

Public Input Binder

The general purpose of proposed "**Colwood Land Use Bylaw No. 151, 1989, Amendment No. 206 (CD40 – 2324 Sooke Rd), Bylaw No. 2003, 2023**" is to amend the current Colwood Land Use Bylaw No 151, 1989 to enable the development of a six-storey residential apartment building consisting of 67 units.

Within the binder, please find a copy of:

1. Notice of Development
2. Staff Report to Planning and Land Use Committee (May 1, 2023)
3. Staff Report to Council (Aug. 28, 2023)
4. Staff Presentation (Aug. 28, 2023)
5. Proposed Bylaw
6. Council Resolution (Aug. 28, 2023)
7. Notice of Amending Bylaw
8. Public Input

Minutes and videos of Council are publicly available, and can be accessed through the following link:

- <https://colwood.civicweb.net/portal>

DEVELOPMENT APPLICATION

2324 Sooke Road

PROPOSAL:

Rezoning application to permit a 6-storey multi-unit residential building with two levels of underground parking.

APPLICANT:

1385811 BC Ltd



For more information, public meeting dates or to provide input: colwood.ca/planning



This information is based on the initial application and is subject to change. Please contact the Development Services Department for interim updates.

City of Colwood Development Services Dept.

3300 Wishart Road

250-294-8153





City of Colwood STAFF REPORT

To: Planning and Land Use Committee
Date: May 1, 2023
From: Desiree Givens, Planner II
RE: Rezoning Application RZ-22-016 for 2324 Sooke Road

RECOMMENDATION

THAT the Planning and Land Use Committee recommend to Council that the proposal for Rezoning Application No. RZ-22-016 for 2324 Sooke Road be revised so that it complies with the regulatory conditions of the proposed TGA1 zone.

SUMMARY AND PURPOSE

The purpose of this report is to present to the Planning and Land Use Committee Rezoning Application RZ-22-016. The applicant is requesting an amendment to the Land Use Bylaw to rezone the property at 2324 Sooke Road from a Residential 1 (R1) Zone to a new CD zone to enable the development of a 6-storey apartment building consisting of 70 units as shown in **Appendix 1** (Architectural Plans).

The subject property is designated in the Official Community Plan (OCP) as Transit Growth Area. While the proposed FAR and apartment land use are generally consistent with the Transit Growth Area land use designation, in staff's opinion, the proposal does not satisfactorily demonstrate that the development will sensitively integrate into the surrounding neighbourhood (as required by Policy 7.2.25 of the OCP) nor does it offer substantial enhanced urban design features to mitigate the vertical impact of a 6-storey building (as required by Policy 7.2.24(a) of the OCP). Hence, the staff recommendation is that the applicant be asked to revise the proposal to better align with the template TGA1 zone.

STRATEGIC PLAN AND RELATED POLICIES

Colwood Strategic Plan 2019-2023

To support mobility and prosperity objectives, the City of Colwood's Strategic Plan 2019-2023 encourages increasing the convenience of mass transit, improving walkability and accessibility, supporting rental housing, increasing housing choices for current and future residents, and attracting future residents.

Housing Needs Report (Urban Matters 2020)

The Housing Needs Report prepared by Urban Matters (2020) indicates that rental housing is a key area of local need in Colwood and that rental vacancy rates have historically been low in Colwood, which speaks to the demand for more rental housing supply. As of October 2022, the overall rental vacancy rate for Colwood was 0.8%. A healthy vacancy rate is generally considered to be between 3% and 5%.

BACKGROUND**Applicant Information**

<u>Applicant:</u>	Rachael Sansom
<u>Owner:</u>	Martin John Lucas
<u>Address:</u>	2324 Sooke Road
<u>Legal:</u>	Lot REM 1, Section 68, Esquimalt District, Plan 21248
<u>Current Zoning:</u>	Residential 1 (R1) Zone
<u>Proposed Zoning:</u>	New Comprehensive Development Zone
<u>Current OCP Designation:</u>	Transit Growth Area and Neighbourhood
<u>Proposed OCP Designation:</u>	No Change
<u>Development Permit Area:</u>	Form & Character – General, Multi-Family

APPLICATION REVIEW**1. Proposal**

This applicant wishes to rezone the property from the Residential 1 (R1) Zone to a new Comprehensive Development (CD) zone to enable the construction of a six-storey residential apartment building consisting of 70 units, including a mix of bachelor, one-bedroom, two-bedroom and three-bedroom units.

2. Site Context

The subject property is located near the intersection of VMP and Sooke Road on a relatively flat lot near the entrance of a residential cul-de-sac on Lynnlark Place. **Figure 3** illustrates the site context of the subject properties and provides information regarding the existing land uses and zoning of the adjacent properties.

Figure 1: Subject Property Map



3. Land Use Bylaw No. 151

At its Regular Meeting of Council on April 24th, Council passed a motion that directed staff to use the proposed Transit Growth Area 1 (TGA1) Zone to evaluate all future rezoning applications for lands designated by the Official Community Plan as Transit Growth Area. The expectation is that properties within the Transit Growth Area should show alignment with the proposed TGA1 zone.

As shown in Table 1, this proposal does not satisfy the minimum lot area and lot width conditions of the TGA1 Zone to qualify for a 6-storey building and the subject property would potentially be better suited for a 3-storey townhouse or a 4-storey apartment use.

Table 1: Comparison of Proposal to TGA1 Zone Regulations

Regulation	Up to 3 Storeys	Up to 4 Storeys	Up to 6 Storeys	Proposal
Minimum Lot Area	1,000 m ²	2,000 m ²	4,000 m ²	2,384 m ²
Minimum Lot Width	30 m	40 m	60 m	29 m
Maximum Floor Area Ratio	1.2	1.75	2.5	2.45
Maximum Lot Coverage for Structures and Buildings	35 %	40 %	50 %	42%
Usable Open Space	10% (minimum)			>10%
Maximum Building Height	Greater of 3 storeys or 12m	Lesser of 4 storeys or 16m	Lesser of 6 storeys or 24m	6 storeys
Front Setback	3 m (minimum) 6 m (maximum)			5 m
Side Setback	4 m first 3 storeys; 7.5 m above 3 rd storey (minimum)			4.5 m
Rear Setback	7.5 m first 3 storeys; 10 m above 3 rd storey (minimum)			7.5 m (all storeys)
Minimum Setback for an Underground or Under Building Parking Structure from Any Lot Line	3 m			0 m (all lot lines)

4. Official Community Plan (OCP) Bylaw No. 1700

The subject property is designated as Transit Growth Area in the Official Community Plan (OCP). The Transit Growth Area land use designation supports low- to mid-scale, multi-unit residential uses at densities that support transit use along Sooke Road.

Table 2, below, describes the OCP objectives for the land use designation and how the proposal aligns with those objectives.

Table 2: Compliance of Proposed Development with OCP Policies

	Transit Growth Area OCP Policy	Proposal	Staff Comment
Land Uses Policy 7.2.23	<ul style="list-style-type: none"> Multi-unit residential Live/work and home occupations Institutional Limited commercial and mixed-use, on a case-by-case basis 	Multi-unit residential	Policy met
Built form Policy 7.2.24.a	Ground-oriented and low-rise buildings up to approximately 4 storeys and up to 6 storeys in limited situations when enhanced urban design mitigates impact of additional vertical impact	<p>The proposal is for a 6-storey apartment building. As the applicant explains in their Letter of Intent (Appendix 2), the additional vertical height is mitigated by stepping the building in on the 6th floor where it fronts Sooke Road and Lynnark Place. To mitigate the impacts on neighbouring residential properties (north and west), the letter suggests that a horizontal setback of 7.8 m – 12.5 m will be provided.</p> <p>For Committee's consideration, previous proposals have demonstrated this policy by reducing the height of the building from six storeys to four storeys where the buildings were next to single-family detached dwellings (stepping down the building height) or by incorporating a combined vertical setback (a grade change) and significant horizontal setback of at least 13 metres to single-family detached dwellings.</p> <p>Staff do not feel that adherence to this policy has been demonstrated.</p>	Policy not met
Density Policy 7.2.24.b	Floor area ratio (FAR) up to approximately 2.5	2.45 FAR	Policy met
Policy 7.2.25 (a)	Providing access to and support for frequent transit, as part of the Transit Growth Area shown on Figure 8: Land Use	Proposed density and residential uses will provide future residents access to and support for frequent transit on Sooke Road.	Policy met
Policy 7.2.25 (b)	Sensitively increasing density while providing a gentle transition in scale to existing predominantly single-detached residential areas, as illustrated in the "Scale Transition" diagram below (see Figure 2).	A gentle transition in scale to the existing predominantly single-detached residential area to the north and east of the property has not been demonstrated.	Policy not met
Policy 7.2.25 (c)	Improving the public realm for pedestrians and transit users, with	The applicant is proposing to complete frontage improvements in accordance with the Transportation	Policy met

	Transit Growth Area OCP Policy	Proposal	Staff Comment
	sidewalk amenities and improved transit facilities.	Master Plan (as amended from time to time) and recommendations in the Traffic Impact Assessment, which may include sidewalks, bike lanes, and landscaped boulevards. This will improve the public realm for both pedestrians and transit users.	
Policy 7.2.25 (d)	Creating and maintaining a high degree of permeability – including walking connections – with adjacent residential areas leading to/from the frequent transit service.	Proposal includes frontage improvements on Lynnlark Place and Sooke Road, including new City sidewalks that will connect adjacent residential properties to frequent transit service along Sooke Road.	Policy met
Policy 7.2.25 (e)	Enabling limited small-scale, neighbourhood-serving retail uses where there is a demand and where they do not compromise the viability of established centres and other commercial areas.	Proposal does not consider retail uses as this is not an area where there is an anticipated demand.	Not applicable
Policy 7.2.25 (f)	Designing buildings, public open spaces, and transportation networks to protect natural assets, consistent with site adaptive policies in Section 11: Park Areas and Natural Assets.	Not applicable as this site is not within an environmentally sensitive area and does not contain natural assets to protect.	Not applicable

Figure 2: Scale Transition Diagram



On December 2, 2022, staff provided a feedback summary letter to the applicant, which expressed concern regarding the proposed vertical massing and scale of development and requested that the applicant revise their submission to bring the proposal into closer alignment with the following policies in the OCP:

- Policy 7.2.25: Encourage gentle transition and sensitive infill in predominantly single detached neighbourhoods (as shown in Figure 2);
- Policy 25.8.a and 25.8.b: Require that proposed developments be compatible with the existing neighbourhood and that where new, more intensive uses are located next to less intensive uses, the scale and height of the new development respects the existing development by transitioning the mass and scale down towards the less intensive development; and,

- Policy 6.2.3.1: This policy targets a minimum units per hectare (UPH) of 17; for context, the applicant's proposal has a UPH of approximately 286, whereas other nearby 6-storey residential developments along Sooke Road have proposed a UPH that ranges between 68-76 UPH.

Staff provided the applicant with two options to address concerns with proposed density:

1. **Townhomes:** The applicant was asked to consider revising their proposal to 3-storey townhome use given the size of the lot and the fact that the lot is surrounded by existing single-family residential dwellings ranging in height from one- to two- storeys.
2. **Apartments (with transition in scale):** The applicant was also given the option to demonstrate that they could achieve the above OCP policies with the proposed apartment use; to demonstrate this, the applicant was advised to incorporate a transition in scale to the predominantly single-detached residential area to the north of the property by stepping down the height of the building at the rear portion of the property.

To date, staff have not received a resubmission that addresses concerns regarding the vertical massing and scale of development next to existing single-detached neighbourhood.

5. Site Adaptive Planning

OCP Policy 11.2.2.3 encourages the application of site adaptive planning and design principles on all greenfield and hillside development sites. Given that this site is not greenfield and is not located within an environmentally sensitive or natural hazard development permit area, there is limited applicability of the principles seeking to preserve natural features and sensitive ecosystems.

However, Committee may wish to consider the impacts of the development on the existing trees on site. The widening of Sooke Road along the property's frontage, the proposed building footprints and the land alteration associated with the proposal would require the removal of all existing trees and vegetation. According to the Tree Management Plan prepared by Talmack Urban Forestry Consultants Ltd. (**Appendix 4**), there are 38 trees located on or within the vicinity of the subject property that require removal to enable construction of the underground parkade, 11 of which are located on adjacent properties and 25 of which are classified as protected trees under Urban Forest Bylaw No. 1735. In accordance with Part 6 of the bylaw, replacement of protected trees is required at a ratio of 2:1 or, where replacement of trees on the lot is not possible, cash-in-lieu may be provided in the amount of \$250 per protected tree required. In this case 76 replacement trees would be required. Hence, if the application proceeds to development permit stage, the applicant would be required to provide a \$19,000 tree security deposit in addition to required landscape security deposit associated with the approved landscape plan.

6. Off-Site Works

If Council chooses to advance this application as it is currently proposed, road dedication along Sooke Road would be required prior to adoption of the amending bylaw to rezone the property and frontage improvements would need to be secured through a long-term condition in the Development Agreement.

Road Dedication

On May 9th, 2022, the Transportation Committee considered several options for the long-term cross section for Sooke Road. At that time, the Transportation Committee recommended a 30-metre right-of-way.

Staff understand that Council has not yet endorsed the ultimate cross section for Sooke Road. However, the applicant's proposed road dedication aligns with the Transportation Committee's recommendation as the site plan was designed to accommodate a 30-metre right-of-way.

Frontage Improvements

Frontage improvements along the property's frontage would be completed in accordance with the standards contained in Colwood's Subdivision Servicing Bylaw No. 285, Colwood's Transportation Master Plan (as amended from time to time), and recommendations from an approved Traffic Impact Assessment.

7. Traffic Impact Assessment

The applicant has commissioned Watt Consulting Group to prepare a traffic impact assessment (TIA) that reviews and comments on the surrounding road network and related intersections, as well as anticipated changes to traffic volume resulting from this development and other development in the area (**Appendix 3**). The TIA has been reviewed and accepted by the City's Engineering department.

The TIA includes recommendations for frontage and design improvements that would be secured in the form of long-term conditions in a Development Agreement. These include:

- Providing cut-outs in the parking garage ramp walls and convex mirrors at all 90 degree turns to provide additional visibility within the parking garage; and,
- Installing sidewalks along the Lynnlark Place and Sooke Road frontage.

8. Site Servicing

The site can be serviced by municipal water. Sewer is not yet available to service the subject property. The applicant is aware that water and sanitary capacity would need to be confirmed during the design stage, in advance of Building Permit consideration so that the works can be available for connection. If the application were to proceed to development permit stage, the applicant would be required to provide Civil Plans for review and acceptance by the City's Engineering department.

9. Building And Life Safety

All upgrades necessary to serve the development are the responsibility of the developer. A FUS report would be required if the development proceeds to the development permit stage. Approval is required prior to Building Permit approval.

10. Community Amenity Contributions

At its regular meeting on February 14, 2022, Council adopted an interim Community Amenity Contribution policy (COM003) to guide negotiations with developers during rezoning consideration.

If Council chooses to advance this application, the applicant is proposing to meet Council's policy as shown in **Table 3**.

Table 3: Comparison of Contributions Proposed to Requirements in CAC Policy

Contributions by type	Current Council Policy Requirements	Applicant's Proposed Contributions
Community Amenity Fund	\$4,500 per apartment dwelling unit	\$4,500* per apartment dwelling unit
Attainable Housing Policy	1 unit per every 10 residential dwellings must be provided for affordable housing	\$1,500 *towards the Affordable Housing Reserve Fund <u>in lieu of</u> an in-kind unit contribution.
Fire Hall Fund	\$525*/dwelling *Subject to annual CPI increase	\$583*/dwelling

* All contribution amounts shall increase annually effective on January 1st of each calendar year in which the amending bylaw is adopted as per the Victoria Consumer Price Index (CPI).

OPTIONS/ALTERNATIVES

Committee may wish to consider the following options:

1. Recommend to Council that Rezoning Application No. RZ-22-016 for 2324 Sooke Road be revised so that it complies with the regulatory conditions of the proposed TGA1 zone; (RECOMMENDED);
OR
2. Recommend to Council that Rezoning Application No. RZ-22-016 for 2324 Sooke Road be approved with no further revisions;

AND THAT amendments be made to the Land Use Bylaw to rezone the property at 2324 Sooke Road from the Residential 1 (R1) Zone to a new zone;

AND THAT prior to adoption of the amending bylaw, a Section 107 Plan showing the proposed road dedication along Sooke Road to achieve a 30 m cross-section based on the Sooke Road Corridor Study that was considered by the Transportation Committee on May 9th 2022 be submitted to the City of Colwood for signature and registered at the BC Land Titles Office;

AND FURTHER THAT prior to adoption of the amending bylaw, the following long-term conditions be registered within a Section 219 Covenant Development Agreement:

Prior to the issuance of a Building Permit:

1. The Owner covenants and agrees with the City that the Lands shall not be built upon, and the Owner shall not apply for a building permit and the Owner agrees it is not entitled to a building permit unless and until:

OFF-SITE WORKS

- a. The Owner completes frontage improvements on Sooke Road (or enters into a Servicing Agreement with the City of Colwood for the required frontage improvements) as required by applicable City of Colwood policies or bylaws.

PARKING

- b. The Owner registers a Section 219 covenant over the lands that agrees to allocate parking for each residential unit as required by applicable City of Colwood bylaws and ensures that the allocated residential parking is not provided in exchange for additional compensation separate from the rent received for each residential unit.
3. Recommend that Council request staff to provide additional information before considering Rezoning Application No. RZ-22-016 for 2324 Sooke Road be approved as it is currently designed;
OR
 4. Recommend to Council that Rezoning Application No. RZ-22-016 for 2324 Sooke Road be denied.

COMMUNICATION

As required by Development Application Consultation Policy DEV 001, the applicant conducted neighbourhood consultation in January and February 2023 by mailing notices to all property owners within 100 metres of the subject property notifying the residents about the two open houses that were held to discuss the proposal. Property owners of the adjacent properties were invited to participate in conversations with the applicant and provide comments and feedback on the application. A summary of the applicant's neighbourhood engagement strategy is included in **Appendix 5**.

A development notification sign was posted on the subject property as required under Bylaw 427 (Colwood Land Use Application Procedures Bylaw). The application and supporting documents are also available for public viewing on the City's website and in person at City Hall during office hours.

CONCLUSIONS

Council's expectation is that staff evaluate all rezoning applications in the Transit Growth Area using the TGA1 zone. Further, the intention behind the new TGA1 zone is that all properties located in the Transit Growth Area be first evaluated against the TGA1 zone as opposed to creating a new CD zone. Staff are concerned that the proposal as it is currently designed also does not meet the OCP policies that encourage a gentle transition in scale to predominantly single detached neighbourhoods. This feedback has been provided to the applicant and has not yet been addressed. As the Rezoning Application RZ-22-016 for 2324 Sooke Road does not comply with the proposed Transit Growth Area 1 (TGA1) Zone and does not comply with policies in the OCP regarding height and scale, staff are recommending that Committee recommend to Council that the application be revised to comply with the regulatory conditions of the TGA1 zone.

Respectfully submitted,

Reviewed By:



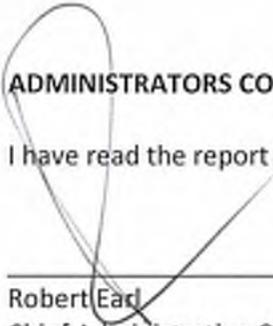
Desiree Givers, MCRP
Planner II



Yazmin Hernandez, MCIP, RPP
Director of Development Services

ADMINISTRATORS COMMENTS:

I have read the report and endorse the recommendation.


Robert Earl
Chief Administrative Officer

Attachments:

- APPENDIX 1: Architectural Plans
- APPENDIX 2: Letter of Intent
- APPENDIX 3: Traffic Impact Assessment
- APPENDIX 4: Tree Management Plan
- APPENDIX 5: Applicant-Led Neighbourhood Consultation Summary

Staff PowerPoint



City of Colwood STAFF REPORT

To: Council
Date: August 28, 2023
From: Desiree Givens, Planner II
RE: Rezoning Application RZ-22-016 for 2324 Sooke Road

RECOMMENDATION

THAT Rezoning Application No. RZ-22-016 for 2324 Sooke Road be considered;

AND THAT amendments be made to the Land Use Bylaw to rezone the property at 2324 Sooke Road from the Residential 1 (R1) Zone the Transit Growth Area 1 (TGA1) Zone;

AND THAT prior to scheduling 1st reading of the amending bylaw, the feasibility of sewer extension beyond the property line of 2324 Sooke Road be confirmed to the satisfaction of the City of Colwood's Engineering department;

AND THAT prior to adoption of the amending bylaw, a Section 107 Plan showing the proposed road dedication along Sooke Road to achieve a 30 m cross-section based on the Sooke Road Corridor Study that was considered by the Transportation Committee on May 9th 2022 be submitted to the City of Colwood for signature and registered at the BC Land Titles Office;

AND FURTHER THAT prior to adoption of the amending bylaw, the following long-term conditions be registered within a Section 219 Covenant Development Agreement:

Prior to the issuance of a Building Permit:

1. The Owner covenants and agrees with the City that the Lands shall not be built upon, and the Owner shall not apply for a building permit and the Owner agrees it is not entitled to a building permit unless and until:

OFF-SITE WORKS

- a. The Owner agrees to either: 1.) complete the frontage improvements on Sooke Road as required by applicable City of Colwood bylaws and policies; 2.) enter into a Servicing Agreement with the City of Colwood (and provide the required security as agreed to by the City) that will address the required frontage improvements; 3.) provide a cash contribution to the City of Colwood in lieu of completing the required frontage improvements as determined and approved by the City; or 4.) a combination of cash-in-lieu and frontage works completion as determined and approved by the City.

PARKING

- b. The Owner registers a Section 219 covenant over the lands that agrees to allocate parking for each residential unit as required by applicable City of Colwood bylaws and ensures that the allocated residential parking is not provided in exchange for additional compensation separate from the rent received for each residential unit.

SUMMARY AND PURPOSE

The purpose of this report is to present to Council Rezoning Application RZ-22-016. The applicant is requesting an amendment to the Land Use Bylaw to rezone the property at 2324 Sooke Road to a new Comprehensive Development (CD) zone to permit a 6-storey apartment building (**Appendix 1**).

The subject property is designated in the Official Community Plan (OCP) as Transit Growth Area. While the proposed FAR and apartment use are generally consistent with the policies for the Transit Growth Area land use designation, in staff's opinion, the proposal does not satisfactorily demonstrate that the development will sensitively integrate into the surrounding neighbourhood (Policy 7.2.25 of the OCP).

At its Regular Meeting of Council held on April 24th, 2023, Council passed a motion directing staff to use the recently adopted TGA1 Zone to evaluate all future rezoning applications for lands that are designated in the OCP as Transit Growth Area. The TGA1 zone is a template zone that was designed to take a more proactive approach to development on land in Transit Growth Areas. It is intended to enable moderate future residential growth in a manner that will help ensure sensitive integration into existing neighbourhoods. To achieve sensitive integration, the zone establishes minimum criteria and requirements based on proposed scale of development. As shown in **Table 1** below, this proposal as designed does not meet the minimum lot area of 4,000 m² or minimum lot width of 60 metres for a mid-rise (5-to-6 storey) apartment building.

Table 1: Comparison of TGA1 Zone Criteria to Applicant's Proposal

Regulation	Attached Housing	Low-Rise Apartment	Mid-Rise Apartment	Proposal
Minimum Lot Area	1,000 m ²	2,000 m ²	4,000 m ²	2,384 m²
Minimum Lot Width	30 m	40 m	60 m	29 m
Maximum Floor Area Ratio	1.2	1.75	2.5	2.3
Maximum Lot Coverage for Structures and Buildings	35 %	40 %	50 %	41%
Usable Open Space	10% (minimum)			>10%
Maximum Building Height	Greater of 3 storeys or 12m	Lesser of 4 storeys or 16m	Lesser of 6 storeys or 24m	6 storeys
Front Setback	3 m (minimum) 6 m (maximum)			4.7 m
Side Setback	4 m first 3 storeys; 7.5 m above 3 rd storey (minimum) where adjacent to a single family or duplex use			5 m (all storeys) adjacent to

Regulation	Attached Housing	Low-Rise Apartment	Mid-Rise Apartment	Proposal
				2322 Sooke Road
Rear Setback	7.5 m first 3 storeys; 10 m above 3 rd storey (minimum) where adjacent to a single family or duplex use			7.5 m (all storeys) adjacent to 3155 Lynnlark Place
Minimum Setback for an Underground or Under Building Parking Structure from Any Lot Line	3 m			0 m (all lot lines)

On May 1st, 2023, the applicant presented their application to the Planning and Land Use Committee. At that meeting, the Committee recommended to Council that the proposal be revised so that it complies with the regulatory conditions (the minimum criteria) of the TGA1 zone. The applicant has since revised their proposal to incorporate a transition in scale to the predominantly single-family neighbourhood to better comply with the TGA1 zone, but the proposal still does not yet meet all criteria.

To comply with the TGA1 zone, the applicant would either need to consider acquiring more land to satisfy the minimum lot area/width requirements or revise their proposal to an attached housing or low-rise apartment. The applicant has attempted to acquire more land to increase their lot area and lot width to align with zone's conditions for a mid-rise apartment. However, these attempts were unsuccessful (**Appendix 7**). The applicant has also provided a letter to Council that outlines their rationale as to why this proposal should not be considered under the lens of the TGA1 zone (**Appendix 8**).

Given Council's direction from the April 24th meeting and the Planning and Land Use Committee's recommendation from the May 1st meeting, staff are recommending that Council consider approving the rezoning application on the condition that the property be rezoned to the TGA1 zone (as opposed to a new CD zone). This would have the effect of limiting the development of 2324 Sooke Road to either an attached housing or low-rise apartment use given that it does not meet the minimum criteria to qualify for a mid-rise apartment building under the TGA1 zone.

However, if Council would like to support the applicant's request to rezone to a site-specific CD zone instead of the TGA1 zone, Council may wish to consider endorsing Option 2 of this report. This would have the effect of enabling the 6-storey apartment building on the subject property as shown in the plans presented.

STRATEGIC PLAN AND RELATED POLICIES

Colwood Strategic Plan 2019-2023

To support mobility and prosperity objectives, the City of Colwood's Strategic Plan 2019-2023 encourages increasing the convenience of mass transit, improving walkability and accessibility, supporting rental housing, increasing housing choices for current and future residents, and attracting future residents.

Housing Needs Report (Urban Matters 2020)

The Housing Needs Report prepared by Urban Matters (2020) indicates that rental housing is a key area of local need in Colwood and that rental vacancy rates have historically been low in Colwood, which speaks to the demand for more rental housing supply. As of October 2022, the overall rental vacancy rate for Colwood was 0.8%. A healthy vacancy rate is generally considered to be between 3% and 5%.

BACKGROUND

Applicant Information

<u>Applicant:</u>	Rachael Sansom
<u>Owner:</u>	Martin John Lucas
<u>Address:</u>	2324 Sooke Road
<u>Legal:</u>	Lot REM 1, Section 68, Esquimalt District, Plan 21248
<u>Current Zoning:</u>	Residential 1 (R1) Zone
<u>Applicant's Proposed Zoning:</u>	<u>New Comprehensive Development Zone</u>
<u>Staff's Proposed Zoning:</u>	Transit Growth Area 1 Zone
<u>Current OCP Designation:</u>	Transit Growth Area and Neighbourhood
<u>Proposed OCP Designation:</u>	No Change
<u>Development Permit Area:</u>	Form & Character – General, Multi-Family

APPLICATION REVIEW

1. Proposal

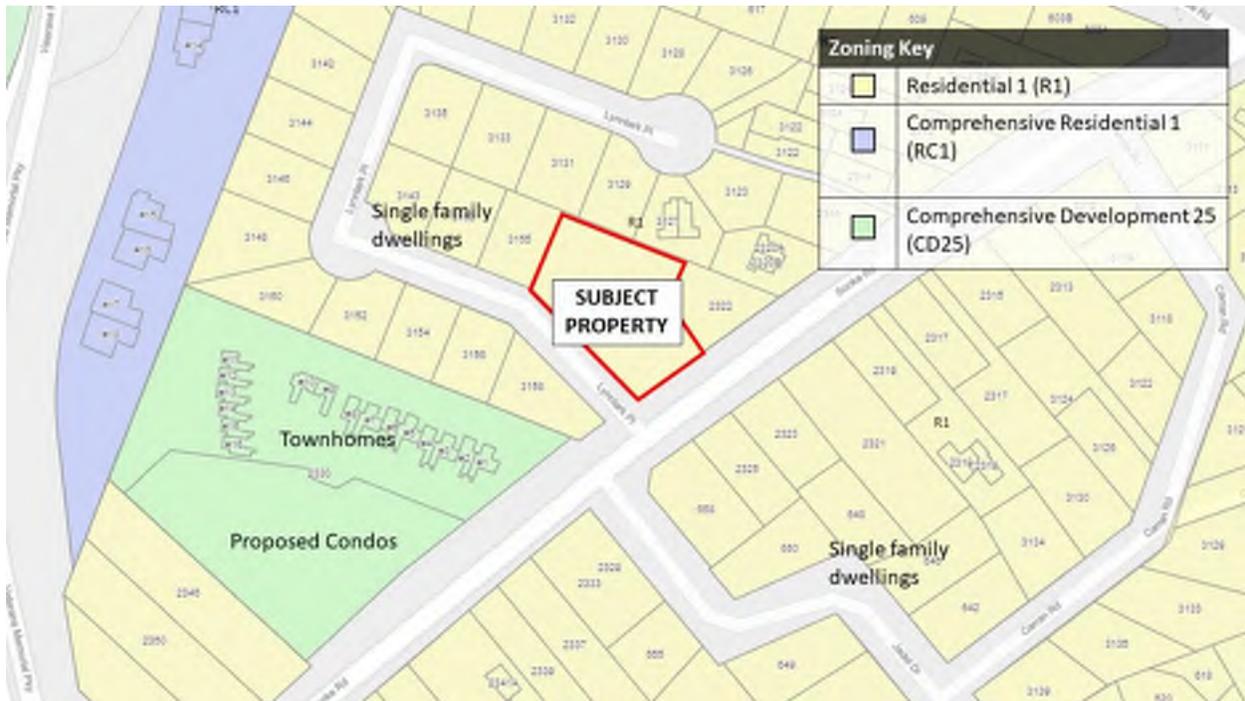
The applicant wishes to rezone the property from the Residential 1 (R1) zone to a new Comprehensive Development (CD) zone to enable the construction of a six-storey residential apartment building consisting of 67 units, including a mix of studios, one-bedroom, two-bedroom and three-bedroom units.

Staff are recommending that the property be rezoned to the Transit Growth Area 1 (TGA1) zone instead, which would enable the construction of attached housing or a low-rise apartment up to 4 storeys.

2. Site Context

The subject property is located near the intersection of Veterans Memorial Parkway and Sooke Road on a relatively flat lot near the entrance of a residential cul-de-sac on Lynnlark Place. **Figure 3** illustrates the site context of the subject properties and provides information regarding the existing land uses and zoning of the adjacent properties.

Figure 1: Subject Property Map



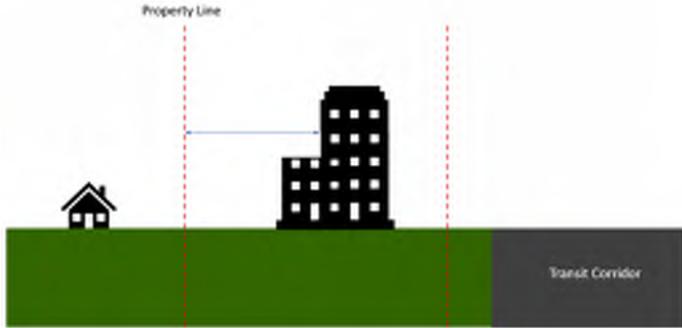
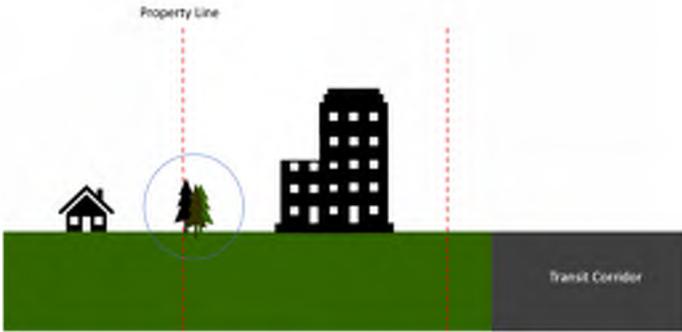
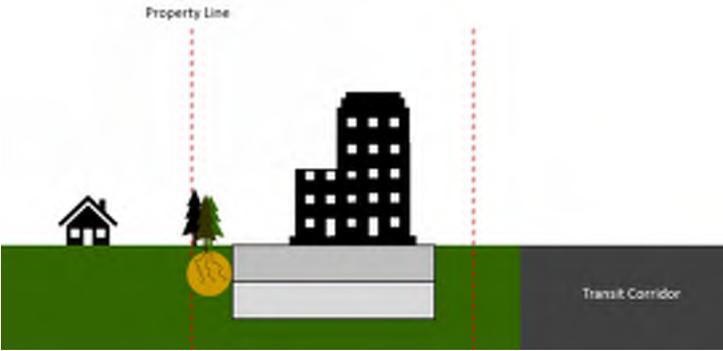
3. Land Use Bylaw No. 151

At its Regular Meeting of Council on April 24th, Council passed a motion that directed staff to use the recently adopted Transit Growth Area 1 (TGA1) Zone to evaluate all future rezoning applications for lands designated by the Official Community Plan as Transit Growth Area.

The TGA1 zone is a template zone that was created to take a more proactive approach to development of lands that are designated by the OCP as Transit Growth Area, particularly development of lands that are next to predominantly single-family detached neighbourhoods that are designated by the OCP as controlled growth areas (Neighbourhood or Neighbourhood Hillside and Shoreline). The TGA1 zone is intended to guide development in a manner that enables growth while still achieving policies in the OCP requiring new developments to be sensitively integrated into surrounding single-family neighbourhoods.

To achieve sensitive integration, the zone establishes minimum criteria and requirements based on proposed scale of development. Importantly, the zone establishes minimum criteria for a mid-rise apartment building (i.e., a 5- or a 6-storey building) as indicated in **Table 2** on the following page.

Table 2: Criteria for Mid-Rise Apartment

Criterion	Rationale (why this is important)
<p>The fourth storey (and above) requires a greater setback to property lines adjacent to single family homes or duplexes.</p>	<p>This criterion encourages development proposals to incorporate a transition in scale to existing single-family residential neighbourhoods (as shown in the image below) in which the proposed mid-rise building “steps down” in height/scale when located next to existing predominantly single family/duplex neighbourhoods that are designated by the OCP as controlled growth areas.</p> 
<p>A landscape buffer must be provided along the inside of all property lines next to a property that is zoned for residential uses. This buffer must be no less than 2 metres (roughly 6.5 feet) in height and no less than 1.5 metres (roughly 5 feet) in width.</p>	<p>This criterion helps protect the privacy of neighbouring residential properties by requiring a landscape screen at the property line.</p> 
<p>An underground parkade structure must not be built to property line. Instead, parkade structures must be set back at least 3 metres from any property line.</p>	<p>This criterion was established with the intention of supporting the feasibility of planting landscaping along the property’s perimeter.</p> 

Criterion	Rationale (why this is important)
A minimum lot width of 60 metres and a minimum lot area of 4,000 m ² is required to support a mid-rise apartment use.	<p>The criteria for minimum lot width and area were based on the desire to see lot consolidation along transit growth corridors throughout Colwood and thus more proactively plan for development that could achieve the City’s desire to provide a gentle transition in scale down to predominantly single-family residential neighbourhoods. Further, the intent was also to minimize the number of accesses off transit growth and arterial roads such as Sooke Road.</p> <p>Various lot sizes and widths were tested by the architectural firm that peer reviewed the TGA1 zone to determine that a width of 60 metres and an area of 4,000 m² is roughly the smallest combination that could reasonably support a 6-storey building with a FAR of 2.5 while still meeting the criteria described above to sensitively integrate into surrounding single-family residential (e.g., ensuring that the built form would make sense given the requirement for the upper 3 storeys to be stepped in further where next to predominantly single family residential).</p>

As shown in **Table 3**, below, this proposal does not satisfy the regulatory conditions of the TGA1 zone for a mid-rise apartment use.

