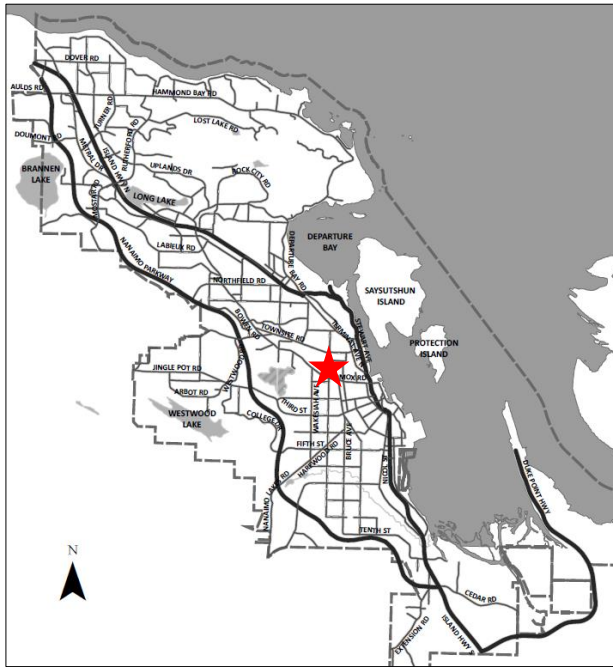


DATE OF MEETING | February 27, 2023

AUTHORED BY | CALEB HORN, PLANNER, CURRENT PLANNING

SUBJECT | **DEVELOPMENT PERMIT APPLICATION NO. DP1263 –
591 BRADLEY STREET**



Proposal:

A 55-unit multi-family development.



Zoning:

R8 – Medium Density Residential

City Plan Land Use Designation:

Neighbourhood

Development Permit Areas:

DPA1 – Environmentally Sensitive Areas

DPA2 – Hazardous Slopes

DPA8 – Form & Character

Lot Area:

5,557m²



OVERVIEW

Purpose of Report

To present for Council's consideration a development permit application for a multi-family development at 591 Bradley Street. |

Recommendation

That Council:

1. approve Development Permit No. DP1263 for a multi-family residential development at 591 Bradley Street with variances as outlined in the "Proposed Variances" section of the Staff report dated 2023-FEB-27; and,
2. direct Staff to secure the conditions outlined in the "Additional Voluntary Contributions" section. |

BACKGROUND

A development permit application, DP1263, was received from Raymond de Beeld Architect Inc., on behalf of 591 Bradley Homes Ltd., to permit a multi-family residential building with 55 dwelling units. A previous DP application, DP1070, was approved in 2019 and expired in 2021. A subsequent DP renewal application for the same proposal, DP1228, was denied in 2021. The present application includes revised project plans meant to address comments related to the previous applications.

The subject property has been zoned for multi-family apartment residential use since 1960. The lot was formerly a single consolidated lot with the neighbouring property to the east, 571 Bradley Street. The property at 591 Bradley Street was subdivided in 1994 and a phased residential development was constructed at 571 Bradley Street beginning in 1995. An easement agreement (EL092987) was registered on the property title of 571 Bradley Street to maintain access for the future development 591 Bradley Street.

Subject Property and Site Context

The subject property is located on the south side of Bradley Street, immediately east of where it turns into Millstone Avenue. A portion of the Millstone Avenue road right-of-way to the west is currently used as a public parking lot. The lot is vacant and slopes steeply downhill from Bradley Street to the Millstone River with a grade change of approximately 21m. The northern portion of the lot was previously disturbed and is approximately 3m below the elevation of Bradley Street. The southern portion of the lot is a steep slope with existing vegetation protected by a restrictive no-build covenant registered on the property title.

Land uses in the surrounding neighbourhood include low-density multi-family residential developments and single residential dwellings. The adjacent property at 571 Bradley Street is a 34-unit strata townhouse development, and to the west is a three-storey rental apartment complex. Bowen Park, on the opposite side of the Millstone River, is accessed by a trail from the end of Millstone Avenue to a pedestrian bridge across the river. |

DISCUSSION

Proposed Development

The applicant is proposing to construct a five-storey multi-family residential rental apartment building with 55 dwelling units and under-the-building parking. Due to the grade change onsite, the building will present a three-storey elevation facing Bradley Street and a five-storey elevation facing the Millstone River. The proposed unit composition is as follows:

Unit Type	Number of Units	Approximate Unit Sizes
Studio	7	33m ² - 41m ²
One-Bedroom	30	48m ² - 60m ²
Two-Bedroom	18	65m ² - 100m ²

The proposed gross floor area is 4,151m² and the total Floor Area Ratio (FAR) will be 0.75, below the maximum permitted base FAR of 1.25 in the R8 zone.

Comparison with Previous Proposal

In support of the application, the applicant has provided a comparison sheet outlining technical differences between the current proposal and the previous proposal (Attachment C). Staff have summarized key project revisions in the table below.

	Previous Proposal (DP1070 / DP1228)	Current Proposal (DP1263)
<i>Number of Units</i>	59 dwelling units	55 dwelling units
<i>Density (FAR)</i>	1.05	0.75
<i>Lot Coverage</i>	25%	20%
<i>Building Height</i>	6 storeys	5 storeys
<i>Variances</i>	Variances for watercourse setback, building height, small car parking, and underground parking setback.	Variances for watercourse setback, front yard setback, and underground parking setback (no building height variance request).
<i>Approximate area of encroachment below top-of-bank</i>	918m ² (17% of site)	375m ² (7% of site)
<i>Proposed Covenant Area (Area of Protection)</i>	2,790m ² (50% of site)	3,332m ² (60% of site)
<i>Riparian Restoration</i>	Details of riparian restoration were to be determined at the time of the building permit as a condition of the DP.	A detailed riparian restoration vegetation management plan was provided and will be secured as a condition of the DP (Attachment H).

	Previous Proposal (DP1070 / DP1228)	Current Proposal (DP1263)
<i>Voluntary Contributions (discussed in more detail later in this report)</i>	Improved public parking area, statutory right-of-way for existing public trail on a portion of the site, and sidewalk along Bradley Street.	In addition to the previously proposed conditions, the following voluntary contributions are proposed: <ul style="list-style-type: none"> • secured purpose-built rental housing; • use of a low-carbon energy system; • off-site frontage works (including improved public parking area); and, • a contribution towards traffic calming measures.

As outlined in the above table, the overall scale and footprint of the proposed development has been reduced when compared to the previous proposal. Additional changes include increased tree retention; greater permeable surfacing; improved rainfall retention; higher building energy efficiency; and others as described in Attachment C.

Site Design

The proposed development is situated on the northernmost portion of the property, at the highest part of the lot and furthest from the Millstone River. Vehicle access to the site will be via separate driveways to two levels of under-the-building parking. The upper parking level will be accessed from Millstone Avenue to the west, and the lower parking level will be accessed from the adjacent strata property to the east (571 Bradley Street), where an existing easement agreement secures vehicle access between Bradley Street and the subject property. A third vehicle access point is proposed for short-term pick-up/drop-off in front of the building which will be accessed directly from Bradley Street. All required vehicle and bicycle parking will be provided onsite and a refuse/recycling storage room is proposed on the upper parking level accessed from Millstone Avenue only.

The principal building entry will face the pick-up/drop-off area. Direct pedestrian connections will be provided from ground-level units to the sidewalk. A new sidewalk will be constructed across the front of the property, and will be protected by a statutory right-of-way (SRW). The portion of the existing trail between Millstone Avenue and Bowen Park that crosses the subject property will be retained and protected by a SRW for public access as a condition of the development permit.

The applicant is proposing to expand the vegetation protection no-build covenant in the southern portion of the property from 2,040m² to approximately 3,330m² as part of the site's development.

Building Design

The proposed building design and massing takes advantage of the slope on the property. South-facing units will be offered views towards the Millstone River and Bowen Park. The two levels of under-the-building parking will be masked from view by the lowermost two storeys of residential

units. An indoor common lounge and outdoor deck is proposed at street-level with access from the main lobby.

In accordance with the General Development Permit Area Design Guidelines, the building design will create a strong street presence facing Bradley Street with a well-defined circular driveway entrance, balconies, ground-level patios, and a covered principal entryway to animate the street. A green roof is proposed for the roof of the covered entryway, and solar panels are proposed for the remaining available roofs. Exterior building materials will consist of fiber cement panels and lap siding in contrasting shades. Additional visual interest will be provided by wood deck columns and soffits. The use of natural shades and materials will allow the development to blend in with the surrounding environment.

As the subject properties falls within Development Permit Area DPA2: Hazardous Slopes, a geotechnical assessment has been prepared by a professional engineer to address the DPA2 guidelines. As a condition of the development permit, a Section 219 covenant will be registered on title to ensure that any development of the site will follow the recommendations of the geotechnical assessment.

Landscape Design

The proposed landscape scheme for the northern portion of the site includes a layered mix of woodland plantings (trees, shrubs, grasses, and groundcovers) to reflect the native forest along the Millstone River. An arbour will frame the pedestrian walkways onsite. Stepped planters will transition from the street level to natural grade on both sides of the proposed building. A fence and gabion mesh retaining wall to the rear of the building will separate the development portion of the site from the proposed covenant area, and green walls are proposed on the south side of the river-facing walls.

The protected covenant area will be subject to a riparian restoration vegetation management plan (the “riparian restoration plan”) as a condition of the development permit. The riparian restoration plan will include invasive species removal, retention of existing native species, interspersed planting, and bonding for a three-year maintenance period.

Design Advisory Panel

The Design Advisory Panel (DAP), at its meeting held on 2022-MAR-10 accepted DP1263 as presented with support for the proposed variances. The following recommendation was provided:

- Consider ways to reduce the massing of the east elevation.

The applicant subsequently revised the building design on the east elevation to include greater material variation, an expanded green screen, and recessing of the exterior decks to create a stepped profile.

Proposed Variances

Minimum Watercourse Setback

The City of Nanaimo “Zoning Bylaw 2011 No. 4500” (the “Zoning Bylaw”) requires a minimum 30m watercourse setback from the top-of-bank above the Millstone River. The proposed

watercourse setback from top-of-bank is 0m, a requested variance of 30m. The entirety of the subject property is located within the 30m setback from top-of-bank and a variance would be required for any structure or development on the lot.

As the Millstone River is a fish-bearing watercourse, it is also subject to the Provincial Riparian Areas Protection Regulation (RAPR). At this location, the required Streamside Protection and Enhancement Area (SPEA) has been determined by a Qualified Environmental Professional to be 15m as measured from the high water mark. As the City's watercourse setback is measured from the top-of-bank above the Millstone River and the top-of-bank is approximately 50m from the high water mark, the City setback extends across Bradley Street to the north of the subject property. Neither the previous proposal nor the current proposal includes any encroachment into the SPEA; however, the proposed nearest distance of excavation from the SPEA has been increased to 15m compared to 6m in the previous proposal (DP1070 / DP1228).

