BATH, 1 CAR GARAGE
3 UNITS AREA 149m² - 1604 SQFT



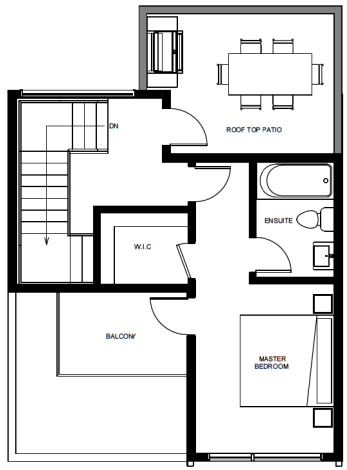
1 Upper TownHome F L1
1 : 50



2 Upper TownHome F L2
1 : 50



3 Upper TownHome F L3
1 : 50



4 Upper TownHome F L4
1 : 50

NORTH

FOOTPRINT 59m²

GARAGE 28m²
AREA INTERIOR 24m²

AREA INTERIOR 49m²
AREA EXTERIOR 10m²

AREA INTERIOR 49m²
AREA EXTERIOR 9m²

AREA INTERIOR 27m²
AREA EXTERIOR 17m²

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HAYAT RESIDENCES

TANYA DRIVE, NANAIMO, BC

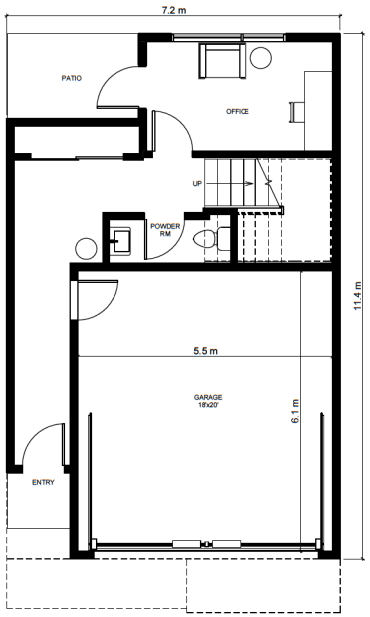
UPPER TOWNHOMES - F PLANS

SCALE:	1 : 50
DRAWN BY:	ART
CHECKED BY:	BJK
DATE:	09/28/2020

D3.5

UNIT G UPPER
3 UNITS

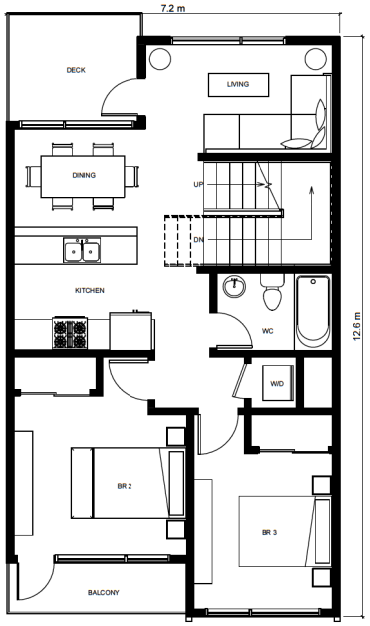
3 BR, 2.5 BATH, 1 CAR GARAGE
AREA 133m² - 1432 SQFT



1 Upper TownHome G L1
1 : 50

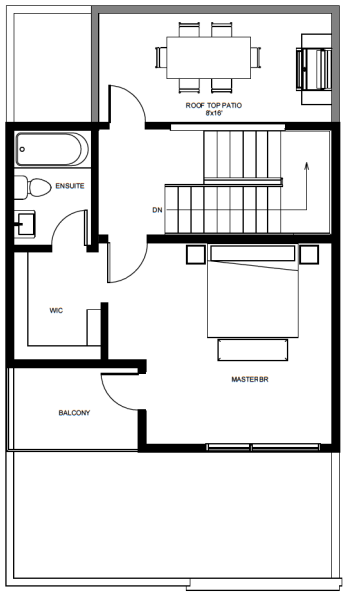
FOOTPRINT 79m²

GARAGE 34m²
AREA INTERIOR 33m²



2 Upper TownHome G L2
1 : 50

AREA INTERIOR 66m²
AREA EXTERIOR 10m²



3 Upper TownHome G L3
1 : 50

NORTH

AREA INTERIOR 34m²
AREA EXTERIOR 17m²

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HEROLD ENGINEERING

HAYAT RESIDENCES

TANYA DRIVE, NANAIMO, BC

UPPER TOWNHOMES - G PLANS

SCALE:	1 : 50
DRAWN BY:	ART
CHECKED BY:	BJK
DATE:	09/28/2020

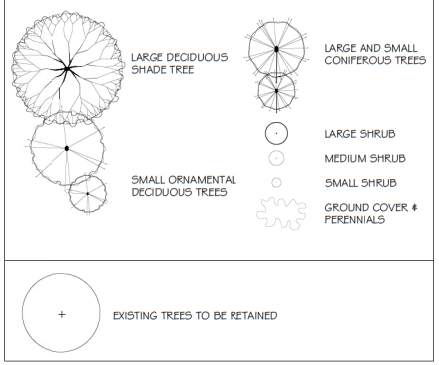
D3.6

PLANT LIST

	Key	Common Name	Latin Name	Size
Trees	VIMAP	Vine Maple	Acer circinatum	6cm Cal.
	RMAP	Red Maple	Acer rubrum var. 'Bowhall'	7cm Cal.
	JMAP	Japanese Maple	Acer palmatum var.'Bloodgood'	6cm Cal.
	SASK	Saskatoon Berry	Amelanchier alnifolia	5cm Cal.
	KAT	Katsura Tree	Cercidiphyllum japonicum	7cm Cal.
	PDOG	Pacific Dogwood	Cornus nuttallii var.'Eddie's White Wonder'	6cm Cal.
	GOAK	Garry Oak	Quercus garriana	5cm Cal.
	WRC	Western Red Cedar	Thuja plicata var. 'Excelsa'	2.2m Ht.
	BETU	River Birch	Betula nigra (Multistem*)	2.5m Ht.
Large Shrubs	CEAN	California Lilac	Ceanothus var.'Victoria'	1.5m Ht.
	SMAG	Star Magnolia	Magnolia stellata var.'Royal Star'	#5 Pot.
	PIER	Lily of the Valley Shrub	Pieris japonica var.'Forest Flame' & 'Valley Rose'	#5 Pot.
	LRPA	Rhododendron	Rhododenaron var.'Pink Walloper'	#7 Pot.
	LRHB	Rhododendron	Rhododenaron var. 'Gomer Waterer'	#7 Pot.
	THUJ	Ujmght Cedar	Thuja occidentalis var.'Smaragd'	1.5m Ht.
	HOLO	Oceanspray	Holodiscus discolor	#5 Pot.
	NINE	Pacific Ninebark	Physocarpos opulis	#5 Pot.
	MAH	Oregon Grape	Mahonia aquifolium	#5 Pot.
Medium Shrubs	ABE	Glossy Abelia	Abelia x grandiflora	#2 Pot.
	RDOG	Red Twig Dogwood	Cornus stolonifera	#2 Pot.
	SALA	Salal	Gaultheria shallon	#2 Pot.
	MAHC	Dwarf Oregon Grape	Mahonia aquifolium var.'Compacta'	#2 Pot.
	MRHA	Rhododendron	Rhododenaron var.'Unique'	
	MRHB	Rhododendron	Rhododenaron var. 'Christmas Cheer'	#5 Pot.
	RIBE	Red Flowering Currant	Ribes Sanguineum var.'King Edward'	#2 Pot.
	DVIB	David Viburnum	Viburnum davidii	#2 Pot.
	ALAT	Dwarf Burning Bush	Euonymus aata var. 'Compacta'	#5 Pot.
	VACC	Mountain Blueberry	Vaccinium ovatum	#5 Pot.
Small Shrubs	AZAW	Evergreen Azalea	Azalea var.'Gumpo White'	#2 Pot.
	WIEA	Winter Flowering Heather	Erica darleyensis var.'Arthur Johnson'	#1 Pot.
	GROS	Bald Hip Rose	Rosa gymnocarpus	#2 Pot.
	NROS	Nootka Rose	Rosa nutkana	#2 Pot.
	EUOF	Creeping Euonymus	Euonymus fortunei var.'Emerald Gaiety'	#1 Pot.
	MAHN	Cascade mahonia	Mahonia nervosa	#1 Pot.
	DWMO	Dwarf Mock Orange	Philadelphus lewisii var.'Snowdwarf'	#1 Pot.
	DWPJ	Dwarf Lily of the Valley Shrub	Pieris japonica var.'Debutante'	#1 Pot.
	POLY	Sword Fern	Polystichum munitum	#1 Pot.
	SARC	Sweetbox	Sarcococca hookeriana humilis	#1 Pot.
	SPGF	Goldflame Spirea	Spirea humulda var' Gold Flame'	
	SNOW	Snowberry	Symphoricarpos albus	#2 Pot.
	AZAW	Azalea x 'Grandis Pleasant White'	Grandis Pleasant White Azalea	#3 Pot.
Ground Covers	BEAR	Bearberry	Arctostaphlos uva-ursi var.'Vancouver Jade'	SP4
	BERG	Heartleaf Bergenia	Bergenia cordifolia var.'Bressingham Ruby'	SP5
	GAUL	Wintergreen	Gaultheria procumbens	SP4
	AJUG	Bugleweed	Ajuga reptans var 'Bressingham Ruby'	SP4
	COTO	Creeping Cotoneaster	Cotoneaster dameri	SP4
Vines	ARM	Evergreen Clematis	Clematis armandii	#5 Pot.
	WIST	Wisteria	Wisteria sinensis var.'Black Knight'	#7 Pot.
Perennials & Grasses	SCIZ	Kaffir Lily	Schizostylis coccinea var.'Oregon Sunset'	SP5
	HEUC	Coral Bells	Heuchera var. 'Palace Purple'	SP5
	TEST	Flame Sedge	Carex testacea	#1 Pot.
	CARX	Variegated Sedge	Carex morrowii aureo-vanegata	SP5
	JUNC	Common Rush	Juncus effusus	#1 Pot.
	MISC	Maiden Hair Grass	Miscanthus sinensis	#1 Pot.
Wildflowers & Bulbs	CAMA	Common Camas	Camassia quamash	Bulb
	DODE	Shooting Star	Dodecatheon hendersonii	Bulb
	ERYT	Easter Lily	Erythronium oregonum	Bulb
	FRIT	Chocolate Lily	Fritillaria lanceolata	Bulb
	SISY	Blue Eyed Grass	Sisyrnchium	#1 Pot.

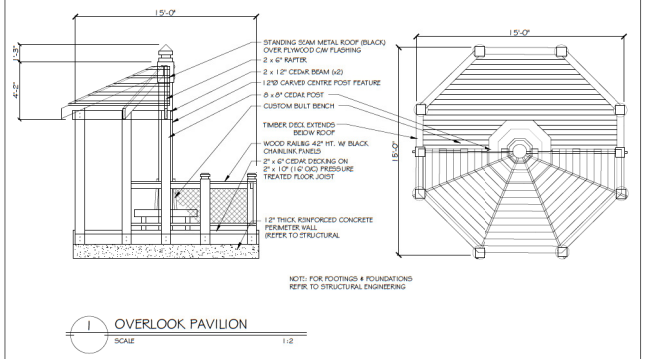
Notes: - All landscape work to conform with B.C.S.L.A. / B.C.N.T.A. standard specification.
- All areas to be irrigated with an automatic underground system.

SOFTSCAPE LEGEND

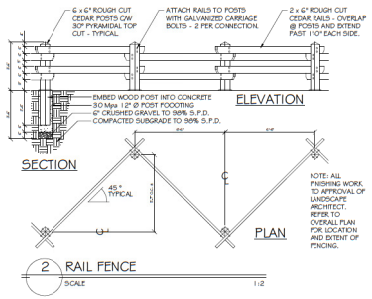


LIGHTING LEGEND

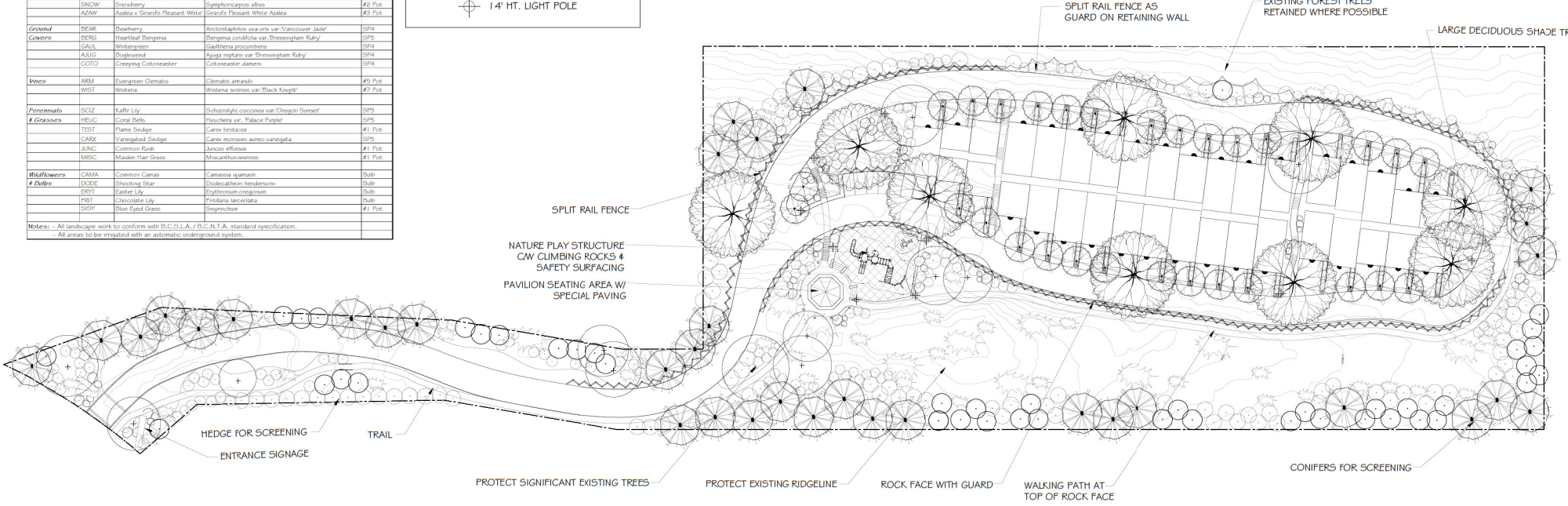
BOLLARD LIGHT
HOUSE LIGHT
14' HT. LIGHT POLE



1 OVERLOOK PAVILION
SCALE 1:2



2 RAIL FENCE
SCALE 1:2



HAYAT RESIDENCES
Landscape Concept Plan

NANAIMO, BC
DATE: SEPTEMBER 9, 2020

SCALE

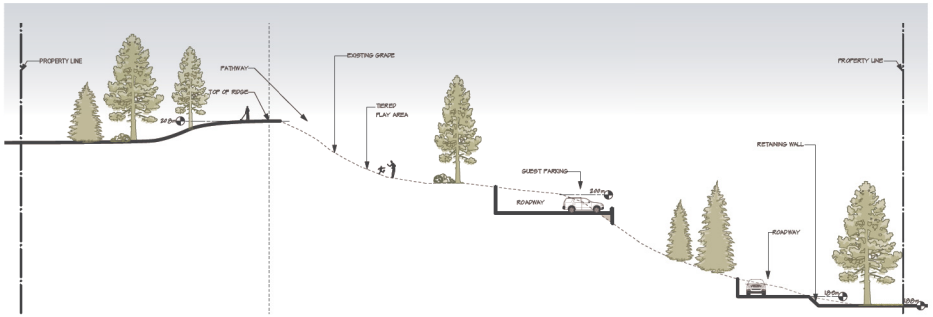
4☆SITE
LANDSCAPE ARCHITECTURE AND SITE PLANNING 250.508.7885

PLANT LIST

	Key	Common Name	Latin Name	Size
Trees	VMAP	Vine Maple	Acer circinatum	6cm Cal.
	RMAP	Red Maple	Acer rubrum var. 'Bowhall'	7cm Cal
	JMAP	Japanese Maple	Acer palmatum var.'Bloodgood'	6cm Cal.
	SASK	Saskatoon Berry	Amelanchier alnifolia	5cm Cal.
	KAT	Katsura Tree	Cercidiphyllum japonicum	7cm Cal
	PDOG	Pacific Dogwood	Cornus nuttallii var.'Eddie's White Wonder	6cm Cal.
	GOAK	Garry Oak	Quercus garriana	5cm Cal.
	WRC	Western Red Cedar	Thuja plicata var. 'Excellsa'	2.2m Ht
	BETU	River Birch	Betula nigra (Multistem*)	2.5m Ht
Large Shrubs	CEAN	California Lilac	Ceanothus var.'Victoria'	1.5m Ht.
	SMAG	Star Magnolia	Magnolia stellata var.'Royal Star'	#5 Pot
	PIER	Lily of the Valley Shrub	Pieris japonica var.'Forest Flame' & 'Valley Rose'	#5 Pot
	LRHA	Rhododendron	Rhododendron var.'Pink Walloper'	#7 Pot
	LRHB	Rhododendron	Rhododendron var. 'Gomer Waterer'	#7 Pot
	THUJ	Upright Cedar	Thuja occidentalis var.'Smaragd'	1.5m Ht.
	HOLO	Oceanspray	Holodiscus discolor	#5 Pot
	NINE	Pacific Ninebark	Physocarpos opulis	#5 Pot
	MAH	Oregon Grape	Mahonia aquifolium	#5 Pot
Medium	ABE	Glossy Abelia	Abelia x grandiflora	#2 Pot
Shrubs	RDOG	Red Twig Dogwood	Cornus stolonifera	#2 Pot
	SALA	Salal	Gaultheria shallon	#2 Pot
	MAHC	Dwarf Oregon Grape	Mahonia aquifolium var.'Compacta'	#2 Pot
	MRHA	Rhododendron	Rhododendron var.'Unique'	
	MRHB	Rhododendron	Rhododendron var. 'Christmas Cheer'	#5 Pot
	RIBE	Red Flowering Currant	Ribes Sanguineum var.'King Edward'	#2 Pot
	DVIB	David Viburnum	Viburnum davidii	#2 Pot
	ALAT	Dwarf Burning Bush	Euonymus alata var. 'Compacta'	#5 Pot
	VACC	Mountain Blueberry	Vaccinium ovatum	#5 Pot
Small Shrubs	AZAW	Evergreen Azalea	Azalea var.'Gumpo White'	#2 Pot
	WHEA	Winter Flowering Heather	Erica darlyensis var.'Arthur Johnson'	#1 Pot
	GROS	Bald Hip Rose	Rosa gymnocarpus	#2 Pot
	NROS	Nootka Rose	Rosa nutkana	#2 Pot
	EUOF	Creeping Euonymus	Euonymus fortunei var.'Emerald Gaiety'	#1 Pot
	MAHN	Cascade mahonia	Mahonia nervosa	#1 Pot
	DWMO	Dwarf Mock Orange	Philadelphus lewisii var.'Snowdwarf'	#1 Pot
	DWPJ	Dwarf Lily of the Valley Shrub	Pieris japonica var.'Debutante'	#1 Pot
	POLY	Sword Fern	Polysticum munitum	#1 Pot
	SARC	Sweetbox	Sarcoccoca hookerana humilis	#1 Pot
	SPGF	Goldflame Spirea	Spirea bumalda var' Gold Flame'	
	SNOW	Snowberry	Symphoricarpos albus	#2 Pot
	AZAW	Azalea x 'Girard's Pleasant White'	Girard's Pleasant White Azalea	#3 Pot
Ground	BEAR	Bearberry	Arctostaphylos uva-ursi var.'Vancouver Jade'	SP4
Covers	BERG	Heartleaf Bergenia	Bergenia cordifolia var.'Bressingham Ruby'	SP5
	GAUL	Wintergreen	Gaultheria procumbens	SP4
	AJUG	Bugleweed	Ajuga reptans var 'Bressingham Ruby'	SP4
	COTO	Creeping Cotoneaster	Cotoneaster dameni	SP4
Vines	ARM	Evergreen Clematis	Clematis armandii	#5 Pot
	WIST	Wistena	Wistena sinensis var.'Black Knight'	#7 Pot
Perennials	SCIZ	Kaffir Lily	Schizostylis coccinea var.'Oregon Sunset'	SP5
& Grasses	HEUC	Coral Bells	Heuchera var. 'Palace Purple'	SP5
	TEST	Flame Sedge	Carex testacea	#1 Pot
	CARX	Variegated Sedge	Carex morowell aureo-variegata	SP5
	JUNC	Common Rush	Juncus effussus	#1 Pot
	MISC	Maiden Hair Grass	Miscanthus sinensis	#1 Pot
Wildflowers	CAMA	Common Camas	Camassia quamash	Bulb
& Bulbs	DODE	Shooting Star	Dodecatheon hendersonii	Bulb
	ERYT	Easter Lily	Erythronium oregonum	Bulb
	FRIT	Chocolate Lily	Fritillana lanceolata	Bulb
	SISY	Blue Eyed Grass	Sisyrinchium	#1 Pot

Notes: - All landscape work to conform with B.C.S.L.A. / B.C.N.T.A. standard specification.