Table 3: Comparison of Proposal to TGA1 Zone Regulations

Regulation	Attached Housing	Low-Rise Apartment	Mid-Rise Apartment	Proposal
Minimum Lot Area	1,000 m ²	2,000 m ²	4,000 m ²	2,384 m²
Minimum Lot Width	30 m	40 m	60 m	29 m
Maximum Floor Area Ratio	1.2	1.75	2.5	2.3
Maximum Lot Coverage for Structures and Buildings	35 %	40 %	50 %	41%
Usable Open Space	10% (minimum)			>10%
Maximum Building Height	Greater of 3 storeys or 12m	Lesser of 4 storeys or 16m	Lesser of 6 storeys or 24m	6 storeys
Front Setback	3 m (minimum) 6 m (maximum)			4.7 m
Side Setback	4 m first 3 storeys; 7.5 m above 3 rd storey (minimum) where adjacent to a single family or duplex use			5 m (all storeys) adjacent to 2322 Sooke Road

Regulation	Attached Housing	Low-Rise Apartment	Mid-Rise Apartment	Proposal
Rear Setback	7.5 m first 3 storeys; 10 m above 3 rd storey (minimum) where adjacent to a single family or duplex use			7.5 m (all storeys) adjacent to 3155 Lynnlark Place
Minimum Setback for an Underground or Under Building Parking Structure from Any Lot Line	3 m			0 m (all lot lines)

Staff recognize that the TGA1 zone is a general framework to evaluate proposals within the Transit Growth Area. Staff remain open to assessing proposals that might not be an exact fit with the TGA1 zone that can still deliver on key OCP policy objectives and design guidelines.

To this end, staff have worked with the applicant to explore other options, including lot consolidation with 2322 Sooke Road (as shown in **Figure 2**). Although the lot area would remain below the minimum 4,000 m² required by the TGA1 zone, the consolidated lot would meet the minimum lot frontage of 60m. By increasing the property’s lot frontage along Sooke Road, a 6-storey development could be designed to frame and front the arterial street, reducing its massing along the local road and lending prominence to the building façade along Sooke Road. The fragmented lot layouts of all other properties east of 2322 Sooke Road, which include a combination of duplexes and bare land strata lots (as shown in **Figure 2**), make future lot consolidations along this block of Sooke Road challenging; hence, the importance of pursuing lot consolidation of these two properties to achieve a development that fronts Sooke Road and conveys the key characteristics of transit-oriented development at a scale and massing that remains respectful of the neighbourhood.

Figure 2: Encouraged Lot Consolidation



Without lot consolidation, the subject property would, however, meet the TGA1 zone requirements for an attached housing use (and potentially a low-rise apartment use with a variance to the minimum lot width).

4. Official Community Plan (OCP) Bylaw No. 1700

The subject property is designated as Transit Growth Area in the Official Community Plan (OCP). The Transit Growth Area land use designation supports low- to mid-scale, multi-unit residential uses at densities that support transit use along Sooke Road.

Table 4, below, describes the OCP objectives for the land use designation and how the proposal aligns with those objectives.

Table 4: Compliance of Proposed Development with OCP Policies

	Transit Growth Area OCP Policy	Proposal	Staff Comment
Land Uses Policy 7.2.23	<ul style="list-style-type: none"> Multi-unit residential Live/work and home occupations Institutional Limited commercial and mixed-use, on a case-by-case basis 	Multi-unit residential	Policy met
Built form Policy 7.2.24.a	Ground-oriented and low-rise buildings up to approximately 4 storeys and up to 6 storeys in limited situations when enhanced urban design mitigates impact of additional vertical impact	The proposal is for a 6-storey apartment building. To mitigate the visual impacts as required by this policy, the applicant is proposing to step down the height of the building from 6 storeys to 4 storeys along the northwest property line.	Policy met
Density Policy 7.2.24.b	Floor area ratio (FAR) up to approximately 2.5	2.3 FAR	Policy met
Policy 7.2.25 (a)	Providing access to and support for frequent transit, as part of the Transit Growth Area shown on Figure 8: Land Use	Proposed density and residential uses will provide future residents access to and support for frequent transit on Sooke Road.	Policy met
Policy 7.2.25 (b)	Sensitively increasing density while providing a gentle transition in scale to existing predominantly single-detached residential areas, as illustrated in the “Scale Transition” diagram below (see Figure 2).	Staff are of the opinion that a gentle transition in scale to the existing predominantly single-detached residential area to the north has not been achieved.	Policy not met
Policy 7.2.25 (c)	Improving the public realm for pedestrians and transit users, with sidewalk amenities and improved transit facilities.	The applicant is proposing to complete frontage improvements in accordance with the Transportation Master Plan (as amended from time to time) and recommendations in the Traffic Impact Assessment, which may include sidewalks, bike lanes, and landscaped boulevards. This will improve the public realm for both pedestrians and transit users.	Policy met

Transit Growth Area OCP Policy		Proposal	Staff Comment
Policy 7.2.25 (d)	Creating and maintaining a high degree of permeability – including walking connections – with adjacent residential areas leading to/from the frequent transit service.	Proposal includes frontage improvements on Lynnlark Place and Sooke Road, including new City sidewalks that will connect adjacent residential properties to frequent transit service along Sooke Road.	Policy met
Policy 7.2.25 (e)	Enabling limited small-scale, neighbourhood-serving retail uses where there is a demand and where they do not compromise the viability of established centres and other commercial areas.	Proposal does not consider retail uses as this is not an area where there is an anticipated demand.	Not applicable
Policy 7.2.25 (f)	Designing buildings, public open spaces, and transportation networks to protect natural assets, consistent with site adaptive policies in Section 11: Park Areas and Natural Assets.	Not applicable as this site is not within an environmentally sensitive area and does not contain natural assets to protect. However, Council may wish to consider the impacts of the development on the existing trees on site and on neighbouring properties (see Section 5 below).	Not applicable

Figure 3: Scale Transition Diagram



5. Site Adaptive Planning

OCP Policy 11.2.2.3 encourages the application of site adaptive planning and design principles on all greenfield and hillside development sites. Given that this site is not greenfield and is not located within an environmentally sensitive or natural hazard development permit area, there is limited applicability of the principles seeking to preserve natural features and sensitive ecosystems.

However, the property does contain 25 protected trees and Council may wish to consider the impacts of the development on the existing trees on site and on neighbouring properties. The proposed building footprints and the land alteration associated with the proposal would require the removal of all existing trees and vegetation.

According to the Tree Management Plan (**Appendix 4**), there are 38 trees located on or within the vicinity of the subject property that require removal to enable construction of the underground parkade, 11 of which are located on adjacent properties and 25 of which are classified as protected trees under the Urban Forest Bylaw No. 1735.

The bylaw requires that replacement trees be planted at a ratio of 2:1; however, given that the underground parkade extends across the entire property, there will likely be limited soil volume and minimal landscape buffers to support the replacement trees.

6. Off-Site Works

If Council chooses to advance this application, road dedication and frontage improvements will be required as conditions of rezoning.

Road Dedication

In May 2022, the Transportation Committee considered several options for the long-term cross section for Sooke Road and recommended a 30-metre right-of-way width.

Staff understand that Council has not yet endorsed the Committee's recommendation and that the ultimate cross section for Sooke Road is undetermined at this time.

Nonetheless, the applicant's proposed road dedication aligns with the Transportation Committee's recommendation as the site plan was designed to accommodate a 30-metre right-of-way.

Should Council choose to advance this application, both Options 1 and 2 would require the applicant to dedicate a portion of the property along Sooke Road to achieve a cross-section in accordance with the Transportation Committee's recommendation.

Frontage Improvements

Frontage improvements along the property's frontage must either be completed or entered into a Servicing Agreement in accordance with the standards contained in Colwood's Subdivision Servicing Bylaw No. 285, the Transportation Master Plan (as amended from time to time), and recommendations in the accepted traffic impact assessment (**Appendix 3**). A cash contribution in lieu of frontage works completion or a combination of cash-in-lieu and completion of works could also be considered.

Should Council choose to advance this application, both Options 1 and 2 would require the applicant to work with the City's Engineering department to ensure that the required frontage improvements are completed.

7. Traffic Impact Assessment

The applicant commissioned Watt Consulting Group to prepare a traffic impact assessment (TIA) that reviews and comments on the surrounding road network and related intersections, as well as anticipated changes to traffic volume resulting from this development and other development in the area (**Appendix 3**). The TIA has been reviewed and accepted by the City's Engineering department.

With respect to the proposed rezoning application, the TIA includes recommendations for frontage improvements and overall design, including:

- Providing cut-outs in the parking garage ramp walls and convex mirrors at all 90 degree turns to provide additional visibility within the parking garage; and,
- Installing sidewalks along the Lynnlark Place and Sooke Road frontage.

8. Site Servicing

The site can be serviced by municipal water. Sewer is not yet available to service the subject property. The applicant is aware that water and sanitary capacity will need to be confirmed during the design stage, in advance of Building Permit consideration so that the works can be available for connection.

If the application were to proceed past rezoning stage, the applicant would be required to provide detailed site servicing plans for review and acceptance by the City’s Engineering department.

The applicant has expressed that they would like to extend the sewer beyond the property line to give the residents along Lynnlark Place the ability to connect to sewer if they wish; however, the feasibility of this extension has not yet been confirmed. If Council wishes to advance this application, they may wish to require that the feasibility of the sewer extension be confirmed prior to 1st reading of the amending bylaw.

9. Building And Life Safety

All upgrades necessary to serve the development are the responsibility of the developer. A FUS report would be required if the development proceeds past rezoning stage. Approval is required prior to Building Permit approval.

10. Community Amenity Contributions

Colwood’s interim Community Amenity Contribution policy (COM003) is intended to guide negotiations with developers during rezoning consideration.

If Council chooses to advance this application, the applicant is proposing to meet this policy as shown in **Table 4**, below.

Table 5: Comparison of Contributions Proposed to Requirements in CAC Policy

Contributions by type	Current Council Policy Requirements	Applicant’s Proposed Contributions
Community Amenity Fund	\$4,500 per apartment dwelling unit	\$4,500* per apartment dwelling unit
Attainable Housing Policy	1 unit per every 10 residential dwellings must be provided for affordable housing	\$1,500 *towards the Affordable Housing Reserve Fund <u>in lieu of</u> an in-kind unit contribution.
Fire Hall Fund	\$525*/dwelling *Subject to annual CPI increase	\$583*/dwelling

* All contribution amounts shall increase annually effective on January 1st of each calendar year in which the amending bylaw is adopted as per the Victoria Consumer Price Index (CPI).

OPTIONS/ALTERNATIVES

Council may wish to consider the following options:

1. Option 1: Staff Recommendation

THAT Rezoning Application No. RZ-22-016 for 2324 Sooke Road be considered;

AND THAT amendments be made to the Land Use Bylaw to rezone the property at 2324 Sooke Road from the Residential 1 (R1) Zone the Transit Growth Area 1 (TGA1);

AND THAT prior to scheduling 1st reading of the amending bylaw, the feasibility of sewer extension beyond the property line of 2324 Sooke Road be confirmed to the satisfaction of the City of Colwood's Engineering department;

AND THAT prior to adoption of the amending bylaw, a Section 107 Plan showing the proposed road dedication along Sooke Road to achieve a 30 m cross-section based on the Sooke Road Corridor Study that was considered by the Transportation Committee on May 9th 2022 be submitted to the City of Colwood for signature and registered at the BC Land Titles Office;

AND FURTHER THAT prior to adoption of the amending bylaw, the following long-term conditions be registered within a Section 219 Covenant Development Agreement:

Prior to the issuance of a Building Permit:

1. The Owner covenants and agrees with the City that the Lands shall not be built upon, and the Owner shall not apply for a building permit and the Owner agrees it is not entitled to a building permit unless and until:

OFF-SITE WORKS

- a. The Owner agrees to either: 1.) complete the frontage improvements on Sooke Road as required by applicable City of Colwood bylaws and policies; 2.) enter into a Servicing Agreement with the City of Colwood (and provide the required security as agreed to by the City) that will address the required frontage improvements; 3.) provide a cash contribution to the City of Colwood in lieu of completing the required frontage improvements as determined and approved by the City; or 4.) a combination of cash-in-lieu and frontage works completion as determined and approved by the City.

PARKING

- b. The Owner registers a Section 219 covenant over the lands that agrees to allocate parking for each residential unit as required by applicable City of Colwood bylaws and ensures that the allocated residential parking is not provided in exchange for additional compensation separate from the rent received for each residential unit.

OR

2. Option 2: Applicant's Proposal

THAT Rezoning Application No. RZ-22-016 for 2324 Sooke Road be considered;

AND THAT amendments be made to the Land Use Bylaw to rezone the property at 2324 Sooke Road from the Residential 1 (R1) Zone a new Comprehensive Development (CD) Zone;

AND THAT prior to scheduling 1st reading of the amending bylaw, the feasibility of sewer extension beyond the property line of 2324 Sooke Road be confirmed to the satisfaction of the City of Colwood's Engineering department;

AND THAT prior to adoption of the amending bylaw, a Section 107 Plan showing the proposed road dedication along Sooke Road to achieve a 30 m cross-section based on the Sooke Road Corridor Study that was considered by the Transportation Committee on May 9th 2022 be submitted to the City of Colwood for signature and registered at the BC Land Titles Office;

AND FURTHER THAT prior to adoption of the amending bylaw, the following long-term conditions be registered within a Section 219 Covenant Development Agreement:

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OFF-SITE WORKS

- a. The Owner agrees to either: 1.) complete the frontage improvements on Sooke Road as required by applicable City of Colwood bylaws and policies; 2.) enter into a Servicing Agreement with the City of Colwood (and provide the required security as agreed to by the City) that will address the required frontage improvements; 3.) provide a cash contribution to the City of Colwood in lieu of completing the required frontage improvements as determined and approved by the City; or 4.) a combination of cash-in-lieu and frontage works completion as determined and approved by the City.

PARKING

- b. The Owner registers a Section 219 covenant over the lands that agrees to allocate parking for each residential unit as required by applicable City of Colwood bylaws and ensures that the allocated residential parking is not provided in exchange for additional compensation separate from the rent received for each residential unit.

OR

3. Option 3: Defer

THAT staff provide additional information before Council considers Rezoning Application No. RZ-22-016 for 2324 Sooke Road;

OR

4. Option 4: Deny

THAT Rezoning Application No. RZ-22-016 for 2324 Sooke Road be denied.

COMMUNICATION

As required by Development Application Consultation Policy DEV 001, the applicant conducted neighbourhood consultation in January and February 2023 by mailing notices to all property owners within 100 metres of the subject property notifying the residents about the two open houses that were held to discuss the proposal. Property owners of the adjacent properties were invited to participate in conversations with the applicant and provide comments and feedback on the application. A summary of the applicant's neighbourhood engagement strategy is included in **Appendix 5**.

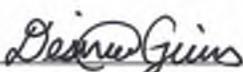
A development notification sign was posted on the subject property as required under Bylaw 427 (Colwood Land Use Application Procedures Bylaw). The application and supporting documents are also available for public viewing on the City's website and in person at City Hall during office hours.

CONCLUSIONS

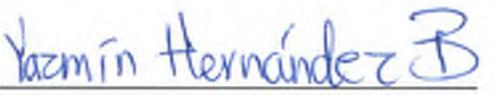
Council's expectation is that staff evaluate all rezoning applications in the Transit Growth Area using the TGA1 zone. Further, the intention behind the new TGA1 zone is that all properties located in the Transit Growth Area be first evaluated against the TGA1 zone as opposed to creating a new CD zone. As it is currently designed, staff are concerned that the proposal does not meet OCP for providing a gentle transition in scale to predominantly single detached neighbourhoods. This feedback has been provided to the applicant and the applicant has revised their proposal and made efforts to address this concern. Nevertheless, as the Rezoning Application RZ-22-016 for 2324 Sooke Road does not comply with the proposed TGA1 Zone and it does not meet the OCP policy for sensitive integration into existing single family neighbourhoods. Therefore, Council may wish to endorse the staff recommendation.

Respectfully submitted,

Reviewed By:



Desiree Givens, MCRP
Planner II



Yazmin Hernandez, MCIP, RPP
Director of Development Services

ADMINISTRATORS COMMENTS:

I have read the report and endorse the recommendation.

Robert Earl
Chief Administrative Officer

Attachments:

- APPENDIX 1: Architectural Plans
- APPENDIX 2: Letter of Intent
- APPENDIX 3: Traffic Impact Assessment
- APPENDIX 4: Tree Management Plan
- APPENDIX 5: Applicant-Led Neighbourhood Consultation Summary
- APPENDIX 6: Original Plans Presented to Planning and Land Use Committee
- APPENDIX 7: Realtor's Letter Summarizing Lot Consolidation Attempt
- APPENDIX 8: Applicant's Letter of Rationale for CD Zone

Staff PowerPoint



G/F PLAN & SITE LAYOUT
SCALE: 1/16" = 1'-0"

SITE STATISTICS	
CIVIC ADDRESS 2324 SOOKE RD. COLWOOD, BRITISH COLUMBIA	
EXISTING ZONING: R1	
PROPOSED ZONING: CD	
SITE AREA: GROSS - 26,609.4 SQ.FT. (2,472.1 SQM.) ROAD DEDICATION - 949.2 SQ.FT. (88.2 SQM.) NET - 25,660.2 SQ.FT. (2,383.9 SQM.)	
BUILDING AREA P2 = 24,547.7 SQ.FT. (2,280.6 SQM.) P1 = 24,547.7 SQ.FT. (2,280.6 SQM.) GF = 10,162 SQ.FT. (944.08 SQM.) 2ND FLOOR = 10,722 SQ.FT. (996.11 SQM.) 3RD FLOOR = 10,581 SQ.FT. (983.01 SQM.) 4TH FLOOR = 10,722 SQ.FT. (996.11 SQM.) 5TH FLOOR = 9,290 SQ.FT. (863.07 SQM.) 6TH FLOOR = 7,694 SQ.FT. (714.80 SQM.)	
ABOVE GRADE TOTAL = 59,171 SQ.FT. (5,497.17 SQM.)	
SITE COVERAGE ALLOWED - MAXIMUM 70%	
BUILDING FOOTPRINT ONLY 10,062 SQ.FT. / 25,660.2 SQ.FT. = .3921 PROPOSED - 39.21 %	
SITE FAR ALLOWED - MAXIMUM 2.5	
TOTAL BUILDING 59,171 SQ.FT. / 25,660.2 = 2.306 PROPOSED - 2.31	
SETBACKS	ALLOWED PROPOSED MAIN BLDG PROPOSED BUILDOUT
FRONT (SOOKE)	6.0m 6.0m * 4.77m
REAR	7.5m 7.83m -
EXTERIOR (SOUTH)	4.5m 4.51m * 3.28M
INTERIOR (NORTH)	5m 5.03m -
* VARIANCE REQUIRED	
BUILDING HEIGHT ALLOWED - 6 STOREYS PROPOSED - 6 STOREYS	
UNIT COUNT	
	D 3-BED A 2-BED B 1-BED C STUDIO TOTAL
GF	0 1 12 0 13
2ND	0 3 10 0 13
3RD	0 2 11 0 13
4TH	0 3 10 0 13
5TH	2 2 5 0 9
6TH	5 0 1 0 6
	7 11 49 0 67
PARKING REQUIRED BACHELOR / STUDIO = 0.8 SPACE PER UNIT ONE BEDROOM = 1.0 SPACE PER UNIT TWO BEDROOM = 1.3 SPACES PER UNIT THREE BEDROOM = 1.5 SPACES PER UNIT VISITOR = 0.2 SPACES PER UNIT	
BACHELOR / STUDIO - 0 ONE BEDROOM - 49 X 1.0 = 49 TWO BEDROOM - 11 X 1.3 = 14.3 THREE BEDROOM - 7 X 1.5 = 10.5 VISITOR - 67 X 0.2 = 13.4 TOTAL = 87.2 TOTAL STALLS REQUIRED = 88	
PROPOSED P1 - 2 SM CAR - 2 H/CAP - 30 REGULAR TOTAL - 34 STALLS P2 - 41 REGULAR TOTAL - 41 STALLS	
TOTAL PROVIDED = 75 STALLS	
SHORT TERM BIKE PARKING REQUIRED 6 STALLS PER BUILDING PROVIDED 6 STALLS	
LONG TERM BIKE PARKING REQUIRED 1.0 PER DWELLING UNIT < 60m ² (645 SqFt.) 1.25 PER DWELLING UNIT > 60m ² (645 SqFt.) PROVIDED 1 X 49 = 49 1.25 X 18 = 22.5 TOTAL PROVIDED = 72	

REV	DATE	DESCRIPTION
02	05/03/23	RE-ISSUED FOR COUNCIL
01	02/07/23	ISSUED FOR REZONING

CONSULTANT

CONSULTANT SEAL

CONTRACTOR SHALL VERIFY ALL DIMENSIONS ON SITE. DRAWINGS SHALL NOT BE SCALED.

ARCHITECT

LOVICK SCOTT ARCHITECTS

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DRAWN BY: AT/DS PROJECT: LSA APPROVED: LSA

2324 APARTMENT

2324 SOOKE ROAD
COLWOOD, BRITISH COLUMBIA

DRAWING

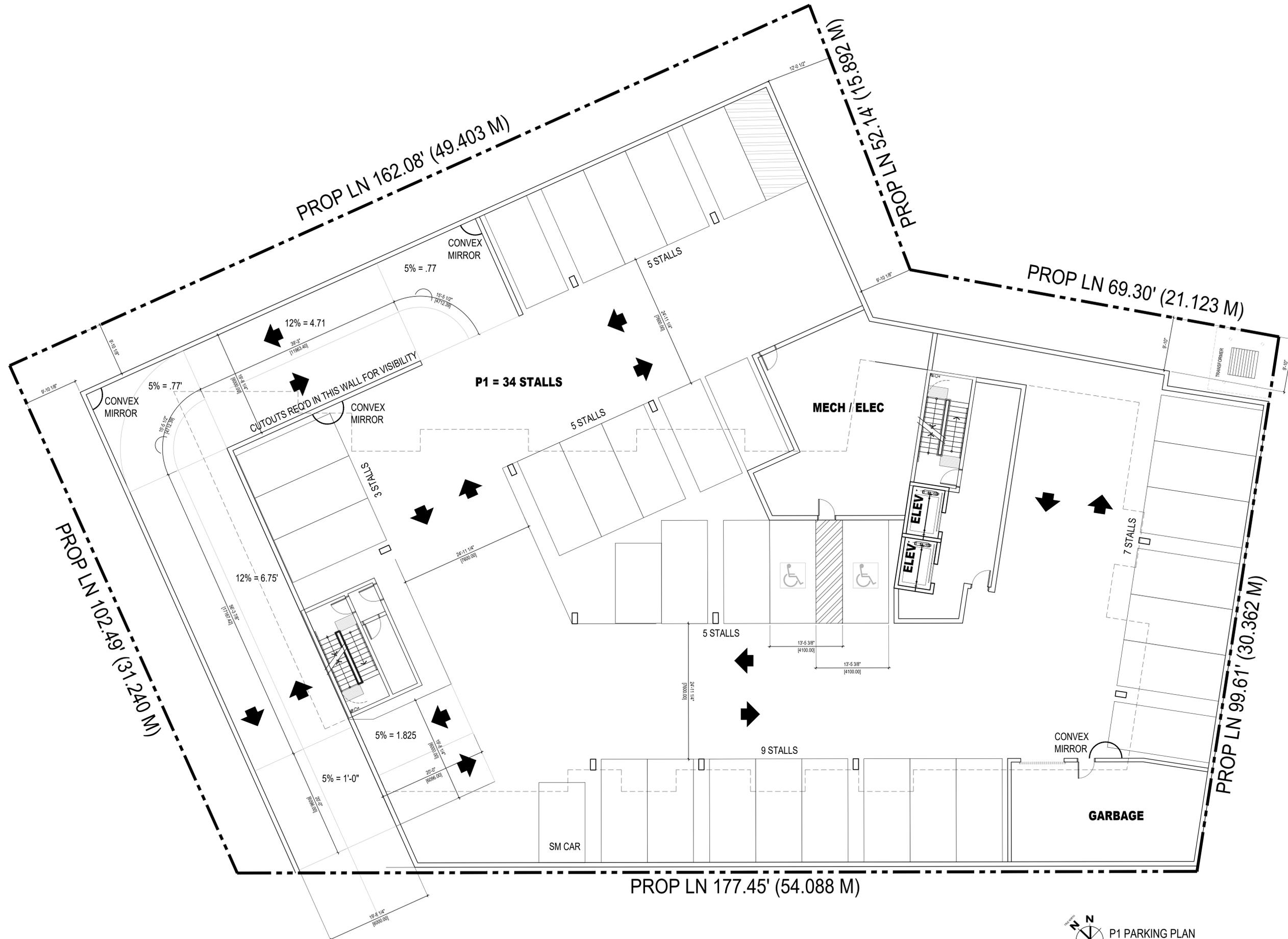
G/F PLAN & SITE LAYOUT

PROJECT NUMBER: 22-044 DRAWING NUMBER: AS1

SCALE: 1/16" = 1'-0"

DATE: MAY 2022 REVISION: MAY 3RD, 2023

2324 APARTMENT (22-044)



REV	DATE	DESCRIPTION
02	05/03/23	RE-ISSUED FOR COUNCIL
01	02/07/23	ISSUED FOR REZONING

CONSULTANT

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CONTRACTOR SHALL VERIFY ALL DIMENSIONS ON SITE. DRAWINGS SHALL NOT BE SCALED.

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DRAWN BY: DS APPROVED: LSA

PROJECT: 2324 APARTMENT

2324 APARTMENT

2324 SOOKE ROAD

COLWOOD, BRITISH COLUMBIA

DRAWING

P1 PARKING PLAN

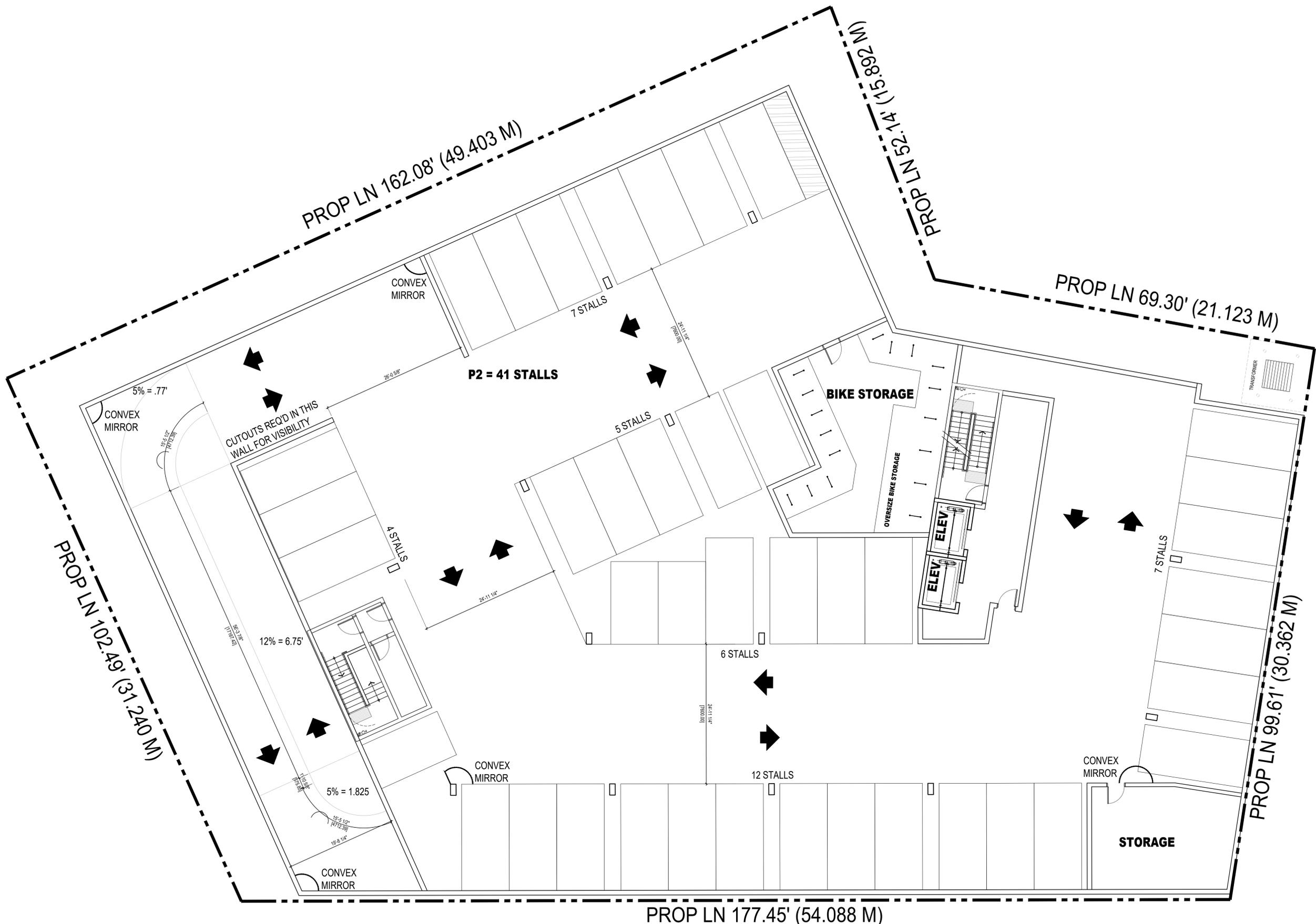
PROJECT NUMBER: 22-044 DRAWING NUMBER: AS1

SCALE: 1/8" = 1'-0"

DATE: MAY 2022 REVISION: MAY 3RD, 2023



2324 APARTMENT (22-044)



REV	DATE	DESCRIPTION
02	05/03/23	RE-ISSUED FOR COUNCIL
01	02/07/23	ISSUED FOR REZONING

CONSULTANT

CONSULTANT SEAL

CONTRACTOR SHALL VERIFY ALL DIMENSIONS ON SITE. DRAWINGS SHALL NOT BE SCALED.

ARCHITECT



**LOVICK
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DRAWN BY: LSA
 PROJECT: 2324 APARTMENT
 APPROVED: LSA

PROJECT NUMBER	DRAWING NUMBER
22-044	A1.1
SCALE: 1/8" = 1'-0"	
DATE: MAY 2022	REVISION: MAY 3RD, 2023

P2 PARKING PLAN
 SCALE: 1/8" = 1'-0"



2324 APARTMENT (22-044)

March 13th, 2023

Ms. Desiree Givens, Planner
City of Colwood
3300 Wishart Road,
Victoria, BC, V9C 1R1

Re: 2324 Sooke Road Rezoning Information Summary and Letter of Intent

Dear Ms. Givens,

Please accept this summary of requested information in support of the proposed rezoning at the above noted address.

The intent is to construct a 6-storey residential apartment condominium building in accordance with the Transit Corridor Guidelines, which allows up to 6 storeys. This density provides much needed housing with reduced dependency on automobiles, as transit services is immediately available on Sooke Road.

The units per hectare for this proposal is high in comparison to recent developments, however the OCP allows a Floor Space Ratio (FSR) at 2.5 which translates to the density suggested. The proposed FSR is 2.45.

Currently 7 of 70 units are proposed to be 3 bedrooms, comprising 10% of the proposed units. In addition, there are 17 two bedroom, 46 one bedroom and no studio apartments proposed. There are no parking variances in number or dimension requested at this time.

The site is flat with no graded changes to adjacent properties. The underground parkade will be flush with the surrounding elevations.

The Lynnlark neighbourhood is predominantly single family and duplex development, likely constructed in the 1970-1980's. The OCP mapping clearly delineates the Transit Corridor and Neighborhood uses, and it is challenging to accommodate both density and a transition zone to the existing neighbourhoods. In order to mitigate the visual impacts of the proposed building to the adjacent single family detached residential properties, the building has been thoughtfully designed to be integrated with the existing neighbourhood. Instead of proposing a large building massing that goes straight up 6 stories+ roof parapet, we have instead stepped the building and the balconies at the front (Sooke Rd) and east side to reduce the visual impact. The 6th floor further steps back from the building floor below. The overall distance to the neighbouring house would be approximately 12.5m, with the existing building setback 8.5m. At the west side, the proposed building is setback 7.8m to provide considerable breathing room between the edge of the property and the adjacent building. At the rear of the property there is a substantial setback from 5m to 23 that will have an abundant landscape incorporated into the outdoor amenity space. Screening can be provided by 6' solid fencing, trees and shrubs along neighbouring property lines and opaque balcony railings. The form and character of the building can be found on the attached elevations.

Grayland Consulting Ltd

In accordance with the Urban Forest Bylaw, the trees will be replaced at a ratio of 2:1 on site or via cash in lieu. While the developer appreciates and respects the importance of the urban tree canopy, as it is not possible to retain any of the existing trees with the proposed underground parkade required to accommodate this project. Please refer to the TreeHelp arborist report.

Greenspaces and green infrastructure considerations are as follows: The landscape plan provides up to 15% of the site area as landscaped greenspace for the residents to enjoy, as well as an active pedestrian street front at Sooke Road. The green infrastructure includes the prescribed resident and visitor bike parking and heat pumps for heating and cooling. The project will accommodate EV chargers in the parkade per Colwood Bylaws. The building will be constructed to the step code of the day.

The project is located on an active transportation corridor, within walking distance to local parks (Colwood Creek Park) and schools (Colwood Elementary), and the Allendale precinct. Pedestrian connections to the public road system are provided in accordance with the LADR landscape plan from the building entrance and the gathering area. The site is adjacent to cycling networks. Sooke Road has adequate road shoulder room for bicycles in the vicinity of the site and is designated as a shared street west of Carran Road. The Galloping Goose Regional Trail can be accessed at Sooke Road at Aldean Avenue or Veterans Memorial Parkway at Kelly Road, providing an off-street cycling connection across the City of Colwood and the Greater Victoria Area.

The Traffic Impact Assessment (TIA) has been provided. While no current improvements are recommended, the developer is willing to provide defined right and left separated exit lands to Sooke Road from Lynnlark to alleviate any traffic back ups from cars trying to turn left to Sooke Road. Road dedication can be provided as a condition of rezoning, and frontage improvements will be provided as a condition of building permit to Colwood standards current at the time of that application.

Amenity and affordable housing contributions will be provided in accordance with Colwood Policy at \$4,500 per unit for the amenity fund, and \$1,500 per units towards affordable housing. The developer is also willing to contribute to the Fire Hall fund as per current policy and precedent.

Our public consultation report has been provided under separate cover. Signage has been installed on site as requested.

I trust this satisfies the requirements to move this project forward to Council.

Best Regards,

A handwritten signature in black ink, appearing to read "Rachael Sansom".

Rachael Sansom A.Sc.T.



REVIEWED City of Colwood
Engineering Dept.
By Deanna Eden Apr-20-2023

ACCEPTED City of Colwood
Engineering Dept.
By Deanna Eden Apr-20-2023

2324 SOOKE ROAD

Traffic Impact Assessment

PERMIT TO PRACTICE
WATT CONSULTING GROUP LTD.
SIGNATURE *Nathan Lowell*
DATE _____
PERMIT NUMBER 1001432
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Date: April 6, 2023
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1.0 INTRODUCTION

WATT Consulting Group is retained by Landvision Group to prepare a Traffic Impact Assessment (TIA) for a proposed residential development at 2324 Sooke Road in Colwood, BC. The site is bound by Sooke Road to the south, Lynnlark Place to the west, and residential homes to the north and the east. The site is located approximately 250 metres east of Veterans Memorial Parkway. The site location is illustrated in **Figure 1**.

1.1 The Site Today

The site today is occupied by a single residential home. The site is currently zoned Residential 1 (R1), and the surrounding properties are also zoned R1.

