



ELECTORAL AREA SERVICES COMMITTEE MEETING AGENDA

WEDNESDAY, MARCH 7, 2018
BOARD ROOM
175 INGRAM STREET, DUNCAN, BC

1:30 PM

	<u>PAGE</u>
1. <u>APPROVAL OF AGENDA</u>	
2. <u>ADOPTION OF MINUTES</u>	
M1 Regular Electoral Area Services Committee meeting of February 21, 2018	1
Recommendation That the minutes of the regular Electoral Area Services Committee meeting of February 21, 2018, be adopted.	
3. <u>BUSINESS ARISING FROM THE MINUTES</u>	
4. <u>DELEGATIONS</u>	
5. <u>CORRESPONDENCE</u>	
6. <u>INFORMATION</u>	
IN1 1. Area D - Cowichan Bay Parks Commission Minutes - January 15, 2018; 2. Area D - Cowichan Bay Parks Commission Minutes - February 19, 2018; 3. Area E - Cowichan Station/Sahtlam/Glenora Revised Parks Commission Minutes - November 9, 2017; 4. Area E - Cowichan Station/Sahtlam/Glenora Parks Commission Minutes - February 8, 2018; 5. Area G - Saltair/Gulf Islands Parks Commission Minutes - February 5, 2018; and 6. Area I - Youbou/Meade Creek Parks Commission - January 17, 2018.	7
Recommendation For information.	
IN2 Land Use Services Department 2017 Year End Report	17
Recommendation For information.	

7. **REPORTS**

- R1 Application No. 01-A-17DVP (653 Sentinel Drive) - Report from Development Services Division 41
- Recommendation** That it be recommended to the Board that Application No. 01-A-17DVP (653 Sentinel Road) to vary Section 10.9(4) of Zoning Bylaw No. 3520 to increase the maximum permitted height of a principal residential building from 7.5 metres to 7.97 metres be approved.
- R2 Application No. 02-A-17DVP (668 Sentinel Drive) - Report from Development Services Division 69
- Recommendation** That it be recommended to the Board that Application No. 02-A-17DVP (668 Sentinel Drive) to vary Section 10.9(4) of Zoning Bylaw No. 3520 to increase the maximum permitted height of a principal residential building from 7.5 metres to 8.06 metres be approved.
- R3 Application No. 03-A-17DVP (649 Sentinel Drive) - Report from Development Services Division 95
- Recommendation** That Application No. 03-A-17DVP (649 Sentinel Drive) to vary Section 10.9(4) of Zoning Bylaw No. 3520 to increase the maximum permitted height of a principal residential building from 7.5 metres to 8.7 metres be approved.
- R4 Application No. 22-D-17DP (1615 Koksilah Road) - Report from Development Services Division 121
- Recommendation** That it be recommended to the Board:
1. That Development Permit Application No. 22-D-17DP be approved;
 2. That Sections 2.4(2)(f), 2.4(2)(g), 2.4(2)(j), 2.4(2)(k) of Zoning Bylaw No. 3705 be varied by eliminating respective requirements for bicycle parking, electric vehicle charging outlet, paved parking area and installation of oil-water separators; and
 3. That the General Manager of Land Use Services be authorized to permit minor revisions to the permit in accordance with the intent of development permit guidelines of Official Community Plan Bylaw No. 3605.

R5 Application No. 03-H-16RS (13271 Simpson Road) - Report from Development Services Division 167

Recommendation For direction.

R6 Request to Close a Portion of Watson Road - Report from Development Services Division 307

Recommendation That it be recommended to the Board that the request to close the portion of Watson Road between Heigh Street and Fisher Road on May 5 and 6, 2018, be supported.

R7 CVRD Cannabis Bylaw Amendments - Report from Community Planning Division 313

Recommendation That it be recommended to the Board:

1. That 2nd reading of Zoning Amendment Bylaws Nos. 4118, 4119, 4120, 4121, 4122, 4123, 4124 and 4125, be rescinded.
2. That Zoning Amendment Bylaws Nos. 4118, 4119, 4120, 4121, 4122, 4123, 4124 and 4125 be forwarded to the Board for consideration of 2nd reading, as amended.
3. That Zoning Amendment Bylaws Nos. 4118, 4119, 4120, 4121, 4122, 4123, 4124 and 4125 not be referred to any external agencies.
4. That a public hearing for Zoning Amendment Bylaws Nos. 4118, 4119, 4120, 4121, 4122, 4123, 4124 and 4125 be held in the CVRD Boardroom with the Directors from Electoral Areas A, F, & H delegated to attend on behalf of the Board.

R8 Twin Cedars Sewer Inclusion Request - 3576 Holland Road - Report from Water Management Division 345

Recommendation That it be recommended to the Board:

1. That the Certificate of Sufficiency confirming that a sufficient petition requesting inclusion into the Twin Cedars Sewer System Service Area be received.
2. That CVRD Bylaw No. 2871 – Twin Cedars Sewer System Service Establishment Bylaw, 2006, be amended to include the property described as PID 006-913-920.

- R9 Cowichan Bay Sewer Inclusion Request - 1590 Cowichan Bay Road - Report from Water Management Division 349

Recommendation That it be recommended to the Board:

1. That the Certificate of Sufficiency confirming that a sufficient petition requesting inclusion into the Cowichan Bay Sewer System Service Area be received.
2. That CVRD Bylaw No. 2128 – Cowichan Bay Sewer System Service Establishment Bylaw, 2000, be amended to include the property described as Lot 2, Plan VIP34963, Section 5, Range 5, Cowichan Land District, PID 000-313-335

8. **UNFINISHED BUSINESS**

9. **NEW BUSINESS**

- NB1 Fireworks - Annual Brentwood Regatta - Report from Inspections & Enforcement Division 357

Recommendation That it be recommended to the Board that the fireworks discharge permit for the 2018 Annual Brentwood Regatta at 2735 Mount Baker Road in Mill Bay on April 27, 2018, be approved.

- NB2 Water Licence Application Referral - Report from Environmental Services Division 365

Recommendation For direction.

10. **QUESTION PERIOD**

11. **CLOSED SESSION**

Motion that the Closed Session Agenda be approved, and that the meeting be closed to the public in accordance with the *Community Charter* Part 4, Division 3, Section 90, subsections as noted in accordance with each agenda item.

- CS M1 - Closed Session Electoral Area Services Committee Minutes of February 7, 2018

- CS R1 - Verbal Report from Manager, Community Planning Division Re: Potential Litigation {Sub (1)(g)}

- CS R2 - Verbal Report from Manager, Inspections & Enforcement Division Re: Law Enforcement {Sub (1)(f)}

12. ADJOURNMENT

The next Electoral Area Services Committee Meeting will be held Wednesday, March 21, 2018 at 1:30 PM, in the Board Room, 175 Ingram Street, Duncan, BC.

Committee Members

Director I. Morrison, Chairperson
Director S. Acton, Vice-Chairperson
Director M. Clement

Director K. Davis
Director M. Dorey
Director L. Iannidinardo

Director K. Kuhn
Director A. Nicholson
Director M. Marcotte

Minutes of the Electoral Area Services Committee Meeting held on Wednesday, February 21, 2018 in the Board Room, 175 Ingram Street, Duncan BC at 1:34 PM.

PRESENT: Director I. Morrison, Chair
Director S. Acton
Director M. Clement
Director K. Davis
Director M. Dorey
Director L. Iannidinardo
Director K. Kuhn
Director A. Nicholson

ALSO PRESENT: R. Blackwell, General Manager, Land Use Services
H. Hatami, General Manager, Engineering Services
K. Harrison, Deputy Corporate Secretary
R. Conway, Manager, Inspections & Enforcement
B. Dennison, Manager, Water Management
A. Melmock, Manager, Economic Development
B. Farquhar, Manager, Parks & Trails
K. Batstone, Planning Coordinator
A. Tokarek, Asset Coordinator
L. Knodel-Joy, Senior Engineering Technologist
I. MacDonald, Chief Building Inspector
N. Morano, Bylaw Enforcement Officer
R. Rondeau, Planner II
D. Lucas, Planning Technician
J. Hughes, Recording Secretary

ABSENT: Director M. Marcotte

APPROVAL OF AGENDA

It was moved and seconded that the agenda be approved.

MOTION CARRIED

ADOPTION OF MINUTES

M1 Regular Electoral Area Services Committee meeting of February 7, 2018

It was moved and seconded that the minutes of the Regular Electoral Area Services Committee meeting of February 7, 2018 be adopted.

MOTION CARRIED

CORRESPONDENCE

C1 Grant-in-Aid Request, Area D - Cowichan Bay, Re: Saanich Inlet Protection Society

(Amended from original recommendation)

It was moved and seconded that it be recommended to the Board that a Grant-in-Aid, Electoral Area D - Cowichan Bay, in the amount of \$1,000 be provided to the Saanich Inlet Protection Society to support its Roundtable Forum Event on March 17, 2018.

MOTION CARRIED

INFORMATION

IN1

The following Items 1 through 4 were received for information:

1. Electoral Area B - Shawnigan Lake Advisory Planning Commission Minutes - February 1, 2018;
2. Electoral Area D - Cowichan Bay Advisory Planning Commission Minutes - January 25, 2018;
3. South Cowichan Parks Commission Minutes - January 22, 2018; and
4. Electoral Area I - Youbou/Meade Creek Parks Commission Minutes - January 17, 2018.

REPORTS

The Committee agreed by consensus that Item R3 (Application No. 03-C-17RS – 3576 Holland Avenue) be moved before Item R1.

R3

Application No. 03-C-17RS (3576 Holland Avenue) - Report from Development Services Division

It was moved and seconded that it be recommended to the Board:

- 1. That the Zoning Amendment Bylaw for Application No. 03-C-17RS (3576 Holland Avenue) be forwarded to the Board for consideration of first and second reading;**
- 2. That the referrals to BC Transit, Cobble Hill Improvement District, Cowichan Tribes, Island Health, and the Ministry of Transportation and Infrastructure be accepted;**
- 3. That a public hearing be waived in accordance with Section 464(2) of the *Local Government Act* as the proposed Zoning Amendment is consistent with the South Cowichan Official Community Plan; and**
- 4. That prior to consideration of final bylaw adoption, a sewer petition be signed; the sewer connection fee be paid; and the deposit for the sewer works be provided.**

MOTION CARRIED

1:48 PM

Director Clement left the meeting at 1:48 PM.

- R1** January 2018 Building Inspection Report - Report from Inspections & Enforcement Division, was received for information.
- R2** January 2018 Bylaw Enforcement Report - Report from Inspections & Enforcement Division, was received for information.
- R3** Item R3 (Application No. 03-C-17RS - 3576 Holland Avenue) - Report from Development Services Division was moved before Item R1.
- R4** Community Works Fund 2018 Budget Amendments - Report from General Manager, Engineering Services Department

It was moved and seconded that it be recommended to the Board:

- 1. That the 2018 Budget for Function 469 – Cowichan Station Association – Area E be amended to increase Grant to Organization by \$10,000 and increase Transfer from Gas Tax Reserve by \$10,000;**
- 2. That the expenditures from the Function 469 – Cowichan Station Association – Area E 2018 Budget amendment be authorized to proceed prior to approval of the 2018 Budget amendment;**
- 3. That the 2018 Budget for 466 - Recreation Cobble Hill Hall be amended to increase Grant to Organization by \$1,732 and increase Transfer from Gas Tax Reserve by \$1,732; and**
- 4. That the expenditures from the Function 466 – Recreation Cobble Hill 2018 Budget amendment be authorized to proceed prior to approval of the 2018 Budget amendment.**

MOTION CARRIED

- R5** 2018 Budget Amendments - Water Management Capital Projects - Report from Water Management Division

It was moved and seconded:

- 1. That the 2018 budget for Function 801 - Brulette Place Sewer System be amended to:**
 - 1. Increase capital engineering structures by \$54,174;**
 - 2. Increase Municipal Finance Authority (MFA) long term borrowing of \$18,192; and**
 - 3. Increase transfer from Community Works Fund (CWF) gas tax reserves to \$35,982 for completion of new sewer treatment plant.**
- 2. That Function 801 – Brulette Place Sewer System 2018 Budget amendments be authorized to proceed prior to approval of the 2018 Budget amendment.**

MOTION CARRIED

(Amended from original recommendation)

It was moved and seconded:

- 3. That the 2018 Budget for Function 815, Arbutus Ridge Sewer System be amended to:**
 - 1. Increase capital engineering structures by \$422,404;**
 - 2. Increase MFA long term borrowing of \$225,000;**
 - 3. Increase transfer from capital reserves of \$61,202 and**
 - 4. Increase transfer from CWF gas tax reserves to \$136,202 for contribution to new sewer treatment plant and disposal field.**

MOTION CARRIED

It was moved and seconded:

- 4. That the 2018 Budget for Function 604 - Lambourn Estates Water System be amended to:**
 - 1. Increase minor capital by \$75,000; and**
 - 2. Increase transfer from Community Works Fund (CWF) gas tax reserves of \$75,000 for completion of a metering project.**
- 5. That Function 604 – Lambourn Estates Water System 2018 Budget amendments be authorized to proceed prior to approval of the 2018 Budget amendment.**

MOTION CARRIED

It was moved and seconded:

- 6. That the 2018 Budget for Function 619 - Burnum Water System be amended to:**
 - 1. Increase minor capital by \$26,000; and**
 - 2. Increase transfer from Community Works Fund (CWF) gas tax reserves of \$26,000 for contribution to a water treatment and storage project.**

MOTION CARRIED

It was moved and seconded:

- 7. That the 2018 Budget for Function 640 - Saltair Water System be amended to:**
 - 1. Increase capital engineering structures by \$535,535;**
 - 2. Increase Community Works Fund (CWF) gas tax reserves by \$20,000;**
 - 3. Increase transfer from capital reserves \$50,535;**
 - 4. Increase transfer from operating reserve \$220,000; and**
 - 5. Increase capital surplus of 2017 by \$245,000 for contribution to a water distribution upgrade, Old Victoria Road distribution upgrade, and a well and or treatment upgrade.**

MOTION CARRIED

It was moved and seconded:

8. That the 2018 Budget for Function 653 - Youbou Water System be amended to:
1. Increase capital engineering structures by \$125,500; and
 2. Increase transfer from operating reserves of \$125,500 for completion of a well and distribution upgrade.

MOTION CARRIED

It was moved and seconded:

9. That the 2018 Budget for Function 660 - Honeymoon Bay Water System be amended to:
1. Increase capital engineering structures by \$38,310; and
 2. Increase transfer from Community Works Fund (CWF) gas tax reserve of \$38,310 for completion of a well upgrade.

MOTION CARRIED

It was moved and seconded:

10. That the 2018 Budget for Function 680 - Shawnigan Lake North Water System be amended to:
1. Increase minor capital by \$82,529;
 2. Increase recovery of costs by \$82,529, for completion of the metering project;
 3. Increase capital engineering structures by \$37,872; and
 4. Increase transfer from reserve of \$37,872 for contribution to the treatment and or well upgrade projects.
11. That Function 680 - Shawnigan Lake North Water System 2018 Budget amendments be authorized to proceed prior to approval of the 2018 Budget amendment.

MOTION CARRIED

R6

Directors Report from Sierra Acton, Director, Electoral Area B - Shawnigan Lake - Director Request for Workshop and Expense Approval

That it be recommended to the Board that the Director for Electoral Area B – Shawnigan Lake be authorized to attend training at the Social Change Institute, Tools, Connections & Leadership Workshop on June 20-24, 2018, at a cost of \$1,476 plus travel.

MOTION CARRIED

R7

Verbal Report from Amy Melmock, Manager, Economic Development Division, Re: Economic Development Cowichan Update, was received for information.

3:08 PM

Director Iannidinardo left the meeting at 3:08 PM.

ADJOURNMENT

It was moved and seconded that the meeting be adjourned.

MOTION CARRIED

The meeting adjourned at 3:11 PM.

Chair

Recording Secretary

Dated: _____



Minutes
 Area D Parks Commission
 Monday January 15th, 2018
 Cowichan Estuary Nature Centre

Call to Order: 6:36 pm

Present: Kerrie Talbot, Roger Southern, Dave Nisbet, Steve Garnett, Lori Iannidinardo, Director, Area D.
 Regrets: Miranda Mason, Nathan Mosewich

Approval of Agenda: **Motioned and carried**

Adoption of Minutes: **Motioned and carried**

Business arising from minutes: None

Correspondence: None

Reports:

Lanes Rd. Park, a.k.a. Pacific Yews. Need park boundary signs posted and a reminder to neighbours of Best Practices for Bank Stability. Discussion of covenant area and what is permitted/not permitted in covenant area.

Sutherland Dr./ Eagle Shores development. Extensive logging and topping of trees has taken place, including next to an Eagle tree.

Motion: Request CVRD staff:

Remind neighbours of Lane Rd. park/Pacific Yews Development about “Best practices to maintain bank stability”.

Install Park Boundary signs.

Clarify what is allowed/not allowed in covenant area.

Implement construction of the off-road walking trail along Lane Rd. at Pacific Yews Development.

Review logging/tree topping at Eagle Shores (Sutherland Dr.) and view the logging and tree topping next to the Eagle tree located on the same property.

New Business:

Potential web cam for the Heron Rookery @ Wessex Ravine as a Cowichan Estuary Nature Centre project. Need a power source for the web cam, and likely a pole to mount the web cam on. Support of Parks Commission expressed to investigate installing a web cam and related equipment.

Upcoming events:

Site visit Friday January 19th, Cowichan Bay Estates 2:30 PM, Upper entrance to Vee Rd.

Note the date change of this site visit!

Adjournment: 7:35 PM

Next meeting, February 19, 2018.



Minutes
 Area D Parks Commission
 Monday, February 19, 2018
 Cowichan Estuary Nature Centre

Call to order: 6:36 pm

Attendees: Roger Southern, Steve Garnett, Dave Nisbet, Kerrie Talbot, Miranda Mason

Regrets: Lori Iannidinardo, Nathan Mosewich

Guest(s):

Approval of Agenda: **Moved and passed**

Approval of previous minutes: **Moved and passed**

Ongoing Business:

Parks and Trails Volunteer Policy – Area D Parks Commission feedback:

The overall consensus is this document contains far too much unnecessary regulation of parks volunteers, and the effect of this will be to eradicate any easily accessible form of community volunteerism.

Specific comments are:

Policy Principles

Item #'s 1,2,5,6 & 7 are fair & reasonable.

Item # 3 - cancellation of a volunteer(s) registration “for any reason” is too broad a statement - specific reason should be required.

Item # 4 – requirement of a formal orientation before “any volunteer opportunity” is overkill for small projects. A sign in sheet & brief overview of the project works well.

Policy Definitions

Age of Consent for volunteers: 19 yrs is too old – we suggest age 16 / 17 is more appropriate.

Concerns expressed re: staff oversight of volunteer activities (particularly for small projects) & the cost of staff oversight on weekends, when more community members are likely to be able to participate.

Who is an “authorized representative” for activities? How long will authorization take?

Upcoming events:

Place Speak: Community Conversation – Drinking water and watershed protection.
Thursday, Feb. 22, 2018, 7-9pm Bench School.

Meeting adjourned: 7:30 pm

Next meeting: March 19, 2018 6:30pm @ CENC.



Date: Thursday, November 9, 2017, **REVISED VERSION WITH CORRECTIONS TO UNFINISHED BUSINESS**

1 AND 2 – Motion to Revise these Minutes was passed at the February 8, 2018 Meeting of the Area E Parks and Recreation Commission.

Time: 7:35 P.M.

MINUTES of the Electoral Area E Parks and Recreation Commission Regular Meeting held at the above time and date at Glenora Hall.

PRESENT: Frank McCorkell (Chair), Gregg Shoop (V/Chair and Secretary), Irene Evans, Howard Heyd, Paul Slade and Gretchen Hartley. **APOLOGIES:** Larry Whetstone, Patty John and Mike Lees.

ALSO PRESENT: Alison Nicholson (Director).

AGENDA: Approved as circulated.

ACCEPTANCE OF PAST MINUTES: Motion to adopt the Minutes of the Regular Meeting held on October 12, 2017. Moved and Seconded. Carried.

MATTERS ARISING:

1. Currie Park: The Chair indicated that the contract will be posted in January, 2018.
2. Bylaw Review: Pending

UNFINISHED BUSINESS:

1. Jack Fleetwood Park: The Chair confirmed that the sand had been deposited and the dangerous step(s) repaired.
2. Alron Park: The Chair confirmed that staff had dealt with the tree and that the Sahtlam Volunteer Fire Department was in discussion with the CVRD about drawing water from Buttle Puddle.

NEW BUSINESS: None was identified.

NEXT MEETING: 7:30 P.M., Thursday, February 8th, 2018 at Glenora Hall.

ADJOURNMENT: a motion to adjourn was made at 7:55. Carried.

Certified correct:

Chair:

Secretary:

Date:



Date: February 8, 2018.

Time: 7:30 P.M.

MINUTES of Electoral Area E Parks and Recreation Commission Regular Meeting held at the Glenora Hall on the above time and date.

PRESENT: Frank McCorkell (Chair), Gregg Shoop (V/Chair and Secretary), Irene Evans, Gretchen Hartley, Howard Heyd, Patty John, Mike Lees and Paul Slade. **APOLOGIES:** Larry Whetstone.

ALSO PRESENT: Alison Nicholson (Director).

AGENDA: Adopted as circulated.

ACCEPTANCE OF PAST MINUTES: Motion to adopt Minutes of the last Regular Meeting held on November 9, 2017, with grammatical and spelling corrections to UNFINISHED BUSINESS 1. AND 2. Moved/Carried.

MATTERS ARISING: Currie Park: The Chair confirmed that the contract had been posted.

UNFINISHED BUSINESS: None was identified.

NEW BUSINESS: Parks and Trails Volunteer Policy: The Commission reviewed Attachment A, which forms part of a Staff Report presented to the Regional Services Committee on November 29, 2017, and offers the following advice concerning the sections headed 'DEFINITIONS' and 'POLICY'.

1. Ensure that the processes for application and authorization are not onerous, otherwise volunteers will be discouraged. Likewise, ensure that the identification, planning, orientation, and execution of work to be done by volunteers goes forward in a timely fashion. Both concerns could be addressed by a single staff coordinator.
2. Substitute the word, 'guidelines' for the phrase "standardized direction", in order to acknowledge the necessity of flexibility in the policy. Similarly, allow for appropriately qualified and certified volunteers to undertake "high risk activities".
3. Regarding the matter of not accepting an application or cancelling a registration, possible grounds for such actions and a means of appeal should be identified, so as to avoid the appearance of them being arbitrary.
4. As for acting "in accordance with CVRD policies...", this should be the responsibility of those supervising the volunteers.

Finally, the policy should clearly underscore that the CVRD is concerned to be supportive and available to volunteers in an effective and timely manner.

NEXT MEETING: 7:30 P.M., March 8, 2018 at Glenora Hall.

ADJOURNMENT: 8:15.

Certified correct by:

Chairperson

Date: 14 Feb /18.

Secretary



Monday, Feb. 05, 2018

CVRD Area “G” Parks Commission Minutes

Call to order 19:01

Attendance: Mel Dorey, Tim Godau, Sean Jonas, Dave Key, Jackie Rieck, Kelly Schellenberg, Jason Wilson

1. Motion to approve agenda: carried.
 2. Previous minutes. Noted that previous minutes (Nov 6, 2017) had incorrect adjournment time of 8:45 pm. Noted that 7:45 pm is the correct time for amendment of these minutes. Motion to approve amended minutes: carried.
-

3. Old Business

- Centennial Park gazebo lights need replacement:
 - Action: Dave Key to investigate options with CVRD Parks staff (Brock, Brent)
 - Liability concerns discussed regarding infield of baseball diamond, as surface uneven with a significant ledge
 - Fireworks for Halloween discussed with regards to ensuring Saltair residents have adequate notice prior to the event:
 - Motion: to contact the CVRD regarding methods to ensure adequate prior notice is given to Saltair residents to address any concerns; carried.
 - Motion: to strive to have posters for Easter and Halloween events put up two weeks prior to events; carried.
-

4. New Business

- Election of Chair, Vice-Chair and Secretary:
 - Kelly Schellenberg nominated for Chair: accepts nomination.
 - Dave Key nominated for Chair: accepts nomination.
 - Kelly Schellenberg voted in as new Chair.
 - Dave Key nominated for Vice-Chair: accepts nomination.
 - Jackie Rieck nominated for vice-chair: declines nomination.
 - No other nominations, Dave Key new Vice-Chair by acclamation.
 - Jason Wilson nominated for Secretary: accepts nomination.
 - No other nominations, Jason Wilson remains Secretary by acclamation.
- Bench request from Saltair resident received by Parks Commission.
 - Motion to place bench as per letter requesting bench: carried.
- Kelly Schellenberg to forward letter of request to CVRD as a measure of support.
- Disc Golf is still being proposed as a recreation option in Centennial Park.
 - Motion to develop a presentation to the CVRD outlining Disc Golf as a positive, affordable and low-impact multi-generational recreation option: carried.

5. Reports

Director's Report

- CVRD developing their new volunteer policies.
- CVRD developing CVRD Area "G" Parks Plan.

CVRD Report

- Fallen trees have been removed from parks.
- Potholes repaired on Thicke Rd.

Centennial Park

- Plugged drain in concession roof has been unplugged.
- Hot water tank in concession has been repaired.
- Action: Eroded area near North parking lot needs to be filled and trees potentially staked.
- Motion: to have the Area "G" Parks Commission host the 2018 Easter and Halloween celebrations in Centennial Park: carried.

Diana Princess of Wales Park

- Fallen tree has been removed.

Stocking Creek Park

- Motion: to have Mel Dorey follow up with Dan Brown regarding the signage in Stocking Creek Park as per the 2017 request.

Beach Accesses

- Concern has been expressed by a constituent regarding a log blocking Boulder Point beach access.
 - CVRD aware and investigating.

Saltair Ball League

- No report.
-

6. Next Meeting

Next Parks Commission meeting to be held Monday March 05, 2018 19:00 at the Saltair Community Centre.

7. Adjournment

Motion to adjourn: carried. Meeting adjourned at 20:25.



Minutes of the regular meeting of the Area I (Youbou/Meades Creek) Parks Commission Held in the Upper Community Hall, 8550 Hemlock St. Youbou BC on Wednesday, Jan.17 2018 at 7:00 PM.

Present: Chairperson Marcia Stewart

Vice Chair Rob Somers

Don Macdonald

Area Director – Klaus Kuhn

Regrets: Duncan Hume

Approval of Agenda:

It was moved and seconded that the agenda be approved.

Motion carried.

Adoption of Minutes:

It was moved and seconded that the minutes of the regular Area I (Youbou/Meades Creek) Parks Commission meeting held on Tuesday, Dec.12, 2017 be adopted.

Motion carried.

Business Arising from Minutes. More detailed budget information was provided by Klaus for the Parks Commission members to discuss.

REPORTS

Area I Director: - Area director Klaus Kuhn gave his report. Mile 77 Park was discussed. It will be closed but there is no decision on what should be done with it.

Cowichan Lake Rec: Cowichan Lake Rec is considering renting a trailer for use at Arbutus Park.

Chair Report: No report.

CVRD Report: Little League Park requires some tree trimming. There is \$50,000.00 available from the gas tax for dock repairs at Arbutus Park.

Old Business:

- The revitalization of Arbutus Park is 50% complete and is scheduled for completion by the end of March. Local Youbou residents have suggested the signs within the park are too large and is it possible to replace them with smaller signs?

2

- The Parks Commission recommends the new, wide gravel road in Arbutus Park be removed and replaced with a narrower walking path, while the upgrades are being completed.
- The Parks Commission members recommend leaving the picnic tables and park benches where they are at Mile 77. There is also a commemorative bench for Wayne Palliser down the trail near the beach that should remain where it is.
- The Carley Cove subdivision – No change.

New Business:

- Go over new budget information received at the January meeting.
- Commission members question the value of hiring a new CVRD employee to oversee the parks commissions.

Adjournment

It was moved and seconded that the regular meeting of Area I Parks Commission be adjourned.

Motion Carried

Meeting adjourned at 8:29 PM

The next regular meeting is scheduled for Tuesday, Feb.13, 2018



Cowichan Valley Regional District Land Use Services Department 2017 YEAR END REPORT



PART ONE: THE CVRD LAND USE SERVICES DEPARTMENT

1.1 INTRODUCTION

This report provides statistical information respecting land use and building applications received by the Cowichan Valley Regional District Land Use Services Department during 2017.

While the following statistical summary is a useful gauge of development activity in the Region, the Land Use Services Department has many additional projects and responsibilities that are assigned to it by the Electoral Area Services Committee and other committees of the Regional Board. Additionally, a primary responsibility not covered in this report is the provision of Official Community Plans, Zoning and other regulatory bylaws for the CVRD's nine electoral areas.

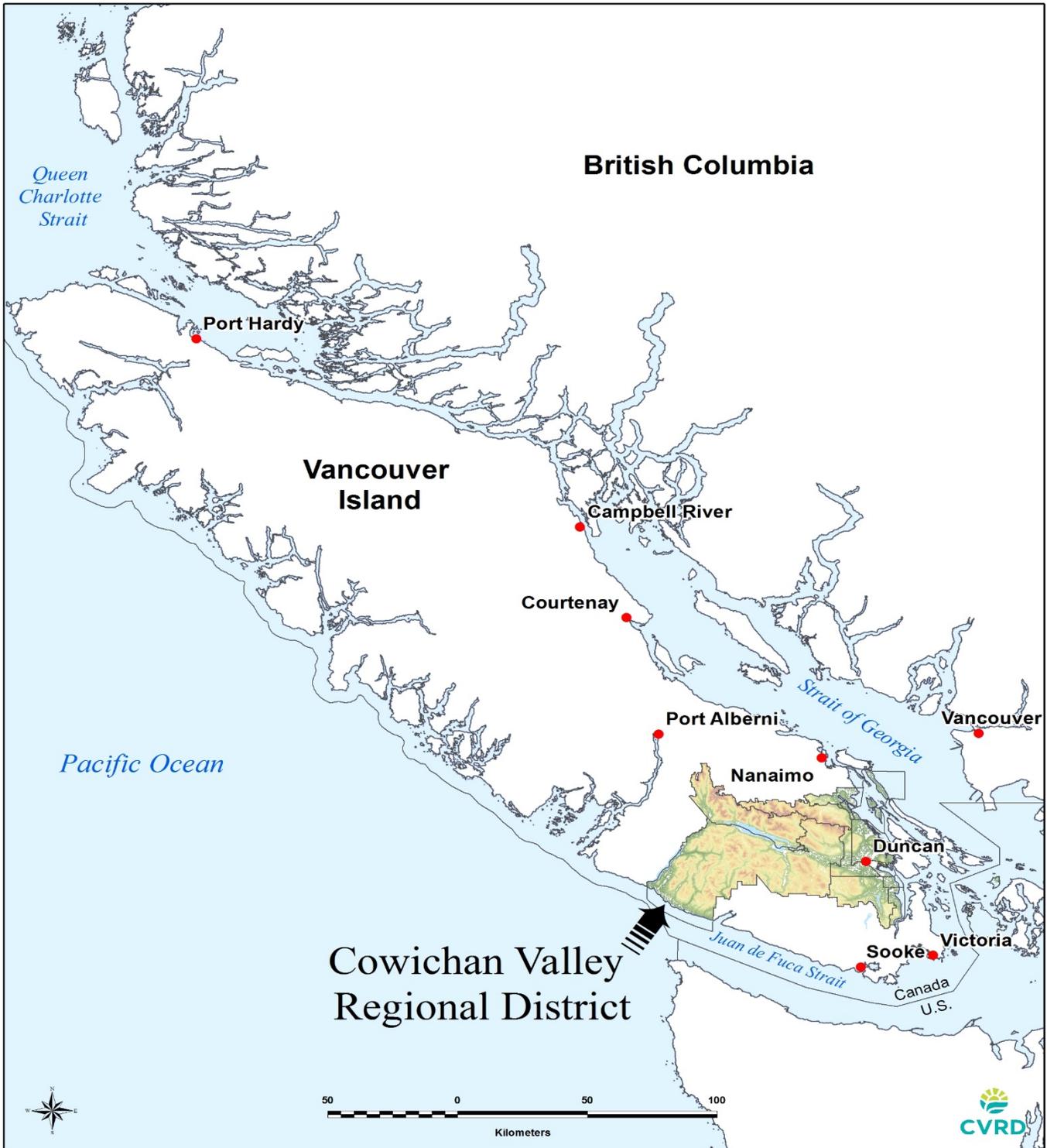
The Land Use Services Department also undertakes special planning projects with the aim of providing guidance and information to assist CVRD elected officials in continuing to make sound and informed decisions. Such advice is based on technical considerations or is given with the over-arching principle of protection of the community – or public – interest over the long term, while being respectful of private property owners' individual interests.

Another role of the Land Use Services Department is to help the public and private sector to access and understand past, present and future Land Use Services issues, policies and trends, by gathering, analyzing and reporting information. Our staff also provides planning advice to prospective applicants. The Department responds to inquiries for information from the public, students, businesses, governments and non-profit agencies. Such requests range from basic to complex. Staff response time varies in accordance with the complexity of the inquiry received as well as the number of inquiries received at that time.

With those thoughts in mind, please enjoy the following statics and if you have any questions, the Land Use Services staff would be pleased to answer them!

PART TWO: GEOGRAPHICAL CONTEXT

2.1 REGIONAL CONTEXT MAP



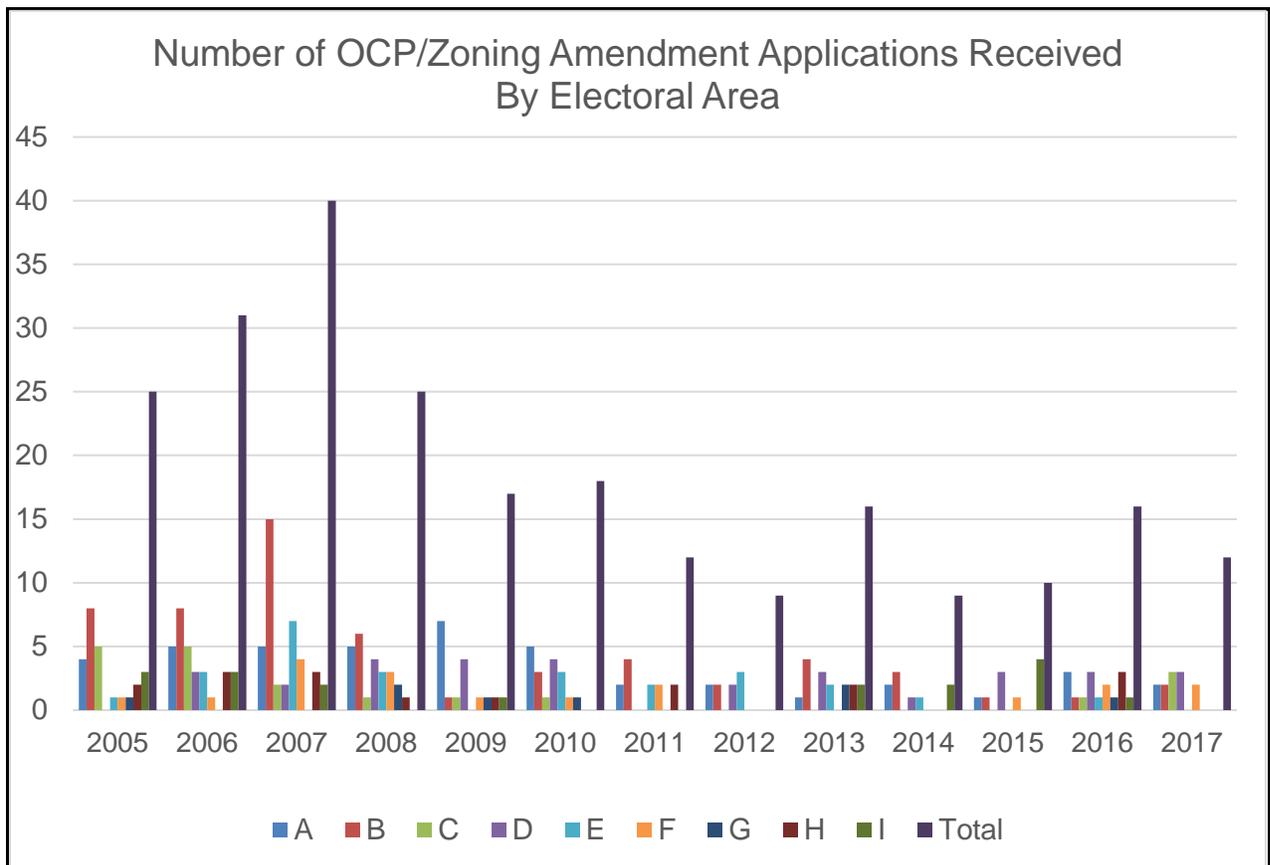
2.2 ELECTORAL AREA MAP



PART THREE: DEPARTMENTAL ACTIVITY REPORT

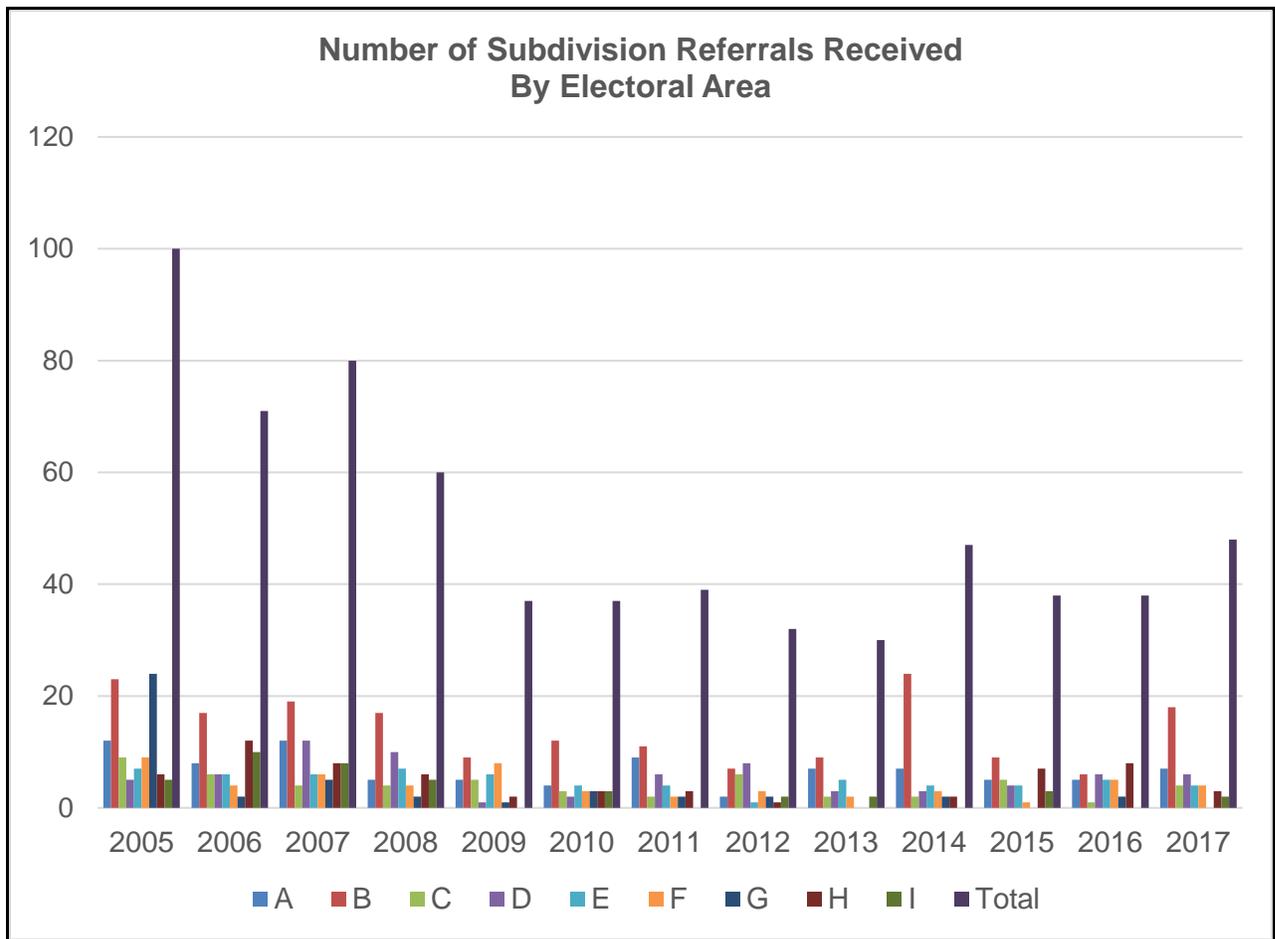
3.1 OFFICIAL COMMUNITY PLAN (OCP)/ZONING AMENDMENTS

Number of OCP/Zoning Amendment Applications Received By Electoral Area										
	A	B	C	D	E	F	G	H	I	Total
2005	4	8	5	0	1	1	1	2	3	25
2006	5	8	5	3	3	1	0	3	3	31
2007	5	15	2	2	7	4	0	3	2	40
2008	5	6	1	4	3	3	2	1	0	25
2009	7	1	1	4	0	1	1	1	1	17
2010	5	3	1	4	3	1	1	0	0	18
2011	2	4	0	0	2	2	0	2	0	12
2012	2	2	0	2	3	0	0	0	0	9
2013	1	4	0	3	2	0	2	2	2	16
2014	2	3	0	1	1	0	0	0	2	9
2015	1	1	0	3	0	1	0	0	4	10
2016	3	1	1	3	1	2	1	3	1	16
2017	2	2	3	3	0	2	0	0	0	12

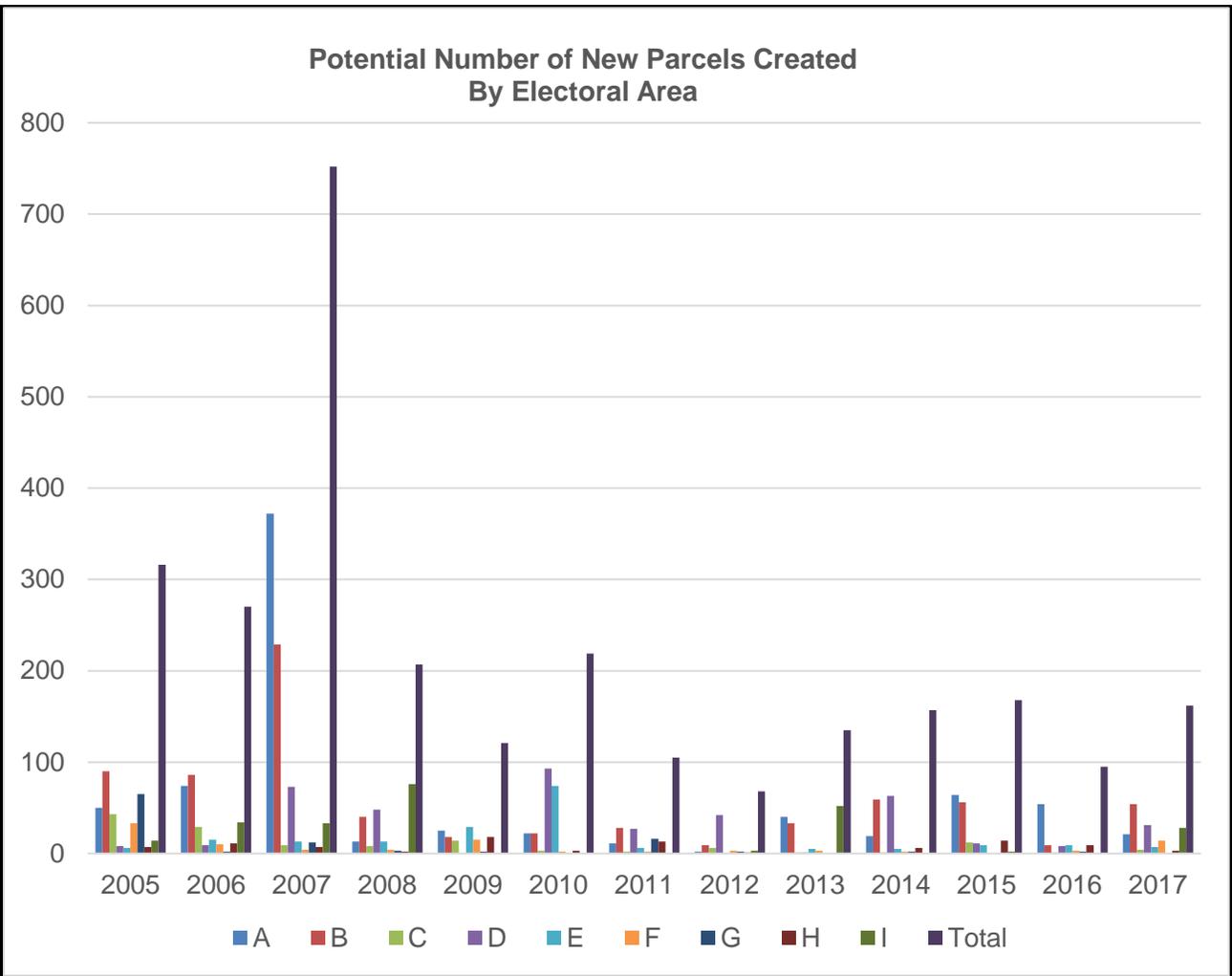


3.2 SUBDIVISION ACTIVITY

Number of Subdivision Referrals Received By Electoral Area										
	A	B	C	D	E	F	G	H	I	Total
2005	12	23	9	5	7	9	24	6	5	100
2006	8	17	6	6	6	4	2	12	10	71
2007	12	19	4	12	6	6	5	8	8	80
2008	5	17	4	10	7	4	2	6	5	60
2009	5	9	5	1	6	8	1	2	0	37
2010	4	12	3	2	4	3	3	3	3	37
2011	9	11	2	6	4	2	2	3	0	39
2012	2	7	6	8	1	3	2	1	2	32
2013	7	9	2	3	5	2	0	0	2	30
2014	7	24	2	3	4	3	2	2	0	47
2015	5	9	5	4	4	1	0	7	3	38
2016	5	6	1	6	5	5	2	8	0	38
2017	7	18	4	6	4	4	0	3	2	48



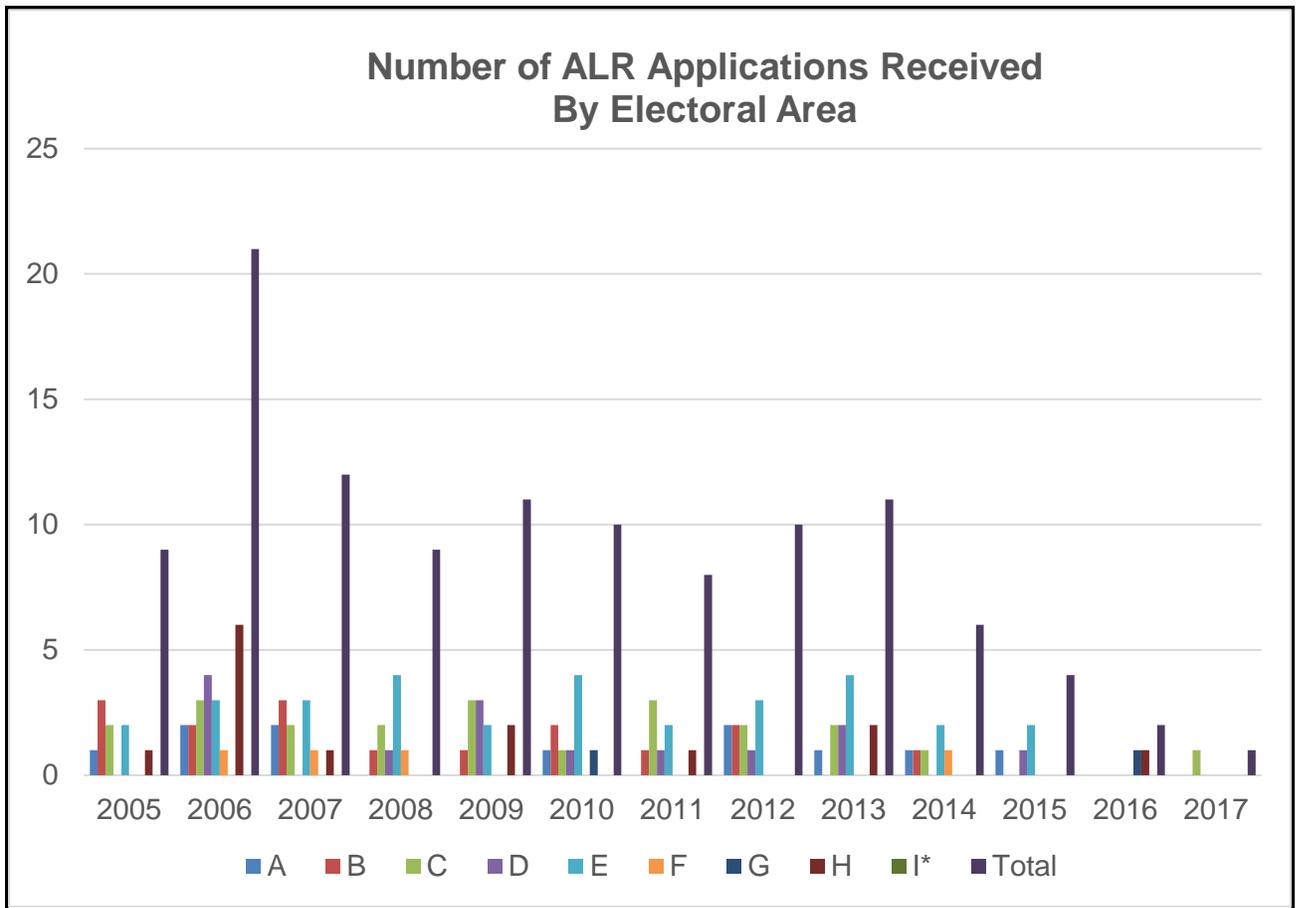
Potential Number of New Parcels Created By Electoral Area										
	A	B	C	D	E	F	G	H	I	Total
2005	50	90	43	8	6	33	65	7	14	316
2006	74	86	29	9	15	10	2	11	34	270
2007	372	229	9	73	13	4	12	7	33	752
2008	13	40	8	48	13	4	3	2	76	207
2009	25	18	14	0	29	15	2	18	0	121
2010	22	22	3	93	74	2	0	3	0	219
2011	11	28	2	27	6	2	16	13	0	105
2012	2	9	6	42	0	3	2	1	3	68
2013	40	33	1	1	5	3	0	0	52	135
2014	19	59	1	63	5	2	2	6	0	157
2015	64	56	12	11	9	0	0	14	2	168
2016	54	9	1	8	9	3	2	9	0	95
2017	21	54	4	31	7	14	0	3	28	162



3.3 AGRICULTURAL LAND RESERVE (ALR) APPLICATIONS

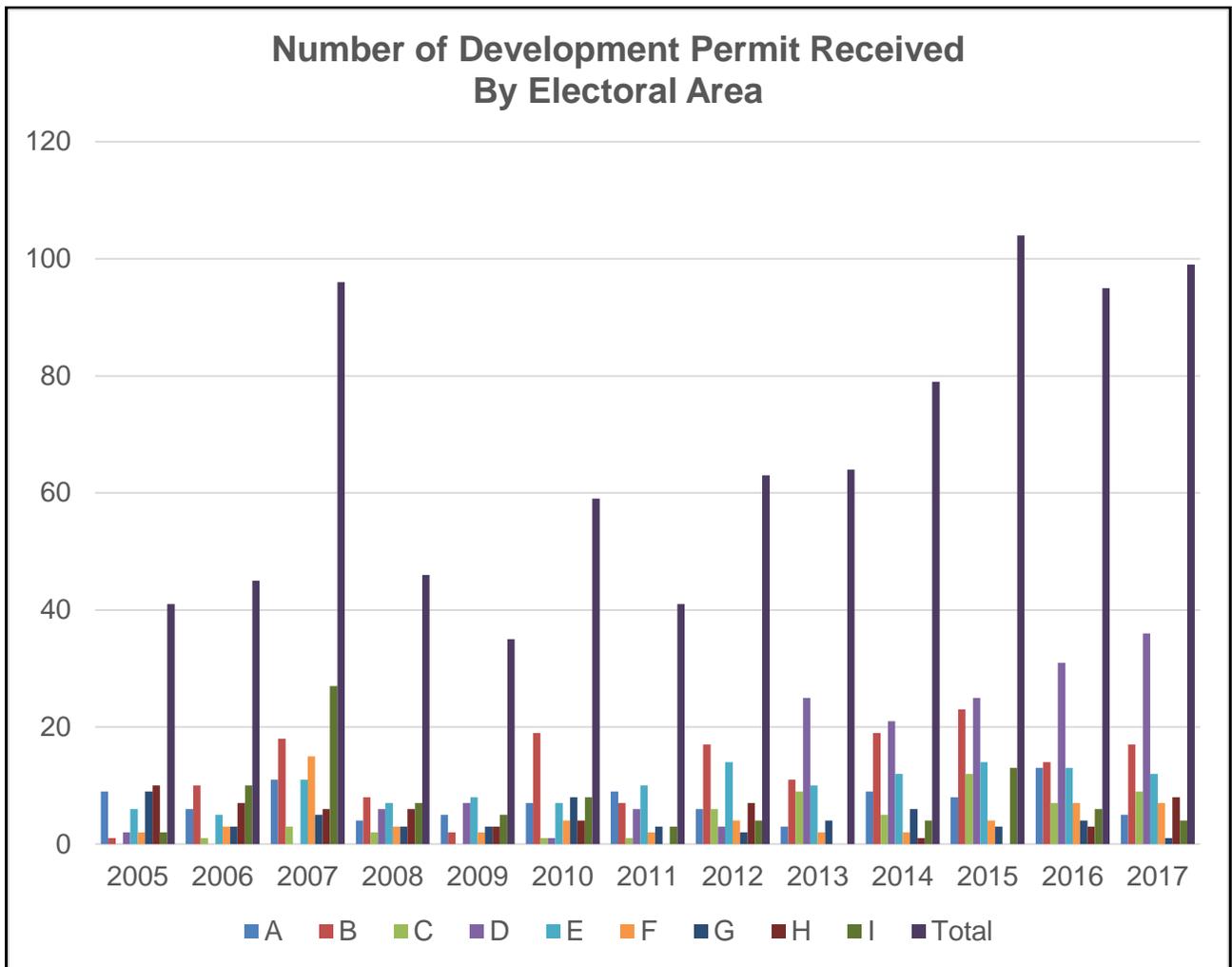
Number of ALR Applications Received By Electoral Area										
	A	B	C	D	E	F	G	H	I*	Total
2005	1	3	2	0	2	0	0	1	NA	9
2006	2	2	3	4	3	1	0	6	NA	21
2007	2	3	2	0	3	1	0	1	NA	12
2008	0	1	2	1	4	1	0	0	NA	9
2009	0	1	3	3	2	0	0	2	NA	11
2010	1	2	1	1	4	0	1	0	NA	10
2011	0	1	3	1	2	0	0	1	NA	8
2012	2	2	2	1	3	0	0	0	NA	10
2013	1	0	2	2	4	0	0	2	NA	11
2014	1	1	1	0	2	1	0	0	N/A	6
2015	1	0	0	1	2	0	0	0	N/A	4
2016	0	0	0	0	0	0	1	1	N/A	2
2017	0	0	1	0	0	0	0	0	N/A	1

*There are no ALR lands within Electoral Area I (Youbou/Meade Creek).



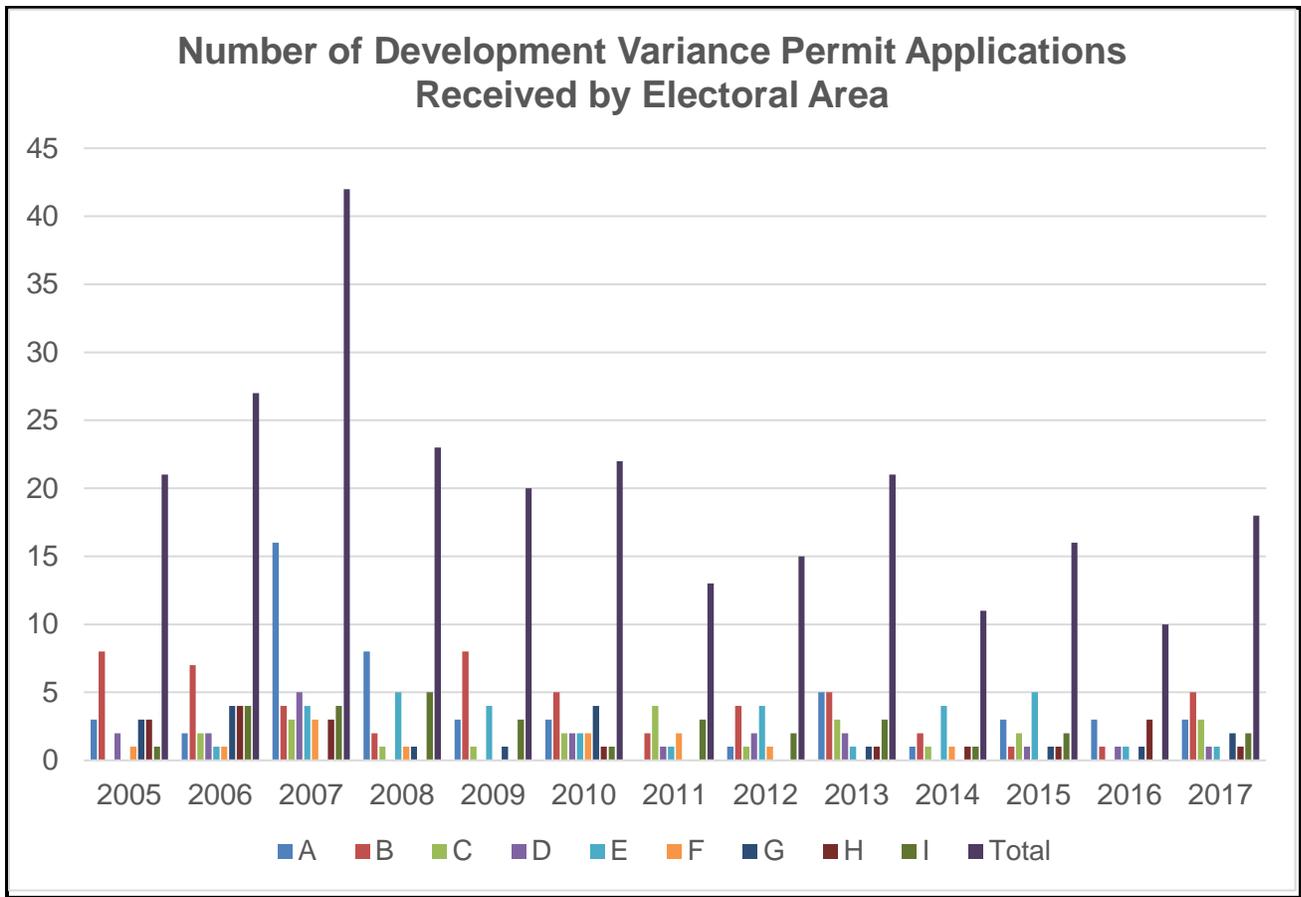
3.4 DEVELOPMENT PERMIT APPLICATIONS

Number of Development Permit Applications Received By Electoral Area										
	A	B	C	D	E	F	G	H	I	Total
2005	9	1	0	2	6	2	9	10	2	41
2006	6	10	1	0	5	3	3	7	10	45
2007	11	18	3	0	11	15	5	6	27	96
2008	4	8	2	6	7	3	3	6	7	46
2009	5	2	0	7	8	2	3	3	5	35
2010	7	19	1	1	7	4	8	4	8	59
2011	9	7	1	6	10	2	3	0	3	41
2012	6	17	6	3	14	4	2	7	4	63
2013	3	11	9	25	10	2	4	0	0	64
2014	9	19	5	21	12	2	6	1	4	79
2015	8	23	12	25	14	4	3	0	13	104
2016	13	14	7	31	13	7	4	3	6	95
2017	5	17	9	36	12	7	1	8	4	99



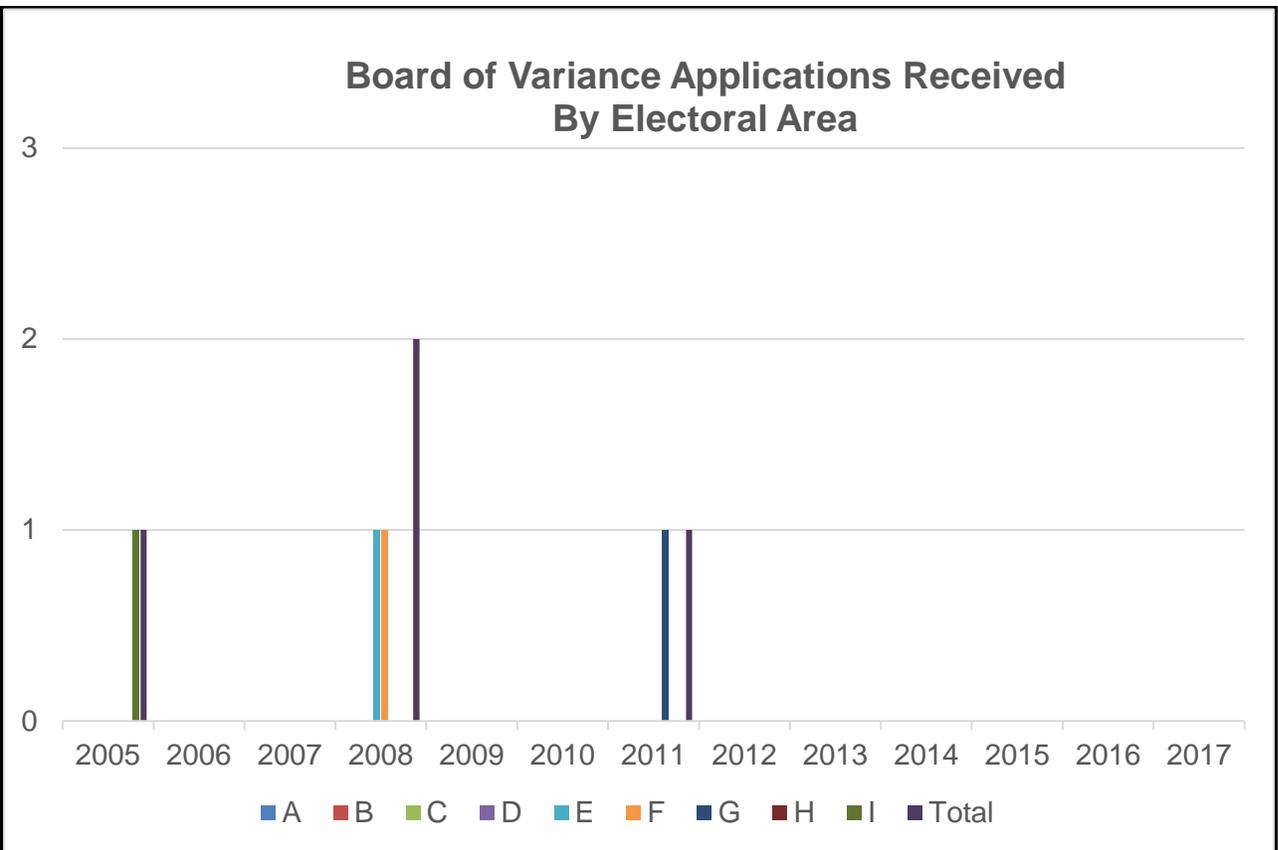
3.5 DEVELOPMENT VARIANCE PERMIT APPLICATIONS

Number of Development Variance Permit Applications Received By Electoral Area										
	A	B	C	D	E	F	G	H	I	Total
2005	3	8	0	2	0	1	3	3	1	21
2006	2	7	2	2	1	1	4	4	4	27
2007	16	4	3	5	4	3	0	3	4	42
2008	8	2	1	0	5	1	1	0	5	23
2009	3	8	1	0	4	0	1	0	3	20
2010	3	5	2	2	2	2	4	1	1	22
2011	0	2	4	1	1	2	0	0	3	13
2012	1	4	1	2	4	1	0	0	2	15
2013	5	5	3	2	1	0	1	1	3	21
2014	1	2	1	0	4	1	0	1	1	11
2015	3	1	2	1	5	0	1	1	2	16
2016	3	1	0	1	1	0	1	3	0	10
2017	3	5	3	1	1	0	2	1	2	18



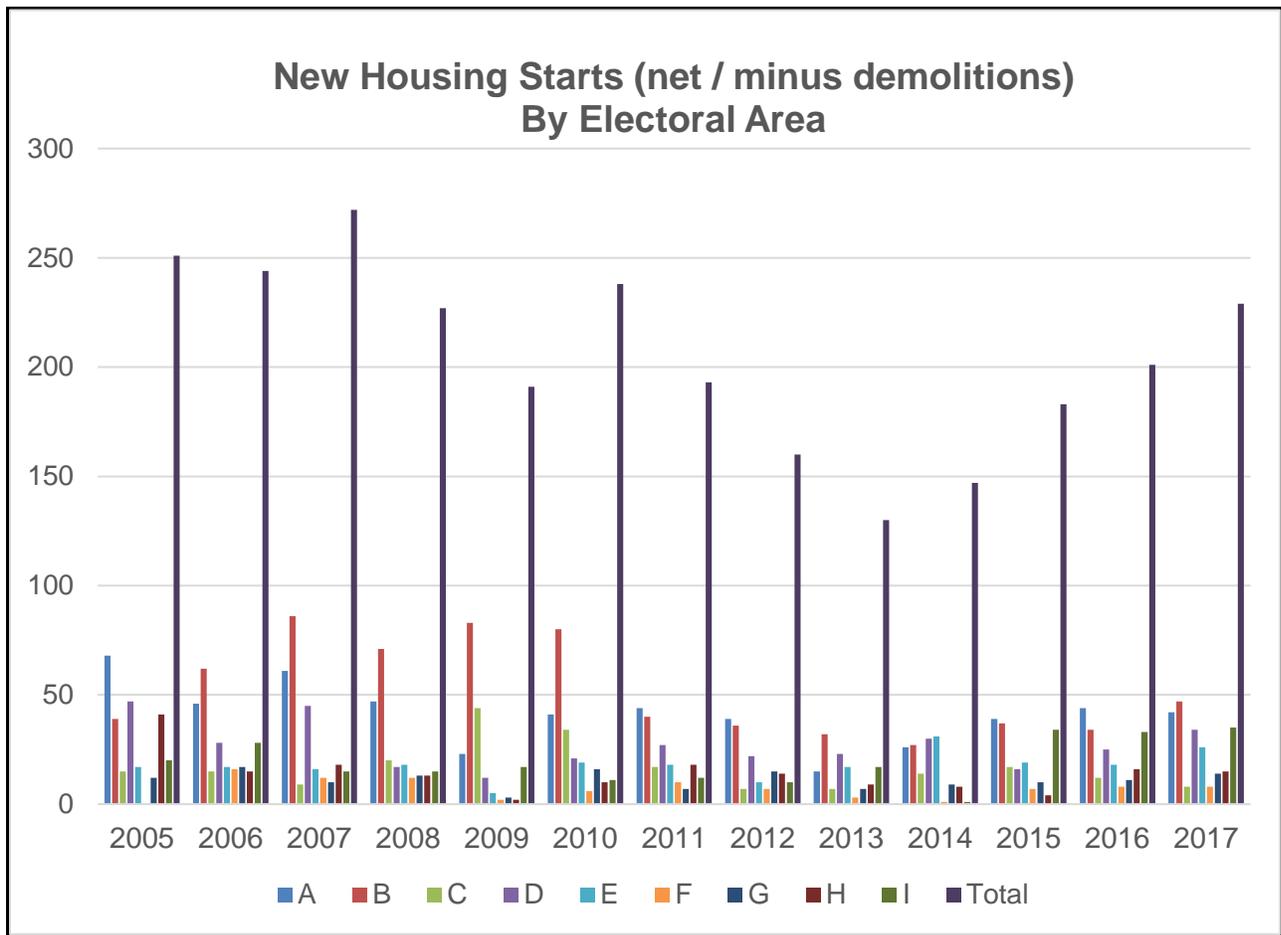
3.6 BOARD OF VARIANCE APPLICATIONS

Number of Board of Variance Applications Received By Electoral Area										
	A	B	C	D	E	F	G	H	I	Total
2005	0	0	0	0	0	0	0	0	1	1
2006	0	0	0	0	0	0	0	0	0	0
2007	0	0	0	0	0	0	0	0	0	0
2008	0	0	0	0	1	1	0	0	0	2
2009	0	0	0	0	0	0	0	0	0	0
2010	0	0	0	0	0	0	0	0	0	0
2011	0	0	0	0	0	0	1	0	0	1
2012	0	0	0	0	0	0	0	0	0	0
2013	0	0	0	0	0	0	0	0	0	0
2014	0	0	0	0	0	0	0	0	0	0
2015	0	0	0	0	0	0	0	0	0	0
2016	0	0	0	0	0	0	0	0	0	0
2017	0	0	0	0	0	0	0	0	0	0



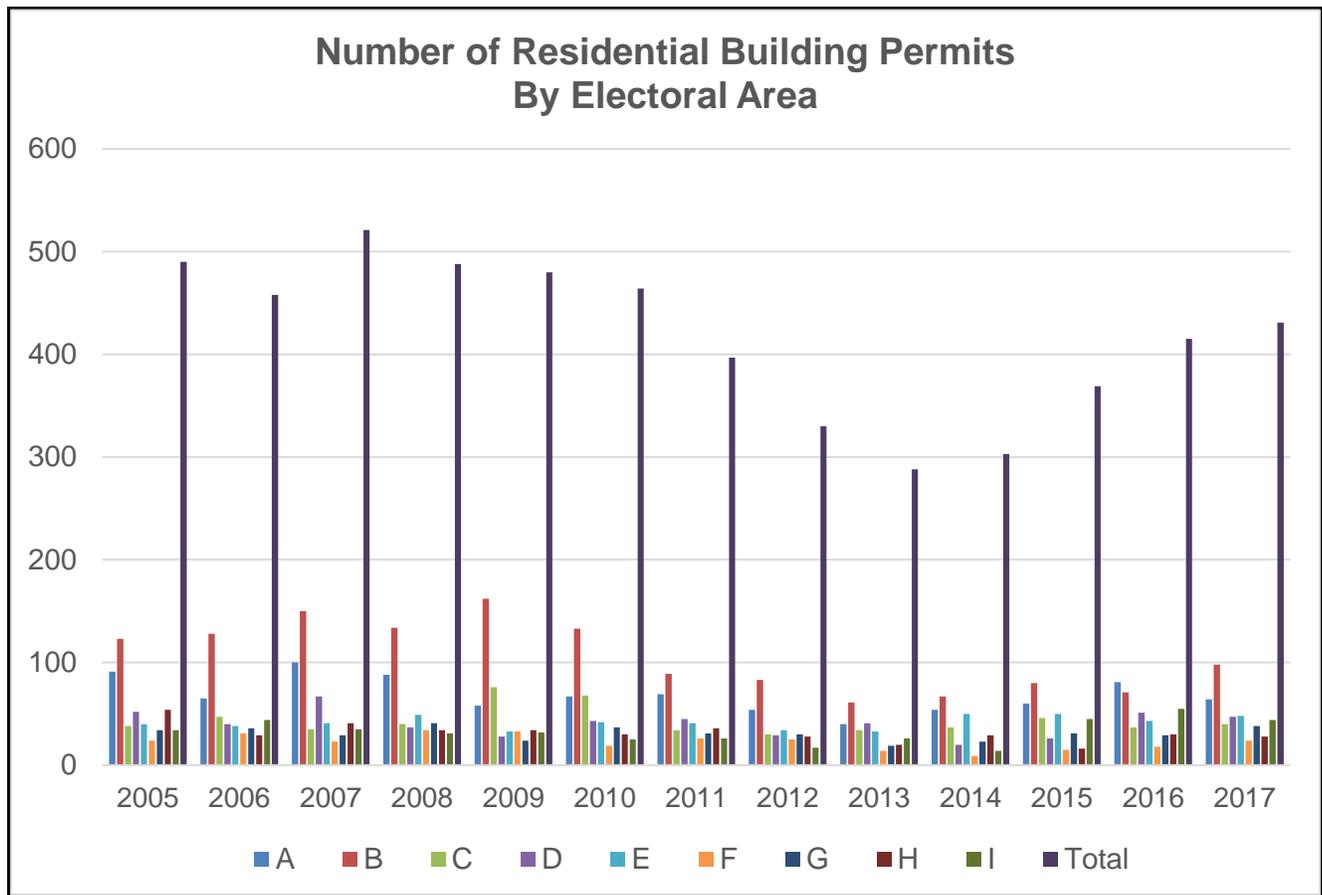
3.7 NEW HOUSING STARTS

New Housing Starts (net / minus demolitions) By Electoral Area										
	A	B	C	D	E	F	G	H	I	Total
2005	68	39	15	47	17	(-8)	12	41	20	251
2006	46	62	15	28	17	16	17	15	28	244
2007	61	86	9	45	16	12	10	18	15	272
2008	47	71	20	17	18	12	13	13	15	227
2009	23	83	44	12	5	2	3	2	17	191
2010	41	80	34	21	19	6	16	10	11	238
2011	44	40	17	27	18	10	7	18	12	193
2012	39	36	7	22	10	7	15	14	10	160
2013	15	32	7	23	17	3	7	9	17	130
2014	26	27	14	30	31	1	9	8	1	147
2015	39	37	17	16	19	7	10	4	34	183
2016	44	34	12	25	18	8	11	16	33	201
2017	38	47	8	34	26	8	14	15	35	225



3.8 RESIDENTIAL BUILDING PERMITS ISSUED

Number of Residential Building Permits Issued By Electoral Area										
	A	B	C	D	E	F	G	H	I	Total
2005	91	123	38	52	40	24	34	54	34	490
2006	65	128	47	40	38	31	36	29	44	458
2007	100	150	35	67	41	23	29	41	35	521
2008	88	134	40	37	49	34	41	34	31	488
2009	58	162	76	28	33	33	24	34	32	480
2010	67	133	68	43	42	19	37	30	25	464
2011	69	89	34	45	41	26	31	36	26	397
2012	54	83	30	29	34	25	30	28	17	330
2013	40	61	34	41	33	14	19	20	26	288
2014	54	67	37	20	50	9	23	29	14	303
2015	60	80	46	26	50	15	31	16	45	369
2016	81	71	37	51	43	18	29	30	55	415
2017	64	98	40	47	48	24	38	28	44	431

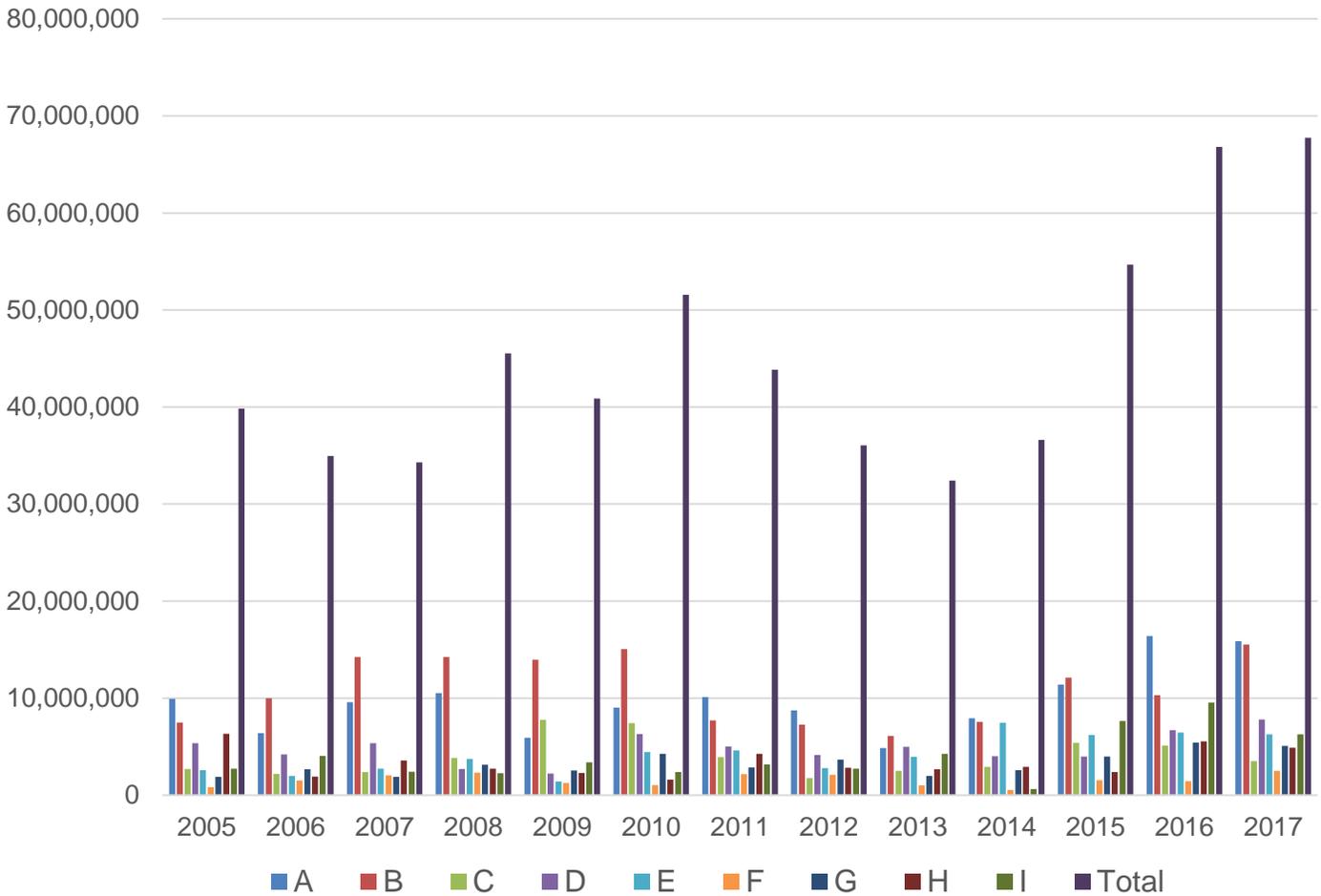


**Value of Residential Building Permits Issued
By Electoral Area (\$)**

(not adjusted for inflation)

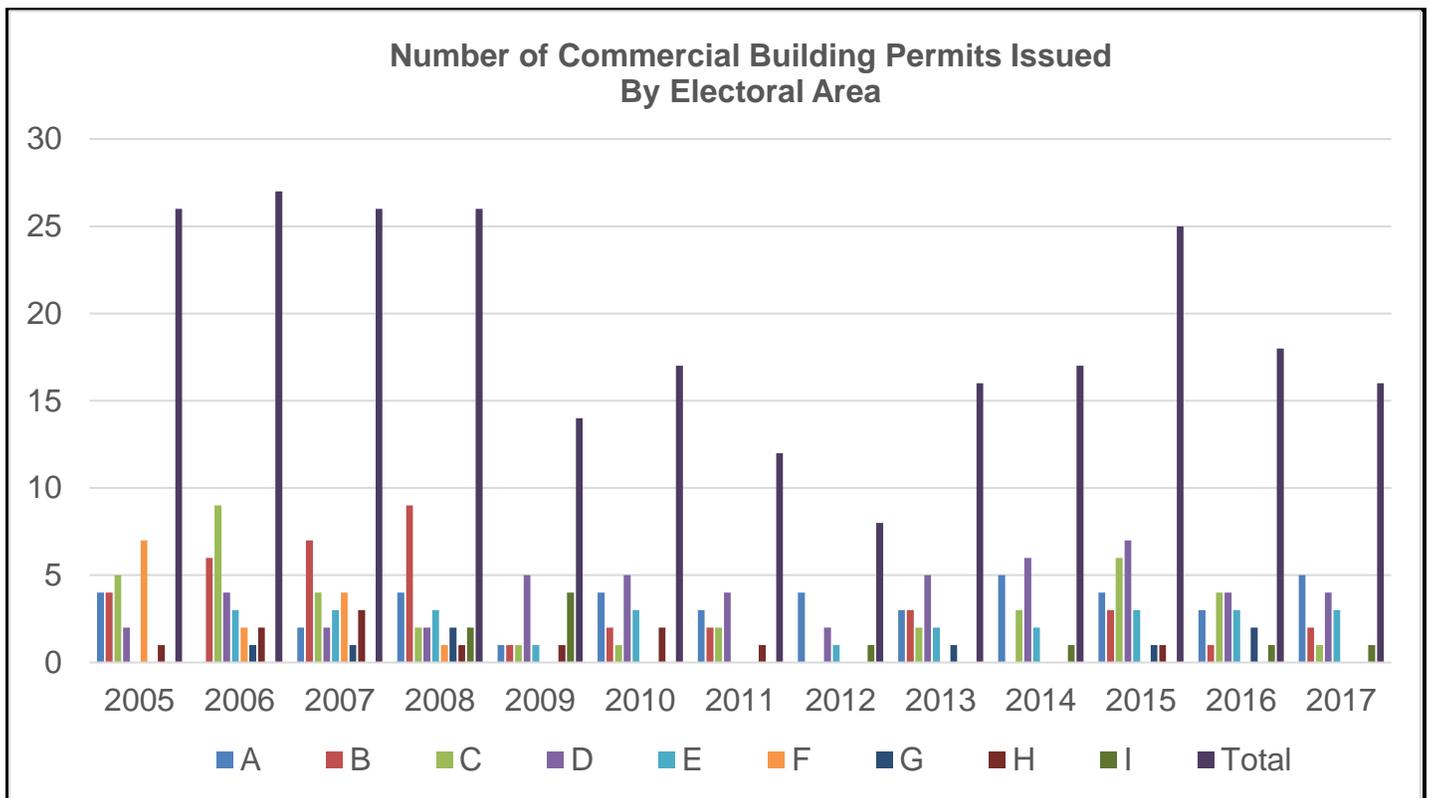
	A	B	C	D	E	F	G	H	I	Total
2005	9,935,928	7,474,224	2,712,342	5,354,645	2,565,088	823,379	1,885,779	6,344,587	2,731,641	39,829,613
2006	6,384,207	9,993,765	2,204,188	4,207,257	1,990,634	1,517,734	2,672,659	1,936,214	4,055,384	34,962,042
2007	9,580,866	14,244,023	2,383,767	5,363,788	2,730,959	2,036,931	1,879,812	3,592,433	2,426,116	34,303,633
2008	10,532,070	14,237,670	3,843,967	2,705,130	3,744,801	2,325,817	3,151,954	2,718,737	2,269,179	45,529,325
2009	5,935,540	13,973,396	7,775,580	2,246,675	1,426,465	1,279,150	2,544,605	2,302,220	3,387,530	40,871,161
2010	9,023,743	15,048,575	7,425,819	6,298,440	4,444,089	1,038,166	4,271,410	1,617,250	2,404,102	51,571,594
2011	10,126,570	7,704,963	3,923,395	5,026,970	4,607,220	2,176,175	2,851,655	4,254,060	3,182,750	43,853,758
2012	8,740,090	7,265,547	1,759,275	4,135,265	2,791,836	2,105,070	3,671,525	2,837,760	2,731,122	36,037,490
2013	4,868,845	6,126,098	2,520,026	4,987,075	3,968,770	1,022,610	1,979,230	2,675,690	4,281,390	32,429,734
2014	7,930,048	7,539,515	2,936,423	4,030,345	7,464,745	543,020	2,575,910	2,935,190	645,700	36,600,896
2015	11,385,469	12,131,575	5,405,063	3,984,890	6,207,717	1,549,880	3,974,060	2,379,510	7,654,610	54,672,774
2016	16,398,205	10,306,846	5,117,981	6,705,890	6,468,685	1,457,792	5,417,070	5,539,220	9,548,735	66,800,419
2017	15,865,538	15,538,395	3,522,780	7,808,485	6,264,020	2,500,800	5,087,302	4,892,340	6,254,940	67,734,600

**Value of Residential Permits Issued
By Electoral Area**



3.9 COMMERCIAL BUILDING PERMITS ISSUED

Number of Commercial Building Permits Issued By Electoral Area										
	A	B	C	D	E	F	G	H	I	Total
2005	4	4	5	2	0	7	0	1	0	26
2006	0	6	9	4	3	2	1	2	0	27
2007	2	7	4	2	3	4	1	3	0	26
2008	4	9	2	2	3	1	2	1	2	26
2009	1	1	1	5	1	0	0	1	4	14
2010	4	2	1	5	3	0	0	2	0	17
2011	3	2	2	4	0	0	0	1	0	12
2012	4	0	0	2	1	0	0	0	1	8
2013	3	3	2	5	2	0	1	0	0	16
2014	5	0	3	6	2	0	0	0	1	17
2015	4	3	6	7	3	0	1	1	0	25
2016	3	1	4	4	3	0	2	0	1	18
2017	5	2	1	4	3	0	0	0	1	16

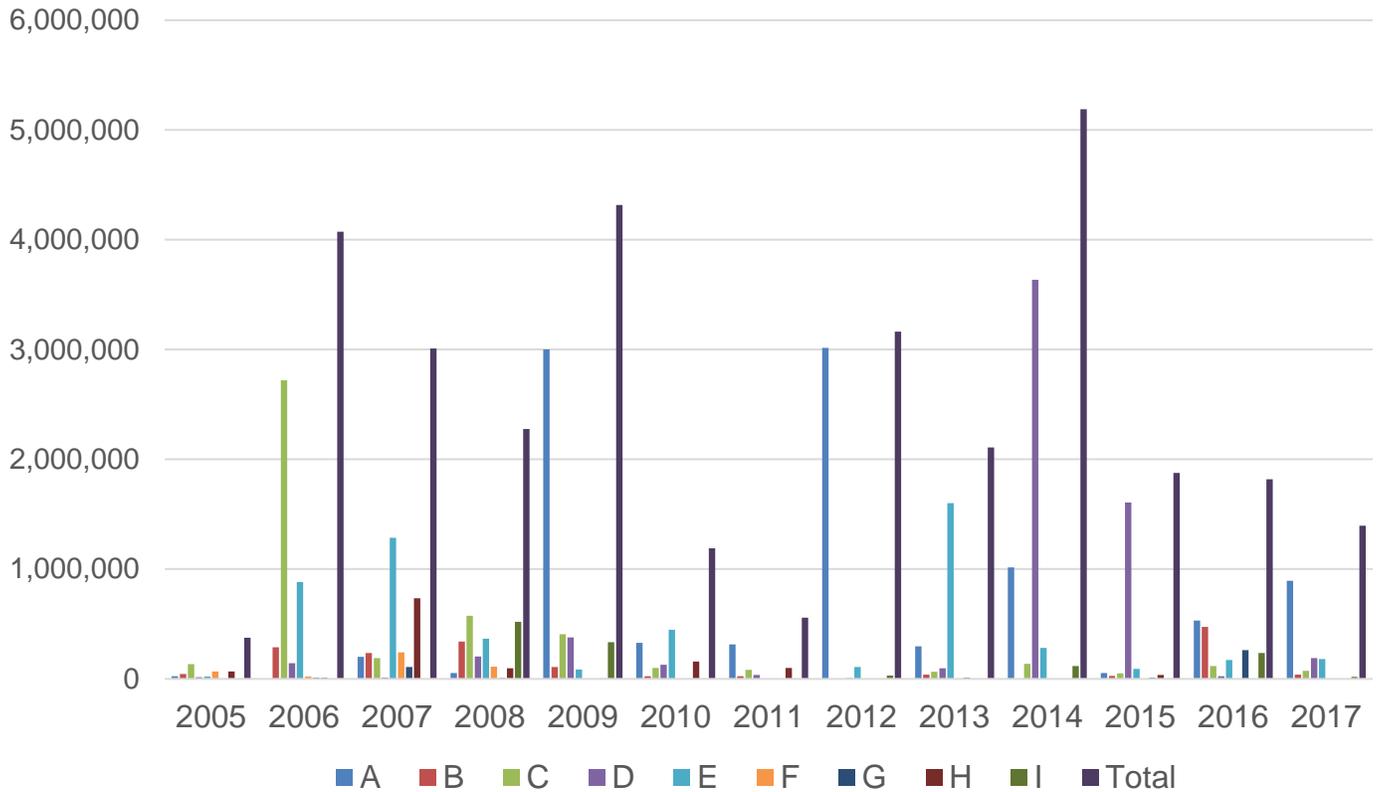


**Value of Commercial Building Permits Issued
By Electoral Area (\$)**

(not adjusted for inflation)

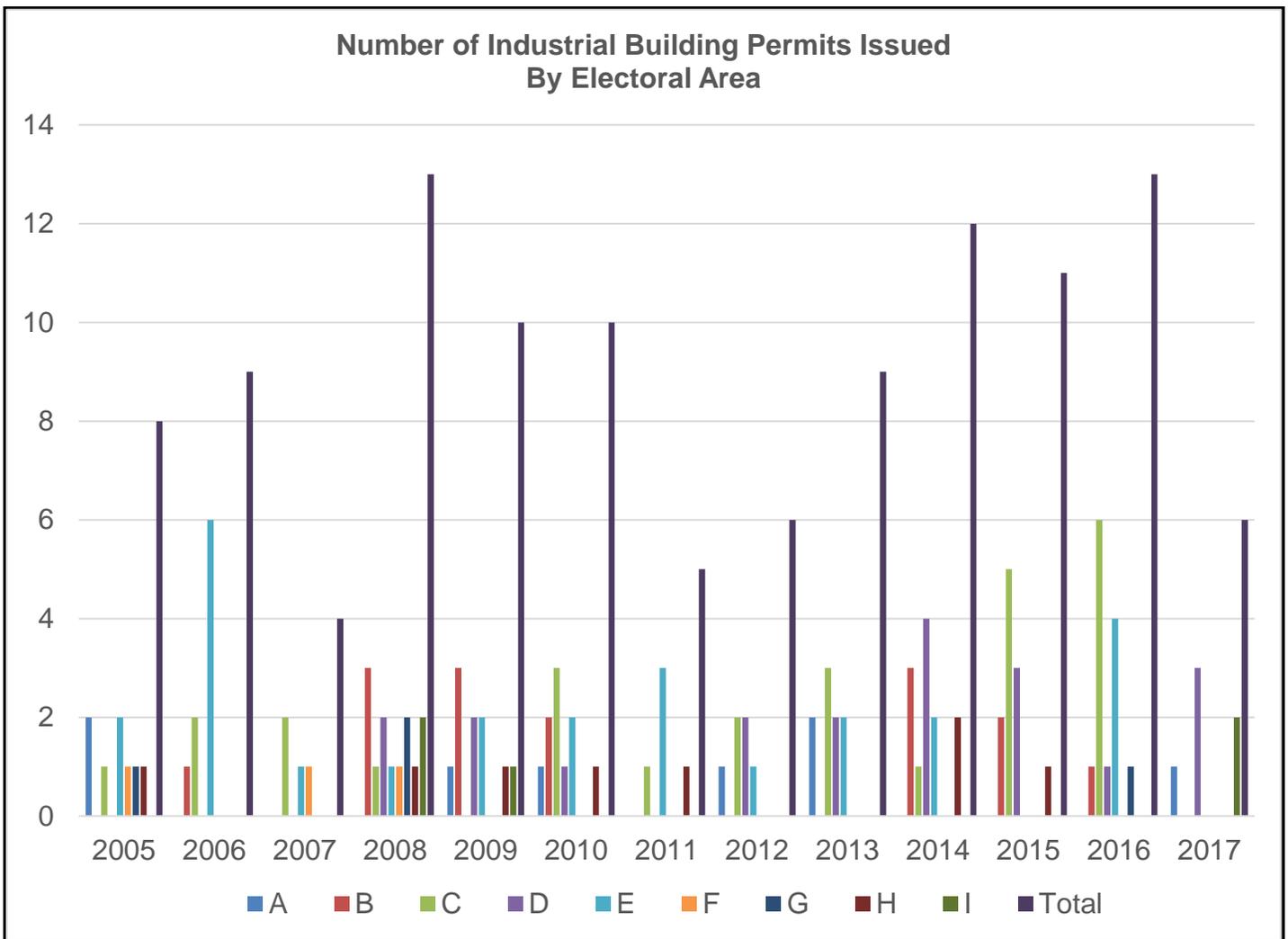
	A	B	C	D	E	F	G	H	I	Total
2005	24,000	43,696	135,000	17,200	21,000	66,703	0	68,210	0	375,729
2006	0	287,858	2,719,012	142,109	881,975	21,868	11,440	10,000	0	4,074,262
2007	200,000	235,934	190,000	12,360	1,284,545	242,400	109,200	734,000	0	3,008,439
2008	55,000	340,068	575,000	205,000	366,300	111,750	7,500	97,050	520,000	2,277,668
2009	3,000,000	108,150	406,275	377,500	84,990	0	0	3,600	336,000	4,316,515
2010	328,700	25,480	100,000	128,750	447,500	0	0	159,000	0	1,189,430
2011	314,800	24,100	82,500	35,500	0	0	0	100,000	0	556,900
2012	3,017,000	0	0	6,000	109,500	0	0	0	30,000	3,162,500
2013	297,500	40,000	65,000	97,000	1,600,000	0	10,000	0	0	2,109,500
2014	1,015,783	0	137,320	3,635,000	283,400	0	0	0	116,640	5,188,143
2015	52,500	27,000	51,500	1,607,000	92,500	0	9,750	37,440	0	1,877,690
2016	532,000	474,600	118,000	23,500	173,000	0	263,520	0	235,000	1,819,620
2017	892,920	38,500	75,000	190,000	180,500	0	0	0	19,200	1,396,120

**Value of Commercial Building Permits Issued
By Electoral Area (\$)**



3.10 INDUSTRIAL BUILDING PERMITS ISSUED

Number of Industrial Building Permits Issued By Electoral Area										
	A	B	C	D	E	F	G	H	I	Total
2005	2	0	1	0	2	1	1	1	0	8
2006	0	1	2	0	6	0	0	0	0	9
2007	0	0	2	0	1	1	0	0	0	4
2008	0	3	1	2	1	1	2	1	2	13
2009	1	3	0	2	2	0	0	1	1	10
2010	1	2	3	1	2	0	0	1	0	10
2011	0	0	1	0	3	0	0	1	0	5
2012	1	0	2	2	1	0	0	0	0	6
2013	2	0	3	2	2	0	0	0	0	9
2014	0	3	1	4	2	0	0	2	0	12
2015	0	2	5	3	0	0	0	1	0	11
2016	0	1	6	1	4	0	1	0	0	13
2017	1	0	0	3	0	0	0	0	2	6

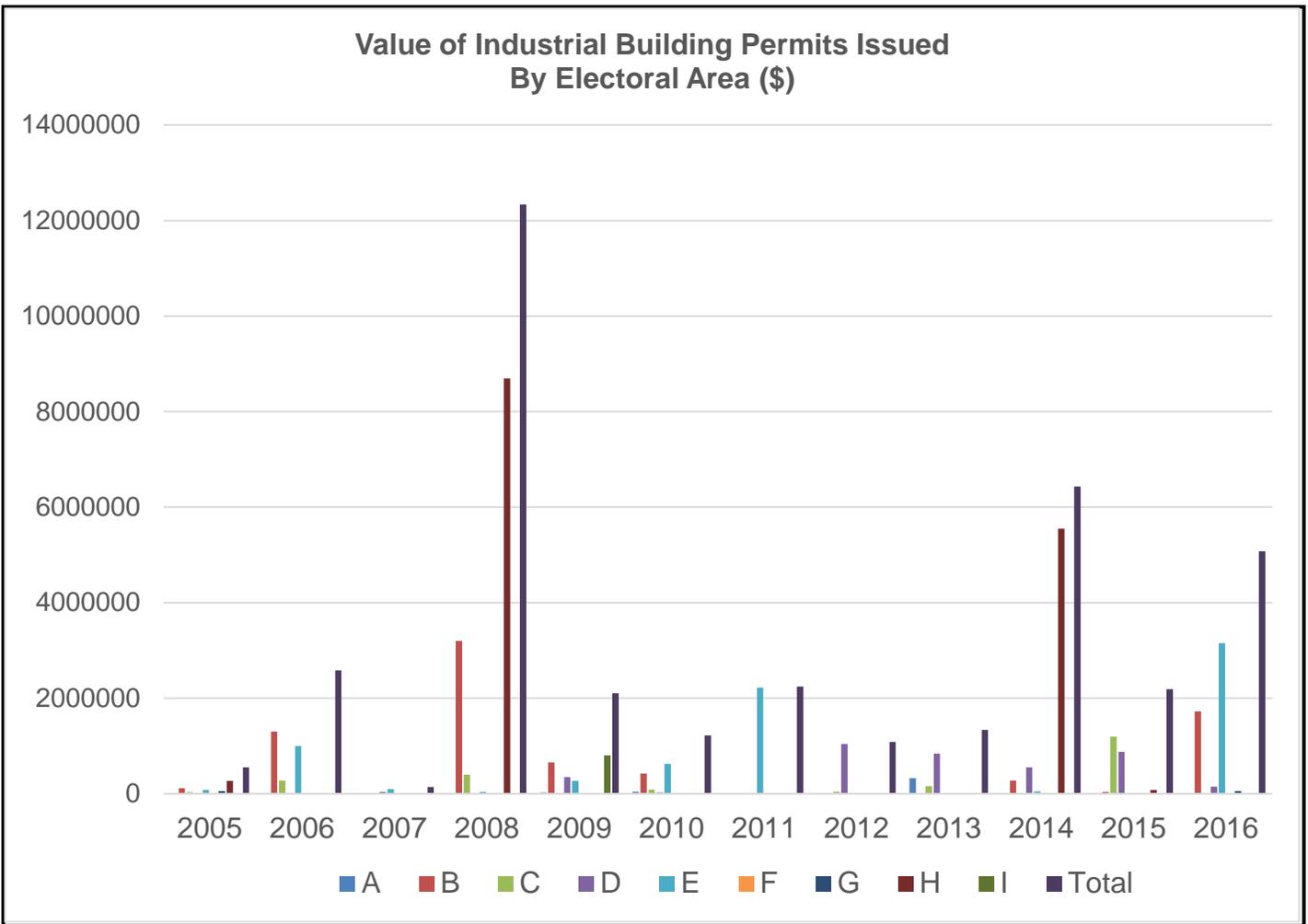


**Value of Industrial Building Permits Issued
By Electoral Area (\$)**

(not adjusted for inflation)

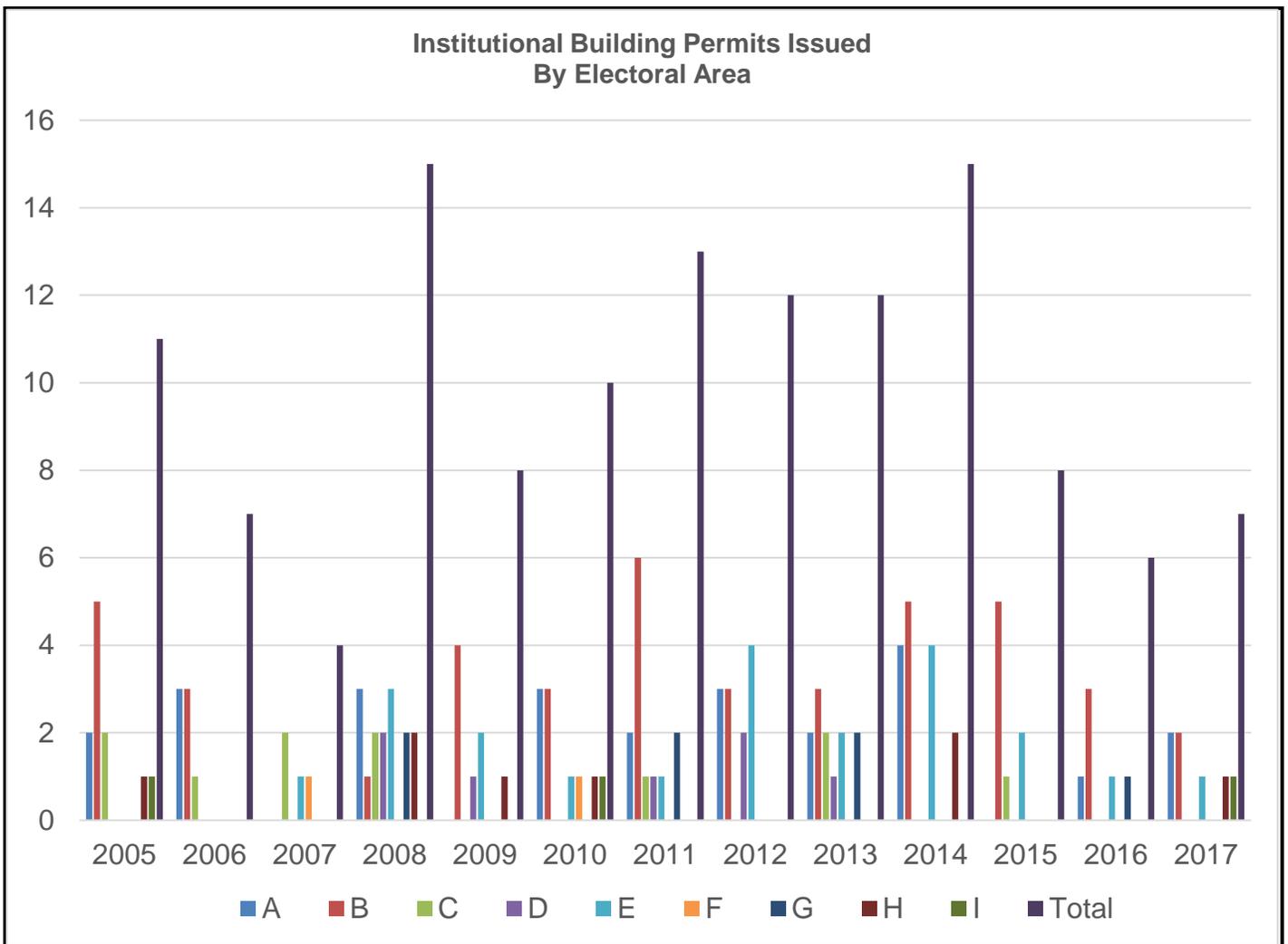
	A	B	C	D	E	F	G	H	I	Total
2005	0	114,768	32,760	0	82,040	0	55,200	270,000	0	554,768
2006	0	1,300,000	278,800	0	1,001,680	0	0	0	0	2,580,480
2007	0	0	0	40,800	100,000	0	0	0	0	140,800
2008	0	3,202,400	400,000	0	39,000	0	0	8,696,000	0	12,337,400
2009	26,350	657,980	0	350,000	271,800	0	0	10,000	785,460	2,101,590
2010	45,000	424,790	86,500	25,000	625,000	0	0	15,000	0	1,221,290
2011	0	0	16,000	0	2,218,720	0	0	7,920	0	2,242,640
2012	0	0	43,500	1,041,280	0	0	0	0	0	1,084,780
2013	324,150	0	161,000	841,492	11,000	0	0	0	0	1,337,642
2014	0	276,000	5,500	551,000	48,800	0	0	5,550,000	0	6,431,300
2015	0	37,000	1,195,000	880,000	0	0	0	80,000	0	2,192,000
2016	0	1,721,070	0	150,000	3,150,000	0	55,000	0	0	5,076,070

**Value of Industrial Building Permits Issued
By Electoral Area (\$)**



3.11 INSTITUTIONAL BUILDING PERMITS ISSUED

Institutional Building Permits Issued By Electoral Area										
	A	B	C	D	E	F	G	H	I	Total
2005	2	5	2	0	0	0	0	1	1	11
2006	3	3	1	0	0	0	0	0	0	7
2007	0	0	2	0	1	1	0	0	0	4
2008	3	1	2	2	3	0	2	2	0	15
2009	0	4	0	1	2	0	0	1	0	8
2010	3	3	0	0	1	1	0	1	1	10
2011	2	6	1	1	1	0	2	0	0	13
2012	3	3	0	2	4	0	0	0	0	12
2013	2	3	2	1	2	0	2	0	0	12
2014	4	5	0	0	4	0	0	2	0	15
2015	0	5	1	0	2	0	0	0	0	8
2016	1	3	0	0	1	0	1	0	0	6
2017	2	2	0	0	1	0	0	1	1	7

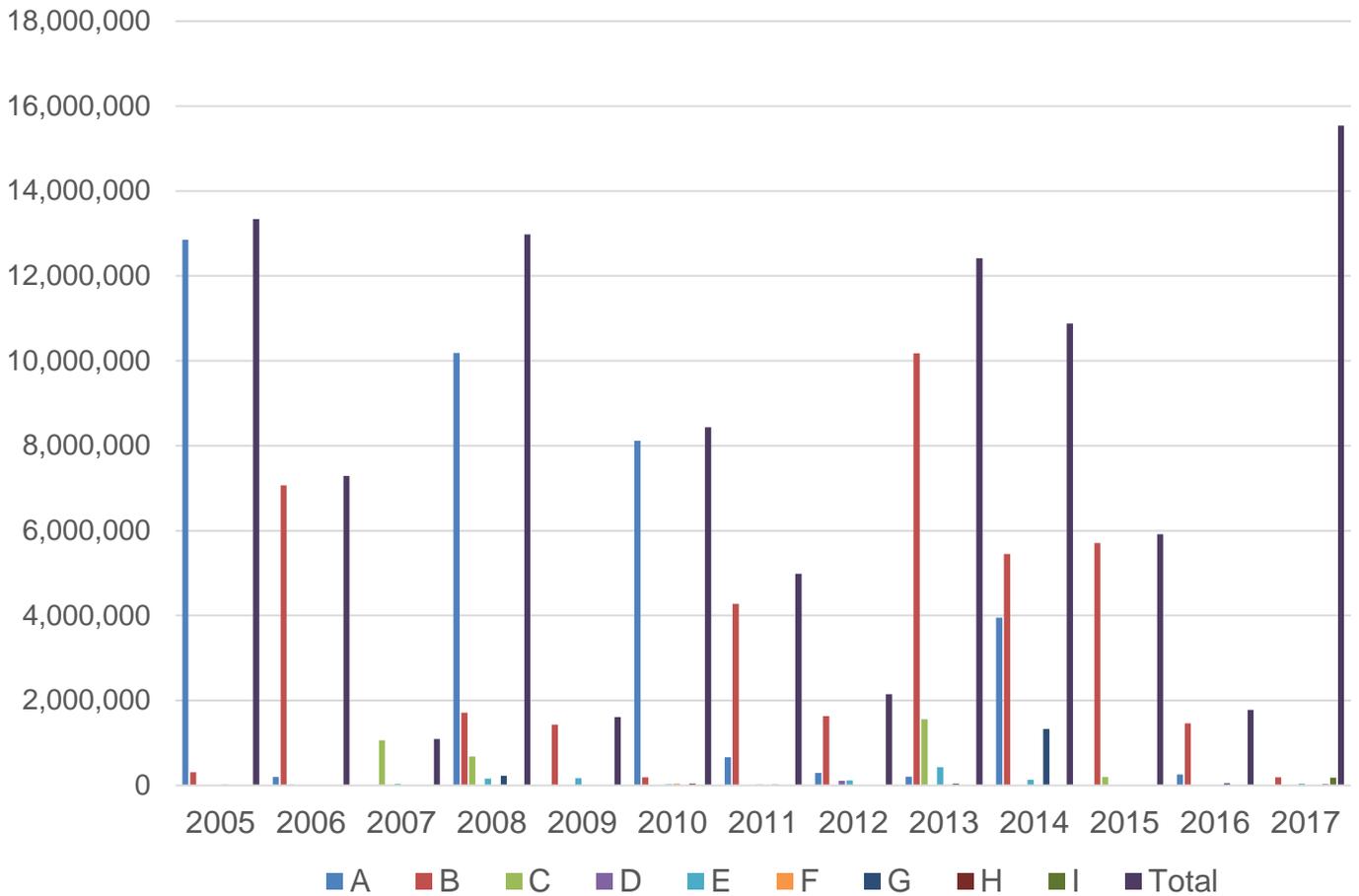


**Value of Institutional Building Permits Issued
By Electoral Area (\$)**

(not adjusted for inflation)

