



STAFF REPORT TO COMMITTEE

DATE OF REPORT March 12, 2025

MEETING TYPE & DATE Electoral Area Services Committee of April 2, 2025

FROM: Development Services Division
Land Use Services Department

SUBJECT: Application No. RZ24A04 (240 Okotoks Drive/PID: 030-309-581
and 296 Meadow Way/PID: 000-005-398)

FILE: RZ24A04

PURPOSE/INTRODUCTION

In accordance with the [CVRD Development Application Referrals Policy](#), this is a “preliminary report” to introduce an application to redesignate and rezone the subject properties located at 240 Okotoks Drive (PID: 030-309-581) and 296 Meadow Way (PID: 000-005-398), from rural residential to industrial, to permit the existing non-conforming auto wrecking and salvage use.

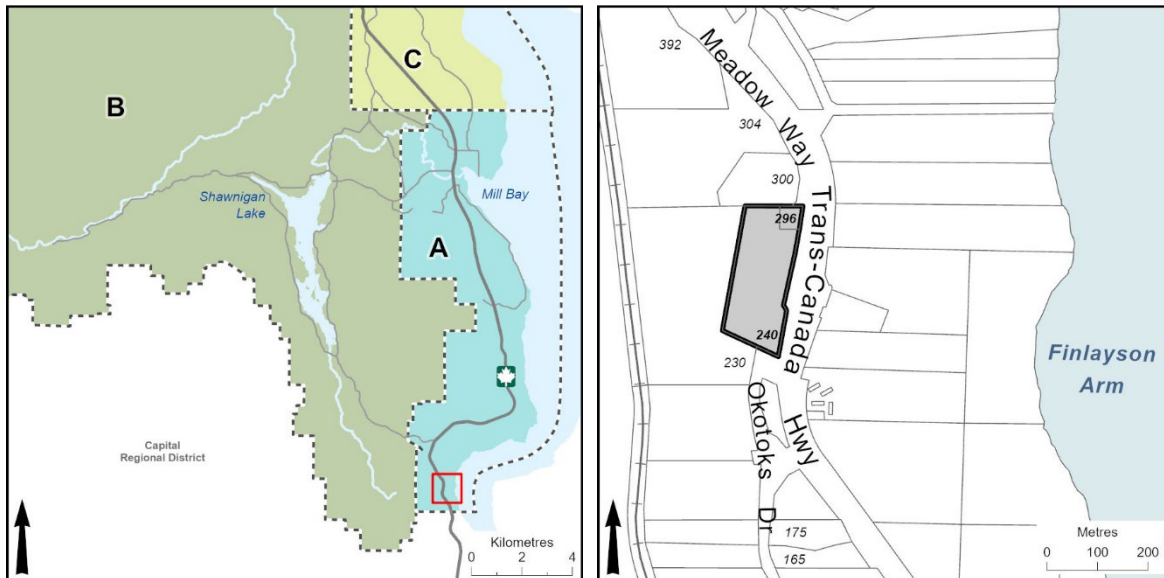
The applicants are requesting to legalize the existing use, as they are interested in expanding and modernizing the business (including construction of new buildings and/or structures to improve services).

RECOMMENDED RESOLUTION

That it be recommended to the Board that Application No. RZ24A04 (240 Okotoks Drive, PID: 030-309-581 and 296 Meadow Way, PID: 000-005-398), be referred to the following external agencies and First Nations:

1. Electoral Area A – Mill Bay/Malahat Advisory Planning Commission;
2. BC Transit;
3. Cowichan Valley School District (SD 79);
4. Island Health;
5. Malahat Fire Rescue;
6. Ministry of Environment and Climate Change Strategy;
7. Ministry of Transportation and Transit;
8. Ministry of Water, Land and Resource Stewardship;
9. Royal Canadian Mounted Police (RCMP);
10. Cowichan Tribes;
11. Malahat Nation;
12. Pauquachin First Nation;
13. Te'mexw Treaty Association;
14. Tsartlip First Nation;
15. Tsawout First Nation; and
16. Tseycum First Nation.

LOCATION MAP



BACKGROUND

The subject properties are located on the west side of the Trans-Canada Highway (TCH), near the CVRD and Capital Regional District boundary. The properties are 2.97 ha (240 Okotoks Drive) and 0.19 ha (296 Meadow Way) in area. Malahat Auto Wrecking and Metal Recycling operates an automobile salvage and wrecking yard on the larger property, which has been in operation for over 50 years. The smaller lot currently provides residential (caretaker) housing.

Existing buildings and structures include a one-storey office building with attached repair bay and dome tent, and several accessory structures (dome tent, concrete block dome, seacan dome, scale, crusher and crusher ramp, barn) on 240 Okotoks Drive. There is an existing single detached dwelling, garage and shed on 296 Meadow Way. Water and sewer servicing are onsite (groundwater well and sewerage system).

Surrounding properties are commercial – tourist accommodation to the north, campground to the west and south, and tourist accommodation, restaurant, convenience store, and gas station across the TCH to the east. Rural residential parcels are also to the northeast, across the TCH, and further south. See Attachment B for mapping.

CVRD mapping indicates the neighbouring property to the west includes Mature Forest sensitive ecosystem. Minimal vegetation has been retained onsite aside from some trees retained along the north, west and southwest boundary of the larger property. There are no watercourses mapped on the property.

The applicants have provided a rationale for the application, site plans, landscaping plan and an ecological overview by Danaca Consulting, dated June 30, 2024 (see Attachments C through F).

OFFICIAL COMMUNITY PLAN / POLICY CONSIDERATIONS

Official Community Plan for the Electoral Areas Bylaw No. 4270:

The subject property is designated Residential regionally and Rural Residential locally and is outside of the Mill Bay Growth Containment Boundary (GCB). The applicant has applied to amend the land use designation from Rural Residential to Industrial.

Official Community Plan (OCP) policies generally support industrial development, albeit in appropriate locations and buffered from adjacent rural and residential uses and along transportation corridors. The OCP recognizes there is a lack of industrial lands in the CVRD, and supports a diverse range of industrial uses. Industrial uses are recognized for their contribution to the local economy in the Electoral Area A – Mill Bay/Malahat Local Area Plan (LAP), which emphasizes accommodating existing industrial areas, such as Bamberton. Conversely, the LAP recognizes that more industrial businesses are required to attract and retain a skilled workforce over an indefinite period.

Relevant OCP and LAP land use policies are listed in Attachment A.

The subject property is subject to Development Permit Areas (DPA) 1 Riparian Protection, DPA 4 Aquifer Protection and DPA 5 Wildfire Hazard.

A recommended condition of rezoning will be to include the subject properties in development permit areas for form and character, and to reduce energy and water consumption in new buildings, reduce operation and maintenance costs of buildings, and promote innovative building design.

Any future development of the site would be subject to the DPAs, and a Development Permit would be required prior to development (unless exempted in CVRD Bylaw No. 4485).

Proposed Official Community Plan Bylaw No. 4373:

Under proposed Bylaw No. 4373, the subject property is identified within the Small Lot Rural designation and is not within the GCB. The Small Lot Rural designation is intended for single detached housing on rural acreages with a maximum density of one (1) unit per hectare (plus permitted suites), typically with no access to community water and sewer system.

Proposed Bylaw No. 4373 has two industrial designations, both of which have access to community water or sewer systems:

- The **Light Industrial** designation enables industrial or mixed-use buildings on small lots, typically located in or near village and urban centres or at a crossroads in more rural settings;
- The **General Industrial** designation enables industrial buildings and structures on large lots, typically located along major highway corridors for access, distribution of materials and tourism-related visibility.

South Cowichan Zoning Bylaw No. 3520:

The subject properties are currently zoned RR-2 Rural Residential 2, which permits agriculture, horticulture and one single detached dwelling as principal uses.

The applicant is proposing to rezone the subject properties to the I-8 Auto Wrecking/Salvage Industrial 8 zone, which permits the following principal uses:

- a. *Automobile salvage or wrecking yard, including trucks and other vehicles;*
- b. *Automobile workshop;*
- c. *Sales of used automotive parts and products;*

and accessory uses:

- d. *Sales of new auto parts;*
- e. *Single detached dwelling.*

Siting regulations for the I-8 zone include a maximum parcel coverage of 60% for buildings and structures; maximum height of 12 m; setbacks for industrial and residential use; and a minimum parcel size of 2 ha for subdivision.

Section 13.15.4 requires: *Any parcel in the I-8 Zone shall be comprehensively screened by continuous evergreen vegetation from any fronting public road.*

Other regulations that apply to the I-8 zone include Section 5.2.3, which permits a maximum fence height of 2.5 m for industrial zones; and Section 7.1 parking requirements, which requires 1 space per 100 m² of covered storage plus 1 space per employee.

Environmental Management Act (Contaminated Sites Regulation):

Under section 557 of the *Local Government Act (LGA)*, a rezoning application for a specified industrial or commercial use listed in [Schedule 2](#) may not be approved unless the regional district has received a site disclosure statement (SDS), or it is a listed exemption. The applicant has submitted an SDS that identifies the following use listed in Schedule 2:

G2. Automotive, truck, bus, subway or other motor vehicle maintenance, repair, salvage or wrecking.

Requirements under the *Contaminated Sites Regulation* may apply. The Ministry of Environment and Climate Change Strategy has been included as a recommended referral agency.

Water Sustainability Act (WSA):

A provincial groundwater licence is required under the *WSA* for commercial and industrial water use. Water licence applications for both properties have been submitted to the Province.

COMMISSION / AGENCY / DEPARTMENTAL CONSIDERATIONS

CVRD division referral comments are summarized as follows:

- ***Building Inspection and Enforcement*** – A few buildings in the last few years are unpermitted and required to be removed; Minus the residential parcel, being able to regulate the parcel is appropriate.
- ***Economic Development*** – There is a lack of Industrial land in CVRD, so access to industrial land towards the highway is sought after; Recycling parts is a supportive initiative.
- ***Environmental Services*** – Potential for contamination (proponent provided an overview of contamination mitigation); Some overlap with mature forest (development should be outside of this area); Majority of concerns are around contamination of groundwater and surface water; Surface water accumulating in depressions was noted in Ecological Overview, recommendations made to this issue including capture and discharge into ditches; Stormwater management and infiltration onsite into the aquifer is a concern; Oil and grit separators to capture washing and degreasing, may require additional mitigation

measures (closed loop containment system; new buildings are to be adequately sized to capture fluids).

- **Fire Services** – 10,000 gallon tank from Malahat Fire (they have access to the gate); Malahat Fire supports application if nothing changes to the existing tank access; No fire hydrants in area.

Recommended external referrals are listed in the staff recommendation on Page 1 of this report.

PLANNING ANALYSIS

This application proposes to redesignate the subject properties from Rural Residential to Industrial, and rezone from the RR-2 Rural Residential 2 to the I-8 Auto Wrecking/Salvage Industrial 8 zone, to bring the existing non-conforming auto wrecking and salvage use into compliance.

While it is understood this business has been in operation for more than 50 years, section 530 of the *Local Government Act (LGA)* provides:

530 *In relation to land, section 528 [non-conforming uses] does not authorize the non-conforming use of land to be continued on a scale or to an extent or degree greater than that at the time of the adoption of the land use regulation bylaw.*

A successful rezoning and re-designation of the properties would permit the existing use, which provides a (regional) service to ensure end-of-life motor vehicles are stripped of commercially usable parts and then appropriately disposed of; and allow for additional buildings and structures or renovations to the existing buildings and structures, to accommodate and update the operation.

The applicant has provided an Ecological Overview, by Danaca Consulting, dated June 30, 2024, that includes recommendations for protecting the Mature Forest sensitive ecosystem adjacent to the property; stormwater and wastewater management, including a closed loop system; and revegetation. Recommendations would best be required through a covenant.

Additional information may be requested and the Board may direct these items be resolved prior to proceeding (either prior to referrals – see Option 2 - or prior to bylaw readings). These items include:

1. Proof of servicing capability (water, sewer, drainage) on the subject property for the existing uses, including water licensing authorization for the use of surface and/or groundwater.
2. Confirmation that there is a written agreement between the applicant and Malahat Fire for 24/7 access to the water supply and an agreement in place to provide water supply to the 10,000 gallon tank. A covenant may be required to be registered prior to bylaw adoption to secure compliance with NFPA 1142 “Standard on Water Supplies for Suburban and Rural Firefighting” in an effort to ensure adequate firefighting protection.
3. A stormwater management plan including an assessment of existing drainage infrastructure and details, and recommendations for on-site drainage design.
4. Registration of a statutory right-of-way and installation of a groundwater monitoring well, as part of the CVRD Drinking Water and Watershed Protection Hydrometric Monitoring Network.

Upon completion of the rezoning, the property owner will need to satisfy CVRD Building Regulation Bylaw requirements for the existing buildings and structures, which may include wastewater, stormwater and engineering requirements.

Staff consider this application an opportunity to address and improve outstanding or potential issues – including environmental considerations; drainage, oil/water separation and stormwater management; fire protection; and screening from the TCH.

Staff are recommending this application proceed to referrals.

OPTIONS

Option 1: (Recommended, refer to external agencies and First Nations)

That it be recommended to the Board that Application No. RZ24A04 (240 Okotoks Drive, PID: 030-309-581 and 296 Meadow Way, PID: 000-005-398), be referred to the following external agencies and First Nations:

1. Electoral Area A – Mill Bay/Malahat Advisory Planning Commission;
2. BC Transit;
3. Cowichan Valley School District (SD 79);
4. Island Health;
5. Malahat Fire Rescue;
6. Ministry of Environment and Climate Change Strategy;
7. Ministry of Transportation and Transit;
8. Ministry of Water, Land and Resource Stewardship;
9. Royal Canadian Mounted Police (RCMP);
10. Cowichan Tribes;
11. Malahat Nation;
12. Pauquachin First Nation;
13. Te'mexw Treaty Association;
14. Tsartlip First Nation;
15. Tsawout First Nation; and
16. Tseycum First Nation.

Option 2: (refer application back to staff for more information, prior to further consideration)

That it be recommended to the Board that Application No. RZ24A04 (240 Okotoks Drive, PID: 030-309-581 and 296 Meadow Way, PID: 000-005-398), be referred back to staff for further information prior to further consideration, including:

1. Proof of servicing capability (water, sewer, drainage) on the subject property for the existing uses, including water licensing authorization;
2. Written confirmation of an agreement between the property owner and Malahat Fire Rescue regarding access to the 10,000 gallon tank (water supply) and an agreement to provide water supply to the tank;
3. Registration of a covenant to secure compliance with NFPA 1142 "Standard on Water Supplies for Suburban and Rural Firefighting";
4. A stormwater management plan that includes an assessment of existing drainage infrastructure and recommendations for on-site drainage design.

Option 3: (advance application without seeking referral comments)

That it be recommended to the Board:

1. That Official Community Plan and Zoning Amendment Bylaws for Application No. RZ24A04 (240 Okotoks Drive, PID: 030-309-581 and 296 Meadow Way, PID: 000-005-398), be prepared and forwarded to the Board for consideration of 1st and 2nd reading.
2. That a public hearing be scheduled for Application No. RZ24A04 240 Okotoks Drive, PID: 030-309-581 and 296 Meadow Way, PID: 000-005-398).

Option 4: (deny the application)


That it be recommended to the Board that Application No. RZ24A04 (240 Okotoks Drive, PID: 030-309-581 and 296 Meadow Way, PID: 000-005-398), be denied.

Prepared by:




Jaime Dubyna
Planner III

Reviewed by:



Michelle Pressman, RPP, MCIP, MPlan
Manager, Development Services Division



Jeff Moore, MRM
A/General Manager
Land Use Services Department

Reviewed for form and content and approved for submission to the Committee:

Resolution:

Corporate Officer

Financial Considerations:

Chief Financial Officer

ATTACHMENTS:

Attachment A – Background Table

Attachment B – Context Maps and Site Photos

Attachment C – Rationale Letter

Attachment D – Plans

Attachment E – Ecological Overview, Danaca Consulting, June 30, 2024

Attachment F – Landscape Plans, Danaca Consulting, July 24, 2024

BACKGROUND TABLE

File: RZ24A04

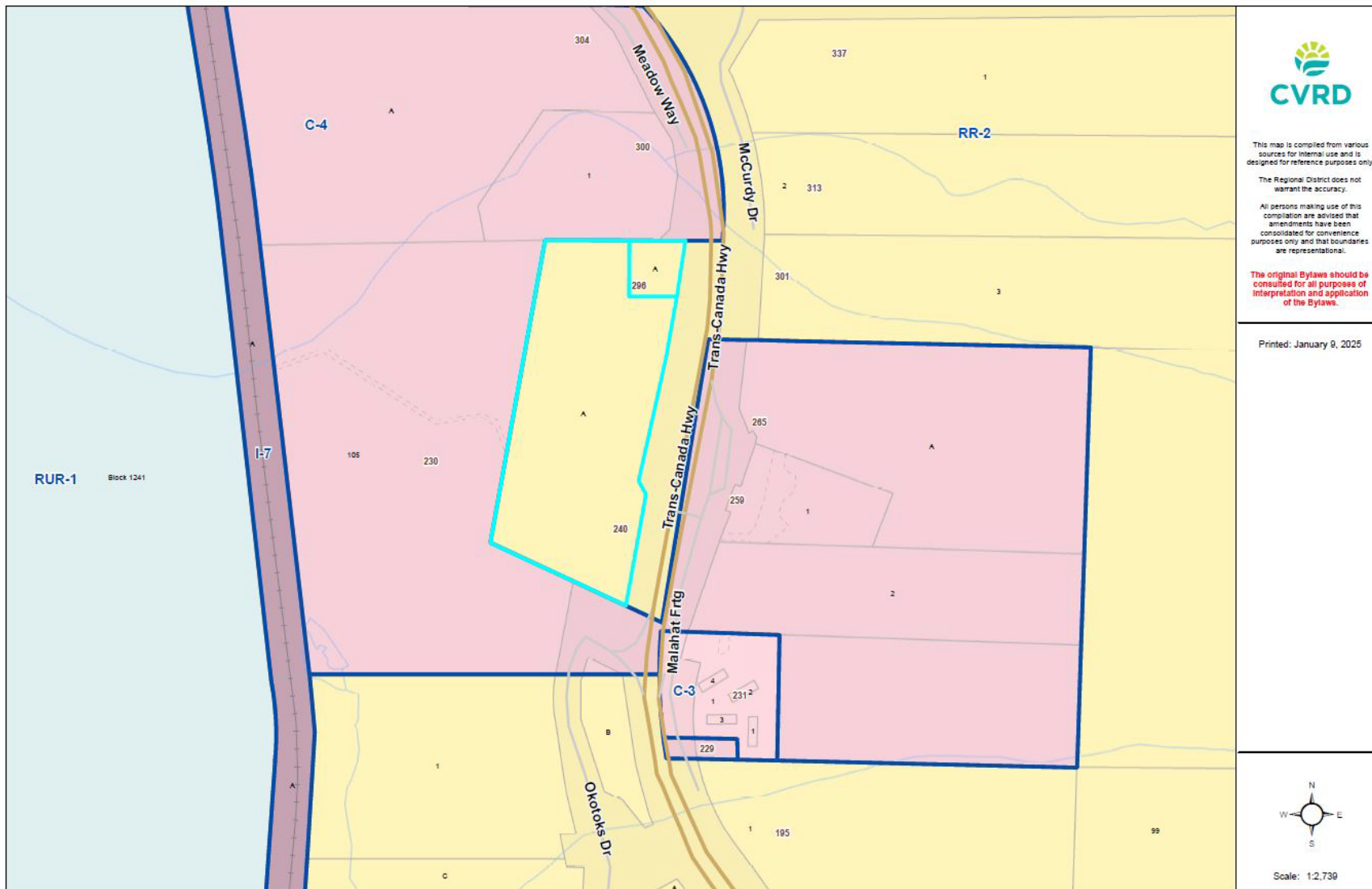
Applicant:	Jeff Montgomery (Rachael Sansom, agent)
Registered Property Owner:	Malahat Auto Parts Ltd., Inc.No. BC1281118
Civic Address:	240 Okotoks Drive 296 Meadow Way
PID & Legal Description:	<u>240 Okotoks Drive:</u> 030-309-581 LOT A DISTRICT LOT 105 MALAHAT DISTRICT PLAN EPP72442 <u>296 Meadow Way:</u> 000-005-398 PARCEL A (DD 186208I), DISTRICT LOT 105, MALAHAT DISTRICT EXCEPT PART IN PLANS EPP29107 AND EPP70071
CVRD Covenants on Title:	None
Size of Existing Parcel(s):	2.97 ha 0.19 ha
Existing Use of Parcel(s):	Light industrial use, auto parts recycling
Natural Hazards:	None mapped
Archaeological Site:	Unknown
Environmentally Sensitive Areas:	None mapped
Species at Risk:	None mapped
Agricultural Land Reserve (ALR):	Not within
Land Use Designation:	Residential – Rural Residential
Containment Boundary:	Not within
Development Permit Areas (DPA's):	DPA 1 Riparian Areas Protection DPA 4 Aquifer Protection DPA 5 Wildfire Hazard
Zoning:	RR-2 Rural Residential 2
Fire Service:	Malahat Fire Service Area
Existing Water Service:	Onsite
Existing Sewerage Service:	Onsite
Existing Drainage Service:	Onsite
Proposed Designation	Industrial
Proposed Zoning	Industrial (I-8)
Relevant OCP Policies:	<ul style="list-style-type: none"> • 3.2.1.2.6 <i>Encourages appropriately located commercial, institutional and light and heavy industrial development.</i>

- **3.2.1.4.4** *Encourages buffering of commercial and industrial uses from adjacent rural and residential uses and the preservation of access and views from adjacent rural and residential uses.*
- **3.2.2.2.4** *Supports consideration of impacts to ground and surface water resources during development application reviews. Applications that pose negative impacts will not be supported unless those impacts are mitigated on the subject parcel or an adjacent parcel containing similar habitat such that the end result represents an overall improvement to the function of the ecosystem being impacted.*
- **3.2.5.2.3** *Supports a diversity of commercial and light industrial uses that provide living wage employment and contribute to the local economy.*
- **3.2.5.2.7** *Encourages the viability of a broad range of industrial sectors.*
- **4.5.2.1** *Encourages a diverse economy by providing for a wide range of industrial businesses within appropriate industrial areas.*

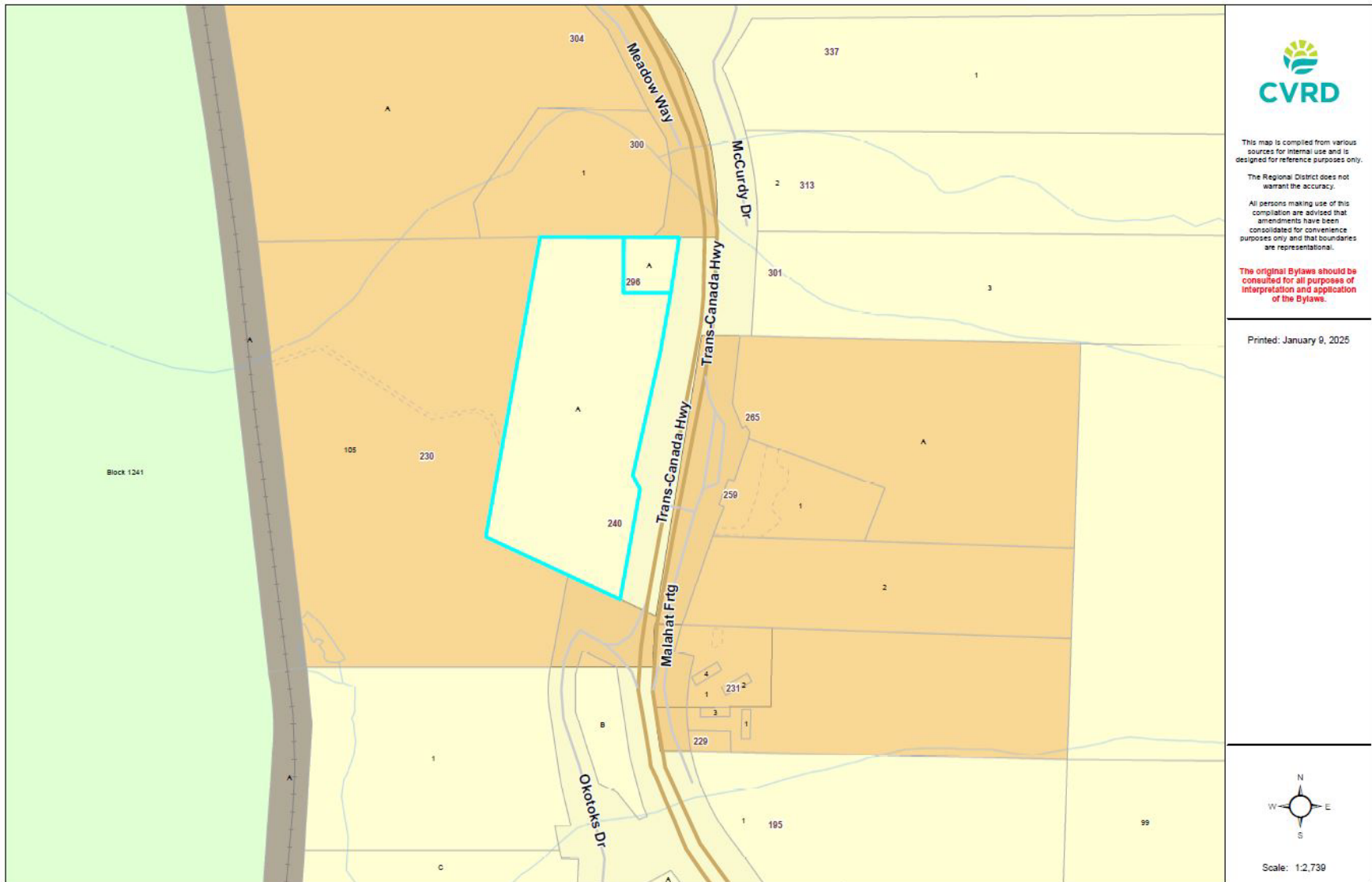
Relevant Area A LAP Policies:

- **2.4.2.1** *Establishes zoning standards to prohibit use of dangerous or toxic materials.*
- **2.4.2.2** *Establishes zoning standards for one dwelling per parcel.*
- **2.4.2.3** *Does not support proposals to expand the Industrial designation to adjacent lands.*

Current Zoning



Current OCP Designation



This map is compiled from various sources for internal use and is designed for reference purposes only.