1.2 Study Area

The development site is located on the northeast corner of Sooke Road / Lynnlark Place. The study area includes the following intersections:

- Sooke Road (Highway 14) / Lynnlark Place
- Sooke Road (Highway 14) / Veterans Memorial Parkway
- Sooke Road (Highway 14) / Metchosin Road

1.3 Proposed Development

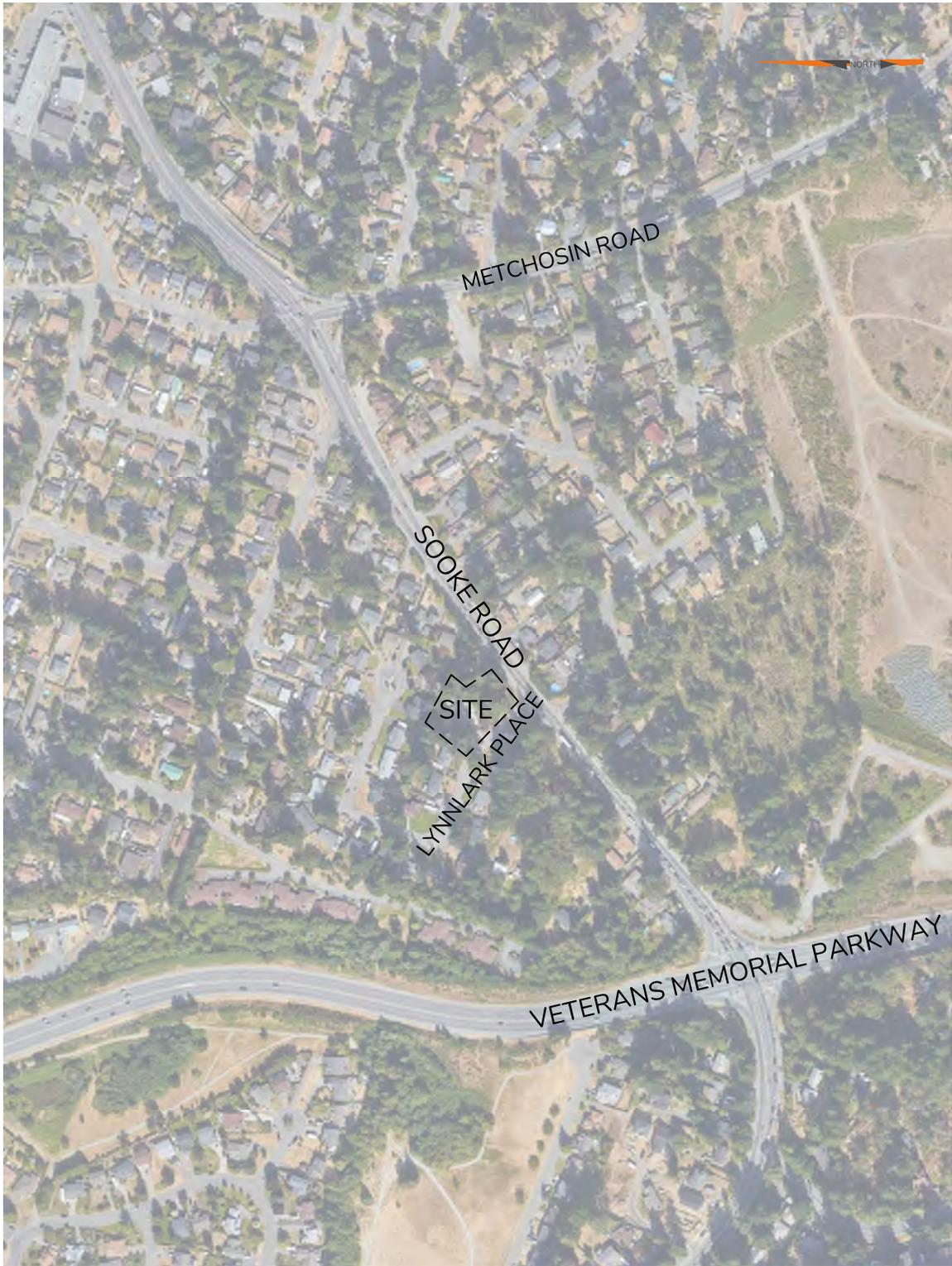
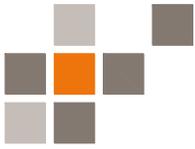
A Zoning Bylaw Amendment application is being submitted to the City of Colwood to change the zoning from R1 to CD, and to permit the proposed redevelopment of the site. The proposed development will include a 6-storey building with 70 residential units.



1.4 This Report

This report is provided as part of the Zoning Bylaw Amendment application being submitted to the City of Colwood. It provides the following:

- An overview of the existing and evolving transportation context in the vicinity of the site, including vehicular, pedestrian, cycling, and transit facilities, and area travel characteristics
- An overview of the proposed development programme
- An assessment of the existing traffic activity patterns and volumes in the study area during the weekday morning and afternoon peak period
- A comprehensive review of the vehicular traffic volume changes that may occur in the area in the future with the construction of other area development projects
- An assessment of the trip generation and assignment characteristics of the proposed development
- An assessment of the addition of a left-turn lane on Lynnlark Place
- A review of vehicular traffic operations at intersections in the area under existing and future conditions (i.e., the 2025 horizon year), including an assessment of the operational impacts of the proposed development





2.0 TRANSPORTATION CONTEXT

2.1 Road Network

2.1.1 Existing Road Network

The existing road network, lane configuration, and intersection control are illustrated in **Figure 2**. There are four roadways within the study area as described below:

- **Sooke Road** is an east-west undivided arterial road under the jurisdiction of the City of Colwood until it reaches Veterans Memorial Parkway. West of Veterans Memorial Parkway, Sooke Road is under the jurisdiction of the Ministry of Transportation and Infrastructure. It extends between Goldstream Avenue in the east and Jacklin Road in the west where it transitions to the City of Langford's jurisdiction. The posted speed limit is 50 km/h. Sooke Road has a four-lane cross section and transitions to a two-lane cross section in the vicinity of the site, west of Metchosin Road. There are left turn lanes provided at key intersections. There are bicycle lanes/road shoulders on Sooke Road in both directions until east of Carran Road at which point the road transitions to a shared street. No parking is permitted on either side of the road.
- **Veterans Memorial Parkway** is a north-south arterial road under the jurisdiction of the Ministry of Transportation and Infrastructure north of Sooke Road, and the City of Colwood to the south. It extends from Latoria Road in the south to Highway 1 in the north where it continues as Millstream Road. The posted speed limit is 60 km/h. Veterans Memorial Parkway has a four-lane cross section with bicycle lanes/road shoulders provided in both directions. No parking is permitted on either side of the road.
- **Metchosin Road** is a north-south arterial road under the jurisdiction of the City of Colwood. It extends between Sooke Road in the north and Happy Valley Road in the south where it continues as William Head Road. The posted speed limit is 50 km/h. Metchosin Road has a two-lane cross section with buffered bicycle lanes provided in both directions. Parking is not permitted on the side of the road.
- **Lynnlark Place** is a north-south local road under the jurisdiction of the City of Colwood. It extends from Sooke Road in the south and curves east and then back south to end in a cul-de-sac. The speed limit is 50 km/h. Lynnlark Place has a two-lane cross section and no bicycle lanes. Parking is permitted on either side of the road.

Bike treatment varies along the Metchosin Road corridor including mane sections without any facilities.
Parking is permitted along certain sections of Metchosin Road



Three key intersections were identified within the study area:

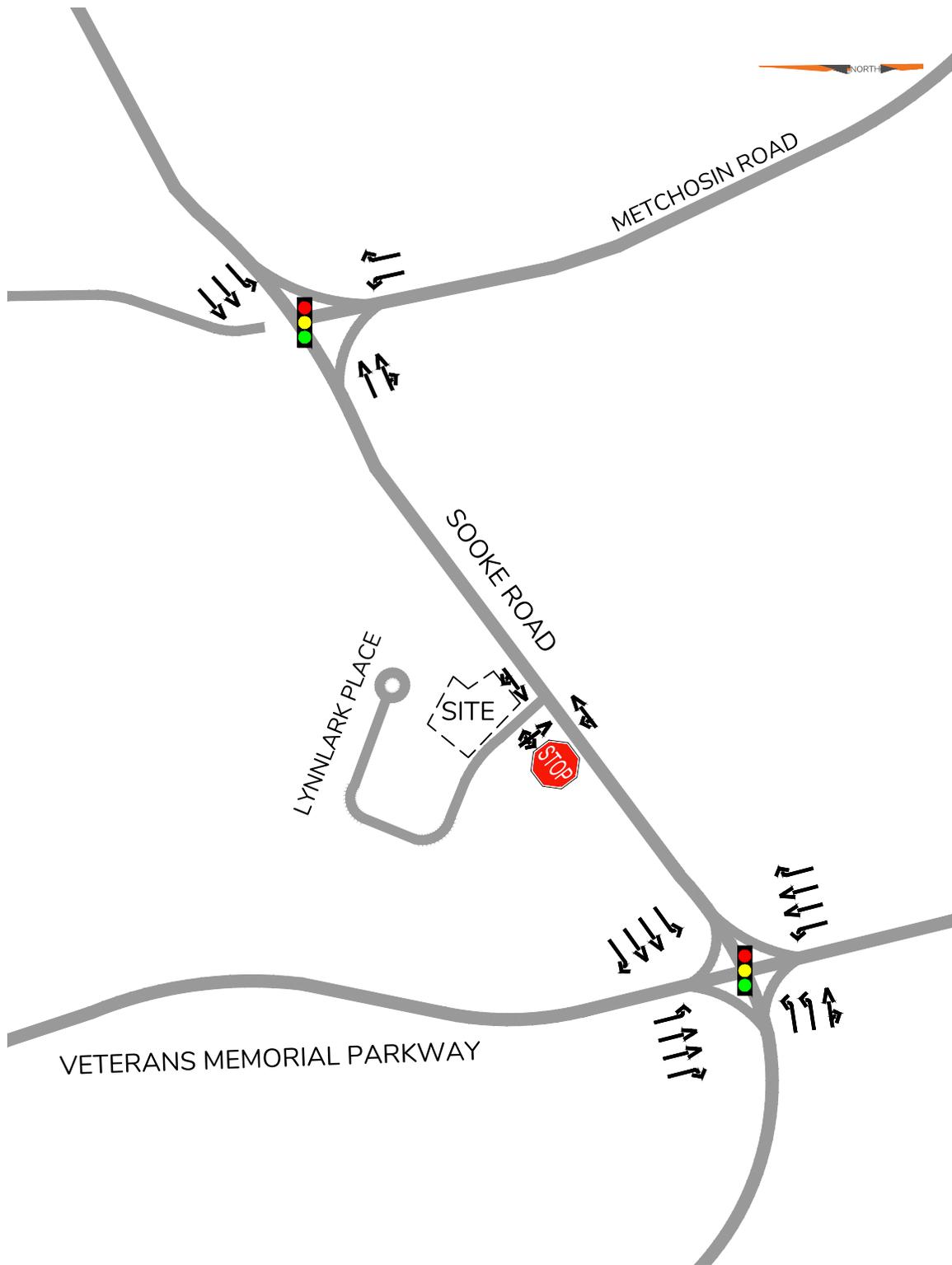
- **Sooke Road / Lynnlark Place** is a three-leg, stop-controlled intersection. The southbound approach is stop-controlled, and the eastbound and westbound approaches are free flow. Jadel Drive (to the south) is offset to the west from the Sooke Road / Lynnlark Place intersection by 10 metres.
- **Sooke Road / Veterans Memorial Parkway** is a four-leg signalized intersection. All approaches have channelized right turn lanes and the southbound and northbound approaches each have a separate left-turn lane and two through movement lanes. The eastbound approach has two left-turn lanes and one through lane and the westbound approach has one left-turn lane and one through lane. The intersection operates under split signal phasing due to the dual eastbound left turn lanes, with the eastbound and westbound approaches proceeding separately.
- **Sooke Road / Metchosin Road** is a three-leg signalized intersection. The westbound and northbound approaches have channelized right turn lanes and the westbound and eastbound approaches each have two through movement lanes. The westbound approach has a separate left-turn lane, and the northbound approach has one left-turn lane.

2.1.2 Evolving Road Network

City of Colwood staff are in the process of consulting with Council to establish a 30-meter road right of way for the Sooke Road corridor to accommodate up to 5 travel lanes (including bus lanes), center medians with center turn lanes, separated and protected bike lanes, and separated sidewalks.

Four alternatives are outlined in the Sooke Road Corridor Study (2022) prepared by Urban Systems, with varying right-of-way widths, boulevard widths, transit priority schemes, dedicated cycling facility alternatives, and vehicle travel lane configurations.

It is not anticipated that the recommended improvements to Sooke Road will be constructed by opening day of the proposed development and therefore these changes were not considered in this study.





2.2 Transit Network

2.2.1 Existing Transit Network

The development site is extremely well-situated relative to public transit services operated by BC Transit. Currently there are nine routes servicing the Sooke Road Corridor: (Route No. 39, 48, 51, 52, 54, 55, 59, 60, and 61). The area transit network is illustrated in **Figure 3**.

Route 39 – Westhills / Interurban / Royal Oak / UVic generally operates in an east-west direction between Westhills Exchange and the University of Victoria, passing by the Colwood Exchange, Camosun College Interurban Campus, and the Royal Oak Exchange. The closest stop is approximately 800 metres (i.e., a 10-minute walk) from the site, at Kelly Road / Sooke Road. Near the site, buses operate at 30-to-60-minute headways on weekdays only.

Route 48 – Happy Valley / Downtown generally operates in an east-west direction between downtown Victoria and the Langford Exchange, passing by the Colwood Exchange. The closest stop is approximately 600 metres (i.e., a 7-minute walk) from the site, at Sooke Road / Ridley Drive. Buses operate at 30-minute headways making 3 trips in the morning and evening between 6:45am – 7:45am and 4:45pm- 5:45pm on weekdays only.

Route 51 – Langford / UVic generally operates in an east-west direction between the UVic Exchange and the Langford Exchange, passing by the Colwood Exchange, Victoria General Hospital, and the Westshore Town Centre. The closest stop is approximately 800 metres (i.e., a 10-minute walk) from the site, at Kelly Road / Sooke Road. Buses operate near the site once in the morning at 8:12am and at 30-to-60-minute headways making 4 trips in the evening between 3:30pm- 6pm on weekdays only.

Route 52 – Millstream / Bear Mountain generally operates in a north-south direction between the Colwood Exchange and Bear Mountain Village Centre. The closest stop is approximately 600 metres (i.e., a 7-minute walk) from the site, at Sooke Road / Ridley Drive. Buses operate at 30-to-60-minute headways on weekdays and 60 minutes on weekends.



Route 54 – Metchosin - Clockwise generally operates in a north-south direction between the Lanford Exchange and the William Head Institution, passing by the Colwood Exchange. The closest stop is approximately 600 metres (i.e., a 7-minute walk) from the site, at Sooke Road / Ridley Drive. Buses operate at 110-to-120-minute headways on weekdays and 2-hour headways on weekends.

Route 55 – Happy Valley - Counterclockwise generally operates in a north-south counterclockwise direction between the Lanford Exchange and the William Head Institution, passing by the Colwood Exchange. The closest stop is approximately 450 metres (i.e., a 6-minute walk) from the site, at Sooke Road / Metchosin Road. Buses generally operate two in the early morning between 6am-7:30am and then transition to 2-hour headways from 10am to 6pm on weekdays only, however this route only passes by the site via the Colwood Exchange once at 7am.

Route 59 – Triangle Mountain operates from the Langford Exchange in a counterclockwise one-way loop through Colwood. The closest stop is approximately 450 metres (i.e., a 6-minute walk) from the site at Sooke Road/ Metchosin Road. Buses operate at 20 minutes to 2-hour headways on weekdays, and 2-hour headways on weekends.

Route 60 – Wishart operates from the Langford Exchange in a clockwise one-way loop through Colwood. The closest stop is approximately 600 metres (i.e., a 7-minute walk) from the site at Sooke Road / Ridley Drive. Buses operate at 40 minutes to 2-hour and 20-minute headways on weekdays, and 2-to-2.5-hour headways on weekends.

Route 61 – Downtown / Langford / Sooke operates in an east-west direction between the District of Sooke and the Victoria Downtown core, primarily travelling along Sooke Road. The closest stop is approximately 70 metres (i.e., a 1-minute walk) from the site, at Sooke Road / Lynnark Place. Buses generally operate at 10-to-30-minute headways during peak periods and one-hour headways outside of peak periods. The route only services the Victoria Downtown core during the peak weekday hours in peak directions (i.e., into downtown during weekday mornings, and out of downtown during weekday afternoons). At all other times, the route continues downtown as Route 50 from the Langford Exchange.



2.2.2 Evolving Transit Network

BC Transit is collaborating with municipal, regional, and provincial partners to develop the Victoria Regional RapidBus Implementation Strategy. RapidBus routes are planned to operate two-ways, 18-20 hours per day, 7 days a week. Phase 1 of the RapidBus implementation includes the Westshore Line, which will service the Victoria Downtown Core from Langford, Colwood, View Royal, and west Saanich. Goldstream Avenue / Sooke Road is the nearest planned stop to the site, and residents can use Route 39 to reach this stop.

2.3 Cycling Network

The site is served by a network of cycling facilities in its immediate vicinity. Sooke Road has adequate road shoulder room for bicycles in the vicinity of the site and is designated as a shared street west of Carran Road. The Galloping Goose Regional Trail can be accessed from Sooke Road at Aldeane Avenue / University Drive or Veterans Memorial Parkway / Kelly Road, providing an off-street cycling connection across the City of Colwood and the Greater Victoria Area as a whole. The area cycling network is illustrated in **Figure 4**.

2.4 Pedestrian Environment

The pedestrian environment in the vicinity of the site is varied in quality and continuity.

Pedestrian infrastructure around the site and along Lynnlark Place is confined to road shoulders. There is a pedestrian trail connection from the end of the cul-de-sac on Lynnlark Place to Sooke Road.

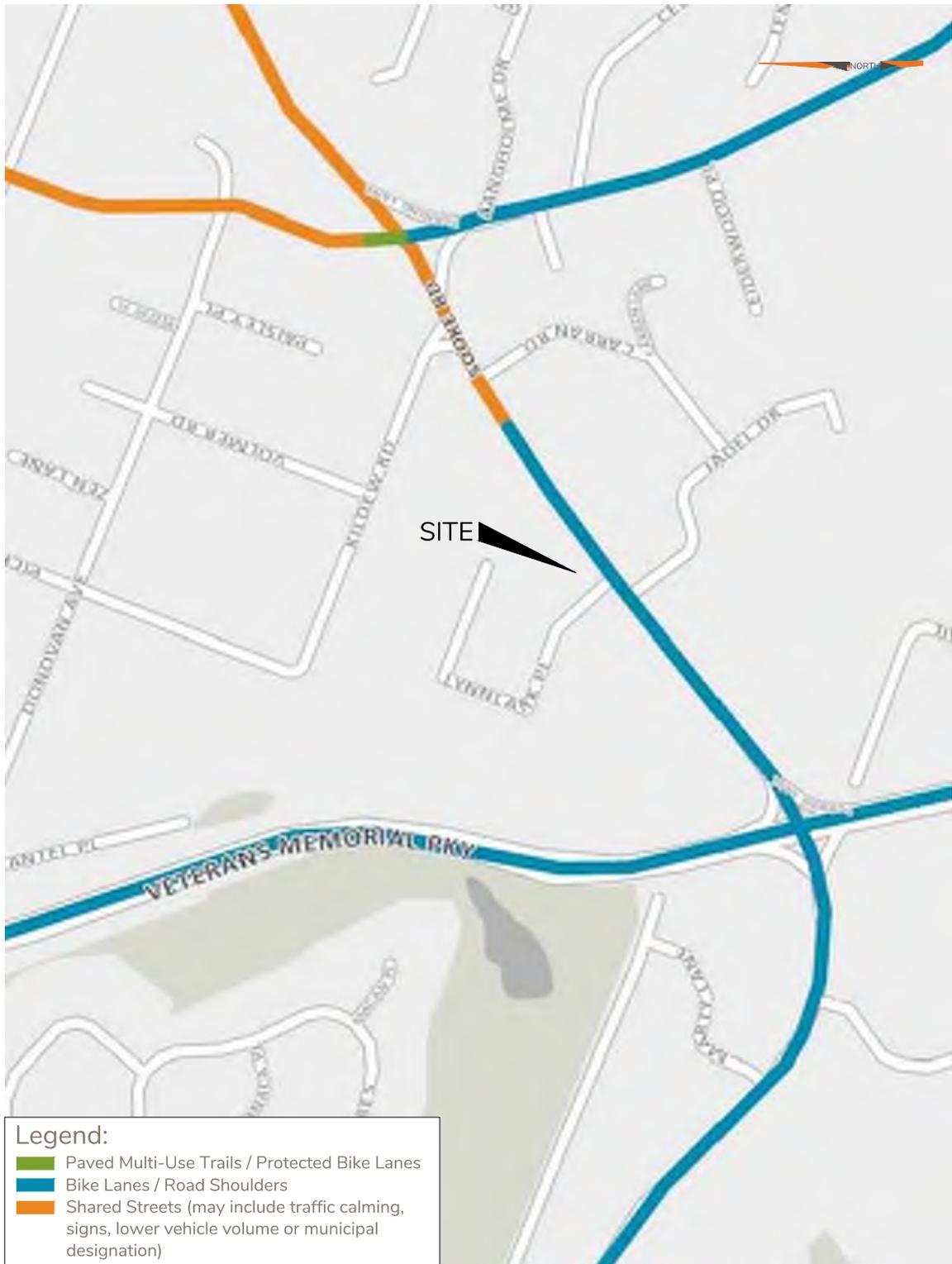
Both the north and south side of the street on Sooke Road have either a raised asphalt sidewalk or road shoulder directly adjacent to the road on both sides. There is some sidewalk along the south side of the road at the Metchosin Road intersection. Metchosin Road also has only road shoulders or raised asphalt sidewalk and Veterans Memorial Parkway has road shoulders.

The intersection at Veterans Memorial Parkway / Sooke Road has pedestrian crosswalks on all legs, Sooke Road / Metchosin Road has pedestrian crosswalks on the south and east legs, and Sooke Road / Lynnlark Place has a pedestrian crosswalk on only the north leg of the intersection.



2324 Sooke Road
Traffic Impact Assessment

Figure 3
Existing Transit Network





2.5 Area Travel Characteristics

2.5.1 Existing Area Travel Characteristics

The 2017 CRD Household Travel Survey provides information on area travel characteristics for southern Vancouver Island. **Table 1** outlines the mode share for the area.

Table 1 – Existing Mode Share

Mode	AM Peak	PM Peak
Auto Driver	60%	61%
Auto Passenger	16%	20%
Transit	5%	4%
Bicycle	5%	3%
Walk	7%	7%
Other	7%	5%

Notes:

1. Based on 2017 CRD Household Travel Survey data for District 16 – City of Colwood
2. Travel mode split calculation based on overall number of trips to, from, and within district.

2.5.2 Evolving Area Travel Characteristics

The 2015 City of Colwood Transportation Master Plan identifies mode share targets to reduce GHG emissions and energy use. **Table 2** outlines Colwood’s mode share targets for 2026 and 2038.

Table 2 – Mode Share Targets

Mode	2026	2038
Auto	75%	70%
Transit	10%	12%
Bicycle	5%	8%
Walk	5%	10%



3.0 DEVELOPMENT PROPOSAL

The current preliminary development proposal consists of a six-storey mixed-use residential apartment building containing 70 units. **Table 3** outlines the development proposal and transportation-related elements of the proposed site plan. The proposed site plan is provided in **Appendix A**.

Table 3 – Development Proposal

Site Element	Details
Residential	70 units
Vehicle Parking Supply	94 spaces
Loading Operations	Loading operations, including waste collection, will be provided from Lynnlark Place.
Bicycle Parking Supply	A bicycle storage room in the centre of the P2 parking level will provide bicycle parking for residents.
Vehicular Access	Access to the parking garage is provided from an east-west driveway connection to Lynnlark Place.
Pedestrian Access	Pedestrian access to the residential lobby is provided from the south side of the building off Sooke Road.

Notes:

1. Site statistics based on a preliminary site plan layout drawing prepared by Lovick Scott Architects, received on February 7, 2023.

3.1 Site Access

The site is located east of Lynnlark Place. The site driveway off Lynnlark Place is on the north end of the site.

3.2 Sight Distance

The available sight distance at the site driveway is approximately 55 metres looking left, and 95 metres looking right.

Looking left, the intersection of Sooke Road / Lynnlark Place is clearly visible, with no obstructions.

Looking right, the 90 degree bend in the road restricts further sight distance. The available sight distance of 95 metres does not meet the TAC criteria for intersection sight distance for a design speed of 50 km/h, however it does meet the stopping sight



distance requirement of 65 metres, and the intersection sight distance for a design speed of 40 km/h (i.e. 85 metres).

Given the short road segments on Lynnlark Place, and the 90 degree bends in the road, it is assumed that vehicles will be travelling at speeds lower than 50 km/h, lowering the in situ design speed on the road.

Based on the above, the sight distance available at the site access is adequate.

3.3 Site Design and Circulation

Access to the site is provided from a driveway off Lynnlark Place. An east-west driveway at the north end of the site curves south behind the proposed building and provides access to the resident parking garage.

The configuration of the parking garage ramp relative to the adjacent parking aisles is awkward and has some challenges as it pertains to sightlines and circulation of vehicle traffic at the top and bottom of the ramps. It is acknowledged that the site is irregularly shaped, providing a challenging environment for ideal circulation. The site plan includes cutouts in the ramp walls to provide additional visibility, as well as convex mirrors at all 90 degree turns in the garage to mitigate these conditions.

Bicycle parking for residents of the proposed building is provided on the P2 level of the underground parking garage. The location of the bicycle parking may change as the design moves to construction drawings.

A 2.9 metre road dedication is provided on Sooke Road to accommodate future improvements. Sidewalks should be included on both the Sooke Road and Lynnlark Place frontages to improve the pedestrian environment in the vicinity of the site.

3.4 Loading Operations

Loading operations, including move-in / move-out, short-term parking, and waste collection operations are to be accommodated on-street on Lynnlark Place.



4.0 TRAFFIC VOLUMES

4.1 Traffic Analysis Scenarios and Design Periods

Traffic operations analyses have been undertaken during the weekday morning and afternoon peak hours under the following conditions:

- Existing traffic – traffic activity under current conditions
- Background traffic – traffic activity levels into the future which includes allowances for corridor growth and background developments
- Post-development traffic – traffic activity levels into the future with the site redeveloped and projected site generated traffic added to the road network

Traffic operations are discussed in the following sections for these scenarios:

- Existing conditions
- Opening day (2025) background conditions
- Opening day (2025) post-development conditions

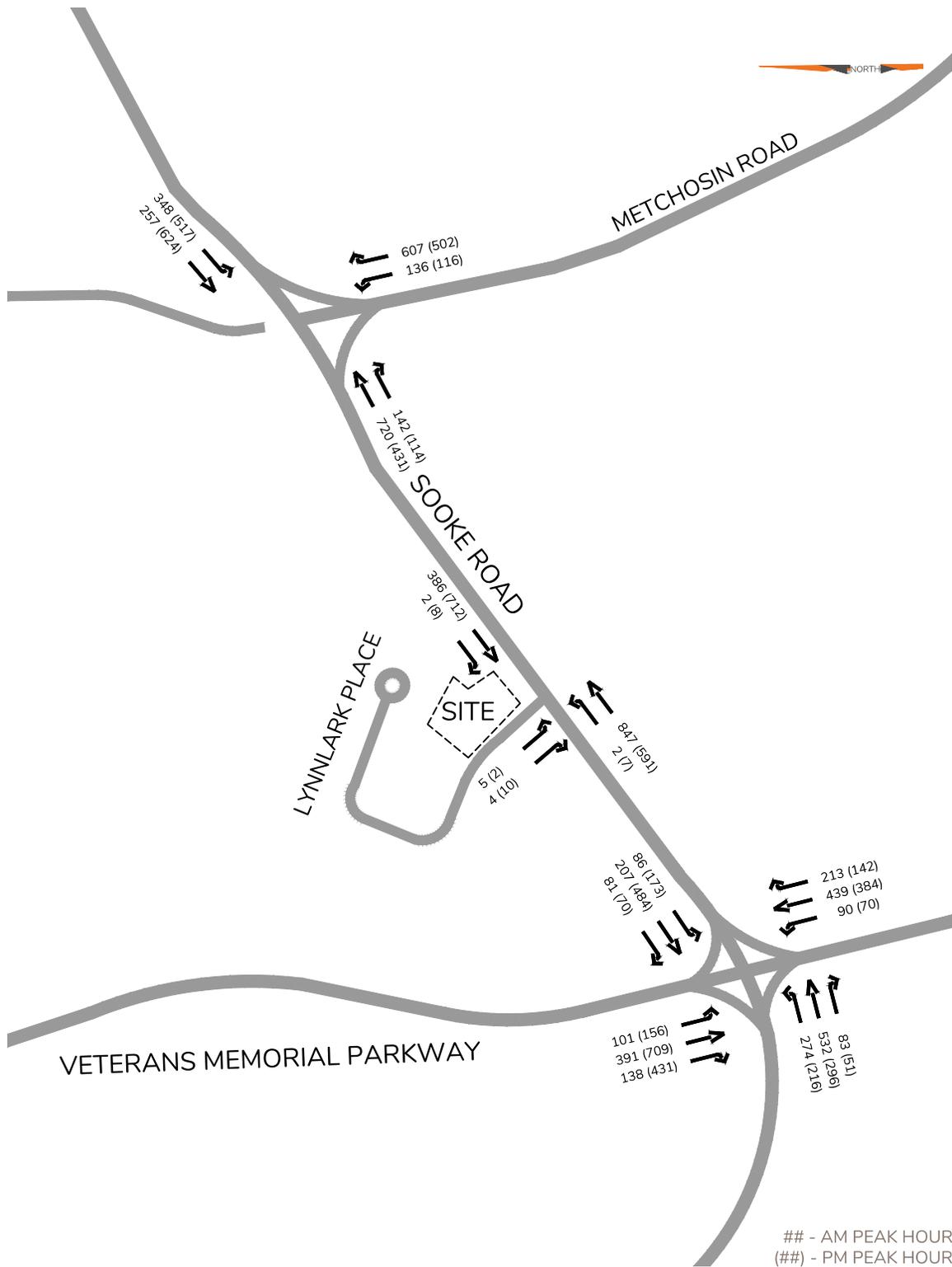
4.2 Existing Traffic Intersection Analysis

Base existing turning movement volumes were established for intersections within the study area for the weekday morning and afternoon peak period. Traffic count information adopted as the basis for the traffic operations analysis is summarized in **Table 4**.

Table 4 – Existing Traffic Count Information

Intersection	Date of Count	Source
Sooke Road / Lynnlark Place	March 16, 2023	WATT
Sooke Road / Veterans Memorial Parkway	March 16, 2023	WATT
Sooke Road / Metchosin Road	March 16, 2023	WATT

The existing area traffic volumes for the weekday morning and afternoon peak hour are illustrated in **Figure 5**.





4.3 Background Traffic Volumes

4.3.1 Corridor Growth

Corridor growth on all streets in the study area was forecast using a 2.0% annual linear growth rate applied to the observed volumes from 2023 to the 2025 horizon year.

4.3.2 Background Developments

Allowances were made to account for new traffic generated by other development proposals in proximity to the proposed site that are either under construction, approved, being reviewed, or in which an application is expected to be submitted to the City in the near future. A total of 6 background developments have been considered for opening day. A summary of the considered background developments is provided in **Table 5**.

Table 5 – Background Developments

Development Address	Development Statistics	Report Source	Trip Generation / Distribution Source
2353/2361 Sooke Road	916m ² Car Wash and Commercial Retail Units	N/A	ITE/Traffic Patterns
2330 Sooke Road	85 Residential Units	WATT Consulting Group	TIA
2403 Sooke Road	227 Residential Units	Bunt & Associates Engineering Ltd.	Draft Mini TIA
2350 & 2356 Sooke Road	83 Residential Units 89m ² Commercial Retail Units	Creative Transportation Solutions Ltd.	Draft TIA
Olympic View	917 Residential Units 40,000 ft ² 120-unit hotel 500-student school	WATT Consulting Group	TIA/Traffic Patterns
Royal Bay	2792 Residential Units 110,000 ft ² 2 schools - 1,900-students 51 Acres of Parkland 80,000 ft ² Office	WATT Consulting Group	TIA/Traffic Patterns



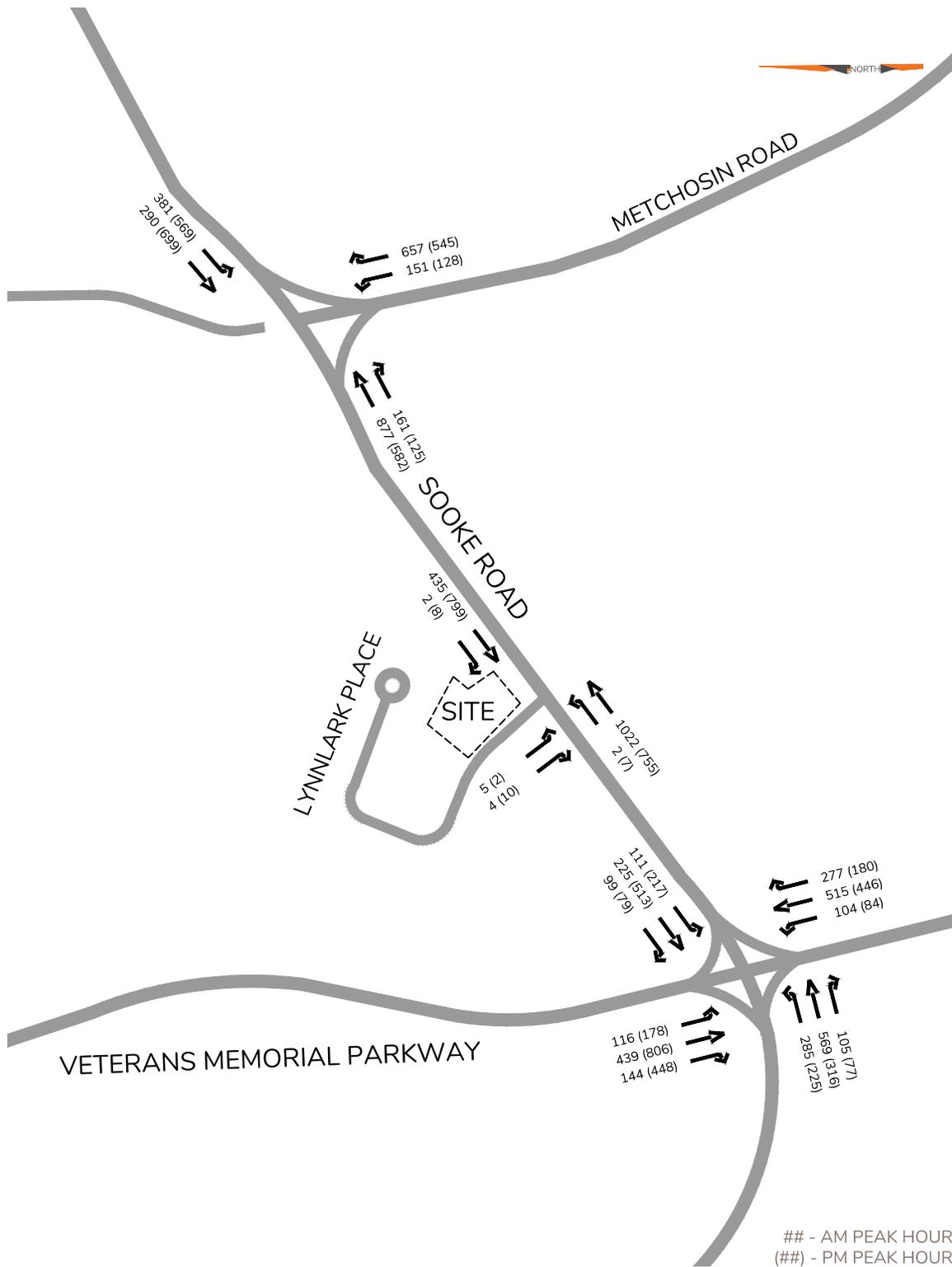
Trip generation and traffic assignments for each background development are based on information contained in the traffic impact assessments prepared for each project, except for 2353/2361 Sooke Road which has no traffic impact assessment written at this time, and Royal Bay and Olympic View which needed manual trip assignment specific to the study area.

For 2353/2361 Sooke Road the trip generation was estimated using rates published by the Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition), and trip assignment was based on existing traffic patterns and site access parameters. The AM trips for the car wash were excluded due to limits in ITE data and the likelihood that the business will not be open during the peak morning hour.

For Royal Bay and Olympic View, the buildout was assumed to be 10% complete for the horizon year of 2025. All trip generation was based on information contained in the traffic impact assessments prepared for the project, and the trip assignment was based on existing traffic patterns and site access parameters.

4.3.3 Opening Day Background Traffic Volumes

The opening day (i.e., 2025 horizon year) background traffic volumes are the sum of the existing traffic volumes, additional traffic generated by background developments, and the corridor growth allowances. The background traffic volumes for opening day are illustrated in **Figure 6**.





4.4 Site Traffic Volumes

4.4.1 Existing Site Trip Generation

Given the limited trip generation potential of the existing uses on the site (one (1) single family home), existing trips were not removed with the contemplation of the redevelopment of the site.

4.4.2 New Site Trip Generation

The developer has indicated that the building will be 6 floors with a total of 70 residential units. Vehicular trip generation rates for the proposed residential development are based on the Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition).

The trip generation forecast is summarized in **Table 6**.

Table 6 - Vehicle Trip Generation

ITE Trip Generation Manual 11th Edition Rates				
Land Use	Peak Hour	Trip Rate In	Trip Rate Out	Avg. Rate
Multifamily Housing (Mid-Rise) (Not Close to Rail Transit) (LU 221) ⁽¹⁾	AM	0.09	0.28	0.37
	PM	0.24	0.15	0.39
Vehicular Trip Generation				
Land Use	Peak Hour	In	Out	2-Way
Residential (70 units)	AM	6	20	26
	PM	17	10	27

Notes:

1. Trip rates are per dwelling unit

The proposed development is forecast to generate 26 and 27 two-way trips during the weekday morning and afternoon peak hours, respectively.