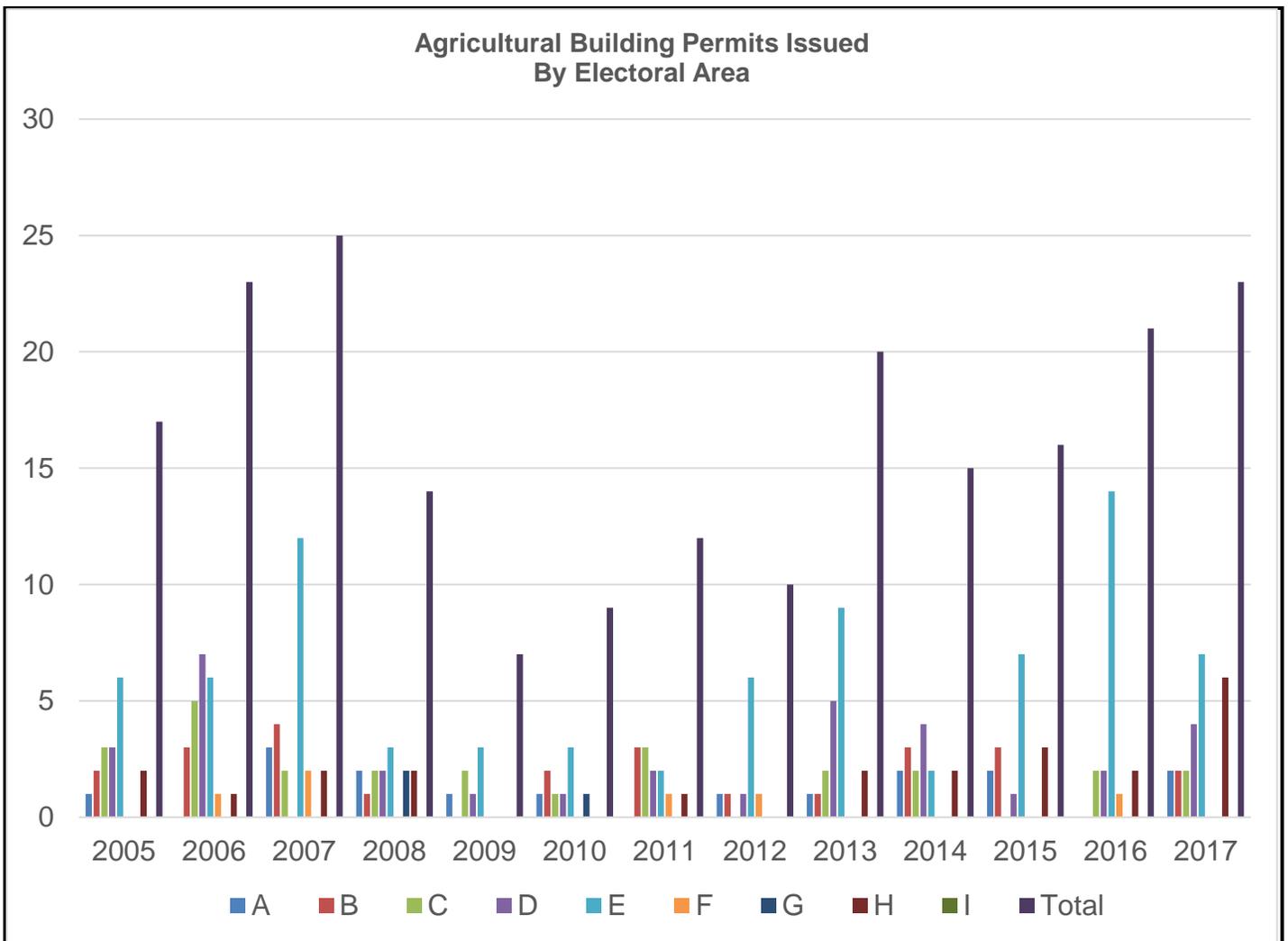
	A	B	C	D	E	F	G	H	I	Total
2005	12,850,000	306,616	10,000	0	0	17,628	0	0	175,000	13,341,616
2006	200,000	7,070,522	20,000	0	0	0	0	0	0	7,290,522
2007	0	0	1,062,800	0	32,186	0	0	0	0	1,094,986
2008	10,187,000	1,713,650	678,652	0	160,000	13,500	225,000	0	0	12,977,802
2009	0	1,429,375	0	7,500	165,240	0	0	5,000	0	1,607,115
2010	8,120,000	194,340	0	0	30,720	45,000	0	40,000	3,000	8,433,060
2011	666,450	4,273,320	5,000	1,000	19,500	0	20,000	0	0	4,985,270
2012	291,280	1,629,000	0	110,000	115,500	0	0	0	0	2,145,780
2013	208,000	10,174,300	1,554,119	10,000	425,000	0	45,500	0	0	12,416,919
2014	3,953,350	5,450,010	0	10,000	135,000	0	1,330,000	0	0	10,878,360
2015	0	5,705,000	200,000	0	11,280	0	0	0	0	5,916,280
2016	258,000	1,458,720	15,000	0	0	0	50,000	0	0	1,781,720
2017	15,100,00	190,000	0	0	40,000	0	0	30,000	180,000	15,540,000

**Value of Institutional Building Permits Issued
By Electoral Area**



3.12 AGRICULTURAL BUILDING PERMITS ISSUED BY ELECTORAL AREA

Agricultural Building Permits Issued By Electoral Area										
	A	B	C	D	E	F	G	H	I	Total
2005	1	2	3	3	6	0	0	2	0	17
2006	0	3	5	7	6	1	0	1	0	23
2007	3	4	2	0	12	2	0	2	0	25
2008	2	1	2	2	3	0	2	2	0	14
2009	1	0	2	1	3	0	0	0	0	7
2010	1	2	1	1	3	0	1	0	0	9
2011	0	3	3	2	2	1	0	1	0	12
2012	1	1	0	1	6	1	0	0	0	10
2013	1	1	2	5	9	0	0	2	0	20
2014	2	3	2	4	2	0	0	2	0	15
2015	2	3	0	1	7	0	0	3	0	16
2016	0	0	2	2	14	1	0	2	0	21
2017	2	2	2	4	7	0	0	6	0	23

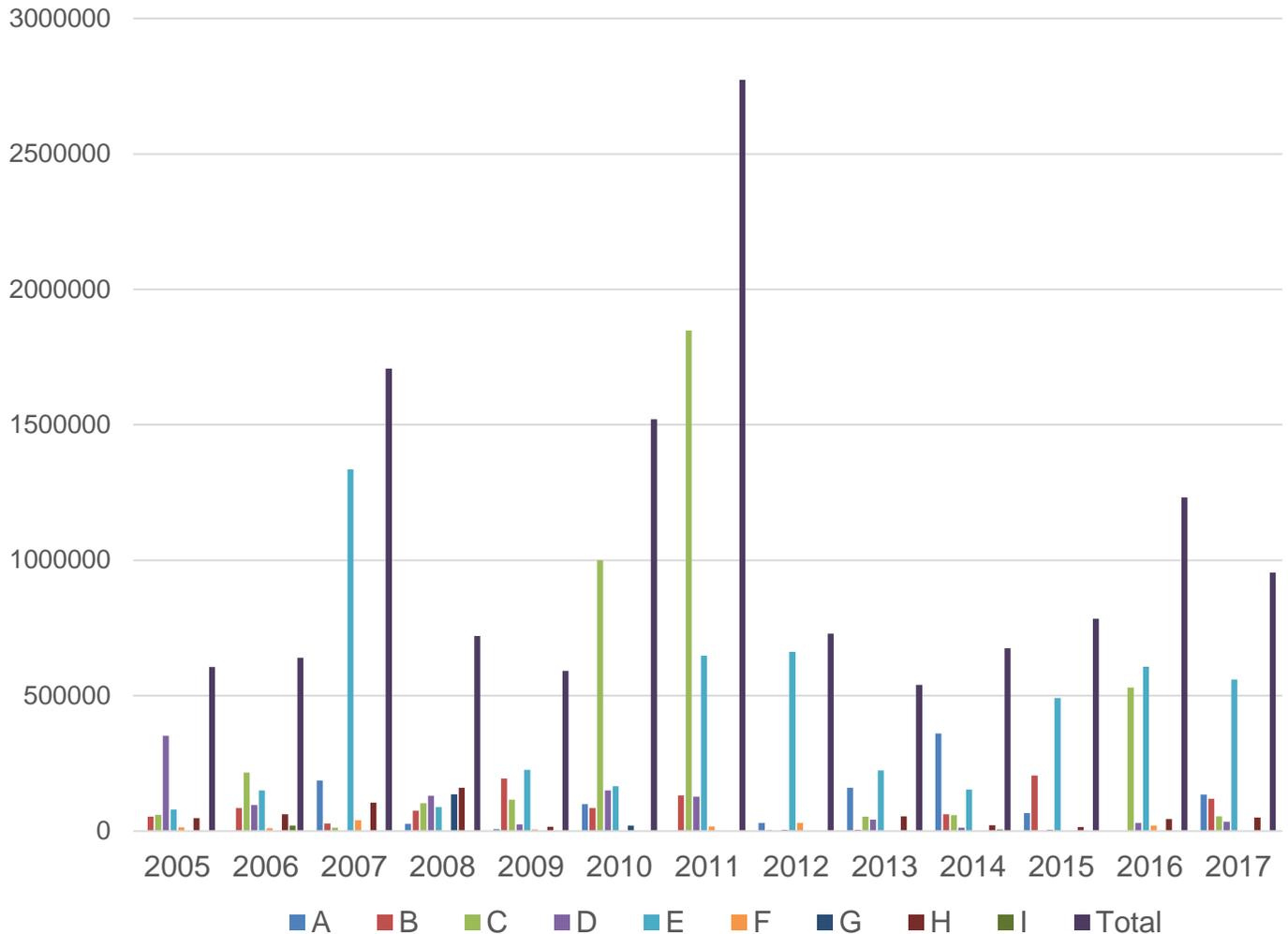


**Value of Agricultural Building Permits Issued
By Electoral Area (\$)**

(not adjusted for inflation)

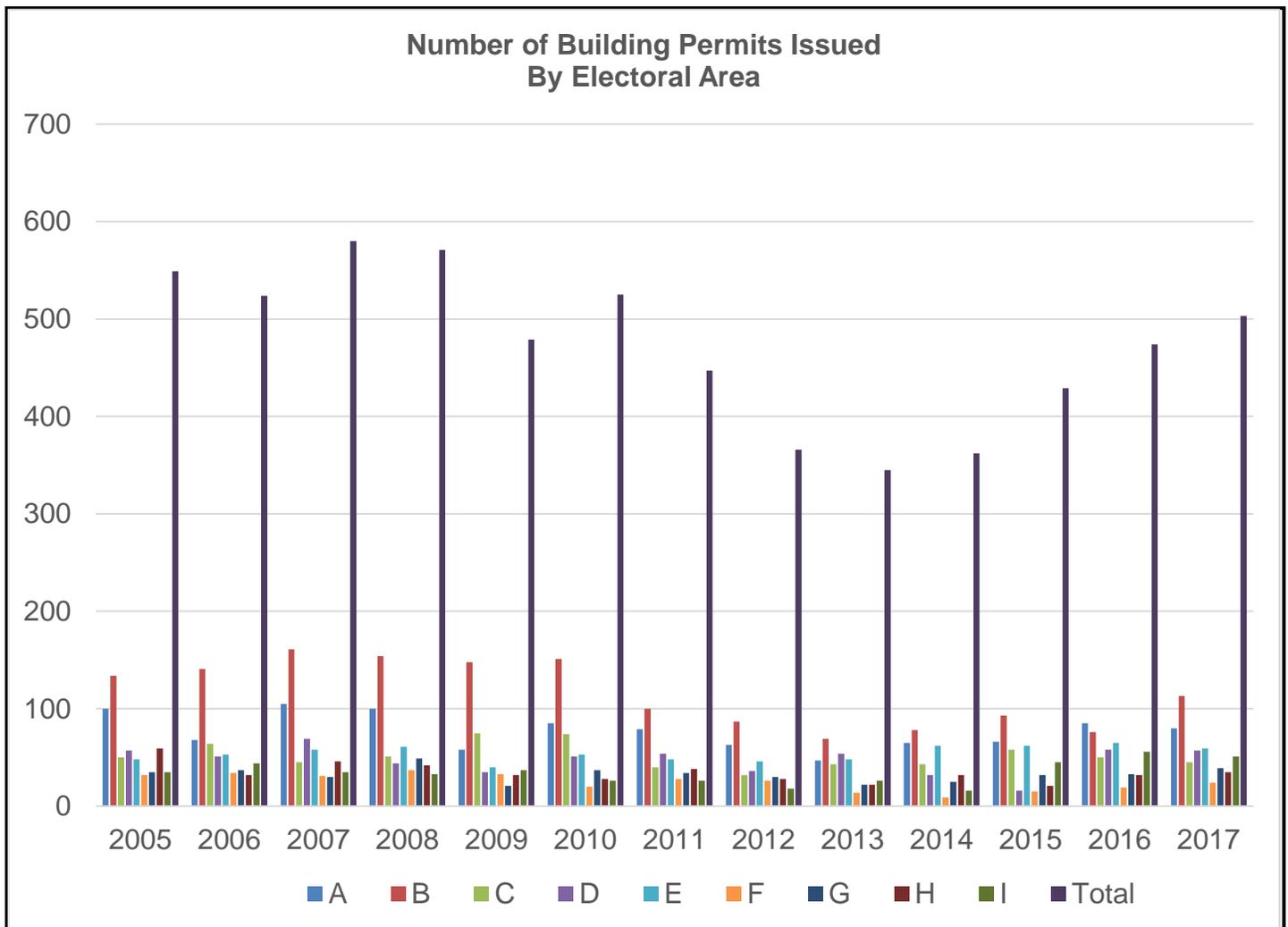
	A	B	C	D	E	F	G	H	I	Total
2005	0	53,500	60,050	351,084	79,575	13,468	0	47,880	0	605,557
2006	0	85,000	216,000	96,780	150,000	10,000	0	61,880	20,000	639,660
2007	186,140	27,958	12,500	0	1,335,311	40,000	0	105,000	0	1,706,909
2008	27,000	75,000	103,000	130,000	89,000	0	136,000	160,000	0	720,000
2009	7,500	194,000	116,500	25,000	226,560	6,000	0	15,500	0	591,060
2010	100,000	85,000	1,000,000	150,000	165,500	0	20,000	0	0	1,520,500
2011	0	132,000	1,848,055	127,000	648,000	17,280	0	1,000	0	2,773,335
2012	30,000	2,500	0	5,000	662,000	30,000	0	0	0	729,500
2013	160,000	5,000	53,500	42,000	223,700	0	0	55,000	0	539,200
2014	360,000	62,100	58,750	12,900	153,600	0	0	21,600	6,000	674,950
2015	67,000	205,600	0	5,000	491,200	0	0	15,000	0	783,800
2016	0	0	530,000	30,000	607,380	20,000	0	45,000	0	1,232,380
2017	135,000	119,000	55,000	35,000	559,745	0	0	50,000	0	954,545

**Value of Agricultural Building Permits Issued
By Electoral Area**



3.13 TOTAL BUILDING PERMITS ISSUED

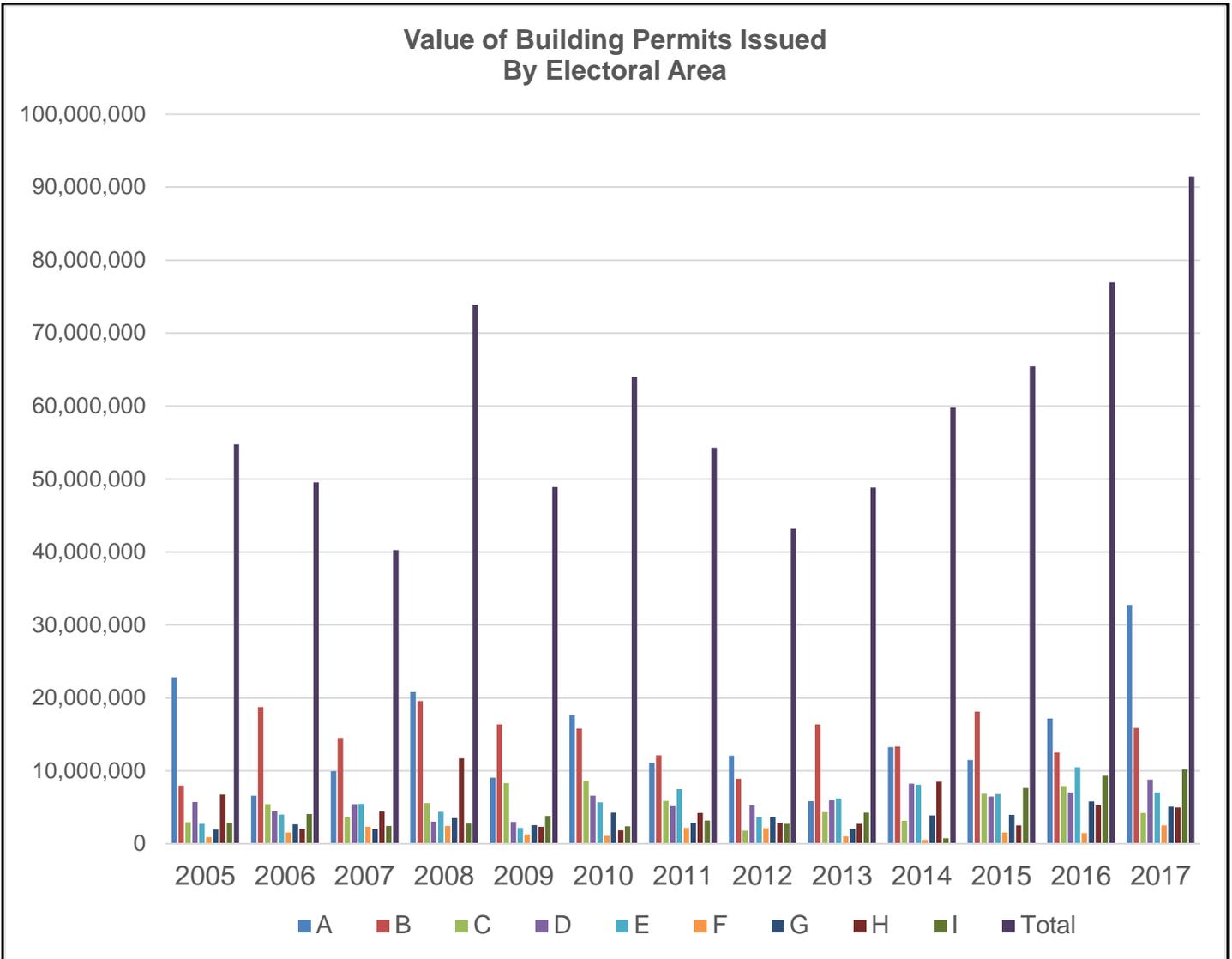
Number of Building Permits Issued By Electoral Area										
	A	B	C	D	E	F	G	H	I	Total
2005	100	134	50	57	48	32	35	59	35	549
2006	68	141	64	51	53	34	37	32	44	524
2007	105	161	45	69	58	31	30	46	35	580
2008	100	154	51	44	61	37	49	42	33	571
2009	58	148	75	35	40	33	21	32	37	479
2010	85	151	74	51	53	20	37	28	26	525
2011	79	100	40	54	48	28	34	38	26	447
2012	63	87	32	36	46	26	30	28	18	366
2013	47	69	43	54	48	14	22	22	26	345
2014	65	78	43	32	62	9	25	32	16	362
2015	66	93	58	16	62	15	32	21	45	429
2016	85	76	50	58	65	19	33	32	56	474
2017	80	113	45	57	59	24	39	35	51	503



Value of Building Permits Issued By Electoral Area (\$)

(not adjusted for inflation)

	A	B	C	D	E	F	G	H	I	Total
2005	22,809,928	7,992,804	2,950,152	5,722,929	2,747,703	921,178	1,940,979	6,730,677	2,906,641	54,722,991
2006	6,584,207	18,737,145	5,438,000	4,446,146	4,024,289	1,549,602	2,684,099	2,008,094	4,075,384	49,546,966
2007	9,967,006	14,507,915	3,649,067	5,416,948	5,483,001	2,319,331	1,989,012	4,431,433	2,426,116	40,254,767
2008	20,801,070	19,568,788	5,600,619	3,040,130	4,399,111	2,451,067	3,520,454	11,726,787	2,789,179	73,897,195
2009	9,059,390	16,362,901	8,298,355	3,006,675	2,175,055	1,285,150	2,544,605	2,336,320	3,837,790	48,906,241
2010	17,617,443	15,778,185	8,612,319	6,602,190	5,712,804	1,083,166	4,291,410	1,831,252	2,407,105	63,935,874
2011	11,107,820	12,134,383	5,874,950	5,190,470	7,493,440	2,193,455	2,871,655	4,244,980	3,182,750	54,293,903
2012	12,078,370	8,897,047	1,802,775	5,297,545	3,678,836	2,135,070	3,671,525	2,837,760	2,761,122	43,160,050
2013	5,858,495	16,345,398	4,353,645	5,977,567	6,228,470	1,022,610	2,034,730	2,730,690	4,281,390	48,832,995
2014	13,259,181	13,327,625	3,137,993	8,239,245	8,085,545	543,020	3,905,910	8,506,790	768,340	59,773,649
2015	11,504,969	18,106,175	6,851,563	6,476,890	6,802,697	1,549,880	3,983,810	2,511,950	7,654,610	65,442,544
2016	17,188,255	12,510,516	7,920,359	7,029,390	10,477,065	1,477,792	5,795,590	5,293,960	9,318,215	76,951,142
2017	32,749,458	15,886,695	4,227,070	8,793,485	7,044,265	2,500,800	5,087,302	4,972,340	10,190,140	91,451,555





STAFF REPORT TO COMMITTEE

DATE OF REPORT February 26, 2018
MEETING TYPE & DATE Electoral Area Services Committee Meeting of March 7, 2018
FROM: Development Services Division
 Land Use Services Department
SUBJECT: Development Variance Permit Application No. 01-A-17DVP
 (653 Sentinel Drive)
FILE: 01-A-17DVP

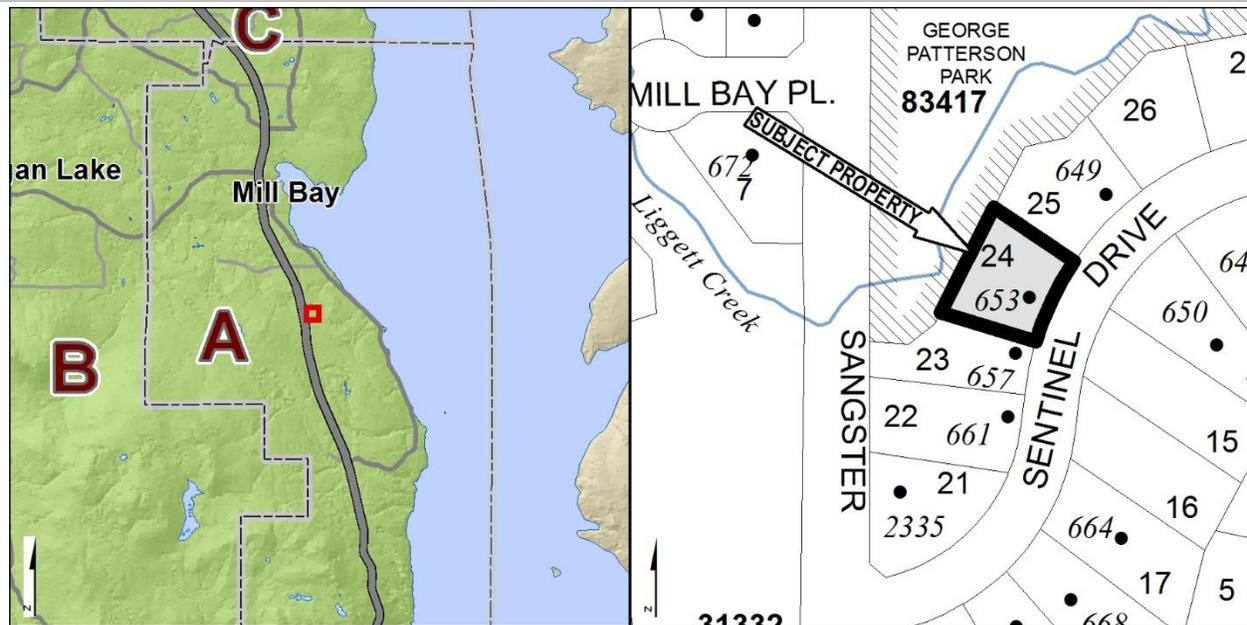
PURPOSE/INTRODUCTION

The purpose of this report is to present a request to vary the maximum height of a single family dwelling located in Sentinel Ridge.

RECOMMENDED RESOLUTION

That it be recommended to the Board that Application No. 01-A-17DVP (653 Sentinel Road) to vary Section 10.9(4) of Zoning Bylaw No. 3520 to increase the maximum permitted height of a principal residential building from 7.5 metres to 7.97 metres be approved.

LOCATION MAP



BACKGROUND

Location of Subject Property: 653 Sentinel Drive
Legal: Lot 24, District Lot 80, Malahat District, Plan VIP88932
Size of Parcel: 0.132 ha (0.326 ac)
Zoning: R-3

<u>Plan Designation:</u>	Village Residential
<u>Use of Property:</u>	Residential
<u>Water:</u>	Mill Bay Waterworks
<u>Sewage Disposal:</u>	Sentinel Ridge Community Sewer (CVRD)
<u>Fire Protection:</u>	Mill Bay Volunteer Fire Department
<u>Agricultural Land Reserve:</u>	N/a
<u>Archaeological Sites:</u>	None identified
<u>Environmentally Sensitive Areas:</u>	No

APPLICATION SUMMARY

The dwelling on the subject property is in the final stage of construction. The CVRD requires height surveys be provided during the truss construction phase, and it was identified that the structure exceeds the maximum 7.5 metre height requirement of the R-3 Zone. Since the height of the dwelling was determined to be 7.97 metres, the applicant has elected to apply for a variance to obtain approval for the increased height (see attachments).

The applicant has submitted two applications for height variances, here at 653 Sentinel Drive and across the street at 668 Sentinel Drive (02-A-17DVP). Three other height variance applications are the subject of current applications.

Although houses have been built on most of the lots in this subdivision, it is significant to note that 14 height DVP applications are on record since 2007 within the two subdivision plans totaling 87 lots. The last application was near the top of the hill to the south of the subject lot at 612 Terrel Court (02-A-16DVP). The unusually high number of height variances have been due to a variety of issues discussed in the planning analysis below.

COMMISSION / AGENCY / DEPARTMENTAL CONSIDERATIONS

Surrounding Property Owner Notification and Response:

A total of 26 letters were mailed-out or hand delivered to owners and occupants within 60 m as required pursuant to CVRD *Development Application and Procedures and Fees Bylaw No. 3275*. The notification letter described the purpose of this application and requested comments regarding this variance within a recommended time frame. To date, no letters have been received in reply.

OFFICIAL COMMUNITY PLAN/POLICY CONSIDERATIONS

Policy 4.1.4 of the Mill Bay Village Plan states, "*The implementing zoning bylaw will provide a separate height regulation for lands within the Village Residential Designation (R) that are located east of the Trans Canada Highway, to limit the height of buildings.*"

The South Cowichan Zoning Bylaw specifies a maximum height of 7.5 metres from the average natural grade for principal residential buildings on the east side of the Trans Canada Highway.

PLANNING ANALYSIS

According to the surveyor who created the subdivision plan, the developer's original intent was to create a development where a view from one house would not be blocked by other houses. This intention was reflected in the building scheme registered on title of all the lots (see Attachment H – Registered Building Scheme FB0417129) where plans were to be reviewed by a developer representative. In addition, a reference plan (see Attachment I) shows most house building envelopes, an estimated main floor elevation (MFE), and often a peak elevation. This drawing may have led to confusion regarding previous height variances, but the subject property has no MFE indicated.

In Zoning Bylaw No. 3520, height is calculated by first determining the *average existing natural grade* (see Zoning Bylaw No. 3520, p.11). A benchmark elevation provided to the builder by the surveyor prior to construction could be misleading, as it would reflect current conditions where fill may have been brought in, and may not reflect the *average existing natural grade* as defined in the zoning bylaw.

When the house was substantially built, a height survey was undertaken which showed the *average grade* at 81.49 m, the existing MFE at 82.27 m and the peak height at 89.46 m. Although the surveyed height of the building from the MFE is 7.19 m (see Attachment G), the calculation from 81.49 m gives a height from the surveyor's average grade at 7.97 m.

653 Sentinel			
label	applicant drawing	Height Survey	building scheme
avg grade	81.00	81.49	N/A
MFE	81.30	82.27	N/A
MFE - Avg gr*	0.30	0.78	N/A
Ridge	+ht=88.38	89.46	N/A
Height	7.38	7.97	N/A
Ht dif		0.59	
* = not drawn to scale			

Building Bylaw No. 3422 requires applicants to provide a site plan showing *the existing natural grade (may require BC Land Surveyor document) and the geodetic elevation of the main floor*. The building plans show the building height from foundation to ridge at 7.38 m, which is measured from an average grade of 81.00 m. The main floor foundation elevation (MFF or MFE) is indicated at 81.30 m.

The elevations shown on the building plans differ significantly from the height survey plan. The building plans may correctly show a 0.30 m (1') difference between average grade and MFE, but the surveyed MFE is 0.78m (~2' 6"), above the surveyed average grade of 81.49m (see Attachment F - Enlarged House Elevation, and drawing No. 1 A4, Attachment E – Building Plans). The building plan elevation points are not shown to scale. The height survey confirms that the height was not measured from the *average existing natural grade* (see Zoning Bylaw No. 3520, p.11 wording), labelled on the design drawing as *average grade*. Subsequently, the house was then built 0.47 m (~1' 6 ½") over the required 7.5 m (88.99 m elevation).

It is not clear where the error was made, by the house designer, the surveyor or builder in interpreting the elevation required from which to build the foundation (see Attachment C – Applicant Letter).

As noted, houses have been built on most of the lots in this subdivision, but there have been a higher than normal number of height DVP applications here since subdivision approval in 2007. Clearly, diligence from all parties involved is ⁴³ required, from the developer (in writing a clear

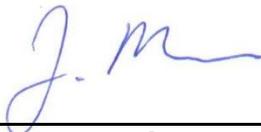
building scheme), to the development technician (Ministry of Transportation subdivision review), surveyor, builder, owner and Building Official/ plan reviewer. Staff will investigate ways to infuse more clarity into the development and construction process, given appropriate resources.

No lots overlook the subject property, so this house will not alter the views from any neighbouring dwelling, so staff recommend Option 1 below.

OPTIONS

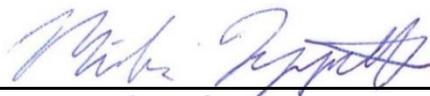
1. That it be recommended to the Board that Development Variance Permit Application No. 01-A-17DVP (653 Sentinel Drive) to vary Section 10.9(4) of Zoning Bylaw No. 3520 to increase the maximum permitted height of a principal residential building from 7.5 metres to 7.97 metres be approved; and
2. That Development Variance Permit Application No. 01-A-17DVP (653 Sentinel Drive) be denied.

Prepared by:

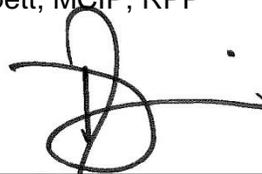


Jon Munn, MCIP, RPP
 Planner II

Reviewed by:



Mike Tippett, MCIP, RPP
 Manager



Ross Blackwell, MCIP, RPP, A. Ag.
 General Manager

ATTACHMENTS:

- Attachment A – Aerial Photo Map
- Attachment B – Zoning Map
- Attachment C – Applicant Letter
- Attachment D – Site Photos 653 Sentinel Drive
- Attachment E – Building Plans
- Attachment F – Enlarged House Plan 653 Sentinel Drive
- Attachment G – Height Survey
- Attachment H – Registered Building Scheme FB0417129
- Attachment I – Lot Plans with Proposed Building Elevations
- Attachment J – Sentinel Ridge Topographical Survey
- Attachment K – Referral Reply Letters
- Attachment L – DRAFT Development Variance Permit



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

The Cowichan Valley 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.

File: 01-A-17DVP

Google Earth Photo (2016)

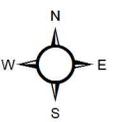
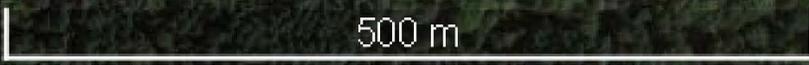
45

SUBJECT PROPERTY



Google Earth

Image © 2017 DigitalGlobe



R1



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

The Cowichan Valley 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.

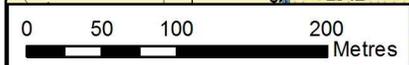
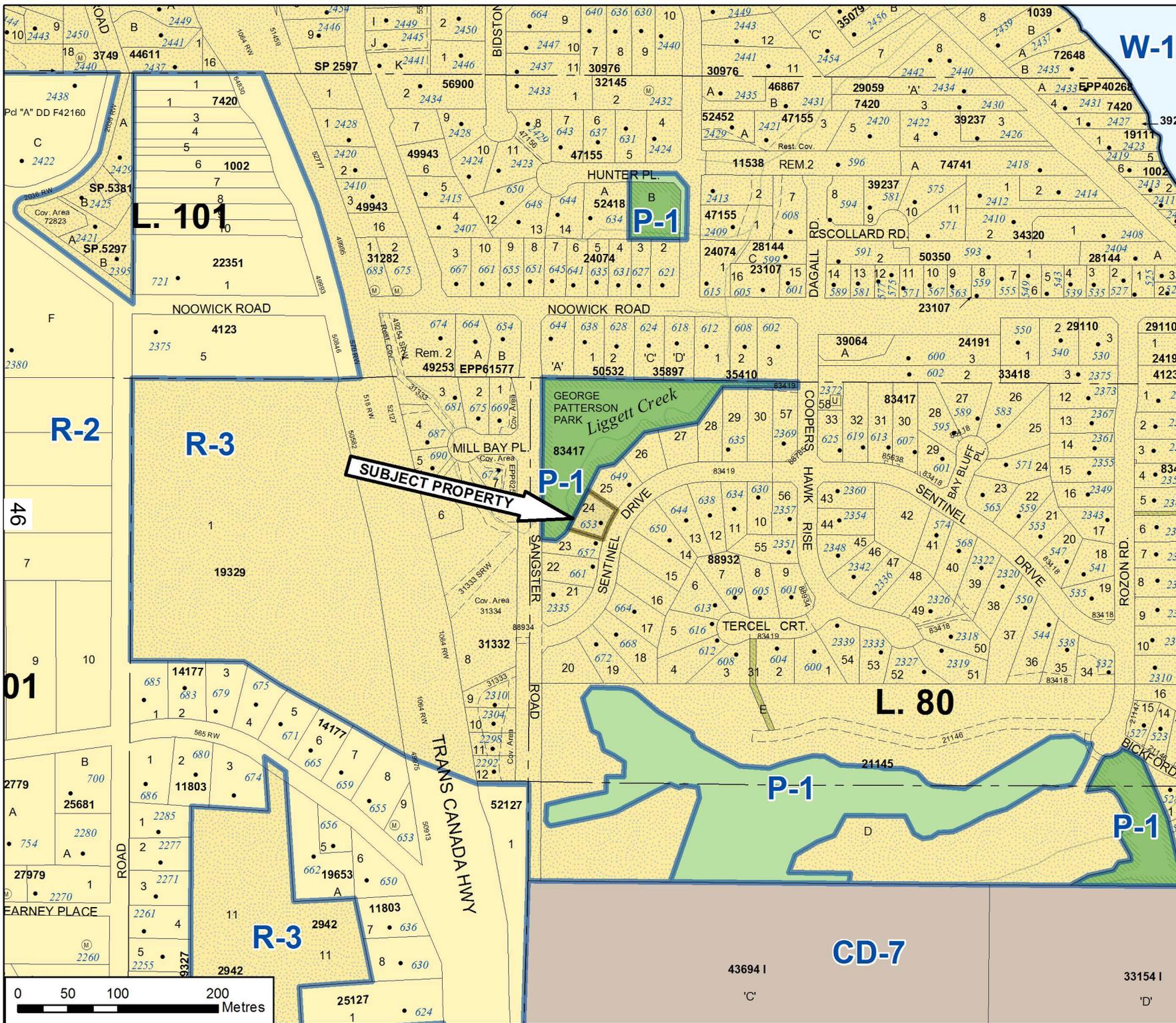
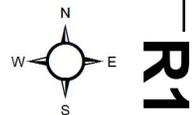
The original Bylaws should be consulted for all purposes of interpretation and application of the Bylaws.

File: 01-A-17DVP

ZONING

Legend

- Subject Property
- Zoning AC



**CVRD Planning, Electoral Area Services Committee, and the Regional Board
175 Ingram Street
Duncan, BC
V9L 1N8**

RE: Development Permit Applications for 668 and 653 Sentinel Drive, Mill Bay

To Whom It May Concern,

These two Development Variance Permit applications are both being submitted to request an increase to the maximum allowable heights of the homes; Plus .56m (22") in regard to 668 Sentinel Drive, and plus .47m (18.5") in regard to 653 Sentinel Drive. Both homes are at lock-up stage or beyond (photos attached), and it would be difficult and prohibitively expensive to modify either home at this time to comply with the height restriction.

How did this happen? As the builder I contracted with a BC Land Surveyor to set benchmark heights for both homes prior to excavation. At 668 the main floor elevation was built to the benchmark and the home to the plans. However, the Building Location Certificate shows that the home is over the allowable height. The surveyor blames the designer for the error. Similar circumstances at 653 except that the benchmark was offset upwards and this information was not clearly communicated to the builder, resulting in the home being over the allowable height.

Neither home was purposely constructed over height for any kind of gain, and neither one adversely affects any neighbouring properties or sightlines. On behalf of the owners I respectfully request your positive consideration of both applications.

Thank you,

John Kyle
Memory Lane Construction Ltd.
PO Box 2541 Cowichan Bay, BC V0R 1N0
250-514-8201

Photos for
Development Variance Permit Application
01-A-17DVP, 653 Sentinel Dr.



653 Sentinel (centre)



Subject Property Looking East, note Slope of Sentinel Dr



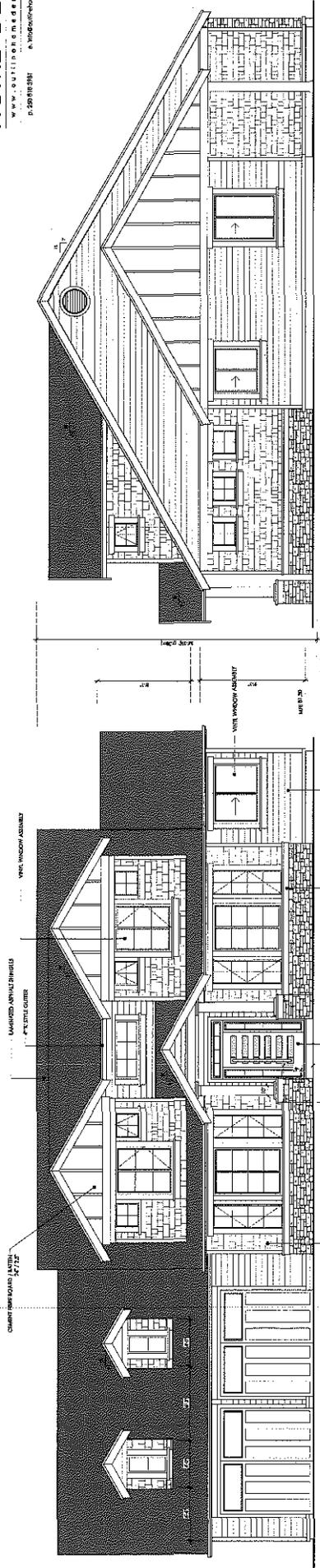
Adjacent 657 Sentinel Dr, Southern neighbour



Adjacent 649 Sentinel Dr, Northern neighbour

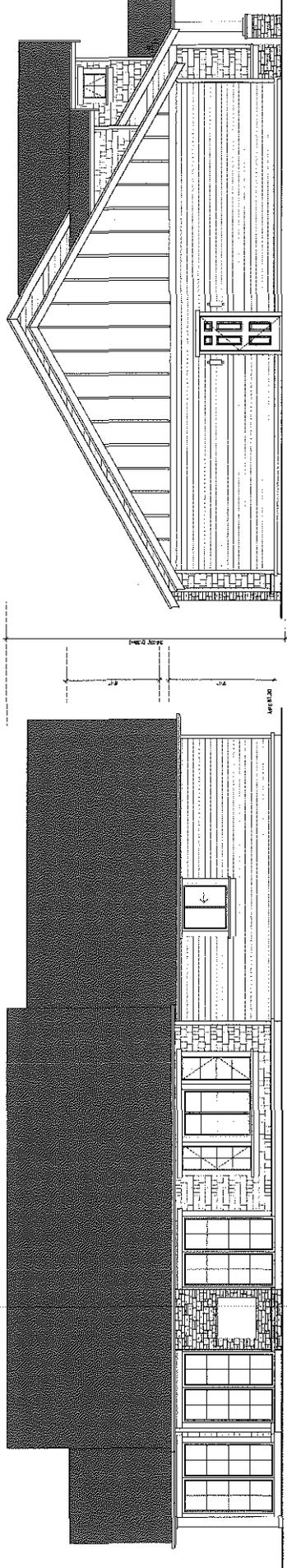


Rear of Subject Property (Northwest) Adjacent Covenant and Park



1 East Elevation
Scale: 1/4" = 1'-0"

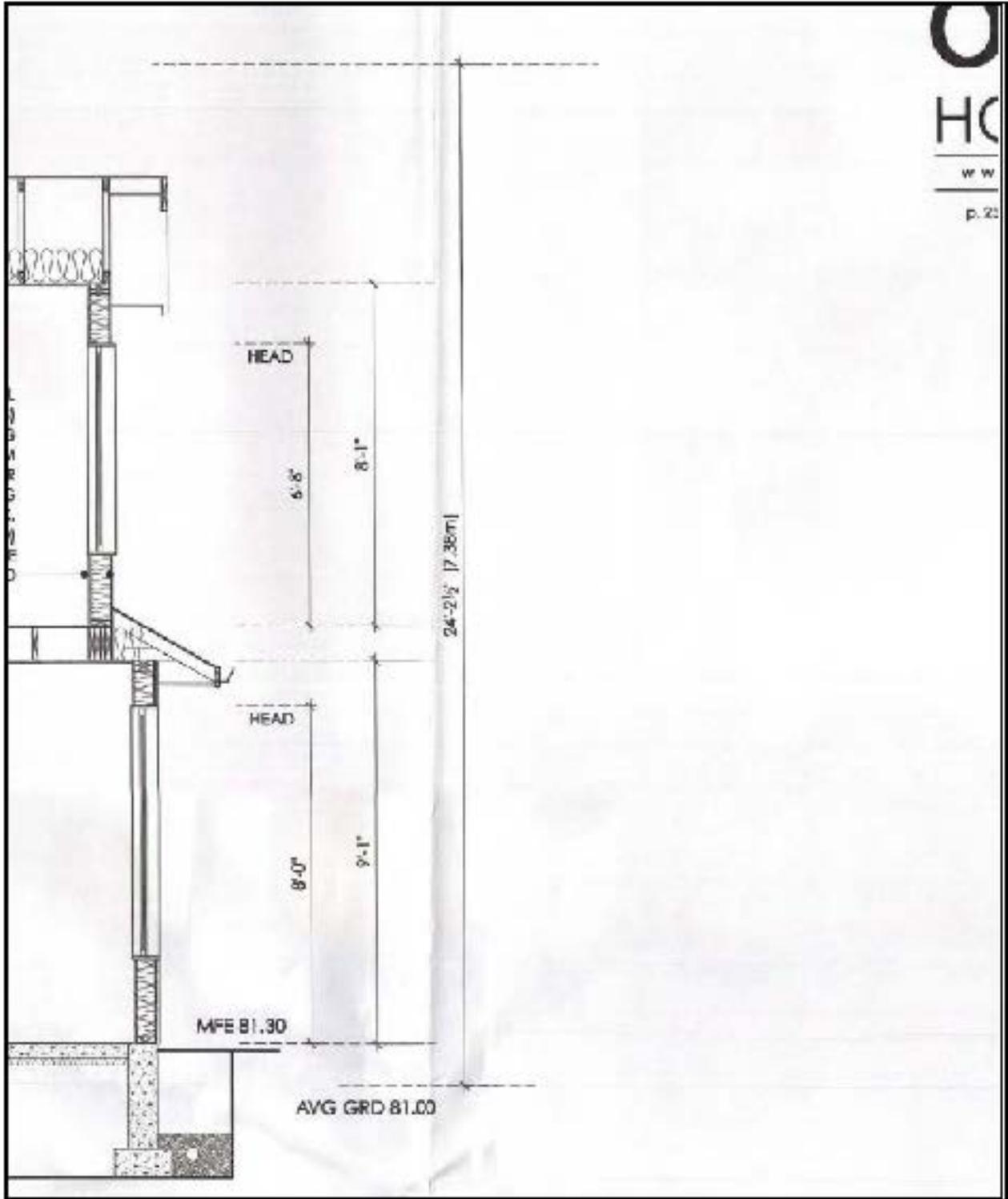
2 North Elevation
Scale: 1/4" = 1'-0"



3 West Elevation
Scale: 1/4" = 1'-0"

4 South Elevation
Scale: 1/4" = 1'-0"

453 Sentinel Drive Single Family Residence	
Building Elevations	
DATE	10/17/17
DESIGNER	DAVID W. BROWN
PROJECT NO.	1001
DATE	NOV 3, 2017
SCALE	1/4" = 1'-0"
PROJECT	PERM
DATE	11/13/17
SCALE	1/4" = 1'-0"
PROJECT	PERM



J.E. ANDERSON & ASSOCIATES
 B.C. Land Surveyors - Consulting Engineers
 Victoria, Nanaimo and Parksville, B.C.
 Phone: 250-727-2214 Fax: 250-727-3395

B.C. LAND SURVEYORS BUILDING LOCATION CERTIFICATE

File: 30492 Civic: 653 Sentinel Drive, Mill Bay, B.C.
 Legal: Lot 24, District Lot 80, Malahat District, Plan VIP88932
 Dimensions are in metres and are derived from Plan VIP88932
 This sketch does not constitute a redefinition of the legal boundaries hereon described and is not to be used in any manner which would assume same.
 This sketch was prepared for confirmation of the CVRD building bylaw and is for the exclusive use of our client: Memory Lane Construction
 This building location certificate has been prepared in accordance with the Professional Reference Manual and is Certified Correct this 22nd day of August, 2017.

This document is not valid unless originally signed and sealed

 D.R. Carrier, B.C.L.S.

© Copyright 2017 J.E. Anderson & Associates. All rights reserved. No person may copy, reproduce transmit or alter this document in whole or in part without the consent of the signatory.
 The signatory accepts no responsibility or liability for any damages that may be suffered by a third party as a result of any decisions made, or actions taken based on this document.
 Subject to charges, legal notations, and interests shown on: Title No. CA5269524 (PID 028-603-834)



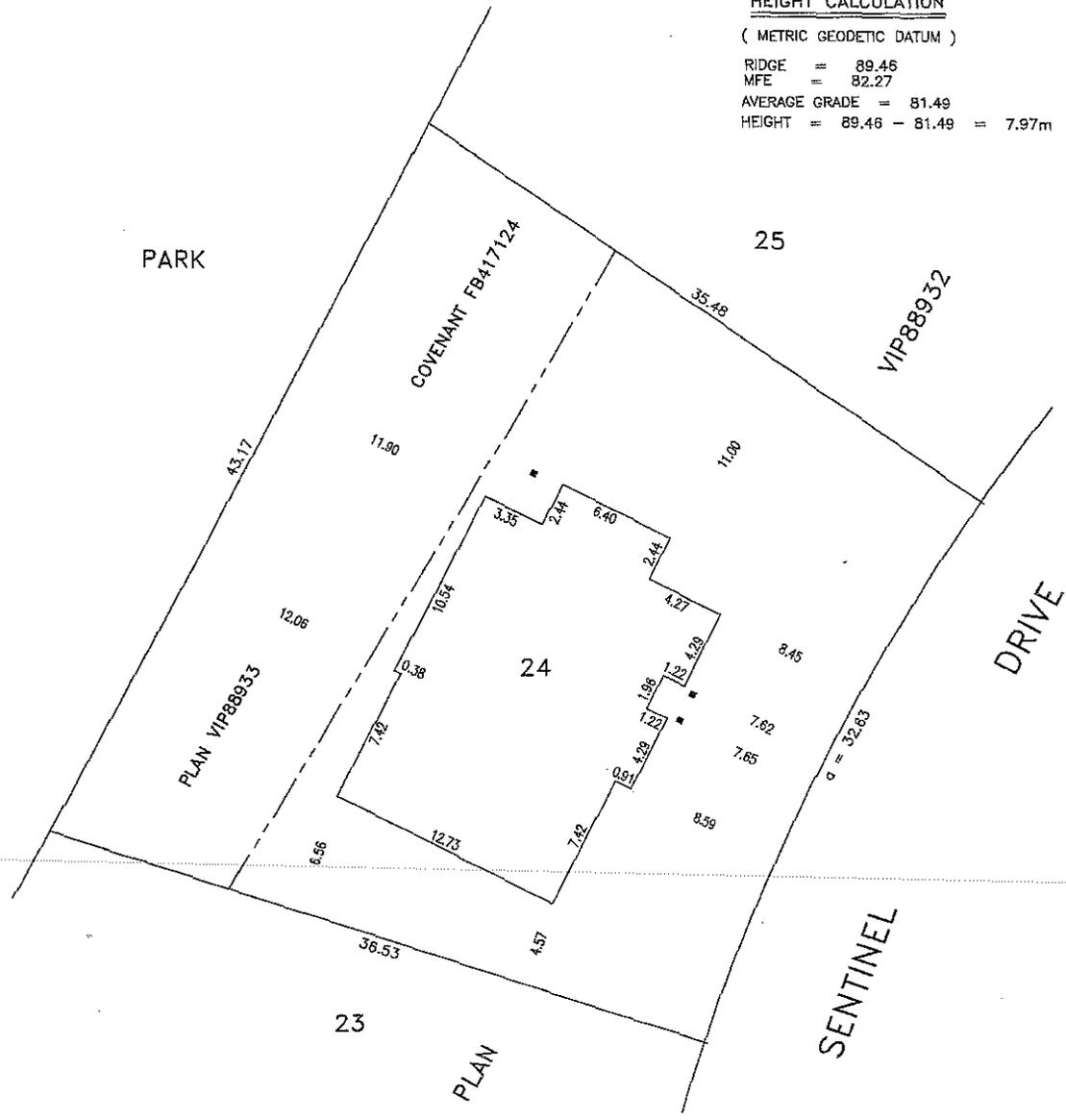
NOTE : OFFSETS ARE SHOWN TO EXTERIOR OF CONCRETE FOUNDATION UNLESS OTHERWISE NOTED.

■ DENOTES SUPPORT POST

HEIGHT CALCULATION

(METRIC GEODETTIC DATUM)

RIDGE = 89.46
 MFE = 82.27
 AVERAGE GRADE = 81.49
 HEIGHT = 89.46 - 81.49 = 7.97m



-3 JUN 2011 13 35

FB0417129

LAND TITLE ACT
Form 35
(Section 216(1))

DECLARATION OF BUILDING SCHEME

NATURE OF INTEREST CHARGE: Statutory Building Scheme

HEREWITH FEES OF: \$73.40

Address of person entitled to apply to register this building scheme:

0704315 B.C. Ltd., c/o 1626 Garnet Road, Victoria, BC, V8P 3C8

7/8

Full name, address, and telephone number of person presenting application:

MULLIN DEMEO, Barristers and Solicitors

1626 Garnet Road, Victoria, B. C., V8P 3C8 Phone: 477-3327

File: Sentinel Ridge/50087/JDM/jan

1C

hw 6/3/2011 1:35:48 PM 2 1

Charge 1 \$73.40

Signature of Applicant or Solicitor or Authorized Agent

sub G. Drake

0704315 B.C. LTD. declares that:

1. 0704315 B.C. LTD. is the registered owner in fee simple of the following land (the "Lots"):

Lots 1 to 30, of District Lot 80, Malahat District, Plan VIP 88932

2. 0704315 B.C. LTD. hereby creates a building scheme relating to the Lots.

3. A sale of any of the Lots is subject to the restrictions enumerated in the schedule attached or annexed hereto.

hw 6/13/2011 1:30:11 PM 2 1

Defect 1 \$32.70

4. The restrictions shall be for the benefit of all the Lots.

OFFICER SIGNATURE(S)

EXECUTION DATE

JOHN D. MULLIN
BARRISTER & SOLICITOR
1626 GARNET ROAD
VICTORIA, BC V8P 3C8

Y	M	D
10	10	12

0704315 B.C. LTD.
by its authorized signatory:
signatory

William Beadle
Name: William Beadle

**SOLICITOR OR NOTARY
OFFICER CERTIFICATION**

Your signature constitutes a representation that you are a solicitor, notary public or other person authorized by the Evidence Act, R.S.B.C. 1979, c. 116, to take affidavits for use in British Columbia and certifies the matters set out in Part 5 of the Land Title Act as they pertain to the execution of this instrument.

CONSENT AND PRIORITY AGREEMENT OF CHARGE HOLDERS

We, COAST CAPITAL SAVINGS CREDIT UNION, the holder of the following registered charges, consent to the registration of the above Declaration of Building Scheme and agree that it shall have priority over our Mortgage No. CA152685 and Assignment of Rents No. CA152686.

OFFICER SIGNATURE(S)

EXECUTION DATE

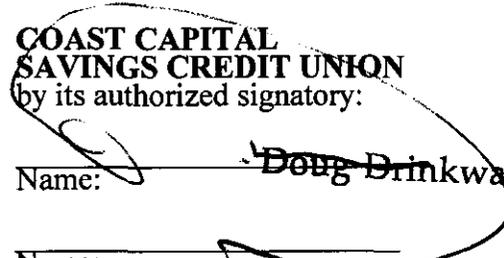


HEINZ SZCZYPIORKOWSKI
A Commissioner For Taking Affidavits
For British Columbia
SUITE 400 - 645 TYEE ROAD
VICTORIA, BC V9A 6X5

Y	M	D
2010	10	15

COAST CAPITAL SAVINGS CREDIT UNION
by its authorized signatory:

Name:

 **Doug Drinkwater**

Name:

(as to both signatures)

SOLICITOR OR NOTARY

OFFICER CERTIFICATION

Your signature constitutes a representation that you are a solicitor, notary public or other person authorized by the Evidence Act, R.S.B.C. 1979, c. 116, to take affidavits for use in British Columbia and certifies the matters set out in Part 5 of the Land Title Act as they pertain to the execution of this instrument.

**BUILDING SCHEME
SCHEDULE OF RESTRICTIONS**

1. DEFINITIONS

- (a) "Developer" means 0704315 B.C. LTD. and includes its assigns and successors.
- (b) "Lot" means any of the 30 residential building lots, in whatever phase, intended to be created by subdivision of the Land, and "Lots" has a corresponding meaning.
- (c) Purchasers and their successors in title of the Lots are subject to this Statutory Building Scheme and are hereinafter referred to as the "Owner" or "Owners".

2. APPROVAL OF PLANS

- (a) No dwelling, building or other improvements shall be constructed, placed, erected or maintained on any Lot unless and until plans and specifications showing compliance in all respects with these restrictions and providing elevations, siting, size, colour scheme, landscaping and all materials to be used have been submitted to and approved in writing by the Developer's authorized agent ("Design Consultant") who shall have the right and power to approve or reject such plans and specifications. For the purposes of this Statutory Building Scheme, construction shall include grading, filling or other preparatory work on any Lot.
- (b) The Developer shall have the right to waive any terms or conditions in whole or in part with respect to any unsold Lot charged by this Statutory Building Scheme and any such waiver of any breach shall not negate or render such provision invalid or unenforceable with respect to any other Lot charged by this Statutory Building Scheme.

3. THE LOT

- (a) Site Requirements
 - (i.) No retaining wall shall be constructed on any Lot having an exposed height greater than 1.2 metres (4 feet). Any exposed concrete over 0.6 metres (2 feet) in height shall be architecturally treated.

Handwritten signature and initials, possibly 'PA' inside a circle, and a squiggle.

4. THE HOUSE

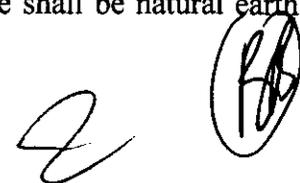
(a) House Size/Siting

- (i.) One level homes shall have a minimum gross floor area of 232.25 square metres (2,500 square feet), not including garage areas.
- (ii.) Two level homes shall have a minimum gross floor area on the first level of 139.35 square metres (1,500 square feet) and the second level of 92.90 square metres (1000 square feet), not including garage areas.
- (iii.) No house shall be constructed on any Lot unless a house siting plan has been approved by the Developer taking into account view corridors of surrounding Lots.

(b) Exterior Design

(i.) Specific exterior design details must include:

- (1) In general, the main materials used on the front of the house should be used on all other faces of the building.
- (2) The main exterior cladding shall be limited to rock or cultured stone, hardi-plank, wood siding and wood shakes/shingle siding. Stucco is permitted as an "accent only" exterior cladding material. A minimum of three types of exterior cladding shall be used. Exterior trim must be a minimum of 15.24 centimetres (6 inches).
- (3) No house shall be constructed on any Lot unless the front façade has the following features:
 - A) A timber-framed entry feature is required and further detailing such as wood trims around appropriate windows and doors is required.
 - B) Columns and garages must be trimmed to provide relief from a siding only front façade.
 - C) The design must be integrated in a related use of materials and complimentary colours.
- (4) No exposed concrete block is permitted. Exposed concrete foundation walls are not to exceed 0.5 metres (1.64 feet) in height.
- (5) The exterior colour scheme used for the house shall be natural earth tones and not primary colours.

Handwritten signature and initials in black ink, located at the bottom right of the page.

- (6) Fascia board colours must compliment the siding colour.
- (7) Front doors will have raised panels of solid wood construction. Decorative windows are permitted within the front door.
- (8) No house on a corner Lot shall be designed unless the house faces both streets with roof and/or wall treatments turning the exposed corner.

(c) Roof

- (i.) No Roofing materials other than "high profile" 30-year fibreglass shingles with raised ridge caps in a weathered wood or dark colour, cedar shakes or cedar shingles are permitted.
- (ii.) The roof pitch must be a minimum of 5:12. Flat roofs are not permitted.
- (iii.) No Gutters, rainwater leaders and soffits other than those painted to match trim colours or selected in a compatible colour if pre-finished are permitted. Any aluminium fascia gutter must be combined with wood fascia boards where appropriate to meet the requirements of this Building Scheme.

(d) Driveways and Garages

- (i.) Each dwelling shall have an enclosed area for a minimum of 2 parking spaces. All garages shall have closing wood doors with raised panels or other detailing and shall be stained/painted to match trim colours or complement the design of the house. Flat panel garage doors are not permitted.
- (ii.) Driveways shall be constructed of exposed aggregate, interlocking brick or a combination thereof. No gravel driveways or parking areas shall be constructed.
- (iii.) No buildings or driveways shall be constructed on the Lots unless provision to reduce storm water run-off from buildings and driveways has been made by the run-off from buildings, driveways and any other impervious surfaces constructed on a Lot being re-charged back to ground through suitable subsurface storm water management systems such as rock pits or exfiltration chambers and run-off from driveways which slope to the public road being intercepted at the property line by the provision of suitably designed and constructed absorbent strip such as grass-concrete or permeable interlocking concrete pavers.



5. GUIDELINES FOR THE STREETScape

- (a) Recreational Equipment, Commercial Equipment and Accessory Buildings
- (i.) Except for licensed passenger automobiles, vans and trucks which do not exceed a capacity of one ton, any vehicle including trailers, boats, motor homes, campers, recreational equipment and other similar objects on a Lot are required to be stored inside an enclosed space or behind fencing or screening to the side or rear of the house and shall not be visible from the street. Storage of these objects is not allowed in the front yard or the side yard along a flanking street.
 - (ii.) Any truck in excess of one ton capacity and commercial vehicles, equipment or machinery of any kind shall not be parked or stored anywhere on a Lot except as may be required for construction or repair of the home on the Lot.
 - (iii.) Accessory buildings shall not be constructed ahead of the front façade of the dwelling. Only one accessory building per Lot is allowed. All accessory buildings shall be finished in the same exterior materials and colours as the principal building.

6. LANDSCAPING

- (a) Landscaping
- (i.) To enhance a settled appearance on the Lots within the subdivision, the relevant Owner shall complete the street front of the Lot, front yard and side yard landscaping within 90 days after completion of house construction unless weather conditions make it impossible to do so.
 - (ii.) All front yard areas and any side yards fronting on either road within the subdivision shall be landscaped with a minimum of one tree per 8 metres (26.25 feet) of frontage. Each tree shall have a minimum caliper of 7 centimetres (2.75 inches) and a height of 1.5 metres (5 feet) or greater. There shall also be at least 9 shrubs in the front yard. Bedding areas containing shrubs, flowers and trees shall occupy a minimum of 20% of the front yard. Any area of the front yard or the side yards fronting roads within the subdivision which are not landscaped with bedding areas shall be turfed or seeded.
 - (iii.) A Sprinkler system is required for front and side yard landscaped/lawn areas.



7. FENCING

- (a) No fences shall be constructed in the front yard of a Lot other than metal vertical picket type fencing not exceeding a height of 1.5 metres (5 feet).
- (b) No fences on side yards shall extend further towards the front of the Lot than the front of the house, except in compliance with the requirements set out in 7(a) above.
- (c) No fences in the back yard and side yards (not including that portion of the side yards in front of the house) shall be constructed other than:
 - (i.) cedar split-rail fences;
 - (ii.) cedar board and/or lattice panel fences;
 - (iii.) hedges that serve as fences along property lines.
- (d) No fences in the back yard and side yards (not including that portion of the side yards in front of the house) shall be higher than 1.83 metres (6 feet).
- (e) No wire fencing (including page wire, barbed wire, chain link, chicken wire) shall be constructed or installed on a Lot, except at the rear property line where combined with tree hedging.

8. LOT CONDITION/CONSTRUCTION

- (a) No Owner shall allow debris, noxious weeds (i.e. thistles) or invasive plant species (i.e. scotch broom, gorse or ivy) to accumulate on a vacant Lot prior to construction of improvements.
- (b) No improvements shall be allowed to remain in an incomplete state and construction shall proceed diligently and continuously from commencement of the improvements until completion of all improvements in the manner approved by the Developer and in no case shall any improvements be incomplete within 12 months of commencement of the improvements for single family homes.
- (c) No dwelling on any Lot shall be occupied by any person until construction of such building has received final Building Approval by the Developer and an Occupancy Permit from the Cowichan Valley Regional District has been issued. No dwelling on any Lot shall be occupied by any person unless and until such dwelling, including the exterior thereof, is substantially finished.

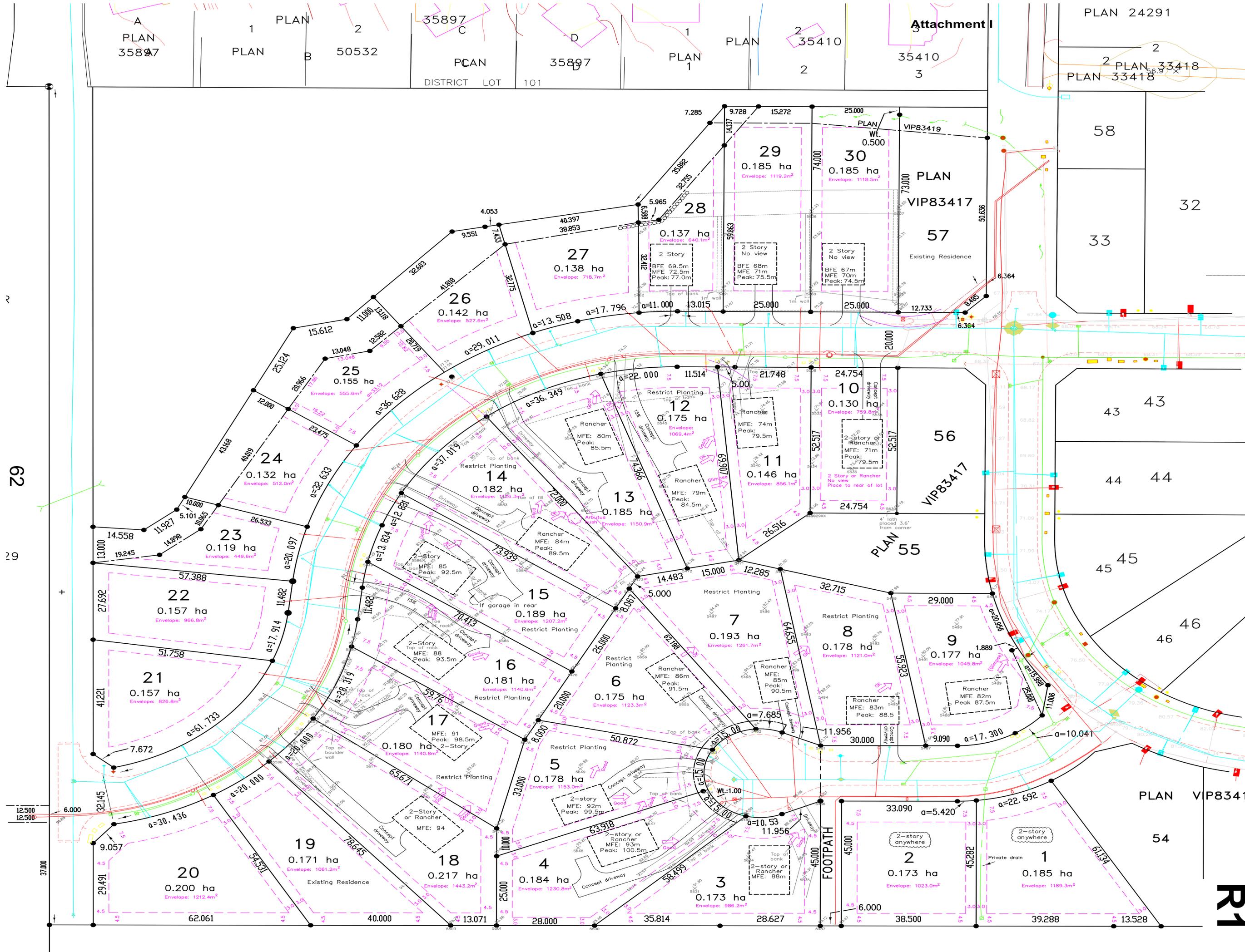
Handwritten signature and initials in black ink, consisting of a stylized 'Z' and a circular stamp containing the letters 'R1'.

9. GENERAL RESTRICTIONS

- (a) No pole, mast, clothesline, antenna, satellite dish or any other similar object of any kind shall be situated on any Lot or on the exterior of any building or improvement on any Lot, save and except for a single satellite dish of approximately .61 metres (2 feet) in diameter.
- (b) No billboard or "For Sale" sign of any character shall be erected, posted or displayed upon or about any part of any Lot other than signs not larger than 76.2 centimetres by 45.72 centimetres (30 inches by 18 inches).
- (c) No heat pumps or air-conditioning units shall be placed in buildings or on any Lot unless the location of the same has been included in the house siting plans and the sound level at the property lines of the Lot will not exceed 50 decibels.
- (d) No Owner or occupier of any Lot shall keep or permit to be kept animals of any kind or description whatsoever except for domesticated household pets which pets shall not be permitted to run wild or uncontrolled within the subdivision.
- (e) There shall not be stored, kept nor permitted to be kept or stored on any Lot any junk or wrecked or partially wrecked motor vehicles or any salvage materials or goods intended for commercial use or sale nor shall any waste or refuse be kept or stored upon any Lot.

END OF DOCUMENT

Handwritten signature and initials in black ink, consisting of a stylized 'Z' and a circled set of initials.



Attachment I

R1

PLAN 35897

PLAN 50532

PLAN 35897

PLAN 35410

PLAN 24291

PLAN 33418

PLAN VIP83417

PLAN 55

PLAN VIP83417

62

29

37,000

20
0.200 ha
Envelope: 1212.4m²

19
0.171 ha
Envelope: 1061.2m²
Existing Residence

18
0.217 ha
Envelope: 1443.2m²

4
0.184 ha
Envelope: 1230.8m²

3
0.173 ha
Envelope: 986.2m²

2
0.173 ha
Envelope: 1023.0m²

1
0.185 ha
Envelope: 1189.3m²

21
0.157 ha
Envelope: 826.8m²

22
0.157 ha
Envelope: 966.8m²

23
0.119 ha
Envelope: 449.6m²

24
0.132 ha
Envelope: 512.0m²

25
0.155 ha
Envelope: 555.6m²

26
0.142 ha
Envelope: 527.6m²

27
0.138 ha
Envelope: 718.7m²

28
0.137 ha
Envelope: 640.1m²
2 Story
BFE 69.5m
MFE 72.5m
Peak: 77.0m

30
0.185 ha
Envelope: 1118.5m²
2 Story
No view
BFE 68m
MFE 71m
Peak: 75.5m

29
0.185 ha
Envelope: 1119.2m²
2 Story
No view
BFE 67m
MFE 70m
Peak: 74.5m

12
0.175 ha
Envelope: 1069.4m²
Rancher
MFE: 80m
Peak: 85.5m

11
0.146 ha
Envelope: 856.1m²
Rancher
MFE: 79m
Peak: 84.5m

13
0.185 ha
Envelope: 1150.9m²
Rancher
MFE: 84m
Peak: 89.5m

14
0.182 ha
Envelope: 1036.3m²
Restrict Planting

15
0.189 ha
Envelope: 1207.2m²
Restrict Planting

16
0.181 ha
Envelope: 1140.6m²
Restrict Planting

17
0.180 ha
Envelope: 1140.8m²
MFE: 91
Peak: 98.5m
2-Story

5
0.178 ha
Envelope: 1153.0m²
2-Story
MFE: 92m
Peak: 99.5m

6
0.175 ha
Envelope: 1123.3m²
Rancher
MFE: 86m
Peak: 91.5m

7
0.193 ha
Envelope: 1261.7m²
Rancher
MFE: 85m
Peak: 90.5m

8
0.178 ha
Envelope: 1121.0m²
Rancher
MFE: 83m
Peak: 88.5

9
0.177 ha
Envelope: 1045.8m²
Rancher
MFE: 82m
Peak: 87.5m

2-story anywhere

2-story anywhere

FOOTPATH

Private drain

Rancher

Rancher

Rancher

2-Story

Restrict Planting

Restrict Planting

2-Story

2-Story

Rancher

Rancher

Rancher

Rancher

2-story anywhere

2-story anywhere

FOOTPATH

Private drain

Rancher

Rancher

Rancher

2-Story

Restrict Planting

Restrict Planting

2-Story

2-Story

Rancher

Rancher

Rancher

Rancher

2-story anywhere

2-story anywhere

FOOTPATH

Private drain

Rancher

Rancher

Rancher

2-Story

Restrict Planting

Restrict Planting

2-Story

2-Story

Rancher

Rancher

Rancher

Rancher

2-story anywhere

2-story anywhere

FOOTPATH

Private drain

Rancher

Rancher

Rancher

2-Story

Restrict Planting

Restrict Planting

2-Story

2-Story

Rancher

Rancher

Rancher

Rancher

2-story anywhere

2-story anywhere

FOOTPATH

Private drain

Rancher

Rancher

Rancher

2-Story

Restrict Planting

Restrict Planting

2-Story

2-Story

Rancher

Rancher

Rancher

Rancher

2-story anywhere

2-story anywhere

FOOTPATH

Private drain

Rancher

Rancher

Rancher

2-Story

Restrict Planting

Restrict Planting

2-Story

2-Story

Rancher

Rancher

Rancher

Rancher

2-story anywhere

2-story anywhere

FOOTPATH

Private drain

Rancher

Rancher

Rancher

2-Story

Restrict Planting

Restrict Planting

2-Story

2-Story

Rancher

Rancher

Rancher

Rancher

2-story anywhere

2-story anywhere

FOOTPATH

Private drain

Rancher

Rancher

Rancher

2-Story

Restrict Planting

Restrict Planting

2-Story

2-Story

Rancher

Rancher

Rancher

Rancher

2-story anywhere

2-story anywhere

FOOTPATH

Private drain

Rancher

Rancher

Rancher

2-Story

Restrict Planting

Restrict Planting

2-Story

2-Story

Rancher

Rancher

Rancher

Rancher

2-story anywhere

2-story anywhere

FOOTPATH

Private drain

Rancher

Rancher

Rancher

2-Story

Restrict Planting

Restrict Planting

2-Story

2-Story

Rancher

Rancher

Rancher

Rancher

2-story anywhere

2-story anywhere

FOOTPATH

Private drain

Rancher

Rancher

Rancher

2-Story

Restrict Planting

Restrict Planting

2-Story

2-Story

Rancher

Rancher

Rancher

Rancher

2-story anywhere

2-story anywhere

FOOTPATH

Private drain

Rancher

Rancher

Rancher

2-Story

Restrict Planting

Restrict Planting

2-Story

2-Story

Rancher

Rancher

Rancher

Rancher

2-story anywhere

2-story anywhere

FOOTPATH

Private drain

Rancher

Rancher

Rancher

2-Story

Restrict Planting

Restrict Planting

2-Story

2-Story

Rancher

Rancher

Rancher

Rancher

2-story anywhere

2-story anywhere

FOOTPATH

Private drain

Rancher

Rancher

Rancher

2-Story

Restrict Planting

Restrict Planting

2-Story

2-Story

Rancher

Rancher

Rancher

Rancher

2-story anywhere

2-story anywhere

FOOTPATH

Private drain

Rancher

Rancher

Rancher

2-Story

Restrict Planting

Restrict Planting

2-Story

2-Story

Rancher

Rancher

Rancher

Rancher

2-story anywhere

2-story anywhere

FOOTPATH

Private drain

Rancher

Rancher

Rancher

2-Story

Restrict Planting

Restrict Planting

2-Story

2-Story

Rancher

Rancher

Rancher

Rancher

2-story anywhere

2-story anywhere

FOOTPATH

Private drain

Rancher

Rancher

Rancher

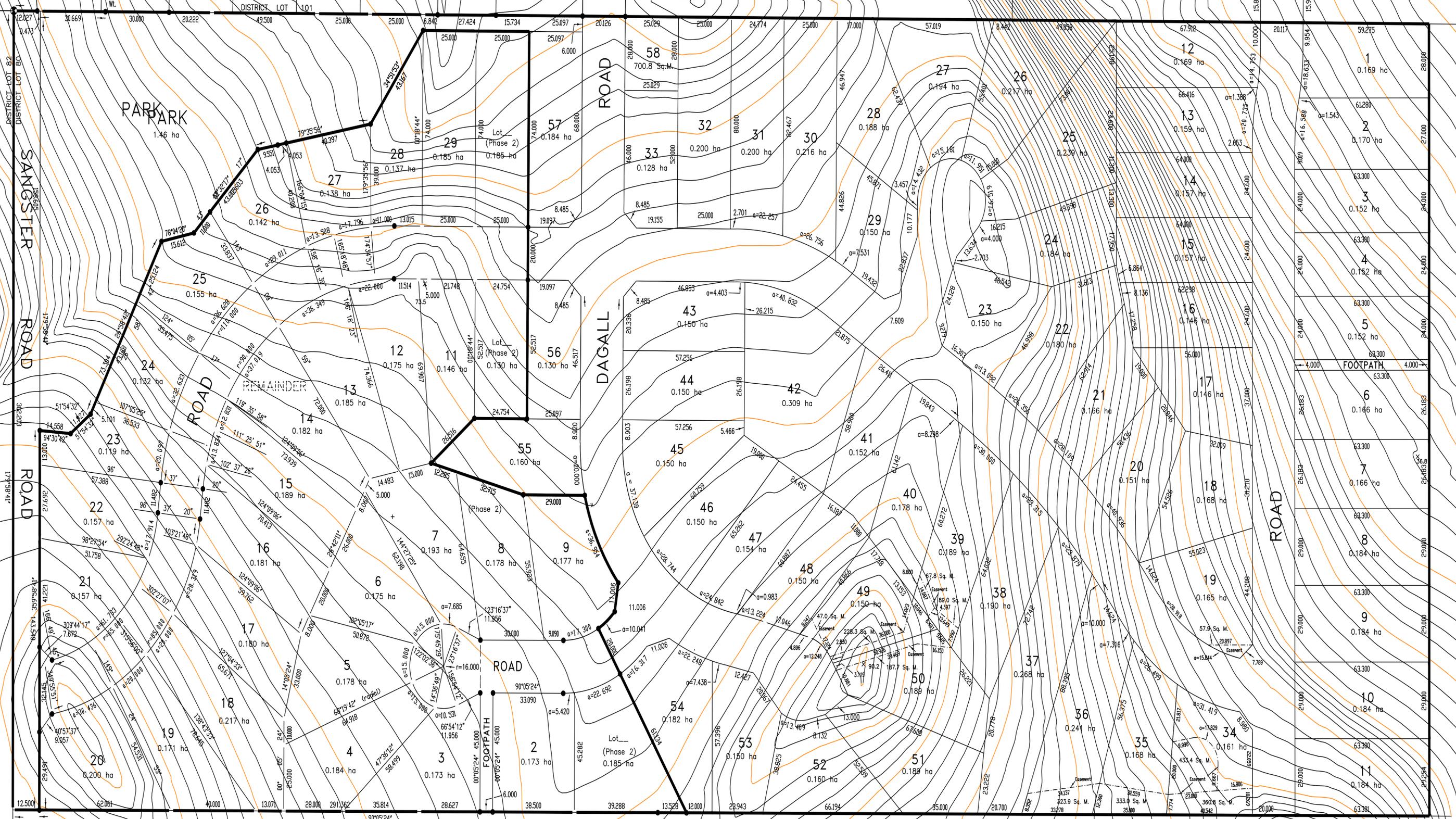
2-Story

Restrict Planting

Restrict Planting

2-Story

2



PLAN 19329

REMAINDER 2

PLAN VIP77596

R1

Original subdivision topography derived from LIDAR data pre-2006
 Grey = 1 metre contour intervals, Orange = 5 metre intervals
 Registered lot boundaries may not be exactly as shown

PARCEL A (DD 36099-1) OF DISTRICT LOTS 77 AND 80

Jon Munn

From: Planning and Development
Sent: February-16-18 2:31 PM
To: Jon Munn
Subject: FW: Development Variance Permit 653 Sentinel Drive Mill Bay.

For 01-A-17DVP

Colin Turner, Administrative Assistant
Land Use Services Department
Cowichan Valley Regional District
175 Ingram Street, Duncan, BC V9L 1N8
Email: ds@cvrd.bc.ca
Tel: 250.746.2620 Toll Free: 1.800.665.3955 Fax: 250.746.2621

-----Original Message-----

From: The Beatties [mailto:
Sent: February-16-18 2:24 PM
To: Planning and Development <ds@cvrd.bc.ca>
Subject: Development Variance Permit 653 Sentinel Drive Mill Bay.

I have no problem with the variance request regarding the above address.

Thanks
Sheila Beattie
644 Sentinel Drive
Mill Bay 250-743-1554.



Malahat Nation
110 Thunder Road, Mill Bay, BC, V0R 2P4
Tel: 250.743.3231 Fax: 250.743.3251
info@malahatnation.com www.malahatnation.ca

February 21, 2018

Referral: R18012
File: 01-A-17DVP

Jon Munn
Planner II, Land Use Services Development
Cowichan Valley Regional District
175 Ingram Street
Duncan, BC
V9L 1N8

Re: Development Variance Permit – 653 Sentinel Drive, Mill Bay
PID: 028-603-834 – Lot 24 District Lot 80, Malahat District, Plan VIP88932

Dear Mr. Munn,

Thank you for the consultation request dated January 24, 2018 regarding the Development Variance Permit application for the residential building on 653 Sentinel Drive, Mill Bay, located within Malahat Nation’s traditional territory.

At this time and with the information we have been provided, Malahat Nation has no objection to the approval of the application as there is no apparent impact to our interests.

Thank you for your time and consideration.

Sincerely,

Heather Adams
Fisheries and Referrals Coordinator
Malahat Nation



COWICHAN VALLEY REGIONAL DISTRICT
DEVELOPMENT VARIANCE PERMIT

FILE NO: 01-A-17DVP
DATE: _____

REGISTERED PROPERTY OWNER(S):

1. This Development Variance Permit is issued subject to compliance with all of the bylaws of the Regional District applicable thereto, except as specifically varied or supplemented by this Permit.
2. This Development Variance Permit applies to and only to those lands within the Regional District described below:

Lot 24, District Lot 80, Malahat District, Plan VIP88932 (PID: 028-603-834)

3. Authorization is hereby given to vary Section 10.9(4) of Zoning Bylaw No. 3520 to increase the maximum permitted height of a principal residential building from 7.5 metres to 7.97 metres.
4. The following plans and specifications are attached to and form a part of this permit.
Schedule A – Site Plan Showing Building Height prepared by J.E. Anderson B.C. Land Surveyors - Consulting Engineers dated August 22, 2017
5. The land described herein shall be developed in substantial compliance with the terms and conditions and provisions of this Permit and any plans and specifications attached to this Permit shall form a part thereof.

6. **This Permit is not a Building Permit. No certificate of final completion shall be issued until all items of this Development Variance Permit have been complied with to the satisfaction of the Land Use Services Department.**

AUTHORIZING RESOLUTION NO. [from Board Minutes] PASSED BY THE BOARD OF THE COWICHAN VALLEY REGIONAL DISTRICT THE [day] DAY OF [month] [year].

NOTE: Subject to the terms of this Permit, if the holder of this Permit does not substantially start any construction within 2 years of its issuance, this Permit will lapse.

I HEREBY CERTIFY that I have read the terms and requirements of the Development Variance Permit contained herein. I understand and agree that the Cowichan Valley Regional District has made no representations, covenants, warranties, guarantees, promises or agreements (verbal or otherwise) with *[NAME ON TITLE; or NAME OF AGENT, on behalf of NAME ON TITLE]*, other than those contained in this Permit.

Owner/Agent (signature)

Witness (signature)

Print Name

Print Name

Date

Date

DRAFT



STAFF REPORT TO COMMITTEE

DATE OF REPORT February 26, 2018

MEETING TYPE & DATE Electoral Area Services Committee Meeting of March 7, 2018

FROM: Development Services Division
Land Use Services Department

SUBJECT: Development Variance Permit Application No. 02-A-17DVP
(668 Sentinel Drive)

FILE: 02-A-17DVP

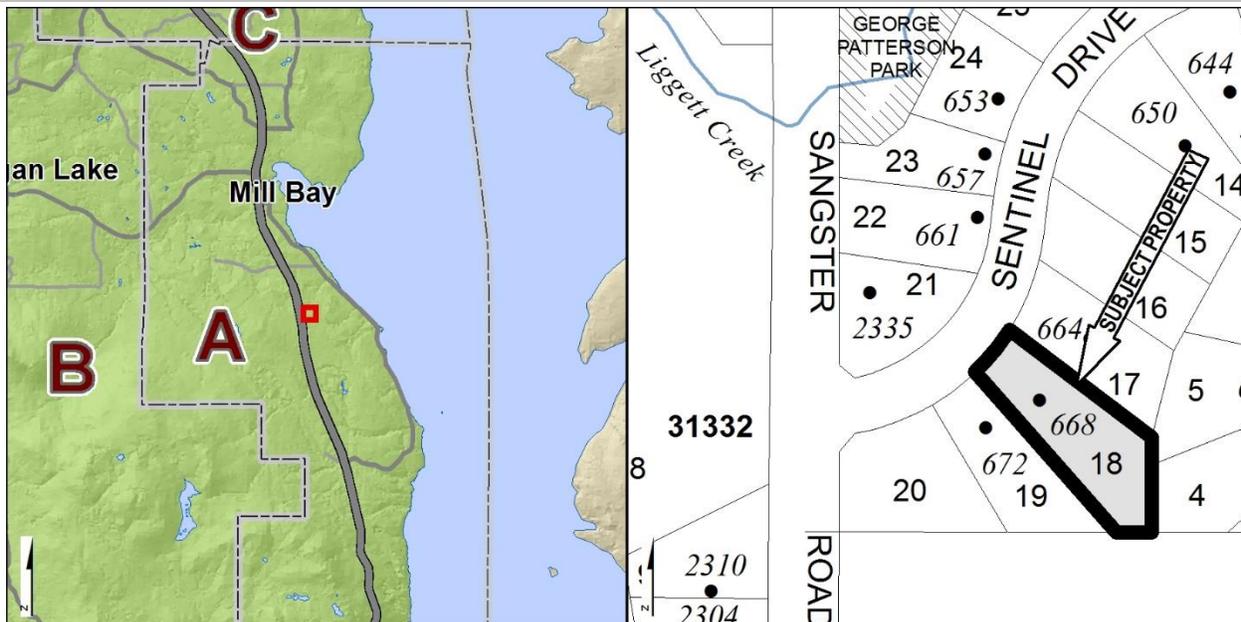
PURPOSE/INTRODUCTION

The purpose of this report is to present a request to vary the maximum height of a single family dwelling located in Sentinel Ridge.

RECOMMENDED RESOLUTION

That it be recommended to the Board that Application No. 02-A-17DVP (668 Sentinel Drive) to vary Section 10.9(4) of Zoning Bylaw No. 3520 to increase the maximum permitted height of a principal residential building from 7.5 metres to 8.06 metres be approved.

LOCATION MAP



BACKGROUND

Location of Subject Property: 668 Sentinel Drive

Legal: Lot 18, district Lot 80, Malahat District, Plan VIP88932

Size of Parcel: 0.217 ha (0.536 ac)

Zoning: R-3

<u>Plan Designation:</u>	Village Residential
<u>Use of Property:</u>	Residential
<u>Water:</u>	Mill Bay Waterworks
<u>Sewage Disposal:</u>	Sentinel Ridge Community Sewer (CVRD)
<u>Fire Protection:</u>	Mill Bay Volunteer Fire Department
<u>Agricultural Land Reserve:</u>	N/a
<u>Archaeological Sites:</u>	None identified
<u>Environmentally Sensitive Areas:</u>	No

APPLICATION SUMMARY

The dwelling is in the final stage construction on the subject property. The CVRD requires height surveys be provided during the truss construction phase, and it was identified that the structure exceeds the maximum 7.5 metre height requirement of the R-3 Zone. Since the height of the dwelling was determined to be 8.06 metres, the applicant has elected to apply for a variance to obtain approval for the increased height (see attachments).

The applicant has submitted two applications for height variances, here at 668 Sentinel Drive and across the street at 653 Sentinel Drive (01-A-17DVP). Three other height variance applications are the subject of current applications.

Although houses have been built on most of the lots in this subdivision, it is significant to note that 14 height DVP applications are on record since 2007 within the two subdivision plans totaling 87 lots. The last application was to the rear of the subject lot at 612 Tercel Court (02-A-16DVP). The unusually high number of height variances have been due to a variety of issues discussed in the planning analysis below.

COMMISSION / AGENCY / DEPARTMENTAL CONSIDERATIONS

Surrounding Property Owner Notification and Response:

A total of 18 letters were mailed-out or hand delivered to owners and occupants within 60 m as required pursuant to CVRD *Development Application and Procedures and Fees Bylaw No. 3275*. The notification letter described the purpose of this application and requested comments regarding this variance within a recommended time frame. To date, no letters have been received in reply.

OFFICIAL COMMUNITY PLAN/POLICY CONSIDERATIONS

Policy 4.1.4 of the Mill Bay Village Plan states, “*The implementing zoning bylaw will provide a separate height regulation for lands within the Village Residential Designation (R) that are located east of the Trans Canada Highway, to limit the height of buildings.*”

The South Cowichan Zoning Bylaw specifies a maximum height of 7.5 metres from the average natural grade for principal residential buildings on the east side of the Trans Canada Highway.

PLANNING ANALYSIS

According to the surveyor who created the subdivision plan, the developer’s original intent was to create a development where a view from one house would not be blocked by other houses. This intention was reflected in the building scheme registered on title of all the lots (see Attachment H – Registered Building Scheme FB0417129) where plans would be reviewed. In addition, a reference plan (see Attachment I) shows most house building envelopes, estimated main floor elevation (MFE), and often includes a peak elevation by adding the 7.5 m maximum permitted height to the MFE. This drawing may have led to confusion regarding the appropriate height measurement.

In Zoning Bylaw No. 3520, height is calculated by first determining the *average existing natural grade* (see Zoning Bylaw No. 3520, p.11). The building scheme may mislead some builders to believe the scheme’s MFE is the same as the grade determined by the bylaw, when in many cases the grade is lower than the scheme’s MFE. A benchmark elevation provided to the builder by the surveyor prior to construction reflects current conditions where fill may have been brought in, and may not reflect the *average existing natural grade* as defined in the zoning bylaw.

The reference plan (see Attachment I) shows a main floor elevation (MFE) for Lot 18 (668 Sentinel Dr.) at 94 metres and no peak elevation indicated. When the house was substantially built, a height survey was undertaken which showed grade (as per bylaw) at 93.58 m, the existing MFE at 94.35 m and the peak height at 101.64 m. Although the height of the building from the MFE is 7.29 m, the calculation from 93.58 m gives a height from the grade at 8.06 m.

668 Sentinel			
label	applicant drawing	Height Survey	building scheme
avg grade	93.58	93.58	N/A
MFE	94.30	94.35	94.00
MFE - Avg gr*	0.72	0.77	N/A
Ridge	+ht=100.88	101.64	N/A
Height	7.30	8.06	N/A
Ht dif		0.76	
	* = not drawn to scale		

Building Bylaw No. 3422 requires applicants to provide a site plan showing *the existing natural grade (may require BC Land Surveyor document) and the geodetic elevation of the main floor*. The building plans show the building height from foundation to ridge at 7.3 m, which is below the zone requirement. The drawing also indicates that this height is measured from an average grade of 93.58 m, confirmed by the height survey as *average existing natural grade*. The main floor foundation elevation (MFF or MFE) is indicated at 94.30 m, which is the same as the on-site benchmark survey (see Attachment # - photos) and 0.30 m higher than the building scheme (94.00 m, see Attachment # - Statutory Building Scheme FB417129), but not the geodetic elevation needed for a 7.5 m tall house.

Only one of the elevations can be correct when both are shown adjacent each other on the same drawing at a scale of ¼" = 1' (one quarter inch to one foot), as they are shown only centimeters/ inches apart (see Attachment F - Enlarged House Elevation, and drawing No. 1 A4, Attachment E – Building Plans). The difference between 93.58 m and 94.30 m is 0.72m (~2' 4"), so these elevation points are not shown to scale. The height survey shows the MFE at 94.35m, which confirms that the height was not measured from the *average existing natural grade* (see Zoning

Bylaw No. 3520, p.11 wording), labelled on the design drawing as *average grade*. The building was then built according to plans at 0.56 m over the required 7.5 m.

It is not clear where the error was made, by the house designer, the surveyor or the builder in interpreting the elevation required from which to build the foundation. For the foundation to be at the correct elevation, the builder or developer would have had to dig below 93.58 m for the foundation to be a suitable height (see Attachment C – Applicant Letter).

As noted, houses have been built on most of the lots in this subdivision, but there have been a higher than normal number of height DVP applications here since subdivision approval in 2007. Clearly, diligence from all parties involved is required, from the developer (in writing a clear building scheme), to the development technician (Ministry of Transportation subdivision review), surveyor, builder, owner and Building Official/ plan reviewer. Staff will investigate ways to infuse more clarity into the development and construction process, given appropriate resources.

No lots overlook the subject property, so this house will not alter the views from any neighbouring dwelling, so staff recommend Option 1 below.

OPTIONS

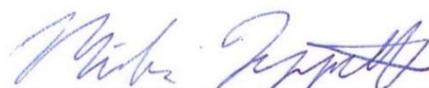
1. That it be recommended to the Board that Development Variance Permit Application No. 02-A-17DVP (668 Sentinel Drive) to vary Section 10.9(4) of Zoning Bylaw No. 3520 to increase the maximum permitted height of a principal residential building from 7.5 metres to 8.06 metres be approved.
2. That Development Variance Permit Application No. 02-A-17DVP (668 Sentinel Drive) be denied.

Prepared by:

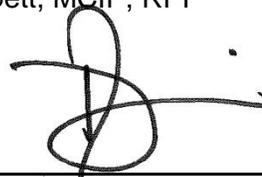


Jon Munn, MCIP, RPP
 Planner II

Reviewed by:



Mike Tippett, MCIP, RPP
 Manager



Ross Blackwell, MCIP, RPP, A. Ag.
 General Manager

ATTACHMENTS:

- Attachment A – Aerial Photo Map
- Attachment B – Zoning Map
- Attachment C – Applicant Letter
- Attachment D – Site Photos 668 Sentinel Dr.
- Attachment E – Building Plans
- Attachment F – Enlarged House Plan 668 Sentinel Dr.
- Attachment G – Height Survey
- Attachment H – Registered Building Scheme FB0417129
- Attachment I – Lot Plans with Proposed Building Elevations
- Attachment J – Sentinel Ridge Topographical Survey
- Attachment K – DRAFT Development Variance Permit



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

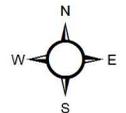
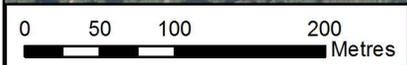
The Cowichan Valley Regional District does not warrant the accuracy.

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.

File: 02-A-17DVP

**TRIM
Orthophoto
(2014)**



R2



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

The Cowichan Valley Regional District does not warrant the accuracy.

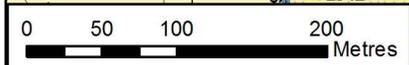
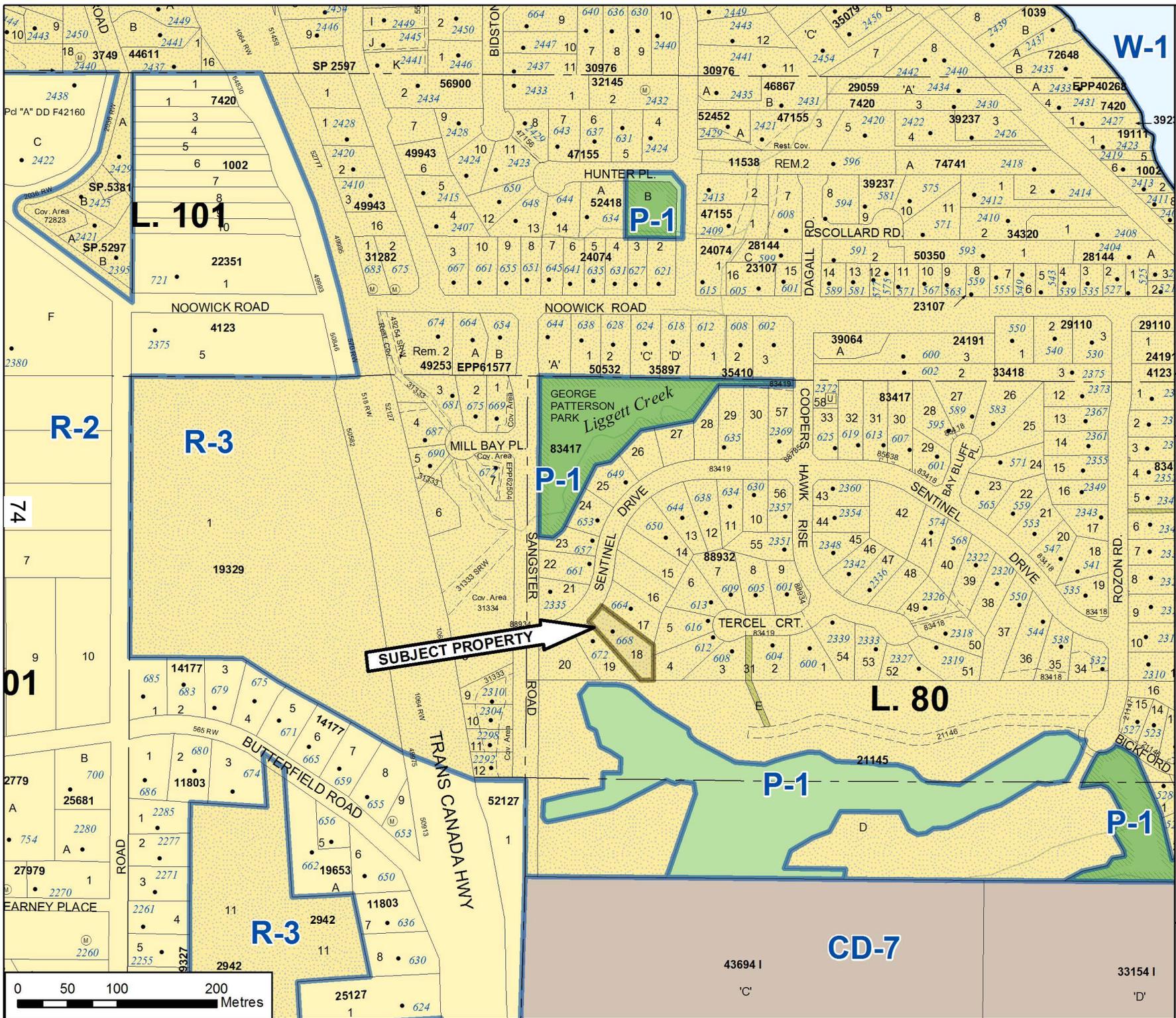
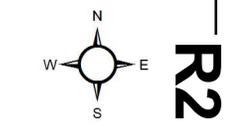
All persons making use of this compilation are advised that amendments have been consolidated for convenience purposes only and that boundaries are representational.

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

File: 02-A-17DVP

ZONING

- Legend
- Subject Property
 - Zoning AC



**CVRD Planning, Electoral Area Services Committee, and the Regional Board
175 Ingram Street
Duncan, BC
V9L 1N8**

RE: Development Permit Applications for 668 and 653 Sentinel Drive, Mill Bay

To Whom It May Concern,

These two Development Variance Permit applications are both being submitted to request an increase to the maximum allowable heights of the homes; Plus .56m (22") in regard to 668 Sentinel Drive, and plus .47m (18.5") in regard to 653 Sentinel Drive. Both homes are at lock-up stage or beyond (photos attached), and it would be difficult and prohibitively expensive to modify either home at this time to comply with the height restriction.

How did this happen? As the builder I contracted with a BC Land Surveyor to set benchmark heights for both homes prior to excavation. At 668 the main floor elevation was built to the benchmark and the home to the plans. However, the Building Location Certificate shows that the home is over the allowable height. The surveyor blames the designer for the error. Similar circumstances at 653 except that the benchmark was offset upwards and this information was not clearly communicated to the builder, resulting in the home being over the allowable height.

Neither home was purposely constructed over height for any kind of gain, and neither one adversely affects any neighbouring properties or sightlines. On behalf of the owners I respectfully request your positive consideration of both applications.

Thank you,

John Kyle
Memory Lane Construction Ltd.
PO Box 2541 Cowichan Bay, BC V0R 1N0
250-514-8201

**Photos for
Development Variance Permit Application
02-A-17DVP, 668 Sentinel Dr.**



View from Sentinel Dr – Northwest Elevation



Northeast Elevation

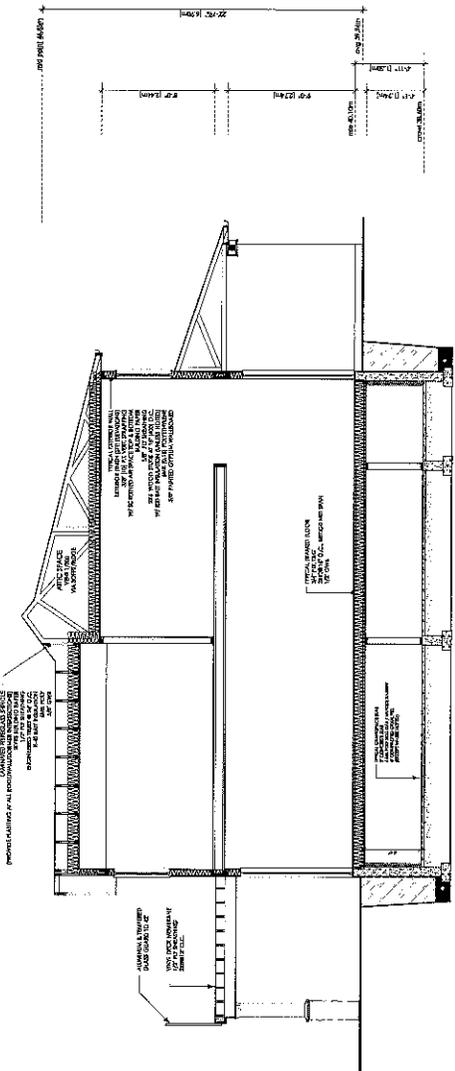


Surveyor Benchmark Height Elevation – Southwest Fence Line

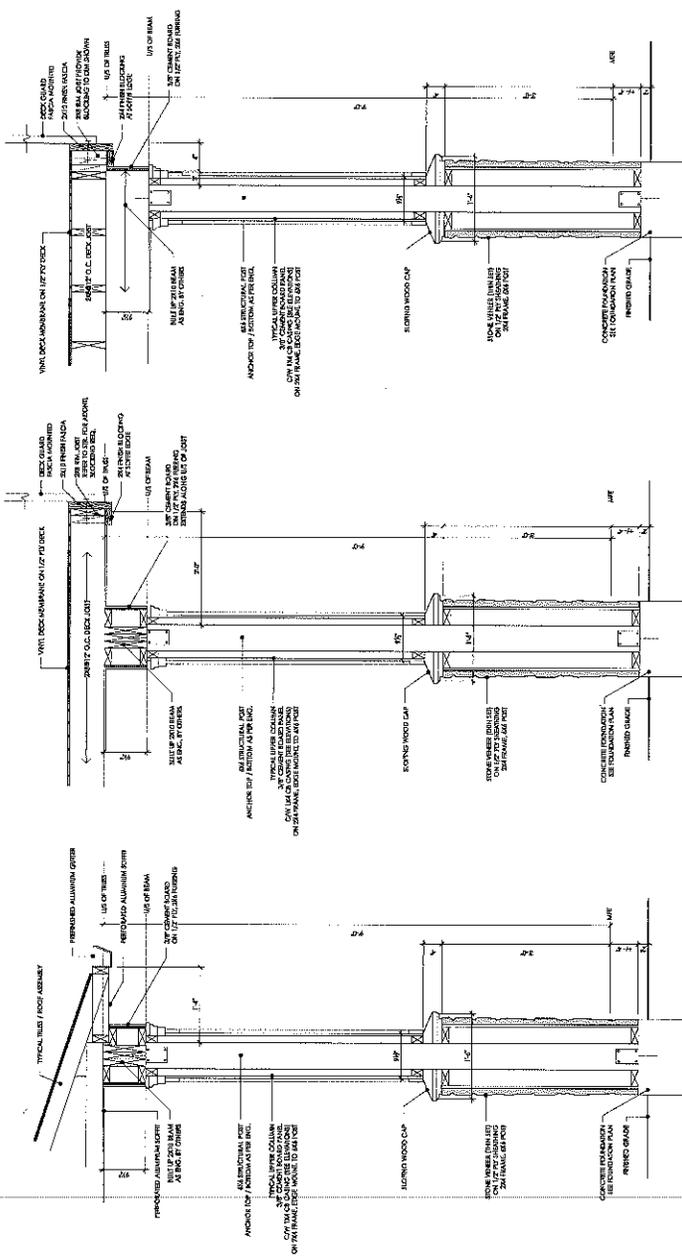


View East to Gulf Islands

PROJECT ADDRESS	56.00sq 1000sq 275.00sq 37.10sq
645 S. 1st St. Mills, SC	
LOT 18, 201-189824 CYPRESS LA	
750 088-603770	
ZONE R3	
LOT AREA 7125sq / 22.41 1/2	
PROJECT DATA	
Impervious roof coverage	7.36m
Impervious building	1000sq / 107.22 sq
Impervious driveway	1000sq / 107.22 sq
Impervious parking	201.82 / 21.633 sq
Impervious other	
Finished total	



1 Building Section
Scale: 1/4" = 1'-0"



2 Typical Column, 4/12 Roof
Scale: 1" = 1'-0"

3 Column at Deck, Side Condition
Scale: 1" = 1'-0"

4 Column at Deck, End Condition
Scale: 1" = 1'-0"

REVISION LIST

R1	April 28, 2017	Issue for Review / Permit
----	----------------	---------------------------

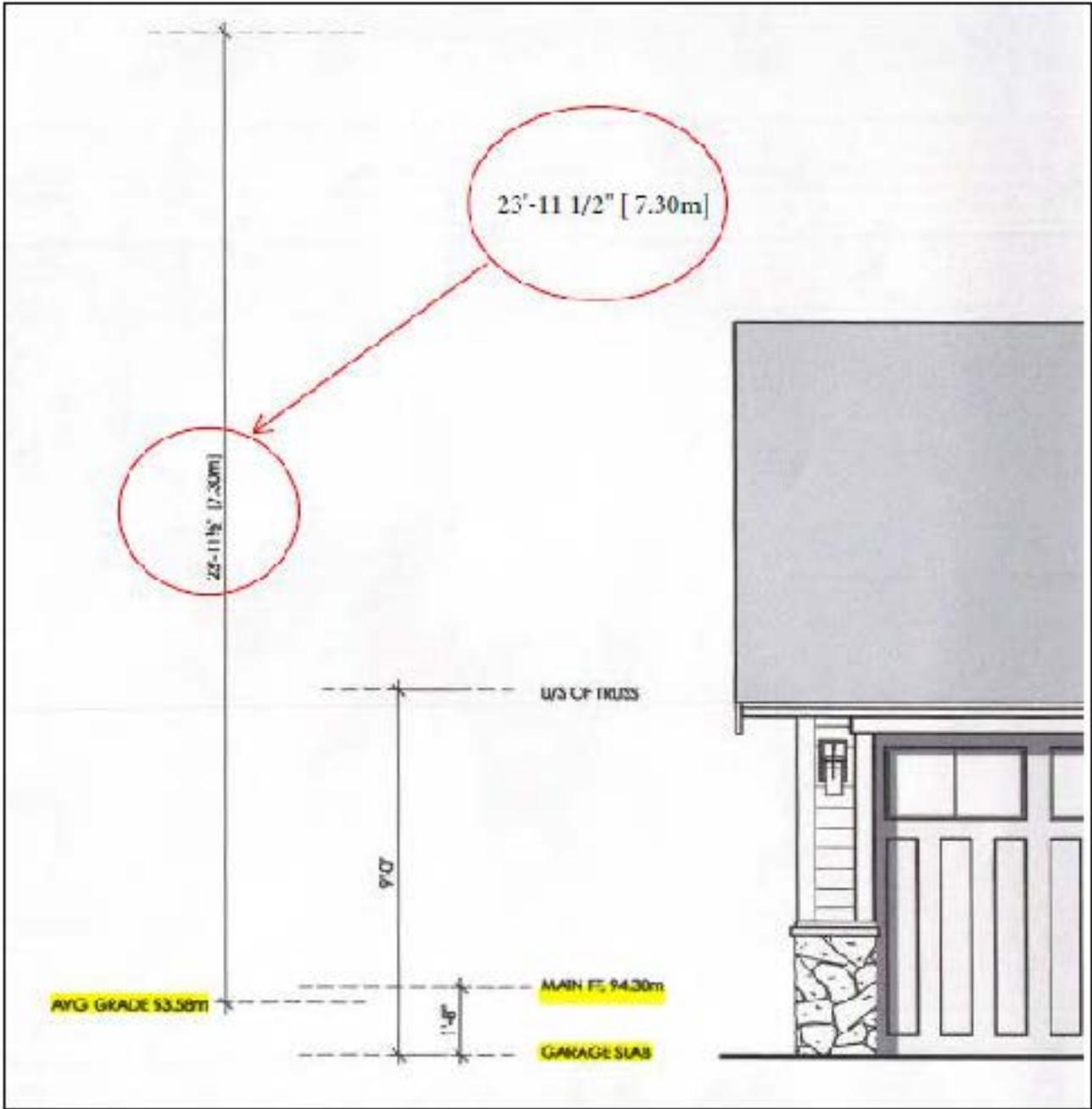
DRAWING LIST

A1	Site and General Notes
A2	Foundation and Main Floor Plan
A3	Roof and Upper Floor Plan
A4	Building Elevations
A5	Building Sections
A6	Envelope Details
A7	Accessory Building

666 Sentinel Drive
Single Family Residence

Building Sections

DATE	2/13/17
PROJECT	666 Sentinel Drive
SCALE	AS SHOWN
DESIGNER	OUTLINE HOME DESIGN
PROJECT NO.	A5



-3 JUN 2011 13 35

FB0417129

LAND TITLE ACT
Form 35
(Section 216(1))

DECLARATION OF BUILDING SCHEME

NATURE OF INTEREST CHARGE: Statutory Building Scheme

HEREWITH FEES OF: \$73.40

Address of person entitled to apply to register this building scheme:

0704315 B.C. Ltd., c/o 1626 Garnet Road, Victoria, BC, V8P 3C8

7/8

Full name, address, and telephone number of person presenting application:

MULLIN DEMEO, Barristers and Solicitors

1626 Garnet Road, Victoria, B. C., V8P 3C8 Phone: 477-3327

File: Sentinel Ridge/50087/JDM/jan

1C

hw 6/3/2011 1:35:48 PM 2 1

Charge 1 \$73.40

Signature of Applicant or Solicitor or Authorized Agent

sub G. Drake

0704315 B.C. LTD. declares that:

1. 0704315 B.C. LTD. is the registered owner in fee simple of the following land (the "Lots"):

Lots 1 to 30, of District Lot 80, Malahat District, Plan VIP 88932

2. 0704315 B.C. LTD. hereby creates a building scheme relating to the Lots.

3. A sale of any of the Lots is subject to the restrictions enumerated in the schedule attached or annexed hereto.

hw 6/13/2011 1:30:11 PM 2 1

Defect 1 \$32.70

4. The restrictions shall be for the benefit of all the Lots.

OFFICER SIGNATURE(S)

EXECUTION DATE

JOHN D. MULLIN
BARRISTER & SOLICITOR
1626 GARNET ROAD
VICTORIA, BC V8P 3C8

Y	M	D
10	10	12

0704315 B.C. LTD.
by its authorized signatory:
signatory

Name: William Beadle

SOLICITOR OR NOTARY
OFFICER CERTIFICATION

Your signature constitutes a representation that you are a solicitor, notary public or other person authorized by the Evidence Act, R.S.B.C. 1979, c. 116, to take affidavits for use in British Columbia and certifies the matters set out in Part 5 of the Land Title Act as they pertain to the execution of this instrument.

CONSENT AND PRIORITY AGREEMENT OF CHARGE HOLDERS

We, COAST CAPITAL SAVINGS CREDIT UNION, the holder of the following registered charges, consent to the registration of the above Declaration of Building Scheme and agree that it shall have priority over our Mortgage No. CA152685 and Assignment of Rents No. CA152686.

OFFICER SIGNATURE(S)

EXECUTION DATE

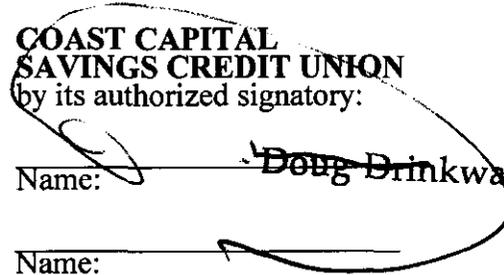


HEINZ SZCZYPIORKOWSKI
A Commissioner For Taking Affidavits
For British Columbia
SUITE 400 - 645 TYEE ROAD
VICTORIA, BC V9A 6X5

Y	M	D
2010	10	15

COAST CAPITAL SAVINGS CREDIT UNION
by its authorized signatory:

Name:


Doug Drinkwater

Name:

(as to both signatures)

SOLICITOR OR NOTARY

OFFICER CERTIFICATION

Your signature constitutes a representation that you are a solicitor, notary public or other person authorized by the Evidence Act, R.S.B.C. 1979, c. 116, to take affidavits for use in British Columbia and certifies the matters set out in Part 5 of the Land Title Act as they pertain to the execution of this instrument.