Any variance to a watercourse setback in the City of Nanaimo is subject to the Development Permit Area DPA1: Environmentally Sensitive Areas (ESAs) guidelines as outlined in Section 18.1 of the Zoning Bylaw. To address the DPA1 guidelines, the applicant has provided a detailed biophysical assessment prepared by a Qualified Environmental Professional (QEP) with a RAPR assessment report. An executive summary prepared by the QEP has also been provided (Attachment J). The assessment recommends that a significant area beyond the SPEA be protected for both wildlife habitat and slope stability. In accordance with the QEP's recommendations, the proposed development will have a setback from the high water mark of the Millstone River ranging from approximately 77.5m on the west side to 31.5m on the east side.

The QEP assessment has been reviewed and accepted by Staff. The proposed development will not encroach any closer to the Millstone River than adjacent developments and the functional habitat will be significantly increased through the riparian restoration plan and secured by covenant. The area of the required SPEA is approximately 821m² and there is an existing covenant on the property title that protects approximately 2,040m² as a no-build area. The proposed covenant area will be 3,332m² providing a significant increase in protected habitat area. Additionally, the riparian restoration plan will increase the density of native plant species within the protected area.

Given the demonstrated ability to meet the DPA1 guidelines and exceed the Provincial SPEA requirements, Staff support the proposed watercourse setback variance.

Minimum Front Yard Setback

The minimum front yard setback in the R8 zone is 6.0m. The proposed front yard setback is 4.5m, a requested variance of 1.5m. The applicant has moved the proposed building closer to Bradley Street compared to the previous proposal in order to expand the proposed environmental protection area, and has demonstrated that adequate landscape buffering can be provided in the proposed 4.5m setback. The front yard setback will also accommodate the public sidewalk onsite. Given the greater setback from the Millstone River on the south side of the development, Staff support the proposed front yard setback variance.

Minimum Underground Parking Structure Setback

The minimum front yard setback for an underground parking structure is 1.8m. The proposed parking structure setback from Bradley Street is 0.0m, a requested variance of 1.8m. The

proposed parking is sited as near to Bradley Street as possible to maximize separation from the riparian area to the south. Additionally, the new underground parking structure will provide necessary lateral support to Bradley Street where it is currently supported by a retaining wall. Staff support the proposed underground parking structure setback variance.

Community Consultation

Though not required for a development permit application, the applicant originally engaged with the surrounding community in 2018 prior to approval of DP1070. In order to provide an update on the revised project proposal, the applicant further engaged both the Bradley Street Neighbourhood Association and the strata council for neighbouring 571 Bradley Street in December 2022. No formal request for comment is required as part of a DP application and the City has not received comments on this application from either group at the time of writing of this report.

Additional Voluntary Contributions

In response to community comments on the previous proposal – specifically regarding traffic and housing tenure – and in order to address City Plan objectives related to climate change, the applicant proposes the following voluntary contributions to be secured as conditions of the development permit:

1. The provision of purpose-built rental units (no independent sale of units) through a Housing Agreement for a period of 10 years, to be secured prior to building permit issuance;
2. Commitment to a low-carbon energy system with a greenhouse gas intensity limit of 3kg/m²/year (consistent with the BC Energy Step Code rezoning policy for applications that require rezoning);
3. A monetary contribution of \$50,000 towards City traffic calming measures for the Bradley Street – Millstone Avenue corridor prior to building permit issuance; and,
4. Completion of the following off-site works through Design Stage Acceptance at the time of building permit:
 - reconstruction of the public parking area within the full extent of the Millstone Avenue right-of-way to the west of the subject property, generally as shown on Attachment D; and
 - construction of a sidewalk with a linear length of approximately 37m on the south side of Bradley Street within the existing road right-of-way, between the subject property and the nearest vehicle drive aisle entry of the adjacent strata development at 571 Bradley Street.

Staff support the proposed voluntary contributions and recommend that issuance of the development permit be withheld until the conditions are secured (e.g. through a Section 219 covenant registered on property title). Through the provision of voluntary contributions and the reduction in scale of development, the proposal both exceeds the requirements of the DPA1 guidelines for protection of environmentally sensitive areas and secures off-site amenities to the benefit of the immediate neighbourhood.

SUMMARY POINTS

- Development Permit Application No. DP1263 is for a five-storey multi-family residential rental building with 55 dwelling units and under-the-building parking.
- Variances are requested for the watercourse setback, front yard setback, and underground parking structure setback.
- The overall scale and footprint of the proposed development has been reduced when compared to the previous proposal.
- The applicant has proposed voluntary contributions related to housing tenure, low-carbon energy systems, traffic calming, and off-site works, to be secured prior to issuance of the development permit.
- Through the provision of voluntary contributions and the reduction in scale of development, the proposal both exceeds the requirements of the DPA1 guidelines for protection of environmentally sensitive areas and secures off-site amenities to the benefit of the immediate neighbourhood.

ATTACHMENTS

ATTACHMENT A:	Permit Terms and Conditions
ATTACHMENT B:	Subject Property Map
ATTACHMENT C:	DP Comparison Sheet
ATTACHMENT D:	Site and Parking Plans
ATTACHMENT E:	Building Elevations and Details
ATTACHMENT F:	Site Sections
ATTACHMENT G:	Building Renderings
ATTACHMENT H:	Landscape Plan and Details
ATTACHMENT I:	Riparian Restoration Vegetation Management Plan
ATTACHMENT J:	Environmental Assessment – Executive Summary

Submitted by:

Lainya Rowett
Manager, Current Planning

Concurrence by:

Jeremy Holm
Director, Development Approvals

Dale Lindsay
General Manager, Development Services
/ Deputy CAO

ATTACHMENT A PERMIT TERMS AND CONDITIONS

TERMS OF PERMIT

Page 1 of 2

The “City of Nanaimo Zoning Bylaw 2011 No. 4500” is varied as follows:

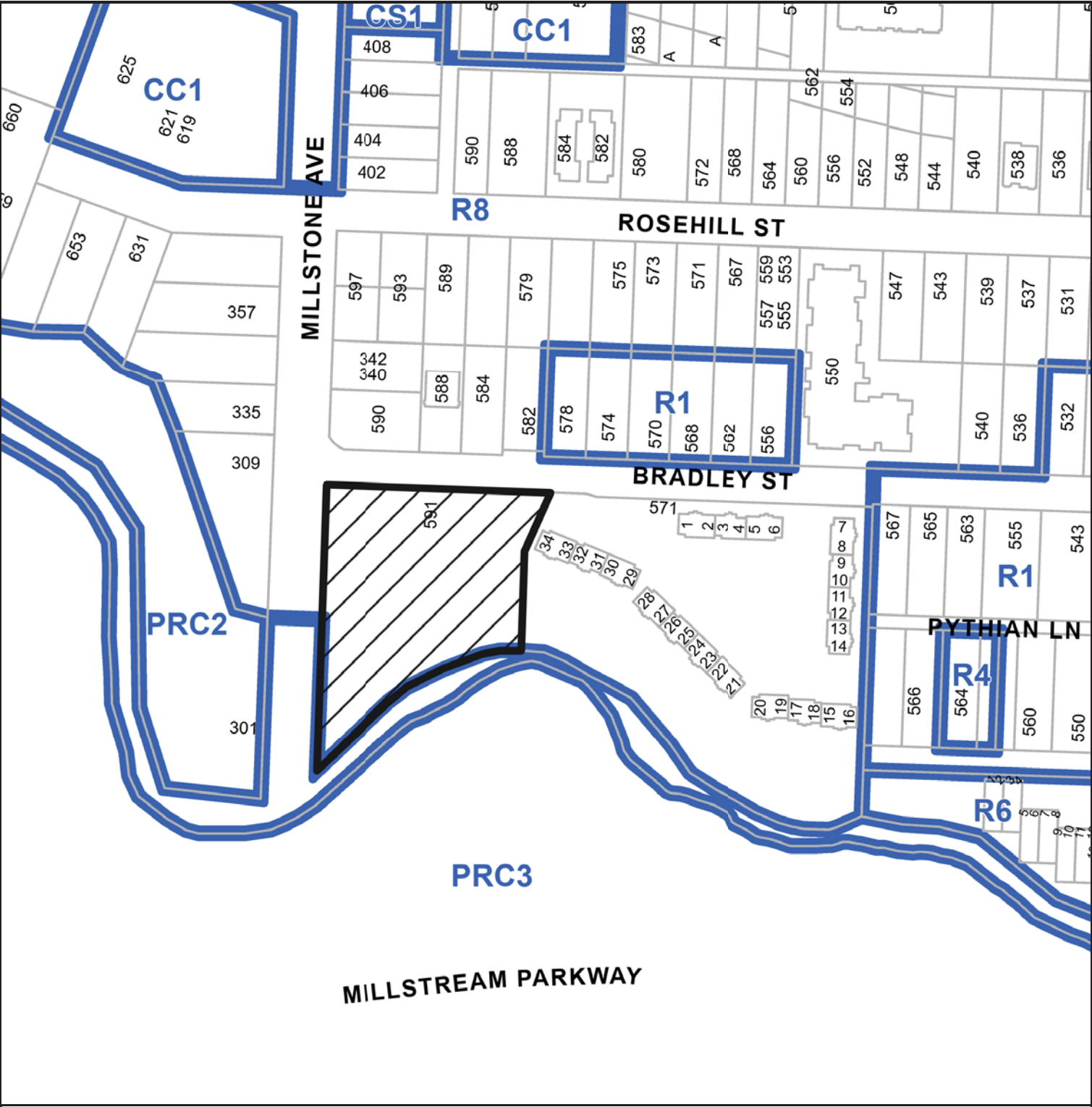
1. *Section 6.3.1.4 Location and Siting of Buildings and Structures to Watercourses and the Sea* – to reduce the minimum required watercourse setback as measured from the top-of-bank of the Millstone River from 30m to 0m.
2. *Section 6.5.1 Projections into Yards* – to reduce the minimum required setback for an underground parking structure from 1.8m to 0m.
3. *Section 7.5 Siting of Buildings* – to reduce the minimum required front yard setback from 6.0m to 4.5m.