- All areas to be irrigated with an automatic underground system.



1 SECTION A

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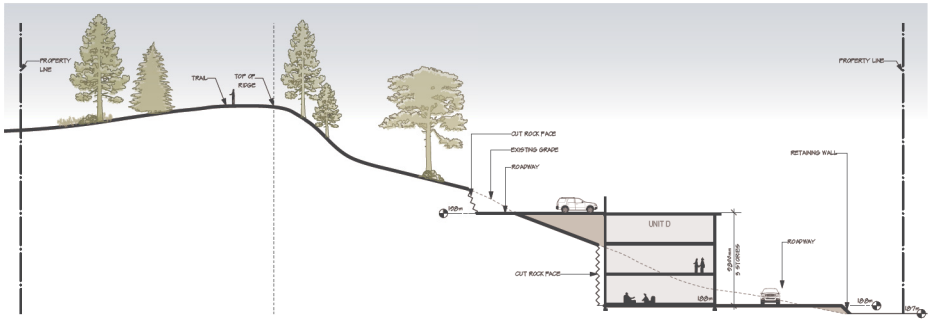

2 SECTION B

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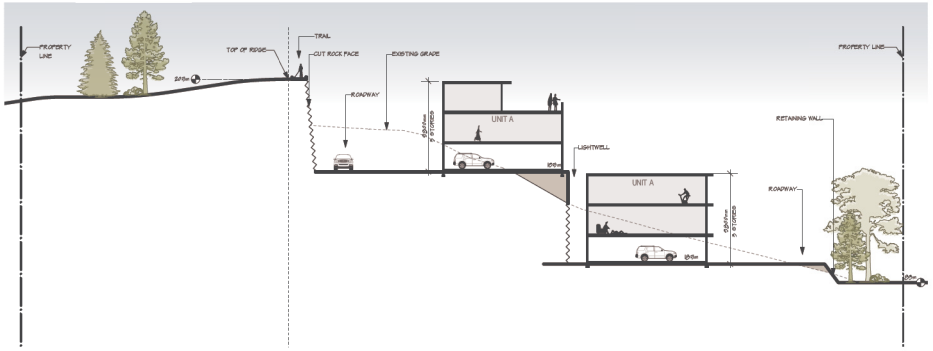
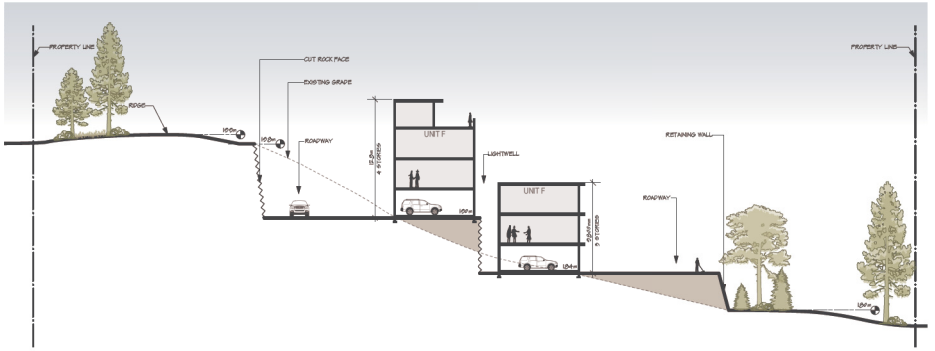


3 SECTION C

SCALE = 1 : 250



4 SECTION D

SCALE = 1 : 250

RECEIVED
DP1186
2020-SEP-30
Current Planning

bjk architecture inc.
2122 Brandon Road, Shawnigan Lake, BC
250-277-2296

HEROLD ENGINEERING

HAYAT RESIDENCES

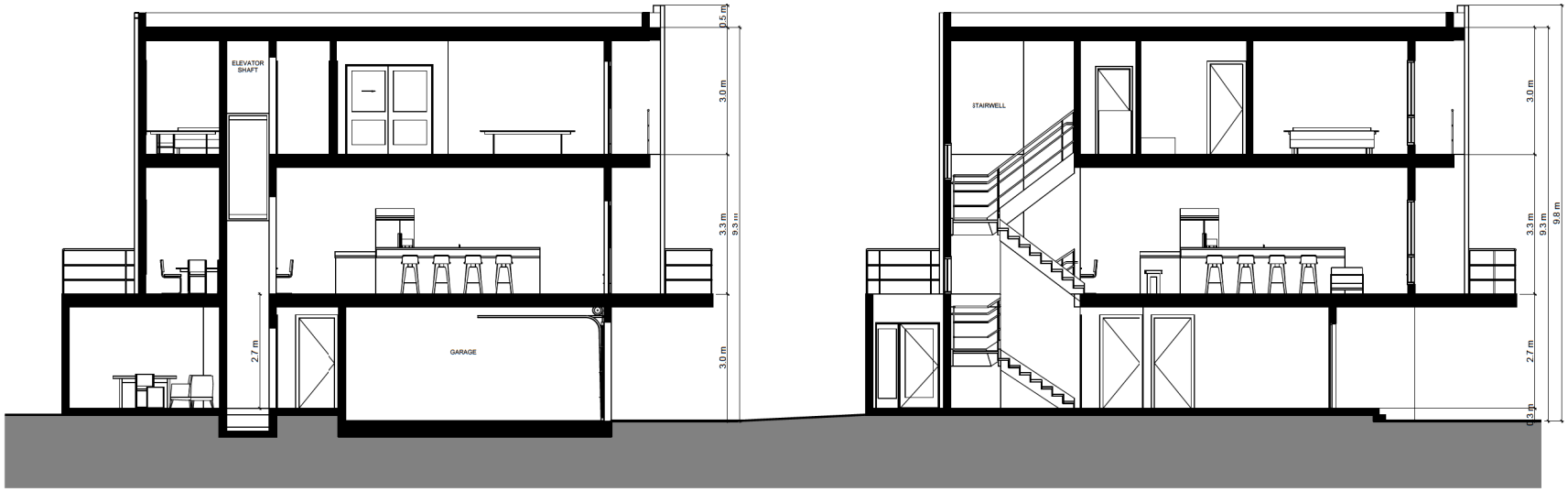
TANYA DRIVE, NANAIMO, BC

SITE SECTIONS

SCALE:	1 : 200
DRAWN BY:	CMW
CHECKED BY:	BJK
DATE:	09/28/2020

D4.6

UNIT A LOWER 3 BR + OFFICE, 3 BATH, 2 CAR GARAGE
AREA 181m² - 1950 SQFT



① TOWNHOME SECTION THRU ELEVATOR SHAFT 1:50

② TOWNHOME SECTION THRU STAIRS 1:50

bjk architecture inc.
2122 Brandon Road, Shawnigan Lake, BC
250-277-2296

HEROLD ENGINEERING

HAYAT RESIDENCES

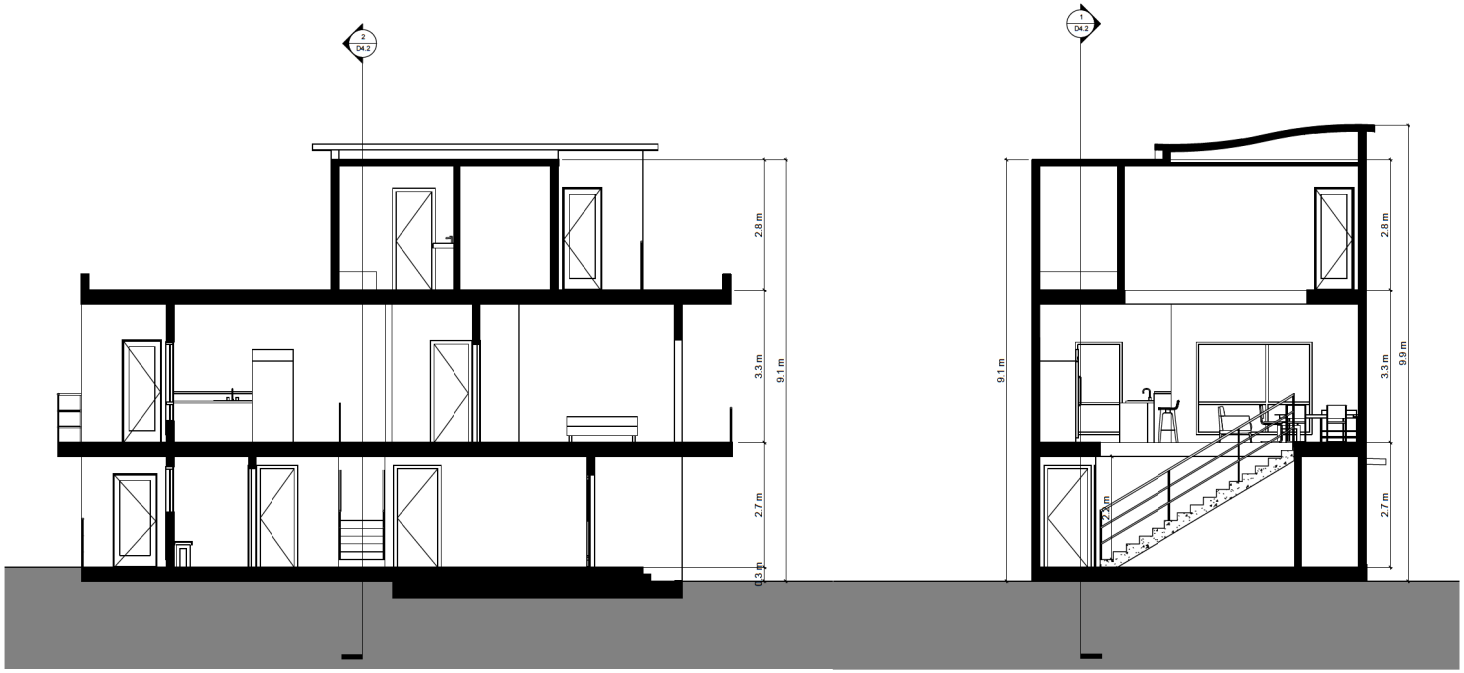
TANYA DRIVE, NANAIMO, BC

LOWER TOWNHOME A SECTIONS

SCALE:	1 : 50
DRAWN BY:	ART
CHECKED BY:	BJK
DATE:	09/28/2020

D4.1

UNIT A UPPER 3 BR +OFFICE, 3 BATH, 2 CAR GARAGE
AREA 152m² - 1636 SQFT



1 TOWNHOME SECTION LENGTHWISE 1:50

2 TOWNHOME SECTION THRU STAIRS 1:50

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HEROLD ENGINEERING

HAYAT RESIDENCES

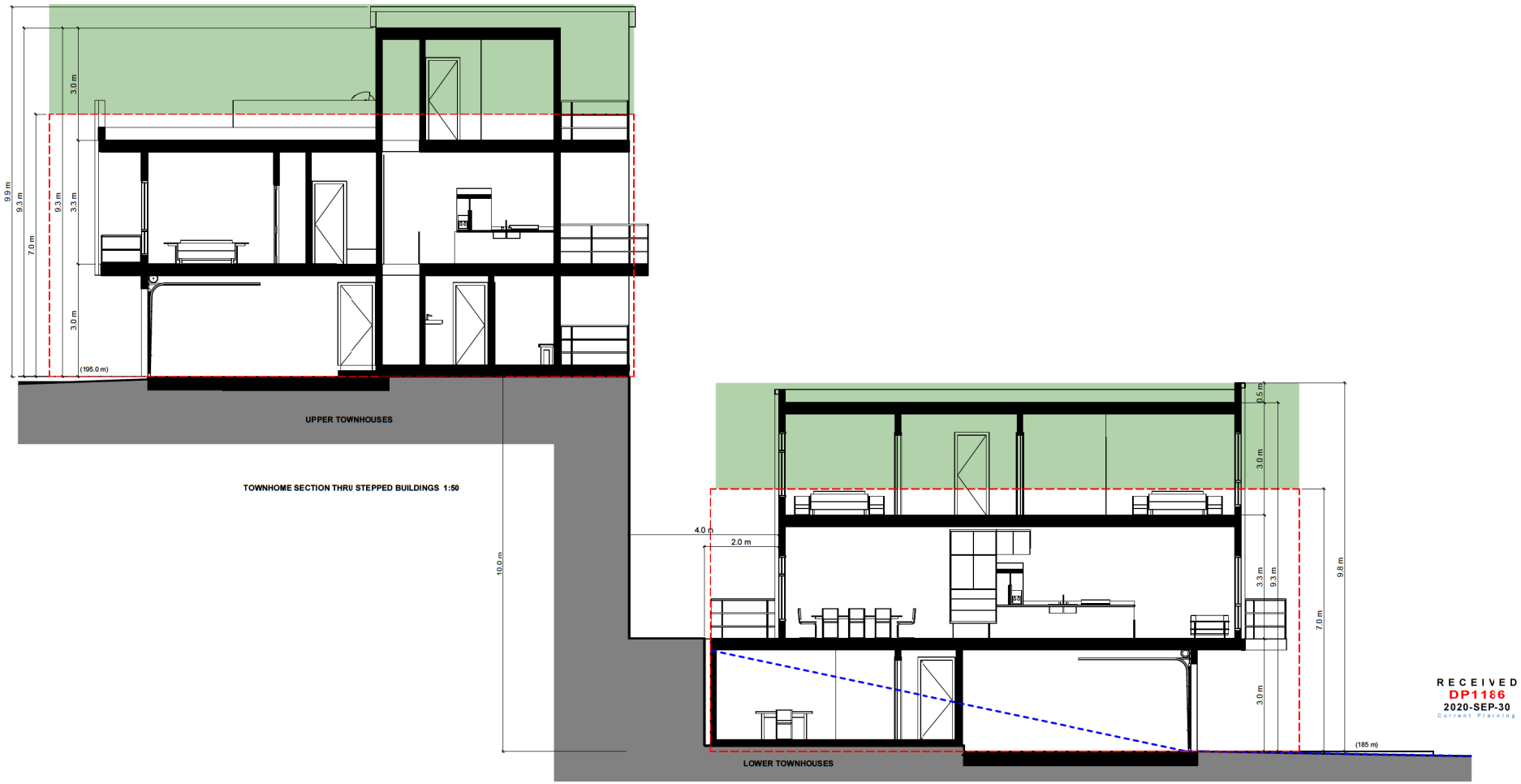
TANYA DRIVE, NANAIMO, BC

UPPER TOWNHOME SECTIONS

SCALE:	1 : 50
DRAWN BY:	ART
CHECKED BY:	BJK
DATE:	09/28/2020

D4.2

UNIT A UPPER + LOWER



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2020-SEP-30
Current Planning

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250-277-2296

HEROLD ENGINEERING

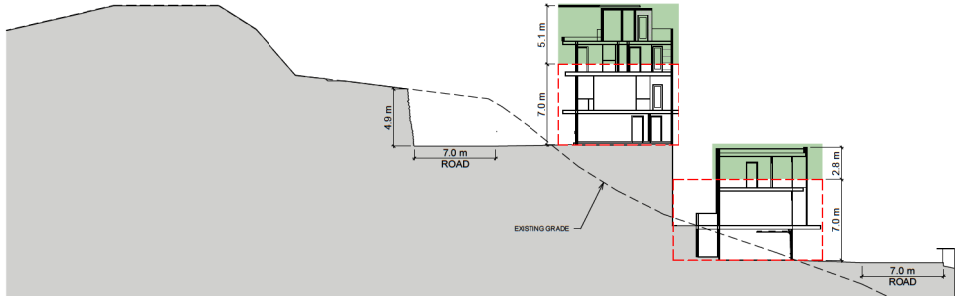
HAYAT RESIDENCES

TANYA DRIVE, NANAIMO, BC

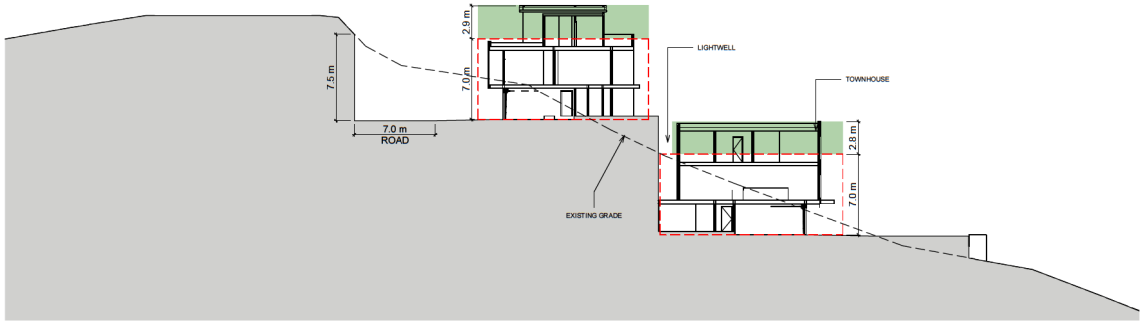
TOWNHOME SECTIONS

SCALE:	1 : 50
DRAWN BY:	ART
CHECKED BY:	BJK
DATE:	09/28/2020

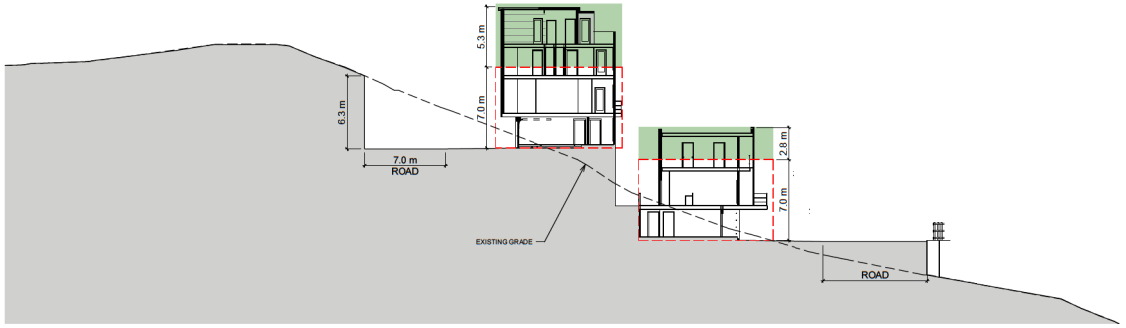
D4.3



SITE SECTION THROUGH UNITS C UPPER + LOWER 1:200



SITE SECTION THROUGH UNITS G UPPER + A LOWER 1:200



SITE SECTION THROUGH UNITS F UPPER + LOWER 1:200

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architecture inc.
2122 Brandon Road, Shawnigan Lake, BC
250-277-2296

HEROLD ENGINEERING

HAYAT RESIDENCES

TANYA DRIVE, NANAIMO, BC

SITE SECTIONS

SCALE:	1 : 200
DRAWN BY:	ART
CHECKED BY:	BJK
DATE:	09/28/2020

D4.4

NORTH ELEVATION 1:200

SOUTH ELEVATION 1:200

bjk
architecture inc.
2122 Brandon Road, Shawnigan Lake, BC
250-277-2296

HEROLD ENGINEERING

HAYAT RESIDENCES

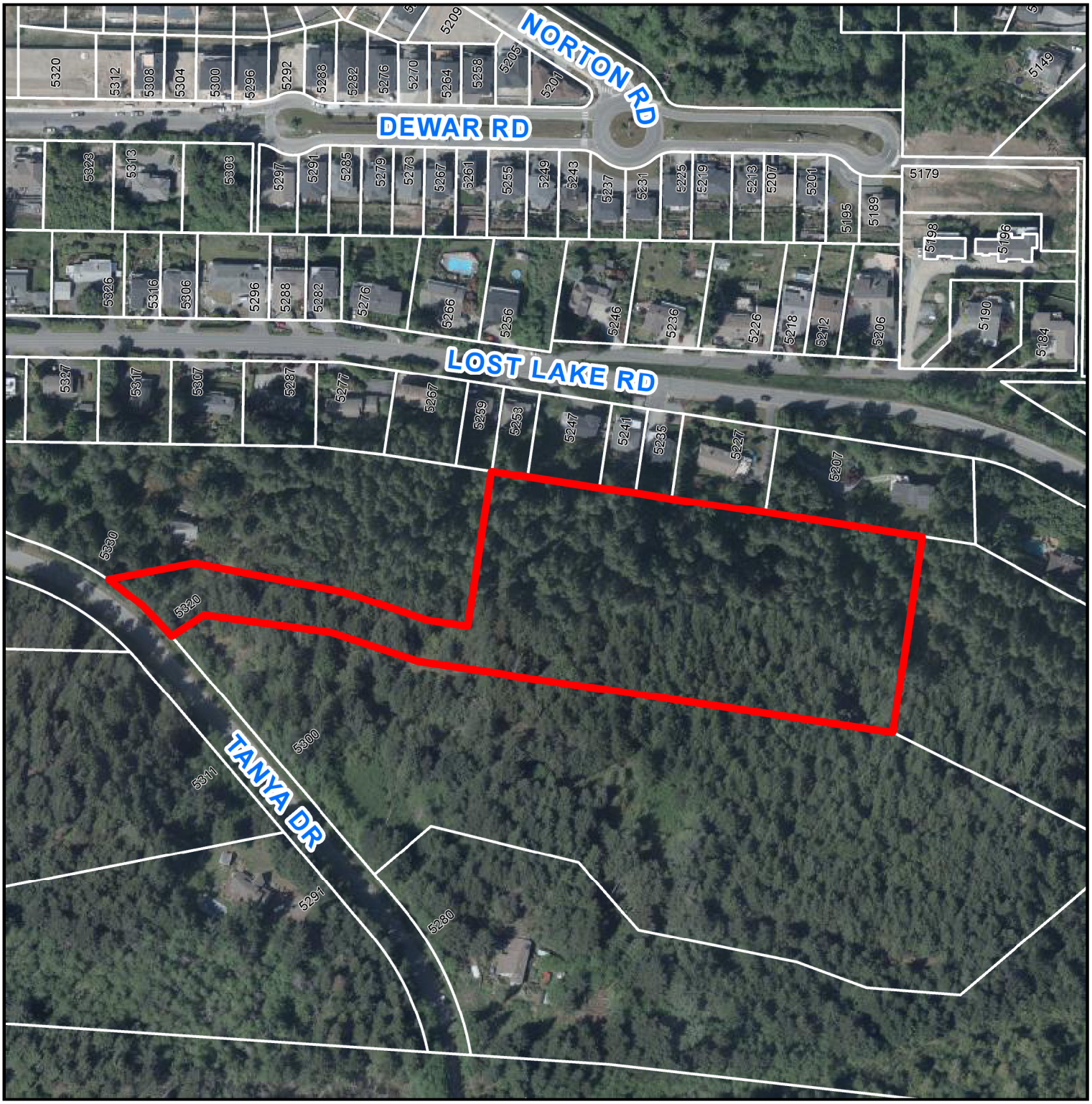
TANYA DRIVE, NANAIMO, BC

SITE ELEVATIONS

SCALE:	1 : 200
DRAWN BY:	ART
CHECKED BY:	BJK
DATE:	09/28/2020

D4.5

AERIAL PHOTO



DEVELOPMENT PERMIT NO. DP001186

5320 TANYA DRIVE

STAFF DESIGN COMMENT

DEVELOPMENT PERMIT APPLICATION NO. DP001202 – 427, 449, & 455 NICOL STREET

Applicant: ISLAND WEST COAST DEVELOPMENT LTD.