**BUILDING SCHEME
SCHEDULE OF RESTRICTIONS**

1. DEFINITIONS

- (a) "Developer" means 0704315 B.C. LTD. and includes its assigns and successors.
- (b) "Lot" means any of the 30 residential building lots, in whatever phase, intended to be created by subdivision of the Land, and "Lots" has a corresponding meaning.
- (c) Purchasers and their successors in title of the Lots are subject to this Statutory Building Scheme and are hereinafter referred to as the "Owner" or "Owners".

2. APPROVAL OF PLANS

- (a) No dwelling, building or other improvements shall be constructed, placed, erected or maintained on any Lot unless and until plans and specifications showing compliance in all respects with these restrictions and providing elevations, siting, size, colour scheme, landscaping and all materials to be used have been submitted to and approved in writing by the Developer's authorized agent ("Design Consultant") who shall have the right and power to approve or reject such plans and specifications. For the purposes of this Statutory Building Scheme, construction shall include grading, filling or other preparatory work on any Lot.
- (b) The Developer shall have the right to waive any terms or conditions in whole or in part with respect to any unsold Lot charged by this Statutory Building Scheme and any such waiver of any breach shall not negate or render such provision invalid or unenforceable with respect to any other Lot charged by this Statutory Building Scheme.

3. THE LOT

- (a) Site Requirements
 - (i.) No retaining wall shall be constructed on any Lot having an exposed height greater than 1.2 metres (4 feet). Any exposed concrete over 0.6 metres (2 feet) in height shall be architecturally treated.

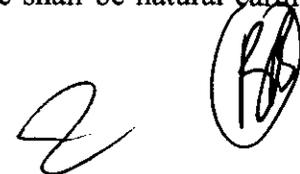
Handwritten signature and initials, possibly 'PA' inside a circle, and a squiggle.

4. THE HOUSE**(a) House Size/Siting**

- (i.) One level homes shall have a minimum gross floor area of 232.25 square metres (2,500 square feet), not including garage areas.
- (ii.) Two level homes shall have a minimum gross floor area on the first level of 139.35 square metres (1,500 square feet) and the second level of 92.90 square metres (1000 square feet), not including garage areas.
- (iii.) No house shall be constructed on any Lot unless a house siting plan has been approved by the Developer taking into account view corridors of surrounding Lots.

(b) Exterior Design**(i.) Specific exterior design details must include:**

- (1) In general, the main materials used on the front of the house should be used on all other faces of the building.
- (2) The main exterior cladding shall be limited to rock or cultured stone, hardi-plank, wood siding and wood shakes/shingle siding. Stucco is permitted as an "accent only" exterior cladding material. A minimum of three types of exterior cladding shall be used. Exterior trim must be a minimum of 15.24 centimetres (6 inches).
- (3) No house shall be constructed on any Lot unless the front façade has the following features:
 - A) A timber-framed entry feature is required and further detailing such as wood trims around appropriate windows and doors is required.
 - B) Columns and garages must be trimmed to provide relief from a siding only front façade.
 - C) The design must be integrated in a related use of materials and complimentary colours.
- (4) No exposed concrete block is permitted. Exposed concrete foundation walls are not to exceed 0.5 metres (1.64 feet) in height.
- (5) The exterior colour scheme used for the house shall be natural earth tones and not primary colours.

Handwritten signature and initials in black ink, located at the bottom right of the page.

- (6) Fascia board colours must compliment the siding colour.
- (7) Front doors will have raised panels of solid wood construction. Decorative windows are permitted within the front door.
- (8) No house on a corner Lot shall be designed unless the house faces both streets with roof and/or wall treatments turning the exposed corner.

(c) Roof

- (i.) No Roofing materials other than "high profile" 30-year fibreglass shingles with raised ridge caps in a weathered wood or dark colour, cedar shakes or cedar shingles are permitted.
- (ii.) The roof pitch must be a minimum of 5:12. Flat roofs are not permitted.
- (iii.) No Gutters, rainwater leaders and soffits other than those painted to match trim colours or selected in a compatible colour if pre-finished are permitted. Any aluminium fascia gutter must be combined with wood fascia boards where appropriate to meet the requirements of this Building Scheme.

(d) Driveways and Garages

- (i.) Each dwelling shall have an enclosed area for a minimum of 2 parking spaces. All garages shall have closing wood doors with raised panels or other detailing and shall be stained/painted to match trim colours or complement the design of the house. Flat panel garage doors are not permitted.
- (ii.) Driveways shall be constructed of exposed aggregate, interlocking brick or a combination thereof. No gravel driveways or parking areas shall be constructed.
- (iii.) No buildings or driveways shall be constructed on the Lots unless provision to reduce storm water run-off from buildings and driveways has been made by the run-off from buildings, driveways and any other impervious surfaces constructed on a Lot being re-charged back to ground through suitable subsurface storm water management systems such as rock pits or exfiltration chambers and run-off from driveways which slope to the public road being intercepted at the property line by the provision of suitably designed and constructed absorbent strip such as grass-concrete or permeable interlocking concrete pavers.



5. GUIDELINES FOR THE STREETScape

- (a) Recreational Equipment, Commercial Equipment and Accessory Buildings
- (i.) Except for licensed passenger automobiles, vans and trucks which do not exceed a capacity of one ton, any vehicle including trailers, boats, motor homes, campers, recreational equipment and other similar objects on a Lot are required to be stored inside an enclosed space or behind fencing or screening to the side or rear of the house and shall not be visible from the street. Storage of these objects is not allowed in the front yard or the side yard along a flanking street.
 - (ii.) Any truck in excess of one ton capacity and commercial vehicles, equipment or machinery of any kind shall not be parked or stored anywhere on a Lot except as may be required for construction or repair of the home on the Lot.
 - (iii.) Accessory buildings shall not be constructed ahead of the front façade of the dwelling. Only one accessory building per Lot is allowed. All accessory buildings shall be finished in the same exterior materials and colours as the principal building.

6. LANDSCAPING

- (a) Landscaping
- (i.) To enhance a settled appearance on the Lots within the subdivision, the relevant Owner shall complete the street front of the Lot, front yard and side yard landscaping within 90 days after completion of house construction unless weather conditions make it impossible to do so.
 - (ii.) All front yard areas and any side yards fronting on either road within the subdivision shall be landscaped with a minimum of one tree per 8 metres (26.25 feet) of frontage. Each tree shall have a minimum caliper of 7 centimetres (2.75 inches) and a height of 1.5 metres (5 feet) or greater. There shall also be at least 9 shrubs in the front yard. Bedding areas containing shrubs, flowers and trees shall occupy a minimum of 20% of the front yard. Any area of the front yard or the side yards fronting roads within the subdivision which are not landscaped with bedding areas shall be turfed or seeded.
 - (iii.) A Sprinkler system is required for front and side yard landscaped/lawn areas.



7. FENCING

- (a) No fences shall be constructed in the front yard of a Lot other than metal vertical picket type fencing not exceeding a height of 1.5 metres (5 feet).
- (b) No fences on side yards shall extend further towards the front of the Lot than the front of the house, except in compliance with the requirements set out in 7(a) above.
- (c) No fences in the back yard and side yards (not including that portion of the side yards in front of the house) shall be constructed other than:
 - (i.) cedar split-rail fences;
 - (ii.) cedar board and/or lattice panel fences;
 - (iii.) hedges that serve as fences along property lines.
- (d) No fences in the back yard and side yards (not including that portion of the side yards in front of the house) shall be higher than 1.83 metres (6 feet).
- (e) No wire fencing (including page wire, barbed wire, chain link, chicken wire) shall be constructed or installed on a Lot, except at the rear property line where combined with tree hedging.

8. LOT CONDITION/CONSTRUCTION

- (a) No Owner shall allow debris, noxious weeds (i.e. thistles) or invasive plant species (i.e. scotch broom, gorse or ivy) to accumulate on a vacant Lot prior to construction of improvements.
- (b) No improvements shall be allowed to remain in an incomplete state and construction shall proceed diligently and continuously from commencement of the improvements until completion of all improvements in the manner approved by the Developer and in no case shall any improvements be incomplete within 12 months of commencement of the improvements for single family homes.
- (c) No dwelling on any Lot shall be occupied by any person until construction of such building has received final Building Approval by the Developer and an Occupancy Permit from the Cowichan Valley Regional District has been issued. No dwelling on any Lot shall be occupied by any person unless and until such dwelling, including the exterior thereof, is substantially finished.

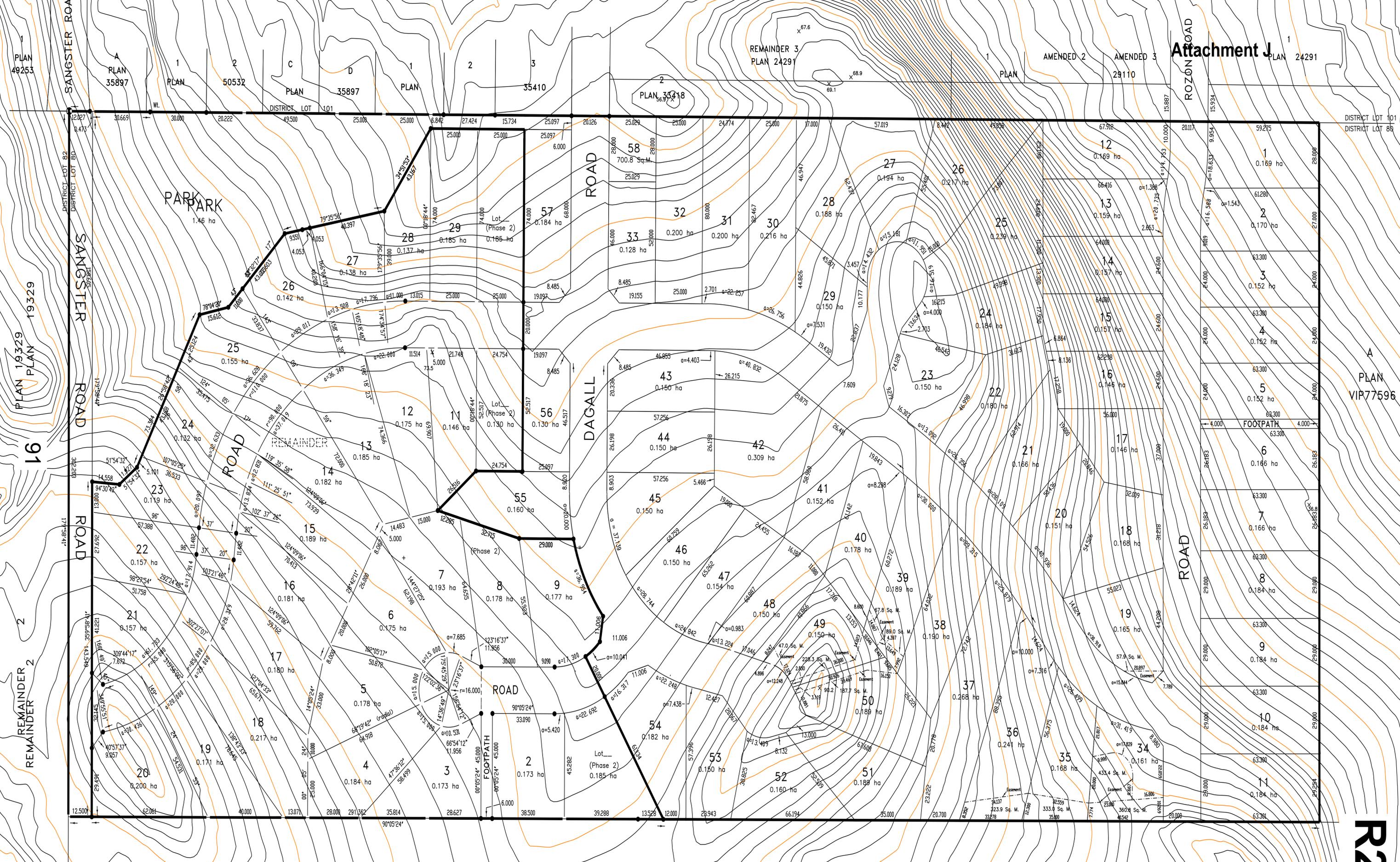
Handwritten signature and initials in black ink, located at the bottom right of the page.

9. GENERAL RESTRICTIONS

- (a) No pole, mast, clothesline, antenna, satellite dish or any other similar object of any kind shall be situated on any Lot or on the exterior of any building or improvement on any Lot, save and except for a single satellite dish of approximately .61 metres (2 feet) in diameter.
- (b) No billboard or "For Sale" sign of any character shall be erected, posted or displayed upon or about any part of any Lot other than signs not larger than 76.2 centimetres by 45.72 centimetres (30 inches by 18 inches).
- (c) No heat pumps or air-conditioning units shall be placed in buildings or on any Lot unless the location of the same has been included in the house siting plans and the sound level at the property lines of the Lot will not exceed 50 decibels.
- (d) No Owner or occupier of any Lot shall keep or permit to be kept animals of any kind or description whatsoever except for domesticated household pets which pets shall not be permitted to run wild or uncontrolled within the subdivision.
- (e) There shall not be stored, kept nor permitted to be kept or stored on any Lot any junk or wrecked or partially wrecked motor vehicles or any salvage materials or goods intended for commercial use or sale nor shall any waste or refuse be kept or stored upon any Lot.

END OF DOCUMENT

Handwritten signature and initials in black ink, consisting of a stylized 'Z' and a circled set of initials.



Original subdivision topography derived from LIDAR data pre-2006
 Grey = 1 metre contour intervals, Orange = 5 metre intervals
 Registered lot boundaries may not be exactly as shown

PARCEL A (DD 36099-1) OF DISTRICT LOTS 77 AND 80

R2



COWICHAN VALLEY REGIONAL DISTRICT
DEVELOPMENT VARIANCE PERMIT

FILE NO: 02-A-17DVP
DATE: _____

REGISTERED PROPERTY OWNER(S):

1. This Development Variance Permit is issued subject to compliance with all of the bylaws of the Regional District applicable thereto, except as specifically varied or supplemented by this Permit.
2. This Development Variance Permit applies to and only to those lands within the Regional District described below:
Lot 18, district Lot 80, Malahat District, Plan VIP88932 (PID: 028-603-770)
3. Authorization is hereby given to vary Section 10.9(4) of Zoning Bylaw No. 3520 to increase the maximum permitted height of a principal residential building from 7.5 metres to 8.06 metres.
4. The following plans and specifications are attached to and form a part of this permit.
Schedule A – Site Plan Showing Building Height prepared by J.E. Anderson B.C. Land Surveyors - Consulting Engineers dated August 22, 2017
5. The land described herein shall be developed in substantial compliance with the terms and conditions and provisions of this Permit and any plans and specifications attached to this Permit shall form a part thereof.
6. **This Permit is not a Building Permit. No certificate of final completion shall be issued until all items of this Development Variance Permit have been complied with to the satisfaction of the Land Use Services Department.**

AUTHORIZING RESOLUTION NO. [from Board Minutes] PASSED BY THE BOARD OF THE COWICHAN VALLEY REGIONAL DISTRICT THE [day] DAY OF [month] [year].

NOTE: Subject to the terms of this Permit, if the holder of this Permit does not substantially start any construction within 2 years of its issuance, this Permit will lapse.

I HEREBY CERTIFY that I have read the terms and requirements of the Development Variance Permit contained herein. I understand and agree that the Cowichan Valley Regional District has made no representations, covenants, warranties, guarantees, promises or agreements (verbal or otherwise) with *[NAME ON TITLE; or NAME OF AGENT, on behalf of NAME ON TITLE]*, other than those contained in this Permit.

Owner/Agent (signature)

Witness (signature)

Print Name

Print Name

Date

Date

DRAFT



STAFF REPORT TO COMMITTEE

DATE OF REPORT February 26, 2018

MEETING TYPE & DATE Electoral Area Services Committee Meeting of March 7, 2018

FROM: Development Services Division
Land Use Services Department

SUBJECT: Development Variance Permit Application No. 03-A-17DVP
(649 Sentinel Drive)

FILE: 03-A-17DVP

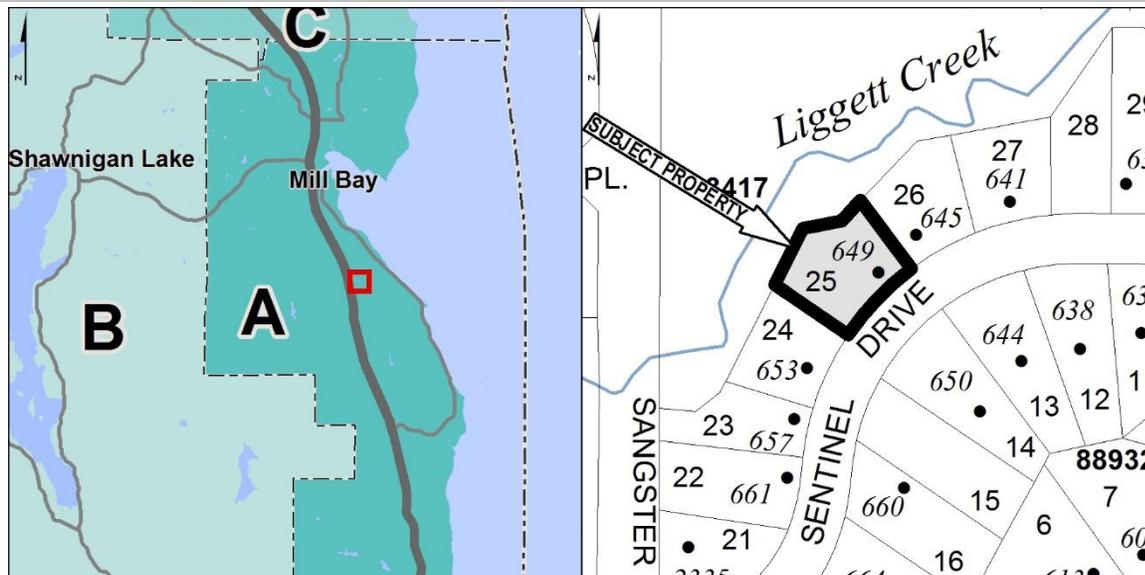
PURPOSE/INTRODUCTION

The purpose of this report is to present a Development Variance Permit application to increase the height of a single family dwelling from 7.5 metres to 8.7 metres.

RECOMMENDED RESOLUTION

That Application No. 03-A-17DVP (649 Sentinel Drive) to vary Section 10.9(4) of Zoning Bylaw No. 3520 to increase the maximum permitted height of a principal residential building from 7.5 metres to 8.7 metres be approved.

LOCATION MAP



BACKGROUND

Location of Subject Property: 649 Sentinel Drive

Size of Parcel: 0.184 ha

Zoning: R-3

Plan Designation: Village Residential

<u>Use of Property:</u>	Residential
<u>Water:</u>	Mill Bay Waterworks
<u>Sewage Disposal:</u>	Sentinel Ridge Community Sewer (CVRD)
<u>Fire Protection:</u>	Mill Bay Volunteer Fire Department
<u>Agricultural Land Reserve:</u>	N/a
<u>Archaeological Sites:</u>	None identified
<u>Environmentally Sensitive Areas:</u>	No identified environmentally sensitive areas.

APPLICATION SUMMARY

A dwelling has recently been constructed on the subject property. The CVRD required a height survey be provided during the construction phase, at which point it was identified that the structure exceeds the maximum 7.5 metre height restriction of the R-3 Zone.

Since the height of the dwelling was determined to be 8.7 metres, and the dwelling has been completed, the applicant has elected to apply for a variance to obtain approval for the increased height. As shown on the attachments, the house was designed and plans revised to comply with the maximum 7.5 metre height restriction. However, the house remains over height.

- **See Attachment A – Zoning Map**
- **See Attachment C – Letter of Rationale**
- **See Attachment D – Surveys**
- **See Attachment E – Revised Building Elevations**

COMMISSION / AGENCY / DEPARTMENTAL CONSIDERATIONS

Surrounding Property Owner Notification and Response:

A total of 18 letters were mailed-out or hand delivered as required pursuant to CVRD Development Application and Procedures and Fees Bylaw No. 3275. The notification letter described the purpose of this application and requested comments regarding this variance within a recommended time frame. To date, one letter has been received.

- **See Attachment I – Adjacent Property Owner Response Letters**

OFFICIAL COMMUNITY PLAN/POLICY CONSIDERATIONS

Policy 4.1.4 of the Mill Bay Village Plan states, “*The implementing zoning bylaw will provide a separate height regulation for lands within the Village Residential Designation (R) that are located east of the Trans Canada Highway, to limit the height of buildings.*”

As a result, the South Cowichan Zoning Bylaw specifies a maximum height of 7.5 metres from the average natural grade for principal residential buildings on the east side of the Trans Canada Highway.

PLANNING ANALYSIS

At the time of subdivision, the developer established anticipated dwelling locations for each lot and established a maximum peak of the roof that would maximize views from each lot. However, this document is not registered on the title, and builders are perhaps not made aware of the overall vision.

There is also a building scheme registered for the development, of which CVRD does not enforce because it is an agreement between the developer/development and owners. With regards to lot development and view protection, the building scheme specifies the following:

“4(a)(iii) - No house shall be constructed on any lot unless a house siting plan has been approved by the Developer taking into account view corridors of surrounding lots.”

The original building lot plan referenced above (Attachment H) did not specify a main floor elevation for the subject property as it backs onto park land, and the configuration of these lots on the north side of Sentinel Drive are not presented with views.

The survey site plan conducted in 2016 for the subject property specified the average natural grade to be 498.6 metres¹, and which accounting for the maximum building height of 7.5 metres results in a proposed finished grade of 506.1 metres. However, the completion survey revealed the height to be 507.3 metres – 1.2 metres over height.

It is not clear to anyone involved in the application (owners, surveyor, Building Inspector) why this building exceeds the maximum height. However, some theories include:

- Grade at the northwest corner (rear) of the dwelling was more significant than expected;
- Building plans clearly show finished grade and existing grade and as shown on the revised building permit drawings, the height of the dwelling was measured somewhere in between, which may not be an accurate reflection of average existing grade.

Caution must be taken when building using the average natural grade as the maximum building height is limited as in the R-3 zone east of the Trans-Canada Highway. Diligence on all parties involved is required.

As this property backs onto CVRD parkland, there are no adjacent properties to the rear that would be negatively affected. The adjacent property to the west is not affected by view, and also applied for a height variance (01-A-17DVP) so they have no objection to this variance application.

- **See Attachment E – Revised Building Elevations**
- **See Attachment F – Building Scheme**
- **See Attachment G – Sentinel Ridge Topographical Survey**
- **See Attachment H – Lot Plans with proposed dwelling elevations**
- **See Attachment J – Site Photos**

Staff recommend Option 1 below.

¹ Established using a survey benchmark, which is not reflective of elevation above sea level. The calculations are accurate for the purposes of determining grade and height but not tied into the actual elevation above sea level.

OPTIONS

1. That it be recommended to the Board that Application No. 03-A-17DVP (649 Sentinel Drive) to vary Section 10.9(4) of Zoning Bylaw No. 3520 to increase the maximum permitted height of a principal residential building from 7.5 metres to 8.7 metres be approved.

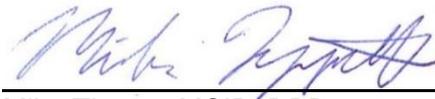
2. That it be recommended to the Board that Application No. 03-A-17DVP (649 Sentinel Drive) be denied.

Prepared by:

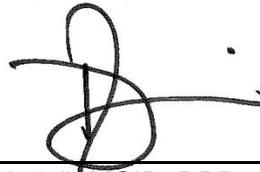
Reviewed by:



Rachelle Rondeau, MCIP, RPP
Planner II



Mike Tippett, MCIP, RPP
Manager



Ross Blackwell, MCIP, RPP, A. Ag.
General Manager

ATTACHMENTS:

- Attachment A – Zoning Map
- Attachment B – Orthophoto Map
- Attachment C – Letter of Rationale
- Attachment D – Surveys
- Attachment E – Revised Building Elevations
- Attachment F – Building Scheme
- Attachment G – Sentinel Ridge Topographical Survey
- Attachment H – Lot Plans with Proposed Dwelling Elevations
- Attachment I – Adjacent Property Owner Response Letters
- Attachment J – Site Photos
- Attachment K – Draft Development Variance Permit



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

The Cowichan Valley 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.

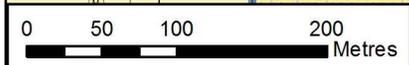
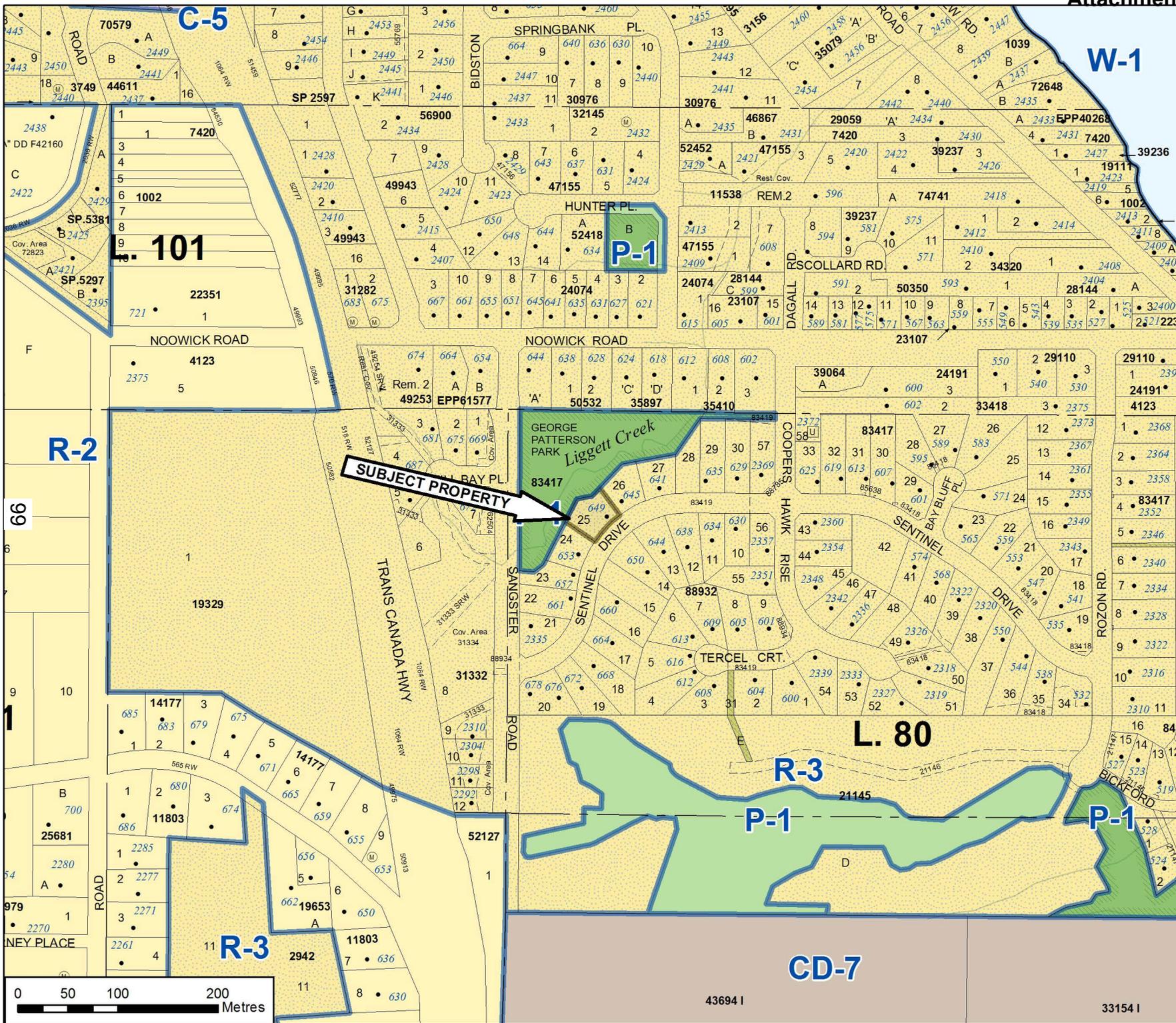
The original Bylaws should be consulted for all purposes of interpretation and application of the Bylaws.

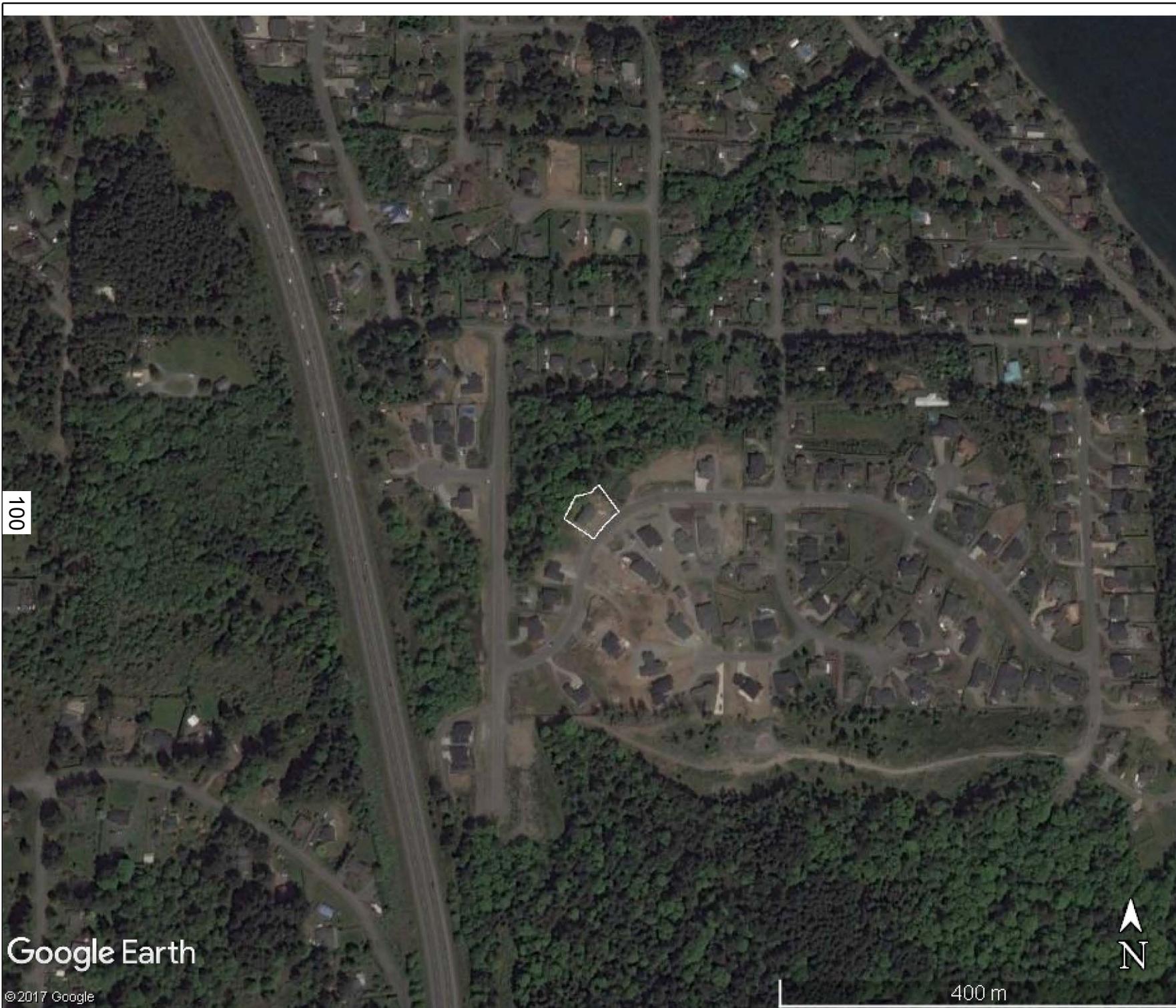
File: 03-A-17DVP

ZONING

Legend

- Subject Property
- Zoning AC



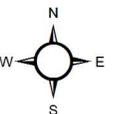


100

Google Earth

© 2017 Google

400 m



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

The Cowichan Valley 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.

File: 03-A-17DVP

Google Earth Photo (2017)

November 14, 2017

David & Yvonne Valois
649 Sentinel Drive
Mill Bay, B.C.
V0R 2P4

To Whom it may concern,

When the initial survey was completed by Kenyon Wilson in September 2016 we were informed by the building inspector Gary Anderson of the CVRD that we were not in compliance with the height of the building.

Gary informed us that we were over height by 36". We changed the roof pitch on the existing plans to drop the peak height by 24". We then dropped the floor joists by 12" using joist hangers on the main floor. Thus the total change made by us to fall into compliance was 36".

When we applied for our occupancy permit we were informed that a final survey must be completed. This was done near the end of September, 2017. Kenyon Wilson again performed the survey and we were told that the existing structure was now 47" over height.

We are now applying for a variance because we have done everything possible to be in compliance from the start of construction only to be informed that the initial survey was not done properly.

At the end of the day, our intention was never to be "out of compliance" from the start and we would appreciate getting this Variance completed as soon as possible because it effects our finances as well as delaying our Occupancy Permit.

Thank you.



David D. Valois



Yvonne B. Valois

**SKETCH PLAN SHOWING
PROPOSED DWELLING LOCATION FOR
LOT 25, DISTRICT LOT 80,
MALAHAT DISTRICT,
PLAN VIP88932.**

SCALE 1 : 500



All distances & elevations are in metres, unless otherwise indicated.

Elevations are derived from ZRB800 with an assumed elevation of 500.00 metres.

499.73 denotes elevation used in Average Natural Grade Calculation.

Average Natural Grade = 498.6 metres.

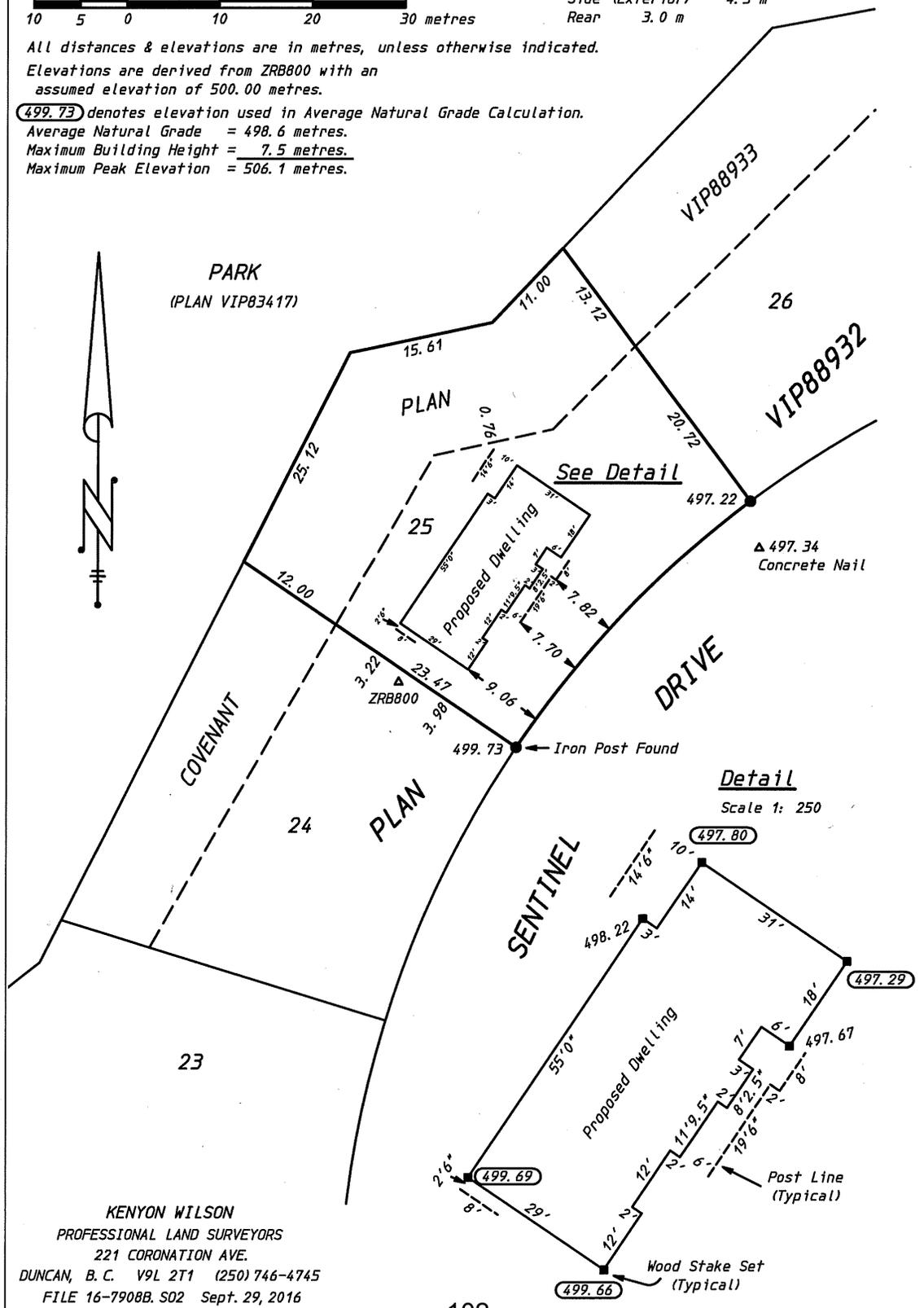
Maximum Building Height = 7.5 metres.

Maximum Peak Elevation = 506.1 metres.

Note: Lot 25 lies within the C. V. R. D. Area A and is Zoned R-3A. Bylaw setback requirements are as follows:

Residential Use	
Front	7.5 m
Side (Interior)	3.0 m
Side (Exterior)	4.5 m
Rear	4.5 m

Accessory to Residential	
Front	7.5 m
Side (Interior)	3.0 m
Side (Exterior)	4.5 m
Rear	3.0 m



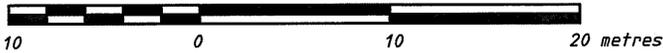
Detail
Scale 1: 250

KENYON WILSON
PROFESSIONAL LAND SURVEYORS
221 CORONATION AVE.
DUNCAN, B. C. V9L 2T1 (250) 746-4745
FILE 16-7908B.S02 Sept. 29, 2016

**SITE PLAN SHOWING
BUILDING HEIGHT FOR**

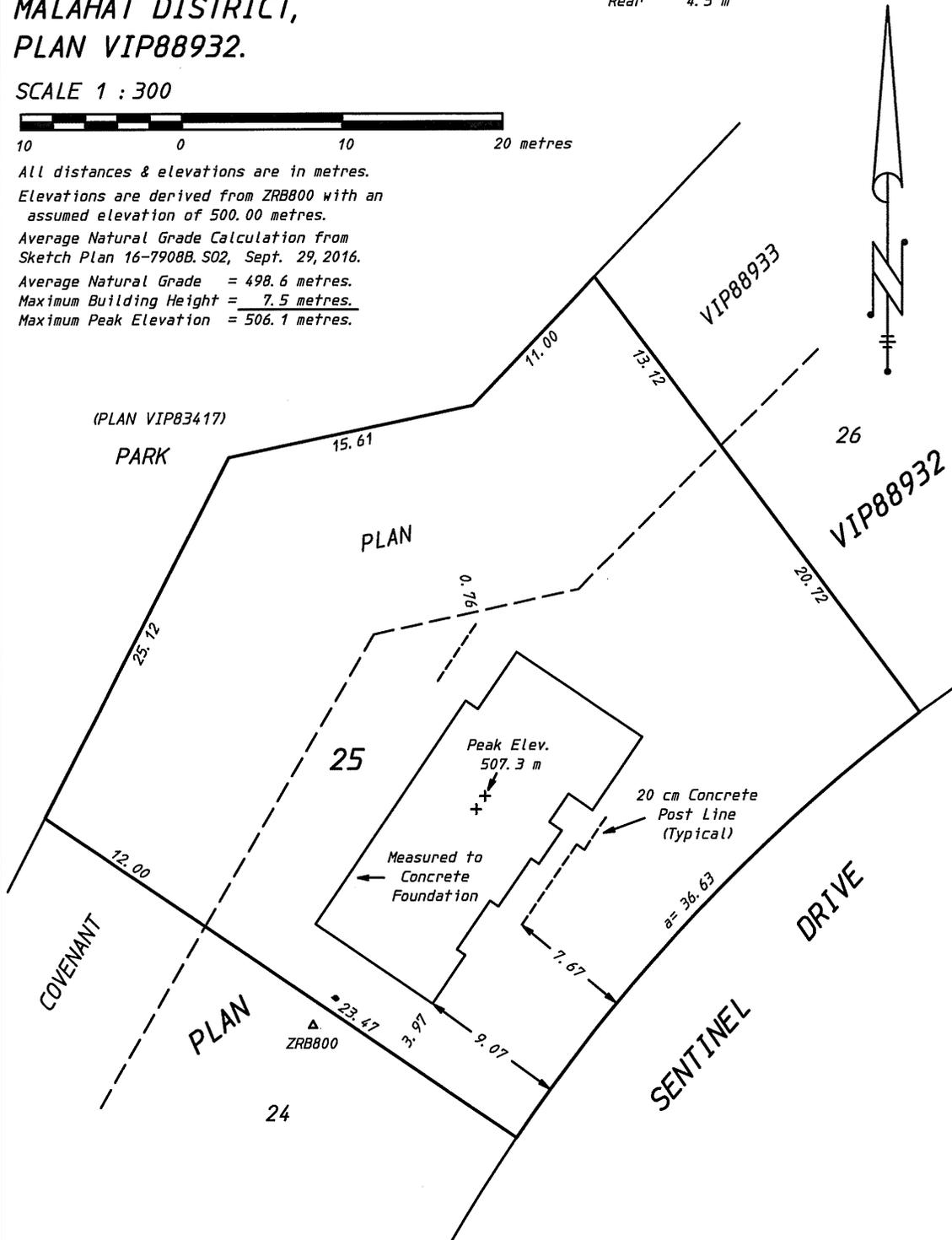
**LOT 25, DISTRICT LOT 80,
MALAHAT DISTRICT,
PLAN VIP88932.**

SCALE 1 : 300



All distances & elevations are in metres.
Elevations are derived from ZRB800 with an assumed elevation of 500.00 metres.
Average Natural Grade Calculation from Sketch Plan 16-7908B.S02, Sept. 29, 2016.
Average Natural Grade = 498.6 metres.
Maximum Building Height = 7.5 metres.
Maximum Peak Elevation = 506.1 metres.

Note: Lot 25 lies within the C. V. R. D. Area A and is Zoned R-3A.
Bylaw setback requirements are as follows:
Residential Use:
Front 7.5 m
Side (Interior) 3.0 m
Side (Exterior) 4.5 m
Rear 4.5 m



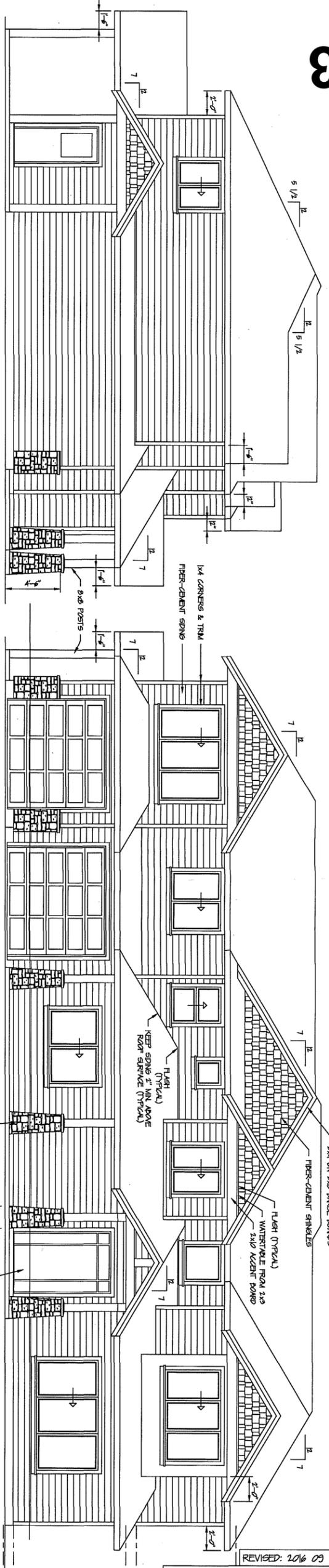
All clearance distances are shown to an accuracy of plus or minus 0.05 metres.

KENYON WILSON
PROFESSIONAL LAND SURVEYORS
221 CORONATION AVE.
DUNCAN, B. C. V9L 2T1 (250) 746-4745
FILE 16-7908. PEK

CERTIFIED CORRECT
ON THE 5th DAY OF OCTOBER, 2017.

ALLEN L. COX B. C. L. S.

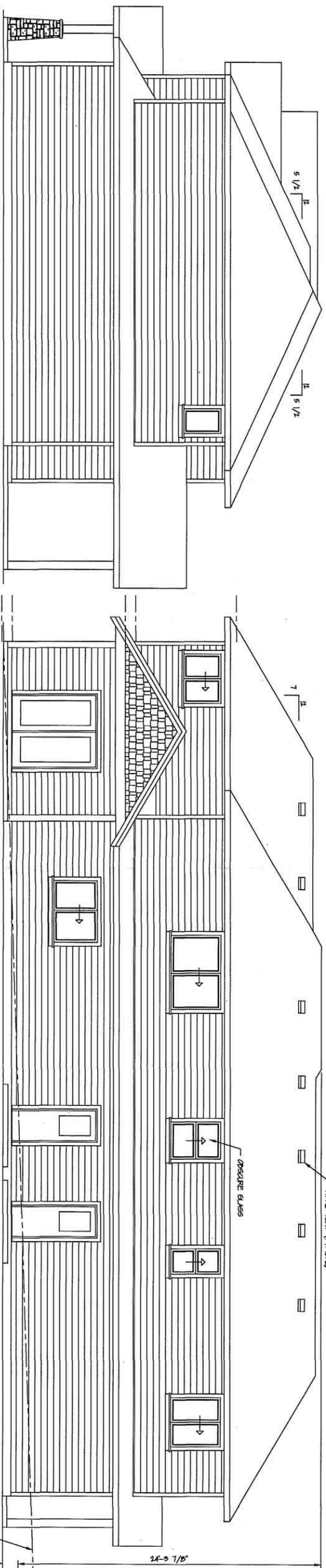
R3



LEFT ELEVATION

FRONT ELEVATION

OFFICE COPY



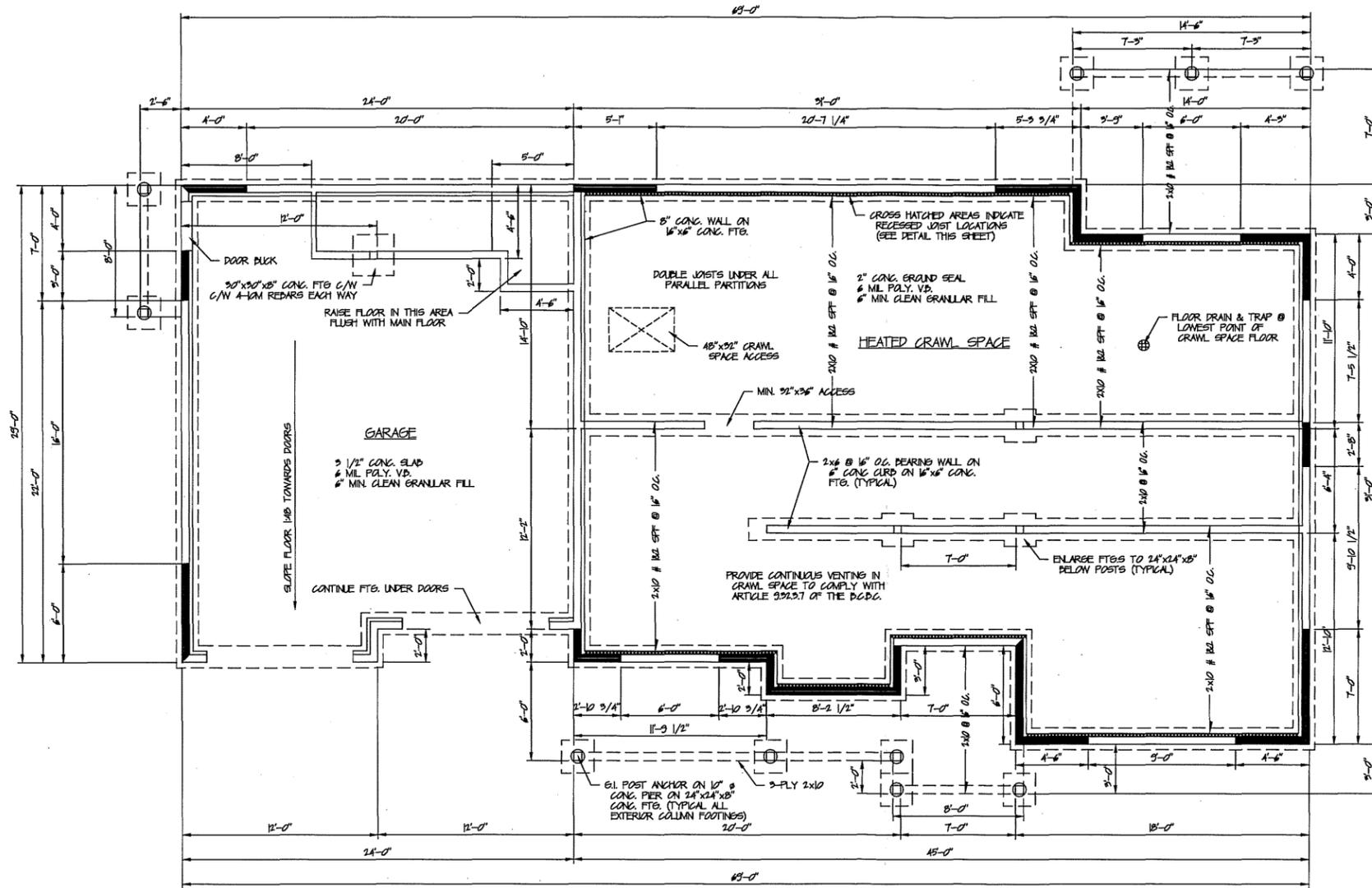
RIGHT ELEVATION

REAR ELEVATION

REVISED: 2016 09 29. ADD WINDOW ON REAR		
REVISED: 2016 09 29. ROOF PITCH & RECESSED JOISTS		
COPYRIGHT. THESE PLANS MAY NOT BE COPIED IN ANY FORM WITHOUT THE WRITTEN PERMISSION OF G. T. BURDGE DESIGNS		
DATE: AUGUST 2016	PLAN NO.	SHEET NO.
SCALE: 1/4" = 1'-0"	C2025	1 OF 8
BY: G.T. BURDGE ASCT, RPD		

LOT 25 SENTINEL DRIVE, MILL BAY
 PROPOSED RESIDENCE FOR:
 DAVE & YVONNE VALOIS

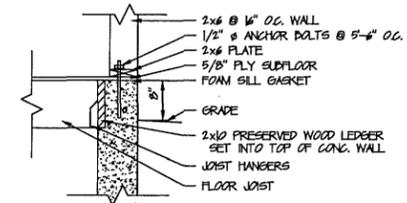
G. T. BURDGE DESIGNS
 4950 KINGSFOTE ROAD, CONNORAN BAY, D.C., VOR. IR2, (050) 740-5044
 EMAIL: gburdgd@shaw.ca



FOUNDATION PLAN

ANCHOR BOLT PLACEMENT

1/2" @ 5'-6" O.C. MAX. OR
5/8" @ 5'-0" O.C. MAX.
MIN. OF 2 ANCHOR BOLTS PER
BRACED WALL PANEL



RECESSED JOIST DETAIL

SCALE: 3/4" = 1'-0"

REVISED: 2016 09 29. REAR STAIR DETAILS	RECESSED JOISTS
REVISED: 2016 09 29. RECESSED JOISTS	COPYRIGHT: THESE PLANS MAY NOT BE COPIED IN ANY FORM WITHOUT THE WRITTEN PERMISSION OF G. T. BURDGE DESIGNS
DATE: AUGUST 2016	PLAN NO. C2025
SCALE: 1/4" = 1'-0"	SHEET NO. 2 OF 8
BY: G.T. BURDGE ASCT, RBD	

LOT 25 SENTINEL DRIVE, MILL BAY
PROPOSED RESIDENCE FOR:
DAVE & YVONNE VALOIS

-3 JUN 2011 13 35

FB0417129

LAND TITLE ACT
Form 35
(Section 216(1))

DECLARATION OF BUILDING SCHEME

NATURE OF INTEREST CHARGE: Statutory Building Scheme

HEREWITH FEES OF: \$73.40

Address of person entitled to apply to register this building scheme:

0704315 B.C. Ltd., c/o 1626 Garnet Road, Victoria, BC, V8P 3C8

7/8

Full name, address, and telephone number of person presenting application:

MULLIN DEMEO, Barristers and Solicitors

1626 Garnet Road, Victoria, B. C., V8P 3C8 Phone: 477-3327

File: Sentinel Ridge/50087/JDM/jan

1C

hw 6/13/2011 1:35:48 PM 2 1
Charge 1 \$73.40

Signature of Applicant or Solicitor or Authorized Agent

sub G. Drake

0704315 B.C. LTD. declares that:

1. 0704315 B.C. LTD. is the registered owner in fee simple of the following land (the "Lots"):

Lots 1 to 30, of District Lot 80, Malahat District, Plan VIP 88932

2. 0704315 B.C. LTD. hereby creates a building scheme relating to the Lots.

3. A sale of any of the Lots is subject to the restrictions enumerated in the schedule attached or annexed hereto.

hw 6/13/2011 1:30:11 PM 2 1
Defect 1 \$32.70

4. The restrictions shall be for the benefit of all the Lots.

OFFICER SIGNATURE(S)

EXECUTION DATE

JOHN D. MULLIN
BARRISTER & SOLICITOR
1626 GARNET ROAD
VICTORIA, BC V8P 3C8

Y	M	D
10	10	12

0704315 B.C. LTD.
by its authorized signatory:
signatory

Name: William Beadle

SOLICITOR OR NOTARY
OFFICER CERTIFICATION

Your signature constitutes a representation that you are a solicitor, notary public or other person authorized by the Evidence Act, R.S.B.C. 1979, c. 116, to take affidavits for use in British Columbia and certifies the matters set out in Part 5 of the Land Title Act as they pertain to the execution of this instrument.

CONSENT AND PRIORITY AGREEMENT OF CHARGE HOLDERS

We, COAST CAPITAL SAVINGS CREDIT UNION, the holder of the following registered charges, consent to the registration of the above Declaration of Building Scheme and agree that it shall have priority over our Mortgage No. CA152685 and Assignment of Rents No. CA152686.

OFFICER SIGNATURE(S)

EXECUTION DATE

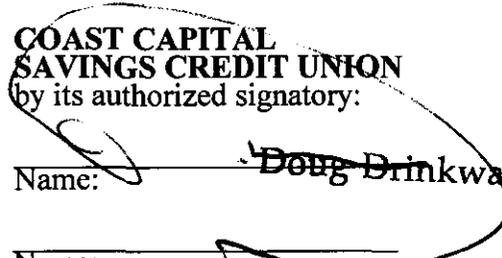


HEINZ SZCZYPIORKOWSKI
A Commissioner For Taking Affidavits
For British Columbia
SUITE 400 - 645 TYEE ROAD
VICTORIA, BC V9A 6X5

Y	M	D
2010	10	15

COAST CAPITAL SAVINGS CREDIT UNION
by its authorized signatory:

Name:

 **Doug Drinkwater**

Name:

(as to both signatures)

SOLICITOR OR NOTARY

OFFICER CERTIFICATION

Your signature constitutes a representation that you are a solicitor, notary public or other person authorized by the Evidence Act, R.S.B.C. 1979, c. 116, to take affidavits for use in British Columbia and certifies the matters set out in Part 5 of the Land Title Act as they pertain to the execution of this instrument.

**BUILDING SCHEME
SCHEDULE OF RESTRICTIONS**

1. DEFINITIONS

- (a) "Developer" means 0704315 B.C. LTD. and includes its assigns and successors.
- (b) "Lot" means any of the 30 residential building lots, in whatever phase, intended to be created by subdivision of the Land, and "Lots" has a corresponding meaning.
- (c) Purchasers and their successors in title of the Lots are subject to this Statutory Building Scheme and are hereinafter referred to as the "Owner" or "Owners".

2. APPROVAL OF PLANS

- (a) No dwelling, building or other improvements shall be constructed, placed, erected or maintained on any Lot unless and until plans and specifications showing compliance in all respects with these restrictions and providing elevations, siting, size, colour scheme, landscaping and all materials to be used have been submitted to and approved in writing by the Developer's authorized agent ("Design Consultant") who shall have the right and power to approve or reject such plans and specifications. For the purposes of this Statutory Building Scheme, construction shall include grading, filling or other preparatory work on any Lot.
- (b) The Developer shall have the right to waive any terms or conditions in whole or in part with respect to any unsold Lot charged by this Statutory Building Scheme and any such waiver of any breach shall not negate or render such provision invalid or unenforceable with respect to any other Lot charged by this Statutory Building Scheme.

3. THE LOT

- (a) Site Requirements
 - (i.) No retaining wall shall be constructed on any Lot having an exposed height greater than 1.2 metres (4 feet). Any exposed concrete over 0.6 metres (2 feet) in height shall be architecturally treated.

Handwritten signature and initials, possibly 'PA' inside a circle, located at the bottom right of the page.

4. THE HOUSE

(a) House Size/Siting

- (i.) One level homes shall have a minimum gross floor area of 232.25 square metres (2,500 square feet), not including garage areas.
- (ii.) Two level homes shall have a minimum gross floor area on the first level of 139.35 square metres (1,500 square feet) and the second level of 92.90 square metres (1000 square feet), not including garage areas.
- (iii.) No house shall be constructed on any Lot unless a house siting plan has been approved by the Developer taking into account view corridors of surrounding Lots.

(b) Exterior Design

(i.) Specific exterior design details must include:

- (1) In general, the main materials used on the front of the house should be used on all other faces of the building.
- (2) The main exterior cladding shall be limited to rock or cultured stone, hardiplank, wood siding and wood shakes/shingle siding. Stucco is permitted as an "accent only" exterior cladding material. A minimum of three types of exterior cladding shall be used. Exterior trim must be a minimum of 15.24 centimetres (6 inches).
- (3) No house shall be constructed on any Lot unless the front façade has the following features:
 - A) A timber-framed entry feature is required and further detailing such as wood trims around appropriate windows and doors is required.
 - B) Columns and garages must be trimmed to provide relief from a siding only front façade.
 - C) The design must be integrated in a related use of materials and complimentary colours.
- (4) No exposed concrete block is permitted. Exposed concrete foundation walls are not to exceed 0.5 metres (1.64 feet) in height.
- (5) The exterior colour scheme used for the house shall be natural earth tones and not primary colours.

Handwritten signature and a circular stamp containing the letters 'FB'.

- (6) Fascia board colours must compliment the siding colour.
- (7) Front doors will have raised panels of solid wood construction. Decorative windows are permitted within the front door.
- (8) No house on a corner Lot shall be designed unless the house faces both streets with roof and/or wall treatments turning the exposed corner.

(c) Roof

- (i.) No Roofing materials other than "high profile" 30-year fibreglass shingles with raised ridge caps in a weathered wood or dark colour, cedar shakes or cedar shingles are permitted.
- (ii.) The roof pitch must be a minimum of 5:12. Flat roofs are not permitted.
- (iii.) No Gutters, rainwater leaders and soffits other than those painted to match trim colours or selected in a compatible colour if pre-finished are permitted. Any aluminium fascia gutter must be combined with wood fascia boards where appropriate to meet the requirements of this Building Scheme.

(d) Driveways and Garages

- (i.) Each dwelling shall have an enclosed area for a minimum of 2 parking spaces. All garages shall have closing wood doors with raised panels or other detailing and shall be stained/painted to match trim colours or complement the design of the house. Flat panel garage doors are not permitted.
- (ii.) Driveways shall be constructed of exposed aggregate, interlocking brick or a combination thereof. No gravel driveways or parking areas shall be constructed.
- (iii.) No buildings or driveways shall be constructed on the Lots unless provision to reduce storm water run-off from buildings and driveways has been made by the run-off from buildings, driveways and any other impervious surfaces constructed on a Lot being re-charged back to ground through suitable subsurface storm water management systems such as rock pits or exfiltration chambers and run-off from driveways which slope to the public road being intercepted at the property line by the provision of suitably designed and constructed absorbent strip such as grass-concrete or permeable interlocking concrete pavers.



5. GUIDELINES FOR THE STREETScape

- (a) Recreational Equipment, Commercial Equipment and Accessory Buildings
- (i.) Except for licensed passenger automobiles, vans and trucks which do not exceed a capacity of one ton, any vehicle including trailers, boats, motor homes, campers, recreational equipment and other similar objects on a Lot are required to be stored inside an enclosed space or behind fencing or screening to the side or rear of the house and shall not be visible from the street. Storage of these objects is not allowed in the front yard or the side yard along a flanking street.
 - (ii.) Any truck in excess of one ton capacity and commercial vehicles, equipment or machinery of any kind shall not be parked or stored anywhere on a Lot except as may be required for construction or repair of the home on the Lot.
 - (iii.) Accessory buildings shall not be constructed ahead of the front façade of the dwelling. Only one accessory building per Lot is allowed. All accessory buildings shall be finished in the same exterior materials and colours as the principal building.

6. LANDSCAPING

- (a) Landscaping
- (i.) To enhance a settled appearance on the Lots within the subdivision, the relevant Owner shall complete the street front of the Lot, front yard and side yard landscaping within 90 days after completion of house construction unless weather conditions make it impossible to do so.
 - (ii.) All front yard areas and any side yards fronting on either road within the subdivision shall be landscaped with a minimum of one tree per 8 metres (26.25 feet) of frontage. Each tree shall have a minimum caliper of 7 centimetres (2.75 inches) and a height of 1.5 metres (5 feet) or greater. There shall also be at least 9 shrubs in the front yard. Bedding areas containing shrubs, flowers and trees shall occupy a minimum of 20% of the front yard. Any area of the front yard or the side yards fronting roads within the subdivision which are not landscaped with bedding areas shall be turfed or seeded.
 - (iii.) A Sprinkler system is required for front and side yard landscaped/lawn areas.



7. FENCING

- (a) No fences shall be constructed in the front yard of a Lot other than metal vertical picket type fencing not exceeding a height of 1.5 metres (5 feet).
- (b) No fences on side yards shall extend further towards the front of the Lot than the front of the house, except in compliance with the requirements set out in 7(a) above.
- (c) No fences in the back yard and side yards (not including that portion of the side yards in front of the house) shall be constructed other than:
 - (i.) cedar split-rail fences;
 - (ii.) cedar board and/or lattice panel fences;
 - (iii.) hedges that serve as fences along property lines.
- (d) No fences in the back yard and side yards (not including that portion of the side yards in front of the house) shall be higher than 1.83 metres (6 feet).
- (e) No wire fencing (including page wire, barbed wire, chain link, chicken wire) shall be constructed or installed on a Lot, except at the rear property line where combined with tree hedging.

8. LOT CONDITION/CONSTRUCTION

- (a) No Owner shall allow debris, noxious weeds (i.e. thistles) or invasive plant species (i.e. scotch broom, gorse or ivy) to accumulate on a vacant Lot prior to construction of improvements.
- (b) No improvements shall be allowed to remain in an incomplete state and construction shall proceed diligently and continuously from commencement of the improvements until completion of all improvements in the manner approved by the Developer and in no case shall any improvements be incomplete within 12 months of commencement of the improvements for single family homes.
- (c) No dwelling on any Lot shall be occupied by any person until construction of such building has received final Building Approval by the Developer and an Occupancy Permit from the Cowichan Valley Regional District has been issued. No dwelling on any Lot shall be occupied by any person unless and until such dwelling, including the exterior thereof, is substantially finished.

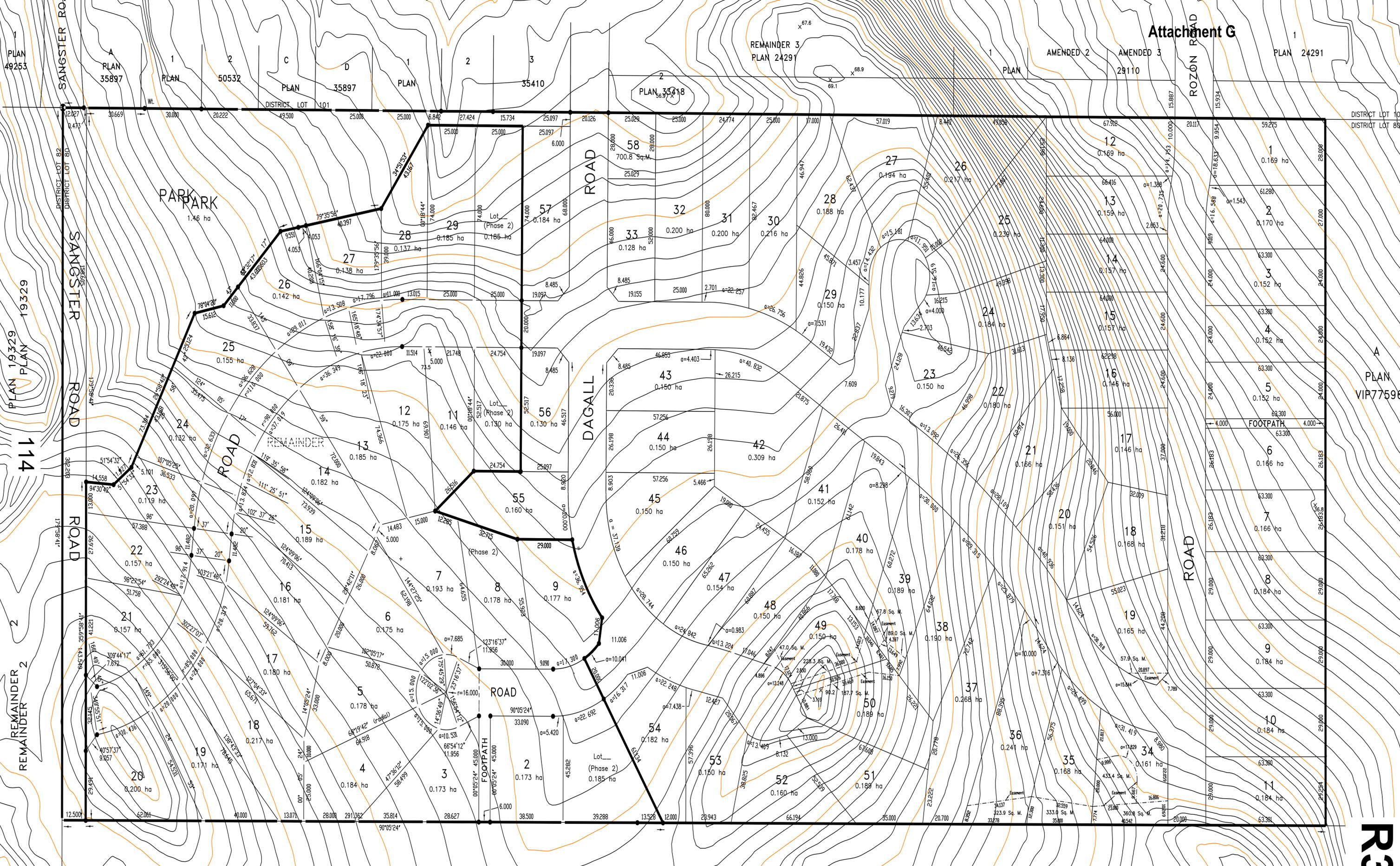
Handwritten signature and initials in black ink, located at the bottom right of the page.

9. GENERAL RESTRICTIONS

- (a) No pole, mast, clothesline, antenna, satellite dish or any other similar object of any kind shall be situated on any Lot or on the exterior of any building or improvement on any Lot, save and except for a single satellite dish of approximately .61 metres (2 feet) in diameter.
- (b) No billboard or "For Sale" sign of any character shall be erected, posted or displayed upon or about any part of any Lot other than signs not larger than 76.2 centimetres by 45.72 centimetres (30 inches by 18 inches).
- (c) No heat pumps or air-conditioning units shall be placed in buildings or on any Lot unless the location of the same has been included in the house siting plans and the sound level at the property lines of the Lot will not exceed 50 decibels.
- (d) No Owner or occupier of any Lot shall keep or permit to be kept animals of any kind or description whatsoever except for domesticated household pets which pets shall not be permitted to run wild or uncontrolled within the subdivision.
- (e) There shall not be stored, kept nor permitted to be kept or stored on any Lot any junk or wrecked or partially wrecked motor vehicles or any salvage materials or goods intended for commercial use or sale nor shall any waste or refuse be kept or stored upon any Lot.

END OF DOCUMENT

Handwritten signature and initials in black ink, consisting of a stylized 'Z' and a circled 'BS'.



PLAN 49253

PLAN 35897

PLAN 50532

PLAN 35897

PLAN 35410

PLAN 35418

REMAINDER 3 PLAN 24291

PLAN 29110

PLAN 24291

PLAN 19329

PLAN 114

REMAINDER 2

PLAN VIP77596

Original subdivision topography derived from LIDAR data pre-2006
 Grey = 1 metre contour intervals, Orange = 5 metre intervals
 Registered lot boundaries may not be exactly as shown

PARCEL A (DD 36099-1) OF DISTRICT LOTS 77 AND 80

R3

Planning and Development

From: The Beatties <Sheilabobbeattie@shaw.ca>
Sent: January-26-18 1:40 PM
To: Planning and Development
Subject: Concerning file 03-A-17DVP

I have no objection to granting this variance regarding home at 649 Sentinel Drive.
Sheila Beattie, 644 Sentinel Drive. If more information required please call [REDACTED]



Subject Dwelling – grey with white trim







COWICHAN VALLEY REGIONAL DISTRICT
DEVELOPMENT VARIANCE PERMIT

FILE
 NO: 03-A-17DVP
 DATE: _____

REGISTERED PROPERTY OWNER :

1. This Development Variance Permit is issued and is subject to compliance with all of the bylaws of the Regional District applicable thereto, except as specifically varied or supplemented by this Permit.
2. This Development Variance Permit applies to and only to those lands within the Regional District described below:

Lot 25, District lot 80, Malahat District, Plan VIP88932 (PID: 028-603-842)

3. Authorization is hereby given to vary Section 10.9(4) of Zoning Bylaw No. 3520 to increase the maximum permitted height of a principal residential building from 7.5 metres to 8.7 metres.
4. The following plans and specifications are attached to and form a part of this permit.
 Schedule A – Site Plan Showing Building Height prepared by Kenyon Wilson Professional Land Surveyors dated October 5, 2017
5. The land described herein shall be developed in substantial compliance with the terms and provisions of this Permit and any plans and specifications attached to this Permit shall form a part thereof.
6. **This Permit is not a Building Permit.** No certificate of final completion shall be issued until all items of this Development Variance Permit have been complied with to the satisfaction of the Planning & Development Department.

AUTHORIZING RESOLUTION NO. XXXX PASSED BY THE BOARD OF THE COWICHAN VALLEY REGIONAL DISTRICT THE xTH DAY OF MONTH, 2018.

Subject to the terms of this Permit, if the holder of this Permit does not substantially start any construction within 2 years of its issuance, this Permit will lapse.

I HEREBY CERTIFY that I have read the terms of the Development Variance Permit contained herein. I understand and agree that the Cowichan Valley Regional District has made no representations, covenants, warranties, guarantees, promises or agreements (verbal or otherwise) with DAVID AND YVONNE VALOIS (owner), other than those contained in this Permit.

Owner/Agent (signature)

Witness (signature)

Print Name

Print Name

Date

Date

DRAFT



STAFF REPORT TO COMMITTEE

DATE OF REPORT February 26, 2018
MEETING TYPE & DATE Electoral Area Services Committee Meeting of March 7, 2018
FROM: Development Services Division
 Land Use Services Department
SUBJECT: Development Permit with Variance Application No. 22-D-17DP
 (1615 Koksilah Road)
FILE: 22-D-17DP

PURPOSE/INTRODUCTION

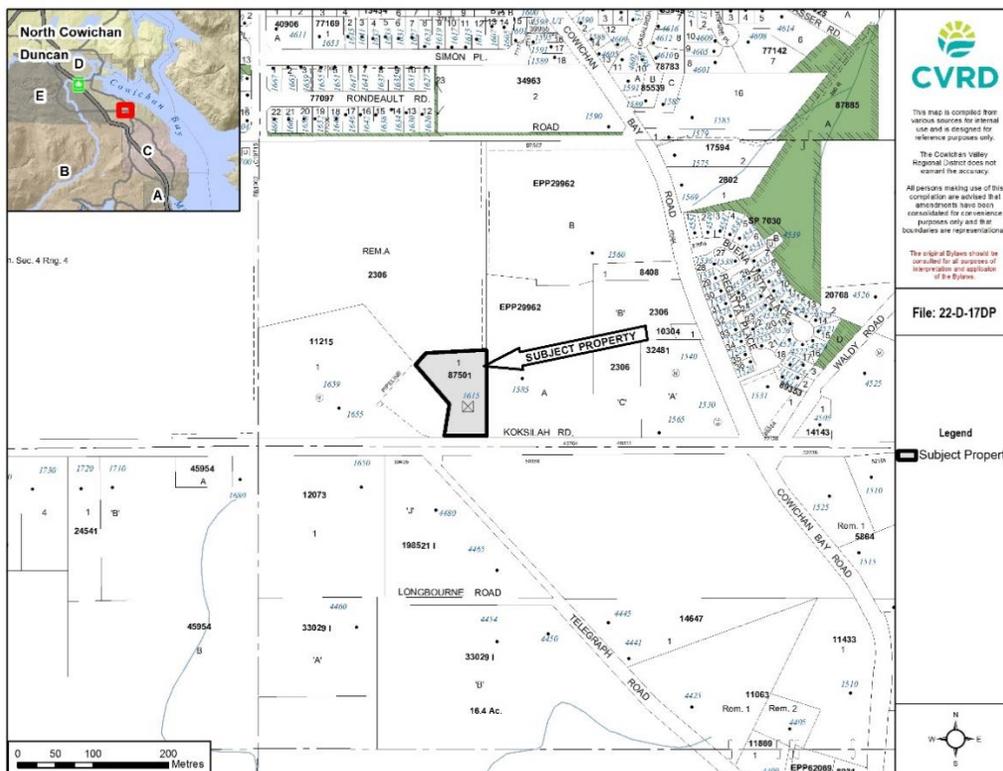
The purpose of this report is to present a Development Permit with Variance application for a two-storey 1017 m² (10,941 sq. ft.) building addition to the chicken processing facility.

RECOMMENDED RESOLUTION

That it be recommended to the Board:

1. That Development Permit Application No. 22-D-17DP be approved;
2. That Sections 2.4(2)(f), 2.4(2)(g), 2.4(2)(j), 2.4(2)(k) of Zoning Bylaw No. 3705 be varied by eliminating respective requirements for bicycle parking, electric vehicle charging outlet, paved parking area and installation of oil-water separators; and
3. That the General Manager of Land Use Services be authorized to permit minor revisions to the permit in accordance with the intent of development permit guidelines of Official Community Plan Bylaw No. 3605.

LOCATION MAP



BACKGROUND

<u>Address:</u>	1615 Koksilah Road
<u>Legal Description:</u>	Lot 1, Section 4, Range 5, Cowichan District, Plan VIP87501 (PID: 028-110-676)
<u>Owner:</u>	Rosstown Holdings Ltd.
<u>Applicant:</u>	Coldbox Builders Inc. (Mike Owsianicki)
<u>Size of Land Parcel:</u>	0.732 ha
<u>Use of Property:</u>	Chicken Processing Facility
<u>Use of Surrounding Properties:</u>	North: Agricultural (A-1/ALR) East: Residential South: Koksilah Road, Residential, Agricultural West: Residential
<u>Existing Water:</u>	Cowichan Bay Improvement District
<u>Existing Sewage Disposal:</u>	Cowichan Bay Sewer
<u>Existing Drainage:</u>	Not connected to a service area
<u>Environmentally Sensitive Areas:</u>	None identified
<u>Fire Protection:</u>	Cowichan Bay Volunteer Fire Department
<u>Wildfire Hazard Rating:</u>	Moderate
<u>OCP Designation:</u>	Agricultural Resource
<u>Zoning:</u>	A-1A (Agricultural Processing)
<u>Development Permit Areas:</u>	Rural Character and Agricultural Protection

APPLICATION SUMMARY

The subject property is off Koksilah Road and is currently the site of the Island Farmhouse Poultry chicken processing facility, within the Agricultural Land Reserve (ALR) and is zoned A-1A.

An approximately 1017 m² (10,941 sq. ft.) two-storey addition to the rear of the existing building is proposed. The interior of the existing building will also be significantly renovated in order to improve efficiency and workflow of the processing facility. The roofline of the existing building on the east side will be removed and replaced for design consistency with the existing main roofline.

There are existing storage containers on the site that will be removed with the construction of the new addition, as the uses within these containers will now be accommodated in the new building.

Additionally, the wash down and offal bin will be enclosed within the new building, resulting in less outdoor activity associated with the processing facility.

There is a covenant registered on the title of the property, which is intended to mitigate the potential for adverse impacts on surrounding properties resulting from the processing facility.

In accordance with the covenant, to process more than 3,000 birds at the facility a noise insulating fence extending along the northwest and western boundaries of the land is required; the facility must include an indoor area for the storage of offal and waste products; and all outdoor lighting fixtures must be equipped with shields or shrouds that direct light downwards in order to prevent light from being cast onto adjoining properties.

The application proposes to vary the following Sections of Electoral Area D – Cowichan Bay Zoning Bylaw No. 3705:

- Section 2.4(2)(f) to eliminate the requirement to provide 3.4 bicycle parking spaces;
- Section 2.4(2)(g) to eliminate the requirement to provide one electric vehicle charging outlet; and
- Section 2.4.2(j) and (k) to eliminate the requirement that parking areas for commercial or industrial uses be paved and provided with oil water separators respectively.

COMMISSION / AGENCY / DEPARTMENTAL CONSIDERATIONS

The Electoral Area D Advisory Planning Commission (APC) recommended approval of the application, with the following specific recommendations:

1. *Take measures to ensure runoff from parking and loading/unloading areas passes through an oil separation system.*
2. *Consider additional design elements to mitigate the appearance of three of the two-storey mass walls. The south face of the new building is acceptable as proposed as most of it will be covered by the existing building and the dark backdrop will highlight the character of the existing building. It is suggested that a simple wood trim be added mid-height to the west, east and north walls to break up the very plain uniformity of the charcoal exterior.*
3. *Resolve property easement issue with neighbour to the east.*
4. *Consider further enhancements for the green space and employee outdoor break area to compliment the gazebo already in place.*

- **See Attachment K – APC Minutes**

Surrounding Property Owner Notification and Response:

A total of 8 letters were mailed-out or hand delivered as required pursuant to CVRD Development Application and Procedures and Fees Bylaw No. 3275. The notification letter described the purpose of this application and requested comments regarding the proposed variances within a recommended time frame. To date, no response letters have been received.

OFFICIAL COMMUNITY PLAN/POLICY CONSIDERATIONS

Cowichan Bay Official Community Plan (OCP) Bylaw No.3605

The proposed development is subject to the *Agricultural Protection and Rural Character Development Permit Areas (DPAs)*.

Agricultural Protection Development Permit Area

The objectives of the Agricultural Protection DPA are to minimize the potential for land use conflicts between agricultural and non-agricultural uses; and to protect arable land for farming.

The DPA applies to lands within the Agricultural Land Reserve (ALR), and lands within 30 metres of ALR or agriculturally designated properties.

Although the subject property is within the ALR, it is considered a “non-farm use”, which has formerly been approved by the Agricultural Land Commission. As a non-farm use, it is incumbent on the applicants to ensure minimal impact to surrounding properties resulting from the processing facility. This was supported through registration of the above-noted covenant.

The DPA guidelines imply that the required landscaped buffer between ALR and non-ALR land be located on the non-ALR land side (i.e. the responsibility of non-ALR properties to provide a buffer).

In the case of the subject property:

- In accordance with the covenant there is a noise insulating fence on the northwest and eastern property boundaries;
- There is a berm/fence/hedge combination along the property boundaries at the northwest;
- A berm and hedge are located along the north, and a berm and fence are located along the east (which is located on the adjacent property).
- The adjacent property to the east is owned by the former owner of the processing plant, and the owners are pursuing an agreement with the adjacent property owner to maintain this berm. Maintenance of the fence/berm or suitable alternative will be a condition of the Development Permit.

Staff recommend that the noise-insulating fence be extended to the north and portions of the west property lines where it does not exist already to mitigate noise potential and ensure a long-term buffer exists.

Rural Character Development Permit Area (DPA)

The Rural Character DPA provides guidelines to ensure that development proceeds in a manner that enhances and does not negatively impact the characteristics of the community.

- *Form and character of development – encourages variation in appearance and natural materials.*

The new addition consists of a 10 metre tall industrial building constructed using insulated metal panels. The rear three sides consist of charcoal-coloured metal walls. The main entry point and focus area from Koksilah Road will continue to be the existing building which was designed to reflect the agricultural qualities of the area, when the processing facility began as a small scale operation in 2005. The existing building will also be renovated and refreshed (new roofline and updating exterior, interior to be significantly renovated). There are no outdoor storage areas in the front. Associated with the construction of the new addition, current outdoor uses such as the wash down area for equipment and the offal waste storage area will be moved indoors.

- *Rain/storm water management - encourages minimal impervious surfaces and low-impact development measures including raingardens and bioswales where possible.*

Existing on-site parking areas and drive aisles are surfaced with compacted crushed gravel. There is an existing concrete where the washdown areas are, and these will be replaced with new concrete. Concrete pathways around the front and extending somewhat around the building, as well as concrete wheelchair accessible parking space are proposed.

The conceptual civil servicing report indicates that the existing large berm on three sides of the property prevents surface water from exiting the property. Surface drainage is currently directed to a low-lying treed area at the front of the site, and towards a French drain at the back of the site along the northern property boundary.

The stormwater management plan recommends the property be divided into two catchment areas with the drainage from the front parking area and drive aisle being directed to a swale and underground detention system at the front, and the drainage from the rear portion of the site being directed to a French drain leading to an underground detention system in the northwest corner of the property. Re-grading of the site is proposed to direct surface water runoff to the new drainage

infrastructure, but the site is proposed to remain gravel (no new paving). An oil-water separator will be installed between the retention tank and the swale inlet.

The volume calculations for rain and stormwater management assume an unpaved site, and the applicants have requested a variance to eliminate the requirement for paving of the parking areas. Should paving be required, the rain/stormwater management plan will need to be revised to include the parking areas to account for the increase in impervious surface area.

- *Landscaping – encourages landscaping that is integrated with the surrounding natural environment and which includes native plants.*

The areas of existing landscaping/buffering are shown on the site plan: existing landscaping and natural area at the front of the property, with a combination of hedge/fence/berm around the rear and side property lines.

A formal landscape plan has not been submitted with the application; however, a condition of the development permit will be that these landscaped areas be maintained as such.

- *Sediment and erosion control - manage the site during construction to control surface runoff and reduce sedimentation and erosion*

There is a berm located on three sides of the property, and therefore limited risk of sediment-laden runoff exiting the property. The applicants have supplied a sediment and erosion control plan, and conditions of the Development Permit will be to manage runoff from the property and to implement appropriate erosion control measures.

- *Lighting - will be kept to a minimum and preserve the ability to view the night sky, and maintain even light levels between properties.*

The covenant reinforces the requirement to reduce the amount of illumination emitted from the site. A conceptual lighting plan has been submitted which illustrates the locations of the proposed lighting on the building, no post-mounted lighting is proposed. Plan indicates lighting is “dark sky compliant LED”.

- *Signage*

No new signage is proposed.

Cowichan Bay Zoning Bylaw (Bylaw No. 3705)

The subject property is zoned Agricultural Processing (A1-A), which contains regulations that apply to the property, including permitted uses, parcel coverage, building height and setbacks. The application complies with the requirements of the Zone.

- **See Attachment I – A-1A Zone**

The following section highlights general regulations from the Zoning Bylaw that apply to the proposed development.

- **See Attachment J – General Regulations for Parking, Landscaping and Screening**

Section 2.3 – General Regulations for Landscaping and Screening

2.3(1) A landscape buffer with a minimum width of 1.5 metres shall be provided along the perimeter of the parcel, and further landscaping shall be specified by a Development Permit.

2.3(4) Garbage and recycling areas must be screened and cannot be located within any setback area.

2.3(7) Mechanical, electrical or other service equipment located at the exterior or on a building roof shall be screened from adjacent highways and lands.

Section 2.4 – General Regulations for Parking and Loading

The total combined gross floor area of the existing and proposed buildings is 1652 m² (17, 773 sq. ft.).

For poultry processing, 1 parking space per 100 m² is required. The application proposes 21 which exceeds the Bylaw requirement.

The following general items apply to commercial and industrial development when there is an expansion or addition to an existing use or building.

2.4(2)(f) Bicycle parking at a rate of 20% of the parking requirement is required.

2.4(2)(g) Development with at least 10 parking spaces is required to provide one electric vehicle charging outlet.

2.4(2)(j) All parking areas required for commercial, multiple dwelling, and industrial uses shall be surfaced with asphalt, concrete, permeable pavers or similar pavement so as to provide a surface that is durable and dust-free.

2.4(2)(k) All parking areas required for commercial, multiple dwelling and industrial uses shall include one or more oil-water separators, and it shall be the responsibility of the owner to properly maintain the oil-water separators regularly removing oils for proper disposal.

The applicants have indicated that since the current on-site parking exceeds the total parking requirement for the new combined gross floor area (existing and proposed buildings), they do not intend to make any changes to the surfacing of the existing parking area, and have requested a variance to eliminate this requirement.

PLANNING ANALYSIS

Based on the information provided the application satisfactorily meets the relevant DPA guidelines.

Although the guidelines encourage more variation in building design including indentation, colours and natural materials, it is important to note that two of the three bordering properties are agricultural and within the ALR, where large barns or agricultural buildings without any attention to form and character could be constructed.

The property on the east side is zoned R-3 (Village Residential) which is subject to a minimum parcel size of 700 m² when connected to community sewer and water. In the future if this property is developed, it will be subject to a development permit which will likely require a natural buffer area of 15 metres between the development the adjacent ALR land, which could possibly include a no-build covenant area for lands within 30 metres of the ALR boundary¹.

The applicants advise that the darker charcoal coloured panels were chosen, at greater expense, to better blend in with the environment, and not be light reflective. The area most visible to the broader public will remain the existing building.

¹ For reference, see Cowichan Bay Official Community Plan Bylaw No. 3605 Agricultural Protection Development Permit Area guidelines for subdivision 126

New fencing is being recommended along the remaining portions of the perimeter of the property where the poultry processing activities occur (north property line and portion of the west). It is not being recommended along the front parcel line or the west property line south of the face of the existing building as this is parking area, which is of lower disturbance, and there are existing treed and landscaped areas at the front of the parcel.

Although staff consider this building an industrial building, which is therefore subject to the general parking standards of the bylaw, and would accordingly require paving and accompanying oil/water separators, the applicants have requested a variance. The civil consultant who designed the stormwater management system recommends limiting hard surfacing (paving) onsite as increased the amount of paved area will only serve to reduce potential infiltration and concentrate storm water surface flows.

Approval of the variance is supported as the facility has a limited retail component and is bermed on three sides limiting the potential for nuisance resulting from dust. The surface water from the front parking area and drive aisle will be directed to a swale and underground retention system, and a requirement to pave the parking area will add significantly to the underground storage requirements since there is no surface connection or dissipation to adjacent properties.

Staff recommend Option 1.

OPTIONS

Option 1:

That it be recommended to the Board:

1. That Development Permit Application No. 22-D-17DP (1615 Koksilah Road) be approved;
2. That Sections 2.4(2)(f), 2.4(2)(g), 2.4(2)(j), 2.4(2)(k) of Zoning Bylaw No. 3705 be varied by eliminating respective requirements for bicycle parking, electric vehicle charging outlet, paved parking area and installation of oil-water separators; and
3. That the General Manager of Land Use Services be authorized to permit minor revisions to the permit in accordance with the intent of development permit guidelines of Official Community Plan Bylaw No. 3605.

Option 2:

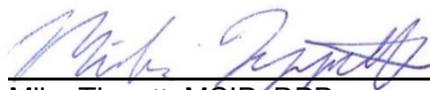
That Development Permit Application No. 22-D-17DP (1615 Koksilah Road) be denied based on inconsistency with specified Development Permit Area guidelines.

Prepared by:

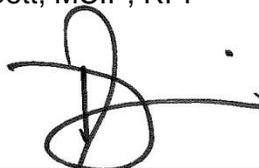


Rachelle Rondeau, MCIP, RPP
Planner II

Reviewed by:



Mike Tippett, MCIP, RPP
Manager



Ross Blackwell, MCIP, RPP, A. Ag.
General Manager

ATTACHMENTS:

- Attachment A – Zoning Map
- Attachment B – Orthophoto Map
- Attachment C – ALR Map
- Attachment D – Site Plan
- Attachment E – Building Elevations
- Attachment F – Conceptual Lighting Plan
- Attachment G – Conceptual Civil Servicing Report and Map
- Attachment H – Sediment and Erosion Control Plan
- Attachment I – A-1A Zone
- Attachment J – General Regulations for Parking, Landscaping and Screening
- Attachment K – APC Minutes
- Attachment L – Draft Development Permit



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

The Cowichan Valley 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.

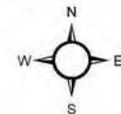
The original Bylaws should be consulted for all purposes of interpretation and application of the Bylaws.

File: 22-D-17DP

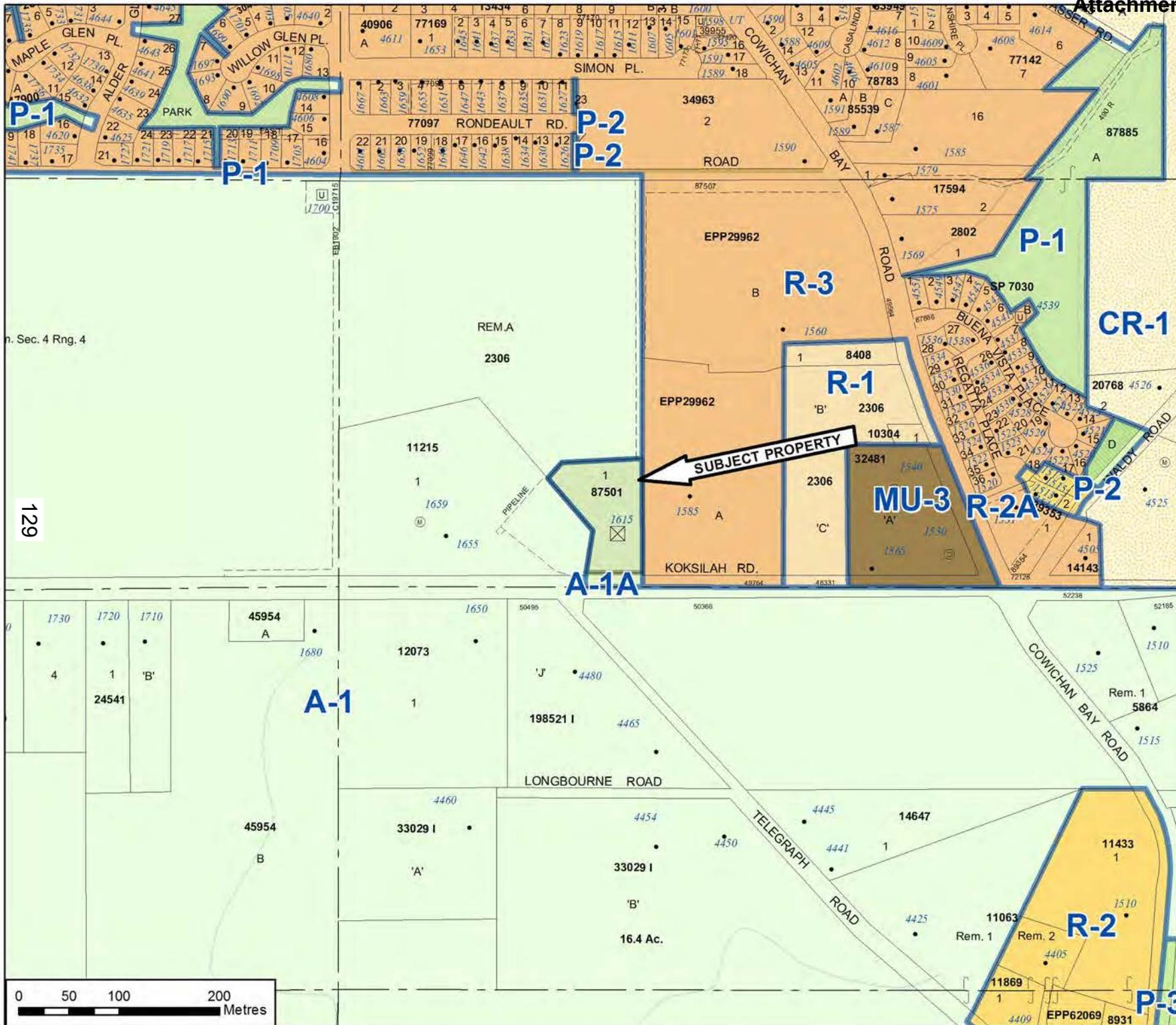
ZONING

Legend

- Subject Property
- Zoning D Uplands



R4



129

n. Sec. 4 Rng. 4



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

The Cowichan Valley 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.

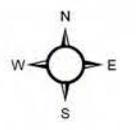
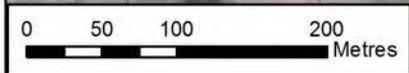
The original Bylaws should be consulted for all purposes of interpretation and application of the Bylaws.

File: 22-D-17DP

TRIM Orthophoto (2014)



130

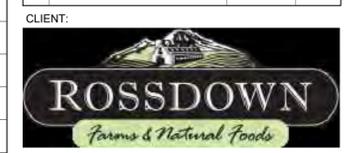


R4

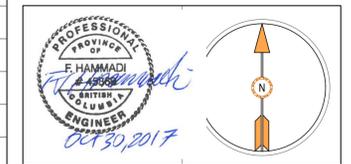
DISCLAIMER:
THIS DRAWING IS COPYRIGHT MATERIAL AND THE PROPERTY OF COLDBOX.
THIS DRAWING IS NOT TO BE REPRODUCED WITHOUT THE EXPRESS WRITTEN CONSENT OF THE AUTHOR.
THIS DRAWING IS PROVIDED SOLELY FOR INFORMATIONAL PURPOSES.
THE INFORMATION ON THIS DRAWING IS INTENDED FOR BUDGETING AND CONCEPTUAL PURPOSES BY COLDBOX.
THIS DRAWING IS NOT FOR CONSTRUCTION.

KEY PLAN:

NO	REVISION	DATE	BY
A	FOR SITE VERIFICATION	17-04-04	R.B.
B	APPROVED CONCEPT	17-08-29	R.B.
C	FOR DEVELOPMENT PLAN APPROVAL	17-09-18	R.B.
D	RE-ISSUED - DEVELOPMENT PERMIT	17-10-30	R.B.



APPROVED BY: _____ DATE _____
PRINT NAME & SIGN ABOVE



PROJECT:
PROPOSED POULTRY PLANT EXPANSION
PROJECT ADDRESS:
1615 - KOKSILAH ROAD, COWICHAN BAY VANCOUVER ISLAND, BRITISH COLUMBIA

LEGAL DESCRIPTION:
SUBDIVISION PLAN POF PART OF LOT 1, SECTION 4, RANGE 5, COWICHAN DISTRICT, PLAN 2306, EXCEPT PART IN PLAN 11215 AND 49764
LEGAL DESCRIPTION:
A1A - AGRICULTURAL PROCESSING ZONE

ISSUANCE:
FOR DEVELOPMENT PLAN APPROVAL

SHEET TITLE:
OVERALL SITE AND PAVEMENT PLAN
PROJECT #:
C17-111
APPROVED: F. HAMMADI P. ENG DATE: 17-
REVIEWED: MIKE OWSIANICKI DATE: 17-
DRAWN: R. BOADO SHEET #:
SCALE: AS SHOWN
DATE: MARCH 31, 2017

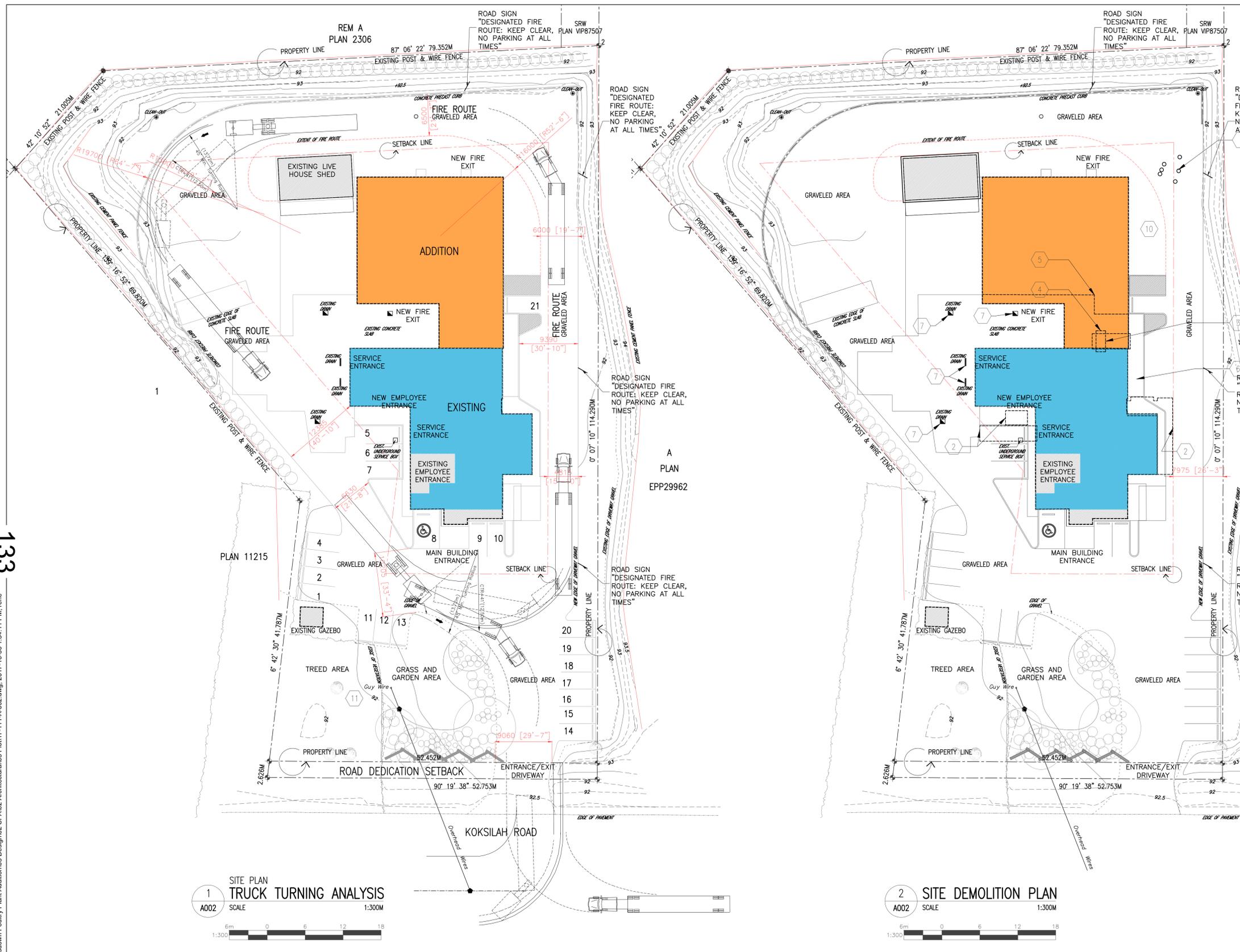
PROPERTY STATISTICS		
LOT DESCRIPTION		
LOT 1 SECTION 4 RANGE 5 COWICHAN DISTRICT PLAN V187501		
PLAN		
2306, EXCEPT PART IN PLAN 11215 AND 49764		
MUNICIPAL ADDRESS		
1615 - KOKSILAH ROAD, COWICHAN BAY VANCOUVER ISLAND, BRITISH COLUMBIA		
ZONING	DISTRICT	
A1A - AGRICULTURAL PROCESSING ZONE	COWICHAN	
BUILDING CODE ANALYSIS		
BUILDING HEIGHT	TWO (2) STOREY	
MAJOR OCCUPANCY	GROUP F DIVISION 2	
FACING STREETS	1 STREET - KOKSILAH ROAD	
BRITISH COLUMBIA BUILDING CODE SECTION	PART 3 ---	
CONSTRUCTION TYPE	NON-COMBUSTIBLE	
AREA CALCULATIONS		
LOT AREA	7 316 SQM [78 709 SFT]	
EXISTING BUILDING FOOTPRINT	556 SQM [5 982 SFT]	
MAIN FLOOR AREA	556 SQM [5 982 SFT]	
SECOND FLOOR AREA	79 SQM [850 SFT]	
INTERIOR ALTERATION SCOPE OF WORK	465 SQM [5003 SFT]	
EXISTING SITE COVERAGE	7.6%	
GROSS FLOOR AREA	635 SQM [6 832 SFT]	
NEW BUILDING FOOTPRINT	545 SQM [5 863 SFT]	
MAIN FLOOR AREA	545 SQM [5 863 SFT]	
SECOND FLOOR AREA	472 SQM [5 078 SFT]	
NEW ADDITION GFA	1017 SQM [10 941 SFT]	
NEW COMBINED GROSS FLOOR AREA	1652 SQM [17 773 SFT]	
TOTAL SCOPE OF WORK (ADDITION + INTERIOR ALTERATION)	1482 SQM [15 944 SFT]	
ZONING ANALYSIS		
ZONING	REQUIRED	PROPOSED
	A1A AGRICULTURAL PROCESSING ZONE	A1A AGRICULTURAL PROCESSING ZONE
LOT WIDTH	AS SHOWN IN SITE PLAN & SURVEY PLAN	
LOT AREA	7 136 SQM	
LOT COVERAGE	30% (ALLOWABLE)	556 SQM (EXISTING)
		545 SQM (NEW)
TOTAL		1101 SQM (COMBINED)
		1101M ² /7136 M ² = 15.42%
		15.42%
PROPERTY SET BACK		
FRONT YARD (EXISTING)	30 M	39.78 M
FRONT YARD TO FRONT PORCH	30 M	37.28 M (EXISTING)
INTERIOR SIDE OF LOT (EXISTING)	8 M	7.98 M (EXISTING) (APPROVED RE-ZONING) (TO BE REMOVED)
INTERIOR SIDE OF LOT	8 M	15.19 M (EXISTING) 15.11 M (NEW)
REAR YARD: (NEW ADDITION)	15 M	18.96 M 20.77 M
REAR YARD (EXISTING LIVE SHED)	15 M	15.49 M
SIDE YARD: (NEW ADDITION)	15 M	19.56 M 20.77 M
LEFT SIDE YARD: (EXISTING)	15.88 M	18 M
BUILDING HEIGHT: (EXISTING)	10.0 M (7.5 FOR ACCESSORY BUILDING)	7.25 M (EXISTING)
BUILDING HEIGHT: (NEW ADDITION)	10.0 M (7.5 FOR ACCESSORY BUILDING)	10.0 M (NEW ROOF)



1 OVERALL SITE PLAN
A001 SCALE 1:300M

2 SITE PAVEMENT PLAN
A001 SCALE 1:300M

SITE ADDITIONAL NOTES:		PARKING		METRIC NOTES		LANDSCAPE		SITE IMPROVEMENTS	
1	EXISTING SEPTIC TANK LOCATION; REFER TO DEMOLITION PLAN FOR ADDITIONAL INFORMATION	EXISTING	7	REQUIRED	21	PROVIDED	21	8	EXISTING CONCRETE SLAB
2	NEW 100MM THICK CONCRETE SIDEWALK; 150 MM CONCRETE PARKING/PAD	NEW	9	REQUIRED	-	PROVIDED	-	9	NEW CONCRETE
3	EXISTING GRAVELED AREA FOR RE-GRADING IF REQUIRED.	ACCESSIBLE PARKING	1	REQUIRED	-	PROVIDED	-	1	EXISTING LANDSCAPE
4	EXISTING GREEN AREAS. REFER TO LANDSCAPE PLANS FOR DETAILS	TOTAL	17	REQUIRED	21	PROVIDED	21	2	GRAVEL (EXISTING)
5	PROPOSED NEW MULCH/GRASS COVERED AREAS. REFER TO LANDSCAPE PLAN FOR DETAILS							3	NEW LANDSCAPE
6	150mm THICK PRECAST CONCRETE CURB (TBD BY CLIENT)								
7	150mm THICK PRECAST WHEEL STOP (TBD BY CLIENT)								



PROPERTY STATISTICS		
LOT DESCRIPTION		
LOT 1 SECTION 4 RANGE 5 COWICHAN DISTRICT PLAN VIP87501		
PLAN		
2306, EXCEPT PART IN PLAN 11215 AND 49764		
MUNICIPAL ADDRESS		
1615 - KOKSILAH ROAD, COWICHAN BAY VANCOUVER ISLAND, BRITISH COLUMBIA		
ZONING	DISTRICT	
A1A - AGRICULTURAL PROCESSING ZONE	COWICHAN	
BUILDING CODE ANALYSIS		
BUILDING HEIGHT	TWO (2) STOREY	
MAJOR OCCUPANCY	GROUP F DIVISION 2	
FACING STREETS	1 STREET - KOKSILAH ROAD	
BRITISH COLUMBIA BUILDING CODE SECTION	PART 3 ---	
CONSTRUCTION TYPE	NON-COMBUSTIBLE	
AREA CALCULATIONS		
LOT AREA	7 316 SQM [78 709 SFT]	
EXISTING BUILDING FOOTPRINT	556 SQM [5 982 SFT]	
MAIN FLOOR AREA	556 SQM [5 982 SFT]	
SECOND FLOOR AREA	79 SQM [850 SFT]	
INTERIOR ALTERATION SCOPE OF WORK	465 SQM [5003 SFT]	
EXISTING SITE COVERAGE	7.6%	
GROSS FLOOR AREA	635 SQM [6 832 SFT]	
NEW BUILDING FOOTPRINT	545 SQM [5 863 SFT]	
MAIN FLOOR AREA	545 SQM [5 863 SFT]	
SECOND FLOOR AREA	472 SQM [5 078 SFT]	
NEW ADDITION GFA	1017 SQM [10 941 SFT]	
NEW COMBINED GROSS FLOOR AREA	1652 SQM [17 773 SFT]	
TOTAL SCOPE OF WORK (ADDITION + INTERIOR ALTERATION)	1482 SQM [15 944 SFT]	
ZONING ANALYSIS		
REQUIRED	PROPOSED	
ZONING	A1A AGRICULTURAL PROCESSING ZONE	
LOT WIDTH	AS SHOWN IN SITE PLAN & SURVEY PLAN	
LOT AREA	7 136 SQM	
LOT COVERAGE	30% (ALLOWABLE)	
	556 SQM (EXISTING)	
	545 SQM (NEW)	
TOTAL	1101 SQM (COMBINED)	
	1101M ² /7136 M ²	
	= 15.42%	
	15.42%	
PROPERTY SET BACK		
FRONT YARD (EXISTING)	30 M	39.78 M
FRONT YARD TO FRONT PORCH	30 M	37.28 M (EXISTING)
INTERIOR SIDE OF LOT (EXISTING)	8 M	7.98 M (EXISTING)
		(APPROVED RE-ZONING) (TO BE REMOVED)
INTERIOR SIDE OF LOT	8 M	15.19 M (EXISTING)
		15.11 M (NEW)
REAR YARD (NEW ADDITION)	15 M	18.96 M
REAR YARD (EXISTING LIVE SHED)	15 M	15.49 M
SIDE YARD (NEW ADDITION)	15 M	19.56 M
		20.77 M
LEFT SIDE YARD (EXISTING)	15.88 M	18 M
BUILDING HEIGHT: (EXISTING)	10.0 M (7.5 FOR ACCESSORY BUILDING)	7.25 M (EXISTING)
BUILDING HEIGHT: (NEW ADDITION)	10.0 M (7.5 FOR ACCESSORY BUILDING)	10.0 M (NEW ROOF)

BUILD GREAT THINGS WITH

coldbox BUILDERS

5500 N SERV., RD. SUITE 630, BURLINGTON, ON L7L 6W6

DISCLAIMER:
THIS DRAWING IS COPYRIGHT MATERIAL AND THE PROPERTY OF COLDBOX.
THIS DRAWING IS NOT TO BE REPRODUCED WITHOUT THE EXPRESS WRITTEN CONSENT OF THE AUTHOR.
THIS DRAWING IS PROVIDED SOLELY FOR INFORMATIONAL PURPOSES.
THE INFORMATION ON THIS DRAWING IS INTENDED FOR BUDGETING AND CONCEPTUAL PURPOSES BY COLDBOX.
THIS DRAWING IS NOT FOR CONSTRUCTION.

KEY PLAN:

NO	REVISION	DATE	BY
A	FOR SITE VERIFICATION	17-04-04	R.B.
B	APPROVED CONCEPT	17-08-29	R.B.
C	FOR DEVELOPMENT PLAN APPROVAL	17-09-18	R.B.
D	RE-ISSUED - DEVELOPMENT PERMIT	17-10-30	R.B.