The Regional District does not warrant the accuracy.

All persons making use of this compilation are advised that amendments have been consolidated for convenience purposes only and that boundaries are representational.

The original Bylaws should be consulted for all purposes of interpretation and application of the Bylaws.

Printed: January 9, 2025



Scale: 1:2,730

Orthophoto (2022)



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The original Bylaws should be consulted for all purposes of interpretation and application of the Bylaws.

Printed: January 9, 2025



Scale: 1:2,191

Attachment B



View of northeast corner from TCH



Office entrance



Scale



Building with concrete block dome in background

Attachment B



Dome tent



Baler area (garage on 296 Meadow Way in background)



Southwest corner of lot, existing barn (background)



Approx. middle of lot

GRAYLAND CONSULTING LTD.

January 21st 2025

Land Use Services Department
Cowichan Valley Regional District
175 Ingram Street, Duncan BC V9L 1N8

RE: Malahat Auto Parts – Proposed Rezoning and Official Community Plan Amendment Rationale PID 030-309-581, 000-005-398

To Whom it may Concern,

The owners of the above noted lands wish to apply to rezone their properties and amend the Official Community Plan designation for the lands to formalize the existing non-conforming use of the lands.

The current OCP designation is Rural Residential, and the request is for an Industrial Designation. The proposed rezoning is also from Rural Residential 2, to the I-8 Auto Wrecking/Salvage Zone that will support the requested uses.

Malahat Auto Parts is an integral part of the insurance, beneficial re-use and body shop network on Vancouver Island and is one of the few remaining local providers of these services. The current business has been operating under new ownership since 2008 and had operated under the original owner for many years previously. The owner wishes to expand his business by modernizing operations, constructing new, safe, and functional structures to offer improved auto recycling services. The business has been operating in this location for over 50 years, its continued operation under the correct land use designation will allow this business to grow, improve and continue to provide this important service.

Environmental Considerations

The industry serves a vital environmental function in the safe and responsible repurposing and disposal of the many components of automobiles. Fluids and fuels are carefully drained and sent off-site for recycling. Steel, copper wire, plastics and other components are separated and recycled. Functional auto parts are removed and entered into a country wide database and reused in the repair of other autos, lengthening their useful life; many components are no longer available as new parts and are sought after by car enthusiasts across the country. The steel frames and bodies are compacted and shipped to appropriate steel recycling facilities.

Expansion of these facilities will allow additional recycling opportunities. For example, electric and hybrid vehicle recycling could be performed on site.

The industry is self-regulating regarding responsible environmental practices. Vehicle dismantlers and recyclers can generate large quantities of waste when they process end-of-life vehicles. The Vehicle Dismantling and Recycling Industry Environmental Planning Regulation (VDRIEP) is an industry-driven initiative.

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Activities can include:

- Dismantling, where vehicles are drained of fluids and dismantled.
- Vehicle crushing for transport to scrap metal recyclers.
- Parts cleaning

Although the industry diverts significant quantities of waste from the waste stream, industrial operations have the potential of causing significant environmental harm through the release of contaminants to the environment. The regulation requires individual operators or industry associations (acting on behalf of their members) to develop environmental management plans that demonstrate how they'll comply with environmental protection standards under the Environmental Management Act (EMA). The EMA has a system of monitoring and reporting to ensure operations are carefully managed. A person who operates or plans to operate a facility that dismantles more than 5 wet vehicles in a calendar year is required to register their operation with the B.C. government.

More information can be found at:

https://www.bclaws.gov.bc.ca/civix/document/id/complete/statreg/49_200_2007

Employment and Employee Retention

Most of these activities are currently performed outdoors and in all weather conditions. The ability to construct new facilities under the appropriate land use designation will allow the owner to offer clean, safe, and weatherproof working conditions. The expansion will attract new employees to the business.

Beyond the on-site environmental benefits, the location of the business is convenient for both greater Victoria and up island vehicle deliveries. ICBC for example is a large supplier of vehicles for recycling and repurpose.

Neighbourhood Impacts

The current operations have the support of the existing neighbours. There is a campground to the west that is currently being upgraded and is well used. This neighbour has no concerns.

To the north is the Malahat Bungalows.

To the east is the Trans-Canada Highway and the Malahat Mountain Inn. The recycling operations are visible on the northeast and southeast corner of the site from the highway. The owner is willing to enhance screening in those locations that would effectively shield the operations from the public eye.

The sound of the operations is minimal and is largely muffled by the sound of the highway and will be further reduced by allowing larger buildings in which to perform some of the recycling activities indoors. The hours of operation are 8:00 to 4:30 Monday to Friday.

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Potential Residential/Caretaker Uses

There is an existing home on Lot 1. It is currently rented. By having residential and caretaker use permitted, it provides potential employee retention as well as site security. The water supply and sanitary disposal requirements are, and will be, in accordance with Island Health regulations.

Community Benefits

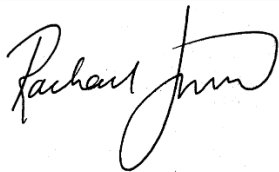
The business has a good relationship with the Malahat Fire Department which provides practice vehicles for rescue drills. There is a 10,000-gallon tank available for firefighting on site.

Existing Services

The property is currently serviced by on site wells and in ground septic disposal. While industrial uses often require connection to community water and sewer services, the required capacity here is low. Water is not used by any of the recycling processes. Water and sewer are for convenience of employees while they are at work only, within washroom and kitchen facilities. The caretaker suite is a typical residential use. As noted above, fire fighting requirements are provided via the on-site water tank. Any landscaping will require water to be established, however planting choices will be native and drought resistant.

Approval of this application will result in numerous benefits to the CVRD, and any potential impacts are well managed. Further, Malahat Auto Parts has demonstrated its sound business practices over its 50 years in business and has been a good neighbour to adjacent property owners. There is no apparent opposition to this application from the community, and we look forward to receiving the support of the CVRD in approving this application.

Best Regards,

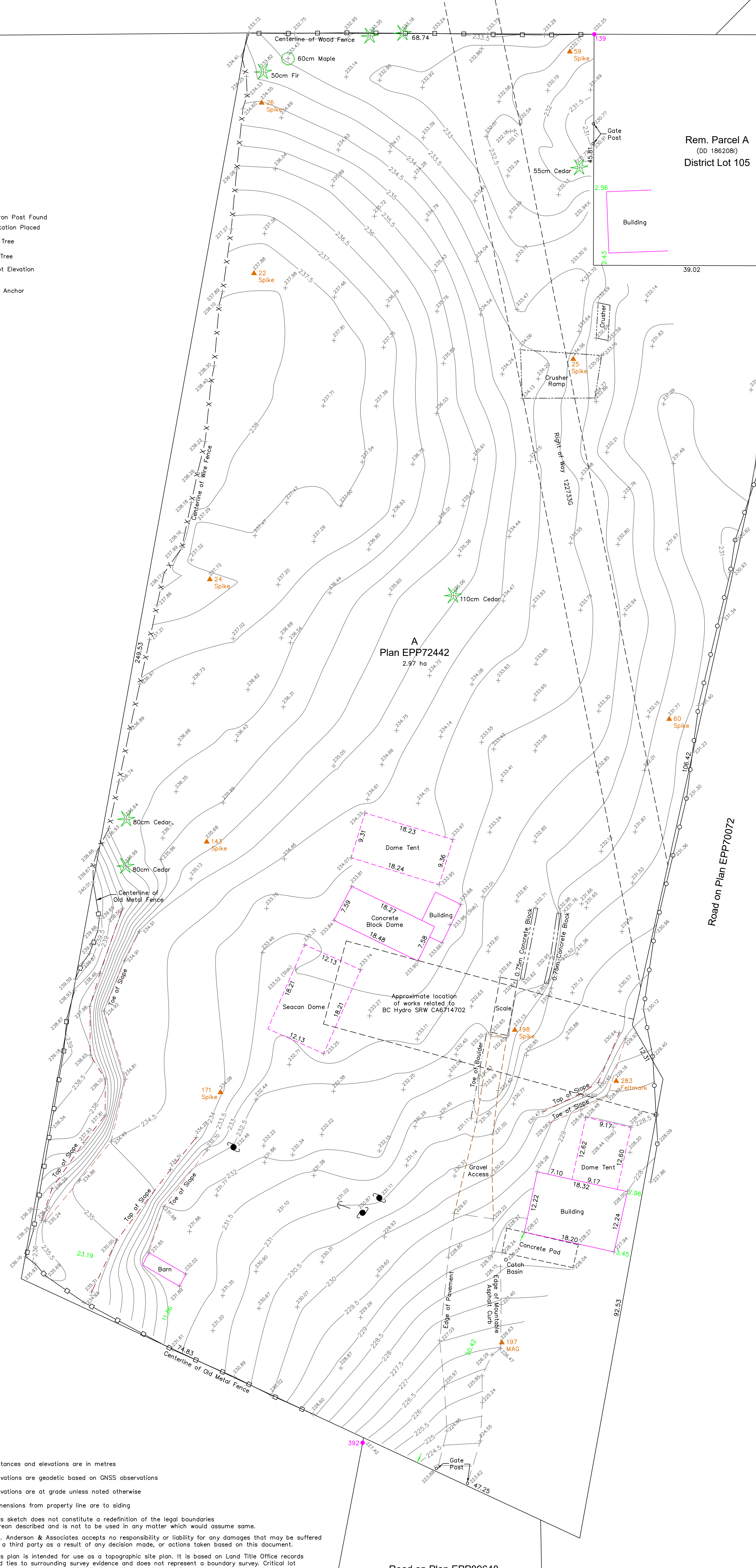


Rachael Sansom, A.Sc.T, Grayland Consulting

Agent for the owner of Malahat Auto Parts.

Rem. Parcel A
(DD 1862081)
District Lot 105

- LEGEND**
- Denotes Standard Iron Post Found
 - Denotes Traverse Station Placed
 - Denotes Coniferous Tree
 - Denotes Deciduous Tree
 - Denotes Typical Spot Elevation
 - Denotes Utility Pole
 - Denotes Utility Pole Anchor



A
Plan EPP72442
2.97 ha

Road on Plan EPP70072

Trans-Canada Highway

Road on Plan EPP89648

Rem. 9
Plan 2001

Rem. District Lot 105



SITE PLAN

**MALAHAT AUTO
WRECKING & RECYCLING**

Lot A, District Lot 105,
Malahat District,
Plan EPP72442

ADDRESS : 720 Okotoks Road, Malahat
PROJECT SURVEYOR : RPH
DRAWN BY : BAR DATE : MAR 13/24
OUR FILE : 34730 REVISION :

**JEA J.E. ANDERSON
& ASSOCIATES**
SURVEYORS - ENGINEERS

4212 GLANFORD AVE, VICTORIA, B.C. V8Z 4B7
TEL: 250-727-2214 FAX: 250-727-3395
E-MAIL: info@jeanderson.com
VICTORIA-NANAIMO-PARRISVILLE-CAMPBELL RIVER

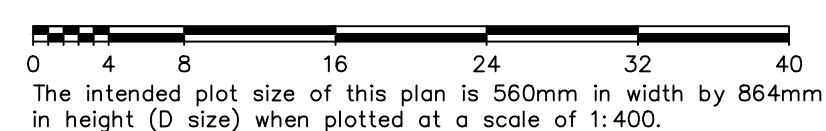
Distances and elevations are in metres
Elevations are geodetic based on GNSS observations
Elevations are at grade unless noted otherwise
Dimensions from property line are to siding

This sketch does not constitute a redefinition of the legal boundaries hereon described and is not to be used in any matter which would assume same.

J.E. Anderson & Associates accepts no responsibility or liability for any damages that may be suffered by a third party as a result of any decision made, or actions taken based on this document.

This plan is intended for use as a topographic site plan. It is based on Land Title Office records and ties to surrounding survey evidence and does not represent a boundary survey. Critical lot dimensions, lot areas and building setbacks should be confirmed by a legal cadastral survey.

Subject to charges, legal notations, and interests shown on: Title No. CBI05968 (P.I.D. 030-309-581)



Rem. 1
Plan 38729

Road on Plan EPP70070

Trans-Canada Highway

A
Plan EPP72442

Rem. Parcel A
(DD 1862081)
District Lot 105
0.194 ha

55cm Cedar

Gate Post

Gravel Driveway

Asphalt Driveway

Well Shed

Dwelling

Approximate Disposal Field

Garage

- LEGEND**
- Denotes Standard Iron Post Found
 - ▲ Denotes Traverse Station Placed
 - ★ Denotes Coniferous Tree
 - + Denotes Typical Spot Elevation
 - Denotes Overhead Powerlines

SITE PLAN

**MALAHAT AUTO
WRECKING & RECYCLING**

Parcel A (DD 186208-1),
District Lot 105, Malahat District,
Except Part in Plans
EPP29107 and EPP70071

ADDRESS : 296 Meadow Way, Malahat

PROJECT SURVEYOR : RPH

DRAWN BY : BAR DATE : JULY 05/24

OUR FILE : 34730 REVISION :

JEA J.E. ANDERSON & ASSOCIATES
SURVEYORS - ENGINEERS

4212 GLANFORD AVE, VICTORIA, B.C. V8Z 4B7
TEL: 250-727-2214 FAX: 250-727-3395
E-MAIL : info@jeanderson.com
VICTORIA-NANAIMO-PARKSVILLE-CAMPBELL RIVER



The intended plot size of this plan is 560mm in width by 432mm in height (C size) when plotted at a scale of 1:150.

This sketch does not constitute a redefinition of the legal boundaries hereon described and is not to be used in any matter which would assume same.

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Subject to charges, legal notations, and interests shown on: Title No. CA9999352 (P.I.D. 030-309-581)

Distances and elevations are in metres
Elevations are geodetic based on GNSS observations
Elevations are at grade unless noted otherwise
Dimensions from property line are to siding



Ecological Overview

Subject Property: 240 Okotoks Road, Malahat BC



Report Date: June 30, 2024

Client Name: Jeff Montgomery
c/o Malahat Auto Wrecking and
Metal Recycling
240 Okotoks Road
Malahat BC, V0R 2L0

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Disclaimer

This plan has been prepared with the best information available at the time of writing, including a review of available information from the local government and Province of British Columbia. This plan has been developed to provide the owner with information to support the rezoning process within development permit areas of the Cowichan Valley Regional District. It is the owner's responsibility to complete the due diligence for this project.

This plan is for the use of the property owner and for the Cowichan Valley Regional District. Any use of this plan by other parties is done so exclusively at their risk. The author assumes no responsibility for: [i] iterations of this plan that are unsigned by the author, [ii] any changes made to this document other than those made or endorsed by the author.

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Background and Scope of Work

Malahat Auto Wrecking and Metal Recycling (the Client) is the owner of the property located at 240 Okotoks Drive, Cobble Hill, BC (hereafter referred to as the Client) which is within the Cowichan Valley Regional District (CVRD) (Figure 1 and 2). The Subject Property is legally described as LOT A DISTRICT LOT 105 MALAHAT DISTRICT PLAN EPP72442 PID: 000-033-057. The Subject Property is currently zoned RR-2 Rural Residential 2 Zone and is proposing to rezone to the I-8 Auto Wrecking/Salvage Industrial 8 Zone to come into compliance with the existing auto wrecking and salvage use. The 2.97-hectare property is completely developed for its existing auto wrecking and salvage use.

As part of the due diligence process, the Client retained Danaca Consulting (Danaca) to conduct an overview Ecological Assessment (EA) because the intention is to rezone the property to I-8 Auto Wrecking/Salvage Industrial 8 Zone.

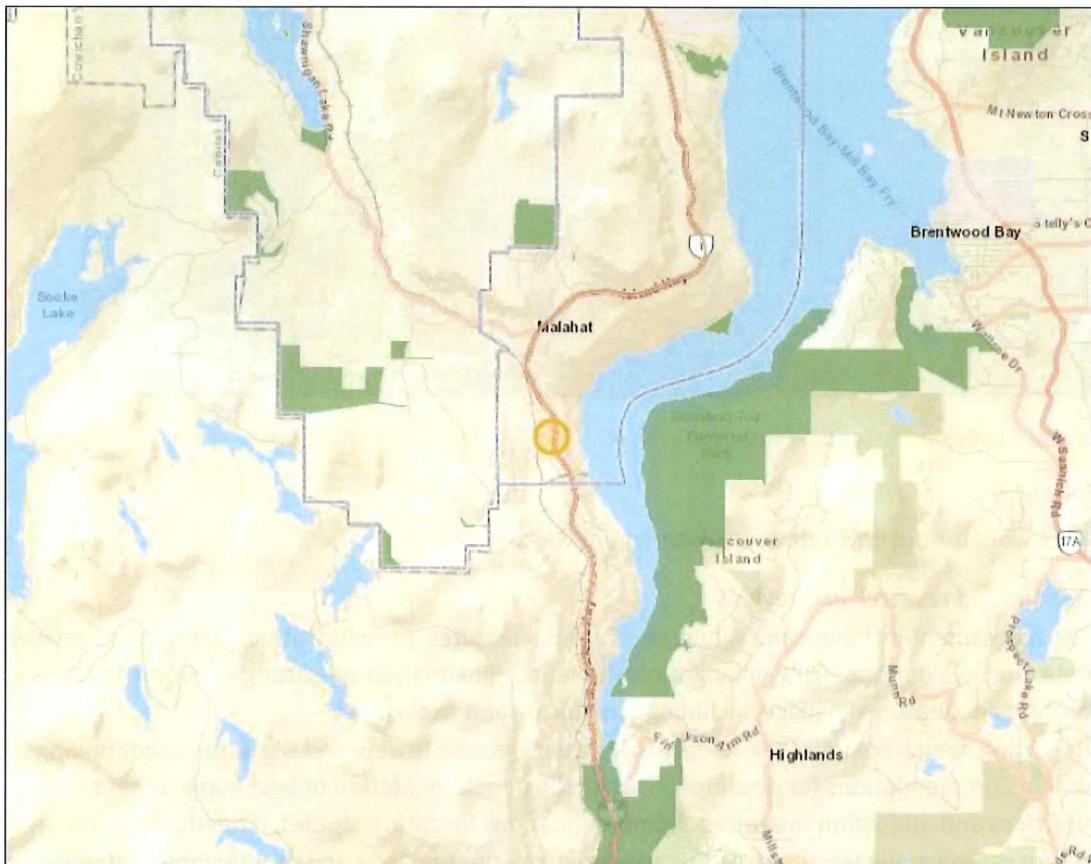


Figure 1: Regional context of 240 Okotoks Drive, Cobble Hill, BC.



Figure 2: Subject Property at 240 Okotoks Drive, Cobble Hill, BC.

Scope of Work

The scope of work for the Environmental Assessment was:

- Background research and review.
- Site assessment including an evaluation of natural features, ground truthing background review data, and evaluating sensitive habitat components. Site analysis of existing environmental protection measures in place, including any stormwater provisions.
- Reporting, which compiles the findings of the background review and site assessment findings with recommendations for development including implementation of best management practices and mitigation measures, recommendations for future studies, if needed, regarding future rezoning. Please note that this scope of work does include any submissions related to contaminated sites and involved a visual inspection only. No materials sampling, soil sampling, water sampling or subsurface examination were conducted.

The proposed rezoning occurs in the CVRD Area A Mill Bay/Malahat Local Area Plan and Cowichan Valley Regional District Schedule C Development Permit Areas apply. Specifically, the following Development Permit areas address the protection of the natural environment:

- DPA 1 Riparian Area Protection
- DPA 2 Environmentally Sensitive Areas Protection - Mature Forest (Figure 3)
- DPA 4 Aquifer Protection

DPA 12 Industrial Development for Form and Character will apply to this property should the proposed rezoning be successful. DPA 12 is not addressed in this report.



Figure 3: Mature Forest Sensitive Ecosystem polygon adjacent to 240 Okotoks Drive, Cobble Hill, BC.

Proposed Development

The owners want to rezone their property from the existing RR-2 Rural Residential 2 Zone to the I-8 Auto Wrecking/Salvage Industrial 8 Zone to come into compliance with the existing auto wrecking and salvage use.

This 2.97-hectare parcel has existing auto wrecking and salvage use. The existing access is from Okotoks Road via the Trans-Canada Highway. The property abuts C-3 Rural Service Commercial 3 Zone and C-4 Rural Tourist Commercial 4 Zone.