4.4.3 Trip Distribution and Assignment

The trip distribution pattern for site-generated traffic was established based on the existing traffic patterns and key origin/destinations in the region. The distribution of inbound and outbound traffic adopted for the proposed development is outlined in **Table 7**.

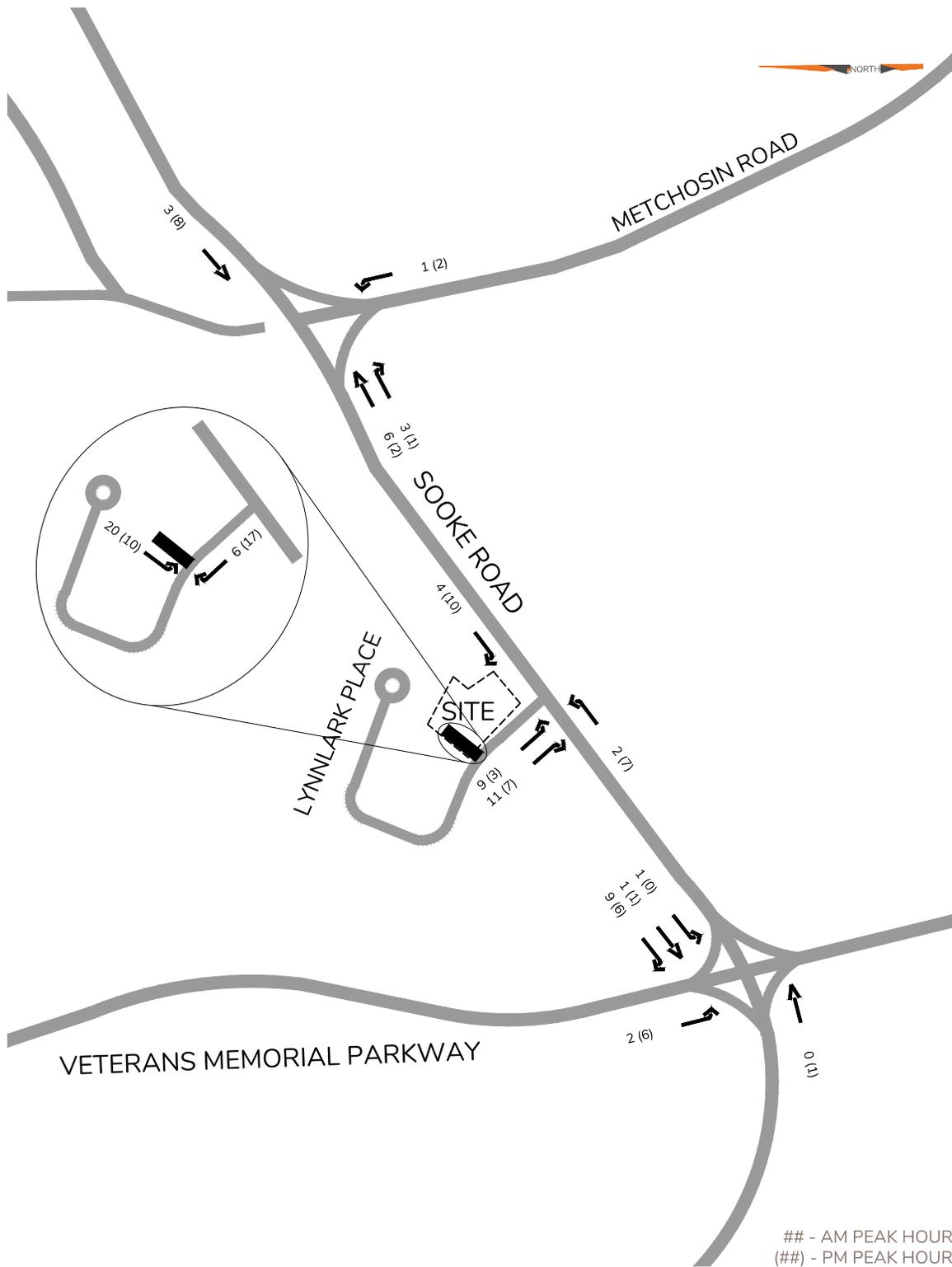
Table 7 – Site Traffic Distribution

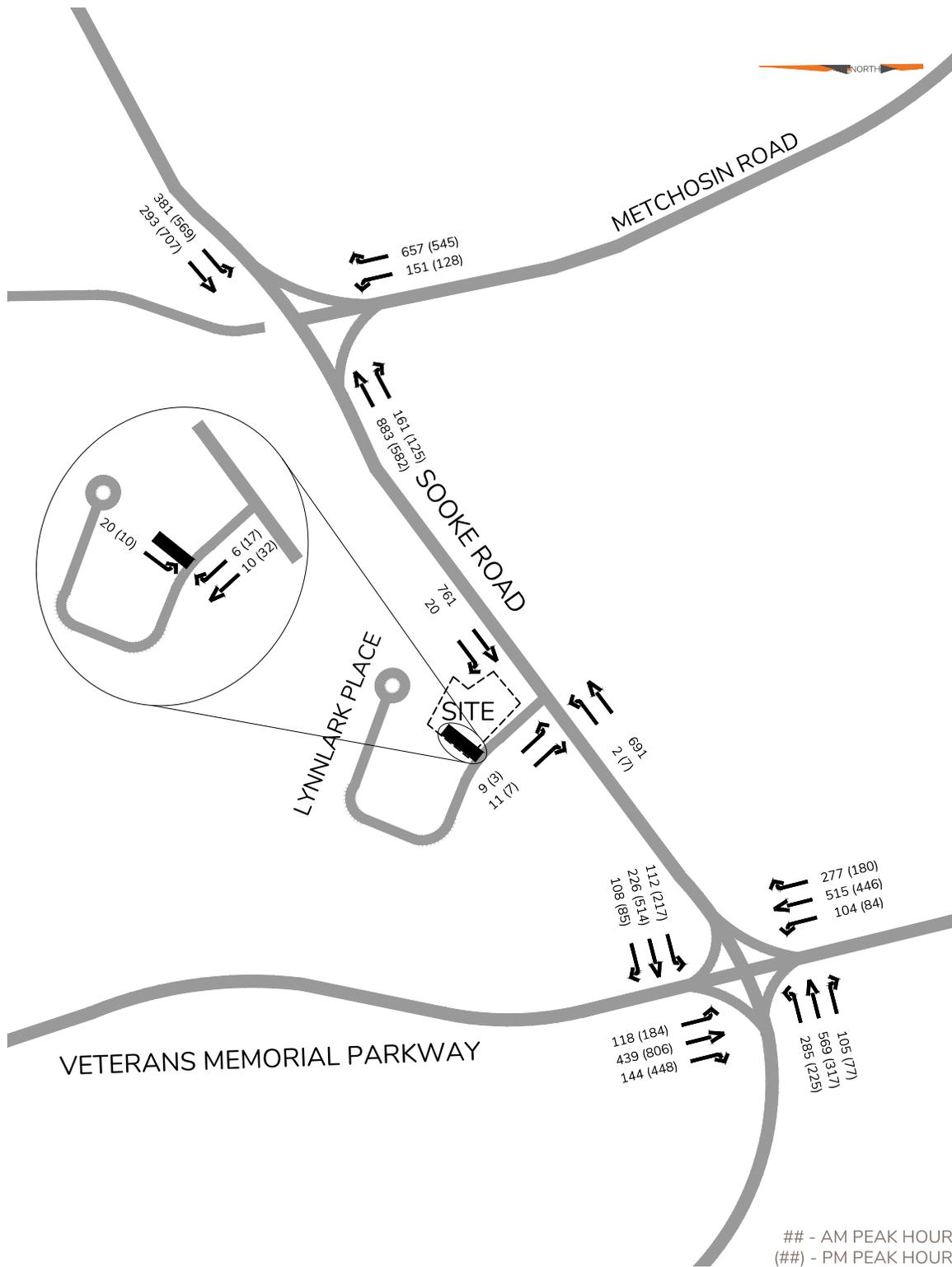
Street	Direction	AM	PM
Entering			
Sooke Road	East	60%	45%
	West	5%	5%
Metchosin Road	South	10%	15%
Veterans Memorial Parkway	North	20%	35%
	South	5%	0%
Exiting			
Sooke Road	East	30%	20%
	West	5%	10%
Metchosin Road	South	15%	10%
Veterans Memorial Parkway	North	45%	60%
	South	5%	0%

The site traffic volumes assigned to the area road network are illustrated in **Figure 7**.

4.5 Post-Development Traffic Volumes

The opening day (i.e., 2025 horizon year) post-development traffic volumes are the sum of the background traffic volumes and the site-related traffic generated by the proposed development. Post-development traffic volumes for the opening day horizon year are illustrated in **Figure 8**.







5.0 TRAFFIC OPERATIONS ANALYSIS

5.1 Methodology

Analysis of the traffic conditions at the intersections within the study area were undertaken using Synchro software (for signalized and stop-controlled intersections). Synchro / SimTraffic is a two-part traffic modelling software that provides analysis of traffic conditions based on traffic control, geometry, volumes, and traffic operations. Synchro software is used because of its ability to provide analysis using the *Highway Capacity Manual* (6th edition) methodology, while SimTraffic integrates established driver behaviours and characteristics to simulate actual conditions by randomly “seeding” or positioning vehicles travelling throughout the network. These measures of effectiveness include Level of Service (LOS), delay and 95th percentile queue length.

The delays and type of traffic control are used to determine the LOS. The LOS is broken down into six letter grades with LOS A being excellent operations and LOS F being unstable / failure operations. LOS C is generally considered to be an acceptable LOS by most municipalities. LOS D is generally considered to be on the threshold between acceptable and unacceptable operations. A description of LOS and Synchro is provided in **Appendix B**. Synchro reports are provided in **Appendix C**.

5.2 Input and Calibration Parameters

Heavy Vehicle Assumptions

A value of 2 percent heavy vehicles was calculated from the existing traffic count information.

Signal Timings

The existing signal timing plan was used for the signalized intersection in the study area.

Peak Hour Factor

Peak hour factors for each intersection were calculated from the existing traffic count information.



5.3 Existing Traffic Conditions

A summary of the existing traffic conditions for the intersections in the study area in the morning and afternoon peak hours is provided in **Table 8**.

Table 8 - Existing Traffic Operations

Key Movement	AM			PM		
	LOS	Delay (s)	95 th % Queue (m)	LOS	Delay (s)	95 th % Queue (m)
Sooke Road / Lynnlark Place						
SBLR	C	20.8	7	C	16.8	14
EBLT	A	8.2	110	A	9.3	86
WBTR	A	0.0	0	A	0.0	38
Sooke Road / Veterans Memorial Parkway						
NBL	C	30.9	22	D	36.7	23
NBT	D	39.7	50	D	41.8	57
NBR	A	0.0	24	A	0.0	11
SBL	C	31.6	28	C	33.1	65
SBT	D	38.3	46	D	45.8	105
SBR	A	0.0	9	A	0.0	88
EBL	C	24.3	27	D	41.4	37
EBL	C	24.3	84	D	41.4	81
EBTR	E	57.9	976	D	53.5	909
WBL	D	37.7	39	C	33.1	94
WBT	D	44.9	69	D	53.2	315
WBR	A	0.0	41	A	0.0	42
Sooke Road / Metchosin Road						
NBL	C	32.2	39	C	31.0	179
NBR	A	0.0	0	A	0.0	46
EBT	B	19.5	52	C	20.9	45
EBTR	B	19.5	61	C	20.9	51
WBL	C	23.6	65	B	19.4	115
WBT	A	2.8	25	A	2.9	214

Note: ## - Exceeds storage/acceptable limits



All intersections within the study area currently perform at an acceptable LOS D or better with delays of 54 seconds or less, except for the eastbound through/right movement at Sooke Road / Veterans Memorial Parkway in the AM peak hour which is operating at LOS E with delays of 58 seconds.

The 95th percentile queues are acceptable on most movements except for the westbound right and the eastbound movements at Sooke Road / Veterans Memorial Parkway. The eastbound left movement exceeds the available storage by 24 metres or less (i.e., three car lengths) during both peak hours. The eastbound through traffic has a queue (976 metres or less) that will back up and impede traffic at Cecil Blogg Drive in both peak hours. The westbound right movement exceeds the available storage by 2 metres or less (i.e., one car length) during both peak hours and the westbound left movement exceeds its storage by 24 metres or less (i.e., three car lengths) in the PM peak hour.



5.4 Opening Day Background Conditions

A summary of the traffic analysis results for the intersections in the study area on opening day (i.e., the 2025 horizon year) under background conditions in the morning and afternoon peak hours is provided in **Table 9**.

Table 9 – Opening Day Background Traffic Operations

Key Movement	AM			PM		
	LOS	Delay (s)	95 th % Queue (m)	LOS	Delay (s)	95 th % Queue (m)
Sooke Road / Lynnlark Place						
SBLR	D	26.8	8	C	20.0	17
EBLT	A	8.3	102	A	9.6	120
WBTR	A	0.0	0	A	0.0	34
Sooke Road / Veterans Memorial Parkway						
NBL	C	31.5	26	D	41.8	31
NBT	D	41.5	64	D	46.2	66
NBR	A	0.0	28	A	0.0	13
SBL	C	32.8	35	D	37.2	82
SBT	D	39.2	57	D	54.9	131
SBR	A	0.0	19	A	0.0	109
EBL	C	28.2	23	D	46.0	31
EBL	C	28.2	84	D	46.0	83
EBTR	F	104.2	978	E	64.2	1123
WBL	D	40.4	52	D	38.2	94
WBT	D	47.5	86	E	68.5	267
WBR	A	0.0	47	A	0.0	46
Sooke Road / Metchosin Road						
NBL	D	36.0	44	D	36.5	333
NBR	A	0.0	0	A	0.0	54
EBT	C	25.0	67	C	24.4	59
EBTR	C	25.0	75	C	24.4	69
WBL	C	27.0	72	C	22.8	137
WBT	A	2.9	26	A	2.9	433

Note: ## - Exceeds storage/acceptable limits



With the addition of background traffic, operational impacts to the network on opening day are relatively minor on most movements. Overall, delays across the network increase by less than 16 seconds, except for the eastbound through movement at Sooke Road / Veterans Memorial Parkway which increases by 46 seconds in the AM peak hour. Most movements continue to operate at LOS D or better, except the eastbound through movement in both peak hours, and the westbound through movement in the PM peak hour, which have reached LOS E/F. The southbound through movement is within 0.1 seconds of also being LOS E.

Most 95th percentile queues remain acceptable, except for where they already previously exceeded the available storage in the existing conditions at Sooke Road / Veterans Memorial Parkway in the AM peak hour, with a few more movements exceeding their storage in the PM peak hour. The eastbound left movement continues to exceed the available storage by 24 metres or less (i.e., three car lengths) during both peak hours and the eastbound through traffic has a queue (1123 metres or less) in the PM peak hour that will back up and impede traffic at Jacklin Road in the PM peak hour. The westbound right movement exceeds the available storage by 7 metres or less (i.e., one car length) during both peak hours and the westbound left movement continues to exceed its storage by 24 metres or less (i.e., three car lengths) in the PM peak hour. The southbound right movement will exceed its storage by 19 metres (i.e., 3 car lengths).

Three movements in the PM peak hour at Sooke Road / Metchosin Road will exceed their available storage. The northbound left movement queues to 333 metres (i.e., 48 car lengths) and will back up to Cedarcrest Drive, the westbound left movement will exceed its storage by 17 metres (i.e., 3 car lengths), and the westbound through movement will have a queue of 433 metres (i.e., 62 car lengths) and will back up to Kelly Road.



5.5 Opening Day Post-Development Conditions

A summary of the traffic analysis results for the intersections in the study area on opening day (i.e., the 2025 horizon year) under post-development conditions in the morning and afternoon peak hours is provided in **Table 10**.

Table 10 – Opening Day Post Development Traffic Operations

Key Movement	AM			PM		
	LOS	Delay (s)	95 th % Queue (m)	LOS	Delay (s)	95 th % Queue (m)
Sooke Road / Lynnlark Place						
SBLR	D	27.6	12	C	23.0	30
EBLT	A	8.4	120	A	9.7	134
WBTR	A	0.0	1	A	0.0	32
Sooke Road / Veterans Memorial Parkway						
NBL	C	31.6	27	D	41.9	27
NBT	D	41.6	59	D	46.3	62
NBR	A	0.0	30	A	0.0	14
SBL	C	32.9	32	D	37.9	79
SBT	D	39.2	53	E	55.1	121
SBR	A	0.0	11	A	0.0	110
EBL	C	28.3	26	D	46.0	31
EBL	C	28.3	83	D	46.0	84
EBTR	F	105.3	956	E	64.4	1100
WBL	D	40.5	48	D	38.3	93
WBT	D	47.6	76	E	68.9	266
WBR	A	0.0	47	A	0.0	50
Sooke Road / Metchosin Road						
NBL	D	36.1	45	D	36.5	170
NBR	A	0.0	11	A	0.0	72
EBT	C	25.2	64	C	24.5	59
EBTR	C	25.2	73	C	24.5	69
WBL	C	27.1	75	C	23.0	150
WBT	A	3.0	25	A	2.9	689
Lynnlark Place / Site Driveway						
WBLR	A	8.7	8	A	8.8	6

Note: ## - Exceeds storage/acceptable limits



With the addition of site-related traffic, operational impacts to the network in both peak hours are minor, with overall delays across the network increasing by less than 3 seconds and most movements operating at LOS D or better, except for the previously failing movements under background conditions.

The 95th percentile queues are acceptable on all movements except where storage was previously noted to be exceeded, and most queues have not grown with the addition of post development traffic, except for some movements at Sooke Road / Metchosin Road. Overall, post development traffic has increased 18 metres or less (i.e., 3 car lengths) to the movements at Sooke Road / Metchosin Road, except for the westbound through movement which increased 256 metres and now has a queue of 689 metres (i.e., 98 car lengths) which will back traffic up to Mount View Avenue.

5.6 Discussion

All intersections within the study area currently perform at an acceptable LOS, except for the eastbound through movement at Sooke Road / Veterans Memorial Parkway. The 95th percentile queues are acceptable on all approaches, except for the westbound turning movements at Sooke Road / Veterans Memorial Parkway (westbound right in the AM peak hour, and westbound right and left in the PM peak hour) which exceeds its storage by 24 metres (i.e., 3 car lengths), and the eastbound through approach at Sooke Road / Veterans Memorial Parkway which has a queue that will impede traffic at Cecil Blogg Drive. The split signal phasing at the Sooke Road / Veterans Memorial Parkway intersection limits eastbound and westbound throughput, extending the queues several hundred metres beyond the intersection. Removing the split phasing when the Sooke Road Corridor re-design is undertaken would improve performance at this intersection.

The addition of concurrent development traffic and corridor growth under background conditions worsens performance on Sooke Road. It is notable that the opening day (2025) analysis assumed that all of the background developments noted above would be built out as noted, and that the improvements to the Sooke Road corridor would not be constructed. Additionally, the assumption of a blanket 2% corridor growth in addition to site-generated traffic from several large concurrent developments is a conservative estimate. As such, the background traffic volumes assumed for the purposes of this study are a worst case scenario.



It is also notable that as the LOS deteriorates, the relationship to increased traffic and delay time is not linear. A small amount of traffic will have minor or no effect when the LOS is good (LOS C or better); however, when the LOS is failing (LOS E / F) the delay time will be affected much more since the delay calculation is an exponential function.

The addition of site-related traffic to the road network traffic has a very minor impact on performance at the study area intersections.

Ultimately, this development is supportive of the City of Colwood's goals to intensify the Sooke Road transit corridor. Planned improvements to Sooke Road in the future should be expedited to support alternatives to single-occupancy automobile travel.



6.0 LEFT TURN LANE ANALYSIS

A left turn lane analysis was examined for Lynnlark Place using the traffic volumes as laid out in this report for the 2025 Opening Day post development conditions. The left-turn comparison is displayed in **Table 11**.

Table 11 – Lynnlark Place Comparison: Left-Turn Lane Analysis

Key Movement	Opening Day Post Development (2025) No Left-Turn Lane					
	AM			PM		
	LOS	Delay (s)	95 th % Queue (m)	LOS	Delay (s)	95 th % Queue (m)
Sooke Road / Lynnlark Place						
SBLR	D	27.6	12	C	23.0	30
Key Movement	Opening Day Post Development (2025) With Left Turn Lane					
	AM			PM		
	LOS	Delay (s)	95 th % Queue (m)	LOS	Delay (s)	95 th % Queue (m)
Sooke Road / Lynnlark Place						
SBL	E	42.6	6	E	43.8	4
SBR	B	11.4	10	C	15.7	32

The delay and queue for the right-hand turning movement would be marginally improved by adding a left-turn lane on Lynnlark Place, but the left-turn would not improve. The LOS on opening day without the left-turn lane is C and there are only 14 left turns in the AM and 5 left turns in the PM peak hour. Based on the low volume and lack of improvement to the LOS and queue on the southbound movement, a left turn lane is not warranted at Sooke Road / Lynnlark Place.



7.0 TRANSPORTATION DEMAND MANAGEMENT

Transportation demand management (TDM) is the application of strategies and policies to influence individual travel choice, most commonly to reduce single-occupant vehicle travel. TDM measures typically aim to encourage sustainable travel, enhance travel options, and decrease parking demand. The following sections present a menu of TDM measures that the applicant has committed to pursue for the proposed development.

7.1 Bicycle Maintenance Facility

7.1.1 Overview

Residential developments can provide dedicated on-site bicycle maintenance facilities, such as bicycle repair tools, pumps, wash stations, etc., to support ongoing bicycle use among building users.¹ This is particularly beneficial for residents living in smaller dwelling units where space is at a premium and/or access to a bicycle repair service may be inaccessible or present a financial barrier. The following amenities should be included at minimum:

- **Repair Tools:** Bicycle repair tools including: two identical tire levers; two screwdrivers (one flat head and one phillips); double sized wrenches at following sizes 8, 9, 10, 11, 15, 32 mm; allen wrenches at the following sizes 2.5, 3, 5, 6, 8 mm; a tire pump that works with Schrader and Presta valves.
- **Bike Repair Stand**
- **Bike Wash Station:** A station with a hose, drain, and supplies which can assist a resident in cleaning their bicycle.
- **Lighting and surveillance:** The facility should be well-lit (inside and out), with consideration for surveillance systems to address possible personal security issues.
- **Information:** Cycling network maps, information on bicycle shops, and an advertising space for scheduled events.

¹ Victoria Transport Policy Institute. (2015). *Parking Management: Strategies for More Efficient Use of Parking Resources*. Retrieved from: www.vtpi.org/tdm/tdm28.htm#_Toc128220491



7.1.2 Commitment

The applicant will provide two (2) bike repair stands, one (1) additional facility than is required by the off-street parking by-law. Both bicycle repair stands will be provided in the bike room on the P2 level of the underground parking garage.



8.0 CONCLUSIONS

Traffic generated by the proposed development can be accommodated on the existing road network on opening day. Existing delays at the study intersections are not substantially impacted by the proposed development.

Sooke Road is the main route for most vehicles in the AM and PM peak hour, leading to significant eastbound queues in the afternoon at the Sooke Road / Veterans Memorial Parkway intersection. This issue will most likely be alleviated by the construction of the 30 metre right of way improvement project that is planned for Sooke Road. The City of Colwood should consider removing the split phasing from the eastbound and westbound movements on Sooke Road when the corridor improvements are undertaken.

Continued investment in walking, cycling and transit infrastructure by the City of Colwood and BC Transit will not only help to reduce vehicular traffic to/from this site, but also across the district. Shifting trips from vehicles to other modes will improve the expected long-term conditions.

9.0 RECOMMENDATIONS

The developer should:

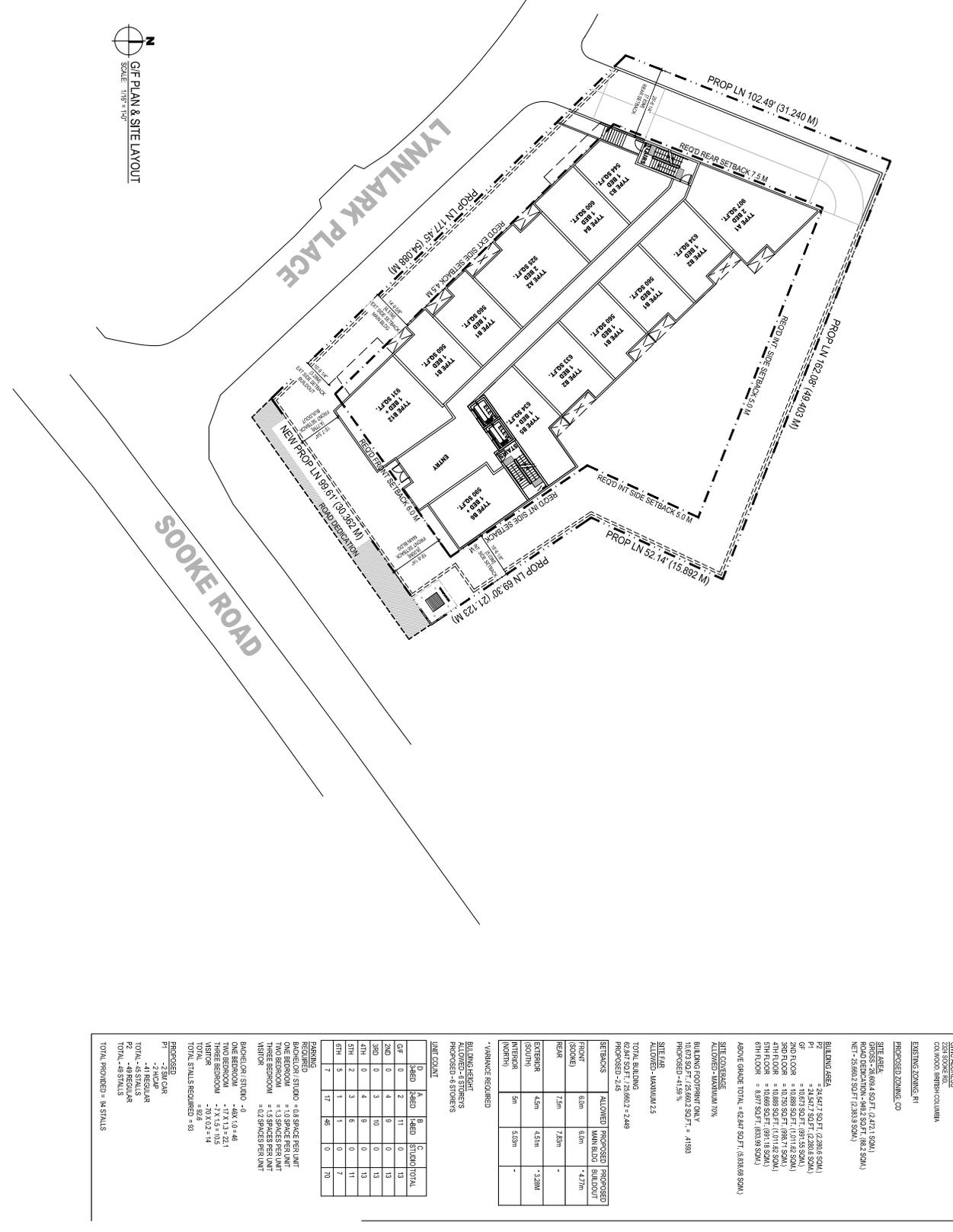
- Provide cutouts in the parking garage ramp walls and convex mirrors at all 90 degree turns to provide additional visibility within the parking garage.
- Install sidewalks along the Lynnlark Place and Sooke Road frontages.

The City of Colwood should:

- Expedite the Sooke Road Corridor redesign in order to better support pedestrians, cyclists, and transit users.
- Explore ways to reconfigure the intersection of Sooke Road / Veterans Memorial Parkway when the Sooke Road Corridor redesign is undertaken to remove the split signal phasing and alleviate excessive queueing



APPENDIX A – SITE PLAN



SITE STATISTICS

DATE: 22-04-2022
SCALE: 1/8" = 1'-0"
PROJECT NUMBER: 22-044
CLIENT: ASI
DATE: FEB 27th, 2022

EXISTING ZONING: R1
PROPOSED ZONING: C3
SITE AREA: 698,450 SQ FT (24,211 SQM)
ROAD FRONTAGE: 489.2 SQ FT (45.2 SQM)
NET AREA: 25,680.2 SQ FT (2,383.9 SQM)

BUILDING AREA:
 P2 = 24,947 SQ FT (2,280.6 SQM)
 GF = 10,677 SQ FT (979.5 SQM)
 2ND FLOOR = 10,888 SQ FT (1,016.9 SQM)
 3RD FLOOR = 10,781 SQ FT (997.1 SQM)
 4TH FLOOR = 10,699 SQ FT (989.1 SQM)
 5TH FLOOR = 10,699 SQ FT (989.1 SQM)
 6TH FLOOR = 8,877 SQ FT (819.9 SQM)
ABOVE GRADE TOTAL: 62,881 SQ FT (5,808.9 SQM)

SITE COVERAGE:
 ALLOWED: MAXIMUM 10%
BUILDING FOOTPRINT ONLY:
 PROPOSED: 22,880 SQ FT = 4,193%
 PROPOSED: 4,253%

SETBACKS	ALLOWED	PROPOSED
FRONT (5.0M)	5.0M	4.27M
REAR (7.5M)	7.5M	-
EXTENSION (SOUTH) (4.5M)	4.5M	3.28M
INTERIOR (5M)	5.0M	-

UNIT COUNT

GF	2ND	3RD	4TH	5TH	6TH	TOTAL
0	2	11	0	13	0	26
0	4	8	0	13	0	25
0	3	10	0	13	0	26
0	4	9	0	13	0	26
1	1	1	0	7	0	9
17	46	0	0	70		

PARKING:
 REQUIRED: 48 SPACES PER UNIT
 PROVIDED: 48 SPACES PER UNIT
BACHELOR STUDIO: 48 SPACES PER UNIT
 PROVIDED: 48 SPACES PER UNIT
ONE BEDROOM: 1.03 SPACES PER UNIT
 PROVIDED: 1.03 SPACES PER UNIT
TWO BEDROOM: 1.5 SPACES PER UNIT
 PROVIDED: 1.5 SPACES PER UNIT
TOTAL SPACES REQUIRED: 83
TOTAL SPACES PROVIDED: 84

PROCESSED:
 P1 - 23M CAR
 P2 - 41 REGULAR
 P3 - 48 REGULAR
 P4 - 48 REGULAR
TOTAL PROVIDED: 84 STALLS

CONTRACTOR: LOVICK SCOTT ARCHITECTS
PROJECT NUMBER: 22-044
DATE: FEB 27th, 2022

3707 1ST AVENUE
 BURNABY, BC V5C 3V6
 602 WILLOW STREET
 MEMBER OF THE ABC: AAA, SAA, MAA
 ARCHITECTURAL FIRM

2324 APARTMENT
 2324 SOOKE ROAD
 CALDWELL, BRITISH COLUMBIA
PROPOSED ZONING: C3
EXISTING ZONING: R1
SCALE: 1/8" = 1'-0"
DATE: FEB 27th, 2022

2324 APARTMENT (22-044)

CONTRACTOR: LOVICK SCOTT ARCHITECTS
PROJECT NUMBER: 22-044
DATE: FEB 27th, 2022

3707 1ST AVENUE
 BURNABY, BC V5C 3V6
 602 WILLOW STREET
 MEMBER OF THE ABC: AAA, SAA, MAA
 ARCHITECTURAL FIRM

2324 APARTMENT
 2324 SOOKE ROAD
 CALDWELL, BRITISH COLUMBIA
PROPOSED ZONING: C3
EXISTING ZONING: R1
SCALE: 1/8" = 1'-0"
DATE: FEB 27th, 2022

2324 APARTMENT (22-044)

CONTRACTOR: LOVICK SCOTT ARCHITECTS
PROJECT NUMBER: 22-044
DATE: FEB 27th, 2022

3707 1ST AVENUE
 BURNABY, BC V5C 3V6
 602 WILLOW STREET
 MEMBER OF THE ABC: AAA, SAA, MAA
 ARCHITECTURAL FIRM



APPENDIX B - SYNCHRO BACKGROUND



SYNCHRO MODELLING SOFTWARE DESCRIPTION

The traffic analysis was completed using Synchro and SimTraffic traffic modelling software. Results were measured in delay, level of service (LOS), 95th percentile queue length and volume to capacity ratio. Synchro is based on the Highway Capacity Manual (HCM) methodology. SimTraffic integrates established driver behaviours and characteristics to simulate actual conditions by randomly “seeding” or positioning vehicles travelling throughout the network. The simulation is run ten times (ten different random seedings of vehicle types, behaviours, and arrivals) to obtain statistical significance of the results.

Levels of Service

Traffic operations are typically described in terms of levels of service, which rates the amount of delay per vehicle for each movement and the entire intersection. Levels of service range from LOS A (representing best operations) to LOS E/F (LOS E being poor operations and LOS F being unpredictable/disruptive operations). LOS E/F are generally unacceptable levels of service under normal everyday conditions. A LOS C or better is considered acceptable operations, while D is on the threshold between acceptable and unacceptable operations. Highway operations will typically need to operate at LOS C or better for through movements and LOS E or better for other traffic movements with lower order roads.

The hierarchy of criteria for grading an intersection or movement not only includes delay times, but also considers traffic control type (stop signs or traffic signal). For example, if a vehicle is delayed for 19 seconds at an unsignalized intersection, it is considered to have an average operation, and would therefore be graded as an LOS C. However, at a signalized intersection, a 19 second delay would be considered a good operation and therefore it would be given an LOS B. The table below indicates the range of delay for LOS for signalized and unsignalized intersections.