CONDITIONS OF PERMIT

1. The subject property is developed in accordance with the Site and Parking Plans prepared by Raymond de Beeld Architect Inc., dated 2023-JAN-26, as shown on Attachment D.
2. The development is in substantial compliance with the Building Elevations and Details prepared by Raymond de Beeld Architect Inc., dated 2023-JAN-26, as shown on Attachment E.
3. The development is in substantial compliance with the Landscape Plan and Details prepared by Victoria Drakeford Landscape Architect, dated 2022-JAN-14, as shown on Attachment H.
4. Development shall be in accordance with the Riparian Restoration Vegetation Management Plan prepared by Victoria Drakeford Landscape Architect, dated 2023-JAN-20, as shown in Attachment I, and bonding equal to 100% of the value of the vegetation restoration works to be provided prior to building permit issuance and retained for a 3-year maintenance period.
5. Compliance with the Riparian Areas Protection Regulation Assessment Report prepared by Toth and Associates Environmental Services, dated 2023-JAN-26, and its recommendations, including:
 - A detailed erosion and sediment control plan to be provided prior to building permit issuance to ensure that overland flows are not directed to ravine side slopes, both during and after construction; and
 - A post-development report to be submitted to the City and Province within six months of project completion to ensure that no encroachment has occurred within the Streamside Protection and Enhancement Area (SPEA) setback.
6. Installation of permanent fencing and signage, as per the City of Nanaimo aquatic setback fence standards, prior to building permit issuance.
7. Registration of a statutory right-of-way with a width of 2.0m adjacent to Bradley Street to accommodate required frontage works (including sidewalk, curb, etc.), prior to building occupancy.

8. Registration of a statutory right-of-way to secure public access for the existing trail from Millstone Avenue to Bowen Road that crosses the property as shown on Attachment D, prior to building occupancy.
9. Registration of a vegetation protection Section 219 covenant on the subject property as shown on Attachment D to replace existing charge VIP60191, prior to building permit issuance.
10. Registration of Section 219 covenant prior to building permit issuance to secure the geotechnical assessment prepared by Lewkowich Engineering Associations Ltd., dated 2022-JAN-20, to require any development of the site to follow the geotechnical assessment's recommendations, and to save harmless the City.

**ATTACHMENT B
SUBJECT PROPERTY MAP**



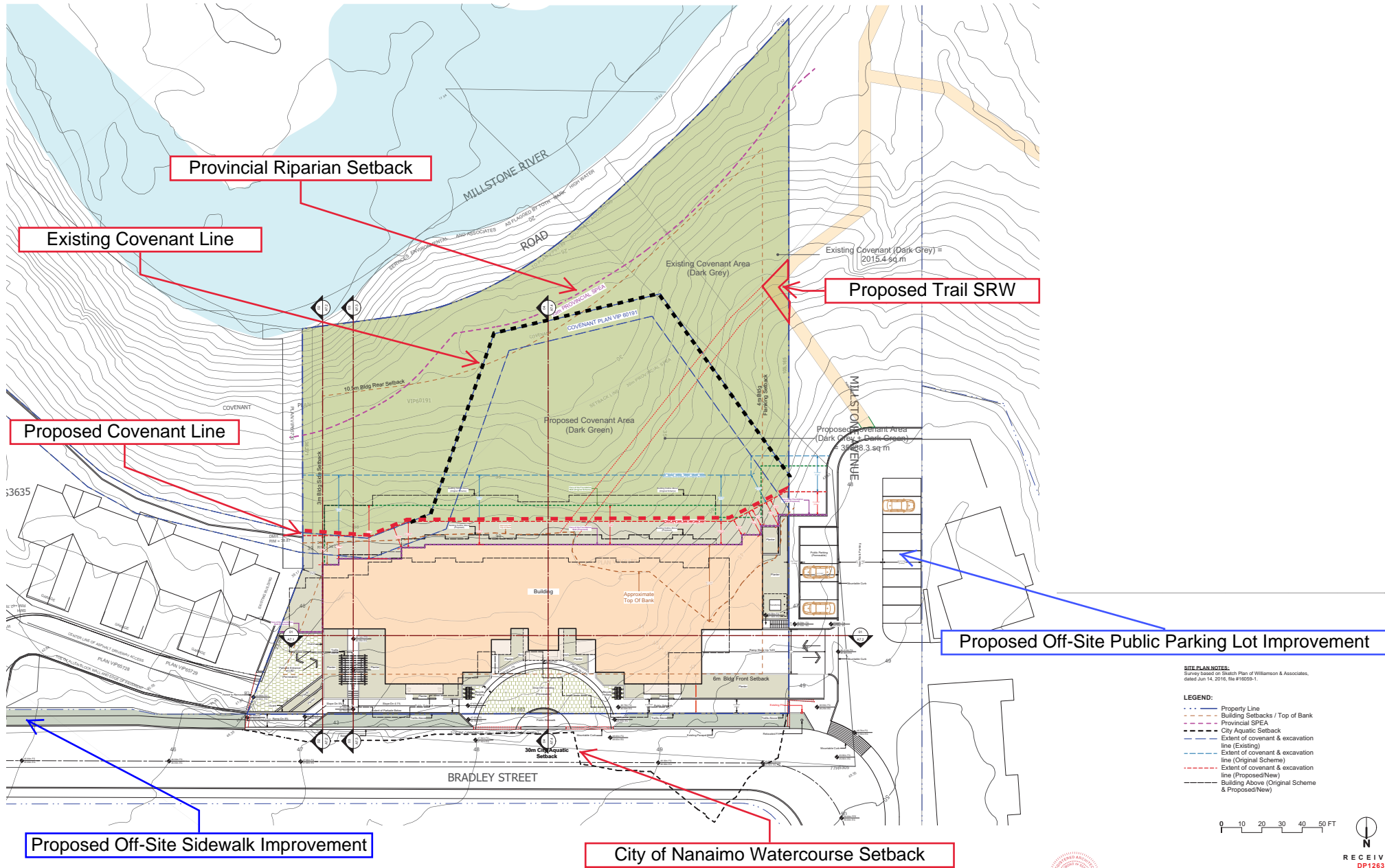
DEVELOPMENT PERMIT APPLICATION NO. DP001263

 591 BRADLEY STREET

ATTACHMENT C DP COMPARISON SHEET

Project:	Bradley Multi-family					
Property Area:	ft ²	m ²	acre	hectare		
	59,814	5,557	1.37	0.56		
Item	Unit	Original DP		New DP		Improvements
Building Area (Footprint)	m ² ft ²	2,107 m ²	22,880 ft ²	1,893 m ²	18,223 ft ²	-20% Smaller Building Footprint
Number of Units	#	59		55		-4 Less units
Maximum Lot Coverage (%)	40%	25%		20%		-5% Less site coverage
Maximum Floor Area Ratio (FAR)	1.25	1.05		0.75		-40% Less floor area ratio
Permeable Areas / Soft Landscape	ft ² %	37,580 ft ²	63%	44,425 ft ²	74%	+18% More permeable site, added green roof over building entry.
Trees to be Removed	#	72		63		-9 Protected/Saved 9 additional trees including a significant tree (Bigleaf Maple). Only 15 are >30 cm diameter, and 8 are introduced / invasive species.
Proposed Covenant Area	m ² ft ²	2,790 m ²	30,031 ft ²	3,332 m ²	35,865 ft ²	+19% Increased covenant area and watercourse setback. The proposed watercourse setbacks exceed the required provincial RAPR SPEA setbacks by approximately 409%.
Development Over Covenant @ Southeast Corner	m ²	109		0		-100% No development over the existing covenant
RAPR 15m SPEA Setback	m	22m-74m		32m-80m		8% 6m to 10m additional setback from the river stream boundary (less encroachment)
Encroachment Below Top of Bank	m	(-1.73m) to (-15.8m)		(3.4m) to (-11.7m)		-26% Most of the proposed development (84%) sits above the top of bank line
Number of Storeys	#	6		5		-1 1 Less storeys (Low profile building)
Height Variance	m	3.92		0		-100% Eliminated building height variance request
Required Number of Parking	#	85		74		-11 Less parking required, less traffic (no parking variance)
Parking Variance (Small Car)	#	1		0		-100% Eliminated small parking variance request
Energy Efficiency Step Code Target	Category	1		3		+2 50% More Energy efficient and less green house gas emissions than base 2018 building code. Equivalent to Built Green Gold Energy Requirement
Improved Rain Fall Retention on Site	m ³	56.5		75.2		+33% More rain fall retention volume provided within the site, exceeds the City of Nanaimo requirement by 10%
Improvement/Contribution to the Public Sidewalk	Redefined/ added raised crossing for safety, pedestrian link, public sharing, usability, and accommodate future bike lane					
New Features						
Solar Panels	ft ²	8,122		<ul style="list-style-type: none"> • 244 PV Modules • 108.29 Mwh Annual Energy Production • 42.45t Saved CO2 Emission • 1,950 Equivalent Trees Planted • Reduces roof heat load for cooling 		
Green/ Living Walls	ft ²	2,400		<ul style="list-style-type: none"> • South of Foundation Wall on LB2 + LB2 Planters • Improve Air Quality • Reduce Urban Temperatures • Improve Biodiversity/ Restore Habitat • Reduce heating/cooling loads • Reduce greenhouse gas emissions • Reduces urban heat island • Extends roof life • Urban amenity 		
Bioswales	ft ²	2,612		Improved Storm Water Management		
Improve Pedestrian/ Bike Safety	Revised the design of the public sidewalk beyond the street frontage to be more user/public oriented rather than to be used by the building resident only. The sidewalk connects Millstone Ave south end to Bradley Street.					
Improve Natural Setbacks	Reduced retaining walls at the public parking platform at the southwest of the development to minimize natural disturbance					
Environmental Improvements	Vegetation Management Plan report to include bond retention for a 3-year maintenance period.					
Landscape Improvements	<ul style="list-style-type: none"> • A bioswale (to slow and filtrate runoff from all hard surfaces) • Deep soils (to aid in stormwater management and to provide healthy soil biology to support the plants). • A biodiverse plant palette, using predominantly indigenous plants. (Plant biodiversity is thought to be one of the important contributors to providing resilience in the landscape). • A planting scheme of indigenous plants (to provide support native wildlife, filter air pollutants, and provide shade and cooling in the summer). • Vertical landscape elements, including a mix of climbing plants against the south side of the building and a series of arbours and trellis' on the North side of the building. (Tangles of vines are protective spaces for birds and provide nectar and food for birds and insects). 					
Increased Energy Efficiency	Increase energy efficiency to BC Step Code 3. 50% More Energy efficient and less green house gas emissions than base 2018 building code. Equivalent to Built Green Gold Energy Requirement					
Low-carbon Energy System	The development commits to provide a low-carbon energy system with a greenhouse gas intensity limit of 3kg/m2/year. This is consistent with low-carbon energy systems as per Council's BC Energy Step Code rezoning policy.					
Provide a 10 Yr Rental Housing Agreement with City	The owner is committed to enter into a 10 year purpose built rental apartment via a Housing Agreement with the City.					
Financial Contributions Towards Road Improvements / Traffic Calming Measurements	The development commits to a monetary contribution up to \$50,000 towards traffic calming measures as determined by the City during Design Stage Acceptance. Possibly a City partnership to reconstruct of the Millstone Avenue / Bradley Street intersection as a raised intersection.					

