



City of Langford

Staff Report to Sustainable Development Advisory Committee

DATE: Tuesday, November 12, 2024

DEPARTMENT: Planning

APPLICATION NO.: Z23-0009

SUBJECT: Bylaw No. 2204 – Application to Rezone 2830 Jacklin Road and 2825 - 2831 Knotty Pine from One-and Two-Family Residential (R2) to City Centre Pedestrian (CCP) to allow for the Development of Two 6-Storey Buildings

EXECUTIVE SUMMARY:

Rachael Sansom of Grayland Consulting has applied on behalf of 1335880 BC Ltd. to rezone five (5) properties along Knotty Pine and Jacklin Road from the R2 zone to Area 2 of the CCP zone. The proposal is to consolidate these five properties and construct two 6-storey buildings that contain a total of 142 residential units and one commercial unit along Jacklin Road. Two vehicular access points for both buildings will be provided off Knotty Pine.

BACKGROUND:

Previous Applications

The City has not received any previous planning applications on the subject properties.

Table 1: Site Data

<i>Applicant</i>	Grayland Consulting, Rachael Sansom	
<i>Owner</i>	1335880 BC Ltd.	
<i>Civic Addresses</i>	2830 Jacklin Road and 2825, 2827, 2829, and 2831 Knotty Pine Road	
<i>Size of Properties</i>	3,810 m ² (0.94 acres)	
<i>DP Areas</i>	Downtown	
<i>Zoning</i>	Existing: R2	Proposed: CCP
<i>OCP Designation</i>	Existing: City Centre	Proposed: City Centre

Site and Surrounding Area

The subject properties are located in the City Centre, with four of the properties fronting Knotty Pine, and the fifth fronting Jacklin Road. When consolidated, the properties will be within the 400 m radius of the Transit-Oriented Area (TOA) established through Bylaw No. 2160. Currently, only two of the five properties are within the 400 m TOA. However, the regulations of the TOA will apply to the entirety of the consolidated parcel. As the properties are in “Tier 5” of the TOA, Council must not reject an application for rezoning for a building containing residential uses that is 2.5 FAR or 6 storeys in height, or less, on the basis of the height and density, and must not require off-street residential parking.

Currently, each property contains a single-family dwelling. All of the properties are topographically flat and collectively there are 11 trees with a trunk diameter of 20cm or greater at 1.4m above the ground located on them, all of which are proposed to be removed due to the proposed underground parkade. Details pertaining to the trees are outlined in the attached arborist report.

South of this site on Knotty Pine is a 26-unit townhouse development that is currently under construction. To the west are existing single-family dwellings and townhomes as well as another 27-unit townhouse site that is preparing for construction. Immediately to the east is a 10-storey mixed use building that is currently under construction. North of this site is a single-family dwelling, could be consolidated with the neighbouring property at 2820 Lequesne Avenue.

School District No 62 has been made aware of this application such that they can consider the proposed increase in density in this area as part of their long-range facility planning.

Figure 1: Subject Properties

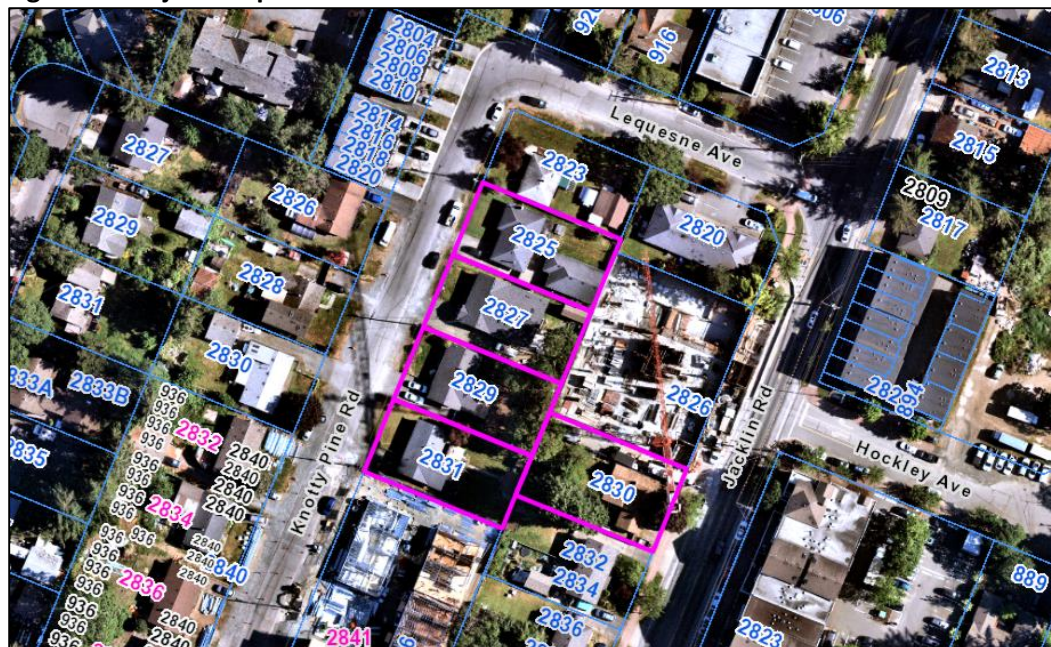


Table 2: Surrounding Land Uses

	Zoning	Use
<i>North</i>	R2 (One- and Two-Family Residential)	Residential
<i>East</i>	CCP (City Centre Pedestrian)	Residential
	MU1 (Mixed Use Residential Commercial)	Residential
<i>South</i>	R2 (One- and Two-Family Residential)	Residential
	CC2 (City Centre)	Residential
<i>West</i>	R2 (One- and Two-Family Residential)	Residential
	RM7A (Medium Density Apartment A)	Residential

COMMENTARY:Development Proposal

The proposal is to construct two 6-storey buildings on the consolidated lot and to share a below-grade parkade that spans under both buildings. One building would front Knotty Pine and consist of 113 residential units. The second building, fronting Jacklin Road, would have 29 residential units and one commercial retail unit along Jacklin Road. The breakdown of all the unfits would include 1 studio unit, 63 1-bedroom units, 73 2-bedroom units, and 5 3-bedroom units. Renderings of each frontage have been included as Appendices C and D.

The ground floor residential units along the Knotty Pine frontage would all have elevated patios with direct access to the street. These units would include a landscaped retaining wall between the patio and sidewalk for increased privacy. Also along Knotty Pine would be two vehicular access points. The one near the southern boundary would be the driveway to the surface parking, which would include 31 residential stalls and 2 commercial stalls. The second driveway would be near the northern boundary, which would provide the ramp down into the underground parkade that would contain 115 parking stalls. Appendix E shows the ground floor layout that illustrates surface parking, the driveways, and ground floor units including the commercial retail unit on Jacklin Road. The total active frontage provided complies with the minimum 80% required for this zone.

The second floor of the larger building fronting Knotty Pine includes an indoor amenity space situated towards the rear of the building. This space is proposed to be approximately 83 m² (890 ft²) in size and would open up to an outdoor amenity space approximately 188 m² (2,025 ft²) in size. Combined with additional outdoor amenity space that is provided on the ground floor to the rear of larger building, the minimum requirement for 5% outdoor amenity space has been exceeded.

Within the underground parkade and in secure rooms, the applicant is proposing bicycle parking for 108 standard bikes and an additional 10 spaces for cargo bikes. There would also be a designated area within the larger bike room for bike repairs. The ground level would also have a secured bike room for 24 bikes as well as a public bike rack next to the commercial unit on Jacklin Road.

With respect to heat pumps, and to remain consistent with other rezoning applications, Council may wish to require that individual heat pumps, or an equivalent central system, will be installed with the development.

With respect to the height, the CCP zone has no height limit, but does have a height section in order to limit heights on a case-by-case basis. Council may consider this proposal to be a case for which they wish to utilize this section by limiting the height on this site to 6-storeys to ensure what is presented is built. This would also allow Council to review any future application to deviate from the current proposal, as they would need to amend the Zoning Bylaw to increase the height if requested in the future.

Parking

When the subject properties are consolidated, prior to issuance of development permit, the site will be located within 400 m of the designated Transit-Oriented Area and therefore, onsite parking for residential units are not required as per Provincial legislation. However, the applicant still wishes to provide onsite parking for future residents and is proposing to provide 146 parking stalls for both buildings, which would have 142 residential units. Two of the 146 stalls would be designated for the commercial unit, which meets the requirement of the Zoning Bylaw.

Even though Council is not permitted to require onsite residential parking, it would be permissible to request that the onsite parking provided is included in the rent or sale of units and not in exchange for additional compensation separate from that of the residential unit.

Table 3: Proposed Data

	Permitted by R2 (Current Zoning)	Permitted by CCP (Proposed Zoning)
<i>Permitted Uses</i>	One-or Two-Family Dwelling Townhouse Group Daycare	Apartment Hotel Retail Store Office (2 nd Floor only)
<i>Density (Dwellings or FAR)</i>	3-6 Dwellings	6.0 FAR
<i>Height</i>	11 m (36 feet)	n/a
<i>Site Coverage</i>	50%	n/a

<i>Front Yard Setback</i>	3.0 m (9.8 ft)	2.0 m (1-2 storeys) 3.56 m (3+ storeys) *
<i>Interior Side Yard Setback</i>	1.5 m (4.9 ft)	3.0 m (9.8 ft)
<i>Exterior Side Yard Setback</i>	3.0 m (9.8 ft)	2.0 m (6.6 ft)
<i>Rear Yard Setback</i>	3.0 m (9.8 ft)	3.0 m (9.8 ft)
<i>Vehicle Parking Requirement</i>	1 per dwelling	0 (within TOA)
<i>Bicycle Parking Requirement</i>	0-1 per dwelling	1 per dwelling
<i>Loading Spaces</i>	0 spaces	0 spaces
<i>Parking Location</i>	n/a	1.6 m offset*

*Variance Requested

VariANCES

The applicant is requesting a variance to the location of a surface parking stall. The bylaw states, 'No unenclosed surface parking spaces may be located within 3 m (9.8 ft) of a lot line abutting a highway unless screened by a building containing an active use.' The design has proposed that the one stall closest to Knotty Pine be allowed to be 1.6 m from the road. To help hide the parked car, the entire area between the parking stall and sidewalk is proposed to be landscaped.

There is one additional variance requested, which is for the front yard setback to the upper storeys of the building abutting Jacklin Road. The bylaw requires a 4.0 m setback but the applicant is requesting this be reduced to 3.56 m, which allows for slightly wider units at this location.