Table A1: LOS Criteria, by Intersection Traffic Control

Level of Service (LOS)	Unsignalized Intersection Average Vehicle Delay (sec / veh)	Signalized Intersection Average Vehicle Delay (sec / veh)
A	0 – 10	0 – 10
B	> 10 – 15	> 10 – 20
C	> 15 – 25	> 20 – 35
D	> 25 – 35	> 35 – 55
E	> 35 – 50	> 55 – 80
F	> 50	> 80



APPENDIX C - SYNCHRO REPORTS

HCM 6th Signalized Intersection Summary
2 - WMP & SOOKE RD
03/24/2023

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SRB
Lane Configurations	7+1	1	1	1	1	1	1	1	1	1	1	1
Traffic Volume (veh/h)	274	532	83	86	207	81	90	439	213	101	391	138
Future Volume (veh/h)	274	532	83	86	207	81	90	439	213	101	391	138
Initial Q (Qd), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Parking Bus. Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	No	No	No	No	No	No	No	No	No	No	No
Adj Sat Flow, veh/hln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	311	605	0	98	235	0	102	499	0	115	444	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh. %	2	2	2	2	2	2	2	2	2	2	2	2
Cap. veh/h	1169	633	2	298	313	2	289	697	2	255	701	2
Arrive On Green	0.34	0.34	0.00	0.17	0.17	0.00	0.07	0.20	0.00	0.07	0.20	0.00
Sat Flow, veh/h	3456	1870	0	1781	1870	1585	1781	3554	1585	1781	3554	1585
Gp Volume(v), veh/h	311	605	0	98	235	0	102	499	0	115	444	0
Gp Sat Flow(s), veh/hln	1728	1870	0	1781	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(q_s), s	6.6	31.7	0.0	4.9	12.0	0.0	4.5	13.2	0.0	5.1	11.5	0.0
Cycle Q Clear(q_c), s	6.6	31.7	0.0	4.9	12.0	0.0	4.5	13.2	0.0	5.1	11.5	0.0
Pop In Lane	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Gp Cap(c), veh/h	1169	633	0.27	298	313	0.33	289	697	0.27	255	701	0.27
V/C Ratio(X)	0.27	0.96	0.00	0.33	0.75	0.00	0.38	0.72	0.00	0.45	0.63	0.00
Avail Cap(c_a), veh/h	1172	634	0.27	746	783	0.33	746	1418	0.27	746	1418	0.27
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	24.1	32.4	0.0	36.8	39.8	0.0	29.6	37.7	0.0	29.9	36.9	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(Q3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOf(60%),veh/h	1.8	13.8	0.0	1.7	4.6	0.0	1.4	4.2	0.0	1.6	3.6	0.0
Unsig. Movement Delay, s/veh	24.3	57.9	0.0	37.7	44.9	0.0	30.9	39.7	0.0	31.6	38.3	0.0
LnGp Delay(d)sv/veh	C	E	D	D	D	C	D	D	C	C	D	D
LnGp LOS	C	E	D	D	D	C	D	D	C	C	D	D
Approach Vol, veh/h	916	916	333	601	559	333	601	559	333	601	559	333
Approach Delay, s/veh	46.5	46.5	42.8	38.2	36.9	42.8	38.2	36.9	42.8	38.2	36.9	42.8
Approach LOS	D	D	D	D	D	D	D	D	D	D	D	D
Timer - Assigned Phs	1	2	4	5	6	8	8	8	8	8	8	8
Phs Duration (G+Y+Rc), s	11.6	25.5	40.4	11.5	25.6	22.8	22.8	22.8	22.8	22.8	22.8	22.8
Change Period (Y+Rc), s	4.6	* 5.8	6.5	* 4.8	* 5.8	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	12.0	* 4.0	34.0	* 12	* 4.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0
Max Q Clear Time (q_c+H), s	7.1	15.2	33.7	6.5	13.5	14.0	14.0	14.0	14.0	14.0	14.0	14.0
Green Ext Time (p_c), s	0.2	4.5	0.2	0.2	4.0	2.8	2.8	2.8	2.8	2.8	2.8	2.8
Intersection Summary	HCM 6th CH Delay 41.7											
HCM 6th LOS	D											

Notes
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for (NBR, EBR, WBR, SBR) is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
3 - METCHOSIN RD & SOOKE RD
03/24/2023

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	7+1	1	1	1	1	1
Traffic Volume (veh/h)	720	142	348	257	136	607
Future Volume (veh/h)	720	142	348	257	136	607
Initial Q (Qd), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00	1.00	1.00	1.00
Parking Bus. Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	No	No	No	No	No
Adj Sat Flow, veh/hln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	800	0	387	286	151	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh. %	2	2	2	2	2	2
Cap. veh/h	1187	535	2548	203	203	2
Arrive On Green	0.33	0.00	0.30	0.72	0.11	0.00
Sat Flow, veh/h	3741	0	1781	3647	1781	1585
Gp Volume(v), veh/h	800	0	387	286	151	0
Gp Sat Flow(s), veh/hln	1777	0	1781	1777	1781	1585
Q Serve(q_s), s	12.1	0.0	12.2	1.6	5.1	0.0
Cycle Q Clear(q_c), s	12.1	0.0	12.2	1.6	5.1	0.0
Pop In Lane	1.00	0.00	1.00	1.00	1.00	1.00
Lane Gp Cap(c), veh/h	1187	535	2548	203	203	0.74
V/C Ratio(X)	0.67	0.00	0.72	0.11	0.11	0.00
Avail Cap(c_a), veh/h	1529	1136	2548	568	568	1.00
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	18.0	0.0	19.6	2.7	26.9	0.0
Incr Delay (d2), s/veh	1.5	0.0	4.0	0.0	5.3	0.0
Initial Q Delay(Q3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOf(60%),veh/h	2.1	0.0	2.7	0.0	1.5	0.0
Unsig. Movement Delay, s/veh	19.5	0.0	23.6	2.8	32.2	0.0
LnGp Delay(d)sv/veh	B	C	A	C	C	C
LnGp LOS	B	C	A	C	C	C
Approach Vol, veh/h	800	673	151	322	800	673
Approach Delay, s/veh	19.5	14.7	32.2	14.7	32.2	19.5
Approach LOS	B	B	C	B	C	B
Timer - Assigned Phs	1	2	4	6	6	6
Phs Duration (G+Y+Rc), s	24.0	26.0	12.8	50.0	50.0	50.0
Change Period (Y+Rc), s	5.2	5.0	* 5.6	5.0	5.0	5.0
Max Green Setting (Gmax), s	40.0	27.0	* 20	20.0	20.0	20.0
Max Q Clear Time (q_c+H), s	14.2	14.1	7.1	3.6	3.6	3.6
Green Ext Time (p_c), s	4.6	6.8	0.6	2.7	2.7	2.7
Intersection Summary	HCM 6th CH Delay 18.7					
HCM 6th LOS	B					

Notes
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for (NBR, EBR) is excluded from calculations of the approach delay and intersection delay.

HCM 6th TWSC
1: SGOKE RD & Lynnark Pl
03/24/2023

Intersection						
Int Delay, s/veh	0.2					
Movement						
	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	2	4	1	2	2	4
Traffic Vol, veh/h	2	847	386	2	5	4
Future Vol, veh/h	2	847	386	2	5	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	941	429	2	6	4

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	431	0	0
Stage 1	-	-	430
Stage 2	-	-	945
Critical Hwy	4.12	-	6.42
Critical Hwy Sig 1	-	-	5.42
Critical Hwy Sig 2	-	-	5.42
Follow-up Hwy	2.218	-	3.518
Plat Cap-1 Maneuver	1129	-	160
Stage 1	-	-	656
Stage 2	-	-	378
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1129	-	159
Mov Cap-2 Maneuver	-	-	159
Stage 1	-	-	653
Stage 2	-	-	378

Approach	EB	WB	SB
HCM Control Delay, s	0	0	20.8
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBL	SBR
Capacity (veh/h)	1129	-	-	-	-	238
HCM Lane V/C Ratio	0.002	-	-	-	-	0.042
HCM Control Delay (s)	6.2	0	-	-	-	20.8
HCM Lane LOS	A	A	-	-	-	C
HCM 95th %ile Q(veh)	0	-	-	-	-	0.1

HCM 6th TWSC
4: Lynnark Pl & Site Driveway
03/24/2023

Intersection						
Int Delay, s/veh	0					
Movement						
	WBL	WBR	NBT	NBR	SBL	SBR
Lane Configurations	4	1	1	2	4	4
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	1	0	0
Stage 1	0	-	-
Stage 2	1	-	-
Critical Hwy	6.42	6.22	4.12
Critical Hwy Sig 1	5.42	-	-
Critical Hwy Sig 2	5.42	-	-
Follow-up Hwy	3.518	3.318	2.218
Plat Cap-1 Maneuver	1022	-	-
Stage 1	-	-	-
Stage 2	1022	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1022	-	-
Mov Cap-2 Maneuver	1022	-	-
Stage 1	-	-	-
Stage 2	1022	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	SBL	SBR
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	0	0	0
HCM Lane LOS	-	A	A	-
HCM 95th %ile Q(veh)	-	-	-	-

HCM 6th Signalized Intersection Summary
 2- VWP & SOOKE RD
 03/24/2023

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SRB
Lane Configurations	1T	1T	1T	1T	1T	1T	1T	1T	1T	1T	1T	1T
Traffic Volume (veh/h)	216	296	51	173	484	70	384	142	156	709	431	431
Future Volume (veh/h)	216	296	51	173	484	70	384	142	156	709	431	431
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Parking Bus. Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	No	No	No	No	No	No	No	No	No	No	No
Adj Sat Flow, veh/h	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	223	305	0	178	499	0	72	395	0	161	731	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh. %	2	2	2	2	2	2	2	2	2	2	2	2
Cap. veh/h	697	377	2	537	584	2	194	786	2	334	906	2
Arrive On Green	0.20	0.20	0.00	0.30	0.30	0.00	0.05	0.22	0.00	0.09	0.25	0.00
Sat Flow, veh/h	3456	1870	0	1781	1870	1585	1781	3554	1585	1781	3554	1585
Gp Volume(v), veh/h	223	305	0	178	499	0	72	396	0	161	731	0
Gp Sat Flow(s), veh/h	1728	1870	0	1781	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(q_s), s	6.6	18.7	0.0	9.3	30.6	0.0	3.7	11.8	0.0	8.1	23.2	0.0
Cycle Q Clear(q_c), s	6.6	18.7	0.0	9.3	30.6	0.0	3.7	11.8	0.0	8.1	23.2	0.0
Pop In Lane	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Gp Cap(c), veh/h	697	377	0	537	584	0	194	786	0	334	906	0
V/C Ratio(X)	0.32	0.81	0.00	0.33	0.88	0.00	0.37	0.50	0.00	0.48	0.81	0.00
Aval Cap(c_a), veh/h	976	528	0	622	653	0	282	1181	0	359	1181	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.0	45.8	0.0	32.6	40.0	0.0	35.0	41.1	0.0	31.6	42.1	0.0
Incr Delay (d2), s/veh	0.4	7.7	0.0	0.5	13.1	0.0	1.7	0.7	0.0	1.5	3.8	0.0
Initial Q Delay(Q), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfC(50%),veh/h	2.3	7.6	0.0	3.1	12.5	0.0	1.3	4.0	0.0	2.6	8.0	0.0
Unsig. Movement Delay, s/veh	41.4	53.5	0.0	33.1	53.2	0.0	36.7	41.8	0.0	33.1	45.8	0.0
LnGp Delay(d)sv/h	D	D	C	D	D	D	D	D	C	D	D	D
LnGp LOS	D	D	C	D	D	D	D	D	C	D	D	D
Approach Vol, veh/h	528	677	484	892	410	435	892	410	435	892	410	435
Approach Delay, s/veh	48.4	47.9	D	D	D	D	D	D	D	D	D	D
Approach LOS	D	D	D	D	D	D	D	D	D	D	D	D
Timer - Assigned Phs	1	2	4	5	6	8						
Phs Duration (G+Y+Rc), s	14.9	32.4	30.8	10.8	36.5	42.3						
Change Period (Y+Rc), s	4.6	*5.8	6.5	*4.8	*5.8	6.0						
Max Green Setting (Gmax), s	12.0	*4.0	34.0	*12	*4.0	42.0						
Max Q Clear Time (Q_c+H), s	10.1	13.8	20.7	5.7	25.2	32.8						
Green Ext Time (g_c+H), s	0.2	3.5	3.5	0.2	5.5	3.7						
Intersection Summary	HCM 6th CH Delay 45.2											
HCM 6th LOS	D											

Notes
 * HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
 Unsignalized Delay for (NBR, EBR, WBR, SBR) is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
 3- METCHOSIN RD & SOOKE RD
 03/24/2023

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	1T	1T	1T	1T	1T	1T
Traffic Volume (veh/h)	431	114	517	624	116	502
Future Volume (veh/h)	431	114	517	624	116	502
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00	1.00	1.00	1.00
Parking Bus. Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	No	No	No	No	No
Adj Sat Flow, veh/h	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	444	0	533	643	120	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh. %	2	2	2	2	2	2
Cap. veh/h	872	2	706	2583	177	2
Arrive On Green	0.25	0.00	0.40	0.73	0.10	0.00
Sat Flow, veh/h	3741	0	1781	3647	1781	1585
Gp Volume(v), veh/h	444	0	533	643	120	0
Gp Sat Flow(s), veh/h	1777	0	1781	1777	1781	1585
Q Serve(q_s), s	6.6	0.0	15.8	3.7	4.0	0.0
Cycle Q Clear(q_c), s	6.6	0.0	15.8	3.7	4.0	0.0
Pop In Lane	1.00	0.00	1.00	1.00	1.00	1.00
Lane Gp Cap(c), veh/h	872	0	706	2583	177	0
V/C Ratio(X)	0.51	0.75	0.25	0.68	0.68	0.68
Aval Cap(c_a), veh/h	1570	1166	2583	583	1570	1570
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	19.9	0.0	15.9	2.8	26.6	0.0
Incr Delay (d2), s/veh	1.0	0.0	3.5	0.1	4.4	0.0
Initial Q Delay(Q), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfC(50%),veh/h	1.4	0.0	2.4	0.0	1.2	0.0
Unsig. Movement Delay, s/veh	20.9	0.0	19.4	2.9	31.0	0.0
LnGp Delay(d)sv/h	C	B	A	C	C	C
LnGp LOS	C	B	A	C	C	C
Approach Vol, veh/h	444	1176	120	310	310	310
Approach Delay, s/veh	20.9	10.4	31.0	31.0	31.0	31.0
Approach LOS	C	B	C	C	C	C
Timer - Assigned Phs	1	2	4	6		
Phs Duration (G+Y+Rc), s	29.4	20.0	11.7	49.4		
Change Period (Y+Rc), s	5.2	5.0	*5.6	5.0		
Max Green Setting (Gmax), s	40.0	27.0	*20	20.0		
Max Q Clear Time (Q_c+H), s	17.8	8.6	6.0	5.7		
Green Ext Time (g_c+H), s	6.5	4.6	0.4	5.9		
Intersection Summary	HCM 6th CH Delay 14.5					
HCM 6th LOS	B					

Notes
 * HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
 Unsignalized Delay for (NBR, EBR) is excluded from calculations of the approach delay and intersection delay.

Queueing and Blocking Report
Baseline

03/24/2023

Intersection: 1: SOOKE RD & Lymark Pl

Movement	EB	WB	B8	B12	B12	SB
Directions Served	LT	TR	T	T		LR
Maximum Queue (m)	191.5	261.0	76.1	83.9	67.6	13.2
Average Queue (m)	10.1	14.8	46.9	52.1	36.0	4.3
95th Queue (m)	85.8	38.2	131.7	177.1	146.5	13.8
Link Distance (m)	262.3	131.0	94.9	165.3	165.3	
Upstream Blk Time (%)	0	27	22	12	4	
Queueing Penalty (veh)	0	203	153	45	13	
Storage Bay Dist (m)						
Storage Blk Time (%)						
Queueing Penalty (veh)						

Intersection: 2: VMP & SOOKE RD

Movement	EB	EB	EB	WB	WB	WB	R	NB	NB	NB	SB	SB
Directions Served	L	L	TR	L	T	T	R	L	T	T	SB	SB
Maximum Queue (m)	49.8	62.4	712.4	72.5	261.7	42.5	30.7	60.7	58.7	22.6	81.8	106.3
Average Queue (m)	15.8	53.5	475.5	53.4	222.7	11.1	10.5	37.5	29.0	1.6	32.2	67.5
95th Queue (m)	36.5	80.8	909.2	93.8	314.6	41.6	22.5	56.5	54.3	10.9	65.4	96.4
Link Distance (m)			942.6	262.5		441.2	441.2					777.5
Upstream Blk Time (%)			4	19								
Queueing Penalty (veh)			0	135								
Storage Bay Dist (m)	60.0	60.0	7.0	7.0	40.0	90.0					140.0	100.0
Storage Blk Time (%)	0	1	66	1	60	0					0	0
Queueing Penalty (veh)	0	3	142	3	146	2					0	1

Intersection: 2: VMP & SOOKE RD

Movement	SB	SB
Directions Served	T	R
Maximum Queue (m)	129.8	92.5
Average Queue (m)	69.9	43.5
95th Queue (m)	104.7	88.3
Link Distance (m)	777.5	
Upstream Blk Time (%)		
Queueing Penalty (veh)	90.0	
Storage Bay Dist (m)	2	1
Storage Blk Time (%)	8	2
Queueing Penalty (veh)	8	2

EXISTING PM

Queueing and Blocking Report
Baseline

03/24/2023

Intersection: 3: METCHOSIN RD & SOOKE RD

Movement	EB	EB	WB	WB	WB	NB	NB
Directions Served	T	TR	L	T	T	L	R
Maximum Queue (m)	50.3	61.2	111.8	148.8	136.8	135.3	16.0
Average Queue (m)	28.4	31.4	65.8	60.3	44.6	44.2	7.4
95th Queue (m)	45.4	51.0	114.8	214.3	199.5	178.6	45.5
Link Distance (m)	165.3	165.3	744.4	744.4	826.2		
Upstream Blk Time (%)							
Queueing Penalty (veh)			120.0	7		9	50.0
Storage Bay Dist (m)			1				
Storage Blk Time (%)			2	38		46	
Queueing Penalty (veh)			2	38		46	

Intersection: 4: Lymark Pl & Site Driveway

Movement	EB	EB	WB	WB	WB	NB	NB
Directions Served	T	TR	L	T	T	L	R
Maximum Queue (m)	50.3	61.2	111.8	148.8	136.8	135.3	16.0
Average Queue (m)	28.4	31.4	65.8	60.3	44.6	44.2	7.4
95th Queue (m)	45.4	51.0	114.8	214.3	199.5	178.6	45.5
Link Distance (m)	165.3	165.3	744.4	744.4	826.2		
Upstream Blk Time (%)							
Queueing Penalty (veh)			120.0	7		9	50.0
Storage Bay Dist (m)			1				
Storage Blk Time (%)			2	38		46	
Queueing Penalty (veh)			2	38		46	

Network Summary

Network wide Queueing Penalty: 953

EXISTING PM

HCM 6th TWSC
1: SOOKE RD & Lynnark Pl

03/24/2023

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	7	591	712	8	2	10
Traffic Vol, veh/h	7	591	712	8	2	10
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	-	0
Grade, %	-	0	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Movt Flow	7	629	757	9	2	11

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	766	0	0 1405 762
Stage 1	-	-	- 762 -
Stage 2	-	-	- 643 -
Critical Hwy	4.12	-	- 6.42 6.22
Critical Hwy Sig 1	-	-	- 5.42 -
Critical Hwy Sig 2	-	-	- 5.42 -
Follow-up Hwy	2,218	-	- 3,518 3,318
Plat Cap-1 Maneuver	847	-	- 154 405
Stage 1	-	-	- 461 -
Stage 2	-	-	- 523 -
Platoon blocked, %	-	-	- -
Mov Cap-1 Maneuver	847	-	- 152 405
Mov Cap-2 Maneuver	-	-	- 152 -
Stage 1	-	-	- 455 -
Stage 2	-	-	- 523 -

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	16.8
HCM LOS			C

Minor Lane/Minor Wvmt	EBL	EBT	WBT	WBR	SBL	SBR
Capacity (veh/h)	847	-	-	-	-	317
HCM Lane V/C Ratio	0.009	-	-	-	-	0.04
HCM Control Delay (s)	9.3	0	-	-	-	16.8
HCM Lane LOS	A	A	-	-	-	C
HCM 95th %ile Q(veh)	0	-	-	-	-	0.1

HCM 6th TWSC
4: Lynnark Pl & Site Driveway

03/24/2023

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBR
Lane Configurations	7	7	7	7	7	7
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Movt Flow	0	0	0	0	0	0

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	1	0	0 0 0 0
Stage 1	0	-	- - - -
Stage 2	1	-	- - - -
Critical Hwy	6.42	6.22	- 4.12 -
Critical Hwy Sig 1	5.42	-	- - - -
Critical Hwy Sig 2	5.42	-	- - - -
Follow-up Hwy	3,518	3,318	- 2,218 -
Plat Cap-1 Maneuver	1022	-	- - - -
Stage 1	-	-	- - - -
Stage 2	1022	-	- - - -
Platoon blocked, %	-	-	- - - -
Mov Cap-1 Maneuver	1022	-	- - - -
Mov Cap-2 Maneuver	1022	-	- - - -
Stage 1	-	-	- - - -
Stage 2	1022	-	- - - -

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Minor Wvmt	NBT	NBR	SBL	SBR
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	0	0	0
HCM Lane LOS	-	A	A	-
HCM 95th %ile Q(veh)	-	-	-	-

HCM 6th Signalized Intersection Summary
2 - VMP & SOOKE RD
03/24/2023

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SRB
Lane Configurations	4T	4T	4T	4T	4T	4T	4T	4T	4T	4T	4T	4T
Traffic Volume (veh/h)	285	569	105	111	225	99	104	515	277	116	439	144
Future Volume (veh/h)	285	569	105	111	225	99	104	515	277	116	439	144
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Parking Bus. Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	No	No	No	No	No	No	No	No	No	No	No
Adj Sat Flow, veh/h	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	324	647	0	126	256	0	118	585	0	132	499	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh. %	2	2	2	2	2	2	2	2	2	2	2	2
Cap. veh/h	1087	589	2	317	333	2	279	780	2	256	790	2
Arrive On Green	0.31	0.31	0.00	0.18	0.18	0.00	0.07	0.22	0.00	0.08	0.22	0.00
Sat Flow, veh/h	3456	1870	0	1781	1870	1585	1781	3554	1585	1781	3554	1585
Gpp Volume(v), veh/h	324	647	0	126	256	0	118	585	0	132	499	0
Gpp Sat Flow(s), veh/h	1728	1870	0	1781	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g, s)	7.7	34.0	0.0	6.8	14.1	0.0	5.4	16.6	0.0	6.1	13.7	0.0
Cycle Q Clear(q, s)	7.7	34.0	0.0	6.8	14.1	0.0	5.4	16.6	0.0	6.1	13.7	0.0
Pop In Lane	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Gpp Cap(c), veh/h	1087	589	0.00	317	333	0.00	279	780	0.00	256	790	0.00
V/C Ratio(X)	0.30	1.10	0.00	0.40	0.77	0.00	0.42	0.75	0.00	0.52	0.63	0.00
Avail Cap(c, a), veh/h	1087	589	1.00	692	727	1.00	350	1316	1.00	319	1316	1.00
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	28.0	37.0	0.0	39.3	42.3	0.0	30.1	39.4	0.0	30.5	38.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(Q), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfC(50%),veh/h	2.3	21.8	0.0	2.4	5.4	0.0	1.7	5.4	0.0	1.9	4.4	0.0
Unsig. Movement Delay, s/veh	28.2	104.2	0.0	40.4	47.5	0.0	31.5	41.5	0.0	32.8	39.2	0.0
LnGpp Delay(d),s/veh	28.2	104.2	0.0	40.4	47.5	0.0	31.5	41.5	0.0	32.8	39.2	0.0
LnGpp LOS	C	F	D	D	D	C	D	D	C	D	D	D
Approach Vol, veh/h	971	971	382	703	631	379	398	398	631	379	398	631
Approach Delay, s/veh	78.9	78.9	45.2	39.8	37.9	37.9	39.8	39.8	37.9	37.9	39.8	631
Approach LOS	E	E	D	D	D	D	D	D	D	D	D	D
Timer - Assigned Phs	1	2	4	5	6	8						
Pls Duration (G+V+Rc), s	12.8	29.5	40.5	12.5	29.8	25.2						
Change Period (Y+Rc), s	4.6	*5.8	6.5	*4.8	*5.8	6.0						
Max Green Setting (Gmax), s	12.0	*4.0	34.0	*12	*4.0	42.0						
Max Q Clear Time (g_c+H), s	8.1	18.6	36.0	7.4	15.7	16.1						
Green Ext Time (g, c), s	0.2	5.1	0.0	0.2	4.5	3.2						
Intersection Summary	HCM 6th CH Delay 54.2											
HCM 6th LOS	D											

Notes
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for (NBR, EBR, WBR, SBR) is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
3 - METCHOSIN RD & SOOKE RD
03/24/2023

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	4T	4T	4T	4T	4T	4T
Traffic Volume (veh/h)	877	161	381	290	151	657
Future Volume (veh/h)	877	161	381	290	151	657
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00	1.00	1.00	1.00
Parking Bus. Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	No	No	No	No	No
Adj Sat Flow, veh/h	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	974	0	423	322	168	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh. %	2	2	2	2	2	2
Cap. veh/h	1229	0	554	2591	219	0
Arrive On Green	0.35	0.00	0.31	0.73	0.12	0.00
Sat Flow, veh/h	3741	0	1781	3647	1781	1585
Gpp Volume(v), veh/h	974	0	423	322	168	0
Gpp Sat Flow(s), veh/h	1777	0	1781	1777	1781	1585
Q Serve(g, s)	17.7	0.0	15.4	1.9	6.5	0.0
Cycle Q Clear(q, s)	17.7	0.0	15.4	1.9	6.5	0.0
Pop In Lane	1.00	0.00	1.00	1.00	1.00	1.00
Lane Gpp Cap(c), veh/h	1229	0.00	554	2591	219	0.00
V/C Ratio(X)	0.79	0.00	0.76	0.12	0.77	0.00
Avail Cap(c, a), veh/h	1338	0.00	993	2591	497	0.00
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	21.1	0.0	22.3	2.9	30.4	0.0
Incr Delay (d2), s/veh	3.8	0.0	4.7	0.0	5.5	0.0
Initial Q Delay(Q), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfC(50%),veh/h	4.1	0.0	3.9	0.0	2.1	0.0
Unsig. Movement Delay, s/veh	25.0	0.0	27.0	2.9	36.0	0.0
LnGpp Delay(d),s/veh	25.0	0.0	27.0	2.9	36.0	0.0
LnGpp LOS	C	C	A	D	D	D
Approach Vol, veh/h	974	745	168	360	657	657
Approach Delay, s/veh	25.0	16.6	36.0	36.0	36.0	36.0
Approach LOS	C	B	D	D	D	D
Timer - Assigned Phs	1	2	4	6		
Pls Duration (G+V+Rc), s	27.5	29.8	14.4	57.3		
Change Period (Y+Rc), s	5.2	5.0	*5.6	5.0		
Max Green Setting (Gmax), s	40.0	27.0	*20	20.0		
Max Q Clear Time (g_c+H), s	17.4	19.7	8.5	3.9		
Green Ext Time (g, c), s	4.9	5.1	0.6	3.0		
Intersection Summary	HCM 6th CH Delay 22.6					
HCM 6th LOS	C					

Notes
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for (NBR, EBR) is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
2- VWP & SOOKE RD
03/24/2023

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SRB
Lane Configurations	4T	4T	7T									
Traffic Volume (veh/h)	225	316	77	217	513	79	84	446	180	178	806	448
Future Volume (veh/h)	225	316	77	217	513	79	84	446	180	178	806	448
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A,pbT)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Parking Bus. Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	No	No	No	No	No	No	No	No	No	No	No
Adj Sat Flow, veh/hln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	232	326	0	224	529	0	87	460	0	184	831	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh. %	2	2	2	2	2	2	2	2	2	2	2	2
Cap. veh/h	709	384	2	538	585	2	177	830	324	954	2	2
Arrive On Green	0.21	0.21	0.00	0.30	0.30	0.00	0.05	0.23	0.00	0.09	0.27	0.00
Sat Flow, veh/h	3456	1870	0	1781	1870	1585	1781	3554	1585	1781	3554	1585
Gp Volume(v), veh/h	232	326	0	224	529	0	87	460	0	184	831	0
Gp Sat Flow(s), veh/hln	1728	1870	0	1781	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(q, s)	7.7	22.6	0.0	13.5	37.1	0.0	4.9	15.3	0.0	10.3	30.1	0.0
Cycle Q Clear(q, c), s	7.7	22.6	0.0	13.5	37.1	0.0	4.9	15.3	0.0	10.3	30.1	0.0
Pop In Lane	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Gp Cap(c), veh/h	709	384	0.33	538	585	0.42	0.94	830	324	954	0.57	0.87
V/C Ratio(X)	0.33	0.85	0.00	0.42	0.94	0.00	0.49	0.55	0.00	0.57	0.87	0.00
Avail Cap(c, a), veh/h	873	472	1.00	556	584	242	1056	324	1056	324	1056	1.00
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	45.6	51.5	0.0	37.5	45.7	0.0	38.8	45.4	0.0	34.3	47.0	0.0
Incr Delay (d2), s/veh	0.4	12.7	0.0	0.7	22.8	0.0	3.0	0.8	0.0	2.9	7.9	0.0
Initial Q Delay(q3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackQ(c)(50%),veh/h	2.7	9.9	0.0	4.8	17.0	0.0	1.8	5.4	0.0	3.6	11.2	0.0
Unsig. Movement Delay, s/veh	46.0	64.2	0.0	38.2	68.5	0.0	41.8	46.2	0.0	37.2	54.9	0.0
LnGp Delay(d),s/veh	D	E	D	D	E	D	D	D	D	D	D	D
LnGp LOS	D	E	D	D	E	D	D	D	D	D	D	D
Approach Vol, veh/h	558	558	753	547	1015	547	1015	547	1015	547	1015	547
Approach Delay, s/veh	56.6	56.6	59.5	45.5	51.7	45.5	51.7	45.5	51.7	45.5	51.7	45.5
Approach LOS	E	E	E	D	D	D	D	D	D	D	D	D
Timer - Assigned Phs	1	2	4	5	6	8						
Phs Duration (G+Y+Rc), s	16.6	37.2	34.1	11.9	41.9	46.7						
Change Period (Y+Rc), s	4.6	*5.8	6.5	*4.8	*5.8	6.0						
Max Green Setting (Gmax), s	12.0	*12	34.0	*12	*40	42.0						
Max Q Clear Time (q, c+H), s	12.3	17.3	24.6	6.9	32.1	39.1						
Green Ext Time (p, c), s	0.0	4.0	3.0	0.2	4.1	1.6						
Intersection Summary	HCM 6th CH Delay 53.5											
HCM 6th LOS	D											

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for (NBR, EBR, WBR, SBR) is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
3- METCHOSIN RD & SOOKE RD
03/24/2023

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	4T	4T	4T	4T	4T	4T
Traffic Volume (veh/h)	582	125	569	699	128	545
Future Volume (veh/h)	582	125	569	699	128	545
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A,pbT)	1.00	1.00	1.00	1.00	1.00	1.00
Parking Bus. Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	No	No	No	No	No
Adj Sat Flow, veh/hln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	600	0	587	721	132	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh. %	2	2	2	2	2	2
Cap. veh/h	925	2	734	2857	177	2
Arrive On Green	0.28	0.00	0.41	0.75	0.10	0.00
Sat Flow, veh/h	3741	0	1781	3547	1781	1585
Gp Volume(v), veh/h	600	0	587	721	132	0
Gp Sat Flow(s), veh/hln	1777	0	1781	1777	1781	1585
Q Serve(q, s)	10.4	0.0	20.0	4.4	5.0	0.0
Cycle Q Clear(q, c), s	10.4	0.0	20.0	4.4	5.0	0.0
Pop In Lane	1.00	0.00	1.00	1.00	1.00	1.00
Lane Gp Cap(c), veh/h	925	0.65	734	2857	177	0.75
V/C Ratio(X)	0.65	0.00	0.80	0.27	0.10	0.00
Avail Cap(c, a), veh/h	1387	1030	2657	515	1.00	1.00
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	22.8	0.0	17.8	2.8	30.3	0.0
Incr Delay (d2), s/veh	1.6	0.0	5.0	0.1	6.1	0.0
Initial Q Delay(q3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackQ(c)(50%),veh/h	2.5	0.0	4.0	0.0	1.6	0.0
Unsig. Movement Delay, s/veh	24.4	0.0	22.8	2.9	36.5	0.0
LnGp Delay(d),s/veh	C	C	C	A	D	D
LnGp LOS	C	C	C	A	D	D
Approach Vol, veh/h	600	1308	132	365	11.8	365
Approach Delay, s/veh	24.4	11.8	36.5	11.8	36.5	36.5
Approach LOS	C	B	D	B	D	D
Timer - Assigned Phs	1	2	4	6		
Phs Duration (G+Y+Rc), s	33.7	23.0	12.5	56.7		
Change Period (Y+Rc), s	5.2	5.0	*5.6	5.0		
Max Green Setting (Gmax), s	40.0	27.0	*20	20.0		
Max Q Clear Time (q, c+H), s	22.0	7.0	6.4	6.4		
Green Ext Time (p, c), s	6.5	5.6	0.5	6.4		
Intersection Summary	HCM 6th CH Delay 17.1					
HCM 6th LOS	B					

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for (NBR, EBR) is excluded from calculations of the approach delay and intersection delay.

Queueing and Blocking Report

03/24/2023

Intersection: 1: SOOKE RD & LYNMARK PI

Movement	EB	WB	B8	B12	B12	SB
Directions Served	LT	TR	T	T		LR
Maximum Queue (m)	225.0	39.0	118.9	176.1	176.4	19.4
Average Queue (m)	16.3	28.9	109.2	136.3	83.6	6.0
95th Queue (m)	120.1	33.6	128.9	226.7	215.6	17.3
Link Distance (m)	262.3	13.0	94.9	165.3	165.3	7
Upstream Blk Time (%)	0	59	58	26	7	
Queueing Penalty (veh)	1	486	477	108	30	
Storage Bay Dist (m)						
Storage Blk Time (%)						
Queueing Penalty (veh)						

Intersection: 2: VMP & SOOKE RD

Movement	EB	EB	EB	WB	WB	WB	R	NR	NR	NR	SB	SB
Directions Served	L	L	TR	L	T	R	L	T	T	R	L	T
Maximum Queue (m)	40.9	62.4	958.1	72.4	266.6	42.5	42.7	77.9	74.0	23.7	102.0	124.0
Average Queue (m)	13.9	52.3	888.6	57.2	264.5	13.4	14.0	44.5	38.2	2.5	38.1	81.8
95th Queue (m)	31.2	82.9	1123.2	94.4	266.5	45.6	31.3	65.4	62.0	13.0	81.6	117.6
Link Distance (m)			942.6		262.5			441.2	441.2			777.5
Upstream Blk Time (%)			65		40							
Queueing Penalty (veh)			0		324							
Storage Bay Dist (m)	60.0	60.0		70.0		40.0	90.0			140.0	100.0	
Storage Blk Time (%)		1	72		2	62	0			0	0	2
Queueing Penalty (veh)		3	162		10	183	3			0	0	4

Intersection: 2: VMP & SOOKE RD

Movement	SB	SB
Directions Served	T	R
Maximum Queue (m)	156.8	92.5
Average Queue (m)	85.1	61.9
95th Queue (m)	131.3	109.1
Link Distance (m)		777.5
Upstream Blk Time (%)		
Queueing Penalty (veh)		90.0
Storage Bay Dist (m)		4
Storage Blk Time (%)		1
Queueing Penalty (veh)		4

Queueing and Blocking Report

03/24/2023

Intersection: 3: METCHOSIN RD & SOOKE RD

Movement	EB	EB	WB	WB	WB	NR	NR
Directions Served	T	TR	L	T	T	L	R
Maximum Queue (m)	64.7	82.8	122.3	307.2	278.2	216.2	32.0
Average Queue (m)	37.9	43.2	85.1	134.6	111.8	81.3	10.1
95th Queue (m)	58.5	68.7	137.4	433.4	408.5	332.5	53.9
Link Distance (m)	165.3	165.3	744.4	744.4	744.4	826.2	
Upstream Blk Time (%)							
Queueing Penalty (veh)			120.0		13	15	50.0
Storage Bay Dist (m)			4		76	80	
Storage Blk Time (%)							
Queueing Penalty (veh)							

Intersection: 4: LYNMARK PI & Site Driveway

Movement	EB	EB	WB	WB	WB	NR	NR
Directions Served	L	L	TR	L	T	R	L
Maximum Queue (m)	40.9	62.4	958.1	72.4	266.6	42.5	42.7
Average Queue (m)	13.9	52.3	888.6	57.2	264.5	13.4	14.0
95th Queue (m)	31.2	82.9	1123.2	94.4	266.5	45.6	31.3
Link Distance (m)			942.6		262.5		441.2
Upstream Blk Time (%)			65		40		
Queueing Penalty (veh)			0		324		
Storage Bay Dist (m)	60.0	60.0		70.0		40.0	90.0
Storage Blk Time (%)		1	72		2	62	0
Queueing Penalty (veh)		3	162		10	183	3

Network Summary

Network wide Queueing Penalty: 1988

HCM 6th TWSC
1: SGOKE RD & Lynnark Pl

03/24/2023

Intersection						
Int Delay, s/Veh	0.2					
Movement						
	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	2	1022	435	2	2	5
Traffic Vol, veh/h	2	1022	435	2	2	4
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	1136	483	2	6	4

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	485	0	0
Stage 1	-	-	484
Stage 2	-	-	1140
Critical Hwy	4.12	-	6.42
Critical Hwy Sig 1	-	-	5.42
Critical Hwy Sig 2	-	-	5.42
Follow-up Hwy	2,218	-	3,518
Platoon blocked, %	-	-	113
Stage 1	-	-	620
Stage 2	-	-	305
Mov Cap-1 Maneuver	1078	-	112
Mov Cap-2 Maneuver	-	-	617
Stage 1	-	-	305
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	26.8
HCM LOS			D

Minor Lane/Minor Mvmt	EBL	EBT	WBT	WBR	SBL	SBR
Capacity (veh/h)	1078	-	-	-	-	175
HCM Lane V/C Ratio	0.002	-	-	-	-	0.057
HCM Control Delay (s)	6.3	0	-	-	-	26.8
HCM Lane LOS	A	A	-	-	-	D
HCM 95th %ile Q(veh)	0	-	-	-	-	0.2

HCM 6th TWSC
4: Lynnark Pl & Site Driveway

03/24/2023

Intersection						
Int Delay, s/Veh	0					
Movement						
	WBL	WBR	NBT	NBR	SBL	SBR
Lane Configurations	1	1	1	1	1	1
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	1	0	0
Stage 1	0	-	-
Stage 2	1	-	-
Critical Hwy	6.42	6.22	-
Critical Hwy Sig 1	5.42	-	-
Critical Hwy Sig 2	5.42	-	-
Follow-up Hwy	3,518	3,318	-
Platoon blocked, %	1022	-	-
Stage 1	-	-	-
Stage 2	1022	-	-
Mov Cap-1 Maneuver	1022	-	-
Mov Cap-2 Maneuver	1022	-	-
Stage 1	-	-	-
Stage 2	1022	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Minor Mvmt	NBT	NBR	SBL	SBR
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	0	0	0
HCM Lane LOS	-	A	A	-
HCM 95th %ile Q(veh)	-	-	-	-

HCM 6th TWSC
1: SOOKE RD & Lynnark Pl

03/24/2023

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	7	755	799	8	2	10
Traffic Vol, veh/h	7	755	799	8	2	10
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	-	0
Grade, %	-	0	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	803	850	9	2	11