ATTACHMENT D SITE AND PARKING PLANS



ATTACHMENT E BUILDING ELEVATIONS AND DETAILS

MATERIALS LEGEND:

- AL1 Aluminum Storefronts - Clear Anodized
- AL2 Aluminum Window Grille - Clear Anodized
- AL3 Aluminum Overhead Door - Clear Anodized

CN1 Concrete - Architectural

FH1 Fiber Cement Siding - Iron Grey

FP1 Fiber Cement Panels - White

WD1 Timber Wood

MT1 Metal Flashing - Grey

GL1 Glass Railing/Glass

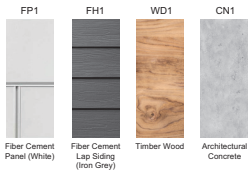
LT1 Lights

SN1 Signage

VW1 Vinyl Windows & Doors - Grey

GW Green Wall (Refer to Landscape Drawings)

MATERIAL BOARD:



3 WEST ELEVATION



2 SOUTH ELEVATION (Facing the Millstone River)

MATERIALS LEGEND:

- AL1 Aluminum Storefronts - Clear Anodized
- AL2 Aluminum Window Grille - Clear Anodized
- AL3 Aluminum Overhead Door - Clear Anodized

CN1 Concrete - Architectural

FH1 Fiber Cement Siding - Iron Grey

FP1 Fiber Cement Panels - White

WD1 Timber Wood

MT1 Metal Flashing - Grey

GL1 Glass Railing/Glass

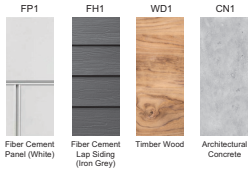
LT1 Lights

SN1 Signage

VW1 Vinyl Windows & Doors - Grey

GW Green Wall (Refer to Landscape Drawings)

MATERIAL BOARD:

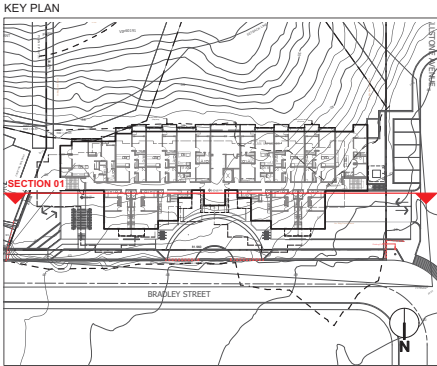
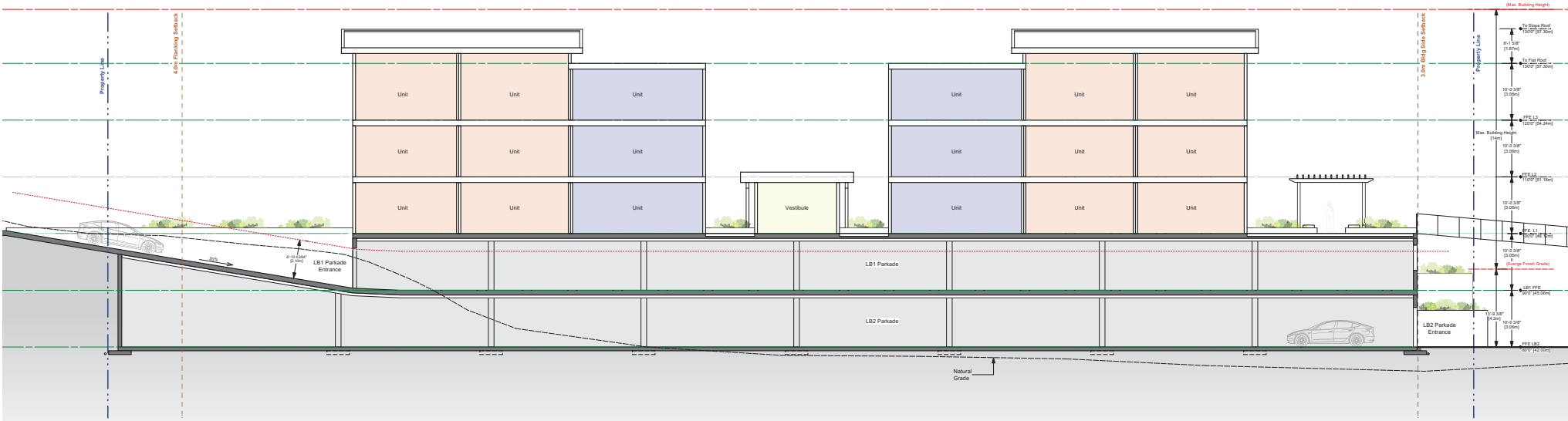