If Council is supportive of the requested variances, they may wish to authorize the Director of Development Services to issue the variances with the Development Permit for Form and Character, subject to one condition; that appropriate landscaping be installed between the parking space and sidewalk to aid in hiding the stall.

Trees

The applicant has provided an arborist report as part of their application, which has identified 11 trees with a trunk diameter of 20cm or greater at 1.4m above the ground that are proposed to be removed as the parkade would be constructed at their locations. A copy of the report has been attached.

A municipal tree within the Jacklin Road boulevard was also assessed. The report notes that it can be retained and recommended tree protection fencing along with supervision under the arborist when the excavation commences.

The final landscape plan for this project is proposing to plant 9 boulevard trees and 21 onsite trees, all of which would be irrigated. In addition to these trees, the landscape plan is also proposing to include 177 onsite shrubs. A copy of the landscape plan has been attached.

Multi-Modal Network

FRONTAGE IMPROVEMENTS

The Director of Engineering has noted that full frontage improvements to Bylaw No. 1000 standards will be required along Knotty Pine and Jacklin Road. The improvements along Knotty Pine would include, but are not limited to, a 4.25 m wide drive lane, a 2.5 m separated boulevard with street trees and streetlights, and a 2.2 m wide sidewalk at the property line.

The improvements along Jacklin Road would need to match the adjacent development at 2826 Jacklin Road and include, but are not limited to, a 2.2 m wide red brick sidewalk, protection of the existing boulevard trees, boulevard landscaping, streetlight(s), and appropriate drive lane along with a bike lane. Much of these already exist, but reinstatement may be required if any are damaged.

PEDESTRIAN, CYCLING, AND MOTORIST NETWORK

Sidewalks do not exist along Knotty Pine but are starting to be installed with development as it occurs in this area. This development would provide a sidewalk that will ultimately connect to a sidewalk that will be constructed to the south, which will extend to Orono Avenue. It has been noted that due to increases traffic volumes, there is a need to install a traffic light at the intersection of Orono and Jacklin. The applicant has agreed to install the traffic light at this location prior to building occupancy. This work is DCC creditable work in accordance with Bylaw No. 2021.

Infrastructure

DRAINAGE AND STORMWATER

The applicant has submitted a stormwater technical memo, which was prepared by a civil engineer and outlines how the onsite storm drainage would be dealt with in order to comply with Bylaw No. 1000 standards. This has been reviewed and approved by the Director of Engineering.

SEWER

A sewer main exists within both Knotty Pine and Jacklin Road fronting this development site. A connection from each building will be required and the civil engineer will determine the best main to connect to, which may include a connection to each main. Any improvements, extensions, or modifications needed to the sewer main within the municipal road right-of-way will be completed by West Shore Environmental Services at the applicant's expense.

FIRE ACCESS AND PROTECTION

The site currently has a hydrant located within 90 m of both the Knotty Pine and Jacklin Road frontages. The installation of another hydrant is not anticipated, but the submission of a Fire Underwriters Survey Report prior to a building permit will provide a professional determination of whether or not another hydrant is necessary.

Construction Impact Mitigation

Council may wish to require a Construction Parking and Delivery Management Plan as a condition of rezoning and require that it be provided to the satisfaction of the Director of Engineering prior to any land alteration. This would be secured within a covenant prior to Bylaw Adoption.

CONSTRUCTION STAGING/ENCROACHMENTS

Any construction staging beyond the property limits requires a construction licence with the City, including but not limited to, temporary above or below ground occupancy of any public lands or rights-of-way. Construction licences must be executed prior to any land alteration and are subject to non-negotiable terms, conditions, and one-time and/or daily fees. All permanent encroachments and above ground temporary construction licences on public lands or rights-of-way are subject to Council approval.

Council Policy

OFFICIAL COMMUNITY PLAN

The Official Community Plan (OCP) Bylaw No. 1200 designated the subject properties as 'City Centre', which is defined by the following text:

- A major regional growth and employment centre that supports a wide range of high-density housing, including affordable and rental housing, in conjunction with commercial, office, institutional and light industrial uses;
- A place with the highest degree of inter-city connection through a regional transportation network and transportation hubs;
- A place where a wide range of public squares, parks, and open spaces are integrated throughout;
- A place of community gathering and celebration where civic uses and public buildings are key landmarks; and
- A place of interactive and animated streetscapes where public art and public space are employed to celebrate local cultural and natural history

DESIGN GUIDELINES

The subject properties are located within the 'Centennial Park' (C1) neighbourhood of the City Centre Design Guidelines as outlined below. For this region of the City Centre, the design intent is as follows:

Surrounding a large green space, the Centennial Park neighbourhood boasts late century single-family dwellings located on cul-de-sac roads. This neighbourhood is very suitable for mixed-use development, shared streets and enlarged walkways as well as high-density apartment buildings near Goldstream Avenue. Other opportunities for development in this neighbourhood include townhouses and medium-density apartments to replace the single-family dwellings on cul-de-sacs and shared streets. Emphasis within the Centennial Park neighbourhood shall be placed on a family focus and being able to move through the housing continuum by addressing various housing types.



Further to these Neighborhood Guidelines, the subject properties were identified as being appropriate for consideration of both the CCP (Area 2) and CC2 Zones on the City Centre Concept Map forming part of the City Centre design guidelines. However, once consolidated, the greater of the two zones apply, deeming this site appropriate for the Area 2 of the CCP zone, which has no height limit and requires ground floor commercial space along Jacklin Rd. As such, given the 6-storey proposal, this development is consistent with the City Centre Concept Map.

DEVELOPMENT PERMIT AREAS

The subject properties are not located within any Environment or Hazard Development Permit Area. However, it is located within the City Centre Development Permit Area and since the proposal is for a multi-family development, a Development Permit for Form and Character will be required. This Development Permit is required prior to issuance of a Building Permit to ensure the design is consistent with the City's Design Guidelines.

LOW CARBON CONCRETE

In accordance with Council's Low Carbon Concrete Policy POL-0167-PLAN, Council may wish to require the applicant to utilize ready-mix concrete that meets or exceeds the weighted average Global Warming Potential targets based on Concrete BC Baseline (average) mix data for the construction of the proposed development.

ATTAINABLE HOUSING POLICY

Council may wish to require the applicant to enter into a Housing Agreement, prior to issuance of a Building Permit, in order to meet the City's Attainable Home Ownership Policy or Council's resolution from February of 2023 that addresses purpose built rental building. This would require that either a minimum of 5% of the units constructed be directed to and sold in accordance with the terms of the Attainable Home Ownership Program Policy **OR** a minimum of 10% of the units constructed be rented for at least 10% below the benchmark rent for the unit type for a term not less than 25-years. The

developer shall identify the Attainable Units on the plans submitted for the required Development Permit application.

FINANCIAL IMPLICATIONS:

Rezoning the subject properties to permit higher density of development will increase the assessed value of lands and eventually will increase municipal revenue due to the number of units created. As the developer is responsible to complete all frontage improvements, the direct capital costs to the City associated with this development will be negligible. A summary of Amenity Contributions and Development Cost Charges that the developer will be expected to pay, is outlined in Tables 4 and 5 below.

Council's Amenity Contribution Policy

The amenity contributions that apply as per Council's current Affordable Housing and Amenity Contribution Policy are summarized in Table 4 below, based the current floor plans and total density of 142 residential units and 67 m² of commercial gross floor area.

Table 4 – Amenity Contributions per Council Policy

Amenity Item	Per unit / area contribution	Total
<i>General Amenity Reserve Fund</i>	\$2,850 per residential unit (1 st through 4 th storeys)	\$256,500.00
	\$1,425 per residential unit (5 th and 6 th storeys)	\$94,900.00
	\$10.75 per m ² of commercial gross floor area	\$720.25
<i>Affordable Housing Reserve Fund</i>	\$750 per residential unit (1 st through 4 th storeys)	\$67,500.00
	\$375per residential unit (5 th and 6 th storeys)	\$19,500.00
TOTAL POLICY CONTRIBUTIONS		\$439,120.25

Note: Units allocated towards the Attainable Housing and Amenity Policy are exempt from additional contributions.

Table 5 - Development Cost Charges

Development Cost Charge		Per Unit / Area Contribution	Total
<i>Roads</i>	<i>Residential</i>	\$3,092.39	\$439,119.38
	<i>Commercial</i>	\$54.12	\$3,626.04
<i>Park Improvement</i>	<i>Residential</i>	\$1,348.00	\$191,416.00
	<i>Commercial</i>	\$0.00	\$0.00

<i>Park Acquisition</i>	<i>Residential</i>	\$90.00	\$12,780.00
	<i>Commercial</i>	\$0.00	\$0.00
<i>ISIF</i>	<i>Residential</i>	\$331.65	\$47,094.30
	<i>Commercial</i>	\$1.51 per m ²	\$101.17
<i>ISA</i>	<i>Residential</i>	\$52 per lot created	\$0.00
	<i>Commercial</i>		
Subtotal (DCC's to Langford)			\$694,136.89
<i>CRD Water</i>	<i>Residential</i>	\$1,644.00	\$233,448.00
	<i>Commercial</i>	\$10.74 per m ²	\$719.58
<i>School Site Acquisition</i>	<i>Residential</i>	\$600.00	\$85,200.00
	<i>Commercial</i>	\$0.00	\$0.00
TOTAL DCC's (estimated)			\$1,013,504.47

LEGAL IMPLICATIONS:

As the properties are in "Tier 5" of the TOA, Council must not reject an application for rezoning for a building containing residential uses that is 2.5 FAR or 6 storeys in height, or less, on the basis of the height and density, and must not require off-street residential parking.

Should Council choose to proceed with consideration of Bylaw No. 2204, the application will be prohibited from being the subject of a Public Hearing, as per the changes made by the Province to the *Local Government Act* through *The Housing Statutes (Residential Development) Amendment Act, 2023*.

The amenity contributions specified in Table 4 above are incorporated into Bylaw No. 2204 and will be payable at the time of building permit along with the current Development Cost Charges specified in the various DCC Bylaws.

Council's other conditions of approval would be registered in a Section 219 Covenant in priority of all other charges on title prior to consideration of Bylaw Adoption.