Architect: WA ARCHITECTS LTD.

Landscape Architect: VICTORIA DRAKEFORD LANDSCAPE ARCHITECT

Owner: NICOL STREET HOLDINGS LTD.

SUBJECT PROPERTY AND SITE CONTEXT

Zoning	Community Corridor (COR3)
Location	The subject property is located on the east side of Nicol Street, midblock between Farquhar Street and Needham Street.
Total Area	1,645m^2
Official Community Plan (OCP)	Map 1 – Future Land Use Plan – Corridor Map 3 – Development Permit Area DPA No. 9 – Commercial, Industrial, Institutional, Multiple Family, and Mixed Commercial / Residential Development
Relevant Design Guidelines	General Development Permit Area Design Guidelines; and South End Neighbourhood Plan Urban Design Guidelines

The subject properties are located in the South End Neighbourhood and are currently vacant. The site is located on a prominent entry corridor to downtown Nanaimo on Nicol Street, which is under the jurisdiction of the Province as part of Highway #1. The properties slope downhill from west to east. At the rear, the properties abut a one-way lane that runs parallel to Nicol Street between Farquhar Street and Needham Street.

Surrounding land uses are primarily lower density residential uses which include single residential dwellings, duplexes, and triplexes. The site is approximately 90m south of the southern extent of the Downtown Gateway (DT12) zone and is approximately 40m northwest of the South End Neighbourhood Centre (CC2) zone. Both sides of Nicol Street are designated Corridor in the Official Community Plan (OCP) future land use map.

PROPOSED DEVELOPMENT

The applicant is proposing to construct a 4-storey multi-family rental residential building with 35 residential dwelling units and under-the-building parking. The building will face Nicol Street with a primary pedestrian entry from the front, and vehicle access from the lane in the rear. The under-the-building parking will be partially underground and partially exposed at ground level, adjacent to the lane.

The proposed unit composition is as follows:

- 8 micro-units, 29m^2 in floor area;
- 15 one-bedroom units between 46m^2 and 72m^2 in floor area; and
- 12 two-bedroom units between 77m^2 and 84m^2 in floor area.

The total proposed gross floor area is 2,345m^2 and the Floor Area Ratio (FAR) will equal 1.43. The base maximum FAR in the COR3 zone is 0.75, and the applicant is proposing to achieve an additional 0.50 FAR through the provision of amenities as outlined for Tier 2 in 'Schedule D' of the Zoning Bylaw and an additional 0.19 FAR by providing 76% of the parking underground as per Section 9.3.2 of the Zoning Bylaw.

Site Design

The site is constrained by the requirement for vehicle access from the lane in the rear, and the setback 4.5m from Nicol Street as required by the Ministry of Transportation and Infrastructure. Two dead-end drive aisles are proposed to enter the under-the-building parking level from the lane, with parking on both sides of each drive aisle. Of the 38 proposed parking stalls, 29 will be underground. The required visitor parking, accessible parking, electric vehicle parking, and bicycle parking are provided. A garbage and recycling room will be located at the rear of the building, with vehicle pick-up from the lane..

The primary pedestrian entry will be from Nicol Street at the southern end of the building and an additional exit will be provided from the north staircase. The four ground-level units will have individual walkway connections to their private patios and front doors. All other units will have decks. An outdoor communal amenity space is proposed at the north end of the site with communal seating and a children's' play area.

Staff Comments:

- Consider relocating the visitor bike rack from the outdoor amenity area to one of the entryways. One other bike rack is proposed near the front entryway.
- Provide site lighting details.

Building Design

The building design presents itself as contemporary and residential. The building's rectangular massing is aligned parallel to the street frontage. Strong framing around the balconies, front entryway, and flat roofline complement the building design. The South End Neighbourhood Plan Urban Design Guidelines are referenced by the building's emphasis on its lower three storeys which breaks up the massing on the west and east elevations. On the north and south elevations, a material change above the second storey breaks up the visual massing.

The exterior materials will include a mix of light and dark vinyl horizontal siding and cementitious panel. Exterior wood staircases are proposed on the north and south elevations.

Staff Comments:

- Consider design modifications to create an entryway at the rear doorway to allow for visitors and deliveries arriving by vehicle to enter from the rear as there is no walkway around the side of the building.
- Review the exterior staircase cladding and consider opportunities for enclosing these staircases.
- Clarify materials used in securing the under-the building parking. Ensure that adequate weather protection and off-site illumination mitigation measures are considered.
- Consider the use of glass railings for all balconies.

Landscape Design

Landscape buffering is proposed on three sides of the site. On the north and the south property lines, the landscape design includes low evergreen shrubs, grasses, and columnar deciduous trees. Retaining walls and fencing will raise the finished grade and screen the building on the north and south property lines. Cascading plants will be planted to screen the retaining walls where they face the rear lane.

Along the Nicol Street frontage, street trees will be retained and an evergreen hedge is proposed to screen the ground-level units. Small evergreen and deciduous shrubs will buffer the ground-level patios. A lawn is proposed in the outdoor communal amenity space.

Staff Comments:

- Provide details for landscaping at the surface level of the parking area, and consider opportunities for landscape islands and a landscape buffer along the rear property line.

PROPOSED VARIANCES

Off-Street Parking

A variance to reduce the required parking from 48 parking stalls to 38 parking stalls is requested, a proposed variance of 10 parking stalls.

WA Architects Ltd.

| PRINCIPALS

Barry Weih
ARCHITECT AIBC, AAA, SAA, LEED® AP

Neil Banich
DESIGN DIRECTOR

Joel Smith
ARCHITECT AIBC, AAA, SAA

David Echaiz-McGrath
ARCHITECT AIBC, AAA, SAA

| STUDIOS

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604.685.3529

VIC
104 — 3212 Jacklin Road
Victoria, BC V9B 0J5
250.391.4933

wa-arch.ca

June 11, 2020

Design Rationale
Nicol Street Residential Development – Project #18085

This proposed entry-level purpose-built rental residential development will be located on a consolidated site comprising of single family lots addressed 427, 449 and 455 Nicol Street in Nanaimo. The site is in the South End Neighbourhood in the "Corridor" designation area. All three single family lots are zoned as COR3 and thus a residential development is permitted outright.

In accordance with the OCP Bylaw 2008 No. 6500 - South End Neighbourhood Plan, this development is proposing a four-story residential building with vehicular access from the rear lane to a basement parkade.

It is our intent to provide a modern, cost-conscious affordable rental product that provides large apartment units for lower income families and individuals. The Proposed development will create a total of 35 units of which 20% will be dedicated as "affordable housing" in accordance with CMHC guidelines. To ensure its perpetuity, the affordable housing criteria will be secured by covenant placed on title.

The increased density of this proposed development will hopefully provide the impetus for similar developments within this neighbourhood. As per CMHC's Rental Market Report on British Columbia (as of October 2018), City of Nanaimo's vacancy rate is at approximately 2.5%. Although higher than the national average of 1.4%, we feel that a rental development is still greatly needed to address this demand.

As we are all aware, the cost of constructing a rental residential apartment building has been one of the more significant challenges in making this project feasible. In order for the Pro Forma to pencil out, the design team has had to look for every possible method to increase density, reduce costs and provide the largest scale project on this site as possible. We've provided very efficient space planning, stacked units (and plumbing) and looked at standardizing as many elements within the design. In addition to this, we have also sought to maximize our FSR density and have taken advantage of COR3 Tier 1 and 2 density bonusing as well as the underground parking bonus. (please refer to our Project Stats Sheet (PSS) and our Tier 1 and 2 Density Bonus document.

The design intent is for a modern clean structure that utilizes economical materials that require minimal amount of maintenance. Balconies have been emphasized by a bold, extruded rectilinear form that provides relief to an otherwise flat façade. The exit stairs are located outside of the building

envelope at both ends of the building, not only to maximize the efficiency of the building, but also to create interest and shadow relief along those elevations. Generous landscaping has been included along both side setbacks to soften the transition from single family home scale to the multi-story residential proposal.

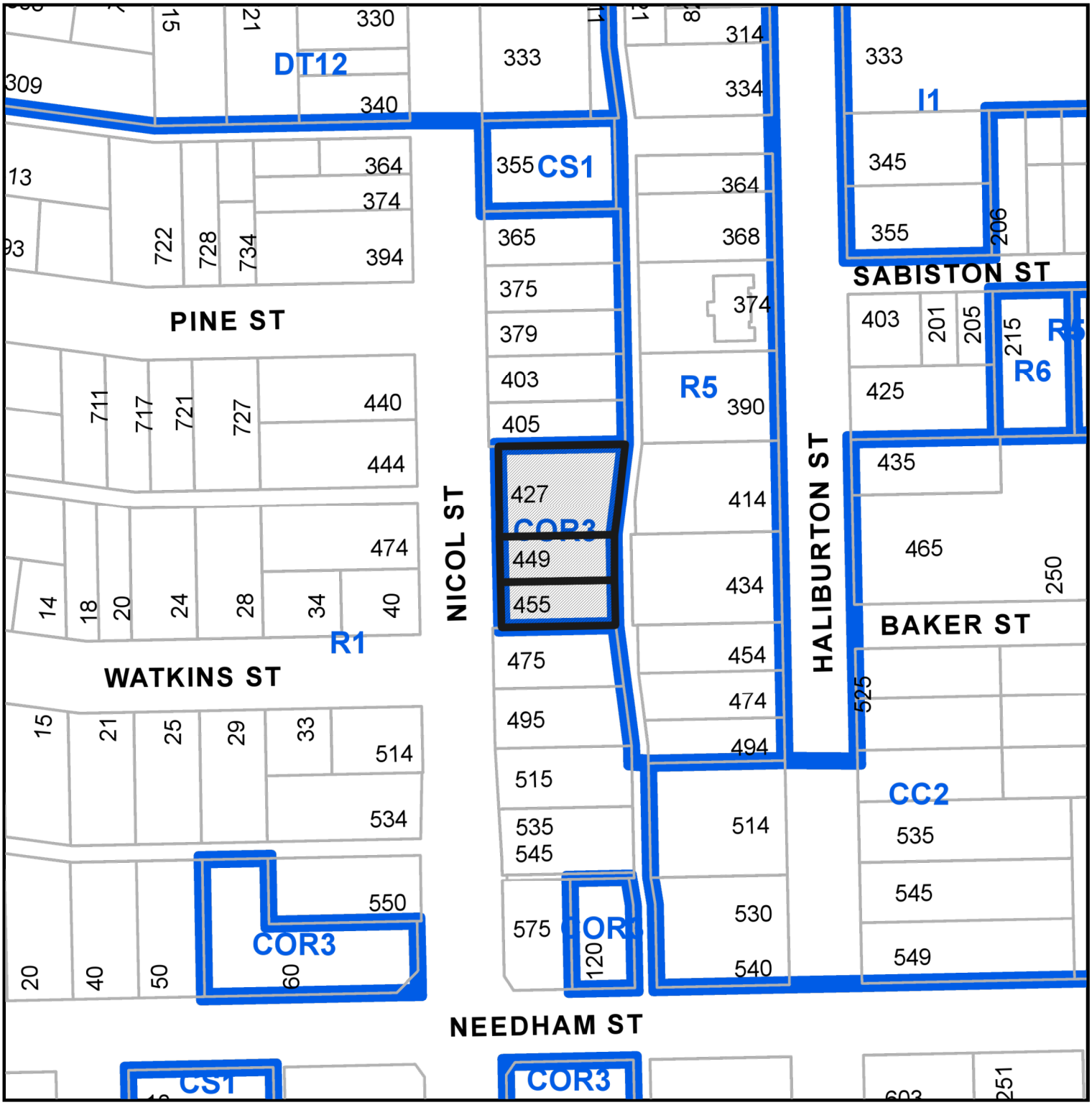
The front elevation is generously set back from the property line thus allowing for a significant amount of landscape buffer and very large outdoor terrace area for the ground floor units. Each one of these units has been provided with a private entrance into their space to animate and provide interest along Nicol Street. All units have access to a private outdoor space directly off their unit as well as a significant communal outdoor amenity space, including a children's play area, at grade at the north end of the site.

We are asking for a parking variance. The target demographics for this development are lower income individuals and families. We have provided a parking study as well as a parking variance rationale for your reference.

Nicol Street Residential provides City of Nanaimo residents an affordable well though-out rental housing option. It provides studios, one-bedroom and two-bedroom units that can accommodate a wide range of demand and can focus on a lower income demographics. This project will be a significant positive addition to this neighbourhood and City of Nanaimo as a whole.

END

LOCATION PLAN

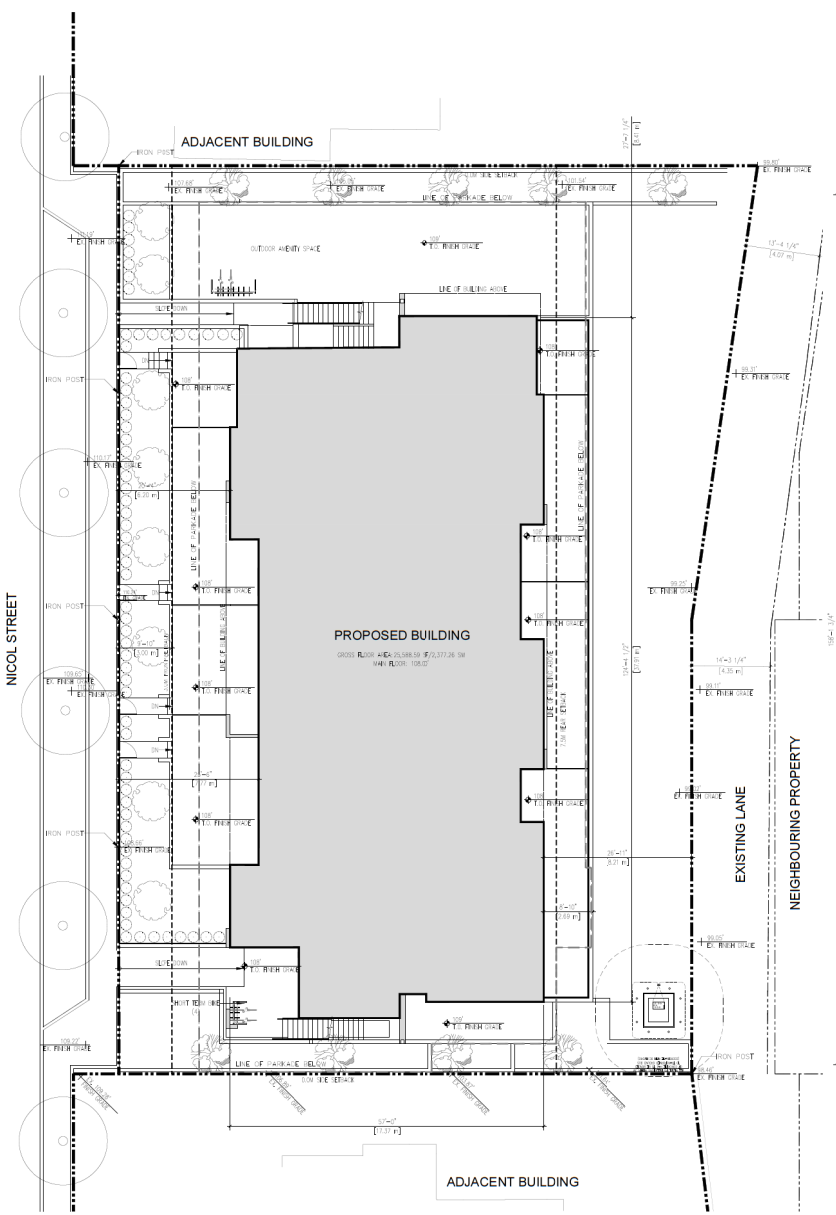


DEVELOPMENT PERMIT NO. DP001202

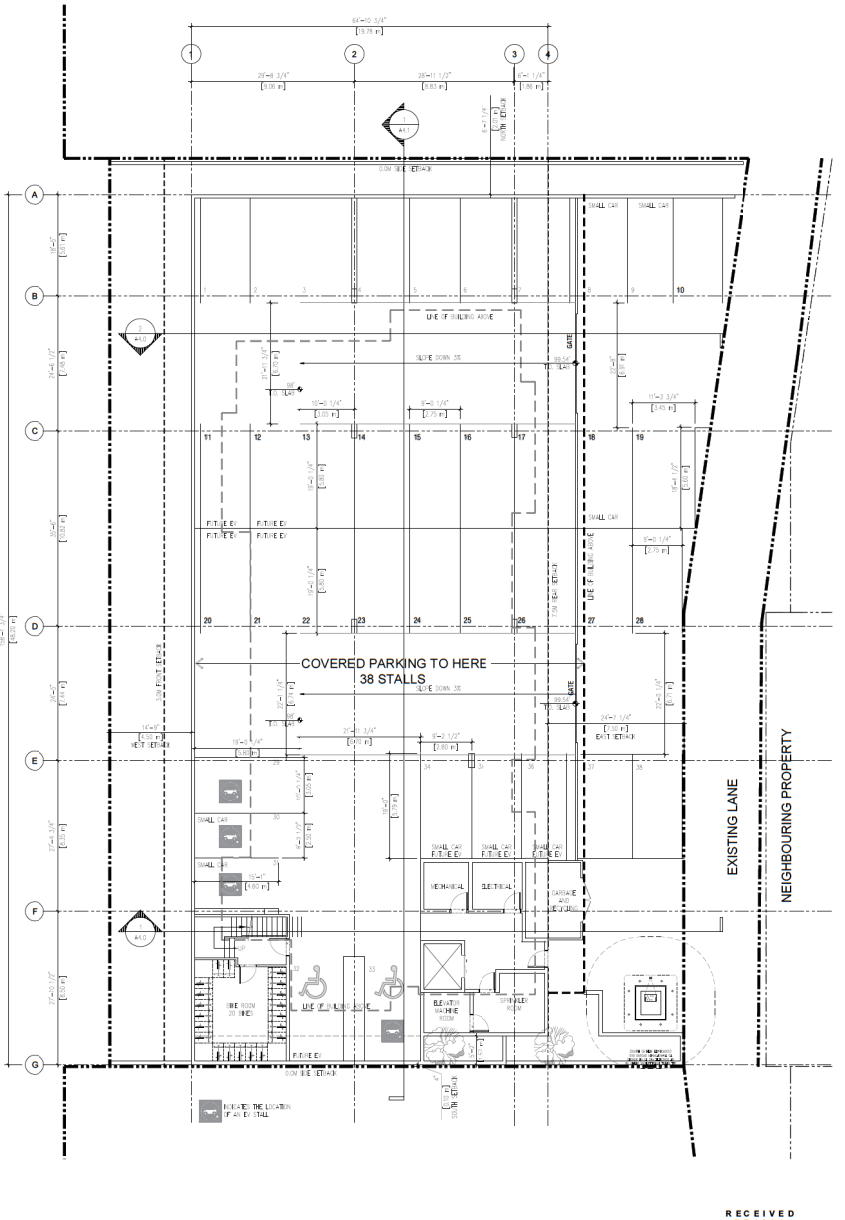
CIVIC: 427, 449, & 455 NICOL STREET

LEGAL: LOT 1 & 19, SECTION 1, NANAIMO DISTRICT, PLANS 4377, 48224 AND VIP51613

Subject Property



1 SITE PLAN



2 PARKING LEVEL

RECEIVED
DP1202
2010-JUN-17
Current Planning

NORTH ARROW:

NORTH

OWNER/CLIENT:

ISLAND WEST COAST DEVELOPMENTS LTD.
2214 MCGULLOUGH ROAD
NANAIMO, B.C.
V9S 4M9

GENERAL NOTES:

NO.	ISSUE	YMD
3	DEVELOPMENT PERMIT SUBMISSION TO CITY	20/04/17
2	ISSUED FOR COORDINATION	20/03/23
1	ISSUED FOR INTERNAL REVIEW	19/1/07

SEAL:

REGISTERED ARCHITECT
DAVID ECHAIZ-MUÑOZ
BRITISH COLUMBIA

CONSULTANT:

WA ARCHITECTS
VAN 301 - 1444 Alberni Street Vancouver, V6G 2Z4
VIC 104 - 3212 Jacklin Road Victoria, V9B 0J5
604.685.3529 | office@wa-arch.ca | wa-arch.ca

PROJECT NAME:

NICOL STREET PROPOSED RESIDENTIAL BUILDING

PROJECT ADDRESS:

427, 449 & 738 NICOL STREET, NANAIMO, B.C.