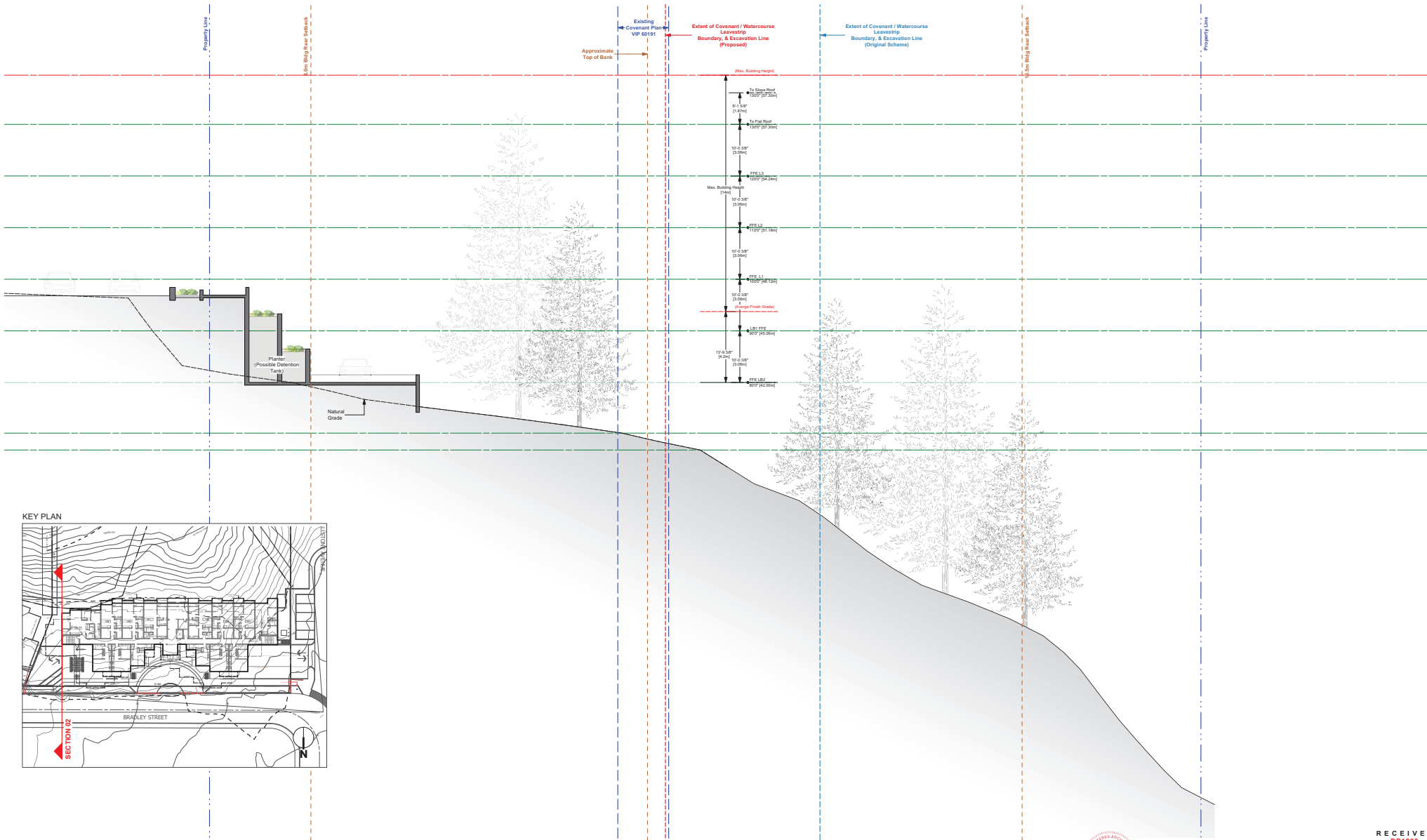
1 EAST ELEVATION

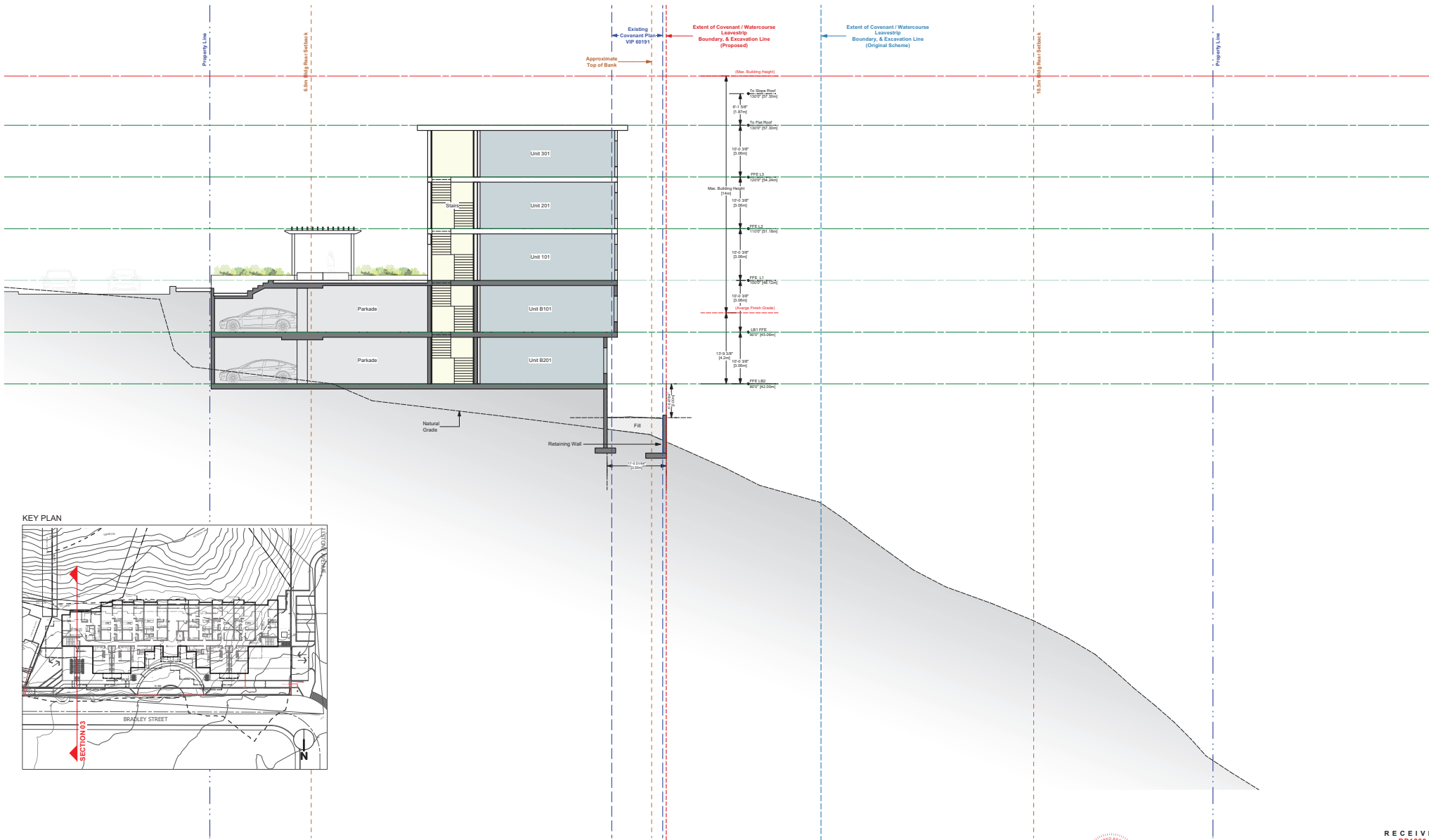


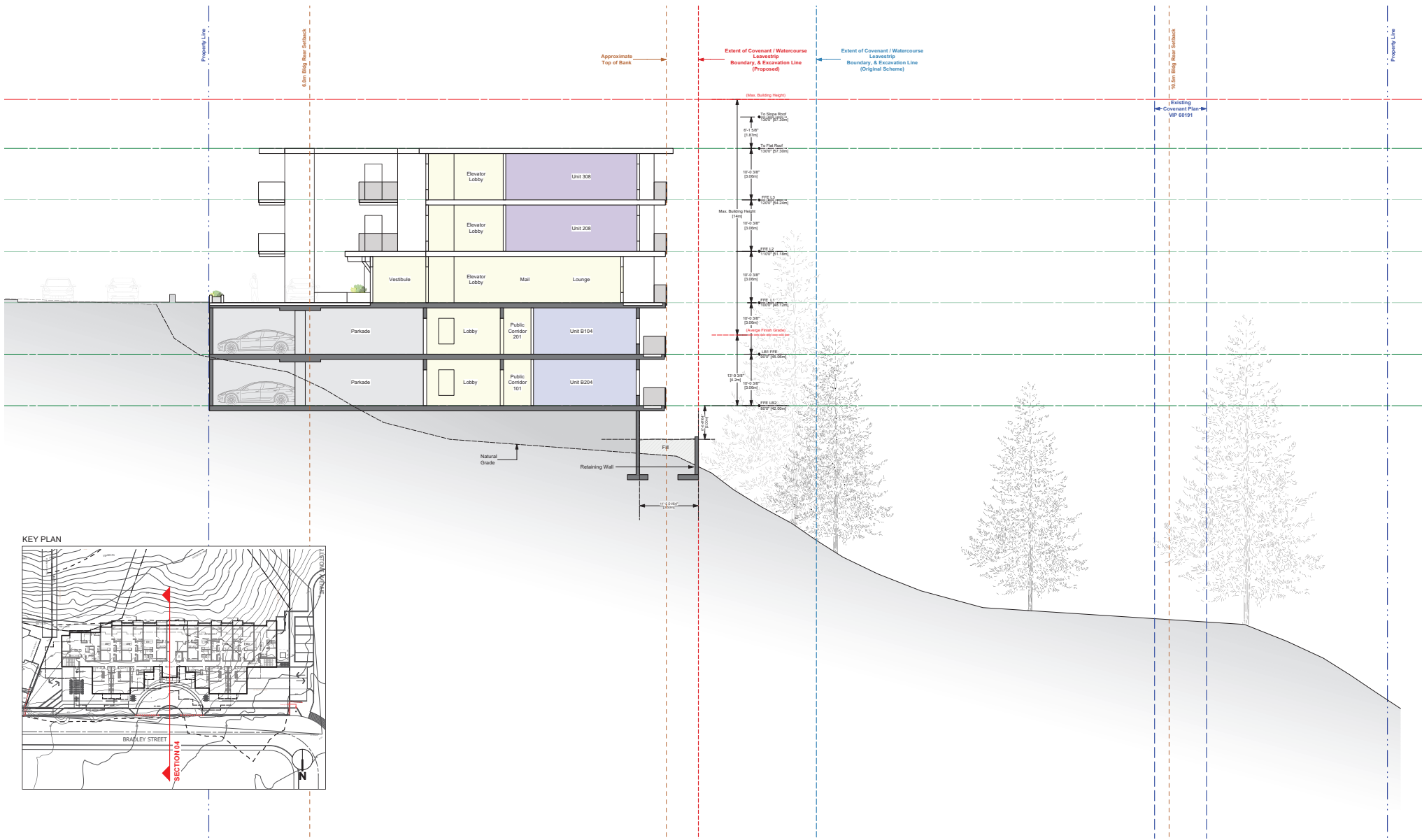
2 NORTH ELEVATION (Facing Bradley Street)

ATTACHMENT F SITE SECTIONS









ATTACHMENT G BUILDING RENDERINGS



1 MAIN ENTRY VIEW



2 NE BIRD'S EYE VIEW



3 NE VIEW



4 NW VIEW



1 SE VIEW



2 SE BIRD'S EYE VIEW



3 SW VIEW



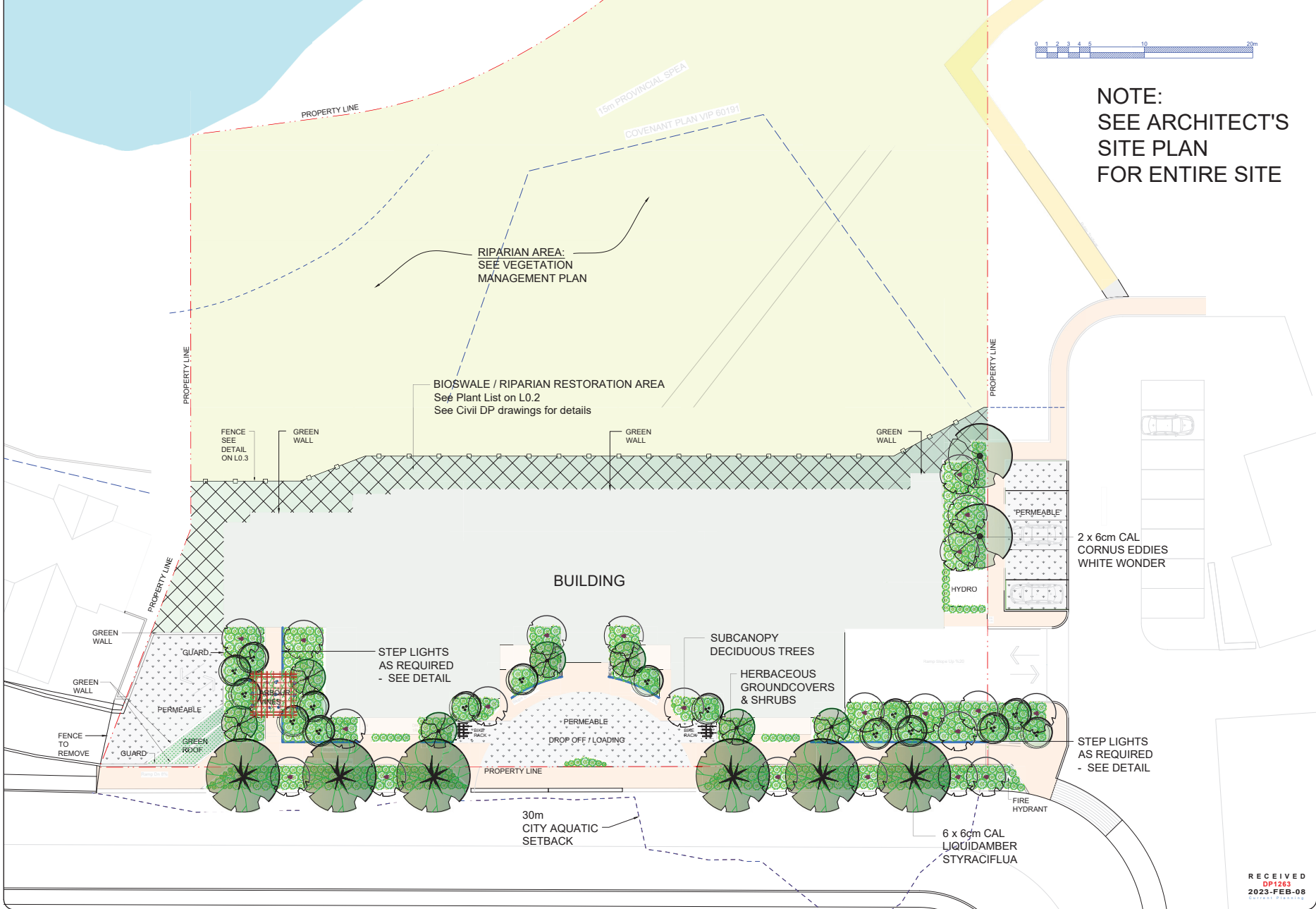
4 SW BIRD'S EYE VIEW

ATTACHMENT H LANDSCAPE PLAN AND DETAILS

BRADLEY MULTI-FAMILY-

LANDSCAPE CONCEPT-

591 BRADLEY ROAD



NOTES:
For grading information,
see Civil & Architectural drawings.



NORTH

REVISIONS:

Issued for DP - 2021Dec23

Issued for Coordination - 2022Jan13

Issued for DP - 2022Jan14

CoN Comments - 2023Jan23

CONSULTANT:



PROJECT:

591 BRADLEY
STREET
NANAIMO, BC

SITE LEGAL DESCRIPTION:

Lot 2, Newcastle Townsite,
Section 1, Nanaimo District,
Plan VIP60189

SHEET TITLE:

CONCEPTUAL
LANDSCAPE
PLAN

SCALE: 1:200 DATE: DEC. 20, 2021

DRAWN: DR CHECKED: VJD

PROJECT NUMBER:
BRADLEY STREET 2021

DRAWING NUMBER:
L0.1 - DP

DESIGN RATIONALE

The site is located on the north bank of the Milstone River. The southern part of the property consists of the existing riparian vegetation. Any disturbance due to construction will be restored with native species that are already growing on the site.