CLIENT:

ROSSDOWN Farms & Natural Foods

APPROVED BY:

PRINT NAME & SIGN ABOVE DATE

PROFESSIONAL ENGINEER
F. HAMMADI
ARTIST
OCT 30, 2017

PROJECT:

PROPOSED POULTRY PLANT EXPANSION

PROJECT ADDRESS:
1615 - KOKSILAH ROAD, COWICHAN BAY VANCOUVER ISLAND, BRITISH COLUMBIA

LEGAL DESCRIPTION:
SUBDIVISION PLAN POF PART OF LOT 1, SECTION 4, RANGE 5, COWICHAN DISTRICT, PLAN 2306, EXCEPT PART IN PLAN 11215 AND 49764

LEGAL DESCRIPTION:
A1A - AGRICULTURAL PROCESSING ZONE

ISSUANCE:
FOR DEVELOPMENT PLAN APPROVAL

SHEET TITLE:
TRUCK TURNING & SITE DEMOLITION PLAN

SITE DEMOLITION NOTES:

- EXISTING SEPTIC TANK TO BE SALVAGED AND RELOCATED.
- TEMPORARY STRUCTURE TO BE DEMOLISHED AND DISPOSED OFF-SITE. EXISTING CONTAINER TO BE SALVAGED & RELOCATED. LOCATION TO BE DECIDED BY CLIENT.
- EXISTING STEEL STRUCTURE TO BE DEMOLISHED, SALVAGE AND OR DISPOSED OFF-SITE.
- ROOFTOP MECHANICAL/REFRIGERATION EQUIPMENT TO BE RELOCATED. REFER TO MECHANICAL PLANS FOR ADDITIONAL INFORMATION AND FINAL MOUNTING LOCATION.
- DEMOLISH AND DISPOSE OFF SITE EXISTING CONCRETE PAVING/PAD AFFECTED BY NEW EXTENSION BUILDING.

- REUSE & RELOCATE EXISTING MECHANICAL EQUIPMENT IN GOOD WORKING CONDITIONS. REFER TO MECHANICAL DRAWINGS FOR FINAL MOUNTING LOCATIONS.
- SITE DRAINS AND MANHOLES TO BE REPAIRED OR RE-USED AS PER SITE GRADING CHANGES

PARKING

PARKING STALLS	REQUIRED	PROVIDED
EXISTING	7	21
NEW	9	-
ACCESSIBLE PARKING	1	-
TOTAL	17	21

PARKING STALL COMPUTATION BASED ON BUILDING GROSS FLOOR AREA [1 PER 100 M² OF GROSS FLOOR AREA] AS PER AREA D ZONING BYLAW No. 3705. REFER TO SITE PLAN FOR PARKING STALL LAYOUT AND LOCATION.

METRIC NOTES

DISTANCES SHOWN ON THIS PLAN ARE IN METERS AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048 METERS

BENCHMARK

ELEVATIONS ARE REFERRED TO THE CITY BENCHMARK No. ___ HAVING AN ELEVATION OF ___ METERS

BEARING NOTE

BEARINGS ARE ASTROMONIC & ARE REFERRED TO THE NORTH EASTERLY LIMIT OF ___ AS SHOWN ON REG. PLAN ___ HAVING A BEARING OF N-___-___W

DOWNSPOUTS

ALL DOWNSPOUTS TO BE DIRECTED AWAY FROM BUILDING, AT DRIVEWAY DOWNSPOUTS TO BE CONCRETE PADS AND ALL NOT TO AFFECT NEIGHBORING PROPERTIES.

LANDSCAPE

ALL LANDSCAPE WORKS ARE TO BE DESIGNED AS PER CITY BYLAWS. REFER TO LANDSCAPE DRAWINGS FOR DETAILS.

SITE SERVICES

ALL SEWERS AND WATER WORKS ARE TO BE DESIGNED AND CONSTRUCTED AS PER CITY STANDARD. REFER TO DRAWINGS FOR DETAILS.

ROAD DESIGNS

SITE ACCESS ROAD AND FIRE LANE DESIGNED IN ACCORDANCE WITH CITY STANDARDS AND SPECIFICATIONS. REFER TO DRAWING FOR DETAILS.

LEGEND:

PROPOSED ADDITION

- PROPOSED BUILDING EXTENSION
- INTERIOR ALTERATION SCOPE OF WORK

EXISTING:

- EXISTING STRUCTURE

PROJECT #:

C17-111

APPROVED: F. HAMMADI P. ENG DATE: 17-10-30

REVIEWED: MIKE OWSIANICKI DATE: 17-10-30

DRAWN: R. BOADO SHEET #:

SCALE: AS SHOWN

DATE: MARCH 31, 2017

A001



PERSPECTIVE



PROPOSED ISLAND FARMHOUSE POULTRY ADDITION

1615 - KOKSILAH ROAD, COWICHAN BAY,
VANCOUVER ISLAND, BRITISH COLUMBIA

ISSUED FOR DEVELOPMENT PERMIT

27 OCTOBER 2017



BUILD GREAT THINGS WITH



5500N SERV. RD. SUITE 630, BURLINGTON ON L



X:\02 ENGINEERING\01 PROJECTS\C17-111 Rosdown Poultry Plant Addition\03 Design\02 SPA\02 Architectural\05 Pict\17-111-C000.dwg, 2017-10-30 3:14:19 PM, rme

DISCLAIMER:
THIS DRAWING IS COPYRIGHT MATERIAL AND THE PROPERTY OF COLDBOX.

THIS DRAWING IS NOT TO BE REPRODUCED WITHOUT THE EXPRESS WRITTEN CONSENT OF THE AUTHOR.

THIS DRAWING IS PROVIDED SOLELY FOR INFORMATIONAL PURPOSES.

THE INFORMATION ON THIS DRAWING IS INTENDED FOR BUDGETING AND CONCEPTUAL PURPOSES BY COLDBOX.

THIS DRAWING IS NOT FOR CONSTRUCTION.

KEY PLAN:

NO	REVISION	DATE	BY
A	FOR SITE VERIFICATION	17-04-04	R.B.
B	CONCEPT CLIENT APPROVAL	17-08-29	R.B.
C	FOR DEVELOPMENT PLAN APPROVAL	17-09-18	R.B.

CLIENT:



APPROVED BY:

PRINT NAME & SIGN ABOVE DATE



PROJECT:

PROPOSED POULTRY PLANT EXPANSION

PROJECT ADDRESS:
1615 - KOKSILAH ROAD, COWICHAN BAY
VANCOUVER ISLAND, BRITISH COLUMBIA

LEGAL DESCRIPTION:

SUBDIVISION PLAN POF PART OF LOT 1, SECTION 4,
RANGE 5, COWICHAN DISTRICT, PLAN 2306, EXCEPT
PART IN PLAN 11215 AND 49764

LEGAL DESCRIPTION:

A1A - AGRICULTURAL PROCESSING ZONE

ISSUANCE:
**FOR DEVELOPMENT PLAN
APPROVAL**

**SHEET TITLE:
EXISTING & DEMOLITION
FLOOR PLANS**

PROJECT #: C17-111

APPROVED: F. HAMMADI P. ENG DATE: 17-1
REVIEWED: MIKE OWSIANICKI DATE: 17-1

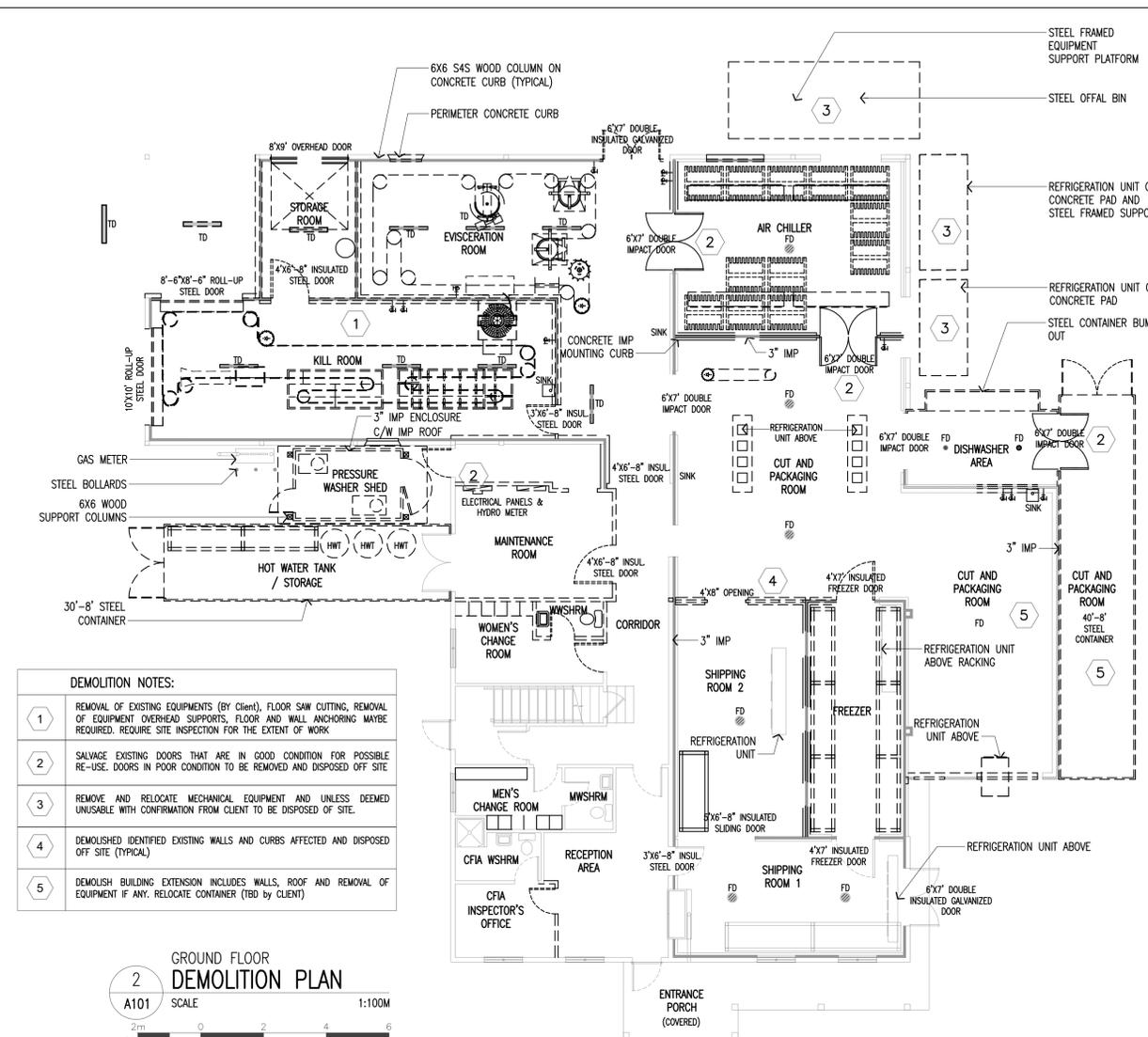
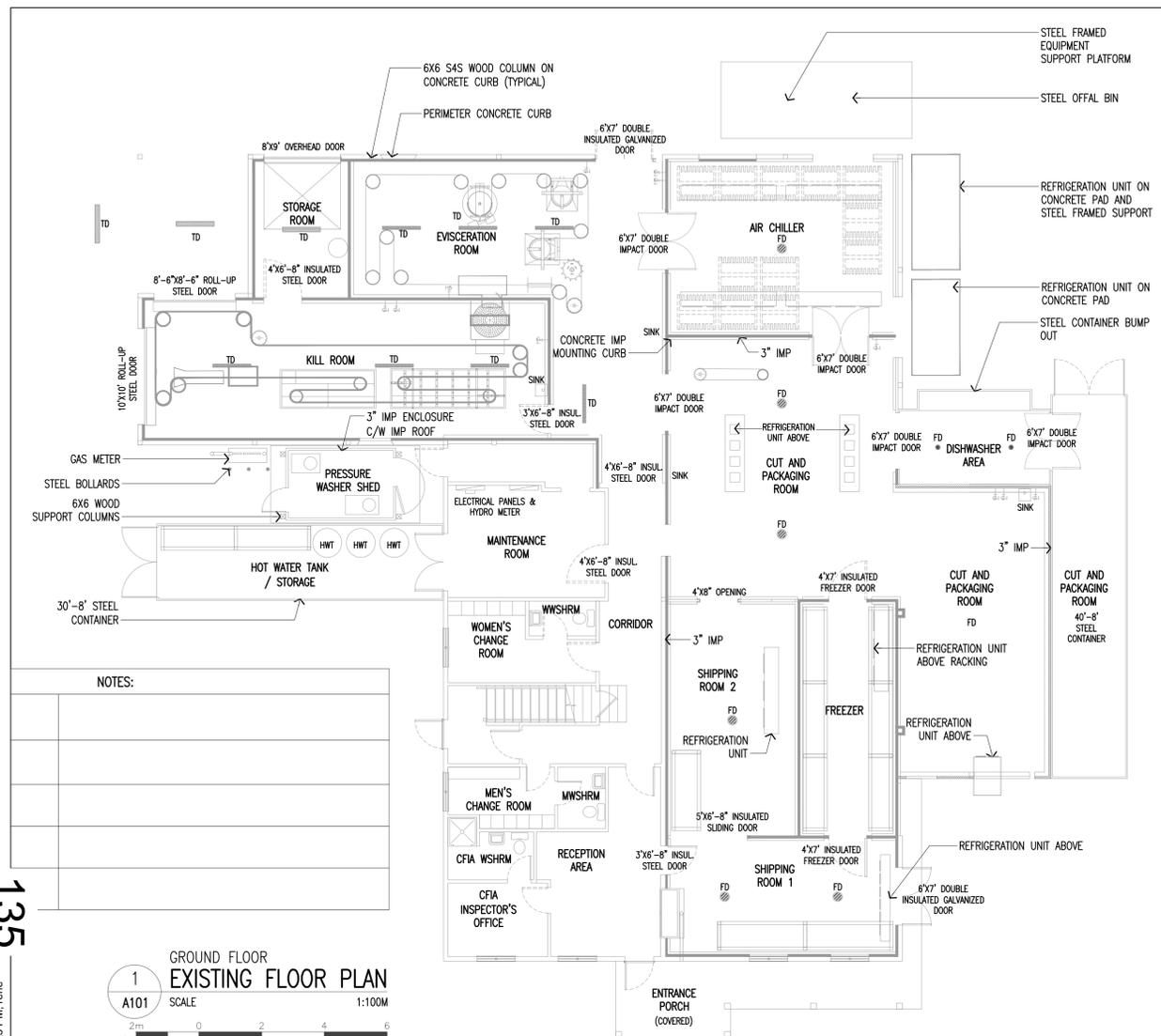
DRAWN: R. BOADO SHEET #:

SCALE: AS SHOWN

DATE: MARCH 31, 2017

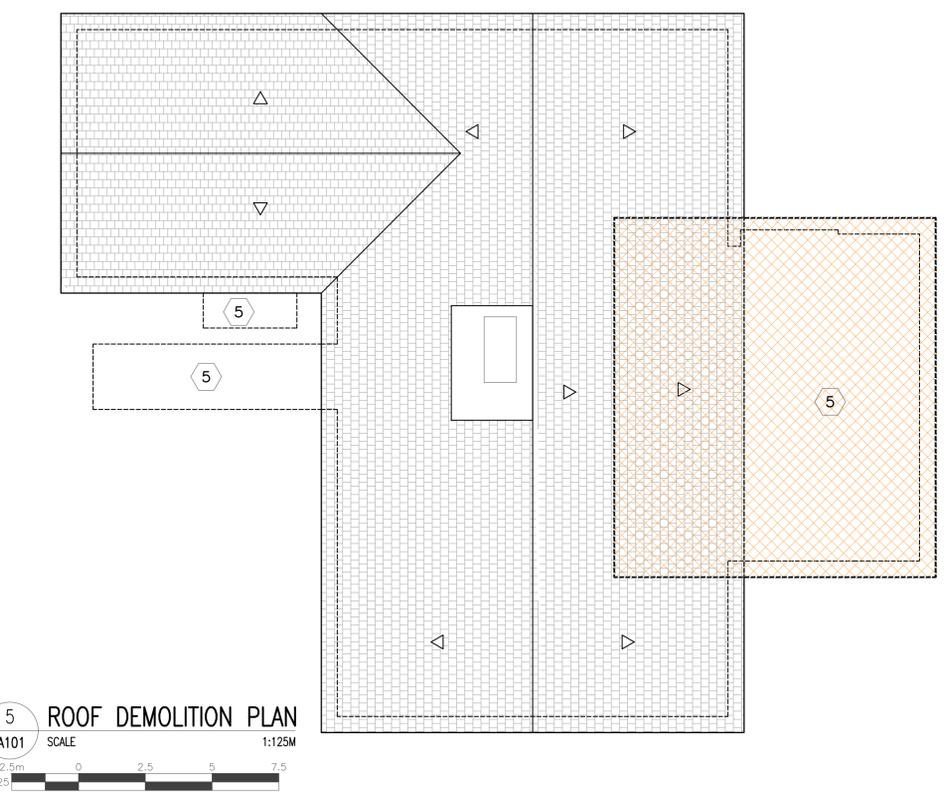
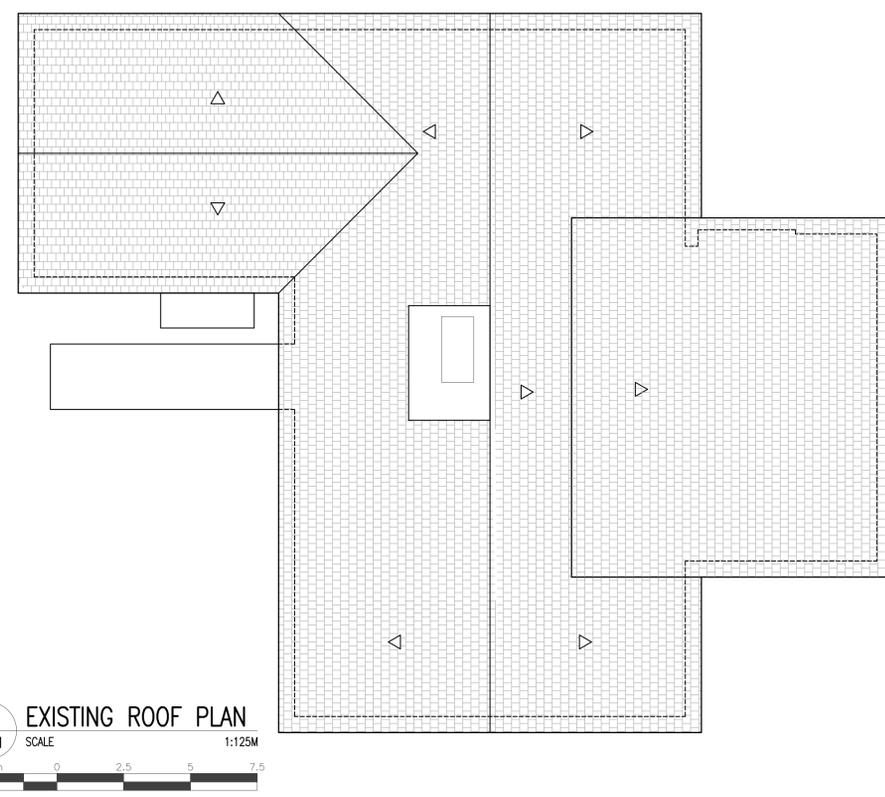
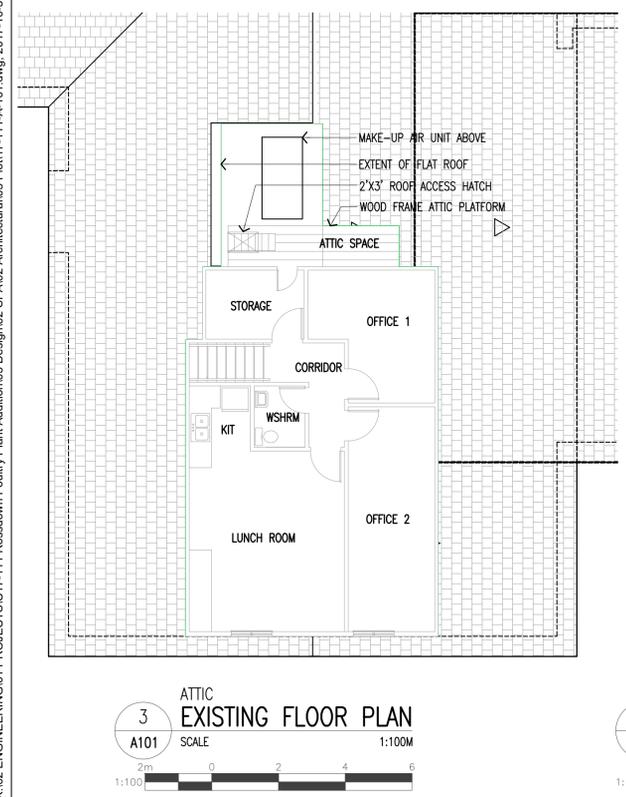
A1

R4



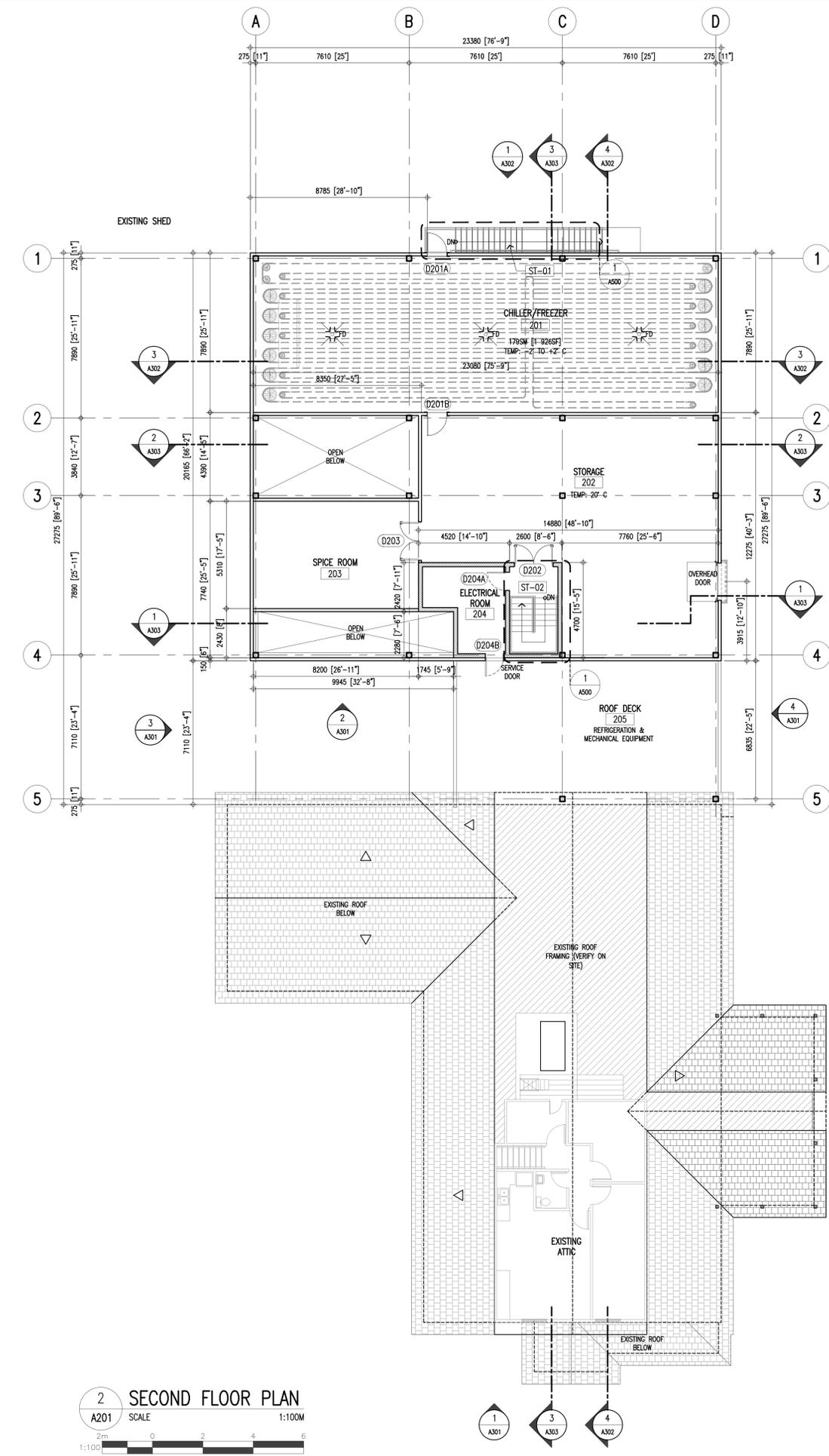
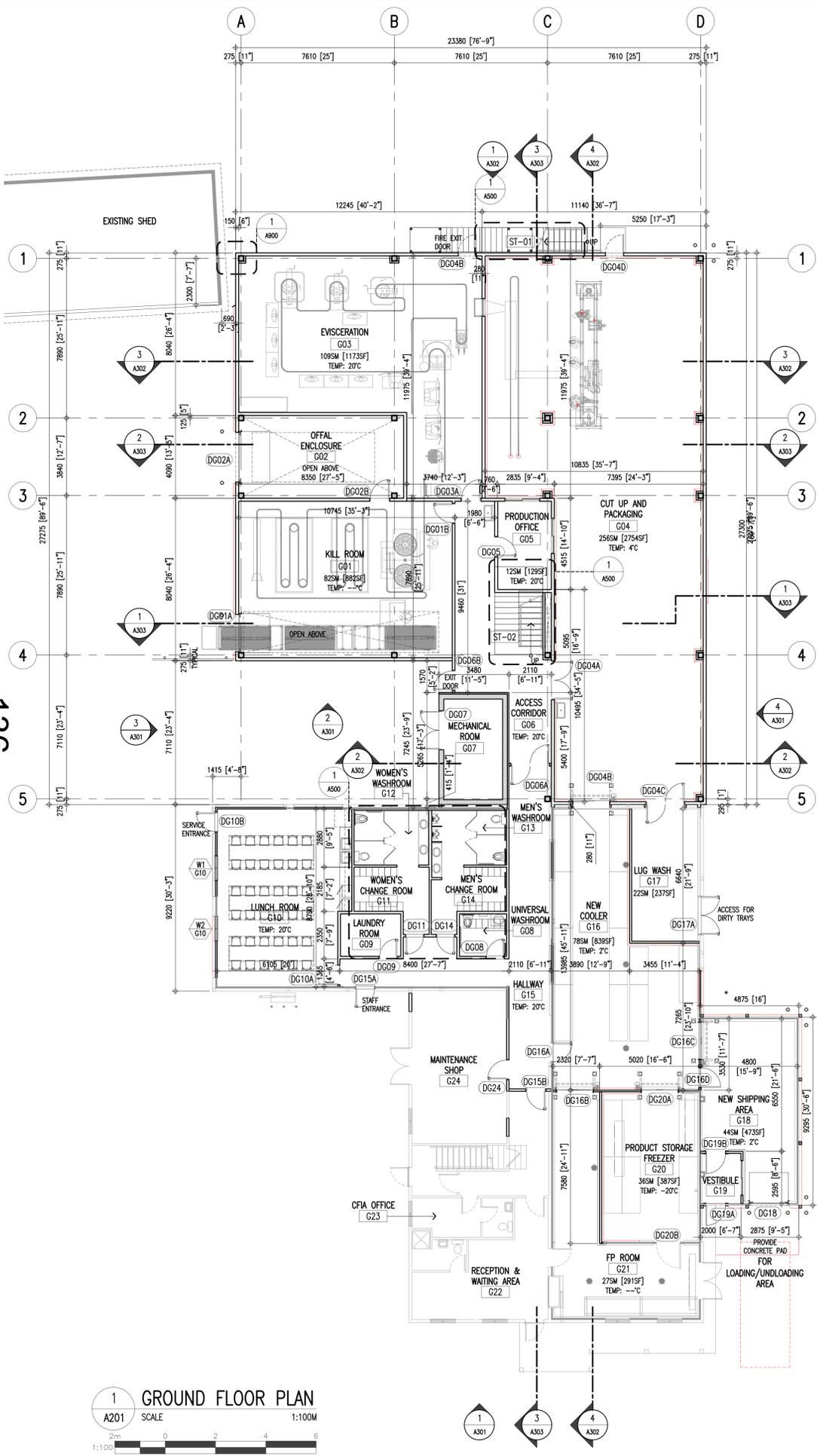
DEMOLITION NOTES:

- REMOVAL OF EXISTING EQUIPMENTS (BY CLIENT), FLOOR SAW CUTTING, REMOVAL OF EQUIPMENT OVERHEAD SUPPORTS, FLOOR AND WALL ANCHORING MAYBE REQUIRED. REQUIRE SITE INSPECTION FOR THE EXTENT OF WORK
- SALVAGE EXISTING DOORS THAT ARE IN GOOD CONDITION FOR POSSIBLE RE-USE. DOORS IN POOR CONDITION TO BE REMOVED AND DISPOSED OFF SITE
- REMOVE AND RELOCATE MECHANICAL EQUIPMENT AND UNLESS DEEMED UNUSABLE WITH CONFIRMATION FROM CLIENT TO BE DISPOSED OF SITE.
- DEMOLISHED IDENTIFIED EXISTING WALLS AND CURBS AFFECTED AND DISPOSED OFF SITE (TYPICAL)
- DEMOLISH BUILDING EXTENSION INCLUDES WALLS, ROOF AND REMOVAL OF EQUIPMENT IF ANY. RELOCATE CONTAINER (TBD BY CLIENT)



135

X:\02 ENGINEERING\01 PROJECTS\C17-111 Rosstown Poultry Plant Addition\03 SPA\02 Architectural\05 Plot\17-111-A-01.dwg, 2017-10-30 3:30:25 PM, rlene

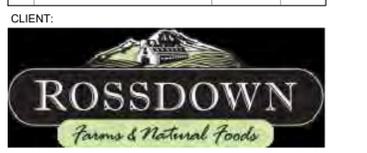


5500 N SERV., RD. SUITE 630, BURLINGTON, ON L7L 6W6

DISCLAIMER:
THIS DRAWING IS COPYRIGHT MATERIAL AND THE PROPERTY OF COLDBOX.
THIS DRAWING IS NOT TO BE REPRODUCED WITHOUT THE EXPRESS WRITTEN CONSENT OF THE AUTHOR.
THIS DRAWING IS PROVIDED SOLELY FOR INFORMATIONAL PURPOSES.
THE INFORMATION ON THIS DRAWING IS INTENDED FOR BUDGETING AND CONCEPTUAL PURPOSES BY COLDBOX.
THIS DRAWING IS NOT FOR CONSTRUCTION.

KEY PLAN:

NO	REVISION	DATE	BY
A	FOR SITE VERIFICATION	17-04-04	R.B.
B	CONCEPT CLIENT REVIEW	17-04-18	R.B.
C	CONCEPT CLIENT REVIEW	17-04-26	R.B.
D	CONCEPT CLIENT REVIEW	17-05-02	R.B.
E	CONCEPT CLIENT REVIEW	17-08-04	R.B.
F	CONCEPT CLIENT REVIEW	17-08-09	R.B.
G	CONCEPT CLIENT REVIEW	17-08-14	R.B.
J	CONCEPT CLIENT APPROVAL	17-08-29	R.B.
K	FOR DEVELOPMENT PLAN APPROVAL	17-09-18	R.B.
L	ISSUED FOR DEVELOPMENT PERMIT	17-10-30	R.B.



APPROVED BY:

PRINT NAME & SIGN ABOVE DATE



PROJECT:
PROPOSED POULTRY PLANT EXPANSION
PROJECT ADDRESS:
1615 - KOKSILAH ROAD, COWICHAN BAY
VANCOUVER ISLAND, BRITISH COLUMBIA

LEGAL DESCRIPTION:
SUBDIVISION PLAN POF PART OF LOT 1, SECTION 4, RANGE 5, COWICHAN DISTRICT, PLAN 2306, EXCEPT PART IN PLAN 11215 AND 49764

LEGAL DESCRIPTION:
A1A - AGRICULTURAL PROCESSING ZONE

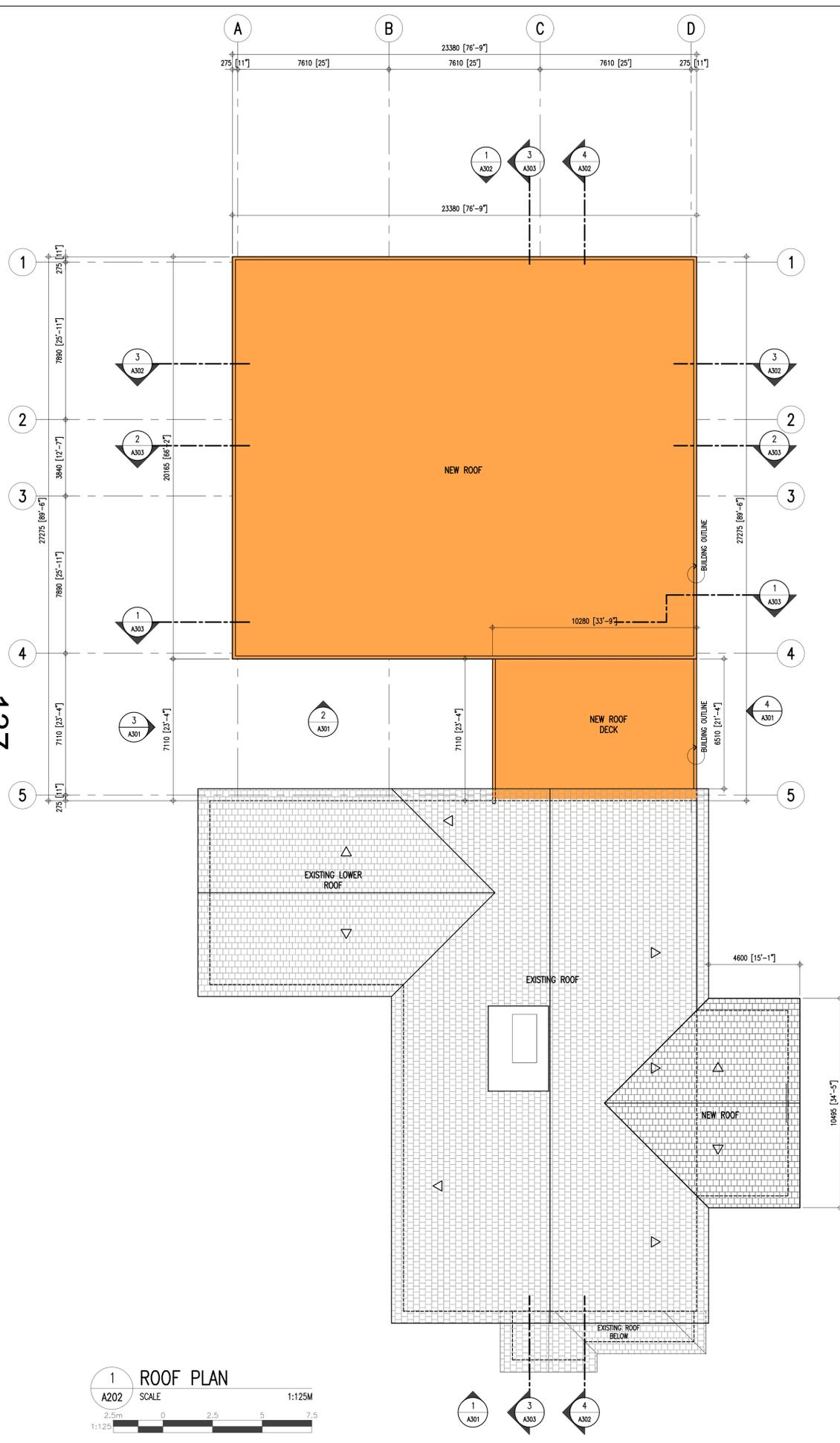
ISSUANCE:
FOR DEVELOPMENT PLAN APPROVAL

SHEET TITLE:
GENERAL FLOOR PLANS

PROJECT #: C17-111

APPROVED: F. HAMMADI P. ENG DATE: 17-11
REVIEWED: MIKE OWSIANICKI DATE: 17-11

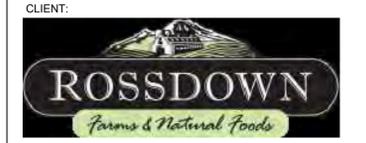
DRAWN: R. BOADO SHEET #:
SCALE: AS SHOWN
DATE: MARCH 31, 2017



DISCLAIMER:
THIS DRAWING IS COPYRIGHT MATERIAL AND THE PROPERTY OF COLDBOX.
THIS DRAWING IS NOT TO BE REPRODUCED WITHOUT THE EXPRESS WRITTEN CONSENT OF THE AUTHOR.
THIS DRAWING IS PROVIDED SOLELY FOR INFORMATIONAL PURPOSES.
THE INFORMATION ON THIS DRAWING IS INTENDED FOR BUDGETING AND CONCEPTUAL PURPOSES BY COLDBOX.
THIS DRAWING IS NOT FOR CONSTRUCTION.

KEY PLAN:

NO	REVISION	DATE	BY
A	FOR DEVELOPMENT PLAN APPROVAL	17-09-18	R.B.
B	RE-ISSUED FOR DEVELOPMENT PERMIT	17-10-30	R.B.



APPROVED BY:

PRINT NAME & SIGN ABOVE DATE



PROJECT:
PROPOSED POULTRY PLANT EXPANSION

PROJECT ADDRESS:
1615 - KOKSILAH ROAD, COWICHAN BAY
VANCOUVER ISLAND, BRITISH COLUMBIA

LEGAL DESCRIPTION:
SUBDIVISION PLAN POF PART OF LOT 1, SECTION 4, RANGE 5, COWICHAN DISTRICT, PLAN 2306, EXCEPT PART IN PLAN 11215 AND 49764

LEGAL DESCRIPTION:
A1A - AGRICULTURAL PROCESSING ZONE

ISSUANCE:
FOR DEVELOPMENT PLAN APPROVAL

SHEET TITLE:
GENERAL ROOF PLAN

PROJECT #:
C17-111

APPROVED:
F. HAMMADI P. ENG DATE: 17-11

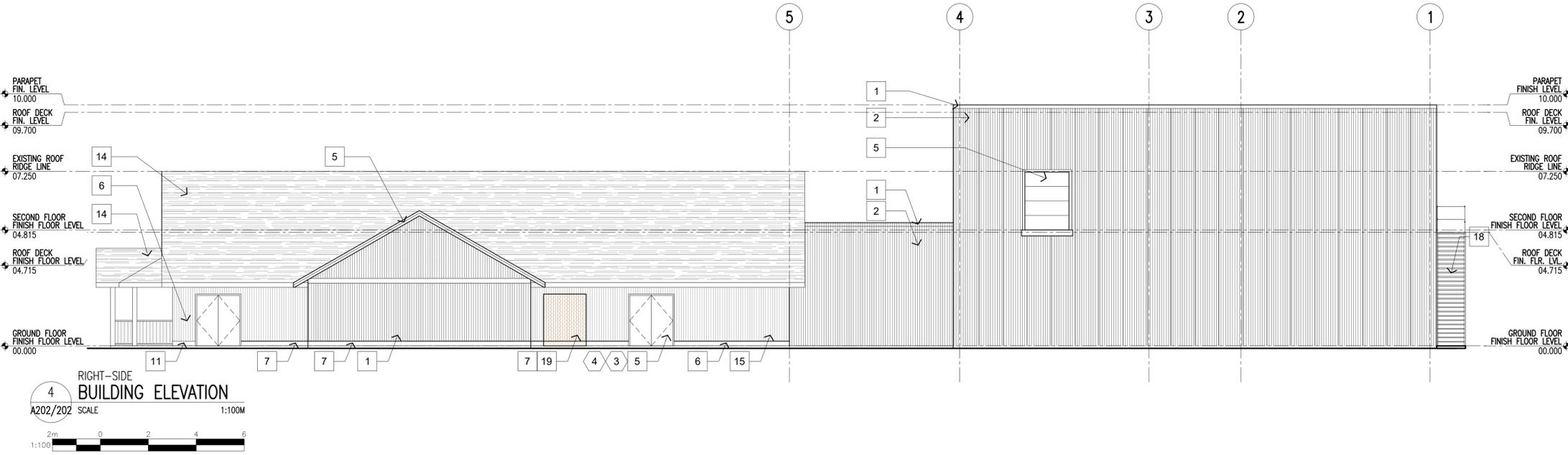
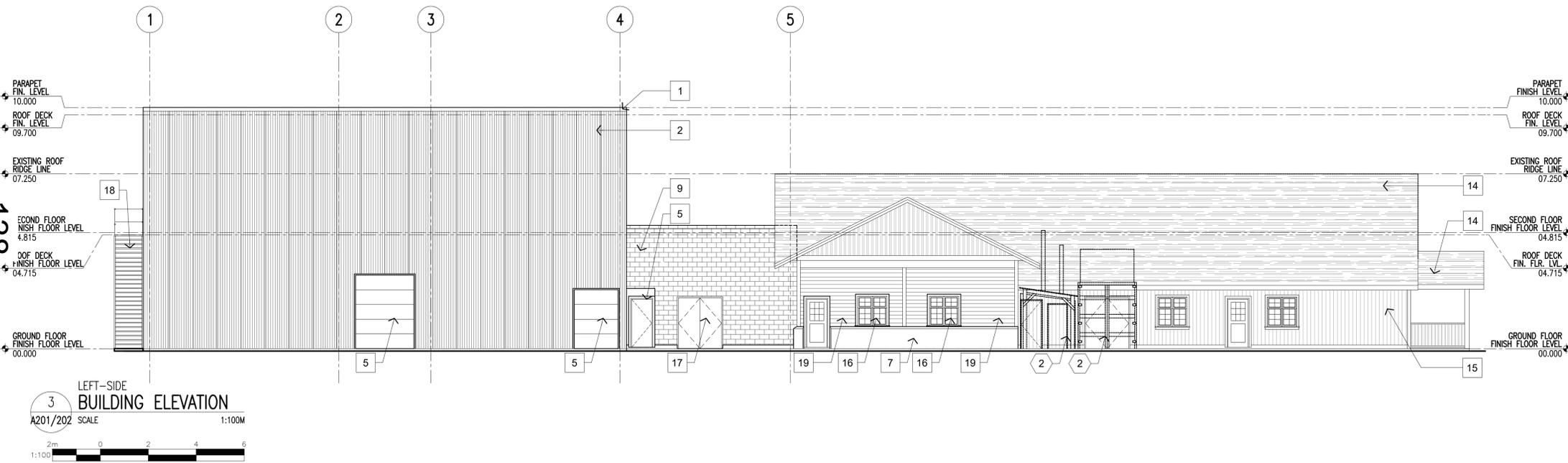
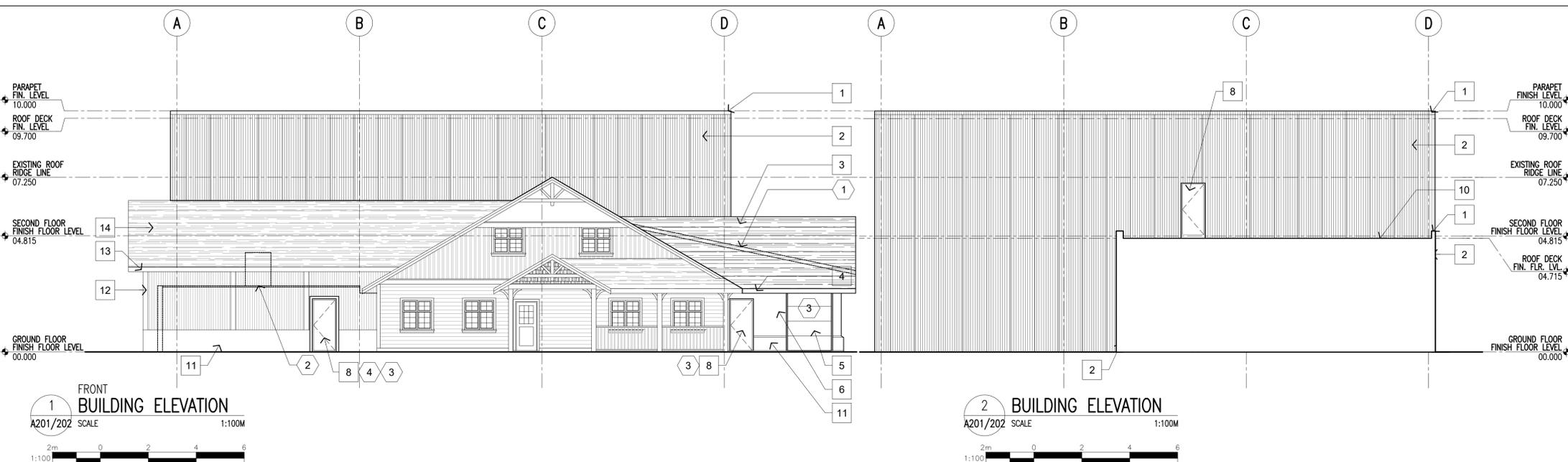
REVIEWED:
MIKE OWSIANICKI DATE: 17-11

DRAWN:
R. BOADO SHEET #:

SCALE:
AS SHOWN

DATE:
MARCH 31, 2017

X:\02 ENGINEERING\01 PROJECTS\C17-111 Rosstown Poultry Plant Addition\03 Design\02 SPA\02 Architectural\05 Plot17-111-A-301.dwg, 2017-10-30 3:26:30 PM, rone



MATERIAL/FINISHES NOTES:

- PRE-PAINTED METAL CAP/FLASHING; COLOR TO MATCH IMP WALL
- NEW IMP WALL
- NEW SHINGLE ROOFING TO MATCH EXISTING
- NEW FASCIA BOARD PAINTED TO MATCH EXISTING
- NEW SECTIONAL INSULATED OVERHEAD DOOR; REFER TO DOOR SCHEDULE FOR ADDITIONAL DETAILS
- EXISTING IMP WALL
- NEW CONCRETE CURB; REFER TO DETAILS FOR ADDITIONAL INFORMATION
- NEW INSULATED METAL DOOR; REFER TO DOOR SCHEDULE FOR ADDITIONAL DETAILS
- NEW CONCRETE BLOCK WALL; REFER TO ARCHITECTURAL PLANS & STRUCTURAL DRAWINGS FOR ADDITIONAL DETAILS
- NEW ROOFING MEMBRANE COMPLETE WITH RIGID INSULATION OVER STEEL DECK. REFER TO ROOF DETAILS
- EXISTING CONCRETE CURB; HEIGHT AND THICKNESS TO BE VERIFIED ON SITE
- NEW INSULATED METAL EXIT DOOR
- EXISTING PAINT FINISH WOOD POST
- EXISTING SHINGLE ROOFING
- EXISTING PAINTED EXTERIOR SIDING
- NEW WINDOW TO MATCH EXISTING
- NEW FIRE RATED METAL DOOR; REFER TO DOOR SCHEDULE FOR ADDITIONAL DETAILS
- GALVANIZED EXTERIOR FIRE EXIT STAIR COMPLETE WITH HANDRAILS. REFER TO STAIR DETAIL FOR ADDITIONAL INFO
- NEW SIDING TO MATCH EXISTING
- NEW FREEZER MAN DOOR; REFER TO DOOR SCHEDULE FOR ADDITIONAL DETAILS
- NEW CONCRETE PAD; REFER TO SITE PLAN AND FLOOR PLAN FOR LOCATIONS AND EXTENT

DEMOLITION NOTES

- EXISTING ROOF TO BE REMOVED AND DISPOSED OFF SITE
- EXISTING UTILITY STRUCTURES TO BE REMOVED AND DISPOSED OFF SITE. REFER TO DEMO PLAN FOR ADDITIONAL INFORMATION
- CREATE NEW DOOR OPENING ON EXISTING WALL
- SAW-CUT, REMOVED AND DISPOSED OFF SITE PORTION OF EXISTING CONCRETE CURB AS SHOWN. REFER TO DEMO PLAN

5500 N SERV., RD. SUITE 630, BURLINGTON, ON L7L 6W6

DISCLAIMER:
THIS DRAWING IS COPYRIGHT MATERIAL AND THE PROPERTY OF COLDBOX.
THIS DRAWING IS NOT TO BE REPRODUCED WITHOUT THE EXPRESS WRITTEN CONSENT OF THE AUTHOR.
THIS DRAWING IS PROVIDED SOLELY FOR INFORMATIONAL PURPOSES.
THE INFORMATION ON THIS DRAWING IS INTENDED FOR BUDGETING AND CONCEPTUAL PURPOSES BY COLDBOX.
THIS DRAWING IS NOT FOR CONSTRUCTION.

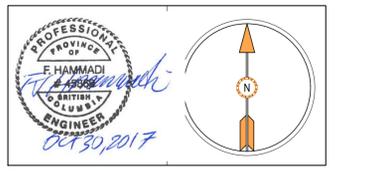
KEY PLAN:

NO	REVISION	DATE	BY
A	ISSUED FOR REVIEW	17-08-18	R.B.
B	FOR DEVELOPMENT PLAN APPROVAL	17-09-18	R.B.
C	RE-ISSUED FOR DEVELOPMENT PERMIT	17-10-30	R.B.



APPROVED BY: _____ DATE _____

PRINT NAME & SIGN ABOVE



PROJECT:
PROPOSED POULTRY PLANT EXPANSION

PROJECT ADDRESS:
1615 - KOKSILAH ROAD, COWICHAN BAY
VANCOUVER ISLAND, BRITISH COLUMBIA

LEGAL DESCRIPTION:
SUBDIVISION PLAN POF PART OF LOT 1, SECTION 4, RANGE 5, COWICHAN DISTRICT, PLAN 2306, EXCEPT PART IN PLAN 11215 AND 49764

LEGAL DESCRIPTION:
A1A - AGRICULTURAL PROCESSING ZONE

ISSUANCE:
FOR DEVELOPMENT PLAN APPROVAL

SHEET TITLE:
BUILDING ELEVATIONS

PROJECT #: **C17-111**

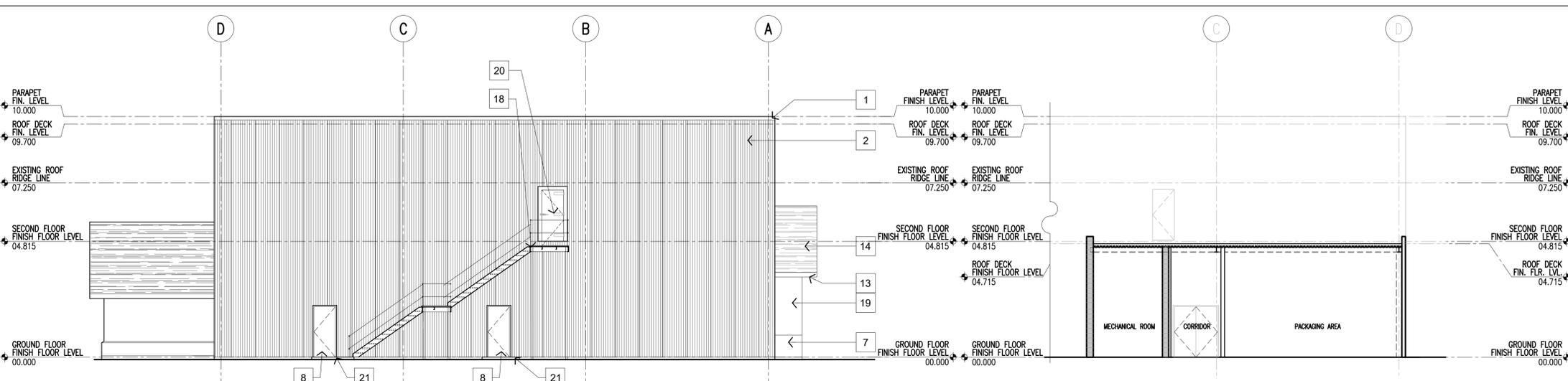
APPROVED: F. HAMMADI P. ENG DATE: 17-11-17
REVIEWED: MIKE OWSIANICKI DATE: 17-11-17

DRAWN: R. BOADO SHEET #:
SCALE: AS SHOWN
DATE: MARCH 31, 2017

R4

A3

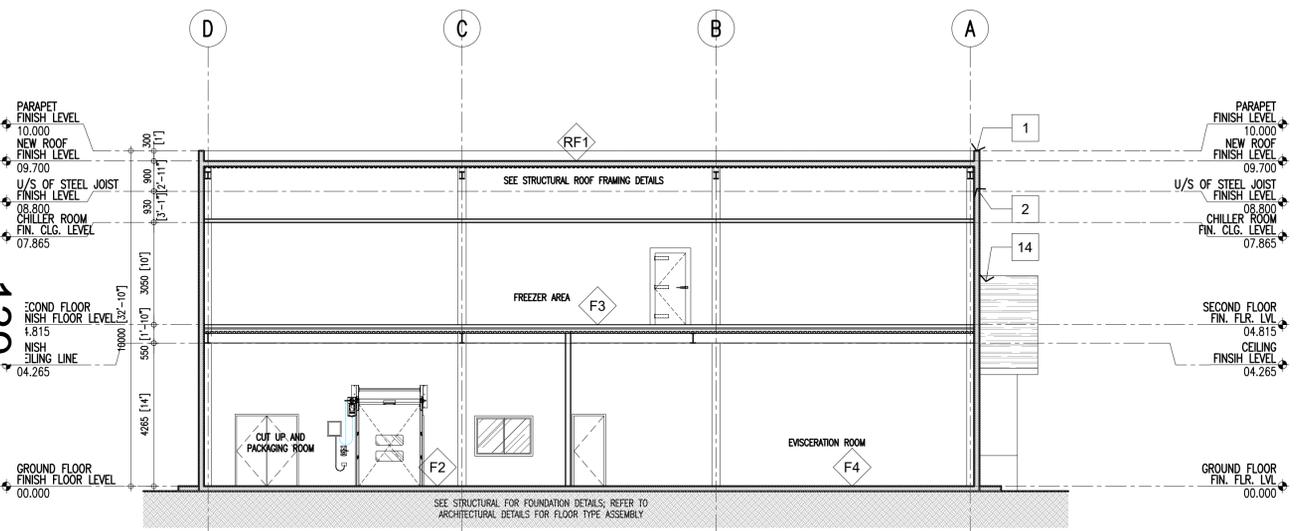
X:\02 ENGINEERING\01 PROJECTS\C17-111 Rosstown Poultry Plant Addition\03 Design\02 SPA\02 Architectural\05 Plot17-111-A-302.dwg -2017-10-30 3:24:38 PM, r.ene



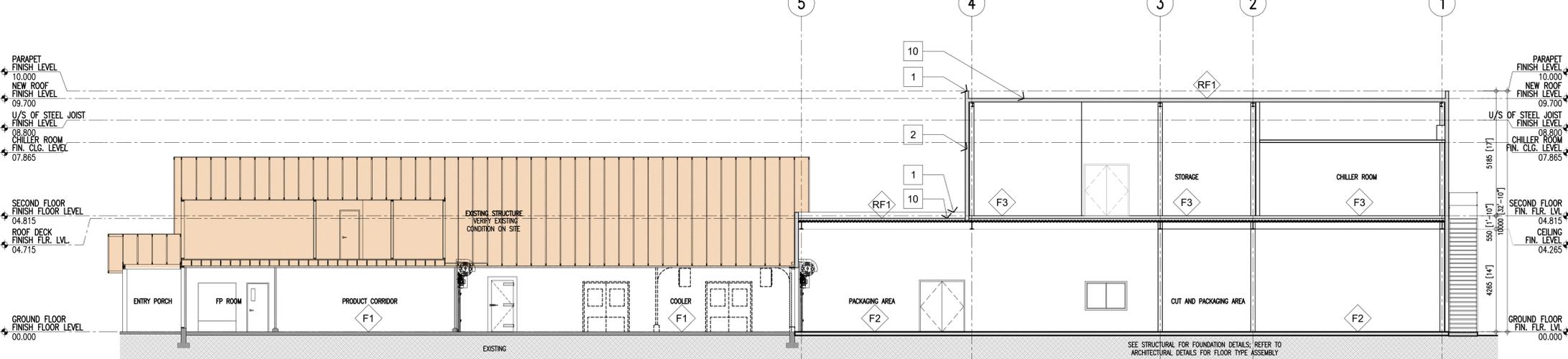
1 REAR BUILDING ELEVATION
A201/202 SCALE 1:100M



2 PARTIAL BUILDING SECTION
A201 SCALE 1:100M



3 BUILDING SECTION
A201/202 SCALE 1:100M



4 LONGITUDINAL BUILDING SECTION
A201/202 SCALE 1:100M



MATERIAL/FINISHES NOTES:

- 1 PRE-PAINTED METAL CAP/FLASHING; COLOR TO MATCH IMP WALL
- 2 NEW IMP WALL
- 3 NEW SHINGLE ROOFING TO MATCH EXISTING
- 4 NEW FASCIA BOARD PAINTED TO MATCH EXISTING
- 5 NEW SECTIONAL INSULATED OVERHEAD DOOR; REFER TO DOOR SCHEDULE FOR ADDITIONAL DETAILS
- 6 EXISTING IMP WALL
- 7 NEW CONCRETE CURB; REFER TO DETAILS FOR ADDITIONAL INFORMATION
- 8 NEW INSULATED METAL DOOR; REFER TO DOOR SCHEDULE FOR ADDITIONAL DETAILS
- 9 NEW CONCRETE BLOCK WALL; REFER TO ARCHITECTURAL PLANS & STRUCTURAL DRAWINGS FOR ADDITIONAL DETAILS
- 10 NEW ROOFING MEMBRANE COMPLETE WITH RIGID INSULATION OVER STEEL DECK. REFER TO ROOF DETAILS
- 11 EXISTING CONCRETE CURB; HEIGHT AND THICKNESS TO BE VERIFIED ON SITE
- 12 NEW INSULATED METAL EXIT DOOR
- 13 EXISTING PAINT FINISH WOOD POST
- 14 EXISTING SHINGLE ROOFING
- 15 EXISTING PAINTED EXTERIOR SIDING
- 16 NEW WINDOW TO MATCH EXISTING
- 17 NEW FIRE RATED METAL DOOR; REFER TO DOOR SCHEDULE FOR ADDITIONAL DETAILS
- 18 GALVANIZED EXTERIOR FIRE EXIT STAIR COMPLETE WITH HANDRAILS. REFER TO STAIR DETAIL FOR ADDITIONAL INFO
- 19 NEW SIDING TO MATCH EXISTING
- 20 NEW FREEZER MAN DOOR; REFER TO DOOR SCHEDULE FOR ADDITIONAL DETAILS
- 21 NEW CONCRETE PAD, REFER TO SITE PLAN AND FLOOR PLAN FOR LOCATIONS AND EXTENT

DEMOLITION NOTES:

- 1 EXISTING ROOF TO BE REMOVED AND DISPOSED OFF SITE
- 2 EXISTING UTILITY STRUCTURES TO BE REMOVED AND DISPOSED OFF SITE. REFER TO DEMO PLAN FOR ADDITIONAL INFORMATION
- 3 CREATE NEW DOOR OPENING ON EXISTING WALL
- 4 SAW-CUT, REMOVED AND DISPOSED OFF SITE PORTION OF EXISTING CONCRETE CURB AS SHOWN. REFER TO DEMO PLAN



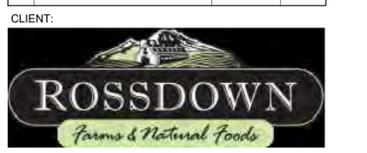
5500 N SERV., RD. SUITE 630, BURLINGTON, ON L7L 6W6

DISCLAIMER:
THIS DRAWING IS COPYRIGHT MATERIAL AND THE PROPERTY OF COLDBOX.
THIS DRAWING IS NOT TO BE REPRODUCED WITHOUT THE EXPRESS WRITTEN CONSENT OF THE AUTHOR.
THIS DRAWING IS PROVIDED SOLELY FOR INFORMATIONAL PURPOSES.
THE INFORMATION ON THIS DRAWING IS INTENDED FOR BUDGETING AND CONCEPTUAL PURPOSES BY COLDBOX.
THIS DRAWING IS NOT FOR CONSTRUCTION.

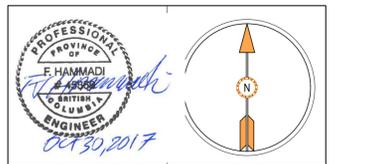
KEY PLAN:



NO	REVISION	DATE	BY
A	ISSUED FOR REVIEW	17-08-18	R.B.
B	FOR DEVELOPMENT PLAN APPROVAL	17-09-18	R.B.
C	RE-ISSUED FOR DEVELOPMENT PERMIT	17-10-30	R.B.



APPROVED BY: _____ DATE: _____



PROJECT:
PROPOSED POULTRY PLANT EXPANSION
PROJECT ADDRESS:
1615 - KOKSILAH ROAD, COWICHAN BAY
VANCOUVER ISLAND, BRITISH COLUMBIA

LEGAL DESCRIPTION:
SUBDIVISION PLAN POF PART OF LOT 1, SECTION 4, RANGE 5, COWICHAN DISTRICT, PLAN 2306, EXCEPT PART IN PLAN 11215 AND 49764
LEGAL DESCRIPTION:
A1A - AGRICULTURAL PROCESSING ZONE

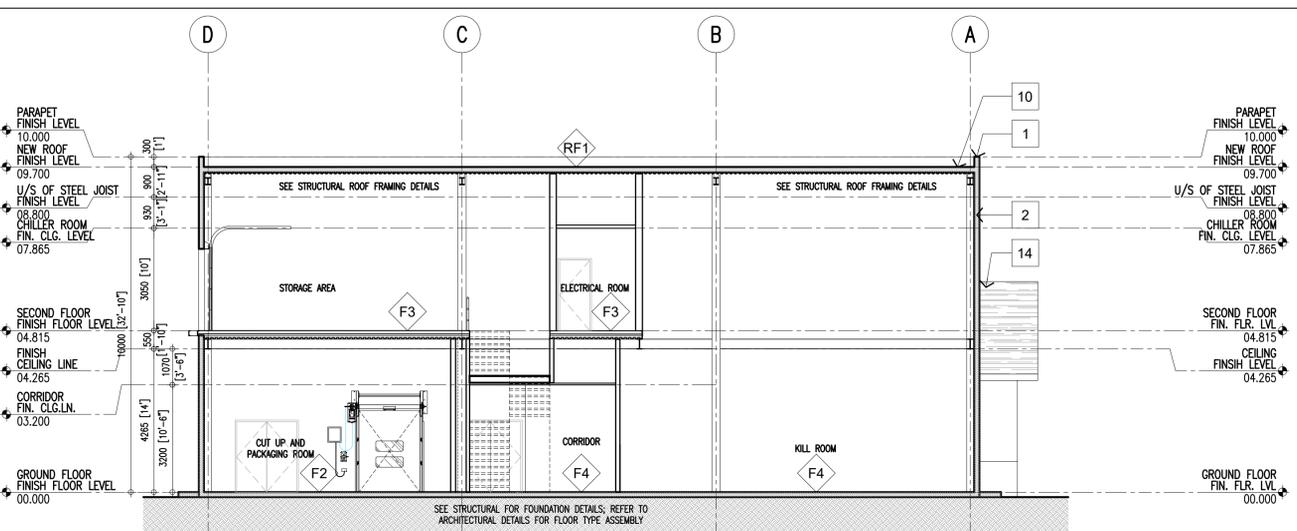
ISSUANCE:
FOR DEVELOPMENT PLAN APPROVAL

SHEET TITLE:
BUILDING ELEVATION & SECTIONS
PROJECT #: C17-111
APPROVED: F. HAMMADI P. ENG DATE: 17-11
REVIEWED: MIKE OWSIANICKI DATE: 17-11
DRAWN: R. BOADO SHEET #:
SCALE: AS SHOWN
DATE: MARCH 31, 2017

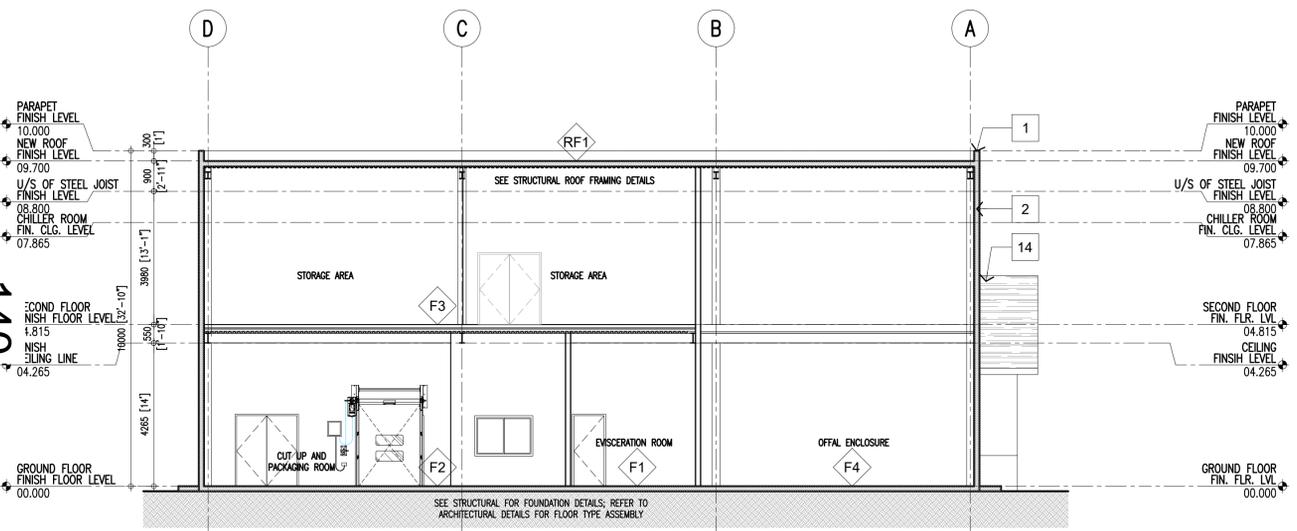
R4

A30

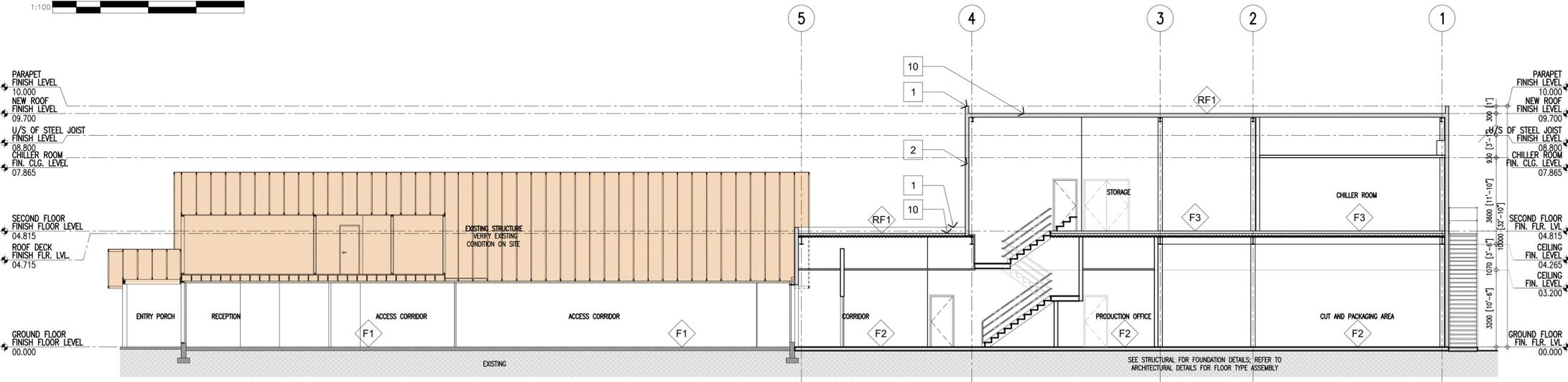
X:\02 ENGINEERING\01 PROJECTS\C17-111 Rosstown Poultry Plant Addition\03 Design\02 SPA\02 Architectural\05 Plot17-111-A-303.dwg, 2017-10-30 3:27:38 PM, rone



1 BUILDING SECTION
A201/202 SCALE 1:100M



2 BUILDING SECTION
A201/202 SCALE 1:100M



3 LONGITUDINAL BUILDING SECTION
A201/202 SCALE 1:100M

MATERIAL/FINISHES NOTES:

- 1 PRE-PAINTED METAL CAP/FLASHING; COLOR TO MATCH IMP WALL
- 2 NEW IMP WALL
- 3 NEW SHINGLE ROOFING TO MATCH EXISTING
- 4 NEW FASCIA BOARD PAINTED TO MATCH EXISTING
- 5 NEW SECTIONAL INSULATED OVERHEAD DOOR; REFER TO DOOR SCHEDULE FOR ADDITIONAL DETAILS
- 6 EXISTING IMP WALL
- 7 NEW CONCRETE CURB; REFER TO DETAILS FOR ADDITIONAL INFORMATION
- 8 NEW INSULATED METAL DOOR; REFER TO DOOR SCHEDULE FOR ADDITIONAL DETAILS
- 9 NEW CONCRETE BLOCK WALL; REFER TO ARCHITECTURAL PLANS & STRUCTURAL DRAWINGS FOR ADDITIONAL DETAILS
- 10 NEW ROOFING MEMBRANE COMPLETE WITH RIGID INSULATION OVER STEEL DECK. REFER TO ROOF DETAILS
- 11 EXISTING CONCRETE CURB; HEIGHT AND THICKNESS TO BE VERIFIED ON SITE
- 12 NEW INSULATED METAL EXIT DOOR
- 13 EXISTING PAINT FINISH WOOD POST
- 14 EXISTING SHINGLE ROOFING
- 15 EXISTING PAINTED EXTERIOR SIDING
- 16 NEW WINDOW TO MATCH EXISTING
- 17 NEW FIRE RATED METAL DOOR; REFER TO DOOR SCHEDULE FOR ADDITIONAL DETAILS
- 18 GALVANIZED EXTERIOR FIRE EXIT STAIR COMPLETE WITH HANDRAILS. REFER TO STAIR DETAIL FOR ADDITIONAL INFO
- 19 NEW SIDING TO MATCH EXISTING
- 20 NEW FREEZER MAN DOOR; REFER TO DOOR SCHEDULE FOR ADDITIONAL DETAILS
- 21 NEW CONCRETE PAD, REFER TO SITE PLAN AND FLOOR PLAN FOR LOCATIONS AND EXTENT

DEMOLITION NOTES

- 1 EXISTING ROOF TO BE REMOVED AND DISPOSED OFF SITE
- 2 EXISTING UTILITY STRUCTURES TO BE REMOVED AND DISPOSED OFF SITE. REFER TO DEMO PLAN FOR ADDITIONAL INFORMATION
- 3 CREATE NEW DOOR OPENING ON EXISTING WALL
- 4 SAW-CUT, REMOVED AND DISPOSED OFF SITE PORTION OF EXISTING CONCRETE CURB AS SHOWN. REFER TO DEMO PLAN

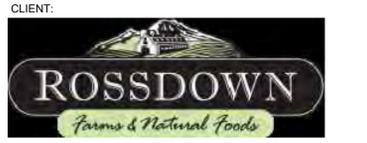


5500 N SERV., RD. SUITE 630, BURLINGTON, ON L7L 6W6

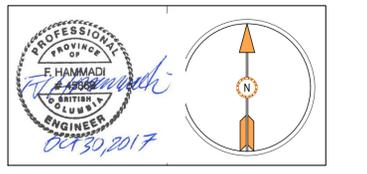
DISCLAIMER:
THIS DRAWING IS COPYRIGHT MATERIAL AND THE PROPERTY OF COLDBOX.
THIS DRAWING IS NOT TO BE REPRODUCED WITHOUT THE EXPRESS WRITTEN CONSENT OF THE AUTHOR.
THIS DRAWING IS PROVIDED SOLELY FOR INFORMATIONAL PURPOSES.
THE INFORMATION ON THIS DRAWING IS INTENDED FOR BUDGETING AND CONCEPTUAL PURPOSES BY COLDBOX.
THIS DRAWING IS NOT FOR CONSTRUCTION.

KEY PLAN:

NO	REVISION	DATE	BY
A	ISSUED FOR REVIEW	17-08-18	R.B.
B	FOR DEVELOPMENT PLAN APPROVAL	17-09-18	R.B.
C	RE-ISSUED FOR DEVELOPMENT PERMIT	17-10-30	R.B.



APPROVED BY: _____ DATE _____
PRINT NAME & SIGN ABOVE



PROJECT:
PROPOSED POULTRY PLANT EXPANSION
PROJECT ADDRESS:
1615 - KOKSILAH ROAD, COWICHAN BAY
VANCOUVER ISLAND, BRITISH COLUMBIA

LEGAL DESCRIPTION:
SUBDIVISION PLAN POF PART OF LOT 1, SECTION 4, RANGE 5, COWICHAN DISTRICT, PLAN 2306, EXCEPT PART IN PLAN 11215 AND 49764

LEGAL DESCRIPTION:
A1A - AGRICULTURAL PROCESSING ZONE

ISSUANCE:
FOR DEVELOPMENT PLAN APPROVAL

SHEET TITLE:
BUILDING SECTIONS

PROJECT #: **C17-111**

APPROVED: **F. HAMMADI P. ENG** DATE: **17-10-30**
REVIEWED: **MIKE OWSIANICKI** DATE: **17-10-30**

DRAWN: **R. BOADO** SHEET #:
SCALE: **AS SHOWN**
DATE: **MARCH 31, 2017**

R4

A30

COPYRIGHT RESERVED: THIS DRAWING AND ALL COPYRIGHT THEREIN ARE THE SOLE AND EXCLUSIVE PROPERTY OF THE CONSULTANT. REPRODUCTION OR USE OF THIS DRAWING IN WHOLE OR IN PART IS PROHIBITED AND MAY NOT BE USED WITHOUT THE WRITTEN CONSENT OF THE CONSULTANT.



PROJECT:
Island Farmhouse Poultry Expansion

CLIENT:
Coldbox Builders

DESIGNED BY:
 BCM
 DRAWN BY:
 BCM
 SCALE:
 1 : 150

REVISION HISTORY
 Oct 31 2017
 Jan 18, 2019
 0 I.F. Development Permit
 2 I.F. DP Update

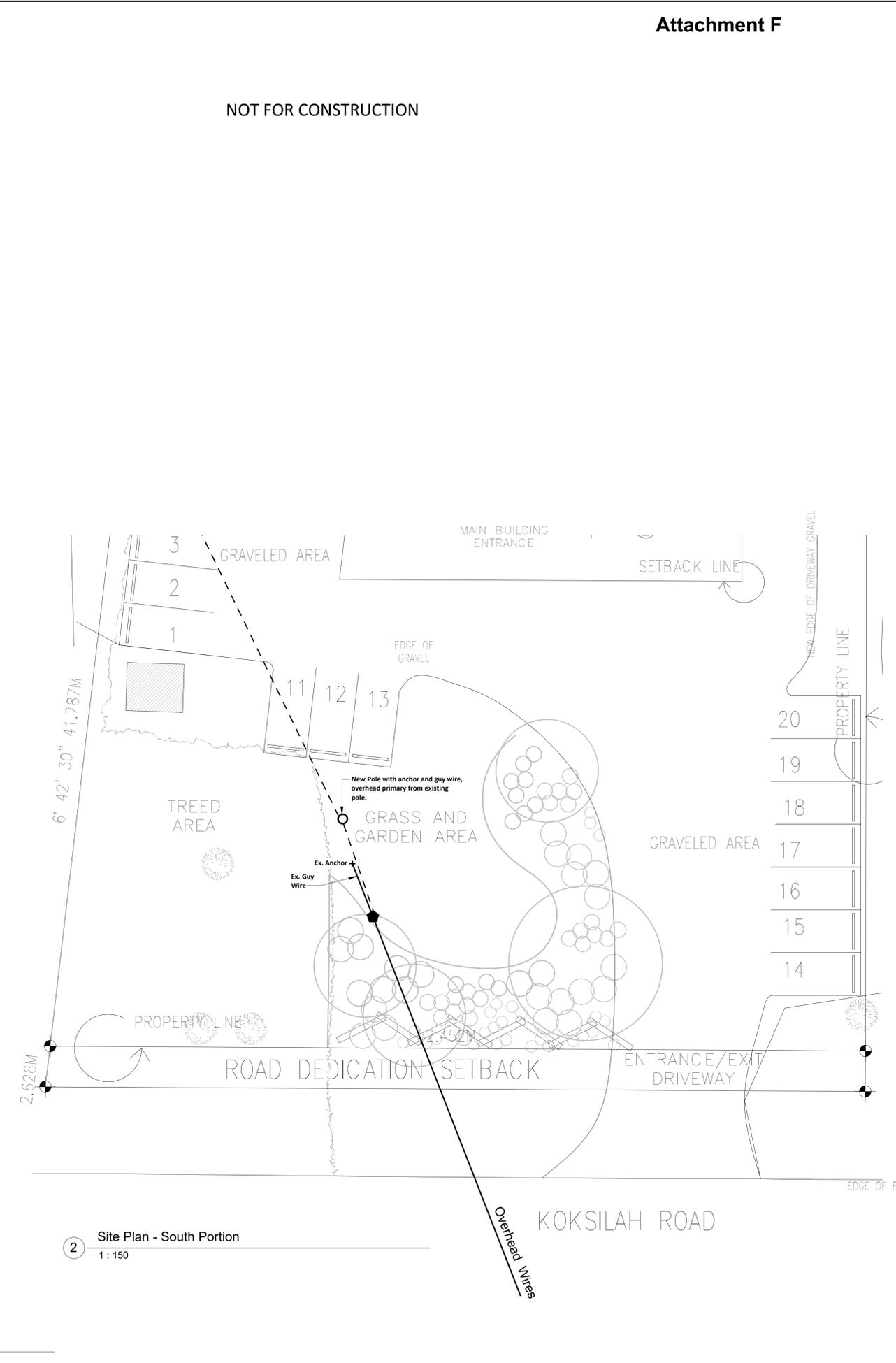
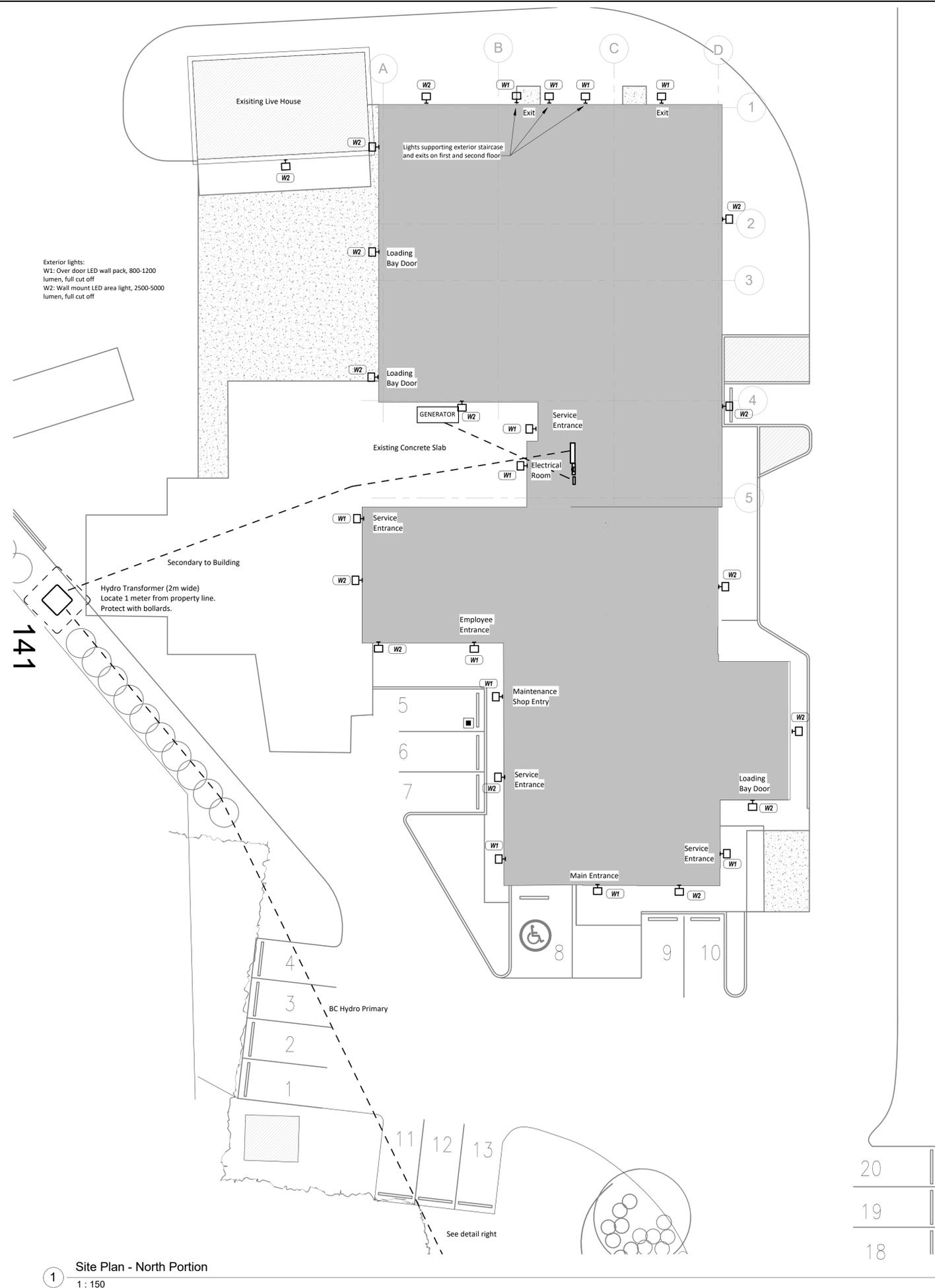
REVISION:2

SEAL:

SHEET TITLE:

Electrical Site F
R4
 Project Nu
 Date: DEC
 SHEET
E01

NOT FOR CONSTRUCTION



DESCRIPTION

The patented Lumark Crosstour™ LED Wall Pack Series of luminaires provides an architectural style with super bright, energy efficient LEDs. The low-profile, rugged die-cast aluminum construction, universal back box, stainless steel hardware along with a sealed and gasketed optical compartment make the Crosstour impervious to contaminants. The Crosstour wall luminaire is ideal for wall/surface, inverted mount for façade/canopy illumination, post/bollard, site lighting, floodlight and low level pathway illumination including stairs. Typical applications include building entrances, multi-use facilities, apartment buildings, institutions, schools, stairways and loading docks test.

SPECIFICATION FEATURES

Construction

Slim, low-profile LED design with rugged one-piece, die-cast aluminum hinged removable door and back box. Matching housing styles incorporate both a small and large design. The small housing is available in 7W and 18W. The large housing is available in the 26W model. Patent pending secure lock hinge feature allows for safe and easy tool-less electrical connections with the supplied push-in connectors. Back box includes three (3) half-inch, NPT threaded conduit entry points. The universal back box supports both the small and large forms and mounts to standard 3-1/2" to 4" round and octagonal, 4" square, single gang and masonry junction boxes. Key hole gasket allows for adaptation to junction box or wall. External fin design extracts heat from the fixture surface. One-piece silicone gasket seals door and back box. Minimum 5" wide pole for site lighting application. Not recommended for car wash applications.

Optical

Silicone sealed optical LED chamber incorporates a custom engineered mirrored anodized reflector providing high-efficiency illumination. Optical assembly includes impact-resistant tempered glass and meets IESNA requirements for full cutoff compliance. Solid state LED Crosstour luminaires are thermally optimized with five (5) lumen packages in cool 5000K or neutral warm 3500K LED color temperature (CCT).

Electrical

LED driver is mounted to the die-cast housing for optimal heat sinking. LED thermal management system incorporates both conduction and natural convection to transfer heat rapidly away from the LED source. 7W models operate in -40°C to 40°C [-40°F to 104°F]. 18W and 26W models operate in -40°C to 40°C [-40°F to 104°F]. High ambient 50°C models available. Crosstour luminaires maintain greater than 90% of initial

Catalog #		Type
Project		
Comments		Date
Prepared by		

light output after 72,000 hours of operation. Three (3) half-inch NPT threaded conduit entry points allow for thru-branch wiring. Back box is an authorized electrical wiring compartment. Integral LED electronic driver incorporates surge protection. 120-277V 50/60Hz or 347V 60Hz models.

Finish

Crosstour is protected with a Super durable TGIC carbon bronze or summit white polyester powder coat paint. Super durable TGIC powder coat paint finishes withstand extreme climate conditions while providing optimal color and gloss retention of the installed life.

Warranty

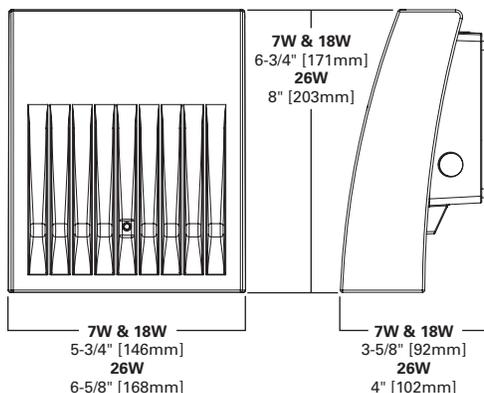
Five-year warranty.



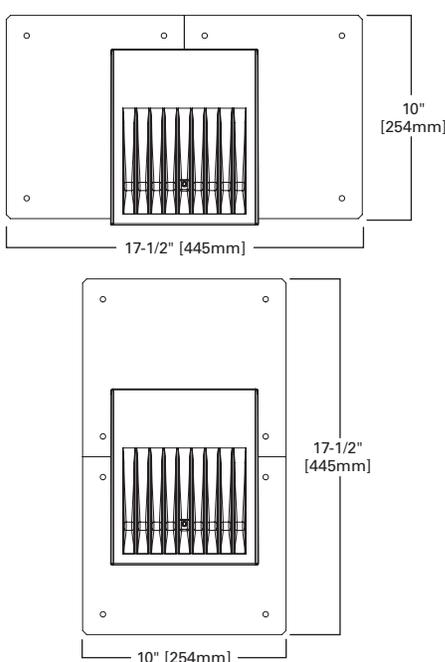
XTOR CROSSTOUR LED

APPLICATIONS:
WALL / SURFACE
POST / BOLLARD
LOW LEVEL
FLOODLIGHT
INVERTED
SITE LIGHTING

DIMENSIONS



ESCUTCHEON PLATES



CERTIFICATION DATA

UL/cUL Wet Location Listed
LM79 / LM80 Compliant
ROHS Compliant
ADA Compliant
NOM Compliant Models
IP66 Ingressed Protection Rated
Title 24 Compliant
DesignLights Consortium® Qualified*

TECHNICAL DATA

40°C Maximum Ambient Temperature
External Supply Wiring 90°C Minimum

EPA

Effective Projected Area (Sq. Ft.):
XTOR1A/XTOR2A=0.34
XTOR3A=0.45

SHIPPING DATA:

Approximate Net Weight:
3.7 – 5.25 lbs. [1.7 – 2.4 kgs.]

LUMEN MAINTENANCE

Ambient Temperature	TM-21 Lumen Maintenance (72,000 Hours)	Theoretical L70 (Hours)
XTOR1A Model		
25°C	> 92%	> 290,000
40°C	> 92%	> 290,000
50°C	> 91%	> 270,000
XTOR2A Model		
25°C	> 91%	> 270,000
40°C	> 90%	> 260,000
50°C	> 88%	> 225,000
XTOR3A Model		
25°C	> 91%	> 280,000
40°C	> 91%	> 270,000
50°C	> 89%	> 240,000

LUMENS - CRI/CCT TABLE

LED Information	XTOR1A	XTOR2A	XTOR2A-N	XTOR3A	XTOR3A-N
Delivered Lumens (Wall Mount)	722	1,633	1,523	2,804	2,284
Delivered Lumens (With Flood Accessory Kit) ¹	468	1,060	978	2,168	1,738
B.U.G. Rating ²	B0-U0-G0	B1-U0-G0	B1-U0-G0	B1-U0-G0	B1-U0-G0
CCT (Kelvin)	5,000	5,000	3,500	5,000	3,500
CRI (Color Rendering Index)	65	65	70	65	70
Power Consumption (Watts)	7W	18W	18W	26W	26W

NOTES: 1 Includes shield and visor. 2 B.U.G. Rating does not apply to floodlighting.

CURRENT DRAW

Voltage	Model Series		
	XTOR1A	XTOR2A	XTOR3A
120V	0.05A	0.15A	0.22A
208V	0.03A	0.08A	0.13A
240V	0.03A	0.07A	0.11A
277V	0.03A	0.06A	0.10A
347V	0.025A	0.058A	0.082A

ORDERING INFORMATION

Sample Number: XTOR2A-N-WT-PC1

Series ¹	LED Kelvin Color	Housing Color	Options (Add as Suffix)	Accessories (Order Separately)
XTOR1A=Small Door, 7W XTOR2A=Small Door, 18W XTOR3A=Small Door, 26W	[Blank]=Bright White (Standard) 5000K N=Neutral Warm White, 3500K ²	[Blank]=Carbon Bronze (Standard) WT=Summit White	PC1=Photocontrol 120V ³ PC2=Photocontrol 208-277V ^{3,4} 347V=347V ⁵ HA=50°C High Ambient ⁵	WG/XTOR=Wire Guard ⁶ XTORFLD-KNC=Knuckle Floodlight Kit ⁷ XTORFLD-TRN=Trunnion Floodlight Kit ⁷ XTORFLD-KNC-WT=Knuckle Floodlight Kit, Summit White ⁷ XTORFLD-TRN-WT=Trunnion Floodlight Kit, Summit White ⁷ EWP/XTOR=Escutcheon Wall Plate, Carbon Bronze EWP/XTOR-WT=Escutcheon Wall Plate, Summit White

NOTES: 1 DesignLights Consortium® Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details. 2 XTOR1A not available in 3500K. 3 Photocontrols are factory installed. 4 Order PC2 for 347V models. 5 Thru-branch wiring not available with HA option or with 347V. 6 Wire guard for wall/surface mount. Not for use with floodlight kit accessory. 7 Floodlight kit accessory supplied with knuckle (KNC) or trunnion (TRN) base, small and large top visors and small and large impact shields.

STOCK ORDERING INFORMATION

7W Series	18W Series	26W Series
XTOR1A=7W, 5000K, Carbon Bronze	XTOR2A=18W, 5000K, Carbon Bronze	XTOR3A=26W, 5000K, Carbon Bronze
XTOR1A-WT=7W, 5000K, Summit White	XTOR2A-N=18W, 3500K, Carbon Bronze	XTOR3A-N=26W, 3500K, Carbon Bronze
XTOR1A-PC1=7W, 5000K, 120V PC, Carbon Bronze	XTOR2A-WT=18W, Summit White	XTOR3A-WT=26W, Summit White
	XTOR2A-PC1=18W, 120V PC, Carbon Bronze	XTOR3A-PC1=26W, 120V PC, Carbon Bronze

5-DAY QUICK SHIP ORDERING INFORMATION

7W Series	18W Series	26W Series
XTOR1A-WT-PC1=7W, 5000K, Summit White, 120V PC	XTOR2A-PC2=18W, 5000K, 208-277V PC, Carbon Bronze	XTOR3A-PC2=26W, 5000K, 208-277V PC, Carbon Bronze
	XTOR2A-WT-PC1=18W, 5000K, Summit White, 120V PC	XTOR3A-WT-PC1=26W, 5000K, Summit White, 120V PC
	XTOR2A-WT-PC2=18W, 5000K, Summit White, 208-277V PC	XTOR3A-WT-PC2=26W, 5000K, Summit White, 208-277V PC
	XTOR2A-N-WT=18W, 3500K, Summit White	XTOR3A-N-WT=26W, 3500K, Summit White
	XTOR2A-N-PC1=18W, 3500K, 120V PC, Carbon Bronze	XTOR3A-N-PC1=26W, 3500K, 120V PC, Carbon Bronze
	XTOR2A-N-PC2=18W, 3500K, 208-277V PC, Carbon Bronze	XTOR3A-N-PC2=26W, 3500K, 208-277V PC, Carbon Bronze
	XTOR2A-N-WHT-PC1=18W, 3500K, Summit White, 120V PC	XTOR3A-N-WHT-PC1=26W, 3500K, Summit White, 120V PC
	XTOR2A-N-WT-PC2=18W, 3500K, Summit White, 208-277V PC	XTOR3A-N-WT-PC2=26W, 3500K, Summit White, 208-277V PC

DESCRIPTION

The Impact Elite family of wall luminaires is the ideal complement to site design. Incorporating modular LightBAR™ technology, the Impact Elite luminaire provides outstanding uniformity and energy-conscious illumination. Combined with a rugged construction, the Impact Elite luminaire is the ideal facade and security luminaire for zones surrounding schools, office complexes, apartments and recreational facilities. UL/cUL listed for wet locations.

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Construction

Heavy-wall, die-cast aluminum housing and removable hinged door frame for precise tolerance control and repeatability. Hinged door inset for clean mating with housing surface and secured via two captive fasteners. Optional tamper-resistant Torx™ head fasteners offer vandal resistant access to the electrical chamber.

Optics

Choice of six patented, high-efficiency AccuLED Optics™ distributions. Optics are precisely designed to shape the light output, maximizing efficiency and application spacing. AccuLED Optics technology creates consistent distributions with the scalability to meet customized application requirements. Offered Standard in 4000K (+/- 275K) CCT and minimum 70 CRI. Optional 3000K CCT, 5000K CCT and 5700K CCT.

Electrical

LED drivers mount to die-cast aluminum back housing for optimal heat sinking, operation efficacy, and prolonged life. Standard drivers feature electronic universal voltage (120-277V 50/60Hz), 347V 60Hz or 480V 60Hz operation, greater than 0.9 power factor, less than 20% harmonic distortion, and are suitable for operation in -40°C to 40°C ambient environments. All fixtures are shipped standard with 10kV/10kA common – and differential – mode surge protection. LightBARs feature an IP66 enclosure rating and maintain greater than 95% lumen maintenance at 60,000 hours per IESNA TM-21. Emergency egress options for -20°C ambient environments and occupancy sensor available.

Mounting

Gasketed and zinc plated rigid steel mounting attachment fits directly to 4" j-box or wall with the Impact Elite "Hook-N-Lock" mechanism for quick installation. Secured with two captive corrosion resistant black oxide coated allen head set screws concealed but accessible from bottom of fixture.

Finish

Cast components finished in a five-stage super TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Standard colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available. Consult the McGraw-Edison Architectural Colors brochure for the complete selection.

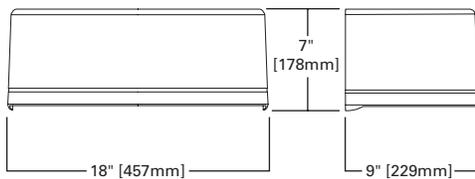
Warranty

Five-year warranty.

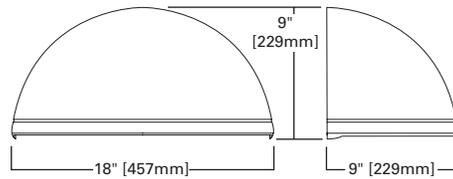


DIMENSIONS

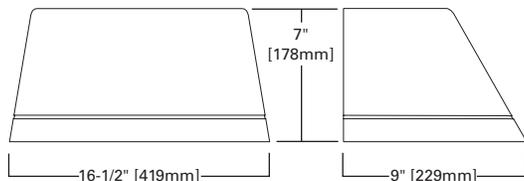
Cylinder



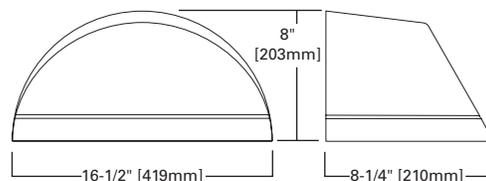
Quarter Sphere



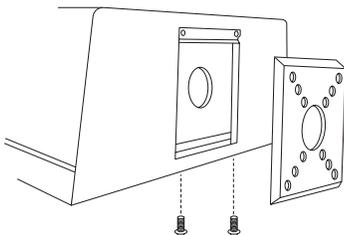
Trapezoid



Wedge



HOOK-N-LOCK MOUNTING



ISC/ISS/IST/ISW IMPACT ELITE LED



1 - 2 LightBARs
Solid State LED

WALL MOUNT LUMINAIRE

CERTIFICATION DATA

UL/cUL Listed
LM79 / LM80 Compliant
IP66 LightBARs
ISO 9001
DesignLights Consortium® Qualified*

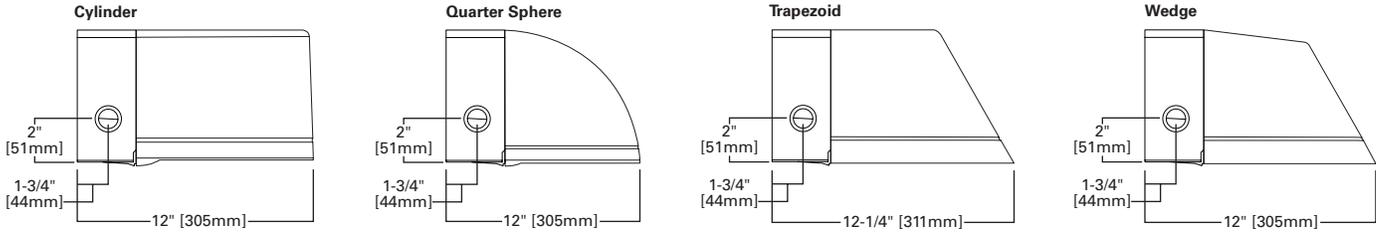
ENERGY DATA

Electronic LED Driver
>0.9 Power Factor
<20% Total Harmonic Distortion
120-277V/50 & 60Hz, 347V/60Hz,
480V/60Hz
-40°C Minimum Temperature
40°C Ambient Temperature Rating

SHIPPING DATA

Approximate Net Weight:
18 lbs. (8 kgs.)

THRUWAY BACK BOX



POWER AND LUMENS BY BAR COUNT

Number of LightBARs	E01		E02		F01		F02	
	21 LED LightBAR				7 LED LightBAR			
Drive Current	350mA				1A			
Power (Watts)	120-277V	25W	47W	26W	50W			
Current (A)	120V	0.22	0.40	0.22	0.42			
	277V	0.10	0.18	0.10	0.19			
Power (Watts)	347V or 480V	31W	52W	32W	55W			
Current (A)	347V	0.11	0.16	0.11	0.17			
	480V	0.16	0.18	0.16	0.18			
Optics								
BL2	Lumens	2,738	5,476	2,260	4,521			
	Bug Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1			
BL3	Lumens	2,702	5,405	2,231	4,462			
	Bug Rating	B1-U0-G1	B1-U0-G2	B1-U0-G1	B1-U0-G1			
BL4	Lumens	2,613	5,225	2,157	4,313			
	Bug Rating	B1-U0-G1	B1-U0-G2	B1-U0-G1	B1-U0-G1			
GZW	Lumens	2,785	5,570	2,299	4,598			
	Bug Rating	B2-U0-G2	B3-U0-G3	B1-U0-G1	B2-U0-G2			
SLR/SL	Lumens	2,435	4,869	2,010	4,020			
	Bug Rating	B1-U0-G1	B1-U0-G2	B1-U0-G1	B1-U0-G2			

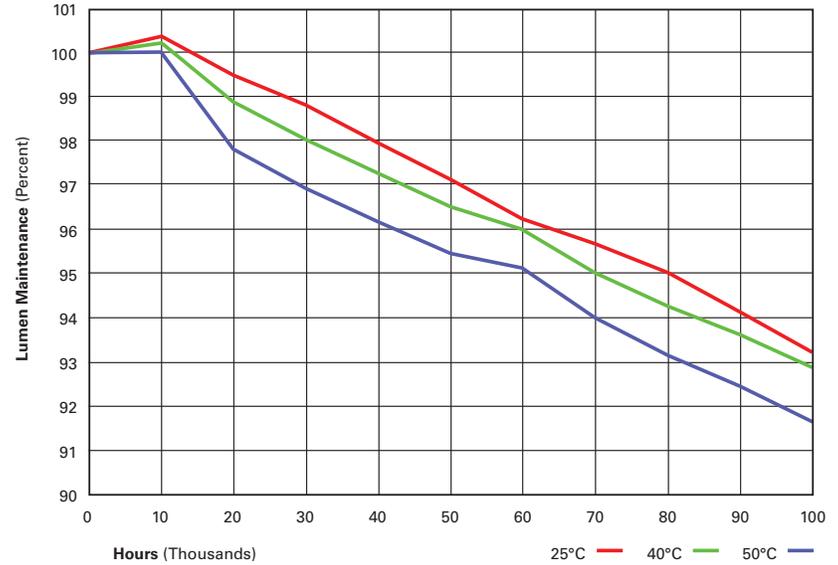
LUMEN MAINTENANCE

Ambient Temperature	25,000 Hours*	50,000 Hours*	60,000 Hours*	100,000 Hours	Theoretical L70 (Hours)
25°C	> 99%	> 97%	> 96%	> 93%	> 450,000
40°C	> 98%	> 97%	> 96%	> 92%	> 425,000
50°C	> 97%	> 96%	> 95%	> 91%	> 400,000

* Per IESNA TM-21 data.

LUMEN MULTIPLIER

Ambient Temperature	Lumen Multiplier
10°C	1.02
15°C	1.01
25°C	1.00
40°C	0.99



ORDERING INFORMATION

Sample Number: ISC-E02-LED-E1-BL3-GM

Product Family ¹	Number of LightBARs ^{2,3}	Lamp Type	Voltage	Distribution	Color ⁵
ISC=Impact Elite LED Small Cylinder ISS=Impact Elite LED Small Quarter Sphere IST=Impact Elite LED Small Trapezoid ISW=Impact Elite LED Small Wedge	E01=(1) 21 LED LightBAR E02=(2) 21 LED LightBARs F01=(1) 7 LED LightBAR F02=(2) 7 LED LightBARs	LED=Solid State Light Emitting Diodes	E1=Electronic (120-277V) 347=347V 480=480V ⁴	BL2=Type II w/Back Light Control BL3=Type III w/Back Light Control BL4=Type IV w/Back Light Control GZW=Wall Grazer Wide SLL=90° Spill Light Eliminator Left SLR=90° Spill Light Eliminator Right	AP=Grey BZ=Bronze BK=Black DP=Dark Platinum GM=Graphite Metallic WH=White
Options (Add as Suffix)				Accessories (Order Separately) ¹¹	
2L=Two Circuits ⁶ 7030=70 CRI / 3000K CCT ⁷ 7050=70 CRI / 5000K CCT ⁷ 7060=70 CRI / 5700K CCT ⁷ 8030=80 CRI / 3000K CCT ⁷ P=Button Type Photocontrol (Available in 120, 208, 240 or 277V. Must Specify Voltage) OSB=Occupancy Sensor with Back Box (Specify 120V or 277V) ⁸ BBB-XX=Battery Pack with Back Box (Specify 120V or 277V) ⁹ CWB-XX=Cold Weather Battery Pack with Back Box (Specify 120V or 277V) ¹⁰ DIM=0-10V Dimming Drivers LCF=LightBAR Cover Plate Matches Housing Finish ULG=Uplight Glow TR=Tamper Resistant Hardware				MA1253=10kV Circuit Module Replacement MA1254-XX=Thruway Back Box - Impact Elite Trapezoid MA1255-XX=Thruway Back Box - Impact Elite Cylinder MA1256-XX=Thruway Back Box - Impact Elite Quarter Sphere MA1257-XX=Thruway Back Box - Impact Elite Wedge	

- NOTES:**
- DesignLights Consortium® Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details.
 - Standard 4000K CCT and greater than 70 CRI. LightBARs for downlight use only.
 - 21 LED LightBAR powered by 350mA and 7 LED LightBAR powered by 1A.
 - Only for use with 480V Wye systems. Per NEC, not for use with ungrounded systems, impedance grounded systems or corner grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems).
 - Custom and RAL color matching available upon request. Consult your lighting representative at Eaton for more information.
 - Low-level output varies by bar count. Consult factory. Not available with 347V or 480V. Available with two bars (E02 or F02) only.
 - Extended lead times apply.
 - Available with E02 or F02, only one bar on street side will be wired to sensor. Time delay factory setting 15-minutes. When ordered with PC option, both bars are connected to photocontrol as primary switching means. Standard sensor lens covers 8" mounting height, 360° coverage, maximum 48" diameter. Not available in all configurations or with BBB or CWB options.
 - Specify 120V or 277V. LED standard integral battery pack is rated for minimum operating temperature 32°F (0°C). Operates one bar for 90-minutes. Not available in all configurations or with OSB option. Consult factory.
 - Specify 120V or 277V. LED cold weather integral battery pack is rated for minimum operating temperature -4°F (-20°C). Operates one bar for 90-minutes. Not available in all configurations or with OSB option. Consult factory.
 - Replace XX with color suffix.

Conceptual Civil Servicing Report for:

Proposed Poultry Plant Expansion
Island Farmhouse Poultry
1615 Koksilah Road, Cowichan Bay, BC

Prepared for:

Mike Owsianicki, Project Engineer
Coldbox Builders
630-5500 North Service Road
Burlington, ON L7L 6W6

Prepared by:



A handwritten signature in blue ink, appearing to read "R. Eathorne", is written over a horizontal line.

Ryan Eathorne, AScT

A handwritten signature in black ink, appearing to read "Charles Ramos", is written over a horizontal line.

Charles Ramos, P.Eng.
Principal

CCEL Project Number: 1025-001

Updated: October 24th, 2017

Table of Contents

1.0	PROJECT UNDERSTANDING	2
2.0	ROADS AND SITE ACCESS.....	2
3.0	WATER SERVICING.....	2
4.0	SANITARY SEWER	3
5.0	STORM DRAINAGE.....	4
6.0	SHALLOW UTILITIES	4
7.0	EROSION & SEDIMENT CONTROL	4
8.0	CONCLUSION.....	4

Appendices

Appendix A – Preliminary Site Servicing Plan (Drawing No. SK1 Rev. A)

1.0 PROJECT UNDERSTANDING

Cascara Consulting Engineers Limited (CCEL) understands that the project consists of a two-story addition at the Island Farmhouse Poultry plant at 1615 Koksilah Road in Cowichan Bay, approximately doubling the building footprint on the site. The development will require alterations to the existing site servicing, site grading, and the implementation of a storm water management plan.

Although the project is located within the Cowichan Valley Regional District (CVRD), Koksilah Road falls under the jurisdiction of the Ministry of Transportation and Infrastructure (MoTI) and the water supply is provided by the Cowichan Bay Waterworks District (CBWD).

The final design requirements for the development will be outlined in the Development Permit (DP), once obtained from the CVRD.

2.0 ROADS AND SITE ACCESS

Koksilah Road is a two-lane roadway under the jurisdiction of the MoTI. There is ditching on both sides of the road for road drainage and the asphalt surface appears to be in good condition. It is assumed that no offsite road improvements will be required with this development.

Access to the site is via an approximately 9.0m wide gravel driveway from Koksilah Road, located towards the east side of the property. The width of the access is typical for a commercial/industrial site and is in good condition. It is anticipated that upgrades to the access will not be required.

The existing onsite parking areas and drive aisles are surfaced with compacted crushed gravel. Regrading of the site and the addition of import gravels will be required in areas to accommodate building construction and for directing storm water to the drainage infrastructure. It is expected that parking areas and drive aisles will remain gravel, with a structure designed to accommodate vehicle loading.

3.0 WATER SERVICING

Water supply in the area is provided by the Cowichan Bay Waterworks District (CBWD). Water infrastructure in the immediate area consists of an existing 150mm PVC watermain on the south side of Koksilah Road and a 50mm metered service to the site, approximately 2.5m from the west property line. The nearest fire hydrants are approximately 350m west and 330m east on Koksilah Road.

Preliminary analysis of the water demands suggest that the existing 50mm service is adequately sized for the expected water usage at this site, with static pressure readings inside the building of approximately 260 kPa(38 psi). Through discussions with the Owner's Representative, it is expected that the building will not be sprinklered. The Owner's Representative has also advised that currently, the poultry plant uses an average of 50m³ of water per day and that a conservative estimate for future usage would be 75m³ per day (an increase of 50%). Based on the assumption that the site operates for an average of 10 hours per day, the 50mm water service will be able to provide the required water at an acceptable velocity.

Fire hydrant spacing on Koksilah Road does not meet current CBWD specifications of 150m between hydrants. Preliminary coordination with the CBWD suggests that, as a part of this development, a new fire hydrant will be required in front of the site. As the authority having jurisdiction, the CBWD may provide additional criteria for the site during detailed design.

Preliminary Fire Underwriters Survey (FUS) calculations suggest that a fire flow of approximately 167 L/s will be required for this development. Although a new fire hydrant will be installed in front of the site, early coordination with the CBWD suggests that the current water system will not be able to provide 167 L/s. We understand an inability to meet FUS flows is fairly common for other areas within the CBWD. As indicated by the CBWD in early correspondence, at this stage, it is expected that this development may not be responsible for upgrades to the CBWD system. The CBWD may conduct an internal feasibility review for this project prior to granting approval.

The final size of the service and appurtenances will be determined during the detailed design process and in coordination with the mechanical engineering consultant.

4.0 SANITARY SEWER

Currently, the site is serviced by a 50mm sanitary sewer force main that exits the site to the north-east, running through a field in the property to the north, then down the Kinscote Heritage Trail, ultimately connecting to an existing CVRD 200mm PVC sanitary main in the Cowichan Bay Road right-of-way. We understand that a service easement is in place with the property owner to the north through which the force main currently runs.

Onsite, it appears that the site wastewater is split into two sanitary settling tanks located in the north-east corner of the site (one tank for all sewage from the building and one tank for all sewage picked-up in the catch basins in the outdoor wash down areas). After settling, it is believed that the liquid from each holding tank collects in a wet well where it is then pumped offsite via the force main service mentioned above. The Owner has advised that the solids that collect in the holding tanks are removed on a regular basis by a licensed septic remover.