The proposed rezoning is requested to allow alignment between the zone and the existing use. Currently most of the labour associated with wrecking and recycling activities occurs outside or under

temporary cover in all weather conditions. The rezoning will permit the construction of new buildings to accommodate the operational needs of the business. An Industrial Development Permit will be required before a building permit is issued. New permanent structures will improve environmental protection and management of contaminants of concern (COCs), as well as improve onsite conditions for the 12 employees and employee recruitment and retention. The ability to construct new buildings will enable the facility to both improve prevention of COCs from migrating to surface and groundwater and expand its recycling opportunities in the emerging EV recycling market and thus create additional employment opportunities. The region will be provided a better service as well as the environmental benefits of COC containment, recycling and reusing auto parts.

Malahat Auto Recycling is committed to being a “green” auto recycler. The construction of new structures and hard surfacing will increase environmental benefits to ensure that dry storage is available.

Desktop Assessment

Sensitive and Rare Ecosystems

The BC CDC identifies a total of 67 animal species that are red or blue-listed and are known to occur within the CVRD. Thirty-five of these species are identified as endangered, special concern, or threatened by Committee on the Status of Wildlife in Canada (COSEWIC) and 31 species are identified as at risk through Species at Risk Act (SARA)¹. The current environmental data and information available for the area was reviewed prior to conducting the field assessment for the site. In part, this included a review of the Official Community Plan for Electoral Areas Bylaw No. 4270 Area A Mill Bay/Malahat Local Area, aerial photography (CVRD Regional Map), the Sensitive Ecosystem Inventory (SEI) for the Area A Mill Bay/Malahat, the BC Conservation Data Centre (CDC) records for rare species occurrences, the BC Fisheries Inventory Data Queries (FIDQ) and the Wildlife Tree Stewardship Program (WiTS) occurrences.

The Biogeoclimatic Ecosystem Classification mapping indicates that the Subject Property is within the Coastal Douglas-fir moist mild subzone (CDFmm). This zone is restricted to low elevations along southeast Vancouver Island from Bowser to Victoria, the Gulf Islands south of Cortes Island, and a narrow strip along the Sunshine Coast near Halfmoon Bay. Elevational limits range from sea level to approximately 150 m. The CDFmm lies in the rainshadow of the Vancouver Island and Olympic mountains resulting in warm, dry summers and mild, wet winters. Growing seasons are very long and feature pronounced water deficits on zonal and drier sites. The CDFmm represents the mildest climate in Canada. The understorey is dominated by salal (*Gaultheria shallon*), dull Oregon grape (*Mahonia nervosa*), ocean-spray (*Holodiscus discolor*), and Oregon beaked moss (*Kindbergia oregana*). Less prominent species include baldhip rose (*Rosa gymnocarpa*), snowberry (*Symphoricarpos albus*), western trumpet honeysuckle (*Lonicera ciliosa*), vanilla leaf (*Achlys triphylla*), and rough goose neck moss (*Rhytidiadelphus triquetrus*). Drier sites are characterized by the presence of Garry oak and arbutus, as well as numerous members of the lily family.

¹ Cowichan Valley Regional District. 2010. State of the Environment Report.

The property is within the Malahat Coastal Benchland and is bordered by Colpman Creek 90 m to the north and Irving Creek approximately 175 m to the south. Their watershed codes are 920-219600 and 920-219400, respectively, and both watercourses drain into Finlayson Arm. While both watercourses are registered in the FIDQ, neither watercourse has any fisheries observations or other associated data listed in the database. Camsusa Creek (920-215500), immediately to the south, has rainbow trout fry/parr recorded in 2017; however, it lacks the steep slopes to the marine interface associated with Colpman and Irving. These steep slopes (>44%) would likely prevent anadromous species (salmon and trout) from migrating upstream in either of these creeks. If there are pools or year-round flows in these creeks, they may have resident trout or other fish species.

According to the Sensitive Ecosystem Inventory (SEI) for the Mill Bay/Malahat Local Area, the subject site abuts and or has marginal overlap by the Mature Forest (80-250 years old) SEI polygon².

Rare Element Occurrences

The Ministry of Environment and Climate Change Strategy's (ENV) Conservation Data Centre (CDC) maintains a database of potentially occurring red and blue-listed animal and plant species in British Columbia. This database was used to determine whether any rare plants, animals or ecosystems are documented as occurring on or near the Subject Property. No element occurrences associated with provincially listed species were shown to overlap with the Subject Property based on the background research conducted.

Wildlife Tree Stewardship Atlas

Wildlife Tree Stewardship Atlas (WiTS) was accessed to determine the known distribution of wildlife trees (e.g. raptor nests) on, or adjacent to, the Subject Property. The nearest documented WiTS waypoints to the Subject Property are bald eagle (*Haliaeetus leucocephalus*) nests. BAEA-102-057 and BAEA-102-059 are approximately 500 m southeast and downslope of the property at the edge of Finlayson Arm.

The proposed rezoning will bring the existing use into compliance with the zone and thus no new activities or uses are proposed. While the bald eagle nests are within the recommended 1 km blasting buffers that are implemented as part of the provincial Best Management Practices (BMPs), if more intrusive industrial activities (i.e. blasting) were required as part of potential future development, the noise levels from potential future industrial activities would likely have no impact on the bald eagle nesting potential. This is due to the combination of the distance, slope, occurrence of residential activities, and the Trans Canada Highway 1 background noise between the Subject Property and the nests.

Contaminated Sites Registry

This portion of the desktop review was conducted after the site visit, based on information provided by the owner. A small portion of the Subject Property in the northeast was formerly Hogg's VW Repair & Parts. The Ministry of Transportation and Infrastructure (MOTI) appropriated a strip of Hogg's and Malahat Auto Wrecking and Metal Recycling adjacent to the highway for expansion (approx. 2017-2019)

² Madrone Environmental Services Ltd. 2018. Environmentally Sensitive Areas (ESAs) Mapping in the Cowichan Region – Phase II. 31 pp.

and conducted contaminated site reviews. The Site Registry was queried in May 2024 for details (see Appendix 1). The summaries provided indicate the following for both properties: “DETERMINATION OF CONTAMINATED SITE REQUESTED” and “PRELIMINARY DETERMINATION OF CONTAMINATED SITE ISSUED - SITE NOT CONTAMINATED”. These summaries do not provide detail as to whether Stage 1 or 2 assessments were conducted and do not indicate whether the assessments included the whole of the properties in question or just the portion appropriated by the MOTI.

Site Assessment

A site visit was conducted on March 21, 2024 to evaluate:

- Natural features,
- Ground truthing background review data,
- Sensitive habitat components including the mature forest sensitive ecosystem and riparian features, and
- Site analysis of existing environmental protection measures in place, including any stormwater provisions.

Documented Best Management Practices for Waste Management

Laura Hooper, MSc, PAg, and Sara Stallard, BSc, ASCT, met onsite with the business and property owner, Jeff Montgomery. Mr. Montgomery’s family has owned the property since 1978 and has worked on the site since 1988 when it was operated by his father, Neil Montgomery. According to Mr. Montgomery there have been no fill activities on the site to his knowledge and no Reportable Spills, as per the BC *Environmental Management Act (EMA)*³.

Malahat Auto Wrecking & Scrap Metal Recycling has been operated to comply with the BC Automotive Recyclers’ Environmental Association (AREA) Environmental Certification Program (<https://area-bc.ca/>). According to their website, the purpose of AREA is to develop and implement an Environmental Certification Program for the automotive recycling industry by:

- Developing and administering the environmental certification process to ensure the environmentally safe removal, transportation, reuse or recycling of hazardous materials.
- Overseeing the communication of information and the on-going training of the industry.
- Working in partnership with the Ministry of Environment, Environment Canada, the Insurance Corporation of BC and other partners to develop, implement and administer the environmental management system for automotive recyclers in an effective and efficient manner.

Under this program, the business is inspected every three years, and its environmental compliance is rated as Bronze, Silver, or Gold. Under the name Malahat Auto Parts Ltd., the Client has achieved a Gold Environmental Rating by inspection since 2003. Best management practices (BMP’s) to achieve this rating include the documentation to track the fluids/recyclable wastes through manifests, from the arrival of the car at the site to delivery of wastes at recycling destinations. Each vehicle received is documented and has a manifest that is kept for inspection. All shipping is done via authorized

³ Reportable Spill types and volumes under the *EMA* are defined in Appendix 2.

transporters to dedicated facilities. Manifests are kept accessible for inspection by AREA personnel every 3 years, with spot visits by BC Ministry of Environment and Climate Change.

As part of the site visit, the owner produced complete environmental records, including inspection reports, and manifests. An Environmental Management Plan dated April 28, 2023 for the operation was noted on-site.

- All fluids and batteries are drained/removed in the dedicated Dismantling Bay facility and stored under cover (unless otherwise noted, e.g. tires).
- Engine & transmission oil is stored in drums and shipped to recycler with manifests.
- Radiator coolant/antifreeze is stored in drums and shipped to recycler (not regulated).
- Gas & diesel are stored in appropriate tanks and re-used by staff.
- Air conditioning (AC) refrigerant is removed with an AC recovery unit and stored in gas cylinders, shipped to local automotive repair facilities with a bottle exchange (documented with each car removal).
- Windshield washer fluid is re-packaged and offered free to staff and clients.
- Automotive batteries are stored on pallets and wrapped for shipping to the recycler with manifests as per Transport Canada requirements.
- 9V batteries and power tool rechargeable batteries are stored separately and are not regulated.
- Household battery recycling is located at main office.
- Tires are racked for resale or stored in a combination of covered and uncovered in piles using guidelines from the Tire Stewardship of BC (<https://tsbc.ca/>). This is common to have approximately 200-400 tires on site.
- Tire weights are stored in lidded plastic buckets prior to shipping.
- Brakes drums and rotors are stored in bins (asbestos pads stay with the vehicles).
- Alternators, wires, radiators are stored in dedicated bins.
- EV batteries are stored in and near the Barn/Old Office & Repair Bay (no fluids, therefore no leaching).
- Mercury containing pellets from convenience light switches and ABS sensors are stored in lidded plastic buckets prior to shipping.

Site Description

The Subject Property is relatively flat with a gentle slope toward the east, ending at an abrupt slope to the Trans-Canada Highway. It has been completely cleared and has been exposed to anthropogenic disturbances with exposed soils/gravels. The property is completely fenced, and access is controlled by a gate. The southern-most portion of the property has an asphalt access driveway and a gravel parking area that provides access to a one-story office building. The majority of the property is well-organized storage of scrap vehicles in rows with a gravel access road bisecting the property north to south. Movable storage bins, both covered and un-covered, are found throughout the site, but mostly adjacent to buildings and the southern end of the access road. Various sized piles of tires are also located throughout the site. There are small areas of surface staining (general oils/hydrocarbons) in the gravels around the shops and some surface areas contain waste metal shavings and small car parts (springs, plastics, etc.) (Photos 1-13).

Appendix 3 is a site layout of the existing facilities. The facilities and sorting areas are described below:

- The Main Office building has a repair bay and dome tent attached to the rear of the building which is used for storage and cleaning parts (including engines) for resale. The floor of the tented area is concrete with a floor drain leading to an oil separator and then to a rock pit which drains to ground (Photos 5, 14-16).
 - Drainage from the roof leaders is conducted east via a large black PVC pipe to the Trans-Canada Highway drainage ditch (flows south to settling pond and then to Irving Creek) (Photo 17).
 - Perimeter drainage intercepting surface flow is conducted south to the driveway ditch leading to Okotoks Road and thence to the Trans-Canada Highway ditch. The slotted manhole cover in the gravel parking area is part of this drainage structure (Photos 18 and 19).
- A mostly abandoned two-storey barn in the southwest corner of the property is the former office and repair bay. It is currently used to store hybrid batteries and electric batteries, but stores several old containers of chemicals and fluids (unknown contents) (Photo 20).
- The Dismantling and Storage Area is part of three adjacent structures in the south-central portion of the property. These structures provide dry storage for controlled materials (i.e. shipping containers providing structure to the container dome provide protected storage for salvaged fluids and car batteries), cover for employees when removing fluids, and a hoist and ramp to facilitate salvage.
 - The Seacan Dome is the main dismantling bay and is composed of a concrete floor and side walls of shipping containers with a Quonset hut-like high roof structure, open at both ends (Photo 21). The shipping containers are used for materials/recycling storage and dismantling work areas. Fluids are removed here, including a specialized machine for removal and compression of air conditioning (AC) refrigerant (Photo 22).
 - The concrete floor has a floor drain leading to a rock pit that drains to ground.
 - The Concrete Block Dome serves as a dismantling bay and has attached structures including a wooden building with a concrete floor attached to a metal domed roof with concrete walls and a small oil shed with concrete floors (Photos 23 and 24). The Oil Shed houses secure tanks for diesel, acetone, gasoline, waste oil, antifreeze and AC refrigerant (Photos 25 and 26).
 - There is a floor drain connected to a rock pit that drains to ground.
 - Additional parts storage is in a large Dome Tent at the north end of this group of structures. It has a gravel floor and contains metal shelving along the interior walls for parts storage (engines, transmissions, etc.) and large movable bins for batteries and other salvaged items (Photos 27 and 28).
- A Weigh Scale is located at the south end of the access road, east of the Dismantling and Storage structures (Photo 29).
- The northeast corner has a concrete block Crusher Ramp and steel dumping area that was formerly part of Hogg's VW Repair and Parts (see previous in Contaminated Sites Registry). This area has a General Scrap Metal (non-auto) deposition area at the base of the ramp that is uncovered and contains material dumped from roll off bins and peddler traffic (uncommon) and also contains mixed non-metal trash to be sorted (Photo 30). A large steel crusher/baler has a

crusher that compacts and bales steel for recycling (Photo 31). A stockpile of propane tanks and tires is located adjacent to an excavator (Photo 32).

- The sloping ground in this area pools surface water to flow through the empty propane tank pile and offsite to the east toward the ditch adjacent to the Trans-Canada Highway (Photo 33).

In addition to the drains (associated with building structures) and surface flow (crusher/baler area) listed above, the only other surface flow consists of stormwater runoff west of the Main Office building. This shallow depression collects runoff from near the Weigh Scale and flows south to empty into the west ditch at the driveway entrance. A scrap vehicle and various scrap wastes are located within the flow depression (Photo 34).

The property is secured by fencing: wood panel fence to the west to screen from the residential area, and page wire or chain link around the remaining perimeter. A chain link double gate restricts access to the main entrance of the property (Photos 2-4).

Waste Management

240 Okotoks Road was purchased by the current owner's family in 1978 and has been actively managed by the current owner since 2010. Given this long history on the land, we are confident in the depth of the knowledge of the site. The site has no history of soil deposits/filling and no history of reportable spills.

We observed an Environmental Management Plan was observed and the Environmental Policy and Emergency Spill Response Plans were posted in the main office of the facility. In addition, we observed the End of Life Vehicle Management Program document and documentation of an Environmental Audit that was conducted of the Environmental Review Protocols by the BC Automotive Recyclers' Environmental Association.

As a generator of hazardous waste, Malahat Auto Wrecking and Metal Recycling is responsible to ensure they are not storing more regulated waste than is permitted under their Generator Registration Number (Table 1). They are responsible for properly and fully characterizing the hazardous waste to prepare it for shipment and disposal. When shipping the materials, they are responsible for determining the proper shipment methods, completing manifests where required, and ensuring the transporter holds a valid transport licence. They are also required to ensure that the hazardous waste is transported to a waste management facility that is authorized to receive the materials under the Hazardous Waste Regulation. We observed shipment manifests, complete with licences to transport hazardous waste, in the detailed documentation on site. Manifests are filed for inspection by Automotive Recyclers' Environmental Association (AREA) every 3 years, and spot visits by BC Ministry of Environment. Records retained on site date back to 2021.

Table 1 Limits of hazardous waste storage for batteries and liquid waste oil for Malahat Auto Wrecking and Metal Recycling.

Materials	Regulatory Agency	Quantity Produced (30 days)	Quantity Stored	Storage Method
Batteries	Ministry of Environment and Climate Change Strategy	6800 kg	13600 kg	Stored on pallets and wrapped for shipping to recycler with manifest as per transport Canada requirements. Dry Storage.
Liquid waste oil Used Oil	Ministry of Environment and Climate Change Strategy	1000 L	2000 L	Drums

We observed the manifests for the shipments of non-regulated waste to waste disposal/recycling facilities when that waste was shipped with regulated waste. The destinations of all non-regulated waste generated in day-to-day operations are summarized in Table 2.

Table 2 Non-regulated materials generated at Malahat Auto Wrecking and Metal Recycling.

Material	Storage Method	End-use or Destination
Antifreeze Radiator Coolant	Drums	Shipped to recyclers with hazardous waste
Gasoline	Drums	Repurposed on-site or shipped to recyclers with hazardous waste
Refrigerant	Bottles	Sold to autobody shops in southern Vancouver Island to recharge A/C units with a bottle exchange system
Scrap Metal and Automobiles	Open air storage, neat rows of vehicles	Crushed and bailed for recycling or retained for spare parts
Tires	Racked for resale or stored in combination of covered and uncovered in piles	Processed via Tire Stewardship BC
Windshield Washer Fluid	Plastic containers	Re-packaged and offered free to staff and clients
Brake Drums and Rotors	Stored in bins Asbestos pads stay with the vehicles	Scrap metal recycling
Alternators, Wires, and Radiators	Stored in bins	Scrap metal recycling
Propane Tanks	Open air storage	Scrap metal recycling

We observed the washing of engines and parts washing using industrial cleaners and degreasers, combined with hot-water pressure washing. Solutions used include Morado by ZEP (extra-heavy-duty industrial cleaner and degreaser, for example) and Duca-sol by Ducan. The wastewater from this process enters an oil separator tank and then rock-pit for ground disposal. The safety data sheets are in Appendix 4. Floor drains that lead to rock-pit disposal are located in two of the other roofed structures (Seacan Dome and Concrete Block Dome). All pits have grit separators that require cleaning on a regular basis.

Stormwater

Directed stormwater runoff appears to be limited to the flows leading into the ditches on either side of the driveway at the entrance that flow to Okotoks Road ditches (gravel parking area with the slotted manhole cover and shallow depression west of the Main Office) (Photos 18 and 34) and the depression at the crusher/baler area which flows east toward the Trans-Canada Highway roadside ditch (Photo 33). No surface staining was observed in the depression west of the office and minimal surface staining of soils was observed in the drainage path south of the crusher/baler below the empty propane tank pile.

Wildlife

Known Occurrences

The following wildlife was observed during the site review: eastern cottontail (*Sylvilagus floridanus*), European wall lizard (*Podarcis muralis*), and house wren (*Troglodytes aedon*).

Potential Occurrences

Nuszdorfer et al.⁴ lists wildlife species as having the potential to inhabit this biogeoclimatic zone.

Mammals: Black-tailed Deer are the most abundant large ungulate, although Roosevelt Elk were present before the conversion of the coastal plain into agricultural fields and small communities. Both Black Bear and Cougar are common throughout but are usually eliminated when they enter rural and urban areas. Their numbers are therefore not as high as they could be. Recently, the Gray Wolf has invaded Vancouver Island, too; and while they are more abundant in the Coastal Western Hemlock zone to the north and west, they occasionally enter the CDF in search of deer. Marten, Raccoon, California Myotis, Red Squirrel, and Deer Mouse were also listed as common in mixed coniferous and deciduous forests.

Birds: Mature and old-growth coniferous forests are important for birds that eat conifer seeds, or wood-boring and bark insects. Species that breed in these forest habitats are: Pileated Woodpecker, Yellow-bellied Sapsucker, Hairy Woodpecker, Downy Woodpecker, Steller's Jay, Raven, Chestnut-backed Chickadee, Brown Creeper, Winter Wren, and Varied Thrush. Some species are highly specialized such as the Western Flycatcher, which only inhabits thickets in depressions, ravines, or along waterways.

Deciduous thickets and shrubbery offer a variety of flying insects and seeds for breeding populations of House Wren, Hutton's Vireo, Black-headed Grosbeak, and White-crowned Sparrow. They also list the Red-tailed Hawk, Northern Saw-whet Owl, Blue Grouse, Ruffed Grouse, Common Merganser, Steller's

⁴ Nuszdorfer, F.C., Klinka, K., & Demarchi D.A. (1991). Chapter 5: Coastal Douglas-fir Zone in D. Meidinger & J. Pojar (Eds.), *Ecosystems of British Columbia* (pp. 81-95). BC Ministry of Forests.

<https://www.for.gov.bc.ca/hfd/pubs/docs/srs/srs06.pdf>

Jay, Hairy Woodpecker, House Wren, Hutton's Vireo, Black-headed Grosbeak, White-crowned Sparrow, and Townsend's Warbler as common in mixed coniferous and deciduous forests.

Amphibians and Reptiles: Western Toad, Pacific Treefrog, Western Red-backed Salamander, Ensatina Salamander, and the Northwestern Salamander.

Sensitive Ecosystems

Mature Forest Features Description

Mature forests are generally >80 years old and < 250 years old. Mature forests are not as structurally complex as old forests but can function as essential habitat areas for many wildlife species and as primary connections between ecosystems in a highly fragmented landscape. There are two main subclasses of mature forests: conifer dominated (> 75% coniferous species) and mixed conifer and deciduous (<75% coniferous and < 75% broadleaf composition). The Subject Property is adjacent to a conifer dominated mature forest which is protected from encroachment by fencing at the property line, and a natural sloping of the property away from the western property line. There is a gravel laneway providing access to the stored hulks. This laneway provides passive protection to the root zones of the mature forest.

The Subject Property has is nearly completely cleared except for seven large trees: five large cedar trees (55 cm – 110 cm diameter), one large maple (60 cm) and one large fir tree (50 cm). There is a band of trees on the southwestern edge of the property immediately adjacent to the mature forest polygon. This is a remnant of the mature forest polygon and contains two large cedar trees (80 cm diameter) and small arbutus (*Arbutus menziesii*), Douglas-fir (*Pseudotsuga menziesii*), Red alder (*Albus rubra*) and Bigleaf maple (*Acer macrophyllum*). The understory is comprised of salal (*Gaultheria shallon*), dull Oregon grape (*Mahonia nervosa*), oceanspray (*Holodiscus discolor*), June plum (*Oemelaria cerasiformis*), and cherry (*Prunus* sp.) and grasses (Photos 7 and 35).

There is a small amount of Scotch Broom (*Cytisus scoparius*) and Himalayan blackberry (*Rubus armeniacus*), both invasive species, in the disturbed areas along the perimeter of the property. It is being proactively managed by the property owner (Photo 36).

Riparian Features Description

All properties within the CVRD are subject to the Riparian Protection Development Permit Area. The Subject Property is bounded by two creeks, one to the north and one to the south. Colpman Creek is approximately 90 m to the north side of 240 Okotoks Road and Irving Creek is 175 m to the south. The subject site drains toward Irving Creek via roadside ditches, culverts and a settling pond south of Okotoks Road. There is no fish access to the site. Fish access to the roadside ditches adjacent to the site is highly unlikely. The Subject Property is not within the 30 m Riparian Assessment Area (RAA) of either Colpman or Irving Creek, however, given the topography and alignment of the highway the adjacent ditches would have a 2-m SPEA under the Riparian Area Protection Regulation (RAPR) for Irving Creek.

Recommendations

Sensitive Ecosystem Development Permit Area Boundary Adjustment

The mapped Mature Forest sensitive ecosystem polygon adjacent to the property is shown in Figure 3. There were no sensitive ecosystems observed on the property. The band of vegetation on the southwestern property line is not comprised of trees of a sufficient age/size and number or shrub understory to warrant classification as a mature forest ecosystem.