OPTIONS:**Option 1**

THAT the Sustainable Development Advisory Committee recommend that Council:

1. Proceed with consideration of First, Second, and Third Reading of Bylaw No. 2204 to amend the zoning designation of the properties located at 2830 Jacklin Road and 2825, 2827, 2829, and 2831 Knotty Pine Road from 'One- and Two-Family Residential' (R2) to Area 2 of the 'City Centre Pedestrian' (CCP) subject to the following terms and conditions:
 - a. That the applicant provides, **as a bonus for increased density**, the following contributions per dwelling unit, **prior to the issuance of a building permit**:
 - i. \$750 towards the Affordable Housing Reserve Fund; and
 - ii. \$2,850 towards the General Amenity Reserve Fund;

subject to reductions in accordance with the Affordable Housing and Amenity Contribution Policy and the Attainable Housing Policy depending on use and height.
 - b. That the applicant provides, **as a bonus for increased density**, the following contributions per square meter of ground floor commercial space, **prior to the issuance of a building permit**:
 - i. \$10.75 towards the General Amenity Reserve Fund.
 - c. That Section 6.58.05 of Bylaw No. 300 include a maximum height limit of six storeys for the subject site.
 - d. That the applicant, **prior to Bylaw Adoption**, registers a Section 219 covenant in priority of all other charges on title, that agrees to the following:
 - i. That the following will be provided and implemented to Bylaw No. 1000 standards to the satisfaction of the Director of Engineering prior to the issuance of a building permit:
 1. Full frontage improvements;
 2. A traffic light at the intersection of Orono and Jacklin; and
 3. A storm water management plan;
 - ii. That the following will be provided and implemented to Bylaw No. 1000 standards to the satisfaction of the Director of Engineering prior to any land alterations:
 1. A construction parking management plan; and
 2. A mitigation plan;

- iii. That the properties be consolidated prior to issuance of a Development Permit for Form and Character;
- iv. That a separate covenant be registered prior to issuance of a building permit for the proposed development that ensures residential parking is allocated to each unit and visitors as required by the zoning bylaw and is not provided in exchange for compensation separate from that of a residential unit;
- v. That tree protection measures, inclusive of tree protection fencing, are implemented prior to commencement of work to protect the trees identified for retention in the arborist report throughout the construction period;
- vi. That individual heat pumps for each unit, or an equivalent central system, be installed prior to issuance of an occupancy permit;
- vii. That all concrete used on-site will utilize ready-mix concrete that meets or exceeds the weighted average Global Warming Potential targets based on Concrete BC Baseline (average) mix data, and that prior to the issuance of a Building Permit the applicant shall provide a Type III Environmental Product Declaration that is 3rd party verified specifying the total Global Warming Potential value and confirming that the proposed development meets the requirements of Low Carbon Concrete Policy POL-0167-PLAN;
- viii. That, prior to the issuance of a Building Permit, the developer enters into a Housing Agreement with the City that requires a minimum 5% of units constructed be directed to and sold in accordance with the terms of the Attainable Home Ownership Program Policy (POL-0166-PLAN) **OR** a minimum 10% of units constructed be rented for at least 10% below the benchmark rent for the unit type for a term not less than 25 years, and that the developer identify the Attainable Units on the plans submitted for the required Development Permit application.

AND

2. Authorize the Director of Development Services to issue the following variances within the future Development Permit for Form and Character:
 - a) That Section 6.58.06(2)(a) be varied by reducing the front yard setback for the 3rd storey and higher along Jacklin Road only from the required 4.0 m (13 ft) to 3.56 m (11.7 ft); and
 - b) That Section 6.58.08(1) be varied by reducing the distance required in between an unclosed surface parking space to a lot line abutting a highway from 3.0 m (9.8 ft) to 1.6 m (5.2 ft) provided that additional landscaping is included in the 1.6m separation.

OR Option 2

THAT the Sustainable Development Advisory Committee recommend that Council take no action with respect to this application to rezone 2830 Jacklin Road and 2825-2831 Knotty Pine under Bylaw No. 2204 until such time as the following items are addressed and reviewed by the Sustainable Development Advisory Committee:

- a. _____;
- b. _____;
- c. _____.

SUBMITTED BY: Robert Dykstra, RPP, MCIP, Senior Planner

- Concurrence:** Matthew Baldwin, RPP, MCIP, Director of Development Services
- Concurrence:** Leah Stohmann, RPP, MCIP, Director of Community Planning and Climate Change
- Concurrence:** Melisa Miles, Manager of Legislative Services
- Concurrence:** Donna Petrie, Senior Manager of Communications & Economic Development
- Concurrence:** Yari Nielsen, Director of Parks, Recreation and Facilities
- Concurrence:** Katelyn Balzer, P.Eng., Director of Engineering and Public Works
- Concurrence:** Michael Dillabaugh, CPA, CA, Director of Finance
- Concurrence:** Marie Watmough, Director of Legislative & Protective Services
- Concurrence:** Braden Hutchins, Deputy Chief Administrative Officer

Attachments:

- Arborist Report
- Landscape Plan
- Bylaw No. 2204

Appendix A – Site Map

**REZONING BYLAW AMENDMENT
(Z23-0009)**

2830 Jacklin Rd 2825 & 2827, 2829, 2831 Knotty Pine Rd



Document Name: Z23-0009_Site_Map

Scale: N.T.S.

Last Revised: 2023-08-28

Appendix B – Location Map

REZONING BYLAW AMENDMENT
(Z23-0009)
2830 Jacklin Rd 2825 & 2827, 2829, 2831 Knotty Pine Rd



Document Name: Z23-0009_Location_Map

Scale: N.T.S.

Last Revised: 2023-08-28

Appendix C – Rendering from Knotty Pine Frontage



Appendix D – Rendering from Jacklin Frontage



Appendix E – Ground Floor Plan





TALMACK
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**2825-2831 KNOTTY PINE ROAD &
2830 JACKLIN ROAD—LANGFORD, BC**
**CONSTRUCTION IMPACT ASSESSMENT &
TREE MANAGEMENT PLAN**

PREPARED FOR: Eden Developments
942 Park Royal South
West Vancouver, BC
V7T 2W4

PREPARED BY: Talmack Urban Forestry Consultants Ltd.
Robert McRae – Consulting Arborist
ISA Certified # PN-7125A
Tree Risk Assessment Qualified
Tree Appraisal Qualified

DATE OF ISSUANCE: May 30, 2024

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APPENDICES

APPENDIX A TREE MANAGEMENT PLAN

REVISION RECORD

REVISION	DESCRIPTION	DATE (YYYY-MM-DD)	ISSUED BY
0	Original CIA/TMP report for the proposed construction.	2024-05-30	RM

1. INTRODUCTION

Talmack Urban Forestry Consultants Ltd. was engaged to complete a tree inventory, construction impact assessment and tree management plan for the trees at the following proposed project:

Site:	2825-2831 Knotty Pine Road & 2830 Jacklin Road
Municipality:	City of Langford
Client Name:	Eden Developments
Dates of Site Visit(s):	May 3, 2024 (initial inventory)
Site Conditions:	5 flat residential lots with no ongoing construction activity.
Weather During Site Visit:	Sunny

The purpose of this report is to address requirements of the City of Langford arborist report terms of reference and Tree Protection Bylaw No. 2117. The construction impact assessment section of this report (**Section 8**) is based on plans reviewed to date, including site survey by Summit Land Surveying (dated March 1/4, 2024) and preliminary building plans from WA Architects (dated May 27, 2024).

2. TREE INVENTORY METHODOLOGY

For the purposes of this report: the size, health, and structural condition of trees were documented. For ease of identification in the field, numerated metal tags are attached to the lower trunks of onsite trees. Trees located on neighbouring properties, the municipal frontage or in areas where access was restricted, were not tagged. Each tree was visually examined on a limited visual assessment basis (level 1), in accordance with Tree Risk Assessment Qualification (TRAQ) methods (Dunster *et al.* 2017) and ISA Best Management Practices.

3. EXECUTIVE SUMMARY

Based on our review of the building plans, eleven (11) on-site trees (20cm DBH or above, as defined by Bylaw No. 2117) are likely to require removal due to impacts from the proposed construction.

One (1) municipal tree is located where it is possible for retention, provided mitigation recommendations outlined in this report are adhered to.

4. TREE INVENTORY DEFINITIONS

Tag: Tree identification number on a metal tag attached to tree with nail or wire, generally at eye level. Trees on municipal or neighboring properties are not tagged.

NT: No tag due to inaccessibility or ownership by municipality or neighbour.

DBH: Diameter at breast height – diameter of trunk, measured in centimetres at 1.4m above ground level. For trees on a slope, it is taken at the average point between the high and low side of the slope.

* Measured over ivy

~ Approximate due to inaccessibility or on neighbouring property

Dripline: Indicates the radius of the crown spread measured in metres to the dripline of the longest limbs.

Relative Tolerance Rating: Relative tolerance of the tree species to construction related impacts such as root pruning, crown pruning, soil compaction, hydrology changes, grade changes, and other soil disturbance. This rating does not consider individual tree characteristics, such as health and vigor. Three ratings are assigned based on our knowledge and experience with the tree species: Poor (P), Moderate (M) or Good (G).

Critical Root Zone: A calculated radial measurement in metres from the trunk of the tree. It is the optimal size of tree protection zone and is calculated by multiplying the DBH of the tree by 6, 8, 10, 12 or 15 depending on the tree's Relative Tolerance Rating. This methodology is based on the methodology used by Nelda Matheny and James R. Clark in their book "Trees and Development: A Technical Guide to Preservation of Trees During Land Development."

- 15 x DBH = Poor Tolerance of Construction
- 12 x DBH = Moderate
- 10 x DBH = Good

To calculate the critical root zone, the DBH of multiple stems is considered the sum of 100% of the diameter of the largest stem and 60% of the diameter of the next two largest stems. It should be noted that these measures are solely mathematical calculations that do not consider factors such as restricted root growth, limited soil volumes, age, crown spread, health, or structure (such as a lean).

Health Condition:

- Poor – significant signs of visible stress and/or decline that threaten the long-term survival of the specimen
- Fair – signs of stress
- Good – no visible signs of significant stress and/or only minor aesthetic issues

Structural Condition:

- Poor – Structural defects that have been in place for an extended period of time to the point that mitigation measures are limited
- Fair – Structural concerns that are possible to mitigate through pruning
- Good – No visible or only minor structural flaws that require no to very little pruning

Suitability ratings are described as follows:

Rating: Suitable.

- A tree with no visible or minor health or structural defects, is tolerant to changes to the growing environment and is a possible candidate for retention provided that the critical root zone can be adequately protected.

Rating: Conditional.

- A tree with good health but is a species with a poor tolerance to changes to its growing environment or has a structural defect(s) that would require that certain measures be implemented, in order to consider it suitable for retention (i.e., retain with other codominant tree(s), structural pruning, mulching, supplementary watering, etc.)

Rating: Unsuitable.

- A tree with poor health, a major structural defect (that cannot be mitigated using ANSI A300 standards), or a species with a poor tolerance to construction impacts, and unlikely to survive long term (in the context of the proposed land use changes).