The design concept for the northern part of the site will be to create a "copse" or small-scale woodland to reflect the native forest on most of the site. Most of this space lies on the parkade with a narrow boulevard lining parallel to Bradley Street.

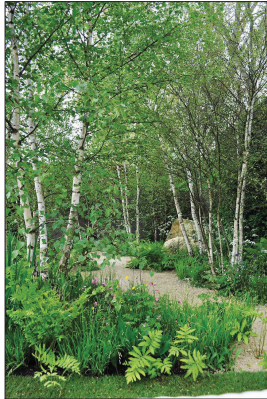
Typically, a woodland planting scheme consists of the canopy, sub-canopy, shrub and herbaceous layer.

Due to the constraints of planting on the parkade below the canopy trees can only be planted along the boulevard area. Within the site small trees/large shrubs with non-aggressive root systems will provide the sub-canopy.

These gardens will provide privacy for the living spaces on the north side, be a wind and dust filter and create habitat for wildlife. The dominant green changes the perception of the space both horizontally and vertically. While the paths that lead residents and visitors through the site are geometric, jogs create places to stop and sit and enjoy the plants. The gardens offer shade, changing interest all year from buds, flowers, leaves, fruit and bark.

The landscape lighting will consist of step lighting in the planter walls that are adjacent to the sidewalks, consistent with the dark sky objectives in OCP. The building entrance will be lit within the canopy.

DESIGN ELEMENTS



Woodland plantings



Arbours and Trellises

DESIGN DETAILS



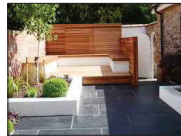
Garden Gate



Vine-covered Walks



Sheltered Seats



Seats in the Sun



Seatwalls - Low Level Lighting



Green Walls



Step Light Detail

PLANT LISTS

PLANT LIST #1 Upland landscape design
City** Replacement trees
Quantities for the vendor of the plan to be determined on Building Permit drawings.

Qty**	Key	Botanical Name	Common Name	Plant Size
Large Deciduous Trees				
2	Cn	Corylus alba/white wonder	White Barked Hazelnut	6.5m tall
1	La	Liquidambar styraciflua	Sweetgum	6.5m tall
Small Deciduous Trees				
20	Az	Asplenium platyneuron	Rocky Mountain Juniper	2.5-3.0m
10	Am	Amaranthus caudatus	Winged Amaryllis	2.0m tall
10	Am	Aster sp. (Various)	Aster	2.0m tall
20	Cm	Cornus canadensis	Spicebush	3m-10
20	Cm	Cornus rugosa	Spicebush (variegated)	3m-10
10	Sp	Salix glauca	Bluish Green Willow	2.5m tall
10	Sp	Salix purpurea	Common Willow	2.5m tall
10	Sp	Salix viticeps	Slender Willow	2.5m tall
Evergreen Shrubs				
10	Ev	Thuja occidentalis	Western Red Cedar	5m tall
Evergreen Trees				
10	Az	Asplenium platyneuron	Rocky Mountain Juniper	2.5-3.0m
10	Az	Asplenium platyneuron	Rocky Mountain Juniper	2.5-3.0m
10	Az	Asplenium platyneuron	Rocky Mountain Juniper	2.5-3.0m
10	Az	Asplenium platyneuron	Rocky Mountain Juniper	2.5-3.0m
10	Az	Asplenium platyneuron	Rocky Mountain Juniper	2.5-3.0m
Herbaceous Shrubs				
10	Am	Amaranthus caudatus	Winged Amaryllis	2.0m tall
10	Am	Amaranthus caudatus	Winged Amaryllis	2.0m tall
10	Am	Amaranthus caudatus	Winged Amaryllis	2.0m tall
Deciduous Shrubs				
10	Am	Amaranthus caudatus	Winged Amaryllis	2.0m tall
10	Am	Amaranthus caudatus	Winged Amaryllis	2.0m tall
10	Am	Amaranthus caudatus	Winged Amaryllis	2.0m tall
10	Am	Amaranthus caudatus	Winged Amaryllis	2.0m tall
10	Am	Amaranthus caudatus	Winged Amaryllis	2.0m tall
Ground Cover				
10	Am	Amaranthus caudatus	Winged Amaryllis	2.0m tall
10	Am	Amaranthus caudatus	Winged Amaryllis	2.0m tall
10	Am	Amaranthus caudatus	Winged Amaryllis	2.0m tall
10	Am	Amaranthus caudatus	Winged Amaryllis	2.0m tall
10	Am	Amaranthus caudatus	Winged Amaryllis	2.0m tall
Grasses				
10	Gr	Cynodon dactylon	Bermuda Grass	2.0m tall
10	Gr	Cynodon dactylon	Bermuda Grass	2.0m tall
10	Gr	Cynodon dactylon	Bermuda Grass	2.0m tall
10	Gr	Cynodon dactylon	Bermuda Grass	2.0m tall
10	Gr	Cynodon dactylon	Bermuda Grass	2.0m tall
Herbaceous Plants				
10	Am	Amaranthus caudatus	Winged Amaryllis	2.0m tall
10	Am	Amaranthus caudatus	Winged Amaryllis	2.0m tall
10	Am	Amaranthus caudatus	Winged Amaryllis	2.0m tall
10	Am	Amaranthus caudatus	Winged Amaryllis	2.0m tall
10	Am	Amaranthus caudatus	Winged Amaryllis	2.0m tall
Ferns				
10	Fern	Asplenium platyneuron	Rocky Mountain Juniper	2.5-3.0m
Flowering				
10	Fl	Asplenium platyneuron	Rocky Mountain Juniper	2.5-3.0m
10	Fl	Asplenium platyneuron	Rocky Mountain Juniper	2.5-3.0m

PLANT LIST #2 Riparian / Bioswale restoration area
Between the building and riparian habitat

Qty	Key	Botanical Name	Common Name	Plant Size	Spacing
100	Ca	Carex acutiformis	Carex	#1	1m x 0.5m
100	Ma	Maianthemum canadense	May Day Lily	#1	1m x 0.5m
100	Ma	Maianthemum canadense	May Day Lily	#1	1m x 0.5m
100	Ma	Maianthemum canadense	May Day Lily	#1	1m x 0.5m
100	Ma	Maianthemum canadense	May Day Lily	#1	1m x 0.5m
100	Ma	Maianthemum canadense	May Day Lily	#1	1m x 0.5m

PLANT LIST #3 Riparian area
Replacement trees planted within existing riparian area
City** Replacement trees

Qty**	Key	Botanical Name	Common Name	Plant Size
10	Dec	Deciduous Trees		
10	Am	Amaranthus caudatus	Winged Amaryllis	2.0m tall
10	Am	Amaranthus caudatus	Winged Amaryllis	2.0m tall

Total replacement trees required: 70
Total replacement trees planted: 70

Drawing Notes

Riparian Restoration Area:
2.0 All riparian plants to be planted 1m x 1m in groups of ten, under direction of Landscape Architect. See Plant List #2.
2.0 All riparian plants to be planted to be ISCLA/BCFTA Landscape Standards, Latest Edition.
2.0 Plants to be irrigated for the first two years.

Riparian Area:
2.0 All riparian plants to be removed. These include Holly, English Hawthorn, Spurge Laurel and Himalayan Blackberry. English Ivy, Refer to City of Nanaimo website: <http://www.nanaimo.ca/development/land-use-standards/riparian-removal-protocol>
2.0 Plant 20 trees in riparian area, see Plant List #2

NOTES:
For grading information, see Civil & Architectural drawings.

REVISIONS:
Issued for DP - 2021Dec23
Issued for Coordination - 2022Jan13
Issued for DP - 2022Jan14
CoN comments - 2023Jan23



PROJECT:
591 BRADLEY STREET
NANAIMO, BC

SITE LEGAL DESCRIPTION:
Lot 2, Newcastle Township,
Section 11, Nanaimo District,
Plan V1P60189

SHEET TITLE:
LANDSCAPE DESIGN
ELEMENTS

SCALE: AS NOTED
DATE: DEC. 20, 2021
DRAWN: DR
CHECKED: VJD
PROJECT NUMBER: BRADLEY STREET 2021
DRAWING NUMBER: L0.2 - DP



Species	DBH (cm)	Number of trees	Number of trees to be removed
DECIDUOUS			
Bigleaf maple	60 mm to 300 mm	37	37
Bigleaf maple	301 mm to 600 mm	15	15
Bigleaf maple	> 600 mm	1	0
Black cottonwood	60 mm to 300 mm	3	3
English holly	60 mm to 300 mm	4	4
Common hawthorn	60 mm to 300 mm	3	3
Cherry	60 mm to 300 mm	1	1
Total		64	63

The locations of all trees within the proposed area of development on the property are indicated in Table 2 and with the Significant bigleaf maple high-lighted in yellow in Table 2 and on Figure 2.