Recommendation 1: We recommend that the fencing remain in place to prevent encroachment into the mature forest and to continue to observe the setback for hulk storage using the laneway buffer. Tree protection measures must be developed by an ISA certified arborist to protect trees being retained during any future development.

Stormwater and Wastewater Management

Swales

The two observed depressions conducting surface water pooling/flow (crusher/baler area and west of the Main Office) contained metal/other scrap/waste materials. All scrap/waste materials should be stored outside of depressions conveying stormwater to eliminate the potential for the transport of contaminants (metals, hydrocarbons, VOCs, etc.) into local waters or aquifers.

- No soil or water samples were taken as part of this assessment. Sampling and analysis of soil (and stormwater if possible) in these two locations is recommended to document the composition of offsite runoff.
- Green infrastructure, such as small vegetated surface swales, could intercept sediment-laden water or potential contaminants from the site.

Rock Pits

The discharge conveyed by the floor drains in the dismantling areas of buildings runs to rock pits and is dissipated below ground. Part 5 of AREA's 2023 Code of Practice (COP) recommends that dismantling areas have:

- Dismantling pads designed in such a way to retain all the fluids that may be spilled or released during draining (approximately 25 liters).
- Dismantling pads must be made of impervious materials and in an enclosed building or contained under a roof of sufficient size to prevent snow or rain fall from reaching the pad.

The space available to the operation to provide dry storage, hazardous waste storage, and dismantling areas is limited and restricted by the current zoning of the Subject Property. Currently, all dry storage areas, hazardous waste storage areas, and dismantling areas observed on the Subject Property were on concrete pads therefore is compliant with the AREA's COP. We recommend that the facility keep records of the annual inspections and maintenance (sludge removal) of the oil/water separators and monitor the discharge to insure they meet the water quality levels of the AREA's COP:

- Total Suspended Solids (TSS): 20 mg/L

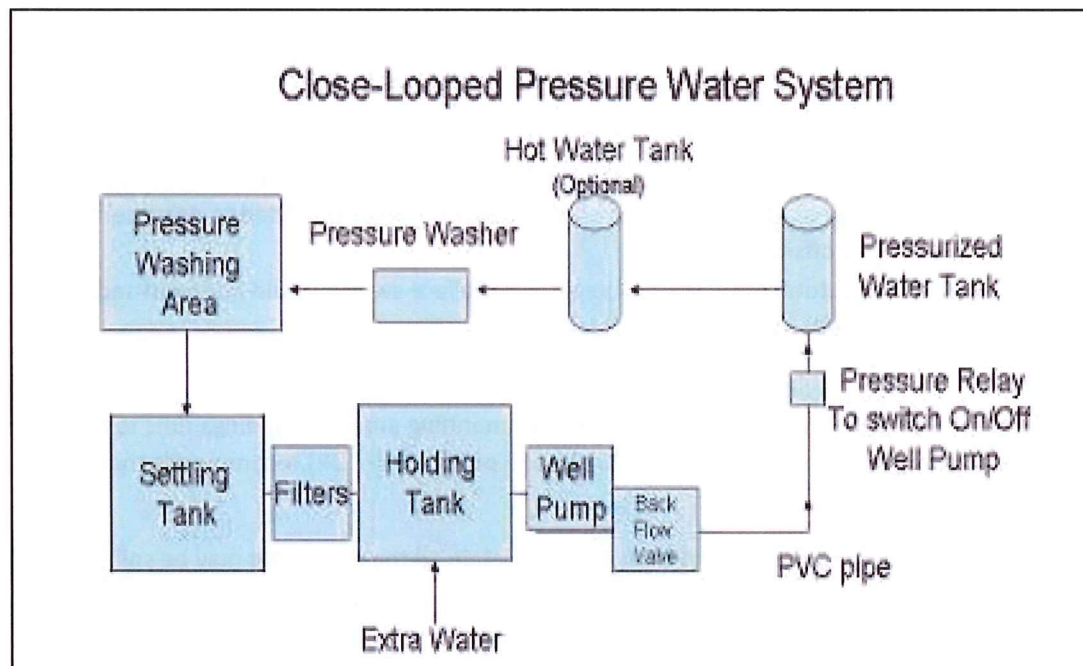
- Biochemical Oxygen Demand (BoD): 20 mg/L
- Oil and Grease: 10 mg/L

AREA's COP recommends that soaps and degreasers not be included in the runoff to the oil/water separators. In particular, the floor drain adjacent to the Main Office includes pressure washing using the degreasers described previously and presumably carrying the hydrocarbons and metals being washed off engine and other car parts into an oil/water separator and rock pit. While the full composition of these discharges and the subsurface receiving environment was not assessed in this report, AREA's COP contains the following recommendations for pressure washer facilities.

Recommendation 2: We recommend a detailed, site-specific Stormwater Management Plan is recommended as part of future development.

Pressure Washers⁵

The design below is the basic design that some recyclers use for a 'closed-loop' pressure washing system. Make sure you have a plumber or engineer design the pipe and pump size. The goal is to avoid discharging water to the ground or the environment.



A septic tank makes a good settling tank – oil and sludge in settling Tank needs to be pumped out occasionally. Filters can be simply absorbent pads that absorb the oil and antifreeze in water. If possible, design a system so that water from the pressure washing area drains using gravity to the holding tank. Extra water will need to be added to the holding tank when water levels get low (water will be lost to evaporation). Aerate the water in the holding tank using a large aquarium air pump to avoid smell.

⁵ Courtesy of Automotive Recyclers Environmental Association (<https://area-bc.ca/pressure-washers/>)

Construction Practices

The proposed rezoning does not include any construction activities; however, general Construction Best Management Practices (BMPs) are provided in Appendix 5 and are recommended as part of any future construction or development. These BMPs are general and specific BMPs should be prepared when a detailed development plan is proposed.

Recommendation 3: We recommend site-specific Construction Best Management Practices (BMPs) be developed and implemented when a detailed development plan is proposed.

Revegetation

Should there be a desire or future requirements to replant any disturbed areas (i.e. perimeter fence) with native species the following species are recommended:

- Douglas-fir (*Pseudotsuga menziesii*)
- Western red cedar (*Thuja plicata*)
- Red alder (*Albus rubra*)
- Bigleaf maple (*Acer macrophyllum*)
- Nootka rose (*Rosa nutkana*)
- Oceanspray (*Holodiscus discolor*)
- June plum (*Oemelaria cerasiformis*)
- Saskatoon berry (*Amelanchier alnifolia*)
- Dull Oregon grape (*Mahonia nervosa*)
- Sword fern (*Polystichum munitum*)
- Salal (*Gaultheria shallon*)
- Kinnickinnick (*Arctostaphylos uva-ursi*)

Development Permit Guidelines

This project, while within three applicable development permit areas, is not proposing redevelopment of the site as part of the rezoning process. We have provided an overview of the applicability of each DPA should the property owner proposed development on the Subject Property.

Sensitive Ecosystem (Mature Forest) Development Permit Area

The following guidelines (in Schedule C: Development Permit Areas of Bylaw 4270) for the Sensitive Ecosystem (Mature Forest) Development Permit Area will be applicable to future development, and should be addressed in future development proposal as follows:

Guideline	Applicable/Not Applicable
SE1. Maintain a minimum 15 m natural buffer adjacent to sensitive ecosystem areas that:	
a. recognizes natural processes and changing natural boundaries;	Applicable

Guideline	Applicable/Not Applicable
b. avoids disturbance of native vegetation, and removes and/or control invasive plant species on the priority plant list;	Applicable
c. avoid disturbance to large trees, snags, stumps and logs;	Not Applicable
d. deter grazing by livestock in sensitive ecosystem areas;	Not Applicable
e. deter predation and disturbance of wildlife by pets and domestic animals in sensitive and other important ecosystem areas; and	Not Applicable
f. maintain wildlife corridors between the ecosystem and nearby wildlife habitat patches.	Not Applicable
SE2. Include in the environmental site plan measures to maintain connectivity and linkages with adjacent sensitive ecosystems and other habitat areas through the use of corridors and greenways to minimize fragmentation. These connectivity features should be as undisturbed/natural as possible (i.e., include a variety of structural attributes or layers such as trees, shrubs, stumps, logs, etc.)	Not Applicable
SE3. Where the development site contains or is adjacent to a natural watercourse	
a. prevent access to the watercourse by construction activities, except as approved by government agencies having jurisdiction;	Not Applicable
b. preserve and restore the watercourse to natural condition, including the planting and retaining of vegetation and trees to preserve and protect fish habitat and riparian areas, control drainage and erosion and protect banks; and	Not Applicable
c. ensure the environmental site plan complies with provisions of the B.C. Water Sustainability Act, Canada Fisheries Act and B.C. Riparian Areas Protection Regulation.	Not Applicable
SE4. Design and implement a sediment and erosion control plan to protect sensitive ecosystems from silt smothering of low-growing plants where land disturbance is planned or likely.	Not Applicable
SE5. Where utilities, servicing and infrastructure are required near sensitive ecosystems	Applicable
a. locate these works within sensitive ecosystem areas and associated buffers only	Applicable

Guideline	Applicable/Not Applicable
<p>where the installation is necessary, such as essential public roads, utilities, public works and pathways, and where there is no other physical alternative, by the determination of the local government;</p>	
<p>b. manage construction to avoid adverse effects on sensitive ecosystem functions and conditions;</p>	Applicable
<p>c. locate and design installations through the environmental site plan so that sensitive ecosystems can be maintained when adjacent lands are developed; and</p>	Applicable
<p>d. restore and enhance any disturbed sensitive ecosystems to maintain previously existing natural conditions and functions of the sensitive ecosystem.</p>	Not Applicable
<p>SE6. Use only native plant species where development occurs within or adjacent to a sensitive ecosystem, and do not use invasive plant species as identified by the Invasive Species Council of BC.</p>	Applicable
<p>SE7. Create and implement a plan to control the introduction or spread of invasive plant species. This plan may include removal of invasive species by hand clearing, pruning, mowing, excavation, or other appropriate method. Disturbed sites are to be planted with appropriate native species.</p>	Applicable
<p>SE8. Avoid development activities in areas that would disturb wildlife during nesting and breeding seasons. Ensure that wildlife agencies and experts are consulted as necessary to determine the best times and practices for development.</p>	Applicable
<p>SE9. Minimize activities that disturb wildlife, compact or expose soils, or damage native vegetation, such as intensive recreation and livestock grazing. Where such activities are unavoidable, use designs that avoid public and livestock access to sensitive and important ecosystems (e.g., via roads and trails).</p>	Not Applicable
<p>SE10. Minimize the presence of trails and other crossings within environmentally sensitive areas or sensitive ecosystems. Where they are required, they should be designed to</p>	Not Applicable
<p>a. be as narrow as possible;</p>	Not Applicable
<p>b. not impact natural hydrological processes (i.e.,</p>	Not Applicable
<p>c. water flows and drainage pathways)</p>	

Guideline	Applicable/Not Applicable
d. provide the least intrusive and disruptive route to viewing areas;	Not Applicable
e. avoid areas with high erosion potential;	Not Applicable
f. ensure adequate drainage;	Not Applicable
g. avoid sensitive or rare vegetation; and	Not Applicable
h. prevent intrusion into wet areas including seepage sites and wetlands.	Not Applicable

Riparian Development Permit Area

All properties in the CRVD are, by default, within the Riparian Development Permit Area. The Subject Property is not within the 30 m Riparian Assessment Area (RAA) of either Colpman or Irving Creek, however, given the topography and alignment of the highway the adjacent ditches would have a 2-m SPEA under the Riparian Area Protection Regulation (RAPR) for Irving Creek. The following guidelines (in Schedule C: Development Permit Areas of Bylaw 4270) for the Riparian Development Permit Area will be applicable to future development due to the connection to Irving Creek:

Guideline	Applicable/Not Applicable
RP1. No development should occur within a streamside protection and enhancement area except for	
a. works authorized by the Minister of Fisheries and Oceans or a regulation under the Fisheries Act (Canada);	Applicable
b. works and activities that comply with the laws and regulations of the Water Sustainability Act, such as bank repairs, stormwater outfalls, road crossings, footbridges and pipeline crossings; and	Applicable
c. a local government has received an approved, non-expired assessment report from a QEP in which the report indicates how permitted use/density can be authorized on the parcel while causing minimum damage to the SPEA and, in some circumstances, how the SPEA encroachment can be compensated for by enhancement of contiguous land outside the SPEA.	Applicable
RP2. Notwithstanding RP1, where a minor intrusion into a SPEA determined in accordance with that guideline is required and the SPEA is greater than 15 m setback, the SPEA boundary may be adjusted to accommodate the intrusion where all the following apply:	
a. the SPEA intrusion is situated within a previously landscaped area;	Not Applicable

Guideline	Applicable/Not Applicable	
<ul style="list-style-type: none"> b. adjustment of the SPEA boundary does not result in any portion of the boundary being less than 10 m from the high-water mark; c. terrain stability is not compromised; d. land is added to the SPEA equal in area to that removed, so that there is no reduction in the overall SPEA area within the property; e. new areas added to the SPEA to replace those removed are contiguous with the original SPEA and located as close to the stream as possible; f. there is, in the opinion of the QEP who performed the riparian area assessment, no reduction in the overall quality of the fish and wildlife habitat provided by the SPEA; g. a B.C. land surveyor survey plan is provided that identifies the high-water mark of the stream, top of the ravine bank if applicable and adjusted SPEA boundary in relation to the parcel boundaries and existing and proposed development; and h. identify the SPEA in the development permit as an area that must remain free of development as a condition of development. 	<p>Not Applicable</p> <p>Not Applicable</p> <p>Not Applicable</p> <p>Not Applicable</p> <p>Not Applicable</p> <p>Not Applicable</p>	
RP3.	Address terrain stability as identified in a geotechnical assessment by a qualified engineer or geologist that may have an impact on the SPEA.	Not Applicable
RP4.	Retain lands within the riparian assessment area (including wetland, seasonal watercourse, lake or pond) in their natural state, preserving native vegetation and trees.	Applicable
RP5.	During construction, protect the root zones of trees located within the SPEA and those identified for retention outside the SPEA as identified by an arborist.	Applicable
RP6.	Remove and/or control invasive plant species on the priority plant list established by the Coastal Invasive Species Committee as identified by the QEP.	Applicable
RP7.	Restore previously disturbed riparian areas to a natural condition based on a local reference ecosystem identified by the qualified environmental professional.	Not Applicable
RP8.	Enhance and, where feasible, restore watercourses in already developed areas to improve watercourse quality from uplands to inlets.	Not Applicable

Guideline	Applicable/Not Applicable
RP9. At the time of subdivision, allocate an area at least 30 m in width from the high-water mark of the watercourse or top of ravine bank to be designated in the development permit to remain free of buildings, structures and alterations of land; designate the riparian assessment area in the development permit as an area that must remain free of development; and lay out subdivision parcels accordingly.	Not Applicable
RP10. Design subdivisions so that all parcels allow for a suitable building envelope and driveway that is set back from the riparian assessment area at least 7.5 m.	Not Applicable
RP11. Design subdivisions to avoid crossings of riparian areas and to maximize the distance between roads and riparian areas.	Not Applicable
RP12. Where a crossing of a riparian area is unavoidable, locate and design crossings to minimize the environmental impact.	Not Applicable
RP13. Design subdivisions to avoid disruption of wildlife corridors in riparian areas.	Not Applicable
RP14. Develop and implement a soil erosion and sediment control plan as part of site design and construction to prevent the discharge of sediment-laden water into a stream.	Applicable
RP15. Install temporary fencing and signage to prevent encroachment into the streamside protection and enhancement area during land preparation and construction.	Applicable
RP16. Minimize alteration of the contours of the land outside the areas approved for buildings, structures and site accesses by minimizing the deposit of fill and the removal of soil.	Not Applicable
RP17. Locate buildings, structures and driveways to maximize separation from riparian areas.	Applicable

Aquifer Protection Development Permit Area

The following guidelines (in Schedule C: Development Permit Areas of Bylaw 4270) for Aquifer Protection Development Permit Area will be applicable to future development, and should be addressed in future development proposal as follows:

Guideline	Applicable/Not Applicable
AP1. Plan and undertake development activities in a manner that complies with B.C. and federal government guidelines for best management practices, including	

Guideline	Applicable/Not Applicable
<ul style="list-style-type: none"> a. Develop with Care: Environmental Guidelines for Urban and Rural Land Development in British Columbia Government of British Columbia, 2014; and 	Applicable
<ul style="list-style-type: none"> b. Natural Resource Best Management Practices Government of British Columbia. 	Not Applicable
<p>AP2. Follow B.C. and federal government best management practices for the protection of water quality and quantity in surface and groundwater hydrologic systems, including</p>	
<ul style="list-style-type: none"> a. Integrated Rainwater and Groundwater Management Water Sustainability Action Plan for British Columbia, 2012; 	Applicable
<ul style="list-style-type: none"> b. Land Development Guidelines for the Protection of Aquatic Habitat. Fisheries and Oceans Canada, 1993; and 	Not Applicable
<ul style="list-style-type: none"> c. Stormwater Planning. Government of British Columbia, 2002. 	Applicable
<p>AP3. Do not construct any septic tank, storage tank, drainage, irrigation or water system in any area identified as having unstable soils or water laden lands subject to degradation. The development permit may allow individual and low-density septic disposal systems only if there is adequate investigation and monitoring to assess the effects of the proposal on the groundwater regime and the steps taken to mitigate degradation.</p>	Unknown
<p>AP4. Ensure sewage treatment and disposal methods meet the requirements of the most recent Liquid Waste Management Plans.</p>	Applicable
<p>AP5. Locate, design, construct and maintain buildings, structures and uses involving the transportation, storage or use of materials, chemicals, compounds, or substances that could contaminate an aquifer or groundwater, including materials or substances used during land alteration and construction activities, to minimize the possibility of contamination.</p>	Applicable
<p>AP6. Implement landscape approaches such as xeriscaping that minimize watering requirements, preserve native vegetation and use non-invasive plant species suited to the local climate.</p>	Applicable

Summary

The proposal for the Subject Property is to change the zoning to be in line with the existing use. There are no other development activities proposed. Construction Best Management Practices are recommended as part of any future construction or development.

The auto wrecking and salvage operations occurring on the subject property are being conducted within the industry guidelines and provincial government's regulations. This report recommends that improvements be made to the stormwater and wastewater management monitoring and, if additional site development occurs, improvements to the stormwater and wastewater infrastructure. Erosion and sediment control and spill prevention and response measures will be required during development to protect the aquifer. A detailed, site-specific waste management plan is recommended as part of future development.

The current use is not directly negatively impacting the adjacent Mature Forest. The owners are actively managing invasive species within this buffer and are further protecting the Mature Forest buffer with a laneway and fencing at the property line. If possible, future development should be limited to the existing disturbed areas to leave the remaining buffer to the sensitive Mature Forest ecosystem intact.

The Subject Property is not within the 30 m Riparian Assessment Area (RAA) of either Colpman or Irving Creek, however, given the topography and alignment of the highway the adjacent ditches would have a 2-m SPEA under the Riparian Area Protection Regulation (RAPR) for Irving Creek.

Please do not hesitate to contact me with any questions you may have.

Sincerely,

Laura Hooper

Laura Hooper, MSc, PAg (#2546)

S. Stallard

Sara Stallard BSc. ASCT (#22338), Env'r Tech



Malahat Auto Wrecking and Metal Recycling Ecological Overview
240 Okotoks Road, Malahat, BC



Photo 1: Asphalt entrance and gate to 240 Okotoks Road.

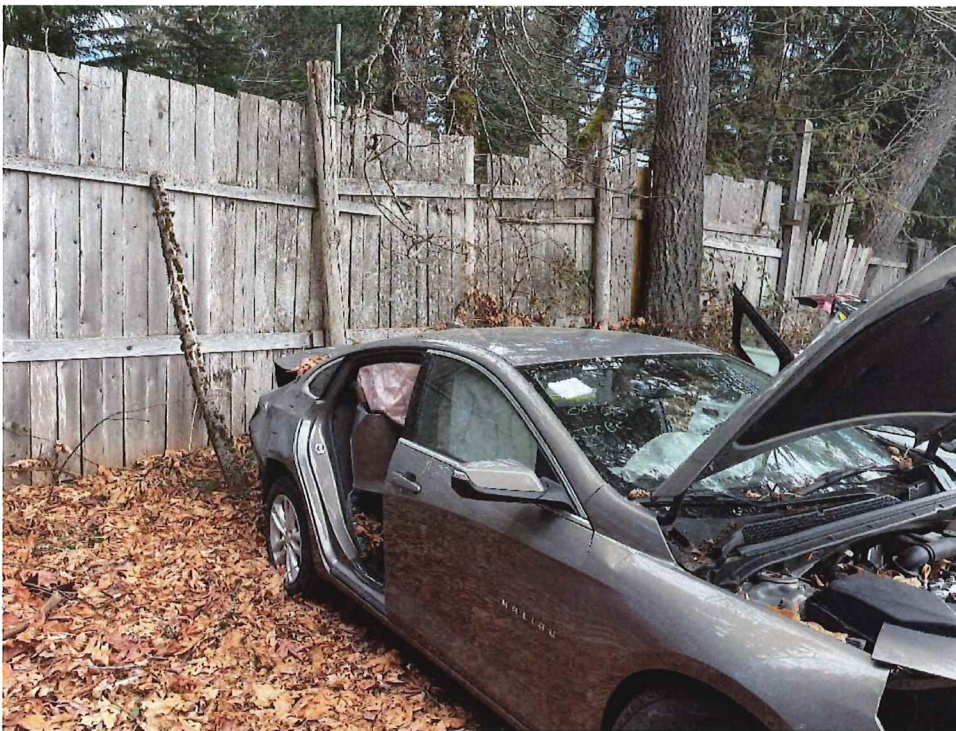


Photo 2: Wooden fence on north property line of 240 Okotoks Road.



Photo 3: Typical chain link fence on east and south property line of 240 Okotoks Road.



Photo 4: Post and rail wire fence on the west property line of 240 Okotoks Road.



Photo 5: Main office building at 240 Okotoks Road.

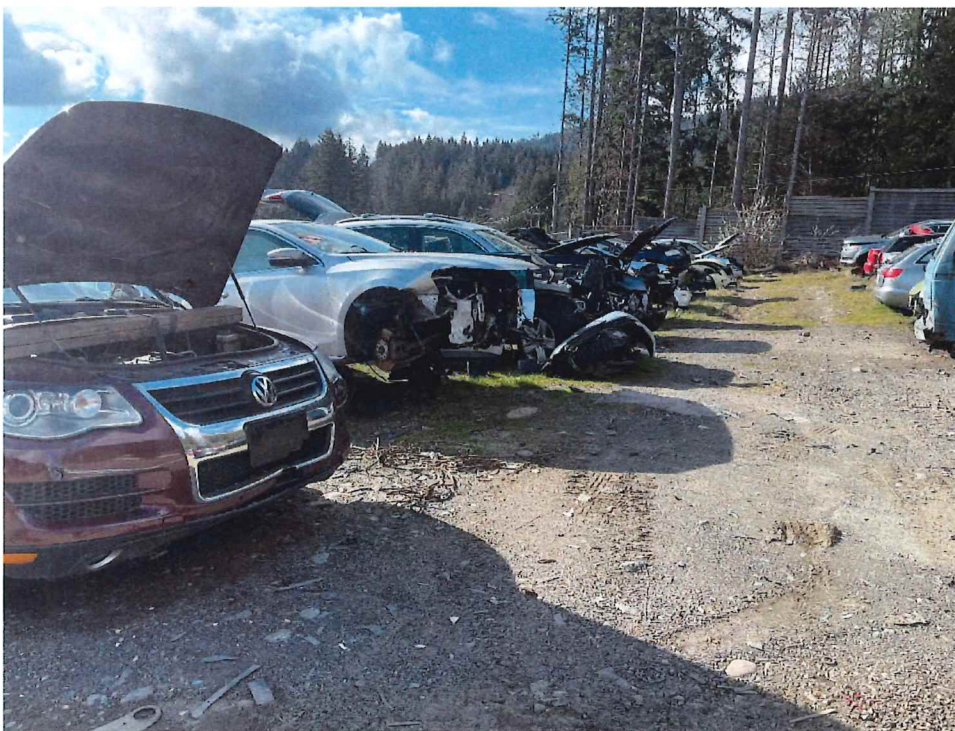


Photo 6: Well organized rows of hulks at 240 Okotoks Road.