Retention Status:

- Remove (X) – Not possible to retain given proposed construction plans
- Retain – It is possible to retain this tree in the long-term given the proposed plans and information available. This is assuming our recommended mitigation measures are followed
- Retain * - See report for more information regarding potential impacts
- TBD - Retention status “to be determined” at the time of construction

TABLE 1. TREE INVENTORY

Tag or ID #	Surveyed? (Yes/No)	Location (On, Off, Shared, City)	Bylaw-defined? (Yes/No)	Name		dbh (cm)	Dripline diameter (m)	Critical root zone radius (m)	Relative Tolerance	Condition		Retention Suitability (on-site trees)	General field observations/remarks	Tree retention / location comments	Retention status
				Common	Botanical					Health	Structural				
M1	Yes	Municipal	Yes, No. 1000	Flowering cherry	<i>Prunus serrulata</i> 'Kwanzan'	~35	8	4.2	Moderate	Good/Fair	Fair	N/A	Within tree barrier fencing, large surface root, included bark and tight unions,	Possible impacts from underground parking. Services?	Retain*
589	Yes	On-site	Yes	Purple leaf plum	<i>Prunus cerasifera</i>	36 below unions	3	4.3	Moderate	Good	Fair/Poor	Unsuitable	Multiple tops originating from ~1.4m, included bark and narrow branch attachments	Conflict with underground parking.	X
590	Yes	On-site	Yes	Arbutus	<i>Arbutus menziesii</i>	53, 50, 43, 37	7.5	16.3	Poor	Fair	Fair/Poor	Unsuitable	Four leaders, large pruning wounds, canker with decay at interior base of eastern stem, compacted soil on and off site, western leaders are over extended	Conflict with underground parking.	X
591	Yes	On-site	Yes	Arbutus	<i>Arbutus menziesii</i>	110 below unions	6.5	16.5	Poor	Fair	Fair/Poor	Unsuitable	Excavation cut within 2.5m of base, eastern limb removed, historical large limb failure on south side with surface decay, western limb over extended and end weighted, seam along union of western limb (potentially response growth), stressed (twig dieback likely from new exposure),	Conflict with underground parking.	X
592	Yes	On-site	Yes	Garry oak	<i>Quercus garryana</i>	34	4	3.4	Good	Fair/Poor	Fair/Poor	Unsuitable	Stressed, sparse canopy, epicormics, canopy weighted to the northwest, included union	Conflict with underground parking.	X
593	No	On-site	Yes	Apple (domestic)	<i>Malus spp.</i>	25 below unions	3	3	Moderate	Fair	Fair	Unsuitable	~3.5m east of corner of house, codominant, topped historically	Conflict with underground parking.	X
594	Yes	On-site	Yes	Garry oak	<i>Quercus garryana</i>	71 below unions	6	7.1	Good	Fair/Poor	Fair/Poor	Unsuitable	Vertical excavation ~2m east of tree, flush cuts, tearout wounds, mechanical damage on southern side, main stem codominant with large inclusion, multiple pruning wounds along eastern side, fruiting bodies in pruning wounds (likely turkey tails), irregular taper, asymmetrical canopy	Conflict with underground parking.	X
595	Yes	On-site	Yes	Norway maple	<i>Acer platanoides</i>	37 below unions	5.5	4.4	Moderate	Good	Fair	Unsuitable	Tridominant, brick between unions, large surface roots, girdling root,	Conflict with underground parking.	X

596	Yes	On-site	Yes	Cherry (domestic)	<i>Prunus spp.</i>	50	5.5	6	Moderate	Fair	Fair	Unsuitable	Large surface roots, tree fort structure built on lateral limb, end weighted limbs, historic limb removals, deadwood	Conflict with underground parking.	X
597	Yes	On-site	Yes	Leyland cypress	<i>Cuprocyparis leylandii</i>	89 below unions	5.5	8.9	Good	Good	Fair	Unsuitable	Historical limb removal from lower trunk, large eastern facing limb (large included limbs), shearing on southern side (neighbours side),	Conflict with underground parking.	X
598	Yes	On-site	Yes	Leyland cypress	<i>Cuprocyparis leylandii</i>	~90	5	9	Good	Good	Fair/Poor	Unsuitable	Multiple leaders with narrow attachments and included bark, over extended limbs to the west,	Conflict with underground parking.	X
993	No	On-site	Yes	Apple (domestic)	<i>Malus spp.</i>	21 over ivy	3	2.5	Moderate	Good/Fair	Fair	Unsuitable	Growing in corner of lot,	Conflict with underground parking.	X

5. SITE INFORMATION & PROJECT UNDERSTANDING

The development site consists of five (5) residential properties (2825-2831 Knotty Pine Road & 2830 Jacklin Road) in Langford, B.C., which have existing residences on each lot. It is our understanding that the proposal is to demolish the existing structures, followed by construction of a new multi-unit residential complex. **At this time, we have not reviewed a site servicing plan.**

Below is a general observation of the tree resource, as it appeared at the time of our site visit(s):

6. FIELD OBSERVATIONS

The on and off-site tree resource consists of a mixture of native and non-native species growing in open landscape conditions (see **Figure 1**):



Figure 1: Site context air photo: The approximate boundary of the subject site is outlined in blue.

7. TREE RISK ASSESSMENT

During our May 3 (2024) site visit and in conjunction with the tree inventory, on-site trees were assessed for risk on a limited visual basis (level 1), in the context of the existing land uses. The time frame used for the purpose of our

assessment is one year (from the date of this report). Unless otherwise noted herein, we did not conduct a detailed (level 2) or advanced (level 3) risk assessment, such as resistograph testing, increment core sampling, aerial examinations, or subsurface root/root collar examinations.

Existing Land Uses

We did not observe any trees that were deemed to be moderate, high, or extreme risk (in the context of the existing land uses, which would require hazard abatement to eliminate present and/or future risks) within a 1-year timeframe. Targets considered during this TRAQ assessment include: occupants of the existing residences on-site and neighbour's (constant use), occupants of vehicles travelling or parked on Knotty Pine Road or Jacklin Road (frequent use), pedestrians travelling along the existing sidewalks (occasional use), occupants of front, rear, and side yards on-site and neighbour's (occasional use), hydro lines (constant use).

8. CONSTRUCTION IMPACT ASSESSMENT

8.1. RETENTION AND REMOVAL OF MUNICIPAL TREES

The following municipal trees (indicated by ID#) are located where they may be possible for retention provided that the critical root zones are adequately protected during construction. The project arborist must be on site to supervise any excavation or fill placement required within the critical root zones—shown on the tree management plan in **Appendix A**:

Retain and protect one (1) municipal tree

- M1

8.1.1. ADDITIONAL MITIGATION MEASURES FOR M1

The new underground parking facility is proposed within the CRZ of **flowering cherry (*Prunus serrulata* 'Kwanzan')** M1 (~35cm DBH):

- If a cut-slope is prescribed by a geotechnical engineer, over-excavation within the CRZ could result in significant impacts to M1. However, we anticipate excavation will be restricted to the east property line. If this is the case, we anticipate this tree can be retained.
- The project arborist must supervise all excavations within the CRZ and perform any required root pruning.
- Protective barrier fencing is currently installed to the edges of the existing curb and sidewalk (due to development on the adjacent lot). We recommend this fencing is maintained until the completion of the proposed construction on the subject properties.

At this time, we have not reviewed plans that show how underground and/or overhead services will be connected to the proposed residential complex:

- We recommend all services are connected outside the CRZ and drip line of M1, if possible. Any excavations or clearance pruning required within these areas must be reviewed and/or directly supervised by the project arborist.

If **Norway Maple (*Acer platanoides*) #595** (37cm trunk diameter below unions) is approved for removal, care must be taken to minimize damage to the canopy of M1, as the crowns of the two trees are intertwined.

8.2. RETENTION AND REMOVAL OF ON-SITE TREES

The following bylaw-defined on-site trees (indicated by tag #) are located where they are likely to be severely impacted by construction and are proposed for removal:

Remove eleven (11) on-site trees

- #589-598, 993

9. IMPACT MITIGATION

Tree Protection Barrier: The areas surrounding the trees to be retained should be isolated from the construction activity by erecting protective barrier fencing (see **Appendix A** for municipal barrier specifications). Where possible, the fencing should be erected at the perimeter of the critical root zone. The barrier fencing to be erected must be a minimum of 4 feet in height, of solid frame construction that is attached to wooden or metal posts. A solid board or rail must run between the posts at the top and the bottom of the fencing. This solid frame can then be covered with flexible snow fencing. The fencing must be erected prior to the start of any construction activity on site (i.e., demolition, excavation, construction), and remain in place through completion of the project. Signs should be posted around the protection zone to declare it off limits to all construction related activity. The project arborist must be consulted before this fencing is removed or moved for any purpose.

Arborist Supervision: All excavation occurring within the critical root zones of protected trees should be completed under supervision by the project arborist. Any severed or severely damaged roots must be pruned back to sound tissue to reduce wound surface area and encourage rapid compartmentalization of the wound. In particular, the following activities should be completed under the direction of the project arborist:

- Any excavations or additions of fill within the CRZs of protected trees to be retained.

Methods to Avoid Soil Compaction: In areas where construction traffic must encroach into the critical root zones of trees to be retained, efforts must be made to reduce soil compaction where possible by displacing the weight of machinery and foot traffic. This can be achieved by one of the following methods:

- Installing a layer of hog fuel or coarse wood chips at least 20 cm in depth and maintaining it in good condition until construction is complete.
- Placing medium weight geotextile cloth over the area to be used and installing a layer of crushed rock to a depth of 15-20 cm over top.
- Placing two layers of 19mm plywood.
- Placing steel plates.

Demolition of the Existing Buildings: The demolition of the existing houses, driveways, and any services that must be removed or abandoned, must take the critical root zone of the trees to be retained into account. If any excavation or machine access is required within the critical root zones of trees to be retained, it must be completed under the supervision and direction of the project arborist. If temporarily removed for demolition, barrier fencing must be erected immediately after the supervised demolition.

Paved Surfaces Above Tree Roots:

If the new paved surfaces within the CRZ of tree to be retained require excavation down to bearing soil and roots are encountered in this area, this could impact their health and structural stability. If tree retention is desired, a raised and permeable paved surface should be constructed in the areas within the critical root zone of the trees. The “paved surfaces above root systems” diagram and specifications is attached.