TABLES 1, 2 & 4 AND AIR PHOTO FROM TRPA PREPARED BY TOTH AND ASSOCIATES; TREE SURVEY CONDUCTED ON FEBRUARY 14, 2018

Tree Tag	Lat/Long Coordinates	Trees > 30 cm DB	Trees < 30 cm DB	Tree	Significant	Species	Non Native	Species	Comment
887	49 10 30 247 -123 57 18 058	1							Multi-stem, suckered from stump.
888	49 10 29 863 -123 57 17 849	1							
889	49 10 30 142 -123 57 17 572	1							
900	49 10 30 217 -123 57 17 554	1							
901	49 10 29 85 -123 57 17 564	1							
902	49 10 29 528 -123 57 17 722	1							
903	49 10 29 449 -123 57 17 669	1							
904	49 10 29 519 -123 57 18 059	3							
905	49 10 29 291 -123 57 17 669	2							
906	49 10 29 711 -123 57 17 333	2							
907	49 10 29 529 -123 57 17 526	2							
908	49 10 29 844 -123 57 17 261	1							
909	49 10 29 387 -123 57 17 565	1							
912	49 10 29 477 -123 57 17 077	1							
913	49 10 29 615 -123 57 17 045	1							
914	49 10 29 784 -123 57 16 917	1							
914a	49 10 29 824 -123 57 16 894	1							
916	49 10 30 032 -123 57 16 804	1							
917	49 10 29 892 -123 57 16 647	1							
918	49 10 29 68 -123 57 16 745	1							
919	49 10 29 481 -123 57 16 717	1							
920	49 10 29 423 -123 57 16 513	1							
921	49 10 29 522 -123 57 16 372	2							
922	49 10 29 759 -123 57 16 244	2							
923	49 10 29 864 -123 57 16 209	1							
924	49 10 30 149 -123 57 15 987	1							
925	49 10 30 15 -123 57 15 671	1							
926	49 10 30 191 -123 57 15 049	2							
927	49 10 29 404 -123 57 15 293	1							
928	49 10 29 339 -123 57 15 372	1							
929	49 10 29 626 -123 57 15 91	2							
930	49 10 29 655 -123 57 16 074	1							
931	49 10 29 686 -123 57 16 274	1							
932	49 10 29 52 -123 57 16 421	1							
933	49 10 29 457 -123 57 16 249	1							
934	49 10 29 383 -123 57 15 979	2							
937	49 10 29 358 -123 57 15 916	2							
Total Trees:		64	Subtotal:	16	37	3	1	8	

Species	DBH (cm)	Number of trees to be removed	Number of replacement trees	Diameter (cm) of Deciduous Stock or Height (m) of Coniferous Stock
DECIDUOUS				
Bigleaf maple	60 mm to 300 mm	37	37	(60 mm min dbh)
Bigleaf maple	301 mm to 600 mm	15	30	(60 mm min dbh)
Black cottonwood	60 mm to 300 mm	3	3	(60 mm min dbh)
Total: (Non-native trees not included)		55	70	

*Note: as the replacement number exceeds the maximum number required (100 trees/ha), the replacement requirements will most likely be based on the area of the property (0.56 ha x 100 trees/ha = 56 replacement trees).

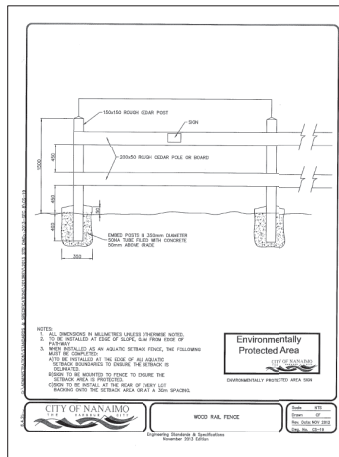
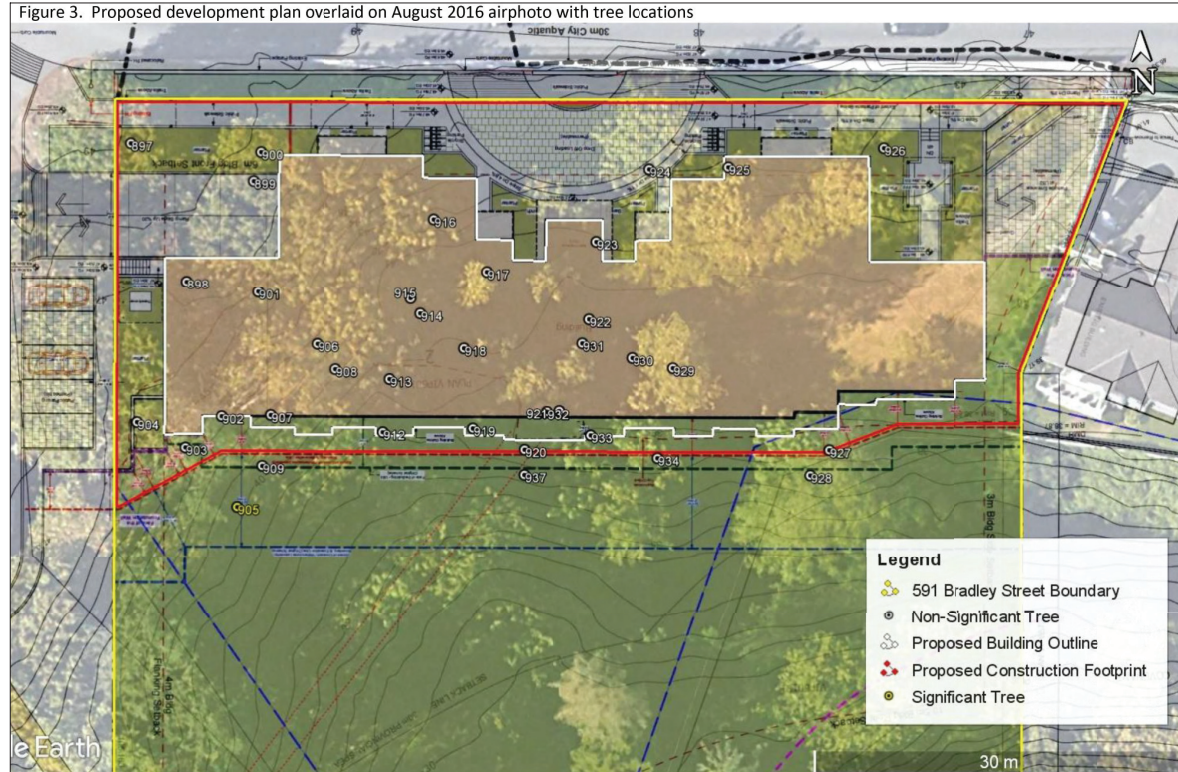


Figure 3. Proposed development plan overlaid on August 2016 airphoto with tree locations



NOTES:
1. Tree survey and removal information from: Toth and Associates R&R Assessment and Tree Survey, conducted on Feb. 14, 2018

REVISIONS:
Issued for DP - 2021Dec23
Issued for Coordination - 2022Jan13
Issued for DP - 2022Jan14
CoN comments - 2023Jan23



PROJECT:
591 BRADLEY STREET NANAIMO, BC

SITE LEGAL DESCRIPTION:
Lot 2, Newcastle Townsite, Section 1, Nanaimo District, Plan V1P60189

SHEET TITLE:
TREE MANAGEMENT PLAN

SCALE: AS NOTED
DATE: DEC. 20, 2021

DRAWN: DR
CHECKED: VJD
PROJECT NUMBER: BRADLEY STREET 2021
DRAWING NUMBER: **L0.3-TMP**



ATTACHMENT I

RIPARIAN RESTORATION VEGETATION MANAGEMENT PLAN

RIPARIAN Restoration Vegetation Management Plan

591 Bradley Street
Nanaimo BC
January 20, 2023

1.0 INTRODUCTION

General Comments

- .1 REFERENCES for all Landscape work:
- BCSLA/BCNTA Landscape Standard, Latest Edition,
 - City of Nanaimo Manual of Engineering Standards and Specifications, latest edition.
 - Toth and Associates:
 - Summary of the environmental assessments conducted for proposed development of 591 Bradley Street (PID# 023-004-169), Nanaimo. January 11 2022
 - RAPR 2022
 - TRPA 1112022
 - Landscape Plans L0.1, L0.2, L0.3

The Landscape Contractor shall make him/herself aware of all prevailing standards Referenced therein and execute work accordingly as it will govern all landscape preparations, execution and deficiencies.

.2 SITE CONDITIONS

Location of all existing utilities are to be verified prior to working on site.

“Call First” Line at 1 800 474 6886

1.1 Site Overview

The site is bounded by the Millstone River to the south, Bradley Street to the north, a townhouse complex to the east and an apartment building to the west.

1.2 Objectives:

- To protect the area to the south of the Covenant/Watercourse Leave Strip/Excavation Boundary (see A1.1 RdB)
- To replant indigenous trees in this area south of the Covenant/Watercourse Leave Strip/ Excavation Boundary as noted on L0.1 and L0.2

- To replant indigenous species in the bioswale/riparian restoration area, between the building and the Covenant/Watercourse Leave Strip/ Excavation area
- Install City of Nanaimo Environmental Fence along the Covenant/Watercourse Leave Strip/Excavation boundary prior to start of construction
- To remove the invasives species where this does not impact slope stability, see notes below
- To remove all the garbage and non-organic debris from the area

2.0 EXISTING TREES and SHRUBS

2.1 Existing vegetation

- .1 “The property consists of a steep south facing slope above the Millstone River, with a previously disturbed bench area near the upper north end of the property. The previously disturbed area consists of young bigleaf maple, introduced invasive English holly and common hawthorn with an understory of Indian plum, introduced spurge laurel and Himalayan blackberry. The proposed development’s footprint would be within the previously disturbed young forest area. Below the proposed development footprint, the forest cover consists of mature Grand fir, Douglas-fir, and red alder, with an understory of Indian plum, sword fern, salmonberry and Himalayan blackberry with a nearly continuous matting of invasive English ivy”. (TRPA, Toth and Associates, January 11, 2022)

2.2 Site Protection

- .1 Install City of Nanaimo Environmental Fencing along the Covenant/Watercourse Leave Strip/Excavation Boundary prior to construction.
- .2 Install silt fencing along the Covenant/Watercourse Leave Strip/Excavation Boundary during construction.
- .3 All existing and new plants, site services, curbs, paving, structures, and all other features shall be protected against damage during the work.
- .4 Appropriate measures shall be taken to ensure that no spillage of fuels, fertilizers, toxic construction materials, or other toxic wastes occurs, and where use of such materials is necessary, to ensure that adequate containment facilities and clean-up equipment are utilized.

- .5 No toxic or waste materials, fuels and fertilizers shall be stored adjacent to or dumped into water courses or any other water body either on or off the job site, or in a location where spillage could result in seepage into a watercourse
- .6 All toxic wastes and other material shall be disposed of in a manner acceptable to the Owner and in accordance with municipal, provincial and federal regulations.

3.0 NON-NATIVE INVASIVE PLANT MANAGEMENT

- The following were the most common invasive plants identified on site:
 - English Ivy
 - Spurge Laurel
 - Himalayan Blackberry (Rubus discolor)

It is the responsibility of the Contractor to identify and remove invasive plant species that may be on the site in the future.

Due to slope conditions and potential for repeated invasive removal to cause erosion, the recommendations are:

- Remove ivy from all the trees.
- Any other invasive removal to be conducted under the supervision of the Environmental Monitor.

3.1 Invasive Plant Removal Methods

See City of Nanaimo website

https://www.nanaimo.ca/docs/services/home-and-property/invasive_plants.pdf

4.0 REPLANTING

4.1 Replant replacement trees according to Toth and Associates TRPA 1112022 and Landscape Plans L0.1, L0.2 and L0.3.

4.2 Plant bioswale/restoration, see Landscape Plans L0.1 and L0.2

5.0 MONITORING/MAINTENANCE STRATEGIES

5.1 Monitoring and maintenance will take place for three years from the time of acceptance of Substantial Completion of the project.