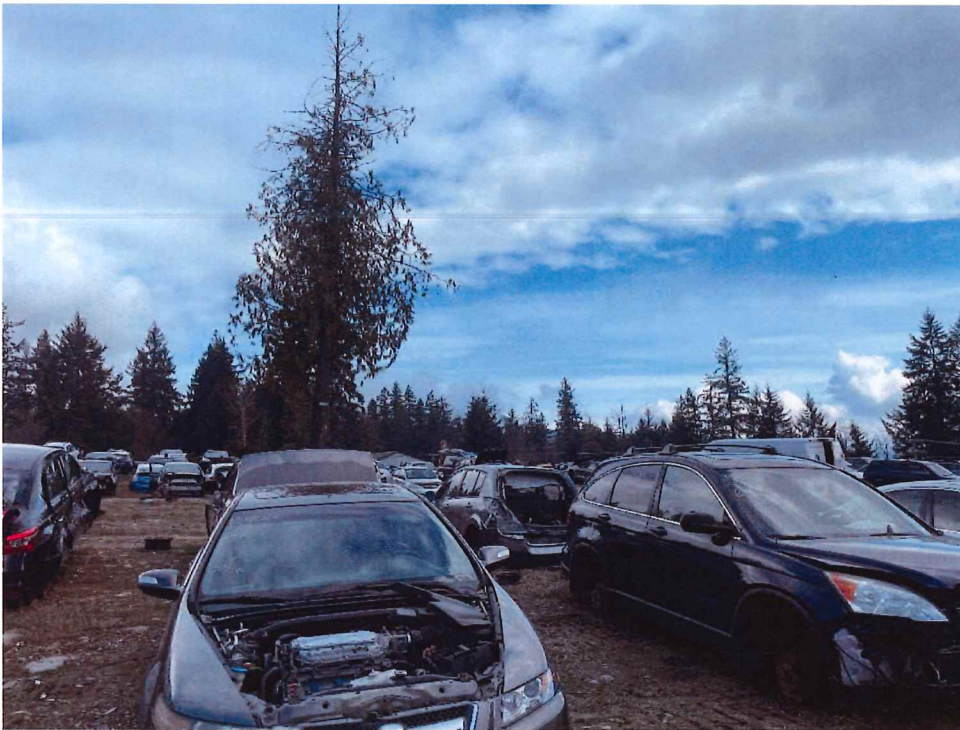


Photo 7: Well organized rows of hulks at 240 Okotoks Road.



Photo 8: Dry storage of car parts destined for recycling in a dome tent at 240 Okotoks Road.



Photo 9: Dry storage of car parts destined for recycling in a dome tent at 240 Okotoks Road.

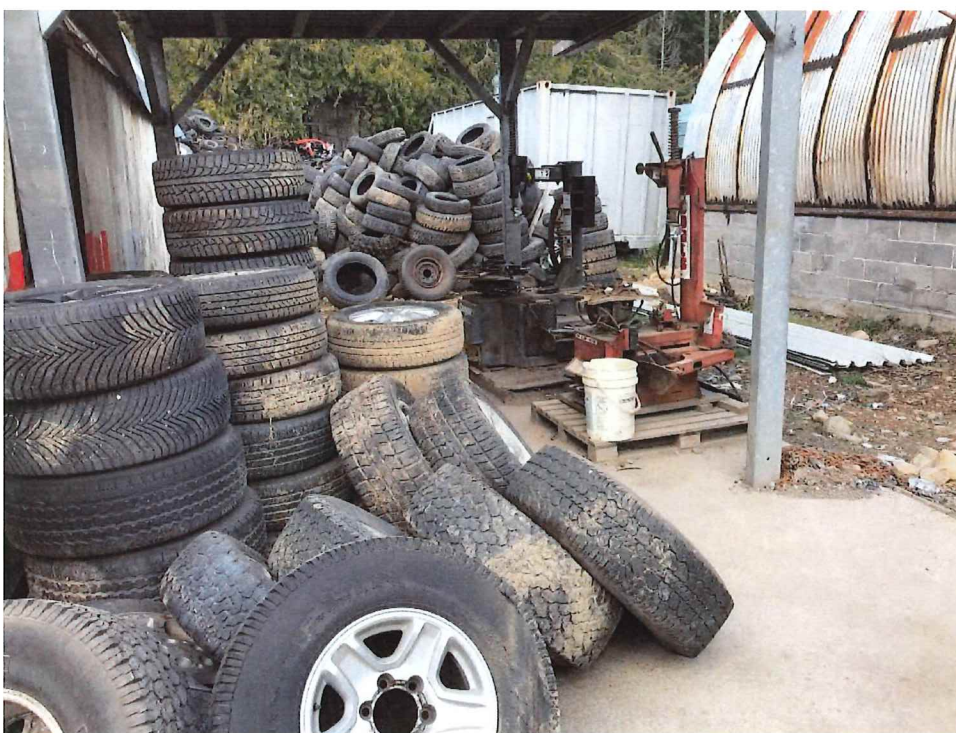


Photo 10: Well organized tires for recycling at 240 Okotoks Road.



Photo 11: Well organized tires for resale at 240 Okotoks Road.



Photo 12: Example of the soil surface staining from small spills at 240 Okotoks Road.



Photo 13: Example of the waste metal shavings and small car parts on the soil surface at 240 Okotoks Road.

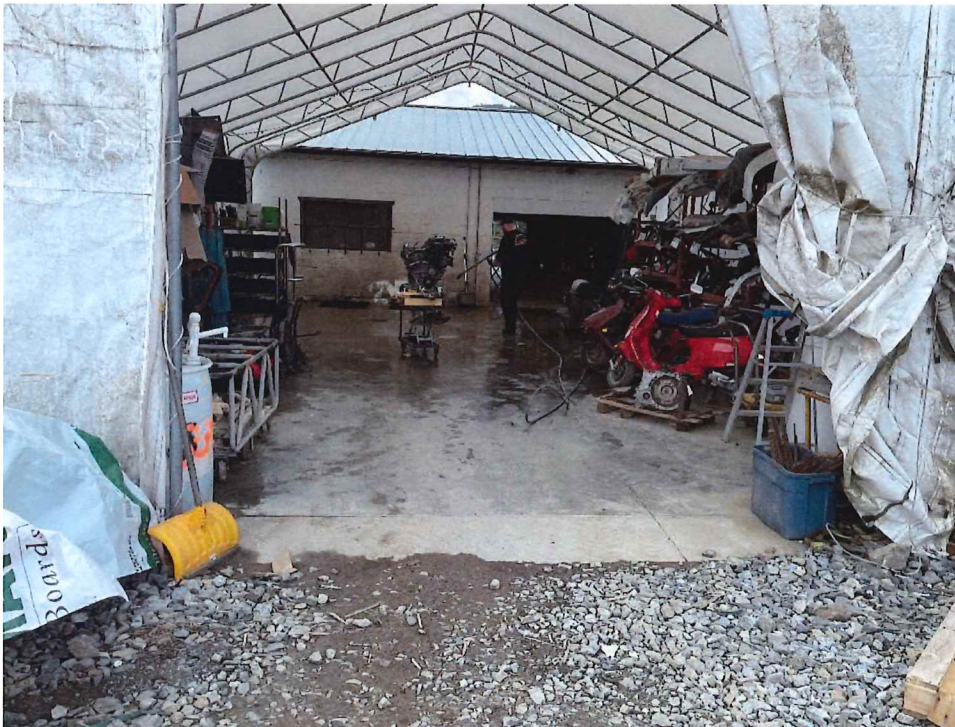


Photo 14: Parts pressure-washing in dome tent attached to the main office building at 240 Okotoks Road.



Photo 15: Location of rock pit connected to the floor drain in dome tent of the main office at 240 Okotoks Road.



Photo 16: Rock pit connected to the floor drain in dome tent of the main office at 240 Okotoks Road.



Photo 17: Drainage spillway of the main office roof leaders at 240 Okotoks Road.



Photo 18: Slotted manhole cover in parking lot for overland flow and connected to the perimeter drain at 240 Okotoks Road.



Photo 19: Drainage ditch for perimeter drain and parking lot of 240 Okotoks Road.



Photo 20: Miscellaneous storage within two-storey barn (old shop/office) at 240 Okotoks Road.



Photo 21: Seacan Dome at 240 Okotoks Road.



Photo 22: Fluid removal area including a specialized machine for removal and compression of air conditioning (AC) refrigerant within Seacan Dome at 240 Okotoks Road.



Photo 23: Concrete Block Dome, flanked by the Seacan Dome and Dome Tent at 240 Okotoks Road.



Photo 24: Oil shed building at 240 Okotoks Road.

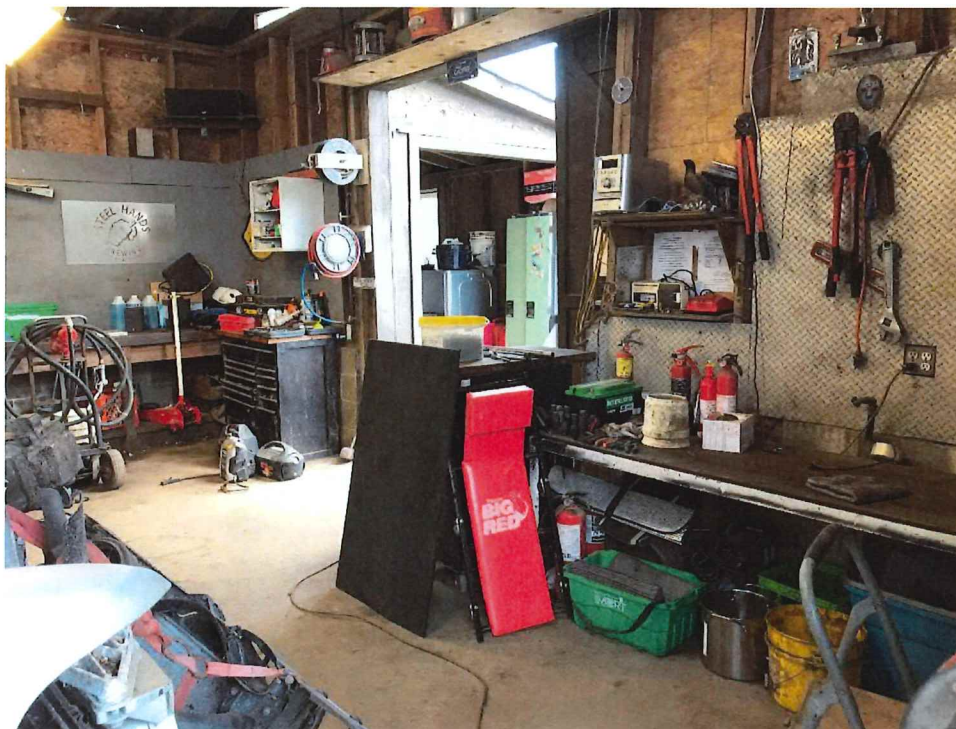


Photo 25: Interior of Concrete Block Dome at 240 Okotoks Road.

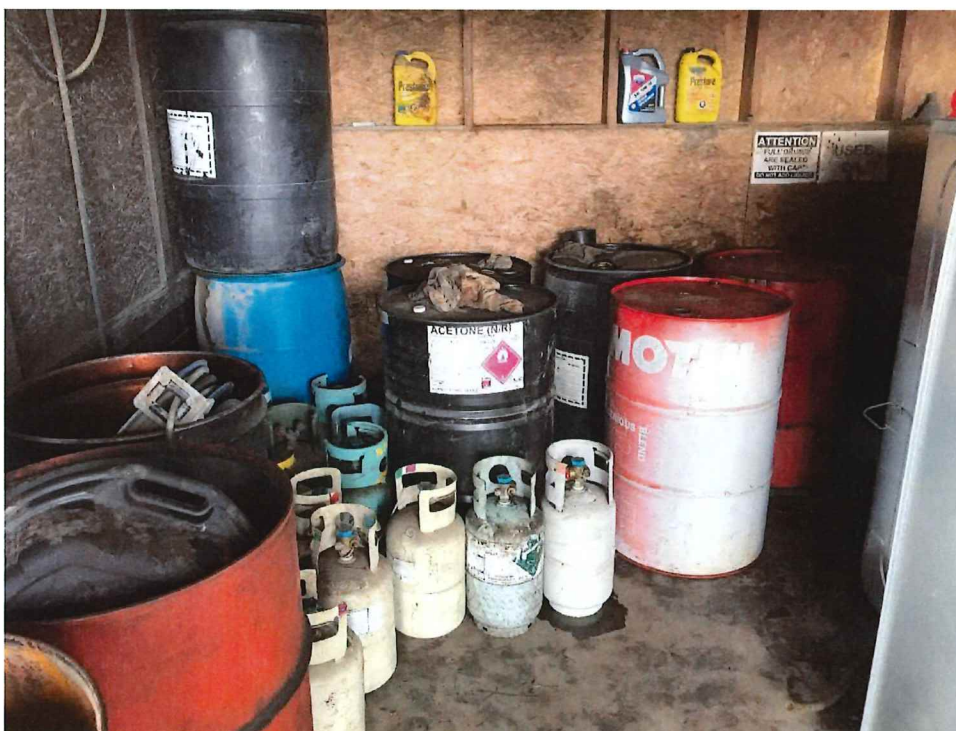


Photo 26: Interior of Oil Shed Building at 240 Okotoks Road.



Photo 27: Large Dome Tent at 240 Okotoks Road.



Photo 28: Storage within the Large Dome Tent at 240 Okotoks Road.



Photo 29: Weigh Scale at 240 Okotoks Road.



Photo 30: General Scrap Metal (non-auto) deposition area at the base of the Crusher Ramp that contains material dumped from roll off bins and peddler traffic at 240 Okotoks Road.

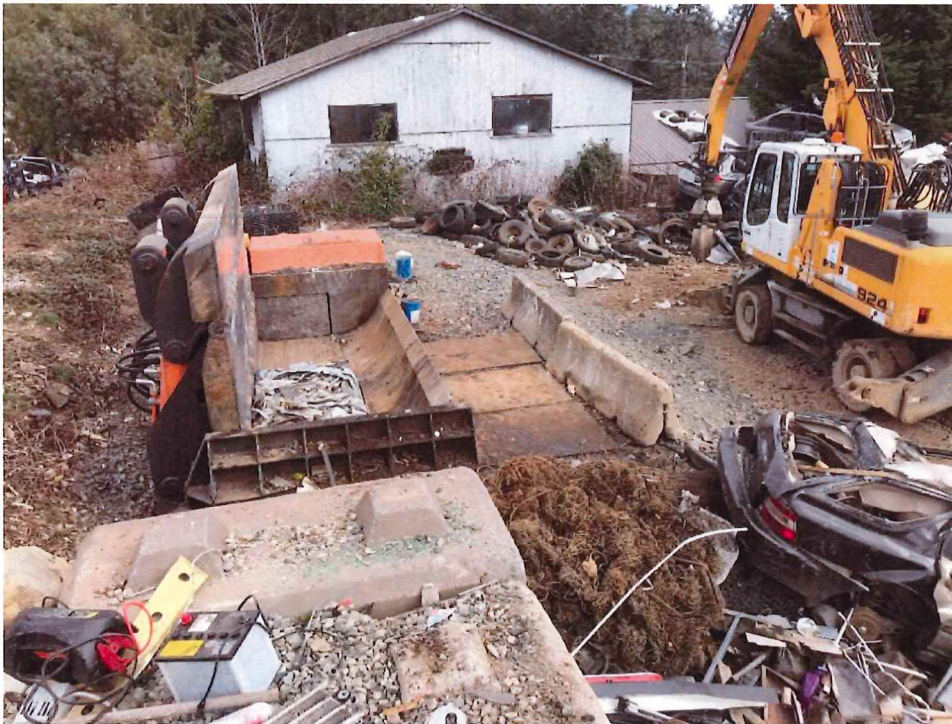


Photo 31: Steel Crusher Ramp area at 240 Okotoks Road.



Photo 32: Stockpile of propane tanks at 240 Okotoks Road.



Photo 33: Pooling of surface water at propane tanks that flows off site to the ditch adjacent to the Trans-Canada Highway.



Photo 34: Depression flowing south to empty into the west ditch at the driveway entrance of 240 Okotoks Road.



Photo 35: Band of vegetation at the western edge of Okotoks Road.



Photo 36: Invasive species management at 240 Okotoks Road.

Appendix 1: Contaminated Site Registry search results for 240 Okotoks Road.

From: BCOLHELP@gov.bc.ca
Subject: Site Registry Search Results
Date: May 6, 2024 at 4:59 PM



Site Registry - Area Search

BC Registries and Online Services

These are the records from the Site Registry that match the search criteria provided:

Folio:

Latitude: 48deg 32min 40.7sec

Longitude: 123deg 33min 56.6sec

Radius: 0.5km

Site ID:	Address/City:	Last Updated:
0000007211	265 TRANS CANADA HIGHWAY, MALAHAT	2013-04-22
0000015224	231 TRANS CANADA HIGHWAY, MALAHAT	2022-07-28
0000020988	290 TRANS-CANADA HIGHWAY, MALAHAT	2018-02-27
0000024189	WEST OF NORTHER JUNCTION OF OKOTOKS DR, MALAHAT	2023-04-06
0000024190	SOUTH OF NORTHER JUNCTION, MALAHAT	2022-03-04
0000024191	NORTH OF NORTHER JUNCTION OF, MALAHAT	2023-04-06

End of Search Results

Disclaimer: Site Registry information has been filed in accordance with the provisions of the *Environmental Management Act*. While we believe the information to be reliable, BC Registries and Online Services and the Province of British Columbia make no representation or warranty as to its accuracy or completeness. Persons using this information do so at their own risk.

Site Registry - Site Details Report

BC Registries and Online Services

SITE LOCATION

Site ID:	24191	Latitude:	48d 32m 32.7s
Victoria File:	26250-20/24191	Longitude:	123d 33m 56.5s
Regional File:			
Common Name:	SITE3 OKOTOKS DR MALAHAT	Prov/State:	BC
Site Address:	NORTH OF NORTHER JUNCTION OF OKOTOKS DR AND HWY 1		
City:	MALAHAT		
Postal Code:			

Notations:	3	Participants:	4	Associated Sites:	0
Documents:	3	Susp. Land Use:	0	Parcel Descriptions:	1

Location Description: LATS/LONGS VERIFIED WITH LTSA MAR 2021

NOTATIONS:

Notation Type: DETERMINATION OF CONTAMINATED SITE REQUESTED
Notation Class: ENVIRONMENTAL MANAGEMENT ACT: GENERAL
Initiated: 2021-03-08
Completed: 2021-03-08
Ministry Contact: POPOVA, ANNA
Note:
Required Actions:

Notation Participants

Name: MINISTRY OF TRANSPORTATION
Role: SUBMITTED BY
Name: PGL ENVIRONMENTAL CONSULTANTS
Role: APPROVED PROFESSIONAL

Notation Type: PRELIMINARY DETERMINATION OF CONTAMINATED SITE ISSUED - SITE NOT
CONTAMINATED
Notation Class: ENVIRONMENTAL MANAGEMENT ACT: GENERAL
Initiated: 2021-04-28
Completed: 2021-04-28
Ministry Contact: MORTENSEN, ANNETTE
Note:
Required Actions:

Notation Participants

Name: PGL ENVIRONMENTAL CONSULTANTS
Role: AUTHOR

Title: STAGE 1 PRELIMINARY SITE INVESTIGATION, LOT 2, SITES 2 AND 3, OKOTOKS DRIVE, MALAHAT, BC
Document Date: 2020-01-01 **Received Date:** 2021-04-28

Document Participants

Name: PGL ENVIRONMENTAL CONSULTANTS
Role: AUTHOR

Title: STAGE 1 PRELIMINARY SITE INVESTIGATION UPDATE AND STAGE 2 PRELIMINARY SITE INVESTIGATION, LOT 2, SITE 2, 3, AND 5, OKOTOKS DRIVE, MALAHAT, BC
Document Date: 2020-07-01 **Received Date:** 2021-04-28

Document Participants

Name: PGL ENVIRONMENTAL CONSULTANTS
Role: AUTHOR

No associated sites have been submitted for this site

No suspect land uses have been submitted for this site

PARCEL DESCRIPTIONS:

Date Noted: 2021-03-08 **Parcel ID:** 031128670
Crown Land PIN: **Crown Lands File Number:**
Land Description: LOT B DISTRICT LOTS 105, 138 AND 149 MALAHAT DISTRICT PLAN EPP89649

No site profile has been submitted for this site

End of Site Details Report

Disclaimer: Site Registry information has been filed in accordance with the provisions of the *Environmental Management Act*. While we believe the information to be reliable, BC Registries and Online Services and the Province of British Columbia make no representation or warranty as to its accuracy or completeness. Persons using this information do so at their own risk.

Site Registry - Site Details Report

BC Registries and Online Services

SITE LOCATION

Site ID:	20988	Latitude:	48d 32m 43.3s
Victoria File:	26250-20/20988	Longitude:	123d 33m 54.8s
Regional File:			
Common Name:	290 TRANS-CANADA HWY MALAHAT	Prov/State:	BC
Site Address:	290 TRANS-CANADA HIGHWAY		
City:	MALAHAT		
Postal Code:			

Notations:	4	Participants:	8	Associated Sites:	0
Documents:	2	Susp. Land Use:	0	Parcel Descriptions:	2

Location Description: LATS/LONGS VERIFIED WITH GOOGLE EARTH SEP 2017

NOTATIONS:

Notation Type: SITE RISK CLASSIFIED - SITE IS NON-HIGH RISK
Notation Class: ENVIRONMENTAL MANAGEMENT ACT: GENERAL
Initiated: 2017-08-22
Completed: 2017-08-22
Ministry Contact: YAN, PETER
Note:
Required Actions:

Notation Participants

Name: SLR CONSULTING (CANADA) LTD.
Role: SUBMITTED BY

Notation Type: DETERMINATION OF CONTAMINATED SITE REQUESTED
Notation Class: ENVIRONMENTAL MANAGEMENT ACT: GENERAL
Initiated: 2017-09-13
Completed: 2017-09-13
Ministry Contact: POPOVA, ANNA
Note:
Required Actions:

Notation Participants

Name: MINISTRY OF TRANSPORTATION
Role: SUBMITTED BY
Name: SLR CONSULTING (CANADA) LTD.