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	859	0	1672
Stage 1	-	-	855
Stage 2	-	-	817
Critical Hwy	4.12	-	6.42
Critical Hwy Sig 1	-	-	5.42
Critical Hwy Sig 2	-	-	5.42
Follow-up Hwy	2.218	-	3.518
Plat Cap-1 Maneuver	782	-	105
Stage 1	-	-	417
Stage 2	-	-	434
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	782	-	103
Mov Cap-2 Maneuver	-	-	103
Stage 1	-	-	410
Stage 2	-	-	434

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	20
HCM LOS			C

Minor Lane/Minor Mvmt	EBL	EBT	WBT	WBR	SBL	SBR
Capacity (veh/h)	782	-	-	-	-	253
HCM Lane V/C Ratio	0.01	-	-	-	-	0.05
HCM Control Delay (s)	9.6	0	-	-	-	20
HCM Lane LOS	A	A	-	-	-	C
HCM 95th %ile Q(veh)	0	-	-	-	-	0.2

HCM 6th TWSC
4: Lynnark Pl & Site Driveway

03/24/2023

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBR
Lane Configurations	7	755	799	8	2	10
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	1	0	0
Stage 1	0	-	-
Stage 2	1	-	-
Critical Hwy	6.42	6.22	4.12
Critical Hwy Sig 1	5.42	-	-
Critical Hwy Sig 2	5.42	-	-
Follow-up Hwy	3.518	3.318	2.218
Plat Cap-1 Maneuver	1022	-	-
Stage 1	-	-	-
Stage 2	1022	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1022	-	-
Mov Cap-2 Maneuver	1022	-	-
Stage 1	-	-	-
Stage 2	1022	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Minor Mvmt	NBT	NBR	SBL	SBR
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	0	0	0
HCM Lane LOS	-	A	A	-
HCM 95th %ile Q(veh)	-	-	-	-

HCM 6th Signalized Intersection Summary
2 - VMP & SOOKE RD
03/24/2023

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SRB
Lane Configurations	4T	4T	4T	4T	4T	4T	4T	4T	4T	4T	4T	4T
Traffic Volume (veh/h)	285	569	105	112	226	108	104	515	277	118	439	144
Future Volume (veh/h)	285	569	105	112	226	108	104	515	277	118	439	144
Initial Q (Qd), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Parking Bus. Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	No	No	No	No	No	No	No	No	No	No	No
Adj Sat Flow, veh/h	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	324	647	0	127	257	0	118	585	0	134	499	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh. %	2	2	2	2	2	2	2	2	2	2	2	2
Cap. veh/h	1085	587	2	318	334	2	279	780	2	257	793	2
Arrive On Green	0.31	0.31	0.00	0.18	0.18	0.00	0.07	0.22	0.00	0.08	0.22	0.00
Sat Flow, veh/h	3456	1870	0	1781	1870	1585	1781	3554	1585	1781	3554	1585
Gp Volume(v), veh/h	324	647	0	127	257	0	118	585	0	134	499	0
Gp Sat Flow(s), veh/h	1728	1870	0	1781	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(q_s), s	7.7	34.0	0.0	6.8	14.2	0.0	5.5	16.7	0.0	6.2	13.7	0.0
Cycle Q Clear(q_c), s	7.7	34.0	0.0	6.8	14.2	0.0	5.5	16.7	0.0	6.2	13.7	0.0
Pop In Lane	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Gp Cap(c), veh/h	1085	587	0.30	318	334	0.40	279	780	0.52	257	793	0.63
V/C Ratio(X)	0.30	1.10	0.00	0.40	0.77	0.00	0.42	0.75	0.00	0.52	0.63	0.00
Avail Cap(c), veh/h	1085	587	691	725	380	1312	380	1312	380	1312	1312	1.00
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	28.1	37.2	0.0	39.3	42.4	0.0	30.1	39.5	0.0	30.6	38.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.2	5.3	0.0	1.4	2.1	0.0	2.3	1.2	0.0
Initial Q Delay(Q), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfC(50%),veh/h	2.3	22.0	0.0	2.4	5.5	0.0	1.7	5.4	0.0	2.0	4.4	0.0
Unsig. Movement Delay, s/veh	28.3	105.3	0.0	40.5	47.6	0.0	31.6	41.8	0.0	32.9	39.2	0.0
LnGp Delay(d),s/veh	C	F	D	D	D	C	D	D	C	D	D	D
LnGp LOS	C	F	D	D	D	C	D	D	C	D	D	D
Approach Vol, veh/h	971	971	384	703	633	379	379	379	633	379	633	379
Approach Delay, s/veh	79.7	79.7	45.3	39.9	39.9	39.9	39.9	39.9	39.9	39.9	39.9	39.9
Approach LOS	E	E	D	D	D	D	D	D	D	D	D	D
Timer - Assigned Phs	1	2	4	5	6	8						
Pls Duration (G+V+Rc), s	12.9	29.6	40.5	12.5	30.0	25.4						
Change Period (Y+Rc), s	4.6	* 5.8	6.5	* 4.8	* 5.8	6.0						
Max Green Setting (Gmax), s	12.0	* 4.0	34.0	* 12	* 4.0	42.0						
Max Q Clear Time (q_c+H), s	8.2	18.7	36.0	7.5	15.7	16.2						
Green Ext Time (g_c+H), s	0.2	5.1	0.0	0.2	4.5	3.2						
Intersection Summary	HCM 6th CH Delay 54.5											
HCM 6th LOS	D											

Notes
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for (NBR, EBR, WBR, SBR) is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
3 - METCHOSIN RD & SOOKE RD
03/24/2023

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	4T	4T	4T	4T	4T	4T
Traffic Volume (veh/h)	883	164	381	293	152	657
Future Volume (veh/h)	883	164	381	293	152	657
Initial Q (Qd), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00	1.00	1.00	1.00
Parking Bus. Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	No	No	No	No	No
Adj Sat Flow, veh/h	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	981	0	423	326	169	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh. %	2	2	2	2	2	2
Cap. veh/h	1230	0.30	553	2591	220	0.00
Arrive On Green	0.35	0.00	0.31	0.73	0.12	0.00
Sat Flow, veh/h	3741	0	1781	3647	1781	1585
Gp Volume(v), veh/h	981	0	423	326	169	0
Gp Sat Flow(s), veh/h	1777	0	1781	1777	1781	1585
Q Serve(q_s), s	17.9	0.0	15.4	2.0	6.6	0.0
Cycle Q Clear(q_c), s	17.9	0.0	15.4	2.0	6.6	0.0
Pop In Lane	1.00	0.00	1.00	1.00	1.00	1.00
Lane Gp Cap(c), veh/h	1230	0.80	553	2591	220	0.77
V/C Ratio(X)	0.80	0.00	0.76	0.13	0.12	0.00
Avail Cap(c), veh/h	1333	990	2591	495	1.00	1.00
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	21.2	0.0	22.4	2.9	30.5	0.0
Incr Delay (d2), s/veh	4.0	0.0	4.7	0.0	5.5	0.0
Initial Q Delay(Q), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfC(50%),veh/h	4.1	0.0	4.0	0.0	2.1	0.0
Unsig. Movement Delay, s/veh	25.2	0.0	27.1	3.0	36.1	0.0
LnGp Delay(d),s/veh	C	C	A	D	D	D
LnGp LOS	C	C	A	D	D	D
Approach Vol, veh/h	981	169	749	169	36.1	36.1
Approach Delay, s/veh	25.2	16.6	16.6	16.6	36.1	36.1
Approach LOS	C	B	B	D	D	D
Timer - Assigned Phs	1	2	4	6		
Pls Duration (G+V+Rc), s	27.6	29.9	14.5	57.5		
Change Period (Y+Rc), s	5.2	5.0	* 5.6	5.0		
Max Green Setting (Gmax), s	40.0	27.0	* 20	20.0		
Max Q Clear Time (q_c+H), s	17.4	19.9	8.6	4.0		
Green Ext Time (g_c+H), s	4.9	5.0	0.6	3.1		
Intersection Summary	HCM 6th CH Delay 22.8					
HCM 6th LOS	C					

Notes
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for (NBR, EBR) is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
2- WMP & SOOKE RD
03/24/2023

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SRB
Lane Configurations	4T	4T	7T	7T	5T	4T	8T	8T	4T	4T	4T	4T
Traffic Volume (veh/h)	225	317	77	217	514	85	84	446	180	184	806	448
Future Volume (veh/h)	225	317	77	217	514	85	84	446	180	184	806	448
Initial Q (Qd), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Parking Bus. Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	No	No	No	No	No	No	No	No	No	No	No
Adj Sat Flow, veh/hln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	232	327	0	224	530	0	87	460	0	190	831	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh. %	2	2	2	2	2	2	2	2	2	2	2	2
Cap. veh/h	710	385	2	538	585	2	177	830	323	953	2	2
Arrive On Green	0.21	0.21	0.00	0.30	0.30	0.00	0.05	0.23	0.00	0.09	0.27	0.00
Sat Flow, veh/h	3456	1870	0	1781	1870	1585	1781	3554	1585	1781	3554	1585
Gp Volume(v), veh/h	232	327	0	224	530	0	87	460	0	190	831	0
Gp Sat Flow(s), veh/hln	1728	1870	0	1781	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(q_s), s	7.7	22.7	0.0	13.5	37.2	0.0	4.9	15.4	0.0	10.7	30.1	0.0
Cycle Q Clear(q_c), s	7.7	22.7	0.0	13.5	37.2	0.0	4.9	15.4	0.0	10.7	30.1	0.0
Pop In Lane	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Gp Cap(c), veh/h	710	385	0.00	538	585	0.00	177	830	323	953	0.00	0.00
V/C Ratio(X)	0.33	0.85	0.00	0.42	0.94	0.00	0.49	0.55	0.59	0.87	0.00	0.00
Aval Cap(c_a), veh/h	871	472	0.00	555	583	0.00	242	1054	323	1054	0.00	0.00
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	45.6	51.6	0.0	37.6	45.8	0.0	38.9	45.5	0.0	34.5	47.1	0.0
Incr Delay (d2), s/veh	0.4	12.9	0.0	0.7	23.1	0.0	3.0	0.8	0.0	3.3	8.0	0.0
Initial Q Delay(q3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfC(50%),veh/h	2.8	10.0	0.0	4.8	17.1	0.0	1.8	5.4	0.0	3.7	11.2	0.0
Unsig. Movement Delay, s/veh	46.0	64.4	0.0	38.3	68.9	0.0	41.9	46.3	0.0	37.9	55.1	0.0
LnGp Delay(d),s/veh	D	E	D	D	E	D	D	D	D	D	E	D
LnGp LOS	D	E	D	D	E	D	D	D	D	D	E	D
Approach Vol, veh/h	559	559	754	547	1021	547	1021	547	1021	547	1021	547
Approach Delay, s/veh	56.8	56.8	59.8	45.6	51.9	45.6	51.9	45.6	51.9	45.6	51.9	45.6
Approach LOS	E	E	E	D	D	D	D	D	D	D	E	D
Timer - Assigned Phs	1	2	4	5	6	8						
Pls Duration (G+V+Rc), s	16.6	37.3	34.2	11.9	42.0	46.7						
Change Period (Y+Rc), s	4.6	* 5.8	6.5	* 4.8	* 5.8	6.0						
Max Green Setting (Gmax), s	12.0	* 4.0	34.0	* 12	* 4.0	42.0						
Max Q Clear Time (q_c+H), s	12.7	17.4	24.7	6.9	32.1	38.2						
Green Ext Time (g_c), s	0.0	4.0	3.0	0.2	4.1	1.5						
Intersection Summary	HCM 6th CH Delay 53.7											
HCM 6th LOS	D											

Notes
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for (NBR, EBR, WBR, SBR) is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
3- METCHOSIN RD & SOOKE RD
03/24/2023

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	4T	4T	4T	4T	4T	4T
Traffic Volume (veh/h)	584	126	589	707	130	545
Future Volume (veh/h)	584	126	589	707	130	545
Initial Q (Qd), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00	1.00	1.00	1.00
Parking Bus. Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	No	No	No	No	No
Adj Sat Flow, veh/hln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	602	0	587	729	134	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh. %	2	2	2	2	2	2
Cap. veh/h	925	0.00	733	2654	179	0.00
Arrive On Green	0.28	0.00	0.41	0.75	0.10	0.00
Sat Flow, veh/h	3741	0	1781	3647	1781	1585
Gp Volume(v), veh/h	602	0	587	729	134	0
Gp Sat Flow(s), veh/hln	1777	0	1781	1777	1781	1585
Q Serve(q_s), s	10.5	0.0	20.1	4.5	5.1	0.0
Cycle Q Clear(q_c), s	10.5	0.0	20.1	4.5	5.1	0.0
Pop In Lane	1.00	0.00	1.00	1.00	1.00	1.00
Lane Gp Cap(c), veh/h	925	0.00	733	2654	179	0.00
V/C Ratio(X)	0.65	0.00	0.80	0.27	0.75	0.00
Aval Cap(c_a), veh/h	1381	0.00	1025	2654	513	0.00
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	22.9	0.0	17.9	2.8	30.4	0.0
Incr Delay (d2), s/veh	1.7	0.0	5.0	0.1	6.1	0.0
Initial Q Delay(q3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfC(50%),veh/h	2.5	0.0	4.0	0.0	1.7	0.0
Unsig. Movement Delay, s/veh	24.5	0.0	23.0	2.9	36.5	0.0
LnGp Delay(d),s/veh	C	C	C	A	D	C
LnGp LOS	C	C	C	A	D	C
Approach Vol, veh/h	602	1316	134	365	602	1316
Approach Delay, s/veh	24.5	11.9	36.5	11.9	36.5	24.5
Approach LOS	C	B	D	B	D	C
Timer - Assigned Phs	1	2	4	6		
Pls Duration (G+V+Rc), s	33.8	23.1	12.6	56.9	5.0	
Change Period (Y+Rc), s	5.2	5.0	* 5.6	5.0		
Max Green Setting (Gmax), s	40.0	27.0	* 20	20.0		
Max Q Clear Time (q_c+H), s	22.1	12.5	7.1	6.5		
Green Ext Time (g_c), s	6.5	5.6	0.5	6.5		
Intersection Summary	HCM 6th CH Delay 17.2					
HCM 6th LOS	B					

Notes
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for (NBR, EBR) is excluded from calculations of the approach delay and intersection delay.

Queueing and Blocking Report

03/24/2023

Intersection: 1: SOOKE RD & LYNMARK PI

Movement	EB	WB	SB
Directions Served	LT TR	LR	
Maximum Queue (m)	229.1	1.4	14.0
Average Queue (m)	15.3	0.0	5.3
95th Queue (m)	119.8	1.0	12.3
Link Distance (m)	262.3	13.0	36.4
Upstream Blk Time (%)	1		
Queueing Penalty (veh)	5		
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queueing Penalty (veh)			

Intersection: 2: VMP & SOOKE RD

Movement	EB	WB	SB	EB	WB	SB	EB	WB	SB	EB	WB	SB
Directions Served	L	L	TR	L	T	R	L	R	L	L	R	T
Maximum Queue (m)	37.8	62.4	958.5	67.1	93.7	42.5	38.6	66.6	58.7	38.5	39.6	56.0
Average Queue (m)	11.6	54.6	949.7	23.2	41.7	14.4	13.0	38.4	32.0	9.3	18.1	32.8
95th Queue (m)	26.3	82.7	955.7	48.2	76.1	47.3	27.2	59.3	55.1	30.0	32.2	51.4
Link Distance (m)			942.6			262.5		441.2	441.2			777.5
Upstream Blk Time (%)			99			0						
Queueing Penalty (veh)		60.0	60.0		70.0			40.0	90.0		140.0	100.0
Storage Bay Dist (m)		1	66		0	11		0				
Storage Blk Time (%)		4	188		0	25		2				
Queueing Penalty (veh)												

Intersection: 2: VMP & SOOKE RD

Movement	SB	SB
Directions Served	T	R
Maximum Queue (m)	55.1	22.6
Average Queue (m)	34.1	1.5
95th Queue (m)	53.3	10.6
Link Distance (m)	777.5	
Upstream Blk Time (%)		
Queueing Penalty (veh)		90.0
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queueing Penalty (veh)		

Queueing and Blocking Report

03/24/2023

Intersection: 3: METCHOSIN RD & SOOKE RD

Movement	EB	WB	WB	WB	NB	NB
Directions Served	T	TR	L	T	L	R
Maximum Queue (m)	74.7	88.4	86.3	29.4	17.2	59.3
Average Queue (m)	41.6	45.6	48.3	11.5	2.3	25.2
95th Queue (m)	63.5	72.8	74.9	24.5	10.7	45.3
Link Distance (m)	165.3	165.3	744.4	744.4	826.2	
Upstream Blk Time (%)						
Queueing Penalty (veh)			120.0			50.0
Storage Bay Dist (m)						
Storage Blk Time (%)						0
Queueing Penalty (veh)						3

Intersection: 4: LYNMARK PI & Site Driveway

Movement	WB
Directions Served	LR
Maximum Queue (m)	6.6
Average Queue (m)	3.0
95th Queue (m)	8.3
Link Distance (m)	34.4
Upstream Blk Time (%)	
Queueing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queueing Penalty (veh)	

Network Summary

Network wide Queueing Penalty: 228

Queueing and Blocking Report

03/24/2023

Intersection: 1: SOOKE RD & LYNMARK PI

Movement	EB	WB	B8	B12	B12	SB
Directions Served	LT	TR	T	T		LR
Maximum Queue (m)	235.5	36.3	119.3	177.6	178.6	29.3
Average Queue (m)	22.3	28.6	111.2	155.8	125.1	12.6
95th Queue (m)	134.4	32.2	119.1	223.2	240.9	29.6
Link Distance (m)	262.3	13.0	94.9	163.3	163.3	36.4
Upstream Blk Time (%)	0	59	62	44	15	2
Queueing Penalty (veh)	2	497	522	186	62	0
Storage Bay Dist (m)						
Storage Blk Time (%)						
Queueing Penalty (veh)						

Intersection: 2: VMP & SOOKE RD

Movement	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	L	TR	L	T	R	R	L	L	T	T	R	L	T
Maximum Queue (m)	39.9	62.5	958.8	72.4	266.5	42.5	33.5	68.0	62.2	25.4	96.2	123.6		
Average Queue (m)	12.8	47.7	875.3	56.0	264.5	16.5	12.6	40.5	34.1	3.0	38.7	78.7		
95th Queue (m)	31.0	84.3	1093.9	93.4	266.4	50.4	26.6	61.5	56.7	14.1	79.1	112.4		
Link Distance (m)			942.6		262.5			441.2	441.2			777.5		
Upstream Blk Time (%)			62		40									
Queueing Penalty (veh)			0		328									
Storage Bay Dist (m)	60.0	60.0		70.0		40.0	90.0			140.0	100.0			
Storage Blk Time (%)	0	1	73	1	62	0								2
Queueing Penalty (veh)	0	4	155	8	186	3								3

Intersection: 2: VMP & SOOKE RD

Movement	SB	SB
Directions Served	T	R
Maximum Queue (m)	137.0	92.5
Average Queue (m)	82.0	57.8
95th Queue (m)	120.7	110.0
Link Distance (m)		777.5
Upstream Blk Time (%)		
Queueing Penalty (veh)	90.0	
Storage Bay Dist (m)	4	1
Storage Blk Time (%)	19	4
Queueing Penalty (veh)		

Queueing and Blocking Report

03/24/2023

Intersection: 3: METCHOSIN RD & SOOKE RD

Movement	EB	EB	WB	WB	WB	NB	NB
Directions Served	T	TR	L	T	T	L	R
Maximum Queue (m)	64.7	80.6	122.4	586.4	571.8	198.1	63.4
Average Queue (m)	37.2	41.2	108.2	287.0	264.1	62.8	17.4
95th Queue (m)	58.5	69.2	150.2	689.3	677.8	170.4	71.7
Link Distance (m)	165.3	163.3	744.4	744.4	826.2		
Upstream Blk Time (%)			9	0	0		
Queueing Penalty (veh)			0	0	0		
Storage Bay Dist (m)			120.0			24	50.0
Storage Blk Time (%)			6	35			
Queueing Penalty (veh)			20	202		129	

Intersection: 4: LYNMARK PI & Site Driveway

Movement	WB	WB
Directions Served	LR	
Maximum Queue (m)	7.7	
Average Queue (m)	1.6	
95th Queue (m)	6.4	
Link Distance (m)	34.4	
Upstream Blk Time (%)		
Queueing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queueing Penalty (veh)		

Network Summary

Network wide Queueing Penalty: 2339

HCM 6th TWSC
1: SOOKE RD & Lynnark Pl
03/24/2023

Intersection							
Int Delay, s/veh	0.5						
Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations	4	1022	435	6	14	15	
Traffic Vol, veh/h	4	1022	435	6	14	15	
Future Vol, veh/h	0	0	0	0	0	0	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Free	Free	Free	Stop	Stop	Stop	
RT Channelized	-	None	-	None	-	None	
Storage Length	-	-	-	-	0	-	
Veh in Median Storage, #	-	0	0	-	0	-	
Grade, %	-	0	0	-	0	-	
Peak Hour Factor	90	90	90	90	90	90	
Heavy Vehicles, %	2	2	2	2	2	2	
Movt Flow	4	1136	483	7	16	17	

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	490	0	1631 487
Stage 1	-	-	487 -
Stage 2	-	-	1144 -
Critical Hwy	4.12	-	6.42 6.22
Critical Hwy Sig 1	-	-	5.42 -
Critical Hwy Sig 2	-	-	5.42 -
Follow-up Hwy	2.218	-	3.518 3.318
Platoon blocked, %	-	-	112 581
Stage 1	-	-	618 -
Stage 2	-	-	304 -
Mov Cap-1 Maneuver	1073	-	111 581
Mov Cap-2 Maneuver	-	-	111 -
Stage 1	-	-	612 -
Stage 2	-	-	304 -

Approach	EB	WB	SB
HCM Control Delay, s	0	0	27.6
HCM LOS			D

Minor Lane/Major Wvmt	EBL	EBT	WBT	WBR	SBL	SBR
Capacity (veh/h)	1073	-	-	-	-	191
HCM Lane V/C Ratio	0.004	-	-	-	-	0.169
HCM Control Delay (s)	6.4	0	-	-	-	27.6
HCM Lane LOS	A	A	-	-	-	D
HCM 95th %ile Q(veh)	0	-	-	-	-	0.6

HCM 6th TWSC
4: Lynnark Pl & Site Driveway
03/24/2023

Intersection							
Int Delay, s/veh	4.7						
Movement	WBL	WBR	NBT	NBR	SBL	SBR	
Lane Configurations	W	W	1	1	4	4	
Traffic Vol, veh/h	20	0	10	6	0	0	
Future Vol, veh/h	20	0	10	6	0	0	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Stop	Free	Free	Free	Free	Free	
RT Channelized	-	None	-	None	-	None	
Storage Length	0	-	-	-	-	-	
Veh in Median Storage, #	0	-	0	-	-	0	
Grade, %	0	-	0	-	-	0	
Peak Hour Factor	92	92	92	92	92	92	
Heavy Vehicles, %	2	2	2	2	2	2	
Movt Flow	22	0	11	7	0	0	

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	16	15	0 18 0
Stage 1	15	-	- - -
Stage 2	1	-	- - -
Critical Hwy	6.42	6.22	- 4.12 -
Critical Hwy Sig 1	5.42	-	- - -
Critical Hwy Sig 2	5.42	-	- - -
Follow-up Hwy	3.518	3.318	- 2.218 -
Platoon blocked, %	1002	1065	- 1599 -
Stage 1	1008	-	- - -
Stage 2	1022	-	- - -
Mov Cap-1 Maneuver	1002	1065	- 1599 -
Mov Cap-2 Maneuver	1002	-	- - -
Stage 1	1008	-	- - -
Stage 2	1022	-	- - -

Approach	WB	NB	SB
HCM Control Delay, s	8.7	0	0
HCM LOS	A		

Minor Lane/Major Wvmt	NBT	NBR	SBL	SBR
Capacity (veh/h)	-	1002	1599	-
HCM Lane V/C Ratio	-	0.022	-	-
HCM Control Delay (s)	-	8.7	0	-
HCM Lane LOS	-	A	A	-
HCM 95th %ile Q(veh)	-	0.1	0	-

HCM 6th TWSC
1: SOOKE RD & Lynnhark Pl

03/24/2023

Intersection									
Int Delay, s/veh									
	0.4								
Movement	EBL	EBT	WBT	WBR	SBL	SBR			
Lane Configurations	4	4	4	4	4	4			
Traffic Vol, veh/h	14	755	799	18	5	17			
Future Vol, veh/h	14	755	799	18	5	17			
Conflicting Peds, #/hr	0	0	0	0	0	0			
Sign Control	Free	Free	Free	Stop	Stop	Stop			
RT Channelized	-	None	-	None	-	None			
Storage Length	-	-	-	-	-	0			
Veh in Median Storage, #	-	0	0	-	-	0			
Grade, %	-	0	0	-	-	0			
Peak Hour Factor	94	94	94	94	94	94			
Heavy Vehicles, %	2	2	2	2	2	2			
Movt Flow	15	803	850	19	5	18			

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	869	0	1693 860
Stage 1	-	-	860 -
Stage 2	-	-	833 -
Critical Hwy	4.12	-	6.42 6.22
Critical Hwy Sig 1	-	-	5.42 -
Critical Hwy Sig 2	-	-	5.42 -
Follow-up Hwy	2.218	-	3.518 3.318
Platoon blocked, %	775	-	102 356
Stage 1	-	-	414 -
Stage 2	-	-	427 -
Mov Cap-1 Maneuver	775	-	98 356
Mov Cap-2 Maneuver	-	-	98 -
Stage 1	-	-	400 -
Stage 2	-	-	427 -

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	23
HCM LOS			C

Minor Lane/Major Wvmt	EBL	EBT	WBT	WBR	SBL	SBR
Capacity (veh/h)	775	-	-	-	223	-
HCM Lane V/C Ratio	0.019	-	-	-	0.105	-
HCM Control Delay (s)	9.7	0	-	-	23	-
HCM Lane LOS	A	A	-	-	C	-
HCM 95th %ile Q(veh)	0.1	-	-	-	0.3	-

HCM 6th TWSC
4: Lynnhark Pl & Site Driveway

03/24/2023

Intersection									
Int Delay, s/veh									
	1.5								
Movement	WBL	WBR	NBT	NBR	SBL	SBR			
Lane Configurations	4	4	4	4	4	4			
Traffic Vol, veh/h	10	0	32	17	0	0			
Future Vol, veh/h	10	0	32	17	0	0			
Conflicting Peds, #/hr	0	0	0	0	0	0			
Sign Control	Stop	Free	Free	Free	Free	Free			
RT Channelized	-	None	-	None	-	None			
Storage Length	0	-	-	-	-	-			
Veh in Median Storage, #	0	-	0	-	-	0			
Grade, %	0	-	0	-	-	0			
Peak Hour Factor	92	92	92	92	92	92			
Heavy Vehicles, %	2	2	2	2	2	2			
Movt Flow	11	0	35	18	0	0			

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	45	44	0 53 0
Stage 1	44	-	- - -
Stage 2	1	-	- - -
Critical Hwy	6.42	6.22	- 4.12 -
Critical Hwy Sig 1	5.42	-	- - -
Critical Hwy Sig 2	5.42	-	- - -
Follow-up Hwy	3.518	3.318	- 2.218 -
Platoon blocked, %	965	1026	- 1553 -
Stage 1	978	-	- - -
Stage 2	1022	-	- - -
Mov Cap-1 Maneuver	965	1026	- 1553 -
Mov Cap-2 Maneuver	965	-	- - -
Stage 1	978	-	- - -
Stage 2	1022	-	- - -

Approach	WB	NB	SB
HCM Control Delay, s	8.8	0	0
HCM LOS	A		

Minor Lane/Major Wvmt	NBT	NBR	SBL	SBR
Capacity (veh/h)	-	965	1553	-
HCM Lane V/C Ratio	-	0.011	-	-
HCM Control Delay (s)	-	8.8	0	-
HCM Lane LOS	-	A	A	-
HCM 95th %ile Q(veh)	-	0	0	-



TALMACK
URBAN FORESTRY
— Consultants Limited —

2324 Sooke Road, Colwood, BC

Construction Impact Assessment &
Tree Management Plan

PREPARED FOR: Landvision Group

PREPARED BY: Talmack Urban Forestry Consultants Ltd.
Noah Talbot – Consulting Arborist
ISA Certified # PN-6822A
Tree Risk Assessment Qualified

DATE OF DRAFT REPORT ISSUANCE: February 01, 2023

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APPENDICES

Appendix A Tree Management Plan (T1)

Appendix B Site Photographs

REVISION RECORD

REVISION	DESCRIPTION	DATE (YYYY-MM-DD)	ISSUED BY
DRAFT	Draft report delivered to the client for review and coordination.	2022-02-01	NT

1. INTRODUCTION

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

Site:	2324 Sooke Road
Municipality	Colwood
Client Name:	Landvision Group
Dates of Site Visit:	October 20, 2022
Site Conditions:	1 lots. No ongoing construction activity.
Weather During Site Visit:	Overcast

The purpose of this report is to address requirements of the arborist report requirements of the Colwood Urban Forest Bylaw No. 1735. The construction impact assessment section of this report (section 8), is based on plans reviewed to date, including the: August 23, 2022 Architectural package (prepared by Lovick Scott Architects) and November 2022 Civil package (prepared by Aplin Martin). At this time we have not reviewed a detailed landscape plan.

2. TREE INVENTORY METHODOLOGY

We attended the subject site to inventory onsite bylaw protected trees, and any trees offsite (within influencing distance of the proposed development). At the time of our site visit, there were no design plans or survey plan available for review. For the purpose of this report, the size, health, and structural condition of trees was documented. For ease of identification in the field, numeric metal tags were attached to the lower trunks of bylaw protected onsite trees. Trees located on neighbouring private properties (where access was restricted) were not tagged, but were given ID numbers. 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 review of the architectural site plan and preliminary civil plan, 25 bylaw protected onsite trees, 1 shared ownership tree and 10 bylaw protected private offsite trees will require removal to facilitate construction of the proposed underground parkade.

Based on bylaw criteria, 72 replacement trees are required to replace the 25 onsite bylaw protected size trees, 1 shared ownership bylaw protected trees and 10 bylaw protected private offsite trees. It is understood that a tree replacement plan will be prepared by others. If the site cannot accommodate the required quantity of

replacement trees, the deficit will be compensated to the City via a cash in lieu contribution to the City tree replacement and maintenance reserve account, by the owner. Current arboricultural best management practices and BCSLA/BCLNA standards apply to; quality, root ball, health, form, handling, planting, guying/staking and establishment care of replacement trees.

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.

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 take into account individual tree characteristics, such as health and vigour. Three ratings are assigned based on our knowledge and experience with the tree species: Poor (P), Moderate (M) or Good (G).

Critical Root Zone: Meant the area of land surrounding the trunk of a tree contained within a circle of radius equal to the DBH of the tree multiplied by 6, or the area of land surrounding the tree that extends one meter beyond the dripline of the tree, whichever is greater.

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 a long 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 (ie. 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 - 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

Table 1. Tree Inventory

Tag or ID #	Surveyed ? (Yes / No)	Location (On, Off, Shared, City)	Bylaw protected ? (Yes / No)	Name		dbh (cm)	Ht (m)	Critical root zone radius (m)	Dripline radius (m)	Condition		Retention Suitability (onsite trees)	Relative tolerance	General field observations/remarks	Tree retention comments	Retention status
				Common	Botanical					Health	Structural					
2201	Yes	On	Yes	Garry oak	<i>Quercus garryana</i>	32	20	3.2	4	Fair/good	Fair	Suitable	Good	Asymmetric crown on West side - likely due to shading from a Douglas-fir tree that was removed, twig dieback.	Located within the footprint of the proposed underground parkade.	Remove
OS1	No	Off	No	Douglas-fir	<i>Pseudotsuga menziesii</i>	22	15	2.2	4	Fair/good	Fair		Moderate	End of tree row, suppressed by 2201 - asymmetric crown on West side due to shading.	Hydro kiosk is proposed within the critical root zone. The project arborist to supervise all excavation required within the critical root zone.	Retain*
2202	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	55, 59	25	11	6	Fair	Fair	Conditional	Moderate	Codominant stems form at 1m above grade - no major weaknesses visible at stem union.	Located within the footprint of the proposed underground parkade.	Remove
2203	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	51	25	5.1	6	Fair	Fair	Conditional	Moderate	Codominant crown with adjacent firs - asymmetric crown on North side due to shading.	Located within the footprint of the proposed underground parkade.	Remove
2204	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	51	25	5.1	6	Fair	Fair	Conditional	Moderate	Codominant crown with adjacent firs - asymmetric crown on North side due to shading.	Located within the footprint of the proposed underground parkade.	Remove
2205	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	38	20	3.8	4	Fair	Fair	Conditional	Moderate	Corrected trunk lean.	Located within the footprint of the proposed underground parkade.	Remove
2206	Yes	On	Yes	Garry oak	<i>Quercus garryana</i>	13	5	1.3	2	Fair/good	Fair	Conditional	Good	Asymmetric crown on North side due to shading.	Will be heavily impacted by excavation required to construct the foundation of the proposed underground parkade.	Remove
2207	Yes	On	Yes	Bigleaf maple	<i>Acer macrophyllum</i>	27, 8	15	3.8	4	Fair/good	Fair	Conditional	Moderate	Side pruned on South side for overhead utilities clearance.	Located within the footprint of the proposed underground parkade.	Remove
2208	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	60	25	7.2	6	Fair/good	Fair	Conditional	Moderate	Asymmetric crown on East side - likely due to shading from a Douglas-fir tree that was removed.	Located within the footprint of the proposed underground parkade.	Remove
2209	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	63	25	7.6	6	Fair/good	Fair	Conditional	Moderate	Asymmetric crown on East side - likely due to shading from a Douglas-fir tree that was removed.	Located within the footprint of the proposed underground parkade.	Remove
2210	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	34	15	4.1	4	Fair/good	Fair	Conditional	Moderate	Asymmetric crown on East side - likely due to shading from a Douglas-fir tree that was removed.	Located within the footprint of the proposed underground parkade.	Remove
2211	Yes	On	Yes	Cherry plum	<i>Prunus cerasifera</i>	26, 15, 19, 16, 16	10	5.6	3	Fair	Fair	Conditional	Moderate	Multiple stems form at 1.5m above grade - no major weaknesses visible at stem union.	Located within the footprint of the proposed underground parkade.	Remove
2212	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	50	20	6	5	Fair/good	Fair	Conditional	Moderate	Topped historically at 20m above grade, asymmetric crown on South side due to shading.	Located within the footprint of the proposed underground parkade.	Remove
2213	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	49	20	5.9	5	Fair/good	Fair	Conditional	Moderate	Topped historically at 20m above grade, asymmetric crown on South side due to shading.	Located within the footprint of the proposed underground parkade.	Remove
2214	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	53	20	6.4	5	Fair/good	Fair	Conditional	Moderate	Codomimant crown with adjacent fir trees.	Located within the footprint of the proposed underground parkade.	Remove
2215	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	69	25	8.3	6	Fair/good	Fair	Conditional	Moderate	Asymmetric crown on South side due to shading.	Located within the footprint of the proposed underground parkade.	Remove
2216	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	48	25	5.8	6	Fair/good	Fair	Conditional	Moderate	Asymmetric crown on East side due to shading.	Located within the footprint of the proposed underground parkade.	Remove

Tag or ID #	Surveyed ? (Yes / No)	Location (On, Off, Shared, City)	Bylaw protected ? (Yes / No)	Name		dbh (cm)	Ht (m)	Critical root zone radius (m)	Dripline radius (m)	Condition		Retention Suitability (onsite trees)	Relative tolerance	General field observations/remarks	Tree retention comments	Retention status
				Common	Botanical					Health	Structural					
OS2	Yes	Off	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	~ 85	25	10.2	6	Fair/good	Fair/good		Moderate	Codominant crown with OS3 - asymmetric crown on North side due to shading.	Will be heavily impacted by excavation required to construct the foundation of the proposed underground parkade.	Remove
OS3	Yes	Off	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	~ 79	25	9.5	6	Fair/good	Fair/good		Moderate	Codominant crown with OS2 - asymmetric crown on South side due to shading.	Will be heavily impacted by excavation required to construct the foundation of the proposed underground parkade.	Remove
2217	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	93	25	11.2	6	Fair/good	Fair/good	Conditional	Moderate	Asymmetric crown on South side due to shading.	Will be heavily impacted by excavation required to construct the foundation of the proposed underground parkade.	Remove
2218	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	89	25	10.7	6	Fair/good	Fair/good	Conditional	Moderate	Codominant crown with adjacent firs - asymmetric crown on North side due to shading.	Located within the footprint of the proposed underground parkade.	Remove
2219	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	66	25	7.9	6	Fair/good	Fair	Conditional	Moderate	Codominant crown with adjacent firs - asymmetric crown on West side due to shading, heavily surface rooted.	Located within the footprint of the proposed underground parkade.	Remove
2220	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	18, 33, 90	25	14.5	8	Fair/good	Fair	Conditional	Moderate	Codominant crown with adjacent firs - asymmetric crown on East side due to shading, dogleg trunk form.	Located within the footprint of the proposed underground parkade.	Remove
2221	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	54	25	6.5	6	Fair/good	Fair	Conditional	Moderate	Codominant crown with adjacent firs - asymmetric crown on East side due to shading.	Located within the footprint of the proposed underground parkade.	Remove
2222	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	89	25	10.7	6	Fair/good	Fair	Conditional	Moderate	Asymmetric crown on East side due to shading, heavily surface rooted.	Located within the footprint of the proposed underground parkade.	Remove
2223	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	79	25	9.5	8	Fair/good	Fair/good	Conditional	Moderate	Asymmetric crown on West side due to shading, trunk rubbing against 2224.	Located within the footprint of the proposed underground parkade.	Remove
2224	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	65, 52	20	11.5	6	Fair/good	Fair	Conditional	Moderate	Trunk rubbing against 2223. Suppressed - stunted growth form.	Located within the footprint of the proposed underground parkade.	Remove
OS4	No	Off	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	~ 50	20	6	5	Fair/good	Fair		Moderate	Asymmetric crown on East side due to shading, stunted growth form.	Will be heavily impacted by excavation required to construct the foundation of the proposed underground parkade.	Remove
OS5	Yes	Off	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	~ 65, 45	20	11	6	Fair/good	Poor		Moderate	Topped historically at 10m above grade - multiple leaders form at topping location.	Will be heavily impacted by excavation required to construct the foundation of the proposed underground parkade.	Remove
OS6	Yes	Off	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	~ 45	8	5.4	4	Fair	Poor		Moderate	Topped historically at 8m above grade and maintained.	Will be heavily impacted by excavation required to construct the foundation of the proposed underground parkade.	Remove
OS7	Yes	Off	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	~ 75	25	9	6	Fair/good	Fair		Moderate	Codominant crown with adjacent firs - asymmetric crown on East side due to shading.	Will be heavily impacted by excavation required to construct the foundation of the proposed underground parkade.	Remove
OS8	Yes	Off	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	~ 45	8	5.4	4	Fair	Poor		Moderate	Topped historically at 8m above grade and maintained.	Will be heavily impacted by excavation required to construct the foundation of the proposed underground parkade.	Remove
OS9	Yes	Off	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	~ 70	25	8.4	8	Fair/good	Fair		Moderate	Codominant crown with adjacent firs - asymmetric crown on West side due to shading.	Will be heavily impacted by excavation required to construct the foundation of the proposed underground parkade.	Remove

Tag or ID #	Surveyed ? (Yes / No)	Location (On, Off, Shared, City)	Bylaw protected ? (Yes / No)	Name		dbh (cm)	Ht (m)	Critical root zone radius (m)	Dripline radius (m)	Condition		Retention Suitability (onsite trees)	Relative tolerance	General field observations/remarks	Tree retention comments	Retention status
				Common	Botanical					Health	Structural					
2225	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	108	25	13	10	Fair/good	Fair/good	Suitable	Moderate	Dominant tree in area - good trunk taper.	Located within the footprint of the proposed underground parkade.	Remove
2226	Yes	On	Yes	Garry oak	<i>Quercus garryana</i>	26	15	2.6	3	Fair/poor	Fair	Unsuitable	Good	Health stress - poor annual shoot elongation.	Located within the footprint of the proposed underground parkade.	Remove
OS10	Yes	Off	Yes	Western redcedar	<i>Thuja plicata</i>	33, 59, 57	20	13.6	6	Fair/good	Fair		Moderate	Tridominant stems form at 1 - 1.5m above grade - narrow angle of attachment.	Will be heavily impacted by excavation required to construct the foundation of the proposed underground parkade.	Remove
OS11	Yes	Off	Yes	Western redcedar	<i>Thuja plicata</i>	36	15	4.3	4	Fair/good	Fair		Moderate	Heath stress - sparse crown.	Will be heavily impacted by excavation required to construct the foundation of the proposed underground parkade.	Remove
OS12	Yes	Off	No	Western redcedar	<i>Thuja plicata</i>	26	15	3.1	3	Fair/good	Fair		Moderate	Asymmetric crown on North side due to shading.	Will be heavily impacted by excavation required to construct the foundation of the proposed underground parkade.	Remove

5. SITE INFORMATION & PROJECT UNDERSTANDING

The development site consists of 1 lot in Colwood, B.C. (see *figure 1* below). It is our understanding that the proposal is to remove the existing building structures and create a new apartment building with underground parking and underground utility connections.