DRAWING TITLE:

SITE PLAN & PARKING LEVEL PLAN

PROJECT NO: 18085 DRAWN BY: OC
SCALE: AS NOTED REVIEW BY: AS
DWG NO: **A2.0**

PROPOSED RESIDENTIAL PROJECT

DEVELOPMENT PERMIT APPLICATION

NICOL STREET, NANAIMO, B.C.

PROJECT NUMBER: 18085

APRIL 17, 2020

ARCHITECTS: WA ARCHITECTS LTD.		LANDSCAPE ARCHITECT: VICTORIA DRAKEFORD LANDSCAPE	
DRAWING LIST		DRAWING LIST	
A0.0	COVER PAGE	L0.1	LANDSCAPE CONCEPT PLAN
A1.0	EXISTING SURVEY	L0.2	ELEVATIONS DESIGN ELEMENTS
A2.0	SITE & PARKING LEVEL PLAN		
A2.1	LEVEL 1 & LEVEL 2 FLOOR PLANS	CIVIL: APLIN MARTIN	
A2.2	LEVEL 3 & LEVEL 4 FLOOR PLANS		
A2.3	ROOF PLAN	DRAWING LIST	
A2.4	UNIT PLANS		
A3.0	NORTH & SOUTH ELEVATIONS	01 OF 06	COVER SHEET
A3.1	EAST & WEST ELEVATIONS	02 OF 06	GENERAL NOTES
A4.0	BUILDING SECTIONS	03 OF 06	KEY PLAN
A4.1	BUILDING SECTIONS	04 OF 06	GRADING PLAN
A5.0	PERSPECTIVES	05 OF 06	SERVICING PLAN
A5.1	MATERIAL BOARD	06 OF 06	STORMWATER MANAGEMENT PLAN
A6.0	RENDER		

1 CONTEXT PLAN
N.T.S.

PROJECT STATISTICS
NICOL STREET
Project No.: 18085

REVISION NO.	ONE		DATE:		28-Oct-19
SITE INFORMATION					
LEGAL DESCRIPTION	LOT 5, PLAN 738, LOT 19, PLAN 4377 AND LOT 1, PLAN 48224, ALL OF SECTION 1, NANAIMO DISTRICT				
CIVIC ADDRESS	427, 449 & 455 NICOL STREET, NANAIMO, B.C.				
ZONING	EXISTING		REQUIRED		PROPOSED
	COR3 (COMMUNITY CORRIDOR)				COR 3
SITE AREA (ft²)	17,702 S.F.				17,702 S.F.
FSR	BASE **0.75** FSR, TIER 1 BONUS FSR - **+0.25**, TIER 2 BONUS FSR - **+0.25**, % PARKING UNDERGROUND (29 / 38 * 0.25) - **+0.19**		0.75 + 0.25 + 0.25 + 0.19 = **1.44**		1.43
SITE COVERAGE			60%		54%
BUILDING HEIGHT			14M		13.70M
SETBACKS	FRONT (NICOL STREET)		MIN 3.0/MAX 6.0M		4.50M
	REAR (LANE)		7.5M		7.5M
	SIDE (SOUTH PROPERTY LINE)		0M		0.1M
	SIDE (NORTH PROPERTY LINE)		0M		2.01M
BUILDING DATA					
MULTIFAMILY UNITS	DESCRIPTION	AREA (SF)	# OF UNITS	UNIT DISTRIBUTION (%)	TOTAL AREA (SF)
UNIT A	ONE BED + DEN	772	4	11%	3,088
UNIT B	ONE BED	497	8	23%	3,976
UNIT C *Unit area to inside face of walls. See A2.4	MICRO UNIT	312	8	23%	2,496
UNIT D	TWO BED	834	8	23%	6,672
UNIT E	TWO BED + DEN	908	4	11%	3,632
UNIT F	ONE BED + DEN	602	3	9%	1,806
		TOTAL	**35**	**100%**	**21,670**

SITE DATA		
	GROSS FLOOR AREA (SF)	FLOOR AREA FOR F.S.R. GROSS FLOOR EXCLUDING LOBBY AREA
LEVEL 1	6,376.74	6,030.45
LEVEL 2	6,403.95	6,403.95
LEVEL 3	6,403.95	6,403.95
LEVEL 4	6,403.95	6,403.95
TOTAL	**25,588.59**	**25,242.30**
BIKE STORAGE/GARBAGE FLOOR AREA		
BULDING FOOTPRINT AREA (ft²)		

PARKING DATA*				
PROPOSED PARKING				
Based on City of Nanaimo Proposed Parking Rates for Multi-Fanilly Dwelling in "Area 2"				
		NUMBER OF UNITS	RATE	STALLS REQUIRED
UNIT A	ONE BED + DEN	4	1.26	5
UNIT B	ONE BED	8	1.26	10
UNIT C	MICRO UNIT	8	1.05	8
UNIT D	TWO BED	8	1.62	13
UNIT E	TWO BED + DEN	4	1.62	6
UNIT F	ONE BED + DEN	3	1.26	4
VISITOR PARKING			1 STALL PER 22 UNITS	2
	TOTAL			**48****
TOTAL PROPOSED PARKING				**38**

ACCESSIBLE PARKING	REQUIRED	PROPOSED
	2	2

SMALL CAR	REQUIRED	PROPOSED
	40% OF TOTAL REQUIRED STALLS (16 STALLS)	21% (8 STALLS)

REQUIRED BICYLE PARKING	TOTAL REQUIRED BICYCLE PARKING PER UNIT MULTIPLIER	NUMBER OF UNITS	REQUIRED	PROVIDED
SHORT TERM	**0.1**	35	3.5	4
LONG TERM***	**0.5**	35	17.5	20
TOTAL REQUIRED			**21**	**24**

NOTES
* 10% of parking stalls must be fitted with level 2 EV charging stations. An additional 20% will be provided with an electrical outlet box wired with a separate brance circuit capable of supplying electricity to support the installation of level 2 EV charge receptacle
** Parking count variance required
*** Every long term bike stall must have an electrical outlet for electricbicycle charging

2 PROJECT DATA
N.T.S.

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2020-JUN-17
Current Planning

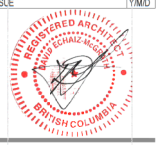
NORTH ARROW:

OWNER/CLIENT:

GENERAL NOTES:

NO.	ISSUE	YY/MM/DD
3	DEVELOPMENT PERMIT SUBMISSION TO CITY	20/04/17
2	ISSUED FOR COORDINATION	20/03/25
1	ISSUED FOR INTERNAL REVIEW	19/12/27

SEAL:



CONSULTANT:

WA ARCHITECTS

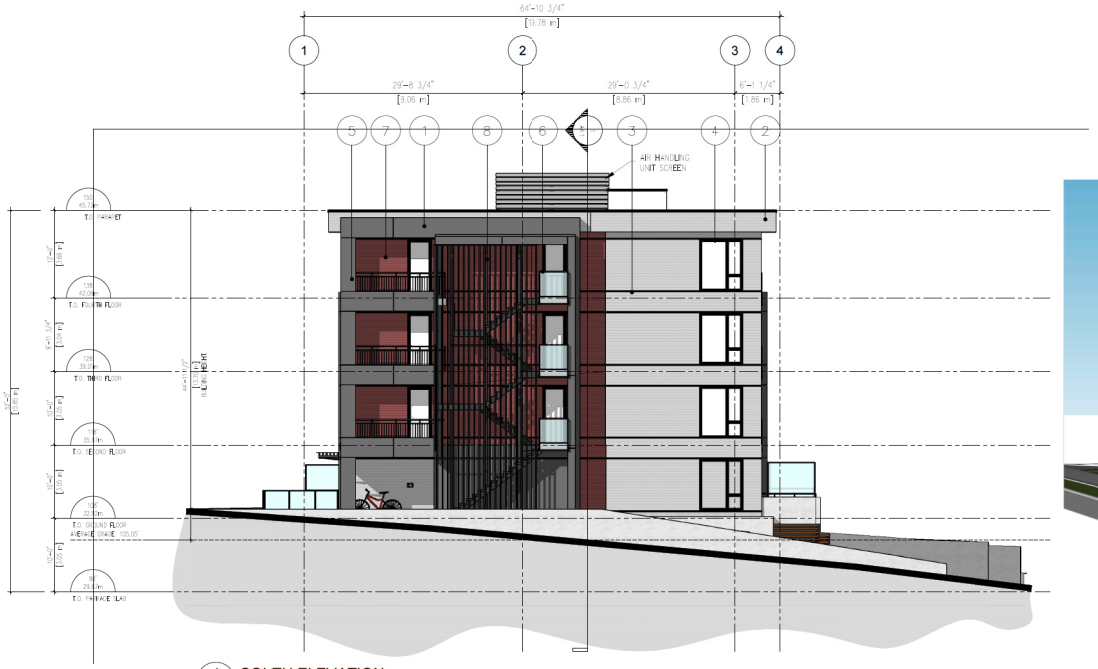
VAN 301 - 1444 Alberni Street Vancouver, V6G 2Z4
VIC 104 - 3212 Jacklin Road Victoria, V9B 0J5
604.685.3529 | office@wa-arch.ca | wa-arch.ca

PROJECT NAME:
PROPOSED RESIDENTIAL PROJECT

PROJECT ADDRESS:
427, 449 & 738 NICOL STREET, NANAIMO, B.C.

DRAWING TITLE:
COVER SHEET

PROJECT NO: 18085 DRAWN BY: OC
SCALE: N/A REVIEW BY: AS
DWG NO: **A0.0**



1 SOUTH ELEVATION
1/8"=1'-0"

3 SOUTHWEST PERSPECTIVE
N.T.S.

2 WEST ELEVATION
1/8"=1'-0"

LEGEND

1 CEMENTITIOUS PANEL - CHARCCAL GREY
2 VINYL HORIZONTAL SIDING - LIGHT GREY
3 FLASHING - BLACK
4 VINYL WINDOW FRAME - BLACK
5 METAL RAILINGS - BLACK
6 GLASS RAILING
7 VINYL SIDING - BRICK RED
8 WOOD STAIRCASE AND RAILINGS - STAINED CHARCOAL GREY
9 CONCRETE RETAINING WALL

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DP1202
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NORTH ARROW:

OWNER/CLIENT:
ISLAND WEST COAST DEVELOPMENTS LTD.
2214 MCGULLOUGH ROAD
NANAIMO, B.C.
V9S 4M8

GENERAL NOTES:

NO.	ISSUE	Y/M/D
3	DEVELOPMENT PERMIT SUBMISSION TO CITY	20/04/17
2	ISSUED FOR COORDINATION	20/03/25
1	ISSUED FOR INTERNAL REVIEW	19/11/27

SEAL:

CONSULTANT:

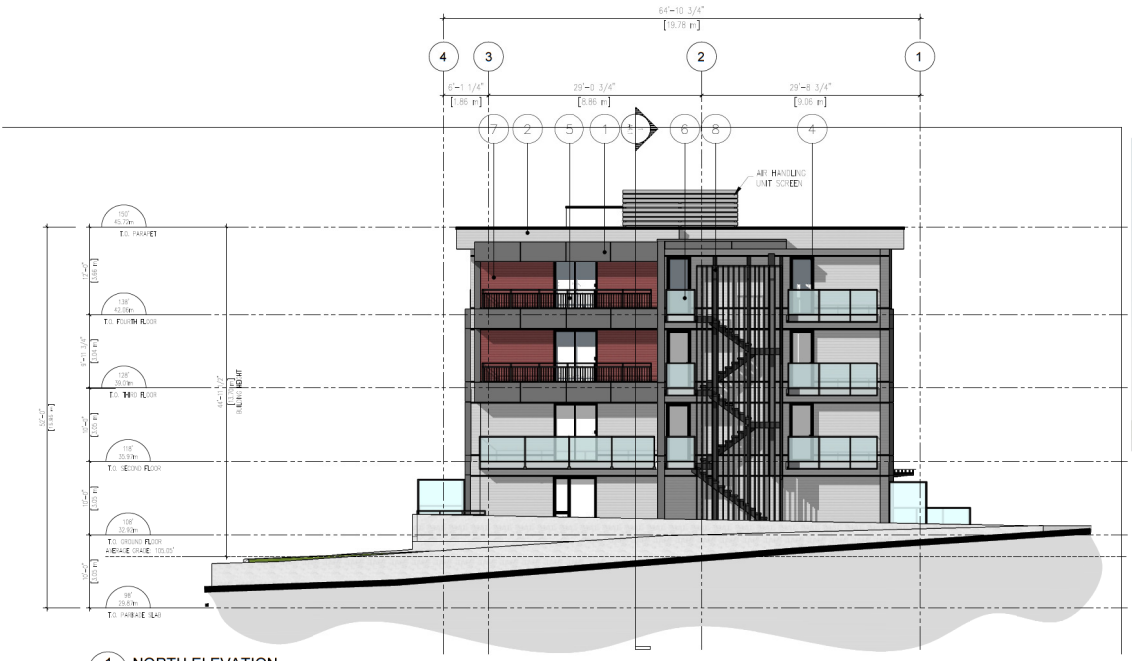
WA ARCHITECTS
VAN 301 - 1444 Alberni Street Vancouver, V6G 2Z4
VIC 104 - 3212 Jacklin Road Victoria, V9B 0J5
604.685.3529 | office@wa-arch.ca | wa-arch.ca

PROJECT NAME:
NICOL STREET PROPOSED RESIDENTIAL BUILDING

PROJECT ADDRESS:
427, 449 & 738 NICOL STREET, NANAIMO, B.C.

DRAWING TITLE:
NORTH & SOUTH ELEVATIONS

PROJECT NO: 18085 DRAWN BY: OC
SCALE: AS NOTED REVIEW BY: AS
DWG NO: **A3.0**



1 NORTH ELEVATION
1/8"=1'-0"

3 NORTHEAST PERSPECTIVE
1/8"=1'-0"

2 EAST ELEVATION
1/8"=1'-0"

LEGEND

1 CEMENTITIOUS PANEL - CHARCOAL GREY

2 VINYL HORIZONTAL SIDING - LIGHT GREY

3 FLASHING - BLACK

4 VINYL WINDOW FRAME - BLACK

5 METAL RAILINGS - BLACK

6 GLASS RAILING

7 VINYL SIDING - BRICK RED

8 WOOD STAIRCASE AND RAILINGS - STAINED CHARCOAL GREY

9 CONCRETE RETAINING WALL

RECEIVED
DP1202
2020-JUN-17
Current Planning

NORTH ARROW:

OWNER/CLIENT:
ISLAND WEST COAST DEVELOPMENTS LTD.
2214 MCGULLOUGH ROAD
NANAIMO, B.C.
V9S 4M8

GENERAL NOTES:

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3	DEVELOPMENT PERMIT SUBMISSION TO CITY	20/04/17
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1	ISSUED FOR INTERNAL REVIEW	19/10/7

SEAL:

CONSULTANT:

WA ARCHITECTS
VAN 301 - 1444 Alberni Street Vancouver, V6G 2Z4
VIC 104 - 3212 Jacklin Road Victoria, V9B 0J5
604.685.3529 | office@wa-arch.ca | wa-arch.ca

PROJECT NAME:
NICOL STREET PROPOSED RESIDENTIAL BUILDING

PROJECT ADDRESS:
427, 449 & 738 NICOL STREET, NANAIMO, B.C.

DRAWING TITLE:
EAST & WEST ELEVATIONS

PROJECT NO: 18085 DRAWN BY: OC
SCALE: AS NOTED REVIEW BY: AS
DWG NO: **A3.1**

1 BUILDING RENDER

N.T.S.

NOTE: STREET TREES HAVE BEEN REMOVED FROM THIS RENDER TO SHOWCASE THE BUILDING. PLEASE REFER TO A 6.1 TO SEE BUILDING WITH STREET TREES INCLUDED.

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DP1202
2020-JUN-17
Current Planning

NORTH ARROW:

OWNER/CLIENT:

ISLAND WEST COAST DEVELOPMENTS LTD.
2214 MCCULLOUGH ROAD
NANAIMO, B.C.
V9S 4MB

GENERAL NOTES:

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SEAL:

REGISTERED ARCHITECT
DAVID ECHAIZ-McGRATH
BRITISH COLUMBIA

CONSULTANT:

WA ARCHITECTS

VAN 301 - 1444 Alberni Street Vancouver, V6G 2Z4
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PROJECT NAME:

NICOL STREET PROPOSED RESIDENTIAL BUILDING

PROJECT ADDRESS:

427, 449 & 738 NICOL STREET, NANAIMO, B.C.

DRAWING TITLE:

BUILDING RENDER

PROJECT NO: 18085 DRAWN BY: OC

SCALE: N/A REVIEW BY: AS

DWG NO: A6.0

1 BUILDING RENDER WITH STREET TREES
N.T.S.

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Current Planning

NORTH ARROW:

OWNER/CLIENT:
ISLAND WEST COAST DEVELOPMENTS LTD.
2214 MCGILLOUGH ROAD
NANAIMO, B.C.
V9S 4M9

GENERAL NOTES:

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SEAL:
REGISTERED ARCHITECT
DAVID ECHAIZ-MUSSA
BRITISH COLUMBIA

CONSULTANT:

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PROJECT NAME:
NICOL STREET PROPOSED RESIDENTIAL BUILDING

PROJECT ADDRESS:
427, 449 & 738 NICOL STREET, NANAIMO, B.C.