The Owner has expressed interest in eliminating the force main service through the property to the north by installing a new service to Koksilah Road; however, there is currently no sanitary infrastructure in Koksilah Road in front of the site for connection. As a part of this project, the onsite sanitary system will be designed to utilize the existing force main service, keeping in mind that in the future the service may be directed to Koksilah Road if/when there is infrastructure in place. The onsite system will follow the same principles that are currently being used by installing two new sanitary settling tanks. Preliminary design suggests that the existing force main is adequately sized to accommodate the projected 50% flow increase.

Final coordination with the mechanical engineering consultant at building permit design stage will confirm if the location and capacity of the existing service satisfies the requirements of this development.

5.0 STORM DRAINAGE

There is currently no storm drainage infrastructure in place within Koksilah Road and there is no service to the site. Koksilah Road has ditching for road drainage, but the ditches do not appear to have capacity for site drainage and they are not deep enough to provide a service that will pick up the drainage from the entire site.

The existing onsite storm system consists of surface grading directing surface runoff towards a treed, low area at the front of the site and towards a french drain at the back of the site that runs parallel to the north property line. A large percentage of the property is surfaced with compacted crushed gravel and there is a large berm on the lower three sides of the site which prevents surface runoff from exiting the property. This suggests that onsite storm water currently percolates through the subsurface materials.

The design intent for this site will be to provide storage for storm water sized for the 100 year storm event, should the berms remain in-place. Storage requirements may be able to be reduced if the berms can be modified in an effort to restore, as close as possible, the previous natural overland drainage paths. The site will be split into two catchment areas with the front parking areas and drive aisle draining to an underground detention system in the front landscaped area and the back half of the site graded towards a French drain along the back drive aisle that will lead to an underground detention system in the north-west corner of the site. As the surface material within the drive aisle and parking areas will remain gravel, it is not expected at this stage that additional storm water treatment will be required.

The final size, location and type of subsurface detention system will be determined through the detailed design process and through coordination with the Owner and the CVRD.

6.0 SHALLOW UTILITIES

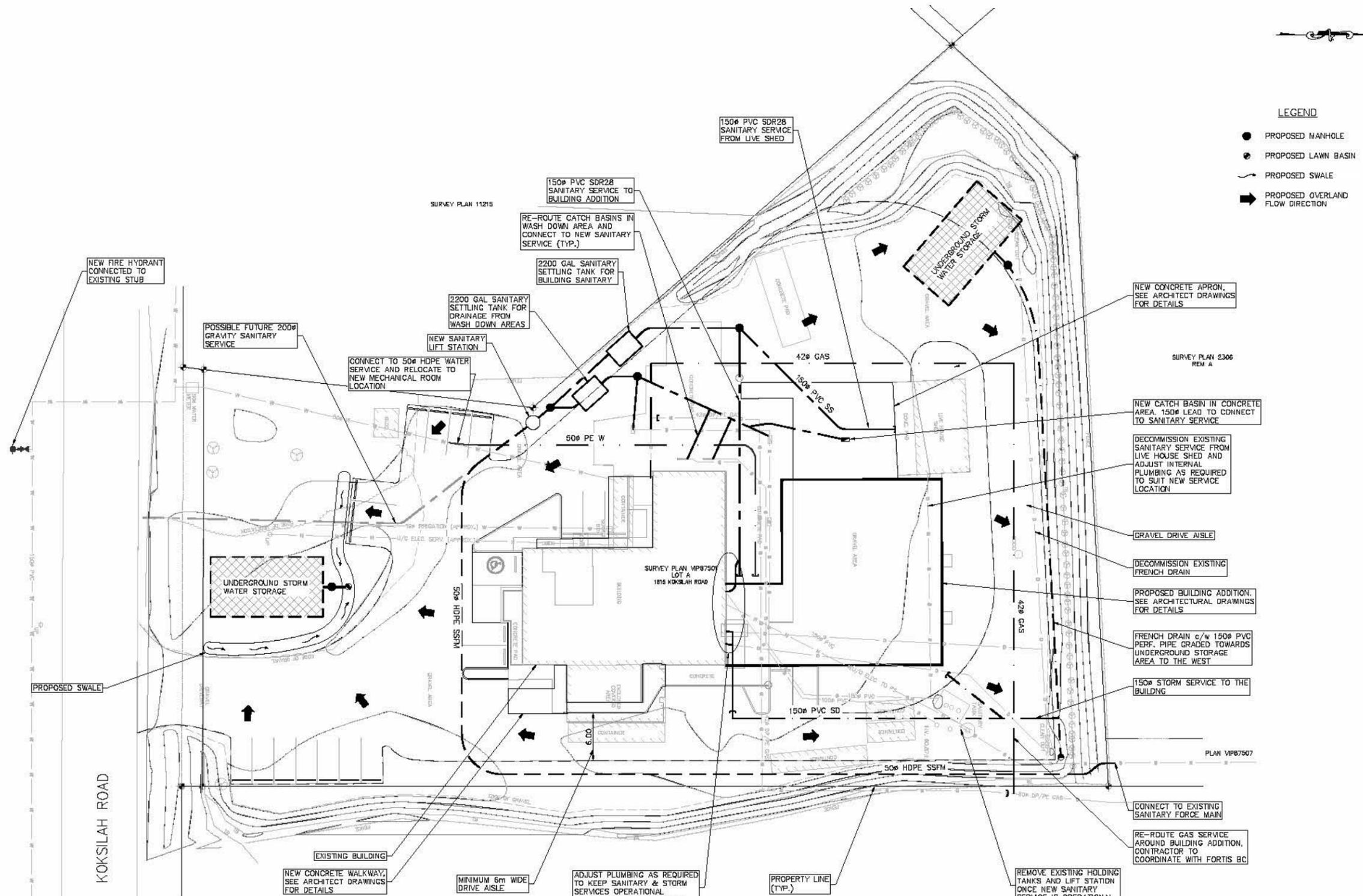
It is expected that the existing electrical service will be upgraded to suit the demand of the new addition and that the communications services will be adequate. The Owner will be coordinating the electrical service installation. Coordination will be required with FortisBC during the building permit stage for relocation of the gas service onsite to accommodate the building addition.

7.0 EROSION & SEDIMENT CONTROL

An Erosion and Sediment Control plan will be prepared and submitted as part of the Detailed Design Package.

8.0 CONCLUSION

The design of the civil works associated with this project will be consistent with Cowichan Valley Regional District requirements and will incorporate best management practices when preparing a detailed storm water management plan.



- LEGEND**
- PROPOSED MANHOLE
 - PROPOSED LAWN BASIN
 - PROPOSED SWALE
 - ➔ PROPOSED OVERLAND FLOW DIRECTION

NOTE:
 PARKING AREAS AND DRIVE AISLES STRUCTURE
 • 150mm THICK OF 19mm MINUS CRUSHED BASE COURSE
 • 250mm THICK OF 75mm MINUS SUBBASE
 PLACED ON A SUBGRADE APPROVED BY THE GEOTECHNICAL ENGINEER



6500 N SERV., RD. SUITE 830, BURLINGTON, ON L7L 6W8
DISCLAIMER:
 THIS DRAWING IS COPYRIGHT MATERIAL AND THE PROPERTY OF COLDBOX.
 THIS DRAWING IS NOT TO BE REPRODUCED WITHOUT THE EXPRESS WRITTEN CONSENT OF THE AUTHOR.
 THIS DRAWING IS PROVIDED SOLELY FOR INFORMATIONAL PURPOSES.
 THE INFORMATION ON THIS DRAWING IS INTENDED FOR BUDGETING AND CONCEPTUAL PURPOSES BY COLDBOX.
 THIS DRAWING IS NOT FOR CONSTRUCTION.

SUBCONSULTANT:

 #208-335 WESLEY STREET NANAIMO, BC V8R 2T5
 TEL: 250.581.7364 EMAIL: info@cascara.ca

NO	REVISION	DATE	BY
A	FOR DEVELOPMENT PLAN APPROVAL	17-10-24	CDR

CLIENT:

APPROVED BY:
 PRINT NAME & SIGN ABOVE DATE

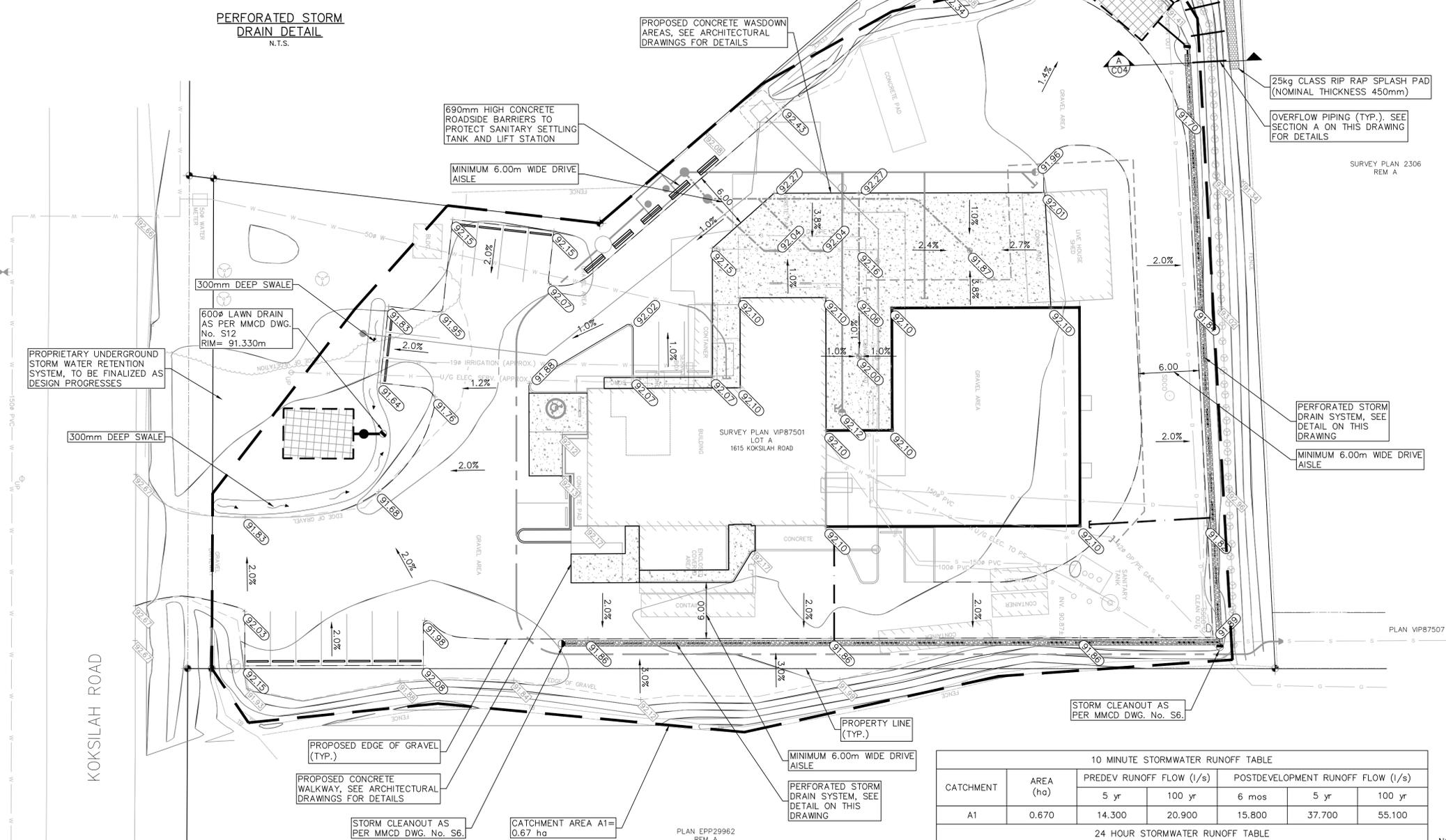
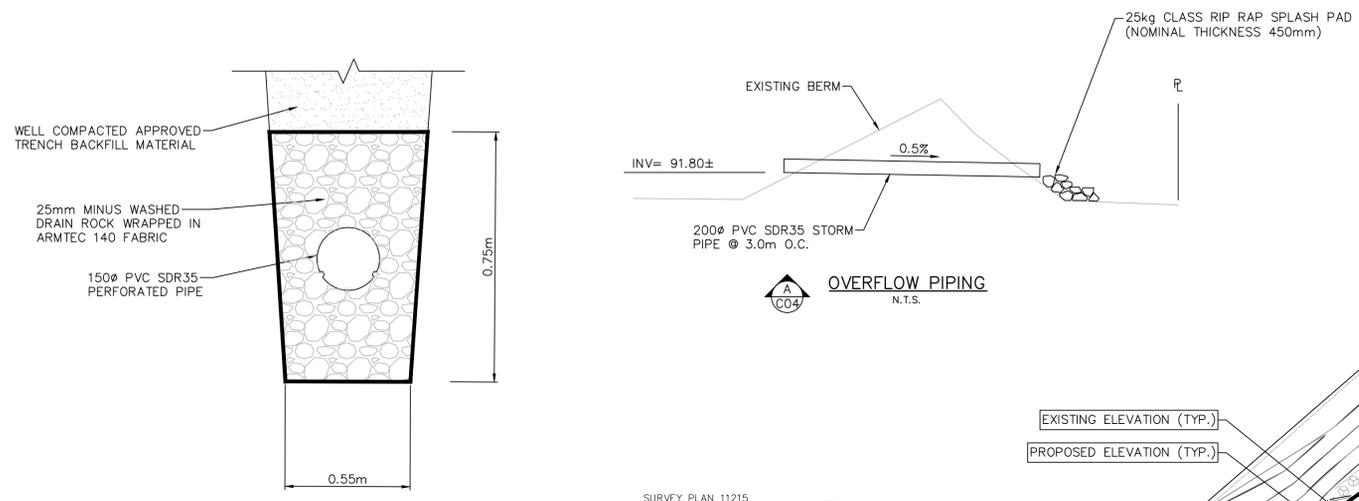
PROJECT:
PROPOSED POULTRY PLANT EXPANSION
PROJECT ADDRESS:
 1615 - KOKSILAH ROAD, COWICHAN BAY VANCOUVER ISLAND, BRITISH COLUMBIA

LEGAL DESCRIPTION:
 SUBDIVISION PLAN FOR PART OF LOT 1, SECTION 4, RANGE 6, COWICHAN DISTRICT, PLAN 2306, EXCEPT PART IN PLAN 11216 AND 48794
LEGAL DESCRIPTION:
 A1A - AGRICULTURAL PROCESSING ZONE

ARRANGEMENT:
FOR DEVELOPMENT PLAN APPROVAL

SHEET TITLE:
PRELIMINARY SITE SERVICING PLAN
PROJECT #: C17-111
APPROVED: CDR DATE: 17-10-13
REVIEWED: DATE: 17-10-13
DRAWN: RDE **SHEET #:** 1
SCALE: AS SHOWN
DATE: OCT. 12, 2017
SK1

R4



10 MINUTE STORMWATER RUNOFF TABLE

CATCHMENT	AREA (ha)	PREDEV RUNOFF FLOW (l/s)		POSTDEVELOPMENT RUNOFF FLOW (l/s)		
		5 yr	100 yr	6 mos	5 yr	100 yr
A1	0.670	14.300	20.900	15.800	37.700	55.100

24 HOUR STORMWATER RUNOFF TABLE

CATCHMENT	AREA (ha)	24 HOUR RUNOFF FLOW (l/s)	
		5 yr	100 yr
A1	0.670	1.900	2.700

NOTE:
 PARKING AREAS AND DRIVE AISLES STRUCTURE
 • 150mm THICK OF 19mm MINUS CRUSHED BASE COURSE
 • 250mm THICK OF 75mm MINUS SUBBASE
 PLACED ON A SUBGRADE APPROVED BY THE GEOTECHNICAL ENGINEER



BUILD GREAT THINGS WITH



5500 N SERV., RD. SUITE 630, BURLINGTON, ON L7L 6W6

DISCLAIMER:
 THIS DRAWING IS COPYRIGHT MATERIAL OF CASCARA CONSULTING ENGINEERS LIMITED FOR USE BY COLDBOX.
 THIS DRAWING IS NOT TO BE REPRODUCED WITHOUT THE EXPRESS WRITTEN CONSENT OF THE AUTHOR.
 THIS DRAWING IS PROVIDED SOLELY FOR INFORMATIONAL PURPOSES.
 THE INFORMATION ON THIS DRAWING IS INTENDED FOR BUDGETING AND CONCEPTUAL PURPOSES BY COLDBOX.
 THIS DRAWING IS NOT FOR CONSTRUCTION.

SUBCONSULTANT:

#206-335 WESLEY STREET NANAIMO, BC V9R 2T5
 TEL: 250.591.7364 EMAIL: info@cascara.ca

NO	REVISION	DATE	BY
0	ISSUED FOR PERMIT	17-12-20	CDR



APPROVED BY: _____ DATE _____
 PRINT NAME & SIGN ABOVE



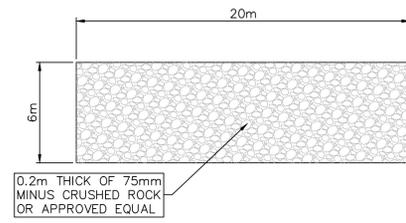
PROJECT:
PROPOSED POULTRY PLANT EXPANSION
 PROJECT ADDRESS:
 1615 - KOKSILAH ROAD, COWICHAN BAY
 VANCOUVER ISLAND, BRITISH COLUMBIA

LEGAL DESCRIPTION:
 SUBDIVISION PLAN POF PART OF LOT 1, SECTION 4, RANGE 5, COWICHAN DISTRICT, PLAN 2306, EXCEPT PART IN PLAN 11215 AND 49764
 LEGAL DESCRIPTION:
 A1A - AGRICULTURAL PROCESSING ZONE

ISSUANCE:
FOR DEVELOPMENT PLAN APPROVAL

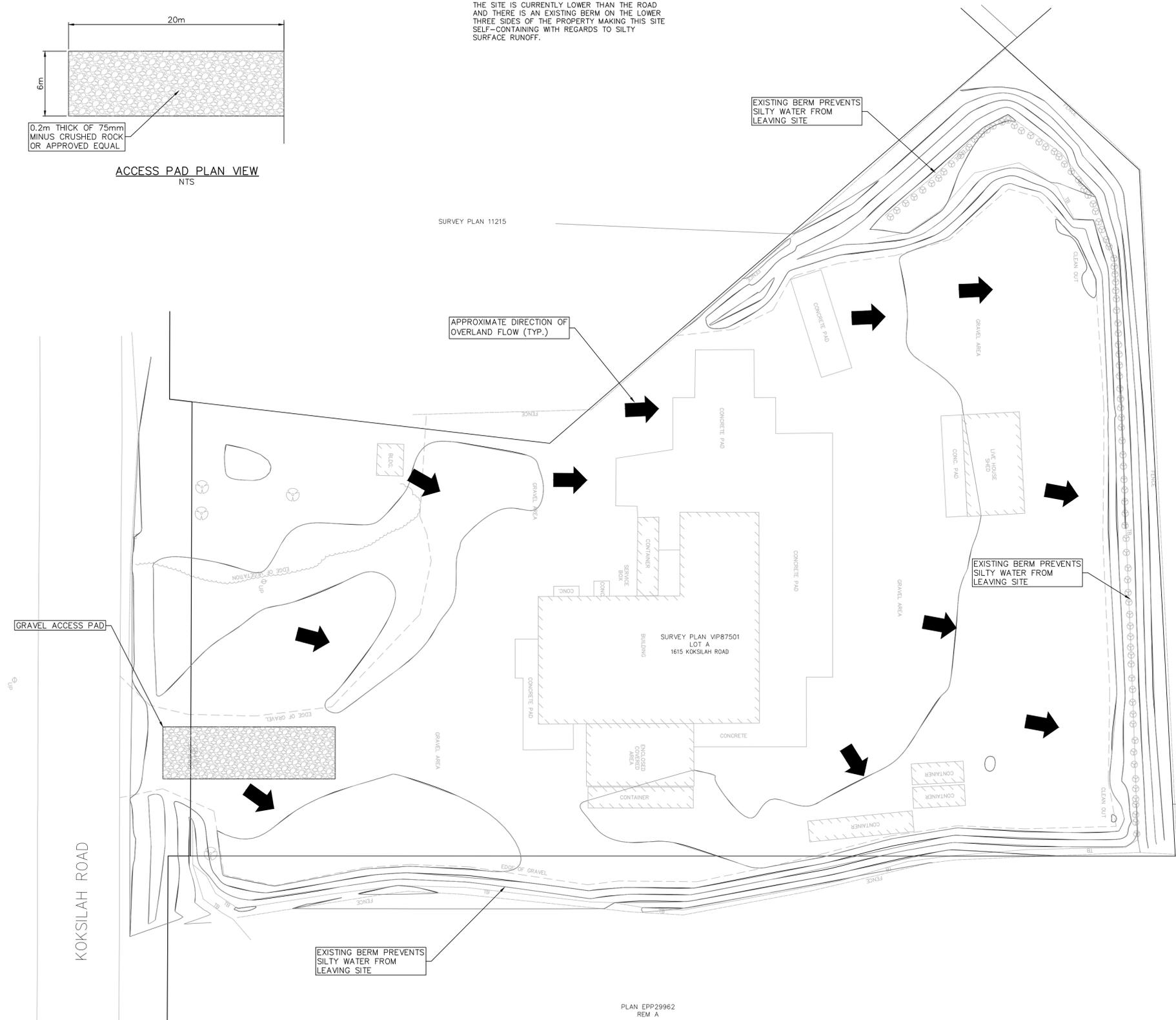
SHEET TITLE:
SITE GRADING & STORM WATER PLAN
 PROJECT #: **C17-111**
 APPROVED: CDR DATE: 17-
 REVIEWED: MO DATE: 17-
 DRAWN: RDE SHEET #:
 SCALE: AS SHOWN
 DATE: DEC. 11, 2017





ACCESS PAD PLAN VIEW
NTS

NOTE:
THE SITE IS CURRENTLY LOWER THAN THE ROAD AND THERE IS AN EXISTING BERM ON THE LOWER THREE SIDES OF THE PROPERTY MAKING THIS SITE SELF-CONTAINING WITH REGARDS TO SILTY SURFACE RUNOFF.



EROSION & SEDIMENT CONTROL NOTES:

1. EROSION AND SEDIMENT CONTROL FOR THIS PROJECT WILL BE AS OUTLINED IN THE FISHERIES AND OCEANS CANADA & MINISTRY OF WATER, LANDS AND AIR PROTECTION HANDBOOK ENTITLED "LAND DEVELOPMENT GUIDELINES FOR THE PROTECTION OF THE AQUATIC HABITAT, SEPTEMBER 1993" AND "ENVIRONMENTAL BEST MANAGEMENT PRACTICES FOR URBAN AND RURAL LAND DEVELOPMENT IN BRITISH COLUMBIA, JUNE 2004". IT IS INCUMBENT UPON THE CONTRACTOR TO ACQUIRE THESE GUIDELINES AND BE FAMILIARIZED WITH THE REQUIREMENTS WITHIN.
2. THE CONSULTANT ASSUMES NO RESPONSIBILITY FOR DAMAGES RESULTING FROM IMPROPER EROSION AND SEDIMENT CONTROL MEASURES UNDERTAKEN BY THE CONTRACTOR.
3. ANY DIRECTION GIVEN BY THE CONSULTANT OR CVRD TO THE CONTRACTOR FOR EROSION AND SEDIMENT CONTROL AND NOT FOLLOWED BY THE CONTRACTOR IS TO BE REPORTED TO THE CVRD IMMEDIATELY.
4. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE NO MUD, DIRT, SOIL, SILT OR ANY OTHER SUBSTANCES ARE SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS OF WAY, OR AREAS THAT LEAD TO CATCH BASINS OR DITCHES CONNECTED TO PUBLIC SYSTEMS. THE CONTRACTOR IS TO CLEAN ANY SUCH MATERIAL IMMEDIATELY. I.e. STREETS ARE TO BE SWEEPED WITH A VACUUM STREET SWEEPER AFTER WORK STOPPAGE EACH DAY.
5. PRIOR TO CONSTRUCTION, INSTALL A TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT TO LIMIT TRACKING OF SITE SOILS ONTO OFFSITE ROADWAYS. THE WIDTH OF THE PAD SHOULD NOT BE LESS THAN THE FULL WIDTH OF POINT OF INGRESS OR EGRESS IN ANY CASE SHOULD NOT BE LESS THAN 6m WIDE WITH A LENGTH OF THE PAD NOT LESS THAN 20m AND HAVING A MINIMUM THICKNESS OF 200mm (8") OF COARSE GRANULAR MATERIAL. COARSE GRANULAR MATERIAL SUCH AS 75mm PLUS SHOT ROCK OR FRACTURED DRAIN ROCK UNDERLAIN WITH GEO-TEXTILE FABRIC IS RECOMMENDED.
6. THE ENTRANCE SHOULD BE MAINTAINED FOR THE DURATION OF CONSTRUCTION, IN A CONDITION THAT WILL PREVENT TRACKING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY, OR AREAS THAT LEAD TO CATCH BASINS CONNECTED TO PUBLIC SYSTEMS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL MATERIAL AS CONDITIONS DEMAND. THE PAD MAY BE REMOVED ONCE PERMANENT PAVEMENTS ARE IN PLACE AT THE SITE. A WHEEL WASH MAY BE REQUIRED IF THE TEMPORARY GRAVEL PAD IS NOT WORKING.
7. CONTRACTOR TO STAGE CONSTRUCTION OPERATIONS TO LIMIT DISTURBANCE. STRIP AND GRUB ONLY THOSE AREAS NECESSARY FOR THE CURRENT CONSTRUCTION. DO NOT STRIP ANY AREA UNTIL REQUIRED.
8. CONTRACTOR TO GRADE WORK AREAS AWAY FROM ADJACENT PROPERTIES.
9. SILT FENCING IS TO BE INSTALLED AROUND ALL STOCK/SPOIL PILES, OR PILES ARE TO BE OTHERWISE COVERED TO LIMIT EROSION AND SEDIMENT GENERATION.
10. ROUTINE INSPECTION AND MAINTENANCE OF THE SYSTEM COMPONENTS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHOULD DESIGNATE AN ON-SITE PERSON TO BE RESPONSIBLE FOR DAY-TO-DAY MANAGEMENT OF THE ESCP. AT A MINIMUM, INSPECT ALL BMP'S WEEKLY TO ENSURE PROPER FUNCTION WITH INSPECTION REPORTS PROVIDED TO THE ENGINEER FOR REVIEW.

DISCLAIMER:
THIS DRAWING IS COPYRIGHT MATERIAL OF CASCARA CONSULTING ENGINEERS LIMITED FOR USE BY COLDBOX.
THIS DRAWING IS NOT TO BE REPRODUCED WITHOUT THE EXPRESS WRITTEN CONSENT OF THE AUTHOR.
THIS DRAWING IS PROVIDED SOLELY FOR INFORMATIONAL PURPOSES.
THE INFORMATION ON THIS DRAWING IS INTENDED FOR BUDGETING AND CONCEPTUAL PURPOSES BY COLDBOX. THIS DRAWING IS NOT FOR CONSTRUCTION.

SUBCONSULTANT:

#206-335 WESLEY STREET NANAIMO, BC V9R 2T5
TEL: 250.591.7364 EMAIL: info@cascara.co

NO	REVISION	DATE	BY
A	FOR DEVELOPMENT PLAN APPROVAL	18-01-22	CDR
1	ISSUED FOR TENDER	18-02-09	CDR

CLIENT:

APPROVED BY: _____ DATE: _____
PRINT NAME & SIGN ABOVE

PROJECT:
PROPOSED POULTRY PLANT EXPANSION
PROJECT ADDRESS:
1615 - KOKSILAH ROAD, COWICHAN BAY VANCOUVER ISLAND, BRITISH COLUMBIA

LEGAL DESCRIPTION:
SUBDIVISION PLAN POF PART OF LOT 1, SECTION 4, RANGE 5, COWICHAN DISTRICT, PLAN 2306, EXCEPT PART IN PLAN 11215 AND 49764
LEGAL DESCRIPTION:
A1A - AGRICULTURAL PROCESSING ZONE

ISSUANCE:
FOR DEVELOPMENT PLAN APPROVAL

SHEET TITLE:
EROSION & SEDIMENT CONTROL PLAN
PROJECT #: **C17-111**
APPROVED: CDR DATE: 18-1
REVIEWED: MO DATE: 18-1
DRAWN: RDE SHEET #:
SCALE: AS SHOWN
DATE: JAN. 22, 2018

3. Subdivision Regulation

The minimum parcel area for the purpose of subdivision is 30 ha.

4. Development Regulations

(a) Parcel coverage shall not exceed 30% for all buildings and structures, provided however that parcel coverage may be increased by an additional 20% to accommodate greenhouses;

(b) The following minimum setbacks for buildings and structures apply:

Type of Parcel Line	Agricultural and Accessory Uses	Residential and Accessory Uses	Kennel Use
Front	30 m	7.5 m	45 m
Interior Side	15 m	3 m	45 m
Exterior Side	30 m	4.5 m	45 m
Rear	15 m	7.5 m	45 m
Adjoining ALR	15 m	15 m	45 m

(c) The maximum height of all buildings and structures is 10 m, except it is 7.5 m for accessory buildings and structures.

5. Special Regulations

In addition to the permitted uses listed in Subsection 1, one non-illuminated sign with a maximum area of 1 m² is permitted on a parcel for the purpose of advertising a farm use designated by statute or regulation by the *ALC Act*.

4.2 A1A – Agricultural Processing Zone

Subject to compliance with **Part 2** of this bylaw and the *ALC Act*, the following regulations apply in the **A1A** zone:

1. Permitted Uses

The following principal uses and no others are permitted:

- (a) Agriculture;
- (b) Farm uses designated by statute or regulation by the *ALC Act*;
- (c) Single detached dwelling;
- (d) Poultry processing;

The following accessory uses and no others are permitted:

- (e) Home-based business;
- (f) Secondary suite.

2. Density

Residential use is limited to one single detached dwelling and one secondary suite permitted per parcel.

3. Subdivision Regulation

The minimum parcel area for the purpose of subdivision is:

- (a) 0.5 ha for parcels serviced by a community water system;
- (b) 1 ha for parcels not serviced by both a community water system and community sewer

system.

4. Development Regulations

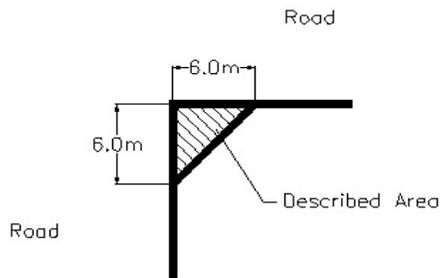
- (a) Parcel coverage shall not exceed 30% for all buildings and structures, provided however that parcel coverage may be increased by an additional 20% to accommodate greenhouses;
- (b) The following minimum setbacks for buildings and structures apply:

Type of Parcel Line	Agricultural and Accessory Uses	Residential and Accessory Uses	Poultry Processing
Front	30 m	7.5 m	30 m
Interior Side	15 m	3 m	8 m
Exterior Side	30 m	4.5 m	30 m
Rear	15 m	7.5 m	15 m
Adjoining ALR	15 m	15 m	15 m

- (c) The maximum height of all buildings and structures is 10 m, except it is 7.5 m for accessory buildings and structures.

5. Special Regulations

The annual average daily limit for processing of fowl is 5,000 birds per calendar year.



2.3 General Regulations for Landscaping & Screening

1. Required Landscaping

- (a) The minimum level of landscaping required in each zone within all front, side and rear yards shall be determined in accordance with the following table:

Zone	Land Use	Required Landscaping and Screening
RR1, RR2, CR1, R2, R2A, R3, R3A, MU1	Single detached dwelling	<p>i) A pervious landscape buffer with a minimum width of 1 m is required, measured from the front and exterior side parcel lines except where intersected by a driveway or pathway;</p> <p>ii) For new development on parcels less than 500 m² in area, landscaping may be specified by a Development Permit;</p>
R1	Manufactured home park	<p>iii) A landscape buffer with a minimum width of 1.5 m shall be provided along the perimeter of the manufactured home park; landscaping and screening shall also be provided in accordance with the <i>CVRD Mobile Home Park Bylaw</i>;</p>
A1, A1A, A1T, A4, A7	<p>Agritourism Accommodation</p> <p>Processing, Cold storage and all other non-residential and non-farm uses</p>	<p>iv) A landscape buffer with a minimum width of 7.5 m shall be provided along the perimeter of campsites and tent sites; further landscaping shall be specified by a Development Permit;</p> <p>v) A landscape buffer with a minimum width of 1.5 m shall be provided along the perimeter of the parcel; further landscaping shall be specified by a Development Permit;</p>
RM2, RM3, RM4, MU1, MU2, MU3, C2, C3, C4, C5, C6, C7, RUR1	Multiple dwelling and non-residential uses	<p>vi) A landscape buffer with a minimum width of 1.5 m shall be provided along the perimeter of the parcel, except a landscape buffer with a minimum width of 3 m shall be provided along all parcel lines abutting a principal residential use; further landscaping shall be specified by a Development Permit;</p>
RUR3, RUR3A	All uses	<p>vii) A landscape buffer with a minimum width of 5 m shall be provided along the perimeter of the parcel, except the width of the buffer may be reduced to 0 m along a parcel line abutting another parcel in the RUR3 or RUR3A zone; further landscaping shall be specified by a Development Permit;</p>

- (b) The requirements of this section may be varied through a development permit;
- (c) Landscaping and screening shall be provided and maintained at the sole cost of the parcel owner.

2. Landscaping and Run-off Control Standards

- (a) Required landscape buffers shall be continuous along the affected property boundaries, except they may be interrupted only by pathways and driveways providing access;
- (b) All site grading will direct overland drainage along or away from any landscape buffer to collection points on-site and away from buildings;
- (c) All landscaped areas and lands impacted by development which are not intended to be used for buildings, parking areas, driveways, pathways, patios or recreation, shall be rehabilitated using a selection of plants which are suited to local climatic conditions, and shall not include invasive plants;
- (d) New trees and shrubs shall be set back a minimum of 1 m from all underground utilities;
- (e) Prior to and during construction, temporary silt fencing shall be provided as an erosion control to prevent the pollution, degradation, or siltation of natural areas and watercourses;
- (f) Run-off from irrigation systems onto highways or parking areas is not permitted.

3. Exterior Storage Areas

For zones within which it is a permitted use, exterior storage shall:

- (a) Not be located within a required landscape buffer or within 1.5 m of a parcel line abutting a highway, whichever has a greater width;
- (b) Be masked by a landscape screen, which is at least 2 m in height, to provide a visual barrier between the exterior storage and adjacent highways and lands, except where exterior storage is ancillary to farm uses pursuant to the *Agricultural Land Use, Subdivision and Procedure Regulation*.

4. Screening of Garbage & Recycling Facilities

- (a) When any development is proposed, provision shall be made for garbage and recycling facilities on the same parcel as the development; such facilities are not permitted to be located within a required setback to a front or exterior side parcel line;
- (b) A landscape screen, which is at least 2 m in height, shall be used to provide a visual barrier between garbage and recycling facilities and adjacent highways and lands, except where such facilities are ancillary to farm uses pursuant to the *Agricultural Land Use, Subdivision and Procedure Regulation*;

5. Off-street Parking & Loading Areas

A landscape screen, which is at least 1.2 m in height, measured from finished grade, shall be installed or planted to provide a visual barrier between required off-street parking and loading spaces and adjacent highways and lands, where the off-street parking and loading spaces are required for a commercial, multiple residential, mixed use, institutional or industrial development or for a home-based business involving automotive service.

6. Utility Kiosks

- (a) A landscape screen, which is at least 1.2 m in height measured from finished grade, shall be used to provide a visual and noise barrier between a utility kiosk and adjacent highways and lands;
- (b) A landscape screen intended to provide a visual barrier from a utility kiosk shall be at least 2.5 m from a utility kiosk door or access panel and at least 0.3 m from another other part of the utility kiosk.

7. Mechanical, Electrical & Service Equipment

All mechanical, electrical or other service equipment located at the exterior or on the roof of a building shall be screened from adjacent highways and lands where the equipment is required for a commercial, industrial, or multiple residential development,

8. Exterior Lighting

Exterior lighting fixtures shall be directed downward so as to prevent illumination above a horizontal plane from a light source, adjacent lands or highways, or watercourses including the ocean.

2.4 General Regulations for Parking & Loading

1. Off-street Parking Requirements

- (a) Minimum off-street parking spaces and facilities shall be provided in accordance with the following table and the requirements of this section. Where a specific use is not identified, a similar use to one listed in the following table shall be selected as an applicable standard.

Use	Minimum Required Parking Spaces
Agritourism accommodation	1 per guest sleeping unit
Art gallery, Artist studio, Cultural Facility, Library	1 per 100 m ² of gross floor area
Assembly	1 per 15 m ² of gross floor area
Automotive service or body shop	2 per service bay
Campground	1 per campsite
Community recreation facility, Fire hall, Police station	1 per 40 m ² of gross floor area
Commercial recreation and entertainment	1 per 30 m ² of gross floor area
Bakery (retail), Cafe	1 per 20 m ² of gross floor area
Brewery, Distillery	1 per 100 m ² of gross floor area
Bed and breakfast	1 per guest sleeping unit
Day Care	1 per 4 people in care
Dwelling, Accessory or Secondary suite	1 per dwelling
Dwelling, Multiple	1 per dwelling plus 0.25 per dwelling for visitors
Dwelling, Single detached or Semi-detached	1 per 100 m ² of gross floor area (to a maximum of 2 spaces)
Equestrian Centre	1 per 6 horse stalls
Exterior storage and sales (commercial or industrial)	1 per 100 m ² of site area
Float home	0.5 per float home
Food Concession Vehicle	1 per concession vehicle
Funeral parlor	1 per 40 m ² of gross floor area
Golf course, Golf driving range	4 per hole plus 1 per driving range tee
Health and wellness studio	1 per 15 m ² of gross floor area
Home-based business	1 per visitor
Hospital, Licensed Community Care Facility	1 per 4 beds
Hotel	1 per accommodation unit
Laundromat	1 per 40 m ² of gross floor area
Live-aboard vessel	0.5 per live-aboard vessel
Manufactured home park	1 per manufactured home plus 0.25 per manufactured home for visitors
Manufacturing, Boat building and repair, Equipment repair, Processing (animal, fish, food, gravel, livestock, poultry,	1 per 100 m ² of gross floor area

wood, value-added, medical marihuana), Welding	
Marina Moorage (non-residential)	1 per 6 berths
Medical service, Personal service	1 per 40 m ² of gross floor area
Office, Financial institution	1 per 40 m ² of gross floor area
Place of Worship	1 per 5 seats
Restaurant, Pub, Lounge	1 per 5 seats
Recycling depot (household consumer goods)	1 per 40 m ² of gross floor area
Recycling, wrecking or storage (automobiles, boats, equipment)	1 per 100 m ² of gross floor area
Sales (retail, liquor, motor vehicle parts)	1 per 20 m ² of gross floor area
Sales (building supply)	1 per 40 m ² of gross floor area
Sales (wholesale, RV, motor vehicle, boat, agricultural/horticultural supply, furniture, appliance, equipment)	1 per 100 m ² of gross floor area
Service station	1 per 40 m ² plus 2 per pump station
School, elementary	1 per classroom
School, secondary or post-secondary	4 per classroom
Veterinary clinic, kennel	1 per 40 m ² of gross floor area
Warehouse, Cold storage facility	1 per 200 m ² of gross floor area

- (b) Where the calculation of the required off-street parking spaces results in a number that is a whole number plus a fraction, the number of required spaces shall be rounded up to the next whole number.
- (c) Where a building or parcel contains more than one function or use, the required number of parking spaces shall be the sum of the requirements for each function or use.
- (d) At least one parking space shall be provided for each parcel unless no building or structure is located on such parcel.
- (e) Where seating accommodation is the basis for a unit of measurement and consists of benches, pews, booths or similar seating accommodation, each 0.5 m² of seating area shall be deemed to be one seat.
- (f) All multiple unit residential, mixed use and commercial developments shall provide bicycle parking at a rate of 20% of the required vehicle parking.
- (g) All multiple unit residential, mixed use and commercial developments requiring at least 10 parking spaces shall provide at least one electric vehicle charging outlet, which is readily accessible for charging a vehicle in a required parking space.
- (h) For any use required to be accessible to persons with a disability by the *BC Building Code*, a minimum of one parking space for a person with a disability shall be provided.
- (i) Where 10 or more parking spaces are required by this bylaw, a minimum of 10% of all required spaces shall be accessible to persons with a disability.
- (j) The parking requirements established in this section do not apply to a building or use existing prior to the adoption date of this bylaw, provided there is no change, expansion or addition to the building or use that requires more parking spaces than were required for the existing building or use when this bylaw was adopted. If there is an expansion or addition to an existing use or building, then the provisions of this section apply to the expansion or addition.

2. Off-Street Parking Design, Development and Maintenance

- (a) The minimum required dimensions for parking spaces and drive aisles shall be in accordance with the following table and requirements of this section.

Angel of Parking	Parking Space Width	Standard Parking Space Length	Drive Aisle Width
30 degrees	2.75 m	5.8 m	3.5 m
45 degrees	2.75 m	5.8 m	4 m
60 degrees	2.75 m	5.8 m	5.5 m
90 degrees	2.75 m	5.8 m	7 m
Parallel	2.5 m	7 m	3.5 m

- (b) Despite the minimum required dimensions for parking spaces in Paragraph (a), where three or more parking spaces are required, 33% of required parking spaces may be reduced to 4.6 m in length provided that such spaces are clearly marked “small vehicle only” within the parking space or on the facing wall or fence, if available.
- (c) Despite the minimum required dimensions for parking spaces in Paragraph (a), all parking spaces for persons with a disability shall be a minimum of 3.7 m in width.
- (d) All parking spaces for persons with a disability shall be:
 - i) Surfaced with material conducive to providing access for wheelchairs;
 - ii) Located in the most accessible and convenient location available within the parking areas;
 - iii) Marked or otherwise designated for sole use by persons with a disability.
- (e) Where any required parking space abuts, along its length any portion of a fence or structure, the minimum parking space width shall be increased by 0.3 m for that space only.
- (f) A driveway shall not be wider than 7 m for the first 1.5 m inside a property line adjoining a highway.
- (g) Street access or egress from parking areas shall be not less than 15 m from the nearest point of intersection of two highways.
- (h) Required parking spaces are not permitted to be located within 1 m of a parcel line adjoining a highway.
- (i) All parking areas shall be provided with adequate curbs to retain all vehicles within such permitted parking area and to ensure that adjacent buildings, fences, walkways and landscaped areas are protected from parked vehicles.
- (j) All parking areas required for commercial, multiple dwelling, and industrial uses shall be surfaced with asphalt, concrete, permeable pavers or similar pavement so as to provide a surface that is durable and dust-free.
- (k) All parking areas required for commercial, multiple dwelling, and industrial uses shall include one or more oil-water separators, and it shall be the responsibility of the owner to properly maintain the oil-water separators in good working order, regularly removing oils for proper disposal.
- (l) All lighting used to illuminate any parking area shall be so arranged to direct light upon such parking area and not any adjoining lands.
- (m) The maximum grade and cross slope for a parking space or parking area required by this bylaw shall not exceed 8%.
- (n) That portion of any parcel used as a driveway from the property line to a required parking area shall not exceed a grade of 20%.
- (o) Required parking spaces for all uses shall be located on the same parcel as the uses they serve.

Minutes of the APC Meeting – Area D**Date: January 25, 2018**

Time: 7:05pm

Location: Nature Centre, Cowichan Bay

Members Attending: Robert Stitt (Chair), Hilary Abbott, Larry Gray, Kerrie Talbot & David Slang.

Ex-Officio: Lori Iannidinardo (Director - Area D) & Anne Bomford (Alternate director)

For the applicant: Dione Wiebe (RossDown), Ryan Pfeiffer, Mike Owsianicki & Rob Shilday (ColdBox).

Business: Development Permit Application

Topics discussed:

- Applicant explained the need for expansion to deal with space constraints, which make it impossible for the plant to operate at its new approved bird-permit quota capacity.
- Planned improvements are designed to improve both animal and worker welfare.
- Planned expansion will relocate the operation of noisy and odor-contributing practices into an enclosed space, thereby allowing the removal of temporary container structures from the property.
- The original structure warrants a "refresh" in terms of paint and possible colour enhancements to ensure the industrial complex fits into the rural neighbourhood in terms of form and character.
- The design and efficacy of proposed plans for retention tanks, vehicle oil-fuel contaminants catchment and site-drainage to deal with extreme seasonal water events – see recommendations.
- The community's desire to see more gravel driveways rather than pavement, to be mitigated by the aforementioned possible water drainage measures.
- Concern about some aspects of the featureless, one-colour finish of the new two-storey addition – see recommendations.
- Applicant will explore options for an electric vehicle charging station to meet requirements.
- Satisfactory resolution for an easement for the neighbour to the east, whose property contains the majority of the sound-attenuating and view-blocking berm-hedge-fence on that side of the subject property – see recommendations.
- Assurances that the owners will continue to serve the "Community Custom-Processing" needs of the Island's small-lot agricultural producers.

Motion: Area D APC recommends that the CVRD supports the application for a development permit to build a two-storey addition at 1615 Koksilah Road.

Motion carried unanimously.

See page two for recommendations.

Recommended that the applicant:

1. Take measures to ensure runoff from parking and loading/unloading areas passes through an oil separation system.
2. Consider additional design elements to mitigate the appearance of three of the two-storey mass walls. The south face of the new building is acceptable as proposed as most of it will be covered by the existing building and the dark backdrop will highlight the character of the existing building. It is suggested that a simple wood trim be added mid-height to the west, east and north walls to break up the very plain uniformity of the charcoal exterior.
3. Resolve property easement issue with neighbour to the east.
4. Consider further enhancements for the green space and employee outdoor break area to compliment the gazebo already in place.

Moved to adjourn the meeting at 8:35 pm.



COWICHAN VALLEY REGIONAL DISTRICT
DEVELOPMENT PERMIT with VARIANCE

FILE NO: 22-D-17DP

DATE: _____

REGISTERED PROPERTY OWNER(S):

1. This Development Permit with Variance is issued and is subject to compliance with all of the bylaws of the Regional District applicable thereto, except as specifically varied or supplemented by this Permit.
2. This Development Permit with Variance applies to and only to those lands within the Regional District described below (legal description):
Lot 1, Section 4, Range 5, Cowichan District, Plan VIP87501 (PID: 028-110-676)
3. Authorization is hereby given for construction of an approximately 1017 m² (10,941 sq. ft.) building addition to the chicken processing facility in accordance with the requirements listed in Section 4, below.
4. Cowichan Bay Zoning Bylaw No. 3705 is varied as follows:
 - Section 2.4(2)(f) to eliminate the requirement to provide 3.4 bicycle parking spaces;
 - Section 2.4(2)(g) to eliminate the requirement to provide one electric vehicle charging outlet;
 - Section 2.4.2(j) and (k) to eliminate the requirement that parking areas for commercial or industrial uses be paved and provided with oil water separators.

The development shall be carried out subject to the following requirement(s), and in accordance with Schedules A – E:

- A landscaped buffer consisting of noise-insulating fence shall be maintained along the west, north and east sides of the parcel accompanied by a hedge or densely planted vegetation;
 - Landscaping within the front yard must be maintained, and if damaged during construction, replaced with equivalent or greater standard of landscaping;
5. The land described herein shall be developed in substantial compliance with the terms and provisions of this Permit and any plans and specifications attached to this Permit shall form a part thereof.

6. The following Schedule(s) is/are attached:

Schedule A – Site Plan

Schedule B – Building Elevations

Schedule C – Civil Servicing Plan

Schedule D – Sediment and Erosion Control Plan

Schedule E – Lighting Plan

This Permit is not a Building Permit. No certificate of final completion shall be issued until all items of this Development Permit with Variance have been complied with to the satisfaction of the Land Use Services Department.

ISSUANCE OF THIS PERMIT HAS BEEN AUTHORIZED BY RESOLUTION NO. XXXX PASSED BY THE BOARD OF THE COWICHAN VALLEY REGIONAL DISTRICT THE X DAY OF MONTH.

Ross Blackwell, MCIP, RPP, General Manager
Land Use Services Department

NOTE: Subject to the terms of this Permit, if the holder of this Permit does not substantially start any construction within 2 years of its issuance, this Permit will lapse.

I HEREBY CERTIFY that I have read the terms and requirements of the Development Permit contained herein. I understand and agree that the Cowichan Valley Regional District has made no representations, covenants, warranties, guarantees, promises or agreements (verbal or otherwise) with MIKE OWSIANICKI (AGENT) on behalf of ROSSDOWN HOLDINGS LTD., other than those contained in this Permit.

Owner/Agent (signature)

Witness (signature)

Print Name

Print Name

Date

Date

From: LC Irly Bird [<mailto:lcirly@shaw.ca>]
Sent: March-03-18 7:46 AM
To: Planning and Development <ds@cprd.bc.ca>
Subject: Development Permit with Variance File#22-D-17DP

Attension Rachelle Rondeau

From Rod Peters Owner 1655 Koksilah road

I don't think addition to the chicken plant should be allowed to be allowed because of the size of building on the property.

I also think they should not be given the variances of Bylaw 3705. Especially the paving of the parking and oil/water separators,

because of runoff to adjacent properties including mine and Cowichan Bay Farm.

I hope my concerns are taken into the process of this Developpe permit variance.

Thank you in advance Rod Peters



STAFF REPORT TO COMMITTEE

DATE OF REPORT February 2, 2018

MEETING TYPE & DATE Electoral Area Services Committee Meeting of March 7, 2018

FROM: Development Services Division
Land Use Services Department

SUBJECT: Rezoning Application No. 03-H-16RS (Zoning Amendment Application for 13271 Simpson Road)

FILE: 03-H-16RS

PURPOSE/INTRODUCTION

The purpose of this report is to present draft Zoning and Official Community Plan amendment bylaws to permit auto recycling and metal recycling on the subject property, in addition to the already permitted I-1 (Light Industrial Zone) uses.

RECOMMENDED RESOLUTION

For direction.

LOCATION MAP



BACKGROUND

At the June 7, 2017, Electoral Area Services Committee meeting, the following resolution was made:

1. *That staff and the Area Director work with the applicant to refine and secure proposed environmental and site improvements emphasizing surface and ground water protection and aesthetics; and*
2. *That Amendment Bylaws be drafted for Application No. 03-H-16RS (13271 Simpson Road), and referred to the Electoral Area Services Committee for consideration.*

APPLICATION SUMMARY

The applicants intend to construct improvements on the property including an approximately 149 m² (1600 sq. ft.) Quonset building for equipment maintenance and a replacement to the current weigh scale. The property's status as non-conformity/non-compliant with the I-1 zoning impedes expansion of the auto recycling and metal recycling business. Construction of new buildings or additions that support the use cannot be completed while the potentially non-conforming use is occurring.

- **See Attachment A – Electoral Area Services Committee report dated June 7, 2017**

COMMISSION / AGENCY / DEPARTMENTAL CONSIDERATIONS

- **See Attachment A – Electoral Area Services Committee report dated June 7, 2017**

OFFICIAL COMMUNITY PLAN/POLICY CONSIDERATIONS

A thorough discussion of OCP policies and Zoning regulations was presented in the staff report formerly considered with regards to this application.

- **See Attachment A – Electoral Area Services Committee report dated June 7, 2017**

The application proposes to amend the I-1 (Light Industrial Zone) in order to permit all the current I-1 (Light Industrial) uses as well as permit the recycling, sorting and storage of metals, motor vehicles and motor vehicle parts, batteries, hazardous wastes (which come from the end-of-life vehicles received on site), appliances, and electrical equipment. The proposed zone would also permit exterior storage of said material.

As discussed in the former staff report, the intent of the zoning amendment application is to accommodate the facility's existing metal recycling facility, which is not currently permitted in the I-1 Zone, but which likely has an element of legal non-conforming status considering auto wrecking has been occurring on the property prior to incorporation of the CVRD. The determination of legal non-conforming status, and its possible extent, has yet to be determined by the courts.

- **See Attachment C – Bylaw No. 1020 I-1 (Light Industrial) Zone**

PLANNING ANALYSIS

The applicants are proposing to resolve the issue of the non-compliant uses by amending the zoning on the property. If approved, this would rationalize the use with the zoning, and allow for further expansion and improvements on the property in accordance with the new zoning and conditions of use regulations within the zone.

Per Committee direction noted above, the applicants have proposed the following:

1. Paving the End-of-Life (ELV) Vehicle Storage areas (processed and unprocessed ELVs) and equipment maintenance area representing approximately 1858 m² (20,000 sq. ft.) and installation of an oil-water separator (OWS) or catch basin;
2. Paving the non-ferrous storage areas representing approximately 1022 m² (11,000 sq. ft.); and
3. Increase groundwater monitoring from bi-annually to semi-annually.

The applicants state that additional landscaping is not being proposed because, in their opinion, 80% of the metal recycling yard is blocked by buildings on the site as well as buildings on adjacent properties: the Island Farms and Coldstar warehouses. They are also concerned that additional trees will attract birds who can become a hazard for aviation. The Nanaimo Airport is located on an immediately adjacent property to the northwest.

As noted in the attachment, the Nanaimo Airport Commission's response to the rezoning referral was they did not object to the zoning amendment subject to activities and/or structures that may interfere with aviation activities and safety not being permitted. Cited examples of this are obstacles that exceed Transport Canada regulated obstacle and height thresholds, reflective surfaces or smoke that may interfere with pilot vision, garbage and/or litter that could pose a direct hazard to aircraft or indirectly by way of attracting birds or wildlife, etc.

With regards to landscaping and buffering, there is no maintained agricultural buffer on the subject property, and the Agricultural Land Commission recommended in their response that a buffer be maintained along the subject property's eastern boundary, which is adjacent to the Agricultural Land Reserve (ALR). Landscaped buffers are a standard requirement between agricultural and adjacent non-agricultural uses. Currently, the vegetation that exists is located on the adjacent property, and there is no proposal associated with this application to increase the buffering or construct any fencing on the subject property to separate the industrial uses from the adjacent ALR land.

Complete referral responses are included in Attachment A.

- **See Attachment A – Electoral Area Services Committee report dated June 7, 2017**
- **See Attachment B – Applicant's Proposed Property Improvements**

The subject property is located above the highly environmentally sensitive Cassidy Aquifer. The Cassidy Aquifer has been referenced as an environmentally sensitive area in every Electoral Area 'H' Official Community Plan since one was first adopted in 1980 (Bylaw No. 515).

This is further supported by intrinsic aquifer vulnerability mapping¹ for the area. For reference, please see Attachment G. This mapping is a tool used to inform governments, planners and policy makers in informing land use decisions and identifying the extent to which a particular groundwater resources is subject to contamination. The first principal of defence in protecting aquifers from contamination is to not locate development that may be a source of contamination within vulnerable areas.

- **See Attachment G – A Guide to the Use of Intrinsic Aquifer Vulnerability Mapping**

Per the Committee's direction, staff have provided draft bylaws for consideration. The intention with the zoning amendment application is to find a resolution that would rectify the non-compliant uses relative to the zoning, and enable CVRD *Waste Stream Management Bylaw* licensing to be enabled with regards to operating procedures.

¹ A Guide to the Use of Intrinsic Aquifer Vulnerability 169 ping, Liggett, Lapcevic and Miller. 2011

Amending the zoning would also permit improvements to the property in terms of buildings, and also allow potential expansion opportunities.

The content of zoning bylaws is limited by the *Local Government Act*, and can include regulations on the following:

- Establishment of different zones;
- Different uses within a zone;
- Different locations within a zone;
- Different standards of works and services provided;
- Different siting circumstances;
- Different protected heritage properties.

Accordingly, staff are suggesting some conditions of use be included in the amended zone pursuant to the above.

The draft amendment bylaw has been structured to amend the existing I-1 Zone by:

1. **Adding metal recycling** - means an area of land where metal based products are wholly or partially disassembled, dismantled, stored or crushed, and fluids and other wastes appropriately removed and stored for disposal offsite, including accessory offices, equipment repair and storage buildings but excludes the sale of recycled products.
2. **Adding auto recycling yard** - means an area of land where End-of-Life vehicles (ELVs) are wholly or partially disassembled, dismantled, stored or crushed, and fluids and other wastes appropriately removed and stored for disposal offsite, including accessory offices, equipment repair and storage buildings but excludes the sale of automobiles, wrecked automobiles or wrecked auto parts.
3. **Adding external storage** (see discussion below).
4. **Adding conditions of use regulations** that all end-of-life vehicles and non-ferrous storage areas must be paved, and oil-water separators installed.

The applicants were disinclined to reduce the number of permitted uses. Therefore, the draft zone includes all the permitted uses of the current I-1 Zone in addition to the two new uses noted above.

With regards to external storage, the current I-1 Zone permits "Recycling sorting and storage of glass, plastic, aluminum, wood, paper, cardboard, *but excluding external storage of any material...*".

By necessity, the application to permit metal recycling and auto recycling includes a requirement for outdoor storage. Within the draft zoning bylaw, it does not therefore make sense to prohibit the outdoor storage of other potential recyclable materials. Therefore, as part of the draft amendment bylaw this has been deleted, which would now enable outdoor storage of any recyclable material.

Staff investigated the potential to include limits to capacity but this was deemed to be unenforceable, and due to the nature of the business could fluctuate significantly.

If the zoning amendment application proceeds, staff recommends an accompanying Official Community Plan amendment that would include the subject property into a commercial/industrial Development Permit Area. This would guide re-development of the property over time and include guidelines regarding building form and character, landscaping, lighting, signage and rainwater management.

- **See Attachment C – Bylaw No. 1020, I-1 (Light Industrial) Zone**
- **See Attachment D – Draft Zoning Amendment Bylaw**
- **See Attachment E – Draft Official Community Plan Amendment Bylaw**

- **See Attachment F – Section 479 Local Government Act Excerpt**

When the adjacent property to the south, where the Coldstar Warehouse is located, was rezoned in 2014, deliberate actions were taken to develop a zone deemed to be an “UltraLight” Zone. This “Ultralight” Zone included permitted uses that are not expected to impact the Cassidy Aquifer. It should also be noted that the I-2 (Heavy Industrial) Zone also excludes auto wrecking.

Given the current and historical uses of the property, the potential for contamination must be considered. Potential for contamination includes both possible impacts to groundwater critical to the community, but also for future development of the site. For example, if there is change in ownership or tenancy, and the remediation is not financially viable given the property value or current market conditions, there is a risk of the property becoming a brownfield site² over time.

From a land use perspective, the fundamental question is does the Committee want to see auto recycling and metal recycling occur on the subject property in perpetuity or is the property better suited, over time, to uses that do not pose the same risk of contamination.

This report presents information regarding the planning matters to be considered in evaluating this proposal, and in staff’s opinion the proposal presented by the applicant fails to satisfy the primary objectives of the Official Community Plan, which is protection of the Cassidy Aquifer and protection of agricultural areas from incompatible uses.

Notwithstanding the planning matters presented in this and the former staff report, should the zoning amendment be denied, there is still the difficult matter of resolving the non-compliant use relative to the zoning. Interestingly, if the zoning amendment is approved, there is the potential it would be approving uses that were never legal non-conforming to begin with: the auto and metal recycling industry has evolved beyond “auto wrecking” that may have been occurring on the property prior to CVRD incorporation.

A detailed analysis of potential other options is not provided in this report, but to establish a true legal non-conforming use, a decision by the courts is required to determine the extent of the non-conforming status.

Direction from the Committee is required.

OPTIONS

Option 1:

That it be recommended to the Board:

1. That Zoning Amendment Bylaw for Application No. 03-H-16RS (13271 Simpson Road) **be forwarded** to the Board for consideration of 1st and 2nd Readings;
2. That referrals to Ministry of Transportation and Infrastructure (Nanaimo), Island Health (Nanaimo), North Oyster Volunteer Fire Department, Regional District of Nanaimo, Agricultural Land Commission, Nanaimo Airport Commission be accepted;
3. That a covenant be drafted to secure proposed amenities and environmental protection measures; and
4. That a public hearing be scheduled with Directors from Electoral Areas H, G and E as delegates.

² Environment Canada defines brownfields as "abandoned, idle or underutilized commercial or industrial properties [typically located in urban areas] where past actions have caused environmental contamination, but which still have potential for redevelopment or of 171 conomic opportunities."

Option 2:

That it be recommended to the Board that Application No. 03-H-16RS (13271 Simpson Road) be **denied**, and a partial refund of fees be given in accordance with CVRD Fees and Procedures Bylaw No. 3275.

Prepared by:

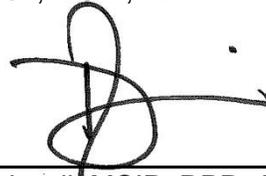
Reviewed by:



Rachelle Rondeau, MCIP, RPP
Planner II



Mike Tippett, MCIP, RPP
Manager



Ross Blackwell, MCIP, RPP, A. Ag.
General Manager

ATTACHMENTS:

- Attachment A – June 7, 2017, Electoral Area Services Committee Staff Report
- Attachment B – Applicant’s Proposed Property Improvements
- Attachment C – Bylaw No. 1020, I-1 (Light Industrial) Zone
- Attachment D – Draft Zoning Amendment Bylaw
- Attachment E – Draft Official Community Plan Amendment Bylaw
- Attachment F – Section 479 *Local Government Act* Excerpt
- Attachment G – A Guide to the Use of Intrinsic Aquifer Vulnerability Mapping



STAFF REPORT TO COMMITTEE

DATE OF REPORT May 29, 2017
MEETING TYPE & DATE Electoral Area Services Committee Meeting of June 7, 2017
FROM: Development Services Division
 Land Use Services Department
SUBJECT: Rezoning Application No. 03-H-16RS (13271 Simpson Road)
FILE: 03-H-16RS

PURPOSE/INTRODUCTION

The purpose of this report is to present an application to expand the list of permitted uses of the I-1 (Light Industrial) zone on the subject property.

RECOMMENDED RESOLUTION

1. That staff work with the applicant to refine and secure proposed environmental and site improvements emphasizing surface and ground water protection and aesthetics;
2. That Amendment Bylaws be drafted for Application No. 03-H-16RS (13271 Simpson Road), and referred to the Electoral Area Services Committee for consideration.

BACKGROUND

Location: 13271 Simpson Road

Legal description: That part of Lot 9, Oyster District, lying to the west of the westerly boundary of Lot 1, Plan 2169 and to the south of the southerly boundary of Lot 3, of said Plan, except the south 10 Chains thereof and except Plan 50801 and VIP76340 (PID: 008-903-603)

Agent: Nures Kara, with Schnitzer Steel Canada Ltd.

Owner: Cassidy Sales & Service Ltd.

Size of Land Parcel: Approximately 2.7 ha (6.6 acres)

Use of Property: Recycling and transfer of autos, auto parts, and other materials

Use of Surrounding Properties: North: C-3 (Service Commercial)
 South: I-3 (Ultra Light Industrial)
 East: A-1 (Primary Agricultural/ALR)
 West: Trans-Canada Highway

Road Access: Simpson Road (Trans-Canada Frontage Road)

Water: Well for non-potable water, water delivery service for drinking water

Sewage Disposal: Septic system for office and scale building, portable washrooms for employees

Environmentally Sensitive Areas: None

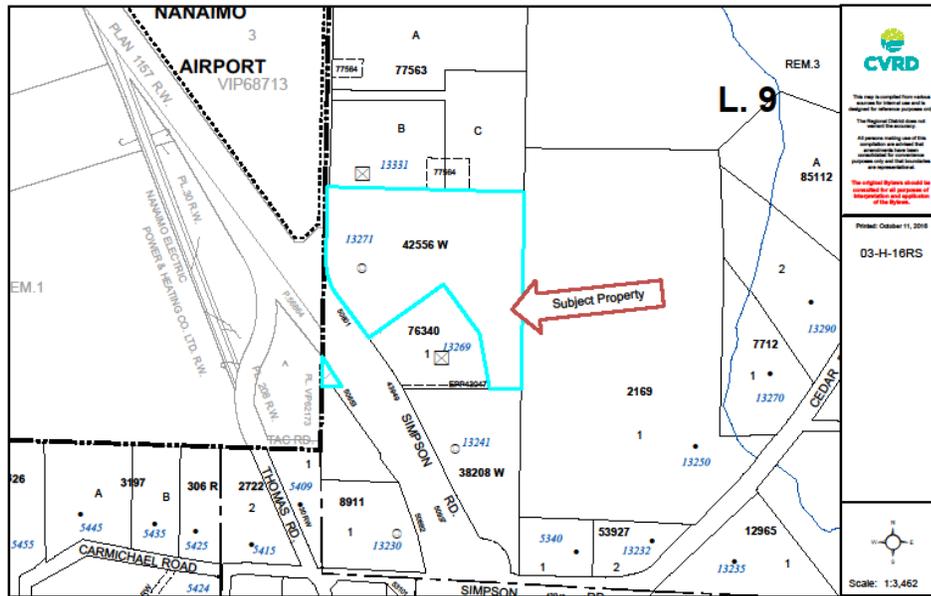
Fire Protection: North Oyster Volunteer Fire Department

Wildfire Hazard Rating: Moderate

Existing Plan Designation: Industrial

Existing Zoning: I-1 (Light Industrial)

LOCATION MAP



APPLICATION SUMMARY

This application proposes to amend the I-1 Zone that is currently applied to the subject property to a new I-1A (Light Industrial A) zone that would permit all the current I-1 (Light Industrial) uses as well as permit the recycling, sorting and storage of metals, motor vehicles and motor vehicle parts, batteries, hazardous wastes (which come from the end-of-life vehicles received on site), appliances, and electrical equipment. The proposed zone would also permit exterior storage of said material.

The subject property is an industrially zoned parcel which operates a metal recycling facility. The facility accepts vehicles, appliances, tires and other materials and prepares them for recycling and transfer to other facilities. Fluids are removed from vehicles and appliances, and materials are sorted, stored on site, and later transferred by barge to other facilities for further processing. The facility on the subject property employs 15 personnel, and operates generally within the hours of 6:00 a.m. and 6:00 p.m. Monday through Friday, and 7:00 a.m. and 4:30 p.m. on Saturday. These hours may vary slightly depending on operational needs.

The intent of the zoning amendment application is to accommodate the facility's existing metal recycling facility, which is not currently permitted in the I-1 Zone, but which likely has an element of legal non-conforming status considering auto wrecking has been occurring on the property prior to incorporation of the CVRD. The determination of legal non-conforming status, and the extent of which, has yet to be determined by the courts.

Adjacent lands to the north and south are zoned for industrial or commercial uses, and the property to the east is within the Agricultural Land Reserve (ALR).

COMMISSION / AGENCY / DEPARTMENTAL CONSIDERATIONS

The Advisory Planning Commission made the following recommendation after conducting a site

visit and has also prepared a background memo for consideration, both of which are included in Attachment J – Advisory Planning Commission Comments and Recommendation:

*“That the Area “H” Advisory Planning Commission recommends the CVRD staff and board to investigate the option of creating a new Light Industrial zone that would permit the applicant to legally continue the current operation on the parcel and apply for a Waste Stream Management Permit but **ONLY and we emphasize ONLY** on the following conditions:*

1. *Any new zone created must not in any way remove or weaken the protection for the general environment and the ground water that is provided by the existing zones. It is unreasonable to cover the entire parcel with a roof so that translates into complete coverage of the ground with non-permeable, properly engineered concrete with run-off collectors and separators etc.. The protection for the aquifer should be “state of the art”. This condition is non-negotiable.*
2. *Should the parcel or operation be sold or the current lease terminated, the parcel zone should revert back to the existing zone.*
3. *An unrestricted list that clearly identifies materials that are specifically excluded from being on the parcel must be a condition of this new zone.*
4. *Consideration be made to mitigate some of the unsightliness of the operation, perhaps with some sort of hedge.*
5. *Consideration should be made regarding appropriate and clearly defined hours of operation.*
6. *Consideration should be made to limit the height of the scrap piles.”*

This application has been referred to the following external agencies for comment (Referral responses are included as Attachment K – Referral Agency Response:

- Island Health
- Ministry of Transportation and Infrastructure
- North Oyster Volunteer Fire Department
- Regional District of Nanaimo
- Agricultural Land Commission
- CVRD Parks & Trails Division
- Public Safety Division
- Economic Development Division
- Engineering Services Department (Recycling and Waste Management)
- Engineering Services Department (Environmental Services).

OFFICIAL COMMUNITY PLAN/POLICY CONSIDERATIONS

The I-1 Zone states the following as a permitted use (Item 26):

“Recycling, sorting and storage of glass, plastic, aluminum, wood, paper, cardboard, but excluding external storage of any material, and excluding the recycling, sorting and storage of heavy metals, batteries, appliances, wrecked motor vehicles or automotive parts.”

The applicant indicates that aspects of the recycling facility have been in operation on the property since the 1960s, perhaps resulting in some degree of legal non-conforming status being applied to the land use. Legal non-conforming status can be established in cases where the use is not permitted by current bylaws, but the use either predates the CVRD and CVRD Zoning Bylaws or was legally permitted at the time it was established, and a subsequent change in bylaws no longer permitted the use.

Non-conforming uses are regulated by the provincial *Local Government Act*, and cannot be expanded beyond the scale and extent of the use occurring at the time the bylaws prohibiting the use became enacted. Proving the extent of non-conforming status generally requires a court decision and can be challenging depending on the historical evidence available, as well as other legal factors.

Policy Context:

The subject property is designated Industrial within the North Oyster/Diamond Official Community Plan (OCP), and is located on land underlain by the Cassidy Aquifer.

The Cassidy Aquifer is classified as an environmentally sensitive area within the OCP (please see Attachment E), and there are numerous objectives and policies within the plan intended to protect the Cassidy aquifer from contamination.

Relevant objectives and policies from the OCP are noted below:

Natural Environmental Objectives

- *Protect natural freshwater systems and important groundwater recharge areas including Woodley Range, Cassidy and Bush Creek Aquifers and Long Lake, Priest Lake, and Michael Lake.*
- *Limit or prohibit development within hazardous or environmentally sensitive areas so as to protect area residents from personal injury or loss of property and to safeguard the natural environment.*

With respect to environmentally sensitive areas defined in the OCP, Policy 3.2.2 states:

Prior to the rezoning of lands which are located in environmentally sensitive areas or which may affect environmentally sensitive areas, the Board shall give due consideration to the following:

- a) Soil stability;*
- b) Natural vegetation or groundcover;*
- c) Wildlife and fish habitat;*
- d) Quality and quantity of surface drainage and groundwater;*
- e) Adjacent land uses.*

Policy 13.1.5

All watercourses and known groundwater aquifers shall be protected from activities which would reduce their suitability as sources of domestic water supply or for fish, shellfish and wildlife habitat.

Industrial Area Objectives

- *Discourage intensive industrial development that would erode the present rural residential, agricultural and recreational character of the plan area.*
- *Recognize existing light industrial land uses and encourage small scale light industrial activities in locations which do not impact on the rural character of the community or natural environment, in particular groundwater resources.*

The following outlines Industrial policies of the plan:

Policy 10.1.3

All industrial development must have regard for the implications respecting the Hazardous and Environmentally Sensitive Area, Freshwater Management and Natural Resource Management policies of this plan.

The industrial policies provide direction for where further light industrial activities should occur, and that no additional areas be designated for heavy industrial use.

Development Permit Area

The property is within the Cassidy Aquifer Development Permit Area, and prior to any new development, a Development Permit would be required subject to the guidelines of the Development Permit Area.

CVRD Waste Stream Management Licencing Bylaw:

Municipal solid waste and/or recycling facilities within the CVRD are required to obtain a licence in accordance with Bylaw No. 2570, "Waste Stream Management Licencing Bylaw". The Bylaw specifies requirements for facilities to ensure that waste and recycling facilities do not negatively impact communities or the environment.

Prior to obtaining a waste stream facility licence, the property must be zoned for the intended land use. The applicants have applied for a waste stream facility licence, which would regulate how the facility is operating and ensure that the facility complies with current regulations. However, a licence cannot be issued while the use is not compliant with the zoning.

Attachment H summarizes the operational plans that have been developed in support of the proponent's application for a Waste Stream Management Licence:

- Operating Plan, 2015;
- Contingency Plan, 2015;
- Environmental Management Plan, 2015

Contaminated Site Regulation – Environmental Management Act:

As a result of the metal recycling and auto wrecking use on the property, a site profile was required. Pursuant to the Contaminate Site Regulation, a preliminary site investigation is required by the Province. In this case, the Ministry of Environment has advised that the CVRD may proceed with the zoning amendment application, and the requirement for a preliminary site investigation can be deferred as the applicants are not proposing any changes to the ground/movement of soil/construction of buildings in the current zoning amendment application.

Attachment H highlights two studies that have been completed for the site, as well as measures the applicants have taken to mitigate impact of the metal recycling and auto-wrecking activities to the environment. The above-referenced studies are:

- Stage 1 Preliminary Site Investigation, prepared by Johnston Gray Environmental which revealed no surface or subsurface impacts to soil and groundwater
- Groundwater Quality Review, prepared by Envirochem Services Inc.

PLANNING ANALYSIS

The motivation for this application is, at a minimum, two-fold:

- 1) *Resolve the ambiguous status of the property in terms of Zoning Bylaw compliance.*
Under the current possibly legal non-conforming status, the applicants are not permitted to expand the metal recycling use from that which occurred at the time the CVRD incorporated. They are also not permitted to construct any buildings, additions or alterations that support the metal recycling/auto wrecking as a result of the unconfirmed legal non-conforming use status. If it was determined through the courts to be legal non-conforming, the Board of Variance has the ability to approve applications for alterations/additions/expansion to legal non-conforming uses. However, the Board of Variance does not have the ability to authorize new structures. The applicants have plans to construct a new scale and a new building, but these and other improvements are not possible while the status of the metal recycling facility is unclear.
- 2) *Apply for a CVRD Waste Stream Management Licence*
Auto wrecking is regulated by the *Provincial Vehicle Dismantling and Recycling Industry Environmental Planning Regulation*. This regulation is not specific to the site and is based on the model of professional reliance, well as compliance verification and enforcement which may be undertaken by the Ministry from time to time. All operators have to register under the regulation but are not required to submit technical documents to be registered. An

Environmental Management Plan and reporting is required every two years for these types of operations.

Given the policies of the plan, and the environmentally sensitive location, there would be no justification for approval of the application if it was a newly proposed use.

However, the site has been operating in some capacity for auto wrecking and metal recycling prior to incorporation of the CVRD, and has been designated and zoned Industrial for many years. It would not appear that the use will cease, and staff have considered whether it is most appropriate to amend the zoning for the existing use with the intention to apply regulations: both the CVRD Waste Stream Management Licencing Bylaw and new conditions of use that could be specified in the amendment bylaw.

Alternatively, the site could remain with its uncertain legal status in anticipation that one day the use will cease from the site in favour of new, more appropriate uses. Adjacent land uses are:

- North - C-3 (Service Commercial Zone)
- South – I-3 (Ultra Light Industrial Zone)
- East – A-1 (Primary Agricultural Zone)
- West – Trans Canada Highway

In addition to the environmental measures summarized in Attachment H, the applicants have proposed the following:

- 1) Increase the frequency of groundwater monitoring to quarterly. If the results continue to be positive over time, reduce the monitoring to semi-annually then annually. Currently, groundwater monitoring occurs every two years.
- 2) Pave more of the site over time such that any hydrocarbons or runoff from the activities be contained onsite and directed to oil water separators. A common theme with the APC and other referral agencies is to require paving of the entire site where business operations are conducted.

If the Committee is inclined to recommend approval, further analysis and careful consideration of zoning regulations, and perhaps amendments to the Cassidy Aquifer Development Permit area, that offer mechanisms to protect groundwater on the site should be considered. These would apply to the land in perpetuity and not be reliant on the operator if there was ever a change in tenants. Currently, the owner of the property is Cassidy Sales and Service, with Schnitzer leasing the site.

Staff is seeking direction from the Committee prior to undertaking further work on developing amendment bylaws. If the Committee finds there is merit to the application, staff will work with the applicant to further refine and secure their commitments, and identify conditions of use for the zone.

Option 1 is recommended.

OPTIONS

Option 1:

That it be recommended to the Board:

1. That staff work with the applicant to refine and secure proposed environmental and site improvements emphasizing surface and groundwater protection and aesthetics;
2. That Amendment Bylaws be drafted for Application No. 03-H-16RS (13271 Simpson Road), and referred to the Electoral Area Services Committee for consideration.

Option 2:

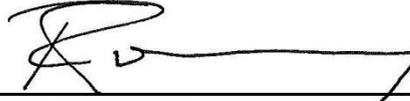
That it be recommended to the Board that Application No. 03-H-16RS (13271 Simpson Road) be denied, and a partial refund of fees be given in accordance with CVRD Fees and Procedures Bylaw No. 3275.

Prepared by:

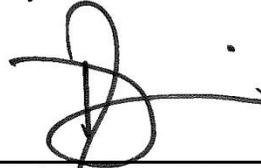


Rachelle Rondeau, MCIP, RPP
Planner II

Reviewed by:



Rob Conway, MCIP, RPP
Manager



Ross Blackwell, MCIP, RPP, A. Ag.
General Manager

ATTACHMENTS:

- Attachment A – Official Community Plan Map
- Attachment B - Zoning Map
- Attachment C – Orthophoto Map
- Attachment D – Agricultural Land Reserve Map
- Attachment E - OCP Designated Environmentally Sensitive Areas
- Attachment F - Site Map
- Attachment G – Application Proposal
- Attachment H - Environmental Summary Letter
- Attachment I - I-1 Light Industrial Zone, Bylaw No. 1020
- Attachment J – Advisory Planning Commission Comments and Recommendation
- Attachment K - Referral Agency Responses

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

The Cowichan Valley Regional District does not warrant the accuracy.

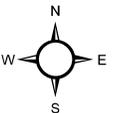
All persons making use of this compilation are advised that amendments have been consolidated for convenience purposes only and that boundaries are representational.

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

File: 03-H-16-RS

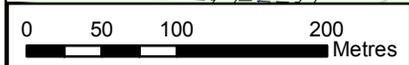
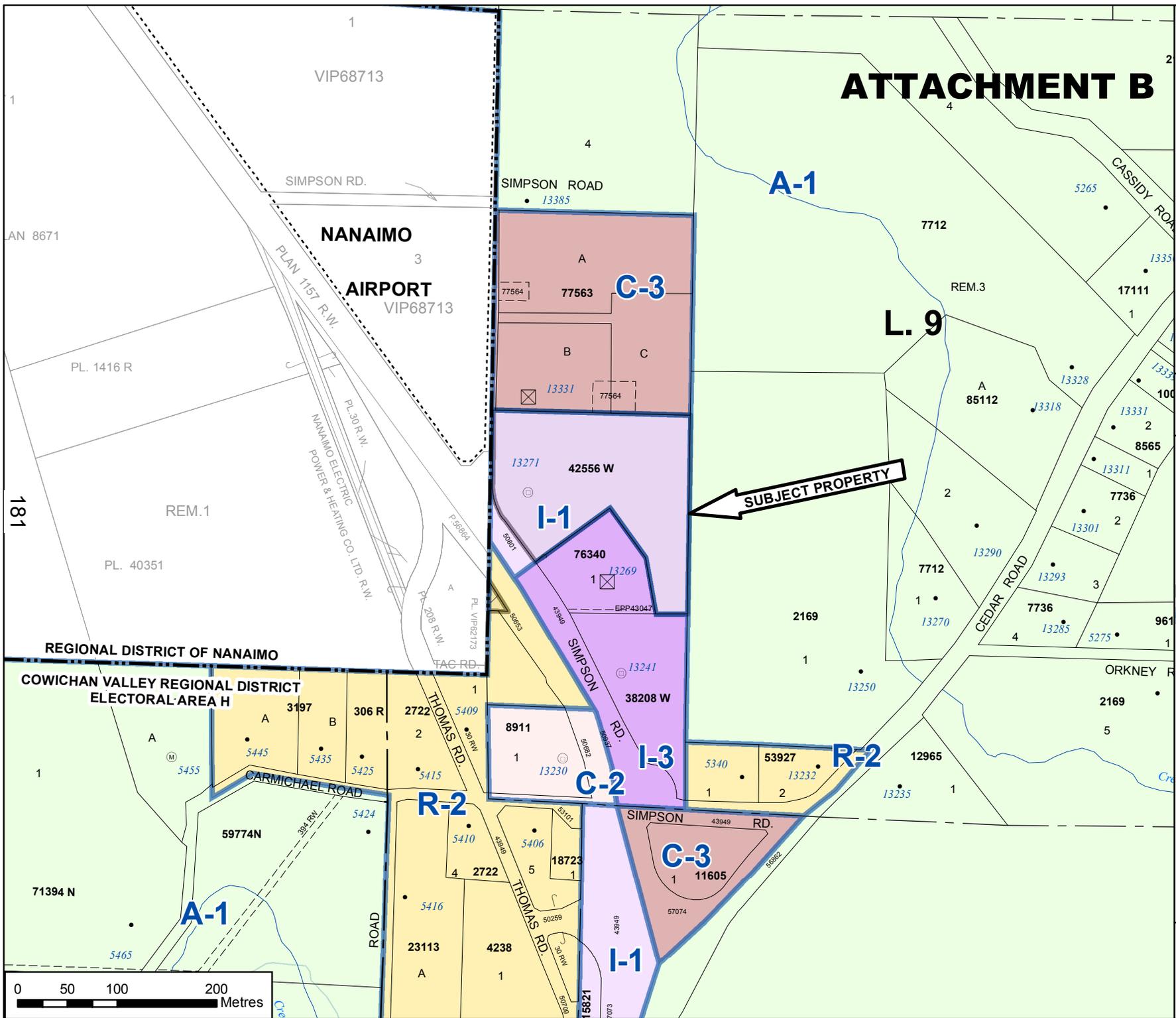
ZONING

- Legend
-  Subject Property
 -  Zoning H

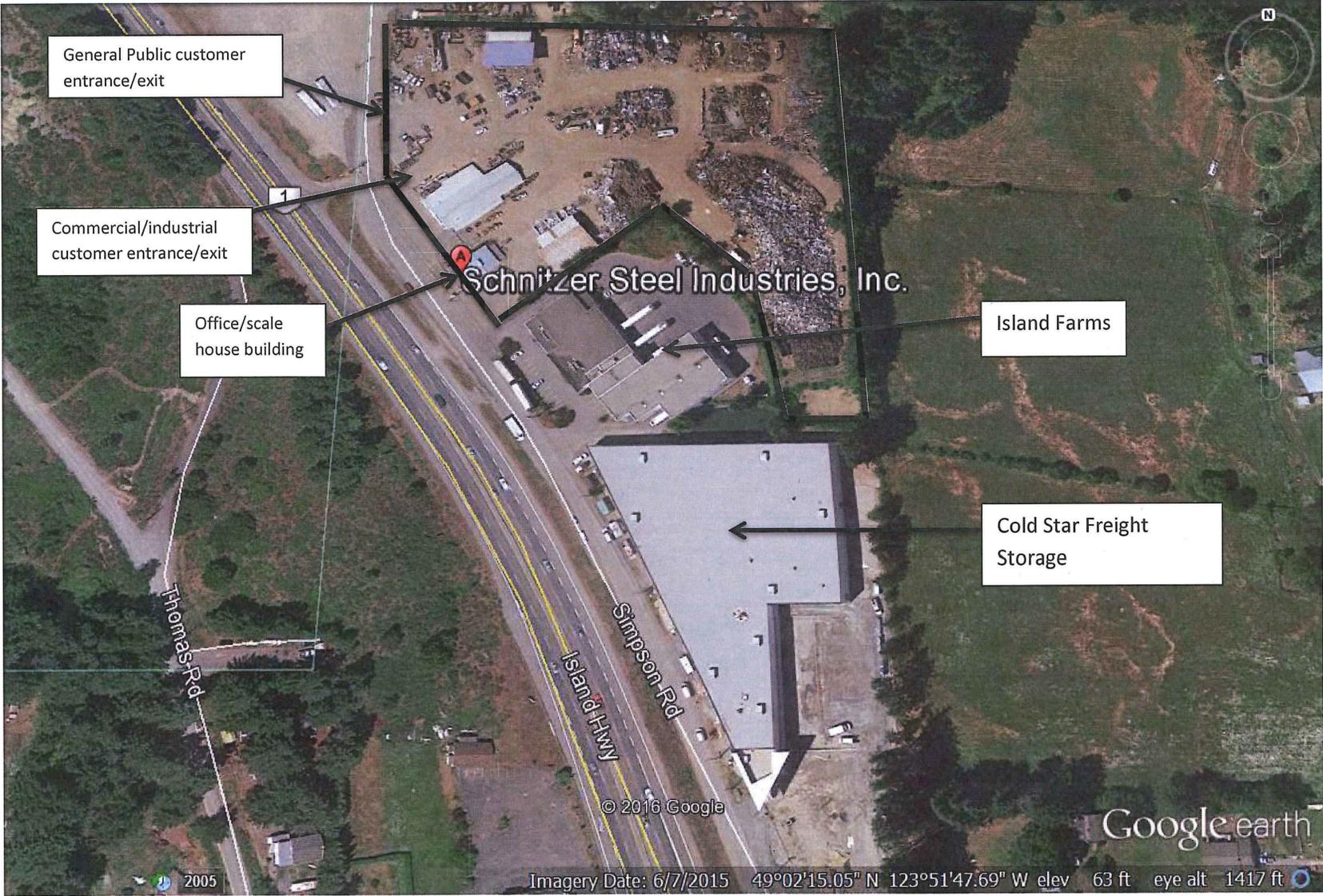


R5

ATTACHMENT B



ATTACHMENT C



182

ATTACHMENT D



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

The Cowichan Valley 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.

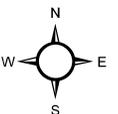
The original Bylaws should be consulted for all purposes of interpretation and application of the Bylaws.

File: 03-H-16-RS

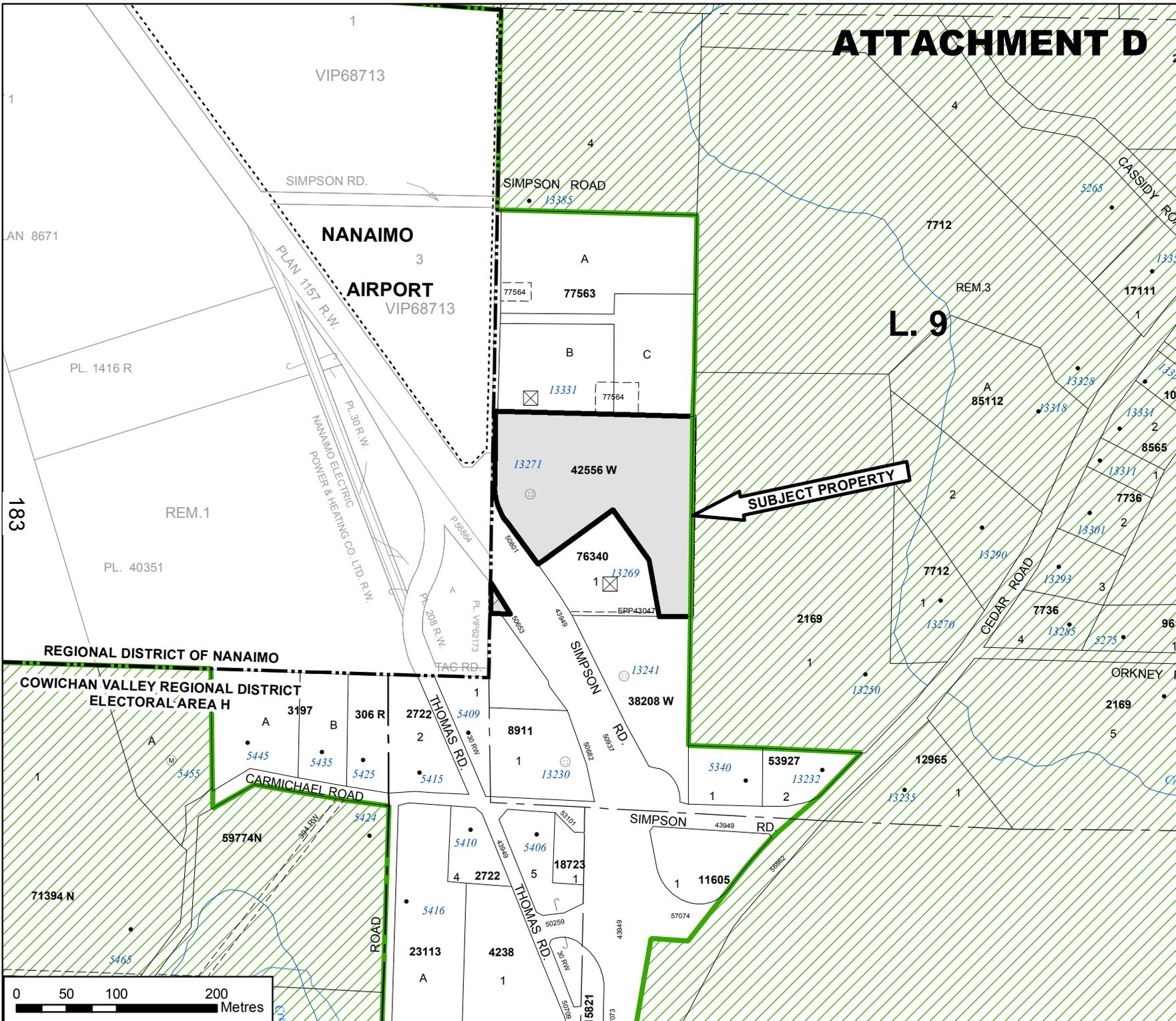
ALR

Legend

- Subject Property
- ALR



R5



AN 8671

183



NORTH OYSTER-DIAMOND COMMUNITY PLAN

184



- 16 -

Environmentally Sensitive Areas

-  Environmentally Sensitive Areas.
-  Historical Significance
-  Tudor Mill (Traditional swimming area)
-  Coffin Point (Swimming area / Indian burials.)
-  Ivy Green Fountain

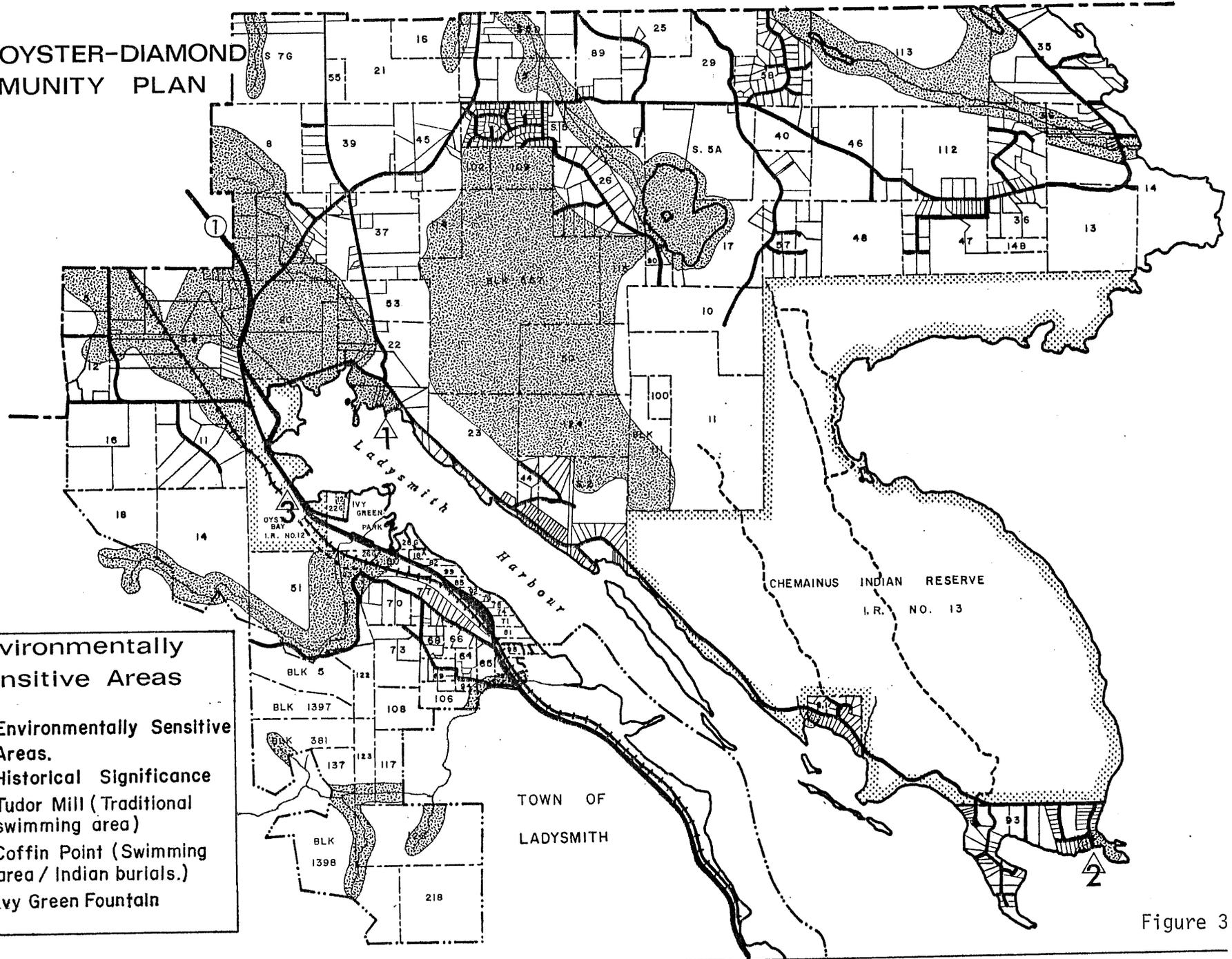
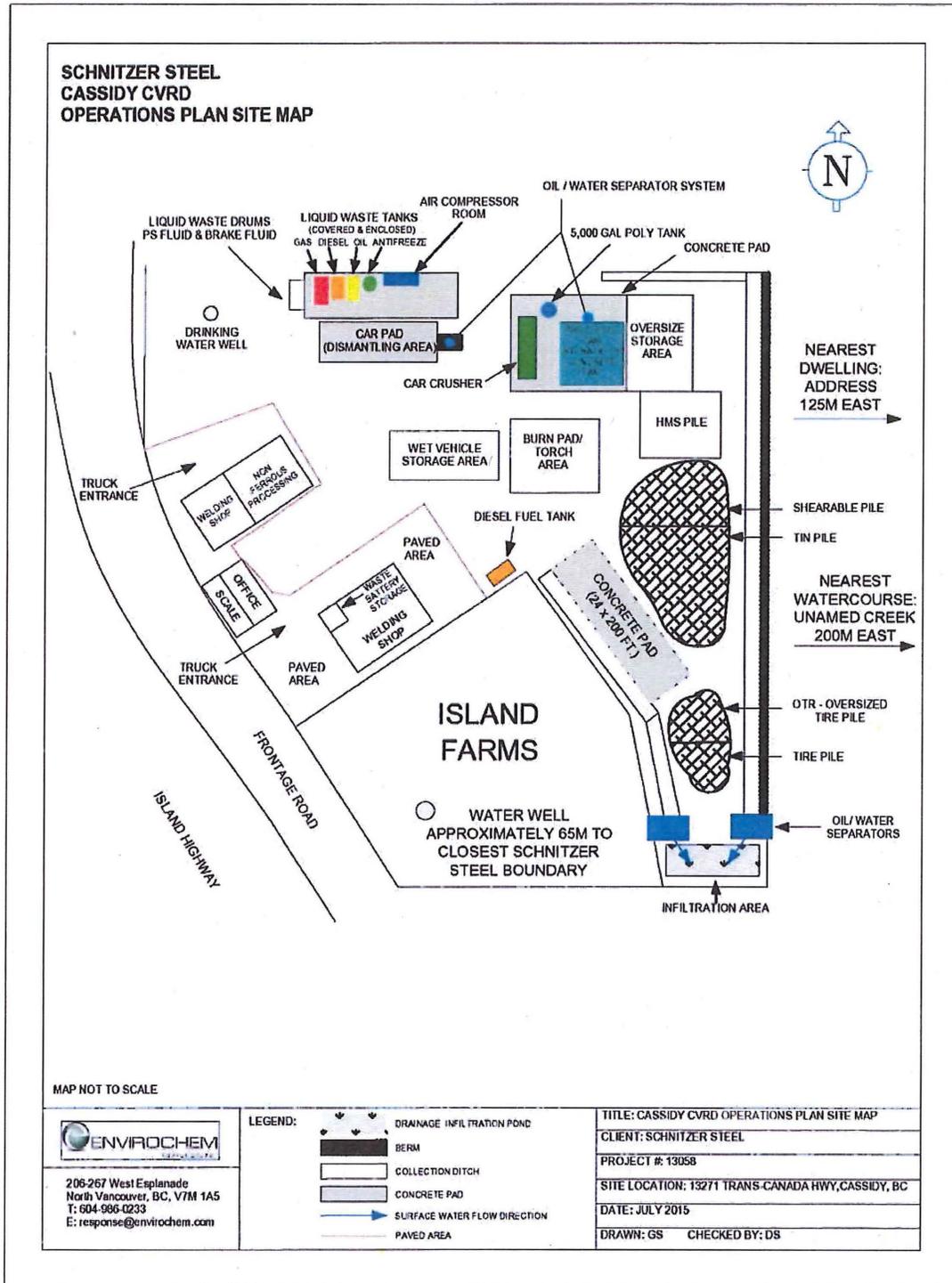


Figure 3

R5

2.0 SITE MAP





October 6, 2016

Mr. Rob Conway, MCIP, RPP
Manager, Development Services Division
Planning & Development Department
Cowichan Valley Regional District
175 Ingram Street
Duncan, BC V9L-1N8

Dear Mr. Conway;

Re: **Schnitzer Steel Canada Ltd. (Schnitzer) Cassidy Facility Zoning Amendment Application for 13271 Trans-Canada Highway, Cassidy, BC – Amendment to I-1 Zone**

Schnitzer Steel Canada (Schnitzer) hereby makes application to the Cowichan Valley Regional District (CVRD) requesting an amendment to the I-1 Zone (CVRD Zoning Bylaw No. 1020) for the above-referenced property. Our requested amendments to the property's allowable uses and zoning designation are as follows:

1. Any use permitted in the I-1 Zone; and
2. Recycling, sorting and internal and/or external storage of any substance or material including but not limited to: glass, plastic, aluminum, wood, paper, cardboard, ferrous and non-ferrous metals, batteries, fluids, hazardous wastes (generated from the processing of End-of-Life Vehicles-ELVs including but not limited to: hydraulic & brake oils, anti-freeze, mercury switches, refrigerant gasses, gasoline, diesel, and tires), appliances, motor vehicles, motor vehicle parts, electrical equipment and other ancillary uses associated with metal recycling.

The purpose for requesting this amendment is to accommodate the facility's existing metal recycling activities (including recycling/processing of motor vehicles/motor vehicle parts) that have been occurring on this property since the 1960s. The property is currently designated as "Industrial" under the CVRD's Official Plan Designation (OCP).

Enclosed herewith is Schnitzer's Zoning Amendment application and supplementary information as outlined below:

1. Two (2) site plans illustrating the current depiction of the property;
2. Title Certificate;
3. Environmental Summary Report; and
4. Completed Site Profile.

Schnitzer thanks you for your consideration of this application. If there are any questions, please do not hesitate to contact me at your earliest convenience.

Sincerely,



Mr. Nures Kara
Senior Environmental/Project Manager – Schnitzer Steel Canada Ltd.

Cc: Mike Tippett, MCIP, RPP (Manager, Community & Regional Planning-CVRD)

Encl.



October 6, 2016

Mr. Rob Conway, MCIP, RPP
Manager, Development Services Division
Planning & Development Department
Cowichan Valley Regional District
175 Ingram Street
Duncan, BC V9L-1N8

Dear Mr. Conway;

Re: **Schnitzer Steel Canada Ltd. (Schnitzer) Cassidy Facility Zoning Amendment Application –
Summary of Environmental Improvements**

Further to our August 11, 2016 pre-application meeting and subsequent information provided to the CVRD Environment Department, outlined below is a summary of Schnitzer's environmental initiatives in support of its zoning amendment application:

1. Independent Environmental Investigations

a. October 2002 – Stage I and II Preliminary Site Investigation Report (PSI)

This site investigation conducted by Johnston Gray Environmental on behalf of the previous operator and landowner, reviewed the history of the site and adjacent properties; surveyed the site and vicinity including the surface, the sub-surface soil including three test pits; and reviewed the present use.

Key findings from the report showed minor hydrocarbon staining on the ground and no surface or sub-surface impacts to soil and groundwater.

The report stated that Phase II Site Assessment was not necessary.

b. August 2015 – Groundwater Quality Assessment

In August 2015, Schnitzer retained Envirochem Services Inc. (Envirochem) – a third party environmental consultant to conduct a soil and groundwater quality assessment, to address the CVRD's concern about the environmental condition of this property. Five (5) boreholes were drilled and five (5) groundwater monitoring wells were installed. Based on the analytical results, Envirochem concluded there is no evidence to suggest that past or present facility operations have had a negative impact on soil and/or groundwater quality. Therefore, groundwater monitoring will be conducted every two years to confirm that these conditions persist.

2. Environmental Management

Schnitzer recognizes the importance of protecting the environment and understands how site activities may affect the environment. As such, Schnitzer has implemented several onsite environmental controls to protect the environment.

a. Surface Water Management

In 2008, two (2) one-metre deep stormwater collection and conveyance channels equipped with liners and crushed rock were installed on the western side of the property adjacent to the Island Farms property, and eastern side of the property, to improve infiltration, conveyance and containment of stormwater. Additionally, four oil water separators (OWS's) and a stormwater retention pond were installed - Two OWS' capture and treat runoff from the western conveyance channel and two OWS' capture and treat runoff from the eastern property boundary conveyance channel. All four OWS' discharge into the infiltration pond. Two additional oil water separators are located at the vehicle processing area (northern part of the site). Water from the vehicle processing area discharges through the OWS' then into a plastic 5,000 US gallon tank located behind the car crusher. The tank water is sampled and disposed at an approved facility when there is sufficient water.

The oil water separators are inspected weekly and are cleaned out on a regular basis to ensure maximum performance. Inspections and clean out events are documented and are part of regular facility maintenance.

Additional stormwater Best Management Practices (BMPs) are implemented (i.e. installing hay bales, oil booms and creating a berm and filter cloth against the fence lines to prevent run-off into the east neighbouring properties (see photographs below). These BMPs are regularly inspected and replaced as required.



Flooding at the entrance of the Facility has occurred sporadically due to the large runoff of of-site stormwater from the Trans-Canada highway. The Ministry of Transportation is responsible for managing run-off from the highway.

b. Groundwater Protection

Schnitzer ensures all storage, handling and processing of end-of-life vehicles is done on impervious paved surfaces, and wherever possible, protected from the weather. Fluids removed from end-of-life vehicles (ELVs) for recycling are stored and disposed in accordance with the BC *Hazardous Waste Regulation*.

Additional initiatives Schnitzer has taken to prevent potential groundwater contamination include:

- Removal, management and disposal of over 520,000 kilograms of contaminated soil (Industrial Land-IL standards) to an authorized landfill in 2013. All pertinent documentation was submitted to the CVRD on August 18, 2015; and
- Storing on-site fuel in double-walled tanks with spill and collision protection. Fuel tanks are subject to annual integrity inspections.

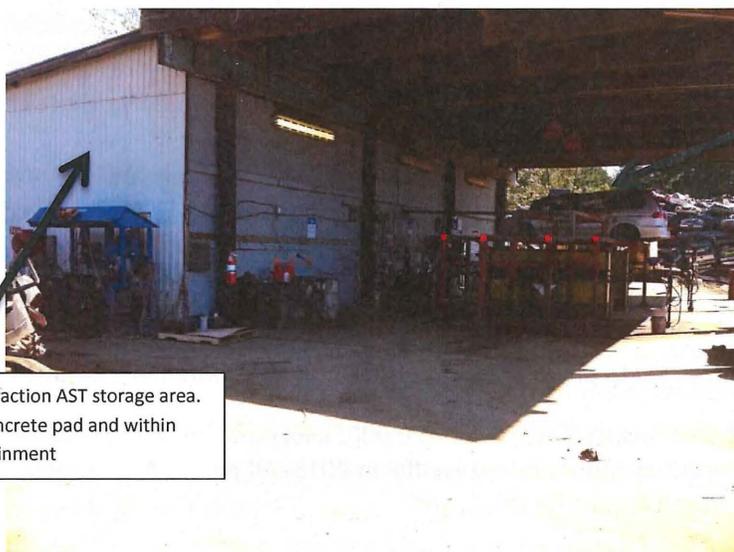
c. End-of-Life Vehicle (ELV) Processing

Intact and unprocessed ELVs received at this facility are temporarily stored (approximately 1-3 days) on the compacted gravel surface adjacent to the Vehicle De-Polluting processing area (VDU). These ELVs are processed within the VDU area, which is equipped with a covered roof, situated on a concrete pad with three catch basins. All vehicle fluids are removed with a vacuum fluid extraction system, connected to contained, double-walled storage tanks located in a separate, enclosed storage unit within the VDU processing area. Overhead stainless steel waste product transfer lines connect the vehicle fluid removal equipment to the tanks. Additionally, all other wastes such as batteries, mercury switches, and air conditioning system refrigerants are removed. Once processed, the ELV's are compacted with a crusher also located on a concrete pad and then temporarily

stockpiled (approximately 30 days) until they are removed and transported to our Tacoma facility for further processing.

These operating procedures are conducted in accordance with the BC *Vehicle Dismantling Recycling Industry Environmental Planning Regulation (VDRIEPR)*. Certain wastes generated by this process (i.e. batteries, anti-freeze, oil, tires) are exempt under CVRD Bylaw 2570 because they are collected and recycled under their respective BC Ministry of Environment's (BCMOE) Product Stewardship Program, also known as Extended Producer Responsibility. Furthermore, Schnitzer has been participating in the CVRD's Zero Waste Challenge by directly or indirectly (via its waste vendors) converting its wastes into new resources.

The following photograph shows the vehicle preparation area on an impermeable concrete surface, with covered area with fluid extraction system and spill containment measures.



Vehicle fluid extraction AST storage area.
Situated on a concrete pad and within
secondary containment

ELV processing area.
Situated on a
concrete pad and
covered. All fluids are
drained with a
vacuum fluid
extraction system
and emptied into
double-walled ASTs
located in the
building next door.

d. Management of Ozone Depleting Substances

Schnitzer personnel hold certification for Ozone Depleting Substance (ODS) Awareness. A VDU technician inspects and evacuates refrigerants (ODS) from each vehicle air conditioning (AC) system. The ODS is transferred from vehicles and refrigerators into appropriate storage tanks and disposed as a hazardous waste using licensed haulers and disposal facilities.

e. **Air Emissions**

Schnitzer has implemented several controls to minimize the generation of dust and other air emissions. They include:

- Approximately 50% of the facility is paved;
- Paved surfaces are regularly swept; and
- Schnitzer ensures there are adequate dust suppression controls in place around the unpaved areas (application of watering roads, dust generating processing activities and unpaved yard surfaces during the summer).

3. **2015 – Cassidy Facility CVRD Operating Plan, Contingency Plan and Environmental Management Plan**

Outlined below are the plans Schnitzer developed in support of its CVRD Waste Stream Licence (WSML) application. To our knowledge, these plans have been reviewed by CVRD Environment staff and previously approved. However, the WSML application is on hold pending the outcome of our rezoning application:

- The October 2015 Operating Plan was developed to address our pending CVRD WSML, and meet the requirements of CVRD Bylaw 2570 regulating the management of municipal solid waste and recyclable material. The Plan covers operating procedures including hours of operation; materials management and procedures; environmental management including ground water protection, surface water management, air emissions, spill response, and inspections.
- The July 2015 Contingency Plan identifies the hazardous wastes generated from site activities and storage and management procedures, including spill and emergency response measures. The Plan also satisfies the requirements of the *Vehicle Dismantling and Recycling Industry Planning Regulation* (BC Reg. 200/2007) and the *Hazardous Waste Regulation* (BC Reg. 63/68).
- The December 2015 Environmental Management Plan (EMP) provides Standard Operating Procedures (SOPs) for the management of wastes generated from the processing of End-of-Life-Vehicles (ELV's) with the purpose of protection of surface and groundwater satisfying the requirements of section 2 of the BC *Vehicle Dismantling and Recycling Industry Environmental Planning Regulation (VDRIEPR)* (B.C. Reg. 200/2007 as amended) and Section 16(2) of the *Hazardous Waste Regulation* for an environmental management plan, as well as standard metals recycling industry practices.

This EMP will be reviewed at a minimum every five years from the date of the Facility's registration under the BC *VDRIEPR*. Any portion of the Plan that does not reflect current waste handling and management practices will be amended to reflect those new practices.

An environmental compliance review will be conducted by a qualified professional at a minimum of every two years. The audit will include a review of all waste management practices in comparison to the EMP and applicable Federal and Provincial Statutes, and evaluate the effectiveness of the Plan for minimizing waste discharges to the environment. A report of the findings will be made available upon request.

4. Unauthorized Waste Management

The Operations Plan and EMP identify the wastes generated from the ELV process and how they managed. In addition, controlled wastes and prohibited wastes, as defined by the CVRD bylaw 2108 and which are not described in the Operations Plan and EMP, are not accepted at the Cassidy Facility. Schnitzer has a detailed procedure for screening incoming scrap metal commodities for unacceptable wastes. A list of prohibited materials is posted at several locations within the drop-off area and shown in the picture below. In the unlikely event these materials are inadvertently received, Schnitzer will isolate them and retain the services of a qualified person/company, and in a timely manner, arrange for proper handling and disposal.