Role: APPROVED PROFESSIONAL

Notation Type: PRELIMINARY DETERMINATION OF CONTAMINATED SITE ISSUED - SITE NOT CONTAMINATED
Notation Class: ENVIRONMENTAL MANAGEMENT ACT: GENERAL
Initiated: 2017-10-27
Completed: 2017-10-27
Ministry Contact: BROOKE, JULIA A
Note:
Required Actions:

Notation Participants

Name: SLR CONSULTING (CANADA) LTD
Role: ROSTERED EXPERT UNDER PROTOCOL SIX
Name: MINISTRY OF TRANSPORTATION
Role: RECEIVED BY
Name: BROOKE, JULIA A
Role: ISSUED BY

Notation Type: FINAL DETERMINATION OF CONTAMINATED SITE ISSUED - SITE NOT CONTAMINATED
Notation Class: ENVIRONMENTAL MANAGEMENT ACT: GENERAL
Initiated: 2017-12-13
Completed: 2017-12-13
Ministry Contact: SAMWAYS, JENNIFER
Note: ISSUED ON THE RECOMMENDATION OF AN APPROVED PROFESSIONAL (TRACI BRANNEN MAGEE) UNDER PROTOCOL 6 OF THE CONTAMINATED SITES REGULATION
Required Actions:

Notation Participants

Name: MINISTRY OF TRANSPORTATION AND INFRASTRUCTURE
Role: RECEIVED BY
Name: BROOKE, JULIA A
Role: ISSUED BY
Name: SLR CONSULTING (CANADA) LTD
Role: APPROVED PROFESSIONAL

SITE PARTICIPANTS:

Participant: SLR CONSULTING (CANADA) LTD.
Role(s): ORGANIZATION
Start Date: 2017-07-01
End Date:
Notes:

Participant: YAN, PETER
Role(s): EMPLOYEE
Start Date: 2017-08-22
End Date:
Notes:

Participant: POPOVA, ANNA
Role(s): EMPLOYEE
Start Date: 2017-09-13 **End Date:** 2021-06-14
Notes:

Participant: MINISTRY OF TRANSPORTATION
Role(s): ORGANIZATION
Start Date: 2017-09-13 **End Date:**
Notes:

Participant: SLR CONSULTING (CANADA) LTD
Role(s): ORGANIZATION
Start Date: 2017-10-27 **End Date:**
Notes:

Participant: BROOKE, JULIA A
Role(s): EMPLOYEE
Start Date: 2017-10-27 **End Date:**
Notes:

Participant: MINISTRY OF TRANSPORTATION AND INFRASTRUCTURE
Role(s): ORGANIZATION
Start Date: 2017-12-13 **End Date:**
Notes:

Participant: SAMWAYS, JENNIFER
Role(s): EMPLOYEE
Start Date: 2017-12-13 **End Date:** 2021-06-14
Notes:

DOCUMENTS:

Title: STAGE 1 AND 2 PRELIMINARY SITE INVESTIGATION, HOGGS VW REPAIR, 290
TRANS-CANADA HIGHWAY, MALAHAT, BC
Document Date: 2017-07-01 **Received Date:** 2017-09-21

Document Participants

Name: SLR CONSULTING (CANADA) LTD.
Role: AUTHOR

Title: SUMMARY OF SITE CONDITION
Document Date: 2017-09-01 **Received Date:** 2017-09-21

Document Participants

Name: SLR CONSULTING (CANADA) LTD.
Role: AUTHOR

No associated sites have been submitted for this site

No suspect land uses have been submitted for this site

PARCEL DESCRIPTIONS:

Date Noted:	2017-09-28	Parcel ID:	005489865
Crown Land PIN:		Crown Lands File Number:	
Land Description:	LOT 1 DISTRICT LOT 105 MALAHAT DISTRICT PLAN 8925 EXCEPT PART IN PLAN EPP72439		

Date Noted:	2017-11-30	Parcel ID:	030309581
Crown Land PIN:		Crown Lands File Number:	
Land Description:	LOT A DISTRICT LOT 105 MALAHAT DISTRICT PLAN EPP72442		

No site profile has been submitted for this site

End of Site Details Report

Disclaimer: Site Registry information has been filed in accordance with the provisions of the *Environmental Management Act*. While we believe the information to be reliable, BC Registries and Online Services and the Province of British Columbia make no representation or warranty as to its accuracy or completeness. Persons using this information do so at their own risk.

Appendix 2: Reportable spill types and volumes under the Environmental Management Act.



March 2021

Spill Reporting

Report spills immediately

If a spill occurs, or is at imminent risk of occurring, responsible persons (spillers) must ensure that it is immediately reported to the Provincial Emergency Program (PEP)/ Emergency Management British Columbia (EMBC) by calling **1-800-663-3456**.

Section 91.2 of *Environmental Management Act* (EMA) identifies the requirements for spill reporting. The [Spill Reporting Regulation](#) (SRR) prescribes the information that is required, as well as the time and manner in which it is required, when reporting spills.

This Fact Sheet is designed to provide information for responsible persons on their reporting obligations should they be in possession, charge, or control of a substance when it spills or is at imminent risk of spilling.

Responsible Person

A responsible person has possession, charge or control of a substance or thing when a spill of the substance or thing occurs or is at imminent risk of occurring.

Definition of a Spill

A spill is defined by the *Environmental Management Act* as the introduction into the environment, other than as authorized and whether intentional or unintentional, of a substance or thing that has the potential to cause adverse effects to the environment, human health, or infrastructure.

The SRR identifies three reports that responsible persons must make based on specific criteria: Initial Report; Update to Minister Report; and End-of-Spill Report. Responsible persons may also be required to make a fourth report, a Lessons-Learned Report, if ordered to do so by a director. The purpose of these reports is to ensure that the Ministry of Environment and Climate Change Strategy (the ministry) has the appropriate information necessary to assess spill impacts and fulfil oversight and regulatory roles and responsibilities.

Initial Report

Section 4 of the SRR outlines the information required in the Initial Report. An Initial Report must be made immediately if any of the following occur or is at imminent risk of occurring:

- 1. If the volume spilled, or likely to be spilled, is equal to or greater than the minimum quantity outlined in the SRR, the spill is reportable.** A list of substances and their reportable quantities is available in Appendix 2: Prescribed substances and quantities for immediate spill reporting of this Fact Sheet.
- 2. If the spill enters, or is likely to enter, a body of water, the spill is reportable.** A body of water is defined in the SRR and includes both marine and fresh bodies of water whether or not they usually

contain water or ice, as well as streams, lakes, ponds, rivers, creeks, springs, aquifers, ravines, gulches, wetlands, and glaciers. The requirement to report a spill of a listed substance of any quantity also includes spills that enter a ditch that is not self-contained and connects to a body of water.

The Initial Report must be made immediately to EMBC by calling 1-800-663-3456. Anyone can make the Initial Report; however, the responsible person must ensure the report has been made and all the information outlined in section 4 of the SRR has been reported. (Appendix 1)

Natural Gas

A release of natural gas is reportable if:

1. The spill is caused by a breakage in a pipeline or fitting operated above 100 pounds per square inch (psi) that results in a sudden release of natural gas; and
2. The amount of the spill is, or is likely to be, equal to or greater than 10 kilograms (kg).

Update to Minister Report

Section 5 of the SRR outlines the requirement for the submission of Update to Minister Reports. Responsible persons must provide an Update to Minister Report:

1. **As soon as possible on request of the minister.**
2. **At least once every 30 days after the date that the spill began** until such time that an End-of-Spill Report is required.
3. **At any time that the responsible person has reason to believe that information that was previously reported as part of the Initial Report, as outlined in Appendix 1, was or has become inaccurate or incomplete.**

If the Update to Minister Report is requested by the Minister or if the spill lasts more than 30 days and the Update to Minister Report is required, an email will be sent by the ministry to the responsible person with instructions on how to complete the report form and how it must be submitted.

If the responsible person believes information previously reported as part of the Initial Report was or has become inaccurate or incomplete, the responsible person can contact the Environmental Emergency Program at SpillReports@gov.bc.ca, stating the Dangerous Goods Incident Report number in the subject line, to advise that an Update to Minister Report is required. Instructions on how to complete the report form and how it must be submitted will be sent to the responsible person by email.

End-of-Spill Report

Section 6 of the SRR outlines the requirement for the submission of End-of-Spill Reports. Responsible persons must submit a written report to the ministry within 30 days following the emergency response completion date of a spill, see information box below. An End-of-Spill Report is required when:

1. **The volume spilled is equal to or greater than the minimum quantity outlined in the SRR.** A list of substances and quantities for immediate spill reporting (is provided in Appendix 2.):
2. **The spill enters, or is likely to enter, a body of water-** 'body of water' is defined in the SRR.

The accountability to adhere to the requirements set out in the SRR is that of the responsible person. All reports, other than the Initial Report, are to be sent to the Environmental Emergency Program at SpillReports@gov.bc.ca.

Emergency Response

Completion Date

The emergency response completion date is defined in section 8 of the SRR as the date that all the following criteria are met:

1. The Incident Command Post is disestablished.
2. The source of the spill is under control and is neither spilling nor at imminent risk of spilling.
3. Emergency actions to stabilize, contain, and remove the spill have been taken.
4. The waste has been removed from the spill site.
5. All evacuation notices have expired or been rescinded.
6. All equipment, personnel, and other resources used in emergency spill response actions have been removed from the spill site, other than resources required for sampling, testing, monitoring, assessing the spill site, or for recovery and restoration of the spill site.

Lessons-Learned Report

Section 7 of the SRR outlines the requirements of a Lessons-Learned Report. Within six months following the emergency response completion date of a spill, the director may order a Lessons-Learned Report from the responsible person. This report must be submitted to the director in the manner and form specified by the director. For additional information on the Lessons-Learned Report, please see the Lessons-Learned Fact Sheet.

B.C. Oil and Gas Commission Equivalency

Responsible persons regulated by the B.C. Oil and Gas Commission (the Commission) under the [Emergency Management Regulation](#) must provide an Initial Report to EMBC, but are exempt from the following requirements in the SRR:

- Section 5 Update to Minister Report;
- Section 6 End-of-Spill Report; and
- Section 7 Lessons-Learned Report.

Fines and Penalties

It is the responsibility of regulated persons, responsible persons and the owners of substances or things to understand and comply with EMA and its associated regulations.

This document is solely for the convenience of the reader and is intended to assist in understanding the legislation and regulations, not replace them. It does not contain and should not be construed as legal advice. Current legislation and regulations should be consulted for complete information.

Failure to be in compliance can result in convictions of fines and imprisonment, as outlined in *EMA* and its associated regulations.

Additional Fact Sheets

Fact sheets on other relevant topics are published by the Environmental Emergency Program (EEP) and available at:

www.gov.bc.ca/spillresponse

The complete list of available Fact Sheets:

- 01 Regulated Person
- 02 Responsible Person
- 03 Spill Reporting
- 04 Lessons-Learned Report
- 05 Cost Recovery
- 06 Requirement to Provide Information
- 07 Spill Contingency Planning
- 08 Testing Spill Contingency Plans
- 09 Recovery Plan

**For more information, contact the
Environmental Emergency Program
at: SpillReports@gov.bc.ca**

Appendix 1: Initial Report content

Report information	Description
1. Contact information of the individual making the report	First and last name, phone number, and email address
2. Contact information of the responsible person	First and last name, phone number, and email address
3. Contact information for the owner of the substance spilled	First and last name, phone number, and email address
4. Location, date, and time of the spill	Provide as much location specific information as possible, including: general directions, description of how to approach the area, latitude and longitude if available, street address, and the date and time in 24-hour clock format
5. Description of the spill site and surrounding area	Provide a description of the receiving environment of the spilled material (for example, the area is wooded and the ground is soft; there are sensitive riparian areas that are at risk of contamination)
6. A description of the source of the spill	The container from which the material spilled (for example, fishing vessel, above- or below-ground storage tank, tanker truck, pipeline, or railcar)
7. Type and quantity of the substance spilled	An estimate of the amount of product spilled and a description of the product type, including product name, UN number, and Safety Data Sheet [SDS] (for example, diesel, UN 1202, 50 liters). If unknown, a description of the spill (for example, sheen or slick approximately 20 meters by 20 meters)
8. Cause and impact of the spill	The circumstances leading to the spill; the immediate cause as well as any contributing factors. May be a combination of the activity and the incident (for example, motor vehicle accident derailment, equipment failure, fire, human error, intentional/unauthorized release, natural occurrence, or unknown)
9. Details of the actions taken or proposed	Provide any necessary/ helpful details of the actions taken or planned (for example, what steps have been taken to contain the spill, which responders have been deployed, and when they will be on scene)
10. The details of further action contemplated or required	Provide any necessary/ helpful details regarding next steps, including response actions, deployment of additional resources, and monitoring activities
11. The names of agencies on scene	Any persons, government, federal government, local government, or Indigenous agencies
12. The names of other persons or agencies advised concerning the spill	Any persons, government, federal government, local government, or Indigenous agencies

Appendix 2: Prescribed substances and quantities for immediate spill reporting¹

Item	Column 1 Substance Spilled	Column 2 Specified Amount
1	Class 1, Explosives as defined in section 2.9 of the Federal Regulations ²	50 kg, or less if the substance poses a danger to public safety
2	Class 2.1, Flammable Gases, other than natural gas, as defined in section 2.14 (a) of the Federal Regulations	10 kg
3	Class 2.2 Non-Flammable and Non-Toxic Gases as defined in section 2.14 (b) of the Federal Regulations	10 kg
4	Class 2.3, Toxic Gases as defined in section 2.14 (c) of the Federal Regulations	5 kg
5	Class 3, Flammable Liquids as defined in section 2.18 of the Federal Regulations	100 L
6	Class 4, Flammable Solids as defined in section 2.20 of the Federal Regulations	25 kg
7	Class 5.1, Oxidizing Substances as defined in section 2.24 (a) of the Federal Regulations	50 kg or 50 L
8	Class 5.2, Organic Peroxides as defined in section 2.24 (b) of the Federal Regulations	1 kg or 1 L
9	Class 6.1, Toxic Substances as defined in section 2.27 (a) of the Federal Regulations	5 kg or 5 L
10	Class 6.2, Infectious Substances as defined in section 2.27 (b) of the Federal Regulations	1 kg or 1 L, or less if the waste poses a danger to public safety or the environment
11	Class 7, Radioactive Materials as defined in section 2.37 of the Federal Regulations	Any quantity that could pose a danger to public safety and an emission level greater than the emission level established in section 20 of the Packaging and Transport of Nuclear Substances Regulations, 2015 (Canada)
12	Class 8, Corrosives as defined in section 2.40 of the Federal Regulations	5 kg or 5 L
13	Class 9, Miscellaneous Products, Substances or Organisms as defined in section 2.43 of the Federal Regulations	25 kg or 25 L

¹ If the spill enters, or is likely to enter, a body of water, it is reportable regardless of the quantity

'Federal regulations' refer to the Transportation of Dangerous Goods Regulations under the *Transportation of Dangerous Goods Act 1992*

'Hazardous Waste Regulation' refers to B.C. Reg. 63/88

14	Waste containing dioxin as defined in section 1 of the Hazardous Waste Regulation	1 kg or 1 L, or less if the waste poses a danger to public safety or the environment
15	Leachable toxic waste as defined in section 1 of the Hazardous Waste Regulation	25 kg or 25 L
16	Waste containing polycyclic aromatic hydrocarbons as defined in section 1 of the Hazardous Waste Regulation	5 kg or 5 L
17	Waste asbestos as defined in section 1 of the Hazardous Waste Regulation	50 kg
18	Waste oil as defined in section 1 of the Hazardous Waste Regulation	100 L
19	Waste that contains a pest control product as defined in section 1 of the Hazardous Waste Regulation	5 kg or 5 L
20	PCB wastes as defined in section 1 of the Hazardous Waste Regulation	25 kg or 25 L
21	Waste containing tetrachloroethylene as defined in section 1 of the Hazardous Waste Regulation	50 kg or 50 L
22	Biomedical waste as defined in section 1 of the Hazardous Waste Regulation	1 kg or 1 L, or less if the waste poses a danger to public safety or the environment
23	A hazardous waste as defined in section 1 of the Hazardous Waste Regulation and not covered under items 1 – 22	25 kg or 25 L
24	A substance, not covered by items 1 to 23, that can cause pollution	200 kg or 200 L
25	Natural gas	10 kg, if there is a breakage in a pipeline or fitting operated above 100 psi that results in a sudden and uncontrolled release of natural gas

Appendix 3: Layout of significant features of 240 Okotoks Road.

Appendix 4: Safety Data Sheets (SDS) for cleaning products used at 240 Okotoks Road.

SAFETY DATA SHEET

ZEP MORADO SUPER CLEANER 5GL

Version 5.1

Revision Date 10/01/2023

Print Date 06/03/2024

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : ZEP MORADO SUPER CLEANER 5GL

Material number : 00000000000085635

Manufacturer or supplier's details

Company : Zep Inc.

Address : 350 Joe Frank Harris Parkway, SE
Emerson, GA 30137

Telephone : Compliance Services - 877-428-9937

Emergency telephone numbers

For SDS Information : Compliance Services - 877-428-9937

For a Medical Emergency : 877-541-2016 Toll Free - All Calls Recorded

For a Transportation Emergency : CHEMTREC: 800-424-9300 - All Calls Recorded.
In the District of Columbia 202-483-7616

Recommended use of the chemical and restrictions on use

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance	liquid
Colour	purple
Odour	ether-like

GHS Classification

Skin corrosion : Category 1

Serious eye damage : Category 1

GHS label elements

Hazard pictograms :



Corrosion

Signal word : Danger

Hazard statements : H314 Causes severe skin burns and eye damage.

Precautionary statements : **Prevention:**
P264 Wash skin thoroughly after handling.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 IF ON SKIN (or hair): Take off

SAFETY DATA SHEET

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immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.
P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
P363 Wash contaminated clothing before reuse.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents/container in accordance with local regulation.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical name	CAS-No.	Concentration [%]
Alcohols, C9-11, ethoxylated	68439-46-3	>= 3 - < 5
2-butoxyethanol	111-76-2	>= 1 - < 3
sodium hydroxide	1310-73-2	>= 1 - < 3
Benzenesulfonic acid, mono-C10-16-alkyl derivs., sodium salts	68081-81-2	>= 1 - < 3

The exact percentages of disclosed substances are withheld as trade secrets.

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.
Get medical attention immediately.

If inhaled : If unconscious, place in recovery position and seek medical advice.
If symptoms persist, call a physician.

In case of skin contact : Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty.
Wash off immediately with plenty of water for at least 15 minutes.
If skin irritation persists, call a physician.
Remove contaminated clothing and shoes.
Wash contaminated clothing before reuse.

In case of eye contact : Small amounts splashed into eyes can cause irreversible

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tissue damage and blindness.
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Continue rinsing eyes during transport to hospital.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.

- If swallowed : Keep respiratory tract clear.
Never give anything by mouth to an unconscious person.
DO NOT induce vomiting unless directed to do so by a physician or poison control center.
Take victim immediately to hospital.
Do not give milk or alcoholic beverages.
- Most important symptoms and effects, both acute and delayed : Effects are immediate and delayed.
Symptoms may include blistering, irritation, burns, and pain.
Effects are dependent on exposure (dose, concentration, contact time).
Causes severe skin burns and eye damage.
Review section 2 of SDS to see all potential hazards.
- Notes to physician : Treat symptomatically. Symptoms may be delayed.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Dry chemical
Water spray jet
Alcohol-resistant foam
Carbon dioxide (CO₂)
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : Carbon dioxide (CO₂)
Carbon monoxide
Smoke
- Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Standard procedure for chemical fires.
- Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

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SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
- Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains, inform respective authorities.
- Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Avoid exposure - obtain special instructions before use.
Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Do not breathe vapours or spray mist.
Take precautionary measures against static discharges.
Provide sufficient air exchange and/or exhaust in work rooms.
Dispose of rinse water in accordance with local and national regulations.
- Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.
Observe label precautions.
Electrical installations / working materials must comply with the technological safety standards.
- Materials to avoid : Store and keep away from, oxidizing agents and acids.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
2-butoxyethanol	111-76-2	TWA	20 ppm	ACGIH
		TWA	5 ppm 24 mg/m ³	NIOSH REL
		TWA	50 ppm 240 mg/m ³	OSHA Z-1
		TWA	25 ppm 120 mg/m ³	OSHA P0
		PEL	20 ppm 97 mg/m ³	CAL PEL
sodium hydroxide	1310-73-2	C	2 mg/m ³	ACGIH

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		C	2 mg/m3	NIOSH REL
		TWA	2 mg/m3	OSHA Z-1
		C	2 mg/m3	OSHA P0
		C	2 mg/m3	CAL PEL

Biological occupational exposure limits

Component	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
2-BUTOXYETHANOL	111-76-2	Butoxyacetic acid (BAA)	Urine	End of shift (As soon as possible after exposure ceases)	200.mg/g Creatinine	ACGIH BEI

Engineering measures : effective ventilation in all processing areas

Personal protective equipment

Respiratory protection : Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.

Hand protection

Material : Protective gloves
Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection

: Access to clean water to rinse eyes must be available, options include: eye wash stations or showers, or eye wash bottles with pure water.
 Tightly fitting safety goggles
 Wear face-shield and protective suit for abnormal processing problems.

Skin and body protection

: Impervious clothing
 Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures

: When using do not eat or drink.
 When using do not smoke.
 Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid
Colour : purple
Odour : ether-like
Odour Threshold : No data available

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pH	: 13.5
Melting point/freezing point	: No data available
Boiling point	: 98.9 °C
Flash point	: does not flash
Evaporation rate	: 1
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: not determined
Relative vapour density	: No data available
Density	: 1.0230 g/cm ³
Solubility(ies)	
Water solubility	: soluble
Solubility in other solvents	: not determined
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: not determined
Thermal decomposition	: No data available
Viscosity	
Viscosity, kinematic	: 6.6 mm ² /s (20 °C)

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: Stable
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No decomposition if stored and applied as directed.
Conditions to avoid	: Heat, flames and sparks.
Incompatible materials	: Acids Oxidizing agents This product contains sodium hydroxide or potassium hydroxide that may corrode some soft metals and may react with tin, zinc, aluminum to form hydrogen gas.
Hazardous decomposition products	: Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

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SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects

Aggravated Medical Condition : None known.

Symptoms of Overexposure : Effects are immediate and delayed.
Symptoms may include blistering, irritation, burns, and pain.
Effects are dependent on exposure (dose, concentration, contact time).
Causes severe skin burns and eye damage.
Review section 2 of SDS to see all potential hazards.
Treat symptomatically. Symptoms may be delayed.

Carcinogenicity:

IARC No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH Confirmed animal carcinogen with unknown relevance to humans

OSHA 2-butoxyethanol 111-76-2
No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Acute toxicity

Product:

Acute oral toxicity : Acute toxicity estimate : > 5,000 mg/kg
Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate : > 200 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate : > 5,000 mg/kg
Method: Calculation method

Components:

Alcohols, C9-11, ethoxylated:

Acute oral toxicity : LD50 Oral Rat: 1,400 mg/kg

2-butoxyethanol:

Acute oral toxicity : LD50 Oral Rat: 880 mg/kg

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Acute dermal toxicity : LD50 Dermal Rabbit: 1,060 mg/kg

sodium hydroxide:
Acute dermal toxicity : Acute toxicity estimate Rabbit: 1,350 mg/kg

Skin corrosion/irritation

Product:

Remarks: Extremely corrosive and destructive to tissue.