5.2 Monitoring newly planted areas

SCOPE:

- .1 Removal of invasive plants by hand
- .2 Indigenous plants shall be allowed to regenerate naturally
- .3 Do not remove fallen leaves

Maintenance Procedures and Frequencies

Maintenance Program to be recorded in a Landscape Maintenance Monthly Report (see BCSLA Landscape Standard, Landscape Maintenance Section for a sample report).

Procedure	M	A	M	J	J	A	S	O	Frequency
Inspection		x	x	x	x	x	x	x	5 times a year
Litter removal									As required
Reporting		x		x		x		x	4 times a year
Invasive removal		x		x	x	x			4 times a year or as directed by Environmental Monitor
repair									As required
Tree hazard assessment									As required
Fire management		x	x	x	x	x	x		To reduce risk of ignition when necessary
Replacement planting	x						x		As compensation for invasive plant removal or hazard tree removal

5.3 Monitoring existing vegetation for invasive plants and newly planted areas,

SCOPE:

- .1 Landscape maintenance operations shall include the removal of all invasive plants, and the removal of all other weeds, as directed by the Environmental Monitor carefully retaining all native plants that are naturally regenerating
- .2 Appearance Standards: The area is intended to be wild, so an informal appearance is desirable with the weeds kept to a minimum. Plants should be kept healthy. Plants should not be trimmed. There should be a routine maintenance of moderate frequency and intensity, with regular monitoring to avoid deterioration. See form below.
- .3 The maintenance period shall be from the time of planting until three years from the date of Substantial Completion of the landscape works. The Environmental Monitor will provide the City of Nanaimo with a progress report every six months.

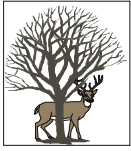
- .4 Maintenance operations for the planted shrubs and ground covers shall include:
 - (a) Weeding, being careful not to weed out naturally regenerating native plants; These weeding sessions should be done on a regular basis, at least four times a year.
 - (b) Invasive plant removal throughout the growing season.

- .5 Maintenance operations should, where possible, follow ecologically sound practices such as:
 - (a) Integrated Pest Management (IPM)
 - (b) Plant Health Care (PHC)
 - (c) Composting
 - (d) Application of Organic Mulches

- .6 Maintain irrigation system

6.0 PLAN REVIEW

As part of the monitoring process, an adaptive management approach will be applied to this Vegetation Management Plan. As inspections take place the health of the scheme will be determined and changes may be made, if necessary, to ensure the success of the planting.



ATTACHMENT J ENVIRONMENTAL ASSESSMENT - EXECUTIVE SUMMARY

Tel: (250) 390-7602
E-mail: stoth@shaw.ca

January 26, 2023

Bluesun Pacific Properties

c/o Raymond de Beeld Architect Inc.
755 Terminal Ave N,
Nanaimo, BC V9S-4K1

Re: Summary of the environmental assessments conducted for proposed development of 591 Bradley Street (PID# 023-004-169), Nanaimo.

In 2016 Toth and Associates Environmental Services were contracted by G&L Enterprises Ltd (Bradley JV) to conduct a provincial *Riparian Areas Regulation* (RAR) assessment, a raptor and heron nest use assessment, a tree survey and to provide a Tree Removal Permit Application for the proposed development of 591 Bradley Street. The 0.56 ha (1.37 acre) subject property is zoned R8 (Medium Density Residential) and is located within the City of Nanaimo's Development Permit Area (DPA) 1 – Environmentally Sensitive Areas, and DPA 2 – Hazardous Slopes. The development proposed in 2016 included construction of a 67 unit apartment building in the northern half of the property adjacent to Bradley Street. The RAR report (Assessment #5157) was reviewed and accepted by the province. The proposed development was subsequently issued a Development Permit (DP 001070) by the City of Nanaimo, however the development did not proceed and the DP lapsed.

The new proponent (Bluesun Pacific Properties) has re-initiated the DP process with a revised development plan which has reduced the number of apartment units from 67 to 55 and the total footprint of the development from 0.266 ha to 0.218 ha. The revised development plan has increased the proposed watercourse setback area by approximately 575 m² from the previously approved plan.

The subject property consists of a forested, steep, south facing slope with the proposed construction footprint located at the north end of the property on previously disturbed, cut and benched material presumably created during construction of the concrete wall that supports Bradley Street (Photograph 1). The proposed development will require removal of 63 trees (all deciduous), of which only 15 are >30 cm diameter and 8 are introduced invasive species.

No raptor or heron nests were found on the subject property.

The Millstone River runs parallel to the south end of the property (Photograph 2). The Millstone River has historically supported resident populations of cutthroat and rainbow trout, three-spine stickleback, sculpin, lamprey, and crayfish as well as introduced pumpkinseed and smallmouth bass. The construction of a side channel bypassing the natural barriers to fish migration in Bowen Park in 2007 now provides anadromous (sea-run) fish access to the upper Millstone River. A stock assessment program has documented 100-500 adult coho using the fishway through Bowen Park as well as chinook salmon and anadromous cutthroat trout.

The former RAR was repealed and replaced in November 2019 by the *Riparian Areas Protection Regulation* (RAPR). The results of the RAPR Detailed Assessment indicated that the Millstone River would require 15 m Streamside Protection and Enhancement Area (SPEA) setbacks, as measured from the high water mark (stream boundary). However, in consideration of the relative importance of the Millstone River, the Hazardous Slopes DPA designation and adjacent parklands, Toth and Associates recommended that the SPEA setbacks be increased to coincide with the proposed southern limit of the construction footprint. The boundaries of the 15 m SPEA setback required under the RAPR and the proposed watercourse setback are shown on Figure 1.


The City of Nanaimo’s Zoning Bylaw No. 4500, Section 6.3.1.4 indicates that “The leave strip on each side of all watercourses identified in Schedule C shall include that area between the centre of the watercourse and a perpendicular line inland from the top of bank to the distance indicated on Schedule C for each watercourse”, which in this case includes the bed of the Millstone River and all area within 30 m from top of bank.

The boundary of the City of Nanaimo’s 30 m setback from the top of bank of the Millstone River is shown on Figure 1. The City of Nanaimo’s watercourse setback encompasses the entire property, effectively sterilizing it from development unless a watercourse setback variance is granted.

The area of the 15 m SPEA setback required by the provincial RAPR on the subject property measures approximately 821 m². The proposed SPEA / watercourse setback measures approximately 3,350 m² (roughly a 409% increase), and extends 31.5 m from the stream boundary along the east side of the property and 77.5 m along the west side of the property.

Please contact us if you require any additional information.

Sincerely,
Steve Toth, ASCT, R.P.Bio.

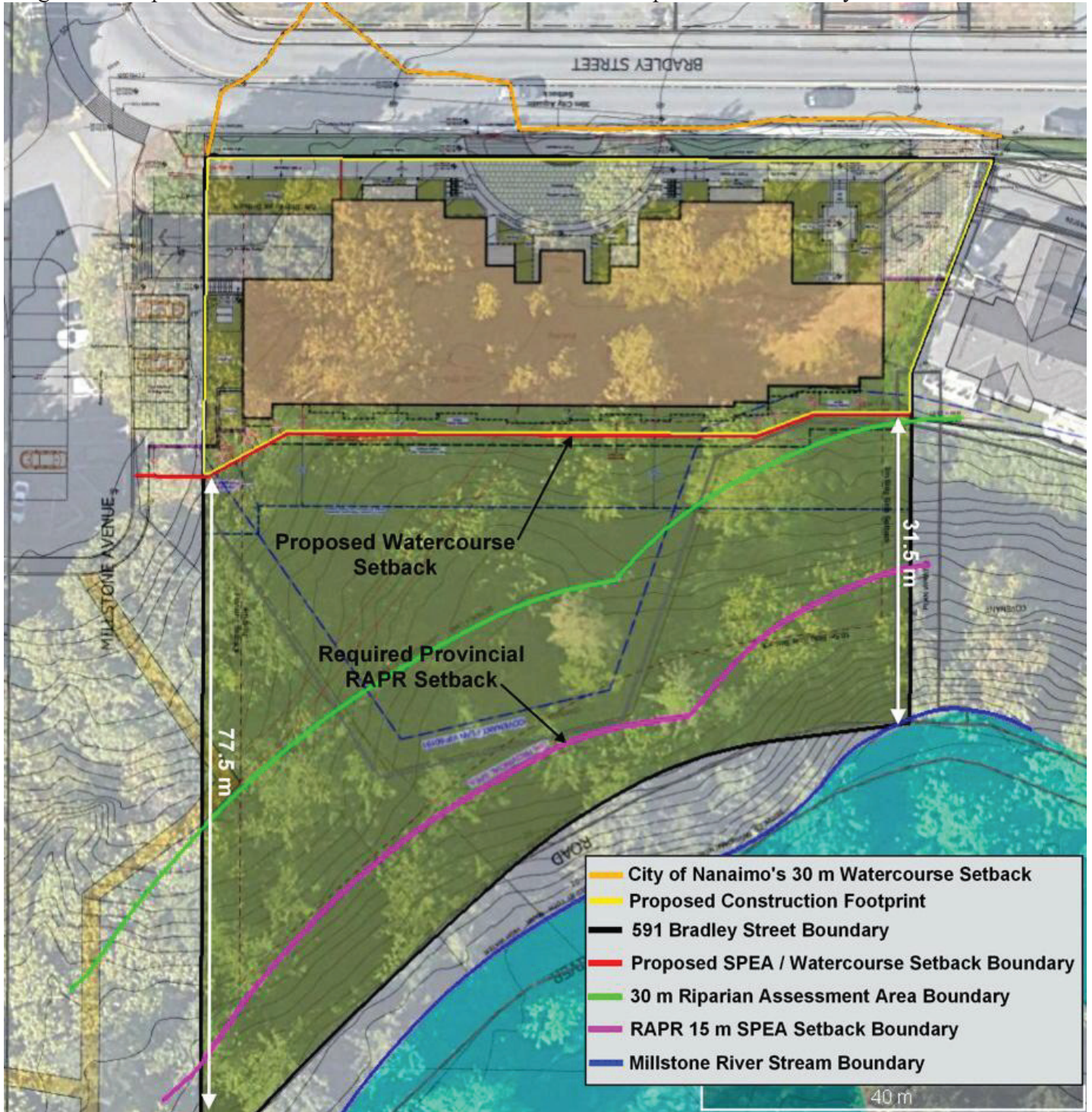


Toth and Associates Environmental Services



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DP1263
2023-FEB-08
Current Planning

Figure 1. Proposed Watercourse Setbacks and Construction Footprint on 591 Bradley Street



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 DP1263
 2023-FEB-08
 Current Planning



Photograph 1. View east to west through benched area of construction footprint.



Photograph 2. View of the bedrock channel morphology on the Millstone River adjacent to 591 Bradley Street.

R E C E I V E D
DP1263
2023-FEB-08
Current Planning