5. Inspections

Inspections at the Cassidy Facility will be conducted in the following manner:

1. Daily inspections (visual) of the areas listed below will be conducted by a Site Supervisor. The visual inspections will entail ensuring received materials conform to our Scrap Acceptance Policy (SAP), observing no residual liquids, litter, etc. migrating off-site:
 - a. Property boundary;
 - b. Shop, Non-ferrous Storage and Processing, Balers;
 - c. Fueling Stations;
 - d. Vehicle De-Pollution Station and Storage Tanks;
 - e. Non-ferrous and Steel piles;
 - f. Oversize Area and Torching Area;
 - g. Perimeter stormwater conveyance channels (ditches); and
 - h. Public Drop-Off Area.

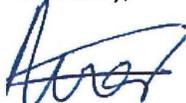
2. Monthly inspections will be conducted on the entire site, including areas in Part 1 above. Inspection results and any follow-up actions will be documented.

6. Aesthetics

The Schnitzer facility is located adjacent (east) to the Trans-Canada Highway, and directly south of the Nanaimo Airport and adjacent industrial lots. From an aesthetics perspective, the view of the metal stockpiles are substantially blocked by existing buildings on the Schnitzer facility, and the existing Island Farms and Cold Storage Freight systems warehouse buildings. Additionally, the eastern property view is blocked by existing trees and a fence. Furthermore, the Schnitzer facility entrance is located adjacent to the Trans-Canada Highway (The facility entrances of our business neighbours – Island Farms and Cold Star Freight Systems are also located adjacent to the Trans-Canada Highway. There are no residential dwellings near these entrances).

Schnitzer is proud of its environmental management practices and wishes to maintain an excellent working relationship with the CVRD. We hope that this information satisfies your requirements at this time. However if you have any questions or require any additional or supporting information please do not hesitate to contact me.

Sincerely,



Nures Kara

Senior Environmental/Project Manager
Schnitzer Steel Canada Ltd.

PART ELEVEN: INDUSTRIAL ZONES

11.1 I-1 ZONE-LIGHT INDUSTRIAL

Subject to compliance with the General Requirements in Part Five of this Bylaw, the following provisions apply in this Zone:

(a) Permitted Uses

The following uses and no others are permitted in an I-1 Zone:

1. Automotive body repair and painting;
2. Automotive repair shop;
3. Boat building;
4. Book binding, publishing;
5. Sale of wholesale and retail building supplies, lumber yard;
6. Broom and brush manufacturing;
7. Cabinet and furniture manufacturing including a joinery;
8. Candy manufacturing;
9. Canning of fruits or vegetables;
10. Cold storage plant;
11. Dairy products manufacturing;
12. Door and window manufacturing;
13. Electric equipment manufacturing;
14. Feed and seed storage;
15. Food products manufacturing, processing and packaging, excluding meat processing and fish processing;
16. Frozen food locker;
17. Parking garage;
18. Kennel;
19. Laboratory;
20. Laundry, dry cleaning and dyeing establishment;
21. Jewellery, mattress, musical instrument, toy, paper box and cardboard, sign, glass, textile, tool, tent and awning, wax products and window shade manufacturing;
22. Contractors workshop, yard and storage;
23. Modular or prefabricated home and truss manufacturing;
24. Welding shop;
25. Warehouse, including mini-warehouse, truck and trailer rentals, and;
26. Recycling, sorting and storage of glass, plastic, aluminum, wood, paper, cardboard, but excluding external storage of any material, and excluding the recycling, sorting and storage of heavy metals, batteries, appliances, wrecked motor vehicles or automotive parts;
27. One single family residential dwelling unit per parcel accessory to a use permitted in Section 11.1 (a) 1 to 26;
28. Separate or secondary suite.

(b) Conditions of Use

For any parcel in an I-1 Zone:

1. The parcel coverage shall not exceed 50 percent for all buildings and structures.
2. The setbacks for the types of parcel lines set out in Column I of this section are set out for all structures in Column II:

COLUMN I Type of Parcel Line	COLUMN II Buildings and Structures
Front Yard	9.0 metres
Side Yard (Exterior or Interior)	9.0 metres
Rear Yard	9.0 metres

3. All uses shall be carried on inside an enclosed building except for storage of material and vehicles.



Minutes of the regular Electoral Area H Advisory Planning Commission Meeting held on March 13, 2017, continuation dated April 3, 2017 at 7:10 pm, at the North Oyster Community Hall.

PRESENT Mike Fall
Jan Tukham
Chris Gerrand
Allison Heikes
Cheryl Chapman

ALSO PRESENT Director Marcotte

ABSENT Assist. Director Daniels, Jody Shupe, Myfanwy Plecas

APPROVAL OF AGENDA It was moved and seconded that the agenda be approved.
MOTION CARRIED

ADOPTION OF MINUTES

M1 It was moved and seconded that the Area H APC meeting of March 13, 2017 be continued, as indicated in the minutes of the March 13, 2017, as circulated, be approved.
MOTION CARRIED

BUSINESS ARISING D1 03-H-16RS

Rezoning application 03-H-16RS. A discussion continued on April 3, 2017, please refer to the notes attached to these minutes regarding this application, and forming of the motion.

Motion: It was moved and seconded: That the Area “H” Advisory Planning Commission recommends the CVRD staff and board to investigate the option of creating a new Light Industrial zone that would permit the applicant to legally continue the current operation on the parcel and apply for a Waste Stream Management Permit but **ONLY and we emphasize ONLY** on the following conditions:

1. Any new zone created must not in any way remove or weaken the protection for the general environment and the ground water that is provided by the existing zones. It is unreasonable to cover the entire parcel with a roof so that translates into complete coverage of the ground with non-permeable, properly engineered concrete with run-off collectors and separators etc.. The protection for the aquifer should be “state of the art”. This condition is non-negotiable.
2. Should the parcel or operation be sold or the current lease terminated, the parcel zone should revert back to the existing zone.
3. An unrestricted list that clearly identifies materials that are specifically excluded from being on the parcel must be a condition of this new zone.
4. Consideration be made to mitigate some of the unsightliness of the operation, perhaps with some sort of hedge.
5. Consideration should be made regarding appropriate and clearly defined hours of operation.
6. Consideration should be made to limit the height of the scrap piles.

MOTION CARRIED

NEW BUSINESS None.

**DIRECTOR'S
REPORT** None.

ADJOURNMENT It was moved and seconded that this meeting be adjourned.

MOTION CARRIED

This meeting adjourned at 8:50 pm.

Jan Tukham, Secretary

Background

- Schnitzer Steel Canada would like to apply for a WSMP (Waste Stream Management Permit). A WSMP will only be considered if the operation is located on a parcel having the correct zone for the activity taking place.
- The activity currently taking place on the parcel in question (and which Schnitzer Steel Canada would like to continue) is primarily, but not restricted to, auto wrecking and the (mostly) outdoor extraction, separation and storage of scrap metals of various different kinds and shapes.
- The current zone on the parcel is I-1 (Light Industrial) which specifically excludes “external storage of any materials, and excludes the recycling, sorting and storage of heavy metals, batteries, appliances, wrecked motor vehicles or automotive parts.” In addition; Section 5.4 of the CVRD Zoning bylaw (which applies to ALL zones) states “Except as otherwise specified in this bylaw.....No parcel shall be used for a junk yard”.
- The current operation on the parcel is only allowed under a “Legal non-conforming status”.
- The application before the APC (Advisory Planning Commission) is to rezone the parcel to an appropriate zone so that Schnitzer Steel Canada can then apply for the WSMP and carry on with the existing activities.
- There is no existing zone in the zoning bylaw that would permit auto wrecking and external storage of the materials currently being stored on the parcel. For this facility to apply for a WSMP and legally continue its current activities a new zone must be designed and created for this parcel. This new zone must avoid the stipulations of the OCP (that forbids Heavy Industrial zones in this area) so it must be a Light Industrial zone not a Heavy Industrial zone. This new zone must also avoid the virtually prohibitive requirement of the existing L1 zone that all scrap metal etc. be processed and stored indoors.

[Advisory Planning Commission List of Consideration/concerns and opinions - Meeting April 3, 2017](#)

List of discussion items regarding Application 03-H-16RS (Schnitzer Steel) re the drafting of a new zone to make the current operation conforming.

1. **Consideration:** The existing facility sits over two aquifers that are irreplaceable and of immeasurable value to the local environment, our community, surrounding communities and to future generations.
Opinion: The citizens of Area 'H' and surrounding communities will demand 'state-of-the-art' protection for those aquifers. Due to the size and value of the aquifers, half measures, such as monitoring, are unacceptable. We consider monitoring to be closing the barn door after the horses are gone.

2. **Consideration:** Easily accessible information indicates extremely deleterious and toxic chemicals can and do (often unintentionally) leak and leach from scrap metal and recycling yards such as the facility here. We presume the intent of the existing bylaw (requiring scrap metals etc. to be stored indoors) is to prevent rainwater from picking up these toxic substances and washing them into the ground water, the soil and/or underlying aquifers.
Opinion of the APC: Because our soils and aquifers are irreplaceable and immensely valuable, this is a good bylaw and should not under any circumstances be weakened or circumvented. These substances must, at all costs, be prevented from polluting the local environment, the soil and the aquifers.

3. **Consideration:** Other than a roof, the only system that will guarantee 100% protection for the aquifers is **complete** coverage of the site where these activities take place, with a non-permeable fabric overtopped by properly engineered concrete. In addition, 'run-off' and storm water collection systems with separators would be required. These systems are known as "Closed Loop". This is the level of protection our citizens should and will demand.
Opinion of the APC: This or similar groundwater protection systems are in place all over the civilized world including many facilities owned and/or operated by Schnitzer. Any community would demand no less.

4. **Consideration:** This facility is of significant value to our community. In our wasteful society, for literally hundreds of good reasons, recycling is absolutely essential.
Opinion of the APC: Unfortunately, this very valuable and essential facility is situated in an entirely inappropriate location. It may have been relatively harmless over 40 years ago when the facility was one tenth the size it is today and when automobiles and appliances were built from simple materials but now they contain a myriad of extremely toxic and/or carcinogenic substances including mercury and PCBs etc. The value of the facility is completely overshadowed by the value of the aquifers and the risks the facility exposes them to.

5. **Consideration:** Rezoning the property this facility sits on, in order to obtain a WSMP is definitely a step in the right direction as it will at least create some level of control (which seems to currently be minimal at best) over the activities and procedures that take place there.

Advisory Planning Commission List of Consideration/concerns and opinions - Meeting April 3, 2017

Opinion of the APC: Based on our experience with the neighbouring property (and Shawnigan Lake), we (the APC) are not convinced the CVRD and/or any other government or private organization will guarantee the protection for the aquifers that a closed loop system will.

6. **Consideration:** This application for rezoning or a new zone has been made by Schnitzer Steel Canada Ltd. and Schnitzer Steel Canada is not the owner of the property.
Opinion of the APC: It is our opinion that the property owner should be the applicant or at least involved in the application process because it is the property owner that will ultimately be the benefactor of a new zone if one is created and granted.
7. **Consideration:** The applicant, Schnitzer Steel Canada, in their presentation to the APC and at the site visit has gone to great lengths to highlight the improvements they have made at the site as well as their track record of environment protection at their other facilities.
Opinion of the APC: Schnitzer Steel Canada's environmental track record IS ENTIRELY IRRELEVANT. A new zone will apply to the property, not the company renting it or the owner. The parcel could be sold at any time in the future and if a new zone is granted, that zone would go with the parcel.
8. **Consideration:** Because this facility is of significant value to the community, it is worth investigating alternatives to the current situation.
Opinion of the APC: Any alternative contemplated must provide the same level of environmental protection (or better) as the existing bylaws. Development Permits do not give the Cassidy aquifers the level of protection they require and the process itself carries a record of abuse. We strongly believe Development Permit process needs to be strengthened to prevent further abuse.
9. **Consideration:** Our current Official Community Plan (OCP) stipulated that "no additional areas be designated for heavy industrial use". We believe the current activity on the site can only be considered as heavy. Because changing the OCP is difficult (and possibly unwise) an alternative could be to create a new light industrial zone that would allow the current activities to continue.
Opinion of the APC: Any new zone, contemplated and/or created specifically for this property in order to circumvent the existing OCP and/or bylaws and make a WSMP grantable, MUST provide the same or better protection for the aquifer and the general environment as the existing bylaw.
10. **Consideration:** Pollution of the Cassidy aquifer would be a catastrophic loss to our community.
Opinion of the APC: By circumventing the existing bylaws and allowing this activity to continue at this site without adequate protection for the aquifer, we would all be held morally accountable should that catastrophe occur. Additionally, if the aquifers were lost, the burden of shame carried by those responsible for allowing an inappropriate facility to operate over them would linger for many years. Our children and grand children would never forgive us.



Nanaimo Airport
P.O. Box 149 3350 Spitfire Rd
Cassidy, BC Canada V0R 1H0
Phone (250) 245-2157

March 10, 2017

Planner, Development Services Division
Cowichan Valley Regional District
Planning and Development Department
175 Ingram Street
Duncan, BC, V9L 1N8

Attention: Rachelle Rondeau

Subject: Rezoning Amendment Referrals

Dear Rachelle,

We appreciate the extension granted to allow us time to respond to the two rezoning requests identified in your email(s) to Lisa Martin at NAI Commercial (Chakalaka Market at 13230 Trans-Canada Highway and Schnitzer Steel, CVRD File No. 03-H-16RS). Our comments and concerns are as follows:

1. Chakalaka Market and vacant lot directly to the north

Comments: **Approval recommended subject to conditions below**

- Activities and/or structures that may interfere with aviation activities and safety are not permitted. Examples of this are obstacles that exceed Transport Canada regulated obstacle and height thresholds, reflective surfaces or smoke that may interfere with pilot vision, garbage and/or litter that could pose a direct hazard to aircraft or indirectly by way of attracting birds or wildlife, etc.

2. Schnitzer Steel, CVRD File No. 03-H-16RS

Comments: **Approval recommended subject to conditions below**

- Activities and/or structures that may interfere with aviation activities and safety are not permitted. Examples of this are obstacles that exceed Transport Canada regulated obstacle and height thresholds, reflective surfaces or smoke that may interfere with pilot vision, garbage and/or litter that could pose a direct hazard to aircraft or indirectly by way of attracting birds or wildlife, etc.

(continued)

Additional comments regarding this application:

- The Nanaimo Airport Commission takes a proactive approach in maintaining good stewardship of the underground aquifer on airport property and is aware that nearby property owners may be concerned about the storage of batteries and/or other types of hazardous waste.

Please don't hesitate to contact me if you have any questions or concerns regarding this matter.

Sincerely,



Jeff Sandford
Business Systems Manager
Nanaimo Airport Commission
Telephone: (250) 245-2157 Ext. 318

Cc: Michael Hooper, CEO, Nanaimo Airport Commission



MEMORANDUM

DATE: February 17, 2017 **FILE No:** 03-H-16RS (Kara for Schnitzer)

TO: Rachelle Rondeau, Planner II, Development Services Division

FROM: Jason deJong, Fire Rescue Services Coordinator, Public Safety Division

SUBJECT: Bylaw Amendment Referral Form **No. 03-H-16RS (Kara for Schnitzer)** – Public Safety Application Review

In review of the Bylaw Amendment Referral Form No. 03-H-16RS (Kara for Schnitzer) the following comments are made regarding the proposed amendment:

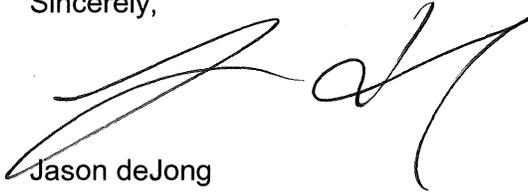
- ✓ Proposal is within the Ladysmith RCMP Detachment area.
- ✓ Proposal is within the British Columbia Ambulance Station 159 (Ladysmith) response area.
- ✓ Proposal is within the boundaries of the CVRD Regional Emergency Program.

Public Safety has the following concerns that may affect the delivery of emergency services to the proposed facility:

- ✓ Proposal is within North Oyster Fire Department boundaries area and their input may further affect Public Safety concerns/comments.
- ✓ The Community Wildfire Protection Plan has identified this area as **Moderate risk for wildfire**.
- ✓ FireSmart principles must be adhered to and maintained (see attached information).
- ✓ All site employees should be taught the permissible methods for fighting incipient fires and for isolating fires and initiating an emergency notification.
- ✓ Using excerpts from NFPA 230, Annex F -- Fire hazard potential exists in the scrap recycling area as there are multiple storage areas of different materials. This can be best controlled by;
 - Storage piles be solid and placed in an orderly manner
 - Separation of yard storage from buildings and flammable materials should be 60m
 - All roads and accesses should be designed to support the loads imposed by fire-fighting equipment and apparatus.
 - Accesses should be well maintained and should remain accessible to the fire department at all times.
 - Accesses should be 6m to 15m wide to provide sufficient room for fire department apparatus.
- ✓ Material Data Safety Sheet and Emergency Site Plan should be made available to the local fire department.

- ✓ It doesn't appear that the site currently has any visible address numbering. As per Cowichan Valley Regional District House Numbering, Unsightly Premises and Graffiti Bylaw No. 1341, building numbers assigned are to be displayed in a conspicuous place on the property on which the building is located so that the number is visible from the roadway.

Sincerely,



Jason deJong

Annex F Guidelines for Outdoor Storage of Scrap Tires

This annex is not a part of the requirements of this NFPA document but is included for informational purposes only.

F.1 Scope. This annex applies to the outdoor storage of scrap tires in whole, baled, or processed form, including incidental usage locations.

F.2 Purpose. This annex has been developed for the purpose of aiding fire officials and authorities having jurisdiction in their effort to both prevent and properly manage fire incidents that occur in whole, baled, or processed scrap tire stockpiles. Each individual property has its own unique conditions of tire handling, exposure, and topography. Thus, in this annex, basic fire protection principles are applied with due consideration of local factors.

Rubber has a heat combustion of about 34.7 MJ/kg (15,000 Btu/lb), or roughly twice that of ordinary combustibles (e.g., paper and wood). Once ignited, fire development is rapid, and high temperatures can be expected due to the large exposed surface area of whole tires. In the case of baled or processed-tire fires, high temperatures can also be expected, although the fire behavior differs. Burning is likely to persist for extended periods. In all cases, there is a high probability of rekindling in the tire pile, even if the fire is controlled.

F.3 Definitions.

F.3.1 Burn-It. A fire-fighting strategy that allows for the free-burn of a tire fire.

F.3.2 Bury-It. A fire-fighting strategy in which a tire pile is buried with soil, sand, gravel, cement dust, or other cover material.

F.3.3 Concrete. A composite material that consists essentially of a binding medium within which particles or fragments of aggregate are embedded in hydraulic cement concrete. The binder is formed from a mixture of hydraulic cement and water.

F.3.4 Forecasting. The ability to predict the fire progression location prior to the completion of the inventory fire break using heavy equipment.

F.3.5 Scrap Tire. A tire that can no longer be used for its original purpose due to wear or damage.

F.3.6 Shredded Tire. A scrap tire reduced in size by a mechanical-processing device, commonly referred to as a shredder.

F.3.7 Tactics. The method of securing the objectives laid out in the strategy through the use of personnel and equipment to achieve optimum results.

F.3.8 Tire Chip. A classified scrap tire particle that has a basic geometrical shape, which is generally 5.1 cm (2 in.) or smaller and has most of the wire removed.

F.4 Fire Experience. Fire experience in outdoor storage of scrap tires reveals a number of concerns, including the following:

- (1) Lack of fire codes for scrap tire storage
- (2) Generation of large amounts of black smoke
- (3) Storage is often too close to buildings on the same or adjacent premises, causing fires in the exposed buildings
- (4) Generation of oil during a fire where oil contributes to fire or where runoff contaminates the surrounding area
- (5) Delays in reporting fires

(6) Lack of fire-fighting capabilities

Fire hazards inherent in scrap rubber tire storage are best controlled by an aggressive fire prevention program that includes a pre-incident plan.

F.5 General. The fire hazard potential inherent in scrap rubber tire storage operations can best be controlled by an aggressive fire prevention program. The method of storage should be solid piles in an orderly manner and should include the following:

- (1) Driveways to separate piles and to provide access for effective fire-fighting operations should be a minimum of 18 m (60 ft) in accordance with Table F.10(a) and Table F.10(b).
- (2) Separation of yard storage from buildings, vehicles, flammable materials, and other exposures should be a minimum of 60 m (200 ft).
- (3) The area within 60 m (200 ft) of a pile should be totally void of trees, plants, or vegetation.
- (4) Topography is a factor in determining the manner of tire fire tactics and environmental mediation.
- (5) Tires should not be stored on wetlands, flood plains, ravines, canyons, or steeply graded surfaces. Scrap tire storage preferably should be on a level area. The preferred surface for the storage area is concrete or hard packed clay, not asphalt or grass.
- (6) Smoking should be prohibited within the tire storage area. Other types of potential ignition sources such as cutting and welding, heating devices, and open fires should be prohibited. Suitable safeguards should be provided to minimize the hazard of sparks from such equipment as refuse burners, boiler stacks, and vehicle exhaust.
- (7) Piles should not be permitted beneath power lines or structures.
- (8) Lightning protection systems that conform to local and state codes should be located at the facility but away from the tire piles.
- (9) Piles should be at least 15 m (50 ft) from the fences. Lanes should be kept clear of debris or vegetation.

F.6 Fire Department Access to Site. Each tire storage yard should be provided with fire access routes as follows:

- (1) Each tire storage yard or pile should be provided with emergency vehicle access routes, such that no portion of the pile is more than 45 m (150 ft) from an access road or fire break.
- (2) All roads and accesses should be designed to support the loads imposed by fire-fighting equipment.
- (3) All bridges and structures, including drainage structures on access roads, should be capable of carrying a minimum design load of HS-20 in accordance with AASHTO *Standard Specifications for Highway Bridges*. The design and as-built plans for all bridges should be certified by a licensed structural engineer. Routes should be surfaced with material designed to allow accessibility under all climatic conditions.
- (4) All emergency vehicle accesses should have an unobstructed vertical clearance of not less than 4.1 m (13½ ft), or as is needed to allow for the passage of large fire-fighting equipment, with a minimum outside turning radius of 13.7 m (45 ft) provided for emergency vehicle access.
- (5) All dead-end accesses in excess of 45 m (150 ft) should be provided with a turn-around area.
- (6) Accesses should be well maintained and should remain accessible to the fire department at all times. The fire chief can allow the use of alternative materials or processes to provide equivalent fire protection.



Strategic and Community
Development
6300 Hammond Bay Rd.
Nanaimo, B.C.
V9T 6N2

Ph. (250) 390-6510
Toll Free: 1-877-607-4111
Fax: (250) 390-4163

RDN Website: www.rdn.bc.ca

February 17, 2017

Your File No.: CVRD: File No. 03-H-16RS

Rachelle Rondeau, RPP
Planner II Development Services Division
Cowichan Valley Regional District
175 Ingram Street
Duncan, BC V9L 1N2

Dear Ms. Rondeau:

**Re: Referral - Bylaw Amendment Referral Form
Schnitzer Steel, 13271 Simpson Road**

Thank you for referring File No. 03-H16RS regarding Schnitzer Steel Canada Ltd's., rezoning application. Regional District of Nanaimo (RDN) staff has reviewed the application to evaluate the potential land use conflicts and environmental risks.

We have provided comments on three areas of interest and these are as follows:

1. Protection of the Cassidy Aquifer

The RDN's concerns pertain to the Cassidy Aquifer as it is classified as an environmentally sensitive area within the RDN's Electoral Area A Official Community Plan. Schnitzer Steel's Summary of Environmental Management Plan seems to address protection of groundwater supplies and any surface water runoff is captured in an oil water separator.

To further protect the aquifer it is recommended that all business operations are conducted on impermeable surfaces such as where the storage of materials are located and where processing operations are carried out. According to the report currently 50% of the site is paved.

Paving the entire site would ensure hydrocarbons or any runoff/leachate from the operation can be contained onsite and directed into an oil water separator. It is preferable that the storage of wet vehicles be stored on an impervious surface such as asphalt, concrete or other similar impermeable surfaces.

.../2

2. Aesthetics

Aesthetics along the Trans-Canada Highway Corridor is of concern. We would encourage that screening and buffering be a requirement of the rezoning or development permit requirements. Any screening or buffering should occur on the side in public view that fronts the Trans-Canada Highway. While the site is industrially zoned there should be some requirement for buffering and screening of the operation from public view. We would recommend a landscaping plan to improve buffering.

As part of the Waste Stream Management License application process, the RDN would suggest a Qualified Professional be engaged to consider current and proposed operations and provide a statement that they are satisfied that all measures are in place to prevent any environmental impact on surface or groundwater.

3. Economic Development

This site provides residents in the south part of the RDN with a convenient location to recycle metal. The continuation of this facility is important to local community economic development and job creation.

Yours sincerely,



Sharon Horsburgh, M.A. MCIP, RPP.
Sustainability Coordinator

cc: Alec McPherson, RDN Director Electoral Area A
Geoff Garbutt, GM of Strategic & Community Development, RDN
Jeremy Holm, Manager of Current Planning, RDN
Paul Thompson, Manager of Long Range Planning, RDN



COWICHAN VALLEY REGIONAL DISTRICT
175 Ingram Street, Duncan, B.C. V9L 1N8
Tel: (250) 746-2620 Fax: (250) 746-2621

3YLAW AMENDMENT REFERRAL FORM

Date: January 17, 2017

CVRD File No. 03-H-16RS (Kara for Schnitzer)

We have received an application to amend the zoning of the subject property from I-1 (Light Industrial) to a new industrial zone that would permit all the current I-1 (Light Industrial) uses as well as permit the recycling, sorting and storage of metals, motor vehicles and motor vehicle parts, batteries, hazardous wastes, appliances, and electrical equipment. The proposed zone would also permit exterior storage of said material.

General Property Location: 13271 Simpson Road

Legal Description: That part of Lot 9, Oyster District, lying to the west of the westerly boundary of Lot 1, Plan 2169 and to the south of the southerly boundary of Lot 3, of said Plan, except the south 10 Chains thereof and except Plan 50801 and VIP76340 (PID: 008-903-603)

You are requested to comment on this proposal for potential effect on your agency's interests. We would appreciate your response by **FRIDAY, FEBRUARY 17, 2017**. If no response is received within that time, it will be assumed that your agency's interests are unaffected. **If you require more time to respond, please contact CVRD Planner Rachelle Rondeau by calling 250-746-2620 or e-mailing rrondeau@cvrld.bc.ca**

RECEIVED
PROV. AGRICULTURAL
LAND COMMISSION
JAN 20 2017

Comments:

Approval recommended for reasons outlined below

Interests unaffected

Approval recommended subject to conditions below

Approval not recommended due to reasons outlined below

Subject property not in ALR.

Commission would appreciate continued maintenance of buffering along subject property's eastern boundary which is adjacent to ALR.

Signature Gordon Bernard Title Regional Planner Contact Info: 604-660-7011
(sign and print) Feb 10/17

This referral has been sent to the following agencies:

- Ministry of Transportation and Infrastructure (Nanaimo)
- Island Health (Nanaimo)
- North Oyster Volunteer Fire Department
- Regional District of Nanaimo
- Agricultural Land Commission
- CVRD Parks & Trails Division
- CVRD Economic Development Division
- CVRD Public Safety Division
- CVRD Recycling & Waste Management Division





COWICHAN VALLEY REGIONAL DISTRICT
175 Ingram Street, Duncan, B.C. V9L 1N8
Tel: (250) 746-2620 Fax: (250) 746-2621

3YLAW AMENDMENT REFERRAL FORM

Date: January 17, 2017

CVRD File No. 03-H-16RS (Kara for Schnitzer)

We have received an application to amend the zoning of the subject property from I-1 (Light Industrial) to a new industrial zone that would permit all the current I-1 (Light Industrial) uses as well as permit the recycling, sorting and storage of metals, motor vehicles and motor vehicle parts, batteries, hazardous wastes, appliances, and electrical equipment. The proposed zone would also permit exterior storage of said material.

General Property Location: 13271 Simpson Road

Legal Description: That part of Lot 9, Oyster District, lying to the west of the westerly boundary of Lot 1, Plan 2169 and to the south of the southerly boundary of Lot 3, of said Plan, except the south 10 Chains thereof and except Plan 50801 and VIP76340 (PID: 008-903-603)

You are requested to comment on this proposal for potential effect on your agency's interests. We would appreciate your response by **FRIDAY, FEBRUARY 17, 2017**. If no response is received within that time, it will be assumed that your agency's interests are unaffected. **If you require more time to respond, please contact CVRD Planner Rachelle Rondeau by calling 250-746-2620 or e-mailing rroudeau@cvrld.bc.ca**

Comments:

- Approval recommended for reasons outlined below
- Interests unaffected
- Approval recommended subject to conditions below
- Approval not recommended due to reasons outlined below

Signature Tauseef Waraich Title Manager Contact Info: twaraich@cvrld.bc.ca
(sign and print)

This referral has been sent to the following agencies:

- Ministry of Transportation and Infrastructure (Nanaimo)
- CVRD Parks & Trails Division
- Island Health (Nanaimo)
- CVRD Economic Development Division
- North Oyster Volunteer Fire Department
- CVRD Public Safety Division
- Regional District of Nanaimo
- CVRD Recycling & Waste Management Division
- Agricultural Land Commission

Rachelle Rondeau

From: Tauseef Waraich
Sent: Wednesday, March 29, 2017 3:52 PM
To: Rachelle Rondeau
Cc: Ilse Sarady
Subject: ,FW: Message from "RNP002673853F77" - Schnitzer Cassidy

Good afternoon Rachelle,

Recycling and Waste Management Division doesn't have any additional comment for this file. Cheers.

Best Regards,

Tauseef Waraich, M.Sc., P.Ag
Manager
Recycling & Waste Management Division
Cowichan Valley Regional District
175 Ingram Street, Duncan, BC V9L 1N8
Email: twaraich@cvrd.bc.ca
Tel: 250.746.2530 Toll Free: 1.800.665.3955 Fax: 250.746.2513



COWICHAN VALLEY REGIONAL DISTRICT
175 Ingram Street, Duncan, B.C. V9L 1N8
Tel: (250) 746-2620 Fax: (250) 746-2621

BYLAW AMENDMENT REFERRAL FORM

Date: January 17, 2017

CVRD File No. 03-H-16RS (Kara for Schnitzer)

We have received an application to amend the zoning of the subject property from I-1 (Light Industrial) to a new industrial zone that would permit all the current I-1 (Light Industrial) uses as well as permit the recycling, sorting and storage of metals, motor vehicles and motor vehicle parts, batteries, hazardous wastes, appliances, and electrical equipment. The proposed zone would also permit exterior storage of said material.

General Property Location: 13271 Simpson Road

Legal Description: That part of Lot 9, Oyster District, lying to the west of the westerly boundary of Lot 1, Plan 2169 and to the south of the southerly boundary of Lot 3, of said Plan, except the south 10 Chains thereof and except Plan 50801 and VIP76340 (PID: 008-903-603)

You are requested to comment on this proposal for potential effect on your agency's interests. We would appreciate your response by **FRIDAY, FEBRUARY 17, 2017**. If no response is received within that time, it will be assumed that your agency's interests are unaffected. **If you require more time to respond, please contact CVRD Planner Rachelle Rondeau by calling 250-746-2620 or e-mailing rroudeau@cvrld.bc.ca**

Comments:

- Approval recommended for reasons outlined below
- Interests unaffected
- Approval recommended subject to conditions below
- Approval not recommended due to reasons outlined below

Signature  Title Ranger, Environmental Services Contact Info: _____
(sign and print) CATHERINE E. HUXEC

This referral has been sent to the following agencies:

- Ministry of Transportation and Infrastructure (Nanaimo)
- Island Health (Nanaimo)
- North Oyster Volunteer Fire Department
- Regional District of Nanaimo
- Agricultural Land Commission
- CVRD Parks & Trails Division
- CVRD Economic Development Division
- CVRD Public Safety Division
- CVRD Recycling & Waste Management Division

MEMORANDUM

DATE: February 14, 2017
TO: Rachelle Rondeau, Development Services
FROM: Kate Miller, Manager, Environmental Services
SUBJECT: 03-H-16RS Schnitzer Steel Canada Ltd. For Cassidy Sales and Services. Ltd.

Thank you for giving me an opportunity to comment on the Rezoning and Official Community Plan Amendment application. The proposal as stated is not supported due to its **Environmental Impact and Critical Location.**

The current proposal seeks to accommodate a current non-conforming use by amending the Zoning and Official Community Plan designation. The proposal suggests not only permitting and regulating the current non-conforming use but also expanding the allowable uses on the property. All the uses listed under the new proposed zoning have potentially substantial environmental impacts on groundwater resources.

The subject property is located in a highly environmentally sensitive location over the Cassidy aquifer. The recently completed intrinsic aquifer vulnerability (DRASTIC) mapping for the area indicates that the subject property is in a zone of high risk and vulnerability to surface contamination. The expansion of the approved activities on the site does not indicate a systematic protection of these values.

Areas of high intrinsic vulnerability offer less natural protection than areas of low or moderate vulnerability; therefore, land use activities which pose a high hazard should be discouraged from these areas, or require much more stringent hydrogeological assessment and reporting requirements to ensure the prevention of contamination is maximized. The intrinsic vulnerability of the site with the existing and now new proposed activities has a high potential to result in groundwater contamination.

While activities on the current site have been historic in nature there is an opportunity to both remediate and put into effect regulatory requirements and constraints to protect valuable environmental resources that benefit the community. The area has also experienced recent growth of important investments in critical food systems infrastructure on the adjacent property which relies on both groundwater resources as well as real and perceived environmental standards related to food protection.

The property could be rezoned to allow for a narrower range of light industrial activities while also establishing requirements for storm water management, groundwater monitoring and site and materials management.

Submitted by,



Kate Miller,

	COWICHAN VALLEY REGIONAL DISTRICT 175 Ingram Street, Duncan, B.C. V9L 1N8 Tel: (250) 746-2620 Fax: (250) 746-2621
---	---

BYLAW AMENDMENT REFERRAL FORM	Date: January 17, 2017
	CVRD File No. 03-H-16RS (Kara for Schnitzer)

We have received an application to amend the zoning of the subject property from I-1 (Light Industrial) to a new industrial zone that would permit all the current I-1 (Light Industrial) uses as well as permit the recycling, sorting and storage of metals, motor vehicles and motor vehicle parts, batteries, hazardous wastes, appliances, and electrical equipment. The proposed zone would also permit exterior storage of said material.

General Property Location: 13271 Simpson Road

Legal Description: That part of Lot 9, Oyster District, lying to the west of the westerly boundary of Lot 1, Plan 2169 and to the south of the southerly boundary of Lot 3, of said Plan, except the south 10 Chains thereof and except Plan 50801 and VIP76340 (PID: 008-903-603)

You are requested to comment on this proposal for potential effect on your agency's interests. We would appreciate your response by **FRIDAY, FEBRUARY 17, 2017**. If no response is received within that time, it will be assumed that your agency's interests are unaffected. **If you require more time to respond, please contact CVRD Planner Rachelle Rondeau by calling 250-746-2620 or e-mailing rroudeau@cvrld.bc.ca**

Comments:

<input type="checkbox"/> Approval recommended for reasons outlined below <input type="checkbox"/> Approval recommended subject to conditions below	<input checked="" type="checkbox"/> Interests unaffected <input type="checkbox"/> Approval not recommended due to reasons outlined below
---	---

Signature *Rachel Melrose* Title *Manager, EDC* Contact Info: *amelrose@cvrld.bc.ca*
(sign and print)

This referral has been sent to the following agencies:

<input checked="" type="checkbox"/> Ministry of Transportation and Infrastructure (Nanaimo) <input checked="" type="checkbox"/> Island Health (Nanaimo) <input checked="" type="checkbox"/> North Oyster Volunteer Fire Department <input checked="" type="checkbox"/> Regional District of Nanaimo <input checked="" type="checkbox"/> Agricultural Land Commission	<input checked="" type="checkbox"/> CVRD Parks & Trails Division <input checked="" type="checkbox"/> CVRD Economic Development Division <input checked="" type="checkbox"/> CVRD Public Safety Division <input checked="" type="checkbox"/> CVRD Recycling & Waste Management Division
--	---



COWICHAN VALLEY REGIONAL DISTRICT
175 Ingram Street, Duncan, B.C. V9L 1N8
Tel: (250) 746-2620 Fax: (250) 746-2621

BYLAW AMENDMENT REFERRAL FORM

Date: January 17, 2017

CVRD File No. 03-H-16RS (Kara for Schnitzer)

We have received an application to amend the zoning of the subject property from I-1 (Light Industrial) to a new industrial zone that would permit all the current I-1 (Light Industrial) uses as well as permit the recycling, sorting and storage of metals, motor vehicles and motor vehicle parts, batteries, hazardous wastes, appliances, and electrical equipment. The proposed zone would also permit exterior storage of said material.

General Property Location: 13271 Simpson Road

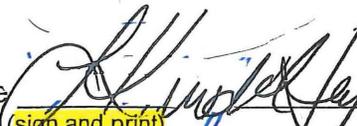
Legal Description: That part of Lot 9, Oyster District, lying to the west of the westerly boundary of Lot 1, Plan 2169 and to the south of the southerly boundary of Lot 3, of said Plan, except the south 10 Chains thereof and except Plan 50801 and VIP76340 (PID: 008-903-603)

You are requested to comment on this proposal for potential effect on your agency's interests. We would appreciate your response by **FRIDAY, FEBRUARY 17, 2017**. If no response is received within that time, it will be assumed that your agency's interests are unaffected. **If you require more time to respond, please contact CVRD Planner Rachelle Rondeau by calling 250-746-2620 or e-mailing rroudeau@cvrld.bc.ca**

Comments:

- Approval recommended for reasons outlined below
- Interests unaffected
- Approval recommended subject to conditions below
- Approval not recommended due to reasons outlined below

No comments from water management.

Signature  Title SR. ENG. TECH Contact Info: 250-746-2536
(sign and print)

This referral has been sent to the following agencies:

- Ministry of Transportation and Infrastructure (Nanaimo)
- Island Health (Nanaimo)
- North Oyster Volunteer Fire Department
- Regional District of Nanaimo
- Agricultural Land Commission
- CVRD Parks & Trails Division
- CVRD Economic Development Division
- CVRD Public Safety Division
- CVRD Recycling & Waste Management Division



COWICHAN VALLEY REGIONAL DISTRICT
175 Ingram Street, Duncan, B.C. V9L 1N8
Tel: (250) 746-2620 Fax: (250) 746-2621

3YLAW AMENDMENT REFERRAL FORM

Date: January 17, 2017

CVRD File No. 03-H-16RS (Kara for Schnitzer)

We have received an application to amend the zoning of the subject property from I-1 (Light Industrial) to a new industrial zone that would permit all the current I-1 (Light Industrial) uses as well as permit the recycling, sorting and storage of metals, motor vehicles and motor vehicle parts, batteries, hazardous wastes, appliances, and electrical equipment. The proposed zone would also permit exterior storage of said material.

General Property Location: 13271 Simpson Road

Legal Description: That part of Lot 9, Oyster District, lying to the west of the westerly boundary of Lot 1, Plan 2169 and to the south of the southerly boundary of Lot 3, of said Plan, except the south 10 Chains thereof and except Plan 50801 and VIP76340 (PID: 008-903-603)

You are requested to comment on this proposal for potential effect on your agency's interests. We would appreciate your response by **FRIDAY, FEBRUARY 17, 2017**. If no response is received within that time, it will be assumed that your agency's interests are unaffected. **If you require more time to respond, please contact CVRD Planner Rachelle Rondeau by calling 250-746-2620 or e-mailing rroudeau@cvrld.bc.ca**

Comments:

Approval recommended for reasons outlined below

Interests unaffected

Approval recommended subject to conditions below

Approval not recommended due to reasons outlined below

There are no parks & trails interesting with this application

Signature *Tanya Suroka* Title Parks & Trails Planner Contact Info: _____
(sign and print) TANYA SUROKA

This referral has been sent to the following agencies:

- Ministry of Transportation and Infrastructure (Nanaimo)
- Island Health (Nanaimo)
- North Oyster Volunteer Fire Department
- Regional District of Nanaimo
- Agricultural Land Commission
- CVRD Parks & Trails Division
- CVRD Economic Development Division
- CVRD Public Safety Division
- CVRD Recycling & Waste Management Division

Rachelle Rondeau

From: Johal, Anika TRAN:EX <Anika.Johal@gov.bc.ca>
Sent: Friday, February 03, 2017 11:50 AM
To: Rachelle Rondeau
Subject: CVRD File 03-H-16RS - Bylaw Amendment Referral Response

CVRD File 03-H-16RS
MoTI File 2017-00560

Hello Rachelle,

The Ministry has no objection to the proposed bylaw amendment for 13271 Simpson Road.

Thank you,

Anika Johal

District Development Technician

BC Ministry of Transportation and Infrastructure

3rd Floor – 2100 Labieux Road, Nanaimo, B.C. V9T 6E9

Tel 250-751-3277 | Fax 250-751-3289 | anika.johal@gov.bc.ca



October 23, 2017

Mr. Mark Annable, Business Development & Real Estate
The Amix Group
#425-625 Agnes Street
New Westminster, BC V3M-5Y4

Dear Mr. Annable;

Re: **SCHNITZER STEEL CANADA LTD. (SCHNITZER) PROPOSED COMMITMENTS TO THE CVRD FOR ZONING AMENDMENT APPLICATION**

Further to our telephone conversation last week, my previous telephone conversations and August 10th and August 14th, 2017 e-mail correspondence with your predecessor Mr. Dave Dungey, outlined below are Schnitzer's proposed commitments to the Cowichan Valley Regional District (CVRD) for its proposed zoning amendment application. Attached is a site plan to supplement the proposed paving areas listed below and illustrate the existing paved areas within the Cassidy facility:

COMMITMENT	RATIONALE
1. Paving the End-of-Life Vehicle storage areas (processed and unprocessed ELVs) and maintenance equipment area (total area to be paved – approximately 20,000 square feet x 8" thick) and installation of an Oil Water Separator (OWS) or catch basin.	<ul style="list-style-type: none"> • Significantly reduce/minimize the potential for soil and groundwater contamination. • Improved aesthetics.
2. Paving the Non-Ferrous storage areas (approximately 11,000 sq. ft).	<ul style="list-style-type: none"> • Reduce the amount of potential dust during the summer months and mud build up during the heavy precipitation/winter months. • Improved aesthetics, customer drop-off area.
3. Increase groundwater monitoring from bi-annually to semi-annually.	<ul style="list-style-type: none"> • To further demonstrate no groundwater impacts from Site activities.

Landscaping:

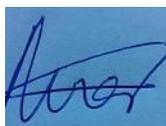
- Schnitzer does not believe landscaping will be effective for the following reasons:
 - Existing on-site buildings and the adjacent (south) buildings (Island Farms and Cold Freight Storage warehouse) visually block 80% of the yard; and
 - When trees mature, birds can become an aviation hazard for the adjacent Nanaimo airport.

- Schnitzer is willing explore the option of increasing the fence height at the Public drop-off area.

Upon Amix's review and approval, these proposed commitments will be negotiated and finalized with the CVRD. The CVRD Planning Department will then draft an amended bylaw and/or covenant for the CVRD'S Electoral Area Service Committee's (EASC's) consideration. Once approved, our understanding is the zoning amendment will be approved.

Schnitzer greatly appreciates Amix's support of its Zoning Amendment application. If there are any questions, please do not hesitate to contact me at your earliest convenience.

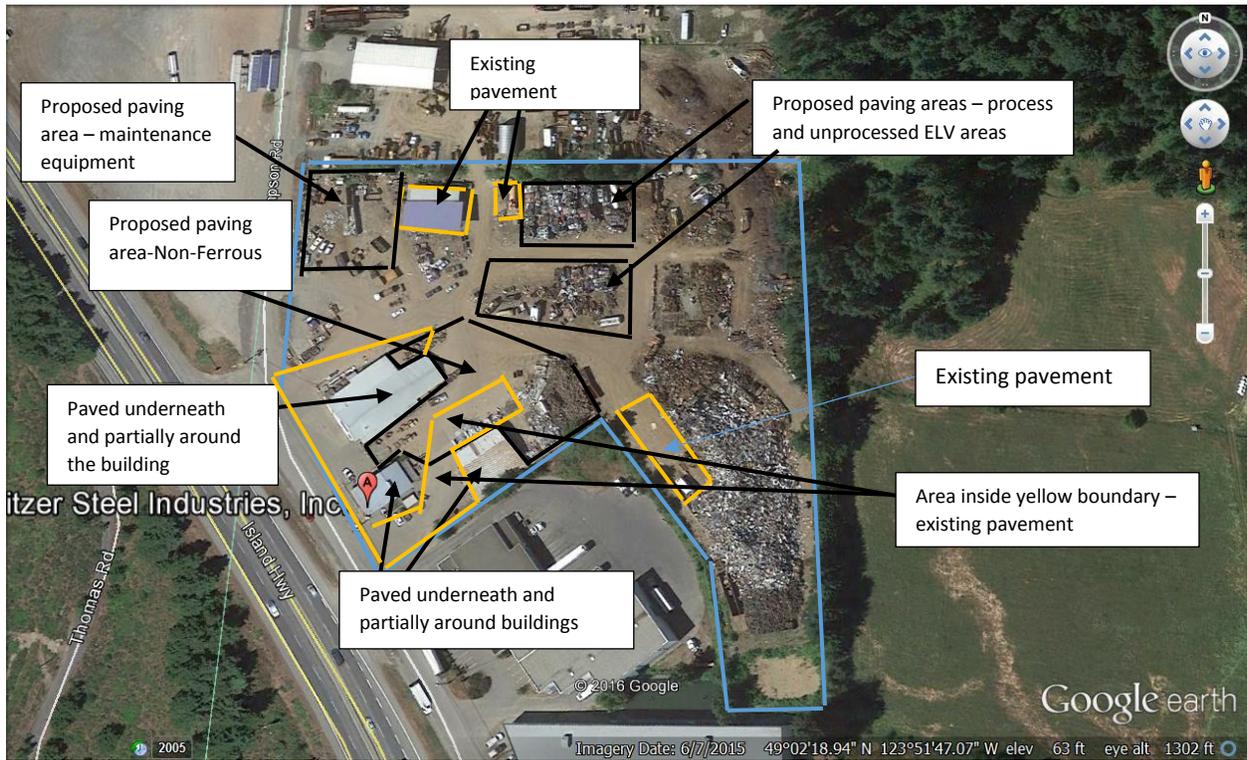
Sincerely,



Nures Kara
Schnitzer Steel Canada Ltd. – Senior Environmental/Project Manager

cc: Willie Jackson, Amix Group - President

SCHNITZER – CURRENT AND PROPOSED PAVING AREAS



PART ELEVEN: INDUSTRIAL ZONES

11.1 I-1 ZONE-LIGHT INDUSTRIAL

Subject to compliance with the General Requirements in Part Five of this Bylaw, the following provisions apply in this Zone:

(a) Permitted Uses

The following uses and no others are permitted in an I-1 Zone:

1. Automotive body repair and painting;
2. Automotive repair shop;
3. Boat building;
4. Book binding, publishing;
5. Sale of wholesale and retail building supplies, lumber yard;
6. Broom and brush manufacturing;
7. Cabinet and furniture manufacturing including a joinery;
8. Candy manufacturing;
9. Canning of fruits or vegetables;
10. Cold storage plant;
11. Dairy products manufacturing;
12. Door and window manufacturing;
13. Electric equipment manufacturing;
14. Feed and seed storage;
15. Food products manufacturing, processing and packaging, excluding meat processing and fish processing;
16. Frozen food locker;
17. Parking garage;
18. Kennel;
19. Laboratory;
20. Laundry, dry cleaning and dyeing establishment;
21. Jewellery, mattress, musical instrument, toy, paper box and cardboard, sign, glass, textile, tool, tent and awning, wax products and window shade manufacturing;
22. Contractors workshop, yard and storage;
23. Modular or prefabricated home and truss manufacturing;
24. Welding shop;
25. Warehouse, including mini-warehouse, truck and trailer rentals, and;
26. Recycling, sorting and storage of glass, plastic, aluminum, wood, paper, cardboard, but excluding external storage of any material, and excluding the recycling, sorting and storage of heavy metals, batteries, appliances, wrecked motor vehicles or automotive parts;
27. One single family residential dwelling unit per parcel accessory to a use permitted in Section 11.1 (a) 1 to 26;
28. Separate or secondary suite.

(b) Conditions of Use

For any parcel in an I-1 Zone:

1. The parcel coverage shall not exceed 50 percent for all buildings and structures.
2. The setbacks for the types of parcel lines set out in Column I of this section are set out for all structures in Column II:

COLUMN I Type of Parcel Line	COLUMN II Buildings and Structures
Front Yard	9.0 metres
Side Yard (Exterior or Interior)	9.0 metres
Rear Yard	9.0 metres

3. All uses shall be carried on inside an enclosed building except for storage of material and vehicles.



COWICHAN VALLEY REGIONAL DISTRICT

BYLAW No. XXXX

**A Bylaw for the Purpose of Amending Zoning Bylaw No. 1020
Applicable to Electoral Area H – North Oyster/Diamond**

WHEREAS the *Local Government Act*, hereafter referred to as the "Act", as amended, empowers the Regional Board to adopt and amend zoning bylaws;

AND WHEREAS the Regional District has adopted a zoning bylaw for Electoral Area H – North Oyster/Diamond that being Zoning Bylaw No. 1020;

AND WHEREAS the Regional Board voted on and received the required majority vote of those present and eligible to vote at the meeting at which the vote is taken, as required by the *Act*;

AND WHEREAS after the close of the public hearing and with due regard to the reports received, the Regional Board considers it advisable to amend Zoning Bylaw No. 1020;

NOW THEREFORE the Board of Directors of the Cowichan Valley Regional District, in open meeting assembled, enacts as follows:

1. **CITATION**

This bylaw shall be cited for all purposes as "**CVRD Bylaw No. XXXX – Electoral Area H – North Oyster/Diamond Zoning Amendment Bylaw (13271 Simpson Road), 2018**".

2. **AMENDMENTS**

Cowichan Valley Regional District Zoning Bylaw No. 1020, as amended from time to time, is hereby amended in the following manner:

a) Part 3.1 is amended by adding the following new definition:

"Auto recycling yard" means an area of land where End-of-Life vehicles (ELVs) are wholly or partially disassembled, dismantled, stored or crushed, and fluids and other wastes appropriately removed and stored for disposal offsite, including accessory offices, equipment repair and storage buildings but excludes the sale of automobiles, wrecked automobiles or wrecked auto parts.

"Metal recycling yard" means an area of land where metal based products are wholly or partially disassembled, dismantled, stored or crushed, and fluids and other wastes appropriately removed and stored for disposal offsite, including accessory offices, equipment repair and storage buildings but excludes the sale of recycled products.

.../2

- b) New Section 11.4 I-4 (Industrial Recycling) Zone is established and subsequent sections are re-numbered.

11.4 I-4 – Industrial Recycling Zone

Subject to compliance with the General Requirements in Part Five of this Bylaw, the following provisions apply in this Zone:

(a) Permitted Uses

The following uses and no others are permitted in an I-4 Zone:

1. Automotive body repair and painting;
2. Automotive repair shop;
3. **Auto recycling yard, including exterior storage; NEW**
4. Boat building;
5. Book binding, publishing;
6. Broom and brush manufacturing;
7. Cabinet and furniture manufacturing including a joinery;
8. Candy manufacturing;
9. Canning of fruits and vegetables;
10. Cold storage plant;
11. Contractor's workshop, yard and storage;
12. Dairy products manufacturing;
13. Door and window manufacturing;
14. Electric equipment manufacturing;
15. Feed and seed storage;
16. Food products manufacturing, processing and packaging, excluding meat processing and fish processing;
17. Frozen food locker;
18. Kennel;
19. Laboratory;
20. Laundry, dry cleaning and dyeing establishment;
21. Jewellery, mattress, musical instrument, toy, paper box and cardboard, sign, glass, textile, tool, tent and awning, wax products and window shade manufacturing;
22. **Metal recycling yard, including exterior storage; NEW**
23. Modular or pre-fabricated home and truss manufacturing;
24. Parking garage;
25. Welding shop;
26. Warehouse, including mini-warehouse, truck and trailer rentals;
27. ~~Recycling, sorting and storage of glass, plastic, aluminium, wood, paper, cardboard, but excluding external storage of any material, and excluding the recycling, sorting and storage of heavy metals, batteries, appliances, wrecked motor vehicles or automotive parts;~~
28. Sale of wholesale and retail building supplies, lumber yard;
29. One single family residential dwelling unit per parcel accessory to a use permitted in Section 11.4(a) 1-26;
30. Separate or secondary suite.

(b) Conditions of Use

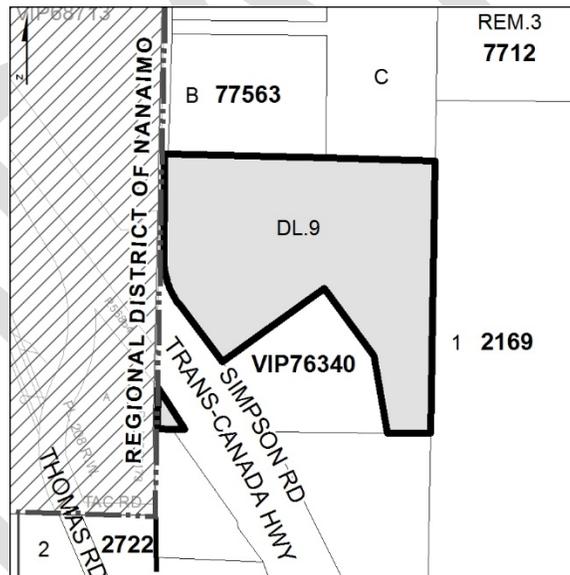
For any parcel in an I-4 Zone:

1. The parcel coverage shall not exceed 50 percent for all buildings and structures;

2. The maximum permitted height of a structure is 15 metres; NEW (Note: There is no height restriction currently specified in I-1 zone, which therefore defaults to 10 metre maximum as specified in Section 5.8 of the general regulations). Applicants have requested a maximum height of 15-20 metres to accommodate large equipment repair buildings.
3. The setbacks for the types of parcel lines set out in Column I of this section are set out for all structures in Column II:

Column I Type of Parcel Line	Column II Buildings and Structures
Front	9.0 metres
Side (Exterior or Interior)	9.0 metres
Rear	9.0 metres

4. The surface of the ground where end-of-life vehicles and non-ferrous materials area stored areas must be paved and serviced by functioning oil-water separators. NEW
 - a) That Schedule B (Zoning Map) to Electoral Area H – North Oyster/Diamond Zoning Bylaw No. 1020 is further amended by rezoning (That part of Lot 9, Oyster District, Lying to the West of the Westerly Boundary of Lot 1, Plan 2169, and To the South of The Southerly Boundary of Lot 3 of Said Plan Except The South 10 Chains Thereof and Except Plan 50801 and VIP76340 (PID: 008-903-603) as shown outlined in a solid black line on Schedule A attached hereto and forming part of this bylaw, numbered Z-XXXX, from I-1 to I-4.



3. **FORCE AND EFFECT**

This bylaw shall take effect upon its adoption by the Regional Board.

READ A FIRST TIME this _____ day of _____, 2018.

READ A SECOND TIME this _____ day of _____, 2018.

READ A THIRD TIME this _____ day of _____, 2018.

ADOPTED this _____ day of _____, 2018.

Chairperson

Corporate Secretary

DRAFT



COWICHAN VALLEY REGIONAL DISTRICT

BYLAW No. XXXX

A Bylaw for the Purpose of Amending Official Community Plan Bylaw No. 1497, Applicable to Electoral Area H – North Oyster/Diamond

WHEREAS the *Local Government Act*, hereafter referred to as the "Act", as amended, empowers the Regional Board to adopt and amend official community plan bylaws;

AND WHEREAS the Regional District has adopted an official community plan bylaw for Electoral Area H – North Oyster/Diamond, that being Official Community Plan Bylaw No. 1497;

AND WHEREAS the Regional Board voted on and received the required majority vote of those present and eligible to vote at the meeting at which the vote is taken, as required by the *Act*;

AND WHEREAS after the close of the public hearing and with due regard to the reports received, the Regional Board considers it advisable to amend Community Plan Bylaw No. 1497;

NOW THEREFORE the Board of Directors of the Cowichan Valley Regional District, in open meeting assembled, enacts as follows:

1. **CITATION**

This bylaw shall be cited for all purposes as "**Cowichan Valley Regional District Bylaw No. XXXX - Area H – North Oyster/Diamond Official Community Plan Amendment Bylaw (13271 Simpson Road), 2018**".

2. **AMENDMENTS**

Cowichan Valley Regional District Official Community Plan Bylaw No. 1497, as amended from time to time, is hereby amended as outlined on the attached Schedule A.

3. **CAPITAL EXPENDITURE PROGRAM**

This bylaw has been examined in light of the most recent Capital Expenditure Program and Solid Waste Management Plan of the Cowichan Valley Regional District and is consistent therewith.

.../2

READ A FIRST TIME this _____ day of _____, 2018.
READ A SECOND TIME this _____ day of _____, 2018.
READ A THIRD TIME this _____ day of _____, 2018.
ADOPTED this _____ day of _____, 2018.

Chairperson

Corporate Secretary



SCHEDULE "A"

To CVRD Bylaw No. XXXX

Schedule A to Official Community Plan Bylaw No. 1497, is hereby amended as follows:

1. That new "Part 11 – Policies: Commercial/Industrial Development Permit Area" be inserted, and subsequent Parts re-numbered.

Part 11 – Commercial/Industrial Development Permit Area

11.1 Category

The Commercial/Industrial Development Permit Area (DPA) is designated pursuant to Section 488 of the *Local Government Act* for the establishment of objectives for the form and character of commercial and industrial development.

11.2 Scope

The Commercial/Industrial DPA applies to land designated on Figure 12, "Commercial/Industrial Development Permit Area Map".

11.3 Justification

The North Oyster/Diamond community's rural character is influenced by the agricultural and rural landscape. The design of any commercial/industrial developments should be in keeping with the community's expectations for visual quality, and should be appropriately screened and landscaped so that it is compatible with surrounding land uses.

The OCP aims to ensure that the integrity of surface water and groundwater is protected from inappropriate development in areas where land uses may directly impact surface and groundwater resources.

The Commercial/Industrial DPA provides guidelines to ensure that development reflects the community's rural character, complements the natural environment and natural processes, and is safe for intended uses.

11.4 Guidelines

Unless otherwise exempt, prior to undertaking any construction, an owner of land will apply for and obtain a development permit, in accordance with the guidelines of the Commercial/Industrial Development Permit guidelines:

GENERAL:

1. Sites will be designed to protect significant features such as streams, wetlands, riparian areas, marine riparian areas, natural drainage features, native vegetation, nest trees, steep slopes, and archaeological and heritage resources. Clustering development, including buildings, structures, parking, and amenity areas will help protect such features, reduce infrastructure costs and minimize the amount of impervious areas.
2. Low-impact development measures incorporating native vegetation and soils such as naturalized ponds, bioswales or rain gardens, should be used to manage rainwater and prevent surface runoff to adjoining lands.
3. Measures will be taken during site preparation and development to retain all eroded soil, protect natural features, control surface runoff, prevent the release of deleterious substances, stabilize disturbed slopes, and restore disturbed areas upon development completion.
4. Significant natural features such as mature trees should be protected during construction through the use of protective fencing.

BUILDING DESIGN - SCALE & MASSING:

5. Buildings should incorporate design elements, materials and colours that enhance the neighbourhood, rural landscape and environment.
6. New development should be designed so all building faces are treated equally through the application of materials, colours and finishes; the use of a variety of complementary colours as accents is encouraged to provide visual interest.
7. Building facades should be three-dimensional, incorporating a high degree of relief through the use of recesses, projections, and other architectural elements. Building facades should be broken up into smaller components. Special measures should be used to reinforce a rhythm and scale that gives the appearance of individual units along the street (e.g. recess the building every 8 m with recesses that are 2 m in width and 2 m in depth).
8. The appearance of sheer, blank walls will be avoided by varying street edge treatment with the use of strategically placed landscaped areas along the length of each wall, staggered or varied building setbacks and other techniques.
9. The apparent mass of a building will be reduced by:
 - a. Using materials and colours in a manner which defines individual storeys (i.e. distinct top, middle and base);
 - b. Using trim, intense colour accents, secondary roof elements and building recesses to articulate façades;
 - c. Using recessed balconies rather than large projecting balconies along public roadways which emphasize bulk;
 - d. Stepping buildings back from public roadways as they increase in height in order to emphasize the ground floor and downplay height; and
 - e. Blending rooflines and roof angles.

10. Building indentations to accommodate landscaped pedestrian areas are encouraged. These areas should be carefully designed to accommodate native vegetation, outdoor seating, bicycle parking and garbage/recycling receptacles.
11. Where commercial uses are located on the ground floor of a building, a maximum amount of glazing should be provided on the ground level of the façade facing a public roadway to create visual interest for pedestrians.
12. Buildings should be designed with protective overhangs over pedestrian and outdoor seating areas. Permanent, structural canopies are preferred and temporary structures or covers such as tarps are discouraged.
13. Building entries should be emphasized and made as inviting and sheltered as possible through the use of structural canopies and entry porticos.
14. Blank facades are discouraged. Where firewalls are necessary, they should be architecturally finished to provide visual interest and coordinate with other building walls, or incorporate high quality, durable murals which complement the neighbourhood.
15. Special attention should be paid to façades to create visual interest for pedestrians. The use of projections and recesses is encouraged to provide visual interest and building façade articulation and avoid long continuous walls. The ground level of a building should be given special consideration in terms of its appearance, function and durability, to enhance the pedestrian experience.
16. Particularly where they abut residential areas, commercial and industrial development should be designed carefully to prevent shading, loss of privacy, air quality or noise pollution impacts on neighbouring properties. Landscaping and screening should be incorporated adjacent to residential areas.
17. Windows and doors should be arranged and detailed to reflect the style of the building and character of the neighbourhood.
18. South-facing windows are encouraged to maximize winter solar gain and natural light.
19. Window overhangs and/or fixed operable shading devices should be used to control solar gain by blocking high-angle summer sun and allowing entry of low-angle winter sun.
20. Duplicate, mirror-image or repetitive, monotonous building designs are discouraged.

BUILDING DESIGN - MATERIALS & COLOURS:

21. Materials should be durable and weather-resistant. Natural materials such as timber and stone are preferred. Textured or corrugated metal or cement fibre-board may be acceptable accent materials in combination with predominantly natural materials. Vinyl siding, flat metal siding, plain concrete block, unfinished cement and unfinished plywood are discouraged.
22. Materials should be reused and recycled where possible for the redevelopment of buildings and structures.

23. Where trim is used on the exterior surface of buildings, wood is preferred.
24. Garage doors should, where possible, not face public roadways. If this is impractical, garage doors widths should be minimized and not exceed 50% of the width of the building.
25. Roof materials should be non-combustible and non- reflective. Metal roofs will have a matte finish.
26. Rooftop mechanical equipment should be incorporated into the building envelope and hidden from view; chimneys should be boxed-in and exposed flues are discouraged.
27. New buildings and structures should be compatible in form, character, exterior design and finish with existing historic buildings or structures. This does not imply that buildings need to be designed to look “old” but should, rather, be in harmony with historic buildings or structures.

LANDSCAPING:

28. A landscape plan prepared by a member of the BCSCLA (BC Society of Landscape Architects) or BCNTA (BC Nursery Trades Association) in accordance with BCSCLA or BCNTA standards shall be submitted to the CVRD in support of the development permit application.
29. A minimum landscaped buffer of 3 m, including a mix of shrubs and trees suited to local conditions, should be provided for development adjacent to the Trans-Canada Highway or frontage roads running parallel to the Trans-Canada Highway.
30. Landscaped berms should be used as a visual and noise barrier separating differing uses and public roadways. Berms should not exceed 1.5 m in height.
31. Landscaping shall be integrated with the development to create a seamless transition with the natural environment.
32. Native plants are preferred to non-native varieties as they are adapted to regional climatic and soil conditions. Gardening with Native Plants, prepared by the Habitat Acquisition Trust, should be used to guide plant selection.
33. To replicate natural “layered” plant communities and encourage biodiversity, a mixture of native deciduous and evergreen species of varying ages and heights should be planted. Smaller shrubs, perennials and groundcovers should be planted beneath taller trees and shrubs.
34. All plants will be planted in a good quality topsoil mix of a type and amount recommended by the BCSLA or BCNTA.
35. All landscaping will be provided with a method of irrigation suitable to ensure the continued maintenance of planted materials.
36. Landscaping will occur in accordance with the plan, described above, and be installed under the supervision of a member of the BCSLA or BCNTA.

SITE DESIGN & CIRCULATION:

37. Outside storage and display areas, if permitted:
- (i) Will not be located in a front yard;
 - (ii) Will be adequately screened and landscaped;
 - (iii) Will not encroach into required setbacks; and
 - (iv) Will occupy an area not in excess of that of the total area of the principal building(s) on the site.
38. On corner sites, the primary mass of the building should not be placed on an angle to the corner and the principal building entry should be oriented toward adjoining streets. Buildings on corner sites should be sited to:
- (i) Coordinate with adjacent buildings;
 - (ii) Create additional pedestrian space;
 - (iii) Maintain sight lines for vehicles and pedestrians; and
 - (iv) Coordinate with landscaping and pathways.
39. Spaces between buildings should be designed for an identified use (e.g. native landscaping, recreation, outdoor seating, or food production) to provide amenity space for users of the development.
40. Development should be designed to promote personal and public safety, including appropriate lighting and clear sightlines for pedestrians through the use of Crime Prevention Through Environmental Design (CPTED) criteria. BC Housing's Design and Construction Standards for CPTED and performance standards checklist should be used as a guide.
41. Landscaped pedestrian walkways should be provided to connect buildings with parking areas, pathways, and adjoining lands.
42. Walkways should be accessible to persons with disabilities, bicycles, scooters and strollers, with even, non-slip surfaces and grades less than 5%.
43. Roadside pathways should be constructed across public road frontages. Where approved by the Ministry of Transportation and Infrastructure, the pathway may be within the road allowance.
44. Siting of pedestrian pathways along property lines that abut neighbouring private properties, should be avoided unless sufficient landscaped buffers are provided to prevent privacy and noise impacts.

ACCESS, PARKING & STORAGE:

45. Direct vehicular access to the Trans-Canada Highway is not supported.
46. Vehicular access driveways should be combined wherever possible to minimize impervious surfaces.

47. Drainage from all impervious surfaces and areas where vehicles are parked should be directed through an appropriately sized and engineered sedimentation, oil, water and grease separator or other engineered solution, designed by a Professional Engineer to the satisfaction of the CVRD. The Professional Engineer should recommend an appropriate maintenance schedule, which should be included as a condition of the development permit.
48. Internal roadways and drive aisles will be designed to accommodate emergency vehicles.
49. Where appropriate, bus shelters, pullouts and turnaround areas should be incorporated into the site to facilitate alternative modes of transportation.
50. Parking, storage, solid waste and recycling, and service areas should be located in the least visible area of the site, screened from public view and public roadways by fencing and/or landscape screening, and incorporate low-impact design features. These areas should be setback a minimum of 1 m from a property line and in no case should they be closer than 3 m to a public roadway, in order to accommodate a landscape buffer.
51. Parking areas will be designed to encourage safe pedestrian travel between parking areas, building entrances, outdoor amenity areas, and pedestrian pathways; separation will be provided between parking and pedestrian areas through the use of raised or landscaped features and smooth, level, and even surfaces.
52. Utility wiring should be installed below grade. Overhead wiring is strongly discouraged.
53. New major development requiring four or more parking stalls should include an on-site electrical car charging station and designated bicycle parking.

EXTERIOR LIGHTING:

54. An exterior lighting plan will be submitted, indicating how building entrances, roadways, servicing and parking areas, outdoor amenity areas, and pedestrian walkways will be illuminated.
55. Exterior lighting will enhance the overall architectural, heritage and design character of development with true colour rendition, while preserving the ability to view the night sky. Special attention will be paid to coordinating lighting with adjacent properties to maintain even light levels and avoid harsh transitions from over-lit to unlit spaces.
56. Exterior lighting will be designed for pedestrian safety and comfort, without causing excessive illumination of the night sky, glare or light trespass onto adjacent properties and roadways.
57. Exterior lighting will be fully shielded to direct light below the horizontal plane towards the ground.
58. Post-mounted or wall mounted fixtures should be kept to the minimum possible height.
59. Energy-efficient (i.e. solar powered, timer or sensor controlled) light fixtures should be used for the illumination of exterior walkways, driveways, entryways and general exterior lighting.

SIGNAGE:

60. Signs should complement and be coordinated with overall site and building design in terms of location, scale, materials, finishes and colours.
61. Sign materials should be durable and weather- resistant. Natural materials including wood and stone are preferred. Plastic and vinyl are generally unacceptable.
62. Signs will be kept to the minimum size and number needed to inform and direct pedestrian and vehicular traffic.
63. Individual mounted, raised or recessed letters, symbols, border and framing are encouraged.
64. Signs should be low profile, kept to pedestrian level and in no case should exceed 5 m in height.
65. Freestanding signs should be mounted on a heavy stone or exposed aggregate base and/or framed with heavy timber rather than post-mounted. Where lighting is included, it should be fully- shielded and directed to illuminate the sign only. Freestanding signs should incorporate decorative landscaping to enhance the quality of development.
66. Multiple freestanding signs should be consolidated into a multi-tenant sign located at the main driveway entrance.
67. Sign lighting should be minimized and directed at the sign only, to prevent excessive illumination, glare and light trespass.
68. Flashing signs or signs incorporating scrolling LED lighting or strip lighting are discouraged because they detract from the rural aesthetic character, contribute to light pollution and pose a risk to public and vehicular safety.
69. Mounting hardware and wiring shall be concealed.
70. Interpretative signage and plaques to commemorate heritage sites, buildings and features, are encouraged.

11.5 Exemptions

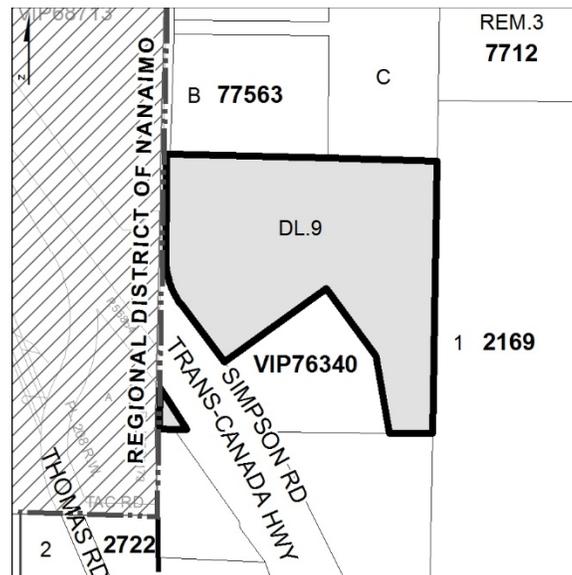
A Development Permit is not required for any of the following:

1. Subdivision of land;
2. Interior renovations to existing buildings;
3. Changes to the text or message on an existing sign allowed by a previous Development Permit, provided that the net illuminated area is equal or less than what was previously approved;
4. Minor exterior renovations and additions that do not exceed 50 m²; and
5. Single family dwellings and residential accessory buildings.

11.6 Application Requirements

In support of the Development Permit application, professional drawings and reports shall be submitted to the CVRD in order to determine compliance with the Commercial/Industrial Development Permit Area guidelines including:

1. Site plan showing all proposed building locations, setbacks, parking areas, amenity areas, and significant natural features;
 2. Landscape Plan prepared by a member of the BCSCLA (BC Society of Landscape Architects) or BCNTA (BC Nursery Trades Association) in accordance with BCSCLA or BCNTA standards;
 3. Rainwater Management Plan prepared by a registered professional with relevant civil, geotechnical, and hydrological engineering experience;
 4. Building elevations and cross-sections including a detailed materials list;
 5. Lighting plan; and
 6. Signage plan, indicating size and type of sign, colours and lighting detail.
2. That Figure 12, "Commercial/Industrial Development Permit Area" be amended to include That Part of Lot 9, Oyster District Lying to the West of the Westerly Boundary of Lot 1 Plan 2169 and to the South of the Southerly Boundary of Lot 3 of Said Plan Except The South 10 Chains Thereof and Except Plan 50801 and VIP76340 (PID: 008-903-603)



- (5) The minister may make regulations in relation to subsection (3) (b)
- (a) defining areas for which and describing circumstances in which referral to the Agricultural Land Commission under that subsection is not required, and
 - (b) providing that an exception under paragraph (a) is subject to the terms and conditions specified by the minister.
- (6) Despite section 135 (3) [at least one day between third reading and adoption] of the *Community Charter*, a council may adopt an official community plan at the same meeting at which the plan passed third reading.

RS2015-1-477 (B.C. Reg. 257/2015).

Effect of official community plan

- 478.** (1) An official community plan does not commit or authorize a municipality, regional district or improvement district to proceed with any project that is specified in the plan.
- (2) All bylaws enacted or works undertaken by a council, board or greater board, or by the trustees of an improvement district, after the adoption of
- (a) an official community plan, or
 - (b) an official community plan under section 711 of the *Municipal Act*, R.S.B.C. 1979, c. 290, or an official settlement plan under section 809 of that Act, before the repeal of those sections became effective,
- must be consistent with the relevant plan.

RS2015-1-478 (B.C. Reg. 257/2015).

Division 5 – Zoning Bylaws

Zoning bylaws

- 479.** (1) A local government may, by bylaw, do one or more of the following:
- (a) divide the whole or part of the municipality or regional district into zones, name each zone and establish the boundaries of the zones;
 - (b) limit the vertical extent of a zone and provide other zones above or below it;
 - (c) regulate the following within a zone:
 - (i) the use of land, buildings and other structures;
 - (ii) the density of the use of land, buildings and other structures;
 - (iii) the siting, size and dimensions of
 - (A) buildings and other structures, and
 - (B) uses that are permitted on the land;
 - (iv) the location of uses on the land and within buildings and other structures;
 - (d) regulate the shape, dimensions and area, including the establishment of minimum and maximum sizes, of all parcels of land that may be created by subdivision.
- (2) The authority under subsection (1) may be exercised by incorporating in the bylaw maps, plans, tables or other graphic material.
- (3) The power to regulate under subsection (1) includes the power to prohibit any use or uses in a zone.
- (4) A bylaw under this section may make different provisions for one or more of the following:
- (a) different zones;
 - (b) different uses within a zone;
 - (c) different locations within a zone;
 - (d) different standards of works and services provided;
 - (e) different siting circumstances;
 - (f) different protected heritage properties.
- (5) In addition to the authority under subsection (4),

- (a) provisions under subsection (1) (d) may be different for different areas, and
- (b) the boundaries of those areas need not be the same as the boundaries of zones created under subsection (1) (a).

A Guide to the Use of Intrinsic Aquifer Vulnerability Mapping



Photo by A. Gilchrist, 2010

Prepared by: Jessica Liggett¹, Pat Lapcevic² and Kate Miller³

May 2011



¹ Independent consultant, St. Albert, AB

² British Columbia Ministry of Forests, Lands and Natural Resource Operations, Nanaimo, BC

³ Cowichan Valley Regional District, Duncan, BC

Library and Archives Canada Cataloguing in Publication

Executive Summary

Over 1 million (25%) of British Columbians rely on groundwater for their daily use, and this number continues to increase¹. Groundwater provides water for drinking, agriculture, industry, and is vital to the functioning of many streams, lakes, and wetlands. Sound water management practices can help protect the quality of groundwater resources for future generations.

To aide in land use decision-making for the protection of groundwater quality, intrinsic aquifer vulnerability maps have been developed for a number of areas of BC with the DRASTIC method, including the Okanagan, Grand Forks, the Fraser Valley, and Vancouver Island. Intrinsic aquifer vulnerability is used describe the relative degree of natural protection of the groundwater from contamination due to the physical characteristics of the land and subsurface^{2,3,4}. Governments, planners, and policy-makers can utilize the maps for various purposes such as to assist in land use decision-making, sustainable development planning, source water protection planning, identifying sensitive areas, prioritizing areas for further monitoring or protection, and educating the public^{3,5,6}. The intrinsic vulnerability maps are conducted at a regional scale and should be used as a screening tool. They are not meant to replace site investigations or to be used for lot scale assessment.

Areas of high intrinsic vulnerability offer less natural protection than areas of low or moderate vulnerability; therefore, land use activities which pose a high hazard should be discouraged from these areas, or require much more stringent hydrogeological assessment and reporting requirements to ensure prevention of contamination is maximized. This combination of intrinsic vulnerability with the hazard threat is one method of groundwater quality risk assessment, which accounts for other factors that influence the potential for contamination in an area rather than just the natural (intrinsic) vulnerability.

This document provides examples of uses of the intrinsic vulnerability maps in land use planning and source water protection, using the South Cowichan area of Vancouver Island as an example. It draws on a number of previously published resources including the BC Well Protection Toolkit²¹, the BC Comprehensive Drinking Water Source-to-Tap Assessment Guideline²², and the BC Groundwater Bylaws Toolkit²³. In this example the intrinsic vulnerability is combined with potential sources of contamination (hazards) to develop a series of levels of hydrogeological reporting requirements for new development permits or zoning applications. The intrinsic vulnerability maps are also combined with previously mapped well capture zones. Monitoring and reporting requirements of existing developments can also be related to the level of intrinsic vulnerability and land-use type for the ongoing protection of groundwater resources in the community.

Acknowledgements

Completion of this document was possible through funding by the Cowichan Valley Regional District (CVRD) on Vancouver Island. Intrinsic aquifer vulnerability mapping for the Vancouver Island Water Resources Vulnerability Mapping Project (VIWRVMP) was sponsored by the Vancouver Island Region Watershed Protection Steering Committee and was funded by the BC Ministry of Environment (MoE), BC Ministry of Health, Vancouver Island Health Authority (VIHA), Vancouver Island University (VIU), Natural Resources Canada (NRC), Regional District of Nanaimo, Cowichan Valley Regional District, and Living Rivers – Georgia Basin and Vancouver Island.

The authors would like to thank the BC MoE for their on-going support of intrinsic vulnerability mapping projects throughout BC, including the VIWRVMP, for the purposes of groundwater quality protection. It was the dedication of Vicki Carmichael and Rick Hardy, both of the MoE, who have persevered to make public (on the GeoBC iMap tool) as many of the intrinsic vulnerability studies in BC as possible. GeoBC staff Darren McKellar, Kevin Metcalfe, and Al Sutherland completed the data analysis necessary for the mapping to be included in the provincial databases.

The authors would also like to thank Vicki Carmichael (MoE), Sonia Talwar (NRC), Lynne Magee (VIHA), and Mike Wei (MoE) for reviewing this document and providing comments.

Table of Contents

1	Introduction	1
2	What is intrinsic aquifer vulnerability mapping?	3
2.1	DRASTIC method	3
3	Assumptions and limitations of intrinsic vulnerability mapping	11
4	Uses of intrinsic vulnerability maps	12
4.1	Uses of intrinsic vulnerability maps in BC	13
5	Assessing risk to groundwater quality – an integrated framework	15
6	Incorporating groundwater protection into land use decisions	17
6.1	Example for the South Cowichan Area of the Cowichan Valley Regional District	18
6.1.1	<i>Official community planning</i>	23
6.1.2	<i>Zoning for groundwater quality protection</i>	24
6.1.3	<i>Aquifer protection development permit areas and development approval information areas</i>	24
6.1.4	<i>Source water well protection planning</i>	30
7	Groundwater protection in British Columbia	35
7.1	Current groundwater legislation	35
7.2	BC Aquifer Classification System	36
7.3	Available groundwater resources	40
8	Conclusions	44
9	References	45
	Appendix	51
	Map creation in iMap BC	51
	Glossary of hydrogeological terms	59

Page left intentionally left blank

1 Introduction

Over 1 million (25%) of British Columbians rely on groundwater for their daily use, and this number continues to increase¹. On Vancouver Island for example, about 40% of municipalities utilize groundwater for their water supply, either exclusively or to augment surface supplies. In addition to providing for drinking water, agricultural, and industrial needs¹, groundwater is vital to the functioning of many streams, lakes, and wetlands. Protection of groundwater quality through sound water management and land use practice is critical to ensuring the quality of this resource for years to come. Good water management involves many aspects, including development and implementation of groundwater protection plans, regulation of land use in sensitive areas and education of the public on wise water use and contamination prevention. Land use can have a significant impact on groundwater quality, and is usually regulated at the local government level, therefore including land use management strategies for the protection of groundwater quality at this local level is important.

The BC Government has committed to improving the protection of both groundwater quantity and quality in its Living Water Smart provincial water plan¹. In response to the desire of local governments for tools to address the need for land use decision-making to incorporate the risk to groundwater quality, intrinsic aquifer vulnerability maps have been developed for a number of areas of BC, including the Okanagan, Grand Forks, the Fraser Valley, Gulf Islands and Vancouver Island. Intrinsic aquifer vulnerability is a common term to describe the degree of natural protection of the groundwater from contamination due to the physical characteristics of the land and subsurface^{2,3,4}. These maps show the relative degree of vulnerability over an area and can be an effective tool for assisting decision-making from regional to local levels. Governments, planners, and policy-makers can utilize the maps for various purposes such as to assist in land use decision-making, sustainable development planning, source water protection planning, identifying sensitive areas, prioritizing areas for further monitoring or protection, and educating the public^{3,5,6}.

This document reports on work completed by the Vancouver Island Water Resources Vulnerability Mapping Project (VIWRVMP), which was initiated in 2006 by the Vancouver Island Water Protection Steering Committee as a collaborative project to develop land use decision-making tools to better protect groundwater quality on Vancouver Island. The intrinsic aquifer vulnerability map was completed in two stages. The first stage comprised a pilot study of the Regional District of Nanaimo (RDN), and Cowichan Valley Regional District (CVRD)⁷; whilst the second expanded the mapping to other parts of the Island where necessary data existed⁸.

This report is intended to assist in the interpretation and use of the intrinsic aquifer vulnerability maps both on Vancouver Island and the rest of BC, and draws on examples

from the South Cowichan area of the CVRD. Figure 1 provides a brief outline of this document as well as examples of those who may find the information in this document useful or beneficial. Technical information on the data used and mapping methodology can be found in Liggett and Gilchrist (2010)⁷ for phase 1, and Newton and Gilchrist (2010)⁸ for phase 2.

What will this document tell you?

- Overview of intrinsic aquifer vulnerability mapping method
- How intrinsic vulnerability mapping fits into groundwater quality risk assessment
- Examples of uses of vulnerability maps
 - in source well protection planning
 - for land use decision-making
- Other groundwater protection tools and resources in BC

Who will find this document useful?^{from 9}

- Those working in:
 - regional and local land use and development planning,
 - water protection,
 - environmental health protection,
 - geoscience and well drilling industry,
- water supply systems owners
- Interested public, and
- Teachers and educators

Figure 1 What will this document tell you and who may find it useful.

2 What is intrinsic aquifer vulnerability mapping?

The concept of intrinsic aquifer vulnerability, from here on simply called 'intrinsic vulnerability', is based on the idea that the natural environment can provide some degree of protection against groundwater contamination from the surface^{2,3,4}. Properties of the land and subsurface which can influence contaminant movement include, but are not limited to, the soil and unsaturated zone material, the depth to the water table or aquifer, the amount of recharge to that aquifer, the slope of the land surface, the aquifer material itself, and any preferential pathways such as fractures which contaminants may follow. Intrinsic vulnerability does not include properties of the contaminant or the hazard related to the threat or likelihood of a contaminant release, or the consequences of the contaminant reaching the groundwater system^{3,10}. For example an area of high vulnerability may have a low hazard because it is located in parkland. Such aspects are taken into account during a water quality risk assessment (See Section 5).

2.1 DRASTIC method

Characterization of intrinsic vulnerability can vary from qualitative indexing methods, to process-based, quantitative hydrogeologic assessments with numerical modelling^{11,12,13,14}. For the Vancouver Island study, the DRASTIC method⁵ was used to map the intrinsic vulnerability of the groundwater resource. This is a qualitative, indexing method, and is used to show the relative differences in vulnerability across regional scales. This approach has been used around the world, both with and without modification to the method^{12,15,16,17,18,19,20}. This method was selected for use in BC, including the VIWRVMP, because it provides a regional assessment of vulnerability, is relatively easy to implement, and uses readily available datasets. Technical details of the mapping process for the VIWRVMP are described in references 7 and 8. The main assumptions of this method are that:

- the contaminant is introduced at ground surface;
- the contaminant moves at the same rate as water (e.g. dissolved in the water), vertically through the unsaturated zone driven by precipitation (i.e. not taking into account specifics of a particular contaminant's transport).
- more rapid pathways such as an open well or fracture are not considered; and,
- the size of the mapped area is 100 acres (40.4 hectares) or larger⁵.

The first three assumptions relate to simplifications regarding contaminant movement and pathways. DRASTIC considers protection from the unsaturated zone (geological material overlying the water table or aquifer), so the vulnerability to contaminants that

are introduced below ground (assumption 1 -e.g. from injection wells or underground storage tanks) or that follow preferential pathways (assumption 3 -e.g. open well or fracture) are not accounted since they bypass the natural protection mechanisms offered by these zones. Additionally, each contaminant has its own specific properties which govern its transport through the subsurface (assumption 2). Some contaminants may move slower than water due to reactions with the surrounding soil or geologic material, while others may move at the same rate of water, or even faster (e.g. in the case of contaminants which are denser than water and sink). DRASTIC considers only conservative (i.e. dissolved and moves at same rate of water) contaminants. The final assumption recognizes the density and availability of data which are used and leads to the regional nature of the DRASTIC mapping.

The name DRASTIC represents each of the seven input parameters (Figure 2):

- Depth to water table;
- Recharge (net);
- Aquifer Media;
- Soil Media;
- Topography;
- Impact of the vadose zone;
- Conductivity (hydraulic) of the aquifer

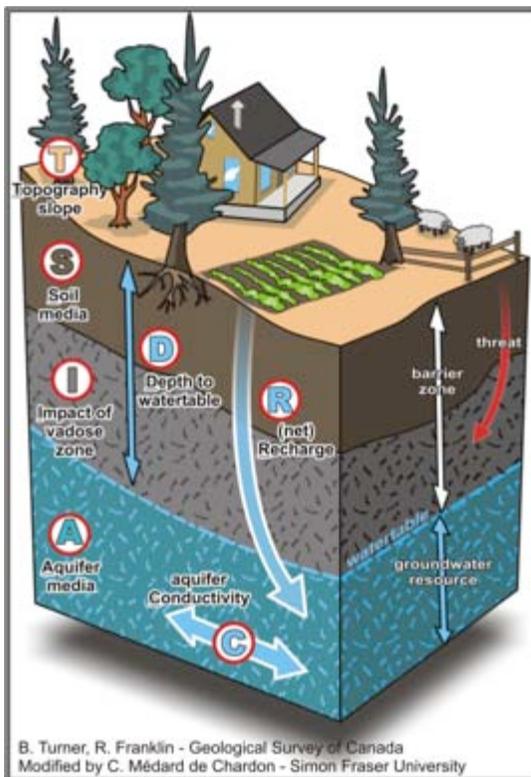
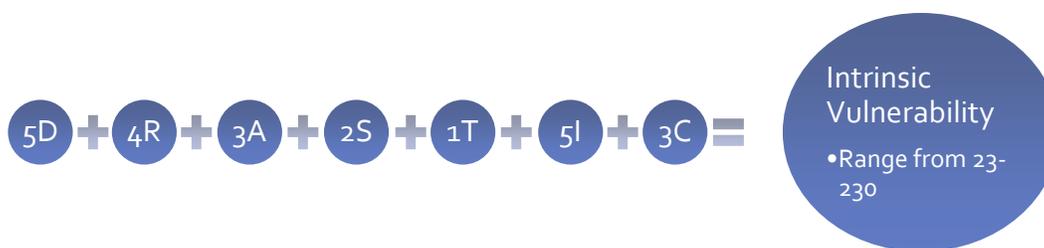


Figure 2: DRASTIC parameters

Each of these seven parameters is mapped, usually from existing datasets, although new field data may also be collected if possible for a particular study area. Attributes of each map are rated from 1 to 10 (lowest to highest vulnerability) according to their relative ability to protect the groundwater system from contamination. For example, a sandy soil is rated as more vulnerable than a clayey soil due to its high permeability, which promotes downwards contaminant movement. Figure 3 summarizes the properties by which each parameter is rated.

Once the map for each parameter is rated from 1 to 10 they are combined to create the final vulnerability index (Figure 3). To do so, each parameter is multiplied by a weighting factor, according to how important that parameter is for overall vulnerability, and all the parameter maps are added together according to:



The final intrinsic vulnerability is represented by a value between 23 and 230. These values can then be classed or grouped in vulnerability categories such as high, medium, and low (Figure 4).

For the Vancouver Island Mapping, the resultant overall vulnerability values ranged from 59 to 218 and were classed into the three categories used to classify the DRASTIC vulnerability in BC as shown in Figure 4. References 7 and 8 outline in detail the methods and data sets used to create the intrinsic vulnerability maps for the Vancouver Island Region. The entire intrinsic vulnerability map for Vancouver Island is shown in Figure 5. Note that for the VIWRVMP the extent of the intrinsic vulnerability map was limited by data availability for the depth to water parameter. For this reason, only those areas within 5 km of available depth to water data (i.e. water well data) were mapped.

Classified (high, medium, and low) or unclassified (numeric vulnerability value) GIS maps in ARCVIEW format can be downloaded from the GeoBC website (see Appendix).

Figure 6 shows the intrinsic vulnerability of the South Cowichan area. Step-by-step instructions on how to create such maps with the online BC iMap tool are outlined in the appendix. The blocky appearance of the intrinsic vulnerability map is due to the larger grid cells (100m) used to map the seven input parameters. This is a reminder of the scale of analysis of the study. The results depict the regional nature of the maps and that they should not be used to determine site-specific vulnerability or detailed site planning at the lot scale.



Figure 3: DRASTIC parameter descriptions and combination to form the final intrinsic vulnerability map

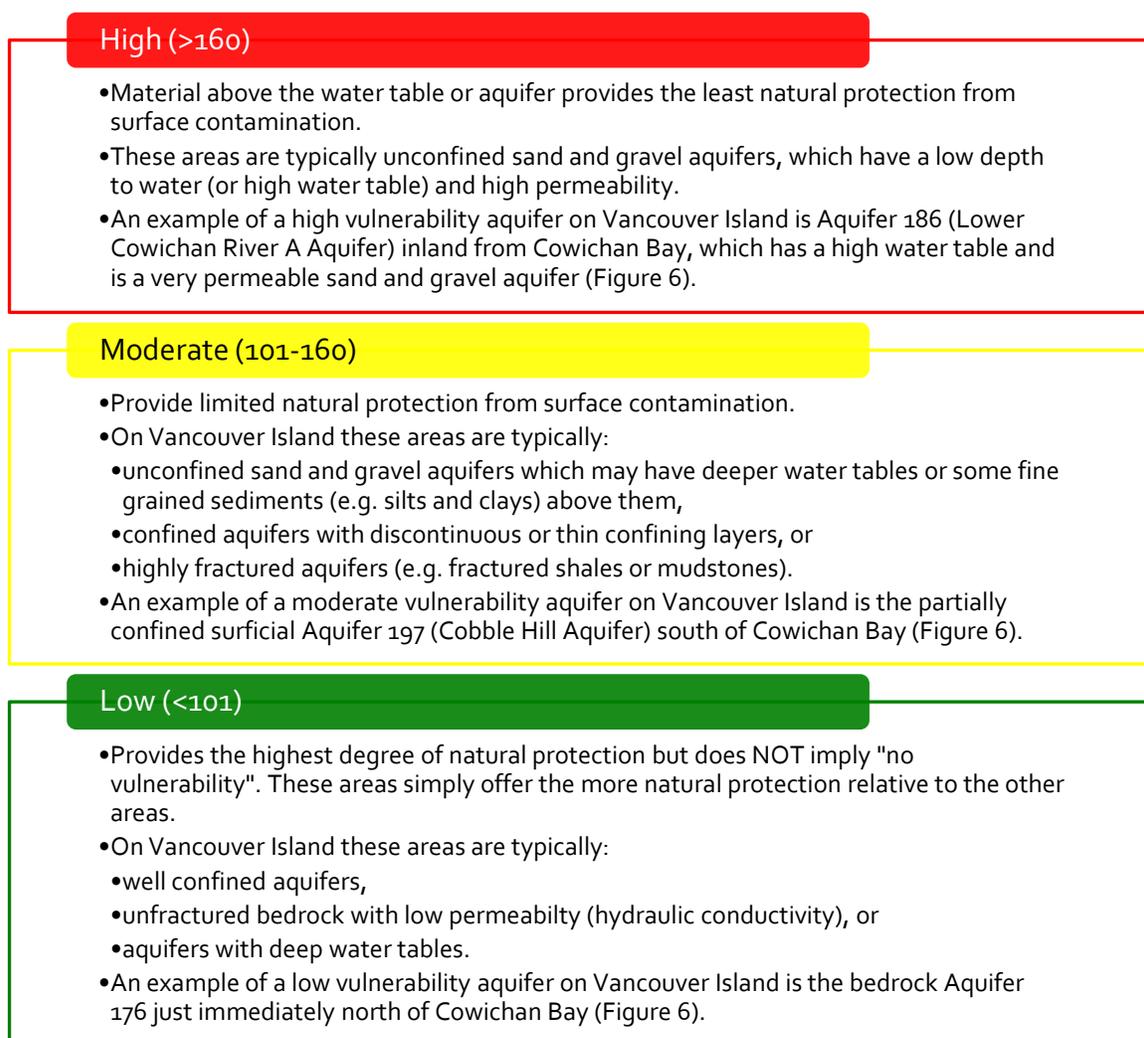


Figure 4: The BC DRASTIC intrinsic aquifer vulnerability classes and examples from the South Cowichan Area.

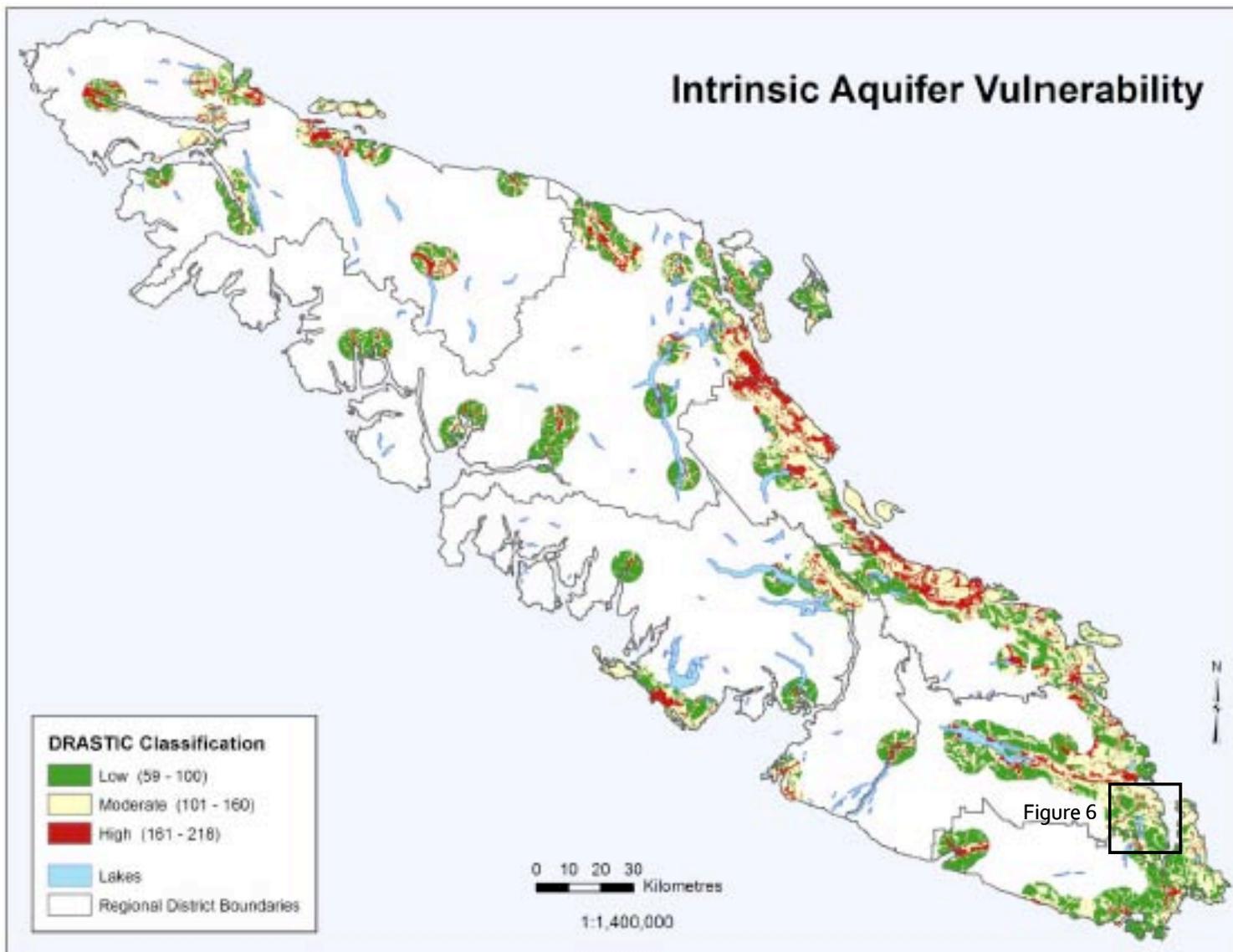


Figure 6: Intrinsic aquifer vulnerability map with DRASTIC for the Vancouver Island from 8.

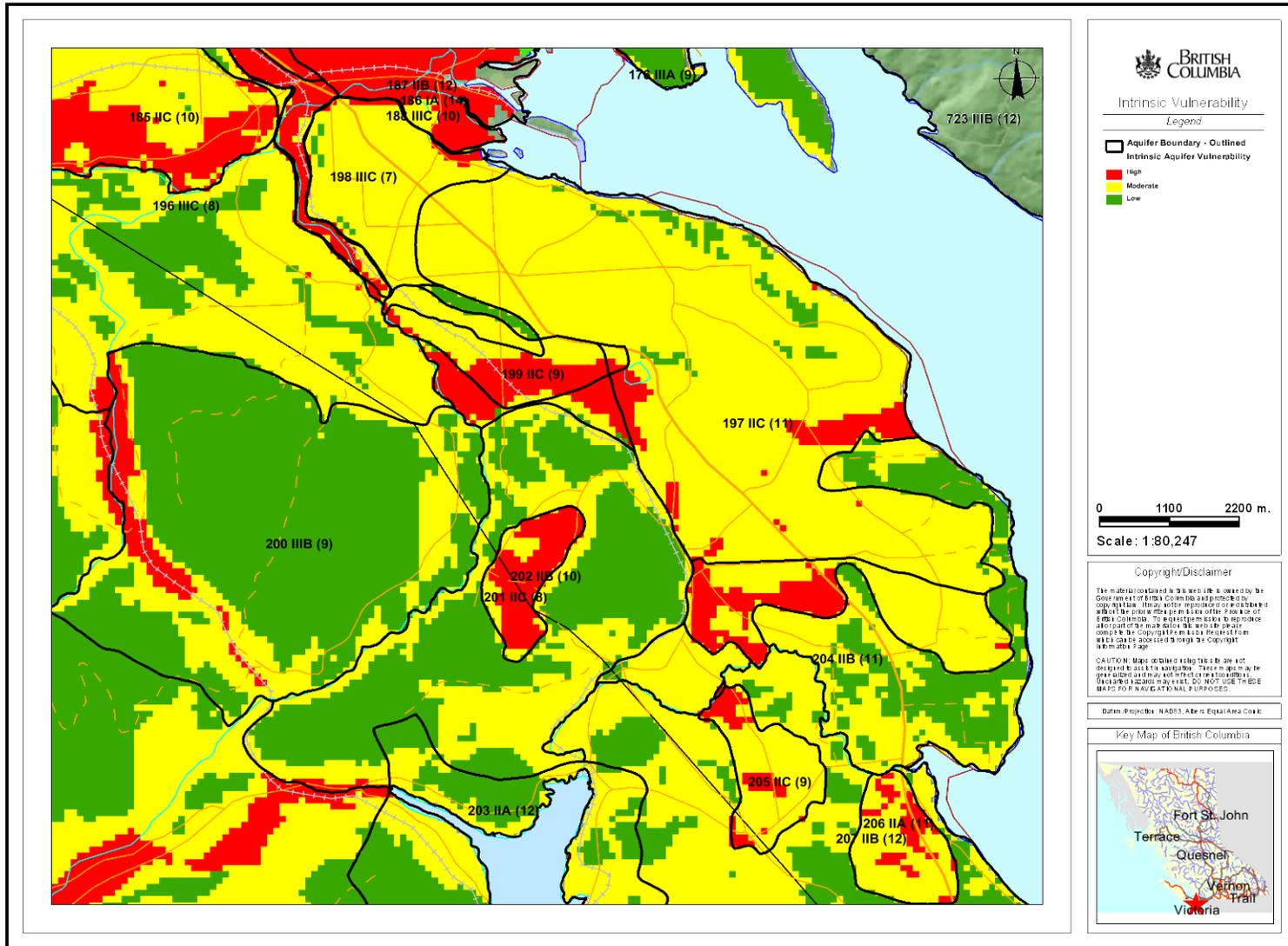


Figure 7a: Intrinsic vulnerability map with DRASTIC for the South Cowichan Area (northern part).

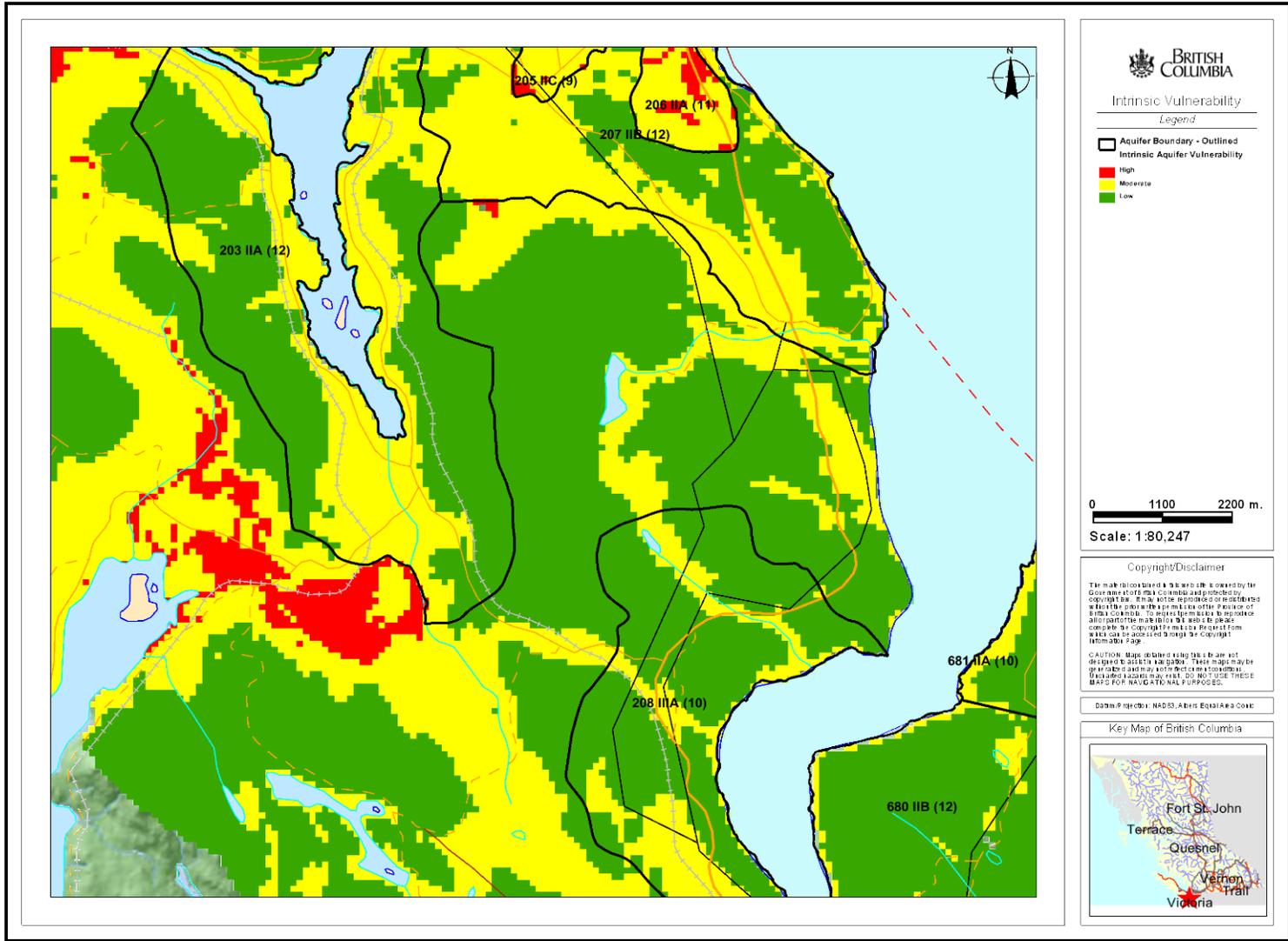


Figure 6b: Intrinsic vulnerability map with DRASTIC for the South Cowichan Area (southern part).

3 Assumptions and limitations of intrinsic vulnerability mapping

There are a number of assumptions and limitations of the uses of the intrinsic vulnerability maps, including those listed in the technical reports to do with the mapping process^{7,8}. Assumptions and limitations of the intrinsic vulnerability maps include:

- the maps are at a regional scale (greater than the property lot level) and are not meant to replace site specific investigations at the lot scale or for detailed site planning;
- the maps apply to the uppermost aquifer only, and do not show areas of vulnerability for deeper or stacked confined aquifers (although these are assumed to be less vulnerable than overlying aquifers);
- the classified maps show three categories of vulnerability and is limited in showing variation in vulnerability within a category, therefore caution should be used in areas close to the boundaries between categories. For example, an area may have vulnerability ranging from 158 to 162, which does not represent a large variation in vulnerability; but part would be classified as moderate vulnerability and the other part as high vulnerability because the category break is at 160);
- only contamination from the surface is considered, therefore the maps do not show vulnerability to such hazards as mines, underground storage tanks, injection wells, short circuiting of contaminants around damaged well seals, etc;
- the maps do not show specific recharge areas for specific aquifers; and
- the DRASTIC method assumes only downwards movement of the contaminant, with the mobility of water (i.e. specific contaminant transport properties are not considered) and does not account for horizontal contaminant movement.

4 Uses of intrinsic vulnerability maps

Intrinsic vulnerability maps can be used for many purposes. Most importantly they are a regional screening tool and can be used as part of:

- groundwater quality risk assessment;
- managing groundwater/source water protection areas;
- guiding development and land use planning;
- prioritizing areas for contaminated sites cleanup and groundwater monitoring;
- developing policy actions related to applications for development permits, zoning or zoning changes, ongoing reporting requirements, onsite regulations on the storage and containment of possible contaminants, emergency response plan requirements, etc.; and,
- educating the public and raising awareness of need for groundwater protection

Currently, intrinsic vulnerability is included specifically in three existing source water and groundwater protection frameworks in BC. These are:

1. the BC Well Protection Toolkit²¹,
2. the Comprehensive Drinking Water Source-to-Tap Assessment Guideline²², and,
3. the Groundwater Bylaws Toolkit²³.

When using the intrinsic vulnerability maps, careful attention should be paid to areas of high vulnerability, since these areas offer the least amount of natural protection to the aquifer. High vulnerability areas generally require more comprehensive groundwater protection measures, especially if located in an area identified as a source water protection zone or an aquifer recharge zone. Excluding or limiting activities which pose a high hazard related to the release of contaminants is desirable, as is requiring detailed site assessments and ongoing emergency spill response plans for development permits. Additionally, understanding why an area has a particular vulnerability is important to the development of the best management strategies for that area.

It is important to note that intrinsic vulnerability maps are only ONE of the tools and considerations that need to be accounted for when making the above assessments and decisions. The maps do not take into account the potential hazards which are present at the land surface, and therefore do not present a complete assessment of the risk to groundwater contamination, which includes the vulnerability, hazard, and consequence of losing the resource (see Section 5). The intrinsic vulnerability maps are also not meant to replace site-specific investigations as they are constructed at a regional scale. However, they do provide useful synoptic information for many purposes, including those listed above.

4.1 Uses of intrinsic vulnerability maps in BC

A number of communities in BC have already mapped intrinsic vulnerability and have utilized the maps in a number of different ways for groundwater protection. The following sections provide a brief outline of some of these studies and how the vulnerability maps have been incorporated into community planning.

Fraser Valley (Langley)^{24, 25, 26}

A number of vulnerability mapping projects have been undertaken in the Fraser Valley.

In 1998 the BC Ministry of Environment used the DRASTIC method, and the Aquifer Vulnerability Index (AVI)⁶ method to determine the intrinsic vulnerability of 169 wells in the Fraser Valley, including the Langley area and the Canadian portion of the Abbotsford-Sumas aquifer²⁴. These methods were compared to each other as well as to nitrate concentrations in each of the wells in order to evaluate if areas of higher vulnerability corresponded to higher levels of nitrates (due to agricultural land use). This vulnerability assessment was performed only for points (wells) and not spatially over the whole area.

In 2005 the AVI method was used to map the intrinsic vulnerability (spatially) as part of a Water Resource Management Strategy (WRMS) for the Township of Langley. The intrinsic vulnerability mapping was completed in earlier phases of the project and it was recommended that the map, together with a numerical groundwater flow model also developed, be used together as a planning and educational tool²⁶. The WRMS is currently in phase 4 of 5, which includes developing action plans, management options, and policy development for groundwater protection based on the previous phases²⁵. As such, a specific example of how the Aquifer Vulnerability Index maps have been used directly is unavailable at this time. At the time of writing, these maps were not available through the BC iMap database.