The objective is to avoid root loss and to instead raise the paved surface and its base layer above the roots. This may result in the grade of the paved surface being raised above the existing grade (the amount depending on how close roots are to the surface and the depth of the paving material and base layers). Final grading plans should take this potential change into account. This may also result in soils which are high in organic content being left intact below the paved area.

To allow water to drain into the root systems below, we also recommend that the surface be made of a permeable material (instead of conventional asphalt or concrete) such as permeable asphalt, paving stones, or other porous paving materials and designs such as those utilized by Grasspave, Gravelpave, Grasscrete and open-grid systems.

Mulching: Mulching can be an important proactive step in maintaining the health of trees and mitigating construction related impacts and overall stress. Mulch should be made from a natural material such as wood chips or bark pieces and be 5-8cm deep. No mulch should be touching the trunk of the tree. See “methods to avoid soil compaction” if the area is to have heavy traffic.

Blasting: Care must be taken to ensure that the area of blasting does not extend beyond the necessary footprints and into the critical root zones of surrounding trees. The use of small low-concussion charges and multiple small charges designed to pre-shear the rock face will reduce fracturing, ground vibration, and overall impact on the surrounding environment. Only explosives of low phytotoxicity and techniques that minimize tree damage should be used. Provisions must be made to ensure that blasted rock and debris are stored away from the critical root zones of trees.

Scaffolding: This assessment has not included impacts from potential scaffolding including canopy clearance pruning requirements. If scaffolding is necessary and this will require clearance pruning of retained trees, the project arborist should be consulted. Depending on the extent of pruning required, the project arborist may recommend that alternatives to full scaffolding be considered such as hydraulic lifts, ladders, or platforms. Methods to avoid soil compaction may also be recommended (see “Minimizing Soil Compaction” section).

Landscaping and Irrigation Systems: The planting of new trees and shrubs should not damage the roots of retained trees. The installation of any in-ground irrigation system must consider the critical root zones of the trees to be retained. Prior to installation, we recommend the irrigation technician consult with the project arborist about the most suitable locations for the irrigation lines and how best to mitigate the impacts on the trees to be retained. This may require the project arborist supervise the excavations associated with installing the irrigation system. Excessive frequent irrigation and irrigation which wets the trunks of trees can have a detrimental impact on tree health and can lead to root and trunk decay.

Arborist Role: It is the responsibility of the client or his/her representative to contact the project arborist for the purpose of:

- Locating the barrier fencing
- Reviewing the report with the project foreman or site supervisor
- Locating work zones, where required
- Supervising any excavation within the critical root zones of trees to be retained
- Reviewing and advising of any pruning requirements for machine clearances

Review and site meeting: Once the project receives approval, it is important that the project arborist meet with the principals involved in the project to review the information contained herein. It is also important that the arborist meet with the site foreman or supervisor before any site clearing, tree removal, demolition, or other construction activity occurs and to confirm the locations of the tree protection barrier fencing.

10. DISCLOSURE STATEMENT

This arboricultural field review report was prepared by Talmack Urban Forestry Consultants Ltd. for the exclusive use of the Client and may not be reproduced, used, or relied upon, in whole or in part, by a party other than the Client without the prior written consent of Talmack Urban Forestry Consultants Ltd. Any unauthorized use of this report, or any part hereof, by a third party, or any reliance on or decisions to be made based on it, are at the sole risk of such third parties. Talmack Urban Forestry Consultants Ltd. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report, in whole or in part.

Arborists are professionals who examine trees and use their training, knowledge, and experience to recommend techniques and procedures that will improve a tree's health and structure or to mitigate associated risks. Trees are living organisms whose health and structure change and are influenced by age, continued growth, climate, weather conditions, and insect and disease pathogens. Indicators of structural weakness and disease are often hidden within the tree structure or beneath the ground. The arborist's review is limited to a visual examination of tree health and structural condition, without excavation, probing, resistance drilling, increment coring, or aerial examination. There are inherent limitations to this type of investigation, including, without limitation, that some tree conditions will inadvertently go undetected. The arborist's review followed the standard of care expected of arborists undertaking similar work in British Columbia under similar conditions. No warranties, either express or implied, are made as to the services provided and included in this report.

The findings and opinions expressed in this report are based on the conditions that were observed on the noted date of the field review only. The Client recognizes that passage of time, natural occurrences, and direct or indirect human intervention at or near the trees may substantially alter discovered conditions and that Talmack Urban Forestry Consultants Ltd. cannot report on, or accurately predict, events that may change the condition of trees after the described investigation was completed.

It is not possible for an Arborist to identify every flaw or condition that could result in failure, nor can he/she guarantee that the tree will remain healthy and free of risk. The only way to eliminate tree risk entirely is to remove the entire tree. All trees retained should be monitored on a regular basis. Remedial care and mitigation measures recommended are based on the visible and detectable indicators present at the time of the examination and cannot be guaranteed to alleviate all symptoms or to mitigate all risk posed.

Immediately following land clearing, grade changes or severe weather events, all trees retained should be reviewed for any evidence of soil heaving, cracking, lifting or other indicators of root plate instability. If added information is discovered in the future during such events or other activities, Talmack Urban Forestry Consultants Ltd. should be requested to re-evaluate the conclusions of this report and to provide amendments as required prior to any reliance upon the information presented herein.

11. IN CLOSING

We trust that this report meets your needs. Should there be any questions regarding the information within this report, please do not hesitate to contact the undersigned.

Yours truly,

Talmack Urban Forestry Consultants Ltd.

Prepared by:



Robert McRae
ISA Certified Arborist PN – 7125A
Tree Risk Assessment Qualified
Tree Appraisal Qualified
Email: Robbie@Talmack.ca

12. REFERENCES

Dunster, J.A., E.T. Smiley, N. Matheny, and S. Lily. 2017. Tree Risk Assessment Manual, International Society of Arboriculture (ISA).

The City of Langford Tree Protection Bylaw No. 2117.








The City of Langford Subdivision and Site Servicing Bylaw No. 1000.

13. COMPANY INFORMATION

General Liability: Intact Insurance, Policy No. 5V2147122 : \$5,000,000

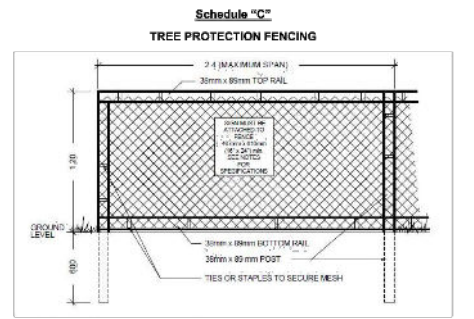
APPENDIX A - TREE MANAGEMENT PLAN

LEGEND

-  Existing tree with tag or ID #
-  Tree protection fencing
-  Dripline radius (m)
-  Critical root zone radius (m)
-  Tree proposed for removal
-  Unsurveyed tree
-  Site boundary

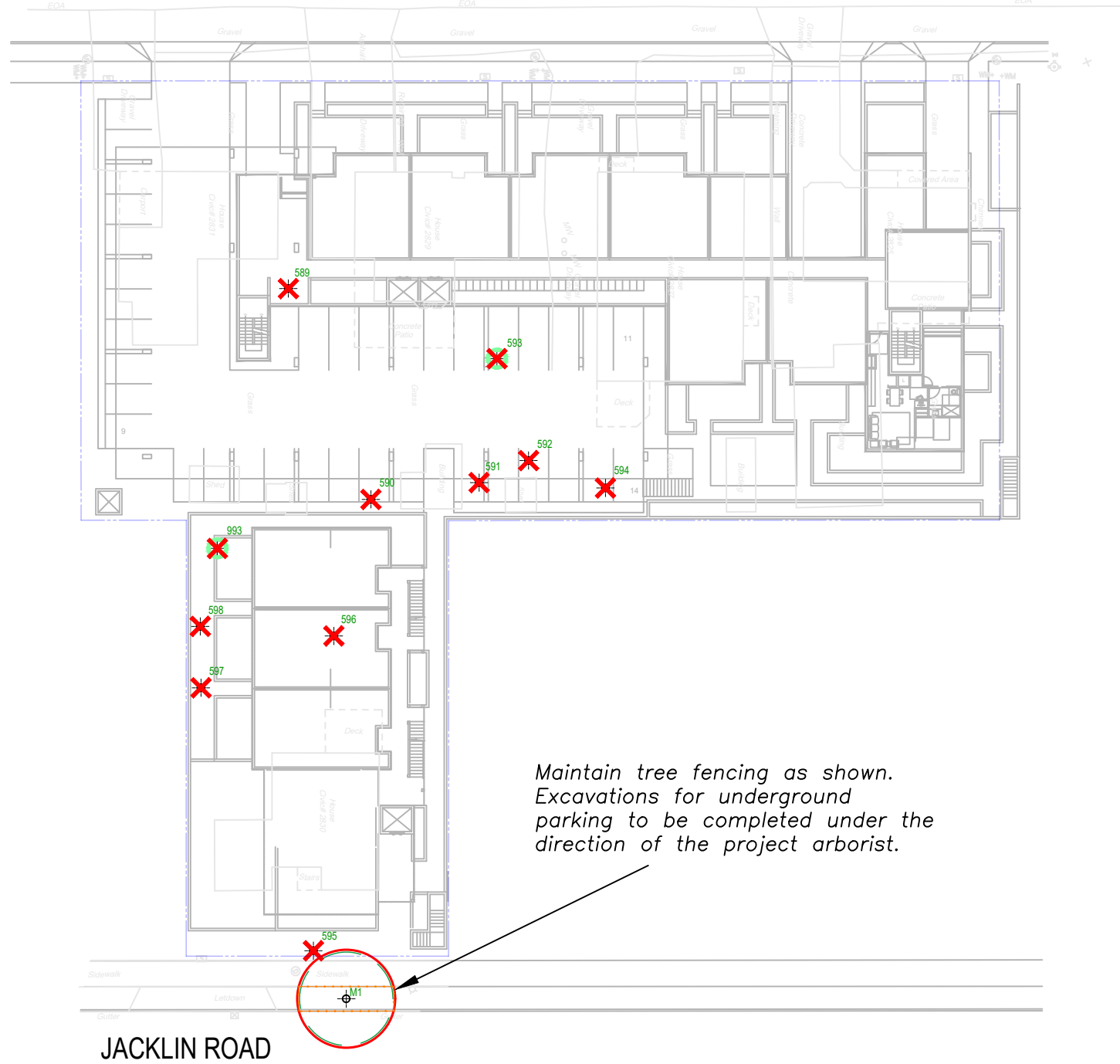


TREE PROTECTION FENCING



- Tree Protection Fencing Specifications:**
- The fence will be constructed using 38 x 89 mm (2" x 4") wood frame:
 - Top, Bottom and Posts.
 - Use orange snow fencing mesh and secure to the wood frame with "zip" ties or galvanized staples.
 - Attach a sign with minimum size of 407 mm x 810 mm (16" X 24") with the following wording:
 - DO NOT ENTER- Tree Protection Zone (For retained trees);
 - DO NOT ENTER- Future Tree Planting Zone (For tree planting sites)
- This sign must be affixed on every fence face or at least every 10 linear metres.
- *In rocky areas, metal posts (t-bar or rebar) drilled into rock will be accepted.