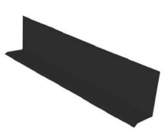
DRAWING TITLE:
BUILDING RENDER WITH STREET TREES

PROJECT NO: 18085 DRAWN BY: OC
SCALE: N/A REVIEW BY: AS
DWG NO: **A6.1**

1 CEMENTITIOUS PANEL - CHARCOAL GREY

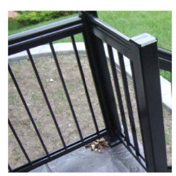
2 VINYL HORIZONTAL SIDING - LIGHT GREY

3 FLASHING - BLACK



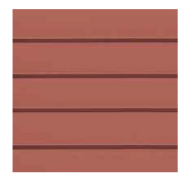
4 VINYL WINDOW FRAME - BLACK

5 METAL RAILINGS - BLACK

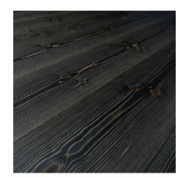


6 GLASS RAILINGS

7 VINYL SIDING - BRICK RED



8 WOOD STAIRCASE AND RAILING - CHARCOAL GREY



NORTH ARROW:

OWNER/CLIENT:
ISLAND WEST COAST DEVELOPMENTS LTD.
2214 MCCULLOUGH ROAD
NANAIMO, B.C.
V9S 4MB

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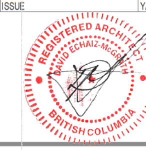
SEAL:



CONSULTANT:

WA ARCHITECTS

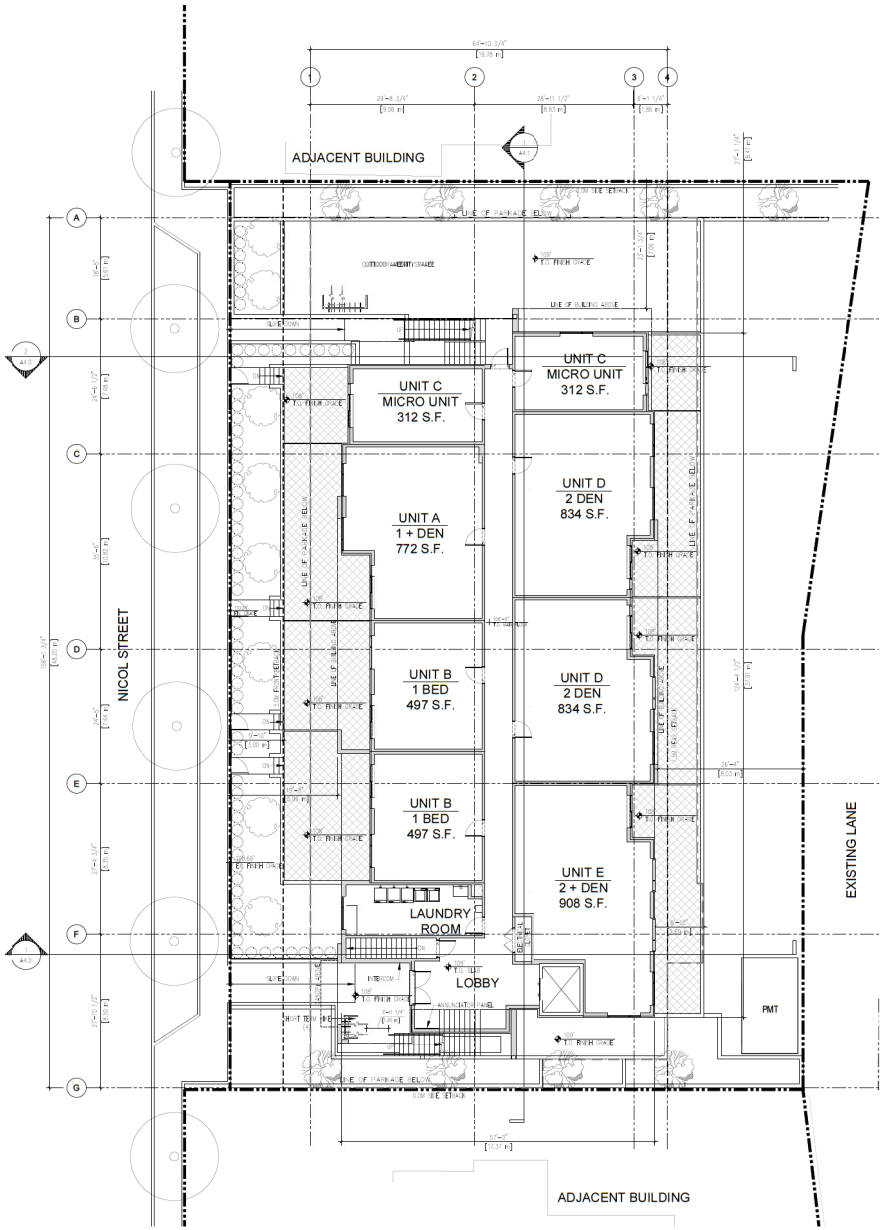
VAN 301 - 1444 Alberni Street Vancouver, V6G 2Z4
VIC 104 - 3212 Jacklin Road Victoria, V9B 0J5
604.685.3529 | office@wa-arch.ca | wa-arch.ca

PROJECT NAME:
NICOL STREET PROPOSED RESIDENTIAL BUILDING

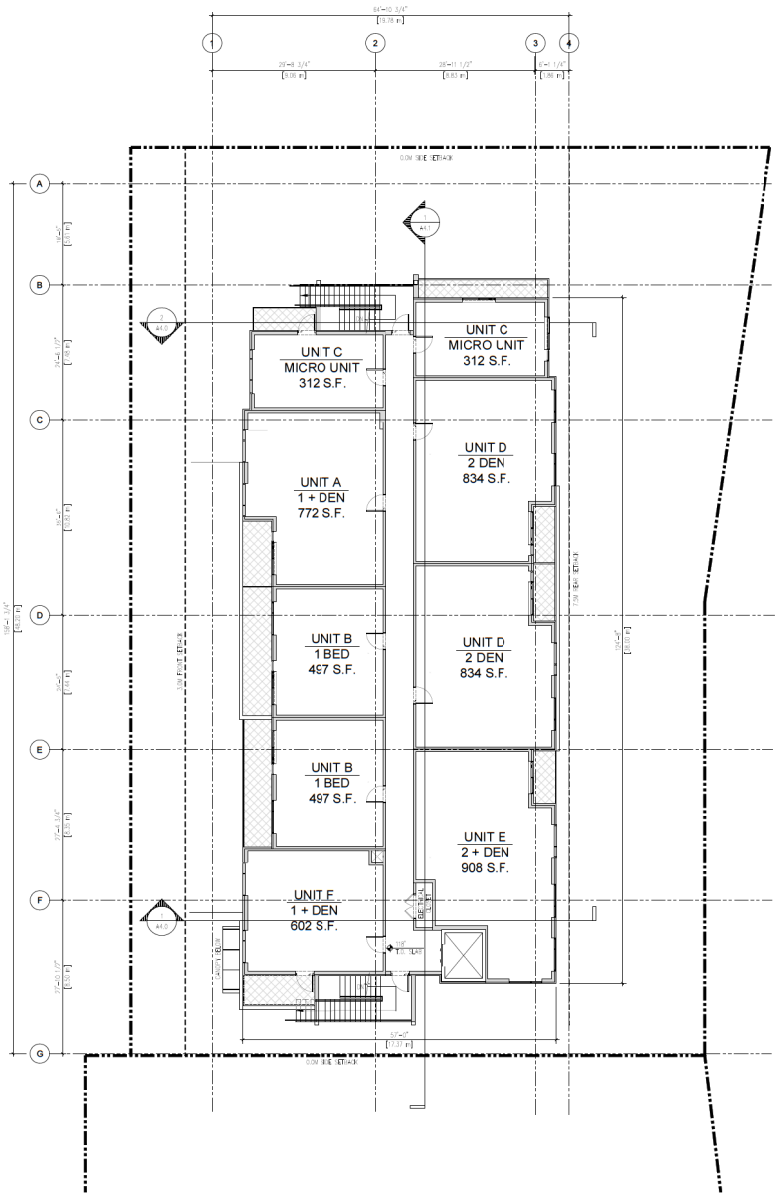
PROJECT ADDRESS:
427, 449 & 738 NICOL STREET, NANAIMO, B.C.

DRAWING TITLE:
MATERIAL BOARD

PROJECT NO: 18085 DRAWN BY: OC
SCALE: N/A REVIEW BY: AS
DWG NO: A5.1



1 LEVEL 1 FLOOR PLAN



2 LEVEL 2 FLOOR PLAN

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2020-JUN-17
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NORTH ARROW:

NORTH

OWNER/CLIENT:

ISLAND WEST COAST DEVELOPMENTS LTD.
2214 MCGULLOUGH ROAD
NANAIMO, B.C.
V9S 4M8

GENERAL NOTES:

NO.	ISSUE	Y/M/D
3	DEVELOPMENT PERMIT SUBMISSION TO CITY	20/04/17
2	ISSUED FOR COORDINATION	20/03/23
1	ISSUED FOR INTERNAL REVIEW	19/12/27

SEAL:

REGISTERED ARCHITECT
MAJID ECHAIZ-MOGHADAM
BRITISH COLUMBIA

CONSULTANT:

WA ARCHITECTS
VAN 301 - 1444 Alberni Street Vancouver, V6G 2Z4
VIC 104 - 3212 Jacklin Road Victoria, V9B 0J5
604.685.3529 | office@wa-arch.ca | wa-arch.ca

PROJECT NAME:

NICOL STREET PROPOSED RESIDENTIAL BUILDING

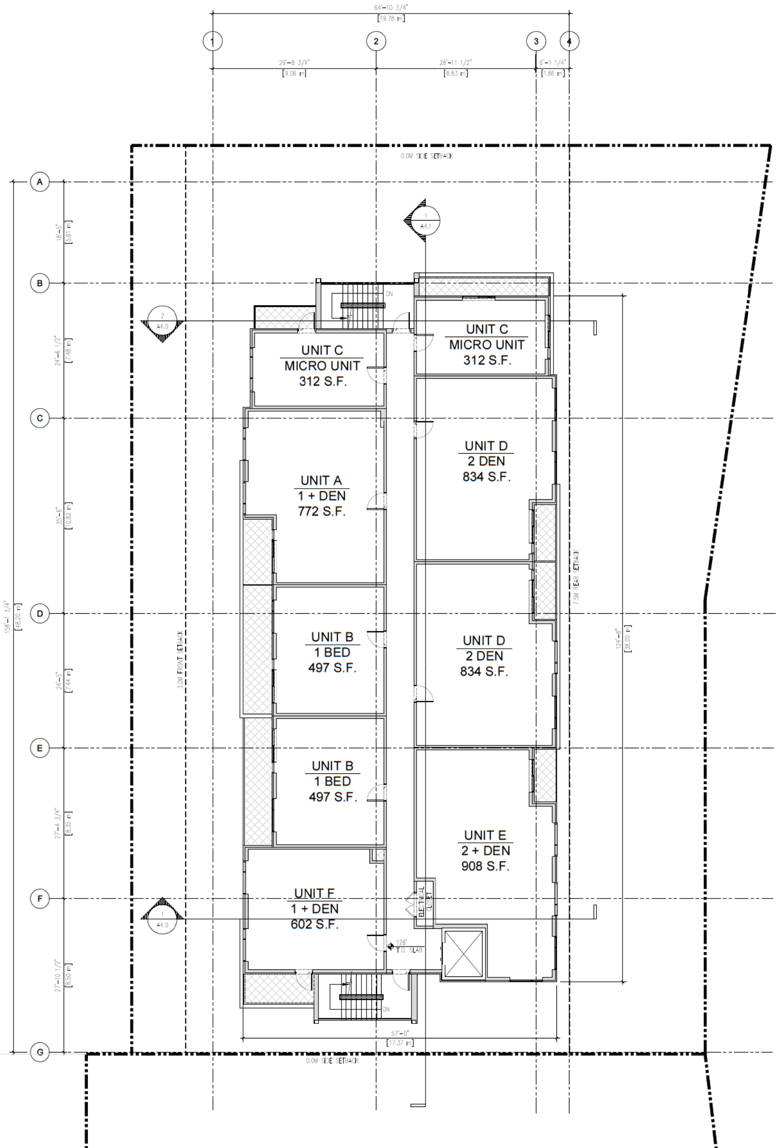
PROJECT ADDRESS:

427, 449 & 738 NICOL STREET, NANAIMO, B.C.

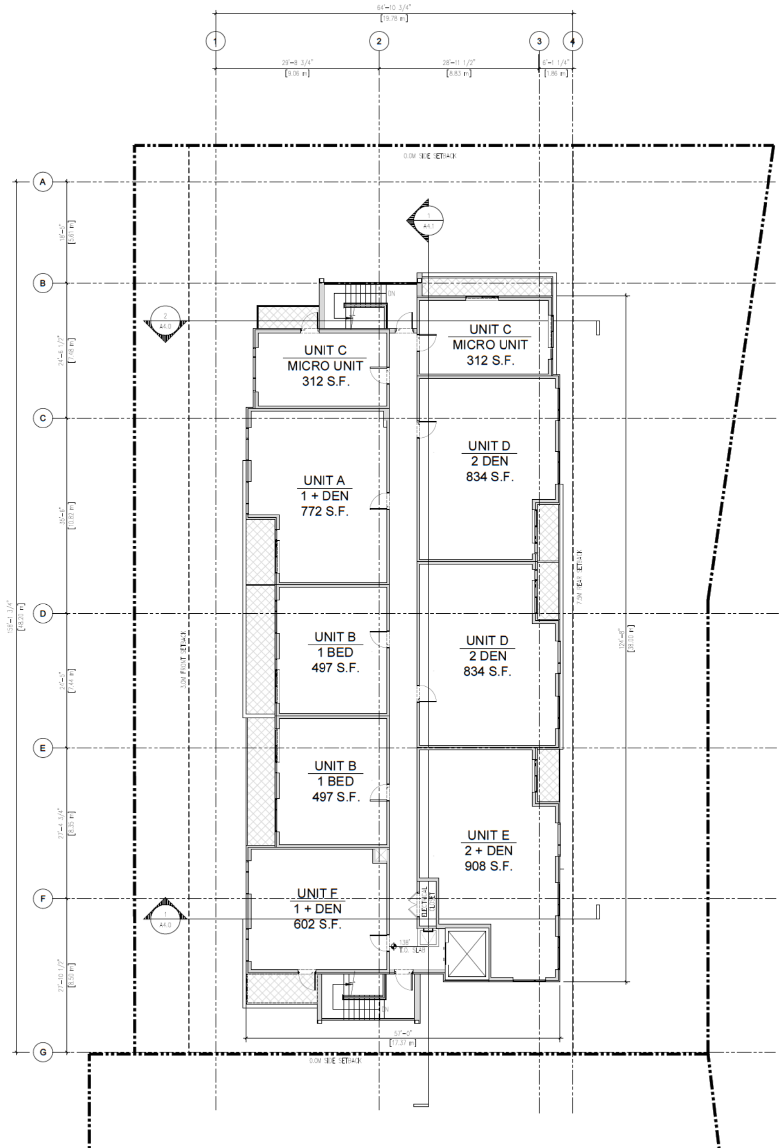
DRAWING TITLE:

LEVEL 1 & LEVEL 2 FLOOR PLANS

PROJECT NO: 18085 DRAWN BY: OC
SCALE: AS NOTED REVIEW BY: AS
DWG NO: **A2.1**



1 LEVEL 3 FLOOR PLAN



2 LEVEL 4 FLOOR PLAN

RECEIVED
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2020-JUN-17
Current Planning

NORTH ARROW:

NORTH

OWNER/CLIENT:

ISLAND WEST COAST DEVELOPMENTS LTD.
2214 MCCULLOUGH ROAD
NANAIMO, B.C.
V9S 4MB

GENERAL NOTES:

NO.	ISSUE	Y/M/D
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1	ISSUED FOR INTERNAL REVIEW	19/11/27

SEAL:

REGISTERED ARCHITECT
DAVID ECHAIZ-McGRATH
BRITISH COLUMBIA

CONSULTANT:

WA ARCHITECTS

VAN 301 - 1444 Alberni Street Vancouver, V6G 2Z4
VIC 104 - 3212 Jacklin Road Victoria, V9B 0J5
604.685.3529 | office@wa-arch.ca | wa-arch.ca

PROJECT NAME:

NICOL STREET PROPOSED RESIDENTIAL BUILDING

PROJECT ADDRESS:

427, 449 & 738 NICOL STREET, NANAIMO, B.C.

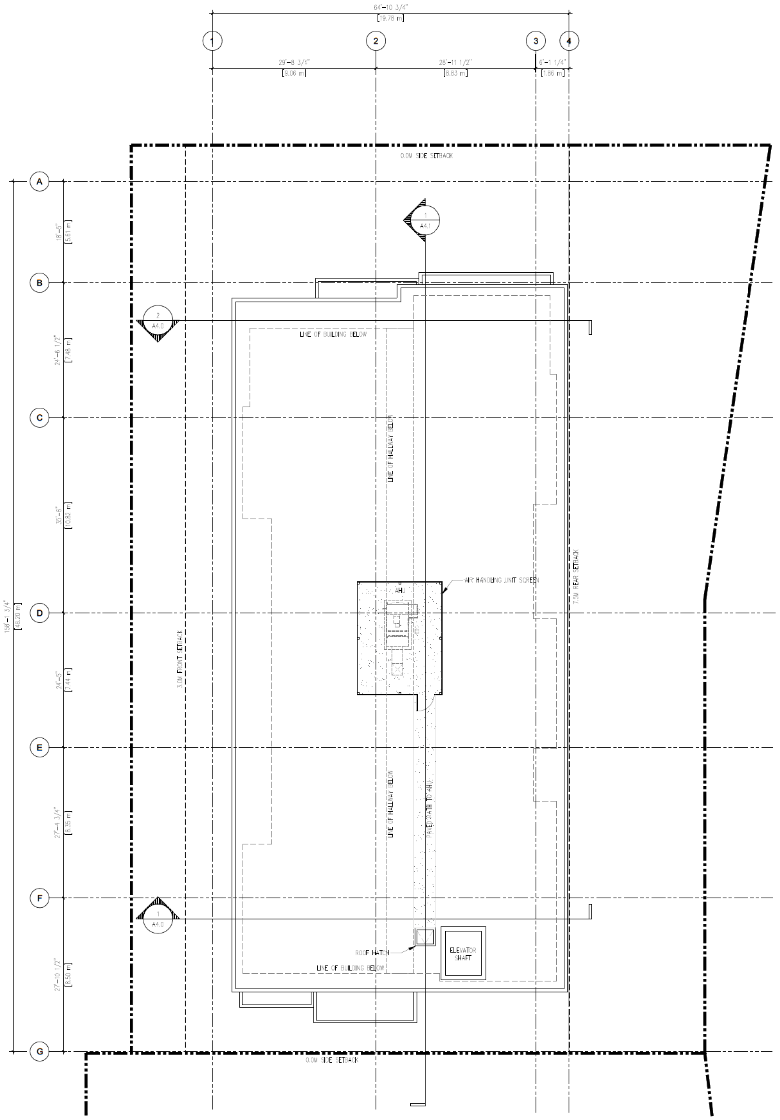
DRAWING TITLE:

LEVELS 3 & LEVEL 4 FLOOR PLANS

PROJECT NO: 18085 DRAWN BY: OC

SCALE: AS NOTED REVIEW BY: AS

DWG NO: **A2.2**



1 ROOF PLAN
3/32" = 1'-0"

RECEIVED
DP1202
2020-JUN-17
Current Planning

NORTH ARROW:
NORTH

OWNER/CLIENT:
ISLAND WEST COAST DEVELOPMENTS LTD.
2214 MCCULLOUGH ROAD
NANAIMO, B.C.
V9S 4M8

GENERAL NOTES:

NO.	ISSUE	Y/M/D
3	DEVELOPMENT PERMIT SUBMISSION TO CITY	20/04/17
2	ISSUED FOR COORDINATION	20/03/25
1	ISSUED FOR INTERNAL REVIEW	19/11/27

SEAL:

CONSULTANT:

WA ARCHITECTS

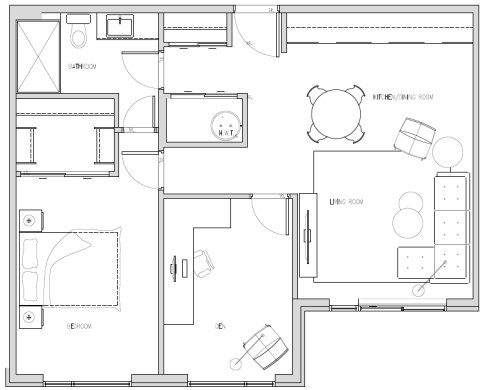
VAN 301 - 1444 Alberni Street Vancouver, V6G 2Z4
VIC 104 - 3212 Jacklin Road Victoria, V9B 0J5
604.685.3529 | office@wa-arch.ca | wa-arch.ca

PROJECT NAME:
NICOL STREET PROPOSED RESIDENTIAL BUILDING

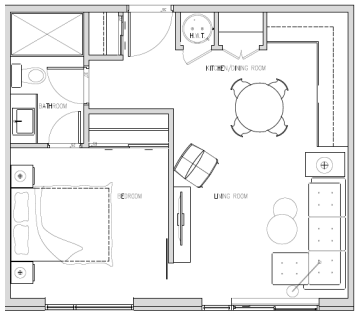
PROJECT ADDRESS:
427, 449 & 738 NICOL STREET, NANAIMO, B.C.

DRAWING TITLE:
ROOF PLAN

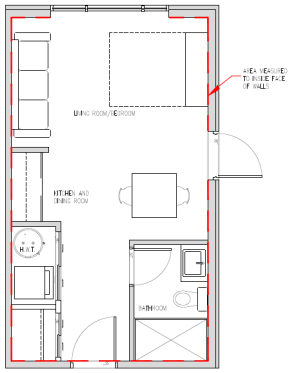
PROJECT NO: 18085
DRAWN BY: OC
SCALE: AS NOTED
REVIEW BY: AS
DWG NO: A2.3



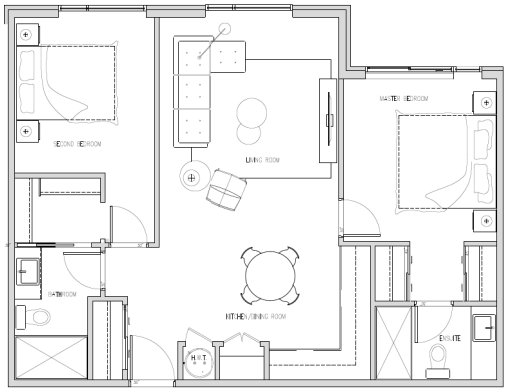
1 UNIT A
+ DEN (772 S.F.)