Currently a new groundwater risk assessment framework is being developed by Simon Fraser University and Natural Resources Canada and was tested in the Langley area as presented in a recent conference abstract²⁷. This risk assessment incorporates the concept of intrinsic vulnerability as well as other components of risk, including hazard threat, consequences of loss, and the social aspects of risk such as the community's ability to prevent and respond to a contamination event.

Gulf Islands (North Pender)^{19,28,29}

A modified DRASTIC method, which accounts for fractured rock¹⁹, was used to map the intrinsic vulnerability of the Gulf Islands. The vulnerability map was included in a community atlas released by the Canadian Parks and Wilderness Society²⁸. Additionally, the development of intrinsic vulnerability and hazard maps has been incorporated into the North Pender Island Official Community Plan (OCP)²⁹ in order to develop a groundwater management strategy and protect water resources. A modified

version of the OCP bylaw text is shown in Section 6.11. At the time of writing, the Gulf Islands maps were not available through the BC iMap database

Okanagan Valley (Oliver, Vernon)^{20, 30,31}

An intrinsic vulnerability map with the DRASTIC method²⁰ was used as part of the Smart Growth on the Ground sustainable development process^{30,31}. Water quality was identified as a key priority in a collaborative process to decide community priorities for future development. The intrinsic vulnerability map was used as one of the layers in a land use allocation model to provide scenarios of future development based on the community priorities. Intrinsic vulnerability maps and the land use allocation model was also used in the Vernon area as part of a similar development planning process.

Regional District of Nanaimo^{7,8,32}

The intrinsic vulnerability map from the pilot VIWRVMP⁷ was incorporated into a "Groundwater Assessment and Vulnerability Study"³². This report included a table of potential best management practices for areas of high, moderate and low vulnerability relating to the hazard posed by a selection of sources of contamination from industry, agriculture, the regional district, and miscellaneous. This table is presented in Section 6.1.3 as an example.

Grand Forks³³

An intrinsic aquifer vulnerability map using the DRASTIC method was incorporated into a "State of Understanding of the Hydrogeology of the Grand Forks Aquifer" where the vulnerability map was placed in context with the overall hydrogeology of the Grand Forks Aquifer.

5 Assessing risk to groundwater quality – an integrated framework

Assessing intrinsic vulnerability is only one part of a complete assessment of risk to groundwater quality and groundwater management^{e.g. 22,34,35,36,37}. Low vulnerability does not mean low risk of contamination. For example, a road salt stockpile in an area with low intrinsic vulnerability may have a higher overall risk of contamination than a schoolyard in an area of high intrinsic vulnerability. Therefore, the potential hazard(s), or threat(s) to groundwater quality at the land surface should also be assessed to compliment the intrinsic vulnerability assessment and provide a more complete picture of risk for a region. The DRASTIC vulnerability maps form a fundamental component of a holistic risk assessment.

There are no standardized risk assessment methods for groundwater quality. Generally, evaluating risk has three main components³⁴:

1. The hazard relating to the potential for pollution at the surface,
2. the intrinsic vulnerability to contamination in the event a spill occurs; and,
3. the consequences of a potential contamination event.

An assessment of hazards can include the:

- locating of potential contaminants within the study area,
- listing of the types and quantities of contaminants which may be present,
- understanding of the movement and toxicity of such contaminants, and
- understanding of the likelihood of release or spill of contaminants³⁵.

Risk assessments may be conducted using a variety of data sources including existing data on land use, zoning, previous development permits, or existing contaminated sites from government databases (e.g. GeoBC); aerial photographs or satellite data (e.g. Google Earth); or surveys specifically conducted to gather required information (e.g. mail, phone, door-to-door, windshield)^{from 21}. There is no standardized risk assessment method and the type of assessment conducted and level of detail included will ultimately depend on the community's preferences and intended use of the maps. In all cases these should be conducted by, or at least in consultation with, trained hydrogeologists.

Data compilations of potential sources of contamination, some including quantity, toxicity, mobility, and likelihoods of release, are present in a number of groundwater protection documents. These include Step 3 (Table 3.1, Appendix 3.1) of the BC Well Protection Toolkit²¹, Ontario Source Water Protection Technical Guidance Modules³⁵ and US EPA Office of Drinking Water³⁸. Examples of potential sources of contamination

are shown in Section 6.1.3 in Figures 12 and 13 from the BC Well Protection Toolkit²¹ and RDN Groundwater Assessment and Vulnerability Study³².

The consequence of losing the resource can be determined based on the value of the groundwater and may be represented by how important the aquifer is (e.g. regionally important, locally important, not an important water source)³⁴. The consequence may also be described financially and may include aspects of environmental, societal (e.g. health, future use), and economic consequences of losing the groundwater resource.

Once a full risk assessment has been completed, specific responses or preventative measures such as restriction of certain activities, or detailed requirements for development or operation can then be developed based on the level of risk associated with that area and activity (See example – Section 6).

6 Incorporating groundwater protection into land use decisions

Development of strategies to protect the quality of groundwater resources at both regional and local scales is vital to ensuring the quality of community water resources and drinking water supplies. The intrinsic vulnerability maps can be incorporated into land use decisions by minimising the risk of contamination. This can be achieved in a number of ways, including moving development with a high hazard threat (e.g. pulp mills, gas stations, etc.) away from areas of high vulnerability, and developing requirements for more detailed hydrogeological site assessments and emergency response plans for the development permitting process for land uses which pose a high hazard threat, or which are to be located in a highly vulnerable area. Also, incorporating best management practices for the prevention of groundwater contamination at the surface and instilling emergency response plans is one way to reduce the hazard potential while still allowing certain activities and development.

Below are some recommendations for incorporating the intrinsic vulnerability maps and groundwater protection strategies into land use decisions.

- Development of groundwater quality risk assessments^{e.g. 22,34,35,36,37} with which to identify high risk areas,
- Development of a response matrix in order to guide and manage land use and development requirements using a risk-based approach,³⁴ (see Section 6.1.3)
- Develop strategies and by-laws to not allow or limit new activities or developments which pose a high hazard threat in areas of high intrinsic vulnerability^{e.g. 23};
- Develop ways to regulate existing activities or developments which pose a high hazard threat^{e.g. 23}. These might include:
 - the use of best management practices for the prevention of groundwater contamination according to the type of activity occurring on the surface (e.g. chemical storage and handling requirements, protective barriers etc.),
 - limiting the types and quantities of hazardous materials stored on site and regulate their storage,
 - the development of emergency spill response plans suitable to the activity on the surface in case an incident does occur;
- Mandate that best management practices for storage and handling of industrial, agricultural, and residential chemicals be observed in all areas.

The Groundwater Bylaws Toolkit²³ outlines eight policy and bylaw tools that can be used by local governments to aid in groundwater protection from a land use planning,

policy, and bylaw context. These eight tools, which also include sample bylaw and policy text, are:

1. Groundwater data collection and mapping,
2. Water management and well protection planning,
3. Regional growth strategies,
4. Official community planning,
5. Zoning for groundwater protection,
6. Aquifer protection development permit areas,
7. Aquifer protection development approval information areas, and,
8. Subdivision servicing bylaws.

The intrinsic vulnerability maps can be used in tools 2 through 8. The development of the intrinsic vulnerability maps can be mandated in regional growth strategies and then used at smaller scales such as for prioritizing highly vulnerable areas in official community plans. They can also be used directly in zoning for groundwater protection and aquifer protection development permit and approval information areas where specific types of development that pose a high hazard threat to groundwater are either not allowed in highly vulnerable areas or are required to provide more detailed hydrogeological site assessments, environmental impact reports, best management practices and emergency response plans. The example below illustrates the direct use of the intrinsic vulnerability maps in the context of the Groundwater Bylaws Toolkit. Additional information, including examples of and sample text for bylaws, regulations, and policy can also be found in the toolkit.

6.1 Example for the South Cowichan Area of the Cowichan Valley Regional District

Land use planners and engineers dealing with ongoing and rapid development along the east coast of Vancouver Island will find the DRASTIC mapping useful for a variety of planning purposes. Particularly to assist in the development of risk management plans, but also for long-term community vulnerability analysis to a range of environmental pressures. An example for illustrative purposes has been provided that covers a developing area of the CVRD from Cowichan Bay to Mill Bay. This area is described as the South Cowichan Area and is located in the Cowichan Valley Regional District, about 10 km south of Duncan, BC. It is estimated that about half of the water use in the South Cowichan Area comes from groundwater and demand is likely to increase as population grows³⁹. There are both public (CVRD operated) and private water districts⁴⁰ in the area that supply water to the community where zoning allows for greater density as well as private water wells for larger lots.

There are a number of aquifers in the area which have been mapped with the BC Aquifer Classification system (See Figure 7, Section 7) and consist of both unconsolidated surficial material and consolidated bedrock. The groundwater resources

in this area are highly utilized to meet community needs. For example, the sand and gravel aquifer #197 is the production aquifer for the 10 community supply wells operated by private water districts, societies and the Regional District (Braithwaite Estates Improvement District, the Cobble Hill Improvement District, Millar's Water Supply Society Cowichan Bay Waterworks, Douglas Hill, Lanbourne, Cherry Point Estates, Garnett Creek, Satellite Park and Arbutus Ridge areas according to the CVRD data available at publishing) (Figure 8).

This aquifer (#197) was evaluated as having low vulnerability by the BC Aquifer Classification System (See Section 7); but, was identified as likely being more vulnerable than first thought due to the presence of both an upper unconfined and lower confined water bearing zones in parts of the aquifer, and a lack of confining layer in others^{in 39,40}. The intrinsic vulnerability map with the DRASTIC system classifies most of the aquifer as moderate vulnerability (Figure 9) with some areas mapped as high vulnerability in the southern portion of the aquifer, which correspond to those areas identified as likely being more vulnerability due to a lack of a confining layer. A well head protection plan has been developed by Braithwaite Estates Improvement District the Cobble Hill Improvement District, Millar's Water Supply Society⁴⁰ for their production wells in this aquifer.

The following is an example of how the intrinsic vulnerability maps could be incorporated into land use decision-making in the South Cowichan area moving from a large-scale OCP level (tool #4), to a small-scale aquifer protection development approval information area (tool #7), as well as well protection planning (tool #2). Please note that the well capture zones from the above mentioned well head protection plan⁴⁰ are shown for illustrative purposes only. In all cases it is stressed that the intrinsic vulnerability maps are not meant to replace site specific assessments, and should not be used at the lot scale. The maps are to be used as regional screening tools. Additionally, it is important to recognise that policies and practices such as the examples above be developed in accordance to the community's priorities for development and groundwater management.

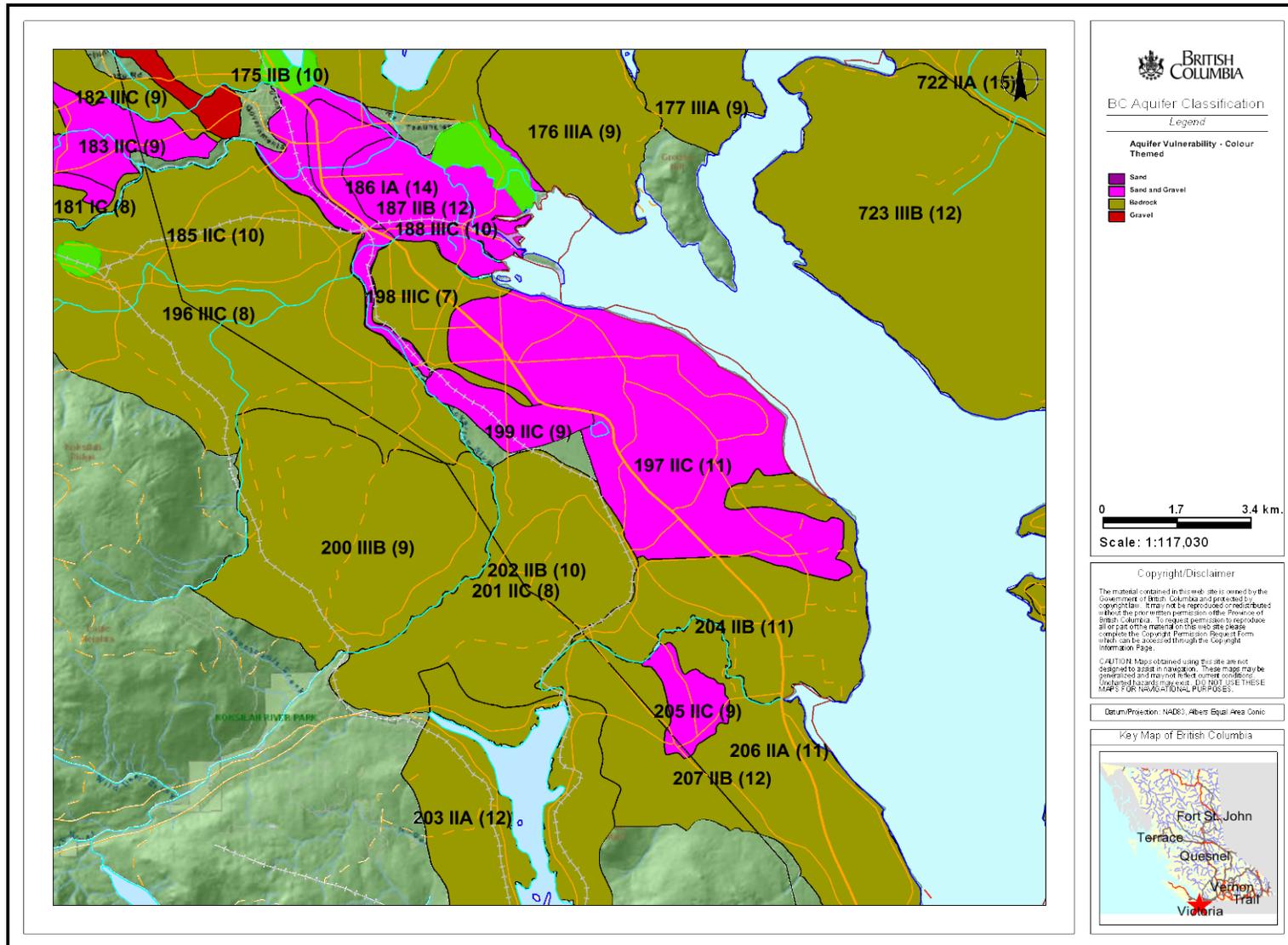


Figure 8: BC mapped aquifers in the Cobble Hill Area. Brown colour is bedrock aquifer material, pink colour is sand and gravel aquifer material. Stars show water supply wells for three water suppliers (BW, CH, Millars). The letter in the BC Aquifer Classification label shows the vulnerability (A=high, B=moderate, C=low)

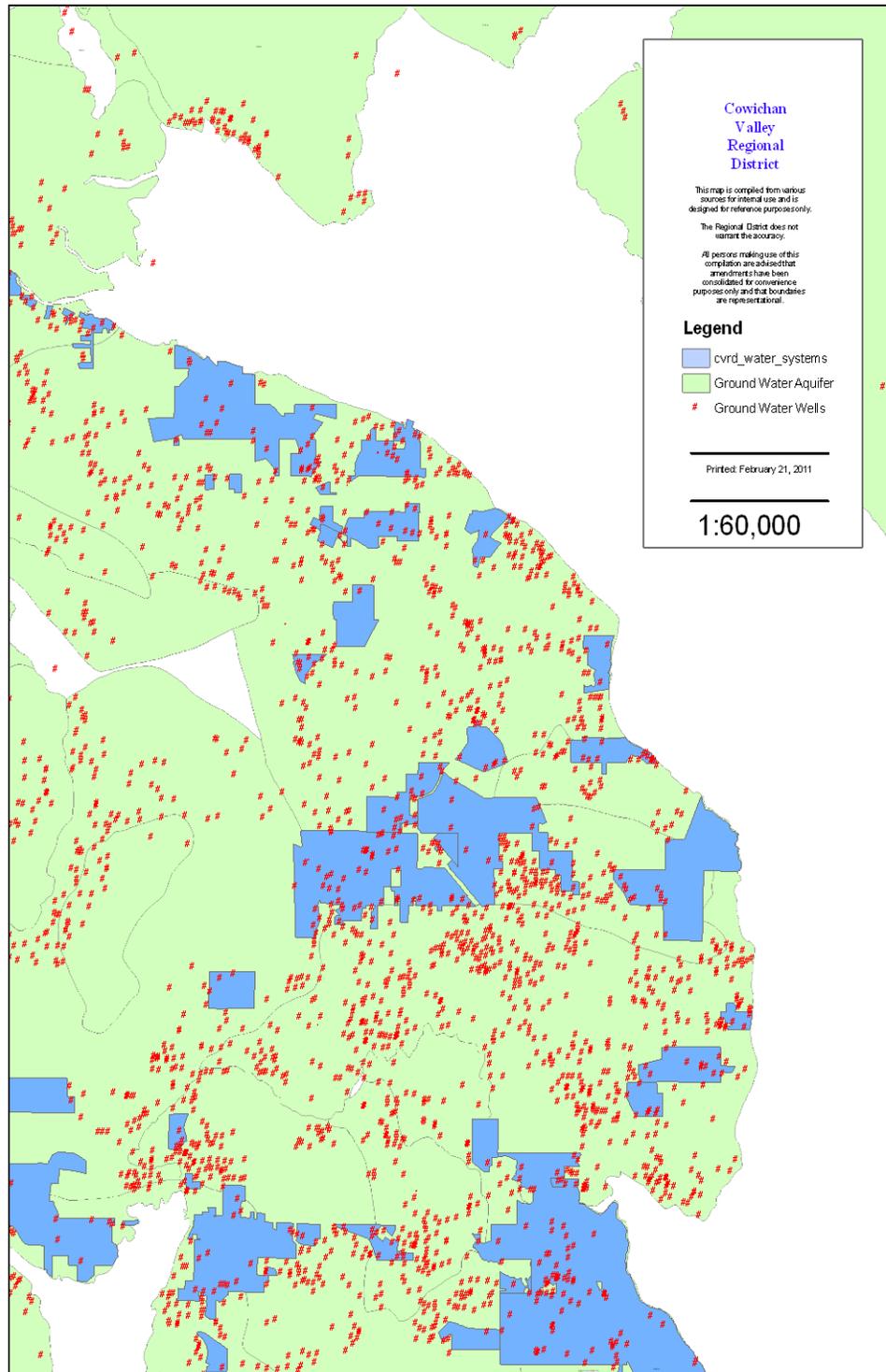


Figure 7: Water wells and groundwater supply systems in the South Cowichan Area

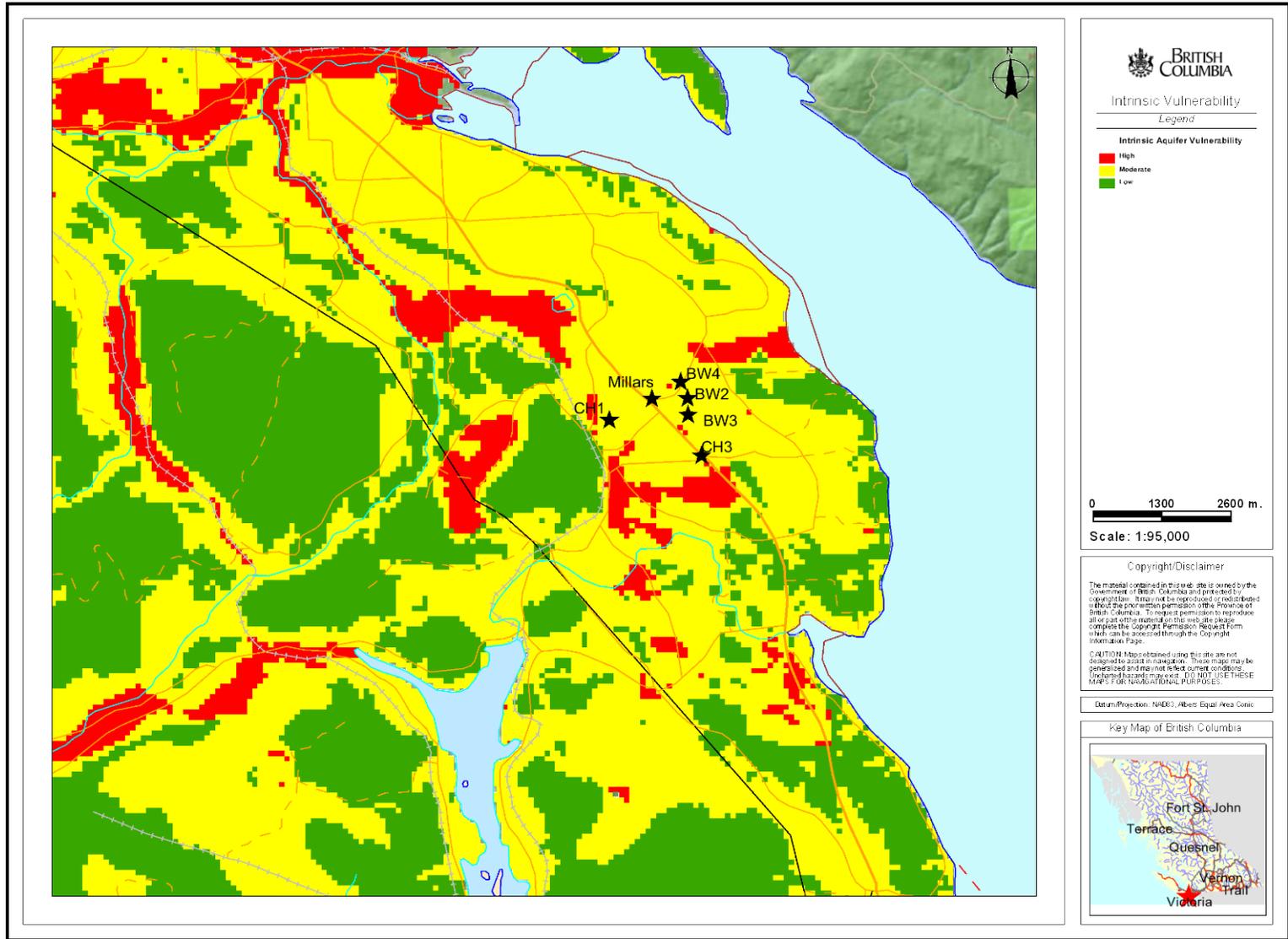


Figure 9: Intrinsic vulnerability (DRASTIC) and the Cobble Hill water supply wells (stars).

6.1.1 Official community planning

The intrinsic vulnerability maps can be incorporated at a large scale into the Official Community Plan (OCP) for local governments. The following shows text that relates to groundwater protection and land use planning from the OCP Bylaw No. 171 from North Pender Island (pg. 55)²⁹ as an example. Modifications are shown in [] for Cowichan Valley Regional District:

Policies

4.1.1 The {Cowichan Valley Regional District} shall work with other agencies and the community in the implementation of a Groundwater Management Strategy. The Strategy should involve the following elements:

- a) development of groundwater aquifer vulnerability mapping that identifies intrinsic aquifer susceptibility and land use hazards;*
- b) identification of groundwater recharge areas and development of a sustainable groundwater yield model;*
- c) recommended amendments to policy and regulations that would enhance the protection of groundwater from potential contamination and promote the sustainable use of the groundwater resource;*
- d) assess the potential magnitude of groundwater demand under existing zoning and create a zoning framework to implement necessary changes to secure sustainable water resources; and*
- e) develop a database of all wells [in the area] (existing, abandoned, etc.) that includes the location, age, depth, depth to water and other relevant parameters.*

4.1.2 Siting regulations and appropriate buffer areas will be established to ensure the protection of wetlands and watercourses.

4.1.3 Watersheds, wetlands, creeks and groundwater recharge areas shall be protected through regulation of land use. Vegetation removal in and adjacent to such features may be limited through the implementation of development permit areas.

4.1.4 Development which may contaminate or compromise the sustainability of surface or ground water resources shall not be permitted.

4.1.5 The [Cowichan Valley Regional District] may consider rezoning large lots with subdivision potential [in] sensitive watershed areas in order to limit development in sensitive areas and to cluster development in other parts of the lot, with no net change in density.

4.1.6 The precautionary principle should be applied with respect to the planning, utilization and protection of potable water supplies, so decision makers act with a conservative approach regarding the impacts of land use on water supplies.

4.1.7 Groundwater shall not be used as a commercial commodity or for heavy industrial use

[without impact studies and appropriate permitting].

4.1.8 No piping of water from a source outside of the Bylaw area shall be permitted [without impact studies and appropriate permitting].

Additional sample OCP policies can be found in the Groundwater Bylaws Toolkit²³.

6.1.2 Zoning for groundwater quality protection

While the OCP provides the mandate for making land use decisions with a focus on groundwater protection, the intrinsic vulnerability maps can be used directly beginning with zoning. In general, intrinsic vulnerability maps can be used to direct development away from highly vulnerable areas by limiting the types of land uses occurring in the area or by controlling the density of development²³. Bylaw text may list permitted uses based on the vulnerability or restrictions on uses²³.

6.1.3 Aquifer protection development permit areas and development approval information areas

Aquifer protection development permit areas may be designated based on a number of factors. Examples of these include the intrinsic vulnerability (e.g. high or moderate), if the area is an aquifer recharge zone, or if the area lies within a source water protection zone (see Section 6.1.4). In these cases area or site specific controls may be placed on development²³.

Requirements and guidelines for hydrogeological assessments can be set out as part of the development permit application process, modifications to existing development permits, or re-zoning. The level of hydrogeological assessment required is based on the both the intrinsic vulnerability of the area and the proposed development type or activity. An example of a matrix of assessment requirements is shown in Figure 10. Figure 11 shows examples of the five levels of hydrogeological assessments which can be used to set investigation requirements. These guidelines can be used in the absence of previous region-wide hazard or risk assessments, as the potential risk is assessed within each development application.

Need a short introductory preamble to the table ...

Development Type - Source of contamination (Hazard)	Intrinsic Vulnerability		
	High	Moderate	Low
High	Level 5	Level 4	Level 3
Industrial e.g. Chemical manufacturing, electronics, petroleum, refining and storage, metal treating, food processing, wood, and pulp processing, textile manufacturing			
Commercial e.g. Gas stations, furniture strippers, drum cleaning			
Other e.g. road de-icing, underground pipelines, waste disposal	Level 4	Level 3	Level 2
Moderate			
Industrial e.g. gravel pits			
Commercial e.g. Dry cleaners, junk yards auto repair and body shops, pest control companies, photographic processing, machine shops, auto part stores, lawn and garden/farm stores, paint stores, hardware stores, medical facilities			
Agricultural e.g. Heavy chemical use agricultural (fruits and vegetables), manure storage (lagoons, stockpiles).			
Residential e.g. Urban housing, high density (>5 dwelling units per hectare) using septic systems, trailer parks, sewer mains.	Level 3	Level 2	Level 1
Other e.g. Highways, roads,			
Low			
Commercial e.g. Grocery stores, department stores, office buildings, laundromats, food service, shoe repair, barber and beauty shop	Level 3	Level 2	Level 1
Agricultural e.g. Low chemical use agriculture (forage crops).			
Residential e.g. Moderate and low density (<5 dwelling units per hectare) using septic systems			

Figure 10 Example of level of hydrogeological assessment for development permit applications based on intrinsic vulnerability mapping classifications and proposed development type (source of contamination or hazard). Requirements for each level is described in Figure 11. Sources of contamination are from the BC Well Protection Toolkit²¹.

Level 1	<ul style="list-style-type: none"> •Groundwater contamination assessment report •A desk study is required to identify the concerns and potential risk to groundwater and the environment. A standard format hydrogeological report would most likely result, showing the nature of groundwater resource, pollution risk, and extent of any barriers to pollution flow, either natural or engineered. •If a potential risk has been identified by the desk study, additional information or groundwater monitoring may be required as per a higher level (depends on the risk).
Level 2	<ul style="list-style-type: none"> •Site investigation with monitoring •Limited site investigation is required to collect baseline data. Some soil and water testing required. Definition of groundwater flow system is required. Effectiveness of barriers, either natural or engineered, to be demonstrated. Calculations or modelling results are to be provided in support of conclusions on level of impact. Limited ongoing monitoring required.
Level 3	<ul style="list-style-type: none"> •Demonstrated groundwater protection plan •Extensive site investigation for baseline soil and water data. Definition of groundwater flow system is required. Engineering designs for any artificial barriers to be provided. An effluent/water management plan is required. Calculations or modelling results are to be provided in support of conclusions on level of impact. Demonstrated management skills have to be shown. A groundwater protection plan is required coupled with a monitoring schedule and an annual report.
Level 4	<ul style="list-style-type: none"> •Demonstrated emergency response plan •For moderate vulnerability areas, or where the previous levels of investigation indicate a clear risk to groundwater, a detailed groundwater site investigation is required. •The work should include an ongoing monitoring program, specifics of the potential contaminants (toxicity, quantity, transport behaviour), details on the protection design factors (natural attenuation, physical barriers, etc), a detailed emergency response plan as well as an assessment of the financial capacity of the responsible party to enact the plan.
Level 5	<ul style="list-style-type: none"> •Possible prohibition •For highly vulnerable areas where high hazard activities are proposed, or where there is a high potential risk determined from previous investigations. •All of the previous reporting requirements (Level 1-4) should be completed. •In the event that the risk to groundwater is unacceptable, development or an activity may be banned by the responsible authority.

Figure 11 Example of hydrogeological assessment requirements for development permit applications. Which level of assessment is required is shown in Figure 10. Text is from the New South Wales Groundwater Quality Protection Policy³⁷

While reporting standards exist for assessing existing contaminated sites, geotechnical investigations, well licencing (e.g. Alberta⁴¹, Ontario⁴²), environmental impact assessments (e.g. Manitoba⁴³) these cover a wide range of disciplines, are quite broad, and do not cover specific aspects of reporting for groundwater management. However, the Groundwater Bylaws Toolkit²³ does contain a section on hydrogeological assessments which could be used in conjunction with Figures 10 and 11 for assessing the hydrogeology of the area for management planning and potential risk to contamination. Additional examples of reporting requirements can be found in the Ontario Ministry of Environment's Technical Rules Assessment Report⁴⁴, the Australian Woollahra Municipal Council's "Guide for preparing geotechnical and hydrogeological reports"⁴⁵, and the Victorian EPA "Hydrogeological Assessment (Groundwater Quality) Guidelines"⁴⁶. A number of Australian references are used here and elsewhere in the document due to their efforts in water management related to years of drought and water scarcity.

While Figures 10 and 11 provide a framework for new activities or land uses, existing land uses may have a more profound impact on groundwater quality and are inherently harder to manage. One approach to managing existing land uses involves conducting a regional hazard and risk assessment as described in Section 5 and ongoing reporting, monitoring, use of best management practices, and review. A response matrix was developed for the Regional District of Nanaimo, which includes best management strategies and reporting requirements for certain types of land uses within each intrinsic vulnerability category (Figure 12).

The following table (Figure 12) is an example^{from 32} of an expansion of Figure 10 with specific notation as to the potential sources of contamination in the region, and provides planning guidance and insights as to how they could potentially be managed in each of the vulnerability classes. It should be noted that there is one land use area (transportation corridors) that has not been included in the following example and which will require some level of risk and hazard abatement – with specialized planning.

Sources of Contamination		Aquifer Vulnerability			Responsible Parties		
		Low	Moderate	High	Senior Governments	RDN & Municipalities	Individuals & Businesses
Industrial	<i>Liquid wastes</i>	Confined industrial wastewaters disposal allowed (use of impermeable liners)	Confined industrial wastewaters disposal allowed (use of impermeable liners)	No industrial wastewaters disposal is allowed	✓		✓
	<i>Tank and pipeline leakage</i>	Tanks and pipelines are allowed, with groundwater monitoring	Tanks and pipelines are allowed, with groundwater monitoring	No tanks or pipelines are allowed	✓		✓
	<i>Mining activities</i>	Mining activities are allowed with water management plans	Mining activities are allowed with water management plans	No mining activities	✓		✓
	<i>Hazardous products handling and storing</i>	Detailed list of hazardous products handled, stored and used.	Detailed list of hazardous products handled, stored and used.	Industrial activities in a high vulnerability zone are not recommended.			
		Use of highest industry standards for handling and storage (double/triple lining of containers, safe storage program, emergency plans)	Use of highest industry standards for handling and storage (double/triple lining of containers, safe storage program, emergency plans)	Detailed list of type and quantity of hazardous products handled, stored and used.			
		Auto – wreck yards: All vehicles coming to the yards have to be drained of all their fluids (fuels, oils – lubricating and hydraulic, cooling) and batteries be removed and recycled. The BC Vehicle Dismantling and Recycling Industry Environmental Planning Regulation (June 2007) applies.	Auto – wreck yards: All vehicles coming to the yards have to be drained of all their fluids (fuels, oils – lubricating and hydraulic, cooling) and batteries be removed and recycled. The BC Vehicle Dismantling and Recycling Industry Environmental Planning Regulation (June 2007) applies.	Use of highest industry standards for handling and storage (double/triple lining of containers, safe storage program, emergency plans)	✓	✓	✓
		Design and implementation of staff education and training programs on toxicity and risks to the environment	Design and implementation of staff education and training programs on toxicity and risks to the environment	Auto – wreck yards: not allowed.			
	Reporting to reg. agencies every 3 years	Reporting to reg. agencies every 2 years	Reporting to regulatory agencies every year.				
<i>Hazardous products use</i>	Detailed reporting of products used (every 3 years)	Detailed reporting of products used (every 2 years)	Detailed reporting of products used (every year)	✓		✓	
<i>Waste generation and disposal</i>	Detailed description of waste generated (type and volume) and outcome of wastes	Detailed description of waste generated (type and volume) and outcome of wastes	Detailed description of waste (type and volume) and outcome of wastes	✓		✓	

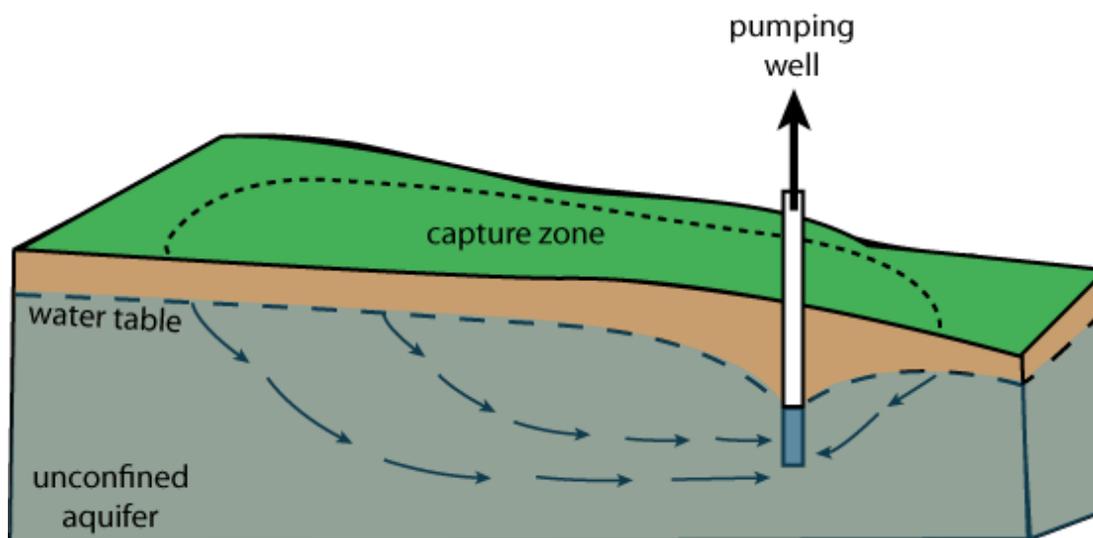
Sources of Contamination		Aquifer Vulnerability			Responsible Parties		
		Low	Moderate	High	Senior Governments	RDN & Municipalities	Individuals & Businesses
Regional District	<i>Sewer leakage</i>	6 year inspections	4 year inspections	2 year inspections	✓	✓	✓
	<i>Liquid wastes</i>	Irrigation, infiltration-percolation, and overland flow allowed	No irrigation or infiltration-percolation allowed, but overland flow is allowed	No irrigation, no infiltration-percolation, no overland flow	✓	✓	✓
	<i>Solid wastes</i>	Landfill permitted	No landfill	No landfill	✓	✓	
Agricultural	<i>Irrigation</i>	Irrigation is allowed- water management and conservation plan recommended	Irrigation is allowed - water management and conservation plan recommended	Irrigation is allowed - water management, monitoring, and conservation plan required	✓	✓	✓
	<i>Animal wastes</i>	Livestock raising is allowed	Livestock raising is allowed	Livestock raising is not allowed	✓	✓	✓
	<i>Fertilizer application</i>	Fertilization is allowed	Fertilization is allowed with groundwater monitoring	Fertilization is not allowed	✓	✓	✓
	<i>Pesticide application</i>	Pesticides are allowed	Pesticides are not allowed	Pesticides are not allowed	✓	✓	✓
Miscellaneous	<i>Spills</i>	Containment is required	Containment is required	Containment is required	✓	✓	✓
	<i>Stockpiles</i>	Containment is required	Containment is required	Containment is required	✓	✓	✓
	<i>Septic tanks and disposal fields</i>	Inspections every 2 years	Inspections every 2 years	Inspections every 2 years Monitoring well installed downgradient of field at property boundary and groundwater quality monitoring every 3 years	✓	✓	✓
	<i>Roadway de-icing</i>	Use of sand recommended. Road de-icing is allowed	Use of sand recommended. Road de-icing is not allowed	Use of sand recommended. Road de-icing is not allowed	✓		
	<i>Cross-contamination of wells</i>	Abandoned wells plugged and new wells properly sealed	Abandoned wells plugged and new wells properly sealed	Abandoned wells plugged and new wells properly sealed	✓		

Figure 12: Example of actions and best management practices from the Regional District of Nanaimo "Groundwater Assessment and Vulnerability Study"³²

6.1.4 Source water well protection planning

The philosophy behind source water well protection planning is the protection and prevention of contamination of the land areas which contribute water to a (community) well. This is a subset of source water protection which can be applied by local governments over larger, watershed scales, and for the protection of both surface water and groundwater supplies.

When a well is pumped it draws in water from the surrounding aquifer and a 'cone of depression' is created in the water table (in an unconfined aquifer) or potentiometric surface (in a confined aquifer) (Figure 13). A capture zone can be defined, which is the land area that contributes water, or recharge, to the well within a certain timeframe (Figure 13). Usually, capture zones are delineated based on the time it takes for water to travel from a certain point to a well. For example, one could delineate 1 year, 5 year, and 10 year zones. Contaminants released within the well capture zone may end up being drawn into the well and contaminating the water supply. Therefore, delineation and mapping of capture zones and source protection areas (the land area around a well in which groundwater protection measures are taken) is an integral part of community source water protection planning²¹. In some areas such as the United States, source water well protections plans are required for community wells.



13: Schematic diagram of a well capture zone and the land surface areas that contribute water to the well

The BC Well Protection Toolkit²¹ describes delineating the capture zone and well protection area in Step 2 of the protection process. Additionally, the Comprehensive Drinking Water Source-to-Tap Assessment Guideline²¹, also describes delineating

capture zones as part of Module 1 – Delineate and Characterize Drinking Water Sources. Following the BC Well Protection Toolkit there are five methods which are most commonly used to delineate the well capture zone (Figure 14).

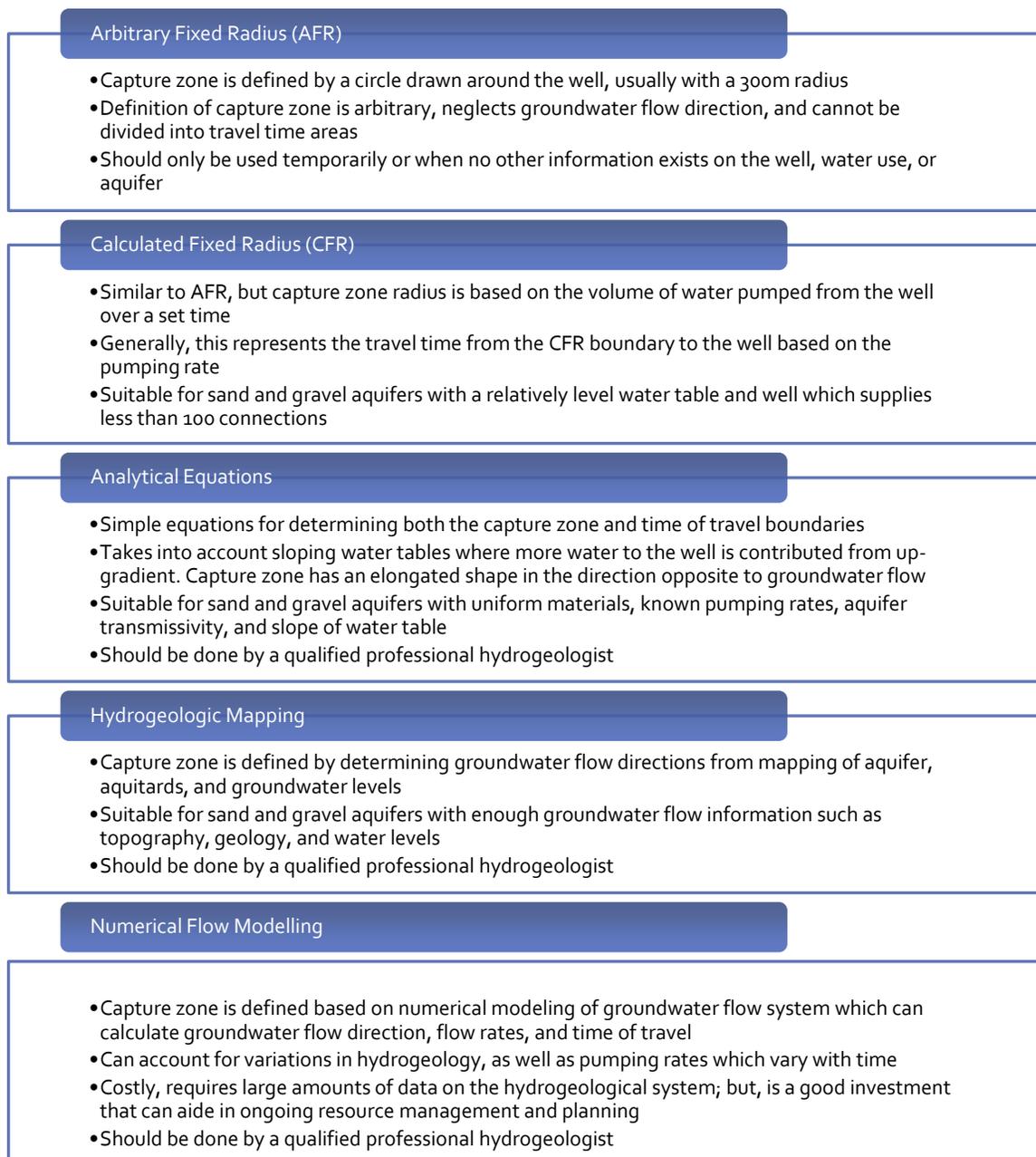


Figure 14: Well capture zone delineation according to the BC Protection Toolkit²¹.

Combination of the intrinsic vulnerability maps with the mapped well capture zones is outlined in both the BC Well Protection Planning Toolkit and Comprehensive Source-to-Tap Assessment Guideline, along with defining the well protection area, identifying potential contaminants, and the development of management strategies. By including the intrinsic vulnerability, management strategies could be set in which activities which pose a high hazard are regulated either by limiting development or requiring groundwater monitoring, groundwater protection plans, the use of best management practices to prevent contamination, and emergency response plans from existing developments. An example of the combination of the intrinsic vulnerability with well capture zones is shown in Section 6.1.4.

The intrinsic vulnerability maps can also be used in the management of source water protection zones, which include the well capture zones. Here, the intrinsic vulnerability is combined with the well capture zones delineated in the Cobble Hill Well Protection Plan⁴⁰ (Figure 15). These capture zones were delineated with a numerical groundwater flow model using backwards particle tracking: where particles are “released” at the well and tracked backwards through time to determine where they would have started given 1-, 5-, and 10- years to migrate to the well under the flow conditions created by the model⁴⁰. The capture zones have an elliptical shape, elongated in the general direction of modelled groundwater flow, with the well at the down gradient side of the ellipse. The 1-year capture zones lie closest to the wells and water recharging this area will take less than 1 year to reach the well. The 5- and 10-year capture zones are larger and enclose a bigger area around the well, with a majority of the capture zone up-gradient of groundwater flow into the well.

The capture zones of all six water supply wells primarily lie within the moderate intrinsic vulnerability category (Figure 15), although there is some overlap with the high vulnerability category in the 5- and 10- year capture zone of wells CH₁, CH₃, BW₄, and BW₂, and BW₃. Although these areas of high vulnerability are small, the DRASTIC classification does not show gradational changes in vulnerability, so it is possible that other areas within these capture zones are near the moderate/high boundary.

Similar to the examples above (e.g. Figures 10, 11, 12), the capture zones and intrinsic vulnerability map can be used to reduce the risk of groundwater contamination by reducing the hazard of the permitted land uses and activities within the source water protection zone. The permitted level of risk should be much lower inside the source water protection zones, and the level of hydrogeological assessment should be higher. For example, while a gas station may be allowed in a moderately vulnerable aquifer in the rest of the region, it may not be allowed on a moderately vulnerable aquifer in the source water protection zone. Additionally, extra protection measures may be taken around Highway 1, which passes through three of the capture zones and may be a source of contamination from road salt and spills from road accidents.

The development of the levels of action and requirements for each, and the matrix of actions should be developed in consultation with hydrogeologists, local governments, land managers and planners and policymakers to ensure that the levels of action are in the best interests of all parties for groundwater protection.

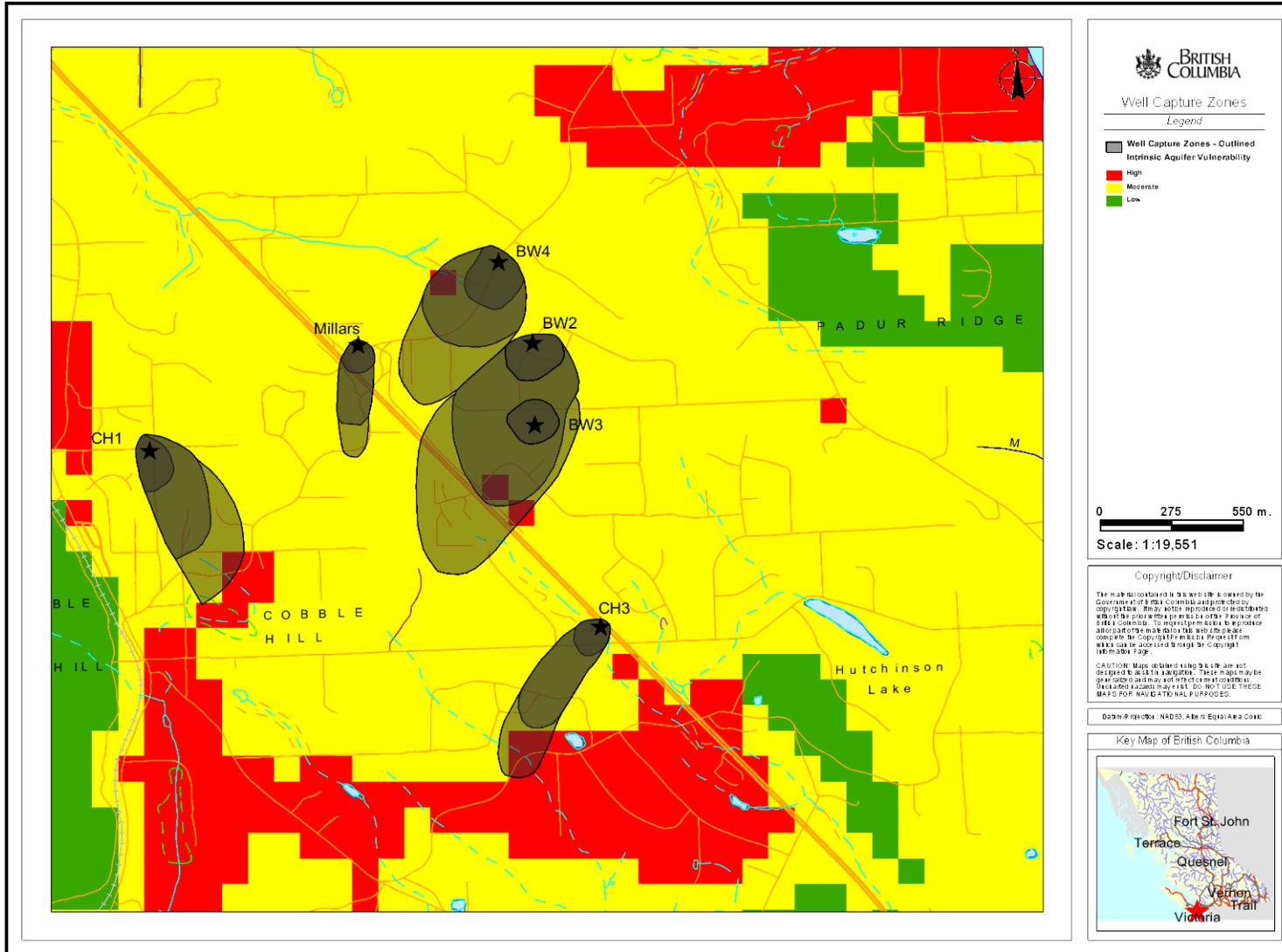


Figure 15: Intrinsic aquifer vulnerability with well capture zones from the Cobble Hill Protection Plan³⁹. Shading in well capture zones shows the 1- (dark), 5-, and 10-year (light) time of travel

7 Groundwater protection in British Columbia

7.1 Current groundwater legislation

While all levels of government in Canada have a role and responsibility in the protection and sustainable use of groundwater, water management and its regulation it is a provincial jurisdiction²³. However, the activities and uses of the land can have a profound effect on the quality of our groundwater resource. Land use regulation is generally a municipal or regional government jurisdiction. Hence the formulation of this document, which is intended to be a primer for local government planners, engineers and consultants. Information on federal government groundwater jurisdiction can be found in *Buried Treasure: Groundwater Permitting and Pricing in Canada*⁴⁷. The *Groundwater Bylaws Toolkit*²³ summarizes the jurisdiction and legislation relating to groundwater in BC. A brief overview of the major groundwater legislation in BC is provided below.

In 2004 the BC *Water Act* (2001)⁴⁸ was amended to include the *Groundwater Protection Regulation*⁴⁹ (GWPR). Up until this time *Water Act* did not include any regulations specifically focused on groundwater. The implementation of the GWPR is a multi-phase process with the first phase relating to the drilling, construction, and maintenance of wells. Phase 2 will follow with additional regulations⁵⁰. A general overview of the GWPR is provided below and more detail can be found on the BC Ministry of Environment's groundwater protection website⁵¹ and in the regulations themselves⁴⁹.

The GWPR applies to all water supply wells (domestic and non-domestic such as municipal wells or irrigation wells), groundwater monitoring wells, recharge and injection wells, dewatering or drainage wells, remediation wells and geotechnical wells. New wells must be drilled and completed by qualified well drillers and the well pump must be installed by a qualified well pump installer. New wells must be constructed with appropriate surface sealing, well cap, well casing stick-up, graded surface away from the wellhead, a well identification plate, and controlled or stopped artesian flow. It is the well owner's responsibility (private owner, municipality, etc.) to:

- cap any existing wells and ensure wells remain capped with secure, vermin-proof caps;
- maintain the well identification plate and obtain a new one if plate is damaged or lost;
- protect the well, including not putting junk (e.g. garbage, pesticides, chemicals, animal or human waste, etc.) down the well, maintaining the wellhead and surface sealing, protect the well from physical damage, and operates the well to prevent saltwater intrusion or contaminant movement into the well; and,

- wells not used for 5 years must be properly deactivated, and wells not used for 10 years must be properly closed.

A sample of other legislation, which also influences how groundwater resources are managed and protected, include:

- *Fisheries Act*⁵² (federal) – regulates protection of fish habitat which may require protection of groundwater baseflow into water bodies²³.
- *Canadian Environmental Protection Act*⁵³ (federal) – regulates the release of toxic substances into the environment, which also includes groundwater.
- *Drinking Water Protection Act*⁵⁴ (provincial) - regulates water supply systems and contains regulations for prevention of drinking water contamination, which also includes groundwater source areas. It allows for a local authority or water supplier to undertake a drinking water protection plan to reduce drinking water health hazards.
- *Environmental Management Act*⁵⁵ (provincial) – regulates environmental assessments of contaminated sites. Various regulations and codes of practise under this act such as the Waste Discharge Regulation, Municipal Sewage regulation and the Vehicle Dismantling and Recycling Industry Environmental Planning Regulation have implications for the quality of groundwater.
- *Environmental Assessment Act*⁵⁶ (provincial) – regulates groundwater withdrawals of greater than 75 litres or more per second (one well or combined wells). Environmental Assessment may be required for such projects. Additionally, impacts to groundwater from projects (e.g. mine) are assessed through the environmental assessment process.
- *Municipal By-Laws* (municipal) – any additional regulations such those due to source water protection plans, stormwater management, land use planning and zoning, development applications, emergency response planning, pesticide use or agricultural activities, etc. which may also incorporate groundwater vulnerability and risk. The Groundwater Bylaws Toolkit²³ provides an extensive list of possible municipal bylaws which may incorporate groundwater protection measures.

7.2 BC Aquifer Classification System

In 1994, the BC Ministry of Water, Land and Air Protection developed the British Columbia Aquifer Classification System as a means of synthesizing raw groundwater data (e.g. well records, water chemistry, geology) into a format which could be easily understood by planners, managers and the public⁵⁷ and used for groundwater protection and management. The system delineates the spatial extent of individual aquifers and then classifies them into one of nine classes based on a level of vulnerability, as well as a level of development and priority for each aquifer.

To date, more than 900 aquifers have been mapped in BC and on Vancouver Island, about 200 aquifers were identified and classified between 1995 and 2007. The BC Aquifer Classification System is dynamic, and will change over time as more groundwater information becomes available. New aquifers will be mapped and the boundaries of existing aquifers may change as detailed site characterization is undertaken.

The BC Aquifer Classification Maps are currently available for viewing and downloading on GeoBC and the BC Water Resources Atlas. Specific details regarding the system can be found in Kreye and Wei (1994)⁵⁷ and in the "Guide to Using the BC Aquifer Classification Maps for the Protection and Management of Groundwater"⁹.

There are several similarities and differences between the DRASTIC method used in the current study and the BC Aquifer Classification System (Figure 16). This may result in one area being classed as a different vulnerability due to the differences in methodology. Since the DRASTIC system accounts for spatially variable parameters within an aquifer (e.g. depth to water, soil type, topography, unsaturated zone material), the DRASTIC intrinsic vulnerability category will generally provide a more reliable and accurate estimate of the vulnerability of the groundwater resource from potential contaminants applied on the ground surface than the vulnerability category assigned by the BC Aquifer Classification System, which is applied over the entire aquifer. However, as DRASTIC evaluates the vulnerability for the aquifer closest to the surface the BC Aquifer Classification system may be used to estimate vulnerability for any underlying aquifers. The DRASTIC methodology is also more objective than the BC Aquifer Classification System as ratings of the individual parameters follow set tables.

A comparison of the BC Aquifer Classification System and the DRASTIC method is shown in Figure 17 for the South Cowichan area (Previously discussed in Section 6) and illustrates differences in methodology. For example, the DRASTIC method shows variation in vulnerability ranging from low to high within Aquifer #197, which is mapped as low vulnerability (C) with the BC Aquifer Classification system. In this case the DRASTIC method not only shows spatial variability within the mapped aquifer, but also indicates a moderate vulnerability over most of the aquifer and a high vulnerability in the southern part of the aquifer. Using the DRASTIC intrinsic vulnerability in this case is not only conservative, but also follows subsequent investigations which have pointed to a more complex and vulnerable aquifer system^{39,40}.

Conversely, Aquifer 203 is classified as high vulnerability (A) yet DRASTIC shows low to moderate vulnerability. In this case the aquifer is a bedrock aquifer with shallow static water levels (depth to water in a well). It is these water levels that lead to a high vulnerability class in the BC Aquifer Classification System. However, static levels in wells intercepting confined bedrock aquifers often reflect a potentiometric surface that can be much higher than the top of the aquifer. The DRASTIC methodology accounts for this difference in the determination of the depth to water surface by using the depth

to top of aquifer instead. This is explained in greater detail in Liggett and Gilchrist (2010)⁷. This alternative methodology may explain the difference in vulnerability rating.

A conservative approach, where the BC Aquifer Classification and the DRASTIC method are in disagreement, might be to use the highest vulnerability category between the two methods; however, due to the more rigorous methodology used mapping vulnerability with DRASTIC, it should be assumed that DRASTIC is providing the more defensible determination of groundwater vulnerability. The general descriptions of the properties of the low, moderate, and high vulnerability categories (Figure 3) is true for both the DRASTIC system and the BC Aquifer Classification System.

BC Aquifer Classification System vs. DRASTIC	
<p>Similarities</p> <ul style="list-style-type: none"> • Regional-scale screening tools for aquifer assessment. • Vulnerability assessment based on same characteristics such as depth to water (D), soil type (S), the permeability of the region above the water table or aquifer (I), and the permeability of the aquifer itself (C). In both methods depth to water is an important parameter • Same management strategies can be applied to same vulnerability classification. 	<p>Differences</p> <ul style="list-style-type: none"> • The BC Aquifer Classification system delineates the shape and extent of aquifers in plan view while DRASTIC does not attempt to do this. • The BC Aquifer Classification system assigns a single vulnerability value to an entire aquifer polygon, whereas DRASTIC provides spatial variability within mapped and unmapped aquifer polygons due to changes in depth to water, soil type, topography, or unsaturated zone material. • DRASTIC includes three additional parameters: aquifer media type (A), topography (T) and recharge (R). • DRASTIC shows the vulnerability to the uppermost aquifer only, whereas the BC Aquifer Classification can show the vulnerability of overlying aquifers. • DRASTIC can estimate vulnerability in unmapped aquifer areas as aquifer boundaries are not considered part of the analysis • BC Aquifer Classification includes level of development, and importance of aquifer, in addition to aquifer vulnerability to contamination. • Vancouver Island DRASTIC maps cover some areas outside the mapped BC Aquifer Classification polygons.

Figure 16: BC Aquifer Classification System^{57,9} and DRASTIC^{6,7,8}

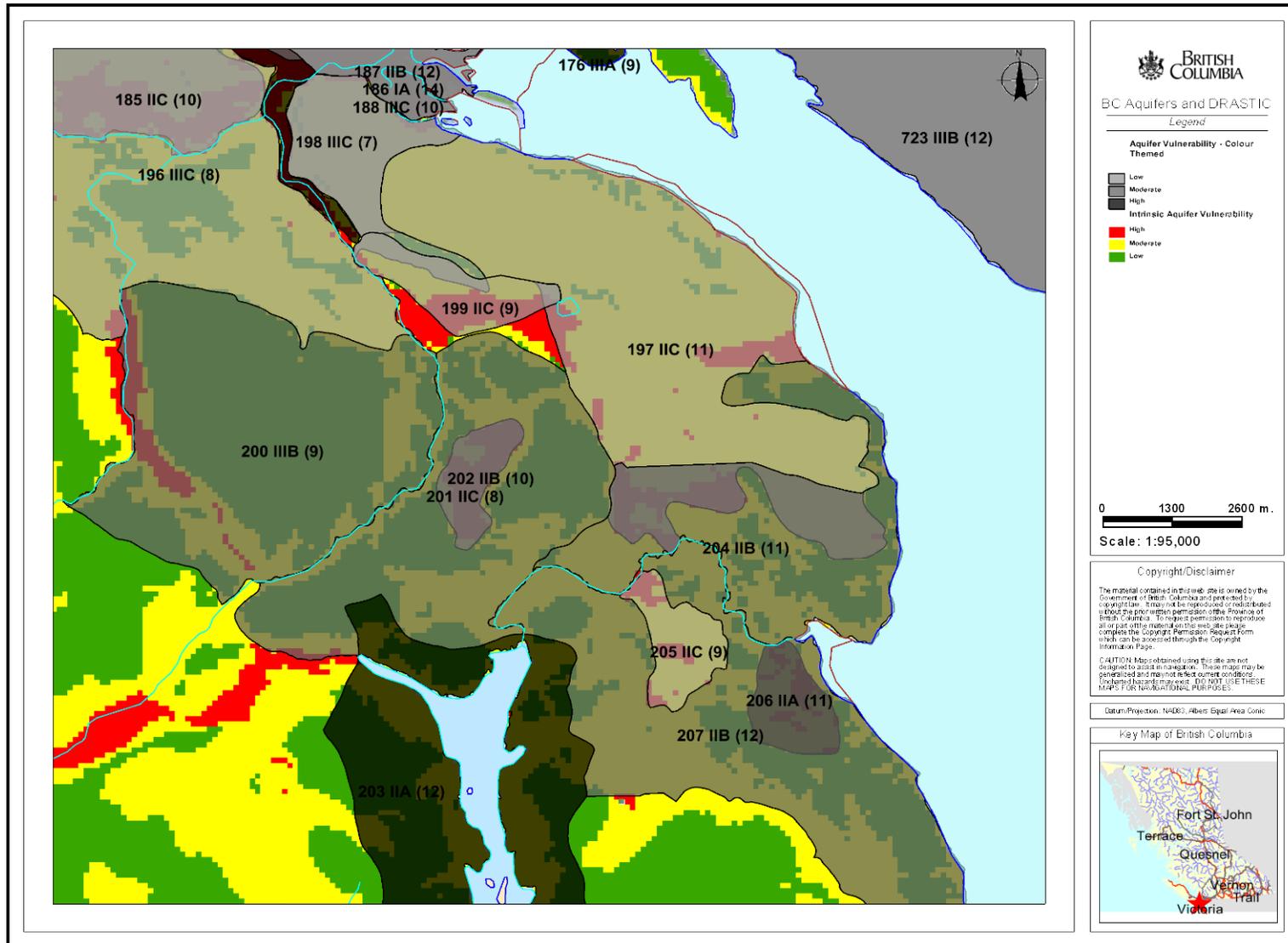


Figure 17: Intrinsic aquifer vulnerability with BC Aquifer Classification (greyscale) and DRASTIC intrinsic vulnerability (colour) for the Cobble Hill Area.

7.3 Available groundwater resources

A number of toolkits and guidelines specific to groundwater protection in BC are available and are listed below. Additionally, there are numerous online repositories available for viewing, mapping, and downloading data related to groundwater resources in BC.



GeoBC is an online data repository of provincial geographical information for viewing, downloading, analysing, and creating maps. Available information ranges from base maps to hydrological, marine, geology, land status, parks, wildlife, climate, forestry, satellite imagery, and physical infrastructure data among many others. Users can view and create maps online using the free iMap tool. Data are available for download, some for free such as the intrinsic vulnerability map, while others require a fee.

Groundwater information can be found under the "Freshwater and Marine" layer and includes the DRASTIC intrinsic vulnerability map for Vancouver Island, aquifers in the BC Aquifer Classification System, water wells, well capture zones, water quality data, and water licences in addition to many other hydrological and hydrogeological data. A layer is also included which links the intrinsic vulnerability maps with the corresponding reports in EcoCat that describe the methodology used to make the maps.

Figure 6 was created with the online iMap tool and a brief outline of how to find groundwater related information and make a map is found in the appendix.



BC Well Protection Toolkit

- http://www.env.gov.bc.ca/wsd/plan_protect_sustain/groundwater/wells/well_protection/wellprotect.html

The BC Well Protection Toolkit was created to raise awareness to the issue of groundwater protection and good water well management. It also provides a practical approach to how communities and water supply system owners can develop well protection plans.



Groundwater Bylaws Toolkit

- http://www.obwb.ca/groundwater_bylaws_toolkit/

The Groundwater Bylaws Toolkit was developed by the Okanagan Basin Water Board and partners as an appendix to the Green Bylaws Toolkit. The aim is to provide guidance to local governments for protecting the quality and quantity of groundwater and includes sections on the basic principals of hydrogeology, groundwater data management, and jurisdiction for managing groundwater. There are also eight policy and bylaw tools outlined, with sample bylaw text, that local governments may use to develop their own groundwater protection regulations. These categories include: groundwater data collection and mapping, water management and well protection planning, regional growth strategies, official community planning, zoning for groundwater protection, aquifer protection development permit areas, aquifer protection development approval information areas, and subdivision servicing bylaws.



Comprehensive Drinking Water Source-to-Tap Assessment Guideline

- <http://www.health.gov.bc.ca/protect/source.html#water2>

The Source-to-Tap Assessment Guideline was developed in 2010 by the BC Ministry of Healthy Living and Sport as a regulatory requirement of the *Drinking Water Protection Act*, and to provide a tool to understand, identify, and manage risks to drinking water systems. Assessment of drinking water systems using groundwater from wells and springs are included. Characterizing the intrinsic vulnerability (including using DRASTIC, AVI, and the BC Aquifer Classification System) falls under Module 1: Delineate and Characterize Drinking Water Sources.



EcoCat

- <http://www.env.gov.bc.ca/ecocat>

The Ecological Reports Catalogue (EcoCat) is a provincially managed database of free digital reports and publications relating to groundwater, reservoirs, floodplain mapping, aquatic and terrestrial species and habitats, and vegetation. Technical documentation for the intrinsic vulnerability maps can be found here (e.g. references 7 and 8 for Vancouver Island).



BC WELLS Database

- http://www.env.gov.bc.ca/wsd/data_searches/wells/index.html

The BC WELLS database is a provincial database of water wells provided voluntarily by water well drillers, well owners, and groundwater specialists. This database may include specific well details such as depth, lithology, location, well diameter, casing information, owner information, well type, construction information, date drilled, and water depth. The WELLS database can be accessed via the link above and some of the well information (e.g. well location, well type) is also available in map format in GeoBC.



BC Observation Well Network

- http://www.env.gov.bc.ca/wsd/data_searches/obswell/

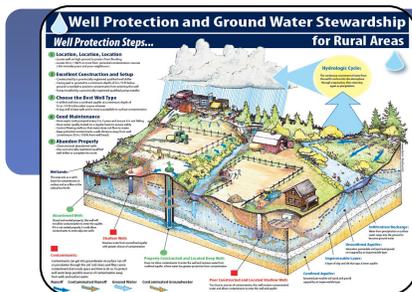
As of May 2011 there were 138 active wells in the provincial observation water well network. These wells cover major developed aquifers and groundwater areas and are used to monitor groundwater by measuring groundwater hydrographs, while some are also used to measure groundwater quality. The measured water levels and hydrographs are available from the site above.



BC Environmental Monitoring System

- <http://www.env.gov.bc.ca/emswr/>

The BC Environmental Monitoring System has a web reporting application (EMS WR) for read-only access to water quality data including physical, chemical, and biological analyses from wells around the province. Analyses are also performed on the quality of air, solid waste discharges and ambient monitoring sites throughout the province.



Groundwater Brochures and Forms

www.env.gov.bc.ca/wsd/plan_protect_sustain/groundwater/brochures_forms.html

A series of brochures and forms relating to groundwater have been developed by the BC Ministry of Environment. Some of these include well protection and ground water stewardship for rural areas, water quality fact sheets, and B.C.'s groundwater protection regulation – what private well owners should know.

8 Conclusions

Intrinsic aquifer vulnerability maps have been developed for different areas of British Columbia and are useful in both source water protection planning and broader groundwater protection frameworks. The vulnerability maps can assist local governments, planners, and policy-makers in land use decision-making and sustainable development planning, by identifying sensitive areas, prioritizing areas for further monitoring or protection, and educating the public. These maps are may also be integrated into more complete assessments of groundwater risk, and can be used as an additional layer in management strategies for source water protection areas. Incorporating these maps into groundwater protection frameworks, together with adhering to those groundwater practices outlined in the frameworks, will help protect the quality of groundwater resources for many years to come.

9 References

1. Office of the Auditor General of British Columbia. 2010. An audit of the management of groundwater resources in British Columbia. Report 8: December 2010. Victoria, British Columbia. <http://www.bcauditor.com/>
2. Foster, S.S.D., 1987. Fundamental concepts in aquifer vulnerability pollution risk and protection strategy. In: van Duijvenbooden, W., van Waegeningh, H.G. (Eds.), Vulnerability of soil and groundwater to pollutants, Proceedings and Information. TNO Committee on Hydrological Research, The Hague, pp. 69-86.
3. Vrba, J., Zaporozec, A., 1994. Guidebook on mapping groundwater vulnerability. International Contributions to Hydrogeology No. 16. International Association of Hydrogeologists, Hannover, Heise, 131 pp.
4. Bekesi, G., McConchie, J., 2002. The use of aquifer-media characteristics to model vulnerability to contamination, Manawatu region, New Zealand. Hydrogeology Journal, 10(2): 322-331.
5. Aller, L., Bennett, T., Lehr, J., Petty, R., Hackett, G., 1987. DRASTIC: a standardized system for evaluating ground water pollution potential using hydrogeologic settings. EPA-600/2-87-035, National Water Well Association, Dublin, Ohio / EPA Ada. Oklahoma.
6. Van Stempvoort, D., Ewert, L., Wassenaar, L., 1992. AVI: a method for groundwater protection mapping in the prairie provinces of Canada. PPWB Report No.114, Prairie Provinces Water Board, Saskatoon, Saskatchewan, Canada.
7. Liggett, J., Gilchrist, A., 2010. Technical summary of intrinsic vulnerability mapping methods in the regional districts of Nanaimo and Cowichan Valley. Geological Survey of Canada. Open file 6168. 64pp.
8. Newton, P., Gilchrist, A., 2010. Technical summary of intrinsic vulnerability mapping methods for Vancouver Island. Vancouver Island Water Resources Vulnerability Mapping Project – Phase 2. Vancouver Island University, 51pp.
9. Berardinucci, J., Ronneseth, K., 2002. Guide to using the BC aquifer classification maps for the protection and management of groundwater resources. Ministry of Water, Land, and Air Protection, Victoria, BC.

10. National Research Council, 1993. Ground water vulnerability assessment, contamination potential under conditions of uncertainty. National Academy Press, Washington D.C., USA, 210 pp.
11. Focazio, M.J., Reilly, T.E., Rupert, M.G., Helsel, D.R., 2002. Assessing ground-water vulnerability to contamination: providing scientifically defensible information for decision makers. 1224, U.S. Geological Survey Circular.
12. Gogu, R.C., Dassargues, A., 2000. Current trends and future challenges in groundwater vulnerability assessment using overlay and index methods. *Environmental Geology*, 39(6): 549-559.
13. Frind, E.O., Molson, J.W., Rudolph, D.L., 2006. Well vulnerability: a quantitative approach for source water protection. *Ground Water*, 44(5): 732-742.
14. Liggett, J.E., Talwar, S., 2009. Groundwater vulnerability assessments and integrated water resource management. *Streamline Watershed Management Bulletin*, Vol. 13, No. 1 Fall 2009: 18-29.
15. Rosen, L., 1994. A study of the DRASTIC methodology with emphasis on Swedish conditions. *Ground Water*, 32(2): 278-285.
16. Al-Zabet, T., 2002. Evaluation of aquifer vulnerability to contamination potential using the DRASTIC method. *Environmental Geology*, 43(1-2): 203-208.
17. Vias, J.M., Andreo, B., Perles, M.J., Carrasco, F., 2005. A comparative study of four schemes for groundwater vulnerability mapping in a diffuse flow carbonate aquifer under Mediterranean climatic conditions. *Environmental Geology*, 47(4): 586-595.
18. Stigter, T.Y., Ribeiro, L., Dill, A., 2006. Evaluation of an intrinsic and a specific vulnerability assessment method in comparison with groundwater salinisation and nitrate contamination levels in two agricultural regions in the south of Portugal. *Hydrogeology Journal*, 14(1-2): 79-99.
19. Denny, S.C., Allen, D.M., Journeay, J.M., 2007. DRASTIC-Fm: a modified vulnerability mapping method for structurally-controlled aquifers. *Hydrogeology Journal*, 15(3): 483-494.
20. Liggett, J.E., Allen, D.M., 2010(online first). Evaluating the sensitivity of DRASTIC using different data sources, interpretations and mapping approaches. *Environmental Earth Science*. DOI: 10.1007/s12665-010-0642-z.

21. Water Stewardship Division, 2004. Well protection toolkit. Ministry of Environment, Lands and Parks, Ministry of Health, and Ministry of Municipal Affairs. British Columbia.
22. British Columbia Ministry of Healthy Living and Sport, 2010. Comprehensive drinking water source-to-tap assessment guideline.
23. Okanagan Basin Water Board, 2009. Groundwater bylaws toolkit. An appendix to the green bylaws toolkit. Okanagan Basin Water Board, Kelowna, British Columbia.
24. Wei, M., 1998. Evaluating AVI and DRASTIC for assessing pollution potential in the Lower Fraser Valley, British Columbia: aquifer vulnerability and nitrate occurrence. 51st Canadian Water Resources Association Conference - Mountains to Sea: Human Interaction with the Hydrologic Cycle. Victoria, BC, Canada, 36pp.
25. Township of Langley. Langley water resource management strategy. Langley, BC. http://www.tol.ca/index.php?option=com_content&task=view&id=1079&Itemid=917
26. Golder Associates Ltd., 2005. Groundwater vulnerability mapping Township of Langley. Report submitted to: Township of Langley, Langley, BC. Report No. 04-1412-224.
27. Simpson, M.W., Allen, D.M., Journeay, M.M., Korteling, B. 2010. Assessing Risk to Groundwater Quality: A Proposed Integrated Groundwater Risk Framework. 63rd Canadian Water Resources Association National Conference – Information, Infrastructure & Environment: What is our Water Legacy? June 15-18, 2010. Vancouver, BC, Canada.
28. CPAWS, 2005. Gulf Islands ecosystem community atlas. Canadian Parks and Wilderness Society - BC Chapter.
29. North Pender Island, 2007. North Pender Island Official Community Plan Bylaw No, 171.
30. Liggett J., Allen D., Journeay M., Denny S., Talwar S., Ivey L. 2006. Intrinsic aquifer vulnerability maps in support of sustainable community planning, Okanagan Valley, BC 59th Canadian Geotechnical Conference and 7th Joint CGS/IAH-CNC Groundwater Specialty Conference, Vancouver, BC, Canada.
31. Smart growth on the ground, 2006. Greater Oliver concept plan. The Design Centre for Sustainability, University of British Columbia.

32. GW Solutions Inc., and Vancouver Island University, 2010. RDN Electoral Area A groundwater assessment and vulnerability study. For: the Regional District of Nanaimo. Nanaimo, BC.
33. Wei, M., Allen, D.M., Carmichael, V., Ronneseth, K. 2010. State of understanding of the hydrogeology of the Grand Forks Aquifer. Water Stewardship Division, BC Ministry of Environment, and Simon Fraser University.
34. Department of the Environment and Local Government, 1999. Groundwater protection schemes. Department of the Environment and Local Government, Environmental Protection Agency, Geological Survey of Ireland. 30pp.
35. Ontario Ministry of Environment. 2006. Source water protection assessment report: draft guidance modules.
36. EnecoTech Inc., 2004. Source water assessment methodology for ground water sources. Report For: Colorado Department of Public Health and Environment, Water Quality Control Department, Source Water Assessment and Protection Program, Denver, CO.
37. NSW Department of Land and Water Conservation, 1998. The NSW groundwater quality protection policy: a component policy of the NSW state groundwater policy. Department of Land and Water Conservation, NSW, Australia. 32pp.
38. US EPA Office of Water. <http://water.epa.gov/drink/>
39. Worley Parsons Ltd. 2009. South Cowichan water plan study, a preliminary assessment of water supply & needs within the South Cowichan Region. For: Cowichan Valley Regional District. V19830100, 11 February 2009.
40. EBA Engineering Consultants Ltd. 2006. Cobble Hill well protection plan. For: Braithwaite Estates Improvement District Board, Millar's Water Supply Society and Cobble Hill Improvement District. 0802-2840349
41. Alberta Environment. 2003. Groundwater evaluation guideline (Information required when submitting an application under the water act). Water Section, Science and Standards Branch, Environmental Assurance Division. Edmonton, SB, Canada.
42. Ontario Ministry of the Environment. 2008. Technical guidance document for hydrogeological studies in support of category 3 applications for permit to take water. Ministry of the Environment Operations Division.

43. Province of Manitoba. 2008. Guideline for environmental site investigations in Manitoba. Manitoba Environment Guideline 98 – 01.
44. Ontario Ministry of the Environment. 2009. Technical Rules: Assessment Report - Clean Water Act, 2006. PIBS # 7559e04
45. Woollahra Municipal Council. Geotechnical and hydrogeological reports - Guide for preparing geotechnical and hydrogeological reports. NSW, Australia. http://www.woollahra.nsw.gov.au/__data/assets/pdf_file/0012/9210/DA_Guide_-_Annexure_3_Geotechnical_and_Hydrogeological_Reports.pdf
46. EPA Victoria. 2006. Hydrogeological assessment (Groundwater Quality) guidelines. EPA Victoria, Southbank Victoria. Publication 668.
47. Nowlan, L. 2005. Buried treasure: groundwater permitting and pricing in Canada. For The Walter and Duncan Gordon Foundation. Toronto, ON.
48. British Columbia Water Act. 2001. Queen's Printer, Victoria, British Columbia, Canada. RSBC 1996, Chapter 483.
49. British Columbia Water Act, Ground water protection regulation. 2004. Queen's Printer, Victoria, British Columbia, Canada. B.C. Reg. 299/2004.
50. British Columbia Groundwater Protection Regulation website: http://www.env.gov.bc.ca/wsd/plan_protect_sustain/groundwater/gw_regulation/backgrounder.html
51. British Columbia Ministry of Environment, Water Stewardship Division, Groundwater website: http://www.env.gov.bc.ca/wsd/plan_protect_sustain/groundwater/index.html#leg
52. Fisheries Act, R. S. C. 1985. c.F-14.
53. Canadian Environmental Protection Act. 1999. c.33, C-15.31.
54. British Columbia Drinking Water Protection Act. 2001. Queen's Printer, Victoria, British Columbia, Canada. SBC 2001, Chapter 9.
55. British Columbia Environmental Management Act. 2003. Queen's Printer, Victoria, British Columbia, Canada. SBC 2003, Chapter 53.
56. British Columbia Environmental Assessment Act. 2002. Queen's Printer, Victoria, British Columbia, Canada. SBC 2002, Chapter 43.

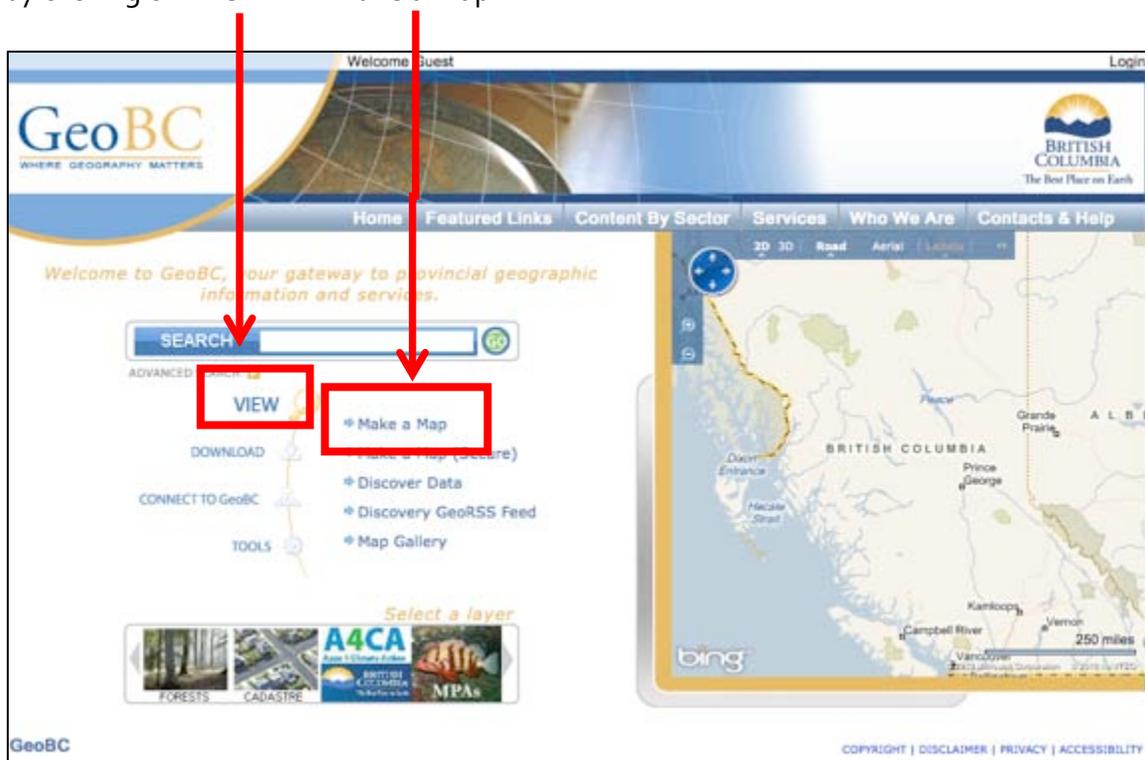
57. Kreye, R. and M. Wei. 1994. A proposed aquifer classification system for groundwater management in British Columbia. B.C. Ministry of Environment, Lands and Parks, Water Management Division, Hydrology Branch, Groundwater Section, Victoria, BC.

Appendix

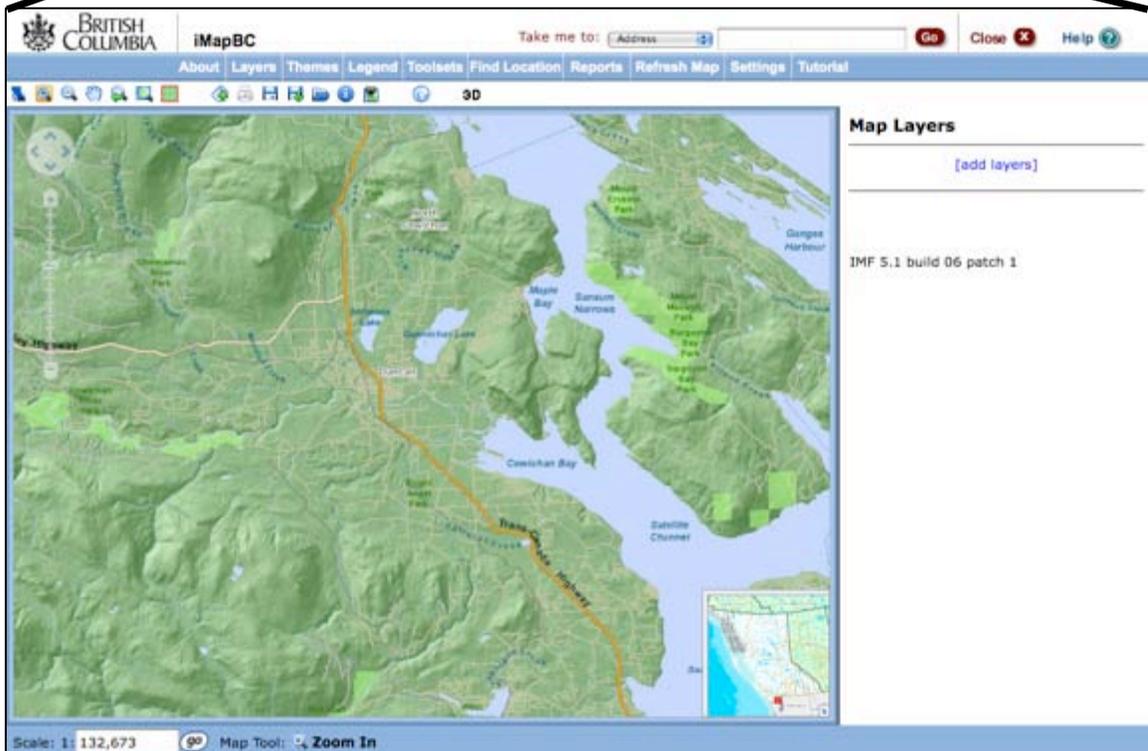
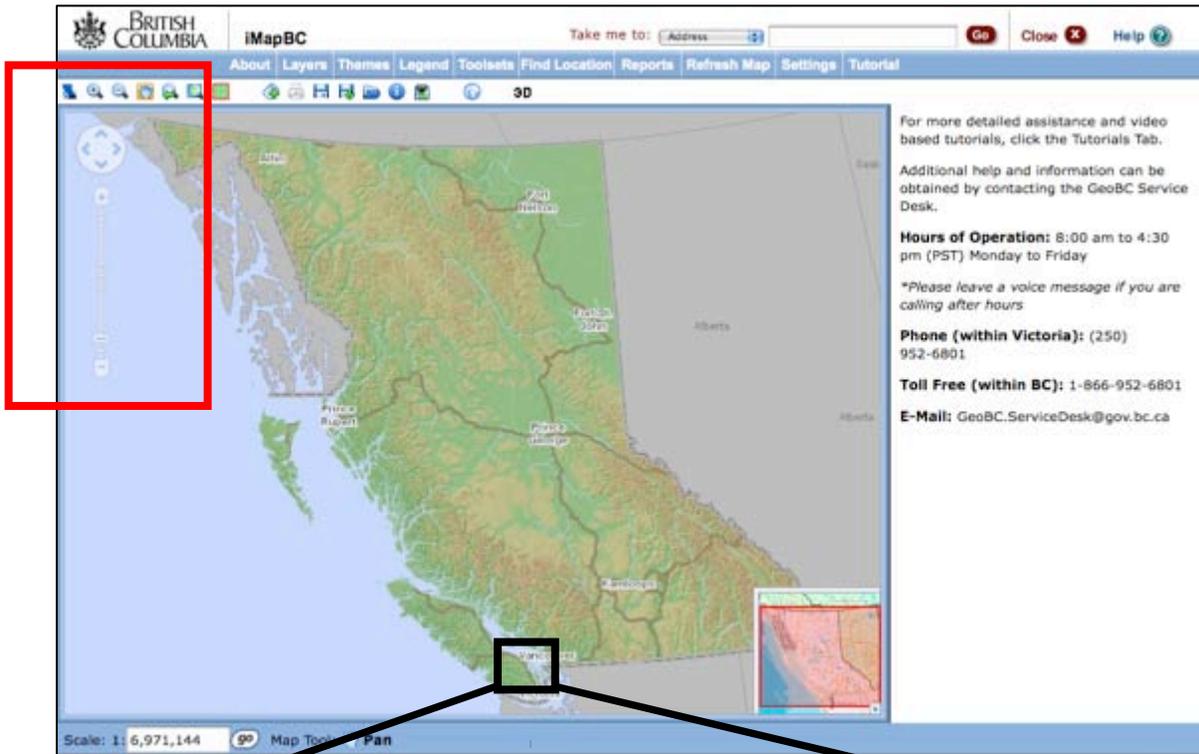
Map creation in iMap BC

Detailed information, tutorials, and help on the iMap system can be accessed from the system itself or at <http://archive.ilmb.gov.bc.ca/imf/HelpSystem/>. The following provides a brief overview of the mapping tool with a focus on finding groundwater related information. Datasets can be downloaded either through the iMap application (see step 3) or through the “download” option on the main GeoBC website (see below).

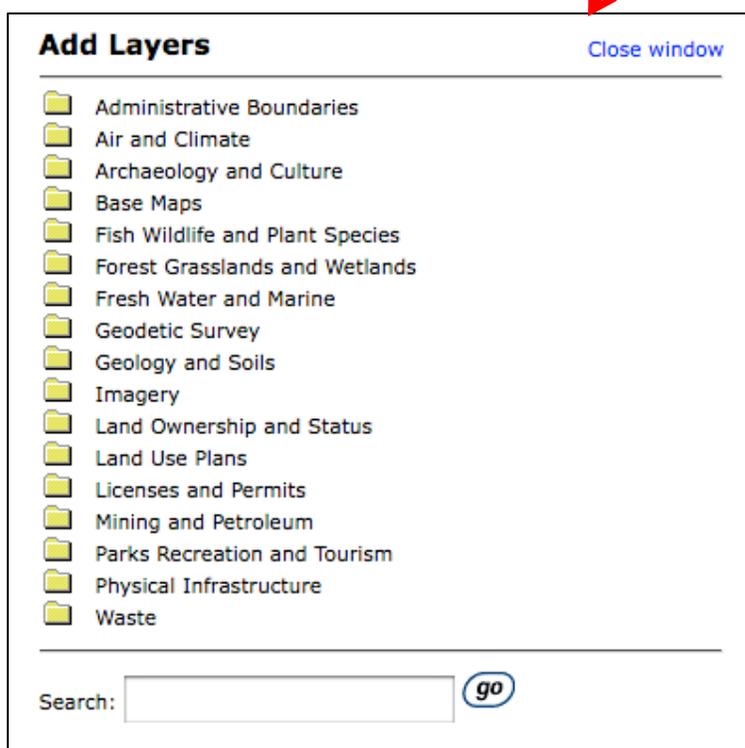
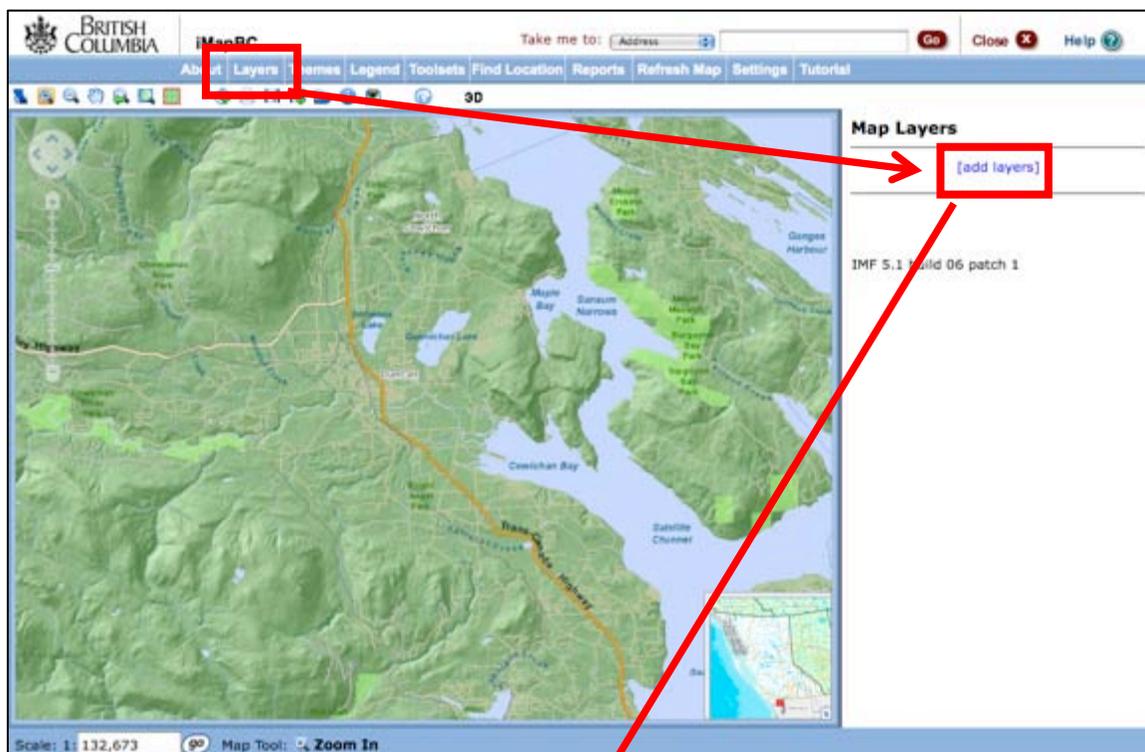
Step 1: Launch the iMap application from the GeoBC website (<http://geobc.gov.bc.ca/>) by clicking on “view” → “make a map”:



Step 2: Navigate to area of interest using zoom and pan tools in the upper left of the screen:



Step 3: Add groundwater-related layers. Click the “Layers” tab in the blue navigation bar at the top of the page, this will show the Map Layers view in the pane to the right of the map. Click on “add layers” to bring up the layers menu:



Groundwater data, including the intrinsic vulnerability maps can be found in the “Fresh Water and Marine” folder:

Add Layers [Close window](#)

-  Click this folder to show all of the folders
-  Fresh Water and Marine
 - Aquifer Chloride 
 - Aquifer GWQ Impact NPS 
 - Aquifer Intrinsic Vulnerability 
 - Aquifer Hardness 
 - Aquifer Nitrate Nitrogen 
 - Aquifer Specific Conductance 
 - Aquifer Total Alkalinity 
 - Aquifer Total Dissolved Solid 
 - BC Hydrometric Stations 
 - Dams 
 - EAUBC Ecological Drainage Units 
 - EAUBC Freshwater Ecoregions 
 - EAUBC Lakes 
 - EAUBC Rivers 
 - Floodplain Mapping in British Columbia 
 - Hydrology - Low Flow Zones 
 - Observation Wells 
 - WDIC - BC Watershed Atlas (50k) 
 - Water Management Service Regions 
 - Well Capture Zones 
 - Wells by Aquifer Material 
 - Wells by Construction Method 
 - Wells by Use 
 - Aquifer Boundary - Outlined
 - Aquifer Demand - Colour Themed
 - Aquifer Productivity - Colour Themed
 - Aquifer Vulnerability - Colour Themed
 - Artesian Wells
 - Drinking Water Extraction Points - BC Health Authority
 - Drinking Water Supply System
 - Flood Protection Appurtenant Works
 - Flood Protection Structural Works
 - Hydrologic Zones
 - Hydrology - 100 Year Peak Flow
 - Hydrology - 10 Year Peak Flow
 - Hydrology - Annual Runoff
 - Hydrometric Watershed Boundary - Outlined
 - Natural Aquifer Data Ground Water Quality Stations
 - Non-TRIM Hydrography
 - Points of Diversion
 - Reservoirs - Permits over Crown Land
 - Water Allocation Restrictions
 - Water Licence Points of Diversion - Drinking Water Sources
 - Water Licence Points of Diversion - Springs
 - Water Licence Points of Diversion - Water Utilities
 - Water Licensed Works Linear Features by Colour
 - Water Licensed Works Linear Features by FCODE
 - Water Licensed Works Point Features
 - Water Quality Objectives Reports Index
 - Water Reserves
 - Water Wells
 - Well Lithologies

Search: 

This menu can be used to plot many datasets related to both surface and groundwater in BC. This includes the aquifers mapped with the BC Aquifer Classification (“Aquifer Boundary”, “Aquifer Demand”, “Aquifer Productivity”, and “Aquifer Vulnerability”), the intrinsic vulnerability, where mapped, with the DRASTIC method (“Aquifer Intrinsic Vulnerability”), water wells, and well capture zones, amongst many other datasets. At the time of writing, intrinsic vulnerability maps with the DRASTIC method were available for areas around Grand Forks, Oliver, Vernon, and Vancouver Island.

The small yellow icon  indicates multiple map layers are available, and clicking on it will expand the category to show individual datasets. For example, the Aquifer Intrinsic Vulnerability Category includes two datasets. The actual intrinsic vulnerability layer, and the report index layer”.



Clicking directly on the individual datasets (in blue) will bring up a window with the metadata for that layer as well as a button to download the dataset if desired for use in a desktop GIS:

The screenshot shows the GeoBC Geographic Data Discovery Service interface. The page title is 'Geographic Data Discovery Service'. The main content area displays metadata for the 'Intrinsic Aquifer Vulnerability' dataset. The metadata is organized into sections: Identification Information, Contact #1, and Contact #2. The Identification Information section includes fields for Title, Description, Data Custodian, Organization, Date of Data, Resource Status, Update Cycle, System, and Product Type. The Contact #1 section includes fields for Contact Name, Contact, Organization, Email Address, and Phone Number. The Contact #2 section includes fields for Contact Name and Contact.

Identification Information	
Title	Intrinsic Aquifer Vulnerability
Description	Provincial wide SDE spatial layer that displays the intrinsic vulnerability of the groundwater.
Data Custodian	BCGOV ENV Water Protection and Sustainability Branch
Organization	BCGOV ENV Water Protection and Sustainability Branch
Date of Data	2010-08-28 (creation)
Resource Status	onGoing
Update Cycle	notPlanned
System	LRDW
Product Type	Feature Type

Contact #1	
Contact Name	Vicki Carmichael
Contact	BCGOV MOE Water Protection and Sustainability Branch
Organization	BCGOV MOE Water Protection and Sustainability Branch
Email Address	Vicki.Carmichael@gov.bc.ca
Phone Number	250 387-9465

Contact #2	
Contact Name	Rick Hardy
Contact	BCGOV ENV Water Protection and Sustainability Branch

For this exercise we will check the boxes to the left, beside the “Aquifer Intrinsic Vulnerability” and the “Well Capture Zones”.



Step 4: Zoom and position map to desired extent. If required, click the  icon to zoom in to the extent of the map layers:

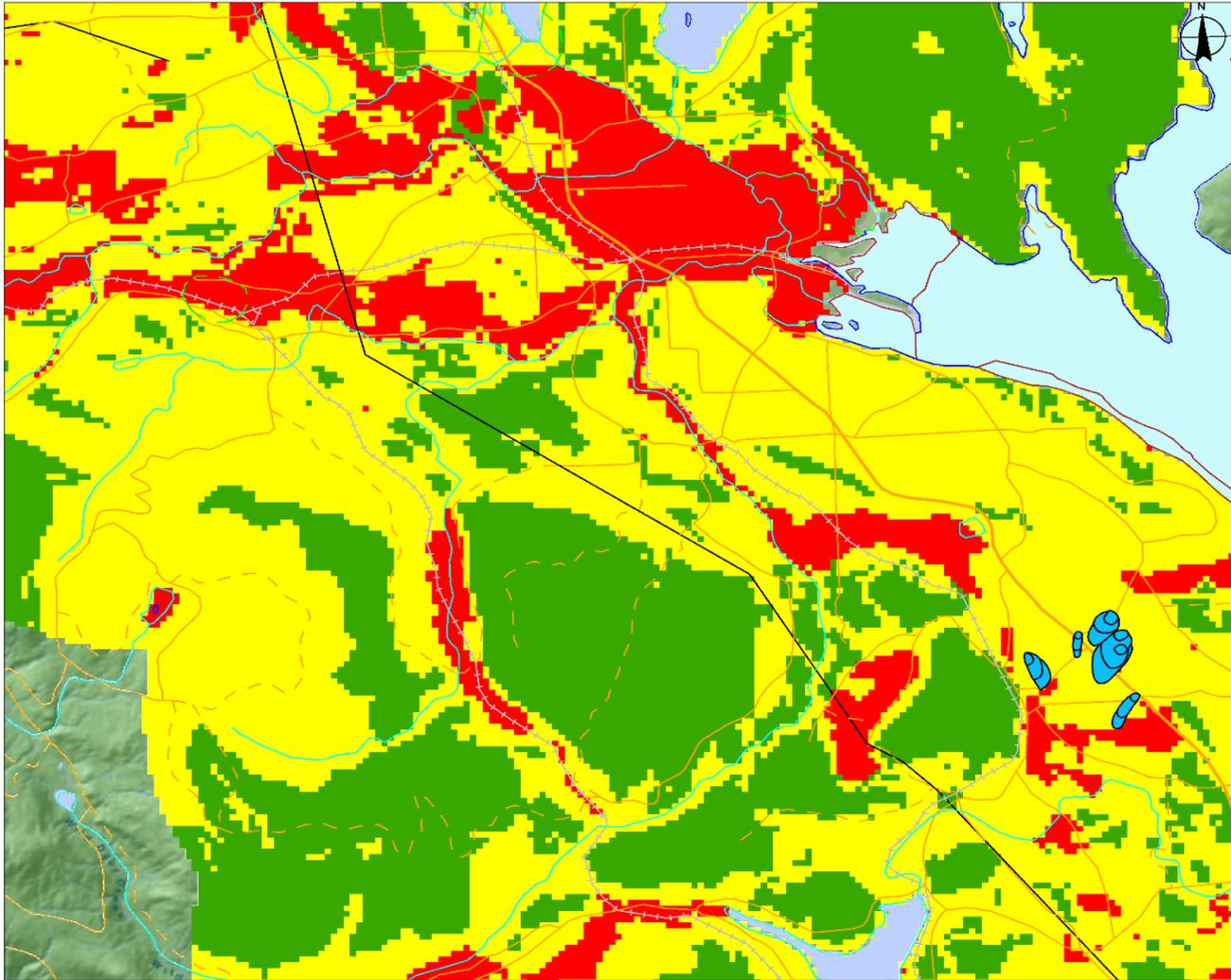
Add base map layers if desired. Click on “add” in the Map Layers Window. In the layers dialogue click “base maps”. Change the order of the map layers by clicking “change order” in the Map Layers window.

Adjust colour scheme if desired by clicking on the  icon.

View legend clicking on the “legend” tab at the top of the map window. Adjust which layers show up in the legend by clicking on “settings” in the Map Legend panel on the right.

Step 5: Print map by clicking on the  icon to bring up the "Create PDF Map" in the panel on the right.

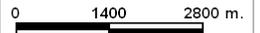
Select map template (Default landscape includes map and legend), scale, and name and click "ok" to produce PDF map:



Example of iMap BC

Legend

- Well Capture Zones - Colour Filled
- High
- Moderate
- Low



Scale: 1:99,743

Copyright/Disclaimer

The material contained in this web site is owned by the Government of British Columbia and protected by copyright law. It may not be reproduced or redistributed without the prior written permission of the Province of British Columbia. To request permission to reproduce all or part of the material on this web site please complete the Copyright Permission Request Form which can be accessed through the Copyright Information Page.

CAUTION: Maps obtained using this site are not designed to assist in navigation. These maps may be generated and may not reflect current conditions. Inland and hazards may exist. **DO NOT USE THESE MAPS FOR NAVIGATIONAL PURPOSES.**

Datum/Projection: NAD83, Albers Equal Area Conic

Key Map of British Columbia



Glossary

Most terms below are from the glossary of BC Ministry of Environment's – "Groundwater Resources of British Columbia" (http://www.env.gov.bc.ca/wsd/plan_protect_sustain/groundwater/gwbc/) and reference 9.

AQUIFER — A saturated geologic unit that yields water in usable quantity to wells and springs. Geologic materials can be consolidated (fractured rock) or unconsolidated (sand and gravel). (See also confined aquifers and unconfined aquifers.)

AQUIFER VULNERABILITY MAPPING — Mapping the vulnerability of an aquifer to contamination from sources. Vulnerability mapping does not consider the type of land use above an aquifer, only the intrinsic vulnerability of the aquifer, typically based on the type, thickness, and extent of geologic materials overlying an aquifer, depth to water, and type of aquifer materials.

CAPTURE ZONE — The land area that contributes groundwater to or recharges a pumping well.

CONTAMINATION — The impairment of natural water quality by chemical or bacterial pollution as a result of human activities. The degree of contamination allowed before an actual hazard to public health is created will depend upon the intended end use, or uses of the water.

CONFINED AQUIFER — Confined is synonymous with artesian. A confined aquifer or an artesian aquifer is an aquifer bounded both below and above by beds of considerably lower permeability than that existing in the aquifer itself. The ground water in a confined aquifer is under pressure that is significantly greater than that existing in the atmosphere.

GROUNDWATER — Water that occurs in the ground. Specifically, water in the zone of saturation, that is under a pressure equal to or greater than atmospheric pressure.

HYDRAULIC CONDUCTIVITY — Hydraulic conductivity is a measure of the ability of a fluid to flow through a porous medium determined by the size and shape of the pore spaces in the medium and their degree of interconnection and also by the viscosity of the fluid. Hydraulic conductivity can be expressed as the volume of fluid that will move in unit time under a unit hydraulic gradient through a unit area measured at right angles to the direction of flow.

HYDRAULIC GRADIENT — The slope of the groundwater level or water table.

INTRINSIC AQUIFER VULNERABILITY — A measure of how vulnerable an aquifer is to contamination based on the natural characteristics of the aquifer and overlying material.

NATURAL ATTENUATION – reduction in mass or concentration of a compound in groundwater over time or distance from the source of constituents of concern due to naturally occurring physical, chemical, and biological processes, such as; biodegradation, dispersion, dilution, adsorption, and volatilization. (from the American Society for Testing and Materials (ASTM))

PERMEABILITY — The property of a porous rock, sediment or soil for transmitting a fluid, it is a test of the relative ease of fluid flow in a porous medium.

RECHARGE AREA— An area where water infiltrates into the ground and joins the zone of saturation. In the recharge area, there is a downward component of hydraulic head.

SATURATED ZONE — The subsurface zone in which all voids are ideally filled with water under pressure greater than atmospheric.

UNCONFINED AQUIFER — An aquifer where its upper boundary is defined by the water table. Where no aquitards (or confining layers) overlie the aquifer is said to be unconfined.

UNSATURATED ZONE — The zone between the land surface and the water table. The pore spaces, interstices, contain water at less than atmospheric pressure, and also air and other gases. Perched ground water bodies (local saturated zones) may exist in the unsaturated zone (also referred to as vadose zone).

WATER TABLE — That surface below which rock, gravel, sand or other material is saturated. It is the top surface of a body of unconfined ground water at which the pressure is atmospheric.



STAFF REPORT TO COMMITTEE

DATE OF REPORT February 26, 2018

MEETING TYPE & DATE Electoral Area Services Committee Meeting of March 7, 2018

FROM: Development Services Division
Land Use Services Department

SUBJECT: Request to Close a Portion of Watson Road

FILE:

PURPOSE/INTRODUCTION

The purpose of this report is to present a request by the organizer of the Cobble Hill Homesteading Fair to close a portion of Watson Road on May 5 and 6, 2018.

RECOMMENDED RESOLUTION

That it be recommended to the Board that the request to close the portion of Watson Road between Heigh Street and Fisher Road on May 5 and 6, 2018, be supported.

BACKGROUND

A “Homesteading Fair” is to take place at Cobble Hill on May 5 and 6, 2018. The event will utilize the Farmer’s Institute Hall and other agricultural buildings on the east side of Watson Road. The organizers would like to close the portion of Watson Road between Heigh Street and Fisher Road to vehicle traffic in order to improve pedestrian safety and to allow use of the road for onsite vendors.

Because Watson Road is the jurisdiction of the Ministry of Transportation and Infrastructure, it is the Ministry that would grant the approval to close the road for the event. However, as the application for the road closure requires confirmation of “municipal approval”, the CVRD has been asked to support the application. As staff are not authorized to grant such approval, a Board resolution supporting the request is required before staff can confirm CVRD approval on the application form.

ANALYSIS

The South Cowichan Community Plan and the Cobble Hill Village Plan support venues and opportunities for community oriented events. The proposed event is well-aligned with Cobble Hill’s rural character and heritage. As there are no private homes or businesses on the segment of Watson Road to be closed, the inconvenience to the public resulting from the temporary closure is expected to be minimal.

Options:

1. That the request to close the portion of Watson Road between Heigh Street and Fisher Road on May 5 and 6, 2018, be supported.
2. That the request to close the portion of Watson Road between Heigh Street and Fisher Road on May 5 and 6, 2018, be denied.

FINANCIAL CONSIDERATIONS

N/A

COMMUNICATION CONSIDERATIONS

N/A

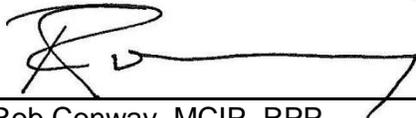
STRATEGIC/BUSINESS PLAN CONSIDERATIONS

N/A

Referred to (upon completion):

- Community Services (*Island Savings Centre, Cowichan Lake Recreation, South Cowichan Recreation, Arts & Culture, Public Safety, Facilities & Transit*)
- Corporate Services (*Finance, Human Resources, Legislative Services, Information Technology*)
- Engineering Services (*Environmental Services, Recycling & Waste Management, Water Management*)
- Planning & Development Services (*Community & Regional Planning, Development Services, Inspection & Enforcement, Economic Development, Parks & Trails*)
- Strategic Services

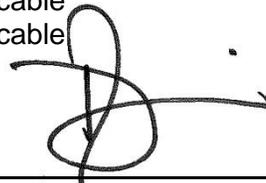
Prepared by:



Rob Conway, MCIP, RPP
Manager

Reviewed by:

Not Applicable
Not Applicable



Ross Blackwell, MCIP, RPP, A.Ag.
General Manager

ATTACHMENTS:

Attachment A – Request Summary to Close a Portion of Watson Road

Homesteading Fair Road Closure Request

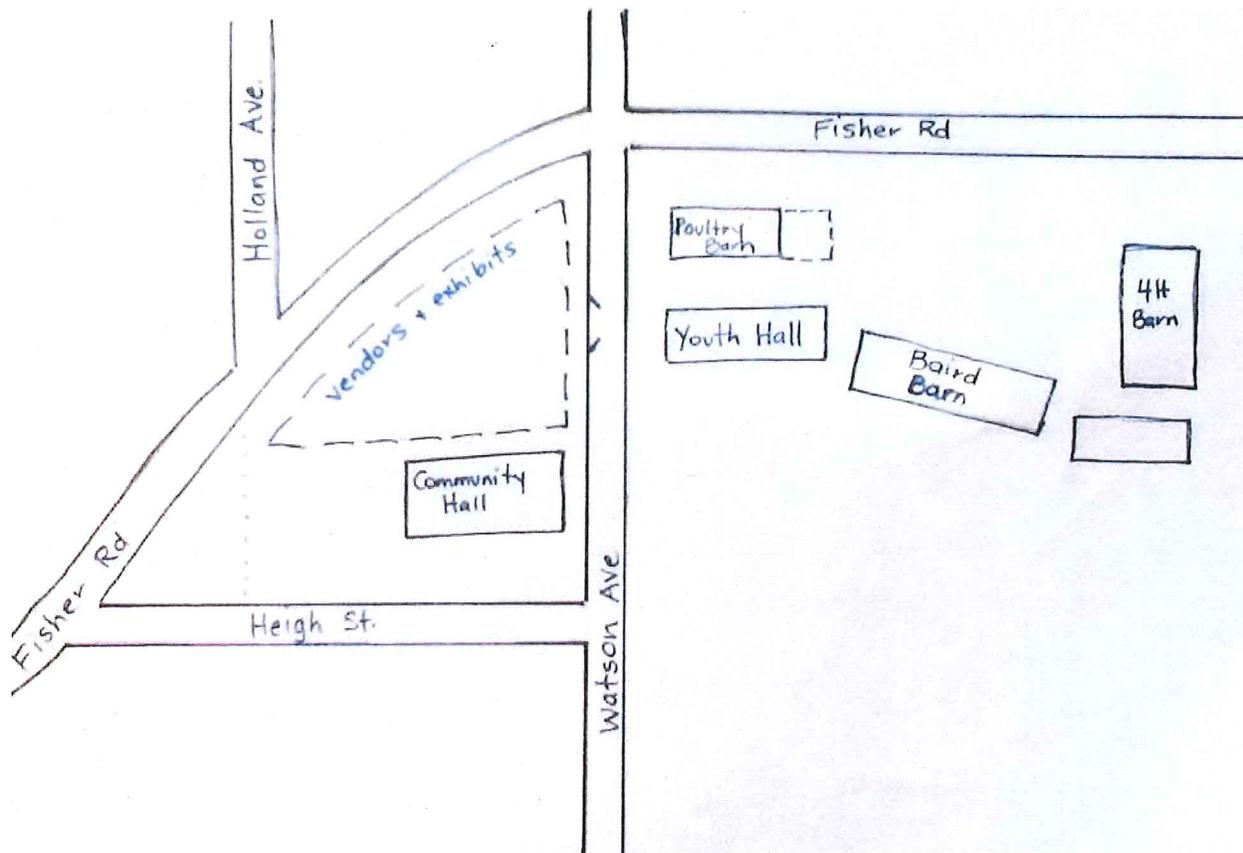
Date: May 5th & 6th, 2018

Closure Request: Watson Ave, between Height St & Fisher

Method of Closure: Barricades

The Homesteading Fair is a not profit, community initiative event that is free and welcomes all to attend. We hope to have a crowd of between 500 – 1000 people for the fair. There will be constant presenters, with 22 booked in total, as well as exhibits & vendors. We will rent barricades to clearly show the road closure on both ends of the avenue.