KNOTTY PINE ROAD



JACKLIN ROAD

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 ARCHITECTURAL PLANS. THE LOCATION OF UNSURVEYED TREES ON THIS PLAN IS APPROXIMATE. THE LOCATION AND OWNERSHIP OF UN-SURVEYED TREES CANNOT BE CONFORMED WITHOUT BEING SURVEYED BY A REGISTERED BC LAND SURVEYOR.



TREE PROTECTION NOTES

Tree protection barrier: The areas, surrounding the trees to be retained, should be isolated from the construction activity by erecting protective barrier fencing. Where possible, the fencing should be erected at the perimeter of the critical root zone. The barrier fencing to be erected must be a minimum of 1200mm in height, of solid frame construction that is attached to wooden or metal posts. A solid board or rail must run between the posts at the top and the bottom of the fencing. This solid frame can then be covered with flexible snow fencing. The fencing must be erected prior to the start of any construction activity on site (i.e. demolition, excavation, construction), and remain in place through completion of the project. Signs should be posted around the protection zone to declare it off limits to all construction related activity. The project arborist must be consulted before this fencing is removed or moved for any purpose.

Arborist supervision: All excavation occurring within the critical root zones of protected trees must be completed under the supervision of the project arborist. Any severed or severely damaged roots must be pruned back to sound tissue to reduce wound surface area and encourage rapid compartmentalization of the wound.

Demolition: The demolition of the existing houses, driveways, and any services that must be removed or abandoned must take the critical root zone of the trees to be retained into account. If any excavation or machine access is required within the critical root zones of trees to be retained, it must be completed under the supervision of the project arborist. If temporarily removed for demolition, barrier fencing must be erected immediately after the supervised demolition.

Methods to avoid soil compaction: In areas where construction traffic must encroach into the critical root zones of trees to be retained, efforts must be made to reduce soil compaction where possible by displacing the weight of machinery and foot traffic. This can be achieved by one of the following methods:

- Installing a layer of hog fuel or coarse wood chips at least 20cm in depth and maintaining it in good condition until construction is complete.
- Placing medium weight geotextile cloth over the area to be used and installing a layer of crushed rock to a depth of 15cm over top.
- Placing two layers of 19mm plywood.
- Placing steel plates.

Mulching: Mulching can be an important proactive step in maintaining the health of trees and mitigating construction related impacts and overall stress. Mulch should be made from a natural material such as wood chips or bark pieces and be 5-8cm deep. No mulch should be touching the trunk of the tree. See "methods to avoid soil compaction" if the area is to have heavy traffic.

Pruning: We recommend that any pruning of bylaw-protected trees be performed to ANSI A300 standards and Best Management Practices.

Paved surfaces above tree roots: Where paved areas cannot avoid encroachment within critical root zones of trees to be retained, construction techniques, such as floating permeable paving, may be required. The "paved surfaces above tree roots" detail above offers a compromise to full depth excavation (which could impact the health or structural stability of the tree). The objective is to avoid root loss and to instead raise the paved surface above the existing grade (the amount depending on how close roots are to the surface and the depth of the paving material and base layers). Final grading plans should take this potential change into account. This may also result in soils which are high in organic content being left intact below the paved area. To allow water to drain into the root systems below, we also recommend that the surface

be made of a permeable material (instead of conventional asphalt or concrete) such as permeable asphalt, paving stones, or other porous paving materials and designs such as those utilized by Grasspave, Gravelpave, Grasscrete and open-grid systems.

Blasting and rock removal: Care must be taken to ensure that the area of blasting does not extend beyond the necessary footprints and into the critical root zones of surrounding trees. The use of small low-concussion charges and multiple small charges designed to pre-shear the rock face will reduce fracturing, ground vibrations and overall impact to the surrounding environment. Only explosives of low phytotoxicity and techniques that minimize tree damage should be used. Provisions must be made to ensure that blasted rock and debris are stored away from the critical root zones of trees.

Scaffolding: This assessment has not included impacts from potential scaffolding including canopy clearance pruning requirements. If scaffolding is necessary and this will require clearance pruning of retained trees, the project arborist should be consulted. Depending on the extent of pruning required, the project arborist may recommend that alternatives to full scaffolding be considered such as hydraulic lifts, ladders or

platforms. Methods to avoid soil compaction may also be recommended (see "Minimizing Soil Compaction" section).

Landscaping and irrigation systems: The planting of new trees and shrubs should not damage the roots of retained trees. The installation of any in-ground irrigation system must take into account the critical root zones of the trees to be retained. Prior to installation, we recommend the irrigation technical consult with the project arborist about the most suitable locations for the irrigation lines and how best to mitigate the impacts on the trees to be retained. This may require the project arborist supervise the excavations associated with installing the irrigation system. Excessive frequent irrigation and irrigation which wets the trunks of trees can have a detrimental impact on the tree health and can lead to root and trunk decay.

Arborists role: It is the responsibility of the client or his/her representative to contact the project arborist for the purpose of:

- Locating the barrier fencing.
- Reviewing the report with the project foreman or site supervisor.
- Locating work zones and machine access corridors where required.
- Supervising excavation for any areas within the critical root zones of trees to be retained including any proposed retaining wall footings and review any proposed fill areas near trees to be retained.

Tree Management Plan
2825-2831 Knotty Pine Rd. & 2830 Jacklin Rd.
Langford, BC

DATE: May 30, 2024
PREPARED FOR: Eden Developments
SCALE: 1 : 500 @ 11" X 17"
DRAWN BY: RM
REVISION: 0
REFERENCE DWG: 24017-Scheme 6 - 27May24 & W128-REGAN-SP2

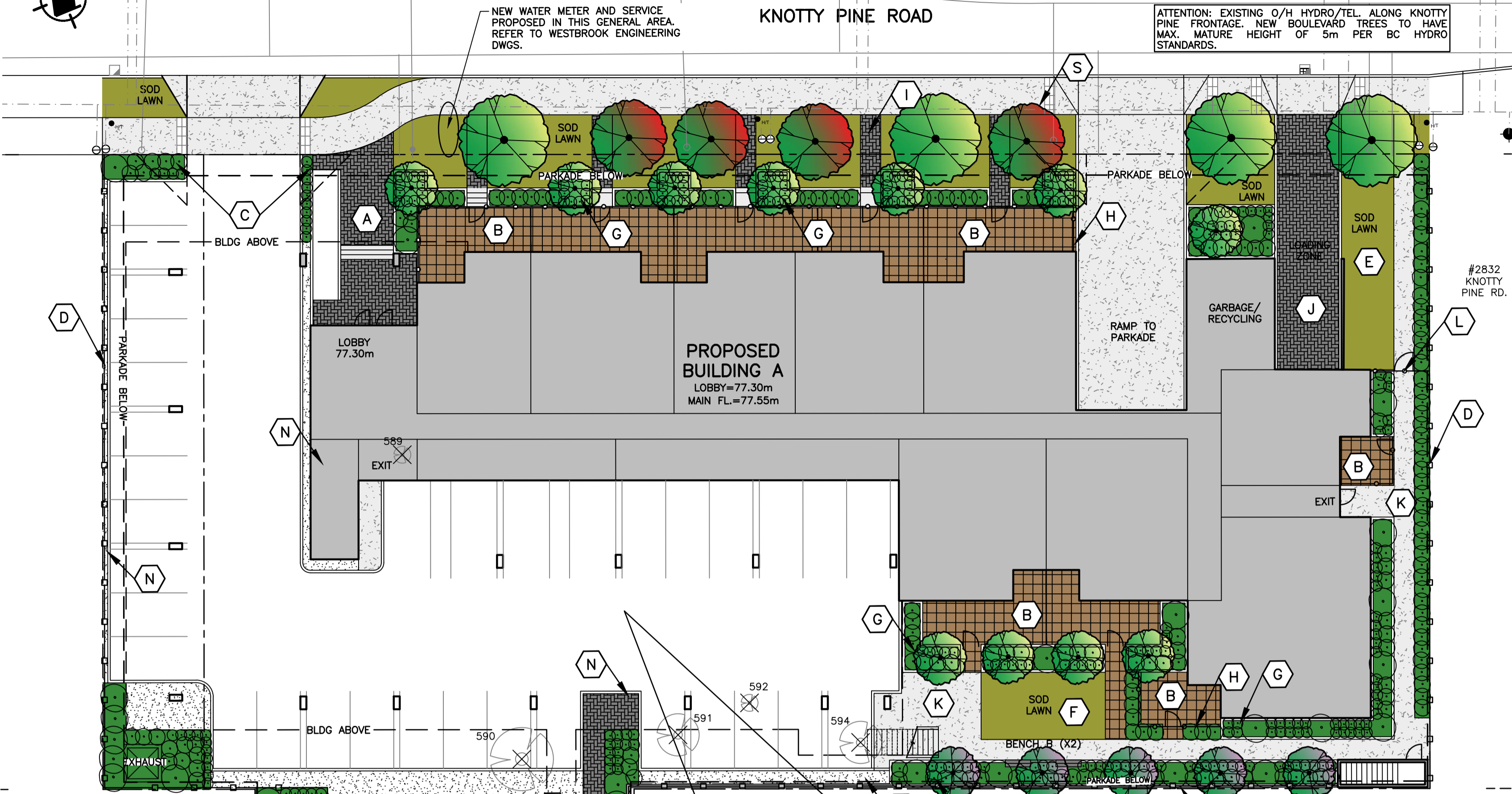


NOTE: WATER MAIN AT KNOTTY PINE FRONTAGE MAKES BOULEVARD UNSUITABLE FOR NEW TREES IF RECOMMENDED ROAD CROSS SECTION FOLLOWED. NEW SIDEWALK AT BACK OF CURB PROPOSED TO ALLOW FOR MUNICIPAL TREES.

NOTE: LANGFORD PARKS TO CONFIRM IRRIGATION REQUIREMENTS (IF ANY) FOR KNOTTY PINE ROAD SOD BOULEVARD.

NEW WATER METER AND SERVICE PROPOSED IN THIS GENERAL AREA. REFER TO WESTBROOK ENGINEERING DWGS.