Serious eye damage/eye irritation

Product:

Remarks: May cause irreversible eye damage.

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

STOT - single exposure

No data available

STOT - repeated exposure

No data available

Aspiration toxicity

No data available

Further information

Product:

Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

sodium hydroxide :

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Toxicity to fish : LC50 (Gambusia affinis (Mosquito fish)): 125 mg/l
Exposure time: 96 h
Test Method: static test

LC50 (Oncorhynchus tshawytscha (chinook salmon)):
152 mg/l
Exposure time: 96 h

LC50 (Oncorhynchus mykiss (rainbow trout)): 40 mg/l
Exposure time: 48 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 34 - 47 mg/l
Exposure time: 48 h

EC50 (Crangon crangon (shrimp)): 33 - 100 mg/l
Exposure time: 48 h

Persistence and degradability

No data available

Bioaccumulative potential

Product:

Partition coefficient: n-octanol/water : Remarks: No data available

Mobility in soil

No data available

Other adverse effects

No data available

Product:

Regulation 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances

Remarks This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information : Not applicable

Components:

sodium hydroxide :

Additional ecological information : Harmful to aquatic life.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

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- Waste from residues : Do not dispose of waste into sewer.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Dispose of in accordance with local regulations.
- Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

Transportation Regulation: 49 CFR (USA):
UN3266, Corrosive liquid, basic, inorganic, n.o.s., (SODIUM HYDROXIDE), 8, II

Transportation Regulation: IMDG (Vessel):
UN3266, CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S., (SODIUM HYDROXIDE), 8, II

Transportation Regulation: IATA (Cargo Air):
UN3266, Corrosive liquid, basic, inorganic, n.o.s., (SODIUM HYDROXIDE), 8, II

Transportation Regulation: IATA (Passenger Air):
UN3266, Corrosive liquid, basic, inorganic, n.o.s., (SODIUM HYDROXIDE), 8, II

Transportation Regulation: TDG (Canada):
UN3266, CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S., (SODIUM HYDROXIDE), 8, II

The product as delivered to the customer conforms to packaging requirements for shipment by road under US Department of Transportation (DOT) regulations. Additional transportation classifications noted above are for reference only, and not a certification or warranty of the suitability of the packaging for shipment under these alternative transport regulations.

SECTION 15. REGULATORY INFORMATION

TSCA list : No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
sodium hydroxide	1310-73-2	1000	*

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

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SARA 311/312 Hazards : Skin corrosion or irritation
Serious eye damage or eye irritation

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : The following components are subject to reporting levels established by SARA Title III, Section 313:

2-butoxyethanol	111-76-2	2.9312 %
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California Prop. 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

The components of this product are reported in the following inventories:

DSL All components of this product are on the Canadian DSL
TSCA On TSCA Inventory

For information on the country notification status for other regions please contact the manufacturer's regulatory group.

Inventory Acronym and Validity Area Legend:

TSCA (USA), DSL (Canada), NDSL (Canada)

SECTION 16. OTHER INFORMATION

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Further information

NFPA:

HEALTH	3
FLAMMABILITY	0
INSTABILITY	0
SPECIAL HAZARD.	

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme

HMIS III:

HEALTH	3
FLAMMABILITY	1
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

OSHA - GHS Label Information:

Hazard pictograms :



Corrosion

Signal word :

Danger:

Hazard statements :

Causes severe skin burns and eye damage.

Precautionary statements :

Prevention: Wash skin thoroughly after handling. Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. Wash contaminated clothing before reuse.

Storage: Store locked up.

Disposal: Dispose of contents/container in accordance with local regulation.

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Print Date 06/03/2024

Version:	5.1
Revision Date:	10/01/2023
Print Date:	06/03/2024

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. Users should make their own investigations to determine the suitability and applicability of the information for their particular purposes. This SDS has been prepared by the Compliance Services organization supporting this manufacturer, supplier or distributor.


SAFETY DATA SHEET

This Material Safety Data Sheet meets or exceeds the requirements of the Canadian Controlled Product Regulations (WHMIS)

1. Identification

• Product Name:	Ducasol (The Duke)
• Product Identifier:	All purpose cleaner
• Recommended use:	Cleaning, degreasing auto parts
• Restrictions on use:	Not Known
• Supplier Details:	Ducan Industries LTD. 1920 Broadway Street, Port Coquitlam, BC Canada, V3C 2N1
• Emergency telephone number and any restrictions on the use of that number, if applicable:	(604) 942-0722

2. Hazard Identification

• OSHA / HCS Status: Not Known
• GHS Classification: <ul style="list-style-type: none">◦ Classification of the Substance or Mixture:<ul style="list-style-type: none">H 314 Contact Hazard - Skin: Skin Corrosion - Sub-category 1AH318 Contact Hazard – Eye: Eye Damage - Category 1 – causes serious eye damageReproductive Toxicity: Category 2
• Label Elements: <ul style="list-style-type: none">◦ Symbol (image) or the name of the symbol : Corrosive Liquid (e.g. , flame, skull and crossbones)

◦ Signal word Danger
◦ Hazard statement(s) Potential Health Effects <ul style="list-style-type: none">Acute effects:<ul style="list-style-type: none">H314 Causes severe skin burns and eye damage.◦ Precautionary statement(s):
Prevention: <ul style="list-style-type: none">P260 Do not breathe mist / vapours / spray.P264 Wash hands thoroughly after handling.P280 Wear protective gloves / protective clothing / eye protection / face protection

Response:
 P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
 P321 Specific treatment (see First Aid Measures on Safety Data Sheet).
 P363 Wash contaminated clothing before re-use.
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P310 Immediately call a POISON CENTER or doctor/physician.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage:
 P405 Store locked up.
 P406 Store in corrosive resistant container with a resistant inner liner. Disposal:
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations

• **Other hazards which do not result in classification (e.g. molten metal hazard)**
 This product is harmful to aquatic life. Avoid release to the environment.

3. Composition / Information on Ingredients

- **Substance:** Mixture
- **Chemical Nature:** Caustic Potash Solution

Component Name	CAS #	Wt%	Hazardous Codes
Potassium Hydroxide	1310 - 58 - 3	1 - 5	H302 H314 H318
Glycol Ether EB	111- 76- 2	6 - 10	----
Isopropyl Alcohol 99%	67 - 63 - 0	2 - 4	-----
Tetrapotassium Pyrophosphate	7320 - 34 - 5	2 - 4	-----
Nitrilotriacetic Acid	139 -13 - 9	1 - 2	-----

4. First Aid Measures

- **General Advice:** In case of accident or if you feel unwell, seek medical advice immediately.
- **Eye Contact:** Check for and remove contact lenses, if present and easy to do. Immediately flush eyes with gentle but large stream of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Call a poison center or doctor/physician immediately.
- **Skin Contact:** Remove contaminated clothing and shoes immediately. Wash skin with plenty of water for at least 15 minutes. Wash clothing before reuse. Call a poison center or doctor/physician immediately.
- **Inhalation:** Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. **WARNING!** It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled or ingested material is toxic, infectious, or corrosive. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a

pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a poison center or doctor/physician immediately.

- **Ingestion:** Do not induce vomiting, unless directed to do so by medical personnel. Rinse mouth with water. If vomiting occurs, keep head low so that vomit does not enter lungs. Never give anything by mouth to an unconscious person. Call a poison center or doctor/physician immediately.
- **Most Important Symptoms and Effects, Both Acute and Delayed:** Corrosive. Causes severe burns and tissue damage if swallowed, inhaled, or exposed to the skin or eyes.
- **Protection of First-aiders:** First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists.
- **Note to Physician:** Treat symptomatically and supportively.

5. Fire Fighting Measures

- **Extinguishing Media:**
 - **Suitable Extinguishing Media:** Not combustible, however, if material is involved in a fire use: Fine water spray, normal foam, dry agent (carbon dioxide, dry chemical powder).
 - **Hazchem or Emergency Action Code:** 2R
 - **Specific Hazards Arising from Product:** Non-combustible material. Corrosive, Excessive thermal conditions may cause decomposition and yield potassium oxides. Contact with metals may yield hazardous hydrogen gas.
- **Hazardous Combustion Products:** Carbon monoxide, Carbon dioxide, Potassium oxides, Oxides of phosphorus and nitrogen oxides (NO_x)
- **Special Protective Equipment and Precautions for Fire-Fighters:** Not combustible, however following evaporation of aqueous component residual material can decompose if involved in a fire, emitting toxic fumes. Contact with metals may liberate hydrogen gas which is extremely flammable. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to products of decomposition.

6. Accidental Release Measures

- **Personal Precautions, Protective Equipment and Emergency Procedures:**
 - **For Non-emergency Personnel:** Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Avoid breathing vapor or mist. Provide adequate ventilation.
 - **For Emergency Responders:** See Section 8 for proper protective equipment to be worn while cleaning an accidental spill.
 - **Environmental Precautions:** Prevent product from entering sewers, natural waterways, or confined spaces.
- **Methods and Materials for Containment and Cleanup:**
 - **Small Spill:** Restrict access to area until completion of cleanup. Stop the flow if it can be done safely. For small spills, contain and collect with absorbent.
 - **Large Spill:** For larger spills, soak up spill with absorbent that does not react with product. Put contaminated material into the proper covered, labeled containers for disposal. Contaminated absorbent may pose the same hazards as the spilled product.

7. Handling and Storage

- **Precautions for Safe Handling:**
 - **Protective Measures:** See Section 8 for proper protective equipment to be worn. Avoid contact with eyes, skin and clothing. Only use with adequate ventilation. Keep containers tightly closed while not in use.
 - **Advice on General Occupational Hygiene:** Avoid inhalation of vapor or mist. Do not swallow. Do not get in eyes. Avoid prolonged or repeated contact with skin. Handle in accordance with good industrial hygiene and safety.

- **Conditions for Safe Storage, Including Any Incompatibilities:** Store in a dry, ventilated area. Store at 15-25 °C. Store away from heat and incompatible materials (see section 10). Store in original container. Do not store in metallic containers. Keep containers tightly closed and upright. Keep away from food, drink, and animal foodstuffs. Keep out of the reach of children. Comply with all national, state, and local codes pertaining to the storage, handling, dispensing, and disposal of this product.

- **Materials to Avoid:** Do not store or handle near open flame, heat or other sources of ignition.

8. Exposure Controls / Personal Protection

• Control Parameter, Including Occupational Exposure Limits:	
Ingredient Name	Exposure Limits
Potassium Hydroxide	ACGIH TLV : 2 mg / m3 Ceil. OSHA PEL: 2 mg / m3
Glycol Ether EB	ACGIH TLV, TWA: 20 ppm, OSHA Z-1, TWA: 50 ppm, 240 mg/m3 OSHA PO, TWA: 25 ppm, 120 mg/m3 NIOSH REL, TWA: 5 ppm, 24 mg/m3
Isopropyl Alcohol	CGIH TLV (United States, 3/2012). TWA: 200 ppm 8 hours. STEL: 400 ppm 15 minutes. OSHA PEL (United States, 6/2010). TWA: 400 ppm 8 hours. TWA: 980 mg/m3 8 hours. NIOSH REL (United States, 1/2013) TWA: 400 ppm 10 hours. TWA: 980 mg/m3 10 hours. STEL: 500 ppm 15 minutes. STEL: 1225 mg/m3 15 minutes.
Tetrapotassium Pyrophosphate	OSHA, TWA: 15 mg/m3 (Total Dust) TWA: 5 mg/m3 (Respirable fraction)
<ul style="list-style-type: none"> • Appropriate Engineering Controls: Ensure adequate ventilation. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. <ul style="list-style-type: none"> ◦ Environmental Exposure: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. • Individual Protection Measures: <ul style="list-style-type: none"> ◦ Hygiene Measures: Wash hands, forearms and face thoroughly after handling the product, before eating, smoking and using the lavatory and at the end of working period. ◦ Skin Protection: Wear appropriate chemical resistant clothing (with long sleeves) and appropriate chemical resistant gloves. ◦ Eye and Face Protection: Chemical splash-proof goggles, safety glasses with unperforated side shields. Make sure eyewash stations and safety showers are close to the workstation location. 	

- **Footwear:** Chemical resistant boots or overshoes.
- **Respiratory Protection:** An air-purifying, NIOSH-approved respirator with appropriate cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Use a positive-pressure, air-supplied respirator if there is any potential for an uncontrolled release, if exposure levels are unknown, or if any other circumstances exist where air-purifying respirators may not provide adequate protection.
- **Other:** Eye wash station should be located near work area.

9. Physical and Chemical Properties

- **Appearance (Physical State, Color):** Blue Clear Liquid
- **Odor:** Alcohol,
- **Odor Threshold:** Not Established
- **pH:** 13.0
- **Melting Point:** Not Applicable
- **Boiling Point:** 97 °C
- **Flammability:** Not Flammable
- **Lower Flammable:** Not Available
- **Higher Flammable:** Not Available
- **Vapour Pressure:** Not established
- **Vapour Density:** Not established
- **Flash point:** Not Applicable
- **Evaporation Rate:** Not established (n-butyl acetate = 1)
- **Decomposition Temperature:**

- **Specific Gravity:** Not applicable.
0.99 g/cm3
Water = 1
- **Partition Coefficient:** Not determined
- **Autoignition temperature:** Not determined
- **Decomposition Temperature:** Not determined
- **Volatiles:** Not determined
- **Viscosity, Kinematic:** Not determined
- **Solubility in water:** Soluble
- **Explosive Properties:** Not Explosive
- **Oxidizing Properties:** The product is not classified as oxidizing.

10. Stability and Reactivity

- **Reactivity:** Not Reactive
- **Chemical Stability:** Product is stable to normal heat, light.
- **Possibility of Hazardous Reactions:** Can react with strong oxidizing agents.
- **Conditions to Avoid:** To maintain product effectiveness, avoid excessive heat, open flames.
- **Incompatibility:** Strong oxidizing agents
- **Hazardous Decomposition Products:** Carbon monoxide, Carbon dioxide, Potassium oxide, Oxides of phosphorus, nitrogen oxides (NOx)

11. Toxicological Information

- **Information on Likely Routes of Exposure:** Inhalation, Skin Contact, Ingestion, Eye Contact.
- **Acute Toxicity:**
 - **Product:** Not classified based on available information.
 - **Ingredients:**
Potassium Hydroxide: LD50 Oral 273 mg/m3 Oral

Glycol Ether EB:	LD50 1,414 mg/m3 (guinea pig) LC50 > 3.1 mg/l , > 641 ppm (guinea pig) 1 h Dermal LD50 > 2,000 mg/kg (guinea pig)
Isopropyl Alcohol:	Oral LD50, 5,000 mg/kg (Rat) Dermal LD50, 12,800 mg/kg (Rabbit) Inhalation Gas LC50, 45,248 ppm (Rat)
Tetrapotassium Pyrophosphate:	Skin LD50, 4,640 mg/m3 (Rabbit) Ingestion/Oral LD50, 1,000 mg/m3 (Rabbit)
Nitrilotriacetic Acid:	Oral LD50, 1,100 mg/kg (Rat) Dermal LD50, > 5 mg/kg (Rabbit) Inhalation Gas LC50, > 5 mg/L (Rat)
• Skin Corrosion / Irritation:	
◦ Product: Not classified based on available information.	
◦ Ingredients:	
Potassium Hydroxide:	Category 1 A – Causes severe skin burns and eye damage.
Glycol Ether EB:	Causes skin irritation
Isopropyl Alcohol:	Mild irritant to skin
Tetrapotassium Pyrophosphate:	Causes skin irritation. Irritation is likely to be more severe if the skin is moist or wet.
• Serious Eye Damage/Eye Irritation:	
◦ Product: Not classified based on available information.	
◦ Ingredients:	
Potassium Hydroxide:	Category 1– Causes serious eye damage.
Glycol Ether EB:	Causes serious eye irritation
Isopropyl Alcohol:	Moderate to severe eye irritation 24 hours 100 mg
Tetrapotassium Pyrophosphate:	Causes eye irritation.
• Respiratory or Skin Sensation: Negative	
• Germ Cell Mutagenicity: Not available	
• Carcinogenicity:	
◦ Ingredients:	
Nitrilotriacetic Acid:	IARC (International Agency for Research on Cancer) has listed Group 2B (Possibly Carcinogenic to Humans) for Nitrilotriacetic Acid.
NTP (National Toxicity Program)	has listed Nitrilotriacetic Acid as "Reasonably Anticipated" carcinogen.
• Reproductive Toxicity: No known significant effects.	
• STOT- Single Exposure:	
Isopropyl Alcohol:	Category 3 Narcotic Effects
• STOT - Repeated Exposure: Not classified based on available information.	
• Repeated Dose Toxicity: Not classified based on available information.	
• Aspiration Toxicity: Not classified based on available information.	

• **Potential Acute Health Effects:**

Isopropyl Alcohol:

Eye Contact: Causes serious eye irritation
Inhalation: Can cause central nervous system (CNS) depression.
May cause drowsiness and dizziness.
Skin Contact: Not known significant effects or critical hazards.
Ingestion: Can cause central nervous system (CNS) depression.
Irritating to mouth, throat and stomach.

• **Symptoms Related to the Physical, Chemical and Toxicological Characteristics:**

Eye Contact: Adverse symptoms may include the following:
Pain or irritation, watering, redness.
Inhalation: Adverse symptoms may include the following:
Nausea or vomiting, headache, drowsiness / fatigue, dizziness /
vertigo, unconsciousness.
Skin Contact: No specific data is available.
Ingestion: No specific data is available.

12. Ecological Information

• **Ecotoxicity:**

◦ **Ingredients:**

Isopropyl Alcohol:

Acute LC50 1,400,000 to 1,950,000 µg/l marine water, 48 hours Cragnon
Acute LC50 4,200 mg/l Fresh water, 96 hours, fish rasbora heteromorpha

Fish Toxicity

◦ **Ingredients:**

Potassium Hydroxide: LC50 Western Mosquitofish (*Gambusia affinis*): 80 mg/m³, 96 h

Nitrilotriacetic Acid: LC50 > 100 mg/l 96 h Freshwater
EC50 > 100 mg/l 96 h Water Flea

Toxicity to Algae:

◦ **Ingredients:**

Nitrilotriacetic Acid: EC50 > 100 mg/l 72 h Fresh Water Algae

Invertebrate Toxicity:

◦ **Ingredients:**

• **Persistence and degradability:**

Nitrilotriacetic Acid: Soluble in water Persistence is unlikely based on information available.

• **Bioaccumulative Potential:**

Biodegradation:

◦ **Ingredients:**

Potassium Hydroxide: Expected to be readily biodegradable.

Glycol Ether EB: 90.4% rapidly degradable. (After 28 days in a ready biodegradable test).

Isopropyl Alcohol: This ingredient has low potential for bioaccumulation. Log Pow 0.05

• **Mobility in Soil:**

Glycol Ether EB: Not expected to hydrolyze readily.

Nitrilotriacetic Acid: Will likely be mobile in the environment due to water solubility.

• **Results of PBT and vPvB assessment half-life:** No data available.

- **Other Adverse Effects:** No data available.

13. Disposal Considerations

- **Disposal Method:** Do not empty into drains; dispose of this material and its container in a safe way. To be disposed of as hazardous waste. Disposal should be in accordance with local, state or national legislation.

14. Transport Information

- **UN Number:** UN 1814
- **UN Proper Shipping Name:** Potassium Hydroxide Solution
- **Transport Hazard Class:** 8
- **Packing Group:** III
- **ERG:** 154
- **Environmental Hazards:** See Section 12. Ecological Information
- **Transport in Bulk, If Applicable:** Not Applicable
- **Special Precautions: Transport within user's premises:** Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident and spillage.

15. Regulatory Information

- **Canadian Federal Regulations:**
 - **DSL:** All chemical substances in this product comply with the CEPA 1999 and NSNR and are on or exempt from listing on the Canadian Domestic Substances List (DSL).
 - **WHMIS classification:** Class D2B Other Toxic Effects, Corrosive
 - **U. S. TSCA Inventory Status:** All component of this product are either on the Toxic Substances Control Act (TSCA) inventory list or exempt.
 - **SARA 302:** No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
 - **SARA 313:** This material does not contain any chemical components with known CAS numbers that exceed threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

16. Other Information

- **NFPA:**
 - Flammability: 2
 - Health : 2
 - Instability : 0
 - Special Hazard: None
- **Preparation Date:** August 11th, 2016
- **Prepared by:** Ducan Industries 1920 Broadway Street Port Coquitlam B.C. Canada V3C 2N1

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• **Revisions/Review Date:** Not Applicable

Appendix 5: General Construction Best Management Practices for future development.

The proposed rezoning does not include any construction activities; however, the following general Best Management Practices (BMPs) are recommended as part of any future construction or development. These BMPs are general and specific BMPs should be prepared when a detailed development plan is proposed.

Protecting Ecological Features

- Locations of no-go zones, critical root zones of retained trees and vegetation, and sensitive areas are fenced and communicated to all personnel.
- Clearing of trees or shrubs between February 1 and August 15 must be preceded by a nesting bird survey to confirm no active nests will be disturbed (BC Wildlife Act, Section 34 and Federal Migratory Bird Act)
- Avoid placing soil/gravel piles or heavy construction materials around roots of trees to be retained, or otherwise compacting soils or cutting into root zones. Protective tree fencing to be used for delineating protected areas.
- Contact Environmental Monitors immediately with any concerns.

Tree Protection

- ISA Certified Arborist is consulted for construction (e.g. well installation) activities adjacent to trees to be retained along the edge of the well site the trees to be retained will have the limits of their Critical Root Area (CRZ) defined by an ISA certified arborist.
- These CRZs will be separated from the development by robust tree protection fencing (e.g. snow fencing).
- No construction-related material shall be stored within any fenced off area.
- An ISA Certified Arborist should be consulted prior to clearing, blasting, rock breaking or filling (soil or rock) adjacent to the Critical Root Zone (CRZ) (e.g. near the dripline) of trees to be retained to provide tree protection measures to minimize root damage and ensure that they remain viable over the long-term. In future development phases, if new construction is proposed and building location and designs are created, an arborist should be consulted to develop specific measures for any trees to be retained.

Erosion & Sediment Control

During any new construction, the contractor must implement environmental protection measures to ensure that no contaminants, such as spills or sediment-laden water, enter downstream receiving environments. These measures should include:

- Minimize vegetation removal.
- Installation of erosion and sediment control structures (e.g. sediment fence) between the construction area and creek or other water bodies.

- Scheduling excavation activities during dry weather, where possible, and additional care and protection will be required while excavation activities are carried out during wet weather
- Cover exposed soils, if needed (e.g. poly, tarps, mulch, seeding, 'rough and loose' treatment)
- Ensure soil and debris stockpiles are placed away from the SPEAs and sediment-laden water cannot flow into the waterbodies.
- Contact Environmental Monitor immediately with any concerns.