We hope that you will accept our request for a small portion of road way to be closed and designated for vendors during the Homesteading Fair. This section of the road is easily detoured, and closure will not limit access for anyone, as the only building nearby is the one hosting the event. Besides vendor space, the road closure will increase the safety of the event as participants wander between the venues, including the Community Hall, Youth Hall & 4H Barn.



Event Coordinator: Carolyn Morris

Contact: islandhomesteading@gmail.com



PLEASE ATTACH PLANS OF THE FOLLOWING TO YOUR APPLICATION:

- A detailed route map showing all check points, distances, etc.
- A traffic control plan showing the location of all proposed traffic control sites, and the placement of signs if applicable.
- A spectator control plan for locations where the anticipated crowd may interfere in any way with normal traffic movement.
- A Media relations plan where the event is anticipated to draw media attention.

GENERAL INFORMATION FOR MINISTRY PERMITS FOR SPECIAL EVENTS ON HIGHWAYS:

A Special Events Permit issued by the Ministry of Transportation is only valid for highways under its jurisdiction. Generally, this includes all roads outside city or municipal boundaries, and some of the major highways through cities or municipalities. In addition to applying for and receiving the Ministry's permit, the applicant must follow the permitting requirements of each city or municipality the Event will impact.

A copy of your application and its attachments will be provided to the policing authorities for their review and comment. The plans submitted must provide the Ministry, Municipal authorities and the R.C.M.P. and/or Municipal Police with the confidence that due consideration has been given to the needs of the motoring public, and the safety of the public and Event participants.

For all Events, a fluorescent safety vest is recommended to be worn by all persons near traffic. At minimum, all participants shall be required to wear highly visible clothing. Special Events occurring outside the daylight hours will require special consideration.

Insurance and Indemnification:

The applicant shall:

At his own expense, carry and maintain liability insurance against third party claims arising from Special Events, with inclusive limits of not less than two million dollars for bodily injury, including death and property damage;

Be solely responsible for all damages arising out of the Special Event activities;

Indemnify and save harmless Her Majesty the Queen in right of the Province of British Columbia as represented by the Minister of Transportation together with the employees, agents, and servants of the Minister, from and against all claims and demands, loss or damages in respect thereof. The maximum deductible shall be no greater than \$5,000.

The name of the insured shall include "Her Majesty the Queen in right of the Province of British Columbia as represented by the Minister of Transportation together with the employees, agents, and servants of the Minister."

The applicant shall return to the Ministry, a signed copy of the provided Certificate of Insurance (form H0111), supplied by the insurer showing that the insurance requirements have been met.

BRITISH
COLUMBIAMinistry of Transportation
and InfrastructureAPPLICATION TO HOLD A SPECIAL
EVENT ON HIGHWAYS

The personal information collected on this form relates directly to, and is necessary for the administration and processing of your application.
Should you have any questions regarding the collection or use of this information, please call 604 527-2221.

Please use additional
paper as necessary,
and return the
completed form(s)
to:

Ministry of Transportation and Infrastructure
Suite 310 – 1500 Woolridge Street,
Coquitlam, BC V3K 0B8
Telephone: 604 527-2221
Email: Special.Events@gov.bc.ca
Website: <http://www2.gov.bc.ca/gov/content/transportation/funding-engagement-permits/highway-event-permits>

I/We hereby apply for permission to conduct a Special Event on a Provincial Highway in accordance with the particulars, plan, and specifications submitted herewith. I/We understand that the submission of this form constitutes an application only and the event may not commence until a permit is issued.

Name of Organization / Event Vancouver Island Homesteading Fair	Requesting Agency Cobble Hill Event Society
Address, City 3550 Watson Ave., Cobble Hill	Postal Code V0R 1L2
Contact Person Carolyn Morris	Title Event Organizer
E-Mail Address islandhomesteading@gmail.com	Number of Participants 1000
Phone 778.746.1024	Fax
Cellular	Previous File Number
Contact Person During Event Carolyn Morris	Phone Number During Event 778.746.1024

The above noted organization requests the use of	Highway Name Watson Ave
Between Fisher Rd and Heigh St.	Landmark
Requested dates for event:	May 5th and 6th, 2018
Requested times for event: From:	9 am a.m. / p.m.
Name and phone # of traffic control company	To: 5 pm a.m. / p.m.
Municipal Approval: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Approved by: n/a

Description of Proposed Event: (Describe the scope and nature of the event, including a description of the capabilities and the age range of participants; a summary of how you propose to support the event (ie: traffic control persons/devices), size of crowd/spectators expected to be drawn; detail any animals you propose to have involved and their experience in traffic if relevant; describe the number and how you propose to use escort vehicles etc.; if a fundraising event, describe how you intend to raise the funds.)



STAFF REPORT TO COMMITTEE

DATE OF REPORT February 26, 2018

MEETING TYPE & DATE Electoral Area Services Committee Meeting of March 7, 2018

FROM: Community Planning Division
Land Use Services Department

SUBJECT: CVRD Cannabis Bylaw Amendments

FILE: Zoning General

PURPOSE/INTRODUCTION

The purpose of this report is to present several amendment bylaws for existing Zoning Bylaws in preparation for the anticipated authorization of the cultivation, processing, and retail sale of medical and non-medical cannabis consistent with and in support of federal, provincial and other local government policies and regulations.

RECOMMENDED RESOLUTION

That it be recommended to the Board:

1. That 2nd reading of Zoning Amendment Bylaws Nos. 4118, 4119, 4120, 4121, 4122, 4123, 4124 and 4125, be rescinded.
2. That Zoning Amendment Bylaws Nos. 4118, 4119, 4120, 4121, 4122, 4123, 4124 and 4125 be forwarded to the Board for consideration of 2nd reading, as amended.
3. That Zoning Amendment Bylaws Nos. 4118, 4119, 4120, 4121, 4122, 4123, 4124 and 4125 not be referred to any external agencies.
4. That a public hearing for Zoning Amendment Bylaws Nos. 4118, 4119, 4120, 4121, 4122, 4123, 4124 and 4125 be held in the CVRD Boardroom with the Directors from Electoral Areas A, F, & H delegated to attend on behalf of the Board.

BACKGROUND

In December 2015, the Federal Government made a commitment to “*legalize, regulate, and restrict access*” to cannabis. On April 13, 2017, the Government of Canada introduced draft legislation to legalize, regulate and restrict access to cannabis. This legislation is expected to come into effect by July 2018. Cannabis is currently a controlled substance under the federal *Controlled Drugs and Substances Act (CDSA)*. The proposed federal legislation would:

- allow adults to possess up to 30 grams of legally-produced cannabis;
- allow adults to grow up to four cannabis plants per household;
- set the minimum age for purchase and use at 18 years of age, with the option for provinces to increase the age limit;
- enable a regulatory regime for the licensed production of cannabis, which would be controlled by the federal government;
- enable a regulatory regime for the distribution and sale of cannabis, which would be controlled by the provincial government; and
- establish new provisions to address drug-impaired driving (while also making several change to the overall legal framework to address alcohol impaired driving).

The Electoral Area Services Committee (EASC) received a staff report on March 15, 2017, regarding cannabis-related land use considerations, in anticipation of the above-note approach of the Government of Canada towards legalization and regulation. At that time, EASC provided direction that staff prepare a series of zoning amendment bylaws that would provide future

flexibility in determining where cannabis related uses could be considered by communities through the zoning amendment application process. EASC subsequently received a staff report on June 7, 2017, providing draft zoning amendments which proceeded to 1st and 2nd reading. Since this time, the proposed regulatory framework has been adjusted by the Government of Canada, in consultation with industry stakeholders and other levels of government, which requires corresponding revisions to the previously drafted zoning bylaw amendments.

Additionally, local governments have begun to develop further insight into the likely regulatory approaches of federal and provincial governments and the recommended best practices for jurisdictions to adapt local policies and regulations to cannabis-related land use. The proposed zoning bylaw amendments contain provisions reflective of comparable local governments; consistent with the advice of the Local Government Management Association (LGMA) and the Union of British Columbia Municipalities (UBCM); and, in conjunction with CVRD legal counsel.

ANALYSIS

The Government of Canada continues to indicate that non-medical cannabis will become legal around July 1, 2018. Local governments in BC have been advised by legal counsel that their communities should consider reviewing and updating zoning regulations to pre-empt land use changes that may result from future lawful non-medical cannabis related activities.

The generally recommended approach for local governments is to prepare zoning bylaw amendments that acknowledge the anticipated allowance by the Government of Canada of *cultivation* (ie. growing), *processing* (ie. research, manufacture and distribution), and *retail sale* activities associated with legal cannabis. The proposed Zoning Bylaw amendments are therefore intended to achieve the following:

1. establish zoning bylaw definitions for the types of land use(s) intended to be *regulated*;
2. identify types of land use(s) to be *prohibited* in the Regional District; and
3. identify locations for the types of land use(s) to be *permitted* in the Regional District.

The existing zoning bylaw requirements for medical marijuana, which were established in consideration of the Government of Canada *Marijuana for Medical Purposes Regulation*, are not applicable to the full range of potential cannabis related activities. As it stands, any land use zones that provide for “retail store” as a permitted use would, for example, be allowed to incorporate a cannabis retail outlet without any requirement to obtain a development permit or zoning amendment.

Staff is of the opinion that local communities would be well served to establish regulatory flexibility that would allow for and support future cannabis related land uses in a controlled manner. In short, the CVRD would clarify any distinctions that are required between existing land uses and similar cannabis related land uses, while prohibiting the new land uses until federal and provincial laws have come into full force and effect. For example, cannabis storefront retailing activities would be distinguished from ‘retail store’ while cannabis production (commercial) is distinguished from ‘agriculture’ activities.

The overall intent of the proposed bylaw amendments, at this time, is to preclude the occupation of existing zoned property by cannabis-related operations contrary to the vision of the Electoral Area communities. The proposed zoning bylaws would remain in effect until such time that the new federal and provincial management regimes are in place, at which time the Board could consider further amendments as each Electoral Area decides the level and types of cannabis related activities that are deemed to be appropriate to the community context.

Staff is of the opinion that the subject of this report is a local priority matter that does not require referral to any external agencies or partner municipalities.

The proposed Zoning Bylaws would contain many similar provisions intended to have the same effect – see Appendices A through H. As a result of the overall intent and scope of the amendments, it is recommended that a single public hearing be convened at the Board Room at 175 Ingram Street, Duncan, BC.

It is requested that the Committee review, debate and consider the following Options:

Option 1 [Recommended]:

That it be recommended to the Board:

1. That 2nd reading of Zoning Amendment Bylaws Nos. 4118, 4119, 4120, 4121, 4122, 4123, 4124 and 4125, be rescinded.
2. That Zoning Amendment Bylaws Nos. 4118, 4119, 4120, 4121, 4122, 4123, 4124 and 4125 be forwarded to the Board for consideration of 2nd reading, as amended.
3. That Zoning Amendment Bylaws Nos. 4118, 4119, 4120, 4121, 4122, 4123, 4124 and 4125 not be referred to any external agencies.
4. That a public hearing for Zoning Amendment Bylaws Nos. 4118, 4119, 4120, 4121, 4122, 4123, 4124 and 4125 be held in the CVRD Boardroom with the Directors from Electoral Areas A, F, & H delegated to attend on behalf of the Board.

Option 2:

That it be recommended to the Board:

1. That 2nd reading of Zoning Amendment Bylaws Nos. 4118, 4119, 4120, 4121, 4122, 4123, 4124 and 4125, be rescinded.
2. That Zoning Amendment Bylaws Nos. 4118, 4119, 4120, 4121, 4122, 4123, 4124 and 4125 be forwarded to the Board for consideration of 2nd reading, as amended.
3. That Zoning Amendment Bylaws Nos. 4118, 4119, 4120, 4121, 4122, 4123, 4124 and 4125 (as amended) not be referred to any external agencies.
4. That a separate public hearing for Zoning Amendment Bylaws Nos. 4118, 4119, 4120, 4121, 4122, 4123, 4124 and 4125 be held in each community with the Directors of the affected Electoral Areas plus two others to be named at this time be delegated to attend on behalf of the Board.

Option 3:

That it be recommended to the Board:

1. That 2nd reading of Zoning Amendment Bylaws Nos. 4118, 4119, 4120, 4121, 4122, 4123, 4124 and 4125, be rescinded.
2. That Zoning Amendment Bylaws Nos. 4118, 4119, 4120, 4121, 4122, 4123, 4124 and 4125 be forwarded to the Board for consideration of 2nd reading, as amended.
3. That Zoning Amendment Bylaws Nos. 4118, 4119, 4120, 4121, 4122, 4123, 4124 and 4125 be referred to relevant external agencies, CVRD municipal partners, all local First Nations, and adjacent regional districts.
4. That a public hearing for Zoning Amendment Bylaws Nos. 4118, 4119, 4120, 4121, 4122, 4123, 4124 and 4125 be held in the CVRD Boardroom at least 45 days after referral notices are sent out for all these bylaws with the Directors for Electoral Areas A, F, & H delegated to attend on behalf of the Board.

FINANCIAL CONSIDERATIONS

N/A.

COMMUNICATION CONSIDERATIONS

Follow existing Corporate Policy and protocols.

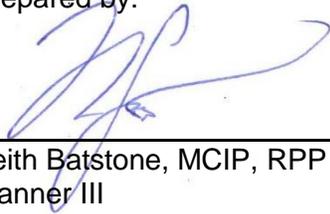
STRATEGIC/BUSINESS PLAN CONSIDERATIONS

The proposed zoning amendment bylaw are consistent with the existing Official Community Plans which do not contemplate cannabis-related activities but support community development.

Referred to (upon completion):

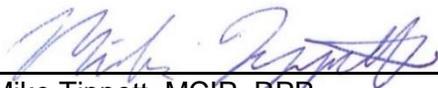
- Community Services (*Island Savings Centre, Cowichan Lake Recreation, South Cowichan Recreation, Arts & Culture, Public Safety, Facilities & Transit*)
- Corporate Services (*Finance, Human Resources, Legislative Services, Information Technology, Procurement*)
- Engineering Services (*Environmental Services, Recycling & Waste Management, Water Management*)
- Land Use Services (*Community Planning, Development Services, Inspection & Enforcement, Economic Development, Parks & Trails*)
- Strategic Services

Prepared by:

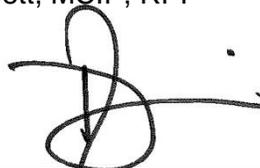


Keith Batstone, MCIP, RPP
Planner III

Reviewed by:



Mike Tippett, MCIP, RPP
Manager



Ross Blackwell, MCIP, RPP, A.Ag.
General Manager

ATTACHMENTS:

- Attachment A – Bylaw 4118 – Areas A&C: South Cowichan Zoning
- Attachment B – Bylaw 4119 – Area B: Shawnigan Lake Zoning
- Attachment C – Bylaw 4120 – Area D: Cowichan Bay (Uplands) Zoning
- Attachment D – Bylaw 4121 – Area E: Cowichan Station/Sahtlam/Glenora Zoning
- Attachment E – Bylaw 4122 – Area F: Cowichan Lake South/Skutz Falls Zoning
- Attachment F – Bylaw 4123 – Area G: Saltair/Gulf Islands Zoning
- Attachment G – Bylaw 4124 – Area H: North Oyster/Diamond Zoning
- Attachment H – Bylaw 4125 – Area I: Youbou/Meade Creek Zoning



COWICHAN VALLEY REGIONAL DISTRICT

BYLAW No. 4118

A Bylaw for the Purpose of Amending South Cowichan Zoning Bylaw No. 3520 Applicable to Electoral Area A – Mill Bay/Malahat and C – Cobble Hill

WHEREAS the *Local Government Act*, hereafter referred to as the "Act", empowers the Regional Board to adopt and amend zoning bylaws;

AND WHEREAS the Regional District has adopted a zoning bylaw for Electoral Areas A and C, that being South Cowichan Zoning Bylaw No. 3520;

AND WHEREAS the Regional Board voted on and received the required majority vote of those present and eligible to vote at the meeting at which the vote is taken, as required by the *Act*;

AND WHEREAS after the close of the public hearing and with due regard to the reports received, the Regional Board considers it advisable to amend Zoning Bylaw No. 3520;

NOW THEREFORE the Board of Directors of the Cowichan Valley Regional District, in open meeting assembled, enacts as follows:

1. CITATION

This bylaw shall be cited for all purposes as "**Cowichan Valley Regional District Bylaw No. 4118 – South Cowichan Zoning Amendment Bylaw (Cannabis Regulations), 2018**".

2. AMENDMENTS

South Cowichan Zoning Bylaw No. 3520 is hereby amended in the following manner:

- a) Section 3.1 is amended by deleting the definition of agriculture and replacing it with the following:

"Agriculture" means growing, rearing, producing or harvesting agricultural crops or livestock and includes the processing on a parcel of the primary agricultural products harvested, reared or produced on that parcel and the use and storage of associated farm machinery, implements and agricultural supplies, but excludes cannabis production (commercial – non-medical) and cannabis production (personal – home cultivation);

- b) Section 3.1 is further amended by adding the following definitions in alphabetical order:

"Cannabis" means cannabis as defined in the *Controlled Drugs and Substances Act* or any subsequent legislation or regulations which may be enacted in substitution and includes any products containing cannabis derivatives intended for human consumption;

“Cannabis-related business” means the carrying on of activity where:

- a) the primary purpose of the business is to advocate or promote the use of cannabis for medical purposes;
- b) Cannabis is sold or otherwise provided to persons for medical purposes;
- c) Cannabis is stored for the purpose of sale or distribution to persons for medical purposes.

“Cannabis consumption lounge” means the use of a building or structure for the service to customers of cannabis products, medical marijuana, equipment, paraphernalia, and related therapeutic services which are primarily intended to be consumed, used or otherwise provided on-site and includes the accessory sale of goods, wares, personal merchandise, articles, or things incidental to the provision of such service;

“Cannabis production (commercial – medical)” means the carrying on of any of the following activities under the Access to Cannabis for Medical Purposes Regulations:

- a) the cultivation, growth, harvesting, and processing of plants or parts of plants of the genus cannabis;
- b) the processing of raw materials, testing, destruction, alteration, manufacturing, assembling, packaging, and labelling of plants or parts of plants of the genus cannabis;
- c) the storage and transshipping of materials, goods or products;
- d) the storage, distribution and sale of materials, goods and products derived from plants or parts of plants of the genus cannabis, to licenced retailers or individual customers.

“Cannabis production (commercial – non-medical)” means the carrying on of any of the following activities under the *Cannabis Act*, but excludes cannabis production (commercial - medical) and cannabis production (personal - home cultivation):

- a) the cultivation, growth, harvesting, and processing of plants or parts of plants of the genus cannabis;
- b) the processing of raw materials, testing, destruction, alteration, manufacturing, assembling, packaging, and labelling of plants or parts of plants of the genus cannabis;
- c) the storage and transshipping of materials, goods or products;
- d) the storage, distribution and sale of materials, goods and products derived from plants or parts of plants of the genus cannabis, to licenced retailers or individual customers.

“Cannabis production (personal – home cultivation)” means the development of no more than 10% of the gross floor area of a residential dwelling or accessory structure and the carrying on of any of the following activities under the Access to Cannabis for Medical Purposes Regulations or the *Cannabis Act*:

- a) the cultivation, growth, harvesting, and processing of plants or parts of plants of the genus cannabis by an individual for personal use or consumption;
- b) the processing of raw materials, testing, destruction, alteration, manufacturing, assembling, packaging, and labelling of plants or parts of plants of the genus cannabis by an individual for personal use or consumption;
- c) the storage and transshipping of materials, goods or products;
- d) the storage of materials, goods and products derived from plants or parts of plants of the genus cannabis by an individual for personal use or consumption.

“Cannabis storefront retail” means the use of lands, buildings or structures for the marketing and sale of cannabis to the final consumer, who attends the premises, provided that the consumer product is stored and sold from within a building;

“Medical marijuana” means a substance used for medical purposes authorized by a licence issued under the Access to Cannabis for Medical Purposes Regulations or any subsequent legislation or regulations which may be enacted in substitution;

- c) The following prohibited uses are added to Section 4.2.2:
 - k. cannabis-related business;
 - l. cannabis consumption lounge;
 - m. cannabis production (commercial - medical);
 - n. cannabis production (commercial - non-medical);
 - o. cannabis production (personal - home cultivation);
 - p. cannabis storefront retail;
- d) Section 4.23 is deleted and replaced by the following:

4.23 Commercial Cannabis Regulations

Where cannabis production (commercial – medical) or cannabis production (commercial – non-medical) is permitted in a zone, the use is subject to the following regulations:

- a. the cannabis producer must be in possession of a valid license from the Government of Canada and be consistently operating in full conformity with all of the conditions of that license;
 - b. all buildings, structures or greenhouses used for that purpose shall be located not less than 30 metres from all parcel lines;
 - c. all parcels used for that purpose shall be located not less than 300 metres from a park, school, daycare, residential or rural residential zone, park zone, institutional zone, comprehensive zone or mixed use zone.
- e) Section 13.2.1 (I-1A Zone) is amended by adding the following as permitted uses, and relabeling all alphabetically subsequent permitted uses as appropriate:
 - e. cannabis-related business;
 - f. cannabis production (commercial - medical);
 - g. cannabis production (commercial – non-medical);
 - h. cannabis storefront retailing;
 - f) Section 13.3.1 (I-1B Zone) is amended by adding the following as permitted uses, and relabeling all alphabetically subsequent permitted uses as appropriate:
 - e. cannabis-related business;
 - f. cannabis production (commercial - medical);
 - g. cannabis production (commercial – non-medical);
 - h. cannabis storefront retailing;

3. **FORCE AND EFFECT**

This bylaw shall take effect upon its adoption by the Regional Board.

READ A FIRST TIME this _____ day of _____, 2018.

READ A SECOND TIME this _____ day of _____, 2018.

READ A THIRD TIME this _____ day of _____, 2018.

ADOPTED this _____ day of _____, 2018.

Chairperson

Corporate Secretary



COWICHAN VALLEY REGIONAL DISTRICT

BYLAW No. 4119

A Bylaw for the Purpose of Amending Electoral Area B Zoning Bylaw No. 985 Applicable to Electoral Area B – Shawnigan Lake

WHEREAS the *Local Government Act*, hereafter referred to as the "*Act*", empowers the Regional Board to adopt and amend zoning bylaws;

AND WHEREAS the Regional District has adopted a zoning bylaw for Electoral Area B, that being Electoral Area B Zoning Bylaw No. 985;

AND WHEREAS the Regional Board voted on and received the required majority vote of those present and eligible to vote at the meeting at which the vote is taken, as required by the *Act*;

AND WHEREAS after the close of the public hearing and with due regard to the reports received, the Regional Board considers it advisable to amend Electoral Area B Zoning Bylaw No. 985;

NOW THEREFORE the Board of Directors of the Cowichan Valley Regional District, in open meeting assembled, enacts as follows:

1. CITATION

This bylaw shall be cited for all purposes as "**Cowichan Valley Regional District Bylaw No. 4119 – Electoral Area B Zoning Amendment Bylaw (Cannabis Regulations), 2018**".

2. AMENDMENTS

Electoral Area B Zoning Bylaw No. 985 is hereby amended in the following manner:

- a) Section 3.1 is amended by deleting the definition of agriculture and replacing it with the following:

"Agriculture" means growing, rearing, producing or harvesting agricultural crops or livestock and includes the processing on a parcel of the primary agricultural products harvested, reared or produced on that parcel and the use and storage of associated farm machinery, implements and agricultural supplies, but excludes cannabis production (commercial – non-medical) and cannabis production (personal – home cultivation);

- b) Section 3.1 is further amended by adding the following definitions in alphabetical order:

"Cannabis" means cannabis as defined in the *Controlled Drugs and Substances Act* or any subsequent legislation or regulations which may be enacted in substitution and includes any products containing cannabis derivatives intended for human consumption;

“Cannabis-related business” means the carrying on of activity where:

- a) the primary purpose of the business is to advocate or promote the use of cannabis for medical purposes;
- b) Cannabis is sold or otherwise provided to persons for medical purposes;
- c) Cannabis is stored for the purpose of sale or distribution to persons for medical purposes.

“Cannabis consumption lounge” means the use of a building or structure for the service to customers of cannabis products, medical marijuana, equipment, paraphernalia, and related therapeutic services which are primarily intended to be consumed, used or otherwise provided on-site and includes the accessory sale of goods, wares, personal merchandise, articles, or things incidental to the provision of such service;

“Cannabis production (commercial – medical)” means the carrying on of any of the following activities under the Access to Cannabis for Medical Purposes Regulations:

- a) the cultivation, growth, harvesting, and processing of plants or parts of plants of the genus cannabis;
- b) the processing of raw materials, testing, destruction, alteration, manufacturing, assembling, packaging, and labelling of plants or parts of plants of the genus cannabis;
- c) the storage and transshipping of materials, goods or products;
- d) the storage, distribution and sale of materials, goods and products derived from plants or parts of plants of the genus cannabis, to licenced retailers or individual customers.

“Cannabis production (commercial – non-medical)” means the carrying on of any of the following activities under the *Cannabis Act*, but excludes cannabis production (commercial - medical) and cannabis production (personal - home cultivation):

- a) the cultivation, growth, harvesting, and processing of plants or parts of plants of the genus cannabis;
- b) the processing of raw materials, testing, destruction, alteration, manufacturing, assembling, packaging, and labelling of plants or parts of plants of the genus cannabis;
- c) the storage and transshipping of materials, goods or products;
- d) the storage, distribution and sale of materials, goods and products derived from plants or parts of plants of the genus cannabis, to licenced retailers or individual customers.

“Cannabis production (personal – home cultivation)” means the development of no more than 10% of the gross floor area of a residential dwelling or accessory structure and the carrying on of any of the following activities under the Access to Cannabis for Medical Purposes Regulations or the *Cannabis Act*:

- a) the cultivation, growth, harvesting, and processing of plants or parts of plants of the genus cannabis by an individual for personal use or consumption;
- b) the processing of raw materials, testing, destruction, alteration, manufacturing, assembling, packaging, and labelling of plants or parts of plants of the genus cannabis by an individual for personal use or consumption;
- c) the storage and transshipping of materials, goods or products;
- d) the storage of materials, goods and products derived from plants or parts of plants of the genus cannabis by an individual for personal use or consumption.

“Cannabis storefront retail” means the use of lands, buildings or structures for the marketing and sale of cannabis to the final consumer, who attends the premises, provided that the consumer product is stored and sold from within a building;

“Medical marijuana” means a substance used for medical purposes authorized by a licence issued under the Access to Cannabis for Medical Purposes Regulations or any subsequent legislation or regulations which may be enacted in substitution;

- c) The following is added after Section 4.6:

The following uses are prohibited in all zones under this Bylaw, unless expressly permitted elsewhere in this Bylaw:

- a) cannabis-related business;
- b) cannabis consumption lounge;
- c) cannabis production (commercial – medical);
- d) cannabis production (commercial – non-medical);
- e) cannabis production (personal - home cultivation);
- f) cannabis storefront retail.

- d) Section 5.21 is deleted and replaced by the following:

5.21 Commercial Cannabis Regulations

Where cannabis production (commercial – medical) or cannabis production (commercial – non-medical) is permitted in a zone, the use is subject to the following regulations:

- a. the cannabis producer must be in possession of a valid license from the Government of Canada and be consistently operating in full conformity with all of the conditions of that license;
 - b. all buildings, structures or greenhouses used for that purpose shall be located not less than 30 metres from all parcel lines;
 - c. all parcels used for that purpose shall be located not less than 300 metres from a park, school, daycare, residential or rural residential zone, park zone, institutional zone, comprehensive zone or mixed use zone.
- e) Section 11.2 (I-1A Zone) is amended by adding the following as permitted uses, and relabeling all alphabetically subsequent permitted uses as appropriate:
- 1) cannabis-related business;
 - 2) cannabis production (commercial - medical);
 - 3) cannabis production (commercial – non-medical);
 - 4) cannabis storefront retailing.
- f) Section 11.4 (I-1C Zone) is amended by adding the following as permitted uses, and relabeling all alphabetically subsequent permitted uses as appropriate:
- 1) cannabis-related business;
 - 2) cannabis production (commercial - medical);
 - 3) cannabis production (commercial – non-medical);
 - 4) cannabis storefront retailing.
- g) Section 11.8 (I-5 Zone) is amended by adding the following as permitted uses, and relabeling all alphabetically subsequent permitted uses as appropriate:

- 1) cannabis-related business;
- 2) cannabis production (commercial - medical);
- 3) cannabis production (commercial – non-medical);
- 4) cannabis storefront retailing.

3. **FORCE AND EFFECT**

This bylaw shall take effect upon its adoption by the Regional Board.

READ A FIRST TIME this _____ day of _____, 2018.

READ A SECOND TIME this _____ day of _____, 2018.

READ A THIRD TIME this _____ day of _____, 2018.

ADOPTED this _____ day of _____, 2018.

Chairperson

Corporate Secretary



COWICHAN VALLEY REGIONAL DISTRICT

BYLAW No. 4120

A Bylaw for the Purpose of Amending Electoral Area D Upland Zoning Bylaw No. 3705 Applicable to Electoral Area D – Cowichan Bay

WHEREAS the *Local Government Act*, hereafter referred to as the "Act", empowers the Regional Board to adopt and amend zoning bylaws;

AND WHEREAS the Regional District has adopted a zoning bylaw for non-marine areas of Electoral Area D, that being Electoral Area D Zoning Bylaw No. 3705;

AND WHEREAS the Regional Board voted on and received the required majority vote of those present and eligible to vote at the meeting at which the vote is taken, as required by the *Act*;

AND WHEREAS after the close of the public hearing and with due regard to the reports received, the Regional Board considers it advisable to amend Zoning Bylaw No. 3705;

NOW THEREFORE the Board of Directors of the Cowichan Valley Regional District, in open meeting assembled, enacts as follows:

1. CITATION

This bylaw shall be cited for all purposes as "**Cowichan Valley Regional District Bylaw No. 4120 – Electoral Area D Zoning Amendment Bylaw (Cannabis Regulations), 2018**".

2. AMENDMENTS

Electoral Area D Zoning Bylaw No. 3705 is hereby amended in the following manner:

- a) Section 1.4 is amended by deleting the definition of agriculture and replacing it with the following:

"Agriculture" means growing, rearing, producing or harvesting agricultural crops or livestock and includes the processing on a parcel of the primary agricultural products harvested, reared or produced on that parcel and the use and storage of associated farm machinery, implements and agricultural supplies, but excludes cannabis production (commercial – non-medical) and cannabis production (personal – home cultivation);

- b) Section 1.4 is further amended by adding the following definitions in alphabetical order:

"Cannabis" means cannabis as defined in the *Controlled Drugs and Substances Act* or any subsequent legislation or regulations which may be enacted in substitution and includes any products containing cannabis derivatives intended for human consumption;

“Cannabis-related business” means the carrying on of activity where:

- a) the primary purpose of the business is to advocate or promote the use of cannabis for medical purposes;
- b) Cannabis is sold or otherwise provided to persons for medical purposes;
- c) Cannabis is stored for the purpose of sale or distribution to persons for medical purposes.

“Cannabis consumption lounge” means the use of a building or structure for the service to customers of cannabis products, medical marijuana, equipment, paraphernalia, and related therapeutic services which are primarily intended to be consumed, used or otherwise provided on-site and includes the accessory sale of goods, wares, personal merchandise, articles, or things incidental to the provision of such service;

“Cannabis production (commercial – medical)” means the carrying on of any of the following activities under the Access to Cannabis for Medical Purposes Regulations:

- a) the cultivation, growth, harvesting, and processing of plants or parts of plants of the genus cannabis;
- b) the processing of raw materials, testing, destruction, alteration, manufacturing, assembling, packaging, and labelling of plants or parts of plants of the genus cannabis;
- c) the storage and transshipping of materials, goods or products;
- d) the storage, distribution and sale of materials, goods and products derived from plants or parts of plants of the genus cannabis, to licenced retailers or individual customers.

“Cannabis production (commercial – non-medical)” means the carrying on of any of the following activities under the *Cannabis Act*, but excludes cannabis production (commercial - medical) and cannabis production (personal - home cultivation):

- a) the cultivation, growth, harvesting, and processing of plants or parts of plants of the genus cannabis;
- b) the processing of raw materials, testing, destruction, alteration, manufacturing, assembling, packaging, and labelling of plants or parts of plants of the genus cannabis;
- c) the storage and transshipping of materials, goods or products;
- d) the storage, distribution and sale of materials, goods and products derived from plants or parts of plants of the genus cannabis, to licenced retailers or individual customers.

“Cannabis production (personal – home cultivation)” means the development of no more than 10% of the gross floor area of a residential dwelling or accessory structure and the carrying on of any of the following activities under the Access to Cannabis for Medical Purposes Regulations or the *Cannabis Act*:

- a) the cultivation, growth, harvesting, and processing of plants or parts of plants of the genus cannabis by an individual for personal use or consumption;
- b) the processing of raw materials, testing, destruction, alteration, manufacturing, assembling, packaging, and labelling of plants or parts of plants of the genus cannabis by an individual for personal use or consumption;
- c) the storage and transshipping of materials, goods or products;
- d) the storage of materials, goods and products derived from plants or parts of plants of the genus cannabis by an individual for personal use or consumption;

“Cannabis storefront retail” means the use of lands, buildings or structures for the marketing and sale of cannabis to the final consumer, who attends the premises, provided that the consumer product is stored and sold from within a building;

“Medical marijuana” means a substance used for medical purposes authorized by a licence issued under the Access to Cannabis for Medical Purposes Regulations or any subsequent legislation or regulations which may be enacted in substitution;

- c) The following prohibited uses are added to Section 2.1.2 in alphabetical order, relabeling as required all other uses :
 - b) cannabis-related business;
 - c) cannabis consumption lounge;
 - d) cannabis production (commercial - medical);
 - e) cannabis production (commercial - non-medical);
 - f) cannabis production (personal - home cultivation);
 - g) cannabis storefront retail.
- d) Section 2.1.20 is deleted and replaced by the following:

20. Commercial Cannabis Regulations

Where cannabis production (commercial – medical) or cannabis production (commercial – non-medical) is permitted in a zone, the use is subject to the following regulations:

- a. the cannabis producer must be in possession of a valid license from the Government of Canada and be consistently operating in full conformity with all of the conditions of that license;
 - b. all buildings, structures or greenhouses used for that purpose shall be located not less than 30 metres from all parcel lines;
 - c. all parcels used for that purpose shall be located not less than 300 metres from a park, school, daycare, residential or rural residential zone, park zone, institutional zone, comprehensive zone or mixed use zone.
- e) Section 4.5 (A7 Zone) is amended by adding the following as permitted uses, and relabeling all alphabetically subsequent permitted uses as appropriate:
- b) cannabis-related business;
 - c) cannabis production (commercial - medical);
 - d) cannabis production (commercial – non-medical);
 - e) cannabis storefront retailing.

3. FORCE AND EFFECT

This bylaw shall take effect upon its adoption by the Regional Board.

READ A FIRST TIME this _____ day of _____, 2018.

READ A SECOND TIME this _____ day of _____, 2018.

READ A THIRD TIME this _____ day of _____, 2018.

ADOPTED this _____ day of _____, 2018.

Chairperson

Corporate Secretary



COWICHAN VALLEY REGIONAL DISTRICT

BYLAW No. 4121

A Bylaw for the Purpose of Amending Electoral Area E Zoning Bylaw No. 1840 Applicable to Electoral Area E – Cowichan Station/Sahtlam/Glenora

WHEREAS the *Local Government Act*, hereafter referred to as the "Act", empowers the Regional Board to adopt and amend zoning bylaws;

AND WHEREAS the Regional District has adopted a zoning bylaw for Electoral Area E, that being Electoral Area E Zoning Bylaw No. 1840;

AND WHEREAS the Regional Board voted on and received the required majority vote of those present and eligible to vote at the meeting at which the vote is taken, as required by the *Act*;

AND WHEREAS after the close of the public hearing and with due regard to the reports received, the Regional Board considers it advisable to amend Zoning Bylaw No. 1840;

NOW THEREFORE the Board of Directors of the Cowichan Valley Regional District, in open meeting assembled, enacts as follows:

1. CITATION

This bylaw shall be cited for all purposes as "**Cowichan Valley Regional District Bylaw No. 4121 – Electoral Area E Zoning Amendment Bylaw (Cannabis Regulations), 2018**".

2. AMENDMENTS

Electoral Area E Zoning Bylaw No. 1840 is hereby amended in the following manner:

- a) Section 3.1 is amended by deleting the definition of agriculture and replacing it with the following:

"Agriculture" means growing, rearing, producing or harvesting agricultural crops or livestock and includes the processing on a parcel of the primary agricultural products harvested, reared or produced on that parcel and the use and storage of associated farm machinery, implements and agricultural supplies, but excludes cannabis production (commercial – non-medical) and cannabis production (personal – home cultivation);

- b) Section 3.1 is further amended by adding the following definitions in alphabetical order:

"Cannabis" means cannabis as defined in the *Controlled Drugs and Substances Act* or any subsequent legislation or regulations which may be enacted in substitution and includes any products containing cannabis derivatives intended for human consumption;

.../2

“Cannabis-related business” means the carrying on of activity where:

- a) the primary purpose of the business is to advocate or promote the use of cannabis for medical purposes;
- b) Cannabis is sold or otherwise provided to persons for medical purposes;
- c) Cannabis is stored for the purpose of sale or distribution to persons for medical purposes.

“Cannabis consumption lounge” means the use of a building or structure for the service to customers of cannabis products, medical marijuana, equipment, paraphernalia, and related therapeutic services which are primarily intended to be consumed, used or otherwise provided on-site and includes the accessory sale of goods, wares, personal merchandise, articles, or things incidental to the provision of such service;

“Cannabis production (commercial – medical)” means the carrying on of any of the following activities under the Access to Cannabis for Medical Purposes Regulations:

- a) the cultivation, growth, harvesting, and processing of plants or parts of plants of the genus cannabis;
- b) the processing of raw materials, testing, destruction, alteration, manufacturing, assembling, packaging, and labelling of plants or parts of plants of the genus cannabis;
- c) the storage and transshipping of materials, goods or products;
- d) the storage, distribution and sale of materials, goods and products derived from plants or parts of plants of the genus cannabis, to licenced retailers or individual customers.

“Cannabis production (commercial – non-medical)” means the carrying on of any of the following activities under the *Cannabis Act*, but excludes cannabis production (commercial - medical) and cannabis production (personal - home cultivation):

- a) the cultivation, growth, harvesting, and processing of plants or parts of plants of the genus cannabis;
- b) the processing of raw materials, testing, destruction, alteration, manufacturing, assembling, packaging, and labelling of plants or parts of plants of the genus cannabis;
- c) the storage and transshipping of materials, goods or products;
- d) the storage, distribution and sale of materials, goods and products derived from plants or parts of plants of the genus cannabis, to licenced retailers or individual customers.

“Cannabis production (personal – home cultivation)” means the development of no more than 10% of the gross floor area of a residential dwelling or accessory structure and the carrying on of any of the following activities under the Access to Cannabis for Medical Purposes Regulations or the *Cannabis Act*:

- a) the cultivation, growth, harvesting, and processing of plants or parts of plants of the genus cannabis by an individual for personal use or consumption;
- b) the processing of raw materials, testing, destruction, alteration, manufacturing, assembling, packaging, and labelling of plants or parts of plants of the genus cannabis by an individual for personal use or consumption;
- c) the storage and transshipping of materials, goods or products;
- d) the storage of materials, goods and products derived from plants or parts of plants of the genus cannabis by an individual for personal use or consumption.

“Cannabis storefront retail” means the use of lands, buildings or structures for the marketing and sale of cannabis to the final consumer, who attends the premises, provided that the consumer product is stored and sold from within a building;

.../2

“**Medical marijuana**” means a substance used for medical purposes authorized by a licence issued under the Access to Cannabis for Medical Purposes Regulations or any subsequent legislation or regulations which may be enacted in substitution;

- c) Section 4.9 is amended by adding the following sentence at the end:

For additional clarity, the following uses are amongst those explicitly prohibited:

- a. cannabis-related business;
 - b. cannabis consumption lounge;
 - c. cannabis production (commercial - medical);
 - d. cannabis production (commercial - non-medical);
 - e. cannabis production (personal - home cultivation);
 - f. cannabis storefront retail.
- d) Section 5.31 is deleted and replaced by the following:

5.31 Commercial Cannabis Regulations

Where cannabis production (commercial – medical) or cannabis production (commercial – non-medical) is permitted in a zone, the use is subject to the following regulations:

- a. the cannabis producer must be in possession of a valid license from the Government of Canada and be consistently operating in full conformity with all of the conditions of that license;
 - b. all buildings, structures or greenhouses used for that purpose shall be located not less than 30 metres from all parcel lines;
 - c. all parcels used for that purpose shall be located not less than 300 metres from a park, school, daycare, residential or rural residential zone, park zone, institutional zone, comprehensive zone or mixed use zone.
- e) Section 11.1 (I-1 Zone) is amended by adding the following as permitted uses, and relabeling all alphabetically subsequent permitted uses as appropriate:
- 4) cannabis-related business;
 - 5) cannabis production (commercial - medical);
 - 6) cannabis production (commercial – non-medical);
 - 7) cannabis storefront retailing.
- f) Section 11.1(A) (I-1A Zone) is amended by adding the following as permitted uses, and relabeling all alphabetically subsequent permitted uses as appropriate:
- 5) cannabis-related business;
 - 6) cannabis production (commercial - medical);
 - 7) cannabis production (commercial – non-medical);
 - 8) cannabis storefront retailing.
- g) Section 11.2 (I-2 Zone) is amended by adding the following as permitted uses, and relabeling all alphabetically subsequent permitted uses as appropriate:
- 1) cannabis-related business;
 - 2) cannabis production (commercial - medical);
 - 3) cannabis production (commercial – non-medical);
 - 4) cannabis storefront retailing.

.../4

3. **FORCE AND EFFECT**

This bylaw shall take effect upon its adoption by the Regional Board.

READ A FIRST TIME this _____ day of _____, 2018.

READ A SECOND TIME this _____ day of _____, 2018.

READ A THIRD TIME this _____ day of _____, 2018.

ADOPTED this _____ day of _____, 2018.

Chairperson

Corporate Secretary



COWICHAN VALLEY REGIONAL DISTRICT

BYLAW No. 4122

A Bylaw for the Purpose of Amending Electoral Area F Zoning Bylaw No. 2600 Applicable to Electoral Area F – Cowichan Lake South/Skutz Falls

WHEREAS the *Local Government Act*, hereafter referred to as the "Act", empowers the Regional Board to adopt and amend zoning bylaws;

AND WHEREAS the Regional District has adopted a zoning bylaw for Electoral Area F, that being Electoral Area F Zoning Bylaw No. 2600;

AND WHEREAS the Regional Board voted on and received the required majority vote of those present and eligible to vote at the meeting at which the vote is taken, as required by the *Act*;

AND WHEREAS after the close of the public hearing and with due regard to the reports received, the Regional Board considers it advisable to amend Zoning Bylaw No. 2600;

NOW THEREFORE the Board of Directors of the Cowichan Valley Regional District, in open meeting assembled, enacts as follows:

1. CITATION

This bylaw shall be cited for all purposes as "**Cowichan Valley Regional District Bylaw No. 4122 – Electoral Area F Zoning Amendment Bylaw (Cannabis Regulations), 2018**".

2. AMENDMENTS

Electoral Area F Zoning Bylaw No. 2600 is hereby amended in the following manner:

- a) Section 1.3 is amended by deleting the definition of agriculture and replacing it with the following:

"Agriculture" means growing, rearing, producing or harvesting agricultural crops or livestock and includes the processing on a parcel of the primary agricultural products harvested, reared or produced on that parcel and the use and storage of associated farm machinery, implements and agricultural supplies, but excludes cannabis production (commercial – non-medical) and cannabis production (personal – home cultivation);

- b) Section 1.3 is further amended by adding the following definitions in alphabetical order:

"Cannabis" means cannabis as defined in the *Controlled Drugs and Substances Act* or any subsequent legislation or regulations which may be enacted in substitution and includes any products containing cannabis derivatives intended for human consumption;

.../2

“Cannabis-related business” means the carrying on of activity where:

- a) the primary purpose of the business is to advocate or promote the use of cannabis for medical purposes;
- b) Cannabis is sold or otherwise provided to persons for medical purposes;
- c) Cannabis is stored for the purpose of sale or distribution to persons for medical purposes.

“Cannabis consumption lounge” means the use of a building or structure for the service to customers of cannabis products, medical marijuana, equipment, paraphernalia, and related therapeutic services which are primarily intended to be consumed, used or otherwise provided on-site and includes the accessory sale of goods, wares, personal merchandise, articles, or things incidental to the provision of such service;

“Cannabis production (commercial – medical)” means the carrying on of any of the following activities under the Access to Cannabis for Medical Purposes Regulations:

- a) the cultivation, growth, harvesting, and processing of plants or parts of plants of the genus cannabis;
- b) the processing of raw materials, testing, destruction, alteration, manufacturing, assembling, packaging, and labelling of plants or parts of plants of the genus cannabis;
- c) the storage and transshipping of materials, goods or products;
- d) the storage, distribution and sale of materials, goods and products derived from plants or parts of plants of the genus cannabis, to licenced retailers or individual customers.

“Cannabis production (commercial – non-medical)” means the carrying on of any of the following activities under the *Cannabis Act*, but excludes cannabis production (commercial - medical) and cannabis production (personal - home cultivation):

- a) the cultivation, growth, harvesting, and processing of plants or parts of plants of the genus cannabis;
- b) the processing of raw materials, testing, destruction, alteration, manufacturing, assembling, packaging, and labelling of plants or parts of plants of the genus cannabis;
- c) the storage and transshipping of materials, goods or products;
- d) the storage, distribution and sale of materials, goods and products derived from plants or parts of plants of the genus cannabis, to licenced retailers or individual customers.

“Cannabis production (personal – home cultivation)” means the development of no more than 10% of the gross floor area of a residential dwelling or accessory structure and the carrying on of any of the following activities under the Access to Cannabis for Medical Purposes Regulations or the *Cannabis Act*:

- a) the cultivation, growth, harvesting, and processing of plants or parts of plants of the genus cannabis by an individual for personal use or consumption;
- b) the processing of raw materials, testing, destruction, alteration, manufacturing, assembling, packaging, and labelling of plants or parts of plants of the genus cannabis by an individual for personal use or consumption;
- c) the storage and transshipping of materials, goods or products;
- d) the storage of materials, goods and products derived from plants or parts of plants of the genus cannabis by an individual for personal use or consumption;

“Cannabis storefront retail” means the use of lands, buildings or structures for the marketing and sale of cannabis to the final consumer, who attends the premises, provided that the consumer product is stored and sold from within a building;

“Medical marijuana” means a substance used for medical purposes authorized by a licence issued under the Access to Cannabis for Medical Purposes Regulations or any subsequent legislation or regulations which may be enacted in substitution;

c) Section 2.3 is amended by adding the following sentence at the end:

3. For additional clarity, the following uses are explicitly prohibited:

- a. cannabis-related business;
- b. cannabis consumption lounge;
- c. cannabis production (commercial - medical);
- d. cannabis production (commercial - non-medical);
- e. cannabis production (personal - home cultivation);
- f. cannabis storefront retail.

d) Section 3.29(a) and (b) is deleted and replaced by the following:

3.29 Commercial Cannabis Regulations

Where cannabis production (commercial – medical) or cannabis production (commercial – non-medical) is permitted in a zone, the use is subject to the following regulations:

- a. the cannabis producer must be in possession of a valid license from the Government of Canada and be consistently operating in full conformity with all of the conditions of that license;
- b. all buildings, structures or greenhouses used for that purpose shall be located not less than 30 metres from all parcel lines;
- c. all parcels used for that purpose shall be located not less than 300 metres from a park, school, daycare, residential or rural residential zone, park zone, institutional zone, comprehensive zone or mixed use zone.

e) Section 5.21 (I-1 Zone) is amended by adding the following as permitted uses, and relabeling all alphabetically subsequent permitted uses as appropriate:

- e. cannabis-related business;
- f. cannabis production (commercial - medical);
- g. cannabis production (commercial – non-medical);
- h. cannabis storefront retailing.

3. FORCE AND EFFECT

This bylaw shall take effect upon its adoption by the Regional Board.

READ A FIRST TIME this _____ day of _____, 2018.

READ A SECOND TIME this _____ day of _____, 2018.

READ A THIRD TIME this _____ day of _____, 2018.

ADOPTED this _____ day of _____, 2018.

Chairperson

Corporate Secretary



COWICHAN VALLEY REGIONAL DISTRICT

BYLAW No. 4123

A Bylaw for the Purpose of Amending Electoral Area G Zoning Bylaw No. 2524 Applicable to Electoral Area G – Saltair

WHEREAS the *Local Government Act*, hereafter referred to as the "*Act*", empowers the Regional Board to adopt and amend zoning bylaws;

AND WHEREAS the Regional District has adopted a zoning bylaw for Electoral Area G, that being Electoral Area G Zoning Bylaw No. 2524;

AND WHEREAS the Regional Board voted on and received the required majority vote of those present and eligible to vote at the meeting at which the vote is taken, as required by the *Act*;

AND WHEREAS after the close of the public hearing and with due regard to the reports received, the Regional Board considers it advisable to amend Zoning Bylaw No. 2524;

NOW THEREFORE the Board of Directors of the Cowichan Valley Regional District, in open meeting assembled, enacts as follows:

1. CITATION

This bylaw shall be cited for all purposes as "**Cowichan Valley Regional District Bylaw No. 4123 – Electoral Area G Zoning Amendment Bylaw (Cannabis Regulations), 2018**".

2. AMENDMENTS

Electoral Area G Zoning Bylaw No. 2524 is hereby amended in the following manner:

- a) Section 1.3 is amended by deleting the definition of agriculture and replacing it with the following:

"Agriculture" means growing, rearing, producing or harvesting agricultural crops or livestock and includes the processing on a parcel of the primary agricultural products harvested, reared or produced on that parcel and the use and storage of associated farm machinery, implements and agricultural supplies, but excludes cannabis production (commercial – non-medical) and cannabis production (personal – home cultivation);

- b) Section 1.3 is amended by adding the following definitions in alphabetical order:

"Cannabis" means cannabis as defined in the *Controlled Drugs and Substances Act* or any subsequent legislation or regulations which may be enacted in substitution and includes any products containing cannabis derivatives intended for human consumption;

.../2

“Cannabis-related business” means the carrying on of activity where:

- a) the primary purpose of the business is to advocate or promote the use of cannabis for medical purposes;
- b) Cannabis is sold or otherwise provided to persons for medical purposes;
- c) Cannabis is stored for the purpose of sale or distribution to persons for medical purposes.

“Cannabis consumption lounge” means the use of a building or structure for the service to customers of cannabis products, medical marijuana, equipment, paraphernalia, and related therapeutic services which are primarily intended to be consumed, used or otherwise provided on-site and includes the accessory sale of goods, wares, personal merchandise, articles, or things incidental to the provision of such service;

“Cannabis production (commercial – medical)” means the carrying on of any of the following activities under the Access to Cannabis for Medical Purposes Regulations:

- a) the cultivation, growth, harvesting, and processing of plants or parts of plants of the genus cannabis;
- b) the processing of raw materials, testing, destruction, alteration, manufacturing, assembling, packaging, and labelling of plants or parts of plants of the genus cannabis;
- c) the storage and transshipping of materials, goods or products;
- d) the storage, distribution and sale of materials, goods and products derived from plants or parts of plants of the genus cannabis, to licenced retailers or individual customers.

“Cannabis production (commercial – non-medical)” means the carrying on of any of the following activities under the *Cannabis Act*, but excludes cannabis production (commercial - medical) and cannabis production (personal - home cultivation):

- a) the cultivation, growth, harvesting, and processing of plants or parts of plants of the genus cannabis;
- b) the processing of raw materials, testing, destruction, alteration, manufacturing, assembling, packaging, and labelling of plants or parts of plants of the genus cannabis;
- c) the storage and transshipping of materials, goods or products;
- d) the storage, distribution and sale of materials, goods and products derived from plants or parts of plants of the genus cannabis, to licenced retailers or individual customer.

“Cannabis production (personal – home cultivation)” means the development of no more than 10% of the gross floor area of a residential dwelling or accessory structure and the carrying on of any of the following activities under the Access to Cannabis for Medical Purposes Regulations or the *Cannabis Act*:

- a) the cultivation, growth, harvesting, and processing of plants or parts of plants of the genus cannabis by an individual for personal use or consumption;
- b) the processing of raw materials, testing, destruction, alteration, manufacturing, assembling, packaging, and labelling of plants or parts of plants of the genus cannabis by an individual for personal use or consumption;
- c) the storage and transshipping of materials, goods or products;
- d) the storage of materials, goods and products derived from plants or parts of plants of the genus cannabis by an individual for personal use or consumption.

“Cannabis storefront retail” means the use of lands, buildings or structures for the marketing and sale of cannabis to the final consumer, who attends the premises, provided that the consumer product is stored and sold from within a building;

“**Medical marijuana**” means a substance used for medical purposes authorized by a licence issued under the Access to Cannabis for Medical Purposes Regulations or any subsequent legislation or regulations which may be enacted in substitution;

- c) Section 2.3 is amended by adding the following sentence at the end:
3. For additional clarity, the following uses are amongst those explicitly prohibited:
 - a. cannabis-related business;
 - b. cannabis consumption lounge;
 - c. cannabis production (commercial - medical);
 - d. cannabis production (commercial - non-medical);
 - e. cannabis production (personal - home cultivation);
 - f. cannabis storefront retail.
- d) Section 3.30 is deleted and replaced by the following:

3.30 Commercial Cannabis Regulations

Where cannabis production (commercial – medical) or cannabis production (commercial – non-medical) is permitted in a zone, the use is subject to the following regulations:

- a. the cannabis producer must be in possession of a valid license from the Government of Canada and be consistently operating in full conformity with all of the conditions of that license;
- b. all buildings, structures or greenhouses used for that purpose shall be located not less than 30 metres from all parcel lines;
- c. all parcels used for that purpose shall be located not less than 300 metres from a park, school, daycare, residential or rural residential zone, park zone, institutional zone, comprehensive zone or mixed use zone.

3. FORCE AND EFFECT

This bylaw shall take effect upon its adoption by the Regional Board.

READ A FIRST TIME this _____ day of _____, 2018.

READ A SECOND TIME this _____ day of _____, 2018.

READ A THIRD TIME this _____ day of _____, 2018.

ADOPTED this _____ day of _____, 2018.

Chairperson

Corporate Secretary



COWICHAN VALLEY REGIONAL DISTRICT

BYLAW No. 4124

A Bylaw for the Purpose of Amending Electoral Area H Zoning Bylaw No. 1020 Applicable to Electoral Area H – North Oyster/Diamond

WHEREAS the *Local Government Act*, hereafter referred to as the "*Act*", empowers the Regional Board to adopt and amend zoning bylaws;

AND WHEREAS the Regional District has adopted a zoning bylaw for Electoral Area H, that being Electoral Area H Zoning Bylaw No. 1020;

AND WHEREAS the Regional Board voted on and received the required majority vote of those present and eligible to vote at the meeting at which the vote is taken, as required by the *Act*;

AND WHEREAS after the close of the public hearing and with due regard to the reports received, the Regional Board considers it advisable to amend Zoning Bylaw No. 1020;

NOW THEREFORE the Board of Directors of the Cowichan Valley Regional District, in open meeting assembled, enacts as follows:

1. CITATION

This bylaw shall be cited for all purposes as "**Cowichan Valley Regional District Bylaw No. 4124 – Electoral Area H Zoning Amendment Bylaw (Cannabis Regulations), 2018**".

2. AMENDMENTS

Electoral Area H Zoning Bylaw No. 1020 is hereby amended in the following manner:

- a) Section 3.1 is amended by deleting the definition of agriculture and replacing it with the following:

"Agriculture" means growing, rearing, producing or harvesting agricultural crops or livestock and includes the processing on a parcel of the primary agricultural products harvested, reared or produced on that parcel and the use and storage of associated farm machinery, implements and agricultural supplies, but excludes cannabis production (commercial – non-medical) and cannabis production (personal – home cultivation);

- b) Section 3.1 is amended by adding the following definitions in alphabetical order:

"Cannabis" means cannabis as defined in the *Controlled Drugs and Substances Act* or any subsequent legislation or regulations which may be enacted in substitution and includes any products containing cannabis derivatives intended for human consumption;

“Cannabis-related business” means the carrying on of activity where:

- a) the primary purpose of the business is to advocate or promote the use of cannabis for medical purposes;
- b) Cannabis is sold or otherwise provided to persons for medical purposes;
- c) Cannabis is stored for the purpose of sale or distribution to persons for medical purposes.

“Cannabis consumption lounge” means the use of a building or structure for the service to customers of cannabis products, medical marijuana, equipment, paraphernalia, and related therapeutic services which are primarily intended to be consumed, used or otherwise provided on-site and includes the accessory sale of goods, wares, personal merchandise, articles, or things incidental to the provision of such service;

“Cannabis production (commercial – medical)” means the carrying on of any of the following activities under the Access to Cannabis for Medical Purposes Regulations:

- a) the cultivation, growth, harvesting, and processing of plants or parts of plants of the genus cannabis;
- b) the processing of raw materials, testing, destruction, alteration, manufacturing, assembling, packaging, and labelling of plants or parts of plants of the genus cannabis;
- c) the storage and transshipping of materials, goods or products;
- d) the storage, distribution and sale of materials, goods and products derived from plants or parts of plants of the genus cannabis, to licenced retailers or individual customers.

“Cannabis production (commercial – non-medical)” means the carrying on of any of the following activities under the *Cannabis Act*, but excludes cannabis production (commercial - medical) and cannabis production (personal - home cultivation):

- a) the cultivation, growth, harvesting, and processing of plants or parts of plants of the genus cannabis;
- b) the processing of raw materials, testing, destruction, alteration, manufacturing, assembling, packaging, and labelling of plants or parts of plants of the genus cannabis;
- c) the storage and transshipping of materials, goods or products;
- d) the storage, distribution and sale of materials, goods and products derived from plants or parts of plants of the genus cannabis, to licenced retailers or individual customers.

“Cannabis production (personal – home cultivation)” means the development of no more than 10% of the gross floor area of a residential dwelling or accessory structure and the carrying on of any of the following activities under the Access to Cannabis for Medical Purposes Regulations or the *Cannabis Act*:

- a) the cultivation, growth, harvesting, and processing of plants or parts of plants of the genus cannabis by an individual for personal use or consumption;
- b) the processing of raw materials, testing, destruction, alteration, manufacturing, assembling, packaging, and labelling of plants or parts of plants of the genus cannabis by an individual for personal use or consumption;
- c) the storage and transshipping of materials, goods or products;
- d) the storage of materials, goods and products derived from plants or parts of plants of the genus cannabis by an individual for personal use or consumption.

“Cannabis storefront retail” means the use of lands, buildings or structures for the marketing and sale of cannabis to the final consumer, who attends the premises, provided that the consumer product is stored and sold from within a building;

“**Medical marijuana**” means a substance used for medical purposes authorized by a licence issued under the Access to Cannabis for Medical Purposes Regulations or any subsequent legislation or regulations which may be enacted in substitution;

c) The following is added after Section 4.6:

4.7 Prohibitions

1. Any use not expressly permitted in this Bylaw is prohibited.
2. Non-conforming uses of land, buildings and structures, as well as siting, size or dimensions of buildings and structures are governed by the provisions of the *Local Government Act*.
3. For additional clarity, the following uses are amongst those explicitly prohibited:
 - a) cannabis-related business;
 - b) cannabis consumption lounge;
 - c) cannabis production (commercial - medical);
 - d) cannabis production (commercial - non-medical);
 - e) cannabis production (personal - home cultivation);
 - f) cannabis storefront retail.

d) Section 5.23 is deleted and replaced by the following:

5.23 Commercial Cannabis Regulations

Where cannabis production (commercial – medical) or cannabis production (commercial – non-medical) is permitted in a zone, the use is subject to the following regulations:

- a. the cannabis producer must be in possession of a valid license from the Government of Canada and be consistently operating in full conformity with all of the conditions of that license;
- b. all buildings, structures or greenhouses used for that purpose shall be located not less than 30 metres from all parcel lines;
- c. all parcels used for that purpose shall be located not less than 300 metres from a park, school, daycare, residential or rural residential zone, park zone, institutional zone, comprehensive zone or mixed use zone.

3. FORCE AND EFFECT

This bylaw shall take effect upon its adoption by the Regional Board.

READ A FIRST TIME this _____ day of _____, 2018.

READ A SECOND TIME this _____ day of _____, 2018.

READ A THIRD TIME this _____ day of _____, 2018.

ADOPTED this _____ day of _____, 2018.

Chairperson

Corporate Secretary



COWICHAN VALLEY REGIONAL DISTRICT

BYLAW No. 4125

A Bylaw for the Purpose of Amending Electoral Area I Zoning Bylaw No. 2465 Applicable to Electoral Area I – Youbou/Meade Creek

WHEREAS the *Local Government Act*, hereafter referred to as the "*Act*", empowers the Regional Board to adopt and amend zoning bylaws;

AND WHEREAS the Regional District has adopted a zoning bylaw for Electoral Area I, that being Electoral Area I Zoning Bylaw No. 2465;

AND WHEREAS the Regional Board voted on and received the required majority vote of those present and eligible to vote at the meeting at which the vote is taken, as required by the *Act*;

AND WHEREAS after the close of the public hearing and with due regard to the reports received, the Regional Board considers it advisable to amend Zoning Bylaw No. 2465;

NOW THEREFORE the Board of Directors of the Cowichan Valley Regional District, in open meeting assembled, enacts as follows:

1. CITATION

This bylaw shall be cited for all purposes as "**Cowichan Valley Regional District Bylaw No. 4125 – Electoral Area I Zoning Amendment Bylaw (Cannabis Regulations), 2018**".

2. AMENDMENTS

Electoral Area I Zoning Bylaw No. 2465 is hereby amended in the following manner:

- a) Section 1.3 is amended by deleting the definition of agriculture and replacing it with the following:

"Agriculture" means growing, rearing, producing or harvesting agricultural crops or livestock and includes the processing on a parcel of the primary agricultural products harvested, reared or produced on that parcel and the use and storage of associated farm machinery, implements and agricultural supplies, but excludes cannabis production (commercial – non-medical) and cannabis production (personal – home cultivation);

- b) Section 1.3 is further amended by adding the following definitions in alphabetical order:

"Cannabis" means cannabis as defined in the *Controlled Drugs and Substances Act* or any subsequent legislation or regulations which may be enacted in substitution and includes any products containing cannabis derivatives intended for human consumption;

“Cannabis-related business” means the carrying on of activity where:

- a) the primary purpose of the business is to advocate or promote the use of cannabis for medical purposes;
- b) Cannabis is sold or otherwise provided to persons for medical purposes;
- c) Cannabis is stored for the purpose of sale or distribution to persons for medical purposes.

“Cannabis consumption lounge” means the use of a building or structure for the service to customers of cannabis products, medical marijuana, equipment, paraphernalia, and related therapeutic services which are primarily intended to be consumed, used or otherwise provided on-site and includes the accessory sale of goods, wares, personal merchandise, articles, or things incidental to the provision of such service;

“Cannabis production (commercial – medical)” means the carrying on of any of the following activities under the Access to Cannabis for Medical Purposes Regulations:

- a) the cultivation, growth, harvesting, and processing of plants or parts of plants of the genus cannabis;
- b) the processing of raw materials, testing, destruction, alteration, manufacturing, assembling, packaging, and labelling of plants or parts of plants of the genus cannabis;
- c) the storage and transshipping of materials, goods or products;
- d) the storage, distribution and sale of materials, goods and products derived from plants or parts of plants of the genus cannabis, to licenced retailers or individual customers.

“Cannabis production (commercial – non-medical)” means the carrying on of any of the following activities under the *Cannabis Act*, but excludes cannabis production (commercial - medical) and cannabis production (personal - home cultivation):

- a) the cultivation, growth, harvesting, and processing of plants or parts of plants of the genus cannabis;
- b) the processing of raw materials, testing, destruction, alteration, manufacturing, assembling, packaging, and labelling of plants or parts of plants of the genus cannabis;
- c) the storage and transshipping of materials, goods or products;
- d) the storage, distribution and sale of materials, goods and products derived from plants or parts of plants of the genus cannabis, to licenced retailers or individual customers.

“Cannabis production (personal – home cultivation)” means the development of no more than 10% of the gross floor area of a residential dwelling or accessory structure and the carrying on of any of the following activities under the Access to Cannabis for Medical Purposes Regulations or the *Cannabis Act*:

- a) the cultivation, growth, harvesting, and processing of plants or parts of plants of the genus cannabis by an individual for personal use or consumption;
- b) the processing of raw materials, testing, destruction, alteration, manufacturing, assembling, packaging, and labelling of plants or parts of plants of the genus cannabis by an individual for personal use or consumption;
- c) the storage and transshipping of materials, goods or products;
- d) the storage of materials, goods and products derived from plants or parts of plants of the genus cannabis by an individual for personal use or consumption;

“Cannabis storefront retail” means the use of lands, buildings or structures for the marketing and sale of cannabis to the final consumer, who attends the premises, provided that the consumer product is stored and sold from within a building;

“Medical marijuana” means a substance used for medical purposes authorized by a licence issued under the Access to Cannabis for Medical Purposes Regulations or any subsequent legislation or regulations which may be enacted in substitution;

- c) Section 2.3 is amended by adding the following at the end:
 - 3. For additional clarity, the following uses are amongst those explicitly prohibited:
 - a. cannabis-related business;
 - b. cannabis consumption lounge;
 - c. cannabis production (commercial - medical);
 - d. cannabis production (commercial - non-medical);
 - e. cannabis production (personal - home cultivation);
 - f. cannabis storefront retail.

- d) Section 3.27 is deleted and replaced by the following:

3.27 Commercial Cannabis Regulations

Where cannabis production (commercial – medical) or cannabis production (commercial – non-medical) is permitted in a zone, the use is subject to the following regulations:

- a. the cannabis producer must be in possession of a valid license from the Government of Canada and be consistently operating in full conformity with all of the conditions of that license;
- b. all buildings, structures or greenhouses used for that purpose shall be located not less than 30 metres from all parcel lines;
- c. all parcels used for that purpose shall be located not less than 300 metres from a park, school, daycare, residential or rural residential zone, park zone, institutional zone, comprehensive zone or mixed use zone.

- e) Section 5.33 (I-1 Zone) is amended by adding the following as permitted uses, and relabeling all alphabetically subsequent permitted uses as appropriate:
 - f. cannabis-related business;
 - g. cannabis production (commercial - medical);
 - h. cannabis production (commercial - non-medical);
 - i. cannabis storefront retailing.

3. FORCE AND EFFECT

This bylaw shall take effect upon its adoption by the Regional Board.

READ A FIRST TIME this _____ day of _____, 2018.

READ A SECOND TIME this _____ day of _____, 2018.

READ A THIRD TIME this _____ day of _____, 2018.

ADOPTED this _____ day of _____, 2018.

Chairperson

Corporate Secretary



STAFF REPORT TO COMMITTEE

DATE OF REPORT February 5, 2018

MEETING TYPE & DATE Electoral Area Services Committee Meeting of March 7, 2018

FROM: Water Management Division
Engineering Services Department

SUBJECT: Twin Cedars Sewer Inclusion Request – 3576 Holland Road

FILE: 0540-20-EAS/05

PURPOSE/INTRODUCTION

The purpose of this report is to request inclusion into the Twin Cedars Sewer System service area.

RECOMMENDED RESOLUTION

That it be recommended to the Board:

1. That the Certificate of Sufficiency confirming that a sufficient petition requesting inclusion into the Twin Cedars Sewer System Service Area be received.
2. That CVRD Bylaw No. 2871 – Twin Cedars Sewer System Service Establishment Bylaw, 2006, be amended to include the property described as PID 006-913-920.

BACKGROUND

The owner of the above-noted property located at 3576 Holland Avenue have requested inclusion in the Twin Cedars Sewer System. The property is described as PID 006-913-920, Lot 9, Section 12, Range 5, Shawnigan Land District, Plan VIP1809.

ANALYSIS

The property falls within the Village Commercial designation of the Cobble Hill Village Plan. The property owner is currently working with the Planning Department to rezone the property from residential to commercial. One of the conditions of the rezoning is the property must connect to the Twin Cedars Sewer service area.

There are capacity units available in the Twin Sewer System for this inclusion. A sewermain extension will be required for servicing the property. A deposit of \$30,000 for the estimated construction cost for the property owners portion of the sewermain extension will be required.

FINANCIAL CONSIDERATIONS

For properties located outside of the sewer service area, the Cowichan Valley Regional District has the discretion to charge any appropriate connection fee as there are no bylaws in place to dictate them. For this property, which will be a medical clinic, which has very low flows, staff is suggesting a Connection Fee of \$6,750.

Each new user brought into the sewer service area will generate annual user fees in the amount of \$657 parcel tax and \$196 in user fees per year.

COMMUNICATION CONSIDERATIONS

The amendment bylaw requires the approval of the service area voters before it can be adopted. In cases where a sufficient petition for service has been received, voter approval may be obtained by the Electoral Area Director consenting, in writing, to the adoption of the bylaw. The Engineering

Services Department is responsible for the operation and administration of this service. A valid and sufficient Petition for Service has been received. The Certificate of Sufficiency and a site plan are attached for consideration.

STRATEGIC/BUSINESS PLAN CONSIDERATIONS

The Corporate Strategic Plan includes an objective to achieve compact, mixed communities. Coordination of water, sewer, and other infrastructure is the strategic action identified to promote compact, mixed-use communities. The recommended resolution provides a reliable essential service.

Referred to (upon completion):

- Community Services (*Island Savings Centre, Cowichan Lake Recreation, South Cowichan Recreation, Arts & Culture, Public Safety, Facilities & Transit*)
- Corporate Services (*Finance, Human Resources, Legislative Services, Information Technology, Procurement*)
- Engineering Services (*Environmental Services, Recycling & Waste Management, Water Management*)
- Land Use Services (*Community Planning, Development Services, Inspection & Enforcement, Economic Development, Parks & Trails*)
- Strategic Services

Prepared by:



Lisa Dagenet, AScT.
Engineering Technologist II

Reviewed by:



Brian Dennison, P. Eng.
Manager



Hamid Hatami, P. Eng.
General Manager

ATTACHMENTS:

Attachment A – Site Plan

Attachment B – Certificate of Sufficiency



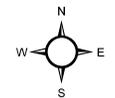
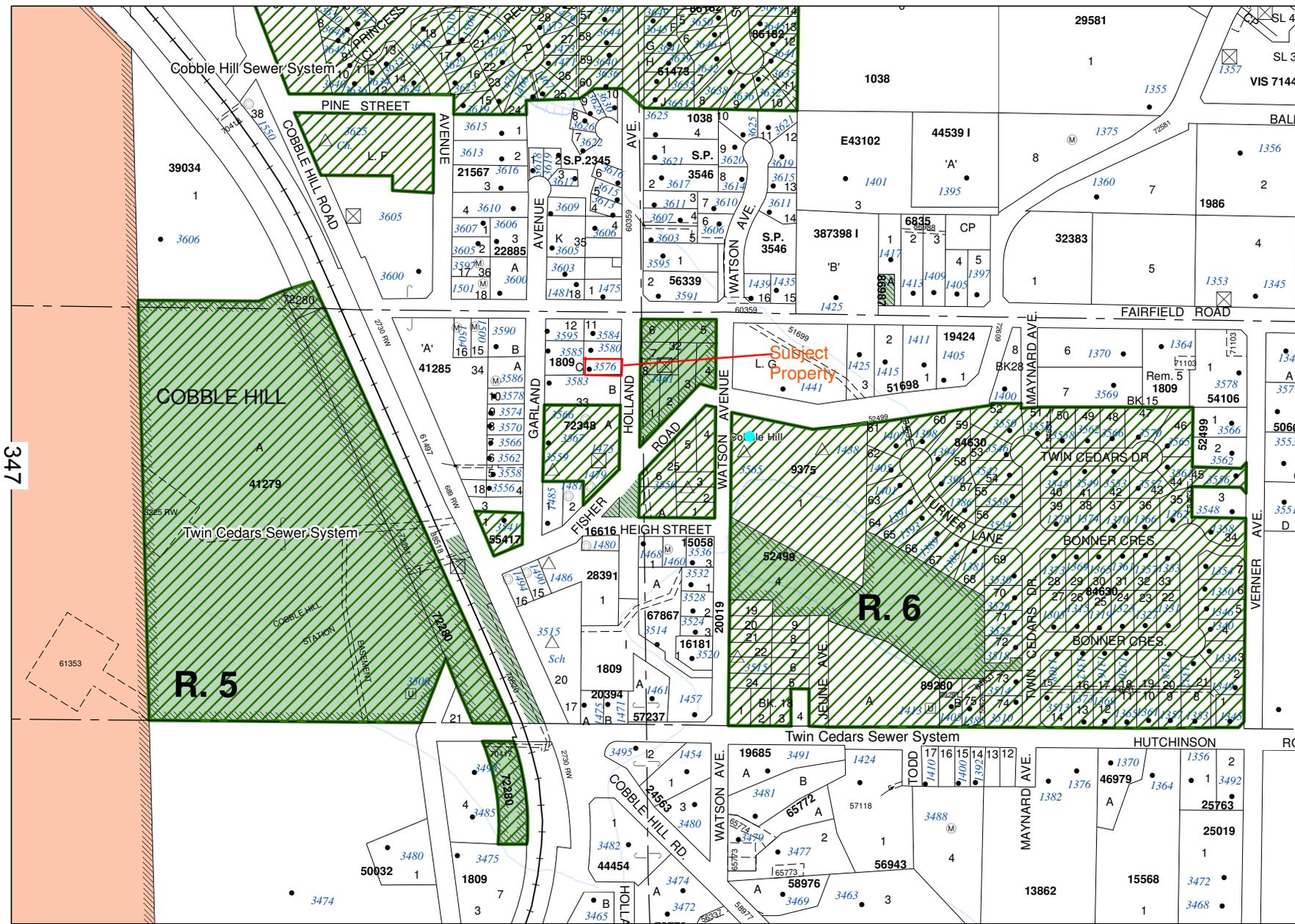
This map is compiled from various sources for internal use and is designed for reference purposes only.

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: February 5, 2018



Scale: 1:3,534

347

R8



CERTIFICATE OF SUFFICIENCY

I hereby certify that the petition for inclusion in the *Twin Cedars Sewer System Service Area* within a portion of Electoral Area C – Cobble Hill is sufficient, pursuant to section 337.3 of the *Local Government Act*.

DATED at Duncan, British Columbia)
 This 14th day of February, 2018)
)
)



Kathleen Harrison, Deputy Corporate Secretary

Twin Cedars Sewer System Service Area

Total Number of Parcels requesting inclusion in Service Area: (PID: 006-913-920)	1
Net Taxable Value of All Land and Improvements of Parcels Petitioning for inclusion in the Service Area:	\$382,000
Number of Petitions received:	1
Net Taxable Value of Petitions received (Land and Improvements):	\$382,000



STAFF REPORT TO COMMITTEE

DATE OF REPORT February 15, 2018

MEETING TYPE & DATE Electoral Area Services Committee Meeting of March 7, 2018

FROM: Water Management Division
Engineering Services Department

SUBJECT: Cowichan Bay Sewer Inclusion Request – 1590 Cowichan Bay Road

FILE: 0540-20-EAS/05

PURPOSE/INTRODUCTION

The purpose of this report is to request inclusion into the Cowichan Bay Sewer System service area.

RECOMMENDED RESOLUTION

That it be recommended to the Board:

1. That the Certificate of Sufficiency confirming that a sufficient petition requesting inclusion into the Cowichan Bay Sewer System Service Area be received.
2. That CVRD Bylaw No. 2128 – Cowichan Bay Sewer System Service Establishment Bylaw, 2000, be amended to include the property described as Lot 2, Plan VIP34963, Section 5, Range 5, Cowichan Land District, PID 000-313-335 .

BACKGROUND

The agent and owners of the above-noted property located at 1590 Cowichan Bay Road have requested inclusion in the Cowichan Bay Sewer System. The property is described as PID 000-313-335, Lot 2, Section 5, Range 5, Cowichan Land District, Plan 34963.

ANALYSIS

In the Cowichan Bay Community Sewer Servicing Policy, sewer capacity was to be allocated in the following order:

- a. first, to properties located within the existing Cowichan Bay Community Sewer Service Area;
- b. second, to properties located within the Cowichan Bay Village Containment boundary and identified as having sewer service potential after June 1, 2016;
- c. third, to properties located within the Rural Village Containment boundary and identified as having sewer service potential after June 1, 2017;
- d. fourth, to properties located outside Village and Rural Village Containment boundaries and identified as having sewer service potential after June 1, 2018; and
- e. last, to properties located outside Village and Rural Village Containment boundaries not identified as having sewer service potential (in this case, an Official Community Plan amendment will be required to adjust Schedule C-4) after June 1, 2019.

The owners are requesting inclusion of this property for development of an estimated 22 lot subdivision, some with suites.

The planning department advises that this property is in the Rural Village Containment Area and is identified as having potential to connect to the sewer system. It is therefore eligible for inclusion into the sewer service area as per the Board policy. The owner will need a preliminary layout approval or development permit for the subdivision in order to reserve units.

FINANCIAL CONSIDERATIONS

For properties located outside of the sewer service area, the Cowichan Valley Regional District has the discretion to charge any appropriate connection fee as there are no bylaws in place to dictate them. With this development, available Joint Utility Board (JUB) capacity units in Cowichan Bay are reaching its limitation. It is estimated that there will be 25 JUB capacity units available if approved. Further, inflow and infiltration is increasing in this area, particularly during major storm events. Therefore, staff is suggesting a Capital Connection Fee of \$10,000 for each lot, or \$220,000 for the subdivision, to help address the extra system flow.

Each new user brought into the sewer service area will generate annual user fees in the amount of \$285 parcel tax and \$260 in user fees per year.

COMMUNICATION CONSIDERATIONS

The amendment bylaw requires the approval of the service area voters before it can be adopted. In cases where a sufficient petition for service has been received, voter approval may be obtained by the Electoral Area Director consenting, in writing, to the adoption of the bylaw. The Engineering Services Department is responsible for the operation and administration of this service. A valid and sufficient Petition for Service has been received. The Certificate of Sufficiency and a site plan are attached for consideration.

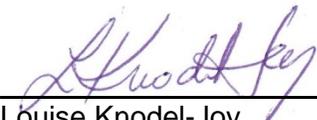
STRATEGIC/BUSINESS PLAN CONSIDERATIONS

The Corporate Strategic Plan includes an objective to achieve compact, mixed communities. Coordination of water, sewer, and other infrastructure is the strategic action identified to promote compact, mixed-use communities. The recommended resolution provides a reliable essential service.

Referred to (upon completion):

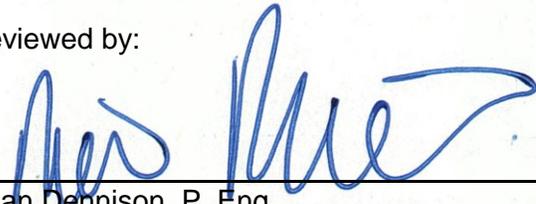
- Community Services (*Island Savings Centre, Cowichan Lake Recreation, South Cowichan Recreation, Arts & Culture, Public Safety, Facilities & Transit*)
- Corporate Services (*Finance, Human Resources, Legislative Services, Information Technology*)
- Engineering Services (*Environmental Services, Recycling & Waste Management, Water Management*)
- Planning & Development Services (*Community & Regional Planning, Development Services, Inspection & Enforcement, Economic Development, Parks & Trails*)
- Strategic Services

Prepared by:



Louise Knodel-Joy
Senior Engineering Technologist

Reviewed by:



Brian Dennison, P. Eng.
Manager



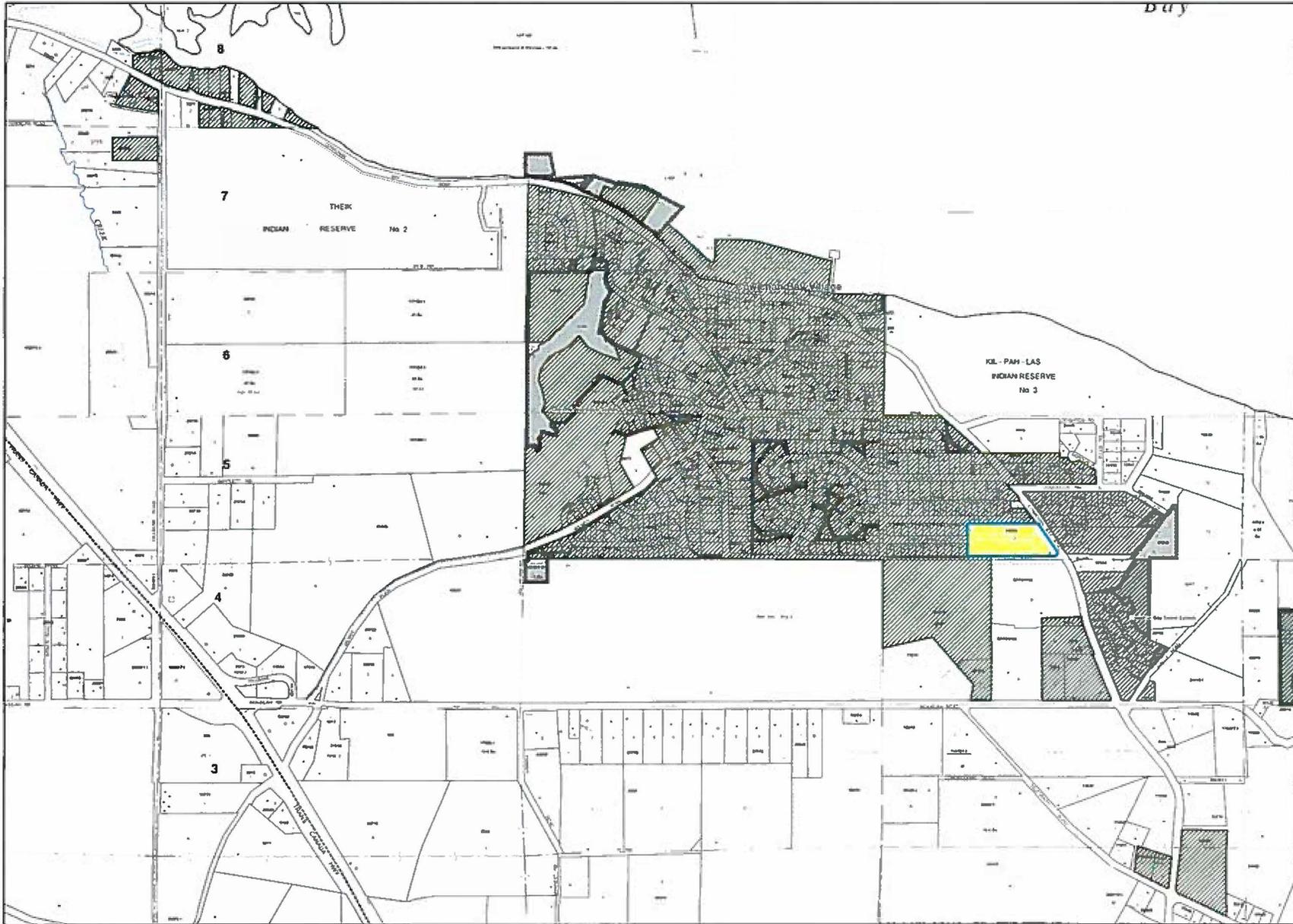
Hamid Hatami, P. Eng.
350 General Manager

ATTACHMENTS:

Attachment A – Site Plan and Request

Attachment B – Certificate of Sufficiency

352



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 uncertainties have been considered for convenience purposes only and that boundaries are a representational.

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

Printed: January 22, 2018



Scale: 1:10,000

Cowichan Bay Investments

Craig Partridge
PO Box 17
Shawnigan Lake, BC
V0R 2W0

January 12, 2018

I, Craig Partridge acting agent for Doug and Carol Watson am requesting to be included in the Cowichan Bay sewer service area. The property being 1590 Cowichan Bay Road. This request is for a purposed 22 lot residential subdivision with the entrance being located at the west end of Rondeault Road.

Parcel Identifier: 000-313-335

Legal Description: Lot 2, Section 5, Range 5, Cowichan District, Plan 34963

Property Zoning: R3 – Village Residential Zone

Acting Agent:

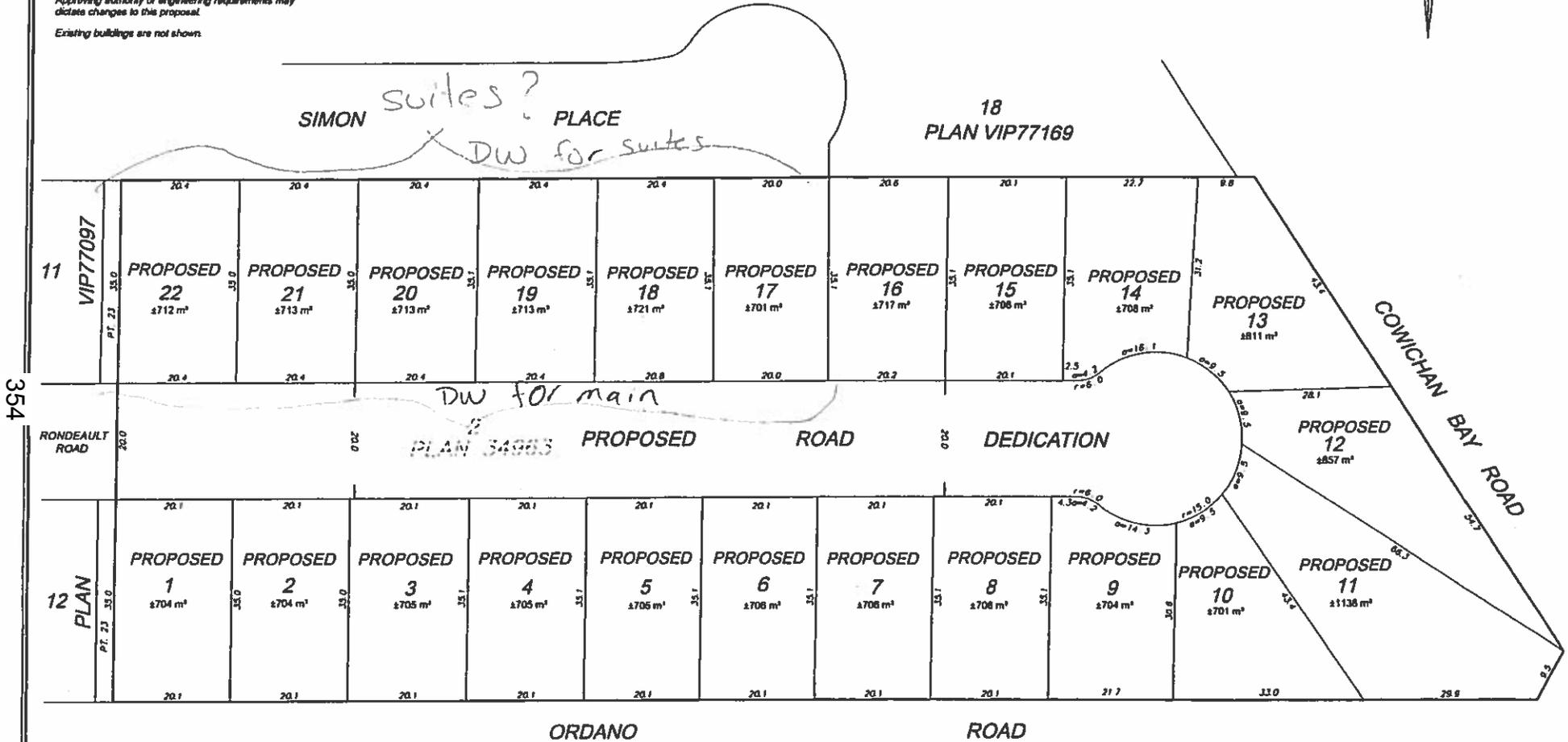


Craig Partridge
250-701-2892

**PROPOSED SUBDIVISION PLAN OF LOT 2, SECTION 5,
RANGE 5, COWICHAN DISTRICT, PLAN 34963.**



NOTE: This plan is for discussion purposes only.
Distances and areas are subject to vary upon field survey.
Approving authority or engineering requirements may dictate changes to this proposal.
Existing buildings are not shown.



354

File: CD-PARTRIDGE-SUB2
Date: November 28, 2017
Island Land Surveying Ltd.
#117-593 Hoffman Avenue
Victoria B.C. V8B 4X1
Tel 250.475.1515 Fax 250.475.1516
www.islandsurveying.ca



CERTIFICATE OF SUFFICIENCY

I hereby certify that the petition for inclusion in the *Cowichan Bay Sewer System Service Area* within a portion of Electoral Area D – Cowichan Bay is sufficient, pursuant to section 337.3 of the *Local Government Act*.

DATED at Duncan, British Columbia)
 this 21st day of February, 2018)

)
)
)

Kathleen Harrison, Deputy Corporate Secretary

Cowichan Bay Sewer System Service Area

Total Number of Parcels requesting inclusion in Service Area:	1
Net Taxable Value of All Land and Improvements of Parcels requesting inclusion in the Service Area: (PID 000-313-335)	\$580,000
Number of Petitions received:	1
Net Taxable Value of Petitions received (Land and Improvements):	\$580,000



STAFF REPORT TO COMMITTEE

DATE OF REPORT March 6, 2018
MEETING TYPE & DATE Electoral Area Services Committee Meeting of March 7, 2018
FROM: Inspection & Enforcement Division
 Land Use Services Department
SUBJECT: Fireworks – Annual Brentwood Regatta
FILE: BE18A07

PURPOSE/INTRODUCTION

The purpose of this report is for the Electoral Area Services Committee to consider a request for a fireworks display in the evening of Friday, April 27, 2018 commencing at 8:30 p.m. at Brentwood College in connection with their Annual Regatta.

RECOMMENDED RESOLUTION

That it be recommended to the Board that the fireworks discharge permit for the 2018 Annual Brentwood Regatta at 2735 Mount Baker Road in Mill Bay on April 27, 2018, be approved.

BACKGROUND

A Fireworks Discharge Permit application has been submitted for a fireworks display planned for the 2018 Annual Brentwood Regatta at 2735 Mount Baker Road in Mill Bay on April 27, 2018.

ANALYSIS

The Fireworks Sale and Discharge Regulation Bylaw No. 39 allows for staff to authorize fireworks displays on January 1, July 1 and October 31, only, in any given year. Since this date is outside of the noted 3 dates that can be authorized by staff, Board authorization will be needed. This office has not received complaints about this event in the past and there does not appear to be a livestock property within 500 metres of the display site. Brentwood College has indicated they will notify the neighborhood in advance of this display.

FINANCIAL CONSIDERATIONS

N/A

COMMUNICATION CONSIDERATIONS

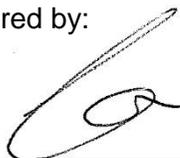
N/A

STRATEGIC/BUSINESS PLAN CONSIDERATIONS

N/A

- Community Services (*Island Savings Centre, Cowichan Lake Recreation, South Cowichan Recreation, Arts & Culture, Public Safety, Facilities & Transit*)
- Corporate Services (*Finance, Human Resources, Legislative Services, Information Technology, Procurement*)
- Engineering Services (*Environmental Services, Recycling & Waste Management, Water Management*)
- Land Use Services (*Community Planning, Development Services, Inspection & Enforcement, Economic Development, Parks & Trails*)
- Strategic Services

Prepared by:



Nino Morano
Bylaw Enforcement Officer

Reviewed by:

Rob Conway, MCIP, RPP
Manager

Ross Blackwell, MCIP, RPP, A.Ag.
General Manager

ATTACHMENTS:

- Attachment A - Fireworks Discharge Permit Application
- Attachment B - Brentwood Annual Regatta - 2018 Notice to Neighbours



SCHEDULE "A"
To CVRD Bylaw No. 3633

FIREWORKS DISCHARGE PERMIT

LOCATION: Brentwood College School

DATE: * April 27, 2018 Around 8:30pm

*Date must be January 1st, July 1st, or October 31st – Special request dates must be approved by the CVRD Board.

*July 1st date may be subject to LOCAL FIRE DEPARTMENT APPROVAL

Fireworks may be discharged only between the hours of 6:00 pm and 12:00 midnight on July 1st or October 31st, and on January 1st between 12:00 midnight and 1:00 am.

I, SHANE ARCHER
C/O FIREWORKS SPECTACULARS, have read and understand the contents of CVRD Fireworks Sale and Discharge Regulation Bylaw No. 39, and amendments, and the Fireworks Safety Awareness Information package, available at the CVRD office. I am over 19 years of age and assume responsibility for the discharge of fireworks on the date and at the location noted above. I acknowledge that fireworks are not to be discharged within 500 metres of livestock.

Name: (print) SHANE ARCHER Date: MARCH 1, 2018

(signature)

email: robbee@fscfireworks.ca phone: 403-936-4540

This Permit is approved by: _____
CVRD Bylaw Enforcement Officer

Date: _____

Note: The RCMP and local Fire Department will be notified of the above event.

Fireworks Spectaculars Canada Ltd.

Box 188
 Langdon, AB., T0J 1X0
 Ph.: 403-936-4540
 Fax: 403-936-4546

Application to Purchase and Display Fireworks

Part 1 - Application by Fireworks Supervisor

Name: SHANE ARCHER

Address: BOX 188, LANGDON AB, T0J 1X0

Telephone: 250-686-9229 Fax: 403-936-4546

Fireworks Card# D29954 Endorsements: FLOATING PLATFORM

Expiry Date: MAY 2020

Sponsoring Agency: BRENTWOOD COLLEGE SCHOOL

Address: 2735 MOUNT BAKER ROAD, MILL BAY BC, V0R 2P1

Contact Person: IAN MCPHERSON Phone: 250-743-5521 (EXT. 8464)

Location of Display: BRENTWOOD COLLEGE SCHOOL

Date and Hour of Display: APRIL 27, 2018 TIME AROUND 8:30 PM

Rain Date (if Applicable): N/A

Proof of Insurance: Policy#FIRE200, Lloyd's of London, \$5,000,000.00

Part 2 Approval by Local Authority Having Jurisdiction

The applicant has complied with local requirements and has permission to hold a fireworks display or pyrotechnics display as the case may be at the location and date mentioned above.

Name of Authorizing Officer: _____

Title: _____

Municipality (Town or City) _____

Signature: _____ Date: _____

Comments: _____

D29954



La certification est valide jusqu'au 31 mai 2020.
Le titulaire de la certification est autorisé à effectuer
des contrôles de conformité en vertu de la Loi sur les explosifs (LSE).

Chief Inspector of Explosives
Inspecteur en chef des explosifs

May/Mai 2020

Expiry/Expiré

361





J.T. Insurance Services

Named Insured And Mailing Address
 Fireworks Spectaculars Canada and Dezotell Holdings
 Ltd.
 Box 188
 Langdon, AB, T0J 1X0

Certificate Issued to:
 Fireworks Spectaculars Canada and Dezotell
 Holdings Ltd.
 Box 188
 Langdon, AB, T0J 1X0

PERIOD OF INSURANCE	EFFECTIVE DATE	EXPIRY DATE	IBC CODE
	M D Y	M D Y	
12:01am Standard Time at the "location of risk" shown below.	4/26/2017	4/26/2018	N/A

Insureds Operations
 Fireworks Displays

Insurance is provided, subject to the Declarations, Terms and Conditions of the Policy and its Riders, only for which specific Riders are attached and for which a specific limit or annotation is shown hereunder.

LIABILITY COVERAGE	DEDUCTIBLE	LIMITS
Commercial General Liability - Per Occurrence	\$2,500	\$2,000,000
Commercial General Liability - General Aggregate		\$2,000,000
Products and Completed Operations - Aggregate		\$2,000,000
Non-Owned Automobile SPF #6	\$2,500	\$2,000,000
Tenants Legal Liability	\$1,000	\$100,000
Personal Injury and Advertising		\$2,000,000
Medical Payments		\$25,000
Excess Liability		\$3,000,000

CONDITIONS:
 Occurrence Basis

EXCLUSIONS:
 Terrorism Exclusion
 Mould Exclusion - Absolute
 Data Exclusion
 Asbestos Exclusion

INSURER(S): As per list of insurers on file at J.T. Insurance Services (Canada), Inc.

Subject otherwise to the usual printed clauses and conditions on the Policy(s) of the Underwriters and/or Companies with whom Insurance is effected. This document is evidence the insurance described above has been effected, against which Underwriters Certificates or Policy(s) will be duly issued. Immediate advice must be given of any discrepancies, inaccuracies or necessary changes. This summary is issued for convenient reference only. Please consult policy(s) for details of coverage.

ISSUE DATE: April 26, 2017

E&OE

J.T. INSURANCE SERVICES (CANADA), INC.

Per: 
 Authorized Representative



Annual Brentwood Regatta - 2018

To All Our Neighbours:

We will soon be welcoming Rowing Crews from various schools throughout Canada and the United States to Brentwood College for our annual Rowing Regatta.

We are always grateful for the warm welcome that the Mill Bay Community extends to our guests during our annual regatta. Our visitors often comment on our beautiful location and the warm and friendly community that we are so fortunate to be a part of.

The Regatta schedule for this three-day event will run as follows:

Friday, April 27th: Commencing at 2:00pm with races finishing around 8:30pm.
Saturday, April 28th: Commencing at 7:00am and finishing around 8:30pm.
Sunday, April 29th: Commencing at 7:00am with the event winding up by around 2:00pm.

Please note we will again be having a brief fireworks display on the water, Friday, April 27th at 8:30pm.

We thank you for your ongoing support throughout the years and once again apologize in advance for any disturbance that our event may cause.

We do hope that you will find time to join us on campus over the weekend to watch and enjoy some of the racing events.

Yours truly,

Tom Shadlock
Director of Operations



STAFF REPORT TO COMMITTEE

DATE OF REPORT March 5, 2018

MEETING TYPE & DATE Electoral Area Services Committee Meeting of March 7, 2018

FROM: Environmental Services Division
Engineering Services Department

SUBJECT: Water Licence Application Referral

FILE: Lake Cowichan Storage

PURPOSE/INTRODUCTION

The purpose of this report is provide the Committee with an opportunity for input to the provincial referral process. This is the CVRD's formal response to Catalyst Paper's application to pump water from Cowichan Lake into the Cowichan River during drought conditions.

RECOMMENDED RESOLUTION

For direction on the draft letter attached.

BACKGROUND

Given current climatic projections, the Cowichan Region as a whole will see a substantial increase in drought conditions during the summer and early fall. This is of particular concern for the Cowichan watershed.

The CVRD is currently participating in a long term Water Use Planning process which is using a structured decision making framework to identify both the demand for water as well as a variety of management responses and impacts. It is clear, and becoming clearer, that there is no simple answer to long term water supply and that a combination of management tools will be necessary to meet future needs. These tools include, but are not limited to, increasing storage at the lake, utilizing negative storage via pumping, and changes to management of the weir to extend storage periods. There will be impacted communities in all scenarios.

The CVRD, as a property owner on Cowichan Lake, recently had an opportunity to provide input to Catalyst Paper's proposed pumping alternative in low water conditions. As a property owner the Parks Division responded with concerns related to potential impacts to their infrastructure in low lake level conditions.

The CVRD has expended substantial time and resources over the years to move towards the development of a long term solution. The solutions will take time and substantial regulatory and public oversight to conclude. The referral at this time is for a ten year period to buy some time as some of the uncertainties regarding licencing and process are determined.

ANALYSIS

At this time there are no other alternatives identified to deal with the emerging trends and issues related to climatic conditions and the effects on storage and ultimately the river system. The effects of low river flow are well known and include impacts to recreation, fisheries, and sewage dilution. The effects of reduced lake levels are less well known as the water level has never been below minimum flow levels before. The prime impacts at the lake are on shoreline ecosystems, including habitat for the Cowichan Lake Lamprey (a species of fish found only in Cowichan Lake and listed as Threatened under the federal *Species at Risk Act*). Both public and private infrastructure will be impacted as the lake is drawn down.

In drought conditions without a pumping or storage alternative the river could revert to a situation in which flow to the river is constrained to precipitation and natural inflow. This may have happened from time to time historically but the river and environmental conditions were very different at that time providing additional resilience.

The Central Sector Liquid Waste Management Plan identified a possible solution to the issue of effluent dilution by removing the effluent from the river to a marine outfall. This process still has substantial consultation and engineering to be completed before any potential removal of effluent is possible.

A draft letter of response is attached for the Committee’s review and input to the provincial referral.

FINANCIAL CONSIDERATIONS

None at this time

COMMUNICATION CONSIDERATIONS

None at this time

STRATEGIC/BUSINESS PLAN CONSIDERATIONS

This application has a number of strategic plan considerations including CVRD’s commitment to finding a long term solution for water storage.

Referred to (upon completion):

- Community Services (*Island Savings Centre, Cowichan Lake Recreation, South Cowichan Recreation, Arts & Culture, Public Safety, Facilities & Transit*)
- Corporate Services (*Finance, Human Resources, Legislative Services, Information Technology, Procurement*)
- Engineering Services (*Environmental Services, Recycling & Waste Management, Water Management*)
- Land Use Services (*Community Planning, Development Services, Inspection & Enforcement, Economic Development, Parks & Trails*)
- Strategic Services

Prepared by:



Kate Miller, MCIP, RPP, LEED AP
Manager

Reviewed by:

Not Applicable
Not Applicable



Hamid Hatami, P. Eng.
General Manager

ATTACHMENTS:

- Attachment A – Draft letter of response
- Attachment B – Referral

Attachment A

March 5, 2018

File No.:

Mr. David Skarbo
Water Authorizations Specialist
Ministry of Forests, Lands, Natural Resource Operations & Rural Development
103-2100 Labieux Rd
NANAIMO BC V9T 6E9

via email:

Dear Mr. Skarbo:

RE: Referral file 1003936

Thank you for the opportunity to respond to the recent Catalyst surface water licence. We appreciate that this is an extremely complex issue and while we do not support the pump out and draw down of the lake as a stand alone option we understand the need for an interim solution. The Cowichan supports substantial community values – including ecological, social and economic, the current proposal is the only option until a longer term water supply solution is agreed upon and implemented to ensure critical base flows to the river.

The Cowichan Valley Regional District (CVRD) has the following general concerns:

- the extreme uncertainty on biota and in particular Cowichan Lake Lamprey;
- long term effects of dewatering on critical lake shore function – both biological and physical;
- impact to private and public property due to unprecedented low levels affecting both dock and shoreline infrastructure; and,
- unknown impacts on water quality.

The CVRD has the following specific comments in regards to the application. The current proposal buys a small amount of time; it is not perfect, nor is it a likely long term solution. In order to support this application we request the following items be addressed by Catalyst:

- As a requirement of such application that funding should be secured to undertake the detailed engineering for an eventual application for upgraded works;
- Catalyst be required to cover costs associated with all monitoring and management plan development to address potential impacts on biota and community infrastructure;
- Catalyst adjust their mill management schedule to allow for potential shutdowns during the late summer low flow period to allow re-diversion of limited water resources to the lower Cowichan system and in order to reduce the effects at the lake;
- Catalyst partner with other initiatives to ensure that low flow channels remain open via gravel removal if possible;
- Funding for salvage operations and necessary training be put in place well in advance of any drawdown;

Mr. David Skarbo
March 5, 2018

Page 2

- Catalyst to work with provincial and federal programs to develop the Cowichan Lake Lamprey recovery strategy; and,
- Catalyst map the impacted foreshore with bathymetric surveys while water levels are still high to develop high resolution management information as soon as possible.

We also request the following of the province:

- The province needs to define their role in protecting community based values as they relate to base flows and impacts on fisheries;
- Clarity with regards to a circumstance where Catalyst is not in operation beyond the ten year window (or even before) of this application (i.e., what is the province's fall back plan should that occur?);
- Clarity with regards to the federal government and its role in ensuring fisheries values are protected particularly in light of Species at Risk legislation; and,
- Currently the Cowichan River is used for effluent treatment at two locations. A recent proposed amendment to the Central Sector Liquid Waste Management Plan was submitted to the province. We are still waiting for review of this application and request it be expedited as it has implications for the management of the lower system in low flow conditions.

Lastly, we recognize that this is an extremely challenging set of issues compounded by rapidly changing environmental conditions never anticipated in the original licence. As such it is difficult to tease out the "ownership" of a future water licence given the wide range of benefiting values as well as the allocation or responsibilities. We request that the province expedite their support for the next stage of the Cowichan Water Use Plan process so these issues can be dealt with under a provincial licence in whole or part.

Yours truly,

KM/jm

pc: Graham Kissack, Catalyst Paper

Linda Wiersma

From: Planning and Development
Sent: Wednesday, February 14, 2018 9:11 AM
To: Records Land Use Services
Cc: Keith Batstone; Mike Tippett
Subject: FW: Province of BC Referral Request on a Water Licence application

Colin Turner, Administrative Assistant
Land Use Services Department
Cowichan Valley Regional District
175 Ingram Street, Duncan, BC V9L 1N8
Email: ds@cvrd.bc.ca
Tel: 250.746.2620 Toll Free: 1.800.665.3955 Fax: 250.746.2621

From: FrontCounterBC@gov.bc.ca [mailto:FrontCounterBC@gov.bc.ca]
Sent: February-13-18 3:55 PM
To: Rob Conway <rconway@cvrd.bc.ca>
Cc: Planning and Development <ds@cvrd.bc.ca>
Subject: Province of BC Referral Request on a Water Licence application

Cowichan Valley Regional District - Planning and Development Department
Conway Rob

Water Licence
Referral Number: 99121864 - 001
Reference Number: Forests, Lands and Natural Resource Operations / 1003936
Request Sent: February 13, 2018
Response Due: February 27, 2018

You are invited to comment on the following application. A response is optional. If no response is received by the deadline, the application and adjudication process will move ahead.

File: 1003936

Proponent: Catalyst Paper

Application Type: New Surface Water Licence

Proposed Licence Purpose: Conservation and Industrial (Pulpmill) purposes.

Water Source: Cowichan Lake

BCGS Mapsheet: 92C160

Location: Cowichan Lake Weir located near 300 North Shore Road, Lake Cowichan.

Volume for consumptive Use: Authorization to allow for the pumping of 4.5 cubic metres per second from upstream side of weir (Cowichan Lake) to the downstream side (Cowichan River). This will provide 1.7 cubic metres per second for a conservation purpose for fisheries and social values in the Cowichan River and 1.7 cubic metres per second for the operation of the Crofton pulpmill, and the supply of water to the Village of Crofton

Licence Term: 10 year expiry

Period of Use: 49 day period possible each year (drought conditions) once Cowichan Lake level reaches 161.40m GSC (Geodetic Survey of Canada)

Water District/Precinct: Victoria/Duncan

Is this application supported by storage?: No

Comment: Proposed Licence to replace their current Section 10 short term use of water approval that expires in April of 2018. This current approval authorized Catalyst Paper to pump water over the weir at Cowichan Lake during periods of extreme drought.

Please [Click Here](#) to respond to this referral. You must be logged in using your BCeID account to view associated information. Note that forwarding or otherwise distributing this email will provide access to the associated information only if the receiver has a corresponding account.

For "how-to" instructions on how to respond to this request, please visit <http://www.frontcounterbc.gov.bc.ca/ereferrals.html> for instructional videos. To obtain a BCeID, please visit <https://www.bceid.ca/>

For technical assistance with e-Referrals, please contact FrontCounter BC at 1-877-855-3222.

For more information regarding this referral, please contact the "Email Coordinator" given within the referral.

Note that it can take an extended period of time to connect from the BCeID login to the e-Referrals website, this is normal. Avoid re-clicking the "Next" button or you could extend this connection time.

Please do not reply to this email.

David Skarbo

FrontCounter BC
Water Authorizations Specialist

(250) 751-7311
david.skarbo@gov.bc.ca