ATTENTION: EXISTING O/H HYDRO/TEL. ALONG KNOTTY PINE FRONTAGE. NEW BOULEVARD TREES TO HAVE MAX. MATURE HEIGHT OF 5m PER BC HYDRO STANDARDS.



KEY NOTES

- A BUILDING A ENTRANCE C/W UNIT PAVING, RAMP, STAIRS & RAILING DESIGN BY OTHERS. REFER TO ARCHITECTURAL DRAWINGS.
B BUILDING A PRIVATE UNIT PATIO C/W UNIT PAVING, SCREEN PLANTING IN CONCRETE PLANTERS & WOOD PRIVACY SCREENS BETWEEN UNITS.
C FEATURE PLANTING BEDS AT DRIVEWAY ENTRANCE. MATURE SHRUB HEIGHT WITHIN 3m SITE TRIANGLE IS NOT TO EXCEED 900mm. PROJECT SIGNAGE TO BE CONFIRMED BY DEVELOPER & ARCHITECT.
D 1.8m HT. PERIMETER WOOD PANEL FENCE ON PROPERTY LINE.
E PET RELIEF LAWN
F RESIDENT AMENITY C/W ACTIVITY LAWN & SEATING BENCHES (ON PLANTER WALL).
G RAISED PLANTER C/W ACCENT TREE. MIN. SOIL DEPTH TO BE 800mm OVER PARKADE SLAB. DRAINAGE LAYER & PROTECTION BOARD REQUIRED OVER PARKADE. TYPICAL.
H 1.2m HEIGHT DECORATIVE METAL FENCE (POWDER COATED BLACK) WITH ACCESS GATE.
I PRIVATE UNIT PAVER WALKWAY TO UNIT. CONCRETE STEPS TO BE DESIGNED BY OTHER. REFER TO ARCHITECTURAL.
J BUILDING LOADING ZONE C/W UNIT PAVING.
K BROOM FINISHED CONCRETE WALKWAY. DESIGN BY OTHERS.
L 1.8m HEIGHT DECORATIVE METAL FENCE (POWDER COATED BLACK) WITH SECURITY GATE.
M PLANTING BED C/W SHADE & DROUGHT TOLERANT PLANTS. ASSUMES 450mm MIN. SOIL DEPTH OVER PARKADE SLAB.
N 200mm DEPTH RIVER ROCK COBBLE BORDER (100mm# TO 150mm# COBBLES) OVER WEED BARRIER FABRIC. PLASTIC WOOD EDGER REQUIRED AT SOD LAWN OR PLANTING BEDS.
O UNIT PAVER WALKWAY. EDGE RESTRAINT REQUIRED AT PLANTING BEDS & SOD LAWNS. TYPICAL.
P BUILDING B ENTRANCE C/W UNIT PAVING. BIKE RACK TO BE DISCUSSED WITH DEVELOPER.
Q BUILDING B PRIVATE YARD C/W SLAB PAVER PATIO, SCREEN PLANTING, SOD LAWN & 1.5m HT. WOOD FENCE BETWEEN UNITS. TYPICAL.
R EX. MUNICIPAL STREET TREE TO BE RETAINED. TREE PROTECTION FENCING TO BY-LAW 1000 STANDARDS TO BE ERECTED AT TREE PRIOR TO START OF ANY SITE WORK.
S PROPOSED BOULEVARD TREE. IRRIGATION VIA MUNICIPAL SYSTEM. 1.2m# MULCH RING REQUIRED. TREE TO BE 1.0m CLEAR OF ANY U/G HYDRO/TEL. ROOT BARRIER REQUIRED.
T PERIMETER PLANTING BED C/W SCREEN HEDGE. ASSUMES 600mm MIN. SOIL DEPTH AT EDGE OF PARKADE SLAB.
U PERIMETER PLANTER C/W SCREEN HEDGE. RETAINING WALL AT PROPERTY IS DESIGNED BY OTHERS.

GENERAL NOTES

- 1. ALL PLANTING, TREE PIT SOIL VOLUMES, CONSTRUCTION, AND MATERIALS TO BE IN ACCORDANCE WITH LANGFORD SPECIFICATIONS, BY-LAW 1000 (SUBDIVISION DEVELOPMENT SERVICES), AND STANDARD DRAWINGS, MUCD SPECIFICATIONS AND BC NURSERY TRADES. ALL LANDSCAPING WORK TO BE REVIEWED BY CALID SERVICES LTD.
2. ALL OFFSITE AREAS AFFECTED BY THE WORK ARE TO BE REINSTATED TO ORIGINAL OR BETTER CONDITION BY CONTRACTOR AND COMPLETED IN PROMPT MANNER TO MINIMIZE LOCAL DISRUPTION.
3. CONTRACTOR TO ENSURE POSITIVE DRAINAGE OF ALL LAWNS AND PLANTING AREAS TO AN APPROVED OUTLET. MINIMUM GRADE TO BE 2.0%.
4. CONTRACTOR TO CONFIRM LOCATION OF AND COORDINATE WITH APPLICABLE UTILITIES PRIOR TO INSTALLATION OF ANY OF THE LANDSCAPE WORKS.
5. CONTRACTOR TO BE REGISTERED WITH WORK SAFE BC AND ALL WORK TO BE CONDUCTED UNDER WORK SAFE BC REGULATIONS AND WORK AREAS TO BE PROTECTED BY APPROVED RIGID CONSTRUCTION FENCING.
6. EXISTING & PROPOSED UNDERGROUND SERVICES SHOWN ON THIS DRAWING ARE FROM WESTBROOK CONSULTING CIVIL DRAWING RECEIVED MAY, 2024. CONTRACTOR TO CONFIRM THE LOCATION OF ANY UNDERGROUND SERVICES AND COORDINATE WITH APPLICABLE UTILITIES PRIOR TO ANY EXCAVATIONS.
7. FOR ANY AMBIGUITIES IN SPECIFICATIONS THE MOST CONSERVATIVE/ROBUST SPECIFICATIONS SHALL GOVERN.
8. CONTRACTOR TO NOTIFY CALID SERVICES LTD. IMMEDIATELY OF ANY CONFLICTS OR DISCREPANCIES.
9. ALL PLANTERS OVER BUILDING SLAB REQUIRE DRAINS CONNECTED TO ROOF DRAINAGE SYSTEM. LOCATION TO BE REVIEWED BY DEVELOPER'S STRUCTURAL ENGINEER.
10. AUTOMATIC IRRIGATION SYSTEM TO LANGFORD BY LAW 1000 REQUIRED FOR ALL PLANTING AREAS, SOD LAWNS & TREES.
11. IRRIGATION REQUIREMENTS FOR MUNICIPAL SOD LAWN BOULEVARD TO BE PROVIDED BY LANGFORD PARKS. POINT OF CONNECTION FOR MUNICIPAL IRRIGATION SYSTEM TO BE REVIEWED WITH LANGFORD PARKS.
12. WELL-ROTTED, HIGH ORGANIC CONTENT, LOW WOOD CONTENT MULCH TO BE APPLIED TO PLANTING BEDS AFTER FINISHED GRADING IS APPROVED AND PLANTING COMPLETE. MULCH TO BE FREE OF CHUNKS, STICKS, SOIL, STONES, ROOTS, ETC. LANDSCAPE CONTRACTOR TO ENSURE MINIMUM BARK MULCH DEPTH OF 50mm AFTER SETTLEMENT. 1.2m# MULCH RINGS REQUIRED FOR ALL TREES IN LAWN AREAS.

SITE FURNISHING SCHEDULE:

STANDARD BENCH (TYPE A BENCH): URBAN FORM BENCH UFB-5 QUANTITY: TWO (2) POWDER COAT COLOUR: GREY GOLD RECYCLED PLASTIC WOOD COLOUR: REDWOOD CONTACT: WISHBONE SITE FURNITURE (1-604-626-0476)
WALL MOUNTED BENCH (TYPE B BENCH): URBAN FORM BENCH UFBM-17 1.5m BENCH QUANTITY: EIGHT (8) POWDER COAT COLOUR: GREY GOLD RECYCLED PLASTIC WOOD COLOUR: REDWOOD CONTACT: WISHBONE SITE FURNITURE (1-604-626-0476)
BIKE RACK: CORA BIKE RACK W3606 POWDER COATED BLACK QUANTITY: 1 CONTACT: CORA CANADA, BURNABY, B.C. (1-604-437-4415)

NOTE: ALL LANDSCAPE AREAS & PLANTERS TO BE CONNECTED TO ONSITE AUTOMATIC IRRIGATION SYSTEM. 150mm IRRIGATION SLEEVES REQUIRED AT PLANTER WALLS, DRIVEWAYS, SIDEWALKS, ETC.