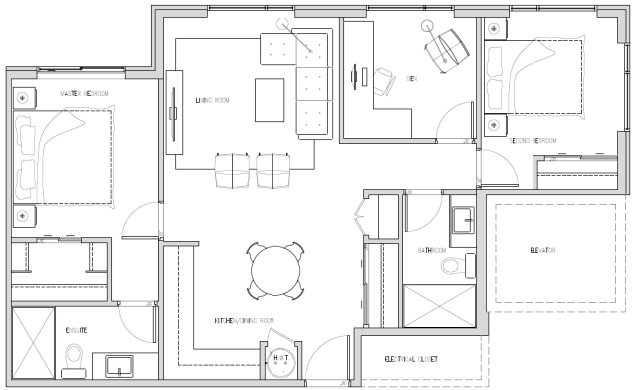
2 UNIT B
1 BED (497 S.F.)



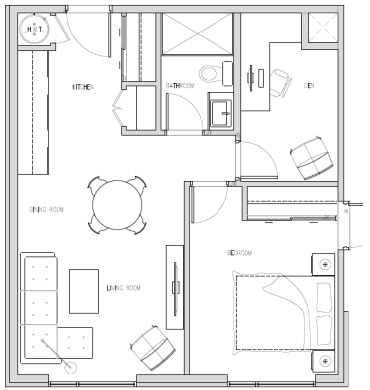
3 UNIT C
MICRO UNIT (332 S.F.) UNIT AREA TO INSIDE FACE OF WALL



4 UNIT D
1 BED (834 S.F.)



5 UNIT E
1 + DEN (908 S.F.)



6 UNIT F
1 + DEN (902 S.F.)

RECEIVED
DP1202
2020-JUN-17
Current Planning

NORTH ARROW:

OWNER/CLIENT:
ISLAND WEST COAST DEVELOPMENTS LTD.
2214 MCGULLOUGH ROAD
NANAIMO, B.C.
V9S 4M8

GENERAL NOTES:

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3	DEVELOPMENT PERMIT SUBMISSION TO CITY	20/04/17
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SEAL:
REGISTERED ARCHITECT
DAVID ECHAIZ-MUÑOZ
BRITISH COLUMBIA

CONSULTANT:

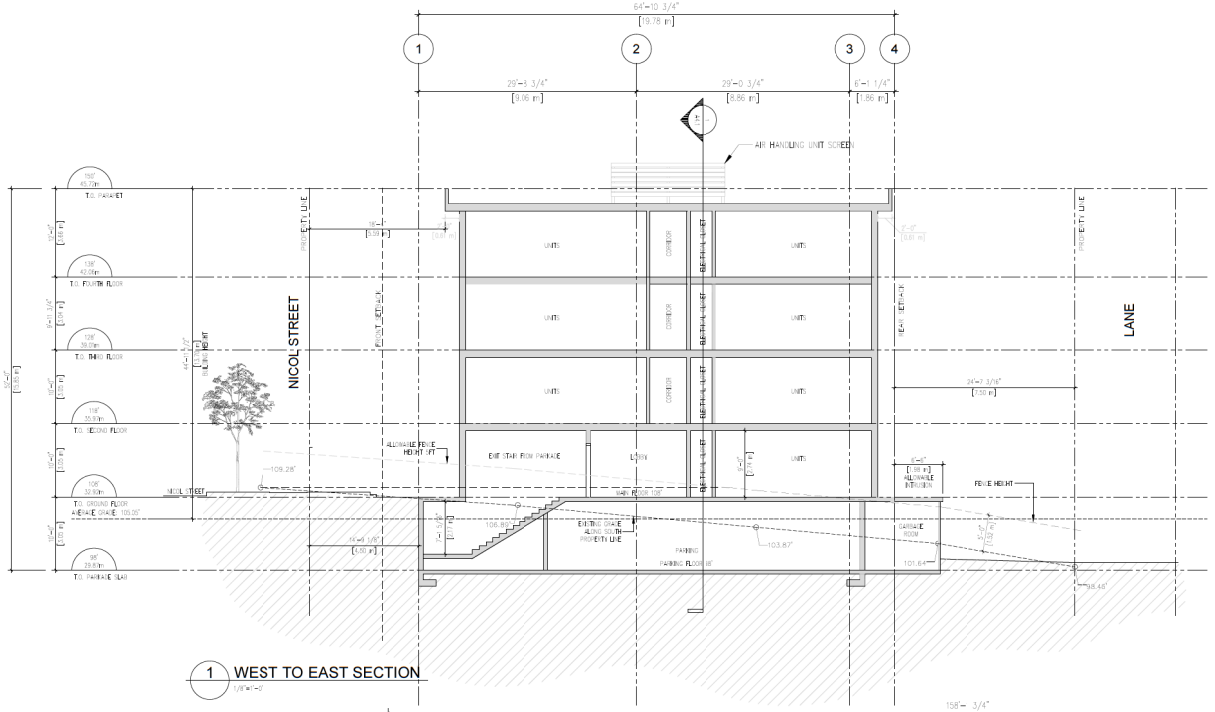
WA ARCHITECTS
VAN 301 - 1444 Alberni Street Vancouver, V6G 2Z4
VIC 104 - 3212 Jacklin Road Victoria, V9B 0J5
604.685.3529 | office@wa-arch.ca | wa-arch.ca

PROJECT NAME:
NICOL STREET PROPOSED RESIDENTIAL BUILDING

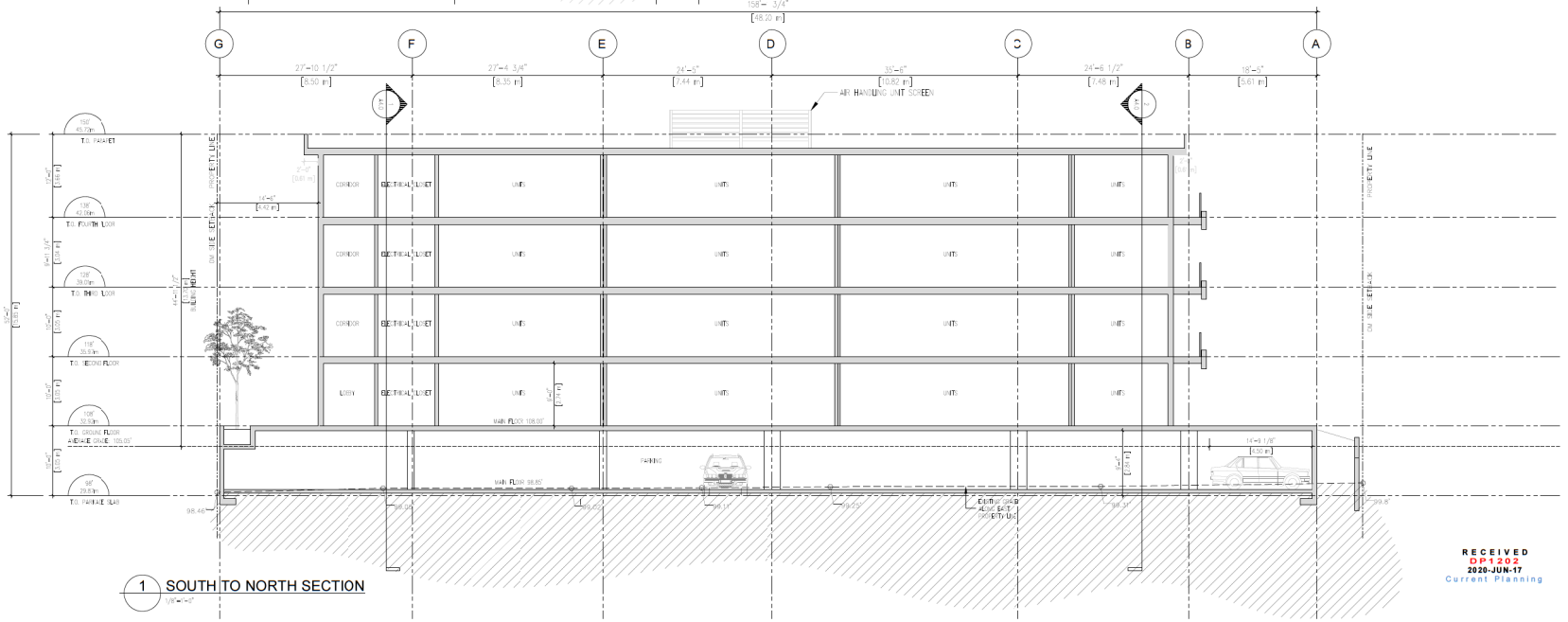
PROJECT ADDRESS:
427, 449 & 738 NICOL STREET, NANAIMO, B.C.

DRAWING TITLE:
UNIT PLANS

PROJECT NO: 18085 DRAWN BY: OC
SCALE: 1/4"=1'-0" REVIEW BY: AS
DWG NO: **A2.4**



1 WEST TO EAST SECTION
1/8"=1'-0"



1 SOUTH TO NORTH SECTION
1/8"=1'-0"

RECEIVED
DP1202
2020-JUN-17
Current Planning

NORTH ARROW:

OWNER/CLIENT:
ISLAND WEST COAST DEVELOPMENTS LTD.
2214 MCGULLOUGH ROAD
NANAIMO, B.C.
V9S 4M8

GENERAL NOTES:

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3	DEVELOPMENT PERMIT SUBMISSION TO CITY	20/04/17
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SEAL:
REGISTERED ARCHITECT
DAVID ECHAIZ-MUÑOZ
BRITISH COLUMBIA

CONSULTANT:

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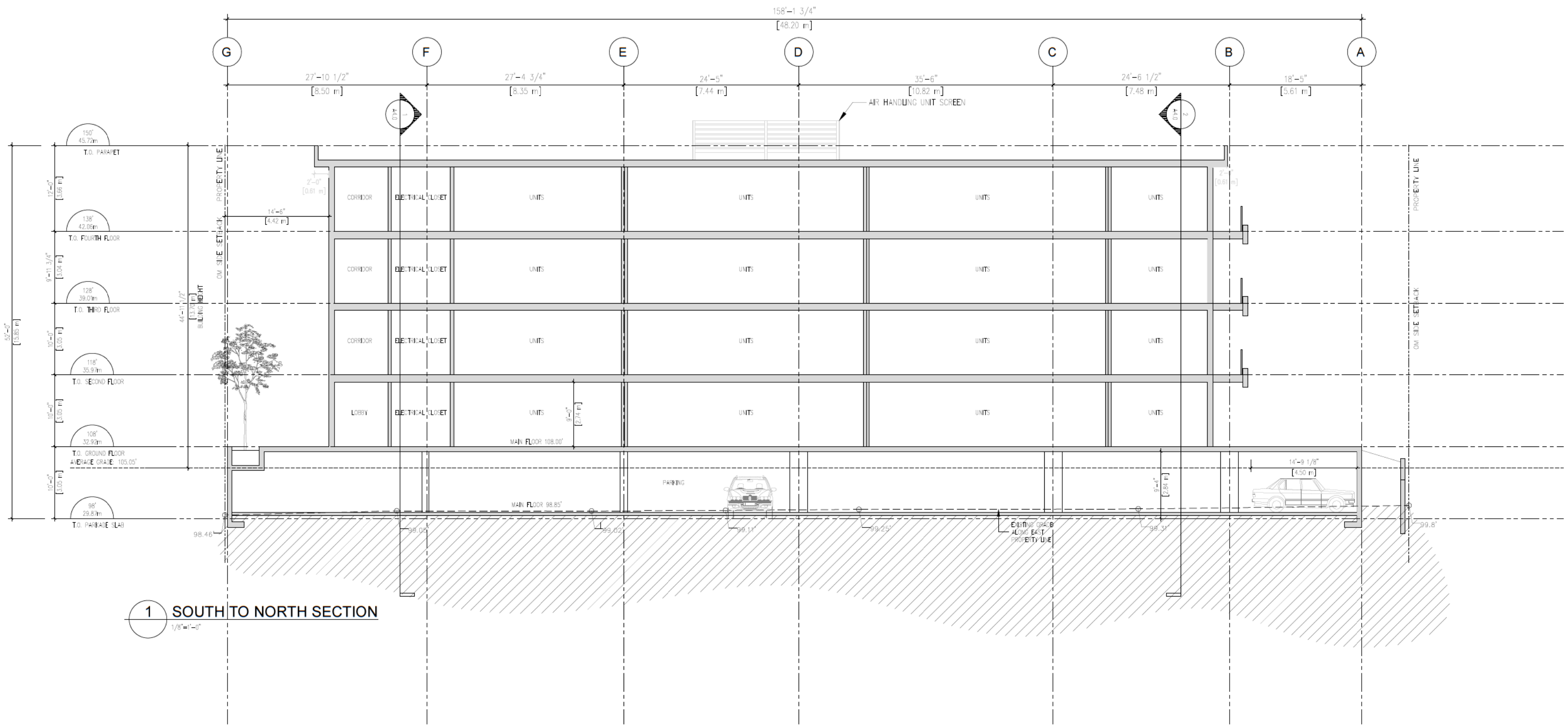
604.685.3529 | office@wa-arch.ca | wa-arch.ca

PROJECT NAME:
NICOL STREET PROPOSED RESIDENTIAL BUILDING

PROJECT ADDRESS:
427, 449 & 738 NICOL STREET, NANAIMO, B.C.

DRAWING TITLE:
BUILDING SECTIONS

PROJECT NO: 18085 DRAWN BY: OC
SCALE: AS NOTED REVIEW BY: AS
DWG NO: **A4.0**



1 SOUTH TO NORTH SECTION

NORTH ARROW:

OWNER/CLIENT:
ISLAND WEST COAST DEVELOPMENTS LTD.
2214 MCCULLOUGH ROAD
NANAIMO, B.C.
V9S 4M8

GENERAL NOTES:

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2	ISSUED FOR COORDINATION	20/03/25
1	ISSUED FOR INTERNAL REVIEW	19/11/27

SEAL:

CONSULTANT:

WA ARCHITECTS

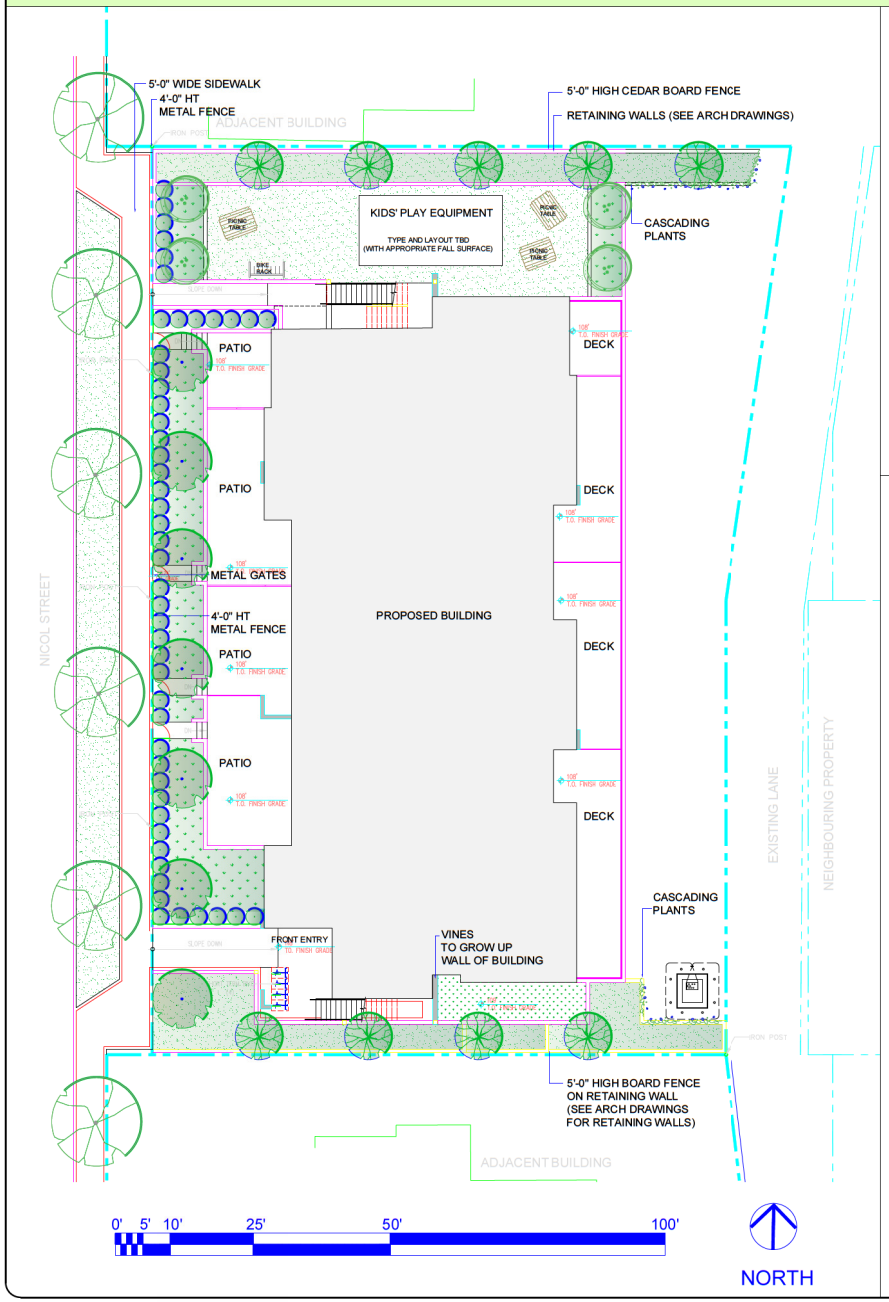
VAN 301 - 1444 Alberni Street Vancouver, V6G 2Z4
VIC 104 - 3212 Jacklin Road Victoria, V9B 0J5
604.685.3529 | office@wa-arch.ca | wa-arch.ca

PROJECT NAME:
NICOL STREET PROPOSED RESIDENTIAL BUILDING

PROJECT ADDRESS:
427, 449 & 738 NICOL STREET, NANAIMO, B.C.

DRAWING TITLE:
BUILDING SECTIONS

PROJECT NO: 18085 DRAWN BY: OC
SCALE: AS NOTED REVIEW BY: AS
DWG NO: A4.1



PLANT LEGEND

- Existing street trees
- Small deciduous trees
- Columnar deciduous trees
- Evergreen hedge
- Vines
- Ornamental grasses
- Area #2 - Low evergreen shrubs & grasses (North & South buffers)
- Area #1- Mixed plantings: evergreen & deciduous shrubs, perennials, ornamental grasses (Nicol St. & playground)
- Grass playground & boulevard

PLANT PALETTE

Note: The plants for this scheme will be chosen from the following list as appropriate.
Not all plants will necessarily be used and others maybe substituted depending on availability and suitability.