Spill Prevention & Response

- Equipment is inspected for leaks prior to beginning work.
- Spill response kits (capable of addressing the volume of fuel/oils/chemicals on site) are on site when any heavy machinery is working, and operators are trained in their use.
- Equipment refueling is at a designated location and >30 m from aquatic ecosystems.
- Fuel generators must be placed in a spill-proof container (e.g. plastic bin, or other impermeable containment area such as poly-lined depression with berms).
- Store all fuel cans in spill-proof containers (e.g. plastic bin, or other impermeable containment area such as poly-lined depression with berms).
- Concrete wash-water and wet concrete is highly alkaline and toxic to fish and other aquatic organisms. All concrete wash-water from equipment, trucks and/or hand tools needs to be directed to a settling area away from runoff paths to the waterbodies. Freshly poured concrete needs to be covered when rain is forecasted, or runoff needs to be isolated from waterbodies during the curing process.
- In case of spills, the following general steps are recommended:
 - Stop source of spill/prevent further spillage (turn off valves, right overturned containers)
 - Block spill from reaching aquatic (marine or freshwater) environment or pathways to waterbodies
 - Block spill from spreading
 - Call Environmental Monitors
 - Clean up spilled materials
- Contact Environmental Monitors immediately with any concerns.

MALAHAT AUTO WRECKING AND METAL RECYCLING

240 OKOTOKS ROAD, MALAHAT

SHEET LIST

L1.01 MATERIALS PLAN
L2.01 PLANTING PLAN
L3.01 SOIL DEPTH PLAN
L4.01 IRRIGATION PLAN

GENERAL LANDSCAPE NOTES

GENERAL:

1. DRAWINGS AND SPECIFICATIONS ARE TO BE READ IN CONJUNCTION WITH ALL OTHER DRAWINGS/SPECIFICATIONS IN THIS PROJECT SET. ANY DISCREPANCIES AMONG DRAWINGS, SPECIFICATIONS AND INDUSTRY BEST PRACTICES TO BE REPORTED TO THE PROJECT / CONSTRUCTION MANAGER AND THE LANDSCAPE CONSULTANT FOR DIRECTION.
2. ALL LANDSCAPE SPECIFICATION SECTIONS AND DRAWINGS ARE AFFECTED BY REQUIREMENTS OF DIVISION 01 SECTIONS (PROVIDED IN THE PROJECT MANUAL). CONTRACTOR TO FAMILIARIZE THEMSELVES WITH ALL SITE CONDITIONS, INCLUDING THE LIMITS OF WORK AND EXISTING FEATURES TO BE PROTECTED, PRIOR TO SUBMITTING BIDS/QUOTES.
3. CONTRACTOR TO CONFIRM LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES/FEATURES PRIOR TO COMMENCING WORK.
4. CONTRACTOR TO TAKE NECESSARY PRECAUTIONS TO PROTECT SITE FEATURES / CONDITIONS, WITHIN AND BEYOND THE LIMITS OF WORK EXISTING AT THE TIME OF CONSTRUCTION. ALL DISTURBED SURFACES, AREAS, STRUCTURES, VEGETATION, HABITAT ETC. ON PUBLIC / PRIVATE PROPERTY TO PROMPTLY BE RESTORED TO EQUAL OR BETTER CONDITION THAN EXISTING AND TO THE SATISFACTION OF THE MUNICIPALITY HAVING JURISDICTION / PROPERTY OWNER.
5. CONTRACTOR TO MAINTAIN THE SITE IN A SAFE AND TIDY CONDITION AT ALL TIMES. DO NOT OBSTRUCT PEDESTRIAN OR VEHICULAR CIRCULATION. DO NOT LEAVE UNPROTECTED HOLES / PITS / OPENINGS OVERNIGHT. ALL EXCESS MATERIALS AND REFUSE TO BE REMOVED FROM THE SITE DAILY UNLESS OTHERWISE DIRECTED BY THE CONSTRUCTION MANAGER.

STANDARDS:

1. ALL WORK ON MUNICIPAL PROPERTY TO CONFORM TO THE STANDARDS OF THE AUTHORITY HAVING JURISDICTION.
2. ALL LANDSCAPE WORK ON THE DEVELOPMENT SITE TO CONFORM TO THE CURRENT EDITION AT TIME OF ISSUE OF THE *Canadian Landscape Standard* (CLS), UNLESS SPECIFICALLY STATED OTHERWISE IN WRITTEN SPECIFICATIONS AND ON DRAWINGS.
3. ALL HARD SURFACE (INCLUDING BUT NOT LIMITED TO PAVING, CONCRETE RETAINING WALLS AND CONCRETE PLANTERS) TO CONFORM TO THE *Master Municipal Construction Documents Association PLATINUM EDITION* (MMCD) AND MMCD SUPPLEMENTAL DRAWINGS AND SPECIFICATIONS, UNLESS SPECIFICALLY STATED OTHERWISE IN WRITTEN SPECIFICATIONS AND ON DRAWINGS.
4. IN CASES OF CONFLICT BETWEEN THE CLS AND THE MMCD, THE MORE STRINGENT REQUIREMENT WILL TAKE PRECEDENCE.
5. LANDSCAPE CONTRACTOR TO BE FAMILIAR WITH MUNICIPAL DEVELOPMENT STANDARDS AND BE IN POSSESSION OF THE CLS AND MMCD MANUALS AND SUPPLEMENTAL DRAWINGS AND SPECIFICATIONS.
6. GROWING MEDIUM AND GROWING MEDIUM TESTING TO CLS Section 5.
7. IRRIGATION DESIGN AND INSTALLATION TO IIABC STANDARDS AND CLS Section 10.

COORDINATION:

1. CONTRACTOR TO COORDINATE INSTALLATION OF IRRIGATION AND ELECTRICAL SLEEVES WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL AND CIVIL WORKS.

SUBMITTALS:

1. CONTRACTOR TO PROVIDE SAMPLES, TEST RESULTS AND SHOP DRAWINGS TO LANDSCAPE CONSULTANT FOR REVIEW AND APPROVAL 45 DAYS PRIOR TO INSTALLATION. SEE ALSO SUBMITTALS TABLE BELOW FOR ADDITIONAL INFORMATION

GROWING MEDIUM TESTING:

1. GROWING MEDIUM TEST RESULTS ARE MANDATORY.
2. TEST RESULTS TO INCLUDE ANALYSIS OF ALL GROWING MEDIUM NUTRIENTS NOTED IN CLS 5.2.7 AND ARE TO BE REPORTED IN THE SAME UNITS AS NOTED IN THAT SECTION.
3. TEST RESULTS TO INCLUDE ANALYSIS OF SOIL TEXTURE, ORGANIC CONTENT AND ACIDITY AS PER CLS 5.3.5 AND BE REPORTED IN THE SAME UNITS AS NOTED IN THAT SECTION (continued next page).



MALAHAT AUTO WRECKING AND METAL RECYCLING

240 OKOTOKS ROAD, MALAHAT

GROWING MEDIUM TESTING (continued).

4. TEST RESULTS TO INCLUDE RECOMMENDATIONS FOR AMENDMENTS TO MEET THE REQUIREMENTS FOR EACH GROWING MEDIUM TYPE.
5. RECOMMENDED GROWING MEDIUM TESTING FACILITY: Pacific Soil Analysis Inc. 11720 Voyageur Way, Richmond, BC V6X 3G9 OR APPROVED EQUAL.

MANDATORY INSPECTIONS:

1. CONTRACTOR TO ALERT THE LANDSCAPE CONSULTANT A MINIMUM OF 3 WORKING DAYS PRIOR TO REQUIRED LANDSCAPE INSPECTIONS.

SUBSTITUTIONS:

1. REQUESTS FOR SUBSTITUTIONS TO CONFORM TO THE DIVISION 01 SECTION AND BE SUBMITTED TO THE LANDSCAPE CONSULTANT, THROUGH THE PROJECT ADMINISTRATOR, A MINIMUM OF 45 DAYS PRIOR TO SCHEDULED WORK
2. PLEASE NOTE THAT SOME SUBSTITUTIONS MAY REQUIRE MUNICIPAL APPROVAL.

WARRANTY:

1. CONTRACTOR SHALL WARRANTY ALL WORKMANSHIP AND MATERIALS FOR 1 FULL YEAR FOLLOWING THE DATE OF TOTAL PERFORMANCE AS PER MMCD UNLESS SPECIFICALLY NOTED OTHERWISE. FAULTY MATERIALS AND WORKMANSHIP SHALL BE PROMPTLY REPAIRED / REPLACED TO THE SATISFACTION OF THE LANDSCAPE CONSULTANT.

ENVIRONMENTAL PROTECTION:

1. CONTRACTOR TO INSTALL AND MAINTAIN SEDIMENTATION FILTRATION MEASURES AS REQUIRED FOR LANDSCAPE WORKS TO PREVENT MATERIALS FROM LEAVING THE SITE AND / OR ENTERING STORM DRAINS; STOCKPILED LANDSCAPE MATERIALS ARE TO BE KEPT TARPED.

IRRIGATION – DESIGN/BUILD

IRRIGATION:

1. IT IS THE INTENTION OF THE PROJECT THAT THE LANDSCAPE CONTRACTOR FURNISH A FUNCTIONAL TEMPORARY IRRIGATION SYSTEM AS DESCRIBED ON THE DRAWINGS AND IN THIS SECTION.
2. IT IS THE INTENTION OF THE PROJECT THAT THE LANDSCAPE CONTRACTOR FURNISH A FUNCTIONAL AUTOMATIC IRRIGATION SYSTEM TO ALL ON-SITE AND OFF-SITE LANDSCAPE AREAS AS DESCRIBED ON THE LANDSCAPE DRAWINGS AND IN THIS SECTION.
3. THE SCOPE OF WORK INCLUDES SUPPLY AND INSTALLATION OF BACKFLOW PREVENTER, CONTROLLER, ALL IRRIGATION COMPONENTS, IRRIGATION SLEEVES, 1 YEAR MAINTENANCE/WARRANTY (SEE WRITTEN SPECIFICATIONS AND REQUIREMENTS BELOW) AND AN OPERATION MANUAL.
4. THE IRRIGATION CONTRACTOR SHALL COORDINATE WITH THE GENERAL CONTRACTOR AND ELECTRICAL CONTRACTOR FOR THE INSTALLATION OF IRRIGATION SLEEVES.

MAINTENANCE

1. UPON COMPLETION OF IRRIGATION INSTALLATION, CONTRACTOR TO SUBMIT AS-CONSTRUCTED DRAWINGS, OPERATION AND MAINTENANCE MANUAL, TOOLS PROVIDED BY THE MANUFACTURER AND BASE IRRIGATION SCHEDULE TO IABC STANDARDS (SECTION 10 OF CLS).
2. INSPECT AND CALIBRATE IRRIGATION SYSTEM AS PER SEASONAL REQUIREMENTS.
3. INSPECT GROWING MEDIUM FREQUENTLY (MINIMUM MONTHLY AND WEEKLY DURING PERIODS OF DROUGHT AND HIGH HEAT) FOR MOISTURE CONTENT AND ADJUST IRRIGATION SCHEDULE AS OFTEN AS REQUIRED TO MAINTAIN THE HEALTH OF THE PLANT MATERIAL DUE TO: RAPID DRAINAGE IN THE GROWING MEDIUM, ABSENCE OF A WATER TABLE, FINITE AMOUNT OF GROWING MEDIUM, AND EXPOSURE TO CLIMATIC CONDITIONS.
4. CONTRACTOR TO COORDINATE WITH THE OWNER'S MAINTENANCE REPRESENTATIVE AND TOGETHER PERFORM ONE WINTERIZATION AND ONE SPRING START-UP DURING THE ONE YEAR WARRANTY PERIOD.

Rem. District Lot 105



2554 Sooke River Road,
 Sooke, BC, V9Z 0X8
danacaconsulting@gmail.com
 250-588-8208

OWNER/CLIENT:
 Jeff Montgomery

PROJECT NAME:
 Malahat Auto Wrecking and Metal
 Recycling

PROJECT ADDRESS:
 240 Okotoks Road, Malahat, BC

DESIGNED AND DRAWN BY:
 Laura Hooper

REVISION DATE:
 July 24, 2024

SEAL:



NORTH ARROW:



DRAWING TITLE:
Materials Plan




DWG NO: **L1.01**

SCALE: 1:125

LEGEND

Property Line	- · - · - · -
Building Footprint	—
Chain Link Fence	○—○—○
Metal Fence	△—△—△
Wire Fence	+—+—+
Wood Fence	□—□—□

MATERIALS SCHEDULE

SYMBOL	DESCRIPTION	QTY
	ON SITE PLANTING AREA REFER TO PLANTING AND SOIL PLAN	37.5 m ²
	PAVING TYPE A: COMPACTED GRAVEL AND NATIVE SOILS	N/A
	PAVING TYPE B: ASPHALT	N/A

OWNER/CLIENT:
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DESIGNED AND DRAWN BY:
Laura Hooper

REVISION DATE:
July 24, 2024

SEAL:



NORTH ARROW:



DRAWING TITLE:

Planting Plan

DWG NO: **L2.01**

SCALE: 1:125



LEGEND

Property Line	- - - - -
Building Footprint	—————
Chain Link Fence	○-○-○-○
Metal Fence	▲-▲-▲
Wire Fence	+--+
Wood Fence	□-□-□

PLANT SCHEDULE

SYMBOL	DESCRIPTION	QTY
●	WESTERN RED CEDAR (THUJA PLACATA)	100

LANDSCAPE PLAN NOTES

LANDSCAPE INSTALLATION NOTES:

- ALL SOFT LANDSCAPE MATERIALS AND INSTALLATION TO CONFORM TO THE CURRENT EDITION OF THE BC SLA/BCLNA B.C. LANDSCAPE STANDARD UNLESS SPECIFICALLY STATED OTHERWISE ON THESE DRAWINGS OR CVRD SPECIFICATION DOCUMENTS.
- ALL HARD SURFACE LANDSCAPE MATERIALS AND INSTALLATION TO CONFORM TO THE CURRENT EDITION OF THE MASTER MUNICIPAL CONSTRUCTION DOCUMENTS (MMCD) UNLESS SPECIFICALLY STATED OTHERWISE ON THE DRAWINGS OR CVRD SPECIFICATION DOCUMENTS.

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NORTH ARROW:

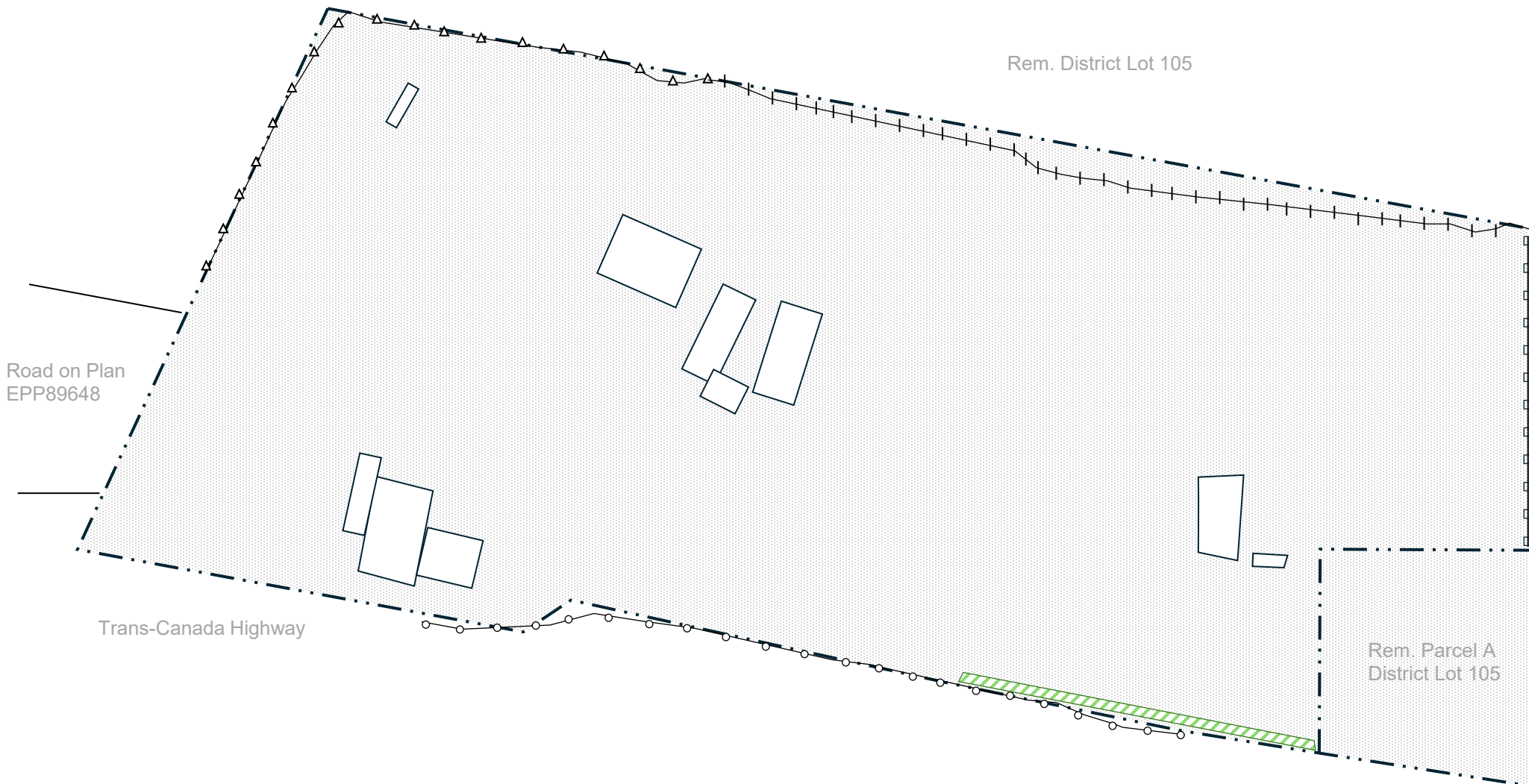


DRAWING TITLE:

Soil Depth Plan

DWG NO: **L3.01**


SCALE: 1:125



LEGEND

Property Line	- · - · - · -
Building Footprint	—
Chain Link Fence	○—○—○—○
Metal Fence	▲—▲—▲
Wire Fence	+—+—+
Wood Fence	▣—▣—▣

SOIL DEPTH SCHEDULE

SYMBOL	DESCRIPTION	QTY
	600 mm DEPTH GROWING MEDIUM – 2P (CLS) PLANTING AREAS	37.5 m ²

LANDSCAPE PLAN NOTES

GROWING MEDIUM NOTES:

- ORGANIC MATTER CONTENT OF 15% DRY WEIGHT IN PLANTING BEDS
- DEPTH OF 600 MM FOR SHRUB BEDS.
- PH BETWEEN 6.0 TO 8.0.
- SUBSOIL SCARIFIED TO A DEPTH OF MINIMUM 100 MM WITH SOME TOPSOIL TO BE INCORPORATED INTO THE SUBSOIL.
- PLANTING BEDS TO BE MULCHED WITH A MINIMUM OF 50 MM OF ORGANIC MATERIALS.



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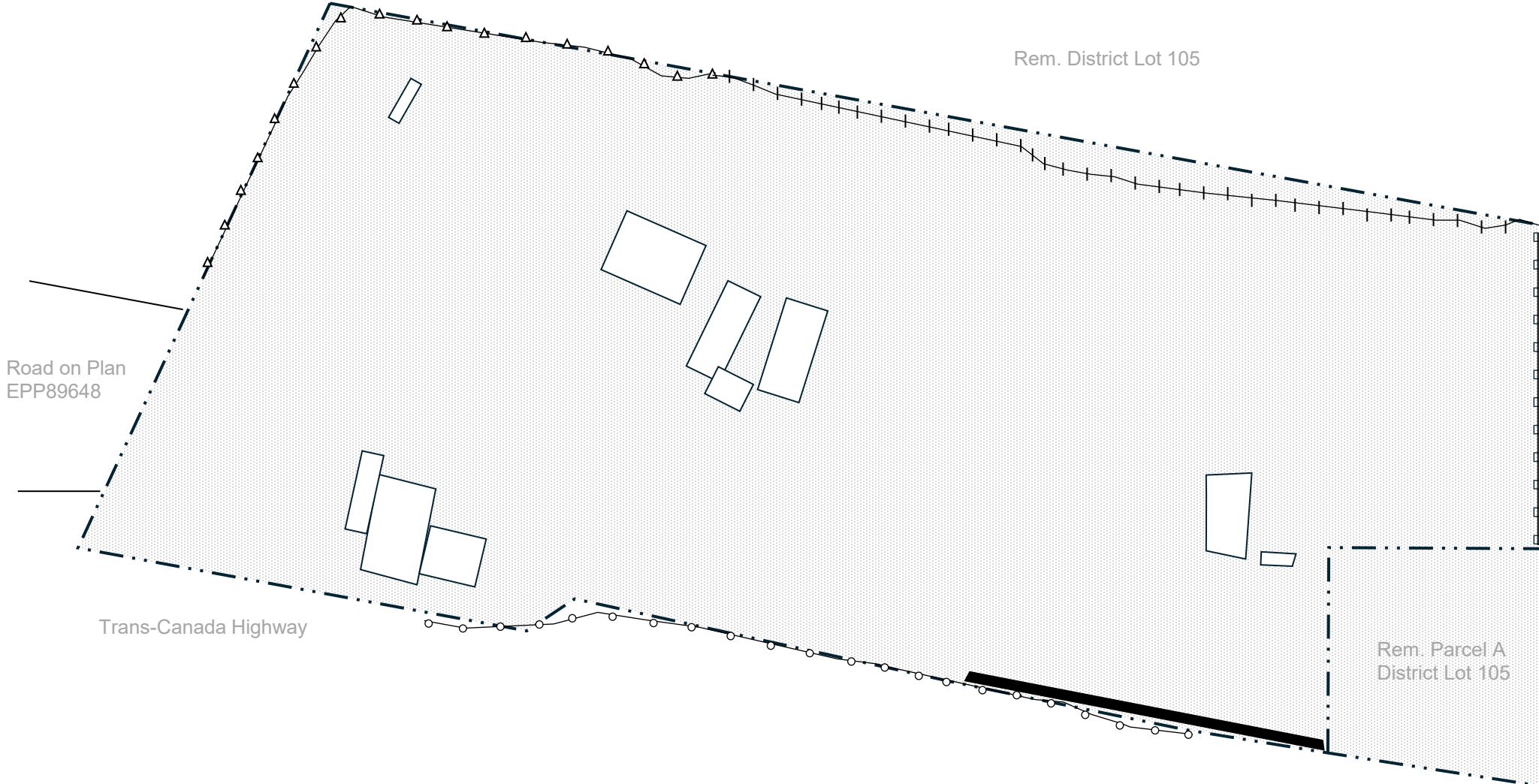
NORTH ARROW:



DRAWING TITLE:
Irrigation Plan

DWG NO: **L4.01**

SCALE: 1:125



LEGEND

Property Line	- · - · - · -
Building Footprint	—
Chain Link Fence	○—○—○—○
Metal Fence	△—△—△—△
Wire Fence	+—+—+—+
Wood Fence	□—□—□—□

IRRIGATION LEGEND

SYMBOL	DESCRIPTION
■	DRIP IRRIGATION

IRRIGATION PLAN NOTES

- IRRIGATION NOTES:
- ALL ON-SITE LANDSCAPE AREAS ARE TO BE IRRIGATED BY A PERMANENT AUTOMATIC IRRIGATION SYSTEM TO CVRD STANDARDS FOR A PERIOD OF 2 YEARS.
 - AUTOMATIC UNDERGROUND IRRIGATION SYSTEM TO BE DESIGNED BY AN IIABC CERTIFIED IRRIGATION DESIGNER AND INSTALLED TO IIABC STANDARDS.
 - DRIP IRRIGATION WITH AUTOMATED CONTROLLER, BLACKFLOW PREVENTION DEVICE AND WINTERIZATION BLOW OUT VALVE.