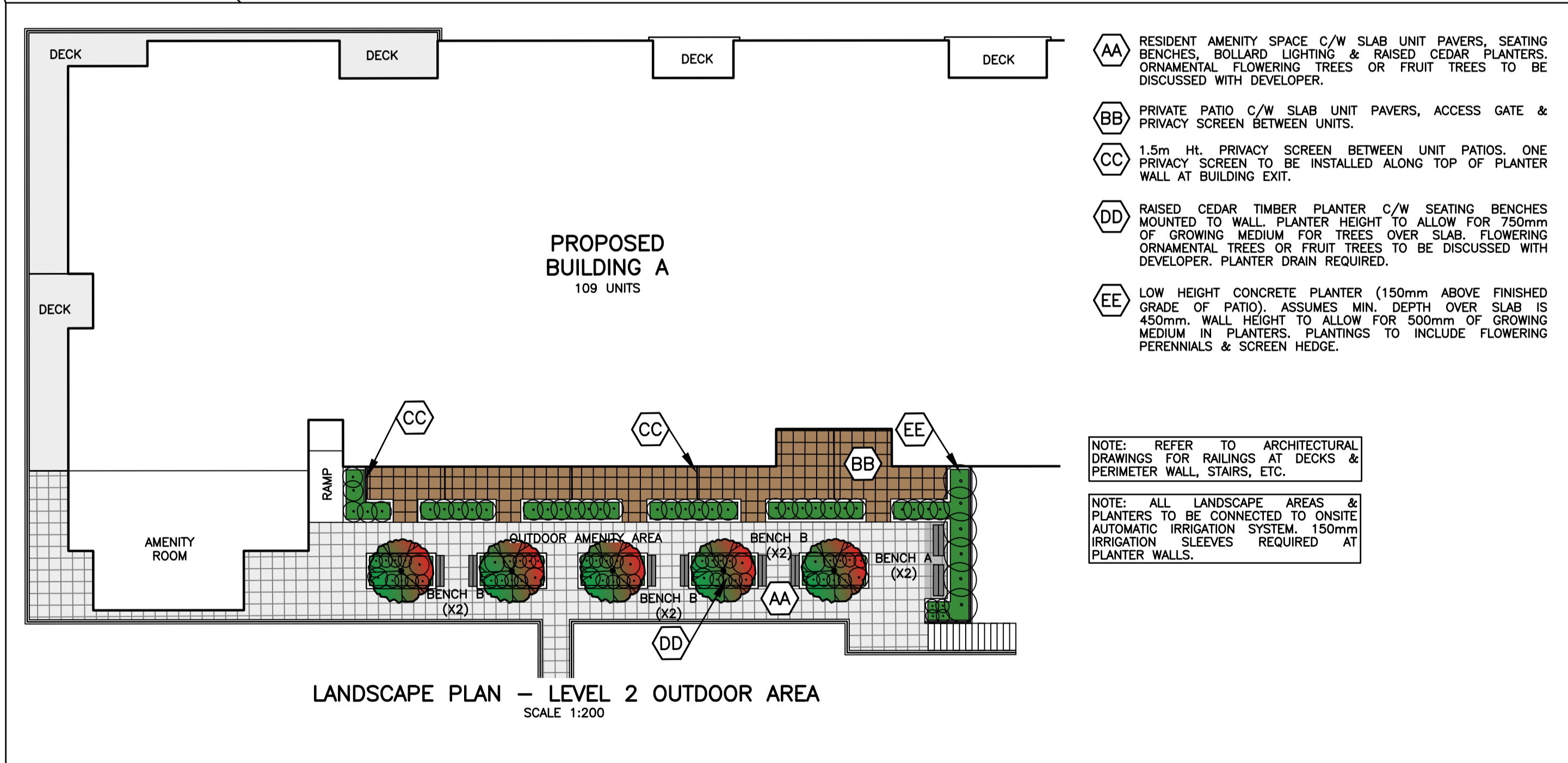
NOTE: TOTAL PROJECT FRONTAGE (KNOTTY PINE & JACKLIN) IS APPROX. 101m. BY-LAW 1000 REQUIRES ONE NEW TREE/12m OF PROJECT FRONTAGE. TOTAL REQUIRED STREET TREES = 8

ASSUMED BC HYDRO PMT LOCATION. TO BE CONFIRMED BY DEVELOPER'S ELECTRICAL ENGINEERING CONSULTANT. NEW BLVD TREE TO BE 1.0m CLEAR OF CONDUIT. ROOT BARRIER REQUIRED.

LANGFORD PARKS TO CONFIRM IF NEW STREET TREE CAN BE PLANTED 1.0m FROM CB LEAD WITH ROOT BARRIER. BC HYDRO TO REVIEW LOCATION AT PMT FRONTAGE.

NOTE: REFER TO DRAWINGS BY OTHERS FOR SITE GRADING, RETAINING WALLS, SITE LIGHTING, OFFSITE IMPROVEMENTS, ETC.

NOTE: LANGFORD PARKS TO CONFIRM IRRIGATION REQUIREMENTS (IF ANY) FOR JACKLIN ROAD SOD BOULEVARD.



- AA RESIDENT AMENITY SPACE C/W SLAB UNIT PAVERS, SEATING BENCHES, BOLLARD LIGHTING & RAISED CEDAR PLANTERS. ORNAMENTAL FLOWERING TREES OR FRUIT TREES TO BE DISCUSSED WITH DEVELOPER.
BB PRIVATE PATIO C/W SLAB UNIT PAVERS, ACCESS GATE & PRIVACY SCREEN BETWEEN UNITS.
CC 1.5m HT. PRIVACY SCREEN BETWEEN UNIT PATIOS. ONE PRIVACY SCREEN TO BE INSTALLED ALONG TOP OF PLANTER WALL AT BUILDING EXIT.
DD RAISED CEDAR TIMBER PLANTER C/W SEATING BENCHES MOUNTED TO WALL. PLANTER HEIGHT TO ALLOW FOR 750mm OF GROWING MEDIUM FOR TREES OVER SLAB. FLOWERING ORNAMENTAL TREES OR FRUIT TREES TO BE DISCUSSED WITH DEVELOPER. PLANTER DRAIN REQUIRED.
EE LOW HEIGHT CONCRETE PLANTER (150mm ABOVE FINISHED GRADE OF PATIO). ASSUMES MIN. DEPTH OVER SLAB IS 450mm. WALL HEIGHT TO ALLOW FOR 500mm OF GROWING MEDIUM IN PLANTERS. PLANTINGS TO INCLUDE FLOWERING PERENNIALS & SCREEN HEDGE.

NOTE: REFER TO ARCHITECTURAL DRAWINGS FOR RAILINGS AT DECKS & PERIMETER WALL, STAIRS, ETC.

NOTE: ALL LANDSCAPE AREAS & PLANTERS TO BE CONNECTED TO ONSITE AUTOMATIC IRRIGATION SYSTEM. 150mm IRRIGATION SLEEVES REQUIRED AT PLANTER WALLS.



THE CONTRACTOR IS TO CALL B.C. ONE CALL, AND HAVE EXISTING U/G SERVICES STAKED PRIOR TO ANY CONSTRUCTION.

NOTE: LANDSCAPE DESIGN IS ONLY VALID IF REVIEWED DURING CONSTRUCTION BY CALID SERVICES LTD.

NOTE: EXISTING & PROPOSED MUNICIPAL SERVICES ARE NOT SHOWN ON THIS DRAWING. REFER TO DRAWINGS BY OTHERS.

FOR REZONING ONLY Not for Construction

CALID SERVICES LTD. PREPARED THIS DRAWING FOR THE LISTED CLIENT ONLY AND ACCEPTS NO RESPONSIBILITY FOR THIRD PARTY USE.

Table with columns: Dwg. No., REFERENCE DRAWINGS, DATE

LEGEND table with symbols and descriptions: PROP. DECIDUOUS TREE, PROP. SHRUBS, 1.8m HT. PERIMETER FENCE, 1.2m HT. DECORATIVE METAL FENCE, 1.5m HT. PRIVACY SCREEN, BROOM FINISHED CONCRETE, SLAB UNIT PAVING, STANDARD UNIT PAVING, PLANTING BED, SOD LAWN, RIVER ROCK COBBLES

Table with columns: REV., DATE, REVISIONS, BY, APPROVED



Client information: 2825/2831 KNOTTY PINE Landscape Plan & General Notes Client: Eden Developments. Logo for CALID Services Ltd. with address: 207-2750 QUADRA ST. VICTORIA, B.C. V8T 4E8. Includes drawing date (July 5, 2024) and scale (AS NOTED).

CITY OF LANGFORD BYLAW NO. 2204

A BYLAW TO AMEND BYLAW NO. 300, "LANGFORD ZONING BYLAW, 1999"

The Council of the City of Langford, in open meeting assembled, hereby enacts as follows:

A. Langford Zoning Bylaw No. 300, 1999 is amended as follows:

1. By deleting from the One- and Two-Family Residential (R2) Zone and adding to the City Centre Pedestrian (CCP) Zone the properties legally described as:

- Lot 4, Section 5, Esquimalt District, Plan 6514, Except Part in Plan 22863, PID No. 002-148-072 (2830 Jacklin Road);
- Lot 2, Section 5, Esquimalt District, Plan 10444, PID No. 005-232-741 (2831 Knotty Pine Road);
- Lot 3, Section 5, Esquimalt District, Plan 10444, PID No. 005-232-783 (2829 Knotty Pine Road);
- Lot 4, Section 5, Esquimalt District, Plan 10444, PID No. 005-232-830 (2827 Knotty Pine Road); and
- Lot 5, Section 5, Esquimalt District, Plan 10444, PID No. 005-232-864 (2825 Knotty Pine Road);

as shown shaded on Schedule A attached to and forming part of this Bylaw.

2. By adding to the CCP Zone map Schedule 'R' those portions of lands identified as 'Area 2' in the attached Schedule B.

3. By adding the following text to Table 1 of Schedule AD:

Zone	Bylaw No.	Legal Description	Amenity Contributions	Eligible for Reduction in Section 2 of Schedule AD
CCP	2204	Lot 4, Section 5, Esquimalt District, Plan 6514, Except Part in Plan 22863, PID No. 002-148-072 (2830 Jacklin Road); Lot 2, Section 5, Esquimalt District, Plan 10444, PID No. 005-232-741 (2831 Knotty Pine Road); Lot 3, Section 5, Esquimalt District, Plan 10444, PID No. 005-232-783 (2829 Knotty Pine Road); Lot 4, Section 5, Esquimalt District, Plan 10444, PID	a) \$2,850 per residential unit on the 1 st to 4 th storeys of the building towards the General Amenity Reserve Fund; b) \$1,425 per residential unit on the 5 th and 6 th storeys of the building towards the General Amenity Reserve Fund; c) \$750 per residential unit on the 1 st to 4 th storeys of the building towards the Affordable Housing Reserve Fund;	No

		No. 005-232-830 (2827 Knotty Pine Road); and Lot 5, Section 5, Esquimalt District, Plan 10444, PID No. 005-232-864 (2825 Knotty Pine Road);	d) \$375 per residential unit on the 5 th and 6 th storeys of the building towards the Affordable Housing Reserve Fund; and e) \$10.75 per square meter of commercial space created towards the General Amenity Reserve Fund.	
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B. By adding the following text to Table 1 of Section 6.58.05:

1. Legal Description	2. Maximum Permitted Height
Lot 4, Section 5, Esquimalt District, Plan 6514, Except Part in Plan 22863 Lot 2, Section 5, Esquimalt District, Plan 10444 Lot 3, Section 5, Esquimalt District, Plan 10444 Lot 4, Section 5, Esquimalt District, Plan 10444 Lot 5, Section 5, Esquimalt District, Plan 10444	6-storeys

C. This Bylaw may be cited for all purposes as “Langford Zoning Bylaw, Amendment No. 739 (2830 Jacklin Road, 2825, 2827, 2829, and 2831 Knotty Pine Road), Bylaw No. 2204, 2024”.

READ A FIRST TIME this day of, 2024.

READ A SECOND TIME this day of, 2024.

READ A THIRD TIME this day of, 2024.

READ A THIRD TIME this day of , 2024.

APPROVED BY THE MINISTRY OF TRANSPORTATION this day of , 2024.

ADOPTED this day of , 2024.

PRESIDING COUNCIL MEMBER

CORPORATE OFFICER

Schedule A