Key	Area	Botanical Name	Common Name	Pot Size	ht/spd	attributes	wildlife
		Deciduous Trees					
Ag	1	Amelanchier x grandiflora 'Autumn Brilliance'	Serviceberry	10 gal	15'x15'	spring flowers and copper leaves, green summer leaves, fall colour, berries	birds
Ap	1	Acer palmatum	Japanese Maple	2 m ht	12'x12'	Fall colour, winter twigs	
Ce	1	Cornus eddies white wonder	Flowering Dogwood	6cm cal	20'x15'	red spring, white flwrs, fall colour	birds
Ck	1	Cornus kousa	Chinese Dogwood	2.5m cal	25'x20'	late spring, white flwrs, fall colour	birds
Fsg	2	Fagus sylvatica 'Dawyck'	Columnar Beech	4 cm cal	15'x35'	Glossy green leaves, columnar form	
Sty	1	Styrax japonica	Snowbell Tree	6cm cal	20'x20'	late spring white flwrs fragrant	
		Evergreen Hedging					
Bs	1	Buxus sempervirens	Box	2 gal	trim to 2'	evergreen	
Epp	1	Escallonia pink princess	Escallonia	1 gal	6'x6'	evergreen, late summer pink flowers	
Ic	1	Ilex crenata 'Hellen"	Boxleafed Holly	2 gal	10'x24'	low evergreen hedge	
Tm	1	Taxus media eddies	Yew	5 gal	trim to 6'	evergreen	
		Evergreen Shrubs					
Ag	1	Abelia grandiflora	Abelia	2 gal	5'x5'	glossy evergreen, pink flowers late summer	hummingbirds
Au	1	Arbutus unedo compacta	Strawberry Tree	5 gal	6'x6'	late winter flowers	hummingbirds
Ct	1	**Choisya ternata**	Mexican Orange Blossom	1 gal	6'x6'	evergreen, flag flwrs	
Ci	1	Cistus ladanifer	Crimson Spot Rock Rose	1 gal	3'x3'	evergreen, white, summer	
Gs	2	Gaultheria shallon	Salal	1 gal	3'x3'	Evergeen, blue berries	Mammal browse birds
LH	1	**Lavandula Hidcote Superior**	English Lavender	1 gal	2'x2'	evergreen, summer,purple	bees, butterflies
LsAs	1	Lavender stoechas Silver Anouk	Spanish Lavender	1 gal.	1'x1'	evergreen, fragrant	bees
LsAr	1	Lavendula stoechas Anouk Deep Rose	Spanish Lavender	1 gal	1'x2'	evergreen deep rose flowers	bees
Mn	2	Mahonia nervosa	Dull Oregon Grape	1 gl	1'x2'	Evergreen, yellow spring flowers, berries	birds
Ndm	1	Nandina domestica 'Moon Bay'	Heavenly Bamboo	1 gal	2'x2'	evergreen, fall colour	
Sh	1	Sarcococca humilis	Sweetbox	1 gal	2'x2'	Evergeen, fragrant white flws, late winter	
Vd	**2**	Viburnum davidii	David's viburnum	1 gal	2'x3'	evergreen, white flowers spring, black berries	
		Deciduous Shrubs					
Hm	1	Hydrangea macrophylla	Lace cap	1 gal	6'x6'	pink blue flwrs summer	
Hp	1	Hydrangea paniculata	PeeGee Hydrangea	1 gal	8'x6'	white to pink, late summer	
Rn	1	Rosa nugosa	Shrub Rose	1 gal	4'x4'	summer deep red flowers	bees, birds
Sr	1	Skimmia reevesiana	Skimmia	1 gal	18"x18"	evergreen, spring fragrant flowers, red berries	birds
		Ferns					
De	1 & 2	Dryopteris erythrosora	Autumn Ferm	1 gal	2'x2'	evergreen, new growth bronze	
Pm	1 & 2	Polystichum munitum	Sword Fern	1 gal		evergreen	ground feeding birds
Psd	1 & 2	Polystichym setiferum 'divisilobum'	Feather Sword Fern	1 gal		semi-evergreen	
		Ornamental Grasses					
Ck	1 & 2	Calamagrostis acutifolia Karl Foester	Feather Reed Grass	1 gal			
Cx	1 & 2	Carex Everolour Everest	Everolour Everest Sedge	1 gal	12"x12"	silver grass	
Fg	1 & 2	Festuca idahoensis	Fescue grass	1 gal	12"x12"	Native fescue grass	
Hk	1 & 2	Hakonechloa macra	Japanese Woodland Grass	1 gal		evergreen foliage	
Hs	1 & 2	Helictotrichon sempervirens	Blue Oat Grass	1 gal	2'x2'	blue evergreen foliage	
Mm	1 & 2	Miscanthus 'Little Miss'	Little Miss Red Maiden Grass	1 gal	2'x2'	red foliage	
MsG	1 & 2	Miscanthus sinensis 'Graziella'	Graziella Maiden Grass	1 gal	3'x3'	silvery white flowrs July into winter	birds
Mp	1 & 2	Miscanthus sinesnsis purpurea	Flame Grass	1 gal	3'x3'	silver flowers, fall to winter	
Sb	1 & 2	Schizachyrium The Blues	Little Bluestem	1 gal	2'-4'	Blue foliage	
		Perennials/Groundcovers					
Ar	1	Ajuga repens	Common Bugle	1 gal	18"x24"	evergreen, mat forming, blue flowers	
Cw	1	Campanula poscharskyania Waterfall	Bellflower	1 gal	12"x12"	cascading, blue flowers in spring	insects
CeW	1	Cerastigma wilmottii	Chinese Plumbago	1 gal	1'x2'	brilliant blue fall flowers	butterflies
Cl	1	Crocosmia Lucifer	Scarlet variety	1 gal		red summer flowers	Hummingbirds
Gl	1	Gaura lindheimeria	Butterfly	1 gal		white summer flowers	butterflies
Gb	1	Geranium biokova	Hardy Geranium	1 gal			
Hn	1	Helleborus niger	Lenten Rose	1 gal	1'x1'	winter flowers, evergreen	
Nfd	1	Nepeta fassenii 'Dropmore'	Catmint	1 gal	12"x12"	deciduous	insects
Ro	1	Rosemarinus officonalis	Rosemary	1 gal	2'x2'	evergreen, blue spring flws	bees
So	1	Salvia officinale "purpurescens"	Purple Leaved Sage	1 gal	24"x24"	grey purple leaves evergreen, purple flwrs	bees
Tv	1	Thymus vulgaris	Culinary Thyme	4cm		evergreen, purple flowers	insects
		Vines					
Ca	2	Clematis armandii	Evergreen Clematis	1 gal		evergreen, white fragrant flowers early spring	bees
Cm	2	Clematis montana	Mountain Clematis	1 gal		deciduous, pink flwrs spring, fragrant	
Cta	2	Clematis tangutica	Oriental Clematis	1 gal		Yellow bells, spring to frost	
Lp	2	Lonicera periclymenum	Honeysuckle	1 gal		fragrant flowers summer,	hummingbirds
Pq	2	Parthenocissus quinquefolia	Virginia Creeper	1 gal		Summer green, fall colour	birds
Pt	2	Parthenocissus tricuspidata	Boston Ivy	1 gal		Summer green, fall colour	birds

NOTES:
For grading information, see Civil drawings.

DRAWING LIST:

REVISIONS:

- Issued for DP - 2019Oct28
- Re-Issued for DP - 2020Apr6
- Revised for DP - 2020Apr8

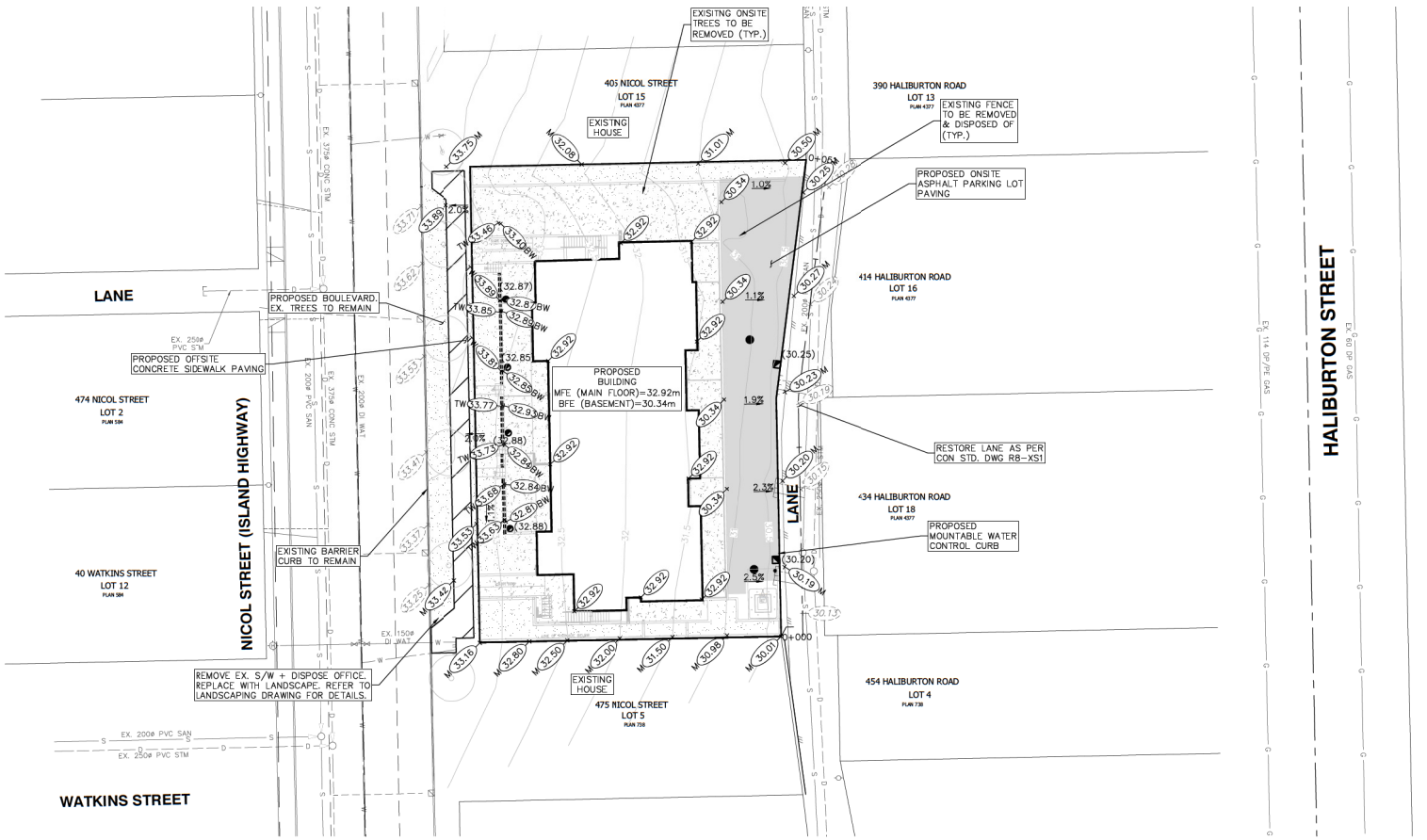
CONSULTANT:
LANDSCAPE ARCHITECT
VICTORIA CRANEFORD

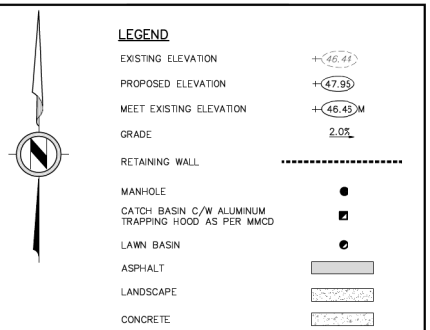
PROJECT:
NICOL STREET MULTI-FAMILY RESIDENTIAL
427, 449, 455 NICOL STREET, NANAIMO BC

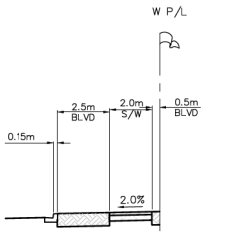
SITE LEGAL DESCRIPTION:
LOT 5, PLAN 738, LOT 19, PLAN 4377, and LOT 1, PLAN 48224, all of SECTION 1, NANAIMO DISTRICT

SHEET TITLE:
LANDSCAPE CONCEPT PLAN

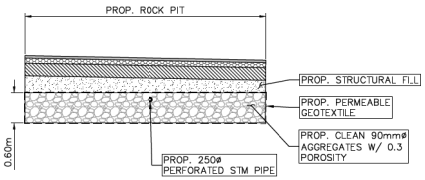
SCALE: 3/32"= 1'-0"
DATE: Oct. 24, 2019
DRAWN: DR
CHECKED: VJD
PROJECT NUMBER: NICOL STREET RENTAL 2019
DRAWING NUMBER: L0.1 - DP







NICOL ST. TO P/L CROSS SECTION
N.T.S.



ROCK PIT TYPICAL SECTION
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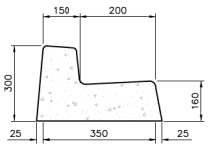
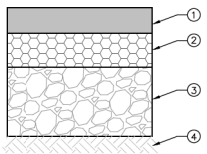


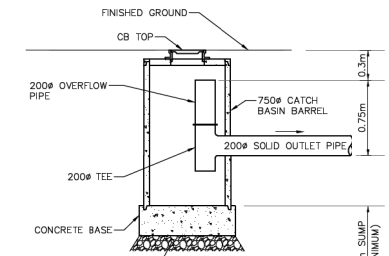
ONSITE BARRIER CURB & GUTTER DETAIL
N.T.S.

PAVEMENT STRUCTURE

1. 50mm – ASPHALTIC CONCRETE
2. 100mm – 19mm MINUS CRUSHED GRAVEL BASE COURSE
3. 250mm – 75mm MINUS CLEAN SAND AND GRAVEL SUB-BASE COURSE, WELL GRADED
4. SUBGRADE TO 95% MODIFIED PROCTOR DENSITY



ROAD STRUCTURE
N.T.S.



OIL SEPARATOR
CATCH BASIN DETAIL
N.T.S.

RECEIVED
DP1202
2020-JUN-17
Current Planning

NOTICE TO CONTRACTOR

IT IS THE RESPONSIBILITY OF THE CONTRACTOR'S SURVEYOR TO VERIFY THAT ALL LEGAL SURVEY DIMENSIONS SHOWN ON THE ENGINEERS DRAWINGS AGREE WITH THOSE ON THE REGISTERED LEGAL SURVEY PLAN. SHOULD THERE BE ANY DISCREPANCIES, THEN IMMEDIATELY NOTIFY THE ENGINEER OF RECORD

NOT FOR CONSTRUCTION

LEGAL DESCRIPTION: THE NORTHERLY 41.25 FEET OF LOT 18, SECTION 1, NANAIMO DISTRICT, PLAN 4377, EXCEPT PART IN PLANS 48224 AND VIP51813; LOT 19, SECTION 1, NANAIMO DISTRICT, PLAN 4377, EXCEPT THE NORTHERLY 41.25 FEET AND EXCEPT PART IN PLANS 48224 AND VIP51813; LOT 1, SECTION 1, NANAIMO DISTRICT, PLAN 48224, EXCEPT PART IN PLAN VIP51813

B.M. MONUMENT NO. 90H9778 ELEVATION: 32.55m
INTERSECTION OF NICOL STREET & NIEDHAM STREET

REV. NO.	DESCRIPTION	DR	CH	DATE	APP
0	FOR COORDINATION	AM	SL	29OCT2019	SL
1	FOR COORDINATION	AM	SL	20NOV2019	SL
2	ISSUED FOR DEVELOPMENT PERMIT	AM	SL	06APR2020	SL

APLIN MARTIN
ENGINEERING ARCHITECTURE PLANNING SURVEYING
Aplin & Martin Consultants Ltd.
#104-6596 Applecross Road Nanaimo, B.C. V9V 0A4
Tel: (778) 84'-0484, Email: general@aplinmartin.com

CLIENT: **ISLAND WEST COAST DEVELOPMENTS LTD.**
2214 McCULLOUGH ROAD,
NANAIMO, BC V9S 4M8 CANADA

PROJECT: **FOUR-STOREY MIXED USE DEVELOPMENT**
427, 449 & 455 NICOL STREET,
NANAIMO, BC CANADA

The location of existing underground utilities are shown in an approximate way only & have not been independently verified by the owner or its representative. The contractor shall determine the exact location of all existing utilities before commencing work, and agrees to be fully responsible for any and all damages which might be occasioned by the contractor's failure to exactly locate and preserve any and all underground utilities.

TITLE: **GRADING PLAN**

DESIGN: AM CHECK: SL
DRAWN: AM APPR: SL

A & M FILE: **19-5018**

PROJECT NO. -

SCALE : 1:250
HORZ.
VERT.

DRAWING DATE: **OCTOBER 2019**

DRAWING NO. -

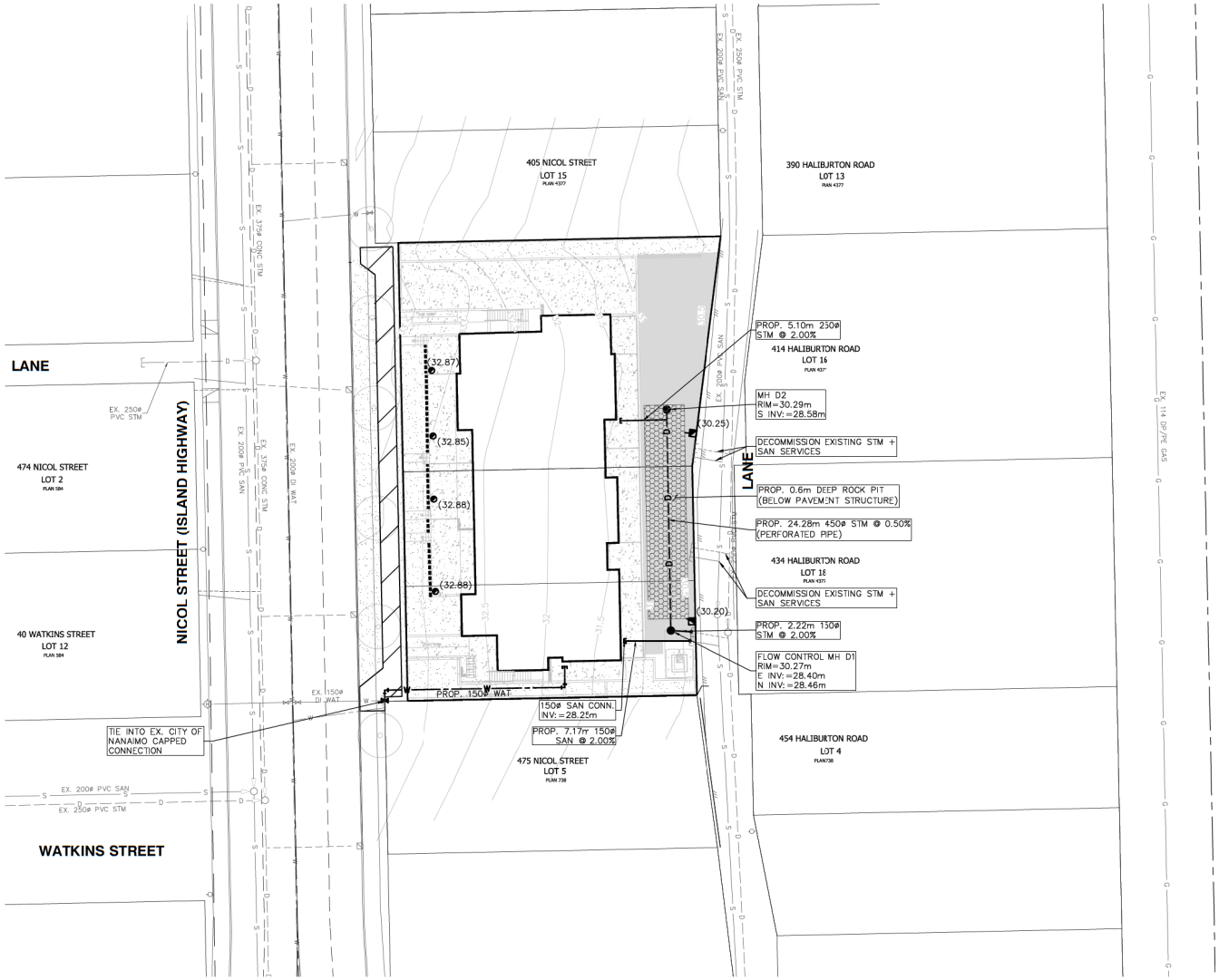
A & M DRAWING NO. **19-5018 - 04**

SHEET NO. **04 of 06**

REV. **2**

0 2 1:250 12m

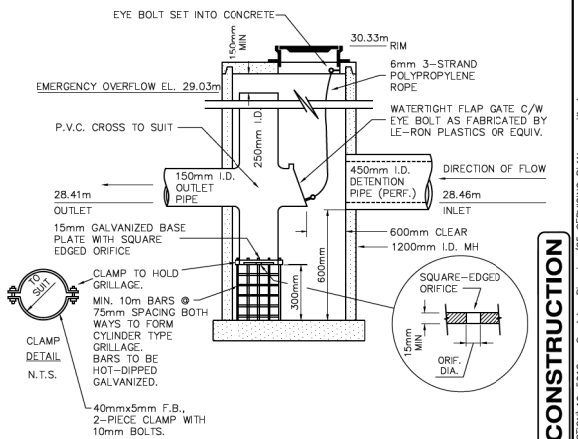
Apr 06 2020 – 4:45pm M:\2019\19-5018\DWG\ONSITE PRODUCTION\19-5018 – Grading Plan.dwg/04 GRADING PLAN amuljoni



LEGEND

- STORM SEWER —D—
- SANITARY SEWER —S—
- WATERMAIN —W—
- STORM SERVICE CONNECTION —D—
- SANITARY SERVICE CONNECTION —S—
- WATER SERVICE CONNECTION —W—
- MANHOLE
- INSPECTION CHAMBER
- CATCH BASIN C/W ALUMINUM TRAPPING HOOD AS PER MMCD
- 600ø LAWN BASIN (UNLESS OTHERWISE SPECIFIED
- ASPHALT
- CONCRETE
- LANDSCAPE

M.H.	ORIFICE DIA.	OUTLET INV.	OUTLET DIA.	RIM ELEV.	EMERGENCY OVERFLOW EL.
D1	100mm	28.41m	150mm	30.33m	29.03m



FLOW CONTROL MANHOLE D1 DETAIL

N.T.S.