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

6. FIELD OBSERVATIONS

The onsite tree resource consists of primarily native tree species (primarily Douglas-fir), growing in closed stand conditions around the existing residence. Offsite and shared trees within influencing distance of the subject site are primarily native species growing in stands that are continuous with the trees on the subject site.



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

7. TREE RISK ASSESSMENT

During our October 20, 2022 site visit and in conjunction with the tree inventory update, onsite trees were assessed for risk, on a limited visual assessment basis (level 1), and 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 the tree inventory). 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, that 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 onsite residence (constant use), occupants of vehicles travelling on Sooke Road or Lynnlark Place (frequent use), pedestrians travelling along the existing sidewalk (frequent use), hydro lines (constant use).

8. CONSTRUCTION IMPACT ASSESSMENT

8.1. RETENTION AND REMOVAL OF PRIVATE OFFSITE TREES

The following private offsite trees (indicated by ID #) is located where it is possible for retention providing that the critical root zone can be adequately protected during construction. The project arborist must be onsite to supervise and excavation or fill placement required within the critical root zone (shown on the tree management plan (T1) in *appendix A*):

Retain and protect 1 private offsite tree

- OS1 (non bylaw protected)

The following private offsite trees or trees with shared ownership (indicated by tag or ID #) are located where they are in conflict with proposed construction and will require removal:

Remove 11 private offsite trees

- OS2, OS3, OS4, OS5, OS6, OS7, OS8, OS9, OS10, OS11, OS12 (non bylaw protected)

***Prior written consent from the neighbouring owner is required prior to the removal of any trees located on neighbouring properties.**

8.2. RETENTION AND REMOVAL OF ONSITE TREES

The following bylaw protected onsite trees (indicated by tag or ID #) are located where they are in conflict with proposed construction and will require removal:

Remove 25 bylaw protected size onsite trees, and 1 tree with shared ownership

- 2201, 2202, 2203, 2204, 2205, 2206 (shared), 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226.

8.3. RETENTION AND REMOVAL OF MUNICIPAL TREES

The following shared ownership tree (indicated by tag #) is located where they are in conflict with proposed construction and will require removal:

Remove 1 bylaw protected size tree that is shared ownership with the municipality

- 2206 (shared).

***Consent from the municipality is required prior to the removal of any trees located on municipal property.**

9. TREE REPLACEMENT

Pursuant to Colwood Urban Forest Bylaw No. 1735, the tree replacement calculations are as follows:

Quantity of Existing trees	# of Trees Retained	# of Trees Removed	Replacement Tree Ratio	Replacement Trees Required
Onsite (Bylaw protected size)				
25 onsite and 1 shared	0	25 onsite and 1 shared	26 trees @ 2:1	52
City Owned Trees				
0	0	0	N/A	N/A
Private Offsite (bylaw protected)				
10	0	10	2:1	20
Total:				72

Based on bylaw criteria, 72 replacement trees are required to replace the 25 onsite bylaw protected size trees, 1 shared ownership bylaw protected trees and 10 bylaw protected private offsite trees. It is understood that a tree replacement plan will be prepared by others. If the site cannot accommodate the required quantity of replacement trees, the deficit will be compensated to the City via a cash in lieu contribution to the City tree replacement and maintenance reserve account, by the owner. Current arboricultural best management practices

and BCSLA/BCLNA standards apply to; quality, root ball, health, form, handling, planting, guying/staking and establishment care of replacement trees.

10. 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:

- All excavation required within the critical root zone of OS1 for the footprint of the proposed underground parkade and the installation of the proposed hydro kiosk.

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 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 take into account 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.

Windthrow: Where forest edge trees are proposed to be removed, we recommend that trees that may experience an increase in wind exposure be re-examined, once tree clearing has taken place, to ensure that they are structurally stable, and suitable for retention as leading-edge trees.

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.

11. 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 new 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.

12. 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:



Noah Talbot, BA
ISA Certified Arborist PN – 6822A
Tree Risk Assessment Qualification
Email: tmtreehelp@gmail.com

13. REFERENCES

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

Colwood Urban Forest Bylaw No. 1735.

APPENDIX A - TREE MANAGEMENT PLAN (T1)



THE DASHED LINE INDICATED THE WALL OF THE PROPOSED U/G PARKADE

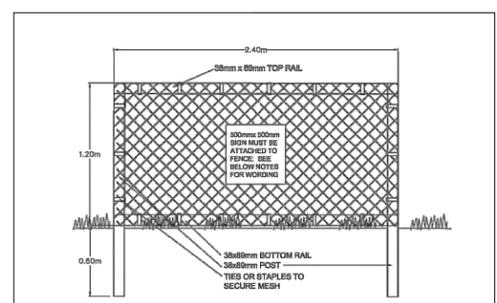
THE DASHED LINE INDICATED THE WALL OF THE PROPOSED U/G PARKADE

THE PROJECT ARBORIST TO SUPERVISE EXCAVATION REQUIRED WITHIN THE CRITICAL ROOT ZONE OF OS1 FOR THE FOOTPRINT OF THE PROPOSED U/G PARKADE AND INSTALLATION OF THE PROPOSED HYDRO KIOSK

LEGEND

- Existing tree with ID #
- Tree protection fencing
- Critical root zone radius (m)
- Tree proposed for removal
- Unsurveyed tree
- Non-bylaw onsite tree
- Site boundary

TREE PROTECTION FENCING



- TREE PROTECTION FENCING**
- FENCE WILL BE CONSTRUCTED USING 38mm x 89mm WOOD FRAME TOP, BOTTOM AND POSTS * USE ORANGE SNOW-FENCING MESH AND SECURE THE WOOD FRAME WITH 22P TIES OR GALVANIZED STAPLES.
 - ATTACH A 500mm X 500mm SIGN WITH THE FOLLOWING WORDING: PROTECTED ROOT ZONE - NO ENTRY. THIS SIGN MUST BE AFFIXED ON EVERY FENCE OR AT LEAST EVERY 10 LINEAR METERS.
- * IN ROCKY AREAS, METAL POSTS (T-BAR OR REBAR) DRILLED INTO ROCK WILL BE ACCEPTED

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 or 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, paving 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 - T1
2324 Sooke Road
Colwood, BC

DATE: February 01, 2023
PREPARED FOR: Client
SCALE: 1 : 500 @ 11" X 17"
DRAWN BY: NT
REVISION: DRAFT
REFERENCE DWG: Servicing plan by Aplin Martin (12.16.2022)
Topo Survey by GeoVerra



APPENDIX B - PHOTOGRAPHS



Photograph 1. Photograph of stand of Douglas-fir trees at the Southwest corner of the site (tag#'s 2212 – 2217).



Photograph 2. Photograph of group of stand of onsite Douglas-fir trees (tag#'s 2218 – 2224).

February 8th, 2023

Ms. Desiree Givens, Planner
City of Colwood
3300 Wishart Road,
Victoria, BC, V9C 1R1

Re: 2324 Sooke Road Public Consultation Summary

Dear Ms. Givens

On January 31st and February 7th, 2023, the LandVision Group hosted an Open House for the residents of the Lynnlark Place and Sooke Road local area at the Children's Hall at the Colwood Community Centre. Residents were provided notice of the meeting by mail (map attached). An email address was also provided to all residents so they could reach out anytime throughout the process with questions or concerns.

Display boards (attached) were available for viewing, questions, and discussion. Landvision representative Nav Nahal and I were in attendance on the 31st and Landvision representative Kiran Nagra and I hosted the open house on the 7th. Display materials attached.

Approximately 20 neighbours were in attendance on January 31st and 7 neighbours attended on the 7th, to share their thoughts and ideas regarding the project.

Certainly, a project of this magnitude is a big change. While in compliance with the OCP for the Transit Growth Corridor, and providing much needed housing, it is certainly something new in an area that is slowly developing to accommodate all forms of housing.

Resident Comments

A summary of the comments we heard are as follows:

- Access out of Lynnlark Road with all the new vehicles. Can the entrance be moved to Sooke Road?
- Concerns regarding overflow parking on Lynnlark; that the parking provided will be inadequate.
- Safety of pedestrians and school children on the street. Kids like to play and ride their bikes in the street.
- Requests that height be limited 4 stories for a better transition to the existing neighbourhood.
- Loss of privacy and trees.
- General lack of enthusiasm for density in the area.
- Smokers from the building loitering about.
- A reduction in the existing property values.

Grayland Consulting Ltd

- Dust dirt and noise during construction.
- Construction parking.
- Will the project bring sewers up the street?
- Colwood should build the necessary infrastructure before rezoning these properties (Roads and sewers)
- Noise from the on-site amenity area.
- Need for neighbourhood commercial in the area.
- Shade for existing residences to the north.
- Loss of quality of life, property values for the neighbourhood.
- Not opposed to development, its just too big for this lot.

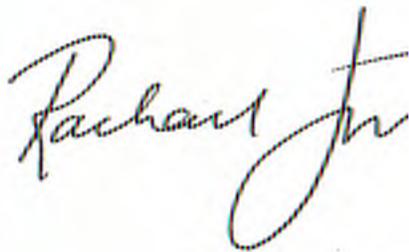
We will do our best to mitigate as many of these concerns within the scope of the existing proposal, as possible. We will outline this mitigation strategy at our first opportunity to meet with Council.

On-going communication with the Neighbourhood

The neighbourhood notice included the email gcpermits2020@gmail.com in case there are additional questions and comments. We also took attendance at each meeting and collected email addresses so that we can advise those neighbours of upcoming meetings.

We believe that on going respectful communication with the residents is critical to the success of any project, and we intend to maintain this relationship through the development approval process and throughout construction. We will be on hand to address concerns with trades parking, construction activity and the like until the project is ready for occupancy. After that, a professional property management company will be at the helm.

We trust that this report is satisfactory. Please do not hesitate to request further information as required.

A handwritten signature in black ink, appearing to read 'Rachael Sansom', written in a cursive style.

Rachael Sansom A.Sc.T

Grayland Consulting Ltd.

January 23rd, 2023

Dear Neighbour,

The LandVision Group has made an application to rezone the lands at 2324 Sooke Road, from the existing single-family home to a 6-storey condominium, in accordance with the Colwood Official Community Plan Transit Corridor Designation. This designation supports density and housing diversity along Sooke Road.

Please join us at one or both Open Houses to learn more about the project.

- Location: Colwood Community Hall, 2219 Sooke Rd – Children’s Hall
- Date: Tuesday January 31st and Tuesday February 7th, 2023
- Time: 7:00-8:30 p.m.

Light refreshments will be served.

The plan and images attached shows the intended project. The proposed building is stepped away from the existing residential areas. Privacy will be improved by opaque balcony glass, fencing and landscape screening. A traffic study has been commissioned that will study the impact of this project on the Lynnlark/Sooke road intersection and will make recommendation for upgrades if necessary. Frontage improvements including sidewalks and streetlights will be provided in front of the property on both the Sooke Road and Lynnlark frontages.

The project is scheduled to go before Colwood Council in either March or April of this year. We wish to introduce ourselves and provide contact information for your questions and comments prior to those meetings.

Please contact us at gcppermits2020@gmail.com if you have further questions or comments. If you wish to receive electronic correspondence from us, please let us know. We will be able to keep you up to date with the status of approvals and meeting dates when known.

Thank you for your interest in this project,



Rachael Sansom, A.Sc.T.

Development Consultant for LandVision Group



Location Plan

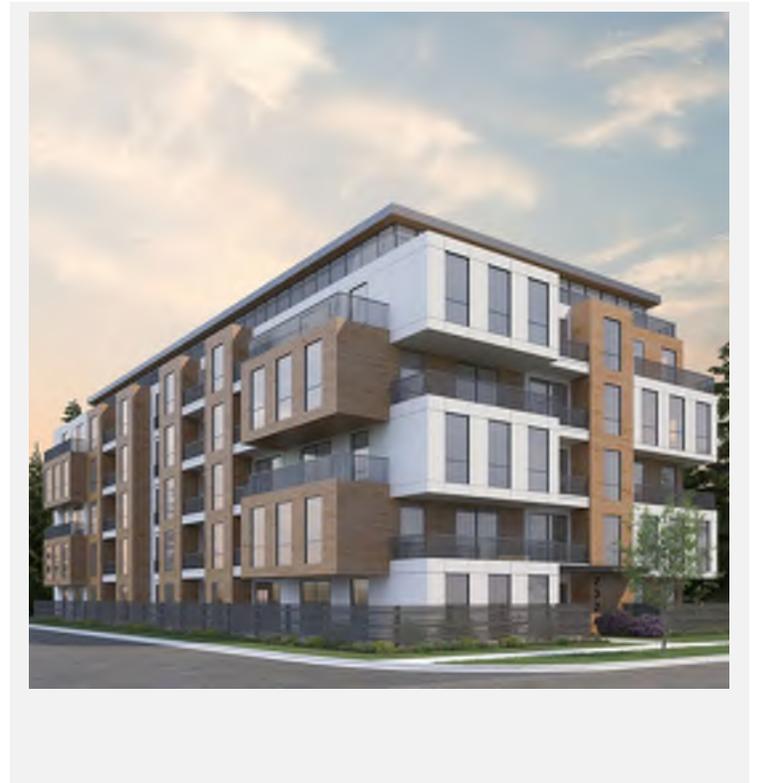
**Proposed Development
at 2324 Sooke Road**



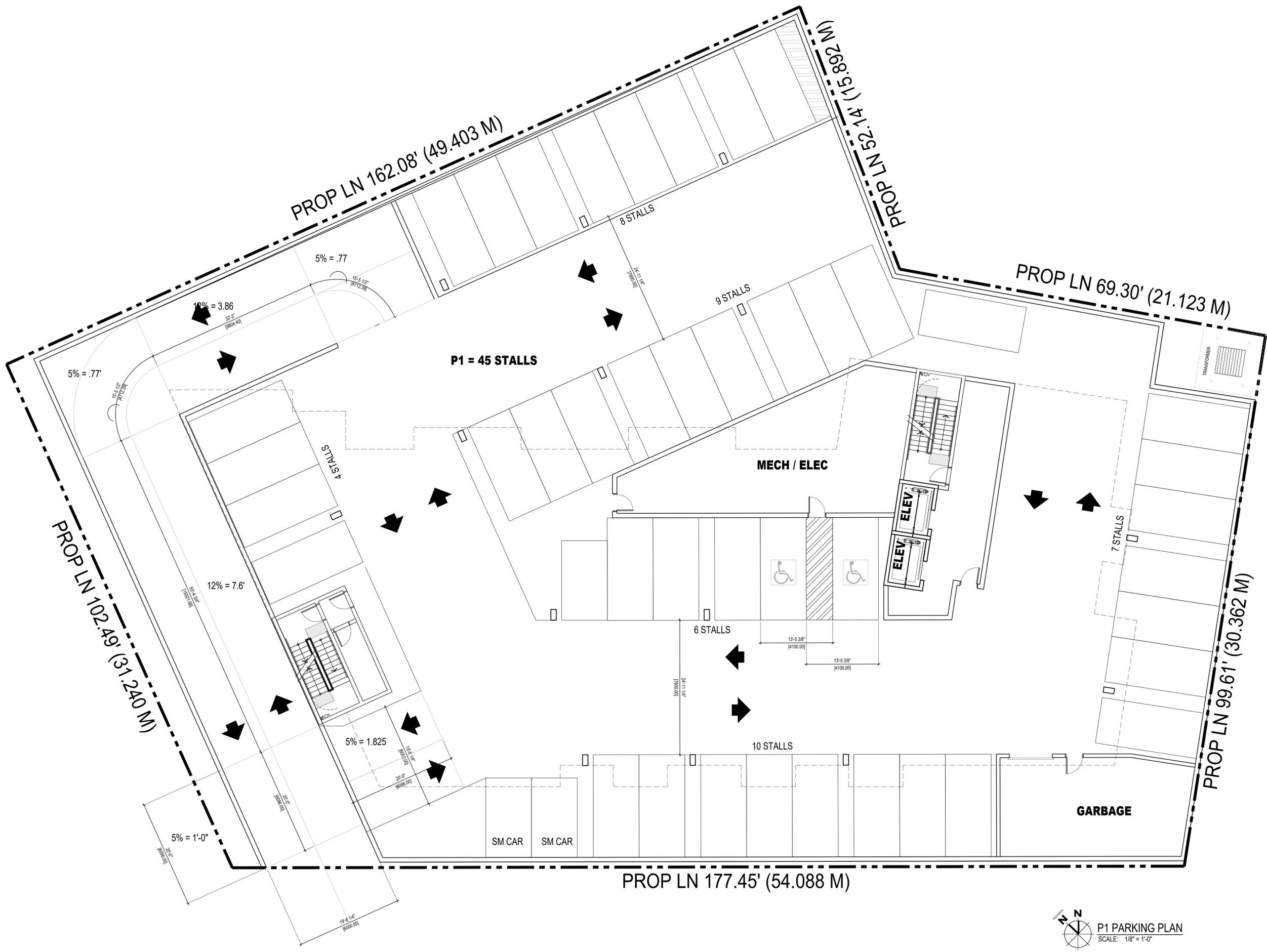
Proposed Site Plan



Rear view of proposed building



Sooke Road looking east



REV	DATE	DESCRIPTION
01	02/07/23	ISSUED FOR REZONING

CONSULTANT

CONSULTANT SEAL

CONTRACTOR SHALL VERIFY ALL DIMENSIONS ON SITE. DRAWINGS SHALL NOT BE SCALED.

ARCHITECT



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DRAWN BY: DS APPROVED: LSA

PROJECT: 2324 APARTMENT

2324 SOOKE ROAD
 COLWOOD, BRITISH COLUMBIA

DRAWING: P1 PARKING PLAN

PROJECT NUMBER: 22-044 DRAWING NUMBER: AS1

SCALE: 1/8" = 1'-0"

DATE: MAY 2022 REVISION: FEB 7TH, 2023

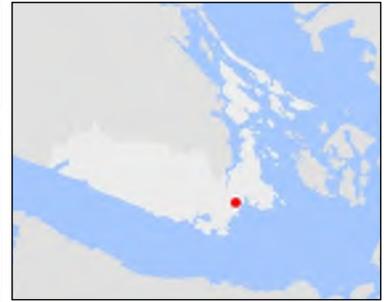


2324 APARTMENT (22-044)



VIEW FROM THE CORNER OF SOOKE RD.
AND LYNNLARK PL.

2324 Sooke Road



Legend

1: 2,500



127.0 0 63.5 127.0 Meters

NAD_1983_UTM_Zone_10N
© Capital Regional District

Important: This map is for general information purposes only. The Capital Regional District (CRD) makes no representations or warranties regarding the accuracy or completeness of this map or the suitability of the map for any purpose. This map is not for navigation. The CRD will not be liable for any damage, loss or injury resulting from the use of the map or information on the map and the map may be changed by the CRD at any time.

Notes

Proposed Re-zoning



G/F PLAN & SITE LAYOUT
SCALE: 1/16" = 1'-0"

SITE STATISTICS

CIVIC ADDRESS
2324 SOOKE RD.
COLWOOD, BRITISH COLUMBIA

EXISTING ZONING: R1

PROPOSED ZONING: CD

SITE AREA:
GROSS - 26,609.4 SQ.FT. (2,472.1 SQM.)
ROAD DEDICATION - 949.2 SQ.FT. (88.2 SQM.)
NET - 25,660.2 SQ.FT. (2,383.9 SQM.)

BUILDING AREA
P2 = 24,547.7 SQ.FT. (2,280.6 SQM.)
P1 = 24,547.7 SQ.FT. (2,280.6 SQM.)
GF = 10,673 SQ.FT. (991.55 SQM.)
2ND FLOOR = 10,889 SQ.FT. (1,011.62 SQM.)
3RD FLOOR = 10,750 SQ.FT. (998.71 SQM.)
4TH FLOOR = 10,889 SQ.FT. (1,011.62 SQM.)
5TH FLOOR = 10,669 SQ.FT. (991.18 SQM.)
6TH FLOOR = 8,977 SQ.FT. (833.99 SQM.)

ABOVE GRADE TOTAL = 62,847 SQ.FT. (5,838.68 SQM.)

SITE COVERAGE
ALLOWED - MAXIMUM 70%

BUILDING FOOTPRINT ONLY
10,673 SQ.FT. / 25,660.2 SQ.FT. = .41593
PROPOSED - 41.59 %

SITE FAR
ALLOWED - MAXIMUM 2.5

TOTAL BUILDING
62,847 SQ.FT. / 25,660.2 = 2.449
PROPOSED - 2.45

SETBACKS	ALLOWED	PROPOSED MAIN BLDG	PROPOSED BUILDOUT
FRONT (SOOKE)	6.0m	6.0m	* 4.77m
REAR	7.5m	7.83m	-
EXTERIOR (SOUTH)	4.5m	4.51m	* 3.28M
INTERIOR (NORTH)	5m	5.03m	-

* VARIANCE REQUIRED

BUILDING HEIGHT
ALLOWED - 6 STOREYS
PROPOSED - 6 STOREYS

UNIT COUNT

	D 3-BED	A 2-BED	B 1-BED	C STUDIO	TOTAL
G/F	0	2	11	1	13
2ND	0	2	12	1	15
3RD	0	2	12	1	15
4TH	0	2	12	1	15
5TH	2	2	8	1	13
6TH	5	1	1	0	8
	7	11	56	5	79

PARKING REQUIRED
BACHELOR / STUDIO = 0.8 SPACES PER UNIT
ONE BEDROOM = 1.0 SPACES PER UNIT
TWO BEDROOM = 1.3 SPACES PER UNIT
THREE BEDROOM = 1.5 SPACES PER UNIT
VISITOR = 0.2 SPACES PER UNIT

BACHELOR / STUDIO - 5 X 0.8 = 4
ONE BEDROOM - 56 X 1.0 = 56
TWO BEDROOM - 11 X 1.3 = 14.3
THREE BEDROOM - 7 X 1.5 = 10.5
VISITOR - 79 X 0.2 = 15.8
TOTAL = 100.6

TOTAL STALLS REQUIRED = 102

PROPOSED
P1 - 2 SM CAR
- 2 HI/CAP
- 41 REGULAR
TOTAL - 45 STALLS
P2 - 49 REGULAR
TOTAL - 49 STALLS

TOTAL PROVIDED = 94 STALLS

VARIANCE REQUIRED - 8 STALLS

REV	DATE	DESCRIPTION
02	AUG/23/22	ISSUED FOR CLIENT REVIEW OPT#2
01	AUG/12/22	ISSUED FOR CLIENT REVIEW

CONSULTANT

CONSULTANT SEAL

CONTRACTOR SHALL VERIFY ALL DIMENSIONS ON SITE. DRAWINGS SHALL NOT BE SCALED.



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DRAWN BY: APPROVED:
PROJECT: LSA

2324 APARTMENT

2324 SOOKE ROAD
COLWOOD, BRITISH COLUMBIA

G/F PLAN & SITE LAYOUT

PROJECT NUMBER	DRAWING NUMBER
22-044	AS1
SCALE:	
1/16" = 1'-0"	
DATE:	
mAY 2022	
REVISION:	
AUG/23/22	

2324 APARTMENT (22-044)

To whom it may concern:

My name is Komal Dodd and I am a Real Estate agent with Sutton group west coast Realty. I have been selling Real Estate in Victoria area for the last 44 years. Assembling development properties is my specialty area.

This letter is prepared to explain the events that happened during the negotiations that took place for 2322 Sooke Rd. The owner is a retired single lady with mature Son living with her.

We prepared an offer in the amount of 1Million to buy the subject property for Landcraft construction corporation on May 31, 2023.

I met with the owner on June 1st to present the offer. The owner told me that I understand that my house is not worth it but I will only sell if the buyer really makes it worthwhile for me. I told her that your property is probably worth around \$850,000+- and this is a very good opportunity for her. She said that the lowest she will go is \$1.1 Million. I told her I will talk to the buyer. I spoke to the buyer and he agreed to offer \$1.1 Million.

I met with the owner again on June 3 and presented her the new offer. We went through the offer in detail and she seemed to be in agreement. Since the owner had no agency representation, the offer was subject to her lawyers approval by June 8th. She said she will see her lawyers and if all goes well she will sign it. The owner text me on June 8th to say the following:

“Sorry, I'm not selling at this time. It's too stressful on myself and my son.”

I text her back to convince her that she is missing a very good opportunity but she did not respond back.

In my opinion there is nothing else I can do to convince her.

Yours truly,

Komal Dodd
Sutton group Westcoast Really
Victoria BC

July 11^h, 2023

Mayor and Council, City of Colwood
3300 Wishart Road,
Victoria, BC, V9C 1R1

Re: 2324 Sooke Road Rezoning Application – RZ-22-016

Dear Mayor and Council

On May 1st, The Planning and Land Use committee gave consideration to a rezoning application for the above noted lands, in accordance with the Transit Growth Area designation for a 6 storey condominium. The recommendation to Council was as follows:

- 1. Recommend to Council that Rezoning Application No. RZ-22-016 for 2324 Sooke Road be revised so that it complies with the regulatory conditions of the proposed TGA1 zone; (RECOMMENDED);**

The LandVision group is respectfully requesting that Council consider option 2 (below) of the staff report that would allow them to proceed with the 6 storey building with a revised setback of the north end of the building to 4 storeys, stepping up to 6 (except the stairwell) and increased setback on the east side, adjacent to existing residents.

- 2. Recommend to Council that Rezoning Application No. RZ-22-016 for 2324 Sooke Road be approved with no further revisions;**

AND THAT amendments be made to the Land Use Bylaw to rezone the property at 2324 Sooke Road from the Residential 1 (R1) Zone to a new zone;

AND THAT prior to adoption of the amending bylaw, a Section 107 Plan showing the proposed road dedication along Sooke Road to achieve a 30 m cross-section based on the Sooke Road Corridor Study that was considered by the Transportation Committee on May 9th 2022 be submitted to the City of Colwood for signature and registered at the BC Land Titles Office;

AND FURTHER THAT prior to adoption of the amending bylaw, the following long-term conditions be registered within a Section 219 Covenant Development Agreement:

Prior to the issuance of a Building Permit:

1. The Owner covenants and agrees with the City that the Lands shall not be built upon, and the Owner shall not apply for a building permit and the Owner agrees it is not entitled to a building permit unless and until:

OFF-SITE WORKS

- a. The Owner completes frontage improvements on Sooke Road (or enters into a Servicing Agreement with the City of Colwood for the required frontage improvements) as required by applicable City of Colwood policies or bylaws.

PARKING

- b. The Owner registers a Section 219 covenant over the lands that agrees to allocate parking for each residential unit as required by applicable City of Colwood bylaws and ensures that the allocated residential parking is not provided in exchange for additional compensation separate from the rent received for each residential unit.

We originally understood that this project was "grandfathered" and the TGA zone would not apply, as the application was made well in advance of the TGA bylaw. Since the PLUC meeting, the design team has been trying to work with the TGA bylaw for compliance and are finding some fundamental technical difficulties with our proposal. The issue is primarily with the 2,000m² lot size, although some of the issues may filter into the other categories.

The first issue is that 4 storey construction is rarely seen these days as it is inefficient and expensive. Most of the building cost is in the foundation and the roof system. The 5th and 6th floors allow larger unit sizes and 3-bedroom suites and is where profit is realized. Developers are willing to contribute to community amenities when they know that the project will be successful. Additional off-site improvements beyond those required by bylaw might be offered.

The other issue is that resident parking is required to be within an underground parking structure. Again, a 4 storey building does not justify the expense of a two storey parkade. One level might be feasible if enough surface parking were permitted at street level under the building to ensure compliance with the parking bylaws.

The 3-metre setback to the underground parkade and ramps is also problematic. Most jurisdictions permit a "0" lot line setback to optimize these expensive spaces. Using the 2,000m² example in the proposed TGA zone, a 40mx50m lot would be reduced to 36mx46m parkade area. This would result in a loss of at least 9 spaces per parking level (this is a very general statement, as parking lot layouts, drive aisles, mechanical rooms, stairwells, elevator shafts and columns all dictate the ultimate space count).

And finally, the requirement for lot width might be revisited. I understand from the staff presentation that the minimum lot widths are suggested to ensure adequate access to Sooke Road. It doesn't consider corner lots with access from a side street, or the ability to share access via reciprocal easements. This development is serviced from Lynnlark Place.

The TGA 4 zone effectively cuts the achievable density on this parcel in half, which we do not believe is the intent, but is certainly the result.

We have prepared a short presentation for Council for further explain the reasons for this request. We attach sketches showing the revised setbacks and will also commit to the enhanced public area in front of the building. We truly appreciate the comments that came from the Committee, however the reality of the TGA in its current draft form does not work for us and would likely not work for others. We would be happy to comply with a revised version that will consider the concerns raised above.

Further, after meeting with Staff in early June, staff indicated that they would support a 6 storey building in this location if the adjacent property at 2322 Sooke Road was purchased and incorporated into the development area. While the landowner originally entertained our generous offer, they ultimately declined as they simply do not want to sell their home at this time.

Parking will be available to each property owner at no additional cost and be specifically assigned to each home. If a home owner does not wish to use their space they are welcome to make their own arrangements with other residents to share those spaces.

With regard to traffic safety, the main entrance to the building is from Lynnlark Place. The intersection of Lynnlark and Sooke Road has been analyzed by the traffic engineers in cooperation with Colwood Engineering staff. Any recommendations for road configuration, laning and other improvements will be constructed well in advance of building occupancy.

To this end, we wish to proceed with a CD Zone that will support this project, as amended to reduce the effects on the surrounding properties by stepping back the upper floors and increasing the setbacks. If there is an opportunity to re-introduce this project to Council at the August 28th Council meeting, we would be happy to make a presentation to introduce the revised building form and discuss this project further. We will ask our traffic consultant to attend the Council meeting to address any safety concerns and questions that Council may have.

Respectfully submitted,

Harj Sandhu

Harj Sandhu
Landvision Group

2324 Sooke Road

Rezoning Application No. RZ-22-016

Council Meeting

August 28th 2023

Site Context



Application History



We are here!