RECEIVED
DP1202
2020-JUN-17
Current Planning

NOT FOR CONSTRUCTION

NOTICE TO CONTRACTOR

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LEGAL DESCRIPTION: THE NORTHERLY 41.25 FEET OF LOT 16, SECTION 1, NANAIMO DISTRICT, PLAN 4377, EXCEPT PART IN PLANS 48524 AND VIP51813; LOT 15, SECTION 1, NANAIMO DISTRICT, PLAN 4377, EXCEPT THE NORTHERLY 41.25 FEET AND EXCEPT PART IN PLANS 48524 AND VIP51813; LOT 1, SECTION 1, NANAIMO DISTRICT, PLAN 48524, EXCEPT PART IN PLAN VIP51813

B.M. MONUMENT NO. 90H9778 ELEVATION: 32.55m
INTERSECTION OF NICOL STREET & NIEDHAM STREET

REV. NO.	DESCRIPTION	DR	CH	DATE	APP
0	FOR COORDINATION	AM	SL	29OCT2019	SL
1	FOR COORDINATION	AM	SL	20NOV2019	SL
2	ISSUED FOR DEVELOPMENT PERMIT	AM	SL	06APR2020	SL

APLIN MARTIN
ENGINEERING ARCHITECTURE PLANNING SURVEYING
Aplin & Martin Consultants Ltd.
#104-6596 Applecross Road Nanaimo, B.C. V9V 0A4
Tel: (778) 84'-0484, Email: general@aplinmartin.com

CLIENT: **ISLAND WEST COAST DEVELOPMENTS LTD.**
2214 McCULLOUGH ROAD,
NANAIMO, BC V9S 4M8 CANADA

PROJECT: **FOUR-STOREY MIXED USE DEVELOPMENT**
427, 449 & 455 NICOL STREET,
NANAIMO, BC CANADA

The location of existing underground utilities are shown in an approximate way only & have not been independently verified by the owner or its representative. The contractor shall determine the exact location of all existing utilities before commencing work, and agrees to be fully responsible for any and all damages which might be occasioned by the contractor's failure to exactly locate and preserve any and all underground utilities.

TITLE: **SERVICING PLAN**

DESIGN: AM CHECK: SL
DRAWN: AM APPR: SL

A & M FILE: **19-5018**

PROJECT NO. -

SCALE : 1:250
HORZ.
VERT.

DRAWING DATE: **OCTOBER 2019**

DRAWING NO. -

A & M DRAWING NO. **19-5018 - 05**

SHEET NO. **05 of 06**

REV. **2**

0 2 1:250 12m

Apr 06 2020 – 4:46pm M:\2019\19-5018\DWG\ONSITE PRODUCTION\19-5018 – Servicing Plan.dwg/05 SERVICING PLAN amuljoni

CITY OF NANAIMO STORM FLOW ANALYSIS- CALCULATION SHEET - 5 YEAR RETURN PERIOD

APLIN MARTIN
ENGINEERING ARCHITECTURE PLANNING SURVEYING

A&M Proj # 19-5018
Designed by: CL
Checked by: SL

PROJECT: FOUR-STOREY MIXED USE DEVELOPMENT
ENGINEERING COMPANY: APLIN & MARTIN CONSULTANTS LTD
ADDRESS: 427, 449, & 445 NICOL STREET, NANAIMO, BC
ENGINEER: SCOTT LEWIS, P. ENG.

RETURN PERIOD: 5 years
DATE: Apr. 6, 20
DESIGN BY: CL
SHEET: 1 of 1

Mannings Formula
$V = (1/n) \times R^{2/3} \times S^{1/2}$
$Q = V \times A$
$n_{(Pipe)} = 0.013$

Rational Formula: Q=CxIxAx2.78x1.10

SEAL/ENGINEER'S STAMP

FROM MH	TO MH	Area #	Area (Ha) (A)	Coeff. (C)	Area x Coeff. (AC)	Accu AxC	Time of Concen (min)	Rainfall Concen (mm/hr) (I)	Q_5 (l/s)	Diam. (mm) (D)	Design Slope (%) (S)	Installe Slope (%)	Q Cap. (l/s)	Velocity (m/s) (V)	Length MH to MH (m)	Time of flow- MH to MH (min)
ONSITE																
D5	D4	A	0.05	0.82	0.04	0.04	10.00	40.39	5.06	375	0.50		124.0	1.12	30.50	0.50
D4	D3					0.04	10.50	39.36	4.94	375	0.50		124.0	1.12	24.02	0.40
D3	ROCKPIT					0.04	10.90	38.59	4.84	375	0.50		124.0	1.12	7.84	0.10
CAP1	ROCKPIT	B	0.06	0.90	0.05	0.10	10.00	40.39	11.74	250	2.00		84.1	1.71	19.70	0.20
D2	D1	C	0.05	0.85	0.04	0.14	10.00	40.39	16.98	250	0.50		42.0	0.86	23.53	0.50
D1	EX. CAP					0.18	11.00	38.40	20.96	250	2.00		84.1	1.71	2.26	0.00

5 YEAR RATIONAL METHOD

CITY OF NANAIMO STORM FLOW ANALYSIS- CALCULATION SHEET - 100 YEAR RETURN PERIOD

APLIN MARTIN
ENGINEERING ARCHITECTURE PLANNING SURVEYING

A&M Proj # 19-5018
Designed by: CL
Checked by: SL

PROJECT: FOUR-STOREY MIXED USE DEVELOPMENT
ENGINEERING COMPANY: APLIN & MARTIN CONSULTANTS LTD
ADDRESS: 427, 449, & 445 NICOL STREET, NANAIMO, BC
ENGINEER: SCOTT LEWIS, P. ENG.

RETURN PERIOD: 100 years
DATE: Apr. 6, 20
DESIGN BY: CL
SHEET: 1 of 1

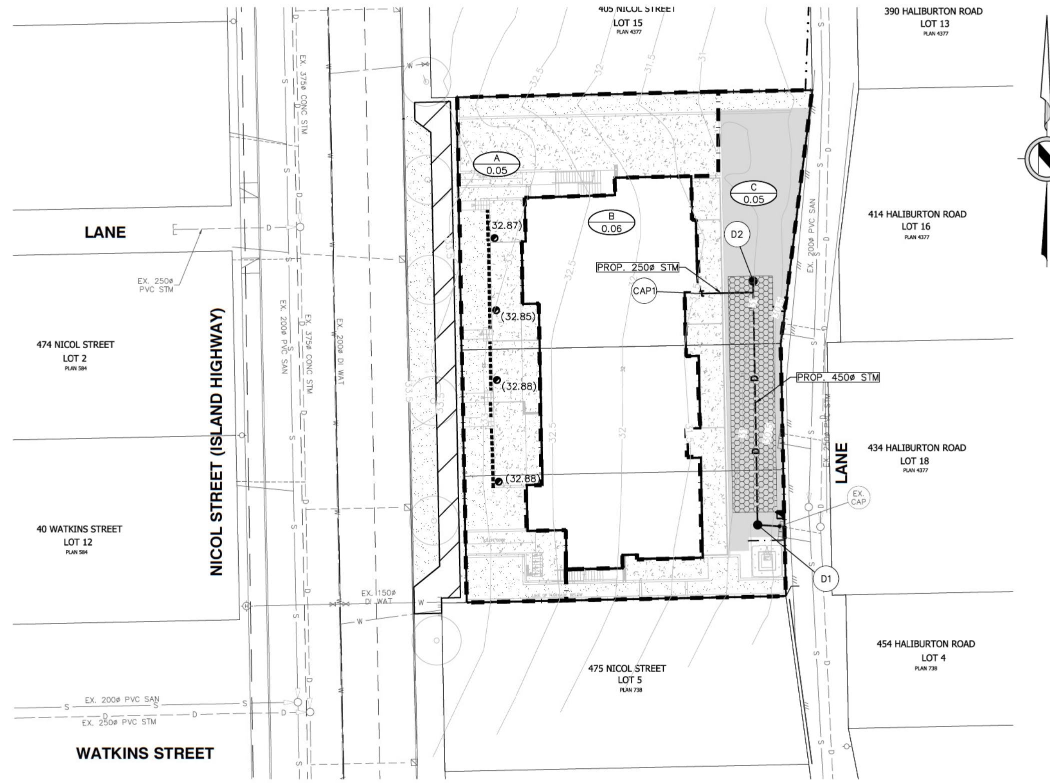
Mannings Formula
$V = (1/n) \times R^{2/3} \times S^{1/2}$
$Q = V \times A$
$n_{(Pipe)} = 0.013$

Rational Formula: Q=CxIxAx2.78x1.20

SEAL/ENGINEER'S STAMP

FROM MH	TO MH	Area #	Area (Ha) (A)	Coeff. (C)	Area x Coeff. (AC)	Accu AxC	Time of Concen (min)	Rainfall Concen (mm/hr) (I)	Q_{100} (l/s)	Diam. (mm) (D)	Design Slope (%) (S)	Installe Slope (%)	Q Cap. (l/s)	Velocity (m/s) (V)	Length MH to MH (m)	Time of flow- MH to MH (min)
ONSITE																
D5	D4	A	0.05	0.82	0.04	0.04	10.00	77.56	10.61	375	0.50		124.0	1.12	30.50	0.500
D4	D3					0.04	10.50	75.36	10.31	375	0.50		124.0	1.12	24.02	0.400
D3	ROCKPIT					0.04	10.90	73.71	10.08	375	0.50		124.0	1.12	7.84	0.100
CAP1	ROCKPIT	B	0.06	0.90	0.05	0.10	10.00	77.56	24.58	250	2.00		84.1	1.71	19.70	0.200
D2	D1	C	0.05	0.85	0.04	0.14	10.00	77.56	35.58	250	0.50		42.0	0.86	23.53	0.500
D1	EX. CAP					0.18	11.00	73.31	43.66	250	2.00		84.1	1.71	2.26	0.000

100 YEAR RATIONAL METHOD



2 Year Peak Flow Calculations

	Tc	Runoff coeffecient	Area	Intensity	n	Q
	min	%	Ha	mm		cms
Q_{Pre}	10	0.50	0.16	16.0	0.00278	0.004
Q_{Post}	10	0.85	0.16	16.0	0.00278	0.007

Storage Volume Required (Modified Rational Method)

Storage Volume = $T_r (Q_{p2} - Q_{rel}) + 0.5 \times T_c \times Q_{rel}^2 (1/Q_{p2} - 1/Q_{p1})$

T_r - Duration of storm, in seconds
T_c - Time to concentration, in seconds
Q_{p1} = Peak flow for storm, $T_r = T_c$, cms
Q_{p2} = Peak flow for storm specified, cms
Q_{rel} = Maximum release rate, cms

Maximum Storage Required = 3 cm

Rainfall Duration Tr	Rainfall Intensity I	Peak Flow Q_{p1}	Peak Flow Q_{p2}	Required Storage
min	mm	cms	cms	cm
5	20	0.006	0.008	1
10	16	0.006	0.007	2
15	14	0.006	0.006	2
20	13	0.006	0.006	2
25	12	0.006	0.005	2
30	12	0.006	0.005	3
35	11	0.006	0.005	2
40	11	0.006	0.005	2
45	10	0.006	0.004	2
50	10	0.006	0.004	2
55	10	0.006	0.004	2
60	9	0.006	0.004	2
65	9	0.006	0.004	2
70	9	0.006	0.004	1
75	9	0.006	0.004	1

2 YEAR DETENTION REQUIREMENTS

5 Year Peak Flow Calculations

	Tc	Runoff coeffecient	Area	Intensity	n	Q
	min	%	Ha	mm		cms
Q_{Pre}	10	0.50	0.16	40.4	0.00278	0.009
Q_{Post}	10	0.85	0.16	40.4	0.00278	0.017

Storage Volume Required (Modified Rational Method)

Storage Volume = $T_r (Q_{p2} - Q_{rel}) + 0.5 \times T_c \times Q_{rel}^2 (1/Q_{p2} - 1/Q_{p1})$

T_r = Duration of storm, in seconds
T_c = Time to concentration, in seconds
Q_{p1} = Peak flow for storm, $T_r = T_c$, cms
Q_{p2} = Peak flow for storm specified, cms
Q_{rel} = Maximum release rate, cms $= Q_{Pre}$

Maximum Storage Required = 5 cm

Rainfall Duration Tr	Rainfall Intensity I	Peak Flow Q_{p1}	Peak Flow Q_{p2}	Required Storage
min	mm	cms	cms	cm
5	58	0.016	0.025	4
10	40	0.016	0.017	5
15	33	0.016	0.014	4
20	28	0.016	0.012	4

5 YEAR DETENTION REQUIREMENTS

PIPE STORAGE				
LOCATION	LENGTH (m)	DIAMETER (m)	AREA (m^2)	VOLUME (m^3)
D1 TO D2	24.28	0.45	0.159	3.86
MANHOLE STORAGE				
LOCATION	DIAMETER (m)	AREA (m^2)	DEPTH (m)	VOLUME (m^3)
D1	1.05	0.87	0.45	0.39
D2	1.2	1.13	0.62	0.70
SUMMARY				
TOTAL VOLUME DETAINED				5.0
TARGET VOLUME TO BE DETAINED				5.0
DESIGN CHECK				OK

DETENTION PROVIDED

Retention Needed		
Total Site Area, **A**	1,645	m^2
Rainfall Depth, **B***	31	mm
Volume to be Retained **(A x B)**	51.0	m^3

*Rainfall depth from CoN Manual of Engineering Standards and Specifications Edition No. 11 Section 7.02.1 (e)

Soil Volume Storage		
Total Landscaped Area, **C**	363	m^2
Soil Water Storage Capacity, **D****:	200	mm/m
Installed Topsoil Depth, **E**	450	mm
Volume Retained in Soil **(C x D x E)**	32.7	m^3

**BC Ministry of Agriculture: Soil Water Storage Capacity and Available Soil Moisture

Rock Pit		
Total Rock Pit Area, Q	103	m^2
Rock Pit Depth, R	600.0	mm
Storage Gravel Porosity, S	0.3	
Volume Retained in Rock Pit **(Q x R x S)**	18.5	m^3

Summary		
Total Volume Retained	51.2	m^3
Target Volume to be retained,	51.0	m^3
Design Check **(G > H)**	OK	

RETENTION PROVIDED

100 YEAR OVERLAND FLOW
100 YEAR FLOW IN PIPE
100 YEAR FLOW BELOW SURFACE
LOCAL OVERLAND FLOW
OVERLAND FLOW
LOCAL SURFACE DRAINAGE CATCHMENT BOUNDARY LINE
EXISTING STORM SEWER
PROPOSED STORM SEWER
EXISTING DITCHES
MANHOLE, CLEANOUT, HEADWALL NUMBER (D1) (EX. D1) (CO #) (HW #)
CATCHMENT AREA (A7 3.11)

NOT FOR CONSTRUCTION

NOTICE TO CONTRACTOR

IT IS THE RESPONSIBILITY OF THE CONTRACTOR'S SURVEYOR TO VERIFY THAT ALL LEGAL SURVEY DIMENSIONS SHOWN ON THE ENGINEERS DRAWINGS AGREE WITH THOSE ON THE REGISTERED LEGAL SURVEY PLAN. SHOULD THERE BE ANY DISCREPANCIES, THEN IMMEDIATELY NOTIFY THE ENGINEER OF RECORD

LEGAL DESCRIPTION: THE NORTHERLY 41.25 FEET OF LOT 19, SECTION 1, NANAIMO DISTRICT, PLAN 4377, EXCEPT PART IN PLANS 48224 AND VIP51613 | LOT 1, SECTION 1, NANAIMO DISTRICT, PLAN 48224, EXCEPT PART IN PLAN VIP51613 | LOT 19, SECTION 1, NANAIMO DISTRICT, PLAN 4377, EXCEPT THE NORTHERLY 41.25 FEET AND EXCEPT PART IN PLANS 48224 AND VIP51613

B.M. MONUMENT NO. 90H9778 ELEVATION: 32.55m
INTERSECTION OF NICOL STREET & NEEDHAM STREET

REV. NO.	DESCRIPTION	DR	CH	DATE	APP
0	FOR COORDINATION	AM	SL	29OCT2019	SL
1	FOR COORDINATION	AM	SL	20NOV2019	SL
2	ISSUED FOR DEVELOPMENT PERMIT	AM	SL	06APR2020	SL

APLIN MARTIN
ENGINEERING ARCHITECTURE PLANNING SURVEYING
Aplin & Martin Consultants Ltd.
#104-6596 Applecross Road Nanaimo, B.C. V9V 0A4
Tel: (778) 841-0484, Email: general@aplinmartin.com

CLIENT: **ISLAND WEST COAST DEVELOPMENTS LTD.**
2214 McCULLOUGH ROAD,
NANAIMO, BC V9S 4M8 CANADA

PROJECT: **FOUR-STOREY MIXED USE DEVELOPMENT**
427, 449 & 455 NICOL STREET,
NANAIMO, BC CANADA

RECEIVED
DP1202
2020-JUN-17
Current Planning

The location of existing underground utilities are shown in an approximate way only & have not been independently verified by the owner or its representative. The contractor shall determine the exact location of all existing utilities before commencing work, and agrees to be fully responsible for any and all damages which might be occasioned by the contractor's failure to exactly locate and preserve any and all underground utilities.

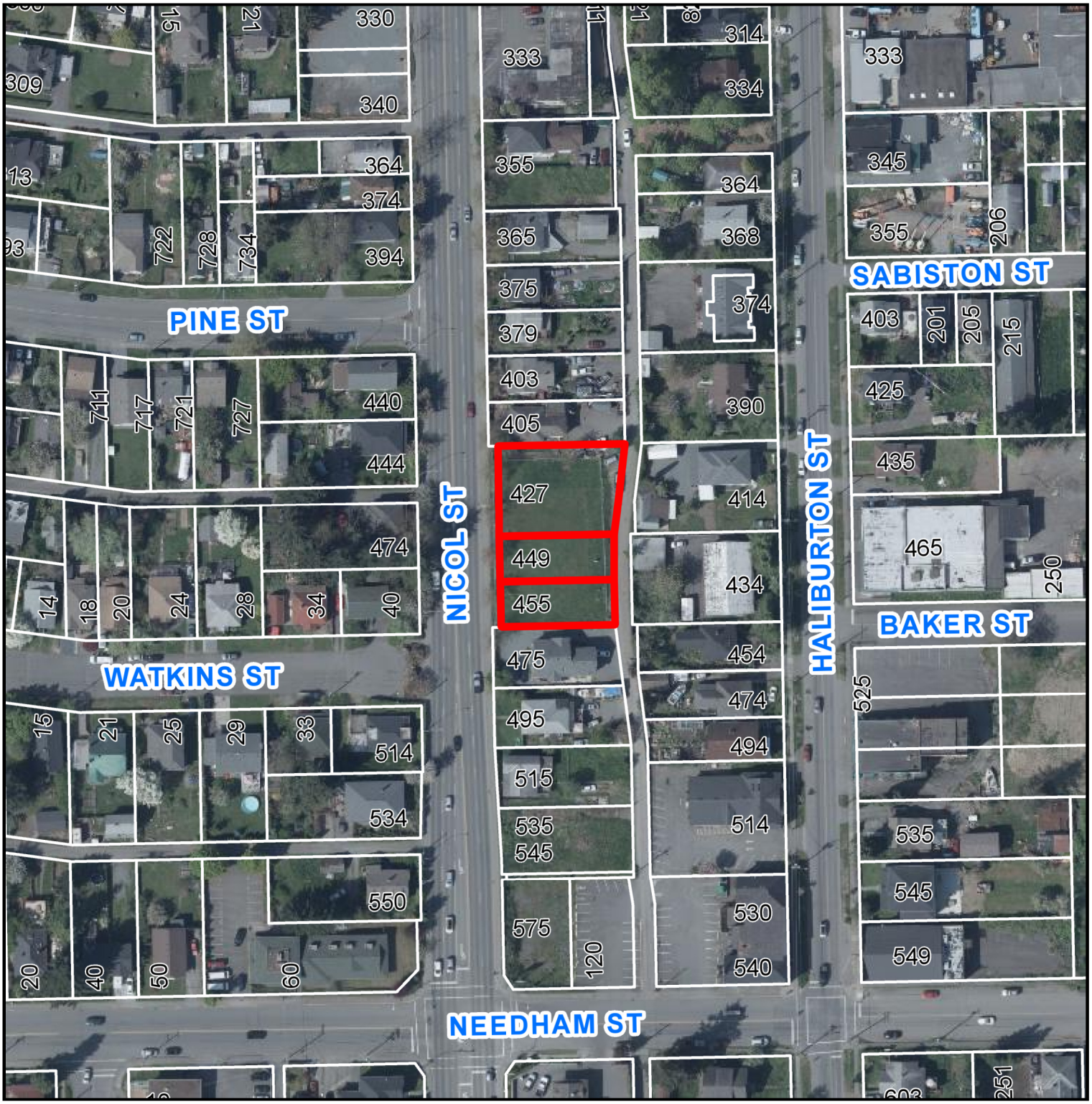
TITLE: **STORMWATER MANAGEMENT PLAN**

DESIGN: AM CHECK: SL
DRAWN: AM APPR: SL
A & M FILE: **19-5018**
PROJECT NO. .
SCALE : 1:250 HORZ. VERT.
DRAWING DATE: **OCTOBER 2019**
DRAWING NO. .
A & M DRAWING NO. **19-5018 - 06**
SHEET NO. **06 of 06**
REV. **2**

0 5 1:500 25m

M:\2019\19-5018\DWG\ONSITE PRODUCTION\19-5018 – Stormwater Management Plan.dwg/06 STORMWATER MANAGEMENT PLAN amujijani
Apr 06 2020 – 4:46pm

AERIAL PHOTO



DEVELOPMENT PERMIT NO. DP001202

427, 449, & 455 NICOL STREET