Proposal Considered by PLUC



View from Sooke Road



View from Lynnlark Place

Revised Proposal



View from Lynnlark Place

OCP Review

Built Form Policies



Transit Growth Areas support:

- Ground-oriented and low-rise buildings
- Up to 4 storeys and 6 in limited situations
- Floor Area Ratio up to 2.5

OCP Review

Transition in Scale

Scale Transition between Transit Growth Areas and Existing Low-Density Neighbourhood Residential Areas



Proposals in Transit Growth Areas should provide a gentle transition in scale to single-detached neighbourhoods

OCP Review

Public Realm Policies



Proposals in Transit Growth Areas should demonstrate improved public realm for pedestrians and transit users

OCP Review

Natural Assets Policies



Buildings in the Transit Growth Areas should be designed to protect natural assets (when proposal is in an environmentally sensitive area or is a greenfield site)

TGA1 Zone

- A template zone that was created to take a more proactive approach to development along transit growth areas
- Intended to guide development in a way that enables growth while still achieving OCP policies for sensitive integration and gentle transition

Attached Housing



Low-Rise Apartment

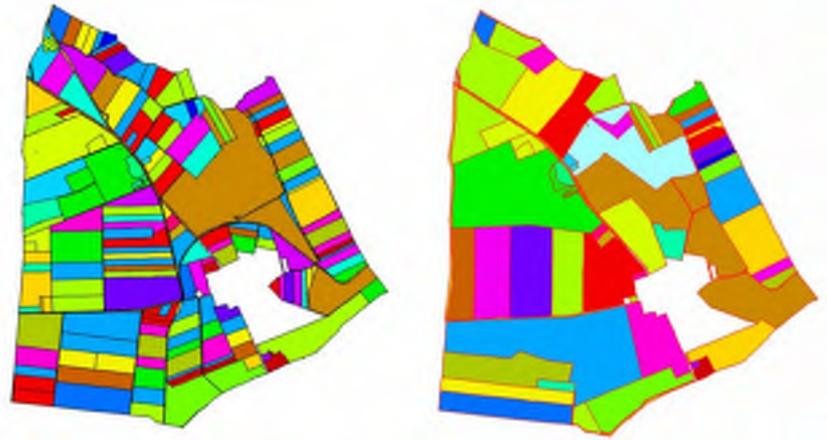


Mid-Rise Apartment

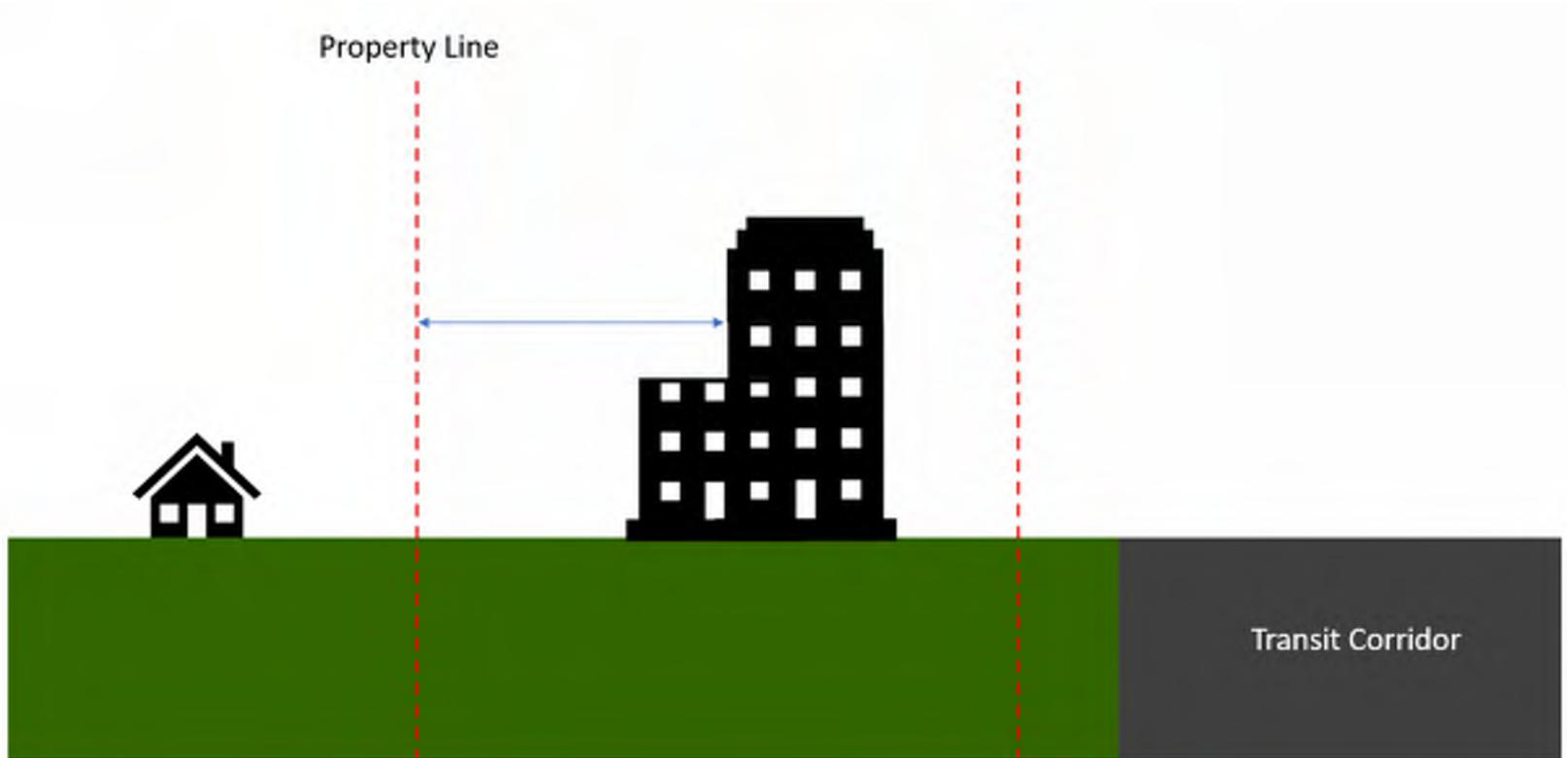


TGA1: Minimum Lot Area/Width

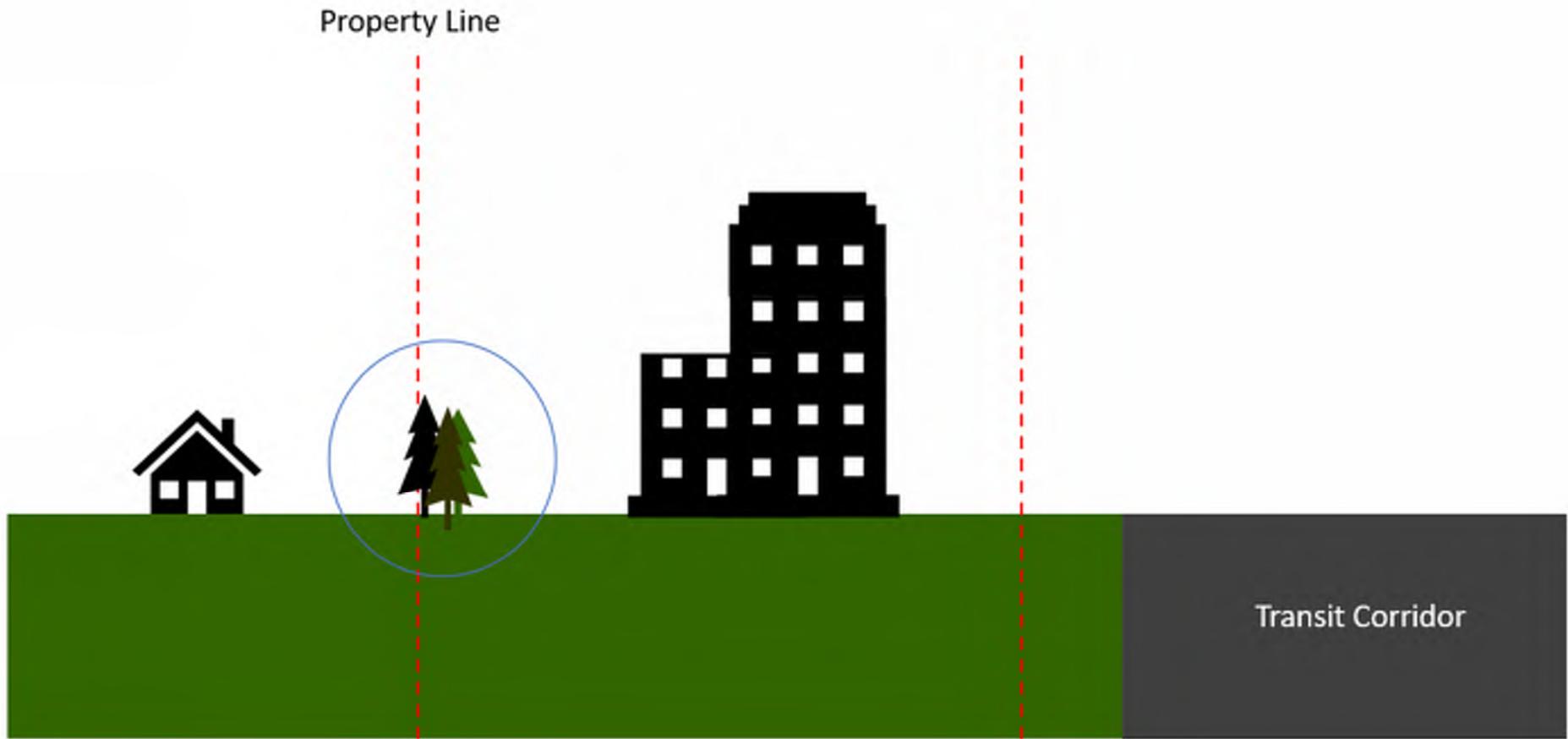
- Encourage lot consolidation
- Minimize the number of accesses off arterial roads
- Various sizes and lot widths were tested



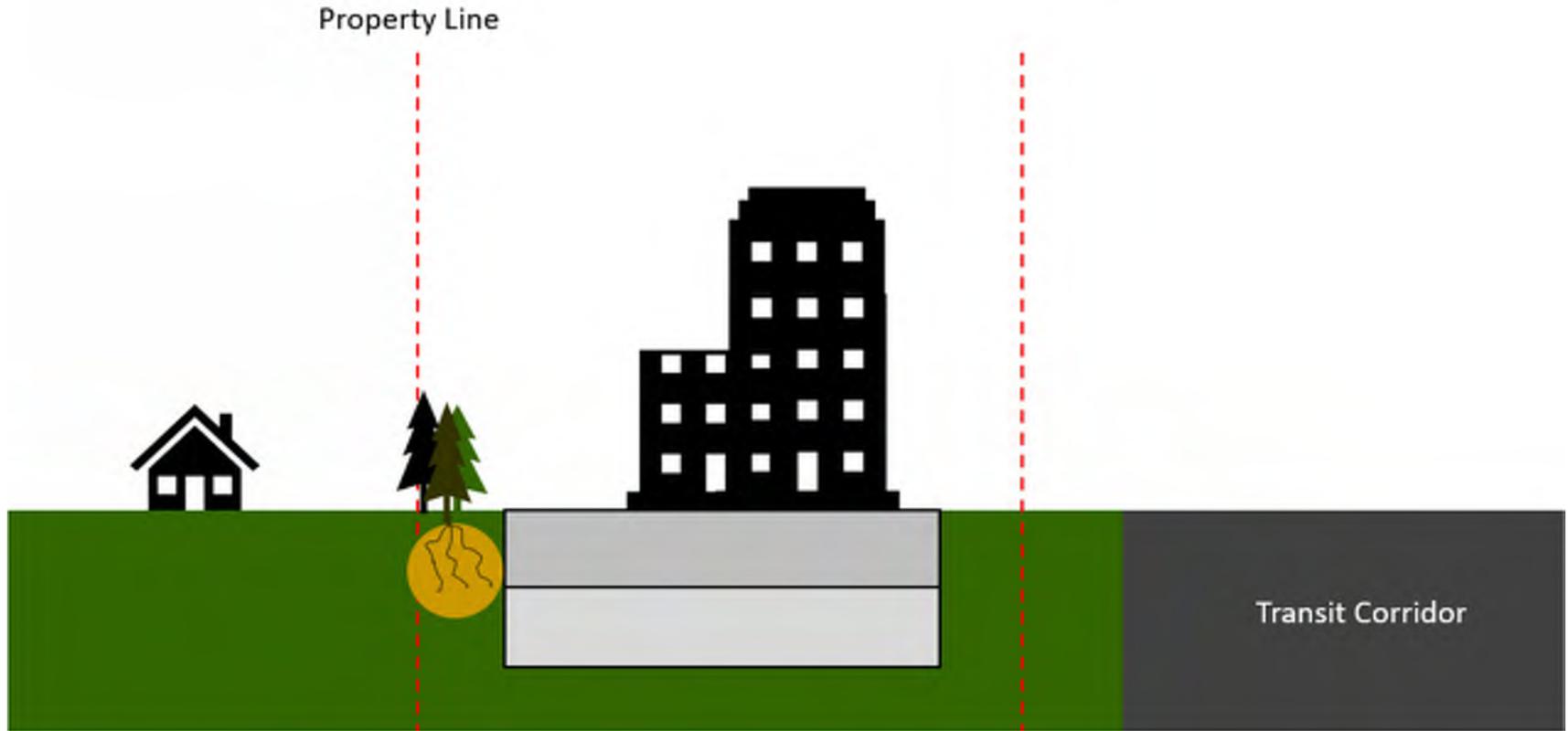
TGA1: Setbacks for Buildings



TGA1: Landscape Buffer Requirement



TGA1: Setbacks for Underground Structures



Proposal's Compliance with TGA1

Regulation	TGA1 Requirement for Mid-Rise Apt.	Applicant's Proposal
Minimum Lot Area	4,000 m ²	2,384 m²
Minimum Lot Width	60 m	29 m
Maximum Floor Area Ratio	2.5	2.3
Maximum Lot Coverage for Structures and Buildings	50%	41%
Usable Open Space	10% (minimum)	>10%
Maximum Building Height	Lesser of 6 storeys or 24m	6 storeys

Proposal's Compliance with TGA1

Regulation	TGA1 Requirement for Mid-Rise Apt.	Proposal
Front Setback	3 - 6 m	4.7 m
Side Setback	4 m first 3 storeys 7.5 m above 3 rd storey (minimum)	5 m (all storeys)
Rear Setback	7.5 m first 3 storey 10 m above 3 rd storey (minimum)	7.5 m (all storeys)
Minimum Setback for an Underground or Under Building Parking Structure from Any Lot Line	3 m	0 m (all lot lines)

Lot Consolidation



Communication/Timeline



Jan 31st



Open House #1

Feb 7th



Open House #2

Feb 27th



Notice Sign Installed

May 8th



PLU Committee

Aug 28th



Council Decision

TBD



Public Notice

TBD



Public Input/Bylaw

Options

Option 1 (Staff Recommendation): That the application be approved and that the subject property be rezoned from the R1 zone to the TGA1 zone

Option 2 (Applicant's Proposal): That the application be approved and that the subject property be rezoned from R1 to a new CD zone

Option 3: That the application be deferred for further information

Option 4: That the application be denied

Thank you!



**CITY OF COLWOOD
BYLAW NO. 2003**

A BYLAW TO AMEND BYLAW NO. 151 BEING THE “COLWOOD LAND USE BYLAW, 1989”

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

1. CITATION

This bylaw may be cited as “**Colwood Land Use Bylaw No. 151, 1989, Amendment No. 206 (CD40-2324 Sooke), Bylaw No. 2003, 2023**”.

2. AMENDMENT

Bylaw No. 151, the “Colwood Land Use Bylaw, 1989” is amended as follows:

- a) Amend Schedule “A” (Zoning Map) by deleting from the Residential 1 (R1) Zone and adding to the Comprehensive Development 40 (CD40) Zone, the property shown in Schedule 1 attached to this bylaw and described as “Lot 1, Section 68, Esquimalt District, Plan VIP21248 Except Plan 32786, PID 000-616-427”
- b) In Section 1.2 “DEFINITIONS”, under the heading “COMPREHENSIVE DEVELOPMENT ZONES” and after “CD36” insert “CD40”
- c) In Section 1.3.09 under the heading “SHORT FORM” and after “CD36” insert “CD40” and under the heading “ZONE” and after “Comprehensive Development 36” insert “Comprehensive Development 40”.
- d) After Section 10.41, add Section 10.45 COMPREHENSIVE DEVELOPMENT 40 (CD40) 2324 SOOKE ZONE as per Schedule 2 of this bylaw.

READ A FIRST TIME on this the _____ day of _____, 2023

READ A SECOND TIME on this the _____ day of _____, 2023

READ A THIRD TIME on this the _____ day of _____, 2023

**APPROVED BY THE MINISTRY OF
TRANSPORTATION AND INFRASTRUCTURE**
on this the _____ day of _____, 2023

**ADOPTED BY THE MUNICIPAL COUNCIL
OF THE CITY OF COLWOOD** on this the

day of

2024

MAYOR

CORPORATE OFFICER

DRAFT

SCHEDULE 2**SECTION 10.45 COMPREHENSIVE DEVELOPMENT 40 (CD 40 – 2324 SOOKE) ZONE****10.45.1 Purpose**

The purpose of this zone is to provide for the orderly development of the lands at 2324 Sooke Road in Colwood. A base level of development is provided for which would permit the development of the lands in the zone at a low density. Alternative regulations are specified for development at greater density, subject to the owner providing amenities contributions as contemplated by Section 482 of the *Local Government Act*.

10.45.2 Permitted Uses

- 1) In addition to the uses permitted by Section 2.1.10, the following uses and no others are permitted in the CD40 Zone:
 - i. Accessory buildings and structures
 - ii. Accessory dwelling unit
 - iii. Apartment
 - iv. Home occupation

10.45.3 Base Level of Development

In the CD40 Zone the number of dwelling units shall not exceed 2.

10.45.4 Community Amenity Contributions

- 1) Notwithstanding Section 10.45.3, the density of development in Section 10.45.5 is permitted on the lands shown on the CD40 Zone Map if the Owner:
 - a) Contributes to the Affordable Housing Fund \$1,500 per additional residential unit;
 - b) Contributes to the Community Amenity Fund \$4,500 per additional dwelling unit for an apartment;
 - c) Contributes to the Fire Hall Fund \$583 per additional dwelling unit;
- 2) All dollar amounts referred to in Section 10.45.4 (1) are the 2022 baseline rates and shall increase annually starting on January 1st of each year starting on January 1, 2023 as per the Victoria Consumer Price Index (CPI).
- 3) Payment of the contributions in Section 10.45.4 (1) shall be made at the time of issuance of a building permit.

10.45.5 Regulatory Conditions

- 1) Within the CD40 Zone, the following regulatory conditions apply:

Regulation	General
Minimum Lot Area	2,300 m ²
Minimum Lot Width	30 m
Floor Area Ratio	2.5
Maximum Lot Coverage	50%
Usable Open Space	15% (minimum)
Maximum Building Height	6 storeys (up to a maximum of 20 m)
Minimum Building Setbacks	
Front (Sooke Road)	3 m (minimum); 6 m (maximum)
Interior side (northeast property line)	9 m
Interior side (all others)	5 m
Exterior side (Lynnlark Place)	3 m (minimum); 6 m (maximum)
Rear (northwest property line)	7.5 m first 4 storeys (minimum)

- 2) The minimum rear setback for the 5th storey and above shall be 10 metres where adjacent to a one family dwelling use or a two family dwelling (duplex) use.

10.45.6 Landscaping and Screening

- 1) Landscaping is to be provided:
- Where a lot line joins a public road, a landscaped area of at least 1.5 m in width must be provided inside the property line that abuts the public road;
 - To separate parking areas from adjacent residential property to the north, a landscaped buffer area of at least 1.5 m in width and 2.0m in height must be provided along the inside of the rear property line;
 - Loading areas and refuse removal area and recycling containers must be screened from adjacent properties and streets by landscaping or solid decorative fence or combination thereof; and
 - All mechanical, electrical, and other service equipment located on the roof of a building must be screened from adjacent properties and streets by ornamental structures, landscaping, or other means.
 - All mechanical, electrical, and other service equipment located outside must be screened from streets with a decorative UV and graffiti resistant laminated wrap that will form a year-round visual barrier.
 - All portions of the lot not covered by buildings, structures or parking areas shall be landscaped and maintained in a neat and tidy condition.
 - Landscape and screening areas shall retain existing trees and natural vegetation wherever possible and add planting including native species that enhances the natural environment.

10.45.7 General

The relevant provisions of Divisions 1 and 2 shall apply. In the case of a conflict between the provisions of Division 1 and 2 and the provisions of this zone, the latter shall prevail.

DRAFT



CITY OF COLWOOD
MINUTES OF
REGULAR COUNCIL MEETING
Monday, August 28, 2023 at 6:30 PM
Council Chambers
3300 Wishart Road, Colwood, BC

PRESENT

Mayor	Doug Kobayashi
Councillors	Cynthia Day
	David Grove
	Dean Jantzen
	Kim Jordison
	Misty Olsen
	Ian Ward

ATTENDING

Chief Administrative Officer	Robert Earl
Director of Finance	Jenn Hepting
Director of Community Development	Iain Bourhill
Director of Development Services	Yazmin Hernandez
Fire Chief	Bryan Erwin
Climate Planner	Carolyn Richman
Planner II	Desiree Givens
Planner I	Kelsea Fielden
Manager of Corporate Services	Marcy Lalande
Recording Secretary	Tiffany MacDonald

1. CALL TO ORDER

Mayor Kobayashi called the meeting to order at 6:30 pm and acknowledged meeting on the shared traditional lands of the Lekwungen speaking people.

2. APPROVAL OF THE AGENDA

MOVED BY: COUNCILLOR WARD
SECONDED: COUNCILLOR OLSEN

R2023-264 THAT the Near Term Agenda be received;

AND THAT the Agenda of the Regular Council meeting of August 28, 2023 be adopted as presented.

CARRIED**3. MAYOR'S MESSAGE**

Mayor Kobayashi advised of a busy fall schedule including the finalization of the strategic priorities.

4. ADOPTION / RECEIPT OF THE MINUTES

**MOVED BY: COUNCILLOR OLSEN
SECONDED: COUNCILLOR GROVE**

R2023-265 THAT the minutes of the Regular Council meeting held July 10, 2023 be adopted as presented.

CARRIED**5. PUBLIC PARTICIPATION**

Two (2) written submissions were received on the following:

- *Draft Climate Action Plan and Climate Planning Foundation*
- *Rezoning Application RZ-22-016 for 2324 Sooke Road*

Resident of Belmont Road addressed Council in support of the Climate Planning Foundation Report. She informed Council that she has started a gardening for wildlife program at the Juan de Fuca Seniors Centre. She advised the Citizens Environment Network in Colwood (CENiC) are in support for the Climate Planning Foundation Report.

Resident of Cuaulta Crescent addressed Council over concerns of the Development Variance Permit - DVP-23-004, 783 Cuaulta Crescent regarding displacement of wildlife and driveway concerns.

Resident of Ridley Drive addressed Council regarding the possibility of having sewer connection on Ridley Drive.

Resident of Cuaulta Crescent addressed Council over concerns of the Development Variance Permit - DVP-23-004, 783 Cuaulta Crescent regarding wildlife protection, amount of lots proposed, rock removal and drainage.

Resident of Delora Drive addressed Council in support of the letter regarding: Petition to Extend Mary Anne Crescent.

Laura Davis, Arts and Culture Colwood Society, addressed Council about concern with the letter regarding: Intermunicipal Advisory Committee for the Westshore Arts and Culture Centre - request for a Colwood representative.

6. DELEGATIONS

6.1 Juan de Fuca Performing Arts Centre Society - Creating a West Shore Community Arts & Culture Centre

Judith Cullington, President of the Juan de Fuca Performing Arts Centre Society provided a presentation on creating a West Shore Community Arts & Culture Centre.

7. CORRESPONDENCE FOR COUNCIL CONSIDERATION

7.1 Judith Cullington, President Juan de Fuca Performing Arts Centre Society

Regarding: Intermunicipal Advisory Committee for the West Shore Arts and Culture Centre - Request for a Colwood Representative

Council discussion ensued regarding the following:

- *Cost per person per year*
- *Feasibility study and estimates*
- *Terms of Reference vs Advisory Committee language clarification*
- *Funding sources*
- *Potential conflict of interest*

7.2 Marianne Alto, Victoria Mayor, City of Victoria

Regarding: Endorsement of the Vancouver Island Housing Leadership Network's Call for Action

Council discussion ensued regarding the following:

- *Alignment of regional housing with realities of life*
- *Involvement of higher levels of government*

MOVED BY: MAYOR KOBAYASHI
SECONDED: COUNCILLOR JANTZEN

R2023-266 THAT this item be forwarded to staff for consideration including financial implications and report back to Council.

CARRIED

7.3 Alison McMillan, Municipal Liaison Proposal Manager

Regarding: Menstrual Equity Pilot Project

MOVED BY: COUNCILLOR JANTZEN
SECONDED: COUNCILLOR GROVE

R2023-267 THAT the letter from Alison McMillan, Municipal Liaison Proposal Manager regarding Menstrual Equity Pilot Project be received.

CARRIED

7.4 John Briggs & Brent Fischbach

Regarding: Petition to Extend Mary Anne Crescent

John Briggs and Brent Fischbach addressed Council regarding: Petition to Extend Mary Anne Crescent and the benefits outlined in the letter.

Council discussion ensued regarding the following:

- *Road safety*
- *Accessibility to neighbourhood*

MOVED BY: COUNCILLOR JANTZEN
SECONDED: COUNCILLOR GROVE

R2023-268 THAT staff examine the feasibility of the proposal to extend Mary Anne Crescent described in the letter of John Briggs and Brent Fischbach dated August 15, 2023 and provide feedback to the Transportation Committee.

CARRIED

7.5 Kristine Chamberlain

Regarding: Sewer on Ridley Drive

Resident of Ridley Drive addressed Council regarding the possibility of having sewer connection on Ridley Drive.

8. NOTICE OF MOTION

8.1 Councillor Kim Jordison

Accessible British Columbia Act

(This item will be brought to Council for discussion at the September 11, 2023 Council meeting.)

Councillor Kim Jordison introduced the following motion:

THAT the City of Colwood continue to participate on the joint Intermunicipal Advisory Committee on Disability Issues (IACDI) as the municipality accessibility committee with potential partners to include, the Township of Esquimalt, the District of Highlands, the City of Langford, the District of Metchosin, the District of Sooke and the Town of View Royal;

AND THAT the draft terms of reference for this joint accessibility advisory committee be provided for consideration of approval in the fall of 2023;

AND THAT each member municipality of this joint accessibility advisory committee appoint one elected representative and one elected alternate representative to the committee;

AND THAT each member municipality of this joint accessibility advisory committee allocate its share of annual operating funds for committee expenses;

AND THAT a joint accessibility advisory committee ad be placed seeking members for this committee;

AND THAT staff collaborate with the joint accessibility advisory committee to prepare the terms of reference for the Accessibility plan;

AND THAT the \$10,000 funding allocated in Year 1 of the 2023-2027 Financial Plan originally for development of the Accessibility Plan be used, as funds permit, instead for:

- assistance, as/when required, with development of the accessibility plan and/or contribution towards retaining a consultant to prepare an accessibility plan which member municipalities will apply to their own accessibility initiatives; and,*
- facilitated engagement sessions (such as focus groups, or surveys) on barriers faced by the public in accessing services of the partner municipalities;*

AND FURTHER THAT the City of Colwood establish an email address to receive public comments as set out in the Accessible BC Act legislation.

9. NEW BUSINESS

9.1 Bryan Erwin, Fire Chief

Mutual Aid Agreement Renewal with City of Langford

Bryan Erwin, Fire Chief presented the Mutual Aid Agreement renewal with the City of Langford.

MOVED BY: COUNCILLOR DAY
SECONDED: COUNCILLOR JANTZEN

R2023-269 THAT Council approve the Mutual Aid Agreement for fire rescue services between the City of Colwood and City of Langford and authorize the Mayor and Chief Administrative Officer or Corporate Officer to execute the agreement.

CARRIED

9.2 Carolyn Richman, Climate Planner

Draft Climate Action Plan and Climate Planning Foundations Report

Carolyn Richman, Climate Planner, provided a presentation on the Draft Climate Action Plan and Climate Planning Foundations Report.

Council discussion ensued regarding:

- *Time lines for implementation*
- *Biodiversity involvement*
- *Community participation*
- *Funding*

MOVED BY: COUNCILLOR GROVE

SECONDED: COUNCILLOR OLSEN

R2023-270 THAT Council endorse the Climate Action Plan and Climate Planning Foundations report for master planning purposes;

AND THAT the target date for Colwood's goal of net-zero emissions be changed to 2040.

NOT VOTED ON DUE TO MOTION TO SEVERE

MOVED BY: COUNCILLOR JANTZEN

SECONDED: COUNCILLOR GROVE

R2023-271 THAT the motion be severed.

CARRIED

MOVED BY: COUNCILLOR GROVE

SECONDED: COUNCILLOR OLSEN

R2023-272 THAT Council endorse the Climate Action Plan and Climate Planning Foundations Report for master planning purposes.

CARRIED

MOVED BY: COUNCILLOR GROVE

SECONDED: COUNCILLOR OLSEN

R2023-273 THAT the target date for Colwood's goal of net-zero emissions be changed to 2040.

**DEFEATED
IN FAVOUR: COUNCILLORS DAY AND GROVE**

MOVED BY: COUNCILLOR DAY

SECONDED: COUNCILLOR OLSEN

R2023-274 THAT staff report back to Council with what the implications would be for accelerating the target date to 2040 or 2045.

DEFEATED**IN FAVOUR: COUNCILLORS DAY, GROVE AND MAYOR KOBAYASHI**

MOVED BY: MAYOR KOBAYASHI
SECONDED: COUNCILLOR JANTZEN

R2023-275 THAT communication be added as a pathway to the plan.

CARRIED

The meeting recessed at 8:29 pm.

The meeting reconvened at 8:33 pm.

9.3 Desiree Givens, Planner II**Rezoning Application RZ-22-016 for 2324 Sooke Road**

(Recommendation from the May 1, 2023 Planning and Land Use Committee meeting.)

Desiree Givens, Planner II, provided a presentation on the Rezoning Application RZ-22-016 for Sooke. Rachael Sansom, representative for the applicant, Landvision Group, provided an updated presentation on changes made on their application.

Resident of Lynnlark Place addressed Council of the neighbouring properties that were approached by the developer to purchase their homes. None of the homeowners approached were willing to sell their home, therefore any form of lot consolidation in the future is highly unlikely. He expressed concerns with a recent four storey development that has caused issues for the existing neighbourhood related to parking, traffic and safety.

Council discussion ensued regarding:

- *Sewer connections*
- *Shape and size of lot*
- *Frontage improvements*
- *Zoning changes*
- *Tree protection*

MOVED BY: COUNCILLOR JANTZEN

SECONDED: COUNCILLOR GROVE

R2023-276 THAT Rezoning Application No. RZ-22-016 for 2324 Sooke Road be approved;

AND THAT amendments be made to the Land Use Bylaw to rezone the property at 2324 Sooke Road from the Residential 1 (R1) Zone a new Comprehensive Development (CD) Zone;

AND THAT prior to scheduling reading of the amending bylaw, the feasibility of sewer extension beyond the property line of 2324 Sooke Road be confirmed to the satisfaction of the City of Colwood's Engineering department;

AND THAT prior to adoption of the amending bylaw, a Section 107 Plan showing the proposed road dedication along Sooke Road to achieve a 30 m cross-section based on the Sooke Road Corridor Study that was considered by the Transportation Committee on May 2022 be submitted to the City of Colwood for signature and registered at the BC Land Titles Office;

AND FURTHER THAT prior to adoption of the amending bylaw, the following long-term conditions be registered within a Section 219 Covenant Development Agreement:

Prior to the issuance of a Building Permit:

1. The Owner covenants and agrees with the City that the Lands shall not be built upon, and the Owner shall not apply for a building permit and the Owner agrees it is not entitled to a building permit unless and until:

OFF-SITE WORKS

a. The Owner agrees to either: 1.) complete the frontage improvements on Sooke Road as required by applicable City of Colwood bylaws and policies; 2.) enter into a Servicing Agreement with the City of Colwood (and provide the required security as agreed to by the City) that will address the required frontage improvements; 3.) provide a cash contribution to the City of Colwood in lieu of completing the required frontage improvements as determined and approved by the City; or 4.) a combination of cash-in-lieu and frontage works completion as determined and approved by the City.

PARKING

b. The Owner registers a Section 219 covenant over the lands that agrees to allocate parking for each residential unit as required by applicable City of Colwood bylaws and ensures that the allocated residential parking is

not provided in exchange for additional compensation separate from the rent received for each residential unit.

CARRIED

OPPOSED: COUNCILLORS DAY AND OLSEN

9.4 Kelsea Fielden, Planner I

Form and Character Development Permit - 85 Belmont Road / 1901 Jerome Road

Yazmin Hernandez, Director of Development Services provided a presentation on the Form and Character Development Permit - 85 Belmont Road / 1901 Jerome Road. Virginia Holden, Executive Director, Greater Victoria Housing Society and Peter Johannknecht, Principal Architect of Cascadia Architects provided an updated presentation.

Council discussion ensued regarding:

- *Rate of income to rental costs*
- *Tenant relocation plan*
- *Life span of building*
- *Accessibility type units*
- *Timeline of project*
- *Upper-level government involvement*

**MOVED BY: COUNCILLOR WARD
SECONDED: COUNCILLOR GROVE**

R2023-277 THAT the meeting proceed past 10:00 pm.

CARRIED

**MOVED BY: COUNCILLOR WARD
SECONDED: COUNCILLOR GROVE**

R2023-278 THAT DP-22-026 - 85 Belmont Road/ 1901 Jerome Road be approved and issued with no changes;

AND THAT the City send a letter of support to our MLA and BC Housing to express that funding is critical to the infrastructure in our community that would make it more cost effective for our income challenged members of our community.

CARRIED

9.5 Kelsea Fielden, Planner I

Development Variance Permit - DVP-23-004_783 Cuaulta Crescent

Kelsea Fielden, Planner I provided a presentation on Development Variance Permit - DVP-23-004 for 783 Cuaulta Crescent. Ross Casey, Property Owner, provided a photo presentation.

Council discussion ensued regarding environmental impacts due to size of lots and access to the new lots.

**MOVED BY: COUNCILLOR WARD
SECONDED: COUNCILLOR GROVE**

- R2023-279 THAT the Development Variance Permit No. DVP-23-004 for the lands at 783 Cuaulta Crescent (PID 001-893-092) be approved, which would have the effect of varying:
- Section 2.1.16(7) of the Land Use Bylaw No. 151 to decrease the minimum width of an access strip from 6.0m to 5.33m on Proposed Lots A and B.

CARRIED

10. BYLAWS**10.1 Bylaw No. 1913 - CD33 2350 Sooke Road - Adoption**

**MOVED BY: COUNCILLOR JANTZEN
SECONDED: COUNCILLOR OLSEN**

- R2023-280 THAT "Colwood Land Use Bylaw No. 151, 1989, Amendment No. 188 (CD33-2350 Sooke), Bylaw No. 1913, 2021" be adopted.

CARRIED

OPPOSED: COUNCILLORS JANTZEN, DAY AND GROVE

10.2 Bylaw No. 1979 -01 Financial Plan Amendment - First, Second and Third Reading

**MOVED BY: MAYOR KOBAYASHI
SECONDED: COUNCILLOR JANTZEN**

- R2023-281 THAT "Five Year Financial Plan (2023 - 2027) Amendment Bylaw No. 1979-01 (Schedule A & B), 2023", Bylaw No. 1979, 2023 be given First, Second and Third Reading.

CARRIED

10.3 Sewer Local Area Service Enlargement Amendment Bylaws - First, Second and Third Reading

- **Bylaw No. 1994 - Colwood Main Sewer, 2118 Sooke Road**
- **Bylaw No. 1997 - Colwood Main Sewer, 475 Delora Drive**
- **Bylaw No. 1998 - Colwood South Sewer, 475 Delora Drive**

**MOVED BY: COUNCILLOR JANTZEN
SECONDED: COUNCILLOR DAY**

R2023-282 THAT the following sewer bylaws be given First, Second and Third Reading:

- “Colwood Main Sewer Local Area Service Establishment and Loan Authorization Bylaw No. 598, 2001, Amendment No. 151 (LAS Enlargement – 2118 Sooke Road), Bylaw No. 1994, 2023”.
- “Colwood Main Sewer Local Area Service Establishment and Loan Authorization Bylaw No. 598, 2001, Amendment No. 152 (LAS Enlargement – 475 Delora Drive), Bylaw No. 1997, 2023”.
- “Colwood South Sewer Local Area Service Establishment and Loan Authorization Bylaw No. 602, 2001, Amendment No. 27 (LAS Enlargement – 475 Delora Drive), Bylaw No. 1198, 2023”.

CARRIED

11. ADJOURNMENT

**MOVED BY: COUNCILLOR DAY
SECONDED: COUNCILLOR WARD**

R2023-283 THAT the meeting adjourn at 10:22 pm.

CARRIED

NOTICE OF AMENDING BYLAW

Colwood Land Use Bylaw No. 151, 1989, Amendment No. 206
(CD40 – 2324 Sooke), Bylaw No. 2003, 2023

MEETING:	Regular Meeting of Council
DATE and TIME:	Tuesday, October 10, 2023, 6:30 pm
PLACE:	Council Chambers, 3300 Wishart Road, Colwood BC

NOTICE IS GIVEN that Council of the City of Colwood will consider First and Second Reading at the Regular Meeting of Council on Tuesday, October 10, 2023, at 6:30 pm in relation to the proposed “Colwood Land Use Bylaw No. 151, 1989, Amendment No. 206 (CD40 – 2076 Sooke), Bylaw No. 2003, 2023”.

PURPOSE: To amend the current Colwood Land Use Bylaw No. 151, 1989 to enable the construction of a six-storey residential apartment building consisting of 67 units.

SUBJECT PROPERTY: This Bylaw applies to the lands legally described as “Lot 1, Section 68, Esquimalt District, Plan VIP21248, Except Part in Plan 32786, PID 000-616-427” (2324 Sooke Road).

INSPECTION OF MATERIALS: Copies of the proposed bylaw and related materials can be viewed at www.colwood.ca/publicnotices from September 25 to October 10, 2023.



We want to hear from you!

WRITE TO US

The deadline for written submissions is 12:00 pm on the day of the meeting and must include your name and civic address.

- Email corporateservices@colwood.ca
- Mail/Drop-off: City of Colwood, 3300 Wishart Road, Colwood, BC V9C 1R1

NEED MORE INFORMATION? Contact Development Services at (250) 478-5053 ext. 112 or planning@colwood.ca.

SPEAK TO COUNCIL

In Person: The public is welcome to provide comments in person during the public participation portion of the meeting.

Electronically: To pre-register to speak please contact corporateservices@colwood.ca up until noon on the day of the